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[Decisions of the United States Court of Customs and Patent Appeals are indicated by a star (*), and of the United States Supreme Court by the letter (°).]

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Adams, James B., Longview, Ala. Lime. 36,490; renewed May 28, 1931.

Akua Sales Co., The, Boston, Mass. Vaginal pessaries. 284,620–1; July 7; Serial Nos. 309,889–40; published Apr. 28, 1931. Class 44.

Aktiebolaget Grumme & Son. (See Grumme & Son.)

Alemagna, Mario, Milan, Italy. Beverage. 284,594; July 7; Serial No. 311,506; published Apr. 21, 1931. Class 45.

Allied Mills, Inc. (See American Milling Company.)

Allied Mills, Inc. (See Peters, M. C.)

Aluminum Company of America, Pittsburgh, Pa. Aluminum tables, chairs, and coat trees. 284,749–50; July 7; Serial Nos. 307,877–8; published Apr. 28, 1931. Class 32.

Ambrosia Chocolate Company, Milwaukee, Wis. Chocolate coatings, candy, powder, etc. 284,545; July 7; Serial No. 299,481; published July 22, 1930. Class 46.

American Chicle Company, Long Island City, N. Y. Chewing gum. 284,737; July 7; Serial No. 290,735; published Apr. 21, 1931. Class 46.

American Management Association, New York, N. Y. Monthly publication. 284,548; July 7; Serial No. 299,666; published Apr. 21, 1931. Class 38.

American Milling Company, Philadelphia, Pa., to Allied Mills, Inc., Chicago, Ill., successor. Cattle food. 35,501; renewed Nov. 27, 1930.

American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Planographic printing ink and lithographic ink. 284,693; July 7; Serial No. 311,864; published Apr. 28, 1931. Class 11.

American Society for Steel Treating, Cleveland, Ohio. Monthly periodicals. 284,835; July 7; Serial No. 310,548; published Apr. 28, 1931. Class 38.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Bale ties. 284,853; July 7; Serial No. 312,287; published Apr. 28, 1931. Class 13.

Anderson Bros. Canning Company, Oskaloosa, Iowa. Canned vegetables and catsup. 284,909; July 7. Class 46.

Aqua Systems, Incorporated, New York, N. Y. Tank traps. 284,810; July 7; Serial No. 310,630; published Apr. 21, 1931. Class 13.

Armand Company, The, Des Moines, Iowa. Face powder. 284,889; July 7; Serial No. 311,856; published Apr. 7, 1931. Class 6.

Aro Equipment Corporation, The, Bryan, Ohio. Portable pressure lubricating equipment. 284,656; July 7; Serial No. 305,600; published Apr. 28, 1931. Class 23.

Atlantic Coast Fisheries Corporation of New York, N. Y. Fish steaks, frozen fish fillets, and fresh fish fillets. 284,619; July 7; Serial No. 309,800; published Apr. 28, 1931. Class 46.

Atlantis Sales Corporation, Rochester, N. Y. Prepared mustard. 284,586; July 7; Serial No. 311,642; published Apr. 28, 1931. Class 46.

Auralite Manufacturing Company, Chicago, Ill. Deodorant. 284,811; July 7; Serial No. 310,631; published Apr. 14, 1931. Class 6.

Aviation Register, Chicago, Ill. Publication. 284,562; July 7; Serial No. 311,417; published Apr. 21, 1931. Class 38.

Bachmeier & Company, Inc., New York, N. Y. Preparation to be used as an aid in soaking raw silk or rayon. 284,884; July 7; Serial No. 311,317; published Apr. 7, 1931. Class 6.

Baker & Company, Inc., Newark, N. J. Precious-metal salts and electroplating preparations. 284,702–3; July 7; Serial Nos. 311,554–5; published Apr. 14, 1931. Class 6.

Bánská- A Hutní Společnost, Brunn, Czechoslovakia. Glauber salt, sulphur and sulphur compounds, etc. 284,613; July 7; Serial No. 309,709; published Apr. 7, 1931. Class 6.

Bánská- A Hutní Společnost, Brunn, Czechoslovakia. Barbed wire and wire tacks. 284,614; July 7; Serial No. 309,710; published Apr. 28, 1931. Class 13.

Bánská- A Hutní Společnost, Brunn, Czechoslovakia. Glauber salt, sulphur and sulphur compounds, etc. 284,615; July 7; Serial No. 309,712; published Apr. 7, 1931. Class 6.

Bánská- A Hutní Společnost, Brunn, Czechoslovakia. Barbed wires and wire tacks. 284,629; July 7; Serial No. 309,708; published Apr. 28, 1931. Class 13.

Bemis Bro. Bag Company, St. Louis, Mo. Woven sacks. 284,846; July 7; Serial No. 312,171; published Apr. 28, 1931. Class 2.

Bennett Mills, Incorporated, Philadelphia, Pa. Pile fabrics. 284,723; July 7; Serial No. 311,079; published Apr. 21, 1931. Class 42.

Bennett Mills, Incorporated, Philadelphia, Pa. Pile fabrics. 284,904; July 7. Class 42.

Bereza Products Ltd., New York, N. Y. Finishing creams and vanishing creams. 284,646; July 7; Serial No. 302,175; published Apr. 7, 1931. Class 6.

Bethlehem Steel Company, Bethlehem, Pa. Machinery steels. 284,576; July 7; Serial No. 311,815; published Apr. 21, 1931. Class 14.

Bianchini, Ferier, Lyon, France. Piece goods. 284,766; July 7; Serial No. 304,714; published Apr. 21, 1931. Class 42.

Binney & Smith Company, New York, N. Y. Jewelers' crucibles. 284,847; July 7; Serial No. 312,172; published Apr. 21, 1931. Class 26.

Bixby, S. M., & Co., Brooklyn, N. Y., to 2 in 1-Shinola-Bixby Corporation, New York, N. Y., successor. Shoe-polish. 84,074; renewed Nov. 7, 1931.

Blue Streak Ltd., Los Angeles, Calif. Outboard-motor boats. 284,812; July 7; Serial No. 310,672; published Apr. 21, 1931. Class 19.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 284,869; July 7; Serial No. 312,086; published Apr. 28, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 284,877–8; July 7; Serial Nos. 311,257–8; published Apr. 21, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 284,890–2; July 7; Serial Nos. 311,357–9; published Apr. 21, 1931. Class 42.

Boston University, Boston, Mass. Magazines. 284,834; July 7; Serial No. 310,543; published Apr. 28, 1931. Class 38.

Botany Worsted Mills, Passaic, N. J. Woven and knitted fabrics. 284,694; July 7; Serial No. 311,865; published Apr. 28, 1931. Class 42.

Botany Worsted Mills, Passaic, N. J. Woolen piece goods. 284,870; July 7; Serial No. 312,087; published Apr. 28, 1931. Class 42.

Boyce and Rankin, Gastonia, N. C. Electrotypes, electroplates, printing plates, and matrices. 284,537; July 7; Serial No. 298,008; published Apr. 21, 1931. Class 50.

Boyce and Rankin, Gastonia, N. C. Newspapers and periodicals. 284,538; July 7; Serial No. 298,009; published Apr. 21, 1931. Class 38.

Brainerd, Winfield S., doing business as Magnolis Co. (not incorporated), Chicago, Ill. Healing ointment. 284,744; July 7; Serial No. 306,797; published Apr. 7, 1931. Class 6.

Bresduck, Inc., New York, N. Y. All manner and kinds of razors, shears, scissors, etc. 284,841; July 7; Serial No. 312,128; published Apr. 28, 1931. Class 28.

British Ropes Limited, London, England. Steel and iron wire. 284,577; July 7; Serial No. 311,818; published Apr. 21, 1931. Class 14.

Burger Bros. Company, The, Cincinnati, Ohio. Chocolate malt food drink. 284,663; July 7; Serial No. 311,226; published Apr. 28, 1931. Class 46.

Byk-Guldenwerke Chemische Fabrik Aktiengesellschaft, Berlin, Germany. Dissolvents, lactic-acid lactates, etc. 284,546; July 7; Serial No. 299,485; published Aug. 12, 1930. Class 6.

Byrd, P. W., Ph. C. Research Laboratories, San Jose, Calif. Skin lotion and bleach, and hair tonic. 284,669; July 7; Serial No. 310,160; published Apr. 21, 1931. Class 6.

C. & C. Company, Oakland, Calif. Laxative embodied in article of food. 284,893; July 7; Serial No. 311,363; published Apr. 7, 1931. Class 6.

C-O Orchards, Inc. (See Columbia-Okanogan Orchards, Inc.)

Calbar Paint & Varnish Co., Philadelphia, Pa. Paints, varnishes, putty, etc. 284,664; July 7; Serial No. 311,228; published Apr. 21, 1931. Class 16.

Carlough, Louis E., doing business as The Safety Fire Extinguisher Company, New York, N. Y. Fire buckets. 284,676; July 7; Serial No. 310,284; published Apr. 21, 1931. Class 2.

Cataract Chemical Company, Inc., Buffalo, N. Y. Chemical products. 284,701; July 7; Serial No. 311,558; published Apr. 21, 1931. Class 6.

Celanese Corporation of America, New York, N. Y. Fabrics made wholly or partially of cellulose derivatives. 284,871–5; July 7; Serial Nos. 312,088–93; published Apr. 28, 1931. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 284,879; July 7; Serial No. 311,259; published Apr. 21, 1931. Class 42.

Chanel, Inc., New York, N. Y. Perfume and face powder. 284,762; July 7; Serial No. 308,964; published Apr. 14, 1931. Class 6.

Cheney Brothers, South Manchester, Conn. Woven, knitted, netted, etc., pile fabrics. 284,696; July 7; Serial No. 311,995; published Apr. 28, 1931. Class 42.

Chesebrough Manufacturing Company, Consolidated, New York, N. Y. Petroleum jelly. 284,672; July 7; Serial No. 310,210; published Apr. 7, 1931. Class 6.

Childs Company, New York, N. Y. Cigars and cigarettes. 284,855; July 7; Serial No. 312,321; published Apr. 28, 1931. Class 17.

Chocolate Products Company, Chicago, Ill. Beverages and syrups and extracts for making same. 284,578; July 7; Serial No. 311,821; published Apr. 28, 1931. Class 45.
Clark, Walter L., & Son, Milford, Conn. Grafting wax and a dipping and coating solution for nursery stock. 284,717; July 7; Serial No. 311,025; published Apr. 28, 1931. Class 6.
Clayola Medicine Co., Inc., Manchester, Ky. Medicine. 284,616; July 7; Serial No. 309,724; published Apr. 7, 1931. Class 6.
Coleman Lamp and Stove Company, The, Wichita, Kans. Incandescent mantles. 284,894; July 7; Serial No. 311,365; published Apr. 21, 1931. Class 34.
Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 284,608; July 7; Serial No. 311,511; published Apr. 28, 1931. Class 4.
Colgate-Palmolive-Peet Company, Chicago, Ill. Toilet soap. 284,609; July 7; Serial No. 311,514; published Apr. 21, 1931. Class 4.
Columbia-Okanogan Orchards, Inc., doing business as C-O Orchards, Inc., Brewster, Wash. Deciduous fruits. 284,736; July 7; Serial No. 287,635; published June 3, 1931. Class 46.
Columbus Chain Company, The, Columbus, Ohio, to Columbus McKinnon Chain Corporation, Tonawanda, N. Y., successor. Chains of iron. 81,856; renewed May 16, 1931.
Consolidated Patentees, Inc., New York, N. Y. Hypodermic kits. 284,564; July 7; Serial No. 309,334; published Apr. 21, 1931. Class 44.
Corn & Ware, Calipatria, Calif. Fresh fruits, vegetables, melons. 284,885; July 7; Serial No. 311,323; published Apr. 28, 1931. Class 46.
Couch Manufacturing Company, Shinnston, W. Va. Glare shields for automobiles, etc. 284,612; July 7; Serial No. 311,517; published Apr. 28, 1931. Class 19.
Crane Co., Chicago, Ill. Heating materials. 284,828; July 7; Serial No. 310,797; published Apr. 28, 1931. Class 34.
Crookes Laboratories, Incorporated, The, New York, N. Y. Preparations used for aiding human and animal metabolism. 284,742; July 7; Serial No. 296,106; published Apr. 7, 1931. Class 6.
Crown Jewel Groves, Redlands, Calif. Fresh citrus fruits. 284,648; July 7; Serial No. 267,937; published May 27, 1930. Class 46.
Crum-Brainard Co. Ltd., Whittier, Calif. Oil-well machinery and tools. 284,617; July 7. Class 23.
Cudahy Packing Co., The, Chicago, Ill. Water softener. 284,751; July 7; Serial No. 307,927; published Apr. 7, 1931. Class 6.
Cunningham-Lebaron Company, Minneapolis, Minn. Candies. 284,700; July 7; Serial No. 311,519; published Apr. 28, 1931. Class 46.
Cycletow Corporation, Ltd., Los Angeles, Calif. Motor-driven vehicles. 284,759; July 7; Serial No. 308,774; published Apr. 21, 1931. Class 19.
Cytola Co. (See Gittings, Cyril F.)
Dairy By-Products, Inc., Chicago, Ill. Milk and chocolate powder. 284,563; July 7; Serial No. 311,422; published Apr. 28, 1931. Class 46.
Davega, Inc., New York, N. Y. Golf balls. 284,880; July 7; Serial No. 311,260; published Apr. 21, 1931. Class 22.
De Land, Charles M., New York, N. Y. Woolen piece goods. 284,547; July 7; Serial Nos. 299,560–1; published Nov. 4, 1930. Class 42.
Dexter Laboratories, New York, N. Y. Pharmaceutical preparations and medicines. 284,569; July 7; Serial No. 309,048; published Apr. 7, 1931. Class 6.
Diapex Corporation, The, New York, N. Y. Paper household aprons. 284,600; July 7; Serial No. 311,473; published Apr. 21, 1931. Class 37.
Diapex Corporation, The, New York, N. Y. Sanitary protective paper sheets and sheeting. 284,601; July 7; Serial No. 311,474; published Apr. 21, 1931. Class 37.
Di Santo, Joseph, doing business as Di Santo & Company, Duluth, Minn. Malt cereal beverages. 284,679; July 7; Serial No. 311,955; published Apr. 28, 1931. Class 48.
Domko, Joseph, doing business as Joseph Domko & Co., Chicago, Ill. Canned fruits, vegetables, fish, etc. 284,544; July 7; Serial No. 299,378; published Aug. 5, 1930. Class 46.
Doraldina, Inc., Hollywood, Calif. Astringents, astringent cerates, bleach creams, etc. 284,653; July 7; Serial No. 283,439; published Apr. 29, 1930. Class 6.
Drug Products Co., Inc., The, Long Island City, N. Y. Liquid preparation. 284,558; July 7; Serial No. 311,424; published Apr. 7, 1931. Class 6.
Drug Products Co., Inc., The, Long Island City, N. Y. Bismuth sodium gluconate colloidal preparation. 284,805; July 7; Serial No. 310,557; published Apr. 21, 1931. Class 6.
Eastman Kodak Company, Rochester, N. Y. Washing and drying apparatus for films and prints, safe-light lamps, shutters, etc. 284,533; July 7; Serial No. 297,247; published April 28, 1931. Class 26.
Edison Storage Battery Company, West Orange, N. J. Storage batteries, parts thereof, and sets of such batteries. 82,971; renewed Aug. 8, 1931.
Eldinger, Benjamin, doing business as Germadol Laboratories, New York, N. Y. Aluminum acetate suspension for external treatment. 284,635; July 7; Serial No. 302,677; published Apr. 7, 1931. Class 6.
Ellendale Canning Company, Philadelphia, Pa. Tomato catsup, tomato soup, etc. 284,771; July 7; Serial No. 305,269; published Apr. 28, 1931. Class 46.
Ess Ess Laboratories. (See Seigle, Solomon S.)
Eureka Fire Hose Manufacturing Company, Jersey City, N. J. Woven linen fabric hose. 82,506, renewed July 4, 1931.
Eureka Tea Co., Chicago, Ill. Coffee. 284,906; July 7. Class 46.
Europa Schreibmaschinen A. G., Erfurt, Germany. Calculating machines. 284,827; July 7; Serial No. 310,862; published Apr. 28, 1931. Class 26.
Falls Rubber Company, The, Cuyahoga Falls, Ohio. Vehicle tires of rubber or rubber composition. 284,767; July 7; Serial No. 304,718; published Apr. 21, 1931. Class 35.
Fansteel Products Company, Inc., assignor to Ramet Corporation, North Chicago, Ill. Metal working and cutting tools. 284,718; July 7; Serial No. 311,028; published Apr. 28, 1931. Class 23.
Federated Stores. (See McClintock-Trunkay Company.)
Ferrin, Frank M., Boston, Mass. Insulated electric conductors and cables. 83,971; renewed Oct. 24, 1931.
Flore, Gaetano, New York, N. Y. Canned tomatoes. 284,803; July 7; Serial No. 311,723; published Apr. 28, 1931. Class 46.
Fireside Publications, Inc., Chicago, Ill. Magazine. 284,774; July 7; Serial No. 310,363; published Apr. 28, 1931. Class 38.
Flexible Steel Lacing Company, Chicago, Ill. Metallic belt-fasteners. 84,224; renewed Nov. 21, 1931.
Flexible Steel Lacing Company, Chicago, Ill. Steel belt-lacing. 84,225; renewed Nov. 21, 1931.
"Flo-Ruth Farm". (See Schwartz, Joseph.)
Forbes Lithograph Manufacturing Company, The, Chelsea, Mass. Product of a process of printing. 284,843; July 7; Serial No. 312,147; published Apr. 21, 1931. Class 38.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 284,579; July 7; Serial No. 311,831; published Apr. 28, 1931. Class 42.
Forstmann & Huffman Company, Passaic, N. J. Woolen piece goods. 284,587–92; July 7; Serial Nos. 311,658–63; published Apr. 28, 1931. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 284,658; July 7; Serial No. 311,140; published Apr. 21, 1931. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 284,715; July 7; Serial No. 310,989; published Apr. 21, 1931. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 284,784–96; July 7; Serial Nos. 311,665–77; published Apr. 28, 1931. Class 42.
Forsyth, Benjamin F., doing business as Ben Forsyth Publishing Company, Minneapolis, Minn. Periodical publication. 284,813; July 7; Serial No. 310,678; published Apr. 21, 1931. Class 38.
Frosted Foods Company, Inc., New York, N. Y. Frozen food products. 284,641; July 7; Serial No. 301,028; published Apr. 21, 1931. Class 46.
Fuller Canneries Company, The, doing business as Fuller's, Cleveland, Ohio. Canned fruits, canned vegetables, etc. 284,680; July 7; Serial No. 311,959; published Apr. 28, 1931. Class 46.
Gabilla, Incorporated, New York, N. Y. Perfume, toilet water, and powder. 284,552; July 7; Serial No. 311,436; published Apr. 7, 1931. Class 6.
Gabilla, Incorporated, New York, N. Y. Perfume. 284,553–4; July 7; Serial Nos. 311,432–3; published Apr. 7, 1931. Class 6.
Gabilla, Incorporated, New York, N. Y. Perfume, toilet water, face powder, etc. 284,555–6; July 7; Serial Nos. 311,434–5; published Apr. 7, 1931. Class 6.
Gabilla, Incorporated, New York, N. Y. Perfume, toilet water, and powder. 284,559; July 7; Serial No. 311,427; published Apr. 21, 1931. Class 6.
Gabilla, Incorporated, New York, N. Y. Perfume. 284,704–5; July 7; Serial Nos. 311,523–4; published Apr. 14, 1931. Class 6.
Gas Equipment Corporation. (See Gurney, Frank W., assignor.)
Geigy Company, Inc., New York, N. Y. Dyestuffs, lakes, and chemical products. 284,692; July 7; Serial No. 311,872; published Apr. 21, 1931. Class 6.
General Talking Pictures Corporation, New York, N. Y. Apparatus for the recording and apparatus for the reproduction of talking pictures and the parts thereof. 284,857; July 7; Serial No. 312,425; published Apr. 28, 1931. Class 26.
Germadol Laboratories. (See Eldinger, Benjamin.)
Geyer, William, doing business as Scientific Glass Apparatus Co., Bloomfield, N. J. Graduated glass cylinders and test tubes, burettes, pipettes, etc. 284,541; July 7; Serial No. 299,056; published Apr. 28, 1931. Class 26.
Gittings, Cyril F., doing business as Cytola Co., Baltimore, Md. General tonic. 284,549; July 7; Serial No. 300,187; published Apr. 14, 1931. Class 6.
Glaser, Crandell Co., Chicago, Ill. Pickles. 284,858; July 7; Serial No. 312,426; published Apr. 28, 1931. Class 46.
Globe American Corporation, Kokomo, Ind. Brooders. 284,860; July 7; Serial No. 312,002; published Apr. 21, 1931. Class 50.

Goeller, Lawrence E., doing business as Kippy Kit Co., Circleville, Ohio. First-aid kits. 284,833; July 7; Serial No. 310,477; published Apr. 28, 1931. Class 44.
Gordon-Allen Ltd., Oakland, Calif. Soap. 284,755; July 7; Serial No. 308,438; published Apr. 21, 1931. Class 4.
Gowan-Peyton-Twohy Co., to Gowan-Lenning-Brown Company, Duluth, Minn., successor. Vanilla, lemon, and almond flavoring extracts and essences. 84,178; renewed Nov. 14, 1931.
Grantorpets Tandsticksfabriks Aktiebolag, Westervik, Sweden, assignor, by mesne assignments, to Jonkopings och Vulcans Tandsticksfabriksaktiebolag, Jonkoping, Sweden. Matches. 82,076; renewed May 30, 1931.
Grasselli Chemical Company, The, Cleveland, Ohio. Wooden packing cases. 284,633; July 7; Serial No. 302,219; published Apr. 21, 1931. Class 2.
Gray Marine Motor Company, Detroit, Mich. Internal-combustion engines. 284,651; July 7; Serial No. 279,843; published Apr. 21, 1931. Class 23.
Green & Hopson, Springfield, Mass. Yarn. 284,706; July 7; Serial No. 311,526; published Apr. 28, 1931. Class 48.
"Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft m. b. H., Frankfort-on-the-Main-Griesheim, Germany. Machines and hand torches for autogenous cutting, etc. 284,628; July 7; Serial No. 309,685; published Apr. 21, 1931. Class 34.
Grumme & Son to Aktiebolaget Grumme & Son, Stockholm, Sweden, successor. Mouth wash. 82,147; renewed June 6, 1931.
Grumme & Son, to Aktiebolaget Grumme & Son, Stockholm, Sweden, successor. Tooth-cream. 82,789; renewed July 25, 1931.
Gulbert Steel Company, Pittsburgh, Pa. Machines for drilling, reaming, grinding, etc. 284,763; July 7; Serial No. 304,557; published Apr. 21, 1931. Class 23.
Gurney, Frank W., assignor to Gas Equipment Corporation, Boston, Mass. Gas water heaters. 284,756; July 7; Serial No. 308,439; published Apr. 21, 1931. Class 34.
H & R Sales Company, Cleveland, Ohio. Cage clamping bird-food holders. 284,557; July 7; Serial No. 311,438; published Apr. 21, 1931. Class 13.
Hagerling, Fred J., St. Louis, Mo. Radiator cement. 284,630; July 7; Serial No. 309,561; published Apr. 7, 1931. Class 6.
Hall, William A., New York, N. Y. Silent and sound motion-picture films. 284,769; July 7; Serial No. 305,184; published Apr. 28, 1931. Class 26.
Hamlin Cement Products, Inc., Garden City, N. Y. Plastic paint. 284,634; July 7; Serial No. 311,916; published Apr. 21, 1931. Class 16.
Handypack Drug Co. (See Ibsen, Johanna.)
Harmor & Co. Inc., Buffalo, N. Y. Rotary driers and parts thereof. 284,895; July 7; Serial No. 311,377; published Apr. 28, 1931. Class 23.
Haskins Bros. & Company, Sioux City, Iowa, and Omaha, Nebr. Soap. 83,646; renewed Oct. 3, 1931.
Hayes Manufacturing Co., Paterson, N. J. Boilers. 284,908; July 7. Class 34.
Heat-Engineering Corp. (See Twining, Edward L.)
Hendrickson, Clarice, Chicago, Ill. Automatic coal stokers. 284,758; July 7; Serial No. 308,628; published Apr. 28, 1931. Class 34.
Hillerich, J. F., & Son, assignor, by mesne assignments, to Hillerich & Bradsby Co., Louisville, Ky. Base-ball bats. 83,408–11; renewed Sept. 12, 1931.
Hillyard Chemical Company, St. Joseph, Mo. Liquid soap. 284,716; July 7; Serial No. 310,999; published Apr. 7, 1931. Class 4.
Hillyard Chemical Company, St. Joseph, Mo. Drainpipe solvent. 284,897; July 7; Serial No. 311,378; published Apr. 21, 1931. Class 6.
Hollins, William, and Company, Limited, Nottingham and London, England. Clothing. 83,068; renewed Aug. 15, 1931.
Hollins, William, and Company, Limited, London and Nottingham, England. Sheets, pillow-cases, rugs, blankets, and shawls. 83,910; renewed Oct. 24, 1931.
Holloway, M. J., & Company, Chicago, Ill. Candy. 284,861; July 7; Serial No. 312,005; published Apr. 21, 1931. Class 46.
Hoppe, P., Amsterdam, Netherlands. Gin. 284,876; July 7; Serial No. 312,100; published Apr. 21, 1931. Class 49.
Ho-Ro-Co Manufacturing Company, St. Louis, Mo. Skin lotion. 284,828; July 7; Serial No. 310,867; published Apr. 7, 1931. Class 6.
Horton, Frederick B., South Manchester, Conn., assignor, by mesne assignments, to Lambert Pharmacal Company, Wilmington, Del. Tooth powder. 36,845; renewed July 30, 1931.
Hostetter Company, The, Pittsburgh, Pa. Stomach-bitters. 84,232; renewed Nov. 21, 1931.
Houbigant, Inc., New York, N. Y. Perfumes, toilet water, face powder, etc. 284,819; July 7; Serial No. 310,770; published Apr. 7, 1931. Class 6.
Huribut Paper Company, South Lee, Mass. Writing and printing paper. 284,804; July 7; Serial No. 311,734; published Apr. 21, 1931. Class 37.
Hydrauger Corporation, Ltd., San Francisco, Calif. Earth-boring machinery. 284,754; July 7; Serial No. 308,870; published Apr. 21, 1931. Class 23.
Hy-Ton Ink Company, Tulsa, Okla. Writing fluid. 284,681; July 7; Serial No. 311,962; published Apr. 21, 1931. Class 11.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Chemical compositions. 284,662; July 7; Serial No. 311,212; published Apr. 28, 1931. Class 6.
Ibsen, Johanna, doing business as Handypack Drug Co., San Diego, Calif. Dried concentrated avocado food. 284,753; July 7; Serial No. 308,335; published Apr. 28, 1931. Class 46.
Illinois Watch Case Company, Elgin, Ill. Watchcases and watch-movements. 83,256; renewed Aug. 29, 1931.
Imperial Rubber Co. (See Lachance, Frederick A.)
Island Road Bottling Co., Philadelphia, Pa. Maltless beverages and syrups and extracts used in making the same. 284,573; July 7; Serial No. 311,783; published Apr. 28, 1931. Class 45.
Italian Fruit Caramel Co. (See Spriano, Alessandro E.)
Italian Vineyard Co., Los Angeles and Gusasti, Calif. Fresh grapes. 284,886; July 7; Serial No. 311,336; published Apr. 21, 1931. Class 46.
Jem Rubber Company Limited, Toronto, Ontario, Canada. Inflated rubber cushions. 284,746; July 7; Serial No. 306,892; published Apr. 28, 1931. Class 32.
Johnson Motor Company, Waukegan, Ill. Boats. 284,740; July 7; Serial No. 293,732; published Apr. 28, 1931. Class 19.
Jonkopings och Vulcans Tandsticksfabriksaktiebolag. (See Grantorpets Tandsticksfabriks Aktiebolag.)
Kabushiki-Kaisha Takeda Chobei Shoten, Osaka, Japan. Specific for axillary odour. 284,657; July 7; Serial No. 305,616; published Apr. 28, 1931. Class 6.
Kaufmann Bros. & Bondy, Inc., West New York, N. J. Cigar holders, cigarette holders, and pipes. 284,720; July 7; Serial No. 311,062; published Apr. 7. Class 8.
Kay-Fries Chemicals, Inc., West Haverstraw, N. Y. Fumigants. 284,814; July 7; Serial No. 310,680; published Apr. 21, 1931. Class 6.
Keep Brothers, assignor, by mesne assignments, to Florence Keep, Philadelphia, Pa. Furniture-polish. 83,653; renewed Oct. 3, 1931.
Kendall Company, The, Boston, Mass. Gauze and adhesive plaster and/or a combination of both. 284,697; July 7; Serial No. 311,918; published Apr. 21, 1931. Class 44.
Kennedy Manufacturing Company, Van Wert, Ohio. Vehicle luggage carriers. 284,582; July 7; Serial No. 311,611; published Apr. 28, 1931. Class 19.
Kinney Bros. & Sipprell, Everett, Wash. Radio tube testers. 284,571; July 7; Serial No. 309,245; published Apr. 28, 1931. Class 26.
Kippy Kit Co. (See Goeller, Lawrence E.)
Kiwanis Club of Marietta, Ohio, Marietta, Ohio. Magazine. 284,622; July 7; Serial No. 309,862; published Apr. 21. 1931. Class 38.
Kiwanis International, Chicago, Ill. Lapel buttons, emblems, badges, etc. 284,896; July 7; Serial No. 311,382; published Apr. 28, 1931. Class 50.
Knu-Knit Manufacturing Corporation, The, Chicago, Ill. Machines for mending runs in fabrics. 284,602; July 7; Serial No. 311,480; published Apr. 21, 1931. Class 23.
Kohnstamm, H., & Co., Inc., New York, N. Y. Bluing and neutralizing compound. 284,540; July 7; Serial No. 298,999; published July 22, 1930. Class 6.
Krekt Way Specialty Co. (See Priest, Harry R.)
Lachance, Frederick A., doing business as Imperial Rubber Co., New York, N. Y. Cotton and rubber lined hose, belting, rubber gaskets, etc. 284,797; July 7; Serial No. 311,687; published Apr. 28, 1931. Class 35.
Lambert Pharmacal Company. (See Horton, Fredrick B., assignor.)
Laymon, Herman B., doing business as World's Products Co., Spencer, Ind. Preparation for relieving pain. 284,642; July 7; Serial No. 301,179; published Oct. 14, 1930. Class 6.
Ledward, Burgess & Company Limited, Manchester, England. Cotton piece goods. 284,842; July 7; Serial No. 312,137; published Apr. 28, 1931. Class 42.
Lentheric Incorporated, New York, N. Y. Face powders, sachets, bath salts, etc. 284,783; July 7; Serial No. 310,448; published Apr. 14, 1931. Class 6.
Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin, Bordeaux, France. Maltless beverages. 284,775; July 7; Serial No. 310,384; published Apr. 21, 1931. Class 45.
Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin, Bordeaux, France. Maltless beverage and syrup therefor. 284,776; July 7; Serial No. 310,385; published Apr. 21, 1931. Class 45.
Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin, Bordeaux, France. Maltless beverages and concentrates therefor. 284,777; July 7; Serial No. 310,386; published Apr. 21, 1931. Class 45.
Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin, Bordeaux, France. Maltless beverages. 284,778–9; July 7; Serial No. 310,387–8; published Apr. 21, 1931. Class 45.

Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin, Bordeaux, France. Maltless syrup. 284,780; July 7; Serial No. 310,389; published Apr. 21, 1931. Class 45.

Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin, Bordeaux, France. Maltless beverages. 284,781–2; July 7; Serial Nos. 310,390–1; published Apr. 21, 1931. Class 45.

Levin, Morris B., doing business as Levin Furnace Company, Portland, Oreg. Gas, oil, coal, and wood burning furnaces, oil burners, stokers, ventilating apparatus, etc. 284,570; July 7; Serial No. 309,136; published Apr. 28, 1931. Class 34.

Liberty Show Printing Company, Pittsburgh, Pa. Parlor football game. 284,881; July 7; Serial No. 311,275; published Apr. 21, 1931. Class 22.

Lindenschmitt, Henry A., Grand Junction, Colo. Meat-block scrapers. 284,859; July 7; Serial No. 312,439; published Apr. 28, 1931. Class 23.

Lipton, Thomas J., Inc., Dover, Del.; Hoboken, N. J.; Chicago, Ill.; San Francisco, Calif. Coffee. 284,798; July 7; Serial No. 311,688; published Apr. 28, 1931. Class 46.

London, Sasieni, Ltd., New York, N. Y. Smokers' pipes. 284,836; July 7; Serial No. 306,244; published Apr. 28, 1931. Class 8.

Long Paint & Chemical Co., The, Oakland, Calif. Baked enamel removers. 284,862; July 7; Serial No. 312,011; published Apr. 28, 1931. Class 16.

Maggioni, L. P., & Co., Savannah, Ga. Canned sea foods. 284,632; July 7; Serial No. 309,646; published Apr. 28, 1931. Class 46.

Magnolia Co. (not incorporated). (See Brainerd, Winfield S.)

Maine Steel Products Co., South Portland, Me. Snowplows. 284,634; July 7; Serial No. 302,324; published Apr. 21, 1931. Class 23.

Marietta Packing Co. (See Romeo, F., & Company, Inc.)

Martin, Hiram F., York, Pa. Cigars. 284,698; July 7; Serial No. 311,921; published Apr. 21, 1931. Class 17.

Master Metal Products Inc., Buffalo, N. Y. Covered cans. 284,752; July 7; Serial No. 308,119; published Apr. 28, 1931. Class 2.

Maxcy, Gregg, Sebring, Fla. Fresh citrus fruits. 284,739; July 7; Serial No. 292,220; published Apr. 21, 1931. Class 46.

May Department Stores Company, The, St. Louis, Mo. Antiseptic solutions. 284,747; July 7; Serial No. 307,323; published Apr. 14, 1931. Class 6.

McBee Binder Company, The, Athens, Ohio. Stationery. 284,817; July 7; Serial No. 310,688; published Apr. 21, 1931. Class 37.

McClintock-Trunkey Company, doing business as Federated Stores, Spokane, Wash. Flour, butter, coffee, etc. 284,647; July 7; Serial No. 306,192; published Apr. 28, 1931. Class 46.

McDermont and Wall, Inc., Riverside, Calif. Fresh citrus fruits. 284,644; July 7; Serial No. 301,977; published Dec. 2, 1930. Class 46.

Melliand, Inc., The, New York, N. Y. Periodicals. 284,848; July 7; Serial No. 312,193; published Apr. 21, 1931. Class 38.

Meyer & Wenthe, Chicago, Ill. Seal-presses. 82,706; renewed July 18, 1931.

Midway Chemical Company, Chicago, Ill. Mops. 284,719; July 7; Serial No. 311,040; published Apr. 28,1931. Class 29.

Miller Music, Incorporated, New York, N. Y. Sheet music. 284,699; July 7; Serial No. 311,532; published Apr. 21, 1931. Class 38.

Miller, Polk, Products Corporation, Richmond, Va. Animal medicine. 284,640; July 7; Serial No. 240,214; published Mar. 15, 1927. Class 6.

Millers Falls Paper Company, Millers Falls, Mass. Ledger paper. 284,690; July 7; Serial No. 311,881; published Apr. 21, 1931. Class 37.

Moline Malleable Iron Company, St. Charles, Ill. Chain and chain link. 284,891; July 7; Serial No. 311,882; published Apr. 28, 1931. Class 13.

Montgomery, H. A., Co. Inc., The, Detroit, Mich. Chemical preparation for preserving rope, cord, twine, etc., and as a waterproofing material. 284,670; July 7; Serial No. 310,182; published Apr. 14, 1931. Class 6.

Moonshine Chemical Co., Pittsburgh, Pa. Insecticide. 284,898; July 7; Serial No. 311,393; published Apr. 28, 1931. Class 6.

Moore, David P., New York, N. Y. Knitted pile fabrics. 284,724; July 7; Serial No. 311,100; published Apr. 28, 1931. Class 42.

Morris, E., Mfg. Co., Detroit, Mich. Razors and shears. 284,645; July 7; Serial No. 301,991; published Apr. 21, 1931. Class 23.

Moseley & Motley Milling Co., Rochester, N. Y. Wheat-flour. 83,848; renewed Oct. 17, 1931.

Moseley & Motley Milling Co., Rochester, N. Y. Wheat-flour. 84,022; renewed Oct. 31, 1931.

Moyses, Harry E., doing business as Vytex Laboratories, New York, N. Y. Prophylactic rubber articles. 284,837–8; July 7; Serial Nos. 309,411–12; published Apr. 21, 1931. Class 44.

Mueller Brass Co., Port Huron, Mich. Pipe and fittings, screw machine products. 284,543; July 7; Serial No. 299,212; published Apr. 28, 1931. Class 13.

Mushroom Growers Co-Operative Association, Kennett Square, Pa. Mushrooms. 284,567; July 7; Serial No. 309,452; published Apr. 28, 1931. Class 46.

Myers, Anna, Pure Food, Inc., Newark, N. J. Preserved pickles. 284,865; July 7; Serial No. 312,058; published Apr. 28, 1931. Class 46.

N. V. Standard Water Maatschappij, Amsterdam, Netherlands. Filtering apparatus. 284,572; July 7; Serial No. 311,747; published Apr. 21, 1931. Class 31.

Nachman Spring-Filled Corporation, Chicago, Ill. Furniture cushions for seats, backs, arms, etc. 284,639; July 7; Serial No. 304,209; published Apr. 28, 1931. Class 32.

National Bellas Hess Company, Inc., New York, N. Y. Golf balls. 284,595; July 7; Serial No. 311,441; published Apr. 28, 1931. Class 22.

National Biscuit Company, Jersey City, N. J., and Chicago, Ill., to National Biscuit Company, New York, N. Y. Bakery products and confectionery. 37,299; renewed Nov. 12, 1931.

National Map Company, Indianapolis, Ind. Maps, atlases. 284,625; July 7; Serial No. 310,061; published Apr. 21, 1931. Class 38.

National Metal Edge Box Company, Philadelphia, Pa. Jute board boxes and cartons and blanks for making the same. 284,733; July 7; Serial No. 296,431; published Apr. 28, 1931. Class 2.

National Metal Edge Box Company, Philadelphia, Pa. Jute board and paper box boards. 284,734; July 7; Serial No. 296,432; published Apr. 28, 1931. Class 37.

National Recreation Association, Incorporated, New York, N. Y. Monthly magazine. 284,876; July 7; Serial No. 310,733; Published Apr. 21, 1931. Class 38.

Neil Manufacturing Co., Ltd., Dunedin, New Zealand. Cigarettes and cigarette tobacco. 284,743; July 7; Serial No. 306,454; published Apr. 21, 1931. Class 17.

Nelson, C. H., Metal Co. Inc., by change of name, to Nelson Metal Company, Inc., Baltimore, Md. Tin-plate, sheet-iron and metals. 83,084; renewed Aug. 15, 1931.

Newport Company, The, Carrollville, Wis. Coal-tar dyestuffs and intermediates used in the preparation of dyestuffs, etc. 284,532; July 7; Serial No. 296,667; published Apr. 14, 1931. Class 6.

Newton, Chambers & Co. Limited, Thorncliffe, near Sheffield, England. Germicides and insecticides. 83,937; renewed Oct. 24, 1931.

Nordmark-Werke Aktiengesellschaft für angewandte Chemie, Hamburg, Germany. Pharmaceutical preparation. 284,560; July 7; Serial No. 309,481; published Apr. 14, 1931. Class 6.

Norris, Perry E., doing business as Norris Products, Chicago, Ill. Bleaching or stripping agent or dye remover. 284,583; July 7; Serial No. 311,621; published Apr. 28, 1931. Class 6.

Nosis, Steven, Massillon, Ohio. Preparation for use in the treatment of leg sores, ulcers, and milk leg. 284,603; July 7; Serial No. 311,483; published Apr. 14, 1931. Class 6.

Novocol Chemical Mfg. Co. Inc., Brooklyn, N. Y. Hypodermic needles. 284,689; July 7; Serial No. 311,884; published Apr. 21, 1931. Class 44.

Osten Chemical Corporation, New York, N. Y. Medicinal germicide or disinfectant. 284,626; July 7; Serial No. 310,063; published Apr. 14, 1931. Class 6.

Osten Chemical Corporation, New York, N. Y. Organic chemical of medicinal value. 284,667–8; July 7; Serial Nos. 310,064–5; published Apr. 7, 1931. Class 6.

Pair-O'-Lipstik Incorporated, New York, N. Y. Lip sticks. 284,820; July 7; Serial No. 310,774; published Apr. 7, 1931. Class 6.

Paraffine Companies, Inc., The, San Francisco, Calif. Pipe-wrapping machines and parts therefor. 284,535; July 7; Serial No. 297,762; published Apr. 28, 1931. Class 23.

Parfumerie Rigaud, Inc., New York, N. Y. Perfumes. 284,659; July 7; Serial No. 311,155; published Apr. 7, 1931. Class 6.

Park, Clyde E., doing business as Park Chemical Company, Ottumwa, Iowa. Medicinal preparation. 284,654; July 7; Serial No. 305,537; published Dec. 2, 1930. Class 6.

Parr, Elizabeth, Baltimore, Md. Composition for promoting the growth of the hair. 284,671; July 7; Serial No. 310,190. Class 6.

Patterson Displays Inc., Cleveland, Ohio. Signs. 284,599; July 7; Serial No. 311,463; published Apr. 21, 1931. Class 38.

Peanut Journal Publishing Co., Suffolk, Va. Periodical. 284,840; July 7; Serial No. 312,117; published Apr. 21, 1931. Class 38.

Perry, David, Minneapolis, Minn. Composition used in the manufacture of artificial dentures. 284,899; July 7; Serial No. 311,394; published Apr. 28, 1931. Class 44.

Peters, M. C., Mill Co., Omaha, Nebr., to Allied Mills, Inc., Chicago, Ill., successor. Stock and poultry food. 76,764; renewed Feb. 15, 1930.

Peters, M. C., Mill Co., Omaha, Nebr., to Allied Mills, Inc., Chicago, Ill., successor. Stock and poultry food composed of corn, oats alfalfa-meal, and molasses. 78,822; renewed July 12, 1930.

Petroleum Derivatives Company, Montclair, N. J. Toilet goods. 284,832; July 7; Serial No. 310,461; published Apr. 7, 1931. Class 6.

Philadelphia Blue Print Co., Philadelphia, Pa. Photographic prints. 284,673; July 7; Serial No. 310,259; published Apr. 21, 1931. Class 38.

Philadelphia Malt Extract Co., Philadelphia, Pa. Malt syrup. 284,799; July 7; Serial No. 311,692; published Apr. 28, 1931. Class 46.

Pittsburgh Plate Glass Company, Pittsburgh, Pa. Painters' brushes. 284,027; July 7; Serial No. 309,660; published Apr. 21, 1931. Class 29.

Plant, Thomas G., Co., assignee, by mesne assignments, to Thomas G. Plant Corporation, Boston, Mass. Shoes. 36,792; renewed July 23, 1931.

Poole, Thomas A., M. D., Washington, D. C. Apparatus used in the treatment of sinusitis, etc. 284,652; July 7; Serial No. 280,413; published Apr. 28, 1931. Class 44.

Potter Drug & Chemical Corporation, Boston, Mass., assignor to Potter Drug and Chemical Corporation, Malden, Mass. Resolvent. 36,920; renewed Aug. 20, 1931.

Potter Drug & Chemical Corporation, Boston, assignor to Potter Drug and Chemical Corporation, Malden, Mass. Ointment. 36,921; renewed Aug. 20, 1931.

Precision Metal Workers, Chicago, Ill. Ash trays. 284,761; July 7; Serial No. 308,867; published Apr. 21, 1931. Class 8.

Preservine Proprietary Limited, Melbourne, Victoria, Australia. Soap, soap flakes, and sand soap. 284,596; July 7; Serial No. 311,445; published Apr. 28, 1931. Class 4.

Press Publishing Company, New York, N. Y. Comic golf cartoon for newspaper publication. 284,850; July 7; Serial No. 312,222; published Apr. 21, 1931. Class 38.

Priest, Harry R., doing business as Krekt Way Specialty Co., Loudonville, Ohio. Toothbrushes. 284,584; July 7; Serial No. 311,623; published Apr. 28, 1931. Class 29.

Printz, Georg, & Co., Aachen, Germany, and New York, N. Y. Hand sewing needles and pins. 81,296; renewed Mar. 21, 1931.

Printz, Georg, & Co., Aachen, Germany, and New York, N. Y. Hand sewing needles and toilet pins. 81,908; renewed May 16, 1931.

Progressive Farmer-Ruralist Company, Birmingham, Ala. Magazine. 284,864; July 7; Serial No. 312,029; published Apr. 21, 1931. Class 38.

Progressive Knitted Rayon Fabric Mills, Inc., Brooklyn, N. Y. Rayon fabric in the piece. 284,854; July 7; Serial No. 312,312; published Apr. 28, 1931. Class 42.

Putnam, Fred A., Boston, Mass., to Fred A. Putnam, Keene, N. H. Compound for making a printed impression. 84,189; renewed Nov. 14, 1931.

Queen Perfumery Co., The, San Juan, P. R. Perfumes. 284,707; July 7; Serial No. 310,921; published Apr. 28, 1931. Class 6.

Rahal, Joseph E., doing business as The Rahal Packing Co. Inc., Cleveland, Ohio. Canned fruit. 284,818; July 7; Serial No. 310,736; published Apr. 21, 1931. Class 46.

Ramet Corporation. (See Fansteel Products Company, Inc., assignor.)

Ra-Var Corporation, New York, N. Y. Paints, varnishes, and lacquers. 284,539; July 7; Serial No. 298,255; published Oct. 7, 1930. Class 16.

Raybestos-Manhattan, Incorporated, Passaic, N. J., and Bridgeport, Conn. Fan belts and transmission belting. 284,636; July 7; Serial No. 303,344; published Sept. 30, 1930. Class 35.

Reach, A. J., Wright & Ditson Incorporated, New York, N. Y. Golf clubs. 284,815; July 7; Serial No. 310,699; published Apr. 21, 1931. Class 22.

Real Letter Opener Corporation, Chicago, Ill. Letter-opening devices. 284,580; July 7; Serial No. 311,847; published Apr. 28, 1931. Class 28.

Regina Company, The, assignor to Regina Corporation, Rahway, N. J. Vacuum cleaning-machines. 83,944; renewed Oct. 24, 1931.

Reid, Wightman T., Covington, Ky. Healing salve. 284,824; July 7; Serial No. 310,811; published Apr. 7, 1931. Class 6.

Reiss-Premier Pipe Co., West New York, N. Y. Pipes, cigar and cigarette holders. 284,581; July 7; Serial No. 311,848; published Apr. 28, 1931. Class 8.

Reiss-Premier Pipe Co., West New York, N. J. Cigar holders, cigarette holders, and pipes. 284,721; July 7; Serial No. 311,071; published Apr. 7, 1931. Class 8.

Reliable Distributing Company, Incorporated, Baltimore, Md. Malt syrup. 284,551; July 7; Serial No. 300,755; Sept. 98, 1930. Class 46.

Roberds, Garfield A., doing business as The Speedler Co., Olathe, Kans. Bicycles and tricycles. 284,611; July 7; Serial No. 311,581; published Apr. 21, 1931. Class 19.

Rock of Ages Corporation, Burlington, Vt. Granite monuments and memorials. 284,826; July 7; Serial No. 310,849; published Apr. 28, 1931. Class 50.

Röhm & Haas Aktiengesellschaft, Darmstadt, Germany. Safety glass in bulk. 284,542; July 7; Serial No. 299,084; published Apr. 21, 1931. Class 33.

Röhm & Haas Aktiengesellschaft, Darmstadt, Germany. Gum films in bulk. 284,650; July 7; Serial No. 278,662; published Apr. 21, 1931. Class 50.

Rohm & Haas Aktiengesellschaft, Darmstadt, Germany. Rubberlike substances of organic polymerides. 284,738; July 7; Serial No. 292,124; published Apr. 28, 1931. Class 50.

Rohrmoser, Esquivel & Co., San Jose, Costa Rica. Coffee. 284,685; July 7; Serial No. 311,688; published Apr. 21, 1931. Class 46.

Rokeach, I., & Sons, New York, N. Y. to I. Rokeach & Sons, Inc., Brooklyn, N. Y., successor. Soap. 82,261; June 13, 1931. Class 4.

Romeo, F. Company, Inc. doing business as Marietta Packing Co., New York, N. Y. Food products. 284,905; July 7. Class 46.

Ross Manufacturing Company, Kansas City, Mo. Compound for stopping leaks in boilers. 284,768; July 7; Serial No. 304,737; published Apr. 7, 1931. Class 6.

Rossie Velvet Company, Mystic, Conn. Pile fabrics. 284,597; July 7; Serial No. 311,448; published Apr. 21, 1931. Class 42.

Rossie Velvet Company, Mystic, Conn. Pile fabrics. 284,852; July 7; Serial No. 312,267; published Apr. 28, 1931. Class 42.

Roth & Nathan Inc., New York, N. Y. Wool and cotton piece goods. 284,643; July 7; Serial No. 301,364; published Apr. 28, 1931. Class 42.

Royal Manufacturing Company, Toledo, Ohio. Golf clubs. 284,725–7; July 7; Serial Nos. 311,108–10; published Apr. 21, 1931. Class 22.

Royal Manufacturing Company, Toledo, Ohio. Golf clubs, balls, and bags. 284,728; July 7; Serial No. 311,111; published Apr. 21, 1931. Class 22.

Safety Fire Extinguisher Company, The. (See Carlough, Louis E.)

Sandoz Chemical Works, Inc., New York, N. Y. Medicinal preparations. 284,623; July 7; Serial No. 309,944; published Apr. 7, 1931. Class 6.

Sands, Taylor & Wood Company, Somerville, Mass. Wheat flour, tea, and coffee. 284,637; July 7; Serial No. 303,348; published Oct. 7, 1930. Class 46.

Sargon Laboratories, Inc., The, Dayton, Ohio. Hemorrhoidal suppositories. 284,882; July 7; Serial No. 311,285; published Apr. 7, 1931. Class 6.

Schlosser, William J., San Antonio, Tex. Game apparatus. 284,806; July 7; Serial No. 310,578; published Apr. 21, 1931. Class 22.

Schoedinger, F. O., Columbus, Ohio. Gas heaters, automatic gas-heated hot-water systems. 284,565; July 7; Serial No. 309,358; published Apr. 28, 1931. Class 34.

Schrafft, W. F., & Sons Corporation, Boston, Mass. Chocolates and candies. 284,574; July 7; Serial No. 311,791; published Apr. 21, 1931. Class 46.

Schreiber Products Corporation, Buffalo, N. Y. Mayonnaise, salad dressing, and spread for bread. 284,800; July 7; Serial No. 311,700; published Apr. 28, 1931. Class 46.

Schwartz, Joseph, doing business under "Flo-Ruth Farm", Benton Harbor, Mich. Live poultry, dressed poultry, etc. 284,764; July 7; Serial No. 304,584; published Apr. 28, 1931. Class 46.

Schwob, Adolphe, Inc., New York, N. Y. Watches, watch-cases, and watch movements. 284,866; July 7; Serial No. 312,066; published Apr. 28, 1931. Class 27.

Scientific Glass Apparatus Co. (See Geyer, William.)

Scott & Bowne, Bloomfield, N. J. Cod-liver oil. 284,745; July 7; Serial No. 306,838; published Apr. 28, 1931. Class 6.

Sea Oro Laboratory, West Palm Beach, Fla. Ointment. 284,821; July 7; Serial No. 310,777; published Apr. 7, 1931. Class 6.

Seigle, Solomon S., doing business as Ess Ess Laboratories, Washington, D. C. Medicinal preparations. 284,772; July 7; Serial No. 305,288; published Apr. 7, 1931. Class 6.

Selick, C. H., Inc., New York, N. Y. Perfumes and cosmetics. 284,536; July 7; Serial No. 297,878; published June 3, 1930. Class 6.

Seward Wire Company, Inc., Parkersburg, W. Va. Clothes-lines. 284,867; July 7; Serial No. 312,067; published Apr. 21, 1931. Class 7.

Shapleigh Hardware Company, St. Louis, Mo. Footballs, football head harness, shin guards, etc. 284,908; July 7. Class 22.

Sheppard, Harry N., Seattle, Wash. Photographic prints. 284,605; July 7; Serial No. 311,501; published Apr. 21, 1931. Class 38.

Shoe Form Co., Inc., Auburn, N. Y. Toy boats. 284,887; July 7; Serial No. 311,345; published Apr. 21, 1931. Class 22.

Shorman, Joseph, New York, N. Y. Chemical preparation. 284,568; July 7; Serial No. 309,037; published Apr. 21, 1931. Class 4.

Sikorsky, I., College Point, N. Y. Toy airplanes and toy airplane parts. 284,901; July 7. Class 22.

Sikorsky, Igor, College Point, N. Y. Toy airplanes and toy airplane parts. 284,902; July 7. Class 22.

Silverstein Bros, assignor to Star Skirt Co. Inc., New York, N. Y. Outer skirts. 82,919; renewed Aug. 1, 1931.

Simonds Saw & Steel Company, Boston, Mass. Steel. 284,686; July 7; Serial No. 311,891; published Apr. 21, 1931. Class 14.

Smith, George Pratt, Vista, Calif. Fresh limes. 284,900; July 7; Serial No. 311,397; published Apr. 28, 1931. Class 46.

Smith, John A., Company, Milwaukee, Wis. Preparation for the treatment of lumbago, stiff joints and muscles. 284,735; Serial No. 285,888; published Dec. 10, 1929. Class 6.

Smooth-On Manufacturing Company, Jersey City, N. J. Iron compound in plastic form. 84,262; renewed Nov. 21, 1931.
Snow & Nealley Company, Bangor, Me. Axes, cant dogs, pickaroons, etc. 284,687; July 7; Serial No. 311,892; published Apr. 28, 1931. Class 28.
Société Anonyme Jean Patou, Paris, France. Talcum and face powder, lip rouge, etc. 284,660; July 7; Serial No. 311,163; published Apr. 7, 1931. Class 6.
Société Anonyme Jean Patou, Paris, France. Perfumes, toilet water, sachets, etc. 284,708–13; July 7; Serial Nos. 310,950–55; published Apr. 14, 1931. Class 6.
Société Anonyme M. Naef & Cie., Geneva, Switzerland. Perfumes and essential oils. 284,585; July 7; Serial No. 311,627; published Apr. 14, 1931. Class 6.
Société en Nom Collectif Majano, Depo et Barral, Nice, France. Olive oil. 284,593; July 7; Serial No. 311,574; published Apr. 28, 1931. Class 46.
Society of Chemical Industry in Basle, Basel, Switzerland. Local anæsthetic. 284,610; July 7; Serial No. 311,575; published Apr. 14, 1931. Class 6.
Southern Cotton Oil Company, The. (See Wesson, David, assignor.)
Southern Pecan Shelling Co., San Antonio, Tex. Pecans. 284,624; July 7; Serial No. 309,996; published Apr. 21, 1931. Class 46.
Southland Coffee Company, Macon, Ga. Coffee. 284,856; July 7; Serial No. 312,392; published Apr. 28, 1931. Class 46.
Speedler Co., The, (See Roberds, Garfield A.)
Spencer Thermostat Company, Cambridge, Mass. Kits for converting a hot-water heater to a heat-storage system, gas burners, and safety pilots. 284,829; July 7; Serial No. 310,889; published Apr. 28, 1931. Class 34.
Sprague, Warner & Company, Chicago, Ill. Salad dressing. 36,412; renewed May 14, 1931.
Spriano, Alessandro E., doing business as Italian Fruit Caramel Co., Boston, Mass. Candy. 284,868; July 7; Serial No. 312,070; published Apr. 21, 1931. Class 46.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Hand and portable sprayers, pumps, squirt guns, etc. 284,575; July 7; Serial No. 311,797; published Apr. 28, 1931. Class 23.
Standard Brands Incorporated, New York, N. Y. Coffee. 284,801; July 7; Serial No. 311,703; published Apr. 21, 1931. Class 46.
Standard Utilities Corporation of America, New York, N. Y. Machine for making solidified carbon dioxide. 284,561; July 7; Serial No. 311,401; published Apr. 21, 1931. Class 23.
Star Skirt Co. Inc. (See Silverstein Bros.)
Star Watch Case Co., Ludington, Mich. Watchcases. 84,196; renewed Nov. 14, 1931.
Steelblast Abrasives Company, Cleveland, Ohio. Abrasive shot and grit for blasting apparatus. 284,807; July 7; Serial No. 310,579; published Apr. 21, 1931. Class 4.
Sternberg, Haberland, Liebert & Co., Berlin, Germany. Adhesive tape, perforated gummed paper, and bandages. 284,741; July 7; Serial No. 293,796; published Apr. 21, 1931. Class 44.
Stockman Farmer Company, The, Cheyenne, Wyo. Monthly publication. 284,843; July 7; Serial No. 312,018; published Apr. 28, 1931. Class 38.
Straus, Alexander H., New York, N. Y. Paper shrouds. 284,604; July 7; Serial No. 311,494; published Apr. 21, 1931. Class 37.
Szabo, Joseph, Cleveland, Ohio. Preparation for treating rheumatism. 284,550; July 7; Serial No. 300,687; published Apr. 7, 1931. Class 6.
Tablax Company. (See Weiner, Louis I.)
Teletype Corporation, assignor to Teletypesetter Corporation, Chicago, Ill. Typesetting and type-casting apparatus and mechanical control units, perforators, etc. 284,631; July 7; Serial No. 309,576; published Apr. 21, 1931. Class 23.
Teletypesetter Corporation. (See Teletype Corporation, assignor.)
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,061, renewed Oct. 31, 1931.
Theall & Pile, Inc., New York, N. Y. Maltless beverages and extracts and flavors for making the same. 284,851; July 7; Serial No. 312,225; published Apr. 21, 1931. Class 45.
Threlkeld, M. C., San Francisco, Calif., and Stuart, Fla. Fresh fruits. 284,830; July 7; Serial No. 310,891; published Apr. 21, 1931. Class 46.
Tire and Rim Association, Incorporated, The, Cleveland, Ohio. Valves for pneumatic tires. 284,808; July 7; Serial No. 310,581; published Apr. 21, 1931. Class 13.
Todd Company, Inc., The, Rochester, N. Y. Check-protecting and check-signing machines. 284,809; July 7; Serial No. 310,583; published Apr. 21, 1931. Class 23.
Toland & Son, Inc., Baltimore, Md. Saws, knives, etc. 284,682; July 7; Serial No. 311,985; published Apr. 21, 1931. Class 23.
Tower Manufacturing Corporation, Boston, Mass. Oil burners for stoves and ranges. 284,688; July 7; Serial No. 311,895; published Apr. 28, 1931. Class 34.
Trading Stamp Relief Club, Oklahoma City, Okla. Trading stamps. 284,888; July 7; Serial No. 311,348; published Apr. 21, 1931. Class 38.
Trimont Manufacturing Company, Boston, Mass. Pipe-cutter wheels. 284,844; July 7; Serial No. 312,167; published Apr. 21, 1931. Class 23.
Trinity Manufacturing Company, Trinity, Tex. Tool handles. 284,845; July 7; Serial No. 312,168; published Apr. 21, 1931. Class 23.
Tuttle & Bailey Manufacturing Company, New York, N. Y. Heating radiator shields. 284,618; July 7; Serial No. 309,753; published Apr. 21, 1931. Class 34.
Twining, Edward L., doing business as Heat-Engineering-Corp., Des Moines, Iowa. Oil burners. 284,566; July 7; Serial No. 309,448; published Apr. 28, 1931. Class 34.
2 in 1-Shinola-Bixby Corporation, New York, N. Y. Shoe cream, shoe dressings, and leather dressings. 284,722; July 7; Serial No. 311,076; published Apr. 21, 1931. Class 4.
2 in 1-Shinola-Bixby Corporation. (See Bixby, S. M. & Co.)
Union Fork and Hoe Company, The, Columbus, Ohio. Hand agricultural implements. 284,606; July 7; Serial No. 311,495; published Apr. 28, 1931. Class 23.
Union Iron Works, Spokane, Wash. Liners or liner plates. 284,661; July 7; Serial No. 311,164; published Apr. 28, 1931. Class 14.
United States Cutlery Co., Belleville, N. J. Ash trays, ash receivers, cigar and cigarette rests, etc. 284,695; July 7; Serial No. 311,986; published Apr. 28, 1931. Class 8.
Upjohn Company, The, Kalamazoo, Mich. Ointment. 284,831; July 7; Serial No. 310,802; published Apr. 21, 1931. Class 6.
Upson-Walton Company, The, Cleveland, Ohio. Wire rope. 284,683; July 7; Serial No. 311,896; published Apr. 28, 1931. Class 7.
Utica Steam & Mohawk Valley Cotton Mills, Utica, N. Y. Cotton sheets. 284,607; July 7; Serial No. 311,498; published Apr. 21, 1931. Class 42.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Steel bottles, pails, and buckets, etc. 284,655; July 7; Serial No. 305,550; published Apr. 28, 1931. Class 2.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Manure, basic slag, etc. 284,729; July 7; Serial No. 296,156; published Apr. 28, 1931. Class 10.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Metal hose pipes, cast-iron pipes and conduits, etc. 284,730; July 7; Serial No. 296,158; published Apr. 28, 1931. Class 13.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Railway rolling stock. 284,731; July 7; Serial No. 296,159; published Apr. 28, 1931. Class 19.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Machinery and parts of machinery. 284,732; July 7; Serial No. 296,161; published Apr. 28, 1931. Class 23.
Veterinary Magazine Corporation, Chicago, Ill. Periodical. 284,802; July 7; Serial No. 311,710; published Apr. 21, 1931. Class 38.
Vytex Laboratories. (See Moyses, Harry E.)
Walker, Myron L., doing business as Myron L. Walker & Co., New York, N. Y. Medicinal compound. 284,674–5; July 7; Serial Nos. 310,271–2; published Apr. 28, 1931. Class 6.
Wall Chemicals Incorporated, Detroit, Mich. Medicated gas. 284,770; July 7; Serial No. 305,201; published Apr. 28, 1931. Class 6.
Wampole, Henry K., and Company, Incorporated, Philadelphia, Pa. Cod-liver-extract preparation. 284,665; July 7; Serial No. 311,250; published Apr. 21, 1931. Class 6.
Wampole, Henry K., and Company, Incorporated, Philadelphia, Pa. Preparations of cod liver. 284,666; July 7; Serial No. 311,251; published Apr. 21, 1931. Class 6.
Weed Destroyer Co., Inc., Aberdeen, Wash. Liquid for destroying weeds. 284,677–8; July 7; Serial Nos. 310,318–19; published Apr. 14, 1931. Class 6.
Weed Destroyer Co., Inc., Aberdeen, Wash. Liquid for destroying weeds. 284,773; July 7; Serial No. 310,358; published Apr. 14, 1931. Class 6.
Weiner, Louis I., doing business as Tablax Company, New York, N. Y. Medicinal preparation. 284,638; July 7; Serial No. 303,938; published Apr. 28, 1931. Class 6.
Weinstock & Sons, New York, N. Y. Metal hamper for laundry. 284,822; July 7; Serial No. 310,784; published Apr. 21, 1931. Class 2.
Wertz, Edith C., Long Beach, Calif. Pile ointment. 284,714; July 7; Serial No. 310,960; published Apr. 7, 1931. Class 6.
Wesson, David, Montclair, N. J., assignor to The Southern Cotton Oil Company, New York, N. Y. Food product. 284,534; July 7; Serial No. 297,289; published Apr. 21, 1931. Class 46.
Westfield River Paper Company, Inc., Russell, Mass. Embossed glassine paper. 284,849; July 7; Serial No. 312,210; published Apr. 21, 1931. Class 37.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Paint, paint thinner, lacquer, etc. 284,825; July 7; Serial No. 310,846; published Apr. 21, 1931. Class 16.
West Point Manufacturing Company, Langdale, Ala. Bed fabrics and bath, floor, and table fabrics. 284,760; July 7; Serial No. 308,801; published Apr. 21, 1931. Class 42.

Wheeler Paper Corporation, Albany, N. Y. Toilet paper. 284,757; July 7; Serial No. 308,525; published Apr. 21, 1931. Class 37.
White, Robert C., Company, Philadelphia, Pa. Insecticides. 284,888; July 7; Serial No. 311,296; published Apr. 28, 1931. Class 6.
Whittenton Manufacturing Company, Boston, Mass. Woolen piece goods. 284,598; July 7; Serial No. 311,456; published Apr. 21, 1931. Class 42.
Williams, Adrian J., Chicago, Ill. Printed matter. 284,839; July 7; Serial No. 306,428; published Apr. 21, 1931. Class 38.
Wittich, Albert, doing business as Albert Wittich and Co., St. Louis, Mo. Disinfectant, stock dip, insecticide, and a liquid solution. 284,649; July 7; Serial No. 271,584; published Apr. 7, 1931. Class 6.
World's Products Co. (See Laymon, Herman B.)
Wright, Wm. E., & Sons Co., Orange, N. J. Ribbons. 284,765; July 7; Serial No. 304,705; published Oct. 14, 1930. Class 42.
Xetal Safety Glass, Limited, Stapleford, England. Unmounted lens for spectacles and goggles. 284,748; July 7; Serial No. 307,437; published Apr. 28, 1931. Class 26.
Young, L. A., Company, The, Detroit, Mich. Wood and metal golf clubs. 284,907; July 7. Class 22.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Amplifiers, Limited, San Francisco, Calif. The Mega-Coustic Program Reproducer. For Apparatus for Audibly Reproducing Programs. 39,397; July 7.
Burchfield, John P., Clearfield, Pa. Dr. Burchfield's Black Pills. For Pills for the Liver, Blood, Indigestion, and Constipation. 39,398; July 7.
Cherokee Remedy Company, Chicago, Ill. Whitlock's Special. For a Stomachic Astringent and Laxative Tonic. 39,399; July 7.
David, Sam'l J., Philadelphia, Pa. Hawaii. For Vinegar. 39,400; July 7.
General Baking Company, New York, N. Y. Bond Bread Sliced. For Bread. 39,401; July 7.
General Baking Company, New York, N. Y. Bond Bread. For Bread. 39,402; July 7.
Gildehaus, Wulfing & Company, St. Louis, Mo. Old Gold Coffee. For Coffee. 39,403; July 7.
Happiness, G. J., Co. (See Luban, Leo.)
La-Bo-Jel Laboratories, Minneapolis, Minn. La-Bo-Jel. For Vaginal Antiseptic and Prophylactic Jelly. 39,404; July 7.
Luban, Leo, doing business as Happiness, G. J. Co., New York, N. Y. Happiness. For Malt Syrup. 39,405; July 7.
Schnclerson, I., & Sons, Inc., New York, N. Y. Joan Of Arc. For Lingerie. 39,406; July 7.
Shur-Gloss Mfg. Co., Chicago, Ill. Shur-Oil. For Oil. 39,407; July 7.
Standard Brands Incorporated, New York, N. Y. Royal. For Baking Powder. 39,408; July 7.
Steelcote Manufacturing Company, St. Louis, Mo. Furnitint. For Enamel Manufactured Especially for Furniture Finishing. 39,409; July 7.
Union Bag & Paper Corporation, New York, N. Y. Coffee. For Coffee. 39,410; July 7.
Vogan Candy Corporation, Portland, Oreg. The Glorious Fourth. For Taffy Bars. 39,411; July 7.
Wood, J. R. & Sons, Inc., doing business as Wood, Brooklyn, N. Y. Moderne. For Rings. 39,412; July 7.
Wood, J. R. & Sons, Inc., doing business as Wood, Brooklyn, N. Y. Moderniste. For Rings. 39,413; July 7.
Wood, J. R. & Sons, Inc., doing business as Wood, Brooklyn, N. Y. Voguiste. For Rings. 39,414; July 7.
Wood, J. R. & Sons, Inc., doing business as Wood, Brooklyn, N. Y. Styliste. For Rings. 39,415; July 7.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Betterly, Warren, Waterbury, Conn. Atlantic & Pacific Coal. For Anthracite Coal. 13,288; July 7.
Bradley Knitting Company, Delaven, Wis. We Recommended These New Bradleys . . . For Very Special Places In The Sun. For Clothing. 13,289; July 7.
Bradley Knitting Company, Delavan, Wis. A Timely Line To The Snowbound . . . About Some Smart New Bradleys. For Clothing. 13,290; July 7.
Bradley Knitting Company, Delavan, Wis. New Spring Bradleys . . . For your First 'Friday-To-Monday' In The Country. For Clothing. 13,291; July 7.
Favorite Stove & Range Company, The, Piqua, Ohio. The Challenger. For Stoves. 13,292; July 7.
Frank and Company, Milwaukee, Wis. Consistently Superior. For Sausages and Meats. 13,293; July 7.
Frank Tea & Spice Co., The, Cincinnati, Ohio. Jumbo. For Peanut Butter. 13,294; July 7.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adam, J. N., & Co., Buffalo, N. Y. Candy. 315,079; July 7. Class 46.
Ajax Hosiery Mills, Phoenixville, Pa. Stockings. 311,768; July 7. Class 39.
Alcoa Ore Company, East St. Louis, Ill. Alumina, aluminum fluorides, calcium oxide, etc. 313,625; July 7. Class 6.
Altrogge, Harry, Dallas, Tex. Shampoo. 314,832; July 7. Class 6.
American Chemical Works, Inc., Covington, Ky. Cleaning compound. 314,264; July 7. Class 4.
American Lecithin Corporation, Wilmington, Del., and Atlanta, Ga. Phosphatide or lecithin and compositions containing same. 313,726; July 7. Class 6.
American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Insulated wire and cables. 314,833–4; July 7. Class 21.
American Thermos Bottle Company, The, Norwich, Conn. Vacuum bottles. 314,442; July 7. Class 2.
Anderson, V. D., Company, The, Cleveland, Ohio. Steam traps. 314,078; July 7. Class 13.
Anti-Cept Co. (See Goldsmith, Joseph, jr.)
Appelbaum, Jack, New York, N. Y. Coats and neck pieces. 314,265; July 7. Class 39.
Atlanta Flour & Grain Company, Incorporated, doing business as Puritan Mills, Atlanta, Ga. Flour. 311,859; July 7. Class 46.
Autogiro Company of America, Wilmington, Del., and Philadelphia, Pa. Publication. 314,977; July 7. Class 38.
B & P Company, The, Cleveland, Ohio. Adhesive sheet or wafer. 309,018; July 7. Class 44.
Barr & Creelman Co., Rochester, N. Y. Boiler expansion tanks, gasoline blow torches, water storage heaters and tanks, etc. 314,035; July 7. Class 34.
Bates, Thompson, Inc., New York, N. Y. Hats. 314,308; July 7. Class 39.
Benn, Joseph, Corporation, Greystone, R. I. Yarns. 315,127; July 7. Class 43.
Best & Co., Inc., New York, N. Y. Hats, caps, and shoes, etc. 313,765; July 7. Class 39.
Bob, H. D., Company Inc., New York, N. Y. Shirts, blouses, and underwear, etc. 314,142; July 7. Class 39.
Böhme, H. Th., A. G., Chemnitz, Germany. Soap preparations. 314,550; July 7. Class 4.
Boston Floral Supply & Snyder Co. Inc., Boston, Mass. Liquid nail polishes, nail polish removers, and liquid cuticle removers. 314,267; July 7. Class 6.
Brillo Manufacturing Co., Brooklyn, N. Y. Pressing pads. 314,945; July 7. Class 24.
Brown Shoe Company, Inc., St. Louis, Mo. Shoes. 314,682; July 7. Class 39.
Burroughs, Incorporated, Los Angeles, Calif. Publication. 315,029; July 7. Class 38.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Carbolac Corporation of America, Parkersburg, W. Va. Chemical preparation. 314,892; July 7. Class 6.
Carbon Products Company, The, Lancaster, Ohio. Dry cells and batteries. 313,328; July 7. Class 21.
Cattell, J. McKeen, doing business as The Science Press, New York, N. Y. Magazine. 314,446; July 7. Class 38.
Central Press Association, Inc., New York, N. Y. Newspaper section. 314,893; July 7. Class 38.
Chameides, Samuel, doing business as Nu Glow Co., Glendale, Long Island, N. Y. Nail polish and liquid nail polish remover. 302,991; July 7. Class 6.
Clark, Burt J., doing business as Volx D'Or, South Minneapolis, Minn. Medicated chewing gum and tablets. 312,840; July 7. Class 6.
Clark-Cutler-McDermott Company, Franklin, Mass. Needled felt. 312,546; July 7. Class 50.
Cleveland Graphite Bronze Company, The, Cleveland, Ohio. Bearings. 314,684; July 7. Class 23.
Closet Shop, The. (See Herzog, Mrs. George.)
Cobbs, Ansalem O., doing business as Cobbs Mfg. Co., Des Moines, Iowa. Composition for stopping leaks of internal combustion engine radiators. 313,831; July 7. Class 6.
Cohen, Joseph H., & Sons, Vanity Clothes, Inc., New York, N. Y. Suits. 314,790; July 7. Class 39.
Colgate-Palmolive-Peet Company, Chicago, Ill. Dental cream. 314,040; July 7. Class 6.
Colorado Fuel and Iron Company, The, Denver, Colo. Wire fence. 315,034; July 7. Class 13.
Columbia River Packers Association, Inc., Astoria, Oreg. Canned salmon. 295,068; July 7. Class 46.
Commonwealth Shoe & Leather Company, Whitman, Mass. Boots and shoes. 311,825; July 7. Class 39.
Cortez Cigar Co., Savannah, Ga. Cigars. 315,035; July 7. Class 17.
Cox, Irving E., Los Angeles, Calif. Maltless beverages. 314,398; July 7. Class 45.
Crown Cap Manufacturing Company, Inc., Dover, Del., and Brooklyn, N. Y. Bottles, caps, and stoppers. 312,325; July 7. Class 50.
Cutler-Hammer, Inc., Milwaukee, Wis. Electrical apparatus, machines, and supplies, etc. 310,798; July 7. Class 21.
Cutler-Hammer, Inc., Milwaukee, Wis. Starting switches. 313,075; July 7. Class 21.
Dampier, R. H., & Co., San Jose, Calif. Rotating shelf structures. 314,101; July 7. Class 32.
Daniel Brothers Company, Atlanta, Ga. Clothing. 314,640; July 7. Class 39.
David-& Blum Inc., New York, N. Y. Gloves. 314,275; July 7. Class 39.
Davis & Geck, Inc., Brooklyn, N. Y. Surgical skin sutures. 313,772; July 7. Class 44.
Day & Night Water Heater Co., Ltd., Monrovia, Calif. Water coolers. 315,076; July 7. Class 31.
Degner Shoe Mfg. Company, Cudahy, Wis. Boots and shoes. 314,232; July 7. Class 39.
Delta Electric Company, Marion, Ind. Electric lamps. 314,686; July 7. Class 21.
Denton, H. B., & Co., Mount Carmel, Ill. Liquid skin cleaner, face cream, and vanishing cream, etc. 310,822; July 7. Class 6.
Detroit Daily Mirror, Inc., Detroit, Mich. Newspaper. 314,400; July 7. Class 38.
Dick, A. B., Company, Chicago, Ill. Duplicating machine ink. 311,185; July 7. Class 11.
Draun, Simon, doing business as Draun Laboratories, Baltimore, Md. Preparation for the extermination of rats and mice. 314,401; July 7. Class 6.
Duplan Silk Corporation, New York, N. Y. Textile fabrics. 314,402; July 7. Class 42.
Eastern Research Laboratories, Baltimore, Md. Astringent powder. 314,104; July 7. Class 6.
Enso-Gutzeit Osakeyhtiö Kotka, Finland. Paper. 302,156; July 7. Class 37.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. 315,309; July 7. Class 22.
Ephedrine Company, The, University City, Mo. Preparation for relief of catarrh, nasal sinus trouble, hay fever, etc. 314,491–2; July 7. Class 6.
Federal Knitting Mills Company, The, Cleveland, Ohio. Bathing suits, sweaters, Jersey shirts, etc. 314,281; July 7. Class 39.
Federal Mill, Inc., Lockport, N. Y. Wheat flour. 315,024; July 7. Class 46.
Ferguson, Delbert, Des Moines, Iowa. Frozen confections. 314,493; July 7. Class 46.
Foraline Products Inc., Circleville, Ohio. Depilatory compound. 313,962; July 7. Class 6.
Foremost Sportswear Inc., New York, N. Y. Dresses, skirts, and blouses, etc. 310,641; July 7. Class 39.
Foster-Grant Co. Inc., Leominster, Mass. Combs, wavers, and hair pins, etc. 304,097; July 7. Class 40.
Foster-Grant Co. Inc., Leominster, Mass. Chokers, pendants, brooches, etc. 304,099; July 7. Class 28.
Foster-Grant Co. Inc., Leominster, Mass. Bridge pads, bridge pencil cases, photo albums, etc. 304,100; July 7. Class 37.
Fresh Air Chair Company, Rochester, N. Y. Household chairs. 314,496; July 7. Class 32.
Fundis, William B., doing business as Sallie Sweets, Pittsburgh, Pa. Candy. 311,724; July 7. Class 46.
Furry, Mrs. Gertrude S., Valdosta, Ga., and Lakeland, Fla. Fresh oranges and grapefruit. 313,898; July 7. Class 46.
General Dyestuff Corporation, New York, N. Y. Dyes and dyestuffs. 314,201; July 7. Class 6.
General Fireproofing Company, The, Youngstown, Ohio. Safes, note cases, etc. 314,692; July 7. Class 25.
Gernsback Publications, Inc., New York, N. Y. Publication. 314,497; July 7. Class 38.
Gibberman Bros. & Co., Chicago, Ill. Coats, vests, trousers, and overcoats. 299,438; July 7. Class 39.
Globe-Union Mfg. Co., Milwaukee, Wis. Golf clubs, roller skates, and ice skates. 314,237; July 7. Class 22.
Goedrich Chemical Company, Park Ridge, N. J. Disinfectant. 314,042; July 7. Class 6.
Golden Eagle Milling Co., Petaluma, Calif. Dairy and poultry foods. 297,189; July 7. Class 46.
Goldsmith, Joseph, jr., doing business as Anti-Cept Co., Los Angeles, Calif. Antiseptic douche powder. 314,409; July 7. Class 6.
Goodier, Elwood J., doing business as Universal Laboratories, Dallas, Tex. Astringents, astringent cerates, bleach creams, beauty creams, etc. 314,490; July 7. Class 6.
Grant, W. T., Company, Lynn, Mass., and New York, N. Y. Sanitary napkins. 313,781; July 7. Class 44.
Greater New York Brewery, Inc., The, New York, N. Y. Malt cereal beverage. 314,500; July 7. Class 48.
H. Th. Böhme A. G., Chemnitz, Germany. Chemical dye aids. 314,546–9; July 7. Class 6.
Haas, John I., Incorporated, Washington, D. C. Hops. 314,449; July 7. Class 1.
Haggard, Via. B., Blackwell, Okla. Medicinal preparation. 314,758; July 7. Class 6.
Hampden Brewing Company, Chicopee, Mass. Malt beverages. 309,562; July 7. Class 48.
Hayes Corporation, The, Michigan City, Ind. Combustion instruments. 314,003; July 7. Class 26.
Heliotone Reproduction Service, Chicago, Ill. Reproductions in the form of prints. 314,849; July 7. Class 38.
Herzog, Mrs. George, doing business as The Closet Shop, New York, N. Y. Electric lighting fixtures. 283,333; July 7. Class 21.
Horii, Shinjiro, Tokyo, Japan. Multigraphs, rotary printing machines, and parts thereof. 312,006; July 7. Class 23.
Horii, Shinjiro, Tokyo, Japan. Stencil sheets. 312,007; July 7. Class 37.
Howe & French, Inc., Boston, Mass. Adhesive liquid cement. 315,143; July 7. Class 5.
Howell, H. R. Publishing Co., Inc., New York, N. Y. Periodical. 314,617; July 7. Class 38.
Howlett & Hockmeyer Co., Inc., New York, N. Y. Textile fabrics. 314,761; July 7. Class 42.
Hubbard, Arthur E., Fort Worth, Tex. Golf tees. 314,697; July 7. Class 22.
Hubenthal, Dr. Charles G., doing business as The Lopex Remedies and Products Co., Minneapolis, Minn. Relief and treatment of gall stones and catarrhal jaundice. 313,963; July 7. Class 6.
Iliff-Bruff Chemical Company, The, Hoopeston, Ill. Anhydrous calcium sulphate. 314,314; July 7. Class 6.
Indianapolis Medical Glass Works. (See Schnorr, William.)
International Newsreel Corporation, New York, N. Y. Motion picture films. 314,621; July 7. Class 26.
International Newsreel Corporation, New York, N. Y. Newspaper section. 314,763; July 7. Class 38.
International Projector Corporation, New York, N. Y. Cameras and parts thereof. 313,266; July 7. Class 26.
Iowa Soap Company, Burlington, Iowa. Toilet soap. 314,619; July 7. Class 4.
Jaburg Brothers, Inc., New York, N. Y. Electrical machines and apparatus. 312,649; July 7. Class 21.
Jensen, James M., Blackfoot, Idaho. Medicinal preparation. 314,004; July 7. Class 6.
Jerolleman, S., New Orleans, La. Flour. 309,169; July 7. Class 46.
Jewel-Brite Co., The. (See Zeitz, F. Otto.)
Johnson Educator Food Company, Cambridge, Mass. Biscuits. 315,147–8; July 7. Class 46.
Johnstown Tribune Publishing Company, The, Johnstown, Pa. Newspaper column. 313,922; July 7. Class 38.
Kaczander & Daroczi, New York, N. Y. Medicated candy lozenges. 311,381; July 7. Class 6.
Kagan, Jacob J., Los Angeles, Calif. Finger rings and mountings therefor. 313,550; July 7. Class 28.
Kambisos, John E., San Francisco, Calif. Cough drops. 313,085; July 7. Class 6.
Keen Manufacturing Corporation, New York, N. Y. Pads for use in permanent hair waving. 314,240; July 7. Class 44.
Kenny, C. D., Company, Baltimore, Md. Coffee. 315,267; July 7. Class 46.
Kitchlew, Mohammed I., Chicago, Ill. Incense. 307,979; July 7. Class 6.
Klaner Manufacturing Company, Dubuque, Iowa. Snow plows. 310,177; July 7. Class 23.

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Klosters Aktienbolag, Langshyttan, Sweden. Steel. 296,350; July 7. Class 14.
Kozlowski, Zygmunt, New York, N. Y. Preparation for restoring natural color to gray hair. 314,502; July 7. Class 6.
Kur Trier G. m. b. H., Amshausen, near Steinhagen, Germany. Medicinal preparation. 308,018; July 7. Class 6.
La Cle Reve. (See Seligman, Irving.)
Lac-R-Glo Products Co., Seattle, Wash. Transparent refinishing liquid. 312,283–4; July 7. Class 16.
Lawton, Stanley W., Miami, Fla. Miniature ten-pin golf bowling game. 310,544; July 7. Class 22.
Leggett, Francis H., & Company, New York, N. Y. Sandwich spreads. 313,603; July 7. Class 46.
Letter Book Co., The, Chicago, Ill. Publication. 315,270; July 7. Class 38.
Leyse Aluminum Company, Kewaunee, Wis. Electric percolators. 311,242; July 7. Class 21.
Lopex Remedies and Products Co., The. (See Hubenthal, Dr. Charles G.)
Lucky Hit Company, The, Hawarden, Iowa. Preparation for the treatment of eczema. 312,521; July 7. Class 6.
Lyons Silk Mfg. Co. Inc., New York, N. Y. Rayon crepe. 313,377; July 7. Class 42.
Mackenzie, Harry, Jamaica Plain (Boston), Mass. Rompers and play suits. 313,848; July 7. Class 39.
Mahzel Limited, London, England. Jewelry. 313,552; July 7. Class 28.
Majestic Leather Goods Co., Inc., New York, N. Y. Travelling bags and luggage, etc. 310,731; July 7. Class 3.
Mannings, Inc., doing business as Mannings, San Francisco, Calif. Tea. 300,072; July 7. Class 46.
Marquardt Company, Milwaukee, Wis. Davenports and beds. 314,506; July 7. Class 32.
Marvel Company, The, New Haven, Conn. Hygienic powders and suppositories. 311,580; July 7. Class 6.
Marvel Company, The, New Haven, Conn. Syringes. 311,531; July 7. Class 44.
May Hosiery Mills, Nashville, Tenn. Hosiery. 314,622; July 7. Class 39.
McKesson & Robbins, Incorporated, Bridgeport and Fairfield, Conn. Tooth brushes. 313,716; July 7. Class 29.
McLaren-Consolidated Cone Corporation, Dayton, Ohio. Ice cream cones. 313,789; July 7. Class 46.
McNaught Syndicate, Inc., The, New York, N. Y. Comic strips. 315,378–9; July 7. Class 38.
McNeil Boiler Company, The, Akron, Ohio. Traction devices for vehicles. 311,002; July 7. Class 28.
Medico Products Co. (See Para Drug and Rubber Company, The.)
Merrelete Remedies, Chatham, Ontario, Canada. Medicine. 315,155; July 7. Class 6.
Metalife, Inc., St. Louis, Mo. Motor lubricating oils. 313,249; July 7. Class 15.
Metzger, George P., New York, N. Y. Newspaper and/or magazine columns. 314,958; July 7. Class 38.
Miller Products Company, Portland, Oreg. Insecticide preparation. 312,678; July 7. Class 6.
Mint-Julep Chewing Gum Company, The. (See Mueller, Elsa G.)
Monument Nut Co. (See Waulters, Ervin E.)
Mueller Brass Co., Port Huron, Mich. Solder. 315,005; July 7. Class 14.
Mueller, Elsa G., doing business as The Mint-Julep Chewing Gum Company, Washington, D. C. Candy tablets. 314,711; July 7. Class 46.
National Aniline & Chemical Company, Inc., New York, N. Y. Dyes, dyestuffs, and dye colors. 313,051; July 7. Class 6.
National League of Consumers, Michigan City, Ind. Merchants' trade discount in book form. 314,503; July 7. Class 38.
Norwich Pharmacal Company, The, Norwich, N. Y. Internal lubricants, laxatives, and preparations for treating constipation. 312,957; July 7. Class 6.
Nu Glow Co. (See Chameides, Samuel.)
Nunnally Company, The, Atlanta, Ga. Candies. 314,510; July 7. Class 46.
O-C Manufacturing Company, The, Jersey City, N. J. Bathing suit belts, athletic headbands, polo shirts, etc. 306,064; July 7. Class 39.
Ohio and Michigan Paper Company, The, Toledo, Ohio. Wrapping, toilet, bond and book paper and correspondence and mailing envelopes. 303,777; July 7. Class 37.
Oil Well Supply Company, assignor to Oil Well Supply Company, Pittsburgh, Pa. Machinery and tools used in well drilling. 292,823; July 7. Class 23.
Olympia Knitting Mills, Inc., Olympia, Wash. Swimming suits and sweaters. 314,712; July 7. Class 39.
Olympic Forest Products Company, Port Angeles, Wash. Wood pulp. 315,008–10; July 7. Class 1.
Paddy's Pup Co., Los Angeles, Calif. Toy animals. 314,391; July 7. Class 22.
Panther Rubber Manufacturing Company, Stoughton, Mass. Rubber heels. 307,986; July 7. Class 39.
Para Drug and Rubber Company, The, doing business as Medico Products Co., Cleveland, Ohio. Medicinal compound. 308,385; July 7. Class 6.

Parker Pen Company, The, Janesville, Wis. Writing ink. 301,123; July 7. Class 11.
Perlman Brothers, Savanah, Ga. Shoes, dresses, and suits. 314,578; July 7. Class 39.
Petrosylla Laboratories. (See Saprin, Max M.)
Pfeiffer, S., Mfg. Co., St. Louis, Mo. Medicinal preparation. 313,866; July 7. Class 6.
Phillips & Uppercu, New York, N. Y. Games. 311,696; July 7. Class 22.
Pierce, Robert J., Inc., New York, N. Y. Prophylactic rubber, tissue, and membranous articles. 314,963; July 7. Class 44.
Premier Products Corp., Ltd., Los Angeles, Calif. Cleansing powder. 314,771; July 7. Class 6.
Provident Chemical Works, St. Louis, Mo. Compound embodying calcium sulphate anhydrous and calcium phosphate pyro. 314,315; July 7. Class 6.
Puritan Mills. (See Atlanta Flour & Grain Company, Incorporated.)
Putnam Spinners Inc., Putnam, R. I. Rayon yarn. 314,220; July 7. Class 43.
Richmond Glove Corporation, Richmond, Ind. Gloves. 314,718; July 7. Class 39.
Riggs, Robert L., Daytona Beach, Fla. Canned juices of grapefruit and oranges. 314,297; July 7. Class 46.
Riley Brothers (Halifax) Limited, Halifax, England. Toffee. 313,610; July 7. Class 46.
Robertson & Co., Inc., Cleveland, Ohio. Kilns. 314,249; July 7. Class 34.
Rock Island Refining Company, Duncan, Okla. Gasoline. 313,611; July 7. Class 15.
Ronan, T. J., Co. Inc., Brooklyn, N. Y. Preparation for stamping fabrics containing a dry color. 313,095; July 7. Class 11.
Ross Manufacturing Company, Kansas City, Mo. Boiler cleaning compound. 312,201; July 7. Class 6.
Russ Manufacturing Company, Cleveland, Ohio. Soda fountains and mechanical carbonators. 312,318; July 7. Class 28.
S-M-S Herb-Nu Remedies. (See Schy-Man-Ski & Sons.)
Sallie Sweets. (See Fundis, William B.)
Saprin, Max M., doing business as Petrosylla Laboratories, Philadelphia, Pa. Laxative. 314,077; July 7. Class 6.
Savage Company, W. J., Incorporated, Knoxville, Tenn. Bag closing machines. 314,212; July 7. Class 23.
Schnorr, William, doing business as Indianapolis Medical Glass Works, Indianapolis, Ind. Glass ampoules. 315,161; July 7. Class 33.
Schutter Johnson Candy Company Inc., Chicago, Ill. Candy. 315,283; July 7. Class 46.
Schy-Man-Ski, Helen, & Sons, doing business as S-M-S Herb-Nu Remedies, Chicago, Ill. Imitation coffee. 301,066; July 7. Class 46.
Science Press, The. (See Cattell, J. McKeen.)
Scott and Fetzer Company, The, Cleveland, Ohio. Carpet sweepers and suction cleaners. 300,368; July 7. Class 23.
Seligman, Irving, doing business as La Cle Reve, New York, N. Y. Face and talcum powder, perfume, nail polish, etc. 313,939; July 7. Class 6.
Seneca Food Products Corporation, Utica, N. Y. Malt syrup. 314,130; July 7. Class 46.
Seymour Troy & Company, Inc., Brooklyn, N. Y. Shoes. 314,581; July 7. Class 39.
Shapapzian, Nazik, Washington, D. C. Medicinal ointment. 315,212; July 7. Class 6.
Silver-Marshall, Inc., Chicago, Ill. Radio receiving sets, kits, electric pick-ups for phonographs, etc. 314,660; July 7. Class 21.
Smith, Kline & French Laboratories, Philadelphia, Pa. Medicinal composition. 310,230; July 7. Class 6.
Snowball Company, The, St. Louis, Mo. Shaving cream. 305,951; July 7. Class 4.
Societe Anonyme Jean Paton, Paris, France. Perfumes, toilet water, face and talcum powder, etc. 314,082; July 7. Class 6.
Soda Lunch Equipment Co., Inc., New York, N. Y. Ginger ale. 283,764; July 7. Class 45.
Spadaro, Giovanni, Philadelphia, Pa. Mouth wash. 299,233; July 7. Class 6.
Spear Folks, The, Portland, Me. Candy. 313,683; July 7. Class 46.
Spooner, Inc., New York, N. Y. Face and body powders, talcum powders, perfumes, toilet waters, etc. 314,517; July 7. Class 6.
Standard Brands Incorporated, New York, N. Y. Coffee. 314,518; July 7. Class 46.
Standard Brands Incorporated, New York, N. Y. Coffee and tea. 314,662; July 7. Class 46.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Animal fly sprays, insecticides, repellents. 314,430; July 7. Class 6.
Stanhope Laboratories. (See Unger, Charles G.)
Stern, I. & Co., New York, N. Y. Alloy. 314,933; July 7. Class 14.
Sternau, Bernhard, Islip Terrace, N. Y. Game. 314,587; July 7. Class 22.
Stikarofsky, Frank, Norwood, Mass. Hand cream, catarrh jelly, and face powder, etc. 299,527; July 7. Class 6.
Stivers, Theo. Milling Company, Rome, Ga. Wheat flour. 314,435; July 7. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Sunrayed Limeshell Products Company, Boston, Mass. Poultry grit and oyster shells. 309,180; July 7. Class 1.
Swift and Company, Chicago, Ill. Sausage. 315,224; July 7. Class 46.
Taylor-Long Company, Winston-Salem, N. C. Maltless beverages and the ingredients for making the same. 310,666; July 7. Class 45.
Technical Lubricants Company, Kansas City, Mo. Lubricating oils, greases, compounds. 313,685; July 7. Class 15.
Terhune, Yearance & Wolff, Inc., New York, N. Y. Woolen fabrics in the piece. 314,383; July 7. Class 42.
Theatre Service Corporation, New York, N. Y. Moving picture films. 309,790; July 7. Class 26.
Timpanelli Shoe Company, Inc., New York, N. Y. Boots and shoes. 295,582; July 7. Class 39.
Unger, Charles G., doing business as Stanhope Laboratories, Brooklyn, N. Y. Deodorant. 304,392; July 7. Class 6.
Unger, Charles G., doing business as Stanhope Laboratories, Brooklyn, N. Y. Shampoo. 304,393; July 7. Class 6.
Unger, Charles G., doing business as Stanhope Laboratories, Brooklyn, N. Y. Dusting face talcum and toilet powder. 305,633; July 7. Class 6.
Unger, Charles G., doing business as Stanhope Laboratories, Brooklyn, N. Y. Liquid and tincture of green soap. 305,635; July 7. Class 6.
United Elastic Corporation, East Hampton, Mass. Elastic webbing. 314,665; July 7. Class 42.
United States Register Co., Battle Creek, Mich. Grilles or registers. 294,097; July 7. Class 34.
United States Rubber Company, New York, N. Y. Raincoats. 311,402; July 7. Class 39.
United States Rubber Company, New York, N. Y. Inner soles. 314,629; July 7. Class 39.
Universal Laboratories. (See Goodier, Elwood J.)
Visual Demonstration System, Inc., Buffalo, N. Y. Apparatus for projecting still pictures from films. 314,258; July 7. Class 26.
Vitamont Sales Company, Butte, Mont. Cat food. 314,666; July 7. Class 46.
Vitamont Sales Company, Butte, Mont. Fox food. 314,667; July 7. Class 46.
Vitamont Sales Company, Butte, Mont. Fish food. 314,668; July 7. Class 46.
Vogel, Joseph A., Wilmington, Del. Cards and folders. 314,780; July 7. Class 37.
Voix D'Or. (See Clark, Burt J.)
Wadhams Oil Company, Milwaukee, Wis. Lubricating oils. 313,569; July 7. Class 15.
Ware, Elmira, Brooklyn, N. Y. Hair dressing preparation. 314,522; July 7. Class 6.
Waulters, Ervin E., doing business as Monument Nut Co., Ballston, Va. Shelled nuts and prepared sandwiches. 313,985; July 7. Class 46.
Wells, Chandler, Buffalo, N. Y. Tow frame. 314,219; July 7. Class 19.
Wilkinson, Gaddis & Co., Newark, N. J. Vinegar, salad oil, and tomato catsup, etc. 314,259; July 7. Class 46.
Williamson, Hiram L., Springfield, Ill. Periodical. 314,477; July 7. Class 38.
Wilson Rubber Company, The, Canton, Ohio. Rubber gloves. 314,882; July 7. Class 44.
Wilson-Western Sporting Goods Company, Chicago, Ill. Golf clubs. 294,371; July 7. Class 22.
Woods, H. A. Inc., Evansville, Ind. Complexion powders, cleansing cream, and tissue cream, etc. 312,818; July 7. Class 6.
Wright, E. T., & Company, Inc., Rockland, Mass. Boots and shoes. 306,914; July 7. Class 39.
Wright, S. B., doing business as Wright Products, Chicago, Ill. Shoe polisher. 315,074; July 7. Class 29.
Zeitz, F. Otto, doing business as The Jewel-Brite Co., Chicago, Ill. Preparation for cleaning jewelry. 313,951; July 7. Class 4.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 2

Bottles, pails, and buckets, etc., Steel. Vereinigte Stahlwerke Aktiengesellschaft. 284,655; July 7; Serial No. 305,550; published Apr. 28, 1931.
Boxes and cartons and blanks for making the same, Jute board. National Metal Edge Box Company. 284,733; July 7; Serial No. 294,431; published Apr. 28, 1931.
Buckets, Fire. L. E. Carlough. 284,676; July 7; Serial No. 310,284; published Apr. 21, 1931.
Cans, Covered. Master Metal Products Inc. 284,752; July 7; Serial No. 308,119; published Apr. 28, 1931.
Cases, Wooden packing. Grasselli Chemical Company. 284,633; July 7; Serial No. 302,219; published Apr. 21, 1931.
Hamper, Metal. Weinstock & Sons. 284,822; July 7; Serial No. 310,784; published Apr. 21, 1931.
Sacks, Woven. Bemis Bro. Bag Company. 284,846; July 7; Serial No. 312,171; published Apr. 28, 1931.

CLASS 4

Abrasive shot and grit for blasting apparatus. Steelblast Abrasives Company. 284,807; July 7; Serial No. 310,579; published Apr. 21, 1931.
Chemical preparation. J. Shorman. 284,568; July 7; Serial No. 309,037; published Apr. 21, 1931.
Cream, shoe dressings, and leather dressings, Shoe. 2 In 1-Shinola-Bixby Corporation. 284,722; July 7; Serial No. 311,076; published Apr. 21, 1931.
Polish, Shoe. S. M. Bixby & Co. 84,074; renewed Nov. 7, 1931.
Soap. Colgate-Palmolive-Peet Company. 284,608; July 7; Serial No. 311,511; published Apr. 28, 1931.
Soap. Gordon-Allen Ltd. 284,755; July 7; Serial No. 308,438; published Apr. 21, 1931.
Soap. Haskins Bros. & Company. 83,646; renewed Oct. 3, 1931.
Soap. I. Rokeach & Sons. 82,261; renewed June 13, 1931.
Soap, Liquid. Hillyard Chemical Company. 284,716; July 7; Serial No. 310,999; published Apr. 7, 1931.
Soap, soap flakes, and sand soap. Preservene Proprietary Limited. 284,596; July 7; Serial No. 311,445; published Apr. 28, 1931.
Soap, Toilet. Colgate-Palmolive-Peet Company. 284,609; July 7; Serial No. 311,514; published Apr. 21, 1931.

CLASS 6

Aluminum acetate suspension for external treatment. B. Eidinger. 284,635; July 7; Serial No. 302,077; published Apr. 7, 1931.
Anæsthetic, Local. Society of Chemical Industry in Basle. 284,610; July 7; Serial No. 311,575; published Apr. 14, 1931.
Antiseptic solutions. May Department Stores Company. 284,747; July 7; Serial No. 307,323; published Apr. 14, 1931.
Astringents, astringent cerates, bleach creams, etc. Doraldina, Inc. 284,653; July 7; Serial No. 283,439; published Apr. 29, 1930.
Bismuth sodium gluconate colloidal preparation. Drug Products Co. 284,805; July 7; Serial No. 310,557; published Apr. 21, 1931.
Bleaching or stripping agent or dye remover. P. E. Norris. 284,583; July 7; Serial No. 311,621; published Apr. 28, 1931.
Bluing and neutralizing compound. H. Kohnstamm & Co. 284,540; July 7; Serial No. 298,999; published July 22, 1930.
Cement, Radiator. F. J. Hagerling. 284,630; July 7; Serial No. 300,561; published Apr. 7, 1931.
Chemical compositions. I. G. Farbenindustrie Aktiengesellschaft. 284,662; July 7; Serial No. 311,212; published Apr. 28, 1931.
Chemical of medicinal value, Organic. Osten Chemical Corporation. 284,667–8; July 7; Serial Nos. 310,064–5; published Apr. 7, 1931.
Chemical preparation for preserving rope, cord, twine, etc., and as a waterproofing material. H. A. Montgomery Co. Inc. 284,670; July 7; Serial No. 310,182; published Apr. 14, 1931.
Chemical products. Cataract Chemical Company. 284,701; July 7; Serial No. 311,558; published Apr. 21, 1931.
Cod-liver extract preparation. Henry K. Wampole and Company. 284,665; July 7; Serial No. 311,250; published Apr. 21, 1931.
Cod liver oil. Scott & Bowne. 284,745; July 7; Serial No. 306,838; published Apr. 28, 1931.
Composition for promoting the growth of the hair. E. Parr. 284,671; July 7; Serial No. 310,199; published Apr. 21, 1931.
Compound for stopping leaks in boilers. Ross Manufacturing Company. 284,768; July 7; Serial No. 304,737; published Apr. 7, 1931.
Creams, Finishing and vanishing. Bereza Products Ltd. 284,646; July 7; Serial No. 302,175; published Apr. 7, 1931.
Deodorant. Auralite Manufacturing Company. 284,811; July 7; Serial No. 310,631; published Apr. 14, 1931.
Disinfectant, stock dip, insecticide, and a liquid solution. A. Wittich. 284,649; July 7; Serial No. 271,584; published Apr. 7, 1931.
Dissolvents, lactic acid latates, etc. Byk-Guldenwerke Chemische Fabrik Aktiengesellschaft. 284,546; July 7; Serial No. 299,485; published Aug. 12, 1930.

Dyestuffs and intermediates used in the preparation of dyestuffs, etc., Coal-tar. Newport Company. 284,532; July 7; Serial No. 296,667; published Apr. 14, 1931.
Dyestuffs, lakes, and chemical products. Geigy Company. 284,692; July 7; Serial No. 311,872; published Apr. 21, 1931.
Fumigants. Kay-Fries Chemicals, Inc. 284,814; July 7; Serial No. 310,680; published Apr. 21, 1931.
Germicides and insecticides. Newton, Chambers & Co. Limited. 83,937; renewed Oct. 24, 1931.
Insecticide. Moonshine Chemical Co. 284,898; July 7; Serial No. 311,393; published Apr. 28, 1931.
Insecticides. Robert C. White Company. 284,883; July 7; Serial No. 311,296; published Apr. 28, 1931.
Laxative embodied in article of food. C. & C. Company. 284,893; July 7; Serial No. 311,363; published Apr. 7, 1931.
Lip sticks. Pair-O'-Lipstik Incorporation. 284,820; July 7; Serial No. 310,774; published Apr. 7, 1931.
Liquid for destroying weeds. Weed Destroyer Co. 284,677–8; July 7; Serial Nos. 310,318–9; published Apr. 14, 1931.
Liquid for destroying weeds. Weed Destroyer Co. 284,773; July 7; Serial No. 310,358; published Apr. 14, 1931.
Liquid preparation. Drug Products Co. 284,558; July 7; Serial No. 311,424; published Apr. 7, 1931.
Lotion and bleach, and hair tonic, Skin. P. W. Byrd, Ph. C. Research Laboratories. 284,669; July 7; Serial No. 310,160; published Apr. 21, 1931.
Lotion, Skin. Ho-Ro-Co Manufacturing Company. 284,828; July 7; Serial No. 310,867; published Apr. 7, 1931.
Medicated gas. Wall Chemicals Incorporated. 284,770; July 7; Serial No. 305,201; published Apr. 28, 1931.
Medicinal compound. M. L. Walker. 284,674–5; July 7; Serial Nos. 310,271–2; published Apr. 28, 1931.
Medicinal germicide or disinfectant. Osten Chemical Corporation. 284,626; July 7; Serial No. 310,063; published Apr. 14, 1931.
Medicinal preparation. C. E. Park. 284,654; July 7; Serial No. 305,537; published Dec. 2, 1930.
Medicinal preparation. L. I. Weiner. 284,638; July 7; Serial No. 303,938; published Apr. 28, 1931.
Medicinal preparations. Sandoz Chemical Works, Inc. 284,623; July 7; Serial No. 309,944; published Apr. 7, 1931.
Medicinal preparations. S. S. Seigle. 284,772; July 7; Serial No. 305,288; published Apr. 7, 1931.
Medicine. Clayola Medicine Co. 284,616; July 7; Serial No. 309,724; published Apr. 7, 1931.
Medicines, Animal. Polk Miller Products Corporation. 284,640; July 7; Serial No. 240,214; published Mar. 15, 1927.
Mouth-wash. Grumme & Son. 82,147; renewed June 6, 1931.
Ointment. Potter Drug & Chemical Corporation. 36,921; renewed Aug. 20, 1931.
Ointment. Sea Oro Laboratory. 284,821; July 7; Serial No. 310,777; published Apr. 7, 1931.
Ointment. Upjohn Company. 284,831; July 7; Serial No. 310,892; published Apr. 21, 1931.
Ointment, Healing. W. S. Brainerd. 284,744; July 7; Serial No. 306,797; published Apr. 7, 1931.
Ointment, Pile. E. C. Wertz. 284,714; July 7; Serial No. 310,960; published Apr. 7, 1931.
Perfume. Gabilla, Incorporated. 284,553–4; July 7; Serial No. 311,432–3; published Apr. 7, 1931.
Perfume. Gabilla, Incorporated. 284,704–5; July 7; Serial No. 311,523–4; published Apr. 14, 1931.
Perfume and face powder. Chanel, Inc. 284,762; July 7; Serial No. 308,964; published Apr. 14, 1931.
Perfume, toilet water, and powder. Gabilla, Incorporated. 284,552; July 7; Serial No. 311,430; published Apr. 7, 1931.
Perfume, toilet water, and powder. Gabilla, Incorporated. 284,550; July 7; Serial No. 311,427; published Apr. 21, 1931.
Perfume, toilet water, face powder, etc. Gabilla, Incorporated. 284,555–6; July 7; Serial No. 311,434–5; published Apr. 7, 1931.
Perfumes. Parfumerie Rigaud, Inc. 284,659; July 7; Serial No. 311,155; published Apr. 7, 1931.
Perfumes. Queen Perfumery Co. 284,707; July 7; Serial No. 310,921; published Apr. 28, 1931.
Perfumes and cosmetics. C. H. Selick, Inc. 284,536; July 7; Serial No. 297,878; published June 3, 1930.
Perfumes and essential oils. Société Anonyme M. Naef & Cie. 284,585; July 7; Serial No. 311,627; published Apr. 14, 1931.
Perfumes, toilet water, face powder, etc. Houbigant, Inc. 284,819; July 7; Serial No. 310,770; published Apr. 7, 1931.
Perfumes, toilet water, sachets, etc. Société Anonyme Jean Patou. 284,708–13; July 7; Serial No. 310,950–55; published Apr. 14, 1931.
Petroleum jelly. Chesebrough Manufacturing Company, Consolidated. 284,672; July 7; Serial No. 310,210; published Apr. 7, 1931.
Pharmaceutical preparation. Nordmark-Werke Aktiengesellschaft fur angewandte Chemie. 284,560; July 7; Serial No. 309,481; published Apr. 14, 1931.
Pharmaceutical preparations and medicines. Dexter Laboratories. 284,569; July 7; Serial No. 309,048; published Apr. 7, 1931.
Powder, Face. Armand Company. 284,889; July 7; Serial No. 311,356; published Apr. 7, 1931.
Powder, lip rouge, face lotion, Talcum and face. Société Anonyme Jean Patou. 284,660; July 7; Serial No. 311,163; published Apr. 7, 1931.
Powders, sachets, bath salt, etc., Face. Lentheric Incorporated. 284,783; July 7; Serial No. 310,448; published Apr. 14, 1931.
Preparation for relieving pain. H. B. Laymon. 284,642; July 7; Serial No. 301,179; published Oct. 14, 1930.
Preparation for the treatment of lumbago, stiff joints and muscles. John A. Smith Company. 284,785; July 7; Serial No. 285,388; published Dec. 10, 1929.
Preparation for treating rheumatism. J. Scabo. 284,550; July 7; Serial No. 300,687; published Apr. 7, 1931.
Preparation for use in the treatment of leg sores, ulcers, and milk leg. S. Nosis. 284,603; July 7; Serial No. 311,483; published Apr. 14, 1931.
Preparation to be used as an aid in soaking raw silk or rayon. Bachmeier & Company. 284,884; July 7; Serial No. 311,317; published Apr. 7, 1931.
Preparations of cod liver. Henry K. Wampole and Company. 284,666; July 7; Serial No. 311,251; published Apr. 21, 1931.
Preparations used for aiding human and animal metabolism. The Crookes Laboratories, Incorporated. 284,742; July 7; Serial No. 296,106; published Apr. 7, 1931.
Resolvent. Potter Drug & Chemical Corporation. 36,920; renewed Aug. 20, 1931.
Salt, sulphur and sulphur compounds, etc., Glauber. Bánská-A Hutní Společnost. 284,618; July 7; Serial No. 309,709; published Apr. 7, 1931.
Salt, sulphur and sulphur compounds, etc., Glauber. Bánská-A Hutní Společnost. 284,615; July 7; Serial No. 309,712 published Apr. 7, 1931.
Salts and electroplating preparations, Precious metal. Baker & Company. 284,702–3; July 7; Serial No. 311,554–5; published Apr. 14, 1931.
Salve Healing. W. T. Reid. 284,824; July 7; Serial No. 310,811; published Apr. 7, 1931.
Solvent, Drain pipe. Hillyard Chemical Company. 284,897; July 7; Serial No. 311,378; published Apr. 21, 1931.
Specific for auxiliary odour. Kabushiki-Kaisha Takeda Chobei Shoten. 284,657; July 7; Serial No. 305,616; published Apr. 28, 1931.
Stomach-bitters. Hostetter Company. 84,232; renewed Nov. 21, 1931.
Suppositories, Hemorrhoidal. Sargon Laboratories, Inc. 284,882; July 7; Serial No. 311,285; published Apr. 7, 1931.
Toilet goods. Petroleum Derivatives Company. 284,832; July 7; Serial No. 310,461; published Apr. 7, 1931.
Tonic, General. C. F. Gittings. 284,549; July 7; Serial No. 300,187; published Apr. 14, 1931.
Tooth-cream. Grumme & Son. 82,789; renewed July 25, 1931.
Tooth powder. F. B. Horton. 36,845; renewed July 30, 1931.
Water softener. Cudahy Packing Co. 284,751; July 7; Serial No. 307,927; published Apr. 7, 1931.
Wax and a dipping and coating solution for nursery stock, Grafting. Walter E. Clark & Son. 284,717; July 7; Serial No. 311,025; published Apr. 28, 1931.

CLASS 7

Clotheslines. Seward Wire Company. 284,867; July 7; Serial No. 312,067; published Apr. 21, 1931.
Rope, Wire. Upson-Walton Company. 284,683; July 7; Serial No. 311,896; published Apr. 28, 1931.

CLASS 8

Cigar and cigarette holders, and pipes. Kaufmann Bros. & Bondy, Inc. 284,720; July 7; Serial No. 311,062; published Apr. 7, 1931.
Cigar and cigarette holders, and pipes. Reiss-Premier Pipe Co., West New York, N. J. 284,721; July 7; Serial No. 311,071; published Apr. 7, 1931.
Pipes. Sasieni London, Ltd. 284,836; July 7; Serial No. 306,244; published Apr. 28, 1931.
Pipes, cigar and cigarette holders. Reiss-Premier Pipe Co. 284,581; July 7; Serial No. 311,848; published Apr. 28, 1931.
Trays, Ash. Precision Metal Workers. 284,761; July 7; Serial No. 308,867; published Apr. 21, 1931.
Trays, receivers, cigar and cigarette rests, etc. United States Cutlery Co. 284,695; July 7; Serial No. 311,986; published Apr. 28, 1931.

CLASS 9

Matches. Grantorpets Tandsticksfabriks Aktiebolag. 82,076; renewed May 30, 1931.

CLASS 10

Manure, basic slag, etc. Vereinigte Stahlwerke Aktiengesellschaft. 284,729; July 7; Serial No. 296,156; published Apr. 28, 1931.

CLASS 11

Compound for making a printed impression. F. A. Putnam. 84,189; renewed Nov. 14, 1931.
Ink. American Multigraph Co. 284,693; July 7; Serial No. 311,864; published Apr. 28, 1931.
Writing fluid. Hy-Ton Ink Company. 284,681; July 7; Serial No. 311,962; published Apr. 21, 1931.

CLASS 12

Lime. J. B. Adams. 36,490; renewed May 28, 1931.

CLASS 13

Chain and chain link. Moline Malleable Iron Company. 284,691; July 7; Serial No. 311,882; published Apr. 28, 1931.
Chains of iron. Columbus Chain Company. 81,856; renewed May 16, 1931.
Holders, Cage clamping bird food. H & R Sales Company. 284,557; July 7; Serial No. 311,438; published Apr. 21, 1931.
Metallic belt-fasteners. Flexible Steel Lacing Company. 84,224; renewed Nov. 21, 1931.
Pipe and fittings, screw machine products. Mueller Brass Co. 284,543; July 7; Serial No. 299,212; published Apr. 28, 1931.
Pipes, conduits, etc. Vereinigte Stahlwerke Aktiengesellschaft. 284,730; July 7; Serial No. 296,158; published Apr. 28, 1931.
Steel belt-lacing. Flexible Steel Lacing Company. 84,225; renewed Nov. 21, 1931.
Ties, Bale. American Steel and Wire Company of New Jersey. 284,853; July 7; Serial No. 312,287; published Apr. 28, 1931.
Traps, Tank. Aqua Systems, Incorporated. 284,810; July 7; Serial No. 310,630; published Apr. 21, 1931.
Valves for pneumatic tires. Tire and Rim Association, Incorporated. 284,805; July 7; Serial No. 310,581; published Apr. 21, 1931.
Wire and tacks. Bánská- A Hutní Společnost. 284,614; July 7; Serial No. 309,710; published Apr. 28, 1931.
Wires and tacks, Barbed. Bánská- A Hutní Společnost. 284,629; July 7; Serial No. 309,708; published Apr. 28, 1931.

CLASS 14

Iron compound in plastic form. Smooth-On Manufacturing Company. 84,262; renewed Nov. 21, 1931.
Liners or liner plates. Union Iron Works. 284,661; July 7; Serial No. 311,164; published Apr. 28, 1931.
Steel. Simonds Saw & Steel Company. 284,686; July 7; Serial No. 311,891; published Apr. 21, 1931.
Steels, Machinery. Bethlehem Steel Company. 284,576; July 7; Serial No. 311,815; published Apr. 21, 1931.
Tin-plate, sheet-iron, and metals. C. H. Nelson Metal Co. Inc. 83,084; renewed Aug. 15, 1931.
Wire, Steel and iron. British Ropes Limited. 284,577; July 7; Serial No. 311,818; published Apr. 21, 1931.

CLASS 15

Oils, Lubricating. Texas Company. 84,061; renewed Oct. 31, 1931.

CLASS 16

Enamel removers, Baked. Long Paint & Chemical Co. 284,862; July 7; Serial No. 312,011; published Apr. 28, 1931.
Paint, paint thinner, lacquer, etc. Westinghouse Electric & Manufacturing Company. 284,825; July 7; Serial No. 310,846; published Apr. 21, 1931.
Paint, Plastic. Hamlin Cement Products, Inc. 284,684; July 7; Serial No. 311,916; published Apr. 21, 1931.
Paints, varnishes, and lacquers. Ra-Var Corporation. 284,539; July 7; Serial No. 298,255; published Oct. 7, 1930.
Paints, varnishes, putty, etc. Calbar Paint & Varnish Co. 284,664; July 7; Serial No. 311,228; published Apr. 21, 1931.
Polish, Furniture. Keep Brothers. 83,653; renewed Oct. 3, 1931.

CLASS 17

Cigarettes and cigarette tobacco. Neil Manufacturing Co. 284,743; July 7; Serial No. 306,454; published Apr. 21, 1931.
Cigars. H. F. Martin. 284,698; July 7; Serial No. 311,921; published Apr. 21, 1931.
Cigars and cigarettes. Childs Company. 284,855; July 7; Serial No. 312,321; published Apr. 28, 1931.

CLASS 19

Bicycles and tricycles. G. A. Roberds. 284,611; July 7; Serial No. 311,581; published Apr. 21, 1931.
Boats. Johnson Motor Company. 284,740; July 7; Serial No. 293,732; published Apr. 28, 1931.
Boats, Outboard motor. Blue Streak Ltd. 284,812; July 7; Serial No. 310,672; published Apr. 21, 1931.
Carriers, Vehicle luggage. Kennedy Manufacturing Company. 284,582; July 7; Serial No. 311,611; published Apr. 28, 1931.
Railway rolling stock. Vereinigte Stahlwerke Aktiengesellschaft. 284,731; July 7; Serial No. 296,159; published Apr. 28, 1931.
Shields. Couch Manufacturing Company. 284,612; July 7; Serial No. 311,517; published Apr. 28, 1931.
Vehicles, Motor driven. Cycletow Corporation. 284,759; July 7; Serial No. 308,774; published Apr. 21, 1931.

CLASS 21

Insulated electric conductors and cables. F. M. Ferrin. 83,971; renewed Oct. 24, 1931.
Storage batteries, parts thereof, and sets of such batteries. Edison Storage Battery Company. 82,971; renewed Aug. 8, 1931.

CLASS 22

Base-ball bats. J. F. Hillerich & Son. 83,408–11; renewed Sept. 12, 1931.
Footballs, football head harness, shin guards, etc. Shapleigh Hardware Company. 284,908; July 7.
Game apparatus. W. J. Schlosser. 284,806; July 7; Serial No. 310,578; published Apr. 21, 1931.
Game, Parlor football. Diberty Show Printing Company. 284,881; July 7; Serial No. 311,275; published Apr. 21, 1931.
Golf balls. Davega, Inc. 284,880; July 7; Serial No. 311,260; published Apr. 21, 1931.
Golf balls. National Bellas Hess Company. 284,595; July 7; Serial No. 311,411; published Apr. 28, 1931.
Golf clubs. A. J. Reach, Wright & Ditson Incorporated. 284,815; July 7; Serial No. 310,699; published Apr. 21, 1931.
Golf clubs. Royal Manufacturing Company. 284,725–7; July 7; Serial Nos. 311,108–10; published Apr. 21, 1931.
Golf clubs, balls, and bags. Royal Manufacturing Company. 284,728; July 7; Serial No. 311,111; published Apr. 21, 1931.
Toy airplanes and toy airplane parts. I. Sikorsky. 284,901–2; July 7.
Toy boats. Shoe Form Co. 284,887; July 7; Serial No. 311,345; published Apr. 21, 1931.
Wood and metal golf clubs. L. A. Young Company. 284,907; July 7.

CLASS 23

Agricultural implements, Hand. Union Fork and Hoe Company. 284,606; July 7; Serial No. 311,495; published Apr. 28, 1931.
Axes, cant dogs, pickaroons, etc. Snow & Nealley Company. 284,687; July 7; Serial No. 311,892; published Apr. 28, 1931.
Check-protecting and check signing machines. Todd Company. 284,809; July 7; Serial No. 310,583; published Apr. 21, 1931.
Driers and parts thereof. Harmor & Co. Inc. 284,895; July 7; Serial No. 311,377; published Apr. 28, 1931.
Earth-boring machinery. Hydrauger Corporation. 284,754; July 7; Serial No. 308,370; published Apr. 21, 1931.
Engines, Internal combustion. Gray Marine Motor Company. 284,651; July 7; Serial No. 279,843; published Apr. 21, 1931.
Letter-opening devices. Real Letter Opener Corporation. 284,580; July 7; Serial No. 311,847; published Apr. 28, 1931.
Lubricating equipment, Portable pressure. Aro Equipment Corporation. 284,656; July 7; Serial No. 305,600; published Apr. 28, 1931.
Machine for making solidified carbon dioxide. Standard Utilities Corporation of America. 284,561; July 7; Serial No. 311,401; published Apr. 21, 1931.
Machinery and parts of machinery. Vereinigte Stahlwerke Aktiengesellschaft. 284,732; July 7; Serial No. 296,161; published Apr. 28, 1931.
Machines for drilling, reaming, grinding, etc. Gulbert Steel Company. 284,763; July 7; Serial No. 304,557; published Apr. 21, 1931.
Machines for mending runs in fabrics. Knu-Knit Manufacturing Corporation. 284,602; July 7; Serial No. 311,480; published Apr. 21, 1931.
Oil well machinery and tools. Crum-Brainard Co. Ltd. 284,617; July 7; Serial No. 309,726; published Apr. 28, 1931.
Pipe cutter wheels. Trimont Manufacturing Company. 284,844; July 7; Serial No. 312,167; published Apr. 21, 1931.
Pipe wrapping machines and parts therefor. Paraffine Companies. 284,535; July 7; Serial No. 297,762; published Apr. 28, 1931.
Razors and shears. E. Morris Mfg. Co. 284,645; July 7; Serial No. 301,991; published Apr. 21, 1931.
Razors, shears, scissors, etc. Bresduck, Inc. 284,841; July 7; Serial No. 312,123; published Apr. 28, 1931.
Saws, knives, etc. Toland & Son, Inc. 284,682; July 7; Serial No. 311,985; published Apr. 21, 1931.
Scrapers, Meat block. H. A. Lindenschmitt. 284,859; July 7; Serial No. 312,439; published Apr. 28, 1931.
Snowplows. Maine Steel Products Co. 284,634; July 7; Serial No. 302,324; published Apr. 21, 1931.
Sprayers, pumps, squirt guns, etc., Hand and portable. Stanco Incorporated. 284,575; July 7; Serial No. 311,797; published Apr. 28, 1931.
Tool handles. Trinity Manufacturing Company. 284,845; July 7; Serial No. 312,168; published Apr. 21, 1931.
Tools. Fansteel Products Company. 284,718; July 7; Serial No. 311,028; published Apr. 28, 1931.

Typesetting and type-casting apparatus and mechanical control units, perforators, etc. Teletype Corporation. 284,631; July 7; Serial No. 309,576; published Apr. 2, 1931.
Vacuum cleaning-machines. Regina Company. 83,944; renewed Oct. 24, 1911.

CLASS 26

Apparatus for recording and for the reproduction of talking pictures and the parts thereof. General Talking Pictures Corporation. 284,857; July 7; Serial No. 312,425; published Apr. 28, 1931.
Calculating machines. Europa Schreibmaschinen A. G. 284,827; July 7; Serial No. 310,862; published Apr. 28, 1931.
Crucibles, Jewelers'. Binney & Smith Company. 284,847; July 7; Serial No. 312,172; published Apr. 21, 1931.
Cylinders and test tubes, burettes, pipettes, etc., Graduated glass. W. Geyer. 284,541; July 7; Serial No. 299,056; published Apr. 28, 1931.
Films and prints, safe-light lamps, shutters, etc., Washing and drying apparatus for. Eastman Kodak Company. 284,533; July 7; Serial No. 297,247; published Apr. 28, 1931.
Films, Motion picture. W. A. Hall. 284,769; July 7; Serial No. 305,184; published Apr. 28, 1931.
Lens, Unmounted. Xetal Safety Glass, Limited. 284,748; July 7; Serial No. 307,437; published Apr. 28, 1931.
Radio tube testers. Kinney Bros. & Sipprell. 284,571; July 7; Serial No. 309,245; published Apr. 28, 1931.

CLASS 27

Watchcases. Star Watch Case Co. 84,196; renewed Nov. 14, 1931.
Watchcases and watch-movements. Illinois Watch Case Company. 83,256; renewed Aug. 29, 1931.
Watches, watchcases, and watch movements. Adolphe Schwob, Inc. 284,866; July 7; Serial No. 312,066; published Apr. 28, 1931.

CLASS 29

Brushes, Painters'. Pittsburgh Plate Glass Company. 284,627; July 7; Serial No. 309,660; published Apr. 21, 1931.
Mops. Midway Chemical Company. 284,719; July 7; Serial No. 311,040; published Apr. 28, 1931.
Toothbrushes. H. R. Priest. 284,584; July 7; Serial No. 311,623; published Apr. 28, 1931.

CLASS 31

Filtering apparatus. N. V. Standard Water Maatschappij. 284,572; July 7; Serial No. 311,747; published Apr. 21, 1931.

CLASS 32

Cushions, Inflated rubber. Jem Rubber Company Limited. 284,746; July 7; Serial No. 306,892; published Apr. 28, 1931.
Furniture cushions for seats, backs, arms, etc. Nachman Spring-Filled Corporation. 284,639; July 7; Serial No. 304,209; published Apr. 28, 1931.
Tables, chairs, and coat trees, Aluminum. Aluminum Company of America. 284,749–50; July 7; Serial No. 307,877–8; published Apr. 28, 1931.

CLASS 33

Glass in bulk, Safety. Röhn & Haas Aktiengesellschaft. 284,542; July 7; Serial No. 299,084; published Apr. 21, 1931.

CLASS 34

Boilers. Hayes Manufacturing Co. 284,903; July 7.
Burners for stoves and ranges, Oil. Tower Manufacturing Corporation. 284,688; July 7; Serial No. 311,895; published Apr. 28, 1931.
Burners, Oil. E. L. Twining. 284,566; July 7; Serial No. 309,448; published Apr. 28, 1931.
Furnaces, oil burners, ventilating apparatus, etc. M. B. Levin. 284,590; July 7; Serial No. 309,136; published Apr. 28, 1931.
Heaters, automatic gas heated hot water systems, Gas. F. O. Schoedinger. 284,565; July 7; Serial No. 309,358; published Apr. 28, 1931.
Heaters, Gas water. F. W. Gurney. 284,756; July 7; Serial No. 308,439; published Apr. 21, 1931.
Heating materials. Crane Co. 284,823; July 7; Serial No. 310,797; published Apr. 28, 1931.
Heating radiator shields. Tuttle & Bailey Manufacturing Company. 284,618; July 7; Serial No. 309,753; published Apr. 21, 1931.
Kits for converting a hot water heater to a heat storage system, gas burners, and safety pilots. Spencer Thermostat Company. 284,829; July 7; Serial No. 310,880; published Apr. 28, 1931.
Machines and hand torches for autogenous cutting. "Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft M. B. H. 284,628; July 7; Serial No. 309,685; published Apr. 21, 1931.
Mantles, Incandescent. Coleman Lamp and Stove Company. 284,894; July 7; Serial No. 311,365; published Apr. 21, 1931.
Stokers, Automatic coal. C. Hendrickson. 284,758; July 7; Serial No. 308,628; published Apr. 28, 1931.

CLASS 35

Fan belts and transmission belting. Raybestos-Manhattan Incorporated. 284,636; July 7; Serial No. 303,344; published Sept. 30, 1930.
Hose, belting, rubber gaskets, etc., Cotton and rubber. F. A. Lachance. 284,797; July 7; Serial No. 311,687; published Apr. 28, 1931.
Hose, Woven linen fabric. Eureka Fire Hose Manufacturing Company. 82,506; renewed July 4, 1931.
Tires of rubber or rubber composition, Vehicle. Falls Rubber Company. 284,767; July 7; Serial No. 304,718; published Apr. 21, 1931.

CLASS 37

Jute board and paper box boards. National Metal Edge Box Company. 284,734; July 7; Serial No. 296,432; published Apr. 28, 1931.
Paper, Embossed glassine. Westfield Paper Company. 284,849; July 7; Serial No. 312,210; published Apr. 21, 1931.
Paper household aprons. Diapex Corporation. 284,600; July 7; Serial No. 311,475; published Apr. 21, 1931.
Paper, Ledger. Millers Falls Paper Company. 284,690; July 7; Serial No. 311,881; published Apr. 21, 1931.
Paper sheets and sheeting, Sanitary protective. Diapex Corporation. 284,601; July 7; Serial No. 311,474; published Apr. 21, 1931.
Paper shrouds. A. H. Straus. 284,604; July 7; Serial No. 311,494; published Apr. 21, 1931.
Paper, Toilet. Wheeler Paper Corporation. 284,757; July 7; Serial No. 308,525; published Apr. 21, 1931.
Paper, Writing and printing. Hurlbut Paper Company. 284,804; July 7; Serial No. 311,734; published Apr. 21, 1931.
Seal-presses. Meyer & Wenthe. 82,706; renewed July 18, 1931.
Stationery. McBee Binder Company. 284,817; July 7; Serial No. 310,688; published Apr. 21, 1931.

CLASS 38

Books or booklets. Forbes Lithograph Manufacturing Company. 284,843; July 7; Serial No. 312,147; published Apr. 21, 1931.
Cartoon for newspaper publication, Comic golf. Press Publishing Company. 284,850; July 7; Serial No. 312,222; published Apr. 21, 1931.
Magazine. Fireside Publications, Inc. 284,774; July 7; Serial No. 310,368; published Apr. 28, 1931.
Magazine. Kiwanis Club of Marietta, Ohio. 284,622; July 7; Serial No. 309,862; published Apr. 21, 1931.
Magazine. Progressive Farmer-Ruralist Company. 284,864; July 7; Serial No. 312,029; published Apr. 21, 1931.
Magazine, Monthly. National Recreation Association, Incorporated. 284,816; July 7; Serial No. 310,733; published Apr. 21, 1931.
Magazines. Boston University. 284,834; July 7; Serial No. 310,543; published Apr. 28, 1931.
Maps, atlases. National Map Company. 284,625; July 7; Serial No. 310,061; published Apr. 21, 1931.
Music, Sheet. Miller Music, Incorporated. 284,609; July 7; Serial No. 311,532; published Apr. 21, 1931.
Newspapers and periodicals. Boyce and Rankin. 284,588; July 7; Serial No. 298,009; published Apr. 21, 1931.
Periodical. Peanut Journal Publishing Co. 284,840; July 7; Serial No. 312,117; published Apr. 21, 1931.
Periodical. Veterinary Magazine Corporation. 284,802; July 7; Serial No. 311,710; published Apr. 21, 1931.
Periodicals. American Society for Steel Treating. 284,835; July 7; Serial No. 310,548; published Apr. 28, 1931.
Periodicals. Melliand, Inc. 284,848; July 7; Serial No. 312,193; published Apr. 21, 1931.
Printed matter. A. J. Williams. 284,839; July 7; Serial No. 306,428; published Apr. 21, 1931.
Prints, Photographic. Philadelphia Blue Print Co. 284,673; July 7; Serial No. 310,259; published Apr. 21, 1931.
Prints, Photographic. H. N. Sheppard. 284,605; July 7; Serial No. 311,501; published Apr. 21, 1931.
Publication. American Management Association. 284,548; July 7; Serial No. 299,666; published Apr. 21, 1931.
Publication. Aviation Register. 284,562; July 7; Serial No. 311,417; published Apr. 21, 1931.
Publication. B. F. Forsyth. 284,813; July 7; Serial No. 310,678; published Apr. 21, 1931.
Publication. Stockman-Farmer Company. 284,863; July 7; Serial No. 312,018; published Apr. 28, 1931.
Signs. Patterson Displays Inc. 284,599; July 7; Serial No. 311,463; published Apr. 21, 1931.
Stamps, Trading. Trading Stamp Relief Club. 284,888; July 7; Serial No. 311,848; published Apr. 21, 1931.

CLASS 39

Clothing. William Hollins and Company. 83,068; renewed Aug. 15, 1931.
Shoes. Thomas G. Plant Co. 36,792; renewed July 23, 1931.
Skirts, Outer. Silverstein Bros. 82,910; renewed Aug. 1, 1931.

CLASS 40

Needles and pins, Hand sewing. Georg. Printz & Co. 81,296; renewed Mar. 21, 1931.
Needles and toilet-pins, Hand sewing. Georg. Printz & Co. 81,908; renewed May 16, 1931.

CLASS 42

Cotton piece goods. Burgess Ledward & Company Limited. 284,842; July 7; Serial No. 312,137; published Apr. 28, 1931.
Cotton sheets. Utica Steam & Mohawk Valley Cotton Mills. 284,607; July 7; Serial No. 311,498; published Apr. 21, 1931.
Fabrics, and bath, floor, and table fabrics, Bed. West Point Manufacturing Company. 284,760; July 7; Serial No. 308,801; published Apr. 21, 1931.
Fabrics, Bed, bath, floor, and table. Forstmann & Huffmann Company. 284,715; July 7; Serial No. 310,989; published Apr. 21, 1931.
Fabrics in the piece, Pile. Sidney Blumenthal & Co. Inc. 284,869; July 7; Serial No. 312,086; published Apr. 28,1931.
Fabrics, Knitted pile. D. P. Moore. 284,724; July 7; Serial No. 311,100; published Apr. 28, 1931.
Fabrics made wholly or partially of cellulose derivatives. Celanese Corporation of America. 284,871–5; July 7; Serial Nos. 312,088–92; published Apr. 28, 1931.
Fabrics of cellulose derivatives. Celanese Corporation of America. 284,879; July 7; Serial No. 311,259; published Apr. 21, 1931.
Fabrics, Woven and knitted. Botany Worsted Mills. 284,694; July 7; Serial No. 311,865; published Apr. 28, 1931.
Fabrics, Woven, knitted, etc. Cheney Brothers. 284,696; July 7; Serial No. 311,995; published Apr. 28, 1931.
Pile fabrics. Bennett Mills, Incorporated. 284,723; July 7; Serial No. 311,079; published Apr. 21, 1931.
Pile fabrics. Bennett Mills, Incorporated. 284,904; July 7.
Pile fabrics. Sidney Blumenthal & Co. Inc. 284,877–8; July 7; Serial Nos. 311,257–8; published Apr. 21, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 284,890–2; July 7; Serial Nos. 311,357–9; published Apr. 21, 1931.
Pile fabrics. Rossie Velvet Company. 284,597; July 7; Serial No. 311,448; published Apr. 21, 1931.
Pile fabrics. Rossie Velvet Company. 284,852; July 7; Serial No. 312,267; published Apr. 28, 1931.
Rayon fabric in the piece. Progressive Knitted Rayon Fabric Mills. 284,854; July 7; Serial No. 312,312; published Apr. 28, 1931.
Ribbons. Wm. E. Wright & Sons Co. 284,765; July 7; Serial No. 304,705; published Oct. 14, 1930.
Sheets, pillow-cases, rugs, blankets, and shawls. William Hollins and Company. 83,910; renewed Oct. 24, 1931.
Wool and cotton piece goods. Roth & Nathan Inc. 284,643; July 7; Serial No. 301,364; published Apr. 28, 1931.
Wool, silk, cotton, etc., piece goods. Bianchini, Ferier. 284,766; July 7; Serial No. 304,714; published Apr. 21, 1931.
Woolen piece goods. Botany Worsted Mills. 284,870; July 7; Serial No. 312,087; published Apr. 28, 1931.
Woolen piece goods. Forstmann & Huffmann. 284,579; July 7; Serial No. 311,831; published Apr. 28, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 284,587–92; July 7; Serial Nos. 311,658–63; published Apr. 28, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 284,658; July 7; Serial No. 311,140; published Apr. 21, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 284,784–91; July 7; Serial Nos. 311,665–77; published Apr. 28, 1931.
Woolen piece goods. C. M. De Land. 284,547; July 7; Serial No. 299,560; published Nov. 4, 1930.
Woolen piece goods. Whittenton Manufacturing Company. 284,598; July 7; Serial No. 311,456; published Apr. 21, 1931.

CLASS 43

Yarn. Green & Hopson. 284,706; July 7; Serial No. 311,526; published Apr. 28, 1931.

CLASS 44

Adhesive tape, perforated gummed paper and bandages. Sternberg, Haberland, Liebert & Co. 284,741; July 7; Serial No. 293,796; published Apr. 21, 1931.
Apparatus used in the treatment of sinusitis, etc. T. A. Poole, M. D. 284,652; July 7; Serial No. 280,413; published Apr. 28, 1931.
Composition used in the manufacture of artificial dentures. D. Perry. 284,899; July 7; Serial No. 311,394; published Apr. 28, 1931.
First aid kit. L. E. Goeller. 284,833; July 7; Serial No. 310,477; published Apr. 28, 1931.
Gauze and adhesive plaster and/or a combination of both. Kendall Company. 284,697; July 7; Serial No. 311,918; published Apr. 21, 1931.
Hypodermic kits. Consolidated Patentees, Inc. 284,564; July 7; Serial No. 309,334; published Apr. 21, 1931.
Hypodermic needles. Novocol Chemical Mfg. Co. Inc. 284,689; July 7; Serial No. 311,884; published Apr. 21, 1931.
Prophylactic rubber articles. H. E. Moyses. 284,837–8, July 7; Serial No. 306,411–12; published Apr. 21, 1931.
Vaginal pessaries. Akma Sales Co. 284,620–1; July 7; Serial No. 309,839–40; published Apr. 28, 1931.

CLASS 45

Beverage. M. Alemagna. 284,594; July 7; Serial No. 311,506; published Apr. 21, 1931.
Beverage and syrups therefor. Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin. 284,776; July 7; Serial No. 310,385; published Apr. 21, 1931.
Beverages and concentrates therefor, Maltless. Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin. 284,777; July 7; Serial No. 310,386; published Apr. 21, 1931.
Beverages and extracts and flavors for making the same, Maltless. Theall & Pile, Inc. 284,851; July 7; Serial No. 312,225; published Apr., 21, 1931.
Beverages and extracts used in making the same, Maltless. Island Road Bottling Co. 284,573; July 7; Serial No. 311,783; published Apr. 28, 1931.
Beverages and syrups and extracts for making same. Chocolate Products Company. 284,578; July 7; Serial No. 311,821; published Apr. 28, 1931.
Beverages, Maltless. Les Heritiers de Marie Brizzard & Roger, M. B. Glotin, Achard & Glotin. 284,775; July 7; Serial No. 310,384; published Apr. 21, 1931.
Beverages, Maltless. Les Heritiers de Marie Brizzard & Roger, M. B. Glotin, Achard & Glotin. 284,778–9; July 7; Serial No. 310,387–8; published Apr. 21, 1931.
Beverages, Maltless. Les Heritiers de Marie Brizzard & Roger, M. B. Glotin, Achard & Glotin. 284,781–2; July 7; Serial No. 310,390–1; published Apr. 21, 1931.
Maltless syrup. Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin. 284,780; July 7; Serial No. 310,389; published Apr. 21, 1931.

CLASS 46

Avocado food, Dried concentrated. J. Ibsen. 284,753; July 7; Serial No. 308,335; published Apr. 28, 1931.
Bakery products and confectionery. National Biscuit Company. 37,299; renewed Nov. 12, 1931.
Candies, Cunningham-Lebaron Company. 284,700; July 7; Serial No. 311,519; published Apr. 28, 1931.
Candy. M. J. Holloway & Company. 284,861; July 7; Serial No. 312,005; published Apr. 21, 1931.
Candy. Speak Forks. Serial No. 313,083; published July 7, 1931.
Candy. A. E. Spriano. 284,868; July 7; Serial No. 312,070; published Apr. 21, 1931.
Catsup, tomato soup, tomato puree, etc. Ellendale Canning Company. 284,771; July 7; Serial No. 305,269; published Apr. 28, 1931.
Canned fruits. J. E. Rahal. 284,818; July 7; Serial No. 310,736; published Apr. 21, 1931.
Canned fruits, canned vegetables, etc. Fuller Canneries Company. 284,680; July 7; Serial No. 311,959; published Apr. 28, 1931.
Canned fruits, vegetables, fish, etc. J. Domko. 284,544; July 7; Serial No. 299,378; published Aug. 5, 1930.
Canned sea foods. L. P. Maggioni & Co. 284,632; July 7; Serial No. 309,646; published Apr. 28, 1931.
Canned tomatoes. G. Fiore. 284,803; July 7; Serial No. 311,723; published Apr. 28, 1931.
Canned vegetables and catsup. Anderson Bros. Canning Company. 284,909; July 7.
Chocolate coatings, chocolate candy, hot chocolate powder, and chocolate. Ambrosia Chocolate Company. 284,545; July 7; Serial No. 299,481; published July 22, 1930.
Chocolate malt food drink. Burger Bros. Company. 284,663; July 7; Serial No. 311,226; published Apr. 28, 1931.
Chocolate and candies. W. F. Schrafft & Sons Corporation. 284,574; July 7; Serial No. 311,791; published Apr. 21, 1931.
Coffee. Eureka Tea Co. 284,906; July 7.
Coffee. T. J. Lipton. 284,798; July 7; Serial No. 311,688; published Apr. 28, 1931.
Coffee. Rohrmoser, Esquivel & Co. 284,685; July 7; Serial No. 311,588; published Apr. 21, 1931.
Coffee. Southland Coffee Company. 284,856; July 7; Serial No. 312,392; published Apr. 28, 1931.
Coffee. Standard Brands Incorporated. 284,801; July 7; Serial No. 311,703; published Apr. 21, 1931.
Extracts and essences, Flavoring. Towan-Peyton-Twohy Co. 84,178; renewed Nov. 14, 1931.
Fish. Atlantic Coast Fisheries Corporation of New York. 284,619; July 7; Serial No. 309,800; published Apr. 28, 1931.
Flour, butter, coffee, etc. McClintock-Trunkey Company. 284,647; July 7; Serial No. 306,192; published Apr. 28, 1931.
Flour, tea, and coffee, Wheat. Sands, Taylor & Wood Company. 284,637; July 7; Serial No. 303,348; published Oct. 7, 1930.
Flour, Wheat. Moseley & Motley Milling Co. 83,848; renewed Oct. 17, 1931.
Food, Cattle. American Milling Company. 35,501; renewed Nov. 27, 1931.

Food product. D. Wesson. 284,534; July 7; Serial No. 297,289; published Apr. 21, 1931.
Food products. F. Romeo & Company. 284,905; July 7.
Food products, Frozen. Frosted Food Company. 284,641; July 7; Serial No. 301,023; published Apr. 21, 1931.
Food, Stock and poultry. M. C. Peters Mill Co. 76,764; renewed Feb. 15, 1930.
Food, Stock and poultry. M. C. Peters Mill Co. 78,822; renewed July 12, 1931.
Fruits, Deciduous. Columbia-Okanogan Orchards, Inc. 284,736; July 7; Serial No. 287,635; published June 3, 1930.
Fruits, Fresh. M. C. Threlkeld. 284,830; July 7; Serial No. 310,891; published Apr. 21, 1931.
Fruits, Fresh citrus. Crown Jewel Groves. 284,648; July 7; Serial No. 267,937; published May 27, 1930.
Fruits, Fresh citrus. G. Maxcy. 284,739; July 7; Serial No. 292,220; published Apr. 21, 1931.
Fruits, Fresh citrus. McDermont and Wall, Inc. 284,644; July 7; Serial No. 301,977; published Dec. 2, 1930.
Fruits, vegetables, melons, Fresh. Corn & Ware. 284,885; July 7; Serial No. 311,323; published Apr. 28, 1931.
Grapes, Fresh. Italian Vineyard Co. 284,886; July 7; Serial No. 311,336; published Apr. 21, 1931.
Gum, Chewing. American Chicle Company. 284,737; July 7; Serial No. 290,735; published Apr. 21, 1931.
Limes, Fresh. G. P. Smith. 284,900; July 7; Serial No. 311,397; published Apr. 28, 1931.
Mayonnaise, Salad dressing, and spread for bread. Schreiber Products Corporation. 284,800; July 7; Serial No. 311,700; published Apr. 28, 1931.
Milk and chocolate powders for making a beverage. Dairy By-Products, Inc. 284,563; July 7; Serial No. 311,422; published Apr. 28, 1931.
Mushrooms. Mushroom Growers Co-Operative Association. 284,567; July 7; Serial No. 309,452; published Apr. 28, 1931.
Mustard, Prepared. Atlantis Sales Corporation. 284,586; July 7; Serial No. 311,642; published Apr. 28, 1931.
Olive oil. Societe en Nom Collectif Majano, Depo et Barral. 284,593; July 7; Serial No. 311,574; published Apr. 28, 1931.
Pecans. Southern Pecan Shelling Co. 284,624; July 7; Serial No. 309,996; published Apr. 21, 1931.
Pickles. Glaser, Crandell Co. 284,858; July 7; Serial No. 312,426; published Apr. 28, 1931.
Pickles, Preserved. Anna Myers Pure Food, Inc. 284,865; July 7; Serial No. 312,058; published Apr. 28, 1931.
Poultry, eggs, canned fruits, and vegetables. J. Schwartz. 284,764; July 7; Serial No. 304,584; published Apr. 28, 1931.
Salad dressing. Sprague, Warner & Company. 86,412; renewed May 14, 1931.
Syrup, Malt. Philadelphia Malt Extract Co. 284,799; July 7; Serial No. 311,692; published Apr. 28, 1931.
Syrup, Malt. Reliable Distributing Company Incorporated. 284,551; July 7; Serial No. 300,755; published Sept. 9, 1930.

CLASS 48

Malt cereal beverages. J. Di Santo. 284,679; July 7; Serial No. 311,955; published Apr. 28, 1931.

CLASS 49

Gin. P. Hoppe. 284,876; July 7; Serial No. 312,100; published Apr. 21, 1931.

CLASS 50

Brooders. Globe American Corporation. 284,860; July 7; Serial No. 312,002; published Apr. 21, 1931.
Electrotypes, electroplates, printing plates, and matrices. Boyce and Rankin. 284,537; July 7; Serial No. 298,008; published Apr. 21, 1931.
Gum films in bulk. Röhm & Haas Aktiengesellschaft. 284,650; July 7; Serial No. 278,662; published Apr. 21, 1931.
Lapel buttons, emblems, badges. Kiwanis International. 284,896; July 7; Serial No. 311,882; published Apr. 28, 1931.
Monuments and memorials, Granite. Rock of Ages Corporation. 284,826; July 7; Serial No. 310,849; published Apr. 28, 1931.
Rubberlike substances of organic polymerides. Rohm & Haas Aktiengesellschaft. 284,738; July 7; Serial No. 292,124; published Apr. 28, 1931.

ALPHABETICAL LIST OF LABELS

Bond Bread. For Bread. General Baking Company. 39,402; July 7.
Bond Bread Sliced. For Bread. General Baking Company. 39,401; July 7.
Coffee. For Coffee. Union Bag & Paper Corporation. 39,410; July 7.
Dr. Burchfield's Black Pills. For Pills for the Liver, Blood, Indigestion, and Constipation. J. P. Burchfield. 39,398; July 7.
Furnitint. For Enamel Manufactured Especially for Furniture. Finishing. Steelcote Manufacturing Company. 39,409; July 7.
Happiness. For Malt Syrup. L. Luban. 39,405; July 7.
Hawaii. For Vinegar. S. J. David. 39,400; July 7.
Joan Of Arc. For Lingerie. I. Schneierson & Sons, Inc. 39,406; July 7.
La-Bo-Jel. For Vaginal Antiseptic and Prophylactic jelly. La-Bo-Jel Laboratories. 39,404; July 7.
Moderne. For Rings. J. R. Wood & Sons, Inc. 39,412; July 7.
Moderniste. For Rings. J. R. Wood & Sons, Inc. 39,413; July 7.
Old Gold Coffee. For Coffee. Gildehaus, Wulfing & Company. 39,403; July 7.
Royal. For Baking Powder. Standard Brands Incorporated. 39,408; July 7.
Shur-Oil. For Oil. Shur-Gloss Mfg. Co. 39,407; July 7.
Styliste. For Rings. J. R. Wood & Sons, Inc. 39,415; July 7.
The Glorious Fourth. For Taffy Bars. Vogan Candy Corporation. 39,411; July 7.
The Mega-Coustic Program Reproducer. For Apparatus for Audibly Reproducing Programs. Amplifiers, Limited. 39,397; July 7.
Voguiste. For Rings. J. R. Wood & Sons, Inc. 39,414; July 7.
Whitlock's Special. For a Stomachic Astringent and Laxative Tonic. Cherokee Remedy Company. 39,399; July 7.

ALPHABETICAL LIST OF PRINTS

A Timely Line To The Snowbound . . . About Some Smart New Bradleys. For Clothing. Bradley Knitting Company. 13,290; July 7.
Atlantic & Pacific Coal. For Anthracite Coal. W. Betterly. 13,288; July 7.
Consistently Superior. For Sausages and Meats. Frank and Company. 13,293; July 7.
Jumbo. For Peanut Butter. Frank Tea & Spice Co. 13,294; July 7.
New Spring Bradleys . . . For Your First 'Friday-To-Monday' In The Country. For Clothing. Bradley Knitting Company. 13,291; July 7.
The Challenger. For Stoves. Favorite Stove & Range Company. 13,292; July 7.
We Recommended These New Bradleys . . . For Very Special Places In The Sun. For Clothing. Bradley Knitting Company. 13,289; July 7.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 7TH DAY OF JULY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abbe, Edward J., assignor to The Elwell-Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,813,595; July 7.

Abbe, Edward J., assignor to The Elwell Parker Electric Co., Cleveland, Ohio. Industrial truck. 1,813,596; July 7.

Abbe, Edward J., assignor to The Elwell-Parker Electric Company, Cleveland, Ohio. Load handling method and apparatus. 1,813,597; July 7.

Abington Textile Machinery Works. (See Clark, Ernest, assignor.)

Abrams, Irving, and I. Sager, Brooklyn, assignors to L. Raphael, New York, N. Y. Lock for window screens and the like. 1,813,652; July 7.

Absmeier, Carl. (See Turner, J. J., and Absmeier.)

Ackley, Raymond E., assignor to R. R. Donnelley & Sons Company, Chicago, Ill. Book trimming machine. 1,813,598; July 7.

Adams, Henry T., Chicago, Ill. Loose leaf ring book. 1,813,599; July 7.

Adams, William J., Santa Cruz, assignor to Ball Wagon Grader Company, Stockton, Calif. Chain drive control for scraper bowls. 1,813,011; July 7.

Addressograph Company. (See McCain, B. Z., and Thompson, assignors.)

Addressograph Company. (See Mohler, Valentine J., assignor.)

Addressograph Company. (See Paschall, Jaques C., assignor.)

Adler, John B., and J. B. O'Connor, Aurora, and W. N. Vance, Chicago Heights, assignors to Lyon Metal Products, Incorporated, Aurora, Ill. Folding chair. 1,813,653; July 7.

Ahlm, Charles E. F., assignor to Automotive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,813,376; July 7.

Ahnger, Yrjö A., Crockett, Calif. Conveyer system. 1,813,130; July 7.

Aircraft Specialties Company. (See Gunn, Charles H., assignor.)

Aktiebolaget Svenska Spiralfabriken. (See Fries, Joel S., assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Gaudenzi, Arthur, assignor.)

Aktiengesellschaft Brown, Boveri and Cie. (See Kern, Erwin, assignor.)

Alden Speare's Sons Co., The. (See Howe, William C., assignor.)

Alemite Corporation. (See Davis, Ernest W., assignor.)

Alemite Corporation. (See Zerk, Oscar U., assignor.)

Allied Process Corporation. (See Smith, Walter C., assignor.)

Allner, Frederick A., Baltimore, Md. Increasing the useful flow capacity of a hydroelectric plant. 1,813,107; July 7.

Altman, Fred E., Rochester, assignor, by mesne assignments, to Felms Revo Corporation, New York, N. Y. Photographic optical system. 1,812,851; July 7.

Aluminum Company of America. (See Boothman, D. M., and Cullerton, assignors.)

American Gasaccumulator Company. (See Eskilson, Sven A., assignor.)

American La France and Foamite Corporation. (See Orton, Albert W., assignor.)

American Miracle Motors, Ltd. (See Clarke, Douglas F., assignor.)

American Optical Company. (See Baker, Nelson M., assignor.)

American Optical Company. (See Cozzens, Charles O., assignor.)

American Optical Company. (See Tillyer, Edgar D., assignor.)

American Piano Corporation. (See Stoddard, Charles F., assignor.)

American Piano Corporation. (See Stoddard, C. F., and Hickman, assignors.)

American Radiator Company. (See Eggleston, Lewis W., assignor.)

American Seal-Kap Corporation. (See Martin, Harold W., assignor.)

American Signs Corporation. (See Schaefer, F., and Duffendack, assignors.)

American Steel Products Co. (See Tolley, Donald B., assignor.)

American Stove Company. (See Possons, Minard A., assignor.)

American Stove Company. (See Stockstrom, Arthur, assignor.)

American Telephone and Telegraph Company. (See Kent, Robert J., assignor.)

American Telephone and Telegraph Company. (See Labaugh, J. M., and Miller, assignors.)

American Telephone and Telegraph Company. (See Ohl, Russell, S., assignor.)

American Thermos Bottle Company, The. (See Wetmore, Miner P., assignor.)

Anacker, Karl. (See Schneevoigt, A., and Anacker.)

Anaconda Sales Company. (See Robinson, Thomas, assignor.)

Anaconda Sales Company. (See Shakespeare, William M., assignor.)

Anderson, Samuel M., assignor to B. F. Sturtevant Company, Hyde Park, Mass. Air conditioning apparatus. 1,813,692; July 7.

Andrassy, Joseph, Cleveland, Ohio. Dispensing receptacle. 1,813,131; July 7.

Andrejanow, Boris P., Moscow, Union of the Socialist Soviet Republics. Rail fastening device. 1,812,917; July 7.

Andrews, Clarence W., Burlington, N. C. Treating tobacco. 1,813,833; July 7.

Andrews, Isaac, Spartanburg, S. C. Antirattle device. 1,813,132; July 7.

Andrussow, Leonid, Livonia, and F. Duerr, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of catalysts. 1,813,478; July 7.

Anello, Rudolph. (See Villatore, J. E., and Anello.)

Angelus, Alfred A., Milwaukee, Wis. Serving tray. Des. 84,560; July 7.

Anhaltzer, Henry, Pittsburgh, Pa. Drying apparatus. 1,813,133; July 7.

Appel, Joseph J., Osdick, Calif. Tire carrier. 1,813,094; July 7.

Appleman, Boyd K., Beaumont, Tex. Well bailing device. 1,813,134; July 7.

Appleton, Ernst G. (See Williams, C., and Appleton.)

Armstrong, Percy A. E., New York, N. Y. Making ferrous products faced with stable surface alloys. 1,813,654; July 7.

Arnesen, Charlotte, Chicago, Ill. Control device for electric irons and the like. 1,813,267; July 7.

Asher, Allen P., Sandpoint, Idaho. Tool for removing dents from metallic bodies. 1,813,012; July 7.

Ashworth, Fred, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J, Sewing machine shuttle. 1,812,852; July 7.

Associated Telephone and Telegraph Company. (See Beale, Charles E., assignor.)

Associated Telephone and Telegraph Company. (See Taylor, R., and Simpson, assignors.)

Astrup Company, The. (See Astrup, Walter C., assignor.)

Astrup, Walter C., assignor to The Astrup Company, Cleveland, Ohio. Ball-bearing worm-gear for roller awnings. 1,813,524; July 7.

Astrup, Walter C., assignor to The Astrup Company, Cleveland, Ohio. Awning bracket. 1,813,525; July 7.

Atlantic Precision Instrument Company. (See Field, Robert F., assignor.)

Atlas Manufacturing Company. (See Gaines, Eugene F., assignor.)

Aubol, Julius A., Minot, N. Dak. Gambrel. 1,813,600; July 7.

Auñero, John M., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y. Windshield wiper. 1,812,918; July 7.

Automotive Patent Holding Company. (See Ahlm, Charles E. F., assignor.)

Automotive Valves Corporation, The. (See Burtnett, Everett R., assignor.)

Autopoint Company. (See Dell, Frank C., assignor.)

Auto Research Corporation. (See Moore, George L., assignor.)

Avery, Charles E., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn. Electric pull socket. 1,813,108; July 7.

Axell, Fred H., Oakland, Calif. Smoker's device. 1,812,850; July 7.

Ayers, Kreigh B., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Condenser. 1,813,871; July 7.

B. B. Machine Corporation. (See Birdsall, Wilfred T., assignor.)

B. G. Corporation, The. (See Hurley, Roy T., assignor.)

Babcock Manufacturing Company. (See Reynolds, Arthur W., assignor.)

Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Babcock & Wilcox Tube Company, The. (See Piersol, Paul B., assignor.)
Bachelder, William H., Woodriver, Ill., assignor to Standard Oil Company, Whiting, Ind. Filter opening means. 1,813,601; July 7.
Bachler, Frederick R., Oxnard, Calif. Making leguminous flakes. 1,813,268; July 7.
Badger, E. B., & Sons Company. (See Lawrence, Almon R., assignor.)
Bailey Meter Company. (See Barrett, Joseph M., assignor.)
Bailey, Roy W. (See Dellaree, Frank H., assignor.)
Baird Machine Company, The. (See Lewis, Arthur J., assignor.)
Baker, George W., assignor, by mesne assignments, to United States Gypsum Company, Chicago, Ill. Manufacture of corner beads. 1,813,477; July 7.
Baker, James B., Scenery Hill, Pa. Milk bottle sterilizer. 1,813,602; July 7.
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Receptacle. 1,813,135; July 7.
Baker Perkins Co. Inc. (See Bunce, John P., assignor.)
Baker, Robert M., Toledo, Ohio. Hot air furnace casing. 1,813,013; July 7.
Baker, William T. (See Friedlander, M., and Baker.)
Balder, Milton C., Yonkers, N. Y. Electric sign. 1,812,919; July 7.
Baldwin, Delavan M., New York, N. Y. Fireplace scuttle. Des. 84,561.; July 7.
Balinski, Amelia C., Tarrytown, and E. Mahoney, New Rochelle, N. Y. Surgical instrument. 1,813,693; July 7.
Ball Wagon Grader Company. (See Adams, William J., assignor.)
Ballard, Bernard T., and F. J. Gough, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill. Liquid measuring apparatus. 1,813,834; June 7.
Ballard, Ernest S., San Francisco, Calif., assignor to Standard Process Corporation, Chicago, Ill. Doctor blade. 1,812,920; July 7.
Baltes, Max. (See Glietenberg, E., Haller and Baltes.)
Banks, Harry P., Seattle, Wash. Making a water resistant adhesive and the product thereof. 1,813,377; July 7.
Banks, Henry W., 3d, Noroton, Conn. Antiseptic composition and making the same. 1,813,100; July 7.
Bankson, William R., Pittsburgh, Pa. Brick cleaner. 1,813,014; July 7.
Barbour, Perley E. (See Barbour, Walter G., assignor.)
Barbour, Walter G., Quincy, assignor to P. E. Barbour, trading as Barbour Welting Company, Brockton, Mass. Shoe or article of analogous nature. Des. 84,562; July 7.
Barbour Welting Company. (See Barbour, Walter G.)
Barker, Ray E. (See Imel, C. E., and Barker.)
Barna, Andrew, Astoria, N. Y. Shoe-last. 1,183,378; July 7.
Barnes, George W., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Safety lock for roller beds. 1,812,853; July 7.
Barrett, Joseph M., Cleveland Heights, assignor to Bailey Meter Company, Cleveland, Ohio. Balanced valve. 1,813,222; July 7.
Barrett, Ray W., Kalamazoo, Mich. Load blocking device for freight cars and the like. 1,813,260; July 7.
Barry, James J., Halifax, Nova Scotia, assignor to Maritime Fish Corporation Limited, Montreal, Canada. Skinning machine. 1,813,479; July 7.
Bates, Don M., and H. W. Coburn, Huntington, W. Va. Powder dispenser. 1,813,835; July 7.
Bathen, John A., and W. F. Ingraham, jr., assignors of one-third to A. D. Bland, Sioux City, Iowa. Strainer. 1,813,136; July 7.
Battey, William A., Haverford, J. E. Stine, Aldan, Pa., and G. W. Borton, New Lisbon, N. J., assignors to Pennsylvania Crusher Company, New York, N. Y. Hammer crusher. 1,813,836; July 7.
Bauer, Edward, assignor, by mesne assignments, to Bucyrus-Erie Company, Milwaukee, Wis. Excavator. 1,813,110; July 7.
Baum, Isaac A., Chicago, Ill. Metal and wood frame. 1,813,223; July 7.
Baum, Isaac A., Chicago, Ill. Door silencer. 1,813,224; July 7.
Baum, Isaac A., Chicago, Ill. Plaster anchor. 1,813,225; July 7.
Baumann, Alfred E., Milwaukee, Wis. Radio frequency coil. 1,813,137; July 7.
Bausman, Alonzo L., assignor to National Equipment Company, Springfield, Mass. Confection coating and decorating machine. 1,813,655; July 7.
Bausman, Alonzo L., Springfield, Mass. Coffee making machine. 1,813,872; July 7.
Beach, Edward S. (See Foley, William V., assignor.)
Beach, Willard C., East Orange, N. J. Paint spraying apparatus. 1,812,854; July 7.
Beale, Charles E., London, England, assignor to Associated Telephone and Telegraph Company, Kansas City, Mo. Telephone system. 1,813,138; July 7.
Bearden, Howell B. (See Tomlinson, W. A., and Bearden.)
Beardsley Chandelier Manufacturing Company. (See Ohm, Albert J. D., assignor.)
Beaver, Rudolph, Watertown, assignor to Gillette Safety Razor Company, Boston, Mass. Knife. 1,813,723; July 7.
Behm, Homer, Chicago, Ill. Treating mineral oil material. 1,813,882; July 7.
Behm, Homer, Tulsa, Okla. Treatment of petroleum oils. 1,813,883; July 7.
Behm, Homer, Belmar, N. J. Treatment of mineral oil material. 1,813,884; July 7.
Behm, Homer, Belmar, N. J. Treating oils and product thereof. 1,813,885; July 7.
Behm, Homer, Belmar, N. J. Producing oil-soluble material and product thereof. 1,813,886; July 7.
Bell Telephone Laboratories, Incorporated. (See Bruce, Edmond, assignor.)
Bell Telephone Laboratories, Incorporated. (See Kerr, Mark B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Inbaugh, J. M., and Miller, assignors.)
Bell, Thomas W., Parkersburg, W. Va. Jar. 1,813,015; July 7.
Bellamy, Finis, Redford, Mich. Safety device for street cars. 1,813,139; July 7.
Bello, Rosario, New York, N. Y. Cushion tire for vehicles. 1,813,603; July 7.
Bendix Aviation Corporation. (See Morris, William L., assignor.)
Bendix Brake Company. (See Dodge, Adiel Y., assignor.)
Benedict, Charles D., Sturgis, Ky. Electrical heater. 1,813,270; July 7.
Benedix, Paul H., Chicago, Ill. Fluid pressure motor. 1,813,526; July 7.
Benner, Russell E., Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,812,855; July 7.
Bennett, John P., Witton, Birmingham, England. Separable fastener. 1,813,434; July 7.
Bentley, Oliver D. H., Norfolk, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Packing. 1,813,016; July 7.
Bentz, Edwin C., Glendale, Calif. Rotary saw. 1,813,435; July 7.
Berg, Hart O., assignor, by mesne assignments, to Sealcones, Inc., New York, N. Y. Apparatus for making receptacles. 1,813,379; July 7.
Berge, Nicolai J., Dearfield, Wis. Windshield scraper. 1,813,604; July 7.
Beste, August A., Virginia, Minn. Radio receiving set. 1,813,724; July 7.
Bethel, Claude, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Railway motor suspension. 1,813,140; July 7.
Bethel, Claude, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Railway motor mounting. 1,813,141; July 7.
Bettger, Carl J., Herreid, S. Dak. Can washer. 1,813,605; July 7.
Beyer, Alfred, Anaconda, Mont. Music holder. 1,813,111; July 7.
Bhosys, Charles W., New York, N. Y. Producing multipose pictures. 1,813,436; July 7.
Bienenstein, Andreas, assignor to Conklin Pen Company, Toledo, Ohio. Fountain pen desk set. 1,813,271; July 7.
Bigelow-Sanford Carpet Co. (See Stone, Edwin W., assignor.)
Blitz, Wilhelm, Hanover, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Dehydration. 1,813,272; July 7.
Binapfl, Joseph, Krefeld, and W. Krey, Uerdingen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Obtaining oxygenated compounds from alkyl benzenes. 1,813,606; July 7.
Binks Manufacturing Company. (See Bramsen, S., and Hersleb, assignors.)
Birdsall, Wilfred T., Montclair, N. J., assignor to B. B. Machine Corporation. Method of and apparatus for rendering fats. 1,813,226; July 7.
Blair, George W., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Slider. 1,813,227; July 7.
Blake, Eli J., and W. F. Bouché, Buffalo, assignors, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y. Turbo-generator. 1,813,656; July 7.
Bland, Abraham D. (See Bathen, J. A., and Ingraham, assignors.)
Boeing Airplane Company. (See Haberlin, John F., assignor.)
Boeing Airplane Company. (See Minshall, Robert J., assignor.)
Boggs Plow Company. (See Neufang, H. J., and Waldo, assignors.)
Boidin, Albert R., Seclin, and I. A. Effront, Marcq en Baroeul, France. Unhairing and batting skins. 1,812,921; July 7.
Boland, Charles R., Baltimore, Md., Ash receiver. 1,813,837; July 7.
Bollmann, Martin, Berlin, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. 1-methyl-4-hydroxybenzene caprylate. 1,813,607; July 7.
Bonbright, John M., Detroit, Mich. Automobile body construction. 1,813,380; July 7.

Bond, Sherman G., Wichita, Kans. Metal window awning. 1,813,017; July 7.
Bonney, Lynn F. (See Wright, J. C., and Bonney.)
Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,813,558; July 7.
Booth, Levis M., Plainfield, N. J. Manufacture of pulp and paper. 1,813,658; July 7.
Boothman, Dale M., Oakmont, and J. A. Cullerton, New Kensington, assignors to Aluminum Company of America, Pittsburgh, Pa. Method of and apparatus for soldering. 1,813,657; July 7.
Borg & Beck Company, The. (See Reed, Harold V., assignor.)
Borton, George W. (See Battey, W. A., Stine, and Borton.)
Botel, Charles, and Leon R. Paul, New York, N. Y. Reenforcing truss. 1,813,838; July 7.
Bouché, William F. (See Blake, E. J., and Bouché.)
Bouchspies, William F. C., San Francisco, Calif. Three dimensional projection. 1,813,559; July 7.
Boudin, Louis, St. Gobain, assignor to Societe Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Glass forming roll. 1,813,142; July 7.
Boulton & Paul Limited. (See Townend, Hubert C. H., assignor.)
Bovey, Sidney J. V., Chicago, Ill., assignor, by mesne assignments, to Metalcraft Heater Corporation, Grand Rapids, Mich. Valve construction and making the same. 1,813,273; July 7.
Bowman, Frederick C., Duluth, Minn., Aerial navigation. 1,813,694; July 7.
Bowman, Oliver S., Colorado Springs, Colo. Heat equipment. 1,813,228; July 7.
Boyce, Erskine E., Coronado, Calif. Knotter. 1,813,725; July 7.
Bradbury, Tennyson F. (See Hall, H. C., and Bradbury.)
Bradner, Donald B., Hamilton, Ohio, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Ethylation of cellulose. 1,813,726; July 7.
Bramsen, Svend, and W. Hersleb, assignors to Binks Manufacturing Company, Chicago, Ill. Touch-up spray gun. 1,812,922; July 7.
Bresch, Albert, St. Louis, Mo. Walking figure wheeled toy. 1,813,112; July 7.
Bristol Aeroplane Company Limited, The. (See Pollard, Harold J., assignor.)
Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Acetyl-8-phenyl-salicylic acid. 1,812,856; July 7.
Brockschmidt, Frederick P., Quincy, Ill. Tongs. 1,813,695; July 7.
Brogden, Joah, Melrose Park, assignor to David Lupton's Sons Company, Philadelphia, Pa. Metallic partitioning. 1,813,878; July 7.
Brooks, William J., Des Moines, Iowa. Tire chain. 1,813,274; July 7.
Brosch, Anton, Vienna, Austria. Apparatus for submerged intestinal lavage. 1,813,608; July 7.
Brown and Sharpe Manufacturing Company. (See Graves, Benjamin P., assignor.)
Brown Company. (See Parker, Howard, assignor.)
Brown Company. (See Richter, George A., assignor.)
Brown Lynch Scott Co. (See Smith, Edward M., assignor.)
Brown, Newton N., assignor to Gold Medal Camp Furniture Manufacturing Company, Racine, Wis. Collapsible table. 1,813,018; July 7.
Brown, Newton N., assignor to Gold Medal Camp Furniture Company, Racine, Wis. Foldable bed. 1,813,019; July 7.
Brown, Newton N., assignor to Gold Medal Camp Furniture Manufacturing Company, Racine, Wis. Fastening flexible seats. 1,813,020; July 7.
Brown, Robert S., assignor, by mesne assignments, to The New Britain-Gridley Machine Company, New Britain, Conn. Threading device. 1,813,480; July 7.
Brown, Thomas H., Chatham, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Sterilizing system. 1,813,021; July 7.
Browne, William A., and R. Kissel, New York, N. Y. Toy electric railway system. 1,813,560; July 7.
Brownlee, Dalmar T. (See Starkey, W. C., and Brownlee.)
Bruce, Edmond, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Aerial system. 1,813,143; July 7.
Brunner, Matthew J., Buffalo, N. Y. Curtain rod. 1,812,857; July 7.
Bruson, Herman A., Germantown, assignor to Rohm & Haas Company, Philadelphia, Pa. Resin. 1,813,838; July 7.
Bryan, Everett, assignor of one-half to C. E. Judd, Chicago, Ill. Lap welding machine. 1,813,727; July 7.
Bryant, William T., assignor to W. A. Williams, Houston, Texas. Refining oils. 1,812,923; July 7.
Bryant, William T., assignor to W. A. Williams, Houston, Tex. Making lubricating oil. 1,812,924; July 7.
Buckland, Frank A., Rochester, N. Y. Excavating machine. 1,812,925; July 7.
Buckland, Frank A., Rochester, N. Y. Excavating machine. 1,812,926; July 7.
Bucyrus-Erie Company. (See Bauer, Edward, assignor.)
Bucyrus-Erie Company. (See Lehman, W., and Davidson, assignors.)
Budd Wheel Company. (See Davenport, Talmon A., assignor.)
Buhren, Hans, assignor of one-third to G. Feddersen and one-third to J. W. Stamp, Brooklyn, N. Y. Propeller of a vessel. 1,813,113; July 7.
Bull, Arthur A., and T. I. Larsen, assignors to Handy Cleaner Corporation, Detroit, Mich. Filter. 1,812,927; July 7.
Bullock, Carl C., Aliquippa, Pa. Pulpit desk. 1,813,793; July 7.
Bunce, John P., London, England, assignor to Baker Perkins Co., Inc., Saginaw, Mich. Conveyer system. 1,813,794; July 7.
Bundy, Fred H., Manhattan, Kans. Hack saw. 1,812,928; July 7.
Burdick, Frank, assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,813,275; July 7.
Burdick, John S., Hamburg, N. Y. Fastener for doors and the like. 1,812,858; July 7.
Burke, Caroline A., Chicago, Ill. Lamp base. Des. 84,563; July 7.
Burke, Caroline A., Chicago, Ill. Lamp base. Des. 84,564; July 7.
Burke, Caroline A., Chicago, Ill. Lamp base. Des. 84,565; July 7.
Burke, James P., assignor of one-half to E. M. Cahalan, Newark, N. J. Internal combustion engine. 1,812,859; July 7.
Burley, Thomas, Seattle, Wash. Automatic ash chute. 1,813,481; July 7.
Burner, William L., Columbus, Ohio, assignor to Western Wheeled Scraper Company, Aurora, Ill. Dump car. 1,813,022; July 7.
Burns, Walter M., Absecon, N. J. Internal combustion engine. 1,812,860; July 7.
Burtnett, Everett R., Los Angeles, Calif., assignor to The Automotive Valves Corporation, Reno, Nev. Internal combustion engine. 1,813,276; July 7.
Butler, Horace. (See Clarke, A., and Butler.)
Cadieux, Joseph O., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Telephone. 1,813,887; July 7.
Cahalan, Eugene M. (See Burke, James P., assignor.)
Cain, John J., Bayonne, N. J. Metal drum, barrel, or container. 1,812,929; July 7.
Cairew Incorporated. (See Ward, Seymour P., assignor.)
Cambridge Rubber Co. (See Dunbar, Ernest W., assignor.)
Campbell, A. S., Company. (See Kubler, Frederick J., assignor.)
Capell, Carl F., Santa Monica, Calif., assignor to Orna-Metal Awning Corporation, Las Vegas, Nev. Stapling machine. 1,813,839; July 7.
Capezio, Salvatore, East Paterson, N. J. Ballet slipper. 1,813,561; July 7.
Capstan Glass Company. (See Piazzoli, Theodore J., assignor.)
Carey, Philip, Manufacturing Company, The. (See Rogers, Homer L., assignor.)
Carlson, Walter C., assignor to The Milwaukee Paper Box Company, Milwaukee, Wis. Receptacle. 1,813,659; July 7.
Carnegie Institution of Washington. (See Gish, Oliver H., assignor.)
Carollus, Fred J., and R. W. Stuler, Pittsburgh, Pa., assignors to Stainless Steel Corporation. Treatment of metal. 1,813,840; July 7.
Carrington, Frank G., assignor to Ferric Engineering Company, Anniston, Ala. Casting ladle. 1,813,381; July 7.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing acetoxime. 1,813,660; July 7.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. J. Cellulosic composition of matter containing iso-propyl-bromide. 1,813,661; July 7.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing iodo-benzene. 1,813,662; July 7.
Carson, James A., assignor to Utah Metals Flux Company, Salt Lake City, Utah. Making iron and steel and product. 1,813,437; July 7.
Carson, William H., New Rockford, N. Dak. Road sign. Des. 84,566; July 7.
Carter, Arthur E., and C. A. Johnson, San Bernardino, Calif. Perforating machine for well casing. 1,813,144; July 7.
Cavicchioli, Gioacchino, and E. Ceschi, Turin, Italy. Vehicle door. 1,813,145; July 7.
Cecil, Warren W., Dixon, Calif. Egg packing mechanism. 1,813,527; July 7.
Celanese Corporation of America. (See Dickie, W. A., and Martin, assignors.)
Ceschi, Eugenio. (See Cavicchioli, G., and Ceschi.)
Challenge Machinery Company. (See Lee, James E., assignor.)
Chance, Albert B., Centralia, Mo. Pole guy fixture. 1,813,482; July 7.
Channell, James W., Southgate, Calif. Cable splicing machine. 1,813,562; July 7.
Chappell, James F., Windsor, Ontario, Canada. Oil level indicating apparatus. 1,813,382; July 7.
Chase Companies, The. (See Pope, Elton A., assignor.)
Chase, Curtis D., Allston, Mass., assignor to Chase Holding Corporation. Material treating apparatus. 1,813,728; July 7.

Chase, Curtis D., Allston, Mass., assignor to Chase Holding Corporation. Snow melting flusher. 1,813,729; July 7.
Chase Foundry & Manufacturing Company, The. (See Chase, Sherwood M., assignor.)
Chase Holding Corporation. (See Chase, Curtis D., assignor.)
Chase, Sherwood M., assignor to The Chase Foundry & Manufacturing Company, Columbus, Ohio. Spring supported platform for vehicles. 1,812,861; July 7.
Cheslock, Frank J., and C. A. Yares, St. Paul, Minn. Electric heater. 1,813,023; July 7.
Cheaney, Jacques W. D., Chicago, and H. P. MacLagan, Oak Park, Ill., assignors to McIntosh Electrical Corporation. Therapeutic lamp apparatus. 1,813,383; July 7.
Chester, Frank R., New York, N. Y., assignor to Chesterfield Control Company, Dover, Del. Game. 1,812,930; July 7.
Chester, Frank R., New York, N. Y., assignor to Chesterfield Control Company, Dover, Del. Fight game. 1,812,931; July 7.
Chester, Frank R., New York, N. Y., assignor to Chesterfield Control Company, Dover, Del. Football game. 1,812,932; July 7.
Chesterfield Control Company. (See Chester, Frank R., assignor.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chiles, George S., assignor to Scullin Steel Company, St. Louis, Mo. Grab iron or ladder rung. 1,813,114; July 7.
Christiansen, Walter G., Bloomfield, and R. Van Winkle, Passaic, N. J., assignors to E. R. Squibb & Sons, New York, N. Y. Treatment and packaging of ether. 1,813,664; July 7.
Christie, Howard E., and H. W. Couse, Bronx, N. Y. Manufacturing hydrometer floats. 1,813,384; July 7.
Churus, George P., New York, N. Y. Rocking figure toy. 1,813,277; July 7.
Cincinnati Grinders Incorporated. (See Shriver, Edward A., assignor.)
Cinema Patents Company. (See Thompson, Frederick B., assignor.)
Clark, Ernest, Abington, assignor to Abington Textile Machinery Works, Boston, Mass. Pipe coupling and support. 1,813,528; July 7.
Clark, George F., West Drayton, England, assignor to Victor Talking Machine Company. Automatic brake for talking machines. 1,813,483; July 7.
Clark, Harold J. (See Taylor, George W., assignor.)
Clark, James, assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Pipe coupling for plain end pipes. 1,813,529; July 7.
Clark, James H., assignor of one-half to Swift and Company, Chicago, Ill. Display and shipping container. 1,813,146; July 7.
Clark, John M., assignor to Universal Button Fastening & Button Co., Detroit, Mich. Button. 1,813,115; July 7.
Clark, John M., assignor to Universal Button Fastening & Button Company, Detroit, Mich. Button. 1,813,339; July 7.
Clark, Thomas H., assignor to The Marion Steel Body Company, Marion, Ohio. Dumping unit for trucks. 1,813,278; July 7.
Clark, Warner, et al. (See McCarty, Madison P., assignor.)
Clarke, Alexander, Eastland, Tex., and H. Butler, West Chester, assignors to United Hydro Carbons Company, West Chester, Pa. Production or recovery of lighter hydrocarbons. 1,813,024; July 7.
Clarke, Douglas F., Salt Lake City, Utah, assignor to American Miracle Motors, Ltd. Internal combustion engine. 1,812,862; July 7.
Class, George M., assignor to Gisholt Machine Company, Madison, Wis. Turret clamping device. 1,813,484; July 7.
Clausen, Peter, Mission, S. Dak. Game apparatus. 1,813,116; July 7.
Clayton Gin Compress Company. (See Mackenzie, Alexander S., assignor.)
Cleveland Crane & Engineering Company, The. (See Heinle, Walter C., assignor.)
Cleveland Heater Company, The. (See Friedman, Arthur, assignor.)
Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Deterioration inhibitor for rubber. 1,813,609; July 7.
Coburn, Harry W. (See Bates, D. M., and Coburn.)
Cocks, Harry J., assignor to Metal Products Company, Des Moines, Iowa. Accelerator push rod control. 1,813,279; July 7.
Cohen, Louis, Washington, D. C. Radio signaling. 1,813,563; July 7.
Coker, Samuel W., Lubbock, Tex. Agricultural implement. 1,813,438; July 7.
Cole, Charles E., Cripple Creek, Colo. Paper weight. 1,813,280; July 7.
Coleman, Clyde J., London, England. Lens of photographic cameras, picture projecting apparatus and other like optical devices. 1,813,439; July 7.
Collins, Robert G., Philadelphia, Pa. Binder strip for floor coverings. 1,813,025; July 7.
Collins Supply & Equipment Company. (See Munson, Willard T., assignor.)
Color-Ray Holding Corporation. (See Peters, Thomas K., assignor.)
Combs, Almon E., and G. D. Fisk, Fort Dodge, Kans. Sawing apparatus. 1,812,863; July 7.
Commercial Solvents Corporation. (See Gabriel, Charles L., assignor.)
Congor Mfg. Company, The. (See Gorsuch, Robert A., assignor.)
Conklin Pen Company. (See Bienenstein, Andreas, assignor.)
Conklin, Roscoe D., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Double acting door reversing track. 1,813,564; July 7.
Conn, Robert W., Vaux Hall, N. J., assignor to Westinghouse Lamp Company. Electric incandescent lamp making machine. 1,813,565; July 7.
Connecticut Telephone & Electric Corporation. (See Cadieux, Joseph O., assignor.)
Constable, Charles E., assignor to The National Marking Machine Company, Cincinnati, Ohio. Assorting and classifying laundry articles. 1,813,229; July 7.
Conti, Eugene, Cliffside Park, N. J., assignor to A. Herz, New Rochelle, N. Y. Apparatus for cutting drinking tubes. 1,813,340; July 7.
Cook, John F., jr., Detroit, Mich. Controlling means for aeroplanes. 1,813,485; July 7.
Cooke, James, Omaha, Nebr. Fastener for display characters. 1,812,933; July 7.
Coole, John L., Boston, Mass. Floor washing machine. 1,813,026; July 7.
Coolidge, Marcus A. (See White, W. D., and Gleason, assignors.)
Cooper, John, Inchinnan, Scotland. Packing inner tubes for pneumatic tires. 1,813,027; July 7.
Cooper, William D., St. Paul, Minn. Telegraphic transmitting instruments. 1,813,230; July 7.
Corey, Lorin A., assignor, by mesne assignments, to General Instrument Company, La Crosse, Wis. Gauge. 1,813,566; July 7.
Coryell, Charles N., Larchmont, N. Y. Vanity case. 1,813,147; July 7.
Couse, Kibbey W. (See Christie, H. E., and Couse.)
Cowan, Roysel J., and P. W. McCoy, assignors to Surface Combustion Corporation, Toledo, Ohio. Case hardening. 1,813,028; July 7.
Cozzens, Charles O., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,813,148; July 7.
Crabtree, Thomas, Worcester, assignor to Independent Lock Company, Fitchburg, Mass. Packing nut for doorchecks and the like. 1,813,443; July 7.
Craig, Robert, Dayton, Ohio, assignor to International Business Machines Corporation, New York, N. Y. Machine for indicating weight and functions of weight. 1,813,029; July 7.
Crittall Casement Window Company. (See Jorss, Karl F., assignor.)
Crocker, Ralph C., Toledo, Ohio, assignor of one-half to S. C. Crocker, Boston, Mass. Golf hole cup. 1,813,696; July 7.
Crocker, S. Chilton. (See Crocker, Ralph C., assignor.)
Croft, Hiram D. (See Perkins, J. L., and Croft.)
Crouse-Hinds Company. (See Olley, Raymond H., assignor.)
Crowe, John M., Covington, Ky., assignor to The Stanley Works, New Britain, Conn. Motor driven hand tool. 1,813,231; July 7.
Cullerton, James A. (See Boothman, D. M., and Cullerton.)
Cummins Perforator Company. (See Swanson, Hjalmar, assignor.)
Cunningham, Orin D. (See Derby, I. H., and Cunningham.)
Cunningham, Orin D., assignor to P. C. Reilly, Indianapolis, Ind. Treatment of pitches and tars. 1,813,341; July 7.
Cunningham, Orin D., assignor to P. C. Reilly, Indianapolis, Ind. Froth flotation process. 1,813,342; July 7.
Cunningham, Orin D., assignor to P. C. Reilly, Indianapolis, Ind. Froth flotation. 1,813,343; July 7.
Currier, Hiram D., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Receiving circuit. 1,813,232; July 7.
Curtis, George V., West Springfield, Mass. Universal joint. 1,812,934; July 7.
D. R. S. Company. (See Offutt, Lawrence H., assignor.)
Dake, Charles W. (See Kennedy, J. J., and Dake.)
Dales, Benton, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber coated article and making same. 1,813,440; July 7.
Dalton, Daniel F., assignor to The Shoe Hardware Company, Waterbury, Conn. Fastening device. 1,813,385; July 7.
Danenhower, William J., assignor to L. J. Woltzen, Los Angeles, Calif. Combined electric and steam garment and cloth pressing apparatus. 1,813,663; July 7.
Darlington, Homer T., West Chester, Pa., assignor to M. B. Schuster, Joliet, Ill., trustee. Apparatus for treating, distilling, and decomposing hydrocarbon oils. 1,813,117; July 7.
Darmstaetter, Armin A. (See Sawtelle, Charles A., assignor.)

Daugherty, John O., Electra, Tex. Ice scoring machine. 1,813,149; July 7.
Davenport, Arthur C., Chicago, Ill. Key cabinet and retainer. 1,813,030; July 7.
Davenport, Talmon A., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Wheel. Des. 84,567; July 7.
Davenport, Talmon A., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Wheel. Des. 84,568; July 7.
Davey, George W., and F. H. Waite, Long Island City, N. Y. Water gas carburetor. 1,813,386; July 7.
Davidson, Glenn, and I. F. Laucks, Seattle, Wash. Making a water resistant double decomposition adhesive and to the product thereof. 1,813,387; July 7.
Davidson, Trevor. (See Lehman, W., and Davidson.)
Davis, Charles, Neuilly-sur-Seine, France. Face powder box. 1,813,281; July 7.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Pressing machine element. 1,813,610; July 7.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Liquid handling means. 1,812,864; July 7.
Davis, Joseph G., Arlington, Tex. Motor vehicle head lamp. 1,812,935; July 7.
Dayton Pump and Mfg. Co., The. (See Eickmeyer, Earl E., assignor.)
Deeds, Clyde C. (See Furstenberger, F. W., and Deeds.)
Deere & Company. (See Silver, Walter H., assignor.)
Deere & Company. (See Strandlund, Carl G., assignor.)
De Faveri, Serafino, Milan, Italy. Cellular material for safety garments. 1,812,936; July 7.
De George, Joe, Ashtabula, Ohio. Hat hanger. Des. 84,509; July 7.
De Grofft, Will, Woodstown, N. J. Awning hook. 1,813,031; July 7.
Deisch, Bert A. (See McDonald, C. D., and Deisch.)
De Laval Separator Company, The. (See Hapgood, Cyrus H., assignor.)
Delco-Light Company. (See Dickey, Ernest, assignor.)
Delco-Light Company. (See Warner, C., and Fisher, assignors.)
Dell, Frank C., assignor to Autopoint Company, Chicago, Ill. Adjustable pen support. 1,813,233; July 7.
Dellaree, Frank H., assignor of one-half to R. W. Bailey, Detroit, Mich. Screw feeding mechanism. 1,813,697; July 7.
Delorme, Alfred, Springfield, Mass. Nipple extractor. 1,813,567; July 7.
Demlinger, Morris, Chicago, Ill. Combination folding bed and imitation fireplace. 1,813,282; July 7.
Dennis, J. C., Co. (See Seifferle, Oliver, assignor.)
Deppeler, John H., Weehawken, N. J. Mold for aluminothermic welding of rails. 1,813,032; July 7.
Derby, Ira H., and O. D. Cunningham, assignors to P. C. Reilly, Indianapolis, Ind. Froth flotation of ores. 1,813,344; July 7.
Derby, Ira H., and O. D. Cunningham, assignors to P. C. Reilly, Indianapolis, Ind. Ore flotation. 1,813,345; July 7.
Derby, Ira H., and O. D. Cunningham, assignors to P. C. Reilly, Indianapolis, Ind. Ore flotation and flotation agent. 1,813,346; July 7.
De Reamer, Frank C., Bridgeport, Conn., assignor to General Electric Company. Combined switch and brush holder. 1,813,889; July 7.
De Simone, Peter, Brooklyn, N. Y. Hat blocking machine. 1,813,795; July 7.
Deutsche Gold & Silber Scheideanstalt vormals Roessler. (See Pfleger, Johannes, assignor.)
De Walt Products Corporation. (See De Walt, Raymond E., assignor.)
De Walt, Raymond E., assignor to De Walt Products Corporation, Leola, Pa. Adjustable machine head. 1,813,568; July 7.
Dewitt, William J., assignor to Shoe Form Co. Inc., Auburn, N. Y. Hosiery form. 1,813,388; July 7.
Dickey, Ernest, assignor to Delco-Light Company, Dayton, Ohio. Electric system. 1,813,033; July 7.
Dickie, William A., and R. Martin, Spondon, near Derby, England, assignors to Celanese Corporation of America. Manufacture of yarns or threads, and apparatus therefor. 1,813,611; July 7.
Diesel, William F., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y. Locking mechanism. 1,813,441; July 7.
Dietzgen, Eugene, Co. (See Langsner, Adolph, assignor.)
Dina, Augusto, Jersey City, N. J., assignor to The Precision Machine Co., Inc., New York, N. Y. Valve for magazines for picture films. 1,812,865; July 7.
Direct Separator Company Inc., The. (See Powers, William T., assignor.)
Divco-Detroit Corporation. (See Maurer, E. R., and Ferguson, assignors.)
Dobrowsky, Emmanuel, assignor to Motor Car Advertising Device Co., Inc., New York, N. Y. Advertising device. 1,813,442; July 7.
Dodd, Gerald D., Greensburg, Pa. Method and apparatus for exchanging heat. 1,813,234; July 7.
Dodge, Adiel Y., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake mechanism. 1,813,444; July 7.
Doherty Research Company. (See Goldsborough, Winder E., assignor.)
Dollack, Charles, assignor to The Jacobs Bros. Co. Inc., Brooklyn, N. Y. Scale. 1,812,937; July 7.
Donnelley, R. R., & Sons Company. (See Ackley, Raymond E., assignor.)
Donohue, John M. (See Seel, P. C., Webb, and Donohue.)
Donovan, John J., Oakland, and E. F. Wiley, San Francisco, Calif. Awning type window. Re18,125; July 7.
Dornbusch, Josef, Krefeld, Germany, assignor to Lambert & Loomis, Inc. Textile fabric or similar article. Des. 84,570; July 7.
Dornbusch, Josef, Krefeld, Germany, assignor to Lambert & Loomis, Inc. Textile fabric or similar article. Des. 84,571; July 7.
Dornbusch, Josef, Krefeld, Germany, assignor to Lambert & Loomis, Inc. Textile fabric or similar article. Des. 84,572; July 7.
Doughty, Howard W., Amherst, Mass. Fire extinguisher. 1,813,034; July 7.
Dow Chemical Company, The. (See Britton, Edgar C., assignor.)
Dowd, Elmer W., Chicago, Ill. Wire broom or rake. 1,813,445; July 7.
Draeger Freres. (See Draeger, Robert, assignor.)
Draeger, Robert, assignor to Draeger Freres, Montrouge, France. Stitching machine for sets of sheets. 1,813,035; July 7.
Draper, Clare H., assignor to Draper Corporation, Hopedale, Mass. Intermittent thread cutting loom temple. 1,813,888; July 7.
Draper Corporation. (See Draper, Clare H., assignor.)
Draper Corporation. (See West, Jack F., assignor.)
Drenthe, John, Chicago, Ill. Mat or similar article. Des. 84,573; July 7.
Dresser, S. R., Manufacturing Company. (See Clark, James, assignor.)
Dreyfus, Camille, New York, N. Y. Crepe fabric and making the same. 1,813,530; July 7.
Drouin, Joseph A., Willimantic, Conn. Railroad gate. 1,812,866; July 7.
Du Boistesselin, Henri, Rouen, assignor of one-half to M. Hurel, Aunay s/Crecy, Eure & Loir, France. Obtaining a product rich in cellulose and useful by-products from straw. 1,813,531; July 7.
Duerr, Felix. (See Andrussow, L., and Duerr.)
Dufaux, Armand, Levallois, France. Adjustable shock absorber. 1,813,532; July 7.
Duff, Ewen C., assignor to Kops Bros. Inc., New York, N. Y. Apparel garment. 1,813,389; July 7.
Duffendack, Ora S. (See Schaefer, F., and Duffendack.)
Duffy, Charles H., Miami, Fla. Radio loud speaker. 1,812,867; July 7.
Dunbar, Ernest W., Hudson, assignor to Cambridge Rubber Co., Cambridge, Mass. Molding die. 1,813,150; July 7.
Dunbar, Ernest W., Hudson, assignor to Cambridge Rubber Co., Cambridge, Mass. Manufacturing rubber articles. 1,813,235; July 7.
Dunham, Charles L., Wellsburg, W. Va. Wrench. 1,812,938; July 7.
Du Pont, E. I., de Nemours, & Company. (See Bradner, Donald B., assignor.)
Du Pont, Eleuthere P., Montchanin, Del. Filler connection for tanks. 1,813,612; July 7.
Du Pont Viscoloid Company. (See Richard, John B., assignor.)
Dutschke, Hermann A., Kassel, Germany. Indicating device for the power consumption in motor cars and the like. 1,812,868; July 7.
Dwyer, Michael J., East Weymouth, Mass. Decorating leather. 1,813,390; July 7.
E. A. Laboratories, Inc. (See Aufiero, John M., assignor.)
Eastman Kodak Company. (See Carroll, Setwart J., assignor.)
Eastman Kodak Company. (See Donohue, J. M., Webb, and Seel, assignors.)
Eastman Kodak Company. (See Hastings, Henry E., assignor.)
Eastman Kodak Company. (See Mihalyi, Joseph, assignor.)
Eastman Kodak Company. (See Sandvik, Otto, assignor.)
Eastman Kodak Company. (See Staud, C. J., and Webber, assignors.)
Eastman Kodak Company. (See Teague, Walter D., assignor.)
Eastman Kodak Company. (See Wittel, Otto, assignor.)
Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmission line device. 1,813,151; July 7.
Eclipse Textile Devices, Inc. (See Hasbrouck, Louis B., assignor.)
Edison, Thomas A., Incorporated. (See Huenlish, Charles, assignor.)
Edwards, James H., Passaic, N. J., and R. A. Marble, Ben Avon, Pa., assignors to United States Steel Corporation, New York, N. Y. Rolled H-section. 1,813,118; July 7.
Edwards, William A., Chicago, Ill. Radiator shutter throttle control. 1,812,869; July 7.
Edwards, William A., Chicago, Ill. Fuel intake controlling device for internal combustion engines. 1,812,939; July 7.

Eeja Auto Accessories Company. (See Small, Edward A., assignor.)
Effront, Ivan A. (See Boidin, A. R., and Effront.)
Eggleston, Lewis W., Detroit, Mich., assignor to American Radiator Company, New York, N. Y. Refrigerating unit. 1,813,486; July 7.
Ehrlich, John B., Portland, Oreg. Smokeless fuel economizing furnace. 1,812,940; July 7.
Eickmeyer, Earl E., assignor to The Dayton Pump and Mfg. Co., Dayton, Ohio. Setting mechanism for pumps. 1,813,347; July 7.
Eickmeyer, Earl E., assignor to The Dayton Pump & Manufacturing Company, Dayton, Ohio. Coin collecting liquid dispensing apparatus. 1,813,348; July 7.
Eickmeyer, Earl E., assignor to The Dayton Pump and Manufacturing Company, Dayton, Ohio. Visible flow device. 1,813,349; July 7.
Eisemann Magneto Corporation. (See Kuehn, George F., assignor.)
Eldridge, Charles H. (See Fink, C. G., and Eldridge.)
Electric Signal Company, The. (See Klein, Joseph W., assignor.)
Electrical Engineers Equipment Co. (See Wagoner, Kenneth S., assignor.)
Electrical Testing Laboratories. (See Millar, Preston S. and H. H., assignors.)
Elliott, Frederick T., Somerville, Mass. Shock absorber. 1,813,666; July 7.
Elliott, Harold F., Palo Alto, Calif., assignor to Victor Talking Machine Company, Camden, N. J. System of neutralization. 1,813,036; July 7.
Ellis Adding Typewriter Company. (See Ens, Emil J., assignor.)
Ellsworth, Henry H., Cohasset, Mass. Antiskid device. 1,813,391; July 7.
Elektrische Lot-und Schweiss-Gesellschaft mit beschränkter Haftung. (See Helle, Carl, assignor.)
Elwell-Parker Electric Company, The. (See Abbe, Edward J., assignor.)
Emerson, Merton L., assignor to The Lamson Company, Syracuse, N. Y. Method of and apparatus for controlling air flow in pneumatic systems. 1,813,487; June 6.
Emerson, Ralph W., assignor to Gyro Brush Co., East Orange, N. J. Washing and scrubbing brush. 1,813,569; July 7.
Engelbrecht, Curt. (See Peterson, I., and Engelbrecht.)
Enghauser, Winford L., Cincinnati, Ohio. Machine for forming openings in piping. 1,813,152; July 7.
Engl, Morris, and G. Mirus, New York, N. Y. Statistical chart. Des. 84,574; July 7.
Englander, Irving. (See Valentine, J. E., and Englander.)
Ens, Emil J., assignor to Ellis Adding Typewriter Company, Newark, N. J. Rack controlling calculating machines. 1,813,037; July 7.
Erne, John A., Spokane, Wash. Pliers. 1,813,038; July 7.
Escol, Jules, Catelet, Belgium. Protecting sheath for electric wires. 1,813,039; July 7.
Eskilson, Sven A., Stockholm, Sweden, assignor to American Gasaccumulator Company, Elizabeth, N. J. Marine light signal reflector. 1,813,874; July 7.
Eslava, Jerome O., assignor of one-half to J. B. Robertson, jr., Mobile, Ala. Steam pipe connection. 1,813,613; July 7.
Euclid Electric & Manufacturing Company, The. (See Rasmussen, Christian A., assignor.)
Evans Products Company, The. (See Snyder, Clifford L., assignor.)
Evans, Wilmot R., trustee. (See Wolfe, Walter G., assignor.)
Exchange Lumber Company. (See Goodloe, Alfred M., assignor.)
Fackler, Louis K., Ridgewood, N. J., and H. F. Gardner, Brooklyn, N. Y., assignors to Stein, Hall & Company, Inc. Adhesive composition and making the same. 1,813,236; July 7.
Fagan, Charles D., Sharon, Pa., assignor to Sharpsville Boiler Works Company, Sharpsville, Pa. Casing for dispensing apparatus. Des 84,575; July 7.
Fageol, Frank R. and W. B., assignors to Twin Coach Company, Kent, Ohio. Motor vehicle. Des. 84,576; July 7.
Fageol, William B. (See Fageol, Frank R. and W. B.)
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Crank shaft. 1,813,153; July 7.
Farnam, Julian P., and E. R. Stone, Minneapolis, Minn. Internal combustion engine. 1,813,730; July 7.
Fast, Friedrich, Berlin, Germany. Device for sorting coins. 1,813,841; July 7.
Feddersen, George, et al. (See Buhren, Hans, assignor.)
Federal Telegraph Company. (See Nicolson, Alexander M., assignor.)
Fehr, Roy B., Detroit, Mich., assignor to Gear Processing, Inc., Cleveland, Ohio. Gear. 1,813,875; July 7.
Feigenbaum, David. (See Lind, Edward, and Feigenbaum.)
Feild, Alexander L., Canton, assignor, by meane assignments, to Republic Steel Corporation, Youngstown, Ohio. Manufacture of stainless iron. 1,812,941; July 7.
Felms Revo Corporation. (See Altman, Fred E., assignor.)
Fenton, Almon N. (See Hollerith, H., jr., and Fenton.)
Ferguson, Donald M. (See Maurer, E. R., and Ferguson.)
Ferric Engineering Company. (See Carrington, Frank G., assignor.)
Ferris, Walter, assignor to Oilgear Company, Milwaukee, Wis. Control gear. 1,813,040; July 7.
Fiedler, Sebastien O. A., assignor to l'Auxiliare des Chemins de Fer et de l'Industrie, Paris, France. Feed water heater. 1,813,041; July 7.
Field, Robert F., Watertown, assignor to Atlantic Precision Instrument Company, Boston, Mass. Oscillatory circuits and method of compensating for voltage changes impressed thereon. 1,813,488; July 7.
Fife, John P., et al. (See Laughlin, William C., assignor.)
Fife, William T., et al. (See Laughlin, William C., assignor.)
Filtrators, Limited. (See Saks, Vadim V., assignor.)
Fink, Colin G., New York, N. Y., and C. H. Eldridge, Metuchen, N. J., assignors, by mesne assignments, to United Chromium, Incorporated, New York, N. Y. Producing protective metal coatings. 1,813,842; July 7.
Finney, Alfred C., Upper Darby, Pa., assignor to General Electric Company. Control system. 1,813,796; July 7.
Fischer, Max M., Brooklyn, N. Y. Radiator screen bracket. 1,813,533; July 7.
Fisher, Harry G. (See Warner, C., and Fisher.)
Fisk, George D. (See Combs, A. E., and Fisk.)
Fisk Rubber Company, The. (See Mead, George J., assignor.)
Fisk Rubber Company, The. (See Warner, Harold E., assignor.)
Fisk Rubber Company, The. (See Wikle, George F., assignor.)
Fleischel, Gaston, Bieneau, France. Automatic gear shift. 1,813,731; July 7.
Flettner, Anton, Berlin, Germany, assignor to N. V. Instituut voor Aero en Hydro-Dynamiek, Amsterdam, Netherlands. Arrangement for exchanging energy between a current and a body therein. Re18,122; July 7.
Flintkote Company, The. (See Plunkett, John H., assignor.)
Flood, Fred L. B., Frostproof, Fla. Fish bait. 1,813,848; July 7.
Flowers, Henry F., Findlay, Ohio. Dump vehicle with actuated doors. 1,813,570; July 7.
Flum, Robert A., Cleveland Heights, Ohio. Handwriting machine. 1,813,237; July 7.
Foley, William V., New Haven, Conn., assignor of one-half to E. S. Beach, Ridgefield, Conn. Making rubber handled tools. 1,813,797; July 7.
Folliet, Alexandre, and Nicolas Sainderichin, Paris, France. Treatment of zinciferous and composite ores by the volatilization of metallic elements. 1,813,042; July 7.
Food Machinery Corporation. (See Slater, Henry B., assignor.)
Ford, Hannibal C., Jamaica, assignor to Ford Instrument Company, Inc., Long Island City, N. Y. Fire control system. 1,813,534; July 7.
Ford Instrument Company. (See Ford, Hannibal C., assignor.)
Foreman, Edwin H., New York, N. Y. Swimming garment. 1,813,043; July 7.
Forker, Major T., Loomis, assignor to Franklin Railway Supply Company, New York, N. Y. Locomotive booster apparatus. 1,813,392; July 7.
Forsberg, Edwin, San Jose, Calif. Can seaming machine. 1,813,350; July 7.
Fowler, Charles H., Eugene, Oreg. Road signal. 1,813,890; July 7.
Fox Company. (See Russell, Frederick T., assignor.)
Francis, Jacob R. (See Heginbottom, W. G., and Francis.)
Francis, Jacob R. (See Redmond, Albert G., assignor.)
Franclare Company. (See Miller, Frank W., assignor.)
Franklin Railway Supply Company. (See Forker, Major T., assignor.)
Franklin Railway Supply Company. (See Martin, Frederick W., assignor.)
Franklin Railway Supply Company. (See Peters, Frank R., assignor.)
Franklin, Sam L. (See Wilson, Rollin V., assignor.)
Franklin Process Company. (See Traver, W. A., and Wood, assignors.)
Franks, Ernest A., Whitchurch, Wales. Transmission gear for use with internal combustion engines. 1,813,614; July 7.
Franks, Harry H., assignor of three-fourths to Tidal Oil Company, Tulsa, Okla. Mounting for calf wheels or the like. 1,813,044; July 7.
Franks, Harry H., assignor of three-fourths to Tidal Oil Company, Tulsa, Okla. Engine frame. 1,813,045; July 7.
Franz, Erwin E., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Terminal for electrical devices. 1,813,154; July 7.
Fraser, Ethelbert M., Yonkers, N. Y. Electric machine. 1,813,393; July 7.
Fraser, Ethelbert M., Yonkers, N. Y. Inductor winding and making same. 1,813,394; July 7.
Fraser, Kenneth, Pasadena, Calif. Damper control system. 1,813,395; July 7.
Frazier, William G., Philadelphia, Pa. Shaving brush. 1,813,615; July 7.
Frazier, William G., Philadelphia, Pa. Shaving outfit. 1,813,616; July 7.
Freedman, Ruth, New York, N. Y. Lingerie fastener. 1,813,283; July 7.
Freeman, Edward E., Danville, Ill. Furnace control. 1,813,732; July 7.

Freeman, James J., Bradford, Pa. Hose nozzle. 1,813,733; July 7.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,577; July 7.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,578; July 7.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,579; July 7.
Fried, Isidore, New York, N. Y. Latching means for dumb waiter doors. 1,813,734; July 7.
Friedlander, Max, and W. T. Baker, San Francisco, Calif. Beach cot. 1,813,046; July 7.
Friedman, Arthur, assignor to The Cleveland Heater Company, Cleveland, Ohio. Coupling for circulating coils. 1,813,284; July 7.
Friedman, Arthur, assignor to The Cleveland Heater Company, Cleveland, Ohio. Reenforced circulating coil. 1,813,891; July 7.
Fries, Joel S., Helenelund, assignor to Aktiebolaget Svenska Spiralfabriken, Stockholm, Sweden. Laminated spring. 1,813,617; July 7.
Frohberg, Arno. (See Scholz, W., and Frohberg.)
Fuehrer, George H. (See Smith, W. A., jr., and Fuehrer.)
Fuller, Herbert M., Bradenton, Fla. Automatic bookmark. 1,813,446; July 7.
Fuller Lehigh Company. (See Monroe, William S., assignor.)
Furstenberger, Francis W., and C. C. Deeds, Terre Haute, Ind. Shelf attached article supporting bracket. 1,813,155; July 7.
G. C. A. Manufacturing Company, The. (See Grinnell, Harold D., assignor.)
G & O Manufacturing Company, The. (See Oppe, Charles, assignor.)
Gabriel, Charles L., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Lacquering composition and employing same. 1,813,735; July 7.
Gabulson, Gustave A. (See Roche, Michael J., assignor.)
Gall, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Gang sewing apparatus. 1,813,489; July 7.
Gaines, Eugene F., assignor to Atlas Manufacturing Company, Philadelphia, Pa. Cleaning power meat saws. 1,812,942; July 7.
Galassi, Pasquale, New York, N. Y. Bimetallic floor strip. 1,813,736; July 7.
Galetschky, Walter, Pittsfield, Mass. Soda straw attachment. 1,813,285; July 7.
Garabrant, Joseph E. (See Kraemer, W. L., and Garabrant.)
Gardner, Herbert F. (See Fackler, L. K., and Gardner.)
Gardner, John H., Chicago, Ill. Ice cream freezer. 1,813,490; July 7.
Gates, Charles C., assignor to The Gates Rubber Company, Denver, Colo. Endless V-shaped belt. 1,813,698; July 7.
Gates Rubber Company, The. (See Gates, Charles C., assignor.)
Gaudenzi, Arthur, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Protection of rectifier systems. 1,813,535; July 7.
Gear Processing, Inc. (See Fehr, Roy B., assignor.)
General Aniline Works, Inc. (See Gliletenberg, E., Haller, and Baltes, assignors.)
General Aniline Works, Inc. (See Hentrich, W., and Tietze, assignors.)
General Aniline Works, Inc. (See Kämmerer, Hans, assignor.)
General Aniline Works, Inc. (See Schneevoigt, A., and Anacker, assignors.)
General Electric Company. (See De Reamer, Frank C., assignor.)
General Electric Company. (See Finney, Alfred C., assignor.)
General Electric Company. (See Halvorson, Cromwell A. B., assignor.)
General Electric Company. (See Hildebrand, Lee E., assignor.)
General Electric Company. (See Hull, Clarence S., assignor.)
General Electric Company. (See Lane, F. J., and Parry, assignors.)
General Electric Company. (See Prince, David C., assignor.)
General Electric Company. (See Ross, Aubrey A., assignor.)
General Electric Vapor Lamp Company. (See Brown, Thomas H., assignor.)
General Instrument Company. (See Corey, Lorin A., assignor.)
General Motors Radio Corporation. (See Pike, George J., assignor.)
Gerosa, Anthony, New York, N. Y. Retainer for shingles. 1,813,798; July 7.
Gerstenslager, William H., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Cord belt building apparatus. 1,813,876; July 7.
Gewalt, William C., assignor to Twin Disc Clutch Company, Racine, Wis. Clutch. 1,813,286; July 7.
Gibson, Alexander, Oakland, Calif. Barber's lathering device. 1,813,047; July 7.
Gift, John, South Temple, Pa. Hydraulic friction device for knitting machines. 1,813,351; July 7.
Gilbert, Howard W., Nazareth, Pa. Automatic window latch. 1,813,287; July 7.
Gilbert, Tyson H., Abilene, Tex. Circuit closing device. 1,813,844; July 7.
Gilchrist, William A., Chicago, Ill. Furnace. 1,813,156; July 7.
Gillard, Francis W., West Norwood, London, assignor, by mesne assignments, to Vividad Holdings Limited, London, England. Luminous advertisement. 1,813,491; July 7.
Gillette Safety Razor Company. (See Beaver, Rudolph, assignor.)
Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)
Gillette Sweeper Corporation, Ltd. (See Smith, Earle R., assignor.)
Gillette-Vibber Company. (See Noble, Edward J., assignor.)
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Drop door for railway cars. 1,813,536; July 7.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Car construction. 1,813,537; July 7.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Coupler positioning device. 1,813,538; July 7.
Gish, Oliver H., Somerset, Chevy Chase, Md., assignor to Carnegie Institution of Washington, Washington, D. C. Apparatus for the study of the earth's crust. 1,813,845; July 7.
Gisholt Machine Company. (See Class, George M., assignor.)
Glascodine, Richard T. (See Spencer, A., and Glascodine.)
Gleason, Clifford J. (See White, W. D., and Gleason.)
Glennon, William K. (See Templeton, E. G., and Glennon.)
Glietenberg, Eugen, Leverkusen-on-the-Rhine, J. Haller, Wiesdorf-on-the-Rhine, and M. Baltes, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azodyes derived from 2.3-hydroxynaphthoic acid arylamides. 1,813,618; July 7.
Globe Machine & Stamping Company, The. (See Green, Lee B., assignor.)
Goetz, Gabriel, et al. (See Stechauner, John, assignor.)
Goetzke, Otto, Jersey City, N. J. Safety razor. 1,813,699; July 7.
Goldhaber, Jacob, Johnstown, Pa. Bottle or similar article of manufacture. Des. 84,581; July 7.
Goldman, Barney, New York, N. Y. Hydraulic jack. 1,813,700; July 7.
Gold Medal Camp Furniture Manufacturing Company. (See Brown, Newton N., assignor.)
Goldsborough, Winder E., South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y. Valve to control high temperature high pressure fluids. 1,812,870; July 7.
Goldsborough, Winder E., South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y. Piston valve. 1,813,846; July 7.
Goodloe, Alfred M., assignor to Exchange Lumber Company, Roanoke, Va. Translucent panel for lamp shades and other purposes. 1,813,492; July 7.
Goodrich, B. F., Company, The. (See Dales, Benton, assignor.)
Goodrich, B. F., Company, The. (See Kvet, Edward J., assignor.)
Goodrich, B. F., Company, The. (See Leguillon, Charles W., assignor.)
Goodyear Tire & Rubber Company, The. (See Ayers, Kreigh B., assignor.)
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goodyear Tire & Rubber Company, The. (See Gerstenslager, William H., assignor.)
Goodyear Tire & Rubber Company, The. (See Johnson, Ray M., assignor.)
Goodyear Tire & Rubber Company, The. (See Kraft, Herman T., assignor.)
Goodyear Tire & Rubber Company, The. (See Templeton, E. G., and Glennon, assignors.)
Gordon, William, Union, N. J. Pen and pencil clip. 1,813,396; July 7.
Gorsuch, Robert A., assignor to The Congor Mfg. Company, Gambier, Ohio. Shipping box and brooder for baby chicks. 1,813,847; July 7.
Gough, Fred J. (See Ballard, B. T., and Gough.)
Gough, Fred J. (See King, G. D., and Gough.)
Granger, Alfred T., Hanover, N. H. Antirattler for window sashes. 1,813,157; July 7.
Granger, Paul H., Los Angeles, Calif. Locating leaks in well tubing. 1,812,943; July 7.
Granger, Paul H., Los Angeles, Calif. Indicating and cementing off leaks in well casings. 1,812,944; July 7.
Granger, Paul H., Los Angeles, Calif. Locating and cementing off leaks in well casings. 1,812,945; July 7.
Grant, John. (See Hamer, Leland S., assignor.)
Grant Manufacturing and Machine Company, The. (See McClean, John G., assignor.)
Graves, Benjamin P., Cranston, R. I., assignor to Brown and Sharpe Manufacturing Company. Variable speed controller mechanism. 1,812,871; July 7.
Grayson Heat Control, Inc. (See Grayson, John H., assignor.)
Grayson, John H., assignor to Grayson Heat Control, Inc., Lynwood, Calif. Safety burner. 1,813,048; July 7.

Grebe, A. H., & Co. (See Lowell, Percival D., assignor.)
Green, Lee B., Lakewood, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Combined washing machine casing and support therefor. Des. 84,580; July 7.
Greene, Albert E., Medina, Wash. Electric arc furnace and crane structure. 1,813,397; July 7.
Greig, James W. (See Toncray, M. H., and Greig.)
Griesemer, John C., Reading, Pa. Lighter filling station. 1,813,398; July 7.
Griffith, Charles T., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Stocking form. 1,813,848; July 7.
Grimm, George, Menlo, Wash. Loading mechanism for trucks and other carriers. 1,813,158; July 7.
Grinnell, Harold D., assignor to The G. C. A. Manufacturing Company, Pittsfield, Mass. Cord coupling. 1,813,399; July 7.
Groehn, Otto J., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Automobile body construction. 1,813,400; July 7.
Groh, Jacob B., Los Angeles, Calif. Radial power device. 1,813,288; July 7.
Grosskinsky, Otto. (See Schmidt, O., and Grosskinsky.)
Grubb, Herbert H., assignor to Humane Stanchion Works, Baraboo, Wis. Roundabout. 1,812,946; July 7.
Grubb, Herbert H., assignor to Humane Stanchion Works, Baraboo, Wis. Swing. 1,812,947; July 7.
Grubman, Leo J., Belle Harbor, Long Island, assignor to Margon Corporation, New York, N. Y. Artificial eye for dolls, manikins, and other figure toys. 1,812,872; July 7.
Gruse, William A. (See Souther, B. L., and Gruse.)
Guardian Safe and Manufacturing Company, The. (See Smith, Adon L., assignor.)
Guggenheim, Paul, assignor to Philadelphia Metal Drying Form Company, Philadelphia, Pa. Hosiery drying form. 1,813,737; July 7.
Guild, Clark J., et al. (See Penrose, Herbert W., assignor.)
Guillemot, Robert, St. Maur des Fosses, France, assignor to Scott & Williams, Incorporated, New York, N. Y. Method and apparatus for forming knitted loops in hosiery machines. 1,813,849; July 7.
Gulf Refining Company. (See Smith, Herschel G., assignor.)
Gulf Refining Company. (See Souther, B. L., and Gruse, assignors.)
Gunderson, George, St. Ansgar, Iowa. Portable scoop. 1,813,159; July 7.
Gunn, Charles H., San Francisco, assignor to Aircraft Specialties Company, San Mateo, Calif. Airplane propeller. 1,813,877; July 7.
Gustin, Daniel S., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Gettering coils. 1,813,571; July 7.
Gustin, Daniel S., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Lamp base. 1,813,572; July 7.
Gyro Brush Co. (See Emerson, Ralph W., assignor.)
Haas, John, et al. (See Stechauner, John, assignor.)
Haberlin, John F., assignor to Boeing Airplane Company, Seattle, Wash. Cover for screw shafts. 1,813,352; July 7.
Hacklander, Carl H., Wermelskirchen, Germany. Carpet or rug. 1,812,948; July 7.
Hadfield-Penfield Steel Company. (See Henneuse, Clarence A., assignor.)
Hall, Horace C., Littleover, Derby, and T. F. Bradbury, assignors to Rolls Royce Limited, Derby, England. Aluminum alloy. 1,813,850; July 7.
Haller, Josef. (See Glittenberg, E., Haller, and Baltes.)
Haller, Josef, Wiesdorf, assignor to I. G. Farbenindustrie Atkiengesellschaft, Frankfort-on-the-Main, Germany. Cyanogen halide derivatives of cellulose and process of making. 1,813,619; July 7.
Halperin, Herman, and K. W. Miller, Chicago, Ill. Transformer. 1,812,949; July 7.
Halvorson, Cromwell A. B., Lynn, Mass., assignor to General Electric Company. Electric lamp fixture. 1,813,738; July 7.
Halvorson, Cromwell A. B., Lynn, Mass., assignor to General Electric Company. Fixture for electric lamps. 1,813,799; July 7.
Halvorson, Cromwell A. B., Lynn, Mass., assignor to General Electric Company. Highway lighting fixture. 1,813,800; July 7.
Hamel, René M. (See Trinquet, L., and Hamel.)
Hamer, Leland S., Long Beach, assignor to J. Grant, Los Angeles, Calif. Well reaming tool. 1,813,160; July 7.
Hamilton, Homer J., and A. E. Stone, South Bend, Ind. Book end. Des. 84,532; July 7.
Handy Cleaner Corporation. (See Bull, A. A., and Larsen, assignors.)
Hapgood, Cyrus H., Nutley, N. J., assignor to The De Laval Separator Company, New York, N. Y. Continuous milk delivery system. 1,813,238; July 7.
Haptonstall, Roy E., Chula Vista, Calif. Transmission mechanism. 1,813,730; July 7.
Harnischfeger Corporation. (See Mitchell, H. L., and Ljungkull, assignors.)
Harper, Carey E., Hampton, Fla. Support. 1,813,740; July 7.
Harper, William E., Chicago, Ill. Seat bar. 1,813,741; July 7.
Harriman, Arthur J. (See O'Neill, H. T., and Harriman.)
Hart-Carter Company. (See Varusky, John J., assignor.)
Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Computing machine. 1,812,873; July 7.
Hartenstein, Herman L., Chicago, Ill. Apparatus for cooling internal combustion engines. 1,813,667; July 7.
Hartford-Empire Company. (See Howard, George E., assignor.)
Hasbrouck, Louis B., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y. Sinb catcher. 1,813,049; July 7.
Haselton, Page S. (See Owens, Percy B., assignor.)
Hassler, Gideon G., Stowe Township, Allegheny County, Pa. Diestock. 1,813,668; July 7.
Hastings, Douglas H., West Sand Lake, N. Y. Carbon cutter. 1,813,289; July 7.
Hastings, Henry E., assignor to Eastman Kodak Company, Rochester, N. Y. Making color photographic film embossing tools. 1,813,669; July 7.
Haubert, Leo, Tulsa, Okla. Pulling implement. 1,813,447; July 7.
Hauk, Edwin, Milwaukee, Wis. Milk cooler. 1,813,050; July 7.
Haynes, Richard H., Sealy, Tex. Electric switch. 1,813,801; July 7.
H'Doubler, Charles W., Racine, Wis. Electrically-driven sewing machine. 1,813,290; July 7.
Hedglon, Mead, assignor to M. L. Oberdorfer Brass Company, Syracuse, N. Y. Sump pump. 1,812,874; July 7.
Hegelmann, Emil. (See Jänecke, E., Klippel, and Hegelmann.)
Heginbottom, Anna, et al., executors. (See Heginbottom, W. G., and Francis.)
Heginbottom, Walter G., and J. R. Francis, Flint, Mich., The Union Industrial Trust Company, and A. Heginbottom, executors of said W. G. Heginbottom, deceased. Heating means control for intake manifolds of internal combustion engines. 1,812,950; July 7.
Heinle, Walter C., Willoughby, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Crane. 1,812,951; July 7.
Helle, Carl, assignor to Elektrische Löt-und Schweiss-Gesellschaft mit beschrankter Haftung, Brunswick, Germany. Electrically heated soldering iron. 1,813,161; July 7.
Helmstaedter, John G., and F. J. Schilling, Newark, N. J. Temperature regulator. 1,813,401; July 7.
Henderson, James B., Blackheath, England. Apparatus for integrating accelerations. 1,813,493; July 7.
Hennense, Clarence A., Sacramento, Calif., assignor to Hadfield-Penfield Steel Company, Bucyrus, Ohio. Tractor. 1,812,875; July 7.
Henry, Casbly A., Dayton, Ohio. Can opener. 1,813,620; July 7.
Hentrich, Winfrid., Wiesdorf-on-the-Rhine, and Ernst Tietze, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Stable diazo compound of 5-nitro-2-amino-1-methylbenzene. 1,813,621; July 7.
Herbold, Henry H., Thayer, Mo. Automatic wood-sawing machine. 1,813,291; July 7.
Herdling, Wilhelm, Wehen, Germany. Sand spraying device for motor vehicles. 1,812,952; July 7.
Hernández, Tomás, Buenos Aires, Argentina. Rear wheel for tractors. 1,813,494; July 7.
Hersleb, William. (See Bramsen, S., and Hersleb.)
Herz, Alexander. (See Conti, Eugene, assignor.)
Herzberg, Max, assignor to Pictorial Review Company, New York, N. Y. Finished pattern and making the same. 1,812,953; July 7.
Hewitt, Evert N., Los Angeles, Calif. Pressure drilling head. 1,813,402; July 7.
Heylandt, Christian W. P., Berlin-Britz, Germany. Method and device for producing compressed gas from liquefied gas. 1,812,954; July 7.
Hickman, Clarence N. (See Stoddard, C. F., and Hickman.)
Higgins, Mark F. (See Nyborg, Tage G., assignor.)
Hildebrand, Lee E., Marblehead, Mass., assignor to General Electric Company. Annealing magnetic punchings. 1,813,802; July 7.
Hill, Alexander B., jr. (See Kettering, W. E., and Hill, jr.)
Hiltscher, John F. (See O'Leary, C. M., and Hiltscher.)
Hiltscher, Lucille U., administratrix. (See O'Leary, C. M., assignor, and Hiltscher.)
Hinderliter Tool Company. (See Smith, Charles E. assignor.)
Hindu Incense Mfg. Co. (See Radkus, Laurent V., assignor.)
Hinkel, Frederick C. (See Snyder, Truman R., assignor.)
Hirner, Emil A., Allentown, Pa. Safety feed for wringers. 1,813,403; July 7.
Hockett, Elmer N., Unionville, Mo. Automobile signal. 1,813,851; July 7.
Hodgman Rubber Company. (See Sindler, Jay J., assignor.)
Hoegger, Joseph A., Jersey City, N. J. Mirror setting. 1,813,162; July 7.
Hogin, James L. (See Smith, Robert N., assignor.)
Holkenbrink, Henry F., Portland, Oreg. Brush contact switch. 1,813,239; July 7.

Holierith, Herman, jr., Riverton, and A. N. Fenton, Audubon, N. J., assignors to Victor Talking Machine Company. Amplifier circuits. 1,813,051; July 7.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,813,803; July 7.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,813,804; July 7.
Honberger, Frank S., Los Angeles, Calif. Protected concrete pile. 1,813,052; July 7.
Hookless Fastener Company. (See Sundback, Gideon, assignor.)
Hord, Wiun E., Maysville, Ky. Tobacco sticks. 1,813,292; July 7.
Horlick, William, jr., Racine, Wis. Food product and manufacture thereof. 1,813,574; July 7.
Horni, Paul P., Newark, N. J. Aerial package carrier and signal. 1,812,955; July 7.
Hornicek, Jerry, Corraopolis, Pa. Hairpin holder. 1,813,622; July 7.
Horton, Bryson D., assignor to Square D Company. Detroit, Mich. Ground wire connection. 1,813,448; July 7.
Hosking, Richard T., Wilmette, assignor, by mesne assignments, to Shakeproof Lock Washer Company, Chicago, Ill. Self-locking filister headset screw. 1,813,053; July 7.
Howard, George E., Butler, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Method and apparatus for feeding molten glass. 1,813,742; July 7.
Howard, John L., Columbus, Ohio. Heater. 1,813,449; July 7.
Howe, William C., Chicago, Ill., assignor to The Alden Speare's Sons Co., Boston, Mass. Detergent. 1,813,701; July 7.
Howie Kenneth, assignor to Wildman Mfg. Co., Norristown, Pa. Full fashioned knitting machine. 1,813,163; July 7.
Howk, Sylvester F., San Antonio, Tex. Adjustable electric receptacle. 1,812,956; July 7.
Hrncsjar, Joseph, Homewood, Ill. Combination wood sawing machine. 1,813,293; July 7.
Hubbell, Harvey, Incorporated. (See Avery, Charles E., assignor.)
Hubby, Harry W., Waco, Tex. Nutcracker. 1,813,353; July 7.
Hudson Motor Car Company. (See Groehn, Otto J., assignor.)
Hudson Motor Car Company. (See Toncray, M. H., and Greig, assignors.)
Huenlich, Charles, Bloomfield, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Electrically operating sound recorder and reproducer. 1,812,957; July 7.
Huestis, Helen C., Washington, D. C. Shoe hanger. 1,813,573; July 7.
Hufferd, George H., Detroit, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio. Eccentrically adjusted spring shackle. 1,812,876; July 7.
Hull, Clarence S., Oakland, Calif., assignor to General Electric Company. Time element control system and apparatus. 1,813,743; July 7.
Humane Stanchion Works. (See Grubb, Herbert H., assignor.)
Humphris, Frank, Parkstone, England. Manufacture from sheet metal of pointed fastening devices. 1,813,805; July 7.
Hunt, Charles, Washington, D. C. Crane hook. 1,813,294; July 7.
Hurel, Maurice. (See Du Boistesselin, Henri, assignor.)
Hurley, Mary C., Dorchester, Mass. Holy water font. Des. 84,583; July 7.
Hurley, Roy T., Dobbs Ferry, N. Y., assignor to The B. G. Corporation. Rolling composite wire. 1,813,539; July 7.
Hutchinson, Joh, Great Neck, N. Y. Changeable indicator. 1,813,450; July 7.
Huther Brothers Saw Mfg. Co. (See Stauder, Emanuel, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Andrussow, L., and Duerr, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Blitz, Wilhelm, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Binapfl, J., and Krey, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Haller, Josef, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Jänecke, E. Klippel, and Hegelmann, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Koppe, P., and Robbel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Petersen, L., and Engelbrecht, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, O., and Grosskinsky, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schneider, Christian, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Weise, Paul, assignor.)
Imel, Cassius E., and R. E. Barker, Erie, Colo. Beet harvester. 1,813,354; July 7.
Independent Lock Company. (See Crabtree, Thomas, assignor.)
Indiana Lamp Corporation. (See Neuner, Frederick W. C., assignor.)
Ingersoll-Rand Company. (See Kirgan, John, assignor.)
Ingersoll-Rand Company. (See Metzgar, Chester W., assignor.)
Ingersoll-Rand Company. (See Smith, William A., jr., assignor.)
Ingersoll-Rand Company. (See Smith, W. A., jr., and Fuehrer, assignors.)
Ingraham, William F., jr. (See Bathen, J. A., and Ingraham.)
International Business Machines Corporation. (See Craig, Robert, assignor.)
International Patents Corporation. (See Zimmerman, M. D., and Pullen, assignors.)
International Precipitation Company. (See Marshall, Kenneth I., assignor.)
International Safety Razor Corp. (See Molenthin, Henry H., assignor.)
International Standard Electric Corporation. (See Wright, Esmond P. G., assignor.)
Iron Fireman Manufacturing Company. (See Walter, Joseph H., assignor.)
Isacco, Vittorio, Paris, France Flying machine. 1,813,852; July 7.
Ives, Clifford E., Wilmette, Ill. Variable speed device 1,812,877; July 7.
Jacobs Bros. Co., The. (See Dollack, Charles, assignor.)
Jacobs, Charles T., East Orange, assignor to Splitdorf Radio Corporation, Newark, N. J. Wireless receiving system. 1,813,054; July 7.
Jackson, Cowill, Chicago, Ill. Tamping or ballasting machine. 1,813,295; July 7.
Jackson, James M., St. Louis, Mo. Roll paper support. 1,813,853; July 7.
Jänecke, Ernst, Heidelberg, H. Klippel, Ludwigshafen-on-the-Rhine, and E. Hegelmann, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Treatment of crude mineral salts. 1,813,575; July 7.
Jansky, Otto L., Pittsburgh, Pa. Spray device. 1,813,623; July 7.
Jeffress, Richard C., Skipwith, Va. Plow attachment. 1813,854; June 7.
Jennings, Ben G., Dallas, Tex. Tractor. 1,812,958; July 7.
Johnson Bros. Engineering Corporation. (See Johnson, Louis J., assignor.)
Johnson Brothers Engineering Corporation. (See Pierce, James H., assignor.)
Johnson, Clarence A. (See Carter, A. E., and Johnson.)
Johnson, John E., assignor to Speedaumat Manufacturing Company, Chicago, Ill. Device for recording sales transactions. 1,813,495; July 7.
Johnson, Louis J., assignor to Johnson Bros. Engineering Corporation, South Bend, Ind. Water-cooling system for outboard motors. Re18,120; July 7.
Johnson, Ray M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Flap branding machine. 1,813,878; July 7.
Johnson, Sigurd W. L., and C. Zembinsky, Minneapolis, assignor of one-third to H. M. Robertson, St. Paul, Minn., Jack with automatic wheel retainer. 1,813,164; July 7.
Johnston, Clarence F. (See Johnston, Orin A. and C. F.)
Johnston, Orin A., Purcell, and C. F., Oklahoma City, Okla. Convertible basket-table. 1,813,451; July 7.
Jones, Adrian S., Redwood City, Calif. Tanning apparatus. 1,813,744; July 7.
Jones, Theodore D., Los Angeles, Calif. Shaving mug. 1,813,702; July 7.
Jones, Walter L., Arlington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Rivet. 1,813,892; July 7.
Jorss, Karl F., Washington, D. C., assignor to Crittall Casement Window Company, Detroit, Mich. Casement window. 1,813,806; July 7.
Joseph, Theodore, H., New York, N. Y. Lock. 1,813,240; July 7.
Judd, Carroll E. (See Bryan, Everett, assignor.)
Judd, Irving H., Detroit, assignor to Whitehead and Kales Company, River Rouge, Mich. Apparatus for making wheel spiders. 1,812,959; July 7.
Jung, Karl, Berlin, Germany. Adjustment device, particularly for the cross-slides of grinding machines. 1,813,165; July 7.
Kahn, Theodor, Berlin-Charlottenburg, Germany. Talking machine recorder. 1,813,166; July 7.
Kaisling, William, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Plug. 1,813,167; July 7.
Kalischer, Milton, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Refrigerating apparatus. 1,813,168; July 7.
Kämmerer, Hans, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Dyestuffs containing chromium and process of making. 1,813,879; July 7.
Kane Manufacturing Company. (See Ward, Lawrence T., assignor.)
Kannen, George P., Berwyn, Ill. Dividing stone for gardens or lawns. 1,813,055; July 7.

Karnes, James C., Buffalo, N. Y. Acoustic chamber. 1,812,878; July 7.
Karnes, James C., Buffalo, N. Y. Acoustic chamber. 1,812,879; July 7.
Karpov, Alexander V., Pittsburgh, Pa. Turbine case. 1,813,404; July 7.
Kattmann, Robert F., Houston, Tex. Tent. 1,813,703; July 7.
Kattwinkel, Hans, Coswig, Germany. Manufacture of friction bodies for brake and clutch purposes. 1,813,576; July 7.
Katz, Max Z. and S. Hartford, Conn. Splasher plate for vehicle bumpers. 1,813,624; July 7.
Katz, Samuel. (See Katz, Max Z., and S.)
Kauffman, Edmund J. (See Ramage, W. H., and Kauffman.)
Kearfott Engineering Company. (See Kraemer, W. L., and Garabrant, assignors.)
Kellett, William P., New York, N. Y. Goods container transportation means. 1,813,169; July 7.
Kelley-Koett Manufacturing Company, The. (See Werner, Wilbur S., assignor.)
Kellogg Switchboard and Supply Company. (See Currier, Hiram D., assignor.)
Kellogg Switchboard and Supply Company. (See Kaisling, William, assignor.)
Kellogg Switchboard and Supply Company. (See Koch, Earl L., assignor.)
Kennedy, Colin B., Incorporated. (See Lauritsen, Charles C., assignor.)
Kennedy, John J., and C. W. Dake, assignors to The Pyle-National Company, Chicago, Ill. Field control for electric machines. 1,813,496; July 7.
Kent, Charles W., Peoria, Ill. Electric massage machine vibrator. 1,812,960; July 7.
Kent, Robert J., Jamaica, N. Y., assignor to American Telephone and Telegraph Company. Cable guide. 1,812,961; July 7.
Kern, Erwin, Wettingen, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Commutation of continuous current. 1,813,056; July 7.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Fluid heater. 1,813,405; July 7.
Kerr, Mark B., Rosebank, S. I., N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. Re18,126; July 7.
Kessler, Justus, Hackensack, N. J. Pan for keeping paint brushes soft and ready for use. 1,813,670; July 7.
Kettering, Ward E., and A. B. Hill, jr., San Francisco, Calif. Washing machine. 1,813,807; July 7.
Key Boiler Equipment Co. (See Key, Frederick E., assignor.)
Key, Frederick E., assignor to Key Boiler Equipment Co., East St. Louis, Ill. Apparatus for heat exchanging. 1,813,057; July 7.
Kidwell, Arthur C., Houston, Tex. Coin separator. 1,813,296; July 7.
Kilstrom, Axel, Cranston, R. I., assignor to Henry Lederer & Bro. Inc. Hairbrush. 1,813,745; July 7.
Kimber, Walter E., London, England. Drawing curtains and the like. 1,813,110; July 7.
King, Charles G., Milwaukee, Wis. Piston ring compressor. 1,812,962; July 7.
King, George D., Chicago, Ill., and F. J. Gough, Fort Dodge, Iowa, assignors to United States Gypsum Co., Chicago, Ill. Gypsum concrete. 1,813,452; July 7.
Kinser, William E., Quincy, Ill. Hose supporter. 1,813,453; July 7.
Kinsley, Carl, Scarsdale, assignor, by mesne assignments, to Magnetic Analysis Corporation, Long Island City, N. Y. Method of and apparatus for magnetic testing. 1,813,746; July 7.
Kintner, Watson, Bloomfield, N. J., assignor to Westinghouse Lamp Company. Vacuum device. 1,813,577; July 7.
Kinzbach, Frank, Houston, and Harve M. Wheeler, Humble, Tex. Whipstock. 1,812,880; July 7.
Kirgan, John, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Centrifugal pump. 1,813,747; July 7.
Kirsch, Charles W., assignor, by mesne assignments, to Kirsch Company, Sturgis, Mich. Curtain pole and bracket therefor. 1,812,881; July 7.
Kirsch Company. (See Kirsch, Charles W., assignor.)
Kirstatter, Frank A., Akron, Ohio. Carburetor. 1,813,406; July 7.
Kissell, Robert. (See Browne, W. A., and Kissel.)
Klar, Ernst, Berlin, Germany, assignor, by mesne assignments, to United Reproducers Patents Corporation. Electrostatical vibration structure. 1,813,855; July 7.
Klein, Albert, Bronx, N. Y. Ash tray or the like. Des. 84,584; July 7.
Klein, Hermann, assignor to Klein, Weiner & Bell, Milwaukee, Wis., a Firm. Machine for washing rugs and the like. 1,813,297; July 7.
Klein, Joseph W., assignor to The Electric Signal Company, Limited, Los Angeles, Calif. Chime. 1,813,171; July 7.
Klein, Weiner & Bell. (See Klein, Hermann, assignor.)
Klein, William C., Allentown, Pa. Direct drive for anti-friction roller bearing free wheels. 1,813,856; July 7.
Klin, John R., assignor to The Rike Folding Box Company, Dayton, Ohio. Provision box. 1,813,298; July 7.
Klippel, Hermann. (See Jänecke, E., Klippel, and Hegelmann.)
Knox, Howard L., Lynden, Ontario, Canada. Transportation system. 1,813,625; July 7.
Knox, W. & J., Net and Twine Company. (See Webster, Robert C., assignor.)
Knudsen, Knud, Danbury, Conn. Push button switch construction. 1,813,407; July 7.
Koch, Earl L., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Thermionic tube. 1,813,241; July 7.
Kochevar, Martin J. A., Pueblo, Colo. Device for preventing retrograde movement of vehicles. 1,813,748; July 7.
Kokatnur, Vaman R., Brooklyn, N. Y. Saponification. 1,813,454; July 7.
Koppe, Paul, Goehlitz, and G. Robbel, Neuroessen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of pure sulphur. 1,813,497; July 7.
Kops Bros. Inc. (See Duff, Ewen C., assignor.)
Kops Bros. Inc. (See Kops, Waldemar, assignor.)
Kops, Waldemar, assignor to Kops Bros. Inc., New York, N. Y. Apparel garment. 1,813,408; July 7.
Kosunen, Arvid K., Jamaica, N. Y. Cutting tool. 1,813,498; July 7.
Kouyoumjian, Haroutiun K., Providence, R. I., assignor to Ward Leonard Electric Company. Alternating current controlling apparatus. 1,813,409; July 7.
Kraemer, Waldo L., Brooklyn, N. Y., and J. E. Garabrant, Montclair, N. J., assignors to Kearfott Engineering Company, Inc. Airport closure device. 1,813,242; July 7.
Kraft, Herman T., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Making molds. 1,813,880; July 7.
Kraner, Hobart M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator. 1,813,172; July 7.
Kretschan, Anton, Chicago, Ill. Hair waver. 1,813,243; July 7.
Krey, Willi. (See Binapfl, J., and Krey.)
Kubler, Frederick J., New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass. Automobile body. 1,813,499; July 7.
Kubler, Johannes, Baden, Switzerland. Transformer. 1,813,857; July 7.
Kuehn, George F., Jackson Heights, N. Y., assignor to Eisemann Magneto Corporation, New York, N. Y. Magneto ventilation. 1,813,808; July 7.
Kuehn, George F., Jackson Heights, N. Y., assignor to Eisemann Magneto Corporation, New York, N. Y. Magneto breaker adjustment. 1,813,809; July 7.
Kuehn, Louis, assignor, by mesne assignments, to Milcor Steel Company, Milwaukee, Wis. Corner molding. 1,813,173; July 7.
Kupetz, Adolph G., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,813,410; July 7.
Kvet, Edward J., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Channeled strip material. 1,812,963; July 7.
L. G. S. Devices Corporation. (See Starkey, W. C., and Brownlee, assignors.)
Labaugh, James M., Paterson, N. J., and V. F. Miller, Queens Village, N. Y.; said Labaugh assignor to American Telephone and Telegraph Company, and said Miller assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Calling dial. 1,812,964; July 7.
La Brie, Ludger E., South Bend, Ind., assignor to Motor Industries, Inc., Chicago, Ill. Wheel. 1,812,882; July 7.
Lachance, Modeste J., Louisville, Ky., assignor to W. F. Stimpson, Detroit, Mich. Compounding scale. 1,813,578; July 7.
Laird, B. L., et al. (See McCarty, Madison P., assignor.)
Lamb, Arthur B., Cambridge, Mass. Making activated sorbent material. 1,813,174; July 7.
Lambert & Loomis, Inc. (See Dornbusch, Josef, assignor.)
Lambrecht, John, Oneonta, N. Y. Trailer hitch. 1,813,858; July 7.
Lamson Company, The. (See Emerson, Merton L., assignor.)
Landahl, Eugene E., Fairmont, W. Va. Friction clutch. 1,813,626; July 7.
Lane, Francis J., Harlsden, London, and R. D. Parry, Northway, Neasden, England, assignors to General Electric Company. Protective arrangement. 1,813,749; July 7.
Lane, Robert S. (See Lowery, H., and Lane.)
Langer, Max, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Automatic telephone system. 1,813,175; July 7.
Langsner, Adolph, assignor to Eugene Dietzgen Co., Chicago, Ill. Measuring tape. 1,812,965; July 7.
Lanier, Edward H., Covington, Ky. Aeroplane. 1,813,627; July 7.
Larsen, Torleif I. (See Bull, A. A., and Larsen.)
Laska, Jacob, Milwaukee, Wis. Weed cutter. 1,813,540; July 7.
Lasker, George, Chicago, Ill. Boiler. 1,813,058; July 7.
Last, James, Kingston, Pa., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Tabulating machine. 1,812,883; July 7.

Lathrop, Elbert C. (See Munroe, T. B., and Lathrop.)
Laucks, Irving F. (See Davidson, G., and Laucks.)
Laughlin, William C., Cleveland, assignor of one-third to J. P. Fife, Cleveland, Ohio, and one-third to W. T. Fife, Atlanta, Ga. Vending machine. 1,813,299; July 7.
Lauritsen, Charles C., assignor to C. B. Kennedy Incorporated, St. Louis, Mo. Circuit control system for radio apparatus. 1,813,541; July 7.
L'Auxiliaire des Chemins de Fer et de l'Industrie. (See Fiedler, Sebastien O. A., assignor.)
Lawrence, Almon R., Arlington, assignor to E. B. Badger & Sons Company, Boston, Mass. Corrugated shell and making the same. 1,813,859; July 7.
Lawson, Walter R., Clarinda, Iowa. Oil gauge. 1,813,244; July 7.
Lawton, Howard B., Detroit, Mich. Log structure. 1,813,455; July 7.
Leach, Grover C., assignor to Thomas R. Leach, Brownwood, Tex. Seed grader. 1,813,300; July 7.
Leach, Thomas R. (See Leach, Grover C., assignor.)
Ledbetter, James C., Brooklyn, assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Press and frame. 1,813,301; July 7.
Ledder, Christopher, and O. Snow, Hardin, Ill. Chair. Des. 84,585; July 7.
Lederer, Ernest A., East Orange, N. J., assignor to Westinghouse Lamp Company. Cathode. 1,813,704; July 7.
Lederer, Henry, & Bro. Inc. (See Kilstrom, Axel, assignor.)
Lee, Frank H., Danbury, Conn. Composite fabric and making the same. 1,813,860; July 7.
Lee, Frank H., Danbury, Conn. Hat construction and making the same. 1,813,861; July 7.
Lee, James E., assignor to Challenge Machinery Company, Grand Haven, Mich. Label holder. 1,813,059; July 7.
Lee, Roger K., Highland Park, Mich. Rubber matting. Des. 84,586; July 7.
Leech, Russ B., assignor to Standard Process Corporation, Chicago, Ill. Combined ink eliminator and doctor blade. 1,812,884; July 7.
Leedy Manufacturing Company. (See Winterhoff, Herman E., assignor.)
Leguillon, Charles W., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Tire bead construction and making same. 1,813,176; July 7.
Lehman, Werner, South Milwaukee, and T. Davidson, Milwaukee, assignors to Bucyrus-Erie Company, South Milwaukee, Wis. Boom suspension. 1,813,119; July 7.
Lenehan, Bernard E., Bloomfield, N. J., assignor to Westinghouse Electric & Manufacturing Company. Remote metering system. 1,813,177; July 7.
Lenhart, Alfred A. and R. F., Minneapolis, Minn. Tractor hitch. 1,813,500; July 7.
Lenhart, Roy F. (See Lenhart, Alfred A. and R. F.)
Lethert, John A., St. Paul, Minn. Nondetachable identification tag. 1,813,060; July 7.
Leventhal, Mitchell, Brooklyn, assignor to Sosy, Inc., New York, N. Y. Lock. 1,813,302; June 7.
Lewis, Arthur J., Stratford, assignor to The Baird Machine Company, Bridgeport, Conn. Chuck. 1,813,705; July 7.
Lewis, Goodrich O., Wheaton, assignor to W. H. Miner, Inc., Chicago, Ill. Resilient unit for car trucks. 1,813,706; July 7.
Lewis Invisible Stitch Machine Company. (See Mueller, Charles W., assignor.)
Lide, Martin J., Birmingham, Ala. Dry separator. 1,813,303; June 7.
Lilly, Eli, and Company. (See Shonle, Horace A., assignor.)
Lilly, Eli, and Company. (See Walden, George B., assignor.)
Limoges Chinga Company, The, et al. (See Smith, Charles O., assignor.)
Lind, Edward, Brooklyn, and D. Feigenbaum, Jamaica, N. Y. Collar. 1,813,304; July 7.
Lindemann, A. J., & Hoverson Company. (See Rutenber, Edwin A., assignor.)
Lindhard, Povl T., Brooklyn, assignor to F. L. Smidth & Co., New York, N. Y. Rotary kiln and cooler. 1,813,061; July 7.
Lindsley, Henry A., Cleveland, Ohio. Package of stacked gaskets. 1,813,178; July 7.
Link-Belt Company. (See Waechter, Ferdinand F., assignor.)
Lippincott, George A., Philadelphia, Pa. Treating nacreous substances and articles formed therefrom. 1,812,885; July 7.
Lippmann, Julius D., East Orange, assignor to Textileather Corporation, Newark, N. J. Tandem coating machine. 1,813,411; July 7.
Liss, George, Paterson, N. J. Sign apparatus. 1,813,062; July 7.
Ljungkull, Rolf. (See Mitchell, H. L., and Ljungkull.)
Lloyd, Arthur H., Coventry, England. Screw-thread cutting die. 1,813,456; July 7.
Locomotive Firebox Company. (See Nelson, Arthur W., assignor.)
Locomotive Firebox Company. (See Noel, Ernest J., assignor.)
Lodge, James H., Camden, N. J. Tooth paste tube holder. 1,813,457; July 7.
Lodge, Joseph E., Maywood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Device for closing openings. 1,813,179; July 7.
Loffler, Jennie E., sole heir and widow. (See Loffler, Stephen.)
Loffler, Stephen, deceased, Charlottenburg, near Berlin, Germany; J. E. Loffler, sole heir and widow. Coal dust furnace for high pressure boilers. 1,812,966; July 7.
Long, James A., assignor to Penn Engineering Company, Reading, Pa. Vise stand. 1,812,967; July 7.
Lowell, Percival D., Jamaica, assignor to A. H. Grebe & Co., Inc., Richmond Hill, N. Y. Radio receiving apparatus. 1,813,180; July 7.
Lower, Melvin S., Barberton, Ohio, assignor to The Sun Rubber Company. Desk pad and pocket piece therefor. 1,813,501; July 7.
Lowery, Hugh, and R. S. Lane, Wood River, Ill., assignors to Standard Oil Company, Whiting, Ind. Decolorizing hydrocarbon oils. 1,813,628; July 7.
Lucas, George J. (See Wheary, J. R., and Lucas.)
Lucas, Henry M., assignor to The Lucas Machine Tool Company, Cleveland, Ohio. Metal working machine. 1,813,355; July 7.
Lucas Machine Tool Company, The. (See Lucas, Henry M., assignor.)
Luehrman, Alfred D. (See Meehan, Francis X., assignor.)
Lumley, Frederick G., Chicago, Ill. Window ventilator. 1,813,629; July 7.
Lupton's, David, Sons Company. (See Brogden, Joah, assignor.)
Luth & Rosens Elektriska Aktiebolag. (See Uggla, Wilhelm R., assignor.)
Luzardo, Rudolph, New York, N. Y. Helicoplane. 1,812,968; July 7.
Lyon Metal Products, Incorporated. (See Adler, J. B., O'Connor, and Vance, assignors.)
Mackenzie, Alexander S., assignor to Clayton Gin Compress Company, Houston, Tex. Drier. 1,813,750; July 7.
MacLagan, Hector P. (See Chesney, J. W. D., and MacLagan.)
MacNeill, John B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. High speed circuit interrupter. 1,813,181; July 7.
Madigan, Thomas J., New York, N. Y. Continuous rotary heater. 1,813,862; July 7.
Madsen, Charles P., New York, N. Y., assignor, by mesne assignments, to W. W. Varney, Baltimore, Md. Transmitting power. 1,813,502; July 7.
Magnenat, René P. (See Selby, W., and Magnenat.)
Magnetic Analysis Corporation. (See Kinsley, Carl, assignor.)
Mahoney, Edward. (See Balinski, A. C., and Mahoney.)
Makepeace, D. E., Company. (See Rohman, William A., assignor.)
Malcolm, Thomas J., Natchez, Miss. Musical instrument key busher. 1,813,751; July 7.
Mallina, Rudolph F., Atlantic City, N. J., assignor to Victor Talking Machine Company. Member or structure vibrated by energy impulses. 1,813,579; July 7.
Malmberg, Anders M. (See Robinson, H. C., and Malmberg.)
Maloney, Norvin G., jr., Key West, Fla. Regenerative atomizing and vaporizing device. 1,813,305; July 7.
Management Engineering and Development Company, The. (See Zimmerman, Walter J., assignor.)
Manne, Lawrence, Rockford, Ill. Powder blower. 1,813,182; July 7.
Mansfeld, Frederick H., Houston, Tex. Trolley plane. 1,813,245; July 7.
Marble, Robert A. (See Edwards, J. H., and Marble.)
Margon Corporation. (See Grubman, Leo J., assignor.)
Marion Steel Body Company, The. (See Clark, Thomas H., assignor.)
Maritime Fish Corporation Limited. (See Barry, James J., assignor.)
Marquette Manufacturing Company. (See Nathe, Charles G., jr., assignor.)
Marr, William H., South Oil City, Pa. Glass surfacing machine. 1,813,412; July 7.
Marshall, Kenneth I., assignor to International Precipitation Company, Los Angeles, Calif. Electrical precipitation apparatus. 1,813,306; July 7.
Martin, Alfred M., Chicago, Ill. Partition sheet. 1,812,886; July 7.
Martin, Frederick W., Bronxville, N. Y., assignor to Franklin Railway Supply Company. Lubricator construction. 1,813,413; July 7.
Martin, Harold W., Natick, Mass., assignor, by mesne assignments, to American Seal-Kap Corporation, Long Island City, N. Y. Bottle cap and applying the same. 1,813,063; July 7.
Martin, Robert. (See Dickie, W. A., and Martin.)
Mason, Charles E., Upper Darby Township, Delaware County, assignor to Novelty Electric Company, Philadelphia, Pa. Attachment plug and receptacle. 1,813,582; July 7.
Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Making integral insulating board with hard welded surfaces. 1,812,969; July 7.
Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Manufacturing insulating board. 1,812,970; July 7.
Masonite Corporation. (See Mason, William H., assignor.)
Mathewson, Wilfred B., Weymouth, assignor to Roy Manufacturing Company, Quincy, Mass. Grease dispenser. 1,813,183; July 7.

Matthews, Louis I., Merion, Pa. Electric sign. 1,813,414; July 7.
Matzka, Wincenty, London, England. Preserving eggs 1,813,064; July 7.
Maurer, Edwin R., Detroit, and D. M. Ferguson, Highland Park, assignors to Divco-Detroit Corporation, Detroit, Mich. Steering mechanism for delivery vehicles. 1,812,887; July 7.
Maynard, Joseph A., Boston, Mass. Temperature and vacuum relief device. 1,812,888; July 7.
McCain, Benjamin Z., Oak Park, and H. L. Thompson, Elgin, Ill., assignors to Addressograph Company, Wilmington, Del. Printing device. 1,812,889; July 7.
McCandless, Harry E., Rochester, N. Y. Infant's combination bathtub and dressing table. 1,812,971; July 7.
McCarty, Madison P., assignor of fifty-one per cent to W. Clark, B. L. Laird, G. B. Moody, L. W. Orynski, and E. R. Wall, Dallas, Tex. Electromagnetic oscillator. 1,813,630; July 7.
McClean, John G., Chicago, Ill., assignor to The Grant Manufacturing and Machine Company, Bridgeport, Conn. Riveting machine. 1,813,415; July 7.
McCoy, Philip W. (See Cowan, R. J., and McCoy.)
McCullough, Ervin W., Indianapolis, Ind. Rendering tank door. 1,813,671; July 7.
McCushker, John E., Ogallala, Nebr. Draft equalizer. 1,813,752; July 7.
McDonald, Charles D., and B. A. Deisch, assignors to McDonald Machine Co., Chicago, Ill. Can end. 1,813,810; July 7.
McDonald Machine Co. (See McDonald, C. D., and Deisch, assignors.)
McGarry, Christopher J., Paterson, N. J. Paper roll holder for printing presses. 1,813,307; July 7.
McGill, Andrew D. (See Wright, S. M., and McGill.)
McHale, Michael J., Scranton, Pa. Flyer construction. 1,813,893; July 7.
McHale, Michael J., Scranton, Pa. Flyer construction. 1,813,894; July 7.
McHale, Michael J., Scranton, Pa. Flyer construction. 1,813,895; July 7.
McIntosh Electrical Corporation. (See Chesney, J. W. D., and MacLagan, assignors.)
McKissick, William H., Tulsa, Okla. Stuffing box. 1,813,308; July 7.
McNolty, George H., Saskatoon, Saskatchewan, assignor of one-half to A. F. Thomas, Saskatoon, Canada. Movable grain door jamb. 1,813,753; July 7.
McQuiston, Raymond C., Newton, and H. von Loesecke, Arlington, assignors to United Fruit Company, Boston, Mass. Treating bagasse and similar fibrous products for the production of pulp and the extraction of cellulose. 1,813,184; July 7.
McWhorter, Allie E., Taft, Tex. Combined tool cabinet and workbench. 1,812,890; July 7.
Mead, George J., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Device for cutting rubber tubes. 1,813,246; July 7.
Meehan, Francis X., assignor of one-half to A. D. Luebrman, St. Louis, Mo. Exercising belt for massaging machines. 1,812,891; July 7.
Merlub-Sobel, Menahem, New York, N. Y. Detergent. 1,813,247; July 7.
Merrifield, Maxwell C., Seattle, Wash. Caponizing stretcher. 1,812,892; July 7.
Merryweather, George E., deceased, Cleveland Heights; L. E. Merryweather, executrix, assignor to The Motch & Merryweather Machinery Company, Cleveland, Ohio. Grinding machinery. 1,813,503; July 7.
Merryweather, Laura E., executrix. (See Merryweather, George E.)
Meslinger, Frederick, Mount Vernon, N. Y. Saddle. 1,813,672; July 7.
Mestice, William R., Newark, N. J. Marine vessel. 1,813,248; July 7.
Metalcraft Heater Corporation. (See Bovey, Sidney J. V., assignor.)
Metal Products Company. (See Cocks, Harry J., assignor.)
Metzgar, Chester W., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Heat exchanger. 1,813,754; July 7.
Metzger, Benjamin L., Toledo, Ohio. Adjustable center for rotary speed indicators and the like. 1,813,065; July 7.
Metzger, Raymond T., and P. D. Potter, Winnetka, assignors to Sprague, Warner & Company, Chicago, Ill. Preparing and preserving the beverage, Tea. 1,813,120; July 7.
Meurer, August, San Bruno, Calif. Dog carrier. 1,813,458; July 7.
Meyer, Geo. J., Manufacturing Company. (See Meyer, George L. N., assignor.)
Meyer, George L. N., Jackson Heights, N. Y., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis. Washer for bottles of different sizes. 1,813,006; July 7.
Mihalyi, Joseph, Rochester, N. Y. Stereoscopic telemeter. 1,813,673; July 7.
Mihalyi, Joseph, assignor to Eastman Kodak Company, Rochester, N. Y. Camera view finder construction 1,813,674; July 7.
Milcor Steel Company. (See Kuehn, Louis, assignor.)
Miles, William C., White Plains, N. Y. Fish bait. 1,813,416; July 7.
Millar, Harold H. (See Millar, Preston S., and H. H.)
Millar, Preston S., Brooklyn, and H. H. Millar, assignors to Electrical Testing Laboratories, New York, N. Y. Optical illuminating system. 1,813,185; July 7.
Miller, Charles, Long Island City, N. Y. Shoe. Des. 84,587; July 7.
Miller, Edward, Chicago, Ill. Handle for street car straps. 1,812,972; July 7.
Miller, Erwin E., assignor to The Timken Roller Bearing Company, Canton, Ohio. Bearing adjusting and locking device. 1,812,973; July 7.
Miller, Frank W., assignor to Franclare Company, Chicago, Ill. Boiler blow-off and refilling system. 1,812,974; July 7.
Miller, Kenneth W. (See Halperin, H., and Miller.)
Miller, Victor F. (See Labaugh, James H., and Miller.)
Miller, William J., Swissvale, Pa. Pottery forming machine. 1,812,893; July 7.
Miller, William J., Sulphur, La. Rotating spear. 1,813,459; July 7.
Milwaukee Paper Box Company, The. (See Carlson, Walter C., assignor.)
Miner, W. H., Inc. (See Lewis, Goodrich Q., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minnium, Byron B., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill. Thermionic amplifier system. 1,813,067; July 7.
Minor, Oscar T., Mayfield, Okla. Stalk cutter attachment for tractors. 1,813,631; July 7.
Minshall, Robert J., assignor to Boeing Airplane Company, Seattle, Wash. Tail wheel support. 1,813,356; July 7.
Mirick, Carlos B., Washington, D. C. Resonant electrical relay. 1,813,899; July 7.
Mirus, Gerhard. (See Engl, M., and Mirus.)
Misbawaka Rubber and Woolen Manufacturing Company. (See Blair, George W., assignor.)
Mitchell, Holger L., and R. Ljungkull, assignors to Harnischfeger Corporation, Milwaukee, Wis. Power clutch. 1,813,068; July 7.
Mitchell, Malcolm E., and A. F. Swan, Oakland, Calif. Tire gauge. 1,813,249; July 7.
Mohler, Valentine J., River Forest, assignor to Addressograph Company, Chicago, Ill. Printing device. 1,812,894; July 7.
Mohr, Georg, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Multirate meter. 1,813,186; July 7.
Molins, Walter E., London, England. Safety stop for cigarette machines. 1,813,811; July 7.
Molkenthin, Henry H., Glenridge, assignor to International Safety Razor Corp., Bloomfield, N. J. Display card. 1,813,812; July 7.
Monroe, William S., Chicago, Ill., assignor, by mesne assignments, to Fuller Lehigh Company. Steam boiler. 1,813,501; July 7.
Moodie, Alexander, East Orange, N. J., assignor to Pendennis Toiletries, Incorporated, New York, N. Y. Cosmetic container. 1,813,121; July 7.
Moody, Graham B., et al. (See McCarty, Madison P., assignor.)
Moore, Charles A., Edina, Minn. Refrigerating and controlling the circulation of air in cold storage rooms. 1,813,187; July 7.
Moore, Charles A., Edina, Minn. Air conditioning and circulating apparatus for cold storage chambers. 1,813,188; July 7.
Moore, Charles A., Edina, Minn. Conditioning and circulating the air in cold storage rooms. 1,813,250; July 7.
Moore, George L., Chicago, Ill., assignor to Auto Research Corporation. Lubricating system. 1,813,122; July 7.
Moore, William J., Brooklyn, assignor to Nomac Corporation, New York, N. Y. Diffuser for exhaust gases. 1,813,189; July 7.
Moore, William L., Dayton, Ohio. Photographic abrasive pencil. 1,813,675; July 7.
Morgan, Blodgett, Morgan, Inc. (See Morgan, Porter S., assignor.)
Morgan Hurricane Company, The. (See Morgan, William H., assignor.)
Morgan, Porter S., assignor to Morgan, Blodgett, Morgan, Inc., New York, N. Y. Shock absorber. 1,813,069; July 7.
Morgan, William H., Alliance, Ohio, assignor, by mesne assignments, to The Morgan Hurrycane Company, New York, N. Y. Apparatus for disintegrating sugar cane. 1,813,070; July 7.
Morin, Emery F., Sioux City, Iowa. Beverage bottle carrying receptacle. 1,813,190; July 7.
Morris, Howard I., Lakewood, assignor to The Yoder Pencil Company, Cleveland, Ohio. Writing device. 1,813,251; July 7.
Moritz, Charles J., Effingham, Ill. Road scraper. 1,813,071; July 7.
Morris, William L., Wilmette, Ill., assignor to Bendix Aviation Corporation, New York, N. Y. Grease feeder. Re18,123; July 7.
Morrison, Montford, Chicago, Ill., assignor, by mesne assignments, to Westinghouse Lamp Company. Mercury vapor lamp. 1,813,580; July 7.
Morton, William A., Pittsburgh, Pa. Glass melting apparatus. 1,812,975; July 7.
Motch & Merryweather Machinery Company, The. (See Merryweather, George E., assignor.)
Motor Car Advertising Device Co. (See Dobrowsky, Emmanuel, assignor.)

Motor Industries, Inc. (See La Brie, Ludger E., assignor.)
Motor Wheel Corporation. (See Nelson, Emil A., assignor.)
Mottlau, August J., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. High speed circuit breaker. 1,813,191; July 7.
Mueller, Charles W., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Feeding mechanism for sewing machines. 1,812,895; July 7.
Mueller Co. (See Sutliff, James T., assignor.)
Mugler, Herman A., Lynbrook, N. Y. Multiple automobile pit. 1,813,460; July 7.
Mullin, Jay M., Elmhurst, N. Y. Combined bookcase, clockcase and radiocabinet. Des. 84,588; July 7.
Munroe, Treadway B., and E. C. Lathrop, Chicago, Ill.; said Lathrop assignor to said Munroe. Preservation of fibers. 1,813,632; July 7.
Munson, Henry L., Fort Wayne, Ind. Combination knob lock. 1,813,818; July 7.
Munson, Willard T., Scranton, Pa., assignor to Collins Supply & Equipment Company. Thread cleaner. 1,813,633; July 7.
Murdock, Henry J., Statesville, N. C. Interlocking stretcher joint in furniture. 1,813,072; July 7.
Murphy, P. H., Company. (See Bonsall, Charles D., assignor.)
Murphy, Patrick J., Scranton, Pa. Signal switch for trolley lines. 1,813,634; July 7.
Murray, John F., et al., executors. (See Murray, Thomas E., assignor.)
Murray, Joseph B., et al., executors. (See Murray, Thomas E., assignor.)
Murray Radiator Corporation. (See Murray, Thomas E., assignor.)
Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E., assignor.)
Murray, Thomas E., deceased, Brooklyn, N. Y., J. B. Murray, T. E. Murray, jr., and J. F. Murray, executor of said T. E. Murray, assignors to Murray Radiator Corporation. Radiator. 1,813,123; July 7.
Myers, F. E., and Bro. Company, The. (See Myers, Philip A., assignor.)
Myers, Hubert A., Toledo, Ohio. Toy. 1,813,252; July 7.
Myers, Joseph W., and R. J. Wilkinson, Jackson, Mich. Automatic iris for cameras. 1,813,635; July 7.
Myers, Philip A., assignor to The F. E. Myers and Bro. Company, Ashland, Ohio. Power head for pumps. 1,813,309; July 7.
N. V. Instituut voor Aero en Hydro-Dynamiek. (See Flettner, Anton, assignor.)
Nathe, Charles G., jr., Minneapolis, assignor to Marquette Manufacturing Company, St. Paul, Minn. Tire changer jaw holding means. 1,813,310; July 7.
National Equipment Company. (See Bausman, Alonzo L., assignor.)
National Marking Machine Company, The. (See Constable, Charles E., assignor.)
National Pneumatic Company. (See Conklin, Roscoe D., assignor.)
Naugle, John J., Greenwich, Conn. Filtering means. 1,813,073; July 7.
Neil, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Mounting for rock drills. 1,813,676; July 7.
Nelson, Arthur W., Park Ridge, assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,813,074; July 7.
Nelson, Emil A., Detroit, assignor to Motor Wheel Corporation. Lansing, Mich. Felly and rim construction. 1,813,192; July 7.
Neufang, Henry J., Atlanta, and W. S. Waldo, Batavia, assignors, by mesne assignments, to Boggs Plow Company, Inc., Atlanta, N. Y. Coupling device. 1,813,075; July 7.
Neuner, Frederick W. C., assignor to Indiana Lamp Corporation, Connersville, Ind. Headlamp locating and clamping band construction. 1,813,755; July 7.
New Britain-Gridley Machine Company, The. (See Brown, Robert S., assignor.)
New Castle Refractories Company. (See Rowland, Roger W., assignor.)
Newell, George W., Burlington, Wis. Brush. 1,813,076; July 7.
Newport, Jesse H., Kenilworth, Ill. Water heater. 1,812,253; July 7.
Nicolson, Alexander M., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Piezo electric crystal apparatus. 1,813,461; July 7.
Nightingale, Edgar L. (See Nightingale, Francis B., assignor.)
Nightingale, Francis B., Pasadena, assignor to E. L. Nightingale, Los Angeles, Calif. Hanger for suspension lighting fixtures. 1,813,863; July 7.
Nistle, Frank P., West Lawn, Pa. Conveying apparatus. 1,812,976; July 7.
Nixon, Jeddy D., Houston, Texas. Wrist pin. 1,813,193; July 7.
Noble, Edward J., assignor to Gillette-Vibber Company, Incorporated, New London, Conn. Ground connecter. 1,813,417; July 7.
Noel, Ernest J., Ironton, Ohio, assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,813,077; July 7.
Nomac Corporation. (See Moore, William J., assignor.)
Noppenz, Richard, Ozone Park, N. Y. Combined window screen, wind deflector, and ventilator. 1,813,756; July 7.
Nordlund, John N., Detroit, Mich. Radio apparatus. 1,813,194; July 7.
Novelty Electric Company. (See Mason, Charles E., assignor.)
Nyborg, Tage G., assignor of one-half to Mark F. Higgins, Worcester, England. Conveyer belt. 1,813,311; July 7.
Nye, Maximilian K., Ellwood City, Pa. Billet conveying apparatus for heating furnaces. 1,813,195; July 7.
Nyrop, Michael, Mount Vernon, N. Y. Automatic pump control means. 1,813,078; July 7.
Oberdorfer, M. L., Brass Company. (See Hedglon, Mead, assignor.)
O'Connor, John B. (See Adler, J. B., O'Connor, and Vance.)
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,813,707; July 7.
Offutt, Lawrence H., Raspeburg, assignor to D. R. S. Company, Inc., Baltimore, Md. Cigarette lighter. 1,813,312; July 7.
Offutt, Lawrence H., Raspeburg, assignor to D. R. S. Company, Inc., Baltimore, Md. Device for extinguishing fire on cigarettes. 1,813,313; July 7.
Ogden, Joseph R., jr., Atlantic City, N. J. Vehicle spring suspension. 1,813,757; July 7.
Ohio Power Shovel Company, The. (See Rauch, J. D., and Reid, assignors.)
Ohl, Russell S., New York, N. Y., assignor to American Telephone and Telegraph Company. Oscillation generator. 1,812,977; July 7.
Ohm, Albert J. D., Oak Park, assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill. Lighting fixture. Des. 84,589; July 7.
Ohm, Albert J. D., Oak Park, assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill. Lighting fixture. Des. 84,590; July 7.
Oilgear Company. (See Ferris, Walter, assignor.)
Olcott, James H., Waterbury, Conn. Spring shackle bearing. 1,813,708; July 7.
O'Leary, Charles M., and J. F. Hiltscher, Los Angeles, Calif.; L. U. Hiltscher, administratrix of said J. F. Hiltscher, deceased, assignor to said O'Leary. Orifice meter fitting. 1,813,418; July 7.
Olley, Raymond H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Switch operating mechanism. 1,812,896 July 7.
O'Neill, Hugh T., and A. J. Harriman, Washington, D. C. Treating fruits. 1,813,357; July 7.
O'Neill, Hugh T., and A. J. Harriman, Washington, D. C. Treating fruits. 1,813,358; July 7.
Oppe, Charles, assignor to The G & O Manufacturing Company, New Haven, Conn. Radiator. 1,813,079; July 7.
Orna-Metal Awning Corporation. (See Capell, Carl F., assignor.)
Orton, Albert W., assignor to American La France and Foamite Corporation, Utica, N. Y. Fire apparatus. 1,812,978; July 7.
Orynski, Leonard W., et al. (See McCarty, Madison P., assignor.)
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Talking picture vehicle. 1,813,542; July 7.
Owens, Percy R., Mount Kisco, assignor of twenty-five per cent to P. S. Haselton, Bayside, N. Y. Heat controlling system. 1,812,807; July 7.
Oxzyn Company. (See Valentine, J. E., and Englander, assignors.)
Paine, Wilbur V., East Hartford, assignor to The Spencer Turbine Company, Hartford, Conn. Filter for dust collectors. 1,813,896; July 7.
Palleson, Thomas, Scotia, Calif. Camera attachment. 1,813,314; July 7.
Pape, James C., New York, N. Sole for a woman's shoe. Des. 84,591; July 7.
Paridy, Charles, Belleville, Ill. Pneumatic tire. 1,813,758; July 7.
Parker, Charles W., Omaha, Nebr. Air directing and ignition electrode support for oil burners. 1,813,080; July 7.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Elbow lathe. 1,813,419; July 7.
Parrish, James I., Indianapolis, Ind. Indicator. 1,813,420; July 7.
Parry, Robert D. (See Lane, F. J., and Parry.)
Parsons, Philip D. (See Rhoads, R. E., and Parsons.)
Paschall, Jacques C., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,812,898; July 7.
Pasini, Jerome, New York, N. Y. Display sign. 1,812,979; July 7.
Pasman, Abram N., assignor to Scovill Manufacturing Company, Waterbury, Conn. 1,813,709; July 7.
Paul, Leon R. (See Botel, C., and Paul).
Peak, Frederick T., New York, N. Y. Telephone attachment. 1,813,505; July 7.
Pearsall, William D. (See Stoesling, L., and Pearsall.)
Pendennis Toiletries, Incorporated. (See Moodie, Alexander, assignor.)

Penn Engineering Company. (See Long, James A., assignor.)
Penney, Clarence R., Des Moines, Iowa. Manually operated stamp cutting, affixing, inking and canceling machine. 1,812,980; July 7.
Pennsylvania Crusher Company. (See Battey, W. A., Stine, and Borton, assignors.)
Penrose, Herbert W., assignor of one-fourth to M. R. Penrose and one-fourth to C. J. Guild, Yerington, Nev. Sign. 1,813,462; July 7.
Penrose, Matthew R., et al. (See Penrose, Herbert W., assignor.)
Perkins, Julian L., West Springfield, and H. D. Croft, Springfield, assignors to Perkins Machine and Gear Company, West Springfield, Mass. Starting and stopping mechanism. 1,813,254; July 7.
Perkins Machine and Gear Company. (See Perkins, J. L., and Croft, assignors.)
Perlman, Abraham, New York, N. Y. Door operating and locking mechanism. 1,813,710; July 7.
Pescara, Raul P., Paris, France. Waste heat apparatus. 1,813,543; July 7.
Peterman, Albert J., assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing construction. 1,813,315; July 7.
Peters, Albert G., Geraldine, Mont. Antiglare shield. 1,813,881; July 7.
Peters, Frank R., assignor to Franklin Railway Supply Company, New York, N. Y. Locomotive booster entraining and idling mechanism. 1,813,421; July 7.
Peters, George E. (See Russell, L. E., jr., and Peters.)
Peters, Thomas K., Los Angeles, Calif., assignor to Color-Ray Holding Corporation, Denver, Colo. Luminous tube. 1,813,759; July 7.
Petersen, Irnfried, Wolfen, near Bitterfeld, and Curt Engelbrecht, Dessaun-in-Anhalt, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Separating formic acid from acetic acid. 1,813,636; July 7.
Petre, John F., Farmingdale, N. Y. Removing water from motor boats. 1,813,253; July 7.
Pettus, Joseph H., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Melting pot. 1,813,196; July 7.
Pfister, William A. (See Price, E., and Pfister.)
Pfleger, Johannes, assignor to Deutsche Gold & Silber Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Manufacture of cyanogen formarylides. 1,813,760; July 7.
Philadelphia Metal Drying Form Company. (See Guggenheim, Paul, assignor.)
Phillips, Clair W., Lynch, Ky. Rotary steam engine. 1,813,316; July 7.
Phillips, Edward W., Hudson, Mich. Mudboat. 1,813,463; July 7.
Piazzoli, Theodore J., assignor to Capstant Glass Company Connellsville, Pa. Jar or similar article. Des. 84,593; July 7.
Pickett, Wingate P., Union Springs, Ala. Cutting metal fence posts from sheet material. 1,813,761; July 7.
Pictorial Review Company. (See Herzberg, Max, assignor.)
Pierce, James H., Bay City, Mich., assignor to Johnson Brothers Engineering Corporation, Waukegan, Ill. Marine propulsion device. Re18,118; July 7.
Piersol, Paul B., Beaver Falls, assignor to The Babcock & Wilcox Tube Company, West Mayfield, Pa. Hot metal working tool. 1,813,677; July 7.
Pike, George J., Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio. Radiocabinet or similar article. Des. 84,592; July 7.
Pike, George J., Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio. Radio cabinet or similar article. Des. 84,594; July 7.
Plunkett, John H., Beverly Hills, Calif., assignor to Flintkote Company, Boston, Mass. Waterproof construction material. 1,813,081; July 7.
Pokorny, Adolph F. J., St. Paul, Minn. Stenciling device. 1,813,711; July 7.
Pollard, Harold J., assignor to The Bristol Aeroplane Company Limited, Bristol, England. Aircraft structure. 1,813,814; July 7.
Poncet, Alexandre, Paris, France. Machine for tubular weaving. 1,813,762; July 7.
Pope, Arthur W., jr., assignor to Waukesha Motor Company, Waukesha, Wis. Steam cooling system. 1,812,899; July 7.
Pope, Elton A., Oakville, assignor to The Chase Companies, Inc., Waterbury, Conn. Laundry tray faucet. 1,813,422; July 7.
Popejoy, H. R., et al. (See Swearingen, Herman G., assignor.)
Popejoy, J. R., et al. (See Swearingen, Herman G., assignor.)
Possons, Minard A., Cleveland, Ohio, assignor to American Stove Company, St. Louis, Mo. Gas cock for ranges. 1,813,815; July 7.
Potter, Paul D. (See Metzger, R. T., and Potter.)
Powers, William T., assignor to The Direct Separator Company Inc., Syracuse, N. Y. Separator. 1,813,637; July 7.
Precision Machine Co., The. (See Dina, Augusto, assignor.)
Price, Emil, and W. A. Pfister, Los Angeles, Calif. Valve. 1,813,464; July 7.
Price, Sterling M., Montgomery, Ala. Rotary engine. 1,813,763; July 7.
Priest, Harry R., Loudonville, Ohio. Shaving outfit. 1,813,817; July 7.
Priest, Harry R., Loudonville, Ohio. Tooth cleaner and polisher. 1,813,359; July 7.
Priest, Harry R., Loudonville, Ohio. Tooth cleaning and polishing tool. 1,813,360; July 7.
Priest, Harry R., Loudonville, Ohio. Tooth cleaner and polisher. 1,813,361; July 7.
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Dynamo electric machine. 1,813,764; July 7.
Procoudine-Gorsky, Michel, Paris, assignor to Societe De Photochimie "Elka", Nice, France. Transferring gelatine silver bromide pictures. 1,812,981; July 7.
Proctor & Schwartz, Incorporated. (See Griffith, Charles T., assignor.)
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Prosperity Company, The. (See Ledbetter, James C., assignor.)
Pudan, Herbert W., Carmel, Calif. Flotation ore concentrating machine. 1,813,082; July 7.
Pullen, Harry. (See Zimmerman, M. D., and Pullen.)
Pyankow, Serge M., Moscow, Union of Socialist Soviet Republics. Oil burner. 1,813,083; July 7.
Pyle-National Company, The. (See Kennedy, J. J., and Dake, assignors.)
Radkus, Laurent V., assignor to Hindu Incense Mfg. Co., Chicago, Ill. Box. 1,813,256; July 7.
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafter, Albert, assignor to Rafter Machine Company, Belleville, N. J. Machine for bending sheet metal shapes. 1,812,982; July 7.
Rafter Machine Company. (See Rafter, Albert, assignor.)
Rafton, Harold R., Andover, Mass., assignor to Raffold Process Corporation. Manufacture of paper. 1,813,362; July 7.
Railway Metal Products Company. (See Van Dorn, William E., assignor.)
Ralston, Alfred L., Omaha, Nebr. Stock waterer. 1,813,318; July 7.
Ramage, William H., Girard, Ohio, assignor to Valley Mould & Iron Corporation, Sharpsville, Pa. Steel ingot. 1,813,507; July 7.
Ramage, William H., Trumbull County, and E. J. Kauffman, Girard, assignors to Valley Mould and Iron Corporation, Hubbard, Ohio. Ingot mold. 1,813,508; July 7.
Ramsden, John T., assignor to The Tabor Manufacturing Company, Philadelphia, Pa. Automatic lock for jarring rollover molding machines. 1,813,509; July 7.
Ramsey, George M., Amarillo, Tex. Grip testing machine. 1,813,816; July 7.
Rand, James H., jr., Tonawanda, assignor, by mesne assignments, to Remington Rand, Inc., New York, N. Y. Credit system. 1,813,257; July 7.
Randall Company, The. (See Randall, Howard D., assignor.)
Randall, Howard D., assignor to The Randall Company, Cincinnati, Ohio. Hood pad. 1,813,678; July 7.
Raphael, Louis. (See Abrams, I., and Sager, assignors.)
Rasmussen, Christian A., Cleveland, assignor to The Euclid Electric & Manufacturing Company, Euclid, Ohio. Electrical controller. 1,813,544; July 7.
Rauch, John D., and W. L. Reid, assignors to The Ohio Power Shovel Company, Lima, Ohio. Dipper handle. 1,813,864; July 7.
Rawson, Louis W., assignor to Worcester Polytechnic Institute. Worcester, Mass. Accelerating clutch. 1,813,638; July 7.
Rayfield, Cecil F., Waldemar, Ontario, Canada. Fertilizer. 1,813,765; July 7.
Ready, William A., Brookline, Mass. Dial apparatus. 1,813,766; July 7.
Redfern, Charles H., St. Louis, Mo. Machine for the purpose of holding and releasing animals in various contests of speed. 1,813,817; July 7.
Redmond, Albert G., Indianapolis, Ind., assignor to Jacob R. Francis, Flint, Mich. Constant compression device for internal combustion engines. 1,812,983; July 7.
Reed, Harold V., assignor to The Borg & Beck Company, Chicago, Ill. Clutch plate. 1,813,510; July 7.
Reeh, Johannes E. W., La Rochelle, France, assignor to Societe Anonyme de Conservation Industrielle du Poisson, Paris, France. Apparatus for and process of congelation. Re18,124; July 7.
Reese, John, Goodhue, Minn. Fire escape ladder. 1,813,865; July 7.
Reflector Hardware Corporation. (See Zadek, Milton, assignor.)
Regan Safety Device Co. (See Shaver, Archibald G., assignor.)
Reichart, James H., Muncie, Ind. Electric heater construction. 1,813,767; July 7.
Reichelt, Lester O., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Cable forming apparatus. 1,813,197; July 7.
Reid, William L. (See Rauch, J. D., and Reid.)

Reilly, Peter C. (See Cunningham, Orin D., assignor.)
Reilly, Peter C. (See Derby, I. H., and Cunningham, assignors.)
Reinhold, William, Buffalo, N. Y. Device for supporting beams from columns in the construction of welded buildings. 1,813,545; July 7.
Remington Rand Inc. (See Last, James, assignor.)
Remington Rand, Inc. (See Rand, James H., jr., assignor.)
Remington Typewriter Company. (See Benner, Russell E., assignor.)
Remington Typewriter Company. (See Hart, Frederick A., assignor.)
Reo Motor Car Company. (See Shaw, Harry A., assignor.)
Republic Steel Corporation. (See Feild, Alexander L., assignor.)
Reserve Holding Company. (See Robinson, H. C., and Malmberg, assignors.)
Reserve Holding Company. (See Wicks, John, assignor.)
Reynolds, Arthur W., assignor to The Babcock Manufacturing Company, Leonardsville, N. Y. Adjusting means for agricultural implements. 1,813,511; July 7.
Reynolds, Edwin, Vineland, N. J. Self adjustable towel bar bracket. 1,813,818; July 7.
Rhoads, Ralph E., Ridley Park, and P. D. Parsons, Swarthmore, Pa., assignors to Scott Paper Company. Toilet room equipment. 1,813,198; July 7.
Rice, Charles W., Union City, Ind. Window shade mounting. 1,813,768; July 7.
Rice, William S., Washington, D. C. Production of dentures. 1,813,583; July 7.
Richard, John B., Leominster, Mass., assignor to Du Pont Viscoloid Company, Wilmington, Del. Barrette. 1,813,423; July 7.
Richards, Andrew H., Grand Junction, Colo. Bicycle. 1,813,639; July 7.
Richards, Thomas A., North Troy, N. Y. Air heating attachment for stoves. 1,813,679; July 7.
Richardson, Harry C., North Salem, N. Y., assignor to Warren Telechron Company. Clock case. Des. 84,595; July 7.
Richardson, William, and George Steingruber, Atlanta, Ga.; said Richardson assignor, by mesne assignments, to said Steingruber. Water heater for electric ranges. 1,813,124; July 7.
Richey, Charles V., Jamaica, N. Y. Lockout for outgoing calls for telephone systems. 1,812,984; July 7.
Richter, George A., assignor to Brown Company, Berlin, N. H. Chemical processing of cellulose pulps. 1,813,465; July 7.
Riha, Henry J., assignor to Swift & Co., Chicago, Ill. Meat package and forming same. 1,813,769; July 7.
Rike Folding Box Company, The. (See Klin, John R., assignor.)
Riley, George, Los Angeles, Calif. Internal combustion engine. 1,813,258; July 7.
Rip Van Winkle Wall Bed Company. (See Sinclair, Neil, assignor.)
Ritzman, Donald. (See Ritzman, F., and D.)
Ritzman, Frank, and D. Ritzman, Chicago, Ill. Crate. 1,812,900; July 7.
Roach-Appleton Manufacturing Company. (See Williams, C., and Appleton, assignors.)
Robbel, Guenther. (See Koppe, P., and Robbel.)
Robbins, Frank D., Newberg, Oreg. Drier. 1,813,680; July 7.
Robertson, Henry M. (See Johnson, S. W. L., and Zarembinsky, assignors.)
Robertson, James, Peace River, Alberta, Canada. Clutch mechanism. 1,813,770; July 7.
Robertson, John B., jr. (See Eslava, Jerome O., assignor.)
Robinson, Harold C., and A. M. Malmberg, assignors to Reserve Holding Company, Chicago, Ill. Testing apparatus. 1,812,985; July 7.
Robinson, Joseph, New York, N. Y. Automatic train pipe connecter. 1,813,125; July 7.
Robinson, Thomas, assignor to Anaconda Sales Company, New York, N. Y. Metal-clad flashing material. 1,813,084; July 7.
Roche, Michael J., Watertown, assignor of one-half to G. A. Gabulson, Jamaica Plain, Mass. Holder for screw-threaded articles. 1,813,424; July 7.
Rodrigues, George, Castroville, Calif. Valve. 1,813,581; July 7.
Rogers, Homer L., Cincinnati, Ohio, assignor to The Philip Carey Manufacturing Company. System of third rail installation. 1,813,199; July 7.
Rogers, Homer L., Cincinnati, Ohio, assignor to The Philip Carey Manufacturing Company. Cover for third rail and other electric conductors. 1,813,200; July 7.
Rohman, William A. assignor to D. E. Makepeace Company, Attleboro, Mass. Wire or similar article. Des. 84,596; July 7.
Rohn & Haas Company. (See Bruson, Herman A., assignor.)
Rohner, Philip B., Carroll, Iowa. Rag ripper. 1,812,901; July 7.
Rolls Royce Limited. (See Hall, H. C., and Bradbury, assignors.)
Rolls Royce Limited. (See Royce, Frederick H., assignor.)
Root, Arthur A., Detroit, Mich. Aeroplane. 1,813,201; July 7.
Rosaire, Esme E., Houston, Tex., assignor to Western Electric Company, Incorporated, New York, N. Y. Heating an electrical and thermal nonconductor. 1,813,425; July 7.
Rosenblatt, Isidor, New York, N. Y. Lighting fixture member or article of similar nature. Des. 84,597; July 7.
Ross, Aubrey Marblehead, Mass., assignor to General Electric Company. Gear wheel. 1,813,819; July 7.
Ross, Aubrey A., Marblehead, Mass., assignor to General Electric Company. Gear wheel and the like. 1,813,820; July 7.
Rossetti, George, Chicago, Ill. Nut lock. 1,813,640; July 7.
Rowbottom, James J., Chicago, Ill. Combined smoker's stand lamp. Des. 84,598; July 7.
Rowland, Roger W., assignor to New Castle Refractories Company, New Castle, Pa. Ware support. 1,813,685; July 7.
Roy Manufacturing Company. (See Mathewson, Wilfred B., assignor.)
Royal Typewriter Company. (See Scherer, Gilbert M., assignor.)
Royce, Frederick H., Elmstead, West Wittering, Chichester, assignor to Rolls Royce Limited, Derby, England. Carburetor. 1,813,866; July 7.
Rüdenberg, Reinhold, Berlin-Grunewald, Germany, assignor to Westinghouse Electric & Manufacturing Company, New York, N. Y. Circuit breaker. 1,813,202; July 7.
Ruebsahm, Harry, San Antonio, Tex. Combination dresser and manicure table. 1,813,821; July 7.
Rugg, Walter S., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Garage elevator. 1,813,203; July 7.
Russell, Frederick T., Utica, N. Y., assignor, by mesne assignments, to Fox Company, Philadelphia, Pa. Toy gun. 1,812,902; July 7.
Russell, Linus E., jr., and G. E. Peters, Springfield, Ohio. Pedal jack. 1,813,426; July 7.
Rutenber, Edwin A., assignor to A. J. Lindemann & Hoverson Company, Milwaukee, Wis. Thermostatic device. 1,813,427; July 7.
Rutzler, John E. jr., Arlington, N. J. Making soap. 1,813,512; July 7.
Ryan, Joseph F., Chicago, Ill. Oil well regulation device. 1,812,986; July 7.
S. & T. Metal Company. (See Shoemaker, Robert J.; assignor.)
Sager, Irving. (See Abrams, I., and Sager.)
Sahmel, Viggo, Forest Hills, assignor to F. L. Smidth & Co., New York, N. Y. Grinding mill. 1,813,086; July 7.
Sainderichin, Nicolas. (See Folliet, A., and Sainderichin.)
Saks, Vadim V., assignor of one-half to Filtrators, Limited, London, England. Sludge remover. 1,813,822; June 7.
Samson-United Corporation. (See Samuels, Abe O. assignor.)
Samuels, Abe O., assignor to Samson-United Corporation, Rochester, N. Y. Electric waffle iron. Des. 84,599; July 7.
Sandage, Jacob R., Chicago, Ill. Impact tool. 1,813,087; July 7.
Sanders, Gilbert E., St. Louis, Mo. Flue air strainer. 1,813,584; July 7.
Sandvik, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Method and apparatus for sound reproduction. 1,813,681; July 7.
Sargent & Greenleaf, Inc. (See Diesel, William F., assignor.)
Sargent & Greenleaf, Inc. (See Walker, Herbert F., assignor.)
Sarkisian, Dickran M., Forest Hills, N. Y. Drapery supporting device. 1,812,903; July 7.
Saunders, Samuel R., Green Bay, Wis. Internal combustion hammer. 1,813,513; July 7.
Sawtelle, Charles A., assignor of one-half to Armin A. Darmstaetter, Detroit, Mich. Fluid brake mechanism. 1,813,319; July 7.
Saxon, Herman R., Toledo, Ohio. Thimble cap for metal bar eyes. 1,812,987; July 7.
Schaefer, Frank, Kalamazoo, and O. S. Duffendack, Ann Arbor; said Duffendack assignor to American Signs Corporation, Kalamazoo, Mich. Gaseous conduction lamp electrode. 1,813,320; July 7.
Scherer, Gilbert M., assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,813,321; July 7.
Schick Dry Shaver, Inc. (See Schick, Jacob, assignor.)
Schick, Jacob, Sound Beach, Conn., assignor to Schick Dry Shaver, Inc. Engine. 1,813,259; July 7.
Schiff, Benjamin A., Chicago, Ill. Clock case. Des. 84,600; July 7.
Schilde, Richard, Hersfeld, Germany. Apparatus for drying textile bands, yarns, slivers, tops, and the like. 1,813,585; July 7.
Schilling, Frederick J. (See Helmstaedter, J. G., and Schilling.)
Schindler, Emanuel, Chicago, Ill. Air hammer. 1,813,546; July 7.

Schmidt, Otto, and O. Grosskinsky, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of carbon black and apparatus therefor. 1,813,514; July 7.

Schnar, Harry A., Wabash, Ind. Construction of sectional conduits. 1,813,771; July 7.

Schneevoigt, Alwin, Ludwigshafen-on-the-Rhine, and K. Anacker, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Fast print on vegetable fibers. 1,813,641; July 7.

Schneider, Christian, Neuroessen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Fire-extinguishing process. 1,813,586; July 7.

Schoenberg, Virgil A., Niles Center, Chicago, Ill. Radio photography transmitter. 1,813,204; July 7.

Scholz, Werner, Oberleschen, and A. Frohberg, Cunnersdorf, Germany. Device for charging vessels. 1,813,205; July 7.

Schroeder, Simon E., Newton, Iowa. Supporting and driving mechanism for wringers. 1,813,406; July 7.

Schubart, Benno, Nuremberg, Germany, assignor to the firm Vereinigte Schuhfabriken Bernels-Wessels A. G., Augsburg-Oberhausen, Germany. Box for baby's shoes. Des. 84,614; July 7.

Schultz, Alfred W., Waterloo, Iowa, assignor to Zeidler Concrete Products Machinery Company, St. Joseph, Mo. Machine for constructing concrete pipe. 1,813,772; July 7.

Schultze, Benno E. (See Tauscher, A. E., and Schultze.)

Schuster, Martin B. (See Darlington, Homer T., assignor.)

Sciacca, George. (See Villatore, J. E., and Anello, assignors.)

Scott Paper Company. (See Rhoads, R. E., and Parsons, assignors.)

Scott & Williams, Incorporated. (See Guillemot, Robert, assignor.)

Scovill Manufacturing Company. (See Pasman, Abram N., assignor.)

Scudder, Charles J., Scranton, Pa. Locomotive driving box cellar. 1,813,712; July 7.

Scullin Steel Company. (See Chiles, George S., assignor.)

Sealcones, Inc. (See Berg, Hart O., assignor.)

Sebring Pottery Company, The, et al. (See Smith, Charles O., assignor.)

Seel, Paul C., W. R. Webb, and J. M. Donohue, assignors to Eastman Kodak Company, Rochester, N. Y. Making cellulose ethers. 1,813,665; July 7.

Segel, Samuel, New York, N. Y. Lock. 1,812,988; July 7.

Segschneider, Rudolph G., Yonkers, N. Y. Manufacture of hats. 1,813,088; July 7.

Seidel, Julius A., assignor to Julius Seidel Lumber Company, St. Louis, Mo. Chair settee. Des. 84,601; July 7.

Seidel, Julius A., assignor to Julius Seidel Lumber Company, St. Louis, Mo. Chair. Des. 84,602; July 7.

Seidel, Julius, Lumber Company. (See Seidel, Julius A., assignor.)

Seifferle, Oliver, Portland, Oreg., assignor to J. C. Dennis Co. Carburetor. 1,813,322; July 7.

Seitz, John F., Los Angeles, Calif. Making dissolves and effects in motion pictures. 1,813,428; July 7.

Selby, William, and R. P. Magnenat, assignors to Waterbury Button Company, Waterbury, Conn. Toy bank and vending machine. 1,813,713; July 7.

Sexton, George A., Brookline, Mass. Traveling lifting jack. 1,813,429; July 7.

Shainline, Joseph B., assignor of one-half to H. Slemmer, Morristown, Pa. Aircraft construction. 1,813,430; July 7.

Shakeproof Lock Washer Company. (See Hosking, Richard T., assignor.)

Shakespeare Company. (See Burdick, Frank, assignor.)

Shakespeare, William M., South Orange, N. J., assignor to Anaconda Sales Company, New York, N. Y. Flashing material. 1,813,089; July 7.

Sharpsville Boiler Works Company. (See Fagan, Charles D., assignor.)

Shaver, Archibald G., Chicago, Ill., assignor to The Regan Safety Devices Co., Inc., New York, N. Y. Automatic train control system, intermittent type with roadside energy. 1,812,989; July 7.

Shaver, Archibald G., Chicago, Ill., assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Automatic train control systems intermittent type with vehicle energy. 1,812,990; July 7.

Shaver, Archibald G., Chicago, Ill. Railroad crossing traffic system. 1,813,210; July 7.

Shaw, Harry A., East Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich. Radiator shell for automobiles. Des. 84,603; July 7.

Shekter, Abraham J., Jamaica, N. Y. Tooth paste tube holder. 1,813,323; July 7.

Shell Development Company. (See Taylor, Jack F. M., assignor.)

Sheppard, Howard M., Philadelphia, Pa., assignor to I. P. Morris Corporation. Valve. 1,813,126; July 7.

Shipman, Ralph, Sunbury, Pa. Carburetor. 1,813,206; July 7.

Shoe Form Co. (See Dewitt, William J., assignor.)

Shoe Hardware Company, The. (See Dalton, Daniel F., assignor.)

Shoemaker, Alvin H., Seattle, Wash. Demountable wheel and hub. 1,813,431; July 7.

Shoemaker, Robert J., assignor to S. & T. Metal Company, Chicago, Ill. Lead alloy. 1,813,324; July 7.

Shonle, Horace A., assignor to Eli Lilly and Company, Indianapolis, Ind. N-amyl ethyl barbituric acid and its intermediates. 1,813,867; July 7.

Shriver, Edward A., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Wheel dresser. 1,813,682; July 7.

Siegel, Morris, Los Angeles, Calif. Combined folding table, ash and buffet tray. 1,813,090; July 7.

Siemens & Halske Aktiengesellschaft. (See Langer, Max, assignor.)

Silver, Walter H., assignor to Deere & Company, Moline, Ill. Lister. 1,813,207; July 7.

Simmons Company. (See Barnes, George W., assignor.)

Simmons Company. (See Gail, John F., assignor.)

Simon, Isidore, Chicago, Ill. Heel. 1,813,515; July 7.

Simplex Equipment Company. (See Blake, R. J., and Bouché, assignors.)

Simpson, Lancelot M. (See Taylor, R., and Simpson.)

Sinclair, Neil, assignor to Rip Van Winkle Wall Bed Company, Inc., Oakland, Calif. Narrow door wall bed. 1,813,091; July 7.

Sindler, Jay J., assignor to Hodgman Rubber Company, Framingham, Mass. Applying designs to flexible sheet materials. 1,813,587; July 7.

Slater, Henry B., Riverside, assignor, by mesne assignments, to Food Machinery Corporation, San Jose, Calif. Treating fresh fruit for retarding decay from blue and green mold. 1,813,127; July 7.

Slemmer, Harold. (See Shainline, Joseph B., assignor.)

Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Drop door for railway cars. 1,813,547; July 7.

Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Railway car hopper door. 1,813,548; July 7.

Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Device for operating car couplers. 1,813,549; July 7.

Small, Edward A., assignor to Eeja Auto Accessories Company, Franksville, Wis. Windshield heater. 1,813,550; July 7.

Smidth, F. L., & Co. (See Lindhard, Povl T., assignor.)

Smidth, F. L., & Co. (See Sahmel, Vigzo, assignor.)

Smiley, John C., Uniontown, Pa. Rug. Des. 84,615; July 7.

Smiroldo, Antonio, Akron, Ohio. Knife guard. 1,813,865; July 7.

Smith, A. O., Corporation. (See Wetmore, Charles P., assignor.)

Smith, Adon L., Rocky River, assignor to The Guardian Safe and Manufacturing Company, Alliance, Ohio. Safe construction. 1,812,991; July 7.

Smith, Charles E., Three Rivers, Tex., assignor to Hinderliter Tool Company. Pipe coupling. Re18,119; July 7.

Smith, Charles O., assignor of one-half to The Sebring Pottery Company and one-half to The Limoges China Company, Sebring, Ohio. Edge decoration. 1,813,551; July 7.

Smith, Earle R., Los Angeles, Calif., assignor to Gillette Sweeper Corporation Ltd. Carpet sweeper. 1,813,325; July 7.

Smith, Edward M., Peoria, assignor to Brown Lynch Scott Co., Monmouth, Ill. Wheeled harrow frame adjustment. 1,812,904; July 7.

Smith, Herschel G., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Purifying petroleum products. 1,813,642; July 7.

Smith, Robert N., Kansas City, Mo., assignor of one-half to J. L. Hogin, Kansas City, Kans. Doorlock. 1,813,092; July 7.

Smith, Robert N., Kansas City, Mo., assignor of one-half to James L. Hogin, Kansas City, Kans. Automobile doorlock. 1,813,093; July 7.

Smith, Walter C., Moylan, Pa., assignor to Allied Process Corporation, New York, N. Y. Casting metals and alloys therefor. 1,812,992; July 7.

Smith, Walter C., Moylan, Pa., assignor to Allied Process Corporation, New York, N. Y. Refining metals. 1,812,993; July 7.

Smith, William A., jr., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,813,773; July 7.

Smith, William A., jr., and G. H. Fuehrer, Phillipsburg, assignors to Ingersoll-Rand Company, Jersey City, N. J. Blowing device for rock drills. 1,813,774; July 7.

Smith, William D., Steubenville, Ohio. Ash tray. 1,813,467; July 7.

Smythe, Edwin H., Evanston, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Acoustic device. 1,813,208; July 7.

Snediker, Morton O., Chicago, Ill. Heating and ventilating unit. 1,813,261; July 7.

Snow, Olin. (See Ledder, C., and Snow.)

Snukiskis, Julius, Philadelphia, Pa. Finishing applied lacquer. 1,813,823; July 7.

Snyder, Clifford L., assignor to The Evans Products Company, Detroit, Mich. Shipping device. 1,813,326; July 7.

Snyder, Martin C., Paterson, N. J. Aircraft. 1,813,468; July 7.

Snyder, Truman R., Meadville, assignor to Frederick C. Hinkel, Ross Township, Allegheny County, Pa. Mechanical stoker. 1,813,262; July 7.

Societe Anonyme de Conservation Industrielle du Poisson. (See Reeh, Johannes E. W., assignor.)

Societe Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey. (See Boudin, Louis, assignor.)

Societe de Photochimie "Elka." (See Procoudine-Gorsky, Michel, assignor.)

Solomon, Nat L., Brooklyn, N. Y. Hair net. 1,813,897; July 7.

Somersalo, George A., New York, N. Y. Preventing retroactive effects in audion amplifier circuits. 1,813,775; July 7.

Sosy, Inc. (See Leventhal, Mitchell, assignor.)

Souther, Benjamin L. Pittsburgh, and William A. Gruse, Wilkinsburg, assignors to Gulf Refining Company, Pittsburgh, Pa. Treatment of petrolatum stocks. 1,813,327; July 7.

Spase, Charles B., Syracuse, N. Y. Antirattle sliding gear assembly. 1,813,209; July 7.

Speedaumat Manufacturing Company. (See Johnson, John E., assignor.)

Spencer, Alexander, and R. T. Glascodine, London, England. Central buffing and draw gear. 1,813,824; July 7.

Spencer, Harry E., New Haven, Conn., assignor to Universal Gear Shift Corporation, New York, N. Y. Pneumatic gear shift. 1,813,683; July 7.

Spencer, John A., Revere, assignor to Spencer Thermostat Company, Cambridge, Mass. Thermostat. 1,813,776; July 7.

Spencer Thermostat Company. (See Spencer, John A., assignor.)

Spencer Turbine Company, The. (See Paine, Wilbur V., assignor.)

Sperry Gyroscope Company. (See Sperry, Elmer A., assignor.)

Sperry, Elmer A., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Borehole inclination recorder. 1,812,994; July 7.

Splitdorf Radio Corporation. (See Jacobs, Charles T., assignor.)

Sprague, Warner & Company. (See Metzger, R. T., and Potter, assignors.)

Spray, Lester E., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,813,363; July 7.

Sprich, Emil M., St. Louis, Mo. Smoke pipe. 1,813,684; July 7.

Square D Company. (See Horton, Bryson D., assignor.)

Squibb, E. R., & Sons. (See Christiansen, W. G., and Van Winkle, assignors.)

Stack, Emmet G., Marshfield, Oreg. Operation meter. 1,813,777; July 7.

Stainless Steel Corporation. (See Crollius, F. J., and Stuler, assignors.)

Stamp, J. W., et al. (See Buhren, Hans, assignor.)

Standard Oil Company. (See Bacheldor, William H., assignor.)

Standard Oil Company. (See Lowery, H., and Lane, assignors.)

Standard Oil Development Company. (See Verner, Jules, assignor.)

Standard Process Corporation. (See Ballard, Ernest S., assignor.)

Standard Process Corporation. (See Leech, Russ B., assignor.)

Standard Products Corporation. (See Whatmough, William H., assignor.)

Stanley Works, The. (See Crowe, John M., assignor.)

Stapler, Floricel A., Philadelphia, Pa., assignor to Victor Talking Machine Company. Member or structure vibrated by energy impulses. 1,813,588; July 7.

Stapler, Floricel A., Philadelphia, Pa., assignor to Victor Talking Machine Company. Member or structure vibrated by energy impulses. 1,813,589; July 7.

Starkey, William C., and D. T. Brownlee, assignors to L. G. S. Devices Corporation, Indianapolis, Ind. Separator driving machine. 1,813,095; July 7.

Staud, Cyril J., and C. S. Webber, assignors to Eastman Kodak Company, Rochester, N. Y. Changing the solubility of cellulose acetates. 1,813,685; July 7.

Stauder, Emanuel, assignor to Huther Brothers Saw Mfg. Co., Rochester, N. Y. Machine for grinding saws. 1,813,825; July 7.

Stechauner, John, assignor of one-sixth to J. Haas, and one-sixth to G. Goetz, Milwaukee, Wis. Propelling mechanism. 1,813,552; July 7.

Steegeman, Albert J., Quincy, Ill., assignor to Westinghouse Electric and Manufacturing Company. Elevator cab. Des. 84,604; July 7.

Stein, Hall & Company. (See Fackler, L. K., and Gardner, assignors.)

Steingruber, George. (See Richardson, W., and Steingruber.)

Stenner, Karl A., Farmington, Conn. Tube expander and expanding tubes. 1,813,096; July 7.

Stetson, Leon W., West Newton, Mass. Blade holder. 1,813,686; July 7.

Stimpson, Walter F. (See Lachance, Modeste J., assignor.)

Stine, James E. (See Battey, W. A., Stine, and Borton.)

Stock, Arthur J., jr., Lakewood, Ohio. Feed chute for stokers and the like. 1,813,590; July 7.

Stockburger, Frank J., Toston, Mont. Truck and trailer. 1,812,995; July 7.

Stocker, Philip J., Jordan, Minn. Attachment for braces. 1,812,996; July 7.

Stockholder, John H., assignor to M. Stockholder, New Orleans, La. Liquid purifying device. 1,813,687; July 7.

Stockholder, Mary. (See Stockholder, John H., assignor.)

Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Range or similar article. Re18,121; July 7.

Stoddard, Charles F., New York, assignor, by mesne assignments, to American Piano Corporation, East Rochester, N. Y. Automatic musical instrument. 1,813,097; July 7.

Stoddard, Charles F., New York, and C. N. Hickman, Jackson Heights, assignors, by mesne assignments, to American Piano Corporation, East Rochester, N. Y. Automatic musical instrument. 1,813,098; July 7.

Stoesling, Ludwig, San Fernando, and W. D. Pearsall, Hollywood, Calif. Compressor. 1,813,128; July 7.

Stone, Auvry E. (See Hamilton, H. J., and Stone.)

Stone, Edward R. (See Farnam J. P., and Stone.

Stone, Edwin W., Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn Tuft pile fabric loom. 1,813,714; July 7.

Stork, Lawrence, Walsh, Ill. Internal combustion engine. 1,813,328; July 7.

Story & Clark Radio Corp. (See Minnium, Byron B., assignor.)

Story, Elliott M., Worcester, Mass. Edible container. 1,813,099; July 7.

Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Plow. 1,813,506; July 7.

Strauss, Siegmund, Vienna, Austria. Device for measuring high resistances. 1,813,778; July 7.

Studevant, Lafayette M. (See Waterworth, Robert J., assignor.)

Stuhr, Robert. (See Thomas, E., and Stuhr.)

Stuler, Rudolph W. (See Crollius, F. J., and Stuler.)

Sturtevant, B. F., Company. (See Anderson, Samuel M., assignor.)

Sturtevant, B. F. Company. (See Bentley, Oliver D. H., assignor.)

Stuyvesant, Lewis R., Allamuchy, N. J. Safety device for firearms. 1,812,905; July 7.

Sucher, Felix and S. H., St. Louis, Mo. Merry-go-round. 1,813,210; July 7.

Sucher, Sophia H. (See Sucher, F. and S. H.)

Sullivan Machinery Company. (See Holmes, Morris P., assignor.)

Summer, Frank S., et al. (See Summer, Samuel, assignor.)

Summer, Samuel, et al. (See Summer, Samuel, assignor.)

Summer, Samuel, Albany, assignor of one-half to S. Summer and one-half to F. S. Summer, New York, N. Y. Cigar and cigarette lighter. 1,813,715; July 7.

Summers, Samuel L., Fort Washington, Pa. Condensation product of the diethyl ester of methelene-disalicylic acid (p-amino benzyl ether) with pyruvic acid. 1,813,364; July 7.

Summers, Samuel L., Fort Washington, Pa. Acetylated disazo compound. 1,813,365; July 7.

Sun Rubber Company, The. (See Lower, Melvin S., assignor.)

Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Separable fastener. 1,813,432; July 7.

Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Separable fastener. 1,813,433; July 7.

Supplee, Anna C., Los Angeles, Calif. Animal toilet. 1,813,329; July 7.

Surface Combustion Corporation. (See Cowan, R. J., and McDoy, assignors.)

Sutcliffe, Edgar R., Leigh, England. Apparatus for the distillation of solid carbonaceous substances. 1,813,826; July 7.

Sutliff, James T., assignor to Mueller Co., Decatur, Ill. Meter connection and support. 1,813,643; July 7.

Sutliff, James T., assignor to Mueller Co., Decatur, Ill. Meter connection and support. 1,813,644; July 7.

Swan, Arthur F. (See Mitchell, M. E., and Swan.)

Swanson, Hjalmar, assignor to Cummins Perforator Company, Chicago, Ill. Check marking device. 1,812,997; July 7.

Swearingen, Clair V., Chattanooga, Tenn. Treating bathing pools with chlorine. 1,813,827; July 7.

Swearingen, Herman G., assignor of one-fourth to H. R. Popejoy and one-fourth to J. R. Popejoy, California, Mo. Artificial bait. 1,812,906; July 7.

Swift and Company. (See Clark, James H., assignor.)

Swift & Co. (See Riha, Henry J., assignor.)

Swindle, John A., Maywood, Calif. Orifice fitting. 1,813,100; July 7.

Tabor Manufacturing Company, The. (See Ramsden, John T., assignor.)

Tauscher, Arno E., and B. E. Schultze, Chicago, Ill. Resonance attachment for sound reproducing devices. 1,812,998; July 7.

Taylor, Albert H., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Frequency multiplication system. 1,813,469; July 7.
Taylor, George W., Wellesley, assignor, by mesne assignments, to H. J. Clark, Watertown, Mass. Axle. 1,813,779; July 7.
Taylor, Jack F. M., Wilmington, assignor to Shell Development Company, San Francisco, Calif. Mixing chamber for foam forming solutions. 1,813,101; July 7.
Taylor, Reginald, Liverpool, and L. M. Simpson, Thorner, near Leeds, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill. Telephone system. 1,812,999; July 7.
Teague, Walter D., New York, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y. Camera casing. Des. 84,605; July 7.
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Urtel, Rudolf, assignor.)
Tell, William J., Detroit, Mich. Device for tapping pipes. 1,812,907; July 7.
Templeton, Daniel H., Mead, Nebr. Mail box. 1,813,516; July 7.
Templeton, Edwin G., and W. K. Glennon, assignors to The Goodyear Tire & Rubber Company, Akron, Ohio. Flap cutting device. 1,813,869; July 7.
Teusch, Heinrich, Essen, Germany. Removing the bitter taste from orange peels. 1,813,366; July 7.
Textileather Corporation. (See Lippmann, Julius D., assignor.)
Thomas, Adolph A., New York, N. Y. Automobile bumper. 1,813,517; July 7.
Thomas, Arthur F. (See McNolty, George H., assignor.)
Thomas, Eugen, and R. Stuhr, Dusseldorf, Germany. Internal combustion engine. 1,813,781; July 7.
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Automatic coupling. 1,813,211; July 7.
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Automatic coupling. 1,813,212; July 7.
Thompson, Claude S., assignor to Thompson Manufacturing Co., Seattle, Wash. Fire extinguisher. 1,813,367; July 7.
Thompson, Fredrick B., Hollywood, Calif., assignor, by mesne assignments, to Cinema Patents Company, Inc., New York, N. Y. Photographic film printer. 1,813,000; July 7.
Thompson, Herbert L. (See McCain, B. Z., and Thompson.)
Thompson Manufacturing Co. (See Thompson, Claude S., assignor.)
Thompson Products, Inc. (See Hufferd, George H., assignor.)
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor blade. 1,813,470; July 7.
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,813,471; July 7.
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Surgical knife. 1,813,782; July 7.
Thordarson, Chester H., assignor to Thordarson Electric Manufacturing Co., Chicago, Ill. Insulating and supporting washer for electrical binding posts. 1,813,716; July 7.
Thordarson Electric Manufacturing Co. (See Thordarson, Chester H., assignor.)
Tidal Oil Company. (See Franks, Harry H., assignor.)
Tietze, Ernst. (See Hentrich, W., and Tietze.)
Tillman, Ferdinand J., St. Louis, Mo. Automatic phonograph. 1,813,472; July 7.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Eye protector. 1,813,213; July 7.
Timken Roller Bearing Company, The. (See Miller, Erwin E., assignor.)
Timken Roller Bearing Company, The. (See Peterman, Albert J., assignor.)
Todd, James H., Brooklyn, N. Y., and G. F. Wheeler, Riverside, Conn. Floating airport. 1,813,263; July 7.
Toles, Melvin F., Myton, Utah. Cable knife. 1,813,368; July 7.
Tolley, Donald B., Macomb, assignor to American Steel Products Co., Macomb, Ill. Electrically heated brooder. 1,813,001; July 7.
Tomlinson, William A., and H. B. Bearden, Phoenix, Ariz. Saw table. 1,813,783; July 7.
Toncray, Millard H., and J. W. Greig, assignors to Hudson Motor Car Company, Detroit, Mich. Hinge. 1,812,908; July 7.
Townend, Hubert C. H., Teddington, assignor to Boulton & Paul Limited, Riverside Works, Norwich, Norfolk, England. Reducing eddy formation in the airflow passing aircraft bodies. 1,813,645; July 7.
Traver, William A., Providence, and J. M. Wood, Pawtucket, assignor to Franklin Process Company, Providence, R. I. Dyeing machine. 1,813,784; July 7.
Trinquet, Louis, Pavillon S/Bois, and René Marcel Hamel, St. Ouen, France. Apparatus for burnishing silver plate. 1,812,909; July 7.
Turkenton, William J., Lancaster, Ohio. Combination cooking utensil. 1,813,646; July 7.
Turner, John J., Chicago, and C. Absmeier, Maywood, assignors to United States Gypsum Company, Chicago, Ill. Mixing device. 1,813,828; July 7.
Tuttle, Ralph V., Lewiston, Idaho. Timing device. 1,813,780; July 7.
Twin Coach Company. (See Fageol, Frank R. and W. B., assignors.)
Twin Disc Clutch Company. (See Gewalt, William C., assignor.)
Uggla, Wilhelm R., Morby, Stocksund, assignor to Luth & Rosens Elektriska Aktiebolag, Stockholm, Sweden. Power transmission gearing. 1,813,369; July 7.
Uhl, George D., Los Angeles, Calif. Sun bath cabinet. 1,813,647; July 7.
Ulrey, Clayton T., East Orange, N. J., assignor to Westinghouse Lamp Company. Electric coil. 1,813,591; July 7.
Underwood Elliott Fisher Company. (See Kupetz, Adolph G., assignor.)
Union Industrial Trust Company et al., executors. (See Heginbottom, W. G., and Francis.)
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Metal Products Company. (See Small, Arthur E., assignor.)
Union Switch & Signal Company. (See Spray, Lester E., assignor.)
United-Carr Fastener Corporation. (See Jones, Walter I., assignor.)
United Chromium, Incorporated. (See Fink, C. G., and Eldridge, assignors.)
United Fruit Company. (See McQuiston, R. C., and von Loesecke, assignors.)
United Hydro Carbons Company. (See Clarke, A., and Butler, assignors.)
United Reproducers Patents Corporation. (See Klar, Ernst, assignor.)
United Shoe Machinery Corporation. (See Ashworth, Fred.)
United States Gypsum Company. (See Baker, George W., assignor.)
United States Gypsum Company. (See Ballard, B. T., and Gough, assignors.)
United States Gypsum Co. (See King, G. D., and Gough, assignors.)
United States Gypsum Company. (See Turner, J. J., and Absmeier, assignors.)
United States Steel Corporation. (See Edwards, J. H., and Marble, assignors.)
Universal Button Fastening & Button Co. (See Clark, John M., assignor.)
Universal Gear Shift Corporation. (See Spencer, Harry E., assignor.)
Urtel, Rudolf, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Transmitter plate potential equalizing circuit. 1,813,688; July 7.
Utah Metals Flux Company. (See Carson, James A., assignor.)
Vaccaro, Michael, Port Chester, N. Y. Storage battery terminal connecter. 1,813,829; July 7.
Valentine, Joseph E., Plainfield, N. J., and I. Englander, Brooklyn, assignors to Oxzyn Company, New York, N. Y. Powder puff and making the same. 1,813,518; July 7.
Valley Mould & Iron Corporation. (See Ramage, William H., assignor.)
Valley Mould and Iron Corporation. (See Ramage, W. H., and Kauffman, assignors.)
Vance, Walter N. (See Adler, J. B., O'Connor, and Vance.)
Van Dorn, William E., Pasadena, Calif., assignor to Railway Metal Products Company, Chicago, Ill. Side door for railway cars. 1,813,553; July 7.
Van Hamersveld, John J. N., Cleveland Heights, assignor to The Warner & Swasey Company, Cleveland, Ohio. Indicator. 1,813,002; July 7.
Van Winkle, Raymond. (See Christiansen, W. G., and Van Winkle.)
Varkas, Spiros S., New York, N. Y. Propeller mounting for aeroplanes and the like. 1,812,910; July 7.
Varney, William W. (See Madsen, Charles P., assignor.)
Varusky, John J., Minneapolis, Minn., assignor to Hart-Carter Company, Peoria, Ill. Grain feeding device. 1,813,519; July 7.
Vereinigte Schuhfabricken Berneis-Wessels A. G. (See Schubart, Benno, assignor.)
Verner, Jules, Linden, N. J., assignor to Standard Oil Development Company. Reducing evaporation losses in tanks. 1,813,870; July 7.
Victor Talking Machine Company. (See Clark, George F., assignor.)
Victor Talking Machine Company. (See Elliott, Harold F., assignor.)
Victor Talking Machine Company. (See Hollerith, H., jr., and Fenton, assignors.)
Victor Talking Machine Company. (See Mallina, Rudolph F., assignor.)
Victor Talking Machine Company. (See Stapler, Floricel A., assignor.)
Vidal, Emil., San Francisco, Calif. Folding table. 1,813,330; July 7.
Villatore, Joseph E., Jersey City, N. J., and R. Anello, Brooklyn, assignors to G. Sciacca, New York, N. Y. Hunter's duck decoy. 1,813,370; July 7.
Vividad Holdings Limited. (See Gillard, Francis W., assignor.)

Vogel, William, New York, N. Y. Foldable and adjustable reflector. 1,813,102; July 7.
Von Frankenberg, Arthur, New York, N. Y. Stand for smoker's and similar articles. Des. 84,606; July 7.
Von Frankenberg, Arthur, New York, N. Y. Stand for smoker's and similar articles. Des. 84,607; July 7.
Von Frankenberg, Arthur, New York, N. Y. Stand for smoker's and similar articles. Des. 84,608; July 7.
Von Frankenberg, Arthur, New York, N. Y. Stand for smoker's and similar articles. Des. 84,609; July 7.
Von Frankenberg, Arthur, New York, N. Y. Stand for smoker's and similar articles. Des. 84,610; July 7.
Von Klein, Bert H., New York, N. Y. Speedometer. 1,813,003; July 7.
Von Loesecke, Harry. (See McQuiston, R. C., and Von Loeschke.)
Wadsten, Sten, Bloomfield, N. J., assignor to Westinghouse Lamp Company. Machine for flattening filamentary wire. 1,813,592; July 7.
Wadsworth, David T., Cold Springs, assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky. Wiring channel structure. 1,813,331; July 7.
Wadsworth Electric Manufacturing Company, The. (See Wadsworth, David T., assignor.)
Waechter, Ferdinand F., Philadelphia, Pa., assignor to Link-Belt Company. Trolley device. 1,813,898; July 7.
Wagoner, Kenneth S., Oak Park, assignor to Electrical Engineers Equipment Co., Melrose Park, Ill. Disconnect switch. 1,813,103; July 7.
Waite, Frank H. (See Davey, G. W., and Waite.)
Walden, George B., Southport, assignor to Eli Lily and Company, Indianapolis, Ind. Liver extract for secondary anemia and making it. 1,813,788; July 7.
Waldo, William S. (See Neufang, H. J., and Waldo.)
Walker, Herbert F., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y. Locking mechanism. 1,813,473; July 7.
Wall, Earl R., et al. (See McCarty, Madison P., assignor.)
Wallace, R., & Sons Manufacturing Company. (See Warren, William S., assignor.)
Walter, Joseph H., assignor to Iron Fireman Manufacturing Company, Portland, Oreg. Agitator for stokers. 1,812,911; July 7.
Walton, Frank W., East Orange, N. J., assignor to Westinghouse Lamp Company. Electrical device. 1,813,593; July 7.
Ward, David H., Seattle, Wash. Display apparatus. 1,813,332; July 7.
Ward, Lawrence T., assignor to Kane Manufacturing Company, Kane, Pa. Closure for windows. 1,813,474; July 7.
Ward, Lawrence T., assignor to Kane Manufacturing Company, Kane, Pa. Screen and like devices. 1,813,475; July 7.
Ward Leonard Electric Company. (See Kouyoumjian, Harcutiun K., assignor.)
Ward, Seymour P., Oakland, assignor to Calrew Incorporated, San Francisco, Calif. Resilient connection. 1,813,214; July 7.
Warner, Clarence, and H. G. Fisher, assignors to Delco-Light Company, Dayton, Ohio. Pump. 1,813,104; July 7.
Warner, Harold E., West Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tube testing apparatus. 1,813,215; July 7.
Warner & Swasey Company, The. (See Van Hamersveld, John J. N., assignor.)
Warren Telechron Company. (See Richardson, Harry C., assignor.)
Warren, William S., Meriden, assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon or similar article. Des. 84,611; July 7.
Waterbury Button Company. (See Selby, W., and Magenat, assignors.)
Waterworth, Robert J., assignor to L. M. Studevant, Sidney, Ohio. Sheet overturning means for paper folding machines. 1,813,476; July 7.
Watson, Ralph, Villa Ridge, Ill. Insect exterminator. 1,813,648; July 7.
Waukesha Motor Company. (See Pope, Arthur W., jr., assignor.)
Webb, William R. (See Donohue, J. M., Webb, and Seel.)
Webber, Charles S. (See Staud, C. J., and Webber.)
Weber, Charles, Pearson, Wash. Attachment for drilling machines or drills. 1,813,785; July 7.
Weber, Frederick C., Eastchester, N. Y. Deodorant powder. 1,813,004; July 7.
Webster, Melvin L., Independence, Iowa. Insulated case. 1,813,786; July 7.
Webster, Melvin L., Independence, Iowa. Heat insulating case. 1,813,787; July 7.
Webster, Robert C., assignor to W. & J. Knox Net and Twine Company, Baltimore, Md. Manufacture of tennis nets. 1,813,717; July 7.
Weed, Harry D. Southport, Conn. Antiskid tire chain. 1,813,718; July 7.
Weiner, Bernard, Prague-Dejvice, Czechoslovakia. Calculating machine. 1,813,830; July 7.
Weise, Paul, Wiesdorf-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Dehydration and decomposition of iron sulphates. 1,813,649; July 7.
Weisker, Ellis, New York, N. Y. Potostatic printing apparatus. 1,813,689; July 7.
Weisker, Ellis, New York, N. Y. Photographic apparatus. 1,813,690; July 7.
Werner, Wilbur S., assignor to The Kelley-Koett Manufacturing Company, Covington, Ky. Radiographic timing apparatus. 1,813,216; July 7.
Wessler, Albert H. W., Arenzville, Ill. Wire reeling apparatus. 1,813,831; July 7.
West, Brennan B., Cleveland Heights, Ohio. Automatic lubricant distributing means. 1,813,005; July 7.
West, Jack F., Canton, Ga., assignor to Draper Corporation, Hopedale, Mass. Filling fork and grid cleaner. 1,813,217; July 7.
Western Electric Company. (See Franz, Erwin E., assignor.)
Western Electric Company. (See Lodge, Joseph E., assignor.)
Western Electric Company. (See Pettus, Joseph H., assignor.)
Western Electric Company. (See Relchelt, Lester O., assignor.)
Western Electric Company. (See Rosaire, Esme E., assignor.)
Western Electric Company. (See Smythe, Edwin H., assignor.)
Western Wheeled Scraper Company. (See Burner, William L., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. See Thomas, Thomas H., assignor.)
Westinghouse Air Brake Company, The. (See Woernley, Harry F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bethel, Claude, assignor.)
Westinghouse Electric & Manufacturing Company. (See Eaton, George M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kalischer, Milton, assignor.)
Westinghouse Electric & Manufacturing Company. (See Kraner, Hobart M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lenehan, Bernard E., assignor.)
Westinghouse Electric & Manufacturing Company. (See MacNeill, John B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mohr, Georg, assignor.)
Westinghouse Electric & Manufacturing Company. (See Mottlau, August J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Rüdenberg, Reinhold, assignor.)
Westinghouse Electric & Manufacturing Company. (See Rugg, Walter S., assignor.)
Westinghouse Electric and Manufacturing Company. (See Stegeman, Albert J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Whittaker, Charles C., assignor.)
Westinghouse Lamp Company. (See Conn, Robert W., assignor.)
Westinghouse Lamp Company. (See Gustin, Daniel S., assignor.)
Westinghouse Lamp Company. (See Kintner, Watson, assignor.)
Westinghouse Lamp Company. (See Lederer, Ernest A., assignor.)
Westinghouse Lamp Company. (See Morrison, Montford, assignor.)
Westinghouse Lamp Company. (See Ulrey, Clayton T., assignor.)
Westinghouse Lamp Company. (See Wadsten, Sten, assignor.)
Westinghouse Lamp Company. (See Walton, Frank W., assignor.)
Wetmore, Charles P., assignor to A. O. Smith Corporation, Milwaukee, Wis. Receding and collapsing tap for threading pipe couplings. 1,813,594; July 7.
Wetmore, Miner P., assignor to The American Thermos Bottle Company, Norwich, Conn. Bottle-sealing method and apparatus. 1,813,105; July 7.
Whatmough, William H., London, England, assignor to Standard Products Corporation. Composite lake pigment. 1,813,371; July 7.
Wheary, Joseph R., and G. J. Lucas, Crewe, Va. Locomotive smoke box construction. 1,812,912; July 7.
Wheeler, George F. (See Todd, J. H., and Wheeler.)
Wheeler, Harve M. (See Kinzbach, F., and Wheeler.)
White, Clark, Ashland, Ky. Rolling mill. 1,813,129; July 7.
White, Halbert E., Tampa, Fla. Building material and making same. 1,813,520; July 7.
White, Thomas J. Fordyce, Ark. Testing attachment for drills. 1,813,789; July 7.
White, Wilford J., Tampa, Fla. Electrically operated fuel control. 1,813,719; July 7.
White, William D., Worcester, and C. J. Gleason, Leicester, assignors, by mesne assignments, to M. A. Coolidge, Fitchburg, Mass. Foot exerciser. 1,813,006; July 7.
White, William E., Chicago, Ill. Bar clip. 1,812,913; July 7.
Whitehead and Kales Company. (See Judd, Irving H., July 7.
Whitlock, Luther C., Lake City, S. C. Dental appliance. 1,813,650; July 7.

Whittaker, Charles C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Ventilating means for electric railway locomotives. 1,813,218; July 7.
Wickline, David P., Lynchburg, Va. Theft preventer for tanks. 1,813,554; July 7.
Wicks, John, Oak Park, assignor to Reserve Holding Company, Chicago, Ill. Automatic telephone system. 1,813,007; July 7.
Wieman, Kammerer, Wright Co. (See Wright, J. C., and Bonney, assignors.)
Wikle, George F., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire building machine. 1,813,264; July 7.
Wildhaber, Ernest, Brooklyn, N. Y. Gripping device. 1,183,72; July 7.
Wildish, Henry W., Gosport, England. Furnace lining. 1,813,790; July 7.
Wildman Mfg. Co. (See Howie, Kenneth, assignor.)
Wiley, Esmond F. (See Donovan, J. J., and Wiley.)
Wilkening Manufacturing Company. (See Wuerfel, William, assignor.)
Wilkinson, Roland J. (See Myers, J. W., and Wilkinson.)
Williams, Clarence, and E. G. Appleton, assignors to Roach-Appleton Manufacturing Company, Chicago, Ill. Three position toggle switch. 1,812,914; July 7.
Williams, W. A. (See Bryant, William T., assignor.)
Wilson, Gardiner C., Lockport, N. Y. Molded commutator assembly. 1,813,333; July 7.
Wilson, Rollin V., Memphis, assignor of one-half to S. L. Franklin, Knoxville, Tenn. Automatic change machine. 1,813,720; July 7.
Wilson, Silvestre F., Oakland, Calif. Garment hanger. Des. 84,612; July 7.
Winkelmüller, Karl, Leipzig, Germany. Furnace for smoking goods such as fish, meat, sausage, and the like. 1,813,008; July 7.
Winterhalter, Cornellus, Le Locle, Switzerland. Watchcase. 1,813,009; July 7.
Winterhoff, Herman E., assignor to Leedy Manufacturing Company, Indianapolis, Ind. Musical element. 1,813,832; July 7.
Winthrop Chemical Company. (See Bollmann, Martin, assignor.)
Wired Radio, Inc. (See Taylor, Albert H., assignor.)
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Diaphragming filter attachment for cameras. 1,813,691; July 7.
Wittemann, John, Los Angeles, Calif. Swinging drapery support for circle-head windows. 1,813,265; July 7.
Woernley, Harry F., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Portable press. 1,813,219; July 7.
Wolfe, Walter G., Greenwood, assignor to W. R. Evans, trustee, Boston, Mass. Thermal filter. 1,813,521; July 7.
Wolff, Franklyn J., Trenton, N. J. Audion circu't battery control. 1,813,334; July 7.
Woltzen, Lora J. (See Dannenhower, William J., assignor.)
Wood, John M. (See Traver, W. A., and Wood.)
Woods, Leonard, St. Louis, Mo. Self-supporting hose. 1,813,266; July 7.
Wooldridge, Charles L., Inc. (See Wooldridge, Charles L., assignor.)
Woolridge, Charles L., assignor to Charles L. Woolridge, Inc., Pittsburgh, Pa. Lattice beam. 1,813,373; July 7.
Woolsey, Naomi H., Los Angeles, Calif. Thread cutter for sewing machines. 1,813,374; July 7.
Worcester Polytechnic Institute. (See Rawson, Louis W., assignor.)
Wright, Esmond P. C., Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Automatic or semiautomatic telephone exchange system. 1,813,555; July 7.
Wright, James A., Montreal, Quebec, Canada. Dump truck. 1,812,915; July 7.
Wright, Jesse C., Huntington Park, and L. F. Bonney, Los Angeles, Calif., assignors to Wieman, Kammerer, Wright Co., Inc. Core drill. 1,813,375; July 7.
Wright, John E., Wheeling, W. Va. Method and apparatus for manufacturing castings. 1,813,721; July 7.
Wright, Leonard K., Jackson Heights, N. Y. Refrigerant. 1,813,335; July 7.
Wright, Leonard K., Jackson Heights, N. Y. Refrigerant. 1,813,336; July 7.
Wright, Stanley M., and A. D. McGill, Denver, Colo. Fish lure and making the same. 1,813,722; July 7.
Wuerfel, William, assignor to Wilkening Manufacturing Company, Philadelphia, Pa. Piston ring. 1,813,791; July 7.
Wuerfel, William, assignor to Wilkening Manufacturing Company, Philadelphia, Pa. Piston ring. 1,813,792; July 7.
Yares, Clement A. (See Chesiock, F. J., and Yares.)
Yates Machine Company. (See Yates, Thomas J., assignor.)
Yates, Thomas J., assignor to Yates Machine Company, Salem, Mass. Neck-band clamp mechanism. 1,813,522; July 7.
Yoder Pencil Company, The. (See Morris, Howard I., assignor.)
Young, Charles M., Ten Mile Township, Whatcom County, Wash. Hand can top scaler. 1,813,220; July 7.
Young, Fred M., Racine, Wis. Radiator side plate. 1,813,221; July 7.
Young, Maurice M., Chicago, Ill. Drapery fixture. 1,813,556; July 7.
Young, Porus J., Charleston, W. Va. Soil pulverizing machine. 1,813,051; July 7.
Zadek, Milton, assignor to Reflector Hardware Corporation, Chicago, Ill. Sign holder. 1,813,557; July 7.
Zappulla, Joseph, Bay Shore, N. Y. Hair brush. Des. 84,613; July 7.
Zarembinsky, Clement. (See Johnson, S. W. L., and Zarembinsky.)
Zeidle Concrete Products Machinery Company. (See Schultz, Alfred W., assignor.)
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Resistance unit. 1,812,916; July 7.
Zimmerman, Martin D Washington, D. C., and H. Pullen, Preston, Md., assignors to International Patents Corporation, Rehoboth Beach, Del. Musical instrument. 1,813,337; July 7.
Zimmerman, Walter J., assignor to The Management Engineering and Development Company, Dayton, Ohio. Building. 1,813,523; July 7.
Zlydin, Peter M., New York, N. Y. Printing machine for silk and other materials. 1,813,010; July 7.
Zornig, Hermann H., U. S. Army, Newhall, Iowa. Fuse for projectiles. 1,813,106; July 7.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 7TH DAY OF JULY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accelerator push rod control. H. J. Cocks. 1,813,279; July 7.
Acetyl-3-phenyl-salicylic acid. E. C. Britton. 1,812,856; July 7.
Acid and its intermediates, N-amyl ethyl barbituric. H. A. Shonle. 1,813,867; July 7.
Acid from acetic acid, Separating formic. I. W. Petersen and C. Engelbrecht. 1,813,636; July 7.
Acoustic chamber. J. C. Karnes. 1,812,878–9; July 7.
Acoustic device. E. H. Smythe. 1,813,208; July 7.
Adhesive and to the product thereof, Making a water resistant. H. P. Banks. 1,813,377; July 7.
Adhesive and to the product thereof, Making a water resistant double decomposition. G. Davidson and I. F. Lancks. 1,813,387; July 7.
Adhesive composition and making the same. L. K. Fackler and H. F. Gardner. 1,813,236; July 7.
Adjustment device, particularly for the cross-slides of grinding machines. K. Jung. 1,813,185; July 7.
Advertisement, Luminous. F. W. Gillard. 1,813,491; July 7.
Advertising device. E. Dobrowsky. 1,813,442; July 7.
Aerial navigation. F. C. Bowman. 1,813,694; July 7.
Aerial system. E. Bruce. 1,813,143; July 7.
Aeroplane. E. H. Lanier. 1,813,627; July 7.
Aeroplane. A. A. Root. 1,813,201; July 7.
Aeroplanes, Controlling means for. J. F. Cook, jr. 1,813,485; June 10.
Agitator for stokers. J. H. Walter. 1,812,911; July 7.
Agricultural implement. S. W. Coker. 1,813,438; July 7.
Air conditioning and circulating apparatus for cold storage chambers. C. A. Moore. 1,813,188; July 7.
Air conditioning apparatus. S. M. Anderson. 1,813,692; July 7.
Aircraft. M. C. Snyer. 1,813,468; July 7.
Aircraft construction. J. B. Shainline. 1,813,430; July 7.
Aircraft structure. H. J. Pollard. 1,813,814; July 7.
Air flow in pneumatic systems, Method of and apparatus for controlling. M. L. Emerson. 1,813,487; July 7.
Airflow passing aircraft bodies, Reducing eddy formation in. H. C. H. Townend. 1,813,645; July 7.
Air in cold storage rooms, Conditioning and circulating the. C. A. Moore. 1,813,250; July 7.
Air in cold storage rooms, Refrigerating and controlling the circulation of. C. A. Moore. 1,813,187; July 7.
Airplane propeller. C. H. Gunn. 1,813,877; July 7.
Air port closure device. W. L. Kraemer and J. E. Garabrant. 1,813,242; July 7.
Airport, Floating. J. H. Todd and G. F. Wheeler. 1,813,263; July 7.
Aluminum alloy. H. C. Hall and T. F. Bradbury. 1,813,850; July 7.
Amplifier system, Thermionic. B. B. Minnium. 1,813,067; July 7.
Anchor, Plaster. I. A. Baum. 1,813,225; July 7.
Animals in various contests of speed, Machine for the purpose of holding and releasing. C. H. Redfern. 1,813,817; July 7.
Antirattle device. I. Andrews. 1,813,132; July 7.
Antirattler for window sashes. A. T. Granger. 1,813,157; July 7.
Antiseptic composition and making the same. H. W. Banks 3d. 1,813,109; July 7.
Antiskid device. H. H. Ellsworth. 1,813,391; July 7.
Apparatus for integrating accelerations. J. B. Henderson. 1,813,493; July 7.
Ash receiver. C. R. Boland. 1,813,837; July 7.
Atomizing and vaporizing device, Regenerative. N. G. Maloney. 1,813,305; July 7.
Automatic coupling. T. H. Thomas. 1,813,211–12; July 7.
Automobile body. F. J. Kubler. 1,813,499; July 7.
Automobile body construction. J. M. Bonbright. 1,813,380; July 7.
Automobile body construction. O. J. Groehn. 1,813,400; July 7.
Automobile pit, Multiple. H. A. Mugler. 1,813,460; July 7.
Awning hook. W. De Grofft. 1,813,031; July 7.
Awning bracket. W. C. Astrup. 1,813,525; July 7.
Automobile signal. E. N. Hockett. 1,813,851; July 7.
Awning, Metal window. S. G. Bond. 1,813,017; July 7.
Axle. G. W. Taylor. 1,813,779; July 7.
Azodyes derived from 2.3-hydroxy-naphthoic acid arylamides. E. Glientenberg, J. Haller, and M. Baltes. 1,813,618; July 7.
Bagasse and similar fibrous products for the production of pulp and the extraction of cellulose, Treating. R. C. McQuiston and H. von Loesecke. 1,813,184; July 7.
Bait, Artificial. H. G. Swearingen. 1,812,906; July 7.
Bait, Fish. W. C. Miles. 1,813,416; July 7.
Bar clip. W. E. White. 1,812,913; July 7.
Barber's lathering device. A. Gibson. 1,813,047; July 7.
Barrette. J. B. Richard. 1,813,423; July 7.
Basket table, Convertible. O. A. and C. E. Johnston. 1,813,451; July 7.
Bathing pools with chlorine, Treating. C. V. Swearingen. 1,813,827; July 7.
Bathtub and dressing table, Infant's combination. H. E. McCandless. 1,812,971; July 7.
Battery control, Audion circuit. F. J. Wolff. 1,813,334; July 7.
Bearing adjusting and locking device. E. E. Miller. 1,812,973; July 7.
Bearing construction, Roller. A. J. Peterman. 1,813,315; July 7.
Bearing, Spring shackle. J. H. Olcott. 1,813,708; July 7.
Beater, Continuous rotary. T. J. Madigan. 1,813,862; July 7.
Bed and imitation fireplace, Combination folding. M. Demlinger. 1,813,282; July 7.
Bed, Foldable. N. N. Brown. 1,813,019; July 7.
Bed, Narrow door wall. N. Sinclair. 1,813,091; July 7.
Belt building apparatus, Cord. W. H. Gerstenslager. 1,813,876; July 7.
Belt, Conveyer. T. G. Nyborg. 1,813,311; July 7.
Belt, Endless V-shaped. C. C. Gates. 1,813,698; July 7.
Belt for massaging machines, Exercising. F. X. Meehan. 1,812,891; July 7.
Bicycle. A. H. Richards. 1,813,639; July 7.
Binder strip for floor coverings. R. G. Collins. 1,813,025; July 7.
Blowing device for rock drills. W. A. Smith, jr., and G. H. Fuehrer. 1,813,774; July 7.
Boiler: *See*—
Locomotive boiler. Steam boiler.
Boiler. G. Lasker. 1,813,058; July 7.
Boiler blow-off and refilling system. F. W. Miller. 1,812,974; July 7.
Bookcase, clockcase, and radiocabinet, Combined. J. M. Mullin. Des. 84,588; July 7.
Book end. H. J. Hamilton and A. E. Stone. Des. 84,582; July 7.
Book, Loose leaf ring. H. T. Adams. 1,813,599; July 7.
Book trimming machine. R. E. Ackley. 1,813,598; July 7.
Bookmark, Automatic. H. M. Fuller. 1,813,446; July 7.
Boom suspension. W. Lehman and T. Davidson. 1,813,119; July 7.
Bottle cap and applying the same. H. W. Martin. 1,813,063; July 7.
Bottle or similar article of manufacture. J. Goldhaber. Des. 84,581; July 7.
Bottle-sealing method and apparatus. M. P. Wetmore. 1,813,105; July 7.
Box: *See*—
Mail box. Provision box.
Powder box. Stuffing box.
Box. L. V. Radkus. 1,813,256; July 7.
Box and brooder for baby chicks, Shipping. R. A. Gorsuch. 1,813,847; July 7.
Box for babies' shoes. B. Schubart. Des. 84,614; July 7.
Braces, Attachment for. P. J. Stocker. 1,812,996; July 7.
Bracket: *See*—
Awning bracket. Supporting bracket.
Radiator screen bracket. Towel bar bracket.
Brake for talking machines, Automatic. G. F. Clark. 1,813,483; July 7.
Brake mechanism. A. Y. Dodge. 1,813,444; July 7.
Brake mechanism, Fluid. C. A. Sawtelle. 1,813,319; July 7.
Brick cleaner. W. R. Bankson. 1,813,014; July 7.
Brooder, Electrically heated. D. B. Tolley. 1,813,001; July 7.
Broom or rake, Wire. E. W. Dowd. 1,813,445; July 7.
Brush. G. W. Newell. 1,813,076; July 7.
Brush, Hair. A. Kilstrom. 1,813,745; July 7.
Brush, Hair. J. Zappulla. Des. 84,613; July 7.
Brush, Shaving. W. G. Frazier. 1,813,615; July 7.
Brush, Washing and scrubbing. R. W. Emerson. 1,813,569; July 7.
Building. W. J. Zimmerman. 1,813,523; July 7.
Building material and making same. H. E. White. 1,813,520; July 7.

Bumper, Automobile. A. A. Thomas. 1,813,517; July 7.
Bur, Seat. W. E. Harper. 1,813,741; July 7.
Burner: *See*—
Oil burner. Safety burner.
Button. J. M. Clark. 1,813,115; July 7.
Button. J. M. Clark. 1,813,339; July 7.
Cabinet and retainer, Key. A. C. Davenport. 1,813,030; July 7.
Cabinet and work bench, Combined tool. A. E. McWhorter. 1,812,890; July 7.
Cabinet, Sun bath. G. D. Uhl. 1,813,647; July 7.
Cable forming apparatus. L. O. Reichelt. 1,813,197; July 7.
Cable guide. R. J. Kent. 1,812,961; July 7.
Cable splicing machine. J. W. Channell. 1,813,562; July 7.
Calculating machine. B. P. Weiner. 1,813,830; July 7.
Calculating machines, Back controlling means for. E. J. Ens. 1,813,037; July 7.
Camera attachment. T. Falleson. 1,813,314; July 7.
Camera casing. W. D. Teague. Des. 84,605; July 7.
Camera view finder construction. J. Mihalyi. 1,813,674; July 7.
Cameras, Automatic iris for. J. W. Myers and R. J. Wilkinson. 1,813,635; July 7.
Can end. C. D. McDonald and B. A. Deisch. 1,813,810; July 7.
Can seaming machine. E. Forsberg. 1,813,350; July 7.
Can washer. C. J. Bettger. 1,813,605; July 7.
Caponizing stretcher. M. C. Merrifield. 1,812,892; July 7.
Car construction. G. G. Gilpin. 1,813,537; July 7.
Car couplers, Device for operating. A. E. Small. 1,813,549; July 7.
Car. Dump. W. L. Burner. 1,813,022; July 7.
Carbon black and apparatus therefor, Production of. O. Schmidt and O. Grosskinsky. 1,813,514; July 7.
Carbon cutter. D. H. Hastings. 1,813,289; July 7.
Carbonaceous substances, Apparatus for the distillation of solid. E. R. Sutcliffe. 1,813,826; July 7.
Carburetor. F. A. Kirstatter. 1,813,406; July 7.
Carburetor. F. H. Royce. 1,813,866; July 7.
Carburetor. O. Seifferle. 1,813,322; July 7.
Carburetor. R. Shipman. 1,813,206; July 7.
Carburetor. Water gas. G. W. Davey and F. H. Waite. 1,813,386; July 7.
Card Display. H. H. Molkenthin. 1,813,812; July 7.
Carpet or rug. C. H. Hacklander. 1,812,948; July 7.
Carrier: *See*—
Dog carrier. Tire carrier.
Carrier and signal, Aerial package. P. P. Horni. 1,812,955; July 7.
Case: *See*—
Insulated case. Turbine case.
Insulating case. Vanity case.
Case hardening. R. J. Cowan and P. W. McCoy. 1,813,028; July 7.
Casing for dispensing apparatus. C. D. Fagan. Des. 84,575; July 7.
Casing, Hot air furnace. R. M. Baker. 1,813,013; July 7.
Castings, Method and apparatus for manufacturing. J. E. Wright. 1,813,721; July 7.
Catalysts, Production of. L. Andrussow and F. Duerr. 1,813,478; July 7.
Cathode. E. A. Lederer. 1,813,704; July 7.
Cellular material for safety garments. S. de Faveri. 1,812,936; July 7.
Cellulose acetates, Changing the solubility of. C. J. Staud and C. S. Webber. 1,813,685; July 7.
Cellulose ethers, Making. P. C. Seel, W. R. Webb, and J. M. Donohue. 1,813,603; July 7.
Cellulose, Ethylation of. D. B. Bradner. 1,813,726; July 7.
Cellulose pulps, Chemical processing of. G. A. Richter. 1,813,465; July 7.
Cellulosic composition of matter containing acetoxime. S. J. Carroll. 1,813,660; July 7.
Cellulosic composition of matter containing iodo-benzene. S. J. Carroll. 1,813,662; July 7.
Cellulosic composition of matter containing iso-propyl-bromide. S. J. Carroll. 1,813,661; July 7.
Center for rotary speed indicators and the like, Adjustable. B. L. Metzger. 1,813,065; July 7.
Chain, Antiskid tire. H. D. Weed. 1,813,718; July 7.
Chain drive control for scraper bowls. W. J. Adams. 1,813,011; July 7.
Chain, Tire. W. J. Brooks. 1,813,274; July 7.
Chair: *See*—
Folding chair.
Chair. C. Ledder and O. Snow. Des. 84,585; July 7.
Chair. J. A. Seidel. Des. 84,602; July 7.
Chair settee J. A. Seidel. Des. 84,601; July 7.
Change machine, Automatic. R. V. Wilson. 1,813,720; July 7.
Changeable indicator. J. Hutchinson. 1,813,450; July 7.
Chart, Statistical. M. Engel and G. Mirus. Des. 84,574; July 7.
Check marking device. H. Swanson. 1,812,997; July 7.
Chime. J. W. Klein. 1,813,171; July 7.
Chuck. A. J. Lewis. 1,813,705; July 7.
Chute, Automatic ash. T. Burley. 1,813,481; July 7.
Chute for stokers and the like, Feed. A. J. Stock, jr. 1,813,590; July 7.
Circuit, Amplifier. H. Hollerith, jr., and A. N. Fento. 1,813,031; July 7.
Circuit breaker. R. Rüdenberg. 1,813,202; July 7.
Circuit breaker, High speed. A. J. Mottlau. 1,813,191; July 7.
Circuit closing device. T. H. Gilbert. 1,813,844; July 7.
Circuit control system for radio apparatus. C. C. Lauritsen. 1,813,541; July 7.
Circuit interrupter, High-speed. J. B. Mac Neill. 1,813,181; July 7.
Circuit, Receiving. H. D. Currier. 1,813,232; July 7.
Circuit, Transmitter plate potential equalizing. R. Urtel. 1,813,688; July 7.
Circuits and compensating for voltage changes impressed thereon, Oscillatory. R. F. Field. 1,813,488; July 7.
Circuits, Preventing retroactive effects in audion amplifier. G. A. Somersalo. 1,813,775; July 7.
Clamp mechanism, Neck-band. T. J. Yates. 1,813,522; July 7.
Clamping device, Turret. G. M. Class. 1,813,484; July 7.
Cleaner: *See*—
Brick cleaner. Thread cleaner.
Fork and grid cleaner.
Clip: *See*—
Bar clip. Pen and pencil clip.
Clock case. H. C. Richardson. Des. 84,595; July 7.
Clock case. B. A. Schiff. Des. 84,600; July 7.
Closure for windows. L. T. Ward. 1,813,474; July 7.
Clutch. W. C. Gawalt. 1,813,206; July 7.
Clutch, Accelerating. L. W. Rawson. 1,813,638; July 7.
Clutch, Friction. E. E. Landahl. 1,813,626; July 7.
Clutch mechanism. J. Robertson. 1,813,377; July 7.
Clutch plate. H. V. Reed. 1,813,510; July 7.
Clutch, Power. H. L. Mitchell and R. Ljungkull. 1,813,068; July 7.
Coating machine, Tandem. J. D. Lippmann. 1,813,411; July 7.
Cock for ranges, Gas. M. A. Possons. 1,813,815; July 7.
Coffee making machine. A. L. Bausman. 1,813,872; July 7.
Coil, Electric. C. T. Ulrey. 1,813,591; July 7.
Coil, Reenforced circulating. A. Friedman. 1,813,891; July 7.
Coils, Gettering. D. S. Gustin. 1,813,571; July 7.
Coin separator. A. C. Kidwell. 1,813,296; July 7.
Coins, Device for sorting. F. Fast. 1,813,841; July 7.
Collapsible table. N. N. Brown. 1,813,018; July 7.
Collar. E. Lind. 1,813,304; July 7.
Commutator assembly, Molded. G. C. Wilson. 1,813,333; July 7.
Compound of 5-nitro-2-amino-1-methylbenzene, Stable diazo. W. Hentrich and E. Tietze. 1,813,621; July 7.
Compounds from alkyl benzenes, Obtaining oxygenated. J. Binapi and W. Krey. 1,813,606; July 7.
Compression device for internal combustion engines, Constant. A. G. Redmond. 1,812,983; July 7.
Compressor. L. Stoesling and W. D. Pearsall. 1,813,128; July 7.
Compressor, Piston ring. C. G. King. 1,812,962; July 7.
Computing machine. F. A. Hart. 1,812,873; July 7.
Concrete, Gypsum. G. D. King and F. J. Gough. 1,813,452; July 7.
Concrete pile, Protected. F. S. Honberger. 1,813,052; July 7.
Condensation product of the diethyl ester of methelene-disalicylic acid-di (p-amino benzyl ether) with pyruvic acid. S. L. Summers. 1,813,364; July 7.
Condenser. K. B. Ayers. 1,813,871; July 7.
Conduits, Construction of sectional. H. A. Schnar. 1,813,771; July 7.
Confection coating and decorating machine. A. L. Bausman. 1,813,653; July 7.
Congelation, Apparatus for and process of. J. E. W. Reeh. Re18,124; July 7.
Contact switch, Brush. H. F. Holkenbrink. 1,813,239; July 7.
Container, Cosmetic. A. Moodie. 1,813,121; July 7.
Container, Display and shipping. J. H. Clark. 1,813,146; July 7.
Container, Edible. E. M. Story. 1,813,099; July 7.
Container transportation means, Goods. W. P. Kellett. 1,813,169; July 7.
Control device for electric irons and the like. C. Arnesen. 1,813,267; July 7.
Control system. A. C. Finney. 1,813,796; July 7.
Conveyer system. Y. A. Ahnger. 1,813,130; July 7.
Conveyer system. J. P. Bunce. 1,813,794; July 7.
Conveying apparatus. F. P. Nistle. 1,812,976; July 7.
Cooler: *See*—
Milk cooler.
Cord coupling. H. D. Grinnell. 1,813,399; July 7.
Core drill. J. C. Wright and L. F. Bonney. 1,813,375; July 7.
Corner beads, Manufacture of. G. W. Baker. 1,813,477; July 7.
Cot, Beach. M. Friedlander and W. T. Baker. 1,813,046; July 7.
Coupler positioning device. G. G. Gilpin. 1,813,538; July 7.
Coupling: *See*—
Automatic coupling. Pipe coupling.
Cord coupling.
Coupling and support, Pipe. E. Clark. 1,813,528; July 7.
Coupling device. H. J. Neufang and W. S. Waldo. 1,813,075; July 7.
Coupling for circulating coils. A. Friedman. 1,813,284; July 7.

Coupling for plain end pipes, Pipe. J. Clark. 1,813,529; July 7.
Cover for screw shafts. J. F. Haberlin. 1,813,352; July 7.
Cover for third rail and other electric conductors. H. L. Rogers. 1,813,200; July 7.
Crane. W. C. Heinle. 1,812,951; July 7.
Crane hook. C. Hunt. 1,813,294; July 7.
Crank shaft. C. C. Farmer. 1,813,153; July 7.
Crate. F. and D. Ritzman. 1,812,900; July 7.
Credit system. J. H. Rand, jr. 1,813,257; July 7.
Crepe fabric and making the same. C. Dreyfus. 1,813,530; July 7.
Crusher: *See*—
Hammer crusher.
Cup: *See*—
Golf hole cup.
Current, Commutation of continuous. E. Kern. 1,813,056; July 7.
Current controlling apparatus, Alternating. H. K. Kouyoumjian. 1,813,409; July 7.
Curtain rod. M. J. Brunner. 1,812,857; July 7.
Curtains and the like, Drawing. W. E. Kimber. 1,813,170; July 7.
Cutter: *See*—
Carbon cutter. Weed cutter.
Cutter attachment for tractors, Stalk. O. T. Minor. 1,813,631; July 7.
Cutter for sewing machines, Thread. N. H. Woolsey. 1,813,374; July 7.
Cutting die, Screw thread. A. H. Lloyd. 1,813,456; July 7.
Cutting drinking tubes, Apparatus for. E. Conti. 1,813,340; July 7.
Cyanogen formarylides, Manufacture of. J. Pfleger. 1,813,760; July 7.
Damper control system. K. Fraser. 1,813,395; July 7.
Decoy, Hunter's duck. J. E. Villatore and R. Anello. 1,813,370; July 7.
Dehydration. W. Biltz. 1,813,272; July 7.
Dental appliance. L. C. Whitlock. 1,813,650; July 7.
Dentures, Production of. W. S. Rice. 1,813,583; July 7.
Deodorant powder. F. C. Weber. 1,813,004; July 7.
Designs to flexible sheet materials, Applying. J. J. Sindler. 1,813,687; July 7.
Desk, Pulpit. C. C. Bullock. 1,813,793; July 7.
Detergent. W. C. Howe. 1,813,701; July 7.
Detergent. Merlub-Sobel. 1,813,247; July 7.
Dial apparatus. W. A. Ready. 1,813,766; July 7.
Dial, Calling. J. M. Labaugh and V. F. Miller. 1,812,964; July 7.
Die: *See*—
Cutting die. Molding die.
Dilestock. G. G. Hassler. 1,813,668; July 7.
Dipper handle. J. D. Rauch and W. L. Reid. 1,813,864; July 7.
Disazo compound, Acetylated. S. L. Summers. 1,813,365; July 7.
Disconnect switch. K. S. Wagoner. 1,813,103; July 7.
Dispenser, Grease. W. B. Mathewson. 1,813,183; July 7.
Dispensing apparatus, Coin collecting liquid. E. E. Eickmeyer. 1,813,348; July 7.
Display apparatus. D. H. Ward. 1,813,332; July 7.
Doctor blade. E. S. Ballard. 1,812,920; July 7.
Dog carrier. A. Meurer. 1,813,458; July 7.
Door for railway cars, Drop. G. G. Gilpin. 1,813,536; July 7.
Door for railway cars, Drop. A. E. Small. 1,813,547; July 7.
Door for railway cars, Side. W. E. Van Dorn. 1,813,553; July 7.
Door jamb, Movable grain. G. H. McNolty. 1,813,753; July 7.
Doorlock. R. N. Smith. 1,813,092; July 7.
Doorlock, Automobile. R. N. Smith. 1,813,093; July 7.
Door operating and locking mechanism. A. Perlman. 1,813,710; July 7.
Door, Railway car hopper. A. E. Small. 1,813,548; July 7.
Door, Rendering tank. E. W. McCullough. 1,813,671; July 7.
Door silencer. I. A. Baum. 1,813,224; July 7.
Door, Vehicle. G. Cavicchioli and E. Ceschi. 1,813,145; July 7.
Draft equalizer. J. E. McCusker. 1,813,752; July 7.
Draft rigging, Railway. J. F. O'Connor. 1,813,707; July 7.
Drapery support for circle head windows, Swinging. J. Witteman. 1,813,265; July 7.
Drapery supporting device. D. M. Sarkisian. 1,812,903; July 7.
Dresser and manicure table, Combination. H. Ruebsahm. 1,813,821; July 7.
Drier. A. S. Mackenzie. 1,813,750; July 7.
Drier. F. D. Robbins. 1,813,680; July 7.
Drill: *See*—
Core drill.
Drilling machines or drills, Attachment for. C. Weber. 1,813,755; July 7.
Drills, Testing attachment for. T. J. White. 1,813,789; July 7.
Drive for antifriction roller bearing free wheels, Direct. W. C. Klein. 1,813,856; July 7.
Driving mechanism, Separator. W. C. Starkley and D. T. Brownlee. 1,813,095; July 7.
Drum, barrel, or container, Metal. J. J. Cain. 1,812,929; July 7.
Dry separator. M. J. Lide. 1,813,303; July 7.
Drying apparatus. H. Anhaltzer. 1,813,133; July 7.
Drying textile bands, yarns, slivers, tops, and the like, Apparatus for. R. Schilde. 1,813,585; July 7.
Dumping unit for trucks. T. H. Clark. 1,813,278; July 7.
Dyeing machine. W. A. Traver and J. M. Wood. 1,813,784; July 7.
Dyestuffs containing chromium and process of making. H. Kämmerer. 1,813,879; July 7.
Earth's crust, Apparatus for the study of the. O. H. Gish. 1,813,845; July 7.
Edge decoration. C. O. Smith. 1,813,551; July 7.
Egg packing mechanism. W. W. Cecil. 1,813,527; July 7.
Eggs, Preserving. W. Matzka. 1,813,064; July 7.
Electric crystal apparatus, Piezo. A. M. Nicolson. 1,813,461; July 7.
Electric heater. F. J. Cheslock and C. A. Yares. 1,813,023; July 7.
Electric machine. E. M. Fraser. 1,813,393; July 7.
Electric machine, Dynamo. D. C. Prince. 1,813,764; July 7.
Electric machines, Field control for. J. J. Kennedy and C. W. Dake. 1,813,496; July 7.
Electric switch. R. H. Haynes. 1,813,801; July 7.
Electric system. E. Dickey. 1,813,033; July 7.
Electrical-controller. C. A. Rasmussen. 1,813,544; July 7.
Electrical device. F. W. Walton. 1,813,593; July 7.
Electrical heater. C. D. Benedict. 1,813,270; July 7.
Electrical precipitation apparatus. K. I. Marshall. 1,813,306; July 7.
Electrode support for oil burners, Air directing and ignition. C. W. Parker. 1,813,080; July 7.
Electromagnetic oscillator. M. P. McCarty. 1,813,630; July 7.
Electrostatical vibration structure. E. Klar. 1,813,855; July 7.
Elevator: *See*—
Garage elevator.
Elevator cab. A. J. Stegeman. Des. 84,004; July 7.
Energy between a current and a body therein, Arrangement for exchanging. A. Flettner. Re18,122; July 7.
Engine: *See*—
Internal-combustion engine. Steam engine.
Rotary engine.
Engine. J. Schick. 1,813,259; July 7.
Engine frame. H. H. Franks. 1,813,045; July 7.
Engines, Apparatus for cooling internal combustion. H. L. Hartenstein. 1,813,667; July 7.
Engines, Fuel intake controlling device for internal combustion. W. A. Edwards. 1,812,939; July 7.
Ether, Treatment and packaging of. W. G. Christiansen and R. Van Winkle. 1,813,664; July 7.
Evaporation losses in tanks, Reducing. J. Verner. 1,813,870; July 7.
Excavating machine. F. A. Buckland. 1,812,925–6; July 7.
Excavator. E. Bauer. 1,813,110; July 7.
Extractor: *See*—
Nipple extractor.
Eye for dolls, manikins, and other figure toys, Artificial. L. J. Grubman. 1,812,872; July 7.
Eye protector. E. D. Tillyer. 1,813,213; July 7.
Fabric and making the same, Composite. F. H. Lee. 1,813,860; July 7.
Fabric or similar article, Embroidered textile. E. W. Freudenberg. Des. 84,577–9; July 7.
Fabric or similar article, Textile. J. Dornbusch. Des. 84,570–2; July 7.
Fastener for display characters. J. Cooke. 1,812,933; July 7.
Fastener for doors and the like. J. S. Burdick. 1,812,858; July 7.
Fastener, Lingerie. R. Freedman. 1,813,283; July 7.
Fastener, Separable. J. P. Bennett. 1,813,434; July 7.
Fastener, Separable. G. Sundback. 1,813,432–3; July 7.
Fastening device. D. F. Dalton. 1,813,385; July 7.
Fastening means for flexible seats. N. N. Brown. 1,813,020; July 7.
Fats, Method of and apparatus for rendering. W. T. Birdsall. 1,813,226; July 7.
Faucet, Laundry tray. E. A. Pope. 1,813,422; July 7.
Felly and rim construction. E. A. Nelson. 1,813,192; July 7.
Ferrous products faced with stable surface alloys, Making. P. A. E. Armstrong. 1,813,654; July 7.
Fertilizer. C. F. Rayfield. 1,813,765; July 7.
Fibers, Preservation of. T. B. Munroe and E. C. Lathrop. 1,813,632; July 7.
Film printer, Photographic. F. B. Thompson. 1,813,000; July 7.
Filter. A. A. Bull and T. I. Larsen. 1,812,927; July 7.
Filter attachment for cameras, Diaphragming. O. Wittel. 1,813,691; July 7.
Filter opening means. W. H. Bacheldor. 1,813,601; July 7.
Filter for dust collectors. W. V. Paine. 1,813,896; July 7.
Filter, Thermal. W. G. Wolfe. 1,813,521; July 7.
Filtering means. J. J. Naugle. 1,813,073; July 7.
Fire apparatus. A. W. Orton. 1,812,978; July 7.
Fire control system. H. C. Ford. 1,813,534; July 7.
Fire extinguisher. H. W. Doughty. 1,813,034; July 7.
Fire extinguisher. C. S. Thompson. 1,813,367; July 7.

Fire-extinguishing process. C. Schneider. 1,813,586; July 7.
Fire on cigarettes, Device for extinguishing. L. H. Offutt. 1,813,313; July 7.
Fish bait. F. L. B. Flood. 1,813,843; July 7.
Fish lure and making the same. S. M. Wright and A. D. McGill. 1,813,722; July 7.
Fishing reel. F. Burdick. 1,813,275; July 7.
Fixture, Drapery. M. M. Young. 1,813,556; July 7.
Fixture for electric lamps. C. A. B. Halvorson. 1,813,799; July 7.
Flap branding machine. R. M. Johnson. 1,813,878; July 7.
Flap cutting device. E. G. Templeton and W. K. Glennon. 1,813,869; July 7.
Flashing material. W. M. Shakespeare. 1,813,089; July 7.
Flashing material, Metal clad. T. Robinson. 1,813,084; July 7.
Floor strip, Bimetallic. P. Gainssl. 1,813 736; July 7.
Floor washing machine. J. L. Coole. 1,813,026; July 7.
Flow device, Visible. E. E. Eickmeyer. 1,813,349; July 7.
Fluid heater. H. J. Kerr. 1,813,405; July 7.
Fluid pressure motor. P. H. Benedix. 1,813,526; July 7.
Flusher, Snow melting. C. D. Chase. 1,813 729; July 7.
Flyer construction. M. J. McHale. 1,813,803–5; July 7.
Flying machine. V. Isacco. 1,813,852; July 7.
Foam forming solutions, Mixing chamber for. J. F. M. Taylor. 1,813,101; July 7.
Folding chair. J. B. Adler, J. B. O'Connor, and W. N. Vance. 1,813,653; July 7.
Folding table. E. Vidal. 1,813,330; July 7.
Font, Holy water. M. C. Hurley. Des. 84,583; July 7.
Foot exerciser. W. D. White and C. J. Gleason. 1,813,006; July 7.
Fork and grid cleaner, Fifling. J. F. West. 1,813,217; July 7.
Form, Hosiery. W. J. DeWitt. 1,813,388; July 7.
Form, Hosiery drying. P. Guggenheim. 1,813,737; July 7.
Form, Stocking. C. T. Griffith. 1,813,848; July 7.
Frame: *See*—
Engine frame. Metal and wood frame.
Freezer, Ice cream. J. H. Gardner. 1,813,490; July 7.
Friction bodies for brake and clutch purposes, Manufacture of. H. Kattwinkel. 1,813,576; July 7.
Froth flotation process. O. D. Cunningham. 1,813,342–3; July 7.
Fruit for retarding decay from blue and green mold, Treating fresh. H. B. Slater. 1,813,127; July 7.
Fruits, Treating. H. T. O'Neill and A. J. Harriman. 1,813,357–8; July 7.
Fuel control, Electrically operated. W. J. White. 1,813,719; July 7.
Fuel economizing furnace, Smokeless. J. B. Ehrlich. 1,812,940; July 7.
Furnace: *See*—
Fuel economizing furnace.
Furnace. W. A. Gilchrist. 1,813,156; July 7.
Furnace and crane structure, Electric arc. A. E. Greene. 1,813,397; July 7.
Furnace control. E. E. Freeman. 1,813,732; July 7.
Furnace for high pressure boilers, Coal dust. S. Löffler. 1,812,966; July 7.
Furnace for smoking goods such as fish, meat, sausage, and the like. K. Winkelmüller. 1,813,008; July 7.
Furnaces, Billet conveying apparatus for heating. M. K. Nye. 1,813,195; July 7.
Furniture, Interlocking stretcher joint in. H. J. Murdock. 1,813,072; July 7.
Fuse for projectiles. H. H. Zornig. 1,813,106; July 7.
Gambrel. J. A. Aubol. 1,813,600; July 7.
Game. F. R. Chester. 1,812,930; July 7.
Game apparatus. P. Clausen. 1,813,116; July 7.
Game, Fight. F. R. Chester. 1,812,931; July 7.
Game, Football. F. R. Chester. 1,812,932; July 7.
Garage elevator. W. S. Rugg. 1,813,203; July 7.
Garment and cloth pressing apparatus, Combined electric and steam. W. J. Danenhower. 1,813,663; July 7.
Garment, Apparel. E. C. Duff. 1,813,389; July 7.
Garment, Apparel. W. Kops. 1,813,408; July 7.
Garment hanger. S. F. Wilson. Des. 84,612; July 7.
Garment, Swimming. E. H. Foreman. 1,813,043; July 7.
Gas from liquefied gas, Method and device for producing compressed. C. W. P. Heylandt. 1,812,954; July 7.
Gases, Diffuser for exhaust. W. J. Moore. 1,813,189; July 7.
Gaskets, Package of stacked. H. A. Lindsley. 1,813,178; July 7.
Gauge: *See*—
Oil gauge. Tire gauge.
Gauge. L. A. Corey. 1,813,566; July 7.
Gear. R. B. Fehr. 1,813,875; July 7.
Gear assembly, Antirattle sliding. C. B. Spase. 1,813,209; July 7.
Gear, Central buffing and draw. A. Spencer and R. T. Glascodine. 1,813,824; July 7.
Gear, Control. W. Ferris. 1,813,040; July 7.
Gear for roller awnings, Ball-bearing worm. W. C. Astrup. 1,813,524; July 7.
Gear for use with internal combustion engines, Transmission. E. A. Franks. 1,813,614; July 7.
Gear shift, Automatic. G. Fleischel. 1,813,731; July 7.
Gear shift, Pneumatic. H. E. Spencer. 1,813,683; July 7.
Gear wheel. A. A. Ross. 1,813,819; July 7.
Gear wheel and the like. A. A. Ross. 1,813,820; July 7.
Gearing, Power transmission. W. R. Uggla. 1,813,869; July 7.
Gearing, Transmission. C. E. F. Ahlm. 1,813,376; July 7.
Generator: *See*—
Oscillation generator. Turbo-generator.
Glass forming roll. L. Boudin. 1,813,142; July 7.
Glass melting apparatus. W. A. Morton. 1,812,975; July 7.
Glass, Method and apparatus for feeding molten. G. E. Howard. 1,813,742; July 7.
Glass surfacing machine. W. H. Marr. 1,813,412; July 7.
Golf hole cup. R. C. Crocker. 1,813,696; July 7.
Grader, Seed. G. C. Leach. 1,813,300; July 7.
Grain feeding device. J. J. Varusky. 1,813,519; July 7.
Grease feeder. W. L. Morris. Re18,123; July 7.
Grinding machinery. G. E. Merryweather. 1,813,503; July 7.
Grinding mill. V. Sahmel. 1,813,086; July 7.
Grip testing machine. G. M. Ramsey. 1,813,816; July 7.
Gripping device. E. Wildhaber. 1,813,372; July 7.
Ground connecter. E. J. Noble. 1,813,417; July 7.
Guard, Knife. A. Smiroldo. 1,813,868; July 7.
Hair net. N. L. Solomon. 1,813,897; July 7.
Hair waver. A. Kretschan. 1,813,243; July 7.
Halide derivatives of cellulose and process of making, Cyanogen. J. Haller. 1,813,619; July 7.
Hammer, Air. E. Selindler. 1,813,546; July 7.
Hammer crusher. W. A. Battey, J. E. Stine, and G. W. Borton. 1,813,836; July 7.
Hammer, Internal combustion. S. R. Saunders. 1,813,513; July 7.
Handle: *See*—
Dipper handle.
Handle for street car straps. E. Miller. 1,812,972; July 7.
Handwriting machine. R. A. Flumm. 1,813,237; July 7.
Hanger: *See*—
Shoe hanger.
Hanger for suspension lighting fixtures. F. B. Nightingale. 1,813,863; July 7.
Harrow frame attachment, Wheeled. E. M. Smith. 1,812,904; July 7.
Harvester, Beet. C. E. Imel and R. E. Barker. 1,813,354; July 7.
Hat blocking machine. P. De Simone. 1,813,795; July 7.
Hat construction and making the same. F. H. Lee. 1,813,861; July 7.
Hat hanger. J. DeGeorge. Des. 84,569; July 7.
Hats, Manufacture of. R. G. Segschneider. 1,813,088; July 7.
Headlamp locating and clamping band construction. F. W. C. Neuner. 1,813,755; July 7.
Heat apparatus, Waste. R. P. Pescara. 1,813,543; July 7.
Heat controlling system. P. R. Owens. 1,812,897; July 7.
Heat equipment. O. S. Bowman. 1,813,228; July 7.
Heat exchanger. C. W. Metzgar. 1,813,754; July 7.
Heat exchanging, Apparatus for. F. E. Key. 1,813,057; July 7.
Heat, Method and apparatus for exchanging. G. D. Dodd. 1,813,234; July 7.
Heater: *See*—
Electric heater. Water heater.
Electrical heater. Windshield heater.
Fluid heater.
Heater. J. L. Howard. 1,813,449; July 7.
Heater construction, Electric. J. H. Reichart. 1,813,767; July 7.
Heater for electric ranges, Water. W. Richardson and G. Steingruber. 1,813,124; July 7.
Heating and ventilating unit. M. O. Snediker. 1,813,261; July 7.
Heating attachment for stoves, Air. T. A. Richards. 1,813,679; July 7.
Heating means control for intake manifolds of internal combustion engines. W. G. Heginbottom and J. R. Francis. 1,812,950; July 7.
Heel. I. Simon. 1,813,515; July 7.
Helicoplane. R. Luzardo. 1,812,968; July 7.
Hinge. M. H. Toncray and J. W. Greig. 1,812,908; July 7.
Holder, Blade. L. W. Stetson. 1,813,606; July 7.
Holder, Combined switch and brush. F. C. De Reamer. 1,813,889; July 7.
Holder for printing presses, Paper roll. C. J. McGarry. 1,813,307; July 7.
Holder for screw threaded articles. M. J. Roche. 1,813,424; July 7.
Holder, Hairpin. J. Hornicek. 1,813,622; July 7.
Holder, Label. J. E. Lee. 1,813,059; July 7.
Holder, Music. A. Beyer. 1,813,111; July 7.
Holder, Sign. M. Zadek. 1,813,557; July 7.
Holder, Tooth paste tube. J. H. Lodge. 1,813,457; July 7.
Holder, Tooth paste tube. A. J. Shekter. 1,813,323; July 7.
Hole inclination recorder, Bore. E. A. Sperry. 1,812,994; July 7.
Hood pad. H. D. Randall. 1,813,678; July 7.
Hook: *See*—
Awning hook. Crane hook.
Hose, Self-supporting. L. Woods. 1,813,266; July 7.

Hosiery machines, Method and apparatus for forming knitted loops in. R. Guillemot. 1,813,849; July 7.
Hydraulic jack. B. Goldman. 1,813,700; July 7.
Hydrocarbons, Production or recovery of lighter. A. Clarke and H. Butler. 1,813,024; July 7.
Hydroelectric plant, Increasing the useful low flow capacity of a. F. A. Allner. 1,813,107; July 7.
Hydrometer floats, Manufacturing. H. E. Christie and K. W. Couse. 1,813,384; July 7.
Ice scoring machine. J. O. Daugherty. 1,813,149; July 7.
Implements, Adjusting means for agricultural. A. W. Reynolds. 1,813,511; July 7.
Indicating device for the power consumption in motor cars and the like. H. A. Dutschke. 1,812,868; July 7.
Indicator: *See*—
Changeable indicator.
Indicator. J. I. Parrish. 1,813,420; July 7.
Indicator. J. J. N. Van Hamersveld. 1,813,002; July 7.
Inductor winding and making same. E. M. Fraser. 1,813,394; July 7.
Ingot mold. W. H. Ramage and E. J. Kauffman. 1,813,508; July 7.
Ink eliminator and doctor blade, Combined. R. B. Leech. 1,812,884; July 7.
Inner tubes for pneumatic tires, Cracking. J. Cooper. 1,813,027; July 7.
Insect exterminator. R. Watson. 1,813,648; July 7.
Insulated case. M. L. Webster. 1,813,786; July 7.
Insulating board, Manufacturing. W. H. Mason. 1,812,970; July 7.
Insulating board with hard welded surfaces, Making integral. W. H. Mason. 1,812,969; July 7.
Insulating case, Heat. M. L. Webster. 1,813,787; July 7.
Insulator. H. M. Kraner. 1,813,172; July 7.
Internal combustion engine. J. P. Burke. 1,812,859; July 7.
Internal combustion engine. W. M. Burns. 1,812,860; July 7.
Internal combustion engine. E. R. Burtnett. 1,813,276; July 7.
Internal combustion engine. D. F. Clarke. 1,812,862; July 7.
Internal combustion engine. J. P. Farnam and E. R. Stone. 1,813,780; July 7.
Internal combustion engine. G. Riley. 1,813,258; July 7.
Internal combustion engine. L. Stork. 1,813,328; July 7.
Internal combustion engine. E. Thomas and R. Stuhr. 1,813,781; July 7.
Intestinal lavage, Apparatus for submerged. A. Brosch. 1,813,608; July 7.
Iron: *See*—
Soldering iron.
Iron, Manufacture of stainless. A. L. Feild. 1,812,941; July 7.
Iron and steel and product, Making. J. A. Carson. 1,813,437; July 7.
Iron or ladder rung, Grab. G. S. Chiles. 1,813,114; July 7.
Iron sulphates, Dehydration and decomposition of. P. Weise. 1,813,649; July 7.
Jack: *See*—
Hydraulic jack. Pedal jack.
Lifting jack.
Jack with automatic wheel retainer. S. W. L. Johnson and C. Zarembinsky. 1,813,164; July 7.
Jar. T. W. Bell. 1,813,015; July 7.
Jar or similar article. T. J. Piazzoli. Des. 84,593; July 7.
Joint: *See*—
Universal joint.
Key busher, Musical instrument. T. J. Malcolm. 1,813,751; July 7.
Kiln and cooler, Rotary. P. T. Lindhard. 1,813,061; July 7.
Knife. R. Beaver. 1,813,723; July 7.
Knife, Cable. M. F. Toles. 1,813,368; July 7.
Knife, Surgical. R. E. Thompson. 1,813,782; July 7.
Knitting machine, Full fashioned. K. Howie. 1,813,163; July 7.
Knitting machines, Hydraulic friction device for. J. Gift. 1,813,351; July 7.
Knob lock, Combination. H. L. Munson. 1,813,818; July 7.
Knotter. E. E. Boyce. 1,813,725; July 7.
Lacquer, Finishing applied. J. Snukiskis. 1,813,823; July 7.
Lacquering composition and employing same. C. L. Gabriel. 1,813,735; July 7.
Ladder, Fire escape. J. Reese. 1,813,865; July 7.
Ladle, Casting. F. G. Carrington. 1,813,381; July 7.
Laminated spring. J. S. Fries. 1,813,617; July 7.
Lamp apparatus, Therapeutic. J. W. D. Chesney and H. P. MacLagen. 1,813,383; July 7.
Lamp base. C. A. Burke. Des. 84,563–5; July 7.
Lamp base. D. S. Gustin. 1,813,572; July 7.
Lamp, Combined smoker's stand. J. J. Rowbottom. Des. 84,598; July 7.
Lamp electrode, Gaseous conduction. F. Schaefer and O. S. Duffendack. 1,813,320; July 7.
Lamp fixture, Electric. C. A. B. Halvorson. 1,813,738; July 7.
Lamp making machine, Electric incandescent. R. W. Conn. 1,813,565; July 7.
Lamp, Mercury vapor. M. Morrison. 1,813,580; July 7.
Lamp, Motor vehicle head. J. G. Davis. 1,812,935; July 7.
Last, Shoe. A. Barna. 1,813,378; July 7.
Latch, Automatic window. H. W. Gilbert. 1,813,287; July 7.
Latching means for dumb waiter doors. I. Fried. 1,813,734; July 7.
Lathe, Elbow. H. Parker. 1,813,419; July 7.
Lattice beam. C. L. Wooldridge. 1,813,373; July 7.
Laundry articles, Assorting and classifying. C. E. Constable. 1,813,229; July 7.
Lead alloy. R. J. Shoemaker. 1,813,324; July 7.
Leaks in well casings, Indicating and cementing off. P. H. Granger. 1,812,944; July 7.
Leaks in well casings, Locating and cementing off. P. Granger. 1,812,945; July 7.
Leaks in well tubing, Locating. P. H. Granger. 1,812,943; July 7.
Leather, Decorating. M. J. Dwyer. 1,813,390; July 7.
Leguminous flakes, Making. F. R. Bachler. 1,813,268; July 7.
Lens of photographic cameras, picture projecting apparatus, and other like optical devices. C. J. Coleman. 1,813,439; July 7.
Lifting jack, Traveling. G. A. Sexton. 1,813,429; July 7.
Lighter, Cigar and cigarette. S. Summer. 1,813,715; July 7.
Lighter, Cigarette. L. H. Offutt. 1,813,312; July 7.
Lighter filling station. J. C. Griesemer. 1,813,398; July 7.
Lighting fixture. A. J. D. Ohm. Des. 84,589–90; July 7.
Lighting fixture, Highway. C. A. B. Halvorson. 1,813,800; July 7.
Lighting fixture member or article of similar nature. I. Rosenblatt. Des. 84,597; July 7.
Lining, Furnace. H. W. Wildish. 1,813,790; July 7.
Liquid handling means. E. W. Davis. 1,812,864; July 7.
Liquid measuring apparatus. B. T. Ballard and F. J. Gough. 1,813,884; July 7.
Liquid purifying device. J. H. Stockholder. 1,813,687; July 7.
Lister. W. H. Silver. 1,813,207; July 7.
Liver extract for secondary anemia and making it. G. B. Walden. 1,813,788; July 7.
Load blocking device for freight cars and the like. R. W. Barrett. 1,813,269; July 7.
Load handling method and apparatus. E. J. Abbe. 1,813,597; July 7.
Loading mechanism for trucks and other carriers. G. Grimm. 1,813,158; July 7.
Lock: *See*—
Knob lock. Nut lock.
Lock. T. H. Joseph. 1,813,240; July 7.
Lock. M. Leventhal. 1,813,302; July 7.
Lock. S. Segal. 1,812,988; July 7.
Lock for jarring rollover molding machines, Automatic. J. T. Ramsden. 1,813,509; July 7.
Lock for roller beds, Safety. G. W. Barnes. 1,812,853; July 7.
Lock for window screens and the like. I. Abrams and I. Sager. 1,813,652; July 7.
Locking mechanism. W. F. Diesel. 1,813,441; July 7.
Locking mechanism. H. F. Walker. 1,813,473; July 7.
Locomotive boiler. A. W. Nelson. 1,813,074; July 7.
Locomotive boiler. E. J. Noel. 1,813,077; July 7.
Locomotive booster apparatus. M. T. Forker. 1,813,302; July 7.
Locomotive booster entraining and idling mechanism. F. R. Peters. 1,813,421; July 7.
Locomotive driving box cellar. C. J. Scudder. 1,813,712; July 7.
Locomotive smoke box construction. J. R. Wheary and G. J. Lucas. 1,812,912; July 7.
Log structure. H. B. Lawton. 1,813,455; July 7.
Loom temple, Intermittent thread cutting. C. H. Draper. 1,813,888; July 7.
Loom, Tuft pile fabric. E. W. Stone. 1,813,714; July 7.
Lubricant distributing means, Automatic. B. B. West. 1,813,005; July 7.
Lubricating system. G. L. Moore. 1,813,122; July 7.
Lubricator construction. F. W. Martin. 1,813,413; July 7.
Luminous tube. T. K. Peters. 1,813,759; July 7.
Machine for bending sheet metal shapes. A. Rafter. 1,812,982; July 7.
Machine for constructing concrete pipe. A. W. Schultz. 1,813,772; July 7.
Machine for flattening filamentary wire. S. Wadsten. 1,813,592; July 7.
Machine for forming openings in piping. W. L. Enghauser. 1,813,152; July 7.
Machine for grinding saws. E. Stauder. 1,813,825; July 7.
Machine for indicating weight and functions of weight. R. Craig. 1,813,029; July 7.
Machine for tubular weaving. A. Poncet. 1,813,762; July 7.
Machine for washing rugs and the like. H. Klein. 1,813,297; July 7.
Machine head, Adjustable. R. E. De Walt. 1,813,568; July 7.
Magnetic punchings, Annealing. L. E. Hildebrand. 1,813,802; July 7.
Magnetic testing, Method of and apparatus for. C. Kinsley. 1,813,746; July 7.

Magneto breaker adjustment. G. F. Kuehn. 1,813,809; July 7.
Magneto ventilation. G. F. Kuehn. 1,813,808; July 7.
Mail box. D. H. Templeton. 1,813,516; July 7.
Marine propulsion device. J. H. Pierce. Re18,118; July 7.
Marine vessel. W. R. Mestice. 1,813,248; July 7.
Mat or similar article. J. Drenthe. Des. 84,573; July 7.
Material treating apparatus. C. D. Chase. 1,813,728; July 7.
Matting, Rubber. R. K. Lee. Des. 84,586; July 7.
Measuring high resistances, Device for. S. Strauss. 1,813,778; July 7.
Meat package and forming same. H. J. Riha. 1,813,760; July 7.
Melting pot. J. H. Pettus. 1,813,196; July 7.
Member or structure vibrated by energy impulses. F. A. Mallina. 1,813,579; July 7.
Member or structure vibrated by energy impulses. F. A. Stapler. 1,813,588–9; July 7.
Merry-go-round. F. and S. H. Sucher. 1,813,210; July 7.
Metal and wood frame. I. A. Baum. 1,813,223; July 7.
Metal coatings, Producing protective. C. G. Fink and C. H. Eldridge. 1,813,842; July 7.
Metal of pointed fastening devices, Manufacture from sheet. F. Humphris. 1,815,805; July 7.
Metal, Treatment of. F. J. Carolius and R. W. Stuler 1,813,840; July 7.
Metal working machine. H. M. Lucas. 1,813,355; July 7.
Metals and alloys therefor, Casting. W. C. Smith. 1,812,992; July 7.
Metals, Refining. W. C. Smith. 1,812,993; July 7.
Meter connection and support. J. T. Sutliff. 1,813,643–4; July 7.
Meter: *See*—
Multirate meter. Operation meter.
Meter filling, Orifice. C. M. O'Leary and J. F. Hiltscher. 1,813,418; July 7.
Metering system, Remote. B. E. Lenehan. 1,813,177; July 7.
Milk cooler. E. Hauk. 1,813,050; July 7.
Milk delivery system, Continuous. C. H. Hapgood. 1,813,238; July 7.
Mill: *See*—
Grinding mill. Rolling mill.
Mining apparatus. M. P. Holmes. 1,813,804; July 7.
Mining machine. M. P. Holmes. 1,813,803; July 7.
Mirror setting. J. A. Hoegger. 1,813,162; July 7.
Mixing device. J. J. Turner and C. Absmeier. 1,813,828; July 7.
Mold: *See*—
Ingot mold.
Mold for alumino-thermic welding of rails. J. H. Deppeler. 1,813,032; July 7.
Molding, Corner. L. Kuehn. 1,813,173; July 7.
Molding die. E. W. Dunbar. 1,813,150; July 7.
Molds, Making. H. T. Kraft. 1,813,880; July 7.
Motor: *See*—
Fluid pressure motor.
Motor suspension, Railway. C. Bethel. 1,813,140; July 7.
Motors, Water-cooling system for outboard. L. J. Johnson. Re18,120; July 7.
Mounting for aeroplanes and the like, Propeller. S. S. Varkas. 1,812,910; July 7.
Mounting for calf wheels or the like. H. H. Franks. 1,813,044; July 7.
Mounting for rock drills. G. M. Nell. 1,813,676; July 7.
Mounting, Ophthalmic. C. O. Cozzens. 1,813,148; July 7.
Mounting, Railway motor. C. Bethel. 1,813,141; July 7.
Mounting, Window shade. C. W. Rice. 1,813,768; July 7.
Mudboat. E. W. Phillips. 1,813,463; July 7.
Mug, Shaving. T. D. Jones. 1,813,702; July 7.
Multiplication system, Frequency. A. H. Taylor. 1,813,469; July 7.
Multirate meter. G. Mohr. 1,813,186; July 7.
Musical element. H. E. Winterhoff. 1,813,832; July 7.
Musical instrument. M. D. Zimmerman and H. Pullen. 1,813,337; July 7.
Musical instrument, Automatic. C. F. Stoddard. 1,813,097; July 7.
Musical instrument, Automatic. C. F. Stoddard and C. N. Hickman. 1,813,098; July 7.
Nacreous substances and articles formed therefrom, Treating. G. A. Lippincott. 1,812,885; July 7.
Neutralization system. H. F. Elliott. 1,813,036; July 7.
Nipple extractor. A. Delorme. 1,813,567; July 7.
Nonconductor, Heating an electrical and thermal. E. E. Rosaire. 1,813,425; July 7.
Nozzle, Hose. J. J. Freeman. 1,813,733; July 7.
Nutcracker. H. W. Hubby. 1,813,353; July 7.
Nut for doorchecks and the like, Packing. T. Crabtree. 1,813,443; July 7.
Nut lock. G. Rossetti. 1,813,640; July 7.
Oil burner. S. M. Pyankow. 1,813,083; July 7.
Oil gauge. W. R. Lawson. 1,813,244; July 7.
Oil level indicating apparatus. J. F. Chappell. 1,813,382; July 7.
Oil, Making lubricating. W. T. Bryant. 1,812,924; July 7.
Oil material, Treating mineral. H. Behm. 1,813,882; July 7.
Oil material, Treating of mineral. H. Behm. 1,813,884; July 7.
Oil soluble material and product thereof, Producing. H. Behm. 1,813,886; July 7.
Oil well regulation device. J. F. Ryan. 1,812,986; July 7.
Oils and products thereof, Treating. H. Behm. 1,813,885; July 7.
Oils, Apparatus for treating, distilling, and decomposing hydrocarbon. H. T. Darlington. 1,813,117; July 7.
Oils, Decolorizing hydrocarbon. H. Lowery and R. S. Lane. 1,813,628; July 7.
Oils, Refining. W. T. Bryant. 1,812,923; July 7.
Oils, Treatment of petroleum. H. Behm. 1,813,883; July 7.
1-methyl-4-hydroxybenzene caprylate. H. Bollmann. 1,813,607; July 7.
Opener, Can. C. A. Henry. 1,813,620; July 7.
Openings, Device for closing. J. E. Lodge. 1,813,179; July 7.
Operation meter. E. G. Stack. 1,813,777; July 7.
Optical illuminating system. P. S. and H. H. Millar. 1,813,185; July 7.
Optical system, Photographic. F. E. Altman. 1,812,851; July 7.
Orange peels, Removing the bitter taste from. H. Teusch. 1,813,366; July 7.
Ore concentrating machine, Flotation. H. W. Pudan. 1,813,082; July 7.
Ore flotation. I. H. Derby and O. D. Cunningham. 1,813,345; July 7.
Ore flotation and flotation agent. I. H. Derby and O. D. Cunningham. 1,813,346; July 7.
Ores, by the volatilization of metallic elements, Treatment of zinciferous and composite. A. Folliet and N. Sainderichin. 1,813,042; July 7.
Ores, Froth flotation of. I. H. Derby and O. D. Cunningham. 1,813,344; July 7.
Orifice fitting. J. A. Swindle. 1,813,100; July 7.
Oscillation generator. R. S. Ohl. 1,812,977; July 7.
Packing. O. D. H. Bentley. 1,813,016; July 7.
Pad: *See*—
Hood pad.
Pad and pocket pieces therefor, Desk. M. S. Lower. 1,813,501; July 7.
Paint spraying apparatus. W. C. Beach. 1,812,854; July 7.
Pan for keeping paint brushes soft and ready for use. J. Kessler. 1,813,670; July 7.
Panel for lamp shades and other purposes, Translucent. A. M. Goodloe. 1,813,492; July 7.
Paper folding machines, Sheet overturning means for. R. J. Waterworth. 1,813,476; July 7.
Paper manufacture. H. P. Rafton. 1,813,362; July 7.
Partition sheet. A. M. Martin. 1,812,886; July 7.
Partitioning, Metallic. J. Brogden. 1,813,873; July 7.
Pattern and making the same, Finished. M. Herzberg. 1,812,953; July 7.
Pedal jack. L. E. Russell, jr., and G. E. Peters. 1,813,426; July 7.
Pen and pencil clip. W. Gordon. 1,813,396; July 7.
Pen desk set, Fountain. A. Bienenstein. 1,813,271; July 7.
Pen support, Adjustable. F. C. Dell. 1,813,283; July 7.
Pencil, Photographic abrasive. W. L. Moore. 1,813,675; July 7.
Perforating machine for well casing. A. E. Carter and C. A. Johnson. 1,813,144; July 7.
Petrolatum stocks, Treatment of. B. L. Souther and W. A. Gruse. 1,813,327; July 7.
Petroleum products, Purifying. H. G. Smith. 1,813,642; July 7.
Phonograph, Automatic. F. J. Tillman. 1,813,472; July 7.
Photographic apparatus. E. Weisker. 1,813,690; July 7.
Pictures, Making dissolves and effects in motion. J. F. Seitz. 1,813,428; July 7.
Pictures, Producing multipose. C. W. Bhosys. 1,813,436; July 7.
Pictures, Transferring gelatine silver bromide. M. Procoudine-Gorsky. 1,812,981; July 7.
Pigment, Composite lake. W. H. Whatmough. 1,813,371; July 7.
Pin: *See*—
Wrist pin.
Pipe: *See*—
Smoke pipe.
Pipe connecter, Automatic train. J. Robinson. 1,813,125; July 7.
Pipe connection, Steam. J. O. Eslava. 1,813,613; July 7.
Pipe coupling. C. E. Smith. Re18,119; July 7.
Pipes, Device for tapping. W. J. Tell. 1,812,907; July 7.
Piston ring. W. Wuerfel. 1,813,791–2; July 7.
Pitches and tars, Treatment of. O. D. Cunningham. 1,813,541; July 7.
Platform for vehicles, Spring supported. S. M. Chase. 1,812,861; July 7.
Pliers. J. A. Erne. 1,813,038; July 7.
Plow. C. G. Strandlund. 1,813,506; July 7.
Plow attachment. R. C. Jeffress. 1,813,854; July 7.
Plug. W. Kaisling. 1,813,167; July 7.
Plug and receptacle, Attachment. C. E. Mason. 1,813,582; July 7.
Pole and bracket therefor, Curtain. C. W. Kirsch. 1,812,881; July 7.
Pole guy fixture. A. B. Chance. 1,813,482; July 7.
Portable press. H. F. Woernley. 1,813,219; July 7.

Posts from sheet material, Cutting metal fence. W. P. Pickett. 1,813,761; July 7.
Pot: *See*—
Melting pot.
Pottery forming machine. W. J. Miller. 1,812,893; July 7.
Powder blower. L. Manne. 1,813,182; July 7.
Powder box, Face. C. Davis. 1,813,281; July 7.
Powder dispenser. D. M. Bates and H. W. Coburn. 1,813,835; July 7.
Powder puff and making the same. J. E. Valentine and I. Englander. 1,813,518; July 7.
Power device, Radial. J. B. Groh. 1,813,288; July 7.
Press: *See*—
Portable press.
Press and frame. J. C. Ledbetter. 1,813,301; July 7.
Pressing machine element. E. Davis. 1,813,610; July 7.
Pressure drilling head. E. N. Hewitt. 1,813,402; July 7.
Printing apparatus, Photostatic. E. Weisker. 1,813,689; July 7.
Printing device. B. Z. McCain and H. L. Thompson. 1,812,889; July 7.
Printing device. V. J. Mobler. 1,812,894; July 7.
Printing device. J. C. Paschall. 1,812,898; July 7.
Printing machine for silk and other materials. P. M. Zlydin. 1,813,010; July 7.
Prints on vegetable fibers, Fast. A. Schneevoigt and K. Anacker. 1,813,641; July 7.
Product and manufacture thereof, Food. W. Horlick, jr. 1,813,574; July 7.
Product rich in cellulose and useful by-product from straw, Obtaining a. H. Du Boisteseelin. 1,813,531; July 7.
Projection, Three dimensional. W. F. C. Bouchspies. 1,813,559; July 7.
Propeller of a vessel. H. Buhren. 1,813,113; July 7.
Propelling mechanism. J. Stechauner. 1,813,552; July 7.
Protecting sheath for electric wires. J. Escol. 1,813,039; July 7.
Protective arrangement. F. J. Lane and R. D. Parry. 1,813,749; July 7.
Provision box. J. R. Klin. 1,813,298; July 7.
Pulling implement. L. Haubert. 1,813,447; July 7.
Pulp and paper, Manufacture of. L. M. Booth. 1,813,658; July 7.
Pump. C. Warner and H. G. Fisher. 1,813,104; July 7.
Pump, Centrifugal. J. Kirgan. 1,813,747; July 7.
Pump control means, Automatic. M. Nyrop. 1,813,078; July 7.
Pump, Sump. M. Hedglon. 1,812,874; July 7.
Pumps, Power head for. P. A. Myers. 1,813,309; July 7.
Radiator. T. E. Murray. 1,813,123; July 7.
Radiator. C. Oppe. 1,813,079; July 7.
Radiator screen bracket. M. M. Fischer. 1,813,533; July 7.
Radiator shell for automobiles. H. A. Shaw. Des. 84,603; July 7.
Radiator shutter throttle control. W. A. Edwards. 1,812,869; July 7.
Radiator, Side plate. F. M. Young. 1,813,221; July 7.
Radio apparatus. J. N. Nordlund. 1,813,194; July 7.
Radiocabinet or similar article. G. J. Pike. Des. 84,592; July 7.
Radiocabinet or similar article. G. J. Pike. Des. 84,594; July 7.
Radio frequency coil. A. E. Baumann. 1,813,137; July 7.
Radio loud speaker. C. H. Duffy. 1,812,867; July 7.
Radio photography transmitter. V. A. Schoenberg. 1,813,204; July 7.
Radio receiving apparatus. P. D. Lowell. 1,813,180; July 7.
Radio receiving set. A. A. Beste. 1,813,724; July 7.
Radio signaling. L. Cohen. 1,812,563; July 7.
Rag ripper. P. B. Rohner. 1,812,901; July 7.
Rail fastening device. B. P. Andreianow. 1,812,917; July 7.
Rail installation, System of third. H. L. Rogers. 1,813,199; July 7.
Railroad gate. J. A. Drouin. 1,812,866; July 7.
Range or similar article. A. Stockstrom. Re18,121; July 7.
Razor blade, Safety. R. E. Thompson. 1,813,470; July 7.
Razor, Safety. O. Goetzke. 1,813,699; July 7.
Razor, Safety. R. E. Thompson. 1,813,471; July 7.
Receptacle. N. M. Baker. 1,813,135; July 7.
Receptacle. W. C. Carlson. 1,813,659; July 7.
Receptacle, Adjustable electric. S. F. Howk. 1,812,956; July 7.
Receptacle, Beverage bottle carrying. E. F. Morin. 1,813,190; July 7.
Receptacle, Dispensing. J. Andrassy. 1,813,131; July 7.
Receptacles, Apparatus for making. H. O. Berg. 1,813,379; July 7.
Recorder: *See*—
Hole inclination recorder. Talking machine recorder.
Rectifier systems, Protection of. A. Gaudenzi. 1,813,585; July 7.
Reel: *See*—
Fishing reel.
Reflector, Foldable and adjustable. W. Vogel. 1,813,102; July 7.
Reflector, Marine light signal. S. A. Eskilson. 1,813,874; July 7.
Refrigerant. L. K. Wright. 1,813,885–6; July 7.
Refrigerating apparatus. M. Kalischer. 1,813,168; July 7.
Refrigerating unit. L. W. Eggleston. 1,813,486; July 7.
Regulator: *See*—
Temperature regulator.
Relay, Resonant electrical. C. B. Mirick. 1,813,899; July 7.
Resilient connection. S. P. Ward. 1,813,214; July 7.
Resin. H. A. Bruson. 1,813,838; July 7.
Resistance unit. O. U. Zerk. 1,812,916; July 7.
Resonance attachment for sound reproducing devices. A. E. Tauscher and B. E. Schultze. 1,812,998; July 7.
Ring: *See*—
Piston ring.
Rivet. W. I. Jones. 1,813,892; July 7.
Riveting machine. J. G. McClean. 1,813,415; July 7.
Rolled H-section. J. H. Edwards and R. A. Marble. 1,813,118; July 7.
Rolling mill. C. White. 1,813,129; July 7.
Roof, Car. C. D. Bonsall. 1,813,558; July 7.
Room equipment, Toilet. R. E. Rhoads and P. D. Parsons. 1,813,198; July 7.
Rotary engine. S. M. Price. 1,813,763; July 7.
Roundabout. H. H. Grubb. 1,812,946; July 7.
Rubber articles, Manufacturing. E. W. Dunbar. 1,813,235; July 7.
Rubber coated article and making same. B. Dales. 1,813,440; July 7.
Rubber, Deterioration inhibitor for. A. M. Clifford. 1,813,609; July 7.
Rubber tubes, Device for cutting. G. J. Mead. 1,813,246; July 7.
Rug. J. C. Smiley. Des. 84,615; July 7.
Safe construction. A. L. Smith. 1,812,991; July 7.
Saddle. F. Mesinger. 1,813,672; July 7.
Safety burner. J. H. Grayson. 1,813,048; July 7.
Safety device for firearms. L. R. Stuyvesant. 1,812,905; July 7.
Safety device for street cars. F. Bellamy. 1,813,139; July 7.
Sales transactions, Device for recording. J. E. Johnson. 1,813,495; July 7.
Salts, Treatment of crude mineral. E. Jänecke, H. Klippel, and E. Hegelmann. 1,813,575; July 7.
Sand spraying device for motor vehicles. W. Herdling. 1,812,952; July 7.
Saponification. V. R. Kokatnur. 1,813,454; July 7.
Saw, Hack. F. H. Bundy. 1,812,928; July 7.
Saw, Rotary. E. C. Bentz. 1,813,435; July 7.
Saw table. W. A. Tomlinson and H. B. Bearden. 1,813,783; July 7.
Sawing apparatus. A. E. Combs and G. D. Fisk. 1,812,863; July 7.
Sawing machine, Automatic wood. H. H. Herbold. 1,813,291; July 7.
Sawing machine, Combination wood. J. Hrnesjar. 1,813,293; July 7.
Saws, Cleaning power meat. E. F. Gaines. 1,812,942; July 7.
Scale. C. Dollack. 1,812,937; July 7.
Scale, Compounding. M. J. Lachance. 1,813,578; July 7.
Scoop, Portable. G. Gunderson. 1,813,150; July 7.
Scraper, Road. C. J. Moritz. 1,813,071; July 7.
Scraper, Windshield. N. J. Berge. 1,813,604; July 7.
Screen and like device. L. T. Ward. 1,813,475; July 7.
Screen wind deflector and ventilator, Combined window. R. Noppenz. 1,813,756; July 7.
Screw feeding mechanism. F. H. Dellaree. 1,813,697; July 7.
Screw, Self locking fillister headset. R. T. Hosking. 1,813,053; July 7.
Scuttle, Fireplace. D. M. Baldwin. Des. 84,561; July 7.
Sealer, Hand can top. C. M. Young. 1,813,220; July 7.
Separator: *See*—
Coin separator. Dry separator.
Separator. W. T. Powers. 1,813,637; July 7.
Setting mechanism for pumps. E. E. Eickmeyer. 1,813,347; July 7.
Sewing apparatus, Gang. J. F. Gall. 1,813,489; July 7.
Sewing machine, Electrically-driven. C. W. H'Doubler. 1,813,290; July 7.
Sewing machines, Feeding mechanism for. C. W. Mueller. 1,812,895; July 7.
Shaving outfit. W. G. Frazier. 1,813,616; July 7.
Shaving outfit. H. R. Priest. 1,813,317; July 7.
Shell and making the same, Corrugated. A. R. Lawrence. 1,813,859; July 7.
Shield, Antiglare. A. G. Peters. 1,813,881; July 7.
Shingles, Retainer for. A. Gerosa. 1,813,798; July 7.
Shipping device. C. L. Snyder. 1,813,326; July 7.
Shock absorber. F. T. Elliott. 1,813,666; July 7.
Shock absorber. P. S. Morgan. 1,813,069; July 7.
Shock absorber, Adjustable. A. Dufaux. 1,813,532; July 7.
Shoe. C. Miller. Des. 84,587; July 7.
Shoe hanger. H. C. Huestis. 1,813,573; July 7.
Shoe or article of analogous nature. W. G. Barbour. Des. 84,562; July 7.
Shuttle, Sewing machine. F. Ashworth. 1,812,852; July 7.
Sign. H. W. Penrose. 1,813,462; July 7.
Sign apparatus. G. P. Liss. 1,813,062; July 7.
Sign, Display. J. Pasini. 1,812,979; July 7.
Sign, Electric. M. C. Balder. 1,812,919; July 7.

Sign, Electric. L. I. Matthews. 1,813,414; July 7.
Sign, Road. W. H. Carson. Des. 84,566; July 7.
Signal: *See*—
Automobile signal.
Signal, Road. C. H. Fowler. 1,813,890; July 7.
Signaling system. M. B. Kerr. Re18,126; July 7.
Silver plate, Apparatus for burnishing. L. Trinquet and R. Marcel Hamel. 1,812,909; July 7.
Skinning machine. J. J. Barry. 1,813,479; July 7.
Skins, Unhairing and bating of. A. R. Boidin and I. A. Effront. 1,812,921; July 7.
Slider. G. W. Blair. 1,813,227; July 7.
Slipper, Ballet. S. Capezio. 1,813,561; July 7.
Slub catcher. L. B. Hasbrouck. 1,813,849; July 7.
Sludge remover. V. V. Saks. 1,813,822; July 7.
Smoke pipe. E. M. Sprich. 1,813,684; July 7.
Smoker's device. F. H. Axell. 1,812,850; July 7.
Soap, Making. J. E. Rutzler, jr. 1,813,512; July 7.
Socket, Electric pull. C. E. Avery. 1,813,108; July 7.
Soil pulverizing machine. P. J. Young. 1,813,651; July 7.
Soldering iron, Electrically heated. C. Helle. 1,813,181; July 7.
Soldering, Method of and apparatus for. D. M. Boothman and J. A. Cullerton. 1,813,657; July 7.
Sole for a woman's shoe. L. C. Pape. Des. 84,591; July 7.
Sorbent material, Making actuated. A. B. Lamb. 1,813,174; July 7.
Sound recorder and reproducer, Electrically operating. C. Huenlich. 1,812,957; July 7.
Sound reproduction, Method and apparatus for. O. Sandvik. 1,813,681; July 7.
Spear, Rotating. W. J. Miller. 1,813,459; July 7.
Speed controller mechanism, Variable. B. P. Graves. 1,812,871; July 7.
Speed device, Variable. C. E. Ives. 1,812,877; July 7.
Speedometer. B. H. von Klein. 1,813,003; July 7.
Splasher plate for vehicle bumpers. M. Z. and S. Katz. 1,813,624; July 7.
Spoon or similar article. W. S. Warren. Des. 84,611; July 7.
Spray device. O. L. Jansky. 1,813,623; July 7.
Spray gun, Touch-up. S. Bramsen and W. Hersleb. 1,812,922; July 7.
Spring: *See*—
Laminated spring.
Spring shackle, Eccentrically adjusted. G. H. Hufferd. 1,812,876; July 7.
Spring suspension, Vehicle. J. R. Ogden, jr. 1,813,757; July 7.
Stamp cutting, affixing, inking and canceling machine, Manually operated. C. R. Penney. 1,812,980; July 7.
Stand: *See*—
Vise stand.
Stand for smoker's and similar articles. A. von Frankenberg. Des. 84,606–10; July 7.
Stapling machine. C. F. Capell. 1,813,839; July 7.
Starting and stopping mechanism. J. L. Perkins and H. D. Croft. 1,813,254; July 7.
Steam boiler. W. S. Monroe. 1,813,504; July 7.
Steam cooling system. A. W. Pope, jr. 1,812,899; July 7.
Steam engine, Rotary. C. W. Phillips. 1,813,316; July 7.
Steel ingot. W. H. Ramage. 1,813,507; July 7.
Steering mechanism for delivery vehicles. E. R. Maurer and D. M. Ferguson. 1,812,887; July 7.
Stenciling device. A. F. J. Pokorny. 1,813,711; July 7.
Sterilizer, Milk bottle. J. B. Baker. 1,813,602; July 7.
Sterilizing system. T. H. Brown. 1,813,021; July 7.
Stitching machine for sets of sheets. R. Draeger. 1,813,035; July 7.
Stoker, Mechanical. T. R. Snyder. 1,813,262; July 7.
Stone for gardens or lawns, Dividing. G. P. Kannen. 1,813,055; July 7.
Stop for cigarette machines, Safety. W. E. Molins. 1,813,811; July 7.
Strainer. J. A. Bathen and W. F. Ingraham, jr. 1,813,136; July 7.
Strainer, Flue air. G. E. Sanders. 1,813,584; July 7.
Straw attachment, Soda. W. Galetschky. 1,813,285; July 7.
Strip material, Channeled. E. J. Kvet. 1,812,963; July 7.
Stuffing box. W. H. McKissick. 1,813,308; July 7.
Sugar cane, Apparatus for disintegrating. W. H. Morgan. 1,813,070; July 7.
Sulphur, Production of pure. P. Koppe and G. Robbel. 1,813,497; July 7.
Support. C. E. Harper. 1,813,740. July 7.
Support, Roll paper. J. M. Jackson. 1,813,853; July 7.
Support, Tail wheel. R. J. Minshall. 1,813,356; July 7.
Support, Ware. R. W. Rowland. 1,813,085; July 7.
Supporter, Hose. W. E. Kinser. 1,813,453; July 7.
Supporting a beam from a column in construction of welded buildings, Device for. W. Reinhold. 1,813,545; July 7.
Supporting bracket, Shelf attached article. F. W. Furstenberger and C. C. Deeds. 1,813,155; July 7.
Surgical instrument. A. C. Balinski and E. Mahoney. 1,813,693; July 7.
Sweeper, Carpet. E. R. Smith. 1,813,325; July 7.
Switch: *See*—
Contact switch.
Disconnected switch.
Electric switch.
Toggle switch.
Switch construction, Push button. K. Knudsen. 1,813,407; July 7.
Switch for trolley lines, Signal. P. J. Murphy. 1,813,634; July 7.
Switch operating mechanism. R. H. Olley. 1,812,896; July 7.
Swing. H. H. Grubb. 1,812,947; July 7.
Table: *See*—
Basket table.
Collapsible table.
Folding table.
Saw table.
Table, ash and buffet tray, Combined folding. M. Siegel. 1,813,090; July 7.
Tabulating machine. J. Last. 1,812,883; July 7.
Tag, Nondetachable identification. J. A. Lethert. 1,813,060; July 7.
Talking machine recorder. T. Kahn. 1,813,166; July 7.
Tamping or ballasting machine. C. Jackson. 1,813,295; July 7.
Tanks, Filler connection for. E. P. du Pont. 1,813,612; July 7.
Tanning apparatus. A. S. Jones. 1,813,744; July 7.
Tap for threading pipe couplings, Receding and collapsing. J. C. P. Wetmore. 1,813,594; July 7.
Tape, Measuring. A. Langsner. 1,812,965; July 7.
Tea, Preparing and preserving the beverage. R. T. Metzger and P. D. Potter. 1,813,120; July 7.
Telegraphic transmitting instrument. W. D. Cooper. 1,813,230; July 7.
Telemeter, Sterescopic. J. Mihalyi. 1,813,673; July 7.
Telephone. J. O. Cadieux. 1,813,887; July 7.
Telephone attachment. F. T. Peak. 1,813,505; July 7.
Telephone exchange system, Autoamtic or semi-automatic. E. F. C. Wright. 1,813,555; July 7.
Telephone system. C. E. Beale. 1,813,138; July 7.
Telephone system. R. Taylor and L. M. Simpson. 1,812,999; July 7.
Telephone system, Automatic. M. Langer. 1,813,175; July 7.
Telephone system, Automatic. J. Wicks. 1,813,007; July 7.
Telephone systems, Lockout for outgoing calls for. C. V. Richey. 1,812,984; July 7.
Temperature and vacuum relief device. J. A. Maynard. 1,812,888; July 7.
Temperature regulator. J. G. Helmstaedter and F. J. Schilling. 1,813,401; July 7.
Tennis nets, Manufacture of. R. C. Webster. 1,813,717; July 7.
Tent. R. F. Kattmann. 1,813,703; July 7.
Terminal connecter, Storage battery. M. Vaccaro. 1,813,829; July 7.
Terminal for electrical devices. E. E. Franz. 1,813,154; July 7.
Testing apparatus. H. C. Robinson and A. M. Malmberg. 1,812,985; July 7.
Testing apparatus, Tube. H. E. Warner. 1,813,215; July 7.
Theft preventer for tanks. D. P. Wickline. 1,813,554; July 7.
Thermionic tube. E. L. Koch. 1,813,241; July 7.
Thermostat. J. A. Spencer. 1,813,776; July 7.
Thermostatic device. E. A. Rutenber. 1,813,427; July 7.
Thimble cap for metal bar eyes. H. R. Saxon. 1,812,987; July 7.
Thread cleaner. W. T. Munson. 1,813,633; July 7.
Threading device. R. S. Brown. 1,813,480; July 7.
Time element control system and apparatus. C. S. Hull. 1,813,743; July 7.
Timing apparatus, Radiographic. W. S. Werner. 1,813,216; July 7.
Timing device. R. V. Tuttle. 1,813,780; July 7.
Tire bead construction and making same. C. W. Leguillon. 1,813,176; July 7.
Tire building machine. G. F. Wikle. 1,813,264; July 7.
Tire carrier. J. J. Appel. 1,813,094; July 7.
Tire changer jaw holding means. C. G. Nathe, jr. 1,813,310; July 7.
Tire gauge. M. E. Mitchell and A. F. Swan. 1,813,249; July 7.
Tire, Pneumatic. C. Paridy. 1,813,758; July 7.
Tires for vehicles, Cushion. R. Bello. 1,813,603; July 7.
Tobacco stick. W. E. Hord. 1,813,292; July 7.
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Toggle switch, Three position. C. Williams and E. G. Appleton. 1,812,914; July 7.
Toilet, Animal. A. C. Supplee. 1,813,329; July 7.
Tongs. F. P. Brockschmidt. 1,813,695; July 7.
Tool, Cutting. A. K. Kosunen. 1,813,498; July 7.
Tool for removing dents from metallic bodies. A. P. Asher. 1,813,012; July 7.
Tool, Hot metal working. P. B. Piersol. 1,813,677; July 7.
Tool, Impact. J. R. Sandage. 1,813,087; July 7.
Tool, Motor driven hand. J. M. Crowe. 1,813,281; July 7.
Tool, Tooth cleaning and polishing. H. R. Priest. 1,813,360; July 7.
Tool, Well reaming. L. S. Hamer. 1,813,160; July 7.
Tools, Making color photographic film embossing. H. E. Hastings. 1,813,669; July 7.
Tools, Making rubber handled. W. V. Foley. 1,813,797; July 7.
Tooth cleaner and polisher. H. R. Priest. 1,813,359; July 7.
Tooth cleaner and polisher. H. R. Priest. 1,813,361; July 7.
Towel bar bracket, Self adjustable. E. Reynolds. 1,813,818; July 7.

Toy. H. A. Myers. 1,813,252; July 7.
Toy bank and vending machine. W. Selby and R. P. Magnenat. 1,813,713; July 7.
Toy electric railway system. W. A. Browne and R. Kissel. 1,813,560; July 7.
Toy gun. F. T. Russell. 1,812,902; July 7.
Toy, Rocking figure. G. P. Churus. 1,813,277; July 7.
Toy, Walking figure wheeled. A. Bresch. 1,813,112; July 7.
Track, Double acting door reversing. R. D. Conklin. 1,813,564; July 7.
Tractor. C. A. Henneuse. 1,812,875; July 7.
Tractor. B. G. Jennings. 1,812,958; July 7.
Tractor hitch. A. A. and R. F. Lenhart. 1,813,500; July 7.
Traffic controlling apparatus, Railway. L. E. Spray. 1,813,363; July 7.
Traffic system, Railroad crossing. A. G. Shaver. 1,813,260; July 7.
Trailer hitch. J. Lambrecht. 1,813,858; July 7.
Train control system, intermittent type with roadside energy, Automatic. A. G. Shaver. 1,812,989; July 7.
Train control system intermittent type with vehicle energy, Automatic. A. G. Shaver. 1,812,990; July 7.
Transformer. H. Halperin and K. W. Miller. 1,812,949; July 7.
Transformer. J. Kubler. 1,813,857; July 7.
Transmission line device. G. M. Eaton. 1,813,151; July 7.
Transmission mechanism. R. E. Haptonstall. 1,813,739; July 7.
Transmitting power. C. P. Madsen. 1,813,502; July 7.
Transportation system. H. L. Knox. 1,813,625; July 7.
Tray, Ash. W. De F. Smith. 1,813,467; July 7.
Tray or the like, Ash. A. Klein. Des. 84,584; July 7.
Tray, Serving. A. A. Angelus. Des. 84,560; July 7.
Trolley device. F. F. Waechter. 1,813,898; July 7.
Trolley plane. F. H. Mansfeld. 1,813,245; July 7.
Truck and trailer. F. J. Stockburger. 1,812,995; July 7.
Truck, Dump. J. A. Wright. 1,812,915; July 7.
Truck, Industrial. E. J. Abbe. 1,813,595–6; July 7.
Trucks, Resilient unit for car. G. Q. Lewis. 1,813,706; July 7.
Truss, Reenforcing. C. Botel and L. R. Paul. 1,813,338; July 7.
Tube: *See*—
Thermionic tube.
Tube expander and expanding tubes. K. A. Stenner. 1,813,096; July 7.
Turbine case. A. V. Karpov. 1,813,404; July 7.
Turbo-generator. E. J. Blake and W. F. Bouche. 1,813,656; July 7.
Typewriting machine. R. E. Benner. 1,812,855; July 7.
Typewriting machine. A. G. Kupetz. 1,813,410; July 7.
Typewriting machine. G. M. Scherer. 1,813,321; July 7.
Universal joint. G. V. Curtis. 1,812,934; July 7.
Utensil, Combination cooking. W. J. Turkenton. 1,813,646; July 7.
Vacuum device. W. Kintner. 1,813,577; July 7.
Valve. E. Price and W. A. Pfister. 1,813,464; July 7.
Valve. G. Rodrigues. 1,813,581; July 7.
Valve. H. M. Sheppard. 1,813,126; July 7.
Valve, Balanced. J. M. Barrett. 1,813,222; July 7.
Valve construction and making the same. S. J. V. Bovey. 1,813,273; July 7.
Valve, Flush. A. N. Pasman. 1,813,709; July 7.
Valve for magazines for picture films. A. Dina. 1,812,865; July 7.
Valve for rock drills. W. A. Smith, jr. 1,813,773; July 7.
Valve, Piston. W. E. Goldsborough. 1,813,846; July 7.
Valve to control high temperature high pressure fluids. W. E. Goldsborough. 1,812,870; July 7.
Vanity case. C. N. Coryell. 1,813,147; July 7.
Vehicle, Motor. F. R. and W. B. Fageol. Des. 84,576; July 7.
Vehicle, Talking picture. F. H. Owens. 1,813,542; July 7.
Vehicle with actuated doors, Dump. H. F. Flowers. 1,813,570; July 7.
Vehicles, Device for preventing retrograde movement of. M. J. A. Kochevar. 1,813,748; July 7.
Vending machine. W. C. Laughlin. 1,813,299; July 7.
Ventilating means for electric railway locomotives. C. C. Whittaker. 1,813,218; July 7.
Ventilator: *See*—
Window ventilator.
Vessels, Device for charging. W. Schols and A. Frohberg. 1,813,205; July 7.
Vibrator, Electric massage machine. C. W. Kent. 1,812,960; July 7.
Vise stand. J. A. Long. 1,812,967; July 7.
Waffle iron, Electric. A. O. Samuels. Des. 84,599; July 7.
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Can washer.
Washer for bottles of different sizes. G. L. N. Meyer. 1,813,066; July 7.
Washer for electrical binding posts, Insulating and supporting. C. H. Thordarson. 1,813,716; July 7.
Washing machine. W. E. Kettering and A. B. Hill, jr. 1,813,807; July 7.
Washing machine casing and support therefor, Combined. L. B. Green. Des. 84,580; July 7.
Watchcase. C. Winterhalter. 1,813,009; July 7.
Water from motor boats, Removing. J. F. Petre. 1,813,255; July 7.
Water heater. J. H. Newport. 1,813,253; July 7.
Water heater, Feed. S. O. A. Fiedler. 1,813,041; July 7.
Waterer, Stock. A. I. Ralston. 1,813,318; July 7.
Waterproof construction material. J. H. Plunkett. 1,813,081; July 7.
Weed cutter. J. Laska. 1,813,540; July 7.
Weight, Paper. C. E. Cole. 1,813,280; July 7.
Welding machine, Lap. E. Bryan. 1,813,727; July 7.
Well bailing device. B. K. Appleman. 1,813,134; July 7.
Wheel: *See*—
Gear wheel.
Wheel. T. A. Davenport. Des. 84,567–8; July 7.
Wheel. L. E. La Brie. 1,812,882; July 7.
Wheel and hub, Demountable. A. H. Shoemaker. 1,813,481; July 7.
Wheel dresser. E. A. Shriver. 1,813,682; July 7.
Wheel for tractors, Rear. T. Hernández. 1,813,494; July 7.
Wheel spiders, Apparatus for making. I. H. Judd. 1,812,959; July 7.
Whipstock. F. Kinzbach. and H. M. Wheeler. 1,812,880; July 7.
Window, Awning type. J. J. Donovan and E. F. Wiley. Re18,125; July 7.
Window, Casement. K. F. Jorss. 1,813,806; July 7.
Window ventilator. F. G. Lumley. 1,813,629; July 7.
Windshield heater. E. A. Small. 1,813,550; July 7.
Wiper, Windshield. J. M. Aufiero. 1,812,918; July 7.
Wire connection, Ground. B. D. Horton. 1,813,448; July 7.
Wire or similar article. W. A. Rohman. Des. 84,596; July 7.
Wire reeling apparatus. A. H. W. Wessler. 1,813,881; July 7.
Wire, Rolling composite. R. T. Hurley. 1,813,539; July 7.
Wireless receiving system. C. T. Jacobs. 1,813,054; July 7.
Wiring channel structure. D. T. Wadsworth. 1,813,331; July 7.
Wrench. C. L. Dunham. 1,812,938; July 7.
Wringers, Safety feed for. E. A. Hirner. 1,813,403; July 7.
Wringers, Supporting and driving mechanism for. S. E. Schroeder. 1,813,466; July 7.
Wrist pin. J. D. Nixon. 1,813,193; July 7.
Writing device. H. I. Morris. 1,813,251; July 7.
Yarns or threads and apparatus therefor, Manufacture of. W. A. Dickie and R. Martin. 1,813,611; July 7.

CLASSIFICATION OF PATENTS

ISSUED JULY 7, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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86: 1,813,312

U. S. GOVERNMENT PRINTING OFFICE: 1931

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

A. & L. Fruit Co., Los Angeles, Calif. Fresh citrus fruits. 285,006; July 14; Serial No. 280,867; published May 5, 1931. Class 46.

Aasen, H. S., doing business as Sioux Oil Co., Winger, Minn. Gasoline, kerosene, lubricating oils, and greases. 285,152; July 14; Serial No. 310,035; published Apr. 14, 1931. Class 15.

Abbott Laboratories, North Chicago, Ill. Hypnotic sedative anesthetic compound. 285,003; July 14; Serial No. 308,821; published Apr. 21, 1931. Class 6.

Advertising Products, Incorporated, Minneapolis, Minn. Electrical signs. 284,971; July 14; Serial No. 311,818; published Apr. 21, 1931. Class 21.

Air-O-Swing Co. Inc., Seattle, Wash. Toy swings. 285,098; July 14; Serial No. 306,589; published May 5, 1931. Class 22.

Aktiebolaget Nya Spis & Knäckebrödsfabriken, Oscarshamn, Oscarshamn, Sweden. Bread. 285,124; July 14; Serial No. 280,534; published May 7, 1929. Class 46.

Aktiengesellschaft Paulanerbrau Salvatorbrauerei und Thomasbrau. (See Gebrüder Thomass Bierbrauerei zum Thomasbräu, assignor.)

Albert, Alexander, doing business as Associated Beauticians, Brooklyn, N. Y. Preparation for the improvement and treatment of the skin, etc. 285,042; July 14; Serial No. 311,764; published Apr. 21, 1931. Class 6.

Albert Lea Packing Company, Incorporated, Albert Lea, Minn. Smoked meats, boiled hams, and sausage. 285,149; July 14; Serial No. 303,412; published May 5, 1931. Class 46.

Allegheny Sales Company, Pittsburgh, Pa. Beverages and syrups for making the same. 285,084; July 14; Serial No. 312,403; published May 5, 1931. Class 45.

Allied Printing and Binding Machinery, Inc., Cleveland, Ohio. Paper folding machines and sealing machines. 284,947; July 14; Serial No. 312,404; published May 5, 1931. Class 23.

Alperin Strauss Co., Inc., New York, N. Y. Shirts. 285,128; July 14; Serial No. 296,724; published Apr. 21, 1931. Class 39.

Alpha Chi Epsilon, Chicago, Ill. Fraternity badges, shields, finger rings, etc. 285,061; July 14; Serial No. 295,595; published Apr. 7, 1931. Class 28.

Aluminum Company of America, Pittsburgh, Pa. Aluminum castings, billets, and ingots, etc. 284,996–7; July 14; Serial Nos. 307,867–8; published May 5, 1931. Class 14.

Aluminum Company of America, Pittsburgh, Pa. Blank lithographic plates. 284,998–9; July 14; Serial Nos. 307,871–2; published May 5, 1931. Class 14.

Ambrosia Chocolate Company, Milwaukee, Wis. Candy, chocolate, cocoa, etc. 284,985; July 14; Serial No. 298,132; published Aug. 5, 1930. Class 46.

American Art Clay Company, Indianapolis, Ind. Modeling clay, clay flour, moist clay, and gesso clay. 285,067; July 14; Serial No. 307,571; published Jan. 13, 1931. Class 1.

American Hardware Company, Petersburg, Va. Suitcases. 285,158; July 14; Serial No. 311,224; published Apr. 28, 1931. Class 3.

American Narrow Fabric Company, Worcester, Mass. Bandelux, bandettes, brassières, etc. 285,163; July 14; Serial No. 311,464; published Apr. 21, 1931. Class 39.

American Oak Leather Company, The, Cincinnati, Ohio. Leather and leather goods. 37,244; renewed Oct. 29, 1931.

American Reenforced Paper Company, Attleboro, Mass. Reenforced paper used as a protecting covering. 285,207; July 14. Class 37.

American Safety Razor Corporation, Brooklyn, N. Y. Razors and blades therefor. 284,956; July 14; Serial No. 312,082; published May 5, 1931. Class 28.

American Tobacco Company, The, New York, N. Y. Plug tobacco. 284,965; July 14; Serial No. 310,439; published May 5, 1931. Class 17.

American Toiletries Company, Inc., Marion, Ohio. Toilet preparations. 284,929; July 14; Serial No. 309,798; published Apr. 21, 1931. Class 6.

Amherst-Logan County Coal Corporation, doing business as the Amherst Coal Company, Charleston, W. Va. Coal. 285,165; July 14; Serial No. 311,769; published May 5, 1931. Class 1.

Aqua-Seal Corporation, Chicago, Ill. Solution used upon wood, textiles, and papers to preserve and protect same. 285,043; July 14; Serial No. 311,770; published Apr. 21, 1931. Class 6.

Artzt, Bernard S., doing business as B. S. Artzt Laboratories, Philadelphia, Pa. Medicinal treatment for hair, scalp, etc. 284,933; July 14; Serial No. 310,705; published Apr. 21, 1931. Class 6.

Associated Beauticians. (See Albert, Alexander.)

Atlantic Packing Company. (See Consolidated Rendering Company.)

Baer, Samuel I., Youngstown, Ohio. Window sashes. 285,102; July 14; Serial No. 309,598; published Apr. 21, 1931. Class 12.

Bancroft Walker Company, Boston, Mass. Boots and shoes. 285,138; July 14; Serial No. 310,931; published Apr. 21, 1931. Class 39.

Barton & Guestier, Bordeaux, France. Claret and white wines. 285,097; July 14; Serial No. 306,230; published May 5, 1931. Class 47.

Beder & Beder, Inc., New York, N. Y. Underwear. 285,061; July 14; Serial No. 302,807; published Apr. 21, 1931. Class 39.

Beffa, Victor, Philadelphia, Pa. Fans. 285,022; July 14; Serial No. 308,185; published Apr. 21, 1931. Class 40.

Berkowitz, M., & Sons, Brooklyn, N. Y. Cut-out parts of leather for shoes. 285,060; July 14; Serial No. 307,382; published Apr. 28, 1931. Class 39.

Best, Richard, Pencil Company, Inc., New York, N. Y. Lead pencils. 285,155; July 14. Class 37.

Bestone, Inc., Omaha, Nebr. Motion-picture projecting and electric sound reproducing and amplifying apparatus and parts. 285,193; July 14. Class 26.

Biltwell Chair and Furniture Company, doing business as Ko-Rect Posture Chair Company, Denton, N. C. Chairs. 284,935; July 14; Serial No. 311,319; published May 5, 1931. Class 32.

Black Magic Products Co. (See Gordon, Abe.)

Bleecker, Warren F., Boulder, Colo. Chemical preparation. 285,037; July 14; Serial No. 311,717; published Apr. 21, 1931. Class 6.

Blue Ridge Ginger Ale Co. (See Marion Orange Crush Bottling Company, Inc.)

Bohn Aluminum & Brass Corporation, Detroit, Mich. Nonferrous castings and forgings. 285,015; July 14; Serial No. 296,391; published May 5, 1931. Class 14.

Bohn Aluminum & Brass Corporation, Detroit, Mich. Nonferrous castings and forgings. 285,016; July 14; Serial No. 296,389; published May 5, 1931. Class 14.

Bond Electric Corporation, Jersey City, N. J. Batteries. 284,911; July 14; Serial No. 310,204; published Apr. 14, 1931. Class 21.

Borgfeldt, Geo., & Co., New York, N. Y. Dolls. 285,081; July 14; Serial No. 312,288; published May 5, 1931. Class 22.

Bovinine Company, The, Chicago, Ill. Tonic. 285,030; July 14; Serial No. 311,320; published Apr. 28, 1931. Class 6.

Brandon Coal Co., The, Youngstown, Ohio. Coke. 285,118; July 14; Serial No. 310,969; published Apr. 21, 1931. Class 1.

Breck, John H., Inc., Springfield, Mass. Preparations for the treatment of the hair and scalp. 285,031; July 14; Serial No. 311,507; published Apr. 28, 1931. Class 6.

Brilliant Brothers Co., Boston, Mass. Leather shoes. 285,159; July 14; Serial No. 311,252; published Apr. 28, 1931. Class 39.

Brinkworth, Charles B., Boston, Mass. Liquid rubber used to prevent rugs from slipping. 285,023; July 14; Serial No. 308,924; published Apr. 28, 1931. Class 5.

British Enka Artificial Silk Company Limited, London, England. Imitation straw and horsehair. 285,114; July 14; Serial No. 310,750; published May 5, 1931. Class 1.

Brocker, Ben, doing business as Geté, New York, N. Y. Cosmetics, astringents, cold cream, etc. 284,932; July 14; Serial No. 310,551; published Apr. 21, 1931. Class 6.

Brown Durrell Co., Boston, Mass. Handkerchiefs. 82,959; renewed Aug. 8, 1931.

Brumbach & Miller, Inc., Temple, Pa. Hosiery. 284,953; July 14; Serial No. 311,508; published Apr. 28, 1931. Class 39.

Buffington, R. L., doing business as Carbonless Fuel Company, Columbus, Ohio. Gasoline containing a chemical preparation. 284,988; July 14; Serial No. 302,210. Class 15.

Bürki, Peter, doing business as Peter Bürki, Lucerne, Switzerland. Cheese. 285,134–5; July 14; Serial Nos. 310,248–9; published Apr. 21, 1931. Class 46.

Burndy Engineering Company, Inc., New York, N. Y. Electrical connectors. 284,960; July 14; Serial No. 311,081; published Apr. 21, 1931. Class 21.

Butler Manufacturing Company, Kansas City, Mo. Fabricated steel. 285,197; July 14. Class 14.

Cain, Ed, Chicago, Ill. Jewelry. 285,142; July 14; Serial No. 311,053; published Apr. 7, 1931. Class 28.

Canadian Club Corporation, Philadelphia, Pa. Maltless beverages and sirups, extracts, and emulsions for making the same. 285,085–6; July 14; Serial Nos. 312,476–7; published May 5, 1931. Class 45.

Carbonless Fuel Company. (See Buffington, R. L.)

Central De Luxe Manufacturing Co. (See Davis, Ben.)

Cherry & Roth, Los Angeles, Calif. Ladies' sportswear. 285,115; July 14; Serial No. 310,481; published Apr. 14, 1931. Class 39.

Chickamauga Cedar Company, Stevenson, Ala. Cedar closet lining. 285,130; July 14; Serial No. 299,760; published Apr. 21, 1931. Class 12.

Chipman's, Chas., Sons Co., Inc., New York, N. Y. Hosiery. 285,116; July 14; Serial No. 310,757; published Apr. 14, 1931. Class 39.

Cincinnati Wholesale Grocery Company, The, Cincinnati, Ohio. Canned fruits, canned vegetables, canned berries, etc. 284,912; July 14; Serial No. 310,250; published May 5, 1931. Class 46.

Clago Radio Corporation, The, Chicago, Ill. Radio receiving sets. 285,151; July 14; Serial No. 305,389; published Apr. 14, 1931. Class 21.

Clover Hill Silver Fox Co., Clover Hill, N. J. Fox pelts. 285,156; July 14; Serial No. 311,181; published Apr. 28, 1931. Class 1.

Cluett, Peabody & Co., Inc., Troy, N. Y. Belts for outside wear. 285,120; July 14; Serial No. 245,049; published Apr. 28, 1931. Class 39.

Collins Company, The, Collinsville, Conn. Axes and machetes. 284,950; July 14; Serial No. 312,511; published May 5, 1931. Class 23.

Colorado Fuel and Iron Company, The, Denver, Colo. Metal wire and metal rails for railway tracks. 285,188; July 14. Class 14.

Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Rifles and machine guns. 285,090; July 14; Serial No. 312,548; published May 5, 1931. Class 9.

Comar & Co., Paris, France. Solution used hypodermically in all cases where arsenical medication is indicated. 285,180; July 14. Class 6.

Combine Hosiery Corporation, Wilmington, Del., and New York, N. Y. Hosiery. 285,074; July 14; Serial No. 311,560; published Apr. 28, 1931. Class 39.

Commercial Importing Co. Inc., Seattle, Wash. Tea. 285,141; July 14; Serial No. 301,852; published May 5, 1931. Class 46.

Condenser Corporation of America, Jersey City, N. J. Electrical condensers. 284,924; July 14; Serial No. 309,461; published Mar. 10, 1931. Class 21.

Consolidated Patentees, Inc., New York, N. Y. Medicinal cream. 284,928; July 14; Serial No. 309,332; published Apr. 21, 1931. Class 6.

Consolidated Rendering Co., Boston, Mass. Soap and grease for soap making. 285,189; July 14. Class 4.

Consolidated Rendering Company, doing business as Atlantic Packing Company, Boston, Mass. Soap and grease for soap making. 285,190; July 14. Class 4.

Consumer's Coal and Coke Company, Flint, Mich. Coal. 285,164; July 14; Serial No. 311,649; published Apr. 28, 1931. Class 1.

Continental Baking Company, Wilmington, Del., and New York, N. Y. Bread. 285,125; July 14; Serial No. 283,387; published Apr. 21, 1931. Class 46.

Cotton States Dairy Laboratories, Nashville, Tenn. Fermenting cultures. 284,936; July 14; Serial No. 311,421; published Apr. 7, 1931. Class 6.

Craigellachie-Glenlivet Distillery Co. Limited, assignor to The Stirling Bonding Company, Limited, Glasgow, Scotland. Blended whisky. 82,056; renewed May 30, 1931.

Craigellachie-Glenlivet Distillery Co. Limited, assignor to The Stirling Bonding Company, Limited, Glasgow, Scotland. Blended whisky. 82,499; renewed July 4, 1931.

Crescent Shoe Co., New York, N. Y. Shoes. 285,021; July 14; Serial No. 307,968; published Apr. 28, 1931. Class 39.

Daggett & Ramsdell, New York, N. Y. Cold cream and cleansing cream. 285,025; July 14; Serial No. 310,902; published Apr. 28, 1931. Class 6.

Daggett & Ramsdell, New York, N. Y. Vanishing cream. 285,026; July 14; Serial No. 310,903; published Apr. 28, 1931. Class 6.

Daggett & Ramsdell, New York, N. Y. Cold cream and cleansing cream. 285,027; July 14; Serial No. 310,904; published Apr. 28, 1931. Class 6.

Daggett & Ramsdell, New York, N. Y. Vanishing cream. 285,028; July 14; Serial No. 310,905; published Apr. 28, 1931. Class 6.

Dassonville, Michel, Paris, France. Artificial cellulostic material. 285,058; July 14; Serial No. 305,999; published Apr. 21, 1931. Class 1.

Davis, Ben, doing business as Central De Luxe Manufacturing Co., New York, N. Y. Undergarments. 285,154; July 14; Serial No. 311,086; published Apr. 28, 1931. Class 39.

Davis Leather Company, Ltd., Newmarket, Ontario, Canada. Leather. 285,160; July 14; Serial No. 311,775; published Apr. 28, 1931. Class 1.

Denise et Cie. (See Wise, Jerome C.)

De Pinna, A., Co., Inc., New York, N. Y. Shoes, boots, and slippers. 285,133; July 14; Serial No. 310,122; published Apr. 21, 1931. Class 39.

Deutsche Calypsol-Gesellschaft mit beschränkter Haftung, Dusseldorf, Germany. Lubricating oils and greases. 285,160; July 14; Serial No. 311,326; published Apr. 7, 1931. Class 15.

Diamond Power Specialty Corporation, Detroit, Mich. Gauge glasses, water columns and gauges. 284,934; July 14; Serial No. 310,818; published May 5, 1931. Class 26.

Dietz, Anna C., doing business as Rex Modeling Clay Co., New York, N. Y. Modeling clay. 285,175; July 14; Serial No. 312,601; published May 5, 1931. Class 1.

Douglas, W. L., Shoe Co., Portland, Me.; Boston and Brockton, Mass.; New York and Buffalo, N. Y.; Denver, Colo.; and Philadelphia, Pa., assignor to W. L. Douglas Shoe Company, Brockton, Mass. Leather boots and shoes. 82,876; renewed Aug. 1, 1931.

Dumari Textile Co., Inc., New York, N. Y. Dresses, skirts, kimonos, etc. 285,139; July 14; Serial No. 310,937; published Apr. 28, 1931. Class 39.

E-Z-Way Egg Preserver Co., Minneapolis, Minn. Egg preserver. 285,033; July 14; Serial No. 311,602; published Apr. 21, 1931. Class 6.

Eastman Kodak Company, Rochester, N. Y. Photographic film. 284,948; July 14; Serial No. 312,555; published May 5, 1931. Class 26.

Electric Clock Corporation of America, Chicago, Ill. Time indicating apparatus. 285,184; July 14. Class 27.

Electrolux, Inc., New York, N. Y. Floor polishers and parts thereof. 284,977; July 14; Serial No. 311,601; published Apr. 21, 1931. Class 21.

Ellis, Harvey W., doing business as Sap Laboratory Company, Waskom, Tex. Preparation for high blood pressure. 285,036; July 14; Serial No. 311,650; published Apr. 21, 1931. Class 6.

Engel-Cohen, Joseph, Co., Inc., The, New York, N. Y. Suits. 285,017; July 14; Serial No. 295,940; published Apr. 28, 1931. Class 39.

Engel-Cohen, Joseph, Co., Inc., The, New York, N. Y. Coats. 285,018; July 14; Serial No. 295,939; published Apr. 28, 1931. Class 39.

Enso-Gutzeit Osakeyhtiö, Kotka, Finland. Cellulose. 285,169; July 14; Serial No. 312,097; published Apr. 21, 1931. Class 1.

Etablissements Roques, Paris, France. Anæsthetics. 284,990; July 14; Serial No. 305,112; published Apr. 21, 1931. Class 6.

Farley, E. O., Limited, Camperdown, near Sydney, Australia. Digestive beverage material containing chocolate and yeast. 285,052; July 14; Serial No. 303,049; published May 5, 1931. Class 46.

Filtros Incorporated, Rochester, N. Y. Acid-proof mineral substance. 285,171; July 14; Serial No. 312,337; published Apr. 28, 1931. Class 1.

Firestone Footwear Company, Hudson, Mass. Rubber heels. 285,155; July 14; Serial No. 311,135; published Apr. 21, 1931. Class 39.

Fischer, Maxmillian, New Orleans, La. Preparation for the treatment of asthma. 285,000; July 14; Serial No. 307,911; published Apr. 21, 1931. Class 6.

Fleer, Frank H., Corporation, Philadelphia, Pa. Chewing gum. 284,993; July 14; Serial No. 305,967; published May 5, 1931. Class 46.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 285,157; July 14; Serial No. 311,138; published Apr. 21, 1931. Class 42.

Frosted Foods Company, Inc., New York, N. Y. Frozen food products. 285,148; July 14; Serial No. 301,024; published May 5, 1931. Class 46.

Gabilla, Incorporated, New York, N. Y. Perfume, toilet water, and powder. 284,951; July 14; Serial No. 311,436; published Apr. 21, 1931. Class 6.

Gamewell Company, The, Newton and Newton Upper Falls, Mass. Electrical fire-alarm systems and parts thereof. 284,978; July 14; Serial No. 311,680; published Apr. 21, 1931. Class 21.

Gash-Stull Company, Chester, Pa. Lubricating oils. 284,979; July 14; Serial No. 311,833; published Apr. 21, 1931. Class 15.

Gebruder Junghans A. G. (See Vereinigte Uhrenfabriken von Gebrüder Junghans & Thomas Haller A-G.)

Gebrüder Thomass Bierbrauerei zum Thomasbräu, assignor to Aktiengesellschaft Paulanerbrau Salvatorbrauerei und Thomasbrau, Munich, Germany. Beer. 83,829; renewed Oct. 17, 1931.

General Coal Company, Cincinnati, Ohio. Coal. 285,045; July 14; Serial No. 311,874; published Apr. 28, 1931. Class 1.

General Mills, Inc., Minneapolis, Minn. Wheat flour. 285,170; July 14; Serial No. 312,181; published Apr. 28, 1931. Class 46.

Geté. (See Brocker, Ben.)

Gilbert Shoe Co., The, Thiensville, Wis. Leather. 285,199; July 14. Class 1.

Gish, Daniel B., doing business as Reda Manufacturing Company, Worcester, Mass. Wrenches. 285,202; July 14. Class 23.

Gitman Brothers, Cincinnati, Ohio. Fresh vegetables. 284,920; July 14; Serial No. 311,329; published May 5, 1931. Class 46.

Glidden Company, The, doing business as Wisconsin Food Products Co., Cleveland, Ohio. Pure uncolored oleomargarine. 285,055; July 14; Serial No. 304,813; published May 5, 1931. Class 46.

Globe Machine & Stamping Co., The, Cleveland, Ohio. Steel boxes for holding tools and batteries. 82,072; renewed May 30, 1931.

Gluck & Cohen, New York, N. Y. Ladies' underwear. 285,103; July 14; Serial No. 309,599; published Apr. 14, 1931. Class 39.

Goldman, Meyer, Philadelphia, Pa. Apparel for dolls. 285,087; July 14; Serial No. 312,518; published May 5, 1931. Class 22.

Gordon, Abe, doing business as Black Magic Products Company, assignor to Black Magic Products Co., Detroit, Mich. Automobile radiator seal and cleaner, radiator cleaner, and scale preventative. 284,987; July 14; Serial No. 301,906; published Apr. 21, 1931. Class 6.

Gorman, Frank F., doing business as Separafine Manufacturing Company, Bristow, Okla. Chemical compositions. 285,034; July 14; Serial No. 311,605; published Apr. 21, 1931. Class 6.

Goudey Gum Co., The, Allston, Mass. Chewing gum. 284,974; July 14; Serial No. 311,330; published May 5, 1931. Class 46.

Grand Rapids Plaster Co., Grand Rapids, Mich. Wall plaster. 37,054; renewed Sept. 10, 1931.

Green Caddie Corporation, Detroit, Mich. Golf tees. 285,104; July 14; Serial No. 300,611; published May 5, 1931. Class 22.

Green, George F., doing business as Nu-Form-Le Laboratory, Culver City, Calif. Medical preparation. 284,926; July 14; Serial No. 309,239; published Apr. 21, 1931. Class 6.

Greenwald, Abraham A., doing business as Jacob Stahl Jr. & Co., New York, N. Y. Cigars. 285,191; July 14. Class 17.

Gretsch & Brenner, Inc., New York, N. Y. Musical instrument strings. 285,196; July 14. Class 36.

"Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft m. b. H., Frankfort-on-the-Main-Griesheim, Germany. Gaseous and liquid fuels. 285,132; July 14; Serial No. 309,684; published Apr. 28, 1931. Class 6.

Griess Pfleger Tanning Company, The, Cincinnati, Ohio. Leathers. 285,065; July 14; Serial No. 296,225; published Apr. 28, 1931. Class 1.

Grissmann, Gus, Co., Inc., New York, N. Y. Hosiery. 284,959; July 14; Serial No. 312,149; published Apr. 28, 1931. Class 39.

Grosbier, Margaret, doing business as The Grosbier Company, Washington, D. C. Medical compound. 284,946; July 14; Serial No. 312,322; published Apr. 28, 1931. Class 6.

Hadad, Henry Co. Inc., New York, N. Y. Pajamas. 285,082; July 14; Serial No. 312,298; published Apr. 28, 1931. Class 39.

Hahn, Wm., & Company, Washington, D. C. Shoes. 285,153; July 14; Serial No. 311,032; published Apr. 21, 1931. Class 39.

Hanna, M. A., Company, The, Cleveland, Ohio. Hard coal, bituminous coal, and coke. 285,093–4; July 14; Serial Nos. 312,645–6; published May 5, 1931. Class 1.

Higgins, Grover B., doing business as The Neverknot Co., Chicago, Ill. Electrical connection plugs and connection cord sets. 284,972; July 14; Serial No. 311,143; published Apr. 21, 1931. Class 21.

Hofferd, Leo J., doing business as White Cross Laboratories, Cedar Rapids, Iowa. Medicinal preparation. 284,941; July 14; Serial No. 311,960; published Apr. 28, 1931. Class 6.

Hollywood Candy Co. (See Martoccio, F. A., Company.)

Hurlbut Paper Company, South Lee, Mass. Writing and printing paper. 285,180–7; July 14. Class 37.

Indestructo Trunk Company, The, Mishawaka, Ind. Receptacles, such as wardrobe trunks, dress trunks, etc. 284,984; July 14; Serial No. 297,193; published Sept. 16, 1930. Class 3.

Indianapolis Glove Company, Indianapolis, Ind. Gloves. 285,161; July 14; Serial No. 311,408; published Apr. 21, 1931. Class 39.

International Graphite & Electrode Corporation, Niagara Falls, N. Y. Graphite electrodes, plates, and anodes. 284,914; July 14; Serial No. 311,148; published Apr. 14, 1931. Class 21.

International Safety Razor Corp., Bloomfield, N. J. Razor blades. 284,949; July 14; Serial No. 312,563; published May 5, 1931. Class 23.

International Safety Razor Corp., Bloomfield, N. J. Razors and razor blades. 284,961; July 14; Serial No. 312,564; published May 5, 1931. Class 23.

International Silver Company, Meriden, Conn. Silver-plated and sterling-silver articles. 284,922; July 14; Serial No. 311,370; published Apr. 21, 1931. Class 28.

International Silver Company, Meriden, Conn. Flatware. 285,126; July 14; Serial No. 291,838; published Apr. 7, 1931. Class 28.

Internationaler Maratti-Maschinenverkauf-A.-G., Berlin, Berlin, Germany. Wearing apparel. 285,057; July 14; Serial No. 305,532; published Apr. 28, 1931. Class 39.

Isaac, Wm., & Son, New York, N. Y. Footwear. 285,053; July 14; Serial No. 304,146; published Apr. 21, 1931. Class 39.

Jameson-Boyce Company, Binghamton, N. Y. Flour, canned fruit and vegetables, etc. 285,127; July 14; Serial No. 292,731; published May 5, 1931. Class 46.

Johnson, Noah A., Kyles Ford, Tenn. Salve. 285,046; July 14; Serial No. 311,875; published Apr. 21, 1931. Class 6.

Junkers, Hugo, Dessau, Germany. Altimeters, instruments for taking bearings, inclinometers, etc. 285,007; July 14; Serial No. 279,920; published May 5, 1931. Class 26.

K O System of Sanitation, Cleveland, Ohio. Deodorants. 285,038; July 14; Serial No. 311,736; published Apr. 21, 1931. Class 6.

Kawneer Company, The, Niles, Mich. Window constructions, metal window constructions, store fronts, etc. 285,192; July 14. Class 12.

Kennedy, W. J., Dairy Co., Detroit, Mich. Dairy products. 285,059; July 14; Serial No. 306,532; published May 5, 1931. Class 46.

Kennel Gardens, Inc. (See Simpson, W. Earl.)

Kiel Furniture Co., The, Milwaukee, Wis. Resonators for loud-speakers. 285,150; July 14; Serial No. 303,908; published Apr. 7, 1931. Class 36.

Kinox Company, Inc., The, Rutland, Vt. Medicated plasters for use in the treatment of callouses, bunions and corns. 285,176; July 14. Class 6.

Kiwanis International, Chicago, Ill. Buttons and emblems. 285,049; July 14; Serial No. 299,267; published Apr. 7, 1931. Class 28.

Ko-Rect Posture Chair Company. (See Biltwell Chair and Furniture Company.

Kramer, Lawrence Z., doing business as The Modern Products Company, Jackson, Mich. Tooth paste. 285,179; July 14. Class 6.

Krause, Chas. A., Milling Co., Milwaukee, Wis. Gelatinized corn flour used as an adhesive. 285,173; July 14; Serial No. 312,437; published Apr. 28, 1931. Class 5.

Kress, Rosalind E., New York, N. Y. Trousers. 284,966; July 14; Serial No. 311,191; published Apr. 21, 1931. Class 39.

Lambert, John B., Woonsocket, R. I. Soda-water. 84,012; renewed Oct. 31, 1931.

Lanman & Kemp, assignor to Lanman & Kemp, Inc., New York, N. Y. Pectoral compound for pulmonary affections, and an anodyne. 84,106; renewed Nov. 7, 1931.

Lanman & Kemp, assignor, by mesne assignments, to Lanman & Kemp, Inc., New York, N. Y. Double extract of witch hazel. 84,107; renewed Nov. 7, 1931.

Lanman & Kemp, assignor to Lanman & Kemp, Inc., New York, N. Y. Vegetable pastils for expelling worms from the system. 84,108; renewed Nov. 7, 1931.

Lanman & Kemp, assignor to Lanman & Kemp, Inc., New York, N. Y. Cathartic pills. 84,109; renewed Nov. 7, 1931.

Lanman & Kemp, assignor to Lanman & Kemp, Inc., New York, N. Y. Emollients. 84,110; renewed Nov. 7, 1931.

Larvacide Service Inc., New York, N. Y. Insecticides. 285,047; July 14; Serial No. 311,877; published Apr. 21, 1931. Class 6.

Lash's Products Company, San Francisco, Calif. Beverages and syrups, compounds, flavors, and concentrates for making the same. 285,083; July 14; Serial No. 312,302; published May 5, 1931. Class 45.

Lee, Edwin A., Philadelphia, Pa. Hosiery. 285,119; July 14; Serial No. 311,001; published Apr. 14, 1931. Class 39.

Lefferman, Rebecca, doing business as The Silver Bottling Works, Port Chester, N. Y. Maltless beverages and syrups and extracts used in making the same. 285,091; July 14; Serial No. 312,565; published May 5, 1931. Class 45.

Le Flore Poteau Coal Company, Tulsa, Okla. Coal. 285,039; July 14; Serial No. 311,741; published Apr. 28, 1931. Class 1.

Leggett, Francis H., & Company, New York, N. Y. Food for dogs. 285,174; July 14; Serial No. 312,505; published May 5, 1931. Class 46.

Lincoln Oil Refining Company, Robinson, Ill. Storage batteries. 284,970; July 14; Serial No. 310,721; published Apr. 21, 1931. Class 21.

Lowenbaum, R., Mfg. Co., St. Louis, Mo. Wearing apparel. 285,109; July 14; Serial No. 310,521; published Apr. 14, 1931. Class 39.

Lyndonville Canning Company, Inc., The, Lyndonville, N. Y. Canned applesauce. 284,983; July 14; Serial No. 312,656; published May 5, 1931. Class 46.

Maclin-Zimmer-McGill Tobacco Co. Incorporated. (See Maclin-Zimmer Tobacco Co. Incorporated, assignor.)

Maclin-Zimmer Tobacco Co. Incorporated, assignor to Maclin-Zimmer-McGill Tobacco Co. Incorporated, Petersburg, Va. Plug, twist cut plug smoking-tobacco and leaf tobacco. 84,184; renewed Nov. 14, 1931.

Madeira, Hill & Company, Philadelphia, Pa. Anthracite coal. 285,044; July 14; Serial No. 311,786; published Apr. 28, 1931. Class 1.

Magdent Laboratories. (See Tinsky, Samuel.)

Mallorov Cap Co., Minneapolis, Minn. Hats and caps. 285,136; June 14; Serial No. 310,564; published Apr. 21, 1931. Class 39.

Marion Orange Crush Bottling Company, Inc., doing business as Orange Crush Bottling Co., Inc., and Blue Ridge Ginger Ale Co., Marion, Va. Maltless beverages. 285,131; July 14; Serial No. 304,056; published May 5, 1931. Class 45.

Marshall Field & Company, Chicago, Ill. Rubber tires and tubes. 284,957; July 14; Serial No. 312,144; published May 5, 1931. Class 35.

Marshall Field & Company, Chicago, Ill. Rubber tires and tubes. 284,958; July 14; Serial No. 312,146; published May 5, 1931. Class 35.

Martoccio, F. A., Company, doing business as Hollywood Candy Co., Minneapolis, Minn. Candy bars. 284,982; July 14; Serial No. 312,611; published May 5, 1931. Class 46.

Marvelax Corporation, Minneapolis, Minn. Laxative medicine. 284,943; July 14; Serial No. 312,055; published Apr. 28, 1931. Class 6.

Maskey, Anna, doing business as Maskey's, San Francisco, Calif. Candies. 284,910; July 14; Serial No. 310,134; published May 5, 1931. Class 46.

Maskey, Anna, doing business as Maskey's, San Francisco, Calif. Candies. 284,925; July 14; Serial No. 310,133; published May 5, 1931. Class 46.

Mayers & Schiller, Inc., New York, N. Y. Ladies' undergarments. 285,069; July 14; Serial No. 300,732; published Apr. 14, 1931. Class 39.
McGuire, P. J., Wenatchee, Wash. Fresh apples. 284,989; July 14; Serial No. 305,048; published May 5, 1931. Class 46.
McKesson & Robbins, Incorporated, Bridgeport, Conn. Salve, baby powder, and baby cream. 285,020; July 14; Serial No. 293,056; published Apr. 28, 1931. Class 6.
Menley & James, Limited, New York, N. Y. Ointment. 285,035; July 14; Serial No. 311,618; published Apr. 21, 1931. Class 6.
Merco Nordstrom Valve Company, San Francisco, Calif. Lubricating greases. 285,121; July 14; Serial No. 271,616; published Apr. 1, 1930. Class 15.
Michigan City Tanning Company, The, Michigan City, Ind. Leather. 285,064; July 14; Serial No. 294,736; published Apr. 21, 1931. Class 1.
Minnesota Consolidated Canneries, Inc., Minneapolis, Minn. Canned corn. 285,147; July 14; Serial No. 301,490; published May 5, 1931. Class 46.
Modern Products Company, The. (See Kramer, Lawrence Z.)
Moffat Coal Company, The, Denver, Colo. Coal. 285,143; July 14; Serial No. 311,152; published Apr. 21, 1931. Class 1.
Morand, A. C., Corporation, San Francisco, Calif. Chaps, vests, apparel belts, and riding cuffs. 285,137; July 14; Serial No. 310,874; published Apr. 21, 1931. Class 39.
Morehouse, Chas D., El Monte, Calif. Fresh rhubarb. 284,992; July 14; Serial No. 305,720; published May 5, 1931. Class 46.
Morel, Adele, Inc., New York, N. Y. Liquid preparations for use upon the face. 285,032; July 14; Serial No. 311,585; published Apr. 28, 1931. Class 6.
Munn & Co., Inc., assignor to Scientific American Publishing Company, New York, N. Y. Weekly periodicals. 84,333; renewed Nov. 18, 1931.
Murphy, Mary E., Dallas, Tex. Window shades and window-shade rollers. 285,206; July 14. Class 32.
National Aniline & Chemical Company, Inc., New York, N. Y. Wetting-out agents, emulsifying agents, and dye assistants. 284,944; July 14; Serial No. 312,114; published Apr. 28, 1931. Class 6.
National Biscuit Company, Jersey City, N. J. and New York, N. Y. to National Biscuit Company, New York, N. Y. Biscuit. 83,858; renewed Oct. 17, 1931.
National Car Wheel Company, Rochester, N. Y., and Pittsburgh, Pa., assignor to Southern Wheel Company, Atlanta, Ga., and New York, N. Y. Car-wheels. 83,764; renewed Oct. 10, 1931.
National Labeling Machine Co., Inc., Long Island City, N. Y. Machines for applying labels. 285,009; July 14; Serial No. 276,896; published May 5, 1931. Class 23.
National Musical String Co., New Brunswick, N. J. Strings for musical instruments. 81,021; renewed Feb. 21, 1931.
Naugatuck Chemical Company, The, New York, N. Y. Condensation product of formaldehyde and ethylamine. 285,004; July 14; Serial No. 309,276; published May 5, 1931. Class 1.
Naylor, Ford, New York, N. Y. Suits, coats, vests, etc. 284,954; July 14; Serial No. 311,622; published Apr. 21, 1931. Class 39.
Neverknot Co., The. (See Higgins, Grover B.)
New England Cranberry Sales Company, Middleboro, Mass. Cranberries. 285,008; July 14; Serial No. 276,976; published June 3, 1930. Class 46.
New England Fish Company, Seattle, Wash. Canned salmon. 284,991; July 14; Serial No. 305,365; published May 5, 1931. Class 46.
Newport Company, The, Carrollville, Wis. Rosin. 285,066; July 14; Serial No. 296,666; published Apr. 21, 1931. Class 1.
Newskin Company. (See Waldstein, Martin E., assignor.)
Norge Corporation, Detroit, Mich. Water coolers. 285,077; July 14; Serial No. 311,883; published May 5, 1931. Class 31.
North American Refractories Co., Cleveland, Ohio. Fire brick. 285,071; July 14; Serial No. 311,533; published Apr. 21, 1931. Class 12.
Northern Jobbing Company, Chicago, Ill. Shirts. 284,955; July 14; Serial No. 311,844; published Apr. 21, 1931. Class 39.
Nu-Form-Le Laboratory. (See Green, George F.)
Nyal Company, Detroit, Mich. Perfumes, face powder, cleansing cream, etc. 285,203; July 14. Class 6.
Ohio Brass Company, The, Mansfield, Ohio. Metals and alloys, rods, etc. 284,969; July 14; Serial No. 311,412; published May 5, 1931. Class 14.
Orange Crush Bottling Co., Inc. (See Marion Orange Crush Bottling Company, Inc.)
Orbit Listerated Gum Company, Chicago, Ill. Chewing gum. 284,919; July 14; Serial No. 312,308; published May 5, 1931. Class 46.
Orenstein Trunk Co., Inc., Newark, N. J. Wardrobe trunks, steamer trunks, etc. 285,012; July 14; Serial No. 286,677; published July 15, 1930. Class 3.
Orenstein Trunk Co., Inc., Newark, N. J. Trunks, Pullman cases, auto trunks, etc. 285,014; July 14; Serial No. 286,678; published July 15, 1930. Class 3.
Orr, J. K., Shoe Company, Atlanta, Ga. Shoes. 285,140; July 14; Serial No. 310,945; published Apr. 28, 1931. Class 39.
Panther Oil & Grease Mfg. Co., Fort Worth, Tex. Lubricating oils and greases. 285,204; July 14. Class 15.
Paragon Novelty Bag Co., Inc., New York, and Newburgh, N. Y. Hand bags, billfolds, wallets, and purses. 285,078; July 14; Serial No. 311,970; published May 5, 1931. Class 3.
Paris American Pharmacal Company, Des Moines, Iowa. Dental cream. 285,198; July 14. Class 6.
Parker Brothers Inc., Salem, Mass. Board game. 285,080; July 14; Serial No. 312,248; published May 5, 1931. Class 22.
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Card game. 285,092; July 14; Serial No. 312,622; published May 5, 1931. Class 22.
Pinaud Incorporated, New York, N. Y. Face powder. 285,011; July 14; Serial No. 286,897; published Feb. 24, 1931. Class 6.
Play-O-Lite Co. Inc., Buffalo, N. Y. Electric lamps. 285,068; July 14; Serial No. 101,458; published June 12, 1917. Class 21.
Process Engineering and Equipment Corporation, Attleboro, Mass. Electric furnaces, conductors, rheostats, etc. 285,002; July 14; Serial No. 308,032; published Apr. 7, 1931. Class 21.
Process Holdings Company, Portland, Oreg. Insulating material. 285,112; July 14; Serial No. 310,657; published Apr. 21, 1931. Class 12.
Pyott Foundry & Machine Co., Chicago, Ill. Power transmission machinery. 285,001; July 14; Serial No. 307,953; published May 5, 1931. Class 23.
Quality Frock Company, Los Angeles, Calif. Dresses. 285,105; July 14; Serial No. 300,868; published Apr. 14, 1931. Class 39.
Rae Chemical Company, Cincinnati, Ohio. Ointment. 285,048; July 14; Serial No. 311,929; published Apr. 21, 1931. Class 6.
Rankin, Wm. H., Company, Chicago, Ill. Beverages and compounds, concentrates, and syrups for making the same. 285,122; July 14; Serial No. 275,296; published May 5, 1931. Class 45.
Rasmussen, Geo., Co., Chicago, Ill. Butter, cocoa, coffee, etc. 285,145; July 14; Serial No. 297,329; published May 5, 1931. Class 46.
Raylite Trading Co., Inc., New York, N. Y. Electric-light bulbs, fuses, plugs, etc. 284,915; July 14; Serial No. 311,200; published Apr. 7, 1931. Class 21.
Ream, Charles A., Lancaster, Pa. Golf game boards. 285,106; July 14; Serial No. 310,026; published May 5, 1931. Class 22.
Reda Manufacturing Company. (See Gish, Daniel B.)
Reeves, Robert C., Co., New York, N. Y. Wire-bound wooden fences. 285,129; July 14; Serial No. 296,793; published May 6, 1930. Class 12.
Refrigeration Corporation of Maryland, Baltimore, Md. Refrigerating cabinets. 285,095; July 14; Serial No. 312,774; published May 5, 1931. Class 31.
Rex Modeling Clay Co. (See Dietz, Anna C.)
Rex Research Corporation, Toledo, Ohio. Antiseptic ointment and rub inhalant. 284,930; July 14; Serial No. 309,089; published Mar. 3, 1931. Class 6.
Reynolds & Co., New York, N. Y. Cheese. 285,088; July 14; Serial No. 312,532; published May 5, 1931. Class 46.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Smoking-tobacco. 84,044; renewed Oct. 31, 1931.
Riker Company, The, Newark, N. J. Buckles. 285,144; July 14; Serial No. 311,284; published Apr. 21, 1931. Class 40.
Roanoke City Mills, Incorporated, Roanoke, Va. Wheat flour. 285,063; July 14; Serial No. 296,240; published Apr. 1, 1930. Class 46.
Rossie Velvet Company, Mystic, Conn. Pile fabric. 285,172; July 14; Serial No. 312,268; published Apr. 28, 1931. Class 42.
Roth, Samuel, doing business as Acratest Products Co., New York, N. Y. Radio receiving sets and parts. 284,923; July 14; Serial No. 310,776; published Apr. 21, 1931. Class 21.
Rowe, Arthur F., Lansing, Mich. Plastic composition. 285,201; July 14. Class 12.
Russell, Charles L. R., Brooklyn, N. Y. Moth repellant. 285,029; July 14; Serial No. 311,112; published Apr. 21, 1931. Class 6.
Russell Manufacturing Company, The, Middletown, Conn. Brake lining. 284,962; July 14; Serial No. 312,572; published May 5, 1931. Class 35.
S & R Infants Wear Co., New York, N. Y. Infants' wear. 285,113; July 14; Serial No. 310,700; published Apr. 21, 1931. Class 39.
St. Paul & Tacoma Lumber Company, Tacoma, Wash. Shingles. 285,070; July 14; Serial No. 311,288; published Apr. 21, 1931. Class 12.
Saks & Company, New York, N. Y. Brassières and combinations thereof. 285,167; July 14; Serial No. 311,790; published Apr. 21, 1931. Class 39.
Sano Typewriter Pad Company, Wilkes-Barre, Pa. Cushioning pads. 284,960; July 14; Serial No. 312,455; published May 5, 1931. Class 50.
Sap Laboratory Company. (See Ellis, Harvey W.)
Saville, Allen J., Inc., Richmond, Va. Reinforced-concrete shingles. 285,072; July 14; Serial No. 311,538; published Apr. 21, 1931. Class 12.

Saville, Allen J., Inc., Richmond, Va. Concrete reproductions of shingles. 285,073; July 14; Serial No. 311,540; published Apr. 21, 1931. Class 12.
Schrank, M. C., Company, Bridgeton, N. J. Slips, petticoats, and nightgowns. 285,110–11; July 14; Serial Nos. 310,588–9; published Apr. 21, 1931. Class 39.
Scientific American Publishing Company. (See Munn & Co., Inc., assignor.)
Scovill Manufacturing Company, Waterbury, Conn. Street and floor markers. 285,195; July 14. Class 50.
Separafine Manufacturing Company. (See Gorman, Frank F.)
Shapleigh Hardware Company, St. Louis, Mo. Radio receiving and transmitting sets and parts thereof, etc. 285,177; July 14. Class 21.
Shastock, Louis W., doing business as L. W. Shastock Company, Cleveland, Ohio. Mutes and attachments for wind instruments, megaphones, batons, etc. 285,205; July 14. Class 36
Shoe Form Co., Inc., Auburn, N. Y. Toy boats. 285,076; July 14; Serial No. 311,344; published May 5, 1931. Class 22.
Silver Bottling Works, The. (See Lefferman, Rebecca.)
Simpson, W. Earl, doing business as Kennel Gardens, Inc., Elkridge, Md. Dog food. 285,117; July 14; Serial No. 310,949; published May 5, 1931. Class 46.
Sioux Oil Co. (See Aasen, H. S.)
Smith, Kline & French Laboratories, Philadelphia, Pa. Medicine. 284,942; July 14; Serial No. 312,019; published Apr. 28, 1931. Class 6.
Smith, W. L., Orchards, Inc., Cheswold, Del. Sweet cider. 285,079; July 14; Serial No. 312,163; published May 5, 1931. Class 45.
Società Anonima Delle Terme di S. Pellegrino, S. Pellegrino, Bergamo, Italy. Antacid. 284,995; July 14; Serial No. 306,468; published Apr. 28, 1931. Class 6.
Society of Chemical Industry in Basle, Basel, Switzerland. Coal-tar dyestuffs. 285,024; July 14; Serial No. 310,455; published Apr. 28, 1931. Class 6.
Southern Rice Sales Company, Inc., New York, N. Y. Rice, barley, dried peas, etc. 285,005; July 14; Serial No. 310,780; published May 5, 1931. Class 46.
Southern Wheel Company. (See National Car Wheel Company, assignor.)
Southland Coffee Company, Macon, Ga. Coffee. 284,980; July 14; Serial No. 311,982; published May 5, 1931. Class 46.
Southland Coffee Company, Macon, Ga. Coffee. 284,981; July 14; Serial No. 312,576; published May 5, 1931. Class 46.
Spencer Chain Stores, Inc., Boston, Mass. Shoes. 285,056; July 14; Serial No. 304,220; published Apr. 28, 1931. Class 39.
Spratt's Patent (America) Limited, London, England. Dog food. 285,089; July 14; Serial No. 312,537; published May 5, 1931. Class 46.
Spry, John W., Dallas, Tex. Asphalt, brick, and concrete paving material. 285,099; July 14; Serial No. 309,179; published Apr. 21, 1931. Class 12.
Stahl, Jacob, jr. & Co. (See Greenwald, Abraham A.)
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Nose and throat spray. 284,938; July 14; Serial No. 311,760; published Apr. 28, 1931. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Nose and throat spray. 284,939; July 14; Serial No. 311,758; published Apr. 28, 1931. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Nose and throat spray. 285,040; July 14; Serial No. 311,759; published Apr. 21, 1931. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Nose and throat spray. 285,041; July 14; Serial No. 311,761; published Apr. 21, 1931. Class 6.
Standard Oil Company, The, Cleveland, Ohio. Lubricating oils and greases. 285,194; July 14. Class 15.
Stanley Works, The, New Britain, Conn. Rules. 284,986; July 14; Serial No. 300,763; published Jan. 27, 1931. Class 28.
Star Watch Case Co., Ludington, Mich. Watchcases. 83,609; renewed Sept. 26, 1931.
Sternberg, Haberland, Liebert & Co., Berlin, Germany. Powders, rouges, cold creams, etc. 285,019; July 14; Serial No. 293,797; published Apr. 21, 1931. Class 6.
Stevens, Chas. A., & Bros., Chicago, Ill. Playing cards. 285,123; July 14; Serial No. 276,105; published May 5, 1931. Class 22.
Stienen, Ernest A., New York, N. Y. Dyeing machinery, driers and extractors. 285,181; July 14. Class 23.
Stirling Bonding Company, Limited, The. (See Craigellachie-Glenlivet Distilling Co., Limited, assignor.)
Storyk Bros., New York, N. Y. Dresses and blouses. 284,967; July 14; Serial No. 311,291; published Apr. 21, 1931. Class 39.
Stratford, Charles W., doing business as Stratford Engineering Company, Kansas City, Mo. Petroleum refining equipment. 284,994; July 14; Serial No. 306,073; published May 5, 1931. Class 23.
Strauber Bros., New York, N. Y. Princess slips, pajamas, bloomers, etc. 285,101; July 14; Serial No. 309,536; published Mar. 10, 1931. Class 39.
Sun Oil Company, assignor to Sun Oil Company, Philadelphia, Pa. Material made from petroleum and similar turpentine. 83,525; renewed Sept. 19, 1931.
Sutter Cooperative Growers, San Francisco, Calif. Fruits and canned vegetables. 285,178; July 14. Class 46.
Tarkio Molasses Feed Company, Kansas City, Mo. Feeds. 284,913; July 14; Serial No. 310,742; published May 5, 1931. Class 46.
Tasty Baking Company, Philadelphia, Pa. Cakes and pies. 285,168; July 14; Serial No. 311,856; published Apr. 28, 1931. Class 46.
Texas Company, The, Houston and Port Arthur, Tex., and, New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,056–8; renewed Oct. 31, 1931.
Thermique, Incorporated, New York, N. Y. Transformers, converters, plugs, etc. 284,146; July 14; Serial No. 298,601; published Apr. 14, 1931. Class 21.
Thermographic Corporation, New York, N. Y. Inks and thermographic compounds. 284,963; July 14; Serial No. 312,580; published May 5, 1931. Class 11.
Tinsky, Samuel, doing business as Magdent Laboratories, New York, N. Y. Tooth paste, tooth powder, and mouth wash. 285,013; July 14; Serial No. 291,940; published Apr. 28, 1931. Class 6.
Tire Savers Corporation, Ltd., San Jose, Calif. Pressure gauges. 284,940; July 14; Serial No. 311,940; published May 5, 1931. Class 26.
Turco Products Inc., Los Angeles, Calif. General household cleaner. 285,200; July 14. Class 4.
United States Radium Corporation, New York, N. Y. Luminous or plain number plates, name plates, sign plates, etc. 284,952; July 14; Serial No. 311,497; published May 5, 1931. Class 50.
Universal Producing Company, Fairfield, Iowa. Costumes for dramatic productions, etc. 285,107; July 14; Serial No. 310,426; published Apr. 14, 1931. Class 39.
Van Raalte Company, New York, N. Y. Underwear. 285,100; July 14; Serial No. 309,405; published Apr. 21, 1931. Class 39.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Coal, coke, briquettes, etc. 285,062; July 14; Serial No. 296,155; published Apr. 28, 1931. Class 1.
Vereinigten Uhrenfabriken von Gebrüder Junghans & Thomas Haller A-G., by change of name to Gebruder Junghans A. G., Schramberg, Germany. Clocks, watches, clockworks, and parts thereof. 83,623; renewed Sept. 26, 1931.
Verellen Limited, Antwerp, Belgium. Cigars, cigarillos, cigarettes, etc. 284,964; July 14; Serial No. 309,912; published May 5, 1931. Class 17.
Viviny Perfumers, Inc., New Haven, Conn. Astringents, astringent cerates, bleach creams. 284,945; July 14; Serial No. 312,119; published Apr. 28, 1931. Class 6.
Waldstein, Martin E., New York, N. Y., assignor, by mesne assignments, to Newskin Company, Brooklyn, N. Y. Liquid compound used as a substitute for court plaster. 36,846; renewed July 30, 1931.
Walker, Daily J., Lamoni, Iowa, to Daily Jerome Walker, Waterloo, Iowa. A remedy for roup, cholera and bowel trouble. 83,872; renewed Oct. 17, 1931.
Wanous, Josie A., Shampoo Bag Company, Minneapolis, Minn. Mixture of herbs for use in washing or shampooing the hair. 285,010; July 14; Serial No. 286,909; published Apr. 21, 1931. Class 6.
Ward, Elmer L., Boston, Mass. Clothing. 285,054; July 14; Serial No. 304,170; published Apr. 14, 1931. Class 39.
Washington Manufacturing Co., Nashville, Tenn. Work shirts. 285,182; July 14. Class 39.
Wayne Knitting Mills, Fort Wayne, Ind. Hose and stockings. 285,108; July 14; Serial No. 310,427; published Apr. 28, 1931. Class 39.
Weber Machine Corporation, Rochester, N. Y. Electrically-operated sound heads. 284,975; July 14; Serial No. 311,405; published Apr. 21, 1931. Class 21.
Werner, Pauline, née Fresenius, Stuttgart, Germany. Corsets, bust supports, etc. 285,050; July 14; Serial No. 300,900; published Apr. 28, 1931. Class 39.
West Disinfecting Company, New York, to West Disinfecting Company, Long Island City, N. Y. Soap. 84,064; renewed Oct. 31, 1931.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Radio receiving sets. 284,976; July 14; Serial No. 311,500; published Apr. 14, 1931. Class 21.
Whitacre, W. B., Inc., El Centro, Calif. Fresh melons. 284,921; July 14; Serial No. 311,351; published May 5, 1931. Class 46.
White Cross Laboratories. (See Hofferd, Leo J.)
White, Jack, Golf Company Limited, London, England. Golf balls, clubs, irons, tees, and bags. 285,096; July 14; Serial No. 306,114; published May 5, 1931. Class 22.
Wilson, C. E., & Company, Inc., Manchester, Conn. Nursery stock. 285,162; July 14; Serial No. 311,454; published Apr. 28, 1931. Class 1.
Winthrop Chemical Company, Inc., New York, N. Y. Vaccine. 284,927; July 14; Serial No. 309,255; published Apr. 21, 1931. Class 6.
Wisconsin Food Products Co. (See Glidden Company, The.)
Wise, Jerome C., doing business as Denise et Cie., New York, N. Y. Nail polish. 284,931; July 14; Serial No. 310,437; published Apr. 21, 1931. Class 6.
Wooster Products Inc., Wooster, Ohio. Treads, floor plates, and ramp plates. 285,075; July 14; Serial No. 311,588; published Apr. 28, 1931. Class 12.

Wróblewski, David, doing business as D. Wróblewski, Brooklyn, N. Y. Preparation for catarrh of the stomach, chronic constipation, indigestion, etc. 285,183; July 14. Class 6.
Youth Products Co., Detroit, Mich. Coloring material for bleached and gray hair. 284,937; July 14; Serial No. 311,944; published Apr. 28, 1931. Class 6.
Zenith Radio Corporation, Chicago, Ill. Radio receiving sets and parts thereof. 284,916; July 14; Serial No. 311,297; published Apr. 14, 1931. Class 21.
Zenith Radio Corporation, Chicago, Ill. Radio receiving sets and parts thereof. 284,917–18; July 14; Serial No. 311,299–300; published Apr. 14, 1931. Class 21.
Zenith Radio Corporation, Chicago, Ill. Radio receiving sets and parts thereof. 284,973; July 14; Serial No. 311,298; published Apr. 14, 1931. Class 21.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Brand Chewing Gum, Spearmint. For Chewing Gum. 39,416; July 14.
Beeks Produce Co. Inc., San Antonio, Tex. Society Brand. For Relish Spread. 39,417; July 14.
Beeks Produce Co. Inc., San Antonio, Tex. Society Brand. For Tartare Sauce. 39,418; July 14.
Dermay Perfumers, Inc., New York, N. Y. Dermex Roller Facial Tissue. For Roller Facial Tissues. 39,419; July 14.
Fuller Brush Company, The, Hartford, Conn. Fuller Floor Wax. For Floor Wax. 39,420; July 14.
Hedge, Roy, doing business as Hedge's Wigwam, Pleasant Ridge, Mich. Hedge's Mayonnaise. For Mayonnaise Dressing. 39,421; July 14.
Houspray Manufacturing Company, The, Toledo, Ohio. Houspray. For Insecticide. 39,422; July 14.
Price, Hyman, Brooklyn, N. Y. Nathan Harbatkin's Bakery. For Challahs and Cakes. 39,423; July 14.
Shipman, Daniel M., doing business as Whipponong Novelty Co., Whippany, N. J. Spot-Em. For Game. 39,424; July 14.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Seal Brand Tea Balls. For Tea Balls. 39,425–6; July 14.
Sussman, Wormser & Company, San Francisco, Calif. Master Grocers Guild. For Canned Peaches. 39,427; July 14.
United Drug Company, Boston, Mass. Fungi-Rex. For Medicinal Preparation Consisting of an Ointment for Treating Athlete's Foot. 39,428; July 14.
Whipponong Novelty Co. (See Shipman, Daniel M.)

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Duplex Swing-Spring Seat Co., Reading, Pa. The Whole World Rests. For Upholstered Furniture. 13,295; July 14.
Inland Motor Products Company, Des Moines, Iowa. Metalkleen. For Preparation for Removing Corrosion From Radiators. 13,296; July 14.
Kasper, Peter J., Company, Chicago, Ill. Gingham. For Preserves. 13,297; July 14.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Acutone Corporation, New York, N. Y. Lenses. 314,942; July 14. Class 26.
Aktiebolaget Probat, Stockholm, Sweden. Disinfectants and means for exterminating vermin. 313,822; July 14. Class 6.
Alaskan Glacier Sea Food Company, Seattle, Wash., and Petersburg, Alaska. Canned shrimp meat. 313,948; July 14. Class 46.
Aluminum Company of America, Pittsburgh, Pa. Anti-seize compound. 314,541–2; July 14. Class 15.
American Legion of Rhode Island, The, Providence, R. I. Uniforms. 314,481; July 14. Class 39.
American Perfit Crystal Corp., New York, N. Y. Watch crystals. 309,113; July 14. Class 33.
Amery, T. Gaines, Inc., New York, N. Y. Fabrics. 313,115; July 14. Class 42.
Atlas Paint and Varnish Co. (See Wexler, Joseph.)
B. & B. Shoe Company, Chicago, Ill. Cardboard boxes. 313,484; July 14. Class 2.
Bates, Dr. J. L. Bliss, Washington, D. C., and Revere, Mass. Medicinal preparation. 315,027; July 14. Class 6.
Bearman, S., Shoe Company, St. Louis, Mo. Boots and shoes. 314,138; July 14. Class 39.
Becker, Abram J., Lansing, Mich. Liquid massage preparation. 314,317; July 14. Class 6.
Becker, Henry & Son, Inc., Roseland, N. J. Milk and cream. 314,745; July 14. Class 46.
Becker, Henry & Son, Inc., Roseland, N. J. Milk and cream. 314,747; July 14. Class 46.
Beiersdorf, P., & Co. Inc., New York, N. Y. Medicated adhesive plasters. 301,785; July 14. Class 6.
Benos, Olga, doing business as Onaida Turkish Beauty Preparations, New York, N. Y. Toilet articles. 314,978; July 14. Class 6.
Blumenfeld Ice & Coal Company, doing business as Blumenfeld Oil Company, Memphis, Tenn. Motor lubricating oils and gasoline. 299,893; July 14. Class 15.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 315,188; July 14. Class 42.
Bob, H. D. Company Inc., New York, N. Y. Shirts, blouses, underwear, etc. 314,141; July 14. Class 39.
Bonicot Warenvertriebsgesellschaft m. b. H., Vienna, Austria. Disinfectants, liquids, and solutions and preparations for rendering harmless poisons and nicotine. 310,932; July 14. Class 6.
Bonicot Warenvertriebsgesellschaft m. b. H., Vienna, Austria. Apparatus for the introduction and injection of liquid into tobacco or tobacco products; pipes, etc. 310,933; July 14. Class 8.
Bradley, Milton, Company, Springfield, Mass. Carving or sculpturing material. 312,523; July 14. Class 1.
Brady, George W., & Company. (See Hodgson, Millard B.)
Bright Star Products Co., Miami, Fla. Mayonnaise. 303,945; July 14. Class 46.
Brock, John D., doing business as Specialty Optical Company, Kansas City, Mo. Lenses and frames. 315,244; July 14. Class 26.
Brock, John D., doing business as Specialty Optical Company, Kansas City, Mo. Eye glass lenses. 315,247; July 14. Class 26.
Buckeye Mineralized Stock Powders Company, Gettysburg, Ohio. Cattle, hog, and poultry powders, and a tonic preparation. 311,645; July 14. Class 6.
Burrough Brothers Manufacturing Company, doing business as Burrough Brothers Laboratories, Baltimore, Md., and Cleveland, Ohio. Liquid ergot. 314,321; July 14. Class 6.
Burton Brothers & Co. Inc., New York, N. Y. Piece goods. 315,030; July 14. Class 42.
Büssing-Nag Vereinigte Nutzkraftwagen Aktiengesellschaft, Brunswick, Germany. Tractors and internal combustion engines. 314,146; July 14. Class 23.
California Corrugated Culvert Co., Berkeley, Calif. Metal pipe and tubing. 313,281; July 14. Class 13.
Carborundum Company, The, Niagara Falls, N. Y. Pyrometer tubes, muffles. 310,283; July 14. Class 26.
Celanese Corporation of America, New York, N. Y. Fabrics made wholly or partially of cellulose derivatives. 314,981; July 14. Class 42.
Chicago Pneumatic Tool Company, New York, N. Y. Electrical apparatus and machines. 314,271; July 14. Class 21.
Clark, Joel B., doing business as J. B. Clark Oil Company, Buffalo, N. Y. Lubricating oils and lubricating oil compositions. 314,947; July 14. Class 15.
Clayton Tablet Company. (See Livezey, Henry N.)
Cleveland Brass Manufacturing Company, The, Cleveland, Ohio. Faucet valves. 314,861; July 14. Class 13.
Coe, Frederick E., Twickenham, England. Chemical substances. 314,140; July 14. Class 6.
Colgate-Palmolive-Peet Company, Chicago, Ill. Dental cream. 314,982; July 14. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Colora Products Company Inc. (See Segal, Herman.)
Columbian Art Works, Inc., Milwaukee, Wis. Calendar pads and stands. 280,541; July 14. Class 37.
Columbus Handle & Tool Corporation, Columbus, Ohio. Handles for shovels, etc. 309,460; July 14. Class 28.
Congoleum-Nairn Inc., Kearny, N. J. Floor wax. 314,791; July 14. Class 16
Cortland Baking Company, The, Cortland, N. Y. Bread. 314,554; July 14. Class 46.
Corwin, David S., Greenport, N. Y. Combination game of croquet and pool. 314,792; July 14. Class 22.
Cowgill Flour Mills, Inc., Carthage, Mo. Wheat flour and wheat stock feed. 312,878; July 14. Class 46.
Daltroff, E., & Cie., doing business as Parfumerie Caron, Paris, France. Perfumery. 314,841; July 14. Class 6.
Davis, Bernard E., doing business as Dav-O-Lin Company, New York, N. Y. Medicinal preparation. 313,585; July 14. Class 6.
Dav-O-Lin Company. (See Davis, Bernard E.)
Dean Rubber Manufacturing Company, North Kansas City, Mo. Prophylactic rubber articles. 314,485–7; July 14. Class 44.
De Lisser Extract Co. Inc., New York, N. Y. Maltless beverages and sirups and extracts for making the same. 315,676; July 14. Class 45.
Delson, John, doing business as The John Delson Drug Co., New York, N. Y. Toilet articles. 311,564; July 14. Class 6.
Dentalade Co. (See Lindahl, Kermit.)
Detroit Waste Works. (See Gallagher, John C.)
Dolge, C. B., Company, The, Westport, Conn. Chlorine disinfectant. 309,420; July 14. Class 6.
Dougherty Cake Products, Incorporated, Muncie, Ind. Cakes. 199,961; July 14. Class 46.
Duplan Silk Corporation, New York, N. Y. Piece goods. 311,268; July 14. Class 42.
Eagle Pencil Company, New York, N. Y. Lead pencils. 315,345; July 14. Class 37.
Eastern Outfitting Co. of Los Angeles, Cal., Los Angeles, Belvedere, and Huntington Park, Calif. Gas ranges. 313,949; July 14. Class 34.
Eau de Cologne- & Parfümerie-Fabrik ("Glockengasse No. 4711") gegenüber der pferdepost von Ferd. Mülhens. (See Mülhens, Paul P.)
Edison, Thomas A. Incorporated, West Orange, N. J. Phonographic apparatus. 308,436; July 14. Class 36.
Emporia Machine Co. Inc., Emporia, Va. Plows. 314,901–2; July 14. Class 23.
Everlastik, Inc., Chelsea, Mass. Narrow elastic webbing. 314,046; July 14. Class 40.
F. & N. Lawn Mower Company, The, Richmond, Ind. Lawn mowers. 314,752; July 14. Class 23.
Fair, The, Chicago, Ill. Lenses. 314,986; July 14. Class 26.
Fay, Loyola J., doing business as Par-Plus Laboratories, Spokane, Wash. Anæsthetic. 313,844; July 14. Class 6.
Foremost Fabrics Corporation, New York, N. Y. Fabrics. 307,887; July 14. Class 42.
Gallagher, John C., doing business as Detroit Waste Works, Detroit, Mich. Golfer's towels. 314,236; July 14. Class 42.
Galree Products Co., Inc. (See Regal Products Co., assignor.)
Gelfand Manufacturing Co. of California, Los Angeles, Calif. Chicken and egg noodles, spaghetti dinner with chicken croquettes, etc. 314,364; July 14. Class 46.
General Silk Corporation, New York, N. Y. Thread. 315,392; July 14. Class 43.
Globe Machine & Stamping Company, The, Cleveland, Ohio. Automobile radiator grills. 314,953; July 14. Class 19.
Globe Overall Company, The, Cincinnati, Ohio. Work clothing. 304,135; July 14. Class 39.
Goldsmith, Jeanne V., doing business as Terri Cosmetics, New York, N. Y. Astringents. 314,644; July 14. Class 6.
Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. 315,050; July 14. Class 39.
Grabosky, Louis B., Philadelphia, Pa. Cigars. 314,908; July 14. Class 17.
Greenberg, Max & Co., New York, N. Y. Dresses. 314,448; July 14. Class 39.
Greenwald, Abraham A., doing business as Jacob Stahl Jr. & Co., New York, N. Y. Cigars. 313,914; July 14. Class 17.
Greenwald, Abraham A., doing business as Jacob Stahl Jr. & Co., New York, N. Y. Cigars. 313,917; July 14. Class 17.
Gruen, Paul R., Chicago, Ill. Periodical magazine. 313,471; July 14. Class 38.
Hass, Joseph, doing business as National Poultry Band Co., Newport, Ky. Identification tags for poultry and animals. 315,094; July 14. Class 50.
Haggard, Vla B., Blackwell, Okla. Medicinal preparation. 314,759; July 14. Class 6.
Hair Research Laboratories. (See Stein, Hermann.)
Hall, E. C. Company, doing business as Nation-Wide Service Grocers and Nation-Wide Stores Co., Brockton and Hyannis, Mass., and Augusta, Me. Tea, coffee, butter, etc. 308,506; July 14. Class 46.
Heddon's, James, Sons, Dowagiac, Mich. Fishing lines. 315,405; July 14. Class 22.
Heflin, R. L., Inc., Sherman, Whitesboro, and Galveston, Tex. Stock feed. 315,452–3; July 14. Class 46.
Hertz Max, Leather Company, Newark, N. J. Leather. 314,993; July 14. Class 1.
Hill, Thos. G., & Co. Limited, Manchester, England. Cotton piece goods. 314,365; July 14. Class 42.
Hillsboro Woolen Mill Co., Inc., Hillsboro, N. H. Wool fabrics. 315,231; July 14. Class 42.
Hodgson, Millard B., doing business as George W. Brady & Company, Chicago, Ill. X-ray film packets. 315,357, July 14. Class 44.
Holland, Joshua, Chicago, Ill. Anti-pain preparation. 314,439; July 14. Class 6.
Hope Construction & Refining Company, Pittsburgh, Pa. Hydrocarbon gases. 314,051–2; July 14. Class 6.
Houbigant, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 314,607–8; July 14. Class 6.
Houbigant, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 314,612; July 14. Class 6.
Houbigant, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 314,615; July 14. Class 6.
House of Crane, The, Indianapolis, Ind. Smoking pipes. 314,696; July 14. Class 8.
Hygienic Tube and Container Company, Newark, N. J. Containers in tube like formation, cylindrical cans, collapsible tubes, etc. 313,600; July 14. Class 2.
Ilg Electric Ventilating Company, Chicago, Ill. Heating systems. 313,784; July 14. Class 34.
Indianapolis Paint & Color Co., Indianapolis, Ind. Paints, paint enamels, wood stains, etc. 315,200; July 14. Class 16.
Insuline Corp. of America, New York, N. Y. Line-noise eliminators for radio sets, electrical tone-control devices, etc. 314,647; July 14. Class 21.
International Compositions Company, Inc., New York, N. Y. Paints. 314,203; July 14. Class 16.
K-O-Kol Company, The, Glendale, Calif. Medicinal preparation. 314,765; July 14. Class 6.
K. P. & B. Co., Decatur, Ill. Cleaning devices. 313,191; July 14. Class 29.
Keith, William M., Youngstown, Ohio. Bolt clippers. 315,053; July 14. Class 23.
Kelley, Maude T., Mount Vernon, N. Y. Washing devices. 314,057; July 14. Class 24.
Kell-Worth Company. (See Wortham, Richard F.)
Kemet Laboratories Company, Inc., New York, N. Y. Metals and/or alloys. 311,785; July 14. Class 14.
Keplar, James M., Elkhart, Ind. Card index. 314,241; July 14. Class 37.
Kuhns & Allen, Kansas City, Mo. Sheet glass and products. 314,163; July 14. Class 33.
Lambert Marketing Company, Sacramento, Calif. Fresh vegetables and fruits. 314,372; July 14. Class 46.
Land O'Lakes Creameries, Inc., Minneapolis, Minn. Creamery butter. 313,579; July 14. Class 46.
Larus & Brother Company, Incorporated, Richmond, Va. Tobacco products. 315,152; July 14. Class 17.
Lau Bros., Berwyn, Ill. Liniment. 291,835; July 14. Class 6.
Layton, Joseph E., doing business as Red-Head Laboratories, Seattle, Wash. Preparation for treating coccidiosis in poultry. 313,430; July 14. Class 6.
Lemke, Dr. H. C., Medicine Co., Chicago, Ill. Mixtures of herbs, compounds for constipation, etc. 301,955; July 14. Class 6.
Lindahl, Kermit, doing business as Dentalade Co., New York, N. Y. Tooth powder. 314,651; July 14. Class 6.
Livezey, Henry N., doing business as Slayton Tablet Company, Los Angeles, Calif. Medicines. 310,019; July 14. Class 6.
Los Angeles Brewing Co., Los Angeles, Calif. Malt syrup. 314,701; July 14. Class 46.
Lowenfeld, Marguerite F. J., London, England. Brassières, corselets, corsets, etc. 312,610; July 14. Class 39.
Malitone, Inc. (See Richardson, James R.)
Markillie, Walter T., San Francisco, Calif. Maltless flavor bases. 312,810; July 14. Class 45.
Martin-Senour Company, The, Cleveland, Ohio. Paints, enamels, varnishes, etc. 314,858; July 14. Class 16.
Martins-Birmingham Limited, Birmingham, England. Purses, wallets, bill cases, etc. 312,109; July 14. Class 3.
Maryland Baking Company, Inc., The, Baltimore, Md. Ice cream cones. 301,670; July 14. Class 46.
Maryland Baking Company, Inc., The, Baltimore, Md. Ice cream cones. 301,672; July 14. Class 46.
Maryland Baking Company, Inc., The, Baltimore, Md. Ice cream cones. 301,674; July 14. Class 46.
Matthews, Paul P., doing business as Salvador Products Co., Cleveland, Ohio. Ointment. 314,336; July 14. Class 6.
Maxwell & Tennyson, Washington, D. C. Intestinal bactericides. 314,065; July 14. Class 6.
McGaugh, Calvin C., Dallas, Tex. Hosiery. 314,376; July 14. Class 39.
McGrew and Nye, Payne, Ohio. Belt dressing. 311,411; July 14. Class 4.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Mennen Company, The, Newark, N. J. Powder. 314,455; July 14. Class 6.
Meyer, Carl W., Toledo, Ohio. Preparations for the treatment of hemorrhoids. 313,506; July 14. Class 6.
Michel, Maksik & Feldman, Inc., New York, N. Y. Hand bags, purses, and pocket books. 315,207; July 14. Class 3.
Midland Metal Manufacturing Company, Kansas City, Mo. Radiator cleaning compound. 315,000; July 14. Class 6.
Mil-Use Chemical Company. (See Western States Manufacturing Company.)
Miller Company, The, Meriden, Conn. Lamps. 314,922–3; July 14. Class 21.
Monarch Shoe Co., Inc., Chicago, Ill. Baby shoes. 313,887; July 14. Class 39.
Mülhens, Paul P., doing business as Eau de Cologne- & Parfümerie-Fabrik ("Glockengasse No. 4711") gegenüber der Pferdepost von Ferd. Mülhens, Cologne, Germany. Eau de Cologne water, perfumery, shampoo, etc. 311,017; July 14. Class 6.
Mutsu Vapor Balm Company, The, Memphis, Tenn. Ointments or salves. 313,719; July 14. Class 6.
N. V. Standard Water Maatschappij, Amsterdam, Netherlands. Preparation for purifying liquids in particular water. 311,748; July 14. Class 6.
National Enameling & Stamping Co., Milwaukee, Wis. Kitchenette sets. 313,145–6; July 14. Class 2.
National Poultry Band Co. (See Haas, Joseph.)
Nation-Wide Service Grocers. (See Hall, E. C., Company.)
Nation-Wide Stores Co. (See Hall, E. C., Company.)
Namm, A. I., & Son, doing business as The Namm Store, Brooklyn, N. Y. Hats. 313,255; July 14. Class 39.
Neumann, William R., doing business as W. R. Neumann & Co., Chicago, Ill. Diamond rings. 308,263; July 14. Class 28.
New Standard Corporation, Mount Joy, Pa. Ice-cream freezers. 314,924; July 14. Class 31.
Newton Manufacturing Company, Newton, Iowa. Bat and ball game. 314,925; July 14. Class 22.
Nip-It Company, Brunswick, Ga. Medicine. 312,568; July 14. Class 6.
O. & W. Thum Company, The, Grand Rapids, Mich. Gummed cloth and paper tape. 314,520; July 14. Class 37.
Onaida Turkish Beauty Preparations. (See Benos, Olga.)
Ovacide Laboratories. (See Savelli, Richard F.)
Pacific Commercial Company, San Francisco, Calif. Canned fish. 308,750; July 14. Class 46.
Parfumerie Caron. (See Daltroff, E., & Cie.)
Parker, Kate E., Santa Rosa, Calif. Mineral water. 315,603; July 14. Class 45.
Par-Plus Laboratories. (See Fay, Loyola J.)
Patex Fibre Corporation, Montville, N. J. Cotton towels and toweling. 314,379; July 14. Class 42.
Patterson Publishing Company, Chicago, Ill. Magazine. 314,071; July 14. Class 38.
Paul, Samuel A., doing business as The Paul Proprietary Co., Auckland, New Zealand. Preparation for the treatment of consumption, etc. 313,933; July 14. Class 6.
Pearl, Theodore, doing business as Pearl Handkerchief Company, New York, N. Y. Handkerchiefs. 313,609; July 14. Class 42.
Permanent Electric Company, The, Cleveland, Ohio. Electrically operated air deoderizer, filter, and purifier. 313,865; July 14. Class 21.
Peters, H. W., Co., Inc., Boston, Mass. Finger rings. 314,293; July 14. Class 28.
Petroleum Derrick Company, Ltd., Los Angeles, Calif. Oil well derricks and structural parts thereof. 315,556; July 14. Class 23.
Pick-Barth, Albert, Company, Inc., New York, N. Y., and Chicago, Ill. Steak knives, forks, spoons, etc. 300,965; July 14. Class 23.
Pick-Barth, Albert, Company, Inc., Chicago, Ill. Chairs, tables, davenports, etc. 300,969; July 14. Class 32.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Paints. 315,499; July 14. Class 16.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Pyroxylin lacquers. 315,500; July 14. Class 16.
Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa. Aircraft propellers. 306,365; July 14. Class 19.
Plough, Inc., doing business as The St. Joseph's Laboratories, Memphis, Tenn. Medicinal preparation. 313,001; July 14. Class 6.
Pressler, Otto, Thüringer Vacuumröhrenfabrik, Leipzig, Germany. Electron tubes, photoelectric cells, etc. 307,112; July 14. Class 21.
Priester, Maximilian I., Brooklyn, N. Y. Checks. 314,012; July 14. Class 37.
Pruser, Henry B., Incorporated, Mount Vernon, N. Y. Coal. 315,417; July 14. Class 1.
Radhill Oil Company, Philadelphia, Pa. Oils. 314,015; July 14. Class 15.
Red-Head Laboratories. (See Layton, Joseph E.)
Regal Products Co., San Francisco, Calif., and New York, N. Y., assignor to Galree Products Co., Inc., New York, N. Y. Preparations for destroying of moth larvæ and eggs 311,246; July 14. Class 6.
Reliance Pencil Corporation, New York, N. Y. Pencils. 315,276–7; July 14. Class 37.
Richardson, James R., doing business as Malitone, Inc., Los Angeles, Calif. Alkaline laxative and antiseptic solution. 311,886; July 14. Class 6.
Riegel, Guy E., Spokane, Wash. Radio receiving apparatus. 303,613; July 14. Class 21.
Robinson Milling Company, The, Salina, Kans. Wheat flour. 315,279; July 14. Class 46.
Rockhill, Malcolm E., doing business as Universal Glass-Spra Company, Tulsa, Okla. Glass cleaning preparation. 301,127; July 14. Class 4.
Roessel, Louis, & Co., Inc., Hazelton, Pa., and New York, N. Y. Silk piece goods. 314,464; July 14. Class 42.
Rogers & Hubbard Company, The, Portland, Conn. Plant food. 314,032; July 14. Class 10.
Royal Baking Powder Company, New York, N. Y. Gelatin desserts. 315,015–18; July 14. Class 46.
Royal Dress Co., Inc., New York, N. Y. Dresses, frocks, and gowns. 314,719; July 14. Class 39.
Rubin, Samuel, New York, N. Y. Order books, form blanks, desk pads. 315,419; July 14. Class 37.
St. Joseph's Laboratories, The. (See Plough, Inc.)
Sakowitz Brothers, Houston, Tex. Wearing apparel. 308,765; July 14. Class 39.
Salvador Products Co. (See Matthews, Paul P.)
Sanozym, Incorporated, New York, N. Y. Preparation consisting of salineaqueous solution. 314,303; July 14. Class 6.
Savelli, Richard F., doing business as Ovacide Laboratories, Oakland, Calif. Antiseptic preparation, medicated antiseptic suppositories, and jelly. 314,252; July 14. Class 6.
Schaaf & Good Company, The, Fremont, Ohio. Manicure files. 315,281–2; July 14. Class 44.
Schering & Glatz, Inc., Bloomfield, N. J. Analgesics, anæsthetic, anodynes, etc. 314,866; July 14. Class 6.
Schering & Glatz, Inc., Bloomfield, N. J. Medicinal preparation. 314,867; July 14. Class 6.
Schnefel Bros., Inc., Newark, N. J. Tweezers, nippers, scissors, etc. 314,463; July 14. Class 44.
Schnefel Bros., Inc., Newark, N. J. Cuticle remover, finger nail enamel and polish, etc. 314,467; July 14. Class 6.
Schrafft's Stores. (See Shattuck, Grank G., Company.)
Schwob, Simon, doing business as The Standard Tailoring Company and The Schwob Company, Columbus, Ga. Suits and overcoats. 314,428; July 14. Class 39.
Segal, Herman, doing business as Colora Products Company Inc., New York, N. Y. Photographic dry plates. 314,931; July 14. Class 26.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Screws, nuts, bolts, cotter pins, etc. 314,253; July 14. Class 13.
Shaddick, Robert C., doing business as Woods Mince Meat Co., Baltimore, Md. Mince meat. 311,889; July 14. Class 46.
Sharples Specialty Company, The, Philadelphia, Pa. Centrifugal machines and parts thereof. 314,176; July 14. Class 23.
Shattuck, Frank G., Company, doing business as Schrafft's Stores, New York, N. Y. Candy. 315,432; July 14. Class 46.
Shelby Gum Company, The, Shelby, Ohio. Menthol chewing gum. 313,979; July 14. Class 6.
Shiraishi Kogyo Kabushiki Kaisha Inben Gun, Miye Ken, Japan. Chalk crayons, school chalk, and pencils. 307,538; July 14. Class 37.
Shiraishi Kogyo Kabushiki Kaisha Inben Gun, Miye Ken, Japan. Chalk crayons and school chalk. 307,539; July 14. Class 37.
Sigler, Charles E., New York, N. Y. Piece goods. 314,078; July 14. Class 42.
Sirocco Manufacturing Co. (See Walrath, Edward.)
Solvay Process Company, The, Syracuse, N. Y. Inorganic chemicals. 314,582; July 14. Class 6.
Specialty Optical Company. (See Brock, John D.)
Sperl, Anna, doing business as The Anna Sperl Mfg. Co., New York, N. Y. Mange ointment. 310,268; July 14. Class 6.
Spool Cotton Company, The, New York, N. Y. Display devices for spools of thread. 299,808; July 14. Class 50.
Spriggs', Jos. M., Sons, Inc., Washington, Pa. Canned fruits and vegetables. 314,932; July 14. Class 46.
Stahy, Jacob, Jr., & Co. (See Greenwald, Abraham A.)
Standard Brands Incorporated, New York, N. Y. Coffee and tea. 315,115–16; July 14. Class 46.
Standard Brands Incorporated, New York, N. Y. Tea. 315,471; July 14. Class 46.
Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread and yarn. 313,941; July 14. Class 43.
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Lubricating oils and greases. 314,869; July 14. Class 15.
Standard Oil Company of New Jersey, Wilmington, Del. Oil. 314,084; July 14. Class 15.
Standard Register Company, The, Dayton, Ohio. Manifolding assemblies of record and carbon material. 315,580; July 14. Class 37.
Standard Tailoring Company, The. (See Schwob, Simon.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Stanley Works, The, New Britain, Conn. Screw drivers. 308,226; July 14. Class 23.
Stark, John H., Miami, Fla. Heel pads. 313,893; July 14. Class 39.
Stein, Hermann, doing business as Hair Research Laboratories, New York, N. Y. Preparations for treating and waving the human hair. 314,434; July 14. Class 6.
Steinberger Bros. Glove Corp., San Francisco, Calif., and New York, N. Y. Gloves. 313,811; July 14. Class 39.
Stephan Bros., Shelbyville, Ind. Heel upper pads. 312,021; July 14. Class 39.
Stevens, J. P., & Co. Inc., New York, N. Y. Broadcloth in the piece. 313,613; July 14. Class 42.
Strouse, Adler Company, The, New Haven, Conn. Elastic fabric material. 312,868; July 14. Class 42.
Stuart, Henry, Company, Incorporated, Milford, Conn. Boning for wearing apparel. 314,823; July 14. Class 40.
Sun Oil Company, Philadelphia, Pa. Oil. 313,758; July 14. Class 15.
Syrup of Cicilian Manna Company, The, Dayton, Ohio. Syrup laxative. 308,757; July 14. Class 6.
Taylor, Alex. & Co. Inc., New York, N. Y. Tennis and squash racquets, canoe paddles and oars, baseball bats, etc. 313,454; July 14. Class 22.
Terri Cosmetics. (See Goldsmith, Jeanne V.)
Togstad, Clarence I., doing business as The C. I. Togstad Company, Kokomo, Ind. Flavoring extracts for food purposes. 314,184; July 14. Class 46.
Traffic Storage Battery Co., Los Angeles, Calif. Storage batteries. 313,584; July 14. Class 21.
Tubize Chatillon Corporation, New York, N. Y. Artificial silk (rayon) yarn. 314,664; July 14. Class 43.
Tyson Roller Bearing Corporation, Massillon, Ohio. Roller bearings. 312,673; July 14. Class 23.
Universal Glass-Spra Company. (See Rockhill, Malcolm E.)
Utica Steam & Mohawk Valley Cotton Mills, Utica, N. Y. Sheets and pillow cases. 315,070; July 14. Class 42.
V. P. O. Company of America. (See Wilke, Rose.)
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Flag and radio masts of steel or iron. 315,222; July 14. Class 50.
Victaulic Company of America, Jersey City, N. J. Laminated gaskets. 314,827; July 14. Class 35.
Vital Food Company of California. (See Wilke, Rose.)
Vulcan Manufacturing Co., Kansas City, Mo. Washing machines. 311,011; July 14. Class 24.
Wallace, William A., doing business as Wallace Chemical Company, Savannah, Ga. Ointment. 311,048; July 14. Class 6.
Walrath, Edward, doing business as Sirocco Manufacturing Co., La Fargeville, N. Y. Preparation for killing flies and insects. 314,474; July 14. Class 6.
Washington Mfg. Co., The, New York, N. Y. Pants. 313,162; July 14. Class 39.
Weingarten Bros., New York, N. Y. Women's undergarments. 312,872; July 14. Class 39.
Western Blower Company, Seattle, Wash. Heater units. 300,842; July 14. Class 34.
Western States Manufacturing Company, doing business as Mil-Use Chemical Company, Los Angeles, Calif. Bleaching compound. 301,541; July 14. Class 6.
Wexler, Joseph, doing business as Atlas Paint and Varnish Co., New York, N. Y. Inside paint. 314,669; July 14. Class 16.
Wigg's Medicine Co., Inc., Mobile, Ala. Insecticide. 301,000; July 14. Class 6.
Wilke, Rose, doing business as Vital Food Company of California and V. P. O. Company of America, Los Angeles, Calif. Tooth powder, lotions, packs, etc. 314,742; July 14. Class 6.
Williams, Edward A., jr., Lima, Ohio. Rust removing preparations. 314,024; July 14. Class 6.
Williams, Nathan, Wilkes-Barre, Pa. Malt syrup. 314,476; July 14. Class 46.
Winchell Shoe Manufacturing Co., Natick and Boston, Mass. Shoes. 314,089; July 14. Class 39.
Wolff, M. & Sons, Chicago, Ill. Food products. 311,049; July 14. Class 46.
Woods Mince Meat Co. (See Shaddick, Robert C.)
Woodwind Company, The, New York, N. Y. Reeds for clarinets and saxophones. 314,312; July 14. Class 36.
Worcester Salt Company, New York, N. Y. Salt. 313,620; July 14. Class 6.
Wortham, Richard F., doing business as Kell-Worth Company, Boston, Mass. Ventilators. 315,123; July 14. Class 34.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Cellulose. Enso-Gutzeit Osakeyhtiö. 285,169; July 14; Serial No. 312,097; published Apr. 21, 1931.
Cellulostic material, Artificial. M. Dassonville. 285,058; July 14; Serial No. 305,999; published Apr. 21, 1931.
Clay and clay flour. American Art Clay Company. 285,067; July 14; Serial No. 307,571; published Jan. 13, 1931.
Clay, Modeling. A. C. Dietz. 285,175; July 14; Serial No. 312,601; published May 5, 1931.
Coal. Amherst-Logan County Coal Corporation. 285,165; July 14; Serial No. 311,769; published May 5, 1931.
Coal. Consumer's Coal and Coke Company. 285,164; July 14; Ser'al No. 311,649; published Apr. 28, 1931.
Coal. General Coal Company. 285,045; July 14; Serial No. 311,874; published Apr. 28, 1931.
Coal. Le Flore Poteau Coal Company. 285,039; July 14; Serial No. 311,741; published Apr. 28, 1931.
Coal. Moffat Coal Company. 285,143; July 14; Serial No. 311,152; published Apr. 21, 1931.
Coal, Anthracite. Madeira, Hill & Company. 285,044; July 14; Serial No. 311,786; published Apr. 28, 1931.
Coal, bituminous coal and coke, Hard. M. A. Hanna Company. 285,093–4; July 14; Serial Nos. 312,645–6; published May 5, 1931.
Coal, coke, briquettes, etc. Vereinigte Stahlwerke Aktiengesellschaft. 285,062; July 14; Serial No. 296,155; published Apr. 28, 1931.
Coke. Brandon Coal Co. 285,118; July 14; Serial No. 310,969; published Apr. 21, 1931.
Formaldehyde and ethylamine, Condensation product of. Naugatuck Chemical Company. 285,004; July 14; Serial No. 309,276; published May 5, 1931.
Leather. Davis Leather Company. 285,166; July 14; Serial No. 311,775; published Apr. 28, 1931.
Leather. Gilbert Shoe Co. 285,199; July 14.
Leather. Michigan City Tanning Company. 285,064; July 14; Serial No. 294,736; published Apr. 21, 1931.
Leather and leather goods. American Oak Leather Company. 37,244; renewed Oct. 29, 1931.
Leathers. Griess Pfleger Tanning Company. 285,065; July 14; Serial No. 296,225; published Apr. 28, 1931.
Mineral substance, Acid proof. Filtros Incorporated. 285,171; July 14; Serial No. 312,337; published Apr. 28, 1931.
Nursery stock. C. E. Wilson & Company. 285,162; July 14; Serial No. 311,454; published Apr. 28, 1931.
Pelts, Fox. Clover Hill Silver Fox Co. 285,156; July 14; Serial No. 311,181; published Apr. 28, 1931.
Rosin. Newport Company. 285,066; July 14; Serial No. 296,666; published Apr. 21, 1931.
Straw and horsehair, Imitation. British Enka Artificial Silk Company Limited. 285,114; July 14; Serial No. 310,750; published May 5, 1931.

CLASS 2

Boxes for holding tools and batteries, Steel. Globe Machine & Stamping Co. 82,072; renewed May 30, 1931.

CLASS 3

Bags, billfolds, wallets, and purses, Hand. Paragon Novelty Bag Co. 285,078; July 14; Serial No. 311,970; published May 5, 1931.
Receptacles, such as wardrobe trunks, shoe trunks, etc. Indestructo Trunk Company. 284,984; July 14; Serial No. 297,193; published Sept. 16, 1930.
Suitcases. American Hardware Company. 285,158; July 14; Serial No. 311,224; published Apr. 28, 1931.
Trunks, steamer trunks, etc., Wardrobe. Orenstein Trunk Co. 285,012; July 14; Serial No. 286,677; published July 5, 1930.
Trunks, steamer trunks, etc., Wardrobe. Orenstein Trunk Co. 285,014; July 14; Serial No. 286,678; published July 15, 1930.

CLASS 4

Cleaner, General household. Turco Products Inc. 285,200; July 14.
Soap. West Disinfecting Company. 84,064; renewed Oct. 31, 1931.
Soap and grease for soap making. Consolidated Rendering Co. 285,189–90; July 14.

CLASS 5

Gelatinized corn flour used as an adhesive. Chas. A. Krause Milling Co. 285,173; July 14; Serial No. 312,437; published Apr. 28, 1931.
Rubber used to prevent rugs from slipping, Liquid. C. B. Brinkworth. 285,023; July 14; Ser'al No. 308,924; published Apr. 28, 1931.

CLASS 6

Anæsthetic compound, Hypnotic sedative. Abbott Laboratories. 285,003; July 14; Serial No. 308,321; published Apr. 21, 1931.

Anæsthetics. Etablissements Roques. 284,990; July 14; Serial No. 305,112; published Apr. 21, 1931.
Antacid. Società Anonima Delle Terme Di S. Pellegrino. 284,995; July 14; Serial No. 306,468; published Apr. 28, 1931.
Astringents, astringent cerates, bleach creams, etc. Viviny Perfumers, Inc. 284,945; July 14; Serial No. 312,119; published Apr. 28, 1931.
Cathartic pills. Lanman & Kemp. 84,109; renewed Nov. 7, 1931.
Chemical compositions. F. F. Gorman. 285,034; July 14; Serial No. 311,605; published Apr. 21, 1931.
Chemical preparation. W. F. Bleecker. 285,037; July 14; Serial No. 311,717; published Apr. 21, 1931.
Coloring material for bleached and gray hair. Youth Products Co. 284,937; July 14; Serial No. 311,944; published Apr. 28, 1931.
Compound for pulmonary affections and an anodyne, Pectoral. Lanman & Kemp. 84,106; renewed Nov. 7, 1931.
Cosmetics, astringents, cold cream, etc. B. Brocker. 284,932; July 14; Serial No. 310,551; published Apr. 21, 1931.
Cream, Cold and cleansing. Daggett & Ramsdell. 285,025; July 14; Serial No. 310,902; published Apr. 28, 1931.
Cream, Cold and cleansing. Daggett & Ramsdell. 285,027; July 14; Serial No. 310,904.
Cream, Dental. Paris American Pharmacal Company. 285,198; July 14.
Cream, Vanishing. Daggett & Ramsdell. 285,026; July 14; Serial No. 310,903; published Apr. 28, 1931.
Cream, Vanishing. Daggett & Ramsdell. 285,028; July 14; Serial No. 310,905; published Apr. 28, 1931.
Cultures, Fermenting. Cotton States Dairy Laboratories. 284,936; July 14; Serial No. 311,421; published Apr. 7, 1931.
Deodorants. K O System of Sanitation. 285,038; July 14; Serial No. 311,736; published Apr. 21, 1931.
Dyestuffs, Coal tar. Society of Chemical Industry in Basle. 285,024; July 14; Serial No. 310,455; published Apr. 28, 1931.
Egg preserver. E-Z-Way Egg Preserver Co. 285,033; July 14; Serial No. 311,602; published Apr. 21, 1931.
Emollients. Lanman & Kemp. 84,110; renewed Nov. 7, 1931.
Extract of witch-hazel, Double. Lanman & Kemp. 84,107; renewed Nov. 7, 1931.
Gaseous and liquid fuels. "Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft m. b. H. 285,132; July 14; Serial No. 309,684; published Apr. 28, 1931.
Herbs for use in washing or shampooing the hair, Mixture of. Josie A. Wanous Shampoo Bag Company. 285,010; July 14; Serial No. 286,909; published Apr. 21, 1931.
Insecticides. Larvacide Service Inc. 285,047; July 14; Serial No. 311,877; published Apr. 21, 1931.
Liquid compound used as a substitute for court plaster. M. E. Waldstein. 36,846; renewed July 30, 1931.
Medical compound. M. Grosbier. 284,946; July 14; Serial No. 312,322; published Apr. 28, 1931.
Medical preparation. G. F. Green. 284,926; July 14; Serial No. 309,239; published Apr. 21, 1931.
Medicated plasters for use in the treatment of callouses, bunions, and corns. Kinox Company. 285,176; July 14.
Medicinal cream. Consolidated Patentees, Inc. 284,928; July 14; Serial No. 309,332; published Apr. 21, 1931.
Medicinal preparation. L. J. Hofferd. 284,941; July 14; Serial No. 311,960; published Apr. 28, 1931.
Medicinal treatment for hair, scalp, etc. B. S. Artzt. 284,933; July 14; Serial No. 310,705; published Apr. 21, 1931.
Medicine. Smith, Kline & French Laboratories. 284,942; July 14; Serial No. 312,019; published Apr. 28, 1931.
Medicine, Laxative. Marvelax Corporation. 284,943; July 14; Serial No. 312,055; published Apr. 28, 1931.
Moth repellant. C. L. R. Russell. 285,029; July 14; Serial No. 311,112; published Apr. 21, 1931.
Nail polish. J. C. Wise. 284,931; July 14; Serial No. 310,437; published Apr. 21, 1931.
Ointment. Menley & James, Limited. 285,035; July 14; Serial No. 311,618; published Apr. 21, 1931.
Ointment. Rae Chemical Company. 285,048; July 14; Serial No. 311,929; published Apr. 21, 1931.
Ointment and rub inhalant, Antiseptic. Rex Research Corporation. 284,930; July 14; Serial No. 309,989; published Mar. 3, 1931.
Perfume, toilet water, and power. Gabilla, Incorporated. 284,951; July 14; Serial No. 311,436; published Apr. 21, 1931.
Perfumes, face powder, cleansing cream, etc. Nyal Company. 285,203; July 14.
Powder, Face. Pinaud Incorporated. 285,011; July 14; Serial No. 286,897; published Feb. 24, 1931.
Powders, rouges, cold creams, etc. Sternberg, Haberland, Liebert & Co. 285,019; July 14; Serial No. 293,797; published Apr. 21, 1931.
Preparation for catarrh of the stomach, chronic constipation, indigestion, etc. D. Wróblewski. 285,183; July 14.
Preparation for high blood pressure. H. W. Ellis. 285,036; July 14; Serial No. 311,650; published Apr. 21, 1931.
Preparation for the improvement and treatment of the skin, etc. A. Albert. 285,042; July 14; Serial No. 311,764; published Apr. 21, 1931.
Preparation for the treatment of asthma. M. Fischer. 285,000; July 14; Serial No. 307,911; published Apr. 21, 1931.
Preparations for the treatment of the hair and scalp. John H. Breck, Inc. 285,031; July 14; Serial No. 311,507; published Apr. 28, 1931.
Preparations for use upon the face, Liquid. Adele Morel Inc. 285,032; July 14; Serial No. 311,585; published Apr. 28, 1931.
Remedy for roup, cholera, and bowel trouble. D. J. Walker. 83,872; renewed Oct. 17, 1931.
Salve. N. A. Johnson. 285,046; July 14; Serial No. 311,875; published Apr. 21, 1931.
Salve, baby powder, and baby cream. McKesson & Robbins, Incorporated. 285,020; July 14; Serial No. 293,056; published Apr. 28, 1931.
Seal and cleaner, radiator cleaner and scale preventative, Automobile radiator. A. Gordon. 284,987; July 14; Serial No. 301,906; published Apr. 21, 1931.
Solution used hypodermically in all cases where arsenical medication is indicated. Comar & Co. 285,180; July 14.
Solution used upon wood, textiles, and papers to preserve and protect same. Aqua-Seal Corporation. 285,043; July 14; Serial No. 311,770; published Apr. 21, 1931.
Spray, Nose and throat. Stanco Incorporated. 284,938; July 14; Serial No. 311,760; published Apr. 28, 1931.
Spray, Nose and throat. Stanco Incorporated. 284,939; July 14; Serial No. 311,758; published Apr. 28, 1931.
Spray, Nose and throat. Stanco Incorporated. 285,040; July 14; Serial No. 311,759; published Apr. 21, 1931.
Spray, Nose and throat. Stanco Incorporated. 285,041; July 14; Serial Nos. 311,761; published Apr. 21, 1931.
Toilet preparations. American Toiletries Company. 284,929; July 14; Serial No. 309,798; published Apr. 21, 1931.
Tonic. Bovinine Company. 285,030; July 14; Serial No. 311,320; published Apr. 28, 1931.
Tooth paste. L. Z. Kramer. 285,179; July 14.
Tooth paste, tooth powder, and mouth wash. S. Tinsky. 285,013; July 14; Serial No. 291,940; published Apr. 28, 1931.
Vaccine. Winthrop Chemical Company. 284,927; July 14; Serial No. 309,255; published Apr. 21, 1931.
Vegetable pastils for expelling worms from the system. Lanman & Kemp. 84,108; renewed Nov. 7, 1931.
Wetting out agent, emulsifying agents, and dye assistants. National Aniline & Chemical Company. 284,944; July 14; Serial No. 312,114; published Apr. 28, 1931.

CLASS 9

Rifles and machine guns. Colt's Patent Fire Arms Manufacturing Co. 285,090; July 14; Serial No. 312,548; published May 5, 1931.

CLASS 11

Inks and thermographic compounds. Thermographic Corporation. 284,963; July 14; Serial No. 312,580; published May 5, 1931.

CLASS 12

Asphalt, brick, and concrete paving material. J. W. Spry. 285,009; July 14; Serial No. 309,179; published Apr. 21, 1931.
Brick, Fire. North American Refractories Co. 285,071; July 14; Serial No. 311,533; published Apr. 21, 1931.
Cedar closet lining. Chickamauga Cedar Company. 285,130; July 14; Serial No. 299,760; published Apr. 21, 1931.
Fences, Wire bound wooden. Robert C. Reeves Co. 285,129; July 14; Serial No. 296,793; published May 6, 1931.
Insulating material. Process Holdings Company. 285,112; July 14; Serial No. 310,657; published Apr. 21, 1931.
Plaster, Wall. Grand Rapids Plaster Co. 37,054; renewed Sept. 10, 1931.
Plastic composition. A. F. Rowe. 285,201; July 14.
Sashes, Window. S. I. Baer. 285,102; July 14; Serial No. 309,598; published Apr. 21, 1931.
Shingles. St. Paul & Tacoma Lumber Company. 285,070; July 14; Serial No. 311,288; published Apr. 21, 1931.
Shingles, Concrete reproductions of. Allen J. Saville, Inc. 285,073; July 14; Serial No. 311,540; published Apr. 21, 1931.
Shingles, Reinforced concrete. Allen J. Saville, Inc. 285,072; July 14; Serial No. 311,538; published Apr. 21, 1931.
Treads, plates. Wooster Products Inc. 285,075; July 14; Serial No. 311,588; published Apr. 28, 1931.
Window constructions, metal window constructions, store fronts, etc. Kawneer Company. 285,192; July 14.

CLASS 14

Castings and forgings, Nonferrous. Bohn Aluminum & Brass Corporation. 285,015; July 14; Serial No. 296,391; published May 5, 1931.
Castings and forgings, Nonferrous. Bohn Aluminum & Brass Corporation. 285,016; July 14; Serial No. 296,389; published May 5, 1931.
Castings, billets and ingots, etc., Aluminum. Aluminum Company of America. 284,996–7; July 14; Serial Nos. 307,867–8; published May 5, 1931.

Lithograph plates, Blank. Aluminum Company of America. 284,998–9; July 14; Serial Nos. 307,871–2; published May 5, 1931.
Metal wire and metal rails for railway tracks. Colorado Fuel and Iron Company. 285,188; July 14.
Metals and alloys, rods, etc. Ohio Brass Company. 284,968; July 14; Serial No. 311,412; published May 5, 1931.
Steel, Fabricated. Butler Manufacturing Company. 285,197; July 14.

CLASS 15

Gasoline containing a chemical preparation. R. L. Buffington. 284,988; July 14; Serial No. 302,210; published Apr. 21, 1931.
Gasoline, kerosene, lubricating oils and greases. H. S. Aasen. 285,152; July 14; Serial No. 310,035; published Apr. 14, 1931.
Greases, Lubricating. Merco Nordstrom Valve Company. 285,121; July 14; Serial No. 271,616; published Apr. 1, 1930.
Oils and greases, Lubricating. Deutsche Calypsol-Gesellschaft mit beschränkter Haftung. 285,160; July 14; Serial No. 311,326; published Apr. 7, 1931.
Oils and greases, Lubricating. Panther Oil & Grease Mfg. Co. 285,204; July 14.
Oils and greases, Lubricating. Standard Oil Company. 285,194; July 14.
Oils, Lubricating. Gash-Stull Company. 284,979; July 14; Serial No. 311,833; published Apr. 21, 1931.
Oils, Lubricating. Texas Company. 84,056–58; renewed Oct. 31, 1931.

CLASS 16

Material made from petroleum and similar turpentine. Sun Oil Company. 83,525; renewed Sept. 19, 1931.

CLASS 17

Cigars. A. A. Greenwald. 285,191; July 14.
Cigars, cigarillos, cigarettes, etc. Verellen Limited. 284,964; July 14; Serial No. 309,912; published May 5, 1931.
Tobacco, and leaf tobacco, Plug, twist cut plug smoking. Maclin-Zimmer Tobacco Co., Incorporated. 84,184; renewed Nov. 14, 1931.
Tobacco, Plug. American Tobacco Company. 284,965; July 14; Serial No. 310,439; published May 5, 1931.
Tobacco, Smoking. R. J. Reynolds Tobacco Company. 84,044; renewed Oct. 31, 1931.

CLASS 19

Car-wheels. National Car Wheel Company. 83,764; renewed Oct. 10, 1931.

CLASS 21

Batteries. Bond Electric Corporation. 284,911; July 14; Serial No. 310,204; published Apr. 14, 1931.
Batteries, Storage. Lincoln Oil Refining Company. 284,970; July 14; Serial No. 310,721; published Apr. 21, 1931.
Electric light bulbs, fuses, plugs, etc. Raylite Trading Co. 284,915; July 14; Serial No. 311,200; published Apr. 7, 1931.
Electric furnaces, conductors, rheostats, etc. Process Engineering and Equipment Corporation. 285,002; July 14; Serial No. 308,032; published Apr. 7, 1931.
Electrical condensers. Condenser Corporation of America. 284,924; July 14; Serial No. 309,461; published Mar. 10, 1931.
Electrical connection plugs and connection cord sets. G. B. Higgins. 284,972; July 14; Serial No. 311,143; published Apr. 21, 1931.
Electrical connectors. Burndy Engineering Company. 284,969; July 14; Serial No. 311,081; published Apr. 21, 1931.
Electrical fire alarm systems and parts thereof. Gamewell Company. 284,978; July 14; Serial No. 311,680; published Apr. 21, 1931.
Electrical signs. Advertising Products, Incorporated. 284,971; July 14; Serial No. 311,813; published Apr. 21, 1931.
Electrodes, plates, and anodes, Graphite. International Graphite & Electrode Corporation. 284,914; July 14; Serial No. 311,148; published Apr. 14, 1931.
Lamps, Electric. Play-O-Lite Co. Inc. 285,068; July 14; Serial No. 101,458; published June 12, 1917.
Polishers and parts thereof, Electrically driven floor. Electrolux, Inc. 284,977; July 14; Serial No. 311,601; published Apr. 21, 1931.
Radio receiving and transmitting sets and parts thereof, etc. Shapleigh Hardware Company. 285,177; July 14.
Radio receiving sets. Clago Radio Corporation. 285,151; July 14; Serial No. 305,380; published Apr. 14, 1931.
Radio receiving sets. Westinghouse Electric & Manufacturing Company. 284,976; July 14; Serial No. 311,500; published Apr. 14, 1931.
Radio receiving sets and parts. S. Roth. 284,923; July 14; Serial No. 310,776; published Apr. 21, 1931.
Radio receiving sets and parts thereof. Zenith Radio Corporation. 284,916; July 14; Serial No. 311,297; published Apr. 14, 1931.
Radio receiving sets and parts thereof. Zenith Radio Corporation. 284,917–18; July 16; Serial Nos. 311,297–300; published Apr. 14, 1931.
Radio receiving sets and parts thereof. Zenith Radio Corporation. 284,973; July 14; Serial No. 311,298; published Apr. 14, 1931.
Sound heads, Electrically operated. Weber Machine Corporation. 284,975; July 14; Serial No. 311,405; published Apr. 21, 1931.
Transformers, converters, plugs, etc. Thermique, Incorporated. 285,146; July 14; Serial No. 298,601; published Apr. 14, 1931.

CLASS 22

Apparel for dolls. M. Goldman. 285,087; July 14; Serial No. 312,518; published May 5, 1931.
Board game. Parker Brother Inc. 285,080; July 14; Serial No. 312,248; published May 5, 1931.
Card game. Parker Brothers, Inc. 285,092; July 14; Serial No. 312,622; published May 5, 1931.
Cards, Playing. Chas. A. Stevens & Bros. 285,123; July 14; Serial No. 276,105; published May 5, 1931.
Dolls. Geo. Borgfeldt & Co. 285,081; July 14; Serial No. 312,288; published May 5, 1931.
Golf balls, clubs, irons, tees, and bags. Jack White Golf Company Limited. 285,096; July 14; Serial No. 306,114; published May 5, 1931.
Golf game boards. C. A. Beam. 285,106; July 14; Serial No. 310,026; published May 5, 1931.
Golf tees. Green Caddie Corporation. 285,104; July 14; Serial No. 309,611; published May 5, 1931.
Toy boats. Shoe Form Co. 285,076; July 14; Serial No. 311,344; published May 5, 1931.
Toy swings. Air-O-Swing Co. Inc. 285,098; July 14; Serial No. 306,589; published May 5, 1931.

CLASS 23

Axes and machets. Collins Company. 284,950; July 14; Serial No. 312,511; published May 5, 1931.
Dyeing machinery, driers, and extractors. E. A. Stienen. 285,181; July 14.
Machines for applying labels. National Labeling Machine Co. 285,009; July 4; Serial No. 276,896; published May 5, 1931.
Paper folding machines and sealing machines. Allied Printing and Binding Machinery, Inc., Cleveland, Ohio. 284,947; July 14; Serial No. 312,404; published May 5, 1931.
Petroleum refining equipment. C. W. Stratford. 284,994; July 14; Serial No. 306,073; published May 5, 1931.
Power transmission machinery. Pyott Foundry & Machine Co. 285,001; July 14; Serial No. 307,953; published May 5, 1931.
Razor blades. International Safety Razor Corp. 284,949; July 14; Serial No. 312,563; published May 5, 1931.
Razors and blades therefor. American Safety Razor Corporation. 284,956; July 14; Serial No. 312,082; published May 5, 1931.
Razors and razor blades. International Safety Razor Corp. 284,961; July 14; Serial No. 312,564; published May 5, 1931.
Wrenches. D. B. Gish. 285,202; July 14.

CLASS 26

Altimeters, instruments for taking bearings, inclinometers, etc. H. Junkers. 285,007; July 14; Serial No. 279,929; published May 5, 1931.
Film, Photographic. Eastman Kodak Company. 284,948; July 14; Serial No. 312,555; published May 5, 1931.
Gauge glasses, water columns and gauges. Diamond Power Specialty Corporation. 284,934; July 14; Serial No. 310,818; published May 5, 1931.
Gauges, Pressure. Tire Savers Corporation. 284,940; July 14; Serial No. 311,940; published May 5, 1931.
Picture projecting and electric sound reproducing and amplifying apparatus and parts, Motion. Bestone, Inc. 285,193; July 14.
Rules. Stanley Works. 284,986; July 14; Serial No. 300,763; published Jan. 27, 1931.

CLASS 27

Clocks, watches, clockworks, and parts thereof. Vereinigten Uhrenfabriken von Gebrüder Junghans & Thomas Haller, A-G. 83,623; renewed Sept. 26, 1931.
Time indicating apparatus. Electric Clock Corporation of America. 285,184; July 14.
Watchcases. Star Watch Case Co. 83,609; renewed Sept. 26, 1931.

CLASS 28

Badges, shields, finger rings, etc., Fraternity. Alpha Chi Epsilon. 285,061; July 14; Serial No. 295,595; published Apr. 7, 1931.
Buttons and emblems. Kiwanis International. 285,049; July 14; Serial No. 299,267; published Apr. 7, 1931.
Flatware. International Silver Company. 285,126; July 14; Serial No. 291,338; published Apr. 7, 1931.
Jewelry. E. Cain. 285,142; July 14; Serial No. 311,053; published Apr. 7, 1931.
Silverplated and sterling-silver articles. International Silver Company. 284,922; July 14; Serial No. 311,379; published Apr. 21, 1931.

CLASS 31

Coolers, Water. Norge Corporation. 285,077; July 14; Serial No. 311,883; published May 5, 1931.

Refrigerating cabinets. Refrigeration Corporation of Maryland. 285,095; July 14; Serial No. 312,774; published May 5, 1931.

CLASS 32

Chairs. Biltwell Chair and Furniture Company. 284,935; July 14; Serial No. 311,319; published May 5, 1931.
Shades and window-shade rollers, Window. M. E. Murphy. 285,206; July 14.

CLASS 35

Brake lining. Russell Manufacturing Company. 284,962; July 14; Serial No. 312,572; published May 5, 1931.
Tires and tubes, Rubber. Marshall Field & Company. 284,957; July 14; Serial No. 312,144; published May 5, 1931.
Tires and tubes, Rubber. Marshall Field & Company. 284,958; July 14; Serial No. 312,146; published May 5, 1931.

CLASS 36

Musical instrument strings. Gretsch & Brenner, Inc. 285,196; July 14.
Mutes and attachments for wind instruments, megaphones, batons, etc. L. W. Shastock. 285,205; July 14.
Resonators for loud speakers. Kiel Furniture Co. 285,150; July 14; Serial No. 303,908; published Apr. 7, 1931.
Strings for musical instruments. National Musical String Co. 81,021; renewed Feb. 21, 1931.

CLASS 37

Paper used as a protecting covering, Reenforced. American Reenforced Paper Company. 285,207; July 14.
Paper, Writing and printing. Hurlbut Paper Company. 285,186–7; July 14.
Pencils, Lead. Richard Best Pencil Company. 285,185; July 14.

CLASS 38

Periodicals. Munn & Co. 84,333; renewed Nov. 28, 1931.

CLASS 39

Bandeaux, bandettes, brassières, etc. American Narrow Fabric Company. 285,163; July 14; Serial No. 311,464; published Apr. 21, 1931.
Belts for outside wear. Cluett, Peabody & Co. 285,120; July 14; Serial No. 245,049; published Apr. 28, 1931.
Boots and shoes. Bancroft Walker Company. 285,138; July 14; Serial No. 310,931; published Apr. 21, 1931.
Boots and shoes. W. L. Douglas Shoe Co. 82,876; renewed Aug. 1, 1931.
Boots and shoes. Wm. Isaac & Son. 285,053; July 14; Serial No. 304,146; published Apr. 21, 1931.
Brassières and combinations thereof. Saks & Company. 285,167; July 14; Serial No. 311,790; published Apr. 21, 1931.
Chaps, vests, apparel belts, and riding cuffs. A. C. Morand Corporation. 285,137; July 14; Serial No. 310,874; published Apr. 21, 1931.
Clothing. E. L. Ward. 285,054; July 14; Serial No. 304,170; published Apr. 14, 1931.
Coats. Joseph Engel-Cohen Co. 285,018; July 14; Serial No. 295,939; published Apr. 28, 1931.
Corsets, bust supports, garters, and suspenders. Pauline Werner, née Fresenius. 285,050; July 14; Serial No. 300,900; published Apr. 28, 1931.
Costumes for dramatic productions, etc. Universal Producing Company. 285,107; July 14; Serial No. 310,426; published Apr. 14, 1931.
Dresses. Quality Frock Company. 285,105; July 14; Serial No. 309,868; published Apr. 14, 1931.
Dresses and blouses. Storyk Bros. 284,967; July 14; Serial No. 311,291; published Apr. 21, 1931.
Dresses and pajamas. R. Lowenbaum Mfg. Co. 285,109; July 14; Serial No. 310,521; published Apr. 14, 1931.
Dresses, skirts, kimonos, etc. Dumari Textile Co. 285,139; July 14; Serial No. 310,937; published Apr. 28, 1931.
Gloves. Indianapolis Glove Company. 285,161; July 14; Serial No. 311,408; published Apr. 21, 1931.
Hats and caps. Mallory Cap Co. 285,136; June 14; Serial No. 310,564; published Apr. 21, 1931.
Heels, Rubber. Firestone Footwear Company. 285,155; July 14; Serial No. 311,135; published Apr. 21, 1931.
Hose and stockings. Wayne Knitting Mills. 285,108; July 14; Serial No. 310,427; published Apr. 28, 1931.
Hosiery. Brumbach & Miller, Inc. 284,953; July 14; Serial No. 311,508; published Apr. 28, 1931.
Hosiery. Chas. Chipman's Sons Co. 285,116; July 14; Serial No. 310,757; published Apr. 14, 1931.
Hosiery. Combine Hosiery Corporation. 285,074; July 14; Serial No. 311,560; published Apr. 28, 1931.
Hosiery. Gus Grissmann Co. 284,959; July 14; Serial No. 312,149; published Apr. 28, 1931.
Hosiery. E. A. Lee. 285,119; July 14; Serial No. 311,001; published Apr. 14, 1931.
Infant's wear. S & R Infants Wear Co. 285,113; July 14; Serial No. 310,700; published Apr. 21, 1931.
Leather for shoes, Cut-out parts of. M. Berkowitz & Sons. 285,060; July 14; Serial No. 307,382; published Apr. 28, 1931.
Pajamas. Hanry Hadad Co. Inc. 285,082; July 14; Serial No. 312,298; published Apr. 28, 1931.
Shirts. Alperin Strauss Co. 285,128; July 14; Serial No. 296,724; published Apr. 21, 1931.
Shirts, Northern Jobbing Company. 284,955; July 14; Serial No. 311,844; published Apr. 21, 1931.
Shirts, Work. Washington Manufacturing Co. 285,182; July 14.
Shoes. Brilliant Brothers Co. 285,159; July 14; Serial No. 311,252; published Apr. 28, 1931.
Shoes. Crescent Shoe Co. 285,021; July 14; Serial No. 307,968; published Apr. 28, 1931.
Shoes. Wm. Hahn & Company. 285,153; July 14; Serial No. 311,032; published Apr. 21, 1931.
Shoes. Spencer Chain Stores, Inc. 285,056; July 14; Serial No. 304,220; published Apr. 28, 1931.
Shoes, boots, and slippers. A. De Pinna Co. 285,133; July 14; Serial No. 310,122; published Apr. 21, 1931.
Shoes, Leather and rubber. J. K. Orr Shoe Company. 285,140; July 14; Serial No. 310,945; published Apr. 28, 1931.
Slips, pajamas, bloomers, etc. Strauber Bros. 285,101; July 14; Serial No. 309,536; published Mar. 10, 1931.
Slips, petticoats, and nightgowns. M. C. Schrank Company. 285,110–11; July 14; Serial Nos. 310,588–9; published Apr. 21, 1931.
Sportswear, Ladies'. Cherry & Roth. 285,115; July 14; Serial No. 310,431; published Apr. 14, 1931.
Suits. Joseph Engel-Cohen Co. 285,017; July 14; Serial No. 295,940; published Apr. 28, 1931.
Suits, coats, vests, etc. F. Naylor. 284,954; July 14; Serial No. 311,622; published Apr. 21, 1931.
Trousers. R. E. Kress. 284,966; July 14; Serial No. 311,191; published Apr. 21, 1931.
Undergarments. B. Davis. 285,154; July 14; Serial No. 311,086; published Apr. 28, 1931.
Undergarments, Ladies. Mayers & Schiller, Inc. 285,069; July 14; Serial No. 300,732; published Apr. 14, 1931.
Underwear. Beder & Beder, Inc. 285,051; July 14; Serial No. 302,807; published Apr. 21, 1931.
Underwear. Van Raalte Company. 285,100; July 14; Serial No. 309,405; published Apr. 21, 1931.
Underwear, Ladies'. Gluck & Cohen. 285,103; July 14; Serial No. 309,599; published Apr. 14, 1931.
Wearing apparel. Internationaler Maratti-Maschinenverkauf-A.-G. 285,057; July 14; Serial No. 305,532; published Apr. 28, 1931.

CLASS 40

Buckles. Riker Company. 285,144; July 14; Serial No. 311,284; published Apr. 21, 1931.
Fans. V. Beffa. 285,022; July 14; Serial No. 308,185; published Apr. 21, 1931.

CLASS 42

Handkerchiefs. Brown Durrell Co. 82,959; renewed Aug. 8, 1931.
Pile fabrics. Rossie Velvet Company. 285,172; July 14; Serial No. 312,268; published Apr. 28, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 285,157; July 14; Serial No. 311,138; published Apr. 21, 1931.

CLASS 45

Beverages and compounds, concentrates, and syrups for making the same. Wm. H. Rankin Company. 285,122; July 14; Serial No. 275,296; published May 5, 1931.
Beverages and syrups. Allegheny Sales Company. 285,084; July 14; Serial No. 312,408; published May 5, 1931.
Beverages and syrups and extracts used in making the same, Maltless. R. Lefferman. 285,091; July 14; Serial No. 312,565; published May 5, 1931.
Beverages, and syrups, compounds, flavors, and concentrates for making the same. Lash's Products Company. 285,083; July 14; Serial No. 312,302; published May 5, 1931.
Beverages and sirups, extracts, and emulsions for making the same, Maltless. Canadian Club Corporation. 285,085–6; July 14; Serial Nos. 312,476–7; published May 5, 1931.
Beverages, Maltless. Marion Orange Crush Bottling Company. 285,131; July 14; Serial No. 304,056; published May 5, 1931.
Cider, Sweet. W. L. Smith Orchards, Inc. 285,079; July 14; Serial No. 312,163; published May 5, 1931.
Soda-water. J. B. Lambert. 84,012; renewed Oct. 31, 1931.

CLASS 46

Apples, Fresh. P. J. McGuire. 284,989; July 14; Serial No. 305,048; published May 5, 1931.
Biscuit. National Biscuit Company. 83,858; renewed Oct. 17, 1931.
Bread. Aktiebolaget Nya Spis & Knäckebrödsfabriken, Oscarshamn. 285,124; July 14; Serial No. 280,534; published May 7, 1929.
Bread. Continental Baking Company. 285,125; July 14; Serial No. 283,387; published Apr. 21, 1931.
Butter, cocoa, coffee, etc. Geo. Rasmussen Co. 285,145; July 14; Serial No. 297,329; published May 5, 1931.
Cakes and pies. Tasty Baking Company. 285,168; July 14; Serial No. 311,856; published Apr. 28, 1931.
Candies. A. Maskey. 284,910; July 14; Serial No. 310,134; published May 5, 1931.

Candies. A. Maskey. 284,925; July 14; Serial No. 310,133; published May 5, 1931.
Candy bars. F. A. Martoccio Company. 284,982; July 14; Serial No. 312,611; published May 5, 1931.
Candy, chocolate, cocoa, etc. Ambrosia Chocolate Company. 284,985; July 14; Serial No. 298,132; published Aug. 5, 1930.
Canned applesauce. Lyndonville Canning Company. 284,983; July 14; Serial No. 312,656; published May 5, 1931.
Canned corn. Minnesota Consolidated Canneries, Inc. 285,147; July 14; Serial No. 301,490; published May 5, 1931.
Canned fruits, vegetables, berries, etc. Cincinnati Wholesale Grocery Company. 284,912; July 14; Serial No. 310,250; published May 5, 1931.
Canned salmon. New England Fish Company. 284,991; July 14; Serial No. 305,365; published May 5, 1931.
Cheese. P. Bürki. 285,134–5; July 14; Serial Nos. 310,248–9; published Apr. 21, 1931.
Cheese. Reynolds & Co. 285,088; July 14; Serial No. 312,532; published May 5, 1931.
Coffee. Southland Coffee Company. 284,980; July 14; Serial No. 311,982; published May 5, 1931.
Coffee. Southland Coffee Company. 284,981; July 14; Serial No. 312,576; published May 5, 1931.
Cranberries. New England Cranberry Sales Company. 285,008; July 14; Serial No. 276,976; published June 3, 1930.
Dairy products. W. J. Kennedy Dairy Co. 285,059; July 14; Serial No. 306,532; published May 5, 1931.
Digestive beverage containing chocolate and yeast. E. O. Farley Limited. 285,052; July 14; Serial No. 303,049; published May 5, 1931.
Feeds. Tarkio Molasses Feed Company. 284,913; July 14; Serial No. 310,742; published May 5, 1931.
Flour, canned fruit and vegetables, etc. Jameson-Boyce Company. 285,127; July 14; Serial No. 292,731; published May 5, 1931.
Flour, Wheat. General Mills, Inc. 285,170; July 14; Serial No. 312,181; published Apr. 28, 1931.
Flour, Wheat. Roanoke City Mills, Incorporated. 285,063; July 14; Serial No. 296,240; published Apr. 1, 1930.
Food, Dog. W. E. Simpson. 285,117; July 14; Serial No. 310,949; published May 5, 1931.
Food, Dog. Spratt's Patent (America) Limited. 285,089; July 14; Serial No. 312,537; published May 5, 1931.
Food for dogs. Francis H. Leggett & Company. 285,174; July 14; Serial No. 312,505; published May 5, 1931.
Food products, Frozen. Frosted Foods Company. 285,148; July 14; Serial No. 301,024; published May 5, 1931.
Fruits and canned vegetables. Sutter Cooperative Growers. 285,178; July 14.
Fruits, Fresh citrus. A. & L. Fruit Co. 285,006; July 14; Serial No. 280,867; published May 5, 1931.
Gum, Chewing. Frank H. Fleer Corporation. 284,993; July 14; Serial No. 305,967; published May 5, 1931.
Gum, Chewing. Goudey Gum Co. 284,974; July 14; Serial No. 311,330; published May 5, 1931.
Gum, Chewing. Orbit Listerated Gum Company. 284,919; July 14; Serial No. 312,308; published May 5, 1931.
Meats, boiled hams, and sausage, Smoked. Albert Lea Packing Company. 285,149; July 14; Serial No. 303,412; published May 5, 1931.
Melons, Fresh. W. E. Whitacre, Inc. 284,021; July 14; Serial No. 311,351; published May 5, 1931.
Oleomargarine. Glidden Company. 285,055; July 14; Serial No. 304,813; published May 5, 1931.
Rice, barley, dried peas, etc. Southern Rice Sales Company. 285,005; July 14; Serial No. 310,780; published May 5, 1931.
Rhubarb, Fresh. C. D. Morehouse. 284,992; July 14; Serial No. 305,720; published May 5, 1931.
Tea. Commercial Importing Co. Inc. 285,141; July 14; Serial No. 301,852; published May 5, 1931.
Vegetables, Fresh. Gitman Brothers. 284,920; July 14; Serial No. 311,329; published May 5, 1931.

CLASS 47

Wines, Claret and white. Barton & Guestier. 285,097; July 14; Serial No. 306,230; published May 5, 1931.

CLASS 48

Beer. Gebrüder Thomass Bierbrauerei zum Thomasbräu. 83,829; renewed Oct. 17, 1931.

CLASS 49

Whisky, Blended. Craigellachie-Glenlivet Distillery Co. Limited. 82,050; renewed May 30, 1931.
Whisky, Blended. Craigellachie-Glenlivet Distillery Co. Limited. 82,499; renewed July 4, 1931.

CLASS 50

Markers, Street and floor. Scovill Manufacturing Company. 285,195; July 14.
Number plates, name plates, sign plates, etc., Luminous or plain. United States Radium Corporation. 284,952; July 14; Serial No. 311,497; published May 5, 1931.
Pads, Cushioning. Sano Typewriter Pad Company. 284,960; July 14; Serial No. 312,455; published May 5, 1931.

ALPHABETICAL LIST OF LABELS

Beech-Nut Brand Chewing Gum, Spearmint. For Chewing Gum. Beech-Nut Packing Company. 39,416; July 14.
Chase & Sanborn's Seal Brand Tea Balls. For Tea Balls. Standard Brands Incorporated. 39,425–6; July 14.
Dermex Roller Facial Tissue. For Roller Facial Tissues. Dermay Perfumers, Inc. 39,419; July 14.
Fuller Floor Wax. For Floor Wax. Fuller Brush Company. 39,420; July 14.
Fungi-Rex. For Medicinal Preparation Consisting of an Ointment For Treating Athlete's Foot. United Drug Company. 39,428; July 14.
Hedge's Mayonnaise. For Mayonnaise Dressing. R. Hedge. 39,421; July 14.
Houspray. For Insecticide. Houspray Manufacturing Company. 39,422; July 14.
Master Grocers Guild. For Canned Peaches. Sussman, Wormser & Company. 39,427; July 14.
Nathan Harbatkin's Bakery. For Challahs and Cakes. H. Price. 39,423; July 14.
Society Brand. For Relish Spread. Beeks Produce Co. Inc. 39,417; July 14.
Society Brand. For Tartare Sauce. Beeks Produce Co. Inc. 39,418; July 14.
Spot-Em. For Game. D. M. Shipman. 39,424; July 14.

ALPHABETICAL LIST OF PRINTS

Gingham. For Preserves. Peter J. Kasper Company. 13,297; July 14.
Metalkleen. For Preparation for Removing Corrosion from Radiators. Inland Motor Products Company. 13,296; July 14.
The Whole World Rests. For Upholstered Furniture. Duplex Swing-Spring Seat Co. 13,295; July 14.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 14TH DAY OF JULY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott, Geoffrey J., assignor to P. I. V. Chain Gears Limited, London, England. Power transmission mechanism. 1,814,883; July 14.

Acoustic Products Company. (See Hutchison, Miller R., assignor.)

Adamson, Allan A., Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio. Box lid. 1,814,071; July 14.

Ainsworth Manufacturing Corporation. (See Potter, Albert T., assignor.)

Aktiebolaget Superior. (See Höglund, Thure G., assignor.)

Aktiebolaget Svenska Kullagerfabriken. (See Palmgren, Per G., assignor.)

Aktiebolaget Svenska Kullagerfabriken. (See Von Zweigbergk, Adolf S. O., assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Jones, Julius, assignor.)

Albert, Paul L. G., Aulnay-Sous Bois, France, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Fluid heater. 1,814,423; July 14.

Alcalá, Victoriano, Elota, Mexico. Motor device. 1,814,779; July 14.

Alemite Die Casting & Mfg Co. (See Gullborg, John S., assignor.)

Alexander, Harry S., and F. B. Pfeiffer, Akron, and J. W. White, Barberton, Ohio, assignors to Seiberling Rubber Company. Method of and apparatus for separating sheet materials. 1,815,020; July 14.

Alexanderson, Ernest F. W., Schenectady, N. Y., assignor to General Electric Company. Radio signaling system. 1,814,813; July 14.

Allen, Robert C., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine support. 1,814,626; July 14.

Allen, Robert C., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine support. 1,814,627; July 14.

Allis, Louis, Company, The. (See Barr, John M., assignor.)

Altgelt, Herman E., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Harrow. 1,814,814; July 14.

Altgelt, Herman E., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Agricultural implement. 1,814,815; July 14.

Aluminum Company of America. (See Hourigan, Joseph, assignor.)

American Airship Corporation. (See Miner, Charles R., assignor.)

American Automobile Applicance Company. (See Wigle, Joy V., assignor.)

American Can Company. (See Nicholls, Henry M., assignor.)

American Cyanamid Company. (See Collins, Charles D., assignor.)

American Gasaccumulator Company. (See Oestnaes, Victor L., assignor.)

American Iron & Machine Works, Inc. (See Lincoln, Robert A., assignor.)

American Iron and Machine Works Company. (See Powers, George V., assignor.)

American Laundry Machinery Co., The. (See Stride, William T., assignor.)

American Lurgi Corporation. (See Baron von Girsewald, Conway and Neumark, assignors.)

American Magnesium Corporation. (See Bakken, Herman E., assignor.)

American Oil Company. (See Wakefield, Arthur T., assignor.)

American Stove Company. (See Stockstrom, Arthur, assignor.)

American Stove Company. (See Wiedemann, John, assignor.)

American Telephone and Telegraph Company. (See Deardorff, Ralph W., assignor.)

American Telephone and Telegraph Company. (See Herman, Joseph, assignor.)

American Telephone and Telegraph Company. (See Holden, William H. T., assignor.)

American Telephone and Telegraph Company. (See Mitchell Doren, assignor.)

American Telephone and Telegraph Company. (See Ohl, Russell S., assignor.)

American Telephone and Telegraph Company. (See Weaver, A., and Branson, assignors.)

American Telephone and Telegraph Company. (See Wright, S. B., and Mitchell, assignors.)

American Tool Works Company, The. (See Robinson, A. E., and Schellenbach, assignors.)

American Tool Works Company, The. (See Schellenbach, William L., assignor.)

American Valve and Meter Company, The. (See Gray, Wallace M., assignor.)

Ames, Fletcher, Berkeley, assignor to Ames Harris Neville Co., San Francisco, Calif. Hammock. 1,814,579; July 14.

Ames Harris Neville Co. (See Ames, Fletcher, assignor.)

Amodeo, Lorenzo, New York, N. Y. Observation bus. 1,814,884; July 14.

Amplex Engineering Corporation. (See Rietmann, J. A., and Radics, assignors.)

Anchor Cap & Closure Corporation. (See Podel, Abraham, assignor.)

Ancira Lock & Seal Corporation. (See Stillman, Allen P., assignor.)

Ancira Lock & Seal Corporation. (See Street, Frederick G., assignor.)

Anderson, Edwin O., Jersey City, N. J. Motor control system for electric elevator installations. 1,814,501; July 14.

Andreasson, Rudolf W., Detroit, Mich. Tool holder. 1,814,655; July 14.

Andrews, Benjamin, Houston, Tex. Mining sulphur. 1,814,539; July 14.

Andrews, Charles W., Duluth, Minn., assignor to H. A. Brassert & Company, Chicago, Ill. Making producer gas. 1,814,580; July 14.

Anoskopay, Joseph, Providence, R. I. Mold for forming molded articles. 1,814,276; July 14.

Anschicks, Rudolph J., assignor to Protectoseal Company of America, Chicago, Ill. Filling and venting device. 1,814,656; July 14.

Antidolor Mfg. Co., The. (See Waite, Ralph B., assignor.)

Anton, Frederick A., Topeka, Kans. Arm for lateral awnings. 1,814,108; July 14.

Apollo Magneto Corporation. (See Lencke, J. K., and Schmid, assignors.)

Appelbaum, Isaac, Brooklyn, assignor to Hangerette Folding Box, Ltd., New York, N. Y. Automatic folding container. 1,814,816; July 14.

Apple Vender Co. (See Claussen, Wells H., assignor.)

Apt Novelty Company Inc. (See Shulman, Charles, assignor.)

Arcturus Radio Tube Company. (See Krahl, Walter L., assignor.)

Armstrong Cork Company. (See Humphreys, Charles F., assignor.)

Armstrong Cork Company. (See McCarthy, John C., assignor.)

Armstrong Mfg. Co., The. (See Neubauer, Charles, assignor.)

Armstrong, James R., Ingram, assignor, by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Demand limit device for fluid meters. 1,814,657; July 14.

Armstrong, Leonard J., Mariners Harbor, N. Y. Spray attachment for faucets. 1,814,020; July 14.

Arthur, James L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,813,900; July 14.

Ashton Valve Company, The. (See Motherwell, Joseph W., assignor.)

Associated Electrical Industries, Ltd., of England. (See Bailey, Richard W., assignor.)

Atwater Kent Manufacturing Company. (See Tarzian, Sarkes, assignor.)

Atwater Kent Manufacturing Company. (See Travis, Charles, assignor.)

Auburn Automobile Company. (See Cord, E. L., Snow, and Hollister, assignors.)

Aurich, Peter, assignor to Gebr. Eickhoff, Maschinenfabrik u. Eisengiesserei, Bochum, Germany. Shaking conveying device. 1,814,277; July 14.

Aurora Sign Company. (See Gross, Joseph E., assignor.)

Aust, Harry, Philadelphia, Pa. Multiple to hose. 1,814,885; July 14.

Austin, Kirby B., Scotia, N. Y., assignor to General Electric Company. Protective means for sound reproducers. 1,814,817; July 14.

Autokraft Box Corporation. (See Adamson, Allan A., assignor.)

Automatic Electric Inc. (See Hersey, Harry E., assignor.)

Automatic Electric Inc. (See Remington, Charles, assignor.)

Baash-Ross Tool Company. (See Black, Millard S., assignor.)

Babcock & Wilcox Company, The. (See Albert, Paul L. G., assignor.)

Babcock & Wilcox Company, The. (See Jacobus, D. S., and Kerr, assignors.)

Babcock & Wilcox Company, The. (See Jones, Edwin W., assignor.)

Babcock & Wilcox Company, The. (See Kerr, H. J., and Fletcher, assignors.)

Baeck, Eugene C., Lake Ronkonkoma, N. Y. Printing machine. 1,814,886; July 14.

Bagley and Sewall Company, The. (See Gallagher, John M., assignor.)

Bahan, William H., Greenville, S. C. Beam supporting means for textile machinery. 1,814,780; July 14.

Bailey, Clarence J. (See Schuh, L. B., and Bailey.)

Bailey, Daveletta D. (See Schuh, L. B., and Bailey, assignors.)

Bailey, Richard W., Altrincham, England, assignor, by mesne assignments, to Associated Electrical Industries, Ltd., of England. Internal combustion engine. 1,814,781; July 14.

Bakke, Knute, West Allis, Wis. Ironing board. 1,814,109; July 14.

Bakken, Herman E., assignor to American Magnesium Corporation, Niagara Falls, N. Y. Separating volatile metals by sublimation. 1,814,072; July 14.

Bakken, Herman E., assignor to American Magnesium Corporation, Niagara Falls, N. Y. Purification of calcium. 1,814,073; July 14.

Ball and Ball Carburetor Company. (See Ball, Frederick O. and T. M., assignors.)

Ball, Frederick O., and T. M. Ball, assignors to Ball and Ball Carburetor Company, Detroit, Mich. Carburetor. 1,814,359; July 14.

Ball, Thomas M. (See Ball, Frederick O., and T. M.)

Baltzley, Louis E., Glen Ridge, N. J. Machine for snelling fishhooks. 1,814,404; July 14.

Bander, Jacob B., Newark, N. J. Reading glass. 1,814,540; July 14.

Banks, Harry P. (See Rippey, H. F., Cone, Davidson, Laucks, and Banks.)

Bard, Albert T., assignor to Reliance Manufacturing Company, Chicago, Ill. Shirt collar. 1,814,818; July 14.

Barkley, Emmett, Chattanooga, Tenn. Combined lamp stand and plant holder. Des. 84,616; July 14.

Barnes, Leslie W., Stratford, Conn. Pouch. 1,814,614; July 14.

Baron von Girsewald, Conway, Frankfort-on-the-Main, and H. Neumark, Wetzlar, Germany, assignors to American Lurgi Corporation, New York, N. Y. Recovery of cadmium from compounds of cadmium and oxygen by distillation. 1,814,023; July 14.

Barr, John M., assignor to The Louis Allis Company, Milwaukee, Wis. Variable speed mechanism. 1,814,424; July 14.

Barrett, Arthur M., Winnetka, assignor to Barrett-Cravens Company, Chicago, Ill. Portable elevator. 1,814,110; July 14.

Barrett-Cravens Company. (See Barrett, Arthur M., assignor.)

Barroll, Henry, & Co. Inc. (See Barroll, Henry E., assignor.)

Barroll, Henry E., assignor to H. Barroll & Co. Inc., Chicago, Ill. Pouring nozzle and closure therefor. 1,814,658; July 14.

Barroll, Henry E., assignor to H. Barroll & Co. Inc., Chicago, Ill. Pouring nozzle. 1,814,659; July 14.

Barton Corporation, The. (See Labisky, A. H., and Zahn, assignors.)

Barwood, Leon J., Cambridge, Mass. Washer. 1,814,502; July 14.

Bassett, Cyrus W., and H. J. Fear, Montclair, assignors to Elevator Supplies Company, Inc., Hoboken, N. J. System of control for elevators. 1,814,660; July 14.

Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping uppers over lasts. 1,813,983; July 14.

Baughman, George W., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,814,581; July 14.

Baumann, John. (See Müller, John H., assignor.)

Bausch & Lomb Optical Company. (See Martin, Allan F., assignor.)

Baxter, William C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Splitting machine. 1,814,111; July 14.

Bayne, Basil R., Gerrards Cross, England. Manufacture of colored patterned glass and other transparencies or translucencies. 1,813,901; July 14.

Beach, Hobart C., Covington, Ky., assignor to The Carborundum Company, Niagara Falls, N. Y. Grinding wheel and holder. 1,814,782; July 14.

Beard, James R., Kensington, London, and G. L. Porter, Manchester, assignors to Electrical Improvements Limited, Newcastle-upon-Tyne, England. Indicating apparatus. 1,814,278; July 14.

Beaver Machine & Tool Co. (See Slade, H. E., and Gehring, assignors.)

Becker, Joseph D., Minneapolis, Minn. Combination tractor grader. 1,814,425; July 14.

Becker, Joseph L., Minneapolis, Minn. Controlling device for motor vehicles. 1,814,426; July 14.

Becker, Joseph L., Stillwater, Minn. Coupling device. 1,814,427; July 14.

Becq, André, Paris, France. Signaling and indicating apparatus. 1,814,465; July 14.

Beddoes, Hubert, assignor to Pacific Flush Tank Company, Chicago, Ill. Sprinkler head or nozzle for filter beds. 1,814,112; July 14.

Beecher, Eugene L., assignor to The Gabriel Company, Cleveland, Ohio. Liquid level indicator. 1,815,001; July 14.

Beecher, Eugene L., assignor to The Gabriel Company, Cleveland, Ohio. Connecter for hydrostatic conduits. 1,815,002; July 14.

Beecher, Eugene L., East Cleveland, assignor to The Gabriel Company, Cleveland, Ohio. Vane for shock absorbers. 1,815,003; July 14.

Beeghly, Urner J., Spokane, Wash. Bunk and post connecting means. 1,814,541; July 14.

Belger, Fred S., assignor to The Eustis Specialty Co., Los Angeles, Calif. Track for sliding sash. 1,814,503; July 14.

Bek, Ernst G. (See Brunhubner, Georg, assignor.)

Bekkens, Henri, Calais, France. Lace. Des. 84,617; July 14.

Bell, James H. (See Tiffany, Tolbert K., assignor.)

Bell Telephone Laboratories, Incorporated. (See Bode, Hendrik W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Clokey, A. A., and Knoop, assignors.)

Bell Telephone Laboratories, Incorporated. (See Gooderham, John W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Heising, Raymond A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Klein, Charles H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Malles, Ralph E., assignor.)

Bell Telephone Laboratories, Incorporated. (See Smith, Edmund B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Terry, Roy V., assignor.)

Belokopytoff, Alexander J., assignor, by mesne assignments, to K. L. Mayehoff, Norwalk, Conn. Dyeing textile fabrics. 1,814,783; July 14.

Bencker, Ralph B., and B. E. Howden, assignors to Horn & Hardart Baking Co., Philadelphia, Pa. Advertising sign. Des. 84,618; July 14.

Bencker, Ralph B., and B. E. Howden, assignors to Horn & Hardart Baking Co., Philadelphia, Pa. Advertising sign. Des. 84,619; July 14.

Bender, Frederick W., Louisville, Ky. Umpire's belt. 1,814,887; July 14.

Benjamin, David, Cleveland Heights, assignor to The Gabriel Company, Cleveland, Ohio. Ball and socket connection. 1,814,999; July 14.

Benjamin, David, Cleveland Heights, assignor to The Gabriel Company, Cleveland, Ohio. Indicator. 1,815,004; July 14.

Benkert, John, and E. Straub, Chicago, Ill. Smoke cleaner. 1,814,582; July 14.

Benner, Raymond C., Niagara Falls, and E. S. Caprou, Buffalo, assignors to The Carborundum Company, Niagara Falls, N. Y. Making electrical resistances. 1,814,583; July 14.

Bennett, Alexander H., London, England. Recovery of essential oils from lemons and other fruits of trees of the genus citrus. 1,814,888; July 14.

Bennett, John L., Decatur, assignor to U. S. Manufacturing Corporation, Decatur, Ill. Utensil. 1,814,784; July 14.

Bennett, Stevens A., Chicago, Ill. Can closing machine. 1,813,984; July 14.

Bentley & Jackson Limited. (See Nuttall, Thomas B., assignor.)

Bergundthal, Carl J., Alameda, Calif. Rail-crossing. 1,814,466; July 14.

Berliner Maschinenbau-Actien-Gesellschaft vormals L. Schwartzkopff. (See Debus, Karl, assignor.)

Bernard, William A., assignor to The W. Schollhorn Company, New Haven, Conn. Hand tool. 1,814,113; July 14.

Berresford, A. W., et al. (See Berresford, John K., assignor.)

Berresford, A. W., et al. (See Low, F. S., assignor.)

Berresford, A. W., et al. (See Low, F. S., Taylor, and Berresford, assignors.)

Berresford, John K. (See Low, F. S., Taylor, and Berresford.)

Berresford, John K., assignor, by mesne assignments, to F. S. Low, Niagara Falls, N. Y., and A. W. Berresford, Detroit, Mich. Production of ferric and chromic chlorides. 1,814,860; July 14.

Bessler Disappearing Stairway Company, The. (See Bessler, Frank E., assignor.)

Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing wall stairway. 1,814,889; July 14.

Bethened, Joseph, Paris, France. High speed radiotelegraphic receiving apparatus. 1,813,908; July 14.

Biagosch, Karl, Leipzig, Germany. Cutting machine for paper, cardboard, and similar material with automatic feed. 1,814,890; July 14.

Bing, Julius, Eisenach, assignor to the Firm Magnet-Werk G. m. b. H. Eisenach Spezialfabrik fur Elektromagnet-Apparate, Eisenach, Thuringia, Germany. Power transmission device for presses and the like. 1,814,891; July 14.

Binns, George W., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Hopper feed. 1,814,279; July 14.

Bishop, Edmund, New York, N. Y. Air filter. 1,814,428; July 14.

Black, Millard S., Huntington Park, assignor to Baash-Ross Tool Company, Incorporated, Los Angeles, Calif. Crown block. 1,814,615; July 14.

Blackmore, Charles C., Dayton, Ohio. Toy. 1,813,985; July 14.

Blackstone Silver Company. (See Ittig, George P., assignor.)

Blain, Willard E., Van Buren, Ark. Aeroplane. 1,814,115; July 14.

Blancard & Co. (See Mountford, Thomas A., assignor.)

Blanco, Galo W., and C. Henningsen, Buffalo, assignors by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Manufacture of viscose. 1,814,542; July 14.

Blanco, Galo W., and C. Henningsen, Buffalo, assignors, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Manufacture of viscose. 1,814,543; July 14.

Bland, Louis, Rochester, N. Y. Power silk screen process printer and coater. 1,815,021; July 14.

Bledsoe, George W. (See Bragaw, W. H., and Bledsoe.)

Blunt, James G., and R. W. Clifford, Schenectady, N. Y. Throttle valve operating mechanism. 1,814,014; July 14.

Bode, Hendrik W., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wave filter. 1,814,238; July 14.

Bodman, Walter L., New York, N. Y., assignor to The Insulation Corporation. Refrigeration system and method. 1,814,114; July 14.

Bodman, Walter L., New York, N. Y., assignor to The Insulation Corporation. Refrigeration system and method. 1,814,280; July 14.

Boesger, George A., assignor to The W. W. Sly Manufacturing Company, Cleveland, Ohio. Pressure operated sand blast valve. 1,814,616; July 14.

Bohn, Gebhard C., St. Paul, Minn. Refrigerator closure. 1,814,661; July 14.

Bollman, Hermann. (See Brown, J. C., and Bohrman.)

Bollman, Hermann. (See Neiss, Oskar, assignor.)

Bond, Raymond W., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Dispensing apparatus of the visible type. 1,814,662; July 14.

Bond, Raymond W., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Totalizing counter mechanism for dispensing pumps. 1,814,663; July 14.

Booth, Clement, assignor to Cincinnati Grinders Incorporated. Cincinnati, Ohio. Grinding machinery. 1,814,361; July 14.

Booth, Clement, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Centerless grinding machinery. 1,814,362; July 14.

Booth, Clement, assignor to Cincinnati Grinders Incorporated. Cincinnati, Ohio. Grinding machinery. 1,814,363; July 14.

Booth, Clement, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Valve grinder. 1,814,364; July 14.

Booth, Clement, assignor to Cincinnati Grinders Incorporated. Cincinnati, Ohio. Grinding machinery. 1,814,365; July 14.

Borden, Arthur G., assignor to The Borden Method, Inc., Washington, D. C. Winding device for hair wavers. 1,814,116; July 14.

Borden Method, Inc., The. (See Borden, Arthur G., assignor.)

Borst, Charles H., Cuyahoga Falls, Ohio. Hot water bottle. 1,814,429; July 14.

Bossert, Theodore J. (See Chackes, W., and Bossert.)

Bost, Henry A., Euclid Village, and E. C. Hummel, Shaker Heights, assignors to The Otis Steel Company, Cleveland, Ohio. Purifying steel. 1,814,584; July 14.

Boston Brick Company. (See Parry, Robert A., assignor.)

Boston Machine Works Company. (See McGrail, Michael J., assignor.)

Boswell, Robert A., Washington, D. C. Machine for extruding ophthalmic mountings. 1,814,819; July 14.

Boswell, Robert A., Washington, D. C. Extruding die for forming ophthalmic mountings. 1,814,820; July 14.

Botts, Laurance H., De Land, Fla. Shears. 1,814,821; July 14.

Bovie, William T., Evanston, Ill., assignor to The Liebel-Flarsheim Company, Cincinnati, Ohio. Electrosurgical apparatus. 1,813,902; July 14.

Bower, Joshua. (See Dreyfus, H., Kinsella, Bower, and Taylor.)

Bowker, William. (See Smith, H. E., Bowker, and Conrow.)

Bowlen, Carlos H., assignor to I. L. Keith, Haverhill, Mass. Cementing machine. 1,814,430; July 14.

Bowman, John L., et al. (See Endsley, Roy H., assignor.)

Bowser, S. F., & Company. (See Bond, Raymond W., assignor.)

Bowser, S. F., & Company. (See Hartley, Lee R., assignor.)

Boye, James H., assignor to James H. Boye Manufacturing Company, Chicago, Ill. Curtain fixture. 1,814,281; July 14.

Boye, James H., assignor to James H. Boye Manufacturing Company, Chicago, Ill. Curtain fixture. 1,814,282; July 14.

Boye, James H., Manufacturing Company. (See Boye, James H., assignor.)

Boyer, Joseph, assignor of one-fourth to L. J. Brennan, L'Anse, Mich. Expanding and contracting tool. 1,814,892; July 14.

Boynton, Alexander, San Antonio, Tex. Packer. 1,814,117; July 14.

Bracke, Robert F., assignor to C. B. Camp, trustee, Chicago, Ill. Carburetor fuel supply system. 1,814,118; July 14.

Bradbury, Clifford C., Glencoe, Ill. Loud speaking apparatus. 1,814,119; July 14.

Bradbury, Clifford C., assignor to C. B. Camp, trustee, Glencoe, Ill. Fuel booster pump. 1,814,120; July 14.

Bradbury, Clifford C., Oak Park, Ill. Hygro-thermostat. 1,814,585; July 14.

Bradford, Zerbe C., assignor to Delco Products Corporation, Dayton, Ohio. Electric motor. 1,814,237; July 14.

Bradley, Harry L., assignor of one-half to L. Bradley, Milwaukee, Wis. Shoe horn. Des. 84,620; July 14.

Bradley, Lynde. (See Bradley, Harry L., assignor.)

Bragaw, William H., and G. W. Bledsoe, Silver City, N. Mex. Power multiplier. 1,813,903; July 14.

Brainard, Clarence H., Glendale, R. G. Carrington, Santa Monica, and A. F. Cooke, assignors to Edwin H. Piersen, Los Angeles, Calif. Building construction. 1,813,909; July 14.

Bramley-Moore, Swinfen, White Plains, N. Y. Viscosity reducer. 1,814,400; July 14.

Braner, Stephen W., Chicago, Ill., assignor to Victor Manufacturing & Gasket Co. Gasket. 1,814,283; July 14.

Branson, David E. (See Weaver, A., and Branson.)

Brassert, H. A., & Company. (See Andrews, Charles W., assignor.)

Breeze, Herbert J., Chatsworth, Calif. Take off and landing apparatus for airplanes. 1,813,986; July 14.

Brennan, Leo J. (See Boyer, Joseph, assignor.)

Briggs Manufacturing Company. (See Williams, Clifford J., assignor.)

Britton, Edgar C. (See Hale, W. J., and Britton.)

Britton, Edgar C., and H. R. Slagh, assignors to The Dow Chemical Company, Midland, Mich. Separation of cuprous and ammonium chloride. 1,814,822; July 14.

Broadwell, William C., Brooklyn, assignor, by mesne assignments, to J. F. Henningsen, Eastport, Long Island, N. Y. Container. 1,814,785; July 14.

Bronander, Wilhelm B., Montclair, N. J. Fire extinguisher. 1,813,910; July 14.

Brown, Edwin M., et al. (See Rutten, Frank M., assignor.)

Brown, John C., and H. W. Bohrman, Los Angeles, Calif. Multiple port valve. 1,814,121; July 14.

Brown, Ora S., Virginia, Minn. Engine starting and lighting system. 1,814,617; July 14.

Brunhübner, Georg, assignor to E. G. Bek, Pforzheim, Germany. Soldering chains, chainmesh, or the like. 1,813,904; July 14.

Bryson, Charles G., assignor to Erie Restaurant Equipment Company, Erie, Pa. Cooker. 1,814,122; July 14.

Buckbee, John C., Chicago, Ill. Concrete railroad tie. 1,814,239; July 14.

Burch, Fred, Milford, assignor to Van Dresser Specialty Corporation, Detroit, Mich. Pocket and forming the same. 1,815,028; July 14.

Burgess, Willard L., Kansas City, Mo. Lamp. 1,813,905; July 14.

Burke, Denis J., assignor to P. Schidrowitz, London, England. Paint for application to rubber and rubber surfaces. 1,814,823; July 14.

Burke & James, Inc. (See Drucker, George A., assignor.)

Burke, Stephen P., assignor to Combustion Utilities Corporation, New York, N. Y. Synthetic resin and making same. 1,814,124; July 14.

Burkhardt, Conrad C. C., Philadelphia, Pa. Tender frame. 1,814,893; July 14.

Burkhardt, Wendell E., Crawfordsville, Ind. Oil indicator wiper. 1,814,075; July 14.

Burkhart, Charles, Bronx, N. Y. Dispenser for heterogeneous liquids. 1,814,123; July 14.

Burnham Chemical Company. (See Burnham, George B., assignor.)

Burnham Chemical Company. (See Duschak, Lionel H., assignor.)

Burnham, George B., assignor to Burnham Chemical Company, Reno, Nev. Obtaining potassium sodium sulphate. 1,814,284; July 14.

Burroughs Adding Machine Company. (See Muller, Robert L., assignor.)

Burton, Frank C., assignor to Grigsby-Grunow Company, Chicago, Ill. Radiocabinet. Des. 84,621; July 14.

Burton, Robert N. (See Hynan, Arthur C., assignor.)

Butler, John M., Evanston, assignor to King Pneumatic Tool Company, Chicago, Ill. Pumping apparatus. 1,814,285; July 14.

Butler Manufacturing Company. (See Glover, William C., assignor.)

Butler, Richard C. (See Hughes, J. M., and Butler.)

Butsko, Stephen, assignor, by mesne assignments, to Pioneer Pearl Button Company, Poughkeepsie, N. Y. Machine for cutting pearl button stock. 1,814,240; July 14.

Büttner, Artur, assignor to Schnellpressenfabrik Aktiengesellschaft Heidelberg, Heidelberg, Germany. Sheet laying-on device. 1,814,021; July 14.

Bypro Manufacturing Company. (See Elliott, William E., assignor.)

Cadenbach, Christian A., assignor to Independent Die & Supply Co., St. Louis, Mo. Cutting die structure. 1,814,824; July 14.

Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Controlling the vulcanization of rubber and similar materials and products obtained thereby. 1,814,286; July 14.

Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Controlling the vulcanization of rubber and similar materials and products obtained thereby. 1,814,287; July 14.

Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Controlling the vulcanization of rubber and similar materials and products obtained thereby. 1,814,288; July 14.

Cahill, John J., Malden, and G. R. Cargill, Medford, Mass. Fire hydrant guard. 1,814,664; July 14.

Cairncross, Robert L., Chicago, Ill., and G. H. Goodell, St. Paul, Minn., assignors to The National Lock Washer Company, Newark, N. J. Wrench of yielding and adjustable structure. 1,814,544; July 14.

Caldwell, Edwin de H., Fredonia, assignor to Franklin Railway Supply Company, New York, N. Y. Valve gear. 1,814,545; July 14.

Caldwell, Leslie M., Rockford, Ill. Window. 1,814,289; July 14.

California Fruit Growers Exchange. (See Wilson, C. P., and Stewart, assignors.)

Camel Company. (See Tobin, K. J., and Darrow, assignors.)

Cameron, Belle S., Wiarton, Ontario, Canada. Hosiery darning form. Des. 84,622; July 14.

Cameron, Eddie C., et al. (See Cameron, Hugh F., assignor.)

Cameron, Hugh F., assignor of three-fourths to E. C. Cameron and G. Muennink, sr., Hondo, and J. C. Johnson, Three Rivers, Tex. Oil well tester. 1,814,894; July 14.

Cameron, Hugh J., Fort Wayne, Ind., assignor to General Electric Company. Nonmetallic gear wheel and manufacturing the same. 1,814,825; July 14.

Camp, Curtis B., trustee. (See Bracke, Robert F., assignor.)

Camp, Curtis B., trustee. (See Bradbury, Clifford C., assignor.)

Campbell, Julian A., Long Beach, Calif. Absorber. 1,814,125; July 14.

Cantrell, Isaac D., Dallas, Tex. Saw filer's gauge. 1,813,989; July 14.

Capron, Everett S. (See Benner, R. C., and Capron.)

Carborundum Company, The. (See Beach, Hobart C., assignor.)

Carborundum Company, The. (See Benner, R. C., and Capron, assignors.)

Card, John L., Baltimore, Md., assignor to United States Hoffman Machinery Corporation, New York, N. Y. Garment press. 1,814,665; July 14.

Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)

Carey, Philip, Manufacturing Company, The. (See Henshaw, Lewis J., assignor.)

Cargill, George R. (See Cahill, J. J., and Cargill.)

Carl, James W., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,813,987; July 14.

Carlson, Elof L., assignor to The E. Ingraham Company, Bristol, Conn. Clock-case. Des. 84,623; July 14.

Carnahan, Glen C., assignor to J. B. Clow & Sons, Chicago, Ill. Gas burning device. 1,814,076; July 14.

Carolin, Frank J., assignor to Kohn & Company, Newark, N. J. Fastener. 1,814,077; July 14.

Caron, Fred M., assignor to Richmond Lewis, Springfield, Mass. Boiler. 1,813,906; July 14.

Carpenter, Charles F., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,814,826; July 14.

Carrington, Reginald G. (See Brainard, C. H., Carrington, and Cooke.)

Carson, Arthur, Surrey Hills, Victoria, Australia. Machine for cutting border slugs. 1,814,366; July 14.

Carson, William H., Norman, Okla. Machine for forming hemispherical caps with sealing lips. 1,814,546; July 14.

Carter, Edward F., Vancouver, British Columbia, Canada. Dock spout. 1,814,618; July 14.

Carter, Edward F., Vancouver, British Columbia, Canada. Turnhead for dock spouts. 1,814,619; July 14.

Cartier, Louis J., Budapest, Hungary, assignor to Cartier, Société Anonyme, Paris, France. Brooch clasp. 1,814,290; July 14.

Cartier, Société Anonyme. (See Cartier, Louis J., assignor.)

Case, J. I., Company. (See MacGregor, Wallace F., assignor.)

Cassel, Elmer F., Washington, D. C. Sound amplifying device. 1,814,022; July 14.

Caster, John E., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Long bar grinder. 1,814,367; July 14.

Caster, John E., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,814,431; July 14.

Castro, Manuel, Canton, Ohio. Aircraft signaling apparatus. 1,814,786; July 14.

Caton, Maurice L., Minneapolis, Minn., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Wooden building strip and making same. 1,814,291; July 14.

Caughey, Reed J., Schenectady, N. Y., assignor to General Electric Company. Hydraulic control system. 1,814,827; July 14.

Cedar, Hyman, Superior, Wis. Ring. 1,814,467; July 14.

Celanese Corporation of America. (See Dreyfus, H., Kinsella, Bower, and Taylor, assignors.)

Celite Corporation. (See Cummins, Arthur B., assignor.)

Celluloid Corporation. (See Smith, H. E., Bowker, and Conrow, assignors.)

Central Trust Company of Illinois, et al., executors. (See Friendly, Herbert M.)

Chackes, Woolf, and T. J. Bossert, assignors to Coopersmith Bed Company, St. Louis, Mo. Folding bed. 1,814,828; July 14.

Chain Belt Company. (See Draeger, Lloyd H., assignor.)

Chamberlain Company, The. (See Dulany, John R., assignor.)

Chambers, Allison R., New Glasgow, Nova Scotia, Canada. Manufacture of ground wood pulp. 1,813,988; July 14.

Chance Brothers and Co. (See Gould, C. E., Hampton, and Martin, assignors.)

Chaplick, Zigman, Chicago, Ill. Top for smoking stands. Des. 84,624; July 14.

Chapman, Edward L., Tulsa, Okla. Stub axle puller. 1,814,368; July 14.

Chapman, Frank D., Berlin, Wis. System of and machine for grading peas. 1,814,126; July 14.

Chapman, Herbert N., Kansas City, Mo. Mailing folder and envelope and making same. 1,814,620; July 14.

Charbonneau, Albert W., assignor to The Roberts Specialty Manufacturing Company, Inc., Boston, Mass. Compound appliance. 1,814,895; July 14.

Charters, William B., Sooke, British Columbia, Canada. Brake. 1,814,666; July 14.

Chartier, Adjutor, Sherbrooke, assignor of twenty-five per cent to A. Lagueux and twenty-five per cent to J. E. Pelletier, Quebec, Canada. Clutch check and release apparatus. 1,814,896; July 14.

Cheetham, Margaret, Youngstown, Ohio. Safety airplane. 1,814,829; July 14.

Chicago Bridge & Iron Co. (See Day, C. L., and McDonald, assignors.)

Chisholm, William D. (See Ryder, F. P., and Chisholm.)

Chittick, Martin B., assignor to The Pure Oil Company, Chicago, Ill. Concrete waterproofing compound. 1,814,292; July 14.

Christians, George W., Chattanooga, Tenn. Process and apparatus for sealing construction and expansion joints. 1,814,127; July 14.

Christiansen, Ejnar, assignor of one-half to C. O. Ericsson, Birmingham, England. Machine for molding pie casings. 1,813,907; July 14.

Christie, Vincent J., Scenic, S. Dak. Auto vision curtain. 1,814,293; July 14.

Chryst, William A., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Engine starting apparatus. 1,814,241; July 14.

Chryst, William A., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Electric motor. 1,814,243; July 14.

Chryst, William A., Dayton, Ohio, and H. E. Norviel, Anderson, Ind., assignors to Delco-Remy Corporation, Dayton, Ohio. Electric switch. 1,814,242; July 14.

Cincinnati Grinders Incorporated. (See Binns, George W., assignor.)

Cincinnati Grinders Incorporated. (See Booth, Clement, assignor.)

Cincinnati Grinders Incorporated. (See Caster, John E., assignor.)

Cincinnati Grinders, Incorporated. (See Einstein, Sol., assignor.)

Cincinnati Grinders Incorporated. (See Theler, Frederick J., assignor.)

Cinquini, Egisto, Whitneyville, Conn. Light holder for windows. 1,813,911; July 14.

Clark, Arthur G., assignor of one-third to A. C. Roburge, and one-third to G. E. Snell, St. Paul, Minn. Concrete building structure. 1,813,912; July 14.

Clark, Eugene F., Damariscotta, Me., assignor to Marshall Field Mills Corporation, Philadelphia, Pa. Loom for weaving tufted pile fabric. 1,814,294; July 14.

Clark, Walter R. (See Webster, W. R., and Clark.)

Claussen, Wells H., assignor to Apple Vender Co., Seattle, Wash. Coin controlled mechanism. 1,814,295; July 14.

Clifford, Roger W. (See Blunt, J. G., and Clifford.)

Clokey, Allison A., Rutherford, N. J., and W. A. Knoop, Hempstead, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Rotary distributor. 1,813,913; July 14.

Clow, James B., & Sons. (See Carnahan, Glen C., assignor.)

Cobb, Willard H., Brooklyn, N. Y., assignor to The Shoe Hardware Company, Waterbury, Conn. Making interlocking elements from sheet material. 1,814,244; July 14.

Coffelt, Oscar T. (See Hopkins, R. Z., Fellers, and Coffelt.)

Cole, Charles B., and O. L. Lewis, Chicago, Ill. Machine for boring cylinders. 1,814,078; July 14.

Cole, Charles B., and O. L. Lewis, Chicago, Ill. Tool carrying head. 1,814,079; July 14.

Collins, Charles D., assignor to American Cyanamid Company, New York, N. Y. Cylinder type fumigating applicator. 1,814,504; July 14.

Columbian Rope Company. (See Palmer, John A., assignor.)

Combustion Utilities Corporation. (See Burke, Stephen P., assignor.)

Commercial Shearing & Stamping Company, The. (See Proctor, Robert V., assignor.)

Cone, Charles N. (See Rippey, H. F., Cone, Davidson, Laucks, and Banks.)

Conklin, Oliver E., Parlin, and G. Rocker, Westfield, N. J. assignors to Du Pont-Pathe Film Manufacturing Corporation, Wilmington, Del. Numbering machine. 1,814,432; July 14.

Conners, John J., Tuckahoe, N. Y. Combination table and cabinet. Des. 84,667; July 14.

Connor, James F., Cleveland, Ohio. Toilet article. 1,814,433; July 14.

Connor, Joseph. (See Goodrich, N. E., and Connor.)

Conrow, Harry. (See Smith, H. E., Bowker, and Conrow.)

Continental Motors Corporation. (See Frederick, Walter A., assignor.)

Continental Motors Corporation. (See Niven, Archie M., assignor.)

Cooke, Albert F. (See Brainard, C. H., Carrington, and Cooke.)

Cooke, George T., South Norwalk, Conn. Cotter-pin puller. 1,814,830; July 14.

Coopersmith Bed Company. (See Chackes, W., and Bossert, assignors.)

Copeland Products Inc. (See Taylor, Samuel W., assignor.)

Copenhaver, Preston S. (See Demonet, E. A., and Copenhaver.)

Corcoran, Ivan, Milwaukee, Wis., assignor to Square D Company, Detroit, Mich. Release mechanism. 1,813,914; July 14.

Cord, Errett L., Chicago, Ill., H. C. Snow and D. C. Hollister, assignors, by mesne assignments, to Auburn Automobile Company, Auburn, Ind. Automobile radiator. Des. 84,625; July 14.

Cornell, Fritz G., jr., Caldwell, assignor to Jensen Creamery Machinery Co., Bloomfield, N. J. Heat exchange device. Re18,127; July 14.

Courtois, Gaston F., Lyon, France. Atomizer. 1,814,128; July 14.

Cover, Harvey S., South Bend, Ind. Respirator. 1,813,915; July 14.

Covey, Clarence F., assignor to The McAuley Automatic Trap Company, Pittsburgh, Pa. Luminous tube sign. 1,814,831; July 14.

Cowdrey, Arthur L., Cleveland Heights, Ohio. Traffic signal indicator. 1,814,667; July 14.

Cowgill, Orph W., University City, assignor to St. Louis Label Works, St. Louis, Mo. Paper box making machine. 1,814,369; July 14.

Coxe, Edmund J. D., Philadelphia, Pa. Apparatus for utilizing solar heat. 1,814,897; July 14.

Craighead, John R., Denver, Colo. Belt. Des. 84,626; July 14.

Crandall, Dean D. (See Haggerty, J. F., and Crandall.)

Crosby, Fred B., assignor to Morgan Construction Company, Worcester, Mass. Apparatus for controlling the shearing of moving materials. 1,814,586; July 14.

Crossman, Robert J., San Francisco, Calif. Combination cutter and guard. 1,814,668; July 14.

Crowley, Sylvester W. (See Schnek, C. R., and Crowley.)

Cummins, Arthur B., Lompoc, Calif., assignor to Celite Corporation, New York, N. Y. Production of finely divided material. 1,813,916; July 14.

Cunningham, Orin D., Provo, Utah, assignor to P. G. Reilly, Indianapolis, Ind. Froth flotation process. 1,814,434; July 14.

Curley, Robert S., Lowell, assignor to Saco-Lowell Shops, Boston, Mass. Cotton opening and picking system. 1,814,129; July 14.

Curtin, Richard J. (See Gilbertson, H. A., Curtin, and Jacobs.)

Cushing, George H., Washington, D. C. Parking lamp. 1,814,669; July 14.

Daae, Reinhardt, Youngstown, Ohio. Gas producer. 1,814,787; July 14.

Danco, Leon A., Rockville Center, N. Y., assignor to McKesson & Robbins, Inc., Bridgeport, Conn. Container for cosmetics. 1,814,080; July 14.

Daniels, Fred H., assignor to Riley Stoker Corporation, Worcester, Mass. Pulp refining apparatus. 1,814,587; July 14.

Darrow, William W. (See Tobin, K. J., and Darrow.)

Dauphin, Marie L. A. H., Paris, France. Sofa capable of being converted into a bed. 1,814,505; July 14.

Davey, George T. (See Hopkins, R. Z., and Davey.)

Davidson, Glenn. (See Rippey, H. F., Cone, Davidson, Laucks, and Banks.)

Davis, Garland H. B., Baton Rouge, La., assignor to Standard Oil Development Company. Hydrocarbon oil and manufacturing the same. 1,815,022; July 14.

Davis, G. M., Regulator Company. (See Hachmeister, George J., assignor.)

Davis, Harry F. (See Davis, Samuel M. and H. F.)

Davis, Michael J., Brooklyn, N. Y. Attachment for internal combustion engines. 1,814,370; July 14.

Davis, Robert H., London, England. Breathing apparatus. 1,814,506; July 14.

Davis, Samuel M., Altoona, Pa. Window blind and curtain fixture. 1,814,204; July 14.

Davis, Samuel M. and H. F., Bellwood, Pa. Window blind and curtain fixture. 1,814,205; July 14.

Day, Clayton L., New York, N. Y., and L. McDonald, Chicago, Ill., assignors to Chicago Bridge & Iron Co. Container for gases and volatile liquids. 1,814,130; July 14.

Dean, Charles A., Coalinga, Calif. Rotary drill bit. 1,814,296; July 14.

Dearborn, Richard J., Summit, N. J., and G. W. Gray, New York, assignors, by mesne assignments, to The Texas Company, New York, N. Y. Decomposing organic materials. 1,814,621; July 14.

Deardorff, Ralph W., Kensington, Calif., assignor to American Telephone and Telegraph Company. Measuring system. 1,814,808; July 14.

De Backer, Joseph, Uccle-Brussels, Belgium. Change speed device. 1,814,297; July 14.

Debus, Karl, Berlin-Waldmannslust, assignor to Berliner Maschinenbau-Actien-Gesellschaft, vormals L. Schwartzkopff, Berlin, Germany. Apparatus for removing any ink remains from the printing plate of the form cylinder of rotary intaglio printing machines. 1,814,024; July 14.

De Forest Radio Company. (See Schenk, C. R., and Crowley, assignors.)

Delamere, Rudolf D., assignor to Delamere and Williams, Toronto, Ontario, Canada. Lowering device. 1,814,131; July 14.

Delamere and Williams. (See Delamere, Rudolf D., assignor.)

De Laney, James C., Houston, Tex. Hand tool. 1,814,435; July 14.

Delco Products Corporation. (See Bradford, Zerbe C., assignor.)

Delco Products Corporation. (See Chryst, William A., assignor.)

Delco Products Corporation. (See Riedel, Walter W., assignor.)

Delco-Remy Corporation. (See Arthur, James L., assignor.)

Delco-Remy Corporation. (See Chryst, William, assignor.)

Delco-Remy Corporation. (See Chryst, W. A., and Norviel, assignors.)

Delco-Remy Corporation. (See Holmes, John Q., assignor.)

Delco-Remy Corporation. (See Norviel, Harry E., assignor.)

De Liso, Vincent, Astoria, assignor to Sakes & Co., New York, N. Y. Shoe. Des. 84,627; July 14.

De Long, William H. (See Ingram, B. L., and De Long.)

Delman, Inc. (See Ellington, Ferdinand W., assignor.)

Delman, Inc. (See Morali, Charles, assignor.)

Demonet, Eugene A., Brooklyn, N. Y., and P. S. Copenhaver, Bayonne, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Busy trunk line signal system. 1,814,899; July 14.

Dennhardt, Chester P., Los Angeles, Calif. Method of and apparatus for demulsifying petroleum. 1,814,298; July 14.

Deppe, C G Henry, Portland, Oreg. Lock hook. 1,814,900; July 14.

Derfer, R. Lagrand. (See Potter, Charles C., jr., assignor.)

De Saussure Equipment Company. (See De Saussure, William P., jr., assignor.)

De Saussure, William P., jr., Englewood, N. J., assignor to De Saussure Equipment Company, West New York, N. J. Checking device. 1,814,436; July 14.

Desmond, Matthew F., Burlingame, Calif. Luggage clamp. 1,814,371; July 14.

De Tartas, Augustus R., Douglas Manor, Long Island, N. Y. Photographic reversal process. 1,814,788; July 14.

Detroit Lubricator Company. (See Weber, Walter H., assignor.)

De Vault, Ralph P., Villa Park, assignor to Society for Visual Education, Inc., Chicago, Ill. Picture projector. 1,814,588; July 14.

De Vry, Herman A., assignor to Q. R. S.-De Vry Corporation, Chicago, Ill. Film spool. 1,813,990; July 14.

Dewey and Almy Chemical Company. (See Hauser, E. A., and Watts, assignors.)

Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)

Dickson, Oliver J., East Peoria, Ill. Rail and tie holding jack. 1,814,901; July 14.

Dictaphone Corporation. (See Johnson, Arthur A., assignor.)

Dilks, William H. (See Scott, Harry T., assignor.)

Dillon, John R. (See Lundelius, O. F., and Dillon.)

Dinger, Frederick, New York, N. Y. Finger ring. Des. 84,628; July 14.

Dirkes, Robert F., Jamaica, assignor to The Western Union Telegraph Company, New York, N. Y. Telegraph system for dividing received intelligence into groups. 1,814,902; July 14.

Doane, Harry C., Flint, assignor to General Motors Corporation, Detroit, Mich. Electric switch. 1,814,245; July 14.

Dobrowsky, Emanuel, assignor to Motor Car Advertising Device Co., Inc., New York, N. Y. Vacuum motor. 1,814,903; July 14.

Dobson, Harry E., New York, N. Y. Automatic valve. 1,814,904; July 14.

Doehler Vending Machines, Inc. (See Morin, Louis H., assignor.)

Dome, Robert B., Schenectady, N. Y., assignor to General Electric Company. Fading control system for radio reception. 1,814,832; July 14.

Donkin, William L., and W. G. McCarty, Longmont, Colo. Inflating and deflating device. 1,814,206; July 14.

Donkin, William L., and W. G. McCarty, Longmont, Colo. Automatic inflating and deflating device. 1,814,207; July 14.

Donle, Harold P., Meriden, Conn., assignor, by mesne assignments, to Radio Inventions, Inc. Amplifier coupling. 1,815,023; July 14.

Doran, John H., Schenectady, N. Y., assignor to General Electric Company. Shaft bearing. 1,814,833; July 14.

Döring, Fritz, Berlin-Frohnau, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin, Siemensstadt, Germany. Electric switch. 1,814,246; July 14.

Dörr, Eduard, and O. Leuchs, Elberfeld, and L. Rosenthal, Vohwinkel, near Elberfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Purifying cellulose ethers. 1,814,208; July 14.

Dorton, John M., Bonner Springs, Kans. Combination bed and seat. 1,814,780; July 14.

Dougan, David F., Memphis, Tenn. Mattress picker and renovator. 1,814,670; July 14.

Dougherty, Gregg, Princeton, N. J., assignor to E. C. Klipstein & Sons Company, New York, N. Y. Making ketones of the benzophenone type. 1,814,025; July 14.

Doughnut Machine Corporation. (See Hunter, Herbert T., assignor.)

Dow Chemical Company, The. (See Britton, E. C., and Singh, assignors.)

Dow Chemical Company, The. (See Grebe, John J., assignor.)

Dow Chemical Company, The. (See Hale, W. J., and Britton, assignors.)

Dow Chemical Company, The. (See Putnam, Mark E., assignor.)

Draeger, Lloyd H., assignor to Chain Belt Company, Milwaukee, Wis. Conveyer system. 1,814,026; July 14.

Drake, John L., assignor to Libbey-Owens Ford Glass Company, Toledo, Ohio. Process and apparatus for forming sheet or plate glass. 1,814,905; July 14.

Drew Richard G., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn. Preparing adhesive tape. 1,814,132; July 14.

Dreyfus, Henry, London, E. Kinsella, J. Bower, and W. I. Taylor, Spondon, near Derby, England, assignors to Celanese Corporation of America. Process and apparatus for the production of artificial filaments or threads. 1,814,468; July 14.

Drucker, George A., assignor to Burke & James, Inc., Chicago, Ill. Flash lamp. 1,814,299; July 14.

Dubilier Condenser Corporation. (See Ungar, Harry, assignor.)

Duckman, Arthur M., London, England. Tunnel kiln. 1,814,906; July 14.

Dufour, Germaine, assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Receptacle. 1,814,671; July 14.

Dugan, Edd, Wichita Falls, Tex. Multiple control valve. 1,814,907; July 14.

Dulany, John R., assignor to The Chamberlain Company, Pittsburgh, Pa. Heat generating compound. 1,814,741; July 14.

Du Mont, Allen B., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Apparatus and method for testing electrical devices. 1,814,437; July 14.

Dunbar, Thomas L., Watertown, N. Y. System for cooking fibrous material. 1,814,027; July 14.

Dunlap, Harry B., et al. (See Gill, Samuel A., assignor.)

Dunlap, Zac D., et al. (See Gill, Samuel A., assignor.)

Du Pont, E. I., de Nemours & Company. (See Handforth, Stanley L., assignor.)

Du Pont, May B., assignor to Max B. Dupont Vitacolor Corporation, Los Angeles, Calif. Color photography. 1,814,672; July 14.

Dupont, Max B., Vitacolor Corporation. (See Du Pont, Max B., assignor.)

Du Pont-Pathe Film Manufacturing Corporation. (See Conklin, O. E., and Rocker, assignors.)

Du Pont Rayon Company. (See Blanco, G. W., and Henningson, assignors.)

Durant, John D., assignor to The Gabriel Company, Cleveland, Ohio. Pressure gauge. 1,815,000; July 14.

Duryee, Mack, Bay City, Mich. Clothes drier. 1,813,917; July 14.

Duschak, Lionel H., Berkeley, assignor to Burnham Chemical Company, Westend, Calif. Recovering supersaturants. 1,814,300; July 14.

Dusenbury, Walter A., assignor to Heco Envelope Company, Chicago, Ill. Stop mechanism. 1,814,081; July 14.

Dutch, Josias D., Sequim, Wash. Hog feeder. 1,814,673; July 14.

Duval, Gaston, Rouen, assignor to Etablissements Jean Schwarze et H. Mahe, Societe a Responsabilite Limitee, Paris, France. Signaling device for automobiles. 1,814,301; July 14.

Dyer, Harry W. (See Scharnagel, H., and Loughridge, assignors.)

Earle, Theodore, Denver, Colo. Inertia operated pump. 1,814,742; July 14.

Eastern Malleable Iron Company, The. (See Tarbox, George R., assignor.)

Eaton Axle & Spring Company, The. (See Reid, James S., assignor.)

Eaton Axle & Spring Company, The. (See Veale, George W., assignor.)

Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Indicating device. 1,813,991; July 14.

Eclipse Petrol Economiser System Company, The. (See Godward, Ernest R., assignor.)

Edgar, Joseph C., St. Joseph, Mo., assignor of one-half to E. H. Wardwell, New York, N. Y. Sheet material and making the same. 1,814,133; July 14.

Edwards, Alrad B., Abilene, Tex. Eating instrument compact. 1,814,547; July 14.

Edwards, Reid A., Albert Lea, Minn. Bar cutter. 1,814,790; July 14.

Edwin, Emil., Trondhjem, Norway, assignor to Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Packing. 1,814,908; July 14.

Egli, Huldreich, Baltimore, Md. Surface conditioner. 1,814,028; July 14.

Egry Register Company, The. (See Schneider, Max, assignor.)

Ege, Abraham, Jersey City, N. J. Insulation casing for pipe fittings, valves, and the like. 1,814,134; July 14.

Einstein, Sol, assignor, by mesne assignments, to Cincinnati Grinders, Incorporated, Cincinnati, Ohio. Centerless grinding machine. 1,814,209; July 14.

Eisenlohr, Friedrich, and C. Uebelen, Stuttgart, Germany, Gerichtsnotar Stellrecht, administrator of said C. Uebelen, deceased; assignors, by mesne assignments, to Norma-Hoffmann Bearings Corporation. Spinning spindle. 1,814,743; July 14.

Eldeen Automatic Hosiery Mender Inc. (See Hoffman, Edward J., assignor.)

Eldridge, Ida M., assignor of one-half to L. R. Hoefler, Los Angeles, Calif. Electric manicure. 1,814,372; July 14.

Electric Boat Company. (See Grieshaber, Hugo E., assignor.)

Electric Boat Company. (See Spear, Lawrence Y., assignor.)

Electric Service Supplies Company. (See Williams, Charles S., assignor.)

Electrical Improvements Limited. (See Beard, J. R., and Porter, assignors.)

Electrical Research Products Inc. (See Reynolds, John L., assignor.)

Electrons, Inc. (See von Wedel, Carl. J. R. H., assignor.)

Elevator Supplies Company. (See Bassett, C. W., and Fear, assignors.)

Ellen, Verner G., Minneapolis, Minn. Automobile heating system and heater. 1,814,744; July 14.

Elliott, William E., Struthers, Ohio, assignor to Bypro Manufacturing Company, Pittsburgh, Pa. Composition of and the treatment of hydrocarbon compounds. 1,814,745; July 14.

Ellington, Ferdinand W., Jamaica, assignor to Delman, Inc., New York, N. Y. Shoe. Des. 84,629; July 14.

Ellington, Ferdinand W., Jamaica, assignor to Delman, Inc., New York, N. Y. Shoe. Des. 84,630; July 14.

Ellington, Ferdinand W., Jamaica, assignor to Delman, Inc., New York, N. Y. Shoe. Des. 84,631; July 14.

Elliott, Edward O., Jenkintown, Pa. Locomotive truck. 1,814,900; July 14.

Ellis, Carleton, Montclair, N. J. Coated or impregnated product. 1,814,135; July 14.

Ellis, Frank H., Braintree, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Cutting block. 1,814,136; July 14.

Ellis, Ruby K., et al., administrators. (See Koenig, Joseph.)

Ellis, Stanley G., Hannibal, Mo. Stock watering trough. 1,814,674; July 14.

Ende, Frank M., New York, N. Y. Diathermy. 1,814,791; July 14.

Endsley, Abel R., et al. (See Endsley, Roy H., assignor.)

Endsley, Roy H., Mishawaka, assignor of one-third to J. L. Bowman, South Bend, Ind., and one-third to A. R. Endsley, Tucson, Ariz. Pliers. 1,814,589; July 14.

Engel Brothers, Inc. (See Engel, Frederick W., assignor.)

Engel, Frederick W., Elmhurst, assignor to Engel Brothers, Inc., New York, N. Y. Bracelet. 1,814,792; July 14.

Ensign-Reynolds, Inc. (See Ensign, W. B., and Reynolds, assignors.)

Ensign, William B., and L. H. V. Reynolds, assignors to Ensign-Reynolds, Inc., New York, N. Y. Blast burner. 1,814,910; July 14.

Erickson, Frederick W., Larchmont, N. Y. Power cutter for round metal objects. 1,814,675; July 14.

Ericsson, Carl O. (See Christiansen, Ejnar, assignor.)

Erie Malleable Iron Company. (See Metcalf, George R., jr., assignor.)

Erie Malleable Iron Company. (See Metcalf, G. R., jr., and Raybould, assignors.)

Erie Restaurant Equipment Company. (See Bryson, Charles G., assignor.)

Espig, Hermann. (See Jaeger, M., and Espig.)

Estep, Adrian C., Seattle, Wash. Valve actuating and controlling mechanism. 1,814,622; July 14.

Estep, Adrian C., Seattle, Wash. Internal combustion engine. 1,814,676; July 14.

Etablissements Ed. Jaeger. (See Rodanet, Charles H. H., assignor.)

Etablissements Jean Schwarze et H. Mahe, Societe a Responsabilite Limitee. (See Duval, Gaston, assignor.)

Eustis Specialty Co., The. (See Beiger, Fred S., assignor.)

Evans, Charles P., New York, N. Y. Powder pad and casing. 1,814,373; July 14.

Evans, Charles V., Pittsburgh, Pa. Window bracket. 1,814,793; July 14.

Evans Products Company. (See Miller, Edward, assignor.)

Everedy Company, The. (See Lebherz, Harry J., assignor.)

Everett, Edward A., Long Island City, N. Y. Insulation block for electric terminals. Des. 84,632; July 14.

Exact Weight Scale Company, The. (See Flanagan, Thomas B., assignor.)

Fafnir Bearing Company, The. (See Smith, John W., assignor.)

Fahrenwald, Frank A., Chicago, Ill. Roller type conveyer for heat treatment furnaces. 1,814,082; July 14.

Fairbanks, Morse & Co. (See Goldberg, Morris J., assignor.)

Fairbanks, Morse & Co. (See Gross, Charles, assignor.)

Falk, Morris, Fitchburg, Mass. Mortise bolt lock. 1,814,302; July 14.

Faries, Robert, St. Davids, Pa. Plate support for rail joints. 1,814,548; July 14.

Farmers' National Bank, trustee. (See Waterman, Russell R., assignor.)

Farr, Henry V. (See Mallinckrodt, E., jr., and Farr.)

Fear, Harold J. (See Bassett, C. W., and Fear.)

Fearing, Edward W., East Orange, N. J. Amplification system. 1,814,247; July 14.

Federal Laboratories Incorporated. (See Young, John, assignor.)

Federal Telegraph Company. (See Gebhard, L. A., and Rudolph, assignors.)

Federal Telegraph Company. (See Hough, Clinton W., assignor.)

Federal Telegraph Company. (See Nicolson, Alexander M., assignor.)

Feldman, Moritz, Barmen, Germany. Garter. 1,814,438; July 14.

Fellers, Albert E. (See Hopkins, R. Z., Fellers, and Coffelt.)

Felshin, Judah B., New York, assignor of one-third to M. Kirschstein and one-third to L. Oskow, Brooklyn, N. Y. Television. 1,814,137; July 14.

Fennema, Albert, Kenosha, Wis. Stopper for pipe lines. 1,814,677; July 14.

Ferguson, Hildrey. (See Hedges, James E., assignor.)

Ferguson, William C., St. Louis, Mo. Joining bell and spigot pipes. 1,814,678; July 14.

Fichten, Frank M., Davenport, Iowa. Clock mechanism. 1,814,679; July 14.

Fickett, Ernest L., Fitchburg, Mass., assignor, by mesne assignments, to Scurlock Gear Corporation, New York, N. Y. Gearing. 1,814,911; July 14.

Finkelstein, Leo. (See Sebastian, R. L., and Finkelstein.)

Finlay, Toll N. M., Detroit, Mich. Article suspension device. 1,814,303; July 14.

Finley, Dozier, Berkeley, assignor to The Paraffine Companies, Inc., San Francisco, Calif. Self hardening bituminous cement and making the same. 1,813,992; July 14.

Finley, Lorenzo W., Phoenix, Ariz. Machine for processing and washing eggs. 1,814,374; July 14.

Finnell, Walter S., Elkhart, Ind. Rubber tired wheel. 1,814,623; July 14.

Finney, Clarence E., Huntington, Ind. Earthworking implement. 1,814,469; July 14.

Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Installing device for paving joints. 1,814,138; July 14.

Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Constructional material. 1,814,139; July 14.

Fischer, Hellmut, Berlin-Siemenstadt, Germany, assignor, by mesne assignments, to Metal & Thermit Corporation, New York, N. Y. Production of beryllium alloys, in particular those with a high beryllium content by fused electrolysis. 1,813,910; July 14.

Fisher, Albert H., East Cleveland, Ohio, assignor to H. G. Wedler and J. F. Shuford. Combination repair apparatus. 1,813,918; July 14.

Fisher, David, assignor to Paden City Glass Manufacturing Company, Paden City, W. Va. Tumbler. Des. 84,633; July 14.

Fisher, Dudley T., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal mining machine. 1,814,439; July 14.

Fisher, Harry P., San Francisco, Calif. Window ventilator. 1,814,590; July 14.

Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Holding demountable bodies on vehicles. 1,814,304; July 14.

Flanagan, Thomas B., assignor to The Exact Weight Scale Company, Columbus, Ohio. Weighing scale. 1,814,591; July 14.

Flashtric Sign Works. (See Goddard, Edwin G., assignor.)

Flauder, Alfred J., assignor to The Weidlich Bros. Mfg. Co., Bridgeport, Conn. Athletic trophy. Des. 84,634; July 14.

Flautt, Porter H., assignor, of one-half to F. C. Yingling, Baltimore, Md. Pouring spout. 1,814,083; July 14.

Fleck, Abraham J., Bradley Beach, N. J. Acoustic device. 1,814,624; July 14.

Fleming, Robert G., Chico, Calif., assignor to G. H. Hall, Evanston, Ill. Trashing machine. 1,814,305; July 14.

Fletcher, James. (See Kerr, H. J., and Fletcher.)

Flintermann, Gerhard, West Orange, N. J. Seat adjusting means for vehicles. 1,814,140; July 14.

Florence Stove Company. (See White, F. E., and Ruttiman, assignors.)

Florido, Pablo V., U. S. Navy. Aircraft landing apparatus. 1,814,985; July 14.

Florman, Irving, New York, N. Y. Electric clock case. Des. 84,635; July 14.

Foerster, Charles J., Newton, Mass. Finger nail polisher. 1,814,625; July 14.

Fogel, Clifford A., and F. O. Nelson, Pittsburgh, Pa. Merchandise display holder. 1,814,440; July 14.

Foltz, Jesse B., Sparks, Nev. Submarine life saving and salvaging device. 1,814,375; July 14.

Ford, Burdette E., assignor to The Sterolene Company, Chicago, Ill. Egg treating machine. 1,814,680; July 14.

Ford, William W., Oklahoma City, Okla. Drafting instrument. 1,814,441; July 14.

Fortune, James C., New York, N. Y. Back pressure valve. 1,814,549; July 14.

Foster, Claud M. (See Grayson, R. V., and Foster.)

Foster, Theodore W., & Bros. Co. (See Foster, William C., assignor.)

Foster, William C., assignor to Theodore W. Foster & Bro. Co., Providence, R. I. Golf score card holder. 1,815,024; July 14.

Foster, Theodore W., & Bro. Co. (See Parkin, Winfred T., assignor.)

Fouch, James R., Los Angeles, Calif. Microphone radio cut-out switch. 1,814,470; July 14.

Fowler, Alfred B., deceased, by M. F. Fowler, administratrix, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,814,550; July 14.

Fowler, Mary F., administratrix. (See Fowler, Alfred B.)

Fox, Arthur O., and J. A. Keenan, assignors, by mesne assignments, to General Laboratories, Inc., Madison, Wis. Container stopper. 1,814,141; July 14.

Francis, William H. (See McGuinness, W. V., and Francis.)

Franklin, Albert W., New York, N. Y. Vacuum device. 1,814,681; July 14.

Franklin Develpoment Company. (See Oberhuber, William F., assignor.)

Franklin Railway Supply Company. (See Caldwell, Edwin D. H., assignor.)

Franklin Simon & Company. (See Long, Dorothy, assignor.)

Frantz, Grover C., assignor to Modern Utilities Company, Harrisburg, Pa. Typewriter attachment. 1,814,142; July 14.

Frederick, Walter A., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve valve engine. 1,814,746; July 14.

Free, William J., Neepawa, Manitoba, Canada. Combined weeder and cultivator. 1,814,029; July 14.

Frey, Charles N., and A. Schultz, New York, N. Y., and A. P. Harrison, Washington, D. C., assignors, by mesne assignments, to Standard Brands Incorporated, Dover, Del. Manufacturing yeast. 1,814,210; July 14.

Fried Krupp Aktiengesellschaft. (See Gross, Siegfried, assignor.)

Fried Krupp Grusonwerk Aktiengesellschaft. (See Edwin, Emil, assignor.)

Friedman, William, assignor to Lupe, Inc., New York, N. Y. Toilet accessory. 1,814,747; July 14.

Friedman, William, assignor to Lupe, Inc., New York, N. Y. Toilet accessory. 1,814,748; July 14.

Friedman William, assignor to Lupe, Inc., New York, N. Y. Toilet accessory. 1,814,749; July 14.

Friendly, Herbert M., deceased, Portland, Oreg., M. S. Friendly and Central Trust Company of Illinois, executors. Telephone system. 1,814,794; July 14.

Friendly, Milton S., et al., executors. (See Friendly, Herbert M.)

Frigidaire Corporation. (See Carl, James W., assignor.)

Frigidaire Corporation. (See Hofferberth, George F., assignor.)

Frigidaire Corporation. (See King, Jesse G., assignor.)

Fritzenwallner, Conrad, Cincinnati, Ohio. Dental articulator. 1,814,750; July 14.

Frost, Arthur E., Sheffield, England. Laminated spring. 1,814,682; July 14.

Fulmer, Joseph H., Nazareth, Pa. Feeding device. 1,814,683; July 14.

Füssel, Herbert, assignor to Getriebebau G. m. b. H., Dresden, Germany. Intermittent actuating gear. 1,814,030; July 14.

Gabriel Company, The. (See Beecher, Eugene L., assignor.)

Gabriel Company, The. (See Benjamin, David, assignor.)

Gabriel Company, The. (See Durant, John D., assignor.)

Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Machine for and method of assembling springs. 1,813,903; July 14.

Gallagher, John M., assignor to The Bagley and Sewall Company, Watertown, N. Y. Winder roll for paper making machines. 1,813,920; July 14.

Garbarak, Josef, Walsum-on-the-Rhine, Germany. Tool holder. 1,814,211; July 14.

Gay, Frazer W., Newark, N. J. Power trasmission system. 1,814,684; July 14.

Gebhard, Louis A., and C. F. Rudolph, Washington, D. C., assignors, by mesne assignments, to Federal Telegraph Company. Electron tube apparatus. 1,814,376; July 14.

Gebr. Aickhoff, Maschinenfabrik u. Eisengiesserei. (See Aurich, Peter, assignor.)

Gehring, John. (See Slade, H. E., and Gehring.)

Geib, Warren J., Madison, Wis. Vehicle towing device. 1,814,912; July 14.

Geiger, Edward F., Binghamton, N. Y. Carburetor. 1,814,143; July 14.

Geiger, Paul H., Ann Arbor, Mich., assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for use in the manufacture of rectifiers. 1,814,592; July 14.

General Aniline Works, Inc. (See Holzach, K., Kämmer, and Müller, assignors.)

General Electric Company. (See Alexanderson, Ernst F. W., assignor.)

General Electric Company. (See Austin, Kirby B., assignor.)

General Electric Company. (See Cameron, Hugh J., assignor.)

General Electric Company. (See Carpenter, Charles F., assignor.)

General Electric Company. (See Caughey, Reed J., assignor.)

General Electric Company. (See Dome, Robert B., assignor.)

General Electric Company. (See Doran, John H., assignor.)

General Electric Company. (See Guedon, Emile C., assignor.)

General Electric Company. (See Hardesty, Llewellyn C., assignor.)

General Electric Company. (See Hehlgans, Friedrich W., assignor.)

General Electric Company. (See Hitchcock, William J., assignor.)

General Electric Company. (See Huber, Herman J. H., assignor.)

General Electric Company. See Hull, John I., assignor.)

General Electric Company. (See Jump, George H., assignor.)

General Electric Company. (See Kingdon, Kenneth H., assignor.)

General Electric Company. (See Murphy, Edwin J., assignor.)

General Electric Company. (See Narath, Albert, assignor.)

General Electric Company. (See Paul, William E., assignor.)

General Electric Company. (See Prince, David C., assignor.)

General Electric Company. (See Seeley, Harold T., assignor.)

General Electric Company. (See Sees, Joseph F., assignor.)

General Electric Company. (See Starie, George B., assignor.)

General Electric Company. (See Traver, Oliver C., assignor.)

General Electric Company. (See Unger, Magnus, assignor.)

General Electric Company. (See Weed, James M., assignor.)

General Electric Company. (See Young, A. P., and Hutt, assignors.)

General Laboratories, Inc. (See Fox, A. O., and Keenan, assignors.)

General Motors Corporation. (See Doane, Harry C., assignor.)

Genter, Albert L., assignor to Genter Thickener Co., Salt Lake City, Utah. Gas scrubbing device. 1,814,377; July 14.

Genter Thickener Co. (See Genter, Albert L., assignor.)

George, Robert B., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Winding and constructing the same. 1,813,994; July 14.

Gerichtsnotar Stellrecht, administrator. (See Eisenlohr, F., and Uebelen.)

Gersman, Harvey M., Buffalo, N. Y. Widening rolled metal products. 1,814,593; July 14.

Gersman, Harvey M., Buffalo, N. Y. Apparatus for widening rolled metal products. 1,814,594; July 14.

Gesellschaft fur Drahtlose Telegraphie m. b. H. Hallesches. (See Meissner, A., and von Bronk, assignors.)

Gettriebebau G. m. b. H. (See Füssel, Herbert, assignor.)

Gilbert, Alva B., Elyria, Ohio. Vehicle transmission. 1,814,442; July 14.

Gilbertson, Helge A., R. J. Curtin, and R. C. Jacobs, Chicago, Ill. Metallic laundry net. 1,814,378; July 14.

Giles, Harvey, Brooklyn, N. Y., assignor to Artemas Ward Inc. Vending machine. 1,814,795; July 14.

Gill, Ferdinand A., Chicago, Ill. Propeller. 1,814,595; July 14.

Gill, Samuel A., assignor of one-half to Z. D. and H. B. Dunlap, Ames, Iowa. Making cornstalk fiber composition. 1,814,751; July 14.

Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)

Giuntini, Frederick. (See Schnell, W., and Giuntini.)

Glaenzer, Harry, Philadelphia, Pa. Poppet valve. 1,814,913; July 14.

Glass, Jackson C. E., Oakland, Calif. Bag. 1,814,685; July 14.

Gleaves, Raymond C., Orlando, Fla. Laundry machine. 1,814,031; July 14.

Glover, William C., assignor to Butler Manufacturing Company, Kansas City, Mo. Closed dry cleaning system. 1,814,212; July 14.

Glowacki, John B., Chicago, Ill. Renewable fuse element. Re18,128; July 14.

Goddard, Edwin G., assignor of one-half to Flashtric Sign Works, Chicago, Ill. Electric sign. 1,814,379; July 14.

Godward, Ernest R., New York, N. Y., assignor to The Eclipse Petrol Economiser System Company, Limited, Christchurch, New Zealand. Vaporizer. 1,814,686; July 14.

Goldberg, Morris J., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Fuel injector for oil engines. 1,814,443; July 14.

Goldberg, Samuel, assignor to Universal Fixture Corporation, New York, N. Y. Metal shelving. 1,814,084; July 14.

Goldinger, Carl M., Tarentum, Pa., assignor to Union Metal Products Company, Chicago, Ill. Car coupler operating device. 1,814,687; July 14.

Goldsmith, Max S., Cincinnati, Ohio. Ceiling slab. 1,814,144; July 14.

Goltz & Brown, et al. (See Rutten, Frank M., assignor.)

Golub, Solomon. (See Stevelman, Nathan, assignor.)

Goodell, George H. (See Cairncross, R. L., and Goodell.)

Gooderham, John W., Larchmont, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,814,248; July 14.

Goodman, Elizabeth A., et al., administratrices. (See Goodman, Patrick.)

Goodman, Mary, et al., administratrices. (See Goodman, Patrick.)

Goodman, Patrick, deceased, Brooklyn, N. Y.; M. and E. A. Goodman, administratrices. Conduit stopper. 1,814,914; July 14.

Goodrich, Chauncey M., Windsor, Ontario, Canada. Scaffold. 1,814,688; July 14.

Goodrich, Norris E., and J. Connor, assignors to Sanitarium Equipment Company, Battle Creek, Mich. Therapeutic lamp. Des. 84,636; July 14.

Gordon, Samuel, Brooklyn, N. Y. Toy. Des. 84,637; July 14.

Gould, Charles E., W. M. Hampton, and H. S. Martin, assignors to Chance Brothers and Co. Limited, West Smethwick, England. Glass. 1,814,507; July 14.

Government and the People of the United States of America. (See Groggins, Philip H., assignor.)

Graban, Boleslaus, Chicago, Ill. Car washing machine. 1,814,551; July 14.

Grant, John. (See Vaughn, Fred B., assignor.)

Graves, Grover E. (See Graves, Noland W., P., and G. E.)

Graves, Noland W., Taft, P. and G. E. Graves, Santa Cruz, Calif. Rotarian. 1,814,213; July 14.

Graves, Pansy. (See Graves, Noland W., P., and G. E.)

Gray, George W. (See Dearborn, R. J., and Gray.)

Gray, Wallace M., assignor to The American Valve and Meter Company, Cincinnati, Ohio. Railway switch stand. 1,814,306; July 14.

Gray, Wallace M., assignor to The American Valve and Meter Company, Cincinnati, Ohio. Railway switch apparatus. 1,814,307; July 14.

Grayson, Ralph V., Macon, and C. M. Foster, Atlanta, Ga., assignors of forty one-hundredths to Polar Products, Inc. Refrigeration system. 1,814,915; July 14.

Grebe, John J., assignor to The Dow Chemical Company, Midland, Mich. Autoclave. 1,814,796; July 14.

Gredell, Paul P., Quincy, Ill. Plant marker. 1,814,380; July 14.

Green, Benjamin F., Homer, La. Standard mounting for bolsters. 1,814,308; July 14.

Green, Charles W., Ilion, N. Y., assignor to Remington Arms Company, Inc. Cash register. 1,815,025; July 14.

Green, Charles W., Ilion, N. Y., assignor to Remington Arms Company, Inc. Ribbon frames. 1,815,026; July 14.

Greenfield, Benjamin. (See Klees, A. L., and Greenfield.)

Grieshaber, Hugo E., New London, assignor to Electric Boat Company, Groton, Conn. Salvage and rescue submarine. 1,814,689; July 14.

Griffin, Cecil M., Pittsburgh, Pa. Tube cleaner. 1,814,752; July 14.

Griffiths, Alfred, Strand, London, assignor to Kleenglas (1929) Limited, London, England. Receptacle cleaning means. 1,814,508; July 14.

Grigsby-Grunow Company. (See Burton, Frank C., assignor.)

Groggins, Philip H., Washington, D. C., dedicated by assignment to the Government and the People of the United States of America. Preparing para-phenyl-orthobenzoyl-benzoic acid. 1,814,145; July 14.

Groggins, Philip H., Washington, D. C., dedicated by assignment to the Government and the People of the United States of America. Preparation of 4-halogen beta-phenyl-anthraquinone. 1,814,146; July 14.

Groggins, Philip H., Washington, D. C., dedicated by assignment to the Government and the People of the United States of America. Preparation of 2-halogen-beta-phenyl-anthraquinone. 1,814,147; July 14.

Groggins, Philip H., Washington, D. C., dedicated by assignments to the Government and the People of the United States of America. Preparation of 4-amino-beta-phenyl anthraquinone by ring closure. 1,814,148; July 14.

Groggins, Philip H., Washington, D. C., dedicated by assignments to the Government and the People of the United States of America. Preparation of 2-amino-beta-phenyl-anthraquinone by ring closure. 1,814,149; July 14.

Gröner, Christian F., Oslo, Norway. Dam. 1,814,509; July 14.

Gross, Charles, Three Rivers, assignor to Fairbanks, Morse & Co., Chicago, Ill. Friction transmission. 1,814,381; July 14.

Gross, Joseph E., Swissvale, Pa., assignor to Aurora Sign Company. Illuminated sign. 1,814,150; July 14.

Gross, Siegfried, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Laminated spring. 1,814,214; July 14.

Grove, William E., Chambersburg, Pa. Making vermin destroying material. 1,814,471; July 14.

Grundstrom, Erik G., Chicago, Ill. Mold. 1,814,797; July 14.

Guedon, Emile C., Schenectady, N. Y., assignor to General Electric Company. Apparatus for producing sound. 1,814,798; July 14.

Gulf Refining Company. (See McAfee, Almer M., assignor.)

Gullborg, John S., Chicago, assignor to Alemite Die Casting & Mfg. Co., Woodstock, Ill. Truck. 1,814,309; July 14.

Gumz, Wilhelm, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Vapor power plant. 1,813,921; July 14.

Gunderson, John, Concrete, Wash. Closure operator. 1,814,510; July 14.

Gundlach, Severin N., Belleville, Ill. Shingle cutter. 1,814,151; July 14.

Gustafson, Victor G., Joliet, Ill. Television receiving apparatus. 1,814,382; July 14.

Guyot, Walter, Janesville, Wis., assignor, by mesne assignments, to Pen Desk Set Company, Chicago, Ill. Desk set. 1,814,085; July 14.

Haack, William F., Newark, N. J., assignor of one-half to A. W. Rahn, New York, N. Y. Vehicle map rack device. 1,814,690; July 14.

Haase, Heinrich, Rathenow, Germany. Metallic ball-head hinge for nonmetallic spectacle-frames. 1,814,032; July 14.

Hachmeister, George J., Des Plaines, assignor to G. M. Davis Regulator Company, Chicago, Ill. Valve. 1,814,691; July 14.

Hackl, Heinrich, Heufeld, Germany. Manufacture of bisulphuric liquor and dimagnesium phosphate. 1,814,916; July 14.

Hadford, Louis, Spokane, Wash. Patch. 1,814,383; July 14.

Haggerty, Joseph F., and D. D. Crandall, assignors to National Gypsum Company, Buffalo, N. Y. Plastic paint. 1,814,086; July 14.

Hagman, William J., Philadelphia, Pa. Bus transportation system. 1,814,917; July 14.

Hale, William J., and E. C. Britton, assignor to The Dow Chemical Company, Midland, Mich. Manufacture of phenolic compounds. Re18,129; July 14.

Hall, Guy H. (See Fleming, Robert G., assignor.)

Hamel, Otto W., Chicago, Ill. Knife. 1,814,596; July 14.

Hamilton, Francis F., and H. E. Van Voorhees, Indianapolis, Ind. Exhaust gas muffler. 1,815,005; July 14.

Hammond, John H., jr. (See Trenor, Albert D., assignor.)

Hammond, John H., jr., Gloucester, Mass. Organ control. 1,814,472; July 14.

Hampton, Wilfred M. (See Gould, C. E., Hampton, and Martin.)

Hancock, William T., Long Beach, Calif. Cracking still. 1,814,249; July 14.

Handforth, Stanley L., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Gauze or screen catalyst holder or support. 1,814,597; July 14.

Hanekop, Georg, Hanover, Germany. Grinding graphite. 1,814,215; July 14.

Hanff, Ferdinand, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Lead covered submarine cable. 1,814,384; July 14.

Hangerette Folding Box, Ltd. (See Appelbaum, Isaac, assignor.)

Hanlon-Waters, Inc. (See Weston, Burton G., assignor.)

Hansell, Clarence W., Port Jefferson, Long Island, N. Y., assignor to Radio Corporation of America. Detection of frequency modulated signals. 1,813,922; July 14.

Hansen, Adolf S., Malmo, Sweden. Pulsator. 1,814,918; July 14.

Hanson & Orth. (See Worden, Edward C., 1st, assignor.)

Hanzlik, Henry J., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elastic fluid turbine. 1,814,620; July 14.

Hardesty, Llewellyn C., Scotia, N. Y., assignor to General Electric Company. Motor control system. 1,814,799; July 14.

Harris, Charles R., East Boston, Mass. Rack. 1,814,692; July 14.

Harris, Henry A., Nacogdoches, Tex. Cultivator. 1,814,693; July 14.

Harris, Ralph W., Caneadea, N. Y. Apparatus for use in milling curd. 1,814,033; July 14.

Harrison, Arthur P. (See Frey, C. N., Schultz, and Harrison.)

Harrison, John K. M., Ogontz, Pa. Marine mine and firing method therefor. 1,814,152; July 14.

Hart, Frank, Los Angeles, Calif. Reproducing multi-color designs. 1,814,310; July 14.

Hartford-Empire Company. (See Lorenz, E. H., and Schroeder, assignors.)

Hartley, Lee R., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Measuring and dispensing pump. 1,814,153; July 14.

Hartley, Lee R., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Motor operated dispensing pump. 1,814,154; July 14.

Hartman, Clive E., Alliance, Nebr. Windshield protector. 1,814,034; July 14.

Hartmann Trunk Company. (See Ritter, Julius, jr., assignor.)

Hartstoff-Metall Aktiengesellschaft. (See Kramer, Erwin, assignor.)

Hartwell, Charles M., Springfield, Ohio. Weeder. 1,814,216; July 14.

Hartwell, Floyd S., assignor to Kelly Reamer Company, Cleveland, Ohio. Boring bar. 1,814,919; July 14.

Hartwell, Floyd S., Cleveland, Ohio. Portable boring machine. 1,814,920; July 14.

Hartwell, Floyd S., Cleveland, Ohio. Boring bar. 1,814,921; July 14.

Hartwell, Floyd S., Cleveland, Ohio. Taper boring tool. 1,814,922; July 14.

Harvey, Paul D., Chicago, Ill. Marine reduction reverse gear unit. 1,814,311; July 14.

Haseltine, Stacey B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Antifriction bearing. 1,814,035; July 14.

Haughey, Theodore P., Accomac, Va. Treating vegetable fibers. 1,814,155; July 14.

Hauser, Ernst A., Frankfort-on-the-Main, Germany, and R. H. Watts, Herne Bay, England, assignors to Dewey and Almy Chemical Company, Cambridge, Mass. Colloidal dispersion of plastic compositions such as caoutchouc, gutta percha, balata, artificial rubber (factis), and the like. 1,814,473; July 14.

Hawk, Carl F., Bellevue, Ohio. Rotary valve for internal combustion engines. 1,814,036; July 14.

Hayes, Harvey C., Washington, D. C. Geophysical method and apparatus. 1,814,444; July 14.

Hayward, Wilbur E., Los Nietos, Calif. Device for use on lathes or the like. 1,814,087; July 14.

Hazen, Edson H., and G. P. Wellington, East Jaffrey, N. H. Expanding grapple. 1,814,037; July 14.

Hebner, Anna O., Los Angeles, Calif. Lady's hose supporter. 1,814,511; July 14.

Heco Envelope Company. (See Dusenbury, Walter A., assignor.)

Hedges, James E., Richmond, assignor of one-half to Hildrey Ferguson, South Richmond, Va. Battery terminal clamp. 1,814,156; July 14.

Heene, George W., Cleveland, Ohio. Marking means. 1,814,312; July 14.

Heeter, Joseph W., Butler, Pa. Well appliance. 1,814,800; July 14.

Heftler, Victor R., Detroit, Mich., assignor to Societe du Carburateur Zenith, Lyon, France. Carburetor. 1,814,804; July 14.

Hehlgans, Friedrich W., Berlin-Hermsdorf, Germany, assignor to General Electric Company. Device for transforming electrical variations into sound variations. 1,814,801; July 14.

Heil Co., The. (See Thwaits, Frederick G., assignor.)

Helmbold, Frank A., Atlantic Highlands, N. J. Emergency valve. 1,814,157; July 14.

Helsing, Raymond A., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Radio receiving system. 1,813,923; July 14.

Henningsen, Carleton. (See Blanco, G. W., and Henningsen.)

Henningsen, John F. (See Broadwell, William C., assignor.)

Henry, George W., jr., assignor to Soabar Company, Philadelphia, Pa. Tag printing machine. 1,814,923; July 14.

Henry, Walter E., Baltimore, Md. Crosshead. 1,814,924; July 14.

Henshaw, Lewis J., College Hill, Ohio, assignor to The Philip Carey Manufacturing Company. Insulating jacket for hot water tanks. 1,813,995; July 14.
Herman, Joseph, Westfield, N. J., assignor to American Telephone and Telegraph Company. Echo suppressor. 1,814,038; July 14.
Herr, Herbert T., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Starting system for internal combustion engines. 1,814,802; July 14.
Herrmann, Rudolf, Dresden, Germany. Making meshsleeves. 1,814,598; July 14.
Hershey, Harry E., Oak Park, assignor to Automatic Electric Inc., Chicago, Ill. Remote control system. 1,814,385; July 14.
Herzberger, George, Stamford, Conn. Refuse receptacle. 1,814,803; July 14.
Hess, Bryce M., Chicago, Ill. Furnace structure. 1,814,694; July 14.
Hetherington, Robert, Sharon Hill, Pa. Thermostatic control for shower heads. 1,814,512; July 14.
Heuck, Claus. (See Tochtermann, H., and Heuck.)
Hevesi, Menyhert, and R. Metzger, New York, N. Y. Swinging-sliding window. 1,814,753; July 14.
Heydon, Charles E., jr., Naperville, Ill. Attachment for motor vehicles. 1,814,037; July 14.
Heyman, Ernst, Frankfort-on-the-Main, Germany. Sieve. 1,814,552; July 14.
Hickok, Arthur S. (See Myers, Hubert A., assignor.)
Hicks, Joseph J., Los Angeles, Calif. Airship. 1,814,925; July 14.
Higgins, Mark E. (See Nyborg, T. G., and Higgins.)
Hill, Leland H., Collingswood, N. J., assignor to Westinghouse Electric & Manufacturing Company. Equipment for changing taps of electrical apparatus. 1,813,996; July 14.
Hill, Roland E., assignor to Williams Sealing Corporation, Decatur, Ill. Bottle capping machine. 1,814,386; July 14.
Hill, Theodore, Baltimore, Md. Motion picture machine. 1,814,217; July 14.
Himes, Walter H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Worm gear reduction mechanism. 1,813,997; July 14.
Hineline, George M., Rice Lake, Wis. Rotary snow remover. 1,814,695; July 14.
Hitchcock, William J., Scotia, N. Y., assignor to General Electric Company. Cathode ray device. 1,814,805; July 14.
Hobart Bros. Company, The. (See Hobart, Edward A., assignor.)
Hobart, Edward A., assignor to The Hobart Bros. Company, Troy, Ohio. Pump. 1,813,998; July 14.
Hock, Alvin, Cincinnati, Ohio. Vacuum kettle. 1,814,927; July 14.
Hodgkinson, Francis, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Compound turbine and condenser arrangement. 1,814,628; July 14.
Hoefler, Lena R. (See Eldridge, Ida M., assignor.)
Hofferberth, George F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,813,999; July 14.
Hoffman, Edward J., assignor to Eldeen Automatic Hosiery Mender Inc., Boston, Mass. Hand operated needle. 1,813,924; July 14.
Hoffman, Zachariah S., Essex County, N. J. Internal combustion engine. 1,813,925; July 14.
Hofstetter, Robert, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Clutch and speed reducing mechanism. 1,813,926; July 14.
Hoge, Edward C., assignor to Lathrop-Hoge Construction Company, Cincinnati, Ohio. Roof and floor construction. 1,814,387; July 14.
Höglund, Thure G., assignor to Aktiebolaget Superior, Stockholm, Sweden. Steam cleaner for preheaters. 1,814,040; July 14.
Hohl, George L., Newport, R. I. Wrapping and banding machine. 1,814,696; July 14.
Holden, William H. T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Signaling system. 1,814,158; July 14.
Hollister, Don C. (See Corp, E. L., Snow, and Hollister.)
Hollmann, Charles, Fort Wayne, Ind. Tube winding machine. 1,814,697; July 14.
Holman, Joseph W., Nashville, Tenn. Building structure. 1,814,474; July 14.
Holmes, John Q., assignor to Delco-Remy Corporation, Anderson, Ind. Machine for making pivot pins. 1,814,250; July 14.
Holtzman, John, New York, N. Y. Doorlock. 1,813,927; July 14.
Holzach, Karl, Ludwigshafen-on-the-Rhine, H. Kämmerer, Mannheim, and W. Müeller, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyestuffs containing chromium and making. 1,814,218; July 14.
Honey, Charles, Winnipeg, Manitoba, Canada. Milk bottle holder. 1,814,926; July 14.
Hope, Ernest, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Finishing tool. 1,814,553; July 14.
Hopkins, Ralph Z., and G. T. Davey, assignors to Hudson Motor Car Company, Detroit, Mich. Safety mechanism for cranes. 1,814,599; July 14.
Hopkins, Ralph Z., and A. E. Fellers, Detroit, and O. T. Coffelt, Grosse Point, assignors to Hudson Motor Car Company, Detroit, Mich. Preparing metal surfaces to receive permanent coatings. 1,814,600; July 14.
Hormel, August, Hudson Heights, N. J., assignor of one-half to C. Wagner. Imprint transfer mechanism. 1,814,806; July 14.
Horn & Hardart Baking Co. (See Bencker, R. B., and Howden, assignors.)
Horsting, Bernard F., and G. C. Leppla, Chicago, Ill. Clip. 1,815,006; July 14.
Horton Manufacturing Company, The. (See Thorpe, Samuel T., assignor.)
Hoscelt, William J., assignor to Rodger Ballast Car Company, Chicago, Ill. Hopper car construction. 1,813,928; July 14.
Hough, Clifton W., Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Electrical switching system. 1,813,929; July 14.
Hourigan, Joseph, New Kensington, assignor to Aluminum Company of America, Pittsburgh, Pa. Core removing device. 1,814,928; July 14.
Housman, George S., Norristown, assignor to E. J. Lavino and Company, Philadelphia, Pa. Refractory material and making the same. 1,814,088; July 14.
Housman, George S., Norristown, assignor to E. J. Lavino and Company, Philadelphia, Pa. Apparatus for molding bricks. 1,814,159; July 14.
Howden, Bruce E. (See Bencker, R. B., and Howden.)
Hrissulakis, Nikolaos P., Chicago, Ill. Smoker's outfit. 1,814,929; July 14.
Hubbell, Minott P., Ashburnham, Mass. Lathe chuck. 1,814,699; July 14.
Huber, Herman J. H., Upper Darby, Pa., assignor to General Electric Company. Contact structure. 1,814,807; July 14.
Huber, Marie W., Seattle, Wash. Combination laundry tray and washboard. 1,814,698; July 14.
Hudson Motor Car Company. (See Hopkins, R. Z., and Davey, assignors.)
Hudson Motor Car Company. (See Hopkins, R. Z., Fellers, and Coffelt, assignors.)
Hughes, John M., Youngstown, and R. C. Butler, Lowellville, Ohio. Method and apparatus for treating slag. 1,814,808; July 14.
Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Protective system for alternating current commutator motors. 1,814,809; July 14.
Hummel, Edgar C. (See Bost, H. A., and Hummel.)
Hummel, Louis W. (See Ohlrich, Charles H., assignor.)
Humphreys, Charles F., Lancaster, assignor to Armstrong Cork Company, Pittsburgh, Pa. Block printing machine. 1,814,160; July 14.
Hunt, Sydney, Birmingham, assignor to J. Walker & Sons Limited, London, England. Cam mechanism. 1,814,313; July 14.
Hunter, David H., Dallas, Tex., assignor to Sullivan Machinery Company. System and apparatus for controlling excess gas. 1,814,000; July 14.
Hunter, Herbert T., Catonsville, Md., assignor to Doughnut Machine Corporation, New York, N. Y. Cooking apparatus. 1,814,930; July 14.
Hutchison, Miller R., Llewellyn Park, West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y. Horn having resonating chambers at antinodal points. 1,814,554; July 14.
Huther Brothers Saw Manufacturing Company. (See Stauder, Emanuel, assignor.)
Hutt, Cecilia E., executrix. (See Young, A. P., and Hutt.)
Hutt, Joseph. (See Young, A. P., and Hutt.)
Hyde, Ralph E., assignor to The Oster Manufacturing Company, Cleveland, Ohio. Stamped ratchet die head. 1,814,388; July 14.
Hydro Electric Manufacturing Company. (See Lederman, John E., assignor.)
Hynan, Arthur C., assignor to R. N. Burton, Chicago, Ill. Demountable wheel. 1,814,161; July 14.
I. G. Farbenindustrie Aktiengesellschaft. (See Dörr, E., Leuchs, and Rosenthal, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Jaeger, M., and Espig, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Nicodemus, Otto, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pfannenstiel, A., and Kautsky, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Reppe, Walter, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Richter, A., and Schäfer, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Tochtermann, H., and Heuck, assignors.)
Independent Die & Supply Co. (See Cadenbach, Christian A., assignor.)
Indestro Mfg. Co. (See Rice, Harold G., assignor.)
Individual Drinking Cup Company. (See Dufour, Germaine, assignor.)
Industrial Development & Manufacturing Corporation. (See White, William C., assignor.)
Ingersoll-Rand Company. (See Larson, Charles, assignor.)
Ingersoll-Rand Company. (See Rutter, John A., assignor.)

Ingraham, E., Company, The. (See Carlson, Elof L., assignor.)
Ingram, Benjamin L., Menard, and W. H. De Long, Champaign, Ill. Door and window screen. 1,814,162; July 14.
Inman Manufacturing Company. (See Joslin, Frank M., assignor.)
Insulation Corporation, The. (See Bodman, Walter L., assignor.)
International Combustion Engineering Corporation. (See Kreisinger, Henry, assignor.)
International Silver Company. (See Saarinen, Eliel, assignor.)
Iowa State College of Agricultural and Mechanical Arts. (See Sweeney, Orland R., assignor.)
Irish, Charles F., Bratenahl, Ohio. Self tamping aeration tool. 1,814,445; July 14.
Irish, Charles F., Bratenahl, Ohio. Treating soil. 1,814,446; July 14.
Irwin, George H., Chicago, Ill. Combustion mixture control. 1,814,163; July 14.
Irwin, George H., Chicago, Ill. Gas burner structure. 1,814,164; July 14.
Isom, Edward W., Scarsdale, assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbon oils. 1,814,700; July 14.
Ittig, George P., assignor to Blackstone Silver Company, Incorporated, Bridgeport, Conn. Table knife. Des. 84,638; July 14.
Ives, Herbert E., Montclair, N. J., assignor to The Perser Corporation, New York, N. Y. Making viewing gratings for relief or stereoscopic pictures. 1,814,701; July 14.
J. F. S. Company. (See Jacobsen, Richard S., assignor.)
Jacobi, Charles V. (See Shelton, I. J., and Jacobi.)
Jacobs Bros. Co. Inc., The. (See Walker, George, assignor.)
Jacobs, Raymond C. (See Gilbertson, H. A., Curtin, and Jacobs.)
Jacobsen, Bernhard, Meeker, Colo. Chalk line holder. 1,814,389; July 14.
Jacobsen, Richard S., Wheaton, assignor to J. F. S. Company, Chicago, Ill. Variable speed transmission. 1,814,165; July 14.
Jacobson, Edward, Winnipeg, Manitoba, Canada. Soldering iron. 1,814,041; July 14.
Jacobus, David S., Montclair, and H. J. Kerr, Westfield, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Furnace. 1,814,555; July 14.
Jaeger, Max, and H. Espig, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Improving certain physical properties of synthetic precious stones. 1,814,219; July 14.
James, Hettie, Seattle, Wash. Electric cooker. 1,814,754; July 14.
James, Thomas, jr., Philadelphia, Pa. Piston and piston ring. 1,813,930; July 14.
Janson, George W., Nutley, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Switchboard signal system. 1,814,931; July 14.
Jeffrey Manufacturing Company. (See Fisher, Dudley T., assignor.)
Jenkins Petroleum Process Company. (See Jenkins, Ulysses S., assignor.)
Jenkins, Ulysses S., assignor to Jenkins Petroleum Process Company, Chicago, Ill. Transformation of petroleum hydrocarbons into gasoline. 1,814,042; July 14.
Jensen, Carl C., Chicago, Ill. Wood joining. 1,814,702; July 14.
Jensen Creamery Machinery Co. (See Cornell, Fritz G., jr., assignor.)
Jewett, John B., jr., Newton, Ohio. Airplane construction and method therefor. 1,814,556; July 14.
Joffé, Peter, New York, N. Y. Instrumentalities for annexing tips to tooth facings. 1,814,044; July 14.
Johnsen, William H., Dallas, Tex. Radiator ornament. Des. 84,639; July 14.
Johnson, Andrew, Tacoma, Wash. Parachute construction. 1,814,220; July 14.
Johnson, Arthur A., assignor to Dictaphone Corporation, Bridgeport, Conn. Hearing tube. 1,813,931; July 14.
Johnson, Chester F., Detroit, Mich. Carburetor. 1,814,601; July 14.
Johnson, Edward E., Incorporated. (See Johnson, Edward E., assignor.)
Johnson, Edward E., St. Paul, assignor to E. E. Johnson, Incorporated, St. Paul, Minn. Making couplings. 1,814,703; July 14.
Johnson, Jesse H., Denver, Colo. Projection board for enlarging machines. 1,814,390; July 14.
Johnson, Joe C., et al. (See Cameron, Hugh F., assignor.)
Johnson, Joseph, Butterfield, Minn. Grain thrasher. 1,814,755; July 14.
Johnson, Lane, Ingram, assignor to United Engineering and Foundry Company, Pittsburgh, Pa. Apparatus for shearing material. 1,814,513; July 14.
Jonas, Julius, assignor to Aktiengesellschaft Brown Boveri & Cie, Baden, Switzerland. Electric transformer. 1,814,557; July 14.
Jones, Edwin W., Lincoln, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Water tube steam generator. 1,814,447; July 14.
Jones, Irving H., Massillon, Ohio. Clock casing. Des. 84,640; July 14.
Jordan, Charles J., assignor of one-fourth to R. G. Schaub, Woodbury, N. J. Method and apparatus for drawing, cutting, gripping and conveying sheet plate glass. 1,814,932; July 14.
Jorgensen, Hans C., Montreal, Quebec, Canada. Furnace. 1,814,391; July 14.
Joslin, Frank M., assignor to Inman Manufacturing Company, Inc., Amsterdam, N. Y. Machine for making boxes. 1,814,043; July 14.
Joyce, Bryan P., Davenport, Iowa. Packing. 1,814,704; July 14.
Joyce, Bryan P., Davenport, Iowa. Packing. 1,814,705; July 14.
Jump, George H., Buffalo, N. Y., assignor to General Electric Company. Control system. 1,814,810; July 14.
Jurs, Albert E. (See Marchant, R. H., and Jurs.)
Kämmerer, Hans. (See Holzach, K., Kämmerer, and Müller.)
Kane, John C., and W. Weiss, Detroit, Mich. Radiator ornament. 1,814,314; July 14.
Karlson, Georg E., Stockholm, Sweden. Shoe, boot, and the like. 1,814,514; July 14.
Karrer, Hans, assignor to firm Maschinenfabrik Benninger, A. G., Uzwil, Switzerland. Machine for treating webs of fabrics in the open state. 1,814,706; July 14.
Kautsky, Hans. (See Pfannenstiel, A., and Kautsky.)
Kay, Oscar J., Los Angeles, Calif. Valve actuating mechanism. 1,814,045; July 14.
Keen, George J., Oklahoma City, Okla. Wire rope clamp. 1,814,933; July 14.
Keenan, John A. (See Fox, A. O., and Keenan.)
Keith, Irving L. (See Bowlen, Carlos H., assignor.)
Kégresse, Adolphe, Suresnes, France. Endless track belt. 1,814,046; July 14.
Kelco Company. (See Thornley, F. C., and Walsh, assignors.)
Kelco Company. (See Walsh, Michael J., assignor.)
Kelley, Samuel I., St. Lawrence, S. Dak. Windshield wiper. 1,814,934; July 14.
Kelly, Charles A., Monroe, Wis. Dash spring starter switch. 1,814,558; July 14.
Kelly Reamer Company. (See Hartwell, Floyd S., assignor.)
Kelsey-Hayes Wheel Corporation. (See Stoler, Edward W., assignor.)
Kennard, Victor P., Portsmouth, N. H. Tie hanger. 1,813,932; July 14.
Kerr Chickeries, Inc. (See Taylor, Irvin A., assignor.)
Kerr, Howard J. (See Jacobus, D. S., and Kerr.)
Kerr, Howard J., Westfield, N. J., and J. Fletcher, New Brighton, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J. Superheater. 1,814,707; July 14.
Kestenman Bros. Mfg. Co. (See Kestenman, Charles H., assignor.)
Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Clasp for bracelets, straps, linkages, or the like. 1,814,475; July 14.
Keystone Aircraft Corporation. (See Koch, Charles D., assignor.)
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,814,001; July 14.
King, John M. (See Rogers, G. E., and King.)
King Pneumatic Tool Company. (See Butler, John M., assignor.)
King, William S., Winnetka, Ill. Illustrative chart. 1,814,251; July 14.
Kingdon, Kenneth H., Schenectady, N. Y., assignor to General Electric Company. Electron discharge device and fabricating the same. 1,814,711; July 14.
Kinsella, Edward. (See Dreyfus, H., Kinsella, Bower, and Taylor.)
Kintz, Robert R. (See Saarinen, E., and Kintz.)
Kirschstein, Morris. (See Oskow, Louis, assignor.)
Kirschstein, Morris, et al. (See Felshin, Judah B., assignor.)
Kleenglas (1929) Limited. (See Griffiths, Alfred, assignor.)
Klees, Albert L., Long Beach, and B. Greenfield, Jackson Heights, N. Y., assignors to Surface Combustion Corporation, Toledo, Ohio. Fluid flow regulating mechanism. 1,814,812; July 14.
Klees, Albert L., Long Beach, and B. Greenfield, Jackson Heights, N. Y., assignors to Surface Combustion Corporation, Toledo, Ohio. Fluid flow regulating apparatus. 1,814,834; July 14.
Klees, Albert, Long Beach, and B. Greenfield, Jackson Heights, N. Y., assignors to Surface Combustion Corporation, Toledo, Ohio. Fluid flow regulating apparatus. 1,814,935; July 14.
Klein, Charles H., Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wire support. 1,813,933; July 14.
Klipstein, E. C., & Sons Company. (See Dougherty, Gregg, assignor.)
Knee, Aaron A., assignor to The Lance Packing Company, Charlotte, N. C. Vending machine. 1,813,934; July 14.
Knee, Aaron A., assignor to The Lance Packing Company, Charlotte, N. C. Vending machine for bulk edibles. 1,813,935; July 14.
Knoll, William V., assignor to Midwest-Fulton Machine Co., Dayton, Ohio. Beater engine. 1,815,007; July 14.
Knoop, William A. (See Clokey, A. A., and Knoop.)

Knotz, Alois, Graz, Austria. Feed device for the paper strip of adding machines and cash registers. 1,814,708; July 14.

Kober, Philip A., Evanston, assignor to G. D. Searle & Company, Chicago, Ill. Mineral food composition and making same. 1,813,936; July 14.

Koch, Charles D., Torresdale, assignor to Keystone Aircraft Corporation, Bristol, Pa. Refrigerator for vehicles. 1,814,315; July 14.

Koebel, Albert J., Daisy, Wash. Treating ores. 1,814,602; July 14.

Koehring Company. (See Lichtenberg, Erich H., assignor.)

Koenig, Joseph, deceased, Manitowoc, Wis., R. Koenig and R. K. Ellis, administrators. Propeller. 1,814,709; July 14.

Koenig, Remus, et al., administrators. (See Koenig, Joseph.)

Kohlmeyer, August H. and F. A., Detroit, Mich. Thermostatic oven control mechanism. 1,814,002; July 14.

Kohlmeyer, Frederick A. (See Kohlmeyer, August H. and F. A.)

Kohn & Company. (See Carolin, Frank J., assignor.)

Komorous, Joseph, Riverside, assignor to Parisian Novelty Co., Chicago, Ill. Key holding device. 1,814,710; July 14.

Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Newark, N. J. Tube construction. 1,814,316; July 14.

Kramer, Erwin, Berlin, assignor to Hartstoff-Metall Aktiengesellschaft, Berlin-Kopenick, Germany. Beetling mill with closed casing. 1,814,559; July 14.

Kramer, Joseph and R., Detroit, Mich. Kite. 1,814,811; July 14.

Kramer, Rudolph. (See Kramer, Joseph and R.)

Kreisinger, Henry, Piermont, assignor to International Combustion Engineering Corporation. New York, N. Y. Fuel preparing and handling systems. 1,814,560; July 14.

Krumm, William L., Chicago, Ill. Box. 1,814,561; July 14.

Krussand, Daniel, Oslo, Norway. Sail, mast, and rig for sailing boats and sailing vessels. 1,813,937; July 14.

Kubelka, Jerry, Ridgewood, N. Y. Weatherproof casement window construction. 1,814,936; July 14.

Küchenmeister, Heinrich I, Berlin, Germany. Portable talking machine. 1,814,947; July 14.

Kudela, Caroline, Beaver Dam, Wis., assignor to Paramount Textile Machinery Co., Chicago, Ill. Repairing looped fabrics. 1,815,008; July 14.

Kuhn, Harry A. (See Sebastian, R. L., and Finkelstein, assignors.)

Kurkjian, Yervant H., Hawthorne, N. J., assignor to Carl J. Schmid, Inc., New York, N. Y. Machine for the treatment of rubber forming devices. 1,814,712; July 14.

Kurkjian, Yervant H., Hawthorne, N. J., assignor to Carl J. Schmid, Inc., New York, N. Y. Device for the removal of articles from formers. 1,814,713; July 14.

Kurz, Heinrich, Duisburg-Ruhrort, assignor to Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Rail structure. 1,814,476; July 14.

Kux, Albert S., Chicago, Ill. Wrapping machine. 1,814,166; July 14.

Kuykendall, Joseph E., San Antonio, Tex. Electrical contactor. 1,814,448; July 14.

Labisky, Arthur H., and O. E. Zahn, assignors to The Barton Corporation, West Bend, Wis. Washing machine. 1,814,714; July 14.

Lagueux, Arthur, et al. (See Chartier, Adjutor, assignor.)

Laird, James M., Charleston, W. Va. Ice cream cabinet. 1,814,167; July 14.

Lambert, Bertram, Oxford, assignor to National Processes Limited, London, England. Manufacture of materials of the nature of catalysts for the oxidation of oxidizable gases in admixture with air or oxygen. 1,814,515; July 14.

Lance Packing Company, The. (See Knee, Aaron A., assignor.)

Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Rail joint bar. 1,814,835; July 14.

Lapointe, Francis J., Ann Arbor, Mich. Power transmission mechanism. 1,814,089; July 14.

Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Fountain pen or similar article. Des. 84,641; July 14.

Larson, Charles, Baxter Springs, Kans., assignor to Ingersoll-Rand Company, Jersey City, N. J. Dolly for drill sharpeners. 1,814,516; July 14.

Lathrop-Hoge Construction Company. (See Hoge, Edward C., assignor.)

Laucks, Irving F. (See Rippey, H. F., Cone, Davidson, Laucks, and Banks.)

Lavino, E. J., and Company. (See Housman, George S., assignor.)

Lawson, Oscar L., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Lock-stitch shoe sewing machine. 1,814,562; July 14.

Leake, Arthur G., Bridgeport, Conn. Tie scupper. 1,814,715; July 14.

Leary, Eugene A., Cincinnati, Ohio. Tray like support. 1,814,252; July 14.

Leary, Eugene A., Cincinnati, Ohio. Wheel stop. 1,814,253; July 14.

Leavens, William B., jr., Maplewood, assignor to The Wilkata Folding Box Co., Kearny, N. J. Display container. 1,813,938; July 14.

Lebherz, Harry J., assignor to The Everedy Company, Frederick, Md. Screen door grille. 1,814,317; July 14.

Lechler, Firm: Paul. (See Mueller, Bernard W., assignor.)

Lederman, John E., assignor to Hydro Electric Manufacturing Company, Milwaukee, Wis. Shaft coupling. 1,814,836; July 14.

Lee, Oscar, Waupun, Wis. Whisk broom. 1,814,169; July 14.

Leiber, William C., Port Washington, N. Y. Miniature toy sternwheel steamboat. 1,814,837; July 14.

Lencke, John K., and H. Schmid., Kingston, N. Y., assignors to Apollo Magneto Corporation. Impulse coupling. 1,814,318; July 14.

Leonard, James, Rochester, N. Y. Filling head for can filling machines. 1,814,168; July 14.

Leppin, George C. (See Horsting, B. F., and Leppin.)

Lester, Charles W., Schenectady, N. Y. Locomotive boiler. 1,813,939; July 14.

Le Tang, Leo R., Cincinnati, Ohio. Electrical operating means. 1,814,563; July 14.

Leuchs, Otto. (See Dörr, E., Leuchs, and Rosenthal.)

Levé, Charles, Cannes, France. Sporting gun. 1,814,937; July 14.

Levison, Harry, San Francisco, Calif. Adjustable clamp. 1,814,254; July 14.

Levy, Lawrence, assignor to L. Ley, New York, N. Y. Gun sight. 1,814,756; July 14.

Lewis Differential Company. (See Tatter, John W., assignor.)

Lewis, Fred H., York, assignor to United States Chain & Forging Company, Pittsburgh, Pa. Antiskid chain. 1,814,716; July 14.

Lewis, Otto L. (See Cole, C. B., and Lewis.)

Lewis, Richmond. (See Caron, Fred M., assignor.)

Ley, Lawrence. (See Levy, Lawrence, assignor.)

Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)

Lichtenberg, Erich H., assignor to Koehring Company, Milwaukee, Wis. Skip hoisting mechanism for concrete mixers. 1,814,564; July 14.

Liebel-Flarsheim Company, The. (See Bovie, William T., assignor.)

Lincoln Electric Company, The. (See Windle, Edward H., assignor.)

Lincoln, Robert A., Pampa, Tex., assignor of one-half to American Iron & Machine Works, Inc., Oklahoma City, Okla. Inside casing or tool joint cutter. 1,814,048; July 14.

Lindbladh Corporation, The. (See Lindbladh, Harmon E., assignor.)

Lindbladh, Harmon E., Brookline, Mass., assignor to The Lindbladh Corporation. Ruling machine. 1,813,940; July 14.

Lindquist, Fred, and O. L. Nave, Sacramento, Calif. Lock. 1,814,938; July 14.

Link-Belt Company. (See Sayers, William W., assignor.)

Linton, Chester A., Kansas City, Mo. Transmission of sound waves. 1,814,603; July 14.

Linville, Robert W., San Fernando, assignor of thirty per cent to I. S. Watson, Burbank, Calif. Electric water heater. 1,814,319; July 14.

Ljungstrom, Fredrik, Lidingo, Sweden. Electric fan. Des. 84,642; July 14.

Locomotive Firebox Company. (See Noel, Ernest J., assignor.)

Loeding, Henry, Chicago, Ill. Floor trap for burglar alarms. 1,814,255; July 14.

Loeffelholz, Henry J., Perry, Okla. Railway rail joint. 1,814,939; July 14.

Lombard, Nathaniel, Worcester, Mass. Air valve. 1,814,565; July 14.

Lombard, Nathaniel, Worcester, Mass. Clutch. 1,814,566; July 14.

Long, Clyde R., Smethport, Pa. Golf ball marker. 1,814,170; July 14.

Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 84,643; July 14.

Long, Verne V., Torrington, Wyo. Bed warmer. 1,814,940; July 14.

Lorenz, Edward H., West Hartford, and J. E. Schroder, Hartford, assignors to Hartford-Empire Company, Hartford, Conn. Setting-up mechanism. 1,815,009; July 14.

Loughridge, Matthew H. (See Scharnagel H., and Loughridge.)

Loughridge, Matthew H., Bogota, N. J. Railway tie and rail fastening. 1,813,941; July 14.

Low, Frank S., et al. (See Berresford, John K., assignor.)

Low, Frank S., et al. (See Low, Frank S., assignor.)

Low, Frank S., et al. (See Low, F. S., Taylor, and Berresford, assignors.)

Low, Frank S., assignor, by mesne assignments, to F. S. Low, Niagara Falls, N. Y., and A. W. Berresford, Detroit, Mich. Chlorination of ferrochrome. 1,814,393; July 14.

Low, Frank S., M. C. Taylor, and J. K. Berresford, assignors, by mesne assignments, to F. S. Low, Niagara Falls, N. Y., and A. W. Berresford, Detroit, Mich. Chlorination of ferrochrome. 1,814,392; July 14.

Lown, Harry O., San Angelo, Tex. Gang plow. 1,814,003; July 14.

Lucas, Jonathan, Savannah, Ga., assignor to Lucas-Lamborn Loom Corporation, New York, N. Y. Automatic switch cam. 1,814,757; July 14.

Lucas-Lamborn Loom Corporation. (See Lucas, Jonathan, assignor.)

Lundelius & Eccleston Motors Corporation. (See Lundelius, O. F., and Dillon, assignors.)

Lundelius, Oscar F., and J. R. Dillon, Los Angeles, Calif., assignors to Lundelius & Eccleston Motors Corporation, Las Vegas, Nev. Vehicle chassis. 1,814,256; July 14.

Lundquist, Hans, Chicago, Ill. Gasoline gauge. 1,814,394; July 14.

Lupe, Inc. (See Friedman, William, assignor.)

Lutz, Alvin, Edinburg, Va. Indicator for mail boxes. 1,814,941; July 14.

Lykken, Henry G., Minneapolis, Minn. Material reducing and classifying device. 1,814,395; July 14.

Lynch, Harry B., McKeesport, Pa. Pipe wrapping machine. 1,814,320; July 14.

Mabey, Charles W., assignor to Mabey Electric and Manufacturing Company, Indianapolis, Ind. Double electric toaster. 1,814,942; July 14.

Mabey Electric and Manufacturing Company. (See Mabey, Charles W., assignor.)

MacGregor, Wallace F., assignor to J. I. Case Company, Racine, Wis. Combination corn harvester. 1,814,723; July 14.

Machinenfabrik Augsburg-Nurnberg A. G. (See Zimmermann, Karl, assignor.)

Magnet-Werk G. m. b. H. Eisenach Spezialfabrik fur Elektromagnet-Apparate. (See Bing, Julius, assignor.)

Main, Thomas J., Lamar, Colo. Controller for electrical signs. 1,814,943; July 14.

Maizner, Julius F., White Plains, N. Y. Denture. 1,814,717; July 14.

Malleable Iron Fittings Company. (See Pickop, George B., assignor.)

Malles, Ralph E., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Frequency indicator. 1,813,942; July 14.

Mallinckrodt Chemical Works. (See Mallinckrodt, E., jr., and Farr, assignors.)

Mallinckrodt, Edward, jr., St. Louis, and H. V. Farr, Ferguson, assignors to Mallinckrodt Chemical Works, St. Louis, Mo. Preserving ether. 1,814,718; July 14.

Mallison, Harry D., Philadelphia, Pa., assignor to National Pneumatic Company, New York, N. Y. Pneumatic door-lock cylinder. 1,813,943; July 14.

Manz Corporation. (See Olsen, Christen, assignor.)

Ma Peña, José, Tampico, Mexico. Horn attachment for string musical instruments. 1,814,767; July 14.

Marchant, Rodney H., Oakland, and A. E. Jurs, Piedmont, Calif., assignors to National Sanitary Valve Corporation, Carson City, Nev. Toilet flush valve. 1,814,396; July 14.

Marden, John W., and H. C. Rentschler, East Orange, N. J., assignors to Westinghouse Lamp Company. Ductile thorium and making the same. 1,814,719; July 14.

Marden, John W., and M. N. Rich, East Orange, N. J., assignors to Westinghouse Lamp Company. Preparation of ductile vanadium. 1,814,720; July 14.

Marden, John W., East Orange, N. J., assignor to Westinghouse Lamp Company. Preparation of ductile uranium. 1,814,721; July 14.

Marion Steam Shovel Company, The. (See Shelton, Dwight J., assignor.)

Marriner, B. A. (See Peebles, Niles, assignor.)

Marsden, John E., Philadelphia, Pa. Bottle or similar article. Des. 84,644; July 14.

Marsh, Esli A., Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Yielding propeller. 1,814,171; July 14.

Marshall Field Mills Corporation. (See Clark, Eugene F., assignor.)

Marshall, James E., assignor, by mesne assignments, to Winchester Repeating Arms Company, New Haven, Conn. Skate roll. 1,813,944; July 14.

Martin, Allan F., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Arc lamp. 1,814,321; July 14.

Martin, Bruno, Saginaw, Mich. Folding table. 1,814,838; July 14.

Martin, Harold S. (See Gould, C. E., Hampton, and Martin.)

Martin, Thomas A., Bridgeport, Conn. Automobile servicing device. 1,814,049; July 14.

Martindell, Milton H., assignor to Jos. Stokes Rubber Co., Trenton, N. J. Flush guide arm. 1,814,604; July 14.

Martinet, Edward D., Los Angeles, Calif. Brick making machine. 1, 814,172; July 14.

Marx, Robert J., London, England. Suction roll. 1,814,050; July 14.

Maschinenfabrik Benninger, A. G. (See Karrer, Hans, assignor.)

Maschinenfabrik Benninger, A. G. (See Weiss, Hans, assignor.)

Maxmoor Corporation. (See Moore, Arlington, assignor.)

Mayehoff, Katherine L. (See Belokopytoff, Alexander J., assignor.)

Maynard, Joseph A., Boston, Mass. Temperature relief device. 1,814,722; July 14.

Mayo, Nathan N. (See Winer, J. F., and Mayo.)

Mayr, Karl A., New York, N. Y., assignor to Siemens-Schuckertwerke Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Steam generator. 1,814,605; July 14.

McAdams, Harry, Atlantic City, N. J. Terry loop fabric knitting machine. 1,814,944; July 14.

McAfee, Almer M., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Making aluminum chloride. 1,814,397; July 14.

McAllister, Edward J., Los Angeles, Calif. Signal gate for motor vehicles. 1,814,477; July 14.

McAuley Automatic Trap Company, The. (See Covey, Clarence F., assignor.)

McCan, David G., Philadelphia, Pa. Method of and apparatus for controlling alternating current. 1,814,051; July 14.

McCafferty, Robert H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Trolley frog. 1,814,004; July 14.

McCarthy, J. Clarence, assignor to Armstrong Cork Company, Lancaster, Pa. Printing block and making the same. 1,814,758; July 14.

McCarty, Worth G. (See Donkin, W. L., and McCarty.)

McClintock, O. B., Company. (See McClintock, Oliver B., assignor.)

McClintock, Oliver B., assignor to O. B. McClintock Company, Minneapolis, Minn. Protector for vault ventilators. 1,814,839; July 14.

McCormack, Alfred D., Mankato, Minn. Auto window screen. 1,814,322; July 14.

McCormick, Peter J., Hagerstown, Md. Washing machine. 1,814,724; July 14.

McCracken, John, Davenport, Iowa. Electric motor. 1,814,945; July 14.

McCullough, Frederick S., Edgewood, Pa. Cathode structure. 1,814,759; July 14.

McDonald, Lewis. (See Day, C. L., and McDonald.)

McDowell, Emma E., Monrovia, Calif. Inverted flatiron holder. 1,814,517; July 14.

McGarry, John T., Cincinnati, Ohio. Railway switch apparatus. 1,814,323; July 14.

McGeorge, Hubert J., Temuka, New Zealand. Converting rectilinear movement to rotary movement. 1,814,946; July 14.

McGogy, Donald H., assignor to McGogy Pump Co. Inc., McMinnville, Oreg. Liquid meter. 1,814,725; July 14.

McGogy Pump Co. Inc. (See McGogy, Donald H., assignor.)

McGrail, Michael J., Gardiner, Me., assignor, by mesne assignments, to Boston Machine Works Company. Shoe lining and making the same. 1,814,518; July 14.

McGuineas, William. (See Parker, Thomas J., assignor.)

McGuinness, William V., Flushing, N. Y., and W. H. Francis, Jersey City, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Automatic selective pneumatic tube carrier relay. 1,814,947; July 14.

McKain, Edward, Los Angeles, Calif. Grain huller. 1,814,398; July 14.

McKee, Garnet W., Rockford, Ill. Meter connection. 1,814,173; July 14.

McKenna Process Company of Illinois. (See Langford, George, assignor.)

McKesson & Robbins, Inc. (See Danco, Léon A., assignor.)

McMullen, John, Buffalo, N. Y. Running board anchor for railway cars. 1,814,519; July 14.

Meakin, Edgar T., Berkeley, Calif. Manufacturing olive oil. 1,814,005; July 14.

Meissner, Alexander, and O. von Bronk, assignors to Gesellschaft fur Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany. Indicator. 1,814,399; July 14.

Meiwald, Franz, Vienna, Austria. Machine for knitting tubular envelopes. 1,814,324; July 14.

Melton, Burton E., Chicago, Ill. Headlight. 1,814,326; July 14.

Merkt, Gustav A., assignor to Morgan Construction Company, Worcester, Mass. Recirculating system and apparatus for waste furnace gases. 1,814,567; July 14.

Mershon, Ralph D., New York, N. Y. Operating electrolytic apparatus. 1,814,174; July 14.

Metal Forms Corporation. (See Miller, George H., assignor.)

Metal & Thermit Corporation. (See Fischer, Hellmut, assignor.)

Metcalf, George R. jr., assignor to Erie Malleable Iron Company, Erie, Pa. Connecter fitting. 1,814,478; July 14.

Metcalf, George R., jr., assignor to Erie Malleable Iron Company, Erie, Pa. Connecter. 1,814,479; July 14.

Metcalf, George R., jr., and F. J. Raybould, assignors to Erie Malleable Iron Company, Erie, Pa. Conduit fitting. 1,814,480; July 14.

Metcalf, George R., jr., and F. J. Raybould, assignors to Erie Malleable Iron Company, Erie, Pa. Conduit fitting. 1,814,481; July 14.

Metcalfe, Roy M., Olympia, Wash. Hosiery protecting compound. 1,814,221; July 14.

Metzger, Rudolf. (See Hevesi, M., and Metzger.)

Meyer, Gerhart, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Suppressing ground currents. 1,814,006; July 14.

Mically, Emanuel, Jackson Heights, assignor to Universal Fixture Corporation, New York, N. Y. Shelving structure. 1,814,090; July 14.

Mically, Emanuel, Jackson Heights, assignor to Universal Fixture Corporation, New York, N. Y. Shelving structure. 1,814,091; July 14.

Michell-Crankless Engines Corporation. (See Sherman, Thomas L., assignor.)
Michell-Crankless Engines Corporation. (See Wilson, Victor R., assignor.)
Midwest-Fulton Machine Co. (See Knoll, William V., assignor.)
Miller, Alexander, assignor to M. Miller and himself, as trustees, Donora, Pa. Amusement device. 1,814,520; July 14.
Miller, George H., assignor to Metal Forms Corporation, Milwaukee, Wis. Stake box. 1,814,521; July 14.
Miller, Edward, Adrian, assignor to Evans Products Company, Detroit, Mich. Riving machine. 1,814,726; July 14.
Miller, James A., jr., New Rochelle, N. Y. Fastening means. 1,814,760; July 14.
Miller, Max A., assignor to Milwell Electric Devices Corporation, New York, N. Y. Method of and apparatus for testing metals and alloys. 1,814,522; July 14.
Miller, Mose. (See Miller, Alexander, assignor.)
Miller, William J., assignor to F. O. Schoedinger, Columbus, Ohio. Operating table. 1,814,482; July 14.
Miller, Wilmam I., Chicago, Ill. Propeller. 1,814,175; July 14.
Milligan, George, Manchester, England. Camera using roll films. 1,814,727; July 14.
Millspaugh, William H., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Centrifugal casting machine. 1,814,176; July 14.
Milwell Electric Devices Corporation. (See Miller, Max A., assignor.)
Miner, Charles R., San Francisco, Calif., assignor to American Airship Corporation, Wilmington, Del. Aerial navigation machine. 1,814,948; July 14.
Miner, W. H. Inc. (See Haseltine, Stacy B., assignor.)
Minnesota Mining & Manufacturing Company. (See Drew, Richard G., assignor.)
Mitchell, Doren. (See Wright, S. B., and Mitchell.)
Mitchell, Doren, New York, N. Y., assignor to American Telephone and Telegraph Company. Echo suppressor. 1,814,052; July 14.
Mitchell, John E., St. Louis Mo. Combined harvesting and cotton cleaning machine. 1,814,761; July 14.
Miyasaki, Leon M., Los Angeles, Calif. Safety device for aeroplanes. 1,814,325; July 14.
Mochel, Norman L., Ridley Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Valve structure. 1,814,762; July 14.
Modern Utilities Company. (See Frantz, Grover C., assignor.)
Moneyron, Marcel. (See Sarrazin, R., and Moneyron.)
Monroe, Albert M., Palo Alto, Calif. Football score board. 1,814,729; July 14.
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Combustion chamber construction for internal combustion engines. 1,814,523; July 14.
Moore, George, Flint, Mich. Combined rear view mirror and parking light for automobiles. 1,814,728; July 14.
Morall, Charles, assignor to Delman, Inc., New York, N. Y. Shoe. Des. 84,645; July 14.
Morehouse, Harry W., Garden City, assignor to The Western Union Telegraph Company, New York, N. Y. Pneumatic tube system. 1,814,222; July 14.
Morgan Construction Company. (See Crosby, Fred B., assignor.)
Morgan Construction Company. (See Merkt, Gustav A., assignor.)
Morgan, David W. R., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser. 1,814,840; July 14.
Morgan Hurrycane Company. (See Morgan, William H., assignor.)
Morgan, Phillip, Stockton, Calif. Gas mixing device. 1,814,949; July 14.
Morgan, William H., Alliance, Ohio, assignor, by mesne assignments, to The Morgan Hurrycane Company, New York, N. Y. Cane stalk disintegrator. 1,814,177; July 14.
Morgan, William T., Neodesha, Kans. Measuring and mixing machine. 1,814,483; July 14.
Morgenstern, Joseph, Cleveland, Ohio. Switch box. 1,814,440; July 14.
Morin, Louis H., New York, N. Y., assignor, by mesne assignments, to Doehler Vending Machines, Inc. Floor stand. 1,813,945; July 14.
Morrell, Charles W., South Pasadena, Calif. Fruit caliper. 1,814,401; July 14.
Morris, Earl H., Paducah, Ky. Plummet. 1,814,484; July 14.
Moscato, Francis, Brooklyn, N. Y. Safety device. 1,814,950; July 14.
Mosieh, Joseph, Brooklyn, N. Y. Magnetic brake for trains. 1,814,841; July 14.
Moss, Elizabeth, Los Angeles, Calif. Pie making process. 1,814,485; July 14.
Motherwell, Joseph W., Melrose, assignor to The Ashton Valve Company, Cambridge, Mass. Pressure gauge. 1,814,092; July 14.
Motor Car Advertising Device Co. (See Dobrowsky, Emmanuel, assignor.)
Motor Terminals Company. (See Fitch, Benjamin F., assignor.)
Mountford, Thomas A., Newark, N. J., assignor to Blancard & Co., Inc., New York, N. Y. Jewelry clasp. 1,814,486; July 14.
Mueller, Arthur W., Cincinnati, Ohio. Combined perforator and handle. 1,814,487; July 14.
Mueller, Bernhard W., San Francisco, Calif., assignor to Firm: Paul Lechler, Stuttgart, Germany. Preventing gas absorption in liquids and for preventing rusting of submerged iron. 1,814,053; July 14.
Muennink, George, sr., et al. (See Cameron, Hugh F., assignor.)
Mullen, James F., jr., Chicago, Ill. Carburetor. 1,814,402; July 14.
Muller, Fred, assignor to Radio Corporation of America, New York, N. Y. Radio dial. 1,814,403; July 14.
Müller, John H., Philadelphia, Pa., assignor to J. Baumann. Attachment for doughnut blank cutting machines. 1,814,951; July 14.
Muller, Robert L., assignor to Burroughs Adding Machine Company, Detroit, Mich. Paper carriage. 1,814,178; July 14.
Müller, Werner. (See Holzach, K., Kämmerer, and Müller.)
Munson, John H., Hollywood, Calif. Automobile hub cap. 1,814,054; July 14.
Murch, Frank G., Methuen, Mass. Textile material and process of making. 1,815,027; July 14.
Murnahan, Louis, Washington, D. C. Marking device. 1,814,488; July 14.
Murphy, Daniel H., West Fartford, assignor to The Wiremold Company, Hartford, Conn. Tubular fabric. 1,814,223; July 14.
Murphy, Daniel H., West Hartford, assignor to The Wiremold Company, Hartford, Conn. Woven tubular fabric. 1,814,224; July 14.
Murphy, Edwin J., Schenectady, N. Y., assignor to General Electric Company. Indicating system. 1,814,842; July 14.
Murphy, John, Jefferson, Iowa. Weeder attachment. 1,814,404; July 14.
Murray, Albert L., Auburn, Ind. Rubber sole for shoes. Des. 84,646; July 14.
Mustad, Hans C. H., assignor to O. Mustad & Son, Oslo, Norway. Manufacture of horseshoe nails. 1,814,952; July 14.
Mustad, O., & Son. (See Mustad, Hans C. H., assignor.)
Myers, Hubert A., assignor of one-half to A. S. Hickok, Toledo, Ohio. Sound instrument. 1,814,730; July 14.
Myers, John S., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Governor. 1,814,630; July 14.
Myhre, Alvin, Colorado, Tex. Shingle clip. 1,814,405; July 14.
Nakagawa, Yoshio, Broderick, Calif. Engine. 1,814,489; July 14.
Napier, Melvin J., Akron, Ohio. Toy and securing means therefor. 1,814,055; July 14.
Narath, Albert, Berlin, Germany, assignor to General Electric Company. Kerr cell. 1,814,843; July 14.
Nashua Sure-Hold Company. (See Wilson, Edward W., assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Gypsum Company. (See Haggerty, J. F., and Crandall, assignors.)
National Lock Washer Company. (See Cairncross, R. L., and Goodell, assignors.)
National Pneumatic Company. (See Mallison, Harry D., assignor.)
National Processes Limited. (See Lambert, Bertram, assignor.)
National Sanitary Valve Corporation. (See Marchant, R. H., and Jurs, assignors.)
Naugatuck Chemical Company, The. (See Cadwell, Sidney M., assignor.)
Nave, Ora L. (See Lindquist, E., and Nave.)
Neely, Andy L., and W. Tolle, San Antonio, Tex. Chair for concrete reenforcement stirrups. 1,814,007; July 14.
Neiss, Oskar, assignor of one-half to H. Bollmann, Hamburg, Germany. Induction heating apparatus. 1,814,225; July 14.
Nelson, Edward, and G. Nelson, Belleville, N. J., assignors to Overman Cushion Tire Company, Inc., New York, N. Y. Apparatus for making cushion tires. 1,814,731; July 14.
Nelson, Fred O. (See Fogel, C. A., and Nelson.)
Nelson, George. (See Nelson, Edward and G.)
Nelson, Herman, Corporation, The. (See Shurtleff, Wilfred, assignor.)
Nelson, John H., and S. Quisling, Madison, Wis.; said Nelson assignor to said Quisling. Portable drinking fountain. 1,814,953; July 14.
Nelson, Martin L., Park Ridge, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Remote control system. 1,814,524; July 14.
Nelson, Richard, assignor of one-half to F. Rosner, Chicago, Ill. Fish bait. 1,814,450; July 14.
Nestal, Marcelino L., San Diego, Calif. Vacuum pump. 1,814,179; July 14.
Netschert, Franz., assignor to Technical Glass Company, Los Angeles, Calif. Latch. 1,814,954; July 14.
Neubauer, Charles, assignor to The Armstrong Mfg. Co., Bridgeport, Conn. Cutting tool. 1,814,763; July 14.

Neumark, Hans. (See Baron von Girsewald, Conway, and Neumark.)
Neveu, Albert A., Northboro, assignor to The Worcester Knitting Company, Worcester, Mass. Bathing suit. 1,814,451; July 14.
Newton, Richard T., New York, N. Y. Vibratory machine. 1,814,606; July 14.
Nicholls, Henry M., Chicago, Ill., assignor to American Can Company, New York, N. Y. Compartment can. 1,814,180; July 14.
Nicodemus, Otto, Frankfort-on-the-Main-Hochst, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Extracting acetylene of high value from gases poor in acetylene. 1,818,948; July 14.
Nicolson, Alexander M., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Thermionic device. 1,814,327; July 14.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve valve and making same. 1,814,764; July 14.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve valve. 1,814,765; July 14.
Noble & Wood Machine Co., The. (See Weir, Harry N., assignor.)
Noel, Ernest J., Ironton, Ohio, assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,814,257; July 14.
Nolette, Abraham, jr. (See Nolette, George L., assignor.)
Nolette, George L., assignor of one-half to A. Nolette, jr., Worcester, Mass. Jack. 1,814,226; July 14.
Norma-Hoffmann Bearings Corporation. (See Eisenlohr, F., and Uebelen, assignors.)
Norviel, Harry E. (See Chryst, W. A., and Norviel.)
Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition switch. 1,814,258; July 14.
Notbohm, Leonard C., Rome, Wis. Vegetable grater. 1,814,844; July 14.
Nuckolls, Samuel H., Stone Mountain, assignor to G. F. Willis, Atlanta, Ga. Portable electric lamp. 1,814,056; July 14.
Nuttall, Thomas D., assignor of one-half to Bentley & Jackson Limited, Bury, England. Pulp beating or refining machine. 1,814,452; July 14.
Nyborg, Tage G., and M. F. Higgins, Worcester, England. Electrically driven shaker conveyer. 1,814,732; July 14.
Oberhuber, William F., Lansdowne, assignor to Franklin Development Company, Philadelphia, Pa. Gun for driving slugs. 1,814,766; July 14.
Odd Sanitary Toothpick Dispenser, Inc. (See Oddsen, Gustav A., assignor.)
Oddsen, Gustav A., assignor to Odd Sanitary Toothpick Dispenser, Inc., Brooklyn, N. Y. Sanitary toothpick dispenser. 1,814,955; July 14.
O'Dowd, Henry W., Jersey City, N. J., assignor to Standard Gas Equipment Corporation. Thermostatic fuel controlling device. 1,814,491; July 14.
Oestnaes, Victor L., Westfield, assignor to American Gasaccumulator Company, Elizabeth, N. J. Combination lamp and reflector. 1,814,328; July 14.
O'Hagan, Bernard E., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,814,329; July 14.
Ohl, Russell S., New York, N. Y., assignor to American Telephone and Telegraph Company. Radio signaling system. 1,814,956; July 14.
Ohlrich, Charles H., assignor of one-half to L. W. Hummel, Philadelphia, Pa. Aircraft. 1,814,957; July 14.
Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)
Olsen, Christen, assignor to Manz Corporation, Chicago, Ill. Color printing process. 1,814,845; July 14.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock nut. 1,813,947; July 14.
Olson, Harry F. (See Wolff, L., and Olson.)
Orr, Samuel W., Peoria, Ill. Valve. 1,814,330; July 14.
Osborn, Harold C., Palatine, Ill. Automatic fire alarm. 1,814,733; July 14.
Osborne, Ralph W., Toronto, Ontario, Canada. Protective device for communication apparatus used with communication lines subjected to extraneous voltage. 1,814,453; July 14.
Osborne, Raymond G., Los Angeles, Calif. Protecting concrete piling. 1,814,332; July 14.
Oskow, Louis, et al. (See Felshin, Judah B., assignor.)
Oskow, Louis, Brooklyn, assignor of one-half to M. Kirschstein, New York, N. Y. Television apparatus. 1,814,181; July 14.
Osmon, Elmer A., Denver, Colo. Direction indicator. 1,814,331; July 14.
Oster Manufacturing Company, The. (See Hyde, Ralph E., assignor.)
Otis Steel Company, The. (See Bost, H. A., and Hummel, assignors.)
Overberg, Harry, Cincinnati, Ohio. Lure carrier. 1,814,490; July 14.
Overman Cushion Tire Company. (See Nelson, Edward and G., assignors.)
Owen, George W., Baltimore, Md. Filing device. 1,814,259; July 14.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Continuous printer. 1,814,525; July 14.
P. I. V. Chain Gears Limited. (See Abbott, Geoffrey J., assignor.)
Pacific Flush Tank Company. (See Beddoes, Hubert, assignor.)
Paden City Glass Manufacturing Company. (See Fisher, David, assignor.)
Palinkos, Stephen J., Norwalk, Conn. Sweatband. 1,814,057; July 14.
Palmer, Clyde C., Concordia, Kans. Dockage collecting and separating device. 1,813,948; July 14.
Palmer, John A., assignor to Columbian Rope Company, Auburn, N. Y. Cordage yarn and producing same. 1,814,958; July 14.
Palmgren, Per G., assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Pressure distributing means for bearings. 1,814,734; July 14.
Palmgren, Per G., assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Rolling mill guide. 1,814,735; July 14.
Palmgren, Per G., assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Rolling mill guide. 1,814,736; July 14.
Paper & Textile Machinery Company, The. (See Millspaugh, William H., assignor.)
Pappadakes, Gust, Bronx, N. Y. Aeroplane. 1,814,846; July 14.
Paraffine Companies, The. (See Finley, Dozier, assignor.)
Paramount Textile Machinery Co. (See Kudela, Caroline, assignor.)
Parisian Novelty Co. (See Komorous, Joseph, assignor.)
Parker, Morgan, New York, N. Y. Manufacture of detachable blades. 1,814,182; July 14.
Parker, Morgan, New York, N. Y. Scissors. 1,814,959; July 14.
Parker, Thomas J., assignor of one-half to W. McGuineas, Chicago, Ill. Internal combustion engine. 1,814,333; July 14.
Parkin, Winfred T., assignor to Theodore W. Foster & Bro. Co., Providence, R. I. Vanity case. 1,814,737; July 14.
Parnell, Fred, Medicine Hat, Alberta, Canada. Candy machine. 1,814,008; July 14.
Parrill, Easton E., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Train indicating apparatus. 1,814,406; July 14.
Parry, Joseph M., Weobley, England. Ladder. 1,814,960; July 14.
Parry, Robert A., Belmont, assignor to Boston Brick Company, Cambridge, Mass. Brick making machine. 1,814,227; July 14.
Patent and Licensing Corporation. (See Caton, Maurice L., assignor.)
Patent and Licensing Corporation, The. (See Ralph, Stuart H., assignor.)
Patterson Ballagh Corporation. (See Patterson, Claude L., assignor.)
Patterson, Claude L., assignor to Patterson Ballagh Corporation, Los Angeles, Calif. Pipe coupling and tool joint. 1,814,183; July 14.
Paul, William E., Schenectady, N. Y., assignor to General Electric Company. Circuit interrupting device. 1,814,847; July 14.
Pavitt, William H., Brooklyn, assignor, by mesne assignments, to Wilputte Coke Oven Corporation, New York, N. Y. Charging horizontal coke oven. 1,814,184; July 14.
Peacock, Charles T., Arriba, Colo. Lister. 1,814,848; July 14.
Peebles, Niles, Dallas, Tex., assignor of one-half to B. A. Marriner, Baton Rouge, La. Elevator. 1,814,407; July 14.
Peerless Pump Company. (See Wintroath, John A., assignor.)
Pelletier, Joseph E., et al. (See Chartier, Adjutor, assignor.)
Pellow, Robert E., Waco, Tex. Cocktail spoon. Des. 84,647; July 14.
Pen Desk Set Company. (See Guyot, Walter, assignor.)
Penn, Albert, assignor to Penn Electric Switch Co., Des Moines, Iowa. Deep well water supply system. 1,814,454; July 14.
Penn Electric Switch Co. (See Penn, Albert, assignor.)
Pennington, Harley D., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Threading die holder. 1,814,492; July 14.
Penote, Augustus J., Shaker Heights, Ohio. Manhole form of adjustable sections. 1,814,738; July 14.
Perpetual Self Winding Watch Company of America, Inc. (See Reiner, Max, assignor.)
Perry, John E., Youngstown, assignor to Valley Mould and Iron Corporation, Hubbard, Ohio. Core box for ingot molds. 1,814,185; July 14.
Perser Corporation, The. (See Ives, Herbert E., assignor.)
Perugia, André, Paris, France. Manufacture of shoe uppers. 1,814,260; July 14.
Pestak, Thomas G., assignor to The Wyoming Shovel Works, Wyoming, Pa. Shovel handle. 1,814,186; July 14.
Peters, Leonard W., Duluth, Minn. Fence post clamp. 1,814,228; July 14.

Pfannenstiel, Adolf, Berlin-Tempelhof, and H. Kautsky, Berlin-Charlottenburg, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Catalyst for chemical reactions. 1,814,493; July 14.
Pfeiffer, Fred B. (See Alexander, H. S., Pfeiffer, and White.)
Phillips, James E., New York, N. Y. Locking plate. 1,814,961; July 14.
Phillips, James V. W., New Westminster, British Columbia, Canada. Shade operating device for motor cars. 1,814,455; July 14.
Pickop, George B., New Haven, assignor to Malleable Iron Fittings Company, Branford, Conn. Fusible link controlled valve. 1,814,526; July 14.
Piersen, Edwin H. (See Brainard, C. H., Carrington, and Cooke.)
Pike, Robert D., Oakland, Calif. Volatilizing phosphorus and potash and for producing potash-bearing phosphoric acid. 1,814,568; July 14.
Pioneer Pearl Button Company. (See Butsko, Stephen, assignor.)
Pittsburgh Equitable Meter Company. (See Armstrong, James R., assignor.)
Podel, Abraham, New York, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Hermetic seal. 1,813,949; July 14.
Polar Products, Inc. (See Grayson, R. V., and Foster, assignors.)
Polleys, Charles G., assignor of one-half to R. J. Regnier, jr., Providence, R. I. Folding cushion seat. 1,814,408; July 14.
Pollock, Archibald F. and D. A., Jedburgh, Scotland, assignors of one-third to Edwin K. Scheftel, Paris, France. Recording and reproducing sound. 1,815,010; July 14.
Pollock, David A. (See Pollock, Archibald F. and D. A.)
Porter, Graham L. (See Beard, J. R., and Porter.)
Potigian, Armen, Davenport, Iowa. Tripod foot. 1,814,334; July 14.
Potter, Albert T., assignor, by mesne assignments, to Ainsworth Manufacturing Corporation, Detroit, Mich. Vehicle windshield. 1,814,261; July 14.
Potter, Charles C., jr., Los Angeles, assignor of one-half to R. L. Derfer, South Pasadena, Calif. Mop wringer. 1,814,527; July 14.
Pouvailsmith Corporation. (See Smith, Grant E., assignor.)
Powers, George V., assignor to American Iron and Machine Works Company, Oklahoma City, Okla. Internal pipe cutter. 1,814,058; July 14.
Preddey, Walter G., San Francisco, Calif. Automatic rewind switch. 1,814,720; July 14.
Pribil, Alexis R., Saginaw, Mich. Guide pulley. 1,813,950; July 14.
Primakow, Joseph E., Milwaukee, Wis. Lighting fixture. Des. 84,648; July 14.
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Vapor electric apparatus. 1,814,850; July 14.
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Circuit controlling apparatus. 1,814,851; July 14.
Proctor, Robert V., assignor to The Commercial Shearing & Stamping Company, Youngstown, Ohio. Tunnel apparatus. 1,814,852; July 14.
Protectoseal Company of America. (See Anschicks, Rudolph J., assignor.)
Purcell, Laurence J., New York, N. Y. Multiple blade knife with adjustable blades. 1,814,528; July 14.
Pure Oil Company, The. (See Chittick, Martin B., assignor.)
Putnam, Mark E., assignor to The Dow Chemical Company, Midland, Mich. Purifying methyl salicylate. 1,814,853; July 14.
Q. R. S.-De Vry Corporation. (See de Vry, Herman A., assignor.)
Quintus, Charles. (See Quintus, Paul and C.)
Quintus, Paul, and C., Garner, Iowa. Thresher. 1,814,494; July 14.
Quisling, Sverre. (See Nelson, J. H., and Quisling.)
Radics, Alex. (See Rietmann, J. A., and Radics.)
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Muller, Fred, assignor.)
Radio Corporation of America. (See Wolff, I., and Olson, assignors.)
Radio Inventions, Inc. (See Donle, Harold P., assignor.)
Rafter, Albert, assignor, by mesne assignments, to said Albert Rafter and J. C. Rafter, jr., Belleville, N. J. Machine for bending sheet metal shapes. 1,813,951; July 14.
Rafter, John C., jr., et al. (See Rafter, Albert, assignor.)
Rahn, Alphonso W. (See Haack, William F., assignor.)
Ralph, Stuart H., Belmont, Mass., assignor to The Patent and Licensing Corporation, Boston, Mass. Composition roofing or siding strip. Des. 84,668; July 14.
Rambacher, Adam, Munich, Germany. Railroad permanent way construction. 1,813,952; July 14.
Rapp, Emmanuel D., Moran, Kans. Candy cooler. 1,814,740; July 14.
Ray, James L., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fluid pressure governor. 1,814,631; July 14.
Raybould, Frank J. (See Metcalf, G. R., jr., and Raybould.)
Redfield, Charles A., San Diego, Calif. Closure fastening mechanism. 1,814,962; July 14.
Redford, Algenon A., Hollywood, Calif. Dolly. 1,814,262; July 14.
Regnier, Ralph J., jr. (See Polleys, Charles G., assignor.)
Reid, James S., assignor, by mesne assignments, to The Eaton Axle & Spring Company, Cleveland, Ohio. Closure. 1,814,409; July 14.
Reiley, Lawrence E., Goldfield, Nev. Heater. 1,814,335; July 14.
Reilly, Peter C. (See Cunningham, Orin D., assignor.)
Reiner, Max, Bronx, assignor, by mesne assignments, to Perpetual Self Winding Watch Company of America, Inc., New York, N. Y. Self winding watch. 1,814,187; July 14.
Reliance Electric and Engineering Company, The. (See Taylor, Stiman B., assignor.)
Reliance Manufacturing Company. (See Bard, Albert T., assignor.)
Remington Arms Company. (See Green, Charles W., assignor.)
Remington, Charles, Liverpool, England, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Remote control system. 1,814,529; July 14.
Rentschler, Harvey C. (See Marden, J. W., and Rentschler.)
Reppe, Walter, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of ketones. 1,813,953; July 14.
Reserve Holding Company. (See Nelson, Martin L., assignor.)
Reynolds, John L., Long Island City, N. Y., assignor, by mesne assignments, to Electrical Research Products Inc. Electrical control system. 1,814,263; July 14.
Reynolds, Lloyd H. V. (See Ensign, W. B., and Reynolds.)
Rhodes, Walter, Terre Haute, Ind. Power driven hole digger. 1,814,093; July 14.
Rhodes, Walter Terre Haute, Ind. Earth excavator for tile ditching. 1,814,094; July 14.
Rice, Harold G., assignor to Indestro Mfg. Co., Chicago, Ill. Bottle capper. 1,813,954; July 14.
Rice Products, Inc. (See West, Frank R., assignor.)
Rich, Malcolm N. (See Marden, J. W., and Rich.)
Rich, Meyer, New London, Conn. Bottle. Des. 84,649; July 14.
Richardson, Harold A., Steelton, Pa. Checker board. Des. 84,650; July 14.
Richardson, Robert C., jr., West Point, N. Y. Plate or similar article. Des. 84,651; July 14.
Richter, Adolf, and W. Schäfer, Dessau-in-Anhalt, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Purifying and refining hydrocarbon oils. 1,814,410; July 14.
Riedel, Walter W., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,814,264; July 14.
Rietmann, John A., Roslyn, and A. Radics, Farmingdale, assignors to Amplex Engineering Corporation, New York, N. Y. Wire tying machine. 1,814,188; July 14.
Riley Stoker Corporation. (See Daniels, Fred H., assignor.)
Ringwald, Clarence, North Hampton, assignor to Robbins & Myers, Inc., Springfield, Ohio. Support lock for electric fans. 1,814,854; July 14.
Rippey, Hugh F., C. N. Cone, G. Davidson, I. F. Laucks, and H. P. Banks, Seattle, Wash. Making a water resistant, animal protein adhesive, and the product thereof. 1,814,768; July 14.
Ritter, Julius, jr., assignor to Hartmann Trunk Company, Racine, Wis. Wardrobe case with foldable garment support. 1,813,955; July 14.
Ritter, Julius, jr., assignor to Hartman Trunk Company, Racine, Wis. Foldable wardrobe case. 1,814,336; July 14.
Rives, Logan, Los Angeles, Calif. Musical wind instrument. 1,814,456; July 14.
Robarge, Alexander C., et al. (See Clark, Arthur G., assignor.)
Robbins & Myers, Inc. (See Ringwald, Clarence, assignor.)
Robbins, William H., Springfield, and H. A. Toulmin, jr., Dayton, assignors to The Williams Company, London, Ohio. Steel wool filter. 1,814,855; July 14.
Roberts, Ethel, Los Angeles, Calif. Child's garment. 1,813,956; July 14.
Roberts, Fred T., jr., Montclair, N. J. Automobile attachment for jacks. 1,814,569; July 14.
Roberts, Fred T., jr., Montclair, N. J. Jack attachment for automobiles. 1,814,570; July 14.
Roberts Specialty Manufacturing Company, The. (See Charbonneau, Albert W., assignor.)
Robertson, John H., London, England. Variable friction gearing. 1,813,957; July 14.
Robinson, Albert E., Cincinnati, and W. L. Schellenbach, Wyoming, assignors to The American Tool Works Company, Cincinnati, Ohio. Drill arm for metal drilling machinery. 1,814,963; July 14.
Robinson, Carol R., New York, N. Y. Skirt retaining device. 1,814,856; July 14.
Robinson, Henry, New York, N. Y. Spinach, etc., washing machine. 1,814,964; July 14.
Robinson, William V., Oskaloosa, Iowa. Building. Des. 84,652; July 14.

Rocciola, John, Lodi, N. J. Embalming pump. 1,814,189; July 14.
Rock, George L., Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for rotating articles. 1,813,958; July 14.
Rocker, George. (See Conklin, O. E., and Rocker.)
Rockford Mitten & Hosiery Company. (See Schabacker, Fred H., assignor.)
Rodanet, Charles H. H., Versailles, assignor to the Society Etablissements Ed. Jaeger, Levallois-Perret, France. Switch. 1,814,337; July 14.
Rodger Ballast Car Company. (See Hosceit, William J., assignor.)
Rodgers, Claude M., Clay Township, St. Joseph County, assignor to South Bend Bait Company, South Bend, Ind. Fish bait. 1,814,571; July 14.
Rogers, Gilbert E., Rockaway, and J. M. King, Dover, N. J. Fuse. 1,814,059; July 14.
Rohr, Frederick H., assignor to Solar Aircraft Company, San Diego, Calif. Riveting machine. 1,814,632; July 14.
Rohrschneider, Max, Hamburg, Germany, assignor to Svenska Aktiebolaget Gasaccumulator, Stockholm-Lidingo, Sweden. Storage of acetylene. 1,814,338; July 14.
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Sealing ring for cans and pails. 1,815,011; July 14.
Romanoff, Alexis L., Ithaca, N. Y. Gas conditioning apparatus. 1,813,959; July 14.
Rosenberg, Heyman, New York, N. Y. Anchorage. 1,814,965; July 14.
Rosenberg, Heyman, New York, N. Y. Anchorage devices. 1,814,966; July 14.
Rosenthal, Leo. (See Dörr, E., Lenchs, and Rosenthal.)
Rösle, Heinrich A., assignor to J. M. Voith, Heidenheim-on-the-Brenz, Germany. Controlling apparatus for conduits. 1,814,857; July 14.
Rosner, Frank. (See Nelson, Richard, assignor.)
Royal-Allen-Mair, Inc. (See Royal, Thomas M., assignor.)
Royal, Thomas M., Philadelphia, Pa., assignor, by mesne assignments, to Royal-Allen-Mair, Inc., Dover, Del. Bag. 1,814,967; July 14.
Rubbersan Products Inc. (See Vernet, Waldemar, assignor.)
Rudolph, Corrie F. (See Gebhard, L. A., and Rudolph.)
Russell, Olin F., Los Angeles, Calif. Valve. 1,841,411; July 14.
Rustad, Louis L., Minneapolis, Minn. Composite character sign. Des. 84,653; July 14.
Rutten, Frank M., Sioux City, Iowa, assignor of ten per cent to Goltz & Brown and ten per cent to E. M. Brown. Sealing device. 1,814,412; July 14.
Rutter, John A., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Locking device for bolts. 1,814,858; July 14.
Ruttiman, Alfred. (See White, F. E., and Ruttiman.)
Ryder, Frank P., and W. D. Chisholm, Niagara Falls, N. Y. Method and apparatus for separating string beans. 1,814,633; July 14.
Saarinen, Eliel, Birmingham, Mich., assignor to International Silver Company, Meriden, Conn. Table knife or similar article. Des. 84,654; July 14.
Saarinen, Eliel, Bloomfield Hills, Mich., and R. R. Kintz, assignors to International Silver Company, Meriden, Conn. Table knife. Des. 84,655; July 14.
Saco-Lowell Shops. (See Curley, Robert S., assignor.)
Sain, Lawrence, St. Marys, Pa. Picture frame. Des. 84,656; July 14.
St. Louis Label Works. (See Cowgill, Orph W., assignor.)
St. Regis Paper Company. (See Marsh, Esli A., assignor.)
Saki, Tossy, Salt Lake City, Utah. Power saving device. 1,814,095; July 14.
Saki, Tossy, Salt Lake City, Utah. Variable speed drive mechanism. 1,814,096; July 14.
Saks & Co. (See Liso, Vincent, assignor.)
Sanders, Edward, Moorhead, Minn. Potato harvester. 1,814,060; July 14.
Sanders, Oscar L., San Francisco, Calif. Power storage and transmission mechanism. 1,814,607; July 14.
Sanitarium Equipment Company. (See Goodrich, N. E., and Connor, assignors.)
Sanmarti, Teodoro, Sabadell, Barcelona, Spain. Elastic wheel. 1,814,634; July 14.
Sarazin, Robert, and M. Moneyron, Neuilly-sur-Seine, France. Direct current generator. 1,814,061; July 14.
Sato, Zentaro, Santa Ana, Calif. Plant shield. 1,814,339; July 14.
Sayers, William W., assignor to Link-Belt Company, Chicago, Ill. Automatic loader. 1,814,760; July 14.
Schabacker, Fred H., assignor to Rockford Mitten & Hosiery Company, Rockford, Ill. Circular knitting machine. 1,814,265; July 14.
Schaeffer, Jacob H., Brooklyn, N. Y. Finger ring. Des. 84,657; July 14.
Schäfer, Wilhelm. (See Richter, A., and Schäfer.)
Schario, Edwin J., Canton, Ohio. Shield for piling bricks. 1,814,968; July 14.
Scharnagel, Herman, Tomkinsville, N. Y., and M. H. Loughridge, Bogota, N. J., assignors to H. W. Dyer, New York, N. Y. Refrigerating apparatus. 1,813,960; July 14.
Schaub, Rudolph G. (See Jordan, Charles J., assignor.)
Scheftel, Edwin K. (See Pollock, Archibald F. and D. A., assignors.)
Schellenbach, William L. (See Robinson, A. E., and Schellenbach.)
Schellenbach, William L., Wyoming, assignor to The American Tool Works Company, Cincinnati, Ohio. Tool attachment for lathes. 1,815,012; July 14.
Schelleng, John C., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system. 1,813,961; July 14.
Schenk, Carl R., Jersey City, and S. W. Crowley, Hudson Heights, assignors to De Forest Radio Company, Jersey City, N. J. Grid making machine. 1,814,770; July 14.
Scheu Products Company. (See Scheu, William C., assignor.)
Scheu, William C., assignor to Scheu Products Company, Ltd., Upland, Calif. Lighting torch for orchard heaters and the like. 1,813,962; July 14.
Schick, Harry C., Madison, N. J. Necklace clasp. 1,813,963; July 14.
Schidrowitz, Philip. (See Burke, Denis J., assignor.)
Schleicher, Frank J., University City, Mo. Box. Des. 84,658; July 14.
Schlundt, Christian H., Indianapolis, Ind. Motor truck. 1,814,635; July 14.
Schmeck, Herbert P., Philadelphia, Pa. Amusement car. 1,814,969; July 14.
Schmid, Carl J., Inc. (See Kurkjian, Yervant H., assignor.)
Schmid, Herman. (See Lencke, J. K., and Schmid.)
Schmidgall, Frederick, Cincinnati, Ohio. Door latch. 1,814,636; July 14.
Schneider, Max, Denver, Colo., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,814,637; July 14.
Schnell, William, and F. Giuntini, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Automobile radiator ornament or similar article. Des. 84,659; July 14.
Schnellpressenfabrik Aktiengesellschaft Heidelberg. (See Büttner, Arthur, assignor.)
Schoedinger, F. O. (See Miller, William J., assignor.)
Schofield, Samuel, Liverpool, England. Bottle. 1,814,638; July 14.
Schollhorn, William, Company, The. (See Bernard, William A., assignor.)
Schroder, John E. (See Lorenz, E. H., and Schroder.)
Schubert, Lawrence J., Madison, Wis. Ventilator for milk cans. 1,813,964; July 14.
Schuh, Leon B., and C. J. Bailey, Minneapolis, Minn.; said Bailey assignor to D. D. Bailey, Jacksonville, Fla. Valves and valve controlled means for operating gates. 1,814,608; July 14.
Schulman, Solomon, New York, N. Y. Mop wringer with lever attachments. 1,814,413; July 14.
Schultz, Alfred. (See Frey, C. N., Schultz, and Harrison.)
Schwarz, Alfred, Montclair, N. J. Extracting a metal from its ore. 1,814,062; July 14.
Schwarz, Julius, Budapest, Hungary. Tipped laces. 1,814,859; July 14.
Schwarz-Presse, Aktiengesellschaft. (See Trutzel, Albert, assignor.)
Schweiker, Roy W., Lansdale, Pa. Side wall lighting fixture. 1,814,229; July 14.
Scott, Harry T., assignor of one-half to W. H. Dilks, Los Angeles, Calif. Lubricator. 1,814,970; July 14.
Scurlock Gear Corporation. (See Fickett, Ernest L., assignor.)
Searle, G. D., & Company. (See Kober, Philip A., assignor.)
Sebastian, Robert L., and L. Finkelstein, Edgewood, assignors to H. A. Kuhn, Edgewood Arsenal, Md. Multilayer filter. 1,814,190; July 14.
Seeley, Harold T., Yeadon, Pa., assignor to General Electric Company. Automatic control system. 1,814,860; July 14.
Sees, Joseph F., Schenectady, N. Y., assignor to General Electric Company. Sound recording and reproducing apparatus. 1,814,861; July 14.
Selberling Rubber Company. (See Alexander, H. S. Pfeiffer, and White, assignors.)
Seil, Gilbert E., Conshohocken, Pa. Gas burner. 1,814,097; July 14.
Semet-Solvay Engineering Corporation. (See Steere, Frank W., assignor.)
Semkow, John, New York, N. Y. Bath spray device. 1,814,862; July 14.
Senft, John, York, assignor to United States Chain & Forging Company, Pittsburgh, Pa. Antiskid chain. 1,814,639; July 14.
Seyl, Joseph C., Evanston, Ill. Filing device. 1,814,191; July 14.
Seymour, Neville C., Jersey City, N. J. Game. 1,814,971; July 14.
Sferrazza, Giuseppe, Thompsonville, Conn. Life saving suit. 1,813,965; July 14.
Shaffer, Randolph, Atlanta, Ga. Fertilizer dispensing device. 1,814,572; July 14.
Shaffer, Randolph, Evanston, Ill. Fertilizer dispensing device. 1,814,573; July 14.
Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)
Sheldon, Daniel F., Montalvo, Calif. Skeleton tetrahedron for jetties and current deflectors. 1,814,495; July 14.

Sheldon, Raymond C., Omaha, Nebr. Portable stall gate. 1,814,972; July 14.

Shelton, Dwight J., assignor to The Marion Steam Shovel Company, Marion, Ohio. Excavating apparatus. 1,814,863; July 14.

Shelton, Ira J., Detroit, and C. V. Jacobi, Grosse Pointe Farms, Mich. Automobile tire. 1,814,340; July 14.

Shelnman, Morris, New York, N. Y. Lock. 1,814,771; July 14.

Sherman, Thomas L., Melbourne, Australia, assignor to Mitchell-Crankless Engines Corporation, New York, N. Y. Crankless engine. 1,813,966; July 14.

Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,814,009; July 14.

Shoe Hardware Company, The. (See Cobb, Willard H., assignor.)

Shuford, John F., et al. (See Fisher, Albert H., assignor.)

Shulman, Charles, assignor to Apt Novelty Company Inc., New York, N. Y. Wall bracket or article of similar nature. Des. 84,660; July 14.

Shurtleff, Wilfred, assignor to The Herman Nelson Corportation, Moline, Ill. Panel for concealed radiator cabinets. Des. 84,661; July 14.

Siegler, Edouard H., Silgo, Md. Tree band. 1,814,414; July 14.

Siemens & Halske, Aktiengesellschaft. (See Wüsteney, Herbert, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Döring, Fritz, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Gums, Wilhelm, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Hanff, Ferdinand, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Mayr, Karl A., assignor.)

Siemiana, Casimir, Bay City, Mich. Beet harvester. 1,813,967; July 14.

Silva, Aladin A., Moratuwa, Colombo, Ceylon. Camera. 1,814,973; July 14.

Simmons Company. (See Gail, John F., assignor.)

Simons, Abraham, New York, N. Y. Nut device. 1,813,968; July 14.

Sinclair, Peter S., Holyoke, Mass. Wiper or cleaner for the dandy rolls of paper making machines. 1,814,864; July 14.

Sinclair Refining Company. (See Isom, Edward W., assignor.)

Skiboard Corporation. (See Sterling, Frank W., assignor.)

Slade, Arthur J., New York, N. Y. Vehicle body. 1,814,640; July 14.

Slade, Harold E., Glen Ridge, and John Gehring, Jersey City, assignors to Beaver Machine & Tool Co., Inc., Newark, N. J. Electric socket. 1,815,013; July 14.

Slagh, Harold R. (See Britton, E. C., and Slagh.)

Slattengren, Henry A., Berwyn, Ill. Power generator. 1,814,192; July 14.

Sly, W. W., Manufacturing Company, The. (See Boesger, George A., assignor.)

Smido, Anna, Roseville, Mich. Dress fastener. 1,814,341; July 14.

Smith, Augustus T., St. Joseph, Mo. Holder and stand. 1,814,342; July 14.

Smith, Burton, Grants Pass, Oreg. Joint connection. 1,814,415; July 14.

Smith, Edmund B., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Method and apparatus for measuring small time intervals. 1,813,969; July 14.

Smith, Ernest C., Ventura, Calif. Line or cable connecter. 1,814,609; July 14.

Smith, Frederick S. (See Urmston, J., and Smith.)

Smith, Grant E., assignor to Pouvailsmith Corporation, Poughkeepsie, N. Y. Drop hammer. 1,814,193; July 14.

Smith, Harry E., William Bowker, Newark, and H. Conrow, Lyndhurst, N. J., assignors to Celluloid Corporation. Imitation pearl and making same. 1,814,641; July 14.

Smith, James R., sr., Trenton, N. J. Combination shelf, tumbler, soap, toothbrush, and jewel cup. Des. 84,662; July 14.

Smith, John W., assignor to The Fafnir Bearing Company, New Britain, Conn. Grinder. 1,815,014; July 14.

Smith, Milton F., Yakima, Wash. Closure fastener. 1,814,343; July 14.

Snell, George E., et al. (See Clark, Arthur G., assignor.)

Snelling, Walter O., Allentown, Pa. Reduction of yellowing of materials with age. 1,814,344; July 14.

Snider, Alden M., Mansfield, Ohio. Automatic electric mixer. 1,814,974; July 14.

Snow, Herbert C. (See Cord, E. L., Snow, and Holl'ster.)

Snow, Norman L., New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Air heater. 1,814,010; July 14.

Snow, Norman L., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Air heater. 1,814,011; July 14.

Soabar Company. (See Henry, George W. jr., assignor.)

Societe du Carburateur Zenith. (See Heftler, Victor R., assignor.)

Society for Visual Education, Inc. (See De Vault, Ralph P., assignor.)

Solar Aircraft Company. (See Rohr, Frederick H., assignor.)

Solid Carbonic Company Ltd, The. (See Thomas Norman M., assignor.)

South Bend Bait Company. (See Rodgers, Claude M., assignor.)

Spear, Lawrence Y., New London, assignor to Electric Boat Company, Groton, Conn. Rescue submarine. 1,814,642; July 14.

Spence, Paulsen, Orange, N. J. Regulating valve. 1,814,530; July 14.

Sperry, William E., La Mesa, Calif. Toy. 1,814,230; July 14.

Spiers, Beatrice, Philadelphia, Pa. Combination garment. 1,814,457; July 14.

Square D Company. (See Corcoran, Ivan, assignor.)

Standard Brands Incorporated. (See Frey, C. N., Schultz, and Harrison, assignors.)

Standard Gas Equipment Corporation. (See O'Dowd, Henry W., assignor.)

Standard Oil Company. (See Youtz, Merrill A., assignor.)

Standard Oil Development Company. (See Davis, Garland H. B., assignor.)

Standard Stoker Company, The. (See Surdykowski, Charles J., assignor.)

Standard Stoker Company, The. (See Turner, Edwin A., assignor.)

Starie, George B., Schenectady, N. Y., assignor to General Electric Company. System of motor control. 1,814,865; July 14.

Stauder, Emanuel, assignor to Huther Brothers Saw Manufacturing Company, Rochester, N. Y. Saw gauge. 1,814,266; July 14.

Steere, Frank W., Detroit, Mich., assignor to Semet-Solvay Engineering Corporation, New York, N. Y. Gas generating apparatus. 1,813,970; July 14.

Steffens, Herman, Concordia, Mo. Cultivator. 1,814,345; July 14.

Steinberg, James E., Oklahoma City, Okla. Telephone transmitter silencer. 1,814,458; July 14.

Sterling, Frank W., Long Island, assignor to Skiboard Corporation, New York, N. Y. Motor surf board. 1,814,772; July 14.

Sterolene Company, The. (See Ford, Burdette E., assignor.)

Steveiman, Nathan, assignor of one-half to S. Golub, New York, N. Y. Counterbalance weight. 1,814,610; July 14.

Stevenson, David A., Edinburgh, Scotland. Radio remote control device. 1,814,346; July 14.

Steward, Joseph E., Prince George, British Columbia, Canada. Vertically adjustable gun sight. 1,814,975; July 14.

Stewart, Earl D. (See Wilson, C. P., and Stewart.)

Stewart, John H., Lynnfield, Mass. Counter molding machine. 1,814,611; July 14.

Stillman, Allen P., Brooklyn, assignor to Ancira Lock & Seal Corporation, New York, N. Y. Seal. 1,814,773; July 14.

Stillman, Allen P., Brooklyn, assignor to Ancira Lock & Seal Corporation, New York, N. Y. Seal. 1,815,015; July 14.

Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Range. Des. 84,663; July 14.

Stoddard, William O., jr., Detroit, Mich. Composite material. 1,814,643; July 14.

Stoddard, William O., jr., Detroit, Mich. Composite material. 1,814,644; July 14.

Stokes, Jos., Rubber Co. (See Martindell, Milton H., assignor.)

Stoler, Edward W., Mansfield, Ohio, assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Wire spoke. 1,814,531; July 14.

Stone, Charles F., Upper Darby, Pa. Score sheet holder. 1,814,194; July 14.

Stone, Morris, Brooklyn, N. Y. Window bench or scaffold. 1,814,231; July 14.

Stoney, John T., Cleveland, assignor to R. E. Stoney, Lakewood, Ohio. Molding apparatus. 1,814,416; July 14.

Stoney, Raymond E. (See Stoney, John T., assignor.)

Stover Manufacturing & Engine Co. (See Swartz, Carl H., assignor.)

Straub, Engelbert. (See Benkert, J., and Straub.)

Strauss, Siegmund, Vienna, Austria. Current rectifier. 1,814,063; July 14.

Street, Frederick G., East Orange, N. J., assignor to Ancira Lock and Seal Corporation, New York, N. Y. Seal. 1,815,016; July 14.

Street, Victor H., Aberdeen, Wash. Imitation roofing tile. 1,814,347; July 14.

Stride, William T., Rochester, N. Y., assignor, by mesne assignments, to The American Laundry Machinery Co. Carpet cleaning machine. 1,814,866; July 14.

Stromer, Oscar A., Sheboygan, Wis. Leveling device. 1,814,976; July 14.

Stuebing, William, jr., Cincinnati, Ohio, assignor, by mesne assignments, to The Yale & Towne Manufacturing Company, Stamford, Conn. Lifting truck. 1,814,977; July 14.

Sturrock, Archibald, Victoria, British Columbia, Canada. Log bunk. 1,814,232; July 14.

Sullivan Machinery Company. (See Hunter, David H., assignor.)

Summerbell, William J., Los Angeles, Calif. Glare shield. 1,814,500; July 14.

Surdykowski, Charles J., Tuckahoe, N. Y., assignor to The Standard Stoker Company, Incorporated. Stoker conveyer. 1,814,645; July 14.

Surface Combustion Corporation. (See Klees, A. L., and Greenfield, assignors.)

Sutherland, William A., Los Angeles, Calif. Roofing tile. 1,814,532; July 14.

Svenska Aktiebolaget Gasaccumulator. (See Rohrschneider, Max, assignor.)

Svenska Jastfabriks Aktiebolaget. (See Swärd, Herbert A. L. and A. G. H., assignors.)

Swanson, Elmer C., Larchwood, Iowa. Buckle. 1,814,978; July 14.

Swärd, Anton G. H. (See Swärd, Herbert A. L. and A. G. H.)

Swärd, Herbert A. L. and A. G. H., Nassjo, assignors to Svenska Jastfabriks Aktiebolaget, Stockholm, Sweden. Machine for automatically forming and dividing plastic masses. 1,814,496; July 14.

Swartz, Carl H., assignor to Stover Manufacturing & Engine Co., Freeport, Ill. Cylinder sleeve and producing the same. 1,814,267; July 14.

Sweeney, Orland R., assignor to Iowa State College of Agricultural and Mechanical Arts, Ames, Iowa. Machine for producing insulating lumber. 1,814,268; July 14.

Swift, George W., jr., assignor to G. W. Swift, Jr., Inc., Bordentown, N. J. Blank slitting and slotting machine. 1,814,867; July 14.

Swift, George W., Jr., Inc. (See Swift, George W., jr., assignor.)

Sykes, William E., Buffalo, N. Y. Machine for cutting gear teeth. 1,814,348; July 14.

Taft, Howard B., Wilkinsburg, assignor of one-half to N. M. Wellman, Pittsburgh, Pa. Making artificial granite. 1,814,012; July 14.

Tarbox, George R., Troy N. Y., assignor to The Eastern Malleable Iron Company, Bridgeport, Conn. Guard rail. 1,814,868; July 14.

Tarzian, Sarkes, assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving apparatus. 1,814,774; July 14.

Tatter, John W., assignor to Lewis Differential Company, Chicago, Ill. Brake mechanism. 1,814,574; July 14.

Tatter, John W., assignor to Lewis Differential Company, Chicago, Ill. Brake. 1,814,575; July 14.

Tatter, John W., assignor to Lewis Differential Company, Chicago, Ill. Steering and braking device. 1,814,576; July 14.

Tauriac, Felix, Jennings, La. Mechanical hammer. 1,814,459; July 14.

Taylor, Charles C. G., Forest Gate, England. Trolley head for electric traction. 1,814,349; July 14.

Taylor, Irvin A., assignor to Kerr Clickeries, Inc., Frenchtown, N. J. Combination chick storage, brooder and incubator. 1,814,979; July 14.

Taylor, Maurice C. (See Low, F. S., Taylor, and Berresford.)

Taylor, Samuel W., Detroit, Mich., assignor to Copeland Products Inc. Tubing and forming the same. 1,813,971; July 14.

Taylor, Stiman B., assignor to The Reliance Electric and Engineering Company, Cleveland, Ohio. Fan for cooling dynamo electric machines, etc. 1,814,447; July 14.

Taylor, William I. (See Dreyfus, H., Kinsella, Bower, and Taylor.)

Technical Glass Company. (See Netschert, Franz, assignor.)

Ternstedt Manufacturing Company. (See Schnell, W., and Giuntini, assignors.)

Terrill, George R., McAlester, Okla. Lock. 1,814,646; July 14.

Terry, Matson C., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Refrigerator control mechanism. 1,814,013; July 14.

Terry, Roy V., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Portable talking motion picture projector. 1,814,269; July 14.

Tetley, Maurice C., Syracuse, N. Y. Valve closure. 1,814,460; July 14.

Texas Company, The. (See Dearborn, R. J., and Gray, assignors.)

Theler, Frederick J., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,814,350; July 14.

Theler, Frederick J., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,814,351; July 14.

Thomas, Adolph A., New York, N. Y. Phonograph. 1,813,972; July 14.

Thomas, Ernest B., North Manchester, Ind. Vehicle signal. 1,814,233; July 14.

Thomas, Friedrich, Gross-Salze, Germany. Production of trinitrotoluene. 1,814,980; July 14.

Thomas, Norman M., Brooklyn, assignor to The Solid Carbonic Company Ltd., New York, N. Y. Apparatus for making carbon dioxide ice. 1,814,195; July 14.

Thompson, Edwin I., Fort Worth, Tex. Folding seat for stadiums and the like. 1,814,497; July 14.

Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor and safety razor blade. 1,814,418; July 14.

Thornley, Fred C., Coronado Beach, Calif., and M. J. Walsh, London, England, assignors, by mesne assignments, to Kelco Company, Los Angeles, Calif. Preparing alginic acid and compounds thereof. 1,814,981; July 14.

Thorpe, Samuel T., assignor to The Horton Manufacturing Company, Bristol, Conn. Fishing reel. 1,814,234; July 14.

Thurneyssen, Guy T., Paris, France. Device for evacuating vacuum tubes. 1,813,973; July 14.

Thwaits, Frederick G., Wauwatosa, assignor to The Heil Co., Milwaukee, Wis. Drop frame tank trailer. 1,814,098; July 14.

Tiffany, Tolbert K., Trenton, N. J., assignor to J. H. Bell, Philadelphia, Pa. Incubator. 1,814,419; July 14.

Tobin, Kenneth J., and W. W. Darrow, assignors to Camel Company, Chicago, Ill. Corner door construction. 1,814,647; July 14.

Tochtermann, Hans, Mannheim, and C. Heuck, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of rubber. 1,814,420; July 14.

Todd, Charles W., Schenectady, N. Y. Railroad vehicle. 1,814,099; July 14.

Tolkow, Isidore, New York, N. Y. Coin holder. 1,814,064; July 14.

Tolle, William. (See Neely, A. L., and Tolle.)

Toulmin, Harry A., jr. (See Robbins, W. H., and Toulmin.)

Townsend, Harry E., Brooklyn, N. Y. Wrapping machine. 1,813,974; July 14.

Traver, Oliver C., Schenectady, N. Y., assignor to General Electric Company. Circuit protection. 1,814,869; July 14.

Travis, Charles, assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Glow discharge device. 1,814,270; July 14.

Trenor, Albert D., assignor to J. H. Hammond, jr., Gloucester, Mass. Torpedo course calculator. 1,814,462; July 14.

Trent Process Corporation, The. (See Trent, Walter E., assignor.)

Trent, Walter E., New York, N. Y., assignor to The Trent Process Corporation. Producing metals from their oxide ores. 1,814,461; July 14.

Trent, Walter E., New York, assignor to Trent Process Corporation, New York, N. Y. Carbonizing materials. 1,814,463; July 14.

Tresner, Raymond B., Mahton, Wash. Thread cutter. 1,814,196; July 14.

Trogner, Arthur M., East Orange, N. J., assignors to Wired Radio, Inc., New York, N. Y. Fluid flow indicator. 1,814,235; July 14.

Troy, Seymour, New York, N. Y. Woman's shoe. Des. 84,664; July 14.

Trupar Manufacturing Company. (See Yount, Clarence B., assignor.)

Trutzel, Albert, assignor to the firm Schwarz-Presse, Aktiengesellschaft, Stendal, Germany. Surface-printing, rotary sheet printing press. 1,814,498; July 14.

Turner, Charles, Airdrie, Scotland. Carbonizing or like retort. 1,814,982; July 14.

Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Stoker conveyer. 1,814,648; July 14.

Tycer, Warren I., Columbus, Ohio. Ceramic vessel and producing the same. 1,814,870; July 14.

Uebelen, Carl. (See Eisenlohr, F., and Uebelen.)

Unger, Harry, St. Louis, Mo., assignor, by mesne assignments, to Dubilier Condenser Corporation, New York, N. Y. Radio connection. 1,814,533; July 14.

Unger, Magnus, Pittsfield, Mass., assignor to General Electric Company. Tubular casing for electrical apparatus. 1,814,871; July 14.

Union Metal Products Company. (See Goldinger, Carl M., assignor.)

Union Switch & Signal Company, The. (See Baughman, George W., assignor.)

Union Switch & Signal Company, The. (See Geiger, Paul H., assignor.)

Union Switch & Signal Company, The. (See O'Hagan, Bernard E., assignor.)

Union Switch & Signal Company, The. (See Parrill, Easton E., assignor.)

United Engineering and Foundry Company. (See Johnson, Lane, assignor.)

United Engineering & Foundry Company. (See Pennington, Harley D., assignor.)

United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)

United Shoe Machinery Corporation. (See Baxter, William C., assignor.)

United Shoe Machinery Corporation. (See Ellis, Frank H., assignor.)

United Shoe Machinery Corporation. (See Fowler, Alfred B., assignor.)

United Shoe Machinery Corporation. (See Hope, Ernest, assignor.)

United Shoe Machinery Corporation. (See Lawson, Oscar L., assignor.)

United States Chain & Forging Company. (See Lewis, Fred H., assignor.)

United States Chain & Forging Company. (See Senft, John, assignor.)

United States Hoffman Machinery Corporation. (See Card, John L., assignor.)
U. S. Manufacturing Company. (See Bennett, John L., assignor.)
Universal Fixture Corporation. (See Goldberg, Samuel, assignor.)
Universal Fixture Corporation. (See Mically, Emanuel, assignor.)
Urmston, James, and F. S. Smith, London, England. Telephone repeater circuit arrangement. 1,814,775; July 14.
Urschel, William E., Valparaiso, Ind. Fish deheader. 1,814,983; July 14.
Valley Mould and Iron Corporation. (See Perry, John E., assignor.)
Vanderhider, Henry M., Weslaco, Tex. Tellurian. 1,814,984; July 14.
Van Dresser Specialty Corporation. (See Burch, Fred, assignor.)
Van Etten, Scott, Marysville, Ohio. Gas cock. 1,814,534; July 14.
Van Voorhees, Harold E. (See Hamilton, F. F., and Van Voorhees.)
Vaughn, Fred B., Maywood, assignor to J. Grant, Los Angeles, Calif. Sucker rod joint. 1,814,271; July 14.
Veale, George W., Cleveland Heights, assignor to The Eaton Axle & Spring Company, Cleveland, Ohio. Connecting means for bumperettes. 1,814,421; July 14.
Vereinigte Stahlwerke Aktiengesellschaft. (See Kurz, Heinrich, assignor.)
Vernet, Waldemar, assignor to Rubbersan Products Inc., New York, N. Y. Cutting sponge rubber. 1,814,197; July 14.
Vickers-Armstrong Limited. (See Wardle, John, assignor.)
Victor Manufacturing & Gasket Co. (See Braner, Stephen W., assignor.)
Vitali, Steven, Plains, Pa. Gripping tool for jars. 1,814,014; July 14.
Voith, J. M. (See Rösle, Heinrich A., assignor).
Von Bronk, Otto. (See Meissner, A., and von Bronk.)
Von Wedel, Carl J. R. H., Berlin, Germany, assignor, by mesne assignments, to Electrons, Inc. Circuits for discharge tubes. 1,814,499; July 14.
Von Zweigbergk, Adolf S. O., assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Bearing for railway vehicles or the like. 1,813,975; July 14.
Wade, Francis W., Canon City, Colo. Combined lawn and hedge trimmer. 1,814,649; July 14.
Wagenhorst, James H., Jackson, Mich. Vehicle wheel. 1,814,198; July 14.
Wagner, Albert G., Covington, Ky., assignor to The Wolf Machine Company, Cincinnati, Ohio. Cloth cutting machine. 1,815,017; July 14.
Wagner, Albert G., assignor to The Wolf Machine Company, Cincinnati, Ohio. Cloth cutting machine. 1,815,018; July 14.
Wagner, Charles. (See Hormel, August, assignor.)
Wagner, Charles, Grantwood, N. J. Hose reel. 1,814,872; July 14.
Waite, Ralph B., Springville, N. Y., assignor to The Antidolor Mfg. Co. Inc. Medicament container. 1,814,650; July 14.
Wakefield, Arthur T., assignor to American Oil Company, Baltimore, Md. Liquid measuring system. 1,814,065; July 14.
Walker, George, assignor to The Jacobs Bros. Co. Inc., Brooklyn, N. Y. Scale. 1,814,873; July 14.
Walker, John, & Sons Limited. (See Hunt, Sydney, assignor.)
Walker, Willis F. Macungie, Pa. Tie, joint and rail fastening combination. 1,814,199; July 14.
Wallace, R., & Sons Manufacturing Company. (See Warren, William S., assignor.)
Walsh, Michael J. (See Thornley, F. C., and Walsh.)
Walsh, Michael J., San Diego, assignor, by mesne assignments, to Keloo Company, Los Angeles, Calif. Alginate in finely divided form derived by spray-drying dilute solutions thereof. 1,814,986; July 14.
Ward, Artemas, Inc. (See Giles, Harvey, assignor.)
Wardle, John, Vickerstown, Barrow-on-Furness, assignor to Vickers-Armstrong Limited, Westminster, England. Telemotor operated liquid discharge and admission valve. 1,813,976; July 14.
Wardwell, Edward H. (See Edgar, Joseph C., assignor.)
Warnick, Philip, Jersey City, N. J. Casing for shade rollers. 1,814,422; July 14.
Warren, Virgil P., Atlanta, Ga. Refrigerator door construction. 1,814,272; July 14.
Warren, William S., Meriden, assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Knife. Des. 84,665; July 14.
Waterman, L. E., Company. (See Larsen, Gabriel, assignor.)
Waterman, Russell R., Long Beach, Calif., assignor to Farmers' National Bank, trustee, Greenville, Ohio. Water seal for steam power plants. 1,814,100; July 14.
Waterman, Russell R., Long Beach, Calif., assignor to Farmers' National Bank, trustee, Greenville, Ohio. Water seal for steam power plants. 1,814,101; July 14.
Watrous, Earl G., Chicago, Ill. Lavatory. 1,814,352; July 14.
Watson, Irving S. (See Linville, Robert W., assignor.)
Watson, William F., Bradenton, Fla. Collar button. 1,814,651; July 14.
Watts, Reginald H. (See Hauser, E. A., and Watts.)
Waugh, Thomas C., Ingram, Pa. Moistening device. 1,814,776; July 14.
Weaver, Allan, Brooklyn, N. Y., and D. E. Branson, Bloomfield, N. J., assignors to American Telephone and Telegraph Company. Picture transmitting system. 1,814,987; July 14.
Webber, Ralph, Clover, S. C. Slub catcher. 1,814,353; July 14.
Weber, Charles, Newark, N. J. Coin chute for vending machines. 1,813,977; July 14.
Weber Dental Maufacturing Company, The. (See Weber, Henry E., assignor.)
Weber, Henry E., assignor to The Weber Dental Manufacturing Company, Canton, Ohio. Dental chair elevator. 1,814,874; July 14.
Weber, Henry E., assignor to The Weber Dental Manufacturing Company, Canton, Ohio. Dental unit standard. 1,814,875; July 14.
Weber, Henry E., assignor to The Weber Dental Manufacturing Company, Canton, Ohio. Headrest. 1,814,876; July 14.
Weber, Henry E., assignor to The Weber Dental Manufacturing Company, Canton, Ohio. Dental chair. 1,814,877; July 14.
Weber, Walter H., assignor to Detroit Lubricator Company, Detroit, Mich. Carburetor. 1,815,019; July 14.
Webster, William R., and W. R. Clark, Bridgeport, Conn. Metal rolling mill screw down control. 1,814,354; July 14.
Wedler, Harry G., et al. (See Fisher, Albert H., assignor.)
Weed, James M., Schenectady, N. Y., assignor to General Electric Company. Arc welding electrode. 1,814,878; July 14.
Weidlich Bros. Mfg. Co., The. (See Flauder, Alfred J., assignor.)
Weir, Harry N., assignor to The Noble & Wood Machine Co., Hoosick Falls, N. Y. Jordan engine plug. 1,814,879; July 14.
Weiset, Max, Tempelhof, near Berlin, Germany. High tension electric cable with paper insulation. 1,814,102; July 14.
Weiss, Hans, Uzwil, assignor to the firm Maschinenfabrick Benninger A. G., Uzwil, Switzerland. Device for stretching fabrics widthwise. 1,814,652; July 14.
Weiss, Irving, New York, N. Y. Evaporator drip pan for radiators. 1,813,978; July 14.
Weiss, William. (See Kane, J. C., and Weiss.)
Weller, Septimus B., Surbiton, England. Gear. 1,814,988; July 14.
Wellington, George P. (See Hazen, E. H., and Wellington.)
Wellman, Norris M. (See Taft, Howard B., assignor.)
Wendel, Ada B., Smithland, Iowa. Shade and curtain hanger. 1,814,006; July 14.
Wessel, Carl, Essen-Borbeck, Germany. Distillation of coal tar and device for carrying out such process. 1,814,989; July 14.
West, Frank R., assignor to Rice Products, Inc., Detroit, Mich. Flow control for refrigerating systems. 1,813,979; July 14.
Western Electric Company. (See Hofstetter, Robert, assignor.)
Western Electric Company. (See Rock, George L., assignor.)
Western Electric Company. (See Schelling, John C., assignor.)
Western Union Telegraph Company, The. (See Demonet, E. A., and Copenhaver, assignors.)
Western Union Telegraph Company, The. (See Dirkes, Robert F., assignor.)
Western Union Telegraph Company, The. (See Janson, George W., assignor.)
Western Union Telegraph Company, The. (See McGuinness, W. V., and Francis, assignors.)
Western Union Telegraph Company, The. (See Morehouse, Harry W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Allen, Robert C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Eaton, George M., assignor.)
Westinghouse Electric & Manufacturing Company. (See George, Robert B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hanzlik, Henry J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Herr, Herbert T., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hill, Leland H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Himes, Walter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hodgkinson, Francis, assignor.)
Westinghouse Electric & Manufacturing Company. (See McCafferty, Robert H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Meyer, Gerhart, assignor.)
Westinghouse Electric & Manufacturing Company. (See Meyer, John S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mochel, Norman L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Morgan, David W. R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ray, James L., assignor.)

Westinghouse Electric & Manufacturing Company. (See Terry, Matson C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wittaker, Charles C., assignor.)
Westinghouse Lamp Company. (See Du Mont, Allan B., assignor.)
Westinghouse Lamp Company. (See Marden, J. W., and Rentschler, assignors.)
Westinghouse Lamp Company. (See Marden, John W., assignor.)
Westinghouse Lamp Company. (See Marden, J. W., and Rich, assignors.)
Weston, Burton G., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Sucker rod or tubing elevator. 1,814,990; July 14.
Wetmore, Julian N., Miami, Fla. Lawn mower. 1,814,991; July 14.
Whaley, William, Knoxville, Tenn. Shoveling machine. 1,814,067; July 14.
Wheat, Roland E., Storm Lake, Iowa. Paper holder. 1,814,200; July 14.
Wheeler, Frank, Del Norte, Colo. Potato digger conveyer shaker. 1,814,992; July 14.
Wheeling Steel Corporation. (See Rollason, Charles H., assignor.)
White, Fred E., and A. Ruttiman, assignors to Florence Stone Company, Gardner, Mass. Detachable tank for pressure burners. 1,814,068; July 14.
White, John W. (See Alexander, H. S., Pfeiffer, and White.)
White, William C., assignor to Industrial Development & Manufacturing Corporation, Portland, Me. Electrically heated cooker. 1,814,103; July 14.
Whittaker, Charles C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,814,015; July 14.
Whittier, Sidney B., Chattahoochee, Ga. Protecting device. 1,814,273; July 14.
Wickland, Harry, Philadelphia, Pa. Retainer for the balls of ball bearings. 1,814,993; July 14.
Wiedemann, John, Cleveland, Ohio, assignor to American Stove Company, St. Louis, Mo. Dining car range. Des. 84,666; July 14.
Wigle, Joy V., assignor to American Automobile Appliance Company, Chattanooga, Tenn. Brake mechanism. 1,814,535; July 14.
Wilkata Folding Box Co., The. (See Leavens, William B., jr., assignor.)
Williams, Anna, Pittsburgh, Pa. Detachable window shade. 1,813,980; July 14.
Williams, Charles S., Kingston, assignor to Electric Service Supplies Company, Philadelphia, Pa. Train control. 1,814,612; July 14.
Williams, Clifford J., assignor to Briggs Manufacturing Company, Detroit, Mich. Doorlock. 1,814,536; July 14.
Williams Company, The. (See Robbins, W. H., and Toulmin, assignors.)
Williams, Judson, Philadelphia, Pa. Piston and ring assembly. 1,814,355; July 14.
Williams Sealing Corporation. (See Hill, Roland E., assignor.)
Williamson, Floyd M., Detroit, Mich. Tool supporting arrangement. 1,814,274; July 14.
Willis, George F. (See Nuckolls, Samuel H., assignor.)
Wilputte Coke Oven Corporation. (See Pavitt, William H., assignor.)
Wilson, Clarence P., Pomona, and E. D. Stewart, Corona, assignor to California Fruit Growers Exchange, Los Angeles, Calif. Food product and making the same. 1,814,994; July 14.
Wilson, Edward W., assignor to Nashua Sure-Hold Company, Nashua, N. H. Collar shape preserver. 1,814,653; July 14.
Wilson, Victor R., Melbourne, Australia, assignor to Michell-Crankless Engines Corporation, New York, N. Y. Crankless mechanisms. 1,813,981; July 14.
Winchester Repeating Arms Company. (See Marshall, James E., assignor.)
Windle, Edward H., assignor to The Lincoln Electric Company, Cleveland, Ohio. Automatic speed control. 1,814,577; July 14.
Winer, James F., Miami, and N. N. Mayo, Ocala, Fla. Sign. 1,814,995; July 14.
Wingard, Charles L., Portland, Oreg. Broom construction. 1,814,201; July 14.
Winget, Adrian, Wapakoneta, Ohio. Wall construction. 1,814,202; July 14.
Winstead, William F., New Orleans, La. Tractor. 1,814,996; July 14.
Winter, August P., Winnipeg, Manitoba, Canada. Driving belt controlling device. 1,814,016; July 14.
Wintroath, John A., assignor to Peerless Pump Co., Los Angeles, Calif. Shaft positioning device. 1,814,537; July 14.
Wintroath, John A., assignor to Peerless Pump Company, Los Angeles, Calif. Tubing tensioning device. 1,814,538; July 14.
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wiremold Company, The. (See Murphy, Daniel H., assignor.)
Wirth, Dorsey M., Bucyrus, Ohio. Belt buckle. 1,814,275; July 14.
Wise, Solomon, Cincinnati, Ohio. Lock. 1,814,356; July 14.
Witte, Edward, Crescent City, Ill. Corn planter. 1,814,069; July 14.
Wittner, Edward F., Chicago, Ill. Spark plug. 1,814,997; July 14.
Wolf Machine Company, The. (See Wagner, Albert G., assignor.)
Wolff, Anton F., Genesee, Idaho. Toy aeroplane. 1,814,104; July 14.
Wolff, Anton F., Genesee, Idaho. Toy aeroplane. 1,814,105; July 14.
Wolff, Irving, New York, and H. F. Olson, Bronx, N. Y., assignors to Radio Corporation of America. Acoustic device for sound pick up. 1,814,357; July 14.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Stereotype plate trimming machine. 1,814,578; July 14.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodruff, Joseph W., Elizabeth, N. J. Cut off valve. 1,813,982; July 14.
Woody, Spencer C., Seattle, Wash. Peripheral jet pump. 1,814,613; July 14.
Worcester Knitting Company, The. (See Neveu, Albert A., assignor.)
Worden, Edward C., 1st., Millburn, N. J., assignor to Hanson & Orth, New York, N. Y. Manufacture of cellulose material from musa fibers. 1,814,106; July 14.
Wright, Leonard K., Long Island, N. Y. Refrigeration apparatus. 1,814,358; July 14.
Wright, Sumner B., South Orange, N. J., and D. Mitchell, New York, N. Y., assignors to American Telephone and Telegraph Company. Controlling sensitivity of voice operated devices. 1,814,017; July 14.
Wright, Sumner B., South Orange, N. J., and D. Mitchell, New York, N. Y., assignors to American Telephone and Telegraph Company. Controlling sensitivity of voice operated devices. 1,814,018; July 14.
Wurdack, William, jr., assignor to Wm. Wurdack Electric Mfg. Co., St. Louis, Mo. Electric snap switch. 1,814,777; July 14.
Wurdack, Wm., Electric Mfg. Co. (See Wurdack, William, jr., assignor.)
Wüsteney, Herbert, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Type printing telegraph apparatus. 1,814,236; July 14.
Wyoming Shovel Works, The. (See Pestak, Thomas G., assignor.)
Yale & Towne Manufacturing Company, The. (See Stuebing, William, jr., assignor.)
Yates, Henry H., Cremorne, near Sydney, New South Wales, Australia. Creeling mechanism. 1,814,203; July 14.
Yingling, Francis C. (See Flautt, Porter H., assignor.)
Yocum, Henry H., Shamokin, Pa. Revolving carpet roll support. 1,814,998; July 14.
Yoss, Emanuel, Richmond, Va. Turbine pump. 1,814,019; July 14.
Young, Arthur P., and J. Hutt, deceased; C. E. Hutt, executrix, Kenilworth, England; assignors to General Electric Company. Amplifying system. 1,814,849; July 14.
Young, John, Ben Avon, assignor to Federal Laboratories Incorporated, Pittsburgh, Pa. Foot controlled device. 1,814,880; July 14.
Yount, Clarence B., near Dayton, assignor to Trupar Manufacturing Company, Dayton, Ohio. Deep well pump. 1,814,070; July 14.
Youtz, Merrill A., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Production of cetyl alcohol. 1,814,654; July 14.
Zahn, Otto E. (See Labisky, A. H., and Zahn.)
Zavatkay, Frederick F., Winsted, Conn. Rail tongs. 1,814,107; July 14.
Zimerman, Ludwig, Philadelphia, Pa. Railroad brake shoe. 1,814,778; July 14.
Zimmermann, Karl, Darmstadt, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Nuremberg, Germany. Bottom packing for weir-locks. 1,814,881; July 14.
Zinslen, Joseph J., Canton, Ohio. Tool holder. 1,814,882; July 14.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 14TH DAY OF JULY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Absorber. J. A. Campbell. 1,814,125; July 14.
Acetylene of high value from gases poor in acetylene, Extracting. O. Nicodemus. 1,813,946; July 14.
Acetylene, Storage of. M. Rohrschneider. 1,814,338; July 14.
Acid and compounds thereof, Preparing alginic. F. C. Thornley and M. J. Walsh. 1,814,981; July 14.
Acoustic device. A. J. Fleck. 1,814,624; July 14.
Acoustic device for sound pick up. I. Wolff and H. F. Olson. 1,814,357; July 14.
Adding machines and cash registers, Feed device for the paper strip of. A. Knorr. 1,814,708; July 14.
Adhesive tape, Preparing. R. G. Drew. 1,814,132; July 14.
Adjustable clamp. H. Levison. 1,814,254; July 14.
Aerial navigation machine. C. R. Miner. 1,814,948; July 14.
Aeroplane. W. E. Blain. 1,814,115; July 14.
Aeroplane. G. Pappadakes. 1,814,846; July 14.
Agricultural implement. H. E. Altgelt. 1,814,815; July 14.
Aircraft. C. H. Ohlrich. 1,814,957; July 14.
Aircraft landing apparatus. P. V. Floridо. 1,814,985; July 14.
Air heater. N. L. Snow. 1,814,010; July 14.
Airplane construction and method therefor. J. B. Jewett, jr. 1,814,556; July 14.
Airplane, Safety. M. Cheetham. 1,814,820; July 14.
Airplanes, Take off and landing apparatus for. H. J. Breeze. 1,813,986; July 14.
Airship. J. J. Hicks. 1,814,925; July 14.
Alarm: *See*—
Fire alarm.
Alcohol, Production of cetyl. M. A. Youtz. 1,814,654; July 14.
Alginates in finely divided form derived by spray drying dilute solutions thereof. M. J. Walsh. 1,814,986; July 14.
Alloy, in particular those with a high beryllium content by means of fused liquid electrolysis. Production of beryllium. H. Fischer. 1,813,919; July 14.
Aluminum chloride, Making. A. M. McAfee. 1,814,397; July 14.
Amplification system. E. W. Fenring. 1,814,247; July 14.
Amplifier coupling. H. P. Donle. 1,815,023; July 14.
Amplifying system. A. P. Young and J. Hutt. 1,814,849; July 14.
Amusement device. A. Miller. 1,814,520; July 14.
Anchor for railway cars, Running board. J. McMullen. 1,814,519; July 14.
Anchorage. H. Rosenberg. 1,814,965; July 14.
Anchorage devices. H. Rosenberg. 1,814,966; July 14.
Apparatus for use in the manufacture of rectifiers. P. H. Geiger. 1,814,592; July 14.
Article suspension device. T. N. M. Finlay. 1,814,303; July 14.
Articles from formers, Device for the removal of. Y. H. Kurkjian. 1,814,713; July 14.
Atomizer. G. F. Courtois. 1,814,128; July 14.
Auto window screen. A. D. McCormack. 1,814,322; July 14.
Autoclave. J. J. Grebe. 1,814,796; July 14.
Autographic register. M. Schneider. 1,814,637; July 14.
Automatic rewind switch. W. G. Preddey. 1,814,739; July 14.
Automobile hub cap. J. H. Munson. 1,814,054; July 14.
Automobile servicing device. T. A. Martin. 1,814,049; July 14.
Awnings, Arm for lateral arm. F. A. Anton. 1,814,108; July 14.
Bag. J. C. E. Glass. 1,814,785; July 14.
Bag. T. M. Royal. 1,814,907; July 14.
Ball and socket connection. D. Benjamin. 1,814,999; July 14.
Bar cutter. R. A. Edwards. 1,814,790; July 14.
Bath spray device. J. Semkow. 1,814,862; July 14.
Battery terminal clamp. J. E. Hedges. 1,814,156; July 14.
Beans, Method and apparatus for separating string. F. P. Ryder and W. D. Chisholm. 1,814,633; July 14.
Bearing, Antifriction. S. B. Haseltine. 1,814,035; July 14.
Bearing for railway vehicles or the like. A. S. O. Von Zweigbergk. 1,813,975; July 14.
Bearing, Shaft. J. H. Doran. 1,814,833; July 14.
Bearings, Pressure distributing means for. P. G. Palmgren. 1,814,734; July 14.
Beater engine. W. V. Knoll. 1,815,007; July 14.
Bed and seat, Combination. J. M. Dorton. 1,814,789; July 14.
Bed, Folding. W. Chackes and T. J. Bossert. 1,814,828; July 14.

Bed warmer. V. V. Long. 1,814,940; July 14.
Beetling mill with closed casing. E. Kramer. 1,814,559; July 14.
Belt. J. R. Craighead. Des. 84,626; July 14.
Belt, Endless track. A. Kégresse. 1,814,046; July 14.
Belt, Umpire's. F. W. Bender. 1,814,887; July 14.
Bench or scaffold, Window. M. Stone. 1,814,231; July 14.
Bisulphite liquor and dimagnesium phosphate, Manufacture of. H. Hackl. 1,814,916; July 14.
Bit: *See*—
Rotary drill bit.
Blades, Manufacture of detachable. M. Parker. 1,814,182; July 14.
Blank slitting and slotting machine. G. W. Swift, jr. 1,814,867; July 14.
Blast burner. W. B. Ensign and L. H. V. Reynolds. 1,814,010; July 14.
Blind and curtain fixture, Window. S. M. Davis and H. F. Davis. 1,814,204–5; July 14.
Block: *See*—
Crown block. Cutting block.
Block for electric terminals, Insulation. E. A. Everett. Des. 84,632; July 14.
Board: *See*—
Ironing board. Score board.
Motor surfboard.
Bodies on vehicles, Holding demountable. B. F. Fitch. 1,814,304; July 14.
Boiler: *See*—
Locomotive boiler.
Boiler. F. M. Caron. 1,813,906; July 14.
Boring bar. F. S. Hartwell. 1,814,919; July 14.
Boring bar. F. S. Hartwell. 1,814,921; July 14.
Boring machine, Portable. F. S. Hartwell. 1,814,920; July 14.
Bottle. M. Rich. Des. 84,649; July 14.
Bottle. S. Schofield. 1,814,638; July 14.
Bottle capper. H. G. Rice. 1,813,954; July 14.
Bottle, Hot water. C. H. Borst. 1,814,429; July 14.
Bottle or similar article. J. E. Marsden. Des. 84,644; July 14.
Box: *See*—
Stake box. Switch box.
Box. W. L. Krumm. 1,814,561; July 14.
Box. F. J. Schleicher. Des. 84,658; July 14.
Bracelet. F. W. Engel. 1,814,792; July 14.
Bracket: *See*—
Window bracket.
Brake. W. B. Charters. 1,814,666; July 14.
Brake. J. W. Tatter. 1,814,575; July 14.
Brake for trains, Magnetic. J. Mosleh. 1,814,841; July 14.
Brake mechanism. J. W. Tatter. 1,814,574; July 14.
Brake mechanism. J. V. Wigle. 1,814,535; July 14.
Brake shoe, Railroad. L. Zimerman. 1,814,778; July 14.
Breathing apparatus. R. H. Davis. 1,814,506; July 14.
Brick making machine. E. D. Martinet. 1,814,172; July 14.
Brick making machine. R. A. Parry. 1,814,227; July 14.
Bricks, Apparatus for molding. G. S. Housman. 1,814,159; July 14.
Brooch clasp. L. J. Cartier. 1,814,290; July 14.
Broom construction. C. L. Wingard. 1,814,201; July 14.
Broom, Whisk. O. Lee. 1,814,169; July 14.
Buckle. E. C. Swanson. 1,814,978; July 14.
Buckle, Belt. D. M. Wirth. 1,814,275; July 14.
Building. W. V. Robinson. Des. 84,652; July 14.
Building construction. C. H. Brainard, R. G. Carrington, and A. F. Cooke. 1,813,909; July 14.
Building structure. J. W. Holman. 1,814,474; July 14.
Bumperettes, Connecting means for. G. W. Veale. 1,814,421; July 14.
Bunk and post connecting means. U. J. Beeghly. 1,814,541; July 14.
Burner: *See*—
Blast burner. **Gas burner.**
Bus, Observation. L. Amodeo. 1,814,884; July 14.
Bus transportation system. W. J. Hagman. 1,814,917; July 14.
Button, Collar. W. F. Watson. 1,814,651; July 14.
Cabinet, Ice cream. J. M. Laird. 1,814,167; July 14.
Cable, Lead covered, submarine. F. Hanff. 1,814,384; July 14.
Cadmium from compounds of cadmium and oxygen by distillation, Recovery of. C. Baron von Girsewald and H. Neumark. 1,814,023; July 14.
Calcium, Purification of. H. E. Bakken. 1,814,073; July 14.
Caliper, Fruit. C. W. Morrell. 1,814,401; July 14.
Cam mechanism. S. Hunt. 1,814,313; July 14.

Camera. A. A. Silva. 1,814,973; July 14.
Can: *See*—
Compartment can.
Can closing machine. S. A. Bennett. 1,813,984; July 14.
Can washing machine. B. Graban. 1,814,551; July 14.
Candy cooler. E. D. Rapp. 1,814,740; July 14.
Candy machine. F. Parnell. 1,814,008; July 14.
Capping machine, Bottle. R. E. Hill. 1,814,386; July 14.
Car, Amusement. H. P. Schmeck. 1,814,969; July 14.
Car construction, Hopper. W. J. Hosceit. 1,813,928; July 14.
Car coupler operating device. C. M. Goldinger. 1,814,687; July 14.
Carbonizing materials. W. E. Trent. 1,814,463; July 14.
Carburetor. F. O. and T. M. Ball. 1,814,359; July 14.
Carburetor. E. F. Geiger. 1,814,143; July 14.
Carburetor. V. R. Heftler. 1,814,804; July 14.
Carburetor. C. F. Johnson. 1,814,601; July 14.
Carburetor. J. F. Mullen, jr. 1,814,402; July 14.
Carburetor. W. H. Weber. 1,815,019; July 14.
Carpet cleaning machine. W. T. Stride. 1,814,866; July 14.
Carpet roll support, Revolving. H. H. Yocum. 1,814,998; July 14.
Carrier: *See*—
Lure carrier.
Case: *See*—
Vanity case. Wardrobe case.
Cash register. C. W. Green. 1,815,025; July 14.
Cash register. B. M. Shipley. 1,814,009; July 14.
Casing for electrical apparatus, Tubular. M. Unger. 1,814,871; July 14.
Casing for pipe fittings, valve and the like, Insulation. A. Eige. 1,814,134; July 14.
Casing for shade rollers. P. Warnick. 1,814,422; July 14.
Casting machine, Centrifugal. W. H. Millspaugh. 1,814,176; July 14.
Catalyst for chemical reactions. A. Pfannenstiel and H. Kautsky. 1,814,493; July 14.
Catalysts for the oxydation of oxidizable gases in admixture with air or oxygen, Manufacture of materials of the nature of. B. Lambert. 1,814,515; July 14.
Cathode ray device. W. J. Hitchcock. 1,814,805; July 14.
Cathode structure. F. S. McCullough. 1,814,759; July 14.
Ceiling slab. M. S. Goldsmith. 1,814,144; July 14.
Cellulose ethers, Purifying. E. Dörr and O. Leuchs. 1,814,208; July 14.
Cellulose material from musa fibers, Manufacture of. E. C. I. Worden. 1,814,106; July 14.
Cement and making the same, Self-hardening bituminous. D. Finley. 1,813,992; July 14.
Cementing machine. C. H. Bowlen. 1,814,430; July 14.
Ceramic vessel and producing the same. W. I. Tycer. 1,814,870; July 14.
Chain, Antiskid. F. H. Lewis. 1,814,716; July 14.
Chain, Antiskid. J. Senft. 1,814,639; July 14.
Chains, chainmesh or the like, Soldering. G. Brunhubner. 1,813,904; July 14.
Chair: *See*—
Dental chair.
Chair for concrete reenforcement stirrups. A. L. Neely and W. Tolle. 1,814,007; July 14.
Change speed device. J. de Backer. 1,814,207; July 14.
Chart, Illustrative. W. S. King. 1,814,251; July 14.
Chassis, Vehicle. O. F. Lundelius and J. R. Dillon. 1,814,256; July 14.
Checker board. H. A. Richardson. Des. 84,650; July 14.
Checking device. W. P. De Saussure, jr. 1,814,436; July 14.
Chick storage, brooder and incubator, Combination. I. A. Taylor. 1,814,979; July 14.
Chlorides, Production of ferric and chromic. J. K. Berresford. 1,814,360; July 14.
Chlorides, Separation of cuprous and ammonium. E. C. Britton and H. R. Slagh. 1,814,822; July 14.
Chute for vending machines, Coin. C. Weber. 1,813,977; July 14.
Circuit controlling apparatus. D. C. Prince. 1,814,851; July 14.
Circuit interrupting device. W. B. Paul. 1,814,847; July 14.
Circuit protection. O. C. Traver. 1,814,869; July 14.
Circuits for discharge tubes. C. J. R. H. von Wedel. 1,814,499; July 14.
Clamp: *See*—
Adjustable clamp. Luggage clamp.
Battery terminal clamp Wire rope clamp.
Clasp; *See*—
Brooch clasp. Necklace clasp.
Jewelry clasp.
Clasps for bracelets, straps, linkages, or the like. C. H. Kestenman. 1,814,475; July 14.
Cleaner: *See*—
Smoke cleaner. Tube cleaner.
Cleaner for preheaters, Steam. T. G. Hoglund. 1,814,040; July 14.
Cleaning system, Closed dry. W. C. Glover. 1,814,212; July 14.
Clip: *See*—
Shingle clip.
Clip. B. F. Horsting and G. C. Leppla. 1,815,006; July 14.
Clock-case. E. L. Carlson. Des. 84,623; July 14.
Clock case, Electric. I. Florman. Des. 84,635; July 14.
Clock casing. I. H. Jones. Des. 84,640; July 14.
Clock mechanism. F. M. Fichten. 1,814,679; July 14.
Closure. J. S. Reid. 1,814,409; July 14.
Closure operator. J. Gunderson. 1,814,510; July 14.
Clothes drier. M. Duryee. 1,814,917; July 14.
Clutch. N. Lombard. 1,814,566; July 14.
Clutch and speed reducing mechanism. R. Hofstetter. 1,813,926; July 14.
Clutch check and release apparatus. A. Chartier. 1,814,896; July 14.
Coal mining machine. D. T. Fisher. 1,814,439; July 14.
Coal tar and device for carrying out such process, Distillation of. C. Wessel. 1,814,989; July 14.
Coated or impregnated product. C. Ellis. 1,814,135; July 14.
Cock, Gas. S. Van Etten. 1,814,534; July 14.
Coin controlled mechanism. W. H. Claussen. 1,814,295; July 14.
Collar shape preserver. E. W. Wilson. 1,814,653; July 14.
Collar, Shirt. A. T. Bard. 1,814,818; July 14.
Colloidal dispersion of plastic compositions such as caoutchouc, gutta percha, balata, artificial rubber (factis,) and the like. E. A. Hauser. 1,814,473; July 14.
Color photography. M. B. du Pont. 1,814,672; July 14.
Color printing process. C. Olsen. 1,814,845; July 14.
Combustion chamber construction for internal combustion engines. A. Moore. 1,814,523; July 14.
Combustion mixture control. G. H. Irwin. 1,814,163; July 14.
Communication apparatus used with communication lines subjected to extraneous voltage, Protective device for. R. W. Osborne. 1,814,453; July 14.
Compact, Eating instrument. A. B. Edwards. 1,814,547; July 14.
Compartment Can. H. M. Nichols. 1,814,180; July 14.
Composite material. W. O. Stoddard, jr. 1,814,643–4; July 14.
Compound appliance. A. W. Charbonneau. 1,814,895; July 14.
Concrete building structure. A. G. Clark. 1,813,912; July 14.
Concrete water proofing compound. M. B. Chittick. 1,814,292; July 14.
Condenser. D. W. R. Morgan. 1,814,840; July 14.
Conduit fitting. G. R. Metcalf, jr., and F. J. Raybould. 1,814,480–1; July 14.
Conduit stopper. P. Goodman. 1,814,914; July 14.
Conduits, Controlling apparatus for. H. A. Rösle. 1,814,857; July 14.
Connecter. G. R. Metcalf, jr. 1,814,479; July 14.
Connecter fitting. G. R. Metcalf, jr. 1,814,478; July 14.
Connecter for hydrostatic conduits. E. L. Beecher. 1,815,020; July 14.
Constructional material. A. C. Fischer. 1,814,139; July 14.
Contact structure. H. J. H. Huber. 1,814,807; July 14.
Container. W. C. Broadwell. 1,814,785; July 14.
Container, Automatic folding. J. Appelbaum. 1,814,816; July 14.
Container, Display. W. B. Leavens. 1,813,938; July 14.
Container for cosmetics. L. A. Danco. 1,814,080; July 14.
Container for gases and volatile liquids. C. L. Day and L. McDonald. 1,814,130; July 14.
Container, Medicament. R. B. Waite. 1,814,650; July 14.
Container stopper. A. O. Fox and J. A. Keenan. 1,814,141; July 14.
Control for elevators, System of. C. W. Bassett and H. J. Fear. 1,814,660; July 14.
Control system. G. H. Jump. 1,814,810; July 14.
Control system. C. C. Whittaker. 1,814,015; July 14.
Control system, Automatic. H. T. Seeley. 1,814,860; July 14.
Control system, Electrical. J. L. Reynolds. 1,814,263; July 14.
Control system, Hydraulic. R. J. Caughey. 1,814,827; July 14.
Controlling device, Driving belt. A. P. Winter. 1,814,016; July 14.
Controlling sensitivity of voice operated devices. S. B. Wright and D. Mitchell. 1,814,017–8; July 14.
Conveyer, Electrically driven shaker. T. G. Nyborg and M. F. Higgins. 1,814,732; July 14.
Conveyer for heat treatment furnaces, Roller type. F. A. Fahrenwald. 1,814,082; July 14.
Conveyer, Stoker. C. J. Surdykowski. 1,814,645; July 14.
Conveyer, Stoker. E. A. Turner. 1,814,648; July 14.
Conveyer system. L. H. Draeger. 1,814,026; July 14.
Conveying device, Shaking. P. Aurich. 1,814,277; July 14.
Cooker. C. G. Bryson. 1,814,122; July 14.
Cooker, Electric. H. James. 1,814,754; July 14.
Cooker, Electrically heated. W. C. White. 1,814,103; July 14.
Cooking apparatus. H. T. Hunter. 1,814,930; July 14.
Cooking fibrous material, System for. T. L. Dunbar. 1,814,027; July 14.
Cooler: *See*—
Candy cooler.
Core removing device. J. Hourigan. 1,814,928; July 14.
Cornstalk fiber composition, Making. S. A. Gill. 1,814,751; July 14.
Cotter pin puller. G. T. Cooke. 1,814,830; July 14.
Cotton opening and picking system. R. S. Curley. 1,814,129; July 14.

Counter molding machine. J. H. Stewart. 1,814,611; July 14.
Coupling: *See*—
Amplifier coupling. Shaft coupling.
Impulse coupling.
Coupling and tool joint, Pipe. C. L. Patterson. 1,814,183; July 14.
Coupling device. J. L. Becker. 1,814,427; July 14.
Couplings, Making. E. E. Johnson. 1,814,703; July 14.
Crankless engine. T. L. Sherman. 1,813,966; July 14.
Crankless mechanisms. V. R. Wilson. 1,813,981; July 14.
Creeling mechanism. H. H. Yates. 1,814,203; July 14.
Crosshead. W. E. Henry. 1,814,924; July 14.
Crown block. M. S. Black. 1,814,615; July 14.
Cultivator. H. A. Harris. 1,814,693; July 14.
Cultivator. H. Steffens. 1,814,345; July 14.
Current generator, Direct. R. Sarazin and M. Moneyron. 1,814,061; July 14.
Current, Method of and apparatus for controlling alternating. D. G. McCaa. 1,814,051; July 14.
Current rectifier. S. Strauss. 1,814,063; July 14.
Currents, Suppressing ground. G. Meyer. 1,814,006; July 14.
Curtain, Auto vision. V. J. Christie. 1,814,293; July 14.
Cushion seat, Folding. C. G. Polleys. 1,814,408; July 14.
Cut-out switch, Microphone radio. J. R. Fouch. 1,814,470; July 14.
Cutter: *See*—
Bar cutter. Shingle cutter.
Joint cutter. Thread cutter.
Pipe cutter.
Cutter and guard, Combination. R. J. Crossman. 1,814,668; July 14.
Cutter for round metal objects, Power. F. W. Erickson. 1,814,675; July 14.
Cutting block. F. H. Ellis. 1,814,136; July 14.
Cutting die structure. C. A. Cadenbach. 1,814,824; July 14.
Cutting machine, Cloth. A. G. Wagner. 1,815,017–18; July 14.
Cutting machine for paper, cardboard, and similar material with automatic feed. K. Biagosch. 1,814,890; July 14.
Cutting machines, Attachment for doughnut blank. J. H. Müller. 1,814,951; July 14.
Dam. C. F. Gröner. 1,814,509; July 14.
Darning form, Hosiery. B. S. Cameron. Des. 84,622; July 14.
Demountable wheel. A. C. Hynan. 1,814,161; July 14.
Dental articulator. C. Fritzenwallner. 1,814,750; July 14.
Dental chair. H. E. Weber. 1,814,877; July 14.
Dental chair elevator. H. E. Weber. 1,814,874; July 14.
Dental unit standard. H. E. Weber. 1,814,875; July 14.
Denture. J. F. Maizner. 1,814,717; July 14.
Designs, Producing multicolor. F. Hart. 1,814,310; July 14.
Desk set. W. Guyot. 1,814,085; July 14.
Diathermy. F. M. Ende. 1,814,791; July 14.
Die for forming ophthalmic mountings, Extruding. R. A. Boswell. 1,814,820; July 14.
Die head, Stamped ratchet. R. E. Hyde. 1,814,388; July 14.
Digger: *See*—
Hole digger.
Digger conveyer shaker, Potato. F. Wheeler. 1,814,992; July 14.
Direction indicator. E. A. Osmon. 1,814,331; July 14.
Discharge device, Glow. C. Travis. 1,814,270; July 14.
Disintegrator, Cane stalk. W. H. Morgan. 1,814,177; July 14.
Dispenser for heterogeneous liquids. C. Burkhart. 1,814,123; July 14.
Dispensing apparatus of the visible type. R. W. Bond. 1,814,662; July 14.
Distributor, Rotary. A. A. Clokey and W. A. Knoop. 1,813,913; July 14.
Dockage collecting and separating device. C. C. Palmer. 1,813,948; July 14.
Dolly. A. A. Redford. 1,814,262; July 14.
Dolly for drill sharpeners. C. Larson. 1,814,516; July 14.
Door and window screen. R. L. Ingram and W. H. De Long. 1,814,162; July 14.
Door construction, Corner. K. J. Tobin and W. W. Darrow. 1,814,647; July 14.
Door construction, Refrigerator. V. P. Warren. 1,814,272; July 14.
Doorlock. J. Holtzman. 1,813,927; July 14.
Doorlock. C. J. Williams. 1,814,536; July 14.
Drafting instrument. W. W. Ford. 1,814,441; July 14.
Dress. D. Long. Des. 84,643; July 14.
Drier: *See*—
Clothes drier.
Drinking fountain, Portable. J. H. Nelson and S. Quisling. 1,814,953; July 14.
Dyestuff containing chromium and process of making. K. Holzach, H. Kämmerer and W. Müller. 1,814,218; July 14.
Earthworking implement. C. E. Finney. 1,814,469; July 14.
Echo suppressor. J. Herman. 1,814,038; July 14.
Echo suppressor. D. Mitchell. 1,814,052; July 14.
Egg treating machine. B. E. Ford. 1,814,680; July 14.
Elastic wheel. T. Sanmartí. 1,814,634; July 14.
Electric cable with paper insulation, High tension. M. Weiset. 1,814,102; July 14.
Electric mixer, Automatic. A. M. Snider. 1,814,974; July 14.
Electric motor. Z. C. Bradford. 1,814,237; July 14.
Electric motor. W. A. Caryst. 1,814,243; July 14.
Electric motor. J. McCracken. 1,814,945; July 14.
Electric snap switch. W. Wurdack, jr. 1,814,777; July 14.
Electric switch. C. F. Carpenter. 1,814,826; July 14.
Electric switch. W. A. Chryst and H. E. Norviel. 1,814,242; July 14.
Electric switch. H. C. Doane. 1,814,245; July 14.
Electric Switch. F. Döring. 1,814,246; July 14.
Electrical contactor. J. E. Kuykendall. 1,814,448; July 14.
Electrical devices, Apparatus and method for testing. A. B. Du Mont. 1,814,437; July 14.
Electrical operating means. L. R. Le Tang. 1,814,563; July 14.
Electrical resistances, Making. R. C. Benner and E. S. Capron. 1,814,583; July 14.
Electrical switching system. C. W. Hough. 1,813,929; July 14.
Electrical variations into sound variations, Device for transforming. F. W. Hehlgans. 1,814,801; July 14.
Electrode, Arc welding. J. M. Weed. 1,814,878; July 14.
Electrolytic apparatus, Operating. R. D. Mershon. 1,814,174; July 14.
Electron discharge device and fabricating the same. K. H. Kingdon. 1,814,711; July 14.
Electron tube apparatus. L. A. Gebhard and C. F. Rudolph. 1,814,376; July 14.
Electrosurgical apparatus. W. T. Bovie. 1,813,902; July 14.
Elevator: *See*—
Dental chair elevator. Portable elevator.
Elevator. N. Peebles. 1,814,407; July 14.
Engine: *See*—
Beater engine. Internal-combustion engine.
Crankless engine. Sleeve valve engine.
Engine. Y. Nakagawa. 1,814,489; July 14.
Engines, Attachment for internal combustion. M. J. Davis. 1,814,370; July 14.
Equipment for changing taps of electrical apparatus. L. H. Hill. 1,813,996; July 14.
Ether, Preserving. E. Mallinckrodt, jr. and H. V. Farr. 1,814,718; July 14.
Excavating apparatus. D. J. Shelton. 1,814,863; July 14.
Excavator for tile ditching, Earth. W. Rhodes. 1,814,094; July 14.
Fabric: *See*—
Tubular fabric.
Fabrics, Dyeing textile. A. J. Belokopytoff. 1,814,783; July 14.
Fabrics, Repairing looped. C. Kudela. 1,815,008; July 14.
Fabrics widthwise, Device for stretching. H. Weiss. 1,814,652; July 14.
Fan, Electric. F. Ljungstrom. Des. 84,642; July 14.
Fan for cooling dynamo electric machines, etc. S. B. Taylor. 1,814,417; July 14.
Fastener. F. J. Carolin. 1,814,077; July 14.
Fastener, Closure. M. F. Smith. 1,814,343; July 14.
Fastener, Dress. A. R. Smido. 1,814,341; July 14.
Fastening combination, Tie, joint and rail. W. F. Walker. 1,814,199; July 14.
Fastening means. J. A. Miller, jr. 1,814,760; July 14.
Fastening mechanism, Closure. C. A. Redfield. 1,814,962; July 14.
Feeder, Hog. J. D. Duuck. 1,814,673; July 14.
Feeding device. J. H. Fulmer. 1,814,683; July 14.
Fence post clamp. L. W. Peters. 1,814,228; July 14.
Ferrochrome, Chlorination of. F. S. Low, M. C. Taylor, and J. K. Berresford. 1,814,392–3; July 14.
Fertilizer dispensing device. R. Shaffer. 1,814,572–3; July 14.
Filaments or threads, Process and apparatus for the production of artificial. H. Dreyfus, E. Kinsella, J. Bower, and W. I. Taylor. 1,814,468; July 14.
Filing device. J. C. Seyl. 1,814,191; July 14.
Filling and venting device. R. J. Anschicks. 1,814,656; July 14.
Filling device. G. W. Owen. 1,814,259; July 14.
Film, Camera using roll. G. Milligan. 1,814,727; July 14.
Film spool. H. A. de Vry. 1,813,990; July 14.
Filter, Air. E. Bishop. 1,814,428; July 14.
Filter, Multilayer. R. L. Sebastian and L. Finkelstein. 1,814,190; July 14.
Filter, Steel wool. W. H. Robbins and H. A. Toulmin, jr. 1,814,855; July 14.
Filter, Wave. H. W. Bode. 1,814,238; July 14.
Finger ring. F. Dinger. Des. 84,628; July 14.
Finger ring. J. H. Schaeffer. Des. 84,657; July 14.
Fire alarm, Automatic. H. C. Osborn. 1,814,733; July 14.
Fire extinguisher. W. B. Bronander. 1,813,910; July 14.
Fish bait. R. Nelson. 1,814,450; July 14.
Fish bait. C. M. Rodgers. 1,814,571; July 14.
Fish deheader. W. E. Urschel. 1,814,983; July 14.
Fishing reel. S. T. Thorpe. 1,814,234; July 14.
Fixture, Curtain. J. H. Boye. 1,814,281–2; July 14.
Fixture, Side wall lighting. R. W. Schweiker. 1,814,229; July 14.
Floor stand. L. H. Morin. 1,813,945; July 14.

Fluid flow indicator. A. M. Trogner. 1,814,235; July 14.
Fluid flow regulating apparatus. A. L. Klees and B. Greenfield. 1,814,934; July 14.
Fluid flow regulating apparatus. A. L. Klees and B. Greenfield. 1,814,935; July 14.
Fluid flow regulating mechanism. A. L. Klees and B. Greenfield. 1,814,812; July 14.
Fluid heater. P. L. G. Albert. 1,814,423; July 14.
Folder and envelope and making same, Mailing. H. N. Chapman. 1,814,620; July 14.
Folding table. B. Martin. 1,814,838; July 14.
Food composition and making same, Mineral. P. A. Kober. 1,813,936; July 14.
Food product and making the same. C. P. Wilson and E. D. Stewart. 1,814,994; July 14.
Foot controlled device. J. Young. 1,814,880; July 14.
Fountain: *See*—
Drinking fountain.
4-amino-beta-phenyl anthraquinone by ring closure, Preparation of. P. H. Groggins. 1,814,148; July 14.
4-halogen-beta-phenyl-anthraquinone, Preparation of. P. H. Groggins. 1,814,146; July 14.
Frame: *See*—
Ribbon frame. Tender frame.
Frequency indicator. R. E. Malles. 1,813,942; July 14.
Froth flotation process. O. D. Cunningham. 1,814,434; July 14.
Fuel injector for oil engines. M. J. Goldberg. 1,814,443; July 14.
Fuel preparing and handling system. H. Kreisinger. 1,814,560; July 14.
Fuel supply system, Carburetor. R. F. Bracke. 1,814,118; July 14.
Fumigating applicator, Cylinder type. C. D. Collins. 1,814,504; July 14.
Furnace. D. S. Jacobus and H. J. Kerr. 1,814,555; July 14.
Furnace. H. C. Jorgensen. 1,814,391; July 14.
Furnace structure. B. M. Hess. 1,814,604; July 14.
Fuse. G. E. Rogers and J. M. King. 1,814,059; July 14.
Fuse element, Renewable. J. B. Glowacki. Re18,128; July 14.
Game. N. C. Seymour. 1,814,971; July 14.
Garment, Child's. E. Roberts. 1,813,956; July 14.
Garment, Combination. B. Spiers. 1,814,457; July 14.
Garment press. J. L. Card. 1,814,665; July 14.
Garter. M. Feldman. 1,814,438; July 14.
Gas absorption in liquids and for preventing rusting of submerged iron, Preventing. B. W. Mueller. 1,814,053; July 14.
Gas burner. G. E. Seil. 1,814,097; July 14.
Gas burner structure. G. H. Irwin. 1,814,164; July 14.
Gas burning device. G. C. Carnaham. 1,814,076; July 14.
Gas conditioning apparatus. A. L. Romanoff. 1,813,959; July 14.
Gas generating apparatus. F. W. Steere. 1,813,970; July 14.
Gas, Making producer. C. W. Andrews. 1,814,580; July 14.
Gas mixing device. P. Morgan. 1,814,949; July 14.
Gas producer. R. Daae. 1,814,787; July 14.
Gas scrubbing device. A. L. Genter. 1,814,377; July 14.
Gas, System and apparatus for controlling excess. D. H. Hunter. 1,814,060; July 14.
Gases, Recirculating system and apparatus for waste furnace. G. A. Merkt. 1,814,567; July 14.
Gasket. S. W. Braner. 1,814,283; July 14.
Gasoline gauge. H. Lundquist. 1,814,394; July 14.
Gate: *See*—
Portable stall gate.
Gate for motor vehicles, Signal. E. J. McAllister. 1,814,477; July 14.
Gauge: *See*—
Gasoline gauge. Saw filer's gauge.
Pressure gauge. Saw gauge.
Gear. S. B. Weller. 1,814,988; July 14.
Gear, Intermittent actuating. H. Füssel. 1,814,030; July 14.
Gear reduction mechanism, Worm. W. H. Himes. 1,813,907; July 14.
Gear unit, Marine reduction reverse. P. D. Harvey. 1,814,311; July 14.
Gear, Valve. E. de H. Caldwell. 1,814,545; July 14.
Gear wheel and manufacturing the same, Non-metallic. H. J. Cameron. 1,814,825; July 14.
Gearing. E. L. Fickett. 1,814,911; July 14.
Gearing, Variable friction. J. H. Robertson. 1,813,957; July 14.
Generator: *See*—
Current generator. Steam generator.
Power generator.
Geophysical method and apparatus. H. C. Hayes. 1,814,444; July 14.
Glare shield. W. J. Summerbell. 1,814,500; July 14.
Glass: *See*—
Reading glass.
Glass. C. E. Gould, W. M. Hampton, and H. S. Martin. 1,814,507; July 14.
Glass and other transparencies and translucencies, Manufacture of colored. B. R. Bayne. 1,813,901; July 14.
Glass, Method and apparatus for drawing, cutting, gripping and conveying sheet plate. C. J. Jordan. 1,814,932; July 14.
Glass, Process and apparatus for forming sheet or plate. J. L. Drake. 1,814,905; July 14.
Governor. J. S. Myers. 1,814,630; July 14.
Governor, Fluid pressure. J. L. Ray. 1,814,631; July 14.
Grader, Combination tractor. J. L. Becker. 1,814,425; July 14.
Grain huller. E. McKain. 1,814,398; July 14.
Granite, Making artificial. H. B. Taft. 1,814,012; July 14.
Graphite, Grinding. G. Hanekop. 1,814,215; July 14.
Grapple, Expanding. E. H. Hazen and G. P. Wellington. 1,814,037; July 14.
Grater, Vegetable. L. C. Nothohm. 1,814,844; July 14.
Grid making machine. C. R. Schenk and S. W. Crowley. 1,814,770; July 14.
Grille, Screen door. H. J. Lebherz. 1,814,317; July 14.
Grinder. J. W. Smith. 1,815,014; July 14.
Grinder, Log bar. J. E. Caster. 1,814,367; July 14.
Grinder, Valve. C. Booth. 1,814,364; July 14.
Grinding machine, Centerless. S. Einstein. 1,814,209; July 14.
Grinding machinery. C. Booth. 1,814,361; July 14.
Grinding machinery. C. Booth. 1,814,363; July 14.
Grinding machinery. C. Booth. 1,814,365; July 14.
Grinding machinery. J. E. Caster. 1,814,431; July 14.
Grinding machinery. F. J. Theler. 1,814,350–1; July 14.
Grinding machinery, Centerless. C. Booth. 1,814,362; July 14.
Guard, Fire hydrant. J. J. Cahill and G. R. Cargill. 1,814,664; July 14.
Guide arm, Flush. M. H. Martindell. 1,814,604; July 14.
Gun for driving slugs. W. F. Oberhuber. 1,814,766; July 14.
Gun sight. L. Levy. 1,814,756; July 14.
Gun sight, Vertically adjustable. J. E. Steward. 1,814,975; July 14.
Gun, Sporting. C. Levé. 1,814,937; July 14.
Hammer, Drop. G. E. Smith. 1,814,193; July 14.
Hammer, Mechanical. F. Tauriac. 1,814,450; July 14.
Hammock. F. Ames. 1,814,570; July 14.
Handle: *See*—
Shovel handle.
Hanger: *See*—
Shade and curtain hanger. Tie hanger.
Harrow. H. E. Altgelt. 1,814,814; July 14.
Harvester, Beet. C. Siemiana. 1,813,967; July 14.
Harvester, Combination corn. W. F. MacGregor. 1,814,723; July 14.
Harvester, Potato. E. Sanders. 1,814,060; July 14.
Harvesting and cotton cleaning machine, Combined. J. E. Mitchell. 1,814,761; July 14.
Head for can filling machines, Filling. J. Leonard. 1,814,168; July 14.
Headlight. B. E. Melton. 1,814,326; July 14.
Headrest. H. E. Weber. 1,814,876; July 14.
Hearing tube. A. A. Johnson. 1,813,931; July 14.
Heat, Apparatus for utilizing solar. E. J., D. Coxe. 1,814,897; July 14.
Heat exchange device. F. G. Cornell, jr. Re18,127; July 14.
Heat generating compound. J. R. Dulany. 1,814,741; July 14.
Heater: *See*—
Air heater. Water heater.
Fluid heater.
Heater. L. E. Reiley. 1,814,335; July 14.
Heating apparatus, Induction. O. Neiss. 1,814,225; July 14.
Heating system and heater, Automobile. V. G. Ellen. 1,814,744; July 14.
Hinge for nonmetallic spectacle-frames, Metallic ball-head. H. Haase. 1,814,032; July 14.
Hoisting mechanism for concrete mixers, Skip. E. H. Lichtenberg. 1,814,564; July 14.
Holder and stand. A. T. Smith. 1,814,342; July 14.
Holder, Chalk line. B. Jacobsen. 1,814,389; July 14.
Holder, Coin. I. Tolkow. 1,814,064; July 14.
Holder for windows, Light. E. Cinquini. 1,813,911; July 14.
Holder, Golf score card. W. C. Foster. 1,815,024; July 14.
Holder, Inverted flatiron. E. E. McDowell. 1,814,517; July 14.
Holder, Merchandise display. C. A. Fogel and F. O. Nelson. 1,814,440; July 14.
Holder, Milk bottle. C. Honey. 1,814,926; July 14.
Holder or support, Gauze or screen catalyst. S. L. Handforth. 1,814,507; July 14.
Holder, Paper. R. E. Wheat. 1,814,200; July 14.
Holder, Score sheet. C. F. Stone. 1,814,194; July 14.
Holder, Threading die. H. D. Pennington. 1,814,492; July 14.
Holder, Tool. R. W. Andreasson. 1,814,655; July 14.
Holder, Tool. J. Garbarak. 1,814,211; July 14.
Holder, Tool. J. J. Zinslen. 1,814,882; July 14.
Hole digger, Power driven. W. Rhodes. 1,814,093; July 14.
Hook: *See*—
Lock hook.
Hopper feed. G. W. Binns. 1,814,279; July 14.
Horn attachment for string musical instruments. J. Ma. Peña. 1,814,767; July 14.
Horn having resonating chambers at antinodal points. M. R. Hutchison. 1,814,554; July 14.
Hose, Multiple toe. H. Aust. 1,814,885; July 14.
Hose reel. C. Wagner. 1,814,872; July 14.

Hosiery protecting compound. R. M. Metcalfe. 1,814,221; July 14.
Huller: *See*—
Grain huller.
Hydrocarbon compounds, Composition of and method for the treatment of. W. B. Elliott. 1,814,745; July 14.
Hygro-thermostat. C. C. Bradbury. 1,814,585; July 14.
Ice, Apparatus for making carbon dioxide. N. M. Thomas. 1,814,195; July 14.
Ignition apparatus. J. L. Arthur. 1,813,900; July 14.
Ignition switch. H. E. Norviel. 1,814,258; July 14.
Impulse coupling. J. K. Lencke and H. Schmid. 1,814,318; July 14.
Incubator. T. K. Tiffany. 1,814,419; July 14.
Indicating apparatus. J. R. Beard and G. L. Porter. 1,814,278; July 14.
Indicating device. G. M. Eaton. 1,813,991; July 14.
Indicator: *See*—
Direction indicator.
Fluid flow indicator.
Frequency indicator.
Liquid level indicator.
Signal indicator.
Indicator. D. Benjamin. 1,815,004; July 14.
Indicator. A. Meissner and O. von Bronk. 1,814,399; July 14.
Indicator for mail boxes. A. Lutz. 1,814,941; July 14.
Indicator system. E. J. Murphy. 1,814,842; July 14.
Inflating and deflating device. W. L. Donkin and W. G. McCarty. 1,814,206; July 14.
Inflating and deflating device, Automatic. W. L. Donkin and W. G. McCarty. 1,814,207; July 14.
Ingot molds, Core box for. J. E. Perry. 1,814,185; July 14.
Ink remains from the printing plate of the form cylinder of rotary intaglio printing machines, Apparatus for removing any. K. Debus. 1,814,024; July 14.
Instrumentalities for annexing tips to tooth facings. P. Joffé. 1,814,044; July 14.
Insulating jacket for hot water tanks. L. J. Henshaw. 1,813,995; July 14.
Interlocking elements from sheet material, Making. W. H. Cobb. 1,814,244; July 14.
Internal combustion engine. R. W. Bailey. 1,814,781; July 14.
Internal combustion engine. A. C. Estep. 1,814,676; July 14.
Internal combustion engine. Z. S. Hoffman. 1,813,925; July 14.
Internal combustion engine. T. J. Parker. 1,814,333; July 14.
Iron: *See*—
Soldering iron.
Ironing board. K. Bakke. 1,814,109; July 14.
Jack: *See*—
Rail and tie holding jack.
Jack. G. L. Nolette. 1,814,226; July 14.
Jack attachment for automobiles. F. T. Roberts, jr. 1,814,570; July 14.
Jacks, Automobile attachment for. F. T. Roberts, jr. 1,814,569; July 14.
Jewelry clasp. T. A. Mountford. 1,814,486; July 14.
Joint: *See*—
Rail joint.
Sucker rod joint.
Joint bar, Rail. G. Langford. 1,814,835; July 14.
Joint connection. B. Smith. 1,814,415; July 14.
Joint cutter, Inside casing or tool. R. A. Lincoln. 1,814,048; July 14.
Kerr cell. A. Narath. 1,814,843; July 14.
Ketones of the benzophenone type, Making. G. Dougherty. 1,814,025; July 14.
Ketones, Production of. W. Reppe. 1,813,953; July 14.
Kettle, Vacuum. A. Hock. 1,813,927; July 14.
Key holding device. J. Komorous. 1,814,710; July 14.
Kiln, Tunnel. A. M. Duckham. 1,814,906; July 14.
Kite. J. and R. Kramer. 1,814,811; July 14.
Knife. O. W. Hamel. 1,814,596; July 14.
Knife. W. S. Warren. Des. 84,665; July 14.
Knife or similar article, Table. E. Saarinen. Des. 84,654–5; July 14.
Knife, Table. G. P. Ittig. Des. 84,638; July 14.
Knife with adjustable blades, Multiple blade. L. J. Purcell. 1,814,528; July 14.
Knitting machine, Circular. F. H. Schabacker. 1,814,265; July 14.
Knitting machine, Terry loop fabric. H. McAdams. 1,814,944; July 14.
Lace. H. Bekkens. Des. 84,617; July 14.
Laces, Tipped. J. Schwarz. 1,814,859; July 14.
Ladder. J. M. Parry. 1,814,960; July 14.
Laminated spring. A. E. Frost. 1,814,682; July 14.
Laminated spring. S. Gross. 1,814,214; July 14.
Lamp. W. L. Burgess. 1,813,905; July 14.
Lamp and reflector, Combination. V. L. Oestnaes. 1,814,328; July 14.
Lamp, Arc. A. F. Martin. 1,814,321; July 14.
Lamp, Flash. G. A. Drucker. 1,814,299; July 14.
Lamp, Parking. G. H. Cushing. 1,814,669; July 14.
Lamp, Portable electric. S. H. Nuckolls. 1,814,056; July 14.
Lamp-stand and plant holder, Combined. E. Barkley. Des. 84,616; July 14.
Lamp, Therapeutic. N. E. Goodrich and J. Connor. Des. 84,636; July 14.
Latch. F. Netschert. 1,814,954; July 14.
Latch, Door. F. Schmidgall. 1,814,636; July 14.
Lathe chuck. M. P. Hubbell. 1,814,699; July 14.
Lathe or the like, Device for use on a. W. E. Hayward. 1,814,087; July 14.
Laundry machine. R. C. Gleaves. 1,814,031; July 14.
Laundry net, Metallic. H. A. Gilbertson, R. J. Curtin, and R. C. Jacobs. 1,814,378; July 14.
Lavatory. E. G. Watrous. 1,814,352; July 14.
Lawn and hedge trimmer, Combined. F. W. Wade. 1,814,649; July 14.
Leveling device. O. A. Stromer. 1,814,976; July 14.
Lid, Box. A. A. Adamson. 1,814,071; July 14.
Life saving and salvaging device, Submarine. J. B. Foltz. 1,814,375; July 14.
Lighting fixture. J. E. Primakow. Des. 84,648; July 14.
Line or cable connecter. E. C. Smith. 1,814,609; July 14.
Lining and making the same, Shoe. M. J. McGrail. 1,814,528; July 14.
Liquid level indicator. E. L. Beecher. 1,815,001; July 14.
Liquid measuring system. A. T. Wakefield. 1,814,065; July 14.
Liquid meter. D. H. McGogy. 1,814,725; July 14.
Lister. C. T. Peacock. 1,814,848; July 14.
Loader, Automatic. W. W. Sayers. 1,814,769; July 14.
Lock: *See*—
Mortise bolt lock.
Lock. F. Lindquist and O. L. Nave. 1,814,938; July 14.
Lock. M. Sheinman. 1,814,771; July 14.
Lock. G. R. Terrill. 1,814,646; July 14.
Lock. S. Wise. 1,814,356; July 14.
Lock cylinder, Pneumatic door. H. D. Mallison. 1,813,943; July 14.
Lock for electric fans; Support. C. Ringwald. 1,814,854; July 14.
Lock hook. C. G. H. Deppe. 1,814,900; July 14.
Locking device for bolts. J. A. Rutter. 1,814,858; July 14.
Locking plate. J. E. Phillips. 1,814,961; July 14.
Locomotive boiler. C. W. Lester. 1,813,939; July 14.
Locomotive boiler. E. J. Noel. 1,814,257; July 14.
Log bunk. A. Sturrock. 1,814,232; July 14.
Loom for weaving tufted pile fabric. E. F. Clark. 1,814,294; July 14.
Loud speaking apparatus. C. C. Bradbury. 1,814,119; July 14.
Lowering device. R. D. Delamere. 1,814,131; July 14.
Lubricator. H. T. Scott. 1,814,970; July 14.
Luggage clamp. M. F. Desmond. 1,814,871; July 14.
Lure carrier. H. Overberg. 1,814,490; July 14.
Machine for and method of assembling springs. J. F. Gall. 1,813,993; July 14.
Machine for automatically forming and dividing plastic masses. H. A. L. and A. G. H. Swärd. 1,814,496; July 14.
Machine for bending sheet metal shapes. A. Rafter. 1,813,951; July 14.
Machine for boring cylinders. C. B. Cole and O. L. Lewis. 1,814,078; July 14.
Machine for cutting border slugs. A. Carson. 1,814,366; July 14.
Machine for cutting gear teeth. W. E. Sykes. 1,814,348; July 14.
Machine for cutting pearl button stock. S. Butsko. 1,814,240; July 14.
Machine for extruding ophthalmic mountings. R. A. Boswell. 1,814,819; July 14.
Machine for forming hemispherical caps with sealing lips. W. H. Carson. 1,814,546; July 14.
Machine for knitting tubular envelopes. F. Meiwald. 1,814,324; July 14.
Machine for making boxes. F. M. Joslin. 1,814,043; July 14.
Machine for making pivot pins. J. Q. Holmes. 1,814,250; July 14.
Machine for molding pie casings. E. Christiansen. 1,813,907; July 14.
Machine for processing and washing eggs. L. W. Finley. 1,814,374; July 14.
Machine for producing insulating lumber. O. R. Sweeney. 1,814,208; July 14.
Machine for shaping uppers over lasts. A. Bates. 1,813,983; July 14.
Machine for snelling fishhooks. L. E. Baltzley. 1,814,464; July 14.
Machine for the treatment of rubber forming devices. Y. H. Kurkjian. 1,814,712; July 14.
Machine for treating webs of fabrics in the open state. H. Karrer. 1,814,706; July 14.
Manhole form of adjustable sections. A. J. Penote. 1,814,738; July 14.
Manicure, Electric. I. M. Eldridge. 1,814,372; July 14.
Marker, Golf ball. C. R. Long. 1,814,170; July 14.
Marker plant. P. P. Gredell. 1,814,380; July 14.
Marking device. L. Murnahan. 1,814,488; July 14.
Marking means. G. W. Heene. 1,814,312; July 14.
Materials, Production of finely divided materials. A. B. Cummins. 1,813,916; July 14.
Mattress picker and renovator. D. F. Dougan. 1,814,670; July 14.
Measuring and mixing machine. W. T. Morgan. 1,814,483; July 14.
Measuring system. R. W. Deardorff. 1,814,898; July 14.
Metal drilling machinery, Drill arm for. A. E. Robinson and W. L. Schellenbach. 1,814,963; July 14.
Metal from its ore, Extracting a. A. Schwarz. 1,814,062; July 14.

Metal products, Apparatus for widening rolled. H. M. Gersman. 1,814,594; July 14.
Metal products, Widening rolled. H. M. Gersman. 1,814,593; July 14.
Metal surfaces to receive permanent coatings, Preparing. R. Z. Hopkins, A. E. Fellers, and O. T. Coffelt. 1,814,600; July 14.
Metals and alloys, Method of and apparatus for testing. M. A. Miller. 1,814,522; July 14.
Metals by sublimation, Separating volatile. H. E. Bakken. 1,814,072; July 14.
Metals from their oxide ores, Producing. W. E. Trent. 1,814,461; July 14.
Meter: *See*—
Liquid meter.
Meter connection. G. W. McKee. 1,814,173; July 14.
Meters, Demand limit device for fluid. J. R. Armstrong. 1,814,657; July 14.
Methyl salicylate, Purifying. M. E. Putnam. 1,814,853; July 14.
Mill guide, Rolling. P. G. Palmgren. 1,814,735–6; July 14.
Mill screw down control, Metal rolling. W. R. Webster and W. R. Clark. 1,814,354; July 14.
Milling curd, Apparatus for use in. R. W. Harris. 1,814,033; July 14.
Mine and firing methods therefor, Marine. J. K. M. Harrison. 1,814,152; July 14.
Mirror and parking light for automobiles, Combined rear view. G. Moore. 1,814,728; July 14.
Mixer: *See*—
Electric mixer.
Moistening device. T. C. Wangh. 1,814,776; July 14.
Mold. E. G. Grundström. 1,814,797; July 14.
Mold for forming molded articles. J. Anoskopay. 1,814,276; July 14.
Molding apparatus. J. T. Stoney. 1,814,416; July 14.
Mop wringer. C. C. Potter, jr. 1,814,527; July 14.
Mortise bolt lock. M. Falk. 1,814,302; July 14.
Motor: *See*—
Electric motor.
Vacuum motor.
Motor control system. L. C. Hardesty. 1,814,799; July 14.
Motor control system for elevator installations. E. O. Anderson. 1,814,501; July 14.
Motor control, System of. G. B. Starle. 1,814,865; July 14.
Motor device. V. Alcalá. 1,814,779; July 14.
Motor surf board. F. W. Sterling. 1,814,772; July 14.
Mounting for bolsters, Standard. B. F. Green. 1,814,308; July 14.
Mower, Lawn. J. N. Wetmore. 1,814,991; July 14.
Muffler, Exhaust gas. F. F. Hamilton, and H. E. Van Voorhees. 1,815,005; July 14.
Musical wind instrument. L. Rives. 1,814,456; July 14.
Nail polisher, Finger. C. J. Foerster. 1,814,625; July 14.
Nails, Manufacture of horseshoe. H. C. H. Mustad. 1,814,952; July 14.
Necklace clasp. H. C. Schick. 1,813,963; July 14.
Needle, Hand operated. E. J. Hoffman. 1,813,924; July 14.
Nozzle and closure therefor, Pouring. H. E. Barroll. 1,814,658; July 14.
Nozzle, Pouring. H. E. Barroll. 1,814,659; July 14.
Numbering machine. O. E. Conklin, and G. Rocker. 1,814,432; July 14.
Nut device. A. Simons. 1,813,968; July 14.
Nut, Lock. C. G. Olson. 1,813,947; July 14.
Oil and manufacturing the same, Hydrocarbon. G. H. B. Davis. 1,815,022; July 14.
Oil well tester. H. F. Cameron. 1,814,894; July 14.
Oils, Cracking hydrocarbon. E. W. Ison. 1,814,700; July 14.
Oils from lemons and other fruits of trees of the genus citrus, Recovery of essential. A. H. Bennett. 1,814,888; July 14.
Oils, Refining and purifying hydrocarbon. A. Richter and W. Schäfer. 1,814,410; July 14.
Olive oil, Manufacturing. E. T. Meakin. 1,814,005; July 14.
Operating table. W. J. Miller. 1,814,482; July 14.
Ores, Treating. A. J. Koebel. 1,814,602; July 14.
Organ control. J. H. Hammond, jr. 1,814,472; July 14.
Organic materials, Decomposing. E. J. Dearborn and G. W. Gray. 1,814,621; July 14.
Ornament or similar article, Automatic radiator. W. Schnell and F. Giuntini. Des. 84,659; July 14.
Ornament, Radiator. W. H. Johnsen. Des. 84,639; July 14.
Ornament, Radiator. J. C. Kane and W. Weiss. 1,814,314; July 14.
Oven control mechanism, Thermostatic. A. H. and F. A. Kohlmeyer. 1,814,002; July 14.
Ovens, Charging horizontal coke. W. H. Pavitt. 1,814,184; July 14.
Packer. A. Boynton. 1,814,117; July 14.
Packing. E. Edwin. 1,814,908; July 14.
Packing. B. P. Joyce. 1,814,704–5; July 14.
Packing for weirlocks, Bottom. K. Zimmermann. 1,814,881; July 14.
Pad and casing, Powder. C. P. Evans. 1,814,373; July 14.
Paint for application to rubber and rubber surfaces. D. J. Burke. 1,814,823; July 14.
Paint, Plastic. J. F. Haggerty and D. D. Crandall. 1,814,086; July 14.
Pan for radiators, Evaporator drip. I. Weiss. 1,813,978; July 14.
Panel for concealed radiator cabinets. W. Shurtleff. Des. 84,661; July 14.
Paper box making machine. O. W. Cowgill. 1,814,369; July 14.
Paper carriage. R. L. Muller. 1,814,178; July 14.
Paper making machines, Winder roll for. J. M. Gallacher. 1,813,920; July 14.
Parachute construction. A. Jenhson. 1,814,220; July 14.
Para-phenyl-ortho-benzoyl-benzoic acid, Preparing. P. H. Groggins. 1,814,145; July 14.
Patch. L. Hadford. 1,814,383; July 14.
Paving joints, Installing device for. A. C. Fischer. 1,814,138; July 14.
Pearl and making same, Imitation. H. E. Smith, W. Bowker, and H. Conrow. 1,814,641; July 14.
Peas, System of and machine for grading. F. D. Chapman. 1,814,126; July 14.
Pen or similar article, Fountain. G. Larsen. Des. 84,641; July 14.
Perforator and handle, Combined. A. W. Mueller. 1,814,487; July 14.
Petroleum hydrocarbons into gasoline, Transformation of. U. S. Jenkins. 1,814,042; July 14.
Petroleum, Method of and apparatus for demulsifying. C. P. Dennhardt. 1,814,298; July 14.
Phenolic compounds, Manufacture of. W. J. Hale and E. C. Britton. Re18,129; July 14.
Phonograph. A. A. Thomas. 1,813,972; July 14.
Phosphorus and potash and for producing potash bearing phosphoric acid, Volatilizing. R. D. Pike. 1,814,568; July 14.
Photographic reversal process. A. R. de Tartas. 1,814,788; July 14.
Picture frame. L. Sain. Des. 84,656. July 14.
Picture machine, Motion. T. Hill. 1,814,217; July 14.
Picture projector. R. P. de Vault. 1,814,588; July 14.
Picture projector, Portable talking motion. R. V. Terry. 1,814,269; July 14.
Picture transmitting system. A. Weaver and D. E. Branson. 1,814,987; July 14.
Pictures, Making viewing gratings for relief or stereoscopic. H. E. Ives. 1,814,701; July 14.
Pie making process. R. Moss. 1,814,485; July 14.
Piling, Protecting concrete. R. G. Osborne. 1,814,332; July 14.
Pipe cutter, Internal. G. V. Powers. 1,814,058; July 14.
Pipe wrapping machine. H. B. Lynch. 1,814,320; July 14.
Pipes, joining bell and spigot. W. C. Ferguson. 1,814,678; July 14.
Piston and piston ring. T. James, jr. 1,813,930; July 14.
Piston and ring assembly. J. Williams. 1,814,355; July 14.
Planter, Corn. E. Witte. 1,814,069; July 14.
Plate or similar article. R. C. Richardson, jr. Des. 84,651; July 14.
Pliers. R. H. Endsley. 1,814,589; July 14.
Plow, Gang. H. O. Lown. 1,814,003; July 14.
Plug, Jordan engine. H. N. Weir. 1,814,879; July 14.
Plummet. E. H. Morris. 1,814,484; July 14.
Pneumatic tube system. H. W. Morehouse. 1,814,222; July 14.
Pocket and forming the same. F. Burch. 1,815,028; July 14.
Portable elevator. A. M. Barrett. 1,814,110; July 14.
Portable stall gate. R. C. Sheldon. 1,814,972; July 14.
Potassium sodium sulphate, Obtaining. G. B. Burnham. 1,814,284; July 14.
Pouch. L. W. Barnes. 1,814,614; July 14.
Power generator. H. A. Slattengren. 1,814,192; July 14.
Power multiplier. W. H. Bragaw and G. W. Bledsoe. 1,813,903; July 14.
Power plant, Vapor. W. Gumz. 1,813,921; July 14.
Power saving device. T. Saki. 1,814,095; July 14.
Power silk screen process printer and coater. L. Bland. 1,815,021; July 14.
Power storage and transmission mechanism. O. L. Sanders. 1,814,007; July 14.
Power transmission device for presses and the like. J. Bing. 1,814,891; July 14.
Power transmission mechanism. G. J. Abbott. 1,814,883; July 14.
Power transmission mechanism. F. J. Lapointe. 1,814,089; July 14.
Power transmission system. F. W. Gay. 1,814,684; July 14.
Press: *See*—
Garment press.
Pressure gauge. J. D. Durant. 1,815,000; July 14.
Pressure gauge. J. W. Motherwell. 1,814,092; July 14.
Printer, Continuous. F. H. Owens. 1,814,525; July 14.
Printing block and making the same. J. C. McCarthy. 1,814,758; July 14.
Printing machine. E. C. Baeck. 1,814,886; July 14.
Printing machine, Block. C. F. Humphreys. 1,814,160; July 14.
Printing press, Surface printing, rotary sheet. A. Trutzel. 1,814,498; July 14.
Projection board for enlarging machines. J. H. Johnson. 1,814,390; July 14.
Propeller. F. A. Gill. 1,814,595; July 14.
Propeller. J. Koenig. 1,814,709; July 14.
Propeller. W. I. Miller. 1,814,175; July 14.

Propeller, Yielding. E. A. Marsh. 1,814,171; July 14.
Protecting device. S. B. Whittier. 1,814,273; July 14.
Protective means for sound reproducers. K. B. Austin. 1,814,817; July 14.
Protective system for alternating current commutator motors. J. I. Hull. 1,814,809; July 14.
Protector for vault ventilators. O. B. McClintock. 1,814,839; July 14.
Puller: *See*—
Cotter pin puller. Stub axle puller.
Pulley, Guide. A. R. Pribil. 1,813,950; July 14.
Pulp beating or refining machine. T. D. Nuttall. 1,814,452; July 14.
Pulp refining apparatus. F. H. Daniels. 1,814,587; July 14.
Pulsator. A. St. Hansen. 1,814,018; July 14.
Pump. E. A. Hobart. 1,813,998; July 14.
Pump, Deep well. C. B. Yount. 1,814,070; July 14.
Pump, Embalming. J. Rocciola. 1,814,189; July 14.
Pump, Fuel booster. C. C. Bradbury. 1,814,120; July 14.
Pump, Inertia operated. T. Earle. 1,814,742; July 14.
Pump, Measuring and dispensing. L. R. Hartley. 1,814,153; July 14.
Pump, Motor operated dispensing. L. R. Hartley. 1,814,154; July 14.
Pump, Peripheral jet. S. C. Woody. 1,814,613; July 14.
Pump, Turbine. E. Yoss. 1,814,019; July 14.
Pump, Vacuum. M. L. Nestal. 1,814,179; July 14.
Pumping apparatus. J. M. Butler. 1,814,285; July 14.
Pumps. Totalizing counter mechanism for dispensing. R. W. Bond. 1,814,663; July 14.
Rack. C. R. Harris. 1,814,692; July 14.
Rack device, Vehicle map. W. F. Haack. 1,814,690; July 14.
Radiator. Automobile. E. L. Cord, H. C. Snow, and D. C. Hollister. Des. 84,625; July 14.
Radiocabinet. F. C. Burton. Des. 84,621; July 14.
Radio connection. H. Ungar. 1,814,533; July 14.
Radio dial. F. Muller. 1,814,403; July 14.
Radio receiving apparatus. S. Tarzian. 1,814,774; July 14.
Radio reception, Fading control system for. R. B. Dome. 1,814,832; July 14.
Radio remote control device. D. A. Stevenson. 1,814,346; July 14.
Radio signaling system. E. F. W. Alexanderson. 1,814,813; July 14.
Radio signaling system. R. S. Ohl. 1,814,956; July 14.
Radio telegraphic receiving apparatus, High speed. J. Bethenod. 1,813,908; July 14.
Rail and tie holding jack. O. J. Dickson. 1,814,901; July 14.
Rail crossing. C. J. Bergundthal. 1,814,466; July 14.
Rail, Guard. G. R. Tarbox. 1,814,868; July 14.
Rail joint, Railway. H. J. Loffelholz. 1,814,939; July 14.
Rail structure. H. Kurz. 1,814,476; July 14.
Railroad permanent way construction. A. Rambacher. 1,813,952; July 14.
Railroad tie, Concrete. J. C. Buckbee. 1,814,239; July 14.
Railway switch stand. W. M. Gray. 1,814,306; July 14.
Range. A. Stockstrom. Des. 84,663; July 14.
Range, Dining car. J. Wiedemann. Des. 84,666; July 14.
Razor and safety razor blade, Safety. R. E. Thompson. 1,814,418; July 14.
Reading glass. J. B. Bander. 1,814,540; July 14.
Receptacle. G. Dufour. 1,814,671; July 14.
Receptacle cleaning means. A. Griffiths. 1,814,508; July 14.
Receptacle, Refuse. G. Herzberger. 1,814,803; July 14.
Rectilinear movement to rotary movement, Converting. H. J. McGeorge. 1,814,946; July 14.
Reducing and classifying device. H. G. Lykken. 1,814,395; July 14.
Reel: *See*—
Fishing reel. Hose reel.
Refractory material and making the same. G. S. Housman. 1,814,088; July 14.
Refrigerating apparatus. J. W. Carl. 1,813,987; July 14.
Refrigerating apparatus. G. F. Hofferberth. 1,813,999; July 14.
Refrigerating apparatus. J. G. King. 1,814,001; July 14.
Refrigerating apparatus. H. Scharnagel and M. H. Loughridge. 1,813,960; July 14.
Refrigerating systems, Flow control for. F. R. West. 1,813,979; July 14.
Refrigeration apparatus. L. K. Wright. 1,814,358; July 14.
Refrigeration system. R. V. Grayson and C. M. Foster. 1,814,915; July 14.
Refrigeration system and method. W. L. Bodman. 1,814,114; July 14.
Refrigeration system and method. W. L. Bodman. 1,814,280; July 14.
Refrigerator closure. G. C. Bonn. 1,814,661; July 14.
Refrigerator control mechanism. M. C. Terry. 1,814,013; July 14.
Refrigerator for vehicles. C. D. Koch. 1,814,315; July 14.
Register: *See*—
Autographic register. Cash register.
Relay, Automatic selective pneumatic tube carrier. W. V. McGuinness and W. H. Francis. 1,814,947; July 14.
Relay, Electrical. B. E. O'Hagan. 1,814,329; July 14.
Release mechanism. I. Corcoran. 1,813,914; July 7.
Remote control system. H. E. Hershey. 1,814,385; July 14.
Remote control system. M. L. Nelson. 1,814,524; July 14.
Remote control system. C. Remington. 1,814,529; July 14.
Repair apparatus, Combination. A. H. Fisher. 1,813,918; July 14.
Resin, and making same, Synthetic. S. P. Burke. 1,814,124; July 14.
Respirator. H. S. Cover. 1,813,915; July 14.
Retainer for the balls of ball bearings. H. Wickland. 1,814,993; July 14.
Retort, Carbonizing or like. C. Turner. 1,814,982; July 14.
Ribbon frame. C. W. Green. 1,815,026; July 14.
Ring. H. Cedar. 1,814,407; July 14.
Riveting machine. F. H. Rohr. 1,814,632; July 14.
Riving machine. E. Miller. 1,814,726; July 14.
Roof and floor construction. E. C. Hoge. 1,814,387; July 14.
Roofing or siding strip, Composition. S. H. Ralph. Des. 84,668; July 14.
Rotarian. N. W., P., and G. E. Graves. 1,814,213; July 14.
Rotary drill bit. C. A. Dean. 1,814,296; July 14.
Rotating Articles, Apparatus for. G. L. Rock. 1,813,958; July 14.
Rubber, Production of. H. Tochtermann and C. Heuck. 1,814,420; July 14.
Rubber tire wheel. W. S. Finnell. 1,814,623; July 14.
Ruling machine. H. E. Lindbladh. 1,813,940; July 14.
Safety device. F. Moscato. 1,814,950; July 14.
Safety device for aeroplanes. L. M. Miyasaki. 1,814,325; July 14.
Safety mechanism for cranes. R. Z. Hopkins and G. T. Davey. 1,814,599; July 14.
Sail, mast, and rig for sailing boats and sailing vessels. D. Krugsand. 1,813,937; July 14.
Sash, Track for sliding. F. S. Belger. 1,814,503; July 14.
Saw filer's gauge. I. D. Cantrell. 1,813,989; July 14.
Saw gauge. E. Stauder. 1,814,266; July 14.
Scaffold. C. M. Goodrich. 1,814,688; July 14.
Scale. G. Walker. 1,814,873; July 14.
Scale, Weighing. T. B. Flanagan. 1,814,591; July 14.
Scissors. M. Parker. 1,814,959; July 14.
Score board, Football. A. M. Monroe. 1,814,729; July 14.
Screen: *See*—
Auto window screen. Door and window screen.
Seal. A. P. Stillman. 1,814,773; July 14.
Seal. A. P. Stillman. 1,815,015; July 14.
Seal. F. G. Street. 1,815,016; July 14.
Seal for steam power plants, Water. R. R. Waterman. 1,814,100–1; July 14.
Seal, Hermetic. A. Podel. 1,813,949; July 14.
Sealing construction and expansion joints, Process and apparatus for. G. W. Christians. 1,814,127; July 14.
Sealing device. F. M. Rutten. 1,814,412; July 14.
Sealing ring for cans and pails. C. H. Rollason. 1,815,011; July 14.
Seat: *See*—
Cushion seat.
Seat adjusting means for vehicles. G. Flintermann. 1,814,140; July 14.
Seat for stadiums and the like, Folding. E. I. Thompson. 1,814,497; July 14.
Setting-up mechanism. E. H. Lorenz and J. E. Schroder. 1,815,009; July 14.
Sewing machine. A. B. Fowler. 1,814,550; July 14.
Sewing machine, Lock-stitch shoe. O. L. Lawson. 1,814,562; July 14.
Shade and curtain hanger. A. B. Wendel. 1,814,066; July 14.
Shade, Detachable window. A. Williams. 1,813,980; July 14.
Shade operating device for motor cars. J. V. W. Phillips. 1,814,455; July 14.
Shaft coupling. J. E. Lederman. 1,814,836; July 14.
Shaft positioning device. J. A. Wintroath. 1,814,537; July 14.
Shearing material, Apparatus for. L. Johnson. 1,814,513; July 14.
Shearing of moving materials, Apparatus for controlling the. F. B. Crosby. 1,814,586; July 14.
Shears. L. H. Botts. 1,814,821; July 14.
Sheet laying-on device. A. Buttner. 1,814,021; July 14.
Sheet material and making the same. J. C. Edger. 1,814,133; July 14.
Sheet materials, Method of and apparatus for separating. H. S. Alexander, F. B. Pfeiffer, and J. W. White. 1,815,020; July 14.
Shelf, tumbler, soap, toothbrush and jewel cup. Combination. J. R. Smith, sr. Des. 84,662; July 14.
Shelving, Metal. S. Goldberg. 1,814,084; July 14.
Shelving structure. E. Mically. 1,814,090–1; July 14.
Shield for piling bricks. E. J. Scharlo. 1,814,968; July 14.
Shield, Plant. Z. Sato. 1,814,339; July 14.
Shingle clip. A. Myhre. 1,814,405; July 14.
Shingle cutter. S. N. Gundlach. 1,814,151; July 14.
Shock absorber. W. W. Riedel. 1,814,264; July 14.
Shoe. V. De Liso. Des. 84,627; July 14.
Shoe. F. W. Ellington. Des. 84,629–31; July 14.

Shoe. C. Morali. Des. 84,645; July 14.
Shoe, boot, and the like. G. E. Karlson. 1,814,514; July 14.
Shoe horn. H. L. Bradley. Des. 84,620; July 14.
Shoe uppers, Manufacture of. A. Perugia. 1,814,260; July 14.
Shoe, Woman's. S. Troy. Des. 84,664; July 14.
Shovel handle. T. G. Pestak. 1,814,186; July 14.
Shoveling machine. W. Whaley. 1,814,067; July 14.
Sieve. E. Heyman. 1,814,552; July 14.
Sieves, Making mesh. R. Herrman. 1,814,598; July 14.
Sign. J. F. Winer and N. N. Mayo. 1,814,995; July 14.
Sign, Advertising. R. B. Bencker and B. E. Howden. Des. 84,618–19; July 14.
Sign, Composite character. L. L. Rustad. Des. 84,653; July 14.
Sign, Electric. E. G. Goddard. 1,814,379; July 14.
Sign, Illuminated. J. E. Gross. 1,814,150; July 14.
Sign, Illuminated tube. C. F. Covey. 1,814,831; July 14.
Signs, Controller for electrical. T. J. Main. 1,814,943; July 14.
Signal: *See*—
Vehicle signal.
Signal indicator, Traffic. A. L. Cowdrey. 1,814,667; July 14.
Signal system, Busy trunk line. E. A. Demonet and P. S. Copenhaver. 1,814,899; July 14.
Signaling and indicating apparatus. A. Becq. 1,814,465; July 14.
Signaling apparatus, Aircraft. M. Castro. 1,814,786; July 14.
Signaling device for automobiles. G. Duval. 1,814,301; July 14.
Signaling system. W. H. T. Holden. 1,814,158; July 14.
Signaling system. J. C. Schelling. 1,813,961; July 14.
Signals, Detection of frequency modulated. C. W. Hansell. 1,813,922; July 14.
Skate roll. J. E. Marshall. 1,813,944; July 14.
Skirt retaining device. C. R. Robinson. 1,814,856; July 14.
Slag, Method and apparatus for treating. J. M. Hughes and R. C. Butler. 1,814,808; July 14.
Sleeve and producing the same, Cylinder. C. H. Swartz. 1,814,267; July 14.
Sleeve valve engine. W. A. Fredrick. 1,814,746; July 14.
Slub catcher. R. Webber. 1,814,358; July 14.
Smoke cleaner. J. Benkert and E. Straub. 1,814,582; July 14.
Smoker's outfit. N. P. Hrisulakis. 1,814,929; July 14.
Snow remover, Rotary. G. M. Hineline. 1,814,695; July 14.
Socket, Electric. H. E. Slade and J. Gehring. 1,815,013; July 14.
Sofa capable of being converted into a bed. M. L. A. H. Dauphin. 1,814,505; July 14.
Soil, Treating. C. F. Irish. 1,814,446; July 14.
Soldering iron. E. Jacobson. 1,814,041; July 14.
Sole for shoes, Rubber. A. L. Murnay. Des. 84,646; July 14.
Sound amplifying device. E. F. Cassel. 1,814,022; July 14.
Sound, Apparatus for producing. E. C. Guedon. 1,814,798; July 14.
Sound instrument. H. A. Myers. 1,814,730; July 14.
Sound, Recording and reproducing. A. F. and D. A. Pollock. 1,815,010; July 14.
Sound recording and reproducing apparatus. J. F. Sees. 1,814,861; July 14.
Sound waves, Transmission of. C. A. Linton. 1,814,603; July 14.
Spark plug. E. F. Wittner. 1,814,997; July 14.
Speed control, Automatic. E. H. Windle. 1,814,577; July 14.
Speed drive mechanism, Variable. T. Saki. 1,814,096; July 14.
Speed mechanism, Variable. J. M. Barr. 1,814,424; July 14.
Spinach, etc., washing machine. H. Robinson. 1,814,964; July 14.
Spindle. Spinning. F. Eisenlohr and C. Uebelen. 1,814,743; July 14.
Splitting machine. W. C. Baxter. 1,814,111; July 14.
Spoke, Wire. E. W. Stoler. 1,814,531; July 14.
Sponge rubber. Cutting. W. Vernet. 1,814,197; July 14.
Spoon, Cocktail. R. E. Pellow. Des. 84,647; July 14.
Spout, Dock. E. F. Carter. 1,814,618; July 14.
Spout, Pouring. P. H. Flautt. 1,814,083; July 14.
Spouts, Turnhead for dock. E. F. Carter. 1,814,619; July 14.
Spray attachment for faucets. L. J. Armstrong. 1,814,020; July 14.
Spring: *See*—
Laminated spring.
Sprinkler head or nozzle for filter beds. H. Beddoes. 1,814,112; July 14.
Stairway, Disappearing wall. F. E. Bessler. 1,814,889; July 14.
Stake box. G. H. Miller. 1,814,521; July 14.
Stand: *See*—
Floor stand. Railway switch stand.
Starter switch, Dash spring. C. A. Kelly. 1,814,558; July 14.
Starting and lighting system, Engine. O. S. Brown. 1,814,617; July 14.
Starting apparatus, Engine. W. A. Chryst. 1,814,241; July 14.
Starting system for internal combustion engines. H. T. Herr. 1,814,802; July 14.
Steam generator. K. A. Mayr. 1,814,605; July 14.
Steam generator, Water tube. E. W. Jones. 1,814,447; July 14.
Steel, Purifying. H. A. Bost and E. C. Hummel. 1,814,584; July 14.
Steering and braking device. J. W. Tatter. 1,814,576; July 14.
Still, Cracking. W. T. Hancock. 1,814,249; July 14.
Stones, Improving certain physical properties of synthetic precious. M. Jaeger and H. Espig. 1,814,219; July 14.
Stop mechanism. W. A. Dusenbury. 1,814,081; July 14.
Stop, Wheel. E. A. Leary. 1,814,253; July 14.
Stopper: *See*—
Conduit stopper. Container stopper.
Stopper for pipe lines. A. Fennema. 1,814,677; July 14.
Stub axle puller. E. L. Chapman. 1,814,368; July 14.
Submarine, Rescue. L. Y. Spear. 1,814,642; July 14.
Submarine, Salvage and rescue. H. E. Griesaber. 1,814,689; July 14.
Sucker rod joint. F. B. Vaughn. 1,814,271; July 14.
Sucker rod or tubing elevator. B. G. Weston. 1,814,990; July 14.
Suction roll. R. J. Marx. 1,814,050; July 14.
Suit, Bathing. A. A. Neven. 1,814,451; July 14.
Suit, Life saving. G. Sferrazza. 1,813,965; July 14.
Sulphur, Mining. B. Andrews. 1,814,539; July 14.
Superheater. H. J. Kerr and J. Fletcher. 1,814,707; July 14.
Superheaters, Recovering. L. H. Duschak. 1,814,300; July 14.
Support for rail joints, Plate. R. Faries. 1,814,548; July 14.
Support, Wire. C. H. Klein. 1,813,933; July 14.
Supporter, Lady's hose. A. O. Hebner. 1,814,511; July 14.
Surface conditioner. H. Egli. 1,814,028; July 14.
Sweatband. S. J. Palinkos. 1,814,057; July 14.
Switch: *See*—
Automatic rewind switch. Electric switch.
Cut-out switch. Ignition switch.
Electric snap switch. Starter switch.
Switch. C. H. H. Rodanet. 1,814,337; July 14.
Switch apparatus, Railway. W. M. Gray. 1,814,307; July 14.
Switch apparatus, Railway. J. T. McGarry. 1,814,328; July 14.
Switchboard signal system. G. W. Janson. 1,814,931; July 14.
Switch box. J. Morgenstern. 1,814,449; July 14.
Switch cam, Automatic. J. Lucas. 1,814,757; July 14.
Table: *See*—
Folding table. Operating table.
Table and cabinet, Combination. J. J. Conners. Des. 84,667; July 14.
Tag printing machine. G. W. Henry, jr. 1,814,923; July 14.
Talking machine, Portable. H. I. Küchenmeister. 1,814,047; July 14.
Tank for pressure burners, Detachable. F. E. White and A. Ruttiman. 1,814,068; July 14.
Tank trailer, Drop frame. F. G. Thwaits. 1,814,098; July 14.
Telegraph apparatus, Type printing. H. Wüsteney. 1,814,236; July 14.
Telegraph system for dividing received intelligence into groups. R. F. Dirkes. 1,814,902; July 14.
Telephone repeater circuit arrangement. J. Urmston and F. S. Smith. 1,814,775; July 14.
Telephone system. H. M. Friendly. 1,814,794; July 14.
Telephone system. J. W. Gooderham. 1,814,248; July 14.
Telephone transmitter silencer. J. E. Steinberg. 1,814,458; July 14.
Television. J. B. Felshin. 1,814,137; July 14.
Television apparatus. L. Oskow. 1,814,181; July 14.
Television receiving apparatus. V. G. Gustafson. 1,814,882; July 14.
Tellurian. H. M. Vanderhider. 1,814,984; July 14.
Temperature relief device. J. A. Maynard. 1,814,722; July 14.
Tender frame. C. C. C. Burkhardt. 1,814,893; July 14.
Tetrahedron for jetties and current deflectors, Skeleton. D. F. Sheldon. 1,814,405; July 14.
Textile machinery, Beam supporting means for. W. H. Bahan. 1,814,780; July 14.
Textile material and process of making. F. G. Murch. 1,815,027; July 14.
Thermionic device. A. M. Nicolson. 1,814,827; July 14.
Thermostatic control for shower heads. R. Hetherington. 1,814,512; July 14.
Thermostatic fuel controlling device. H. W. O'Dowd. 1,814,491; July 14.
Thorium and making the same, Ductile. J. W. Marden and H. C. Rentschler. 1,814,719; July 14.
Thrasher. P. Quintus and C. Quintus. 1,814,494; July 14.
Thrasher, Grain. J. Johnson. 1,814,755; July 14.
Thrashing machine. R. G. Fleming. 1,814,305; July 14.
Thread cutter. R. B. Tresner. 1,814,196; July 14.
Tie: *See*—
Railroad tie.
Tie and rail fastening, Railway. M. H. Loughridge. 1,813,941; July 14.
Tie banger. V. P. Kennard. 1,813,982; July 14.

Tie scupper. A. G. Leake. 1,814,715; July 14.
Tile, Imitation roofing. V. H. Street. 1,814,347; July 14.
Tile, Roofing. W. A. Sutherland. 1,814,532; July 14.
Time intervals, Method and apparatus for measuring small. E. B. Smith. 1,813,969; July 14.
Tire, Automobile. I. J. Shelton and C. V. Jacobi. 1,814,340; July 14.
Tires, Apparatus for making cushion. E. and G. Nelson. 1,814,731; July 14.
Toaster, Double electric. C. W. Mabey. 1,814,942; July 14.
Toilet accessory. W. Friedman. 1,814,747–9; July 14.
Toilet article. J. F. Connor. 1,814,433; July 14.
Tongs, Rail. F. F. Zavatkay. 1,814,107; July 14.
Tool attachment for lathes. W. L. Schellenbach. 1,815,012; July 14.
Tool carrying head. C. B. Cole and O. L. Lewis. 1,814,079; July 14.
Tool, Cutting. C. Neubauer. 1,814,703; July 14.
Tool, Expanding and contracting. J. Boyer. 1,814,892; July 14.
Tool, Finishing. E. Hope. 1,814,553; July 14.
Tool for jars, Gripping. S. Vitall. 1,814,014; July 14.
Tool, Hand. W. A. Bernard. 1,814,113; July 14.
Tool, Hand. J. C. De Laney. 1,814,435; July 14.
Tool, Self tamping aeration. C. F. Irish. 1,814,445; July 14.
Tool supporting arrangement. F. M. Williamson. 1,814,274; July 14.
Tool, Taper boring. F. S. Hartwell. 1,814,922; July 14.
Toothpick dispenser, Sanitary. G. A. Oddsen. 1,814,955; July 14.
Top for smoking stands. Z. Chaplick. Des. 84,624; July 14.
Torch for orchard heaters and the like, Lighting. W. C. Scheu. 1,813,962; July 14.
Torpedo course calculator. A. D. Trenor. 1,814,462; July 14.
Toy. C. C. Blackmore. 1,813,985; July 14.
Toy. S. Gordon. Des. 84,637; July 14.
Toy. W. E. Sperry. 1,814,230; July 14.
Toy aeroplane. A. F. Wolff. 1,814,104–5; July 14.
Toy and securing means therefor. M. J. Napier, Akron, Ohio. 1,814,055; July 14.
Toy sternwheel steamboat, Miniature. W. C. Leiber. 1,814,837; July 14.
Tractor. W. F. Winstead. 1,814,996; July 14.
Traffic controlling apparatus, Railway. G. W. Baughman. 1,814,581; July 14.
Train control. C. S. Williams. 1,814,612; July 14.
Train indicating apparatus. E. E. Parrill. 1,814,406; July 14.
Transfer mechanism, Imprint. A. Hormel. 1,814,806; July 14.
Transformer, Electric. J. Jonas. 1,814,557; July 14.
Transmission, Friction. C. Gross. 1,814,381; July 14.
Transmission, Variable speed. R. S. Jacobsen. 1,814,165; July 14.
Transmission, Vehicle. A. B. Gilbert. 1,814,442; July 14.
Trap for burglar alarms, Floor. H. Loeding. 1,814,255; July 14.
Tray and washboard, Combination laundry. M. W. Huber. 1,814,578; July 14.
Tray-like support. E. A. Leary. 1,814,252; July 14.
Tree band. E. H. Siegler. 1,814,414; July 14.
Trimmer: *See*—
Lawn and hedge trimmer.
Trimming machine, Stereotype plate. H. A. W. Wood. 1,814,578; July 14.
Trinitrotoluene, Production of. F. Thomas. 1,814,980; July 14.
Tripod foot. A. Potigian. 1,814,334; July 14.
Trolley frog. R. H. McCafferty. 1,814,004; July 14.
Trolley head for electric traction. C. C. G. Taylor. 1,814,349; July 14.
Trophy, Athletic. A. J. Flauder. Des. 84,634; July 14.
Trough, Stock watering. S. G. Ellis. 1,814,674; July 14.
Truck. J. S. Gullborg. 1,814,309; July 14.
Truck, Lifting. W. Stuebing, jr. 1,814,077; July 14.
Truck, Locomotive. E. O. Elliott. 1,814,909; July 14.
Truck, Motor. C. H. Schlundt. 1,814,635; July 14.
Tube: *See*—
Hearing tube.
Tube cleaner. C. M. Griffin. 1,814,752; July 14.
Tube construction. W. L. Krahl. 1,814,316; July 14.
Tube winding machine. C. Hollmann. 1,814,697; July 14.
Tubing and forming the same. S. W. Taylor. 1,813,971; July 14.
Tubing tensioning device. J. A. Wintroath. 1,814,538; July 14.
Tubular fabric. D. H. Murphy. 1,814,223; July 14.
Tubular fabric, Woven. D. H. Murphy. 1,814,224; July 14.
Tumbler. D. Fisher. Des. 84,633; July 14.
Tunnel apparatus. R. V. Proctor. 1,814,852; July 14.
Turbine and condenser arrangement, Compound. F. Hodgkinson. 1,814,628; July 14.
Turbine, Elastic fluid. H. J. Hanzlik. 1,814,629; July 14.
Turbine support. R. C. Allen. 1,814,626–7; July 14.
2-amino-beta-phenyl-anthraquinone by ring closure, Preparation of. P. H. Groggins. 1,814,149; July 14.
2-halogen-beta-phenyl-anthraquinone, Preparation of. P. H. Groggins. 1,814,147; July 14.
Typewriter attachment. G. C. Frantz. 1,814,142; July 14.
Uranium, Preparation of ductile. J. W. Marden. 1,814,721; July 14.
Utensil. J. L. Bennett. 1,814,784; July 14.
Vacuum device. A. W. Franklin. 1,814,681; July 14.
Vacuum motor. E. Dobrowsky. 1,814,903; July 14.
Vacuum tubes, Device for evacuating. G. T. Thurneyssen. 1,813,973; July 14.
Valve. G. J. Hachmeister. 1,814,691; July 14.
Valve. S. W. Orr. 1,814,330; July 14.
Valve. O. F. Russell. 1,814,411; July 14.
Valve actuating and controlling mechanism. A. C. Estep. 1,814,622; July 14.
Valve actuating mechanism. O. J. Kay. 1,814,045; July 14.
Valve and making same, Sleeve. A. M. Niven. 1,814,764; July 14.
Valve, Air. N. Lombard. 1,814,565; July 14.
Valve, Automatic. H. E. Dobson. 1,814,904; July 14.
Valve, Back pressure. J. C. Fortune. 1,814,549; July 14.
Valve closure. M. C. Tetley. 1,814,460; July 14.
Valve, Cut off. J. W. Woodruff. 1,813,982; July 14.
Valve, Emergency. F. A. Heimbold. 1,814,157; July 14.
Valve for internal combustion engines, Rotary. C. F. Hawk. 1,814,036; July 14.
Valve, Fusible link controlled. G. B. Pickop. 1,814,526; July 14.
Valve, Multiple control. E. Dugan. 1,814,907; July 14.
Valve, Multiple port. J. C. Brown and H. W. Bohrman. 1,814,121; July 14.
Valve operating mechanism, Throttle. J. G. Blunt and R. W. Clifford. 1,814,074; July 14.
Valve, Poppet. H. Glaenzer. 1,814,918; July 14.
Valve, Pressure operated sand blast. G. A. Boesger. 1,814,616; July 14.
Valve, Regulating. P. Spence. 1,814,530; July 14.
Valve, Sleeve. A. M. Niven. 1,814,765; July 14.
Valve structure. N. L. Mochel. 1,814,762; July 14.
Valve, Telemotor operated liquid discharge and admission. J. Wardle. 1,813,976; July 14.
Valve, Toilet flush. R. H. Marchant and A. E. Jurs. 1,814,396; July 14.
Valves and valve controlled means for operating gates. L. B. Schuh and C. J. Bailey. 1,814,608; July 14.
Vanadium, Preparation of ductile. J. W. Marden and M. N. Rich. 1,814,720; July 14.
Vane for shock absorbers. E. L. Beecher. 1,815,003; July 14.
Vanity case. W. T. Parkin. 1,814,737; July 14.
Vapor electric apparatus. D. C. Prince. 1,814,850; July 14.
Vaporizer. E. R. Godward. 1,814,686; July 14.
Vegetable fibers, Treating. T. P. Haughey. 1,814,155; July 14.
Vehicle body. A. J. Slade. 1,814,640; July 14.
Vehicle, Railroad. C. W. Todd. 1,814,099; July 14.
Vehicle signal. E. B. Thomas. 1,814,233; July 14.
Vehicle towing device. W. J. Gelb. 1,814,912; July 14.
Vehicle wheel. J. H. Wagenhorst. 1,814,198; July 14.
Vehicles, Attachment for motor. C. E. Heydon, jr. 1,814,039; July 14.
Vehicles, Controlling device for motor. J. L. Becker. 1,814,426; July 14.
Vending machine. H. Giles. 1,814,795; July 14.
Vending machine. A. A. Knee. 1,813,934; July 14.
Vending machine for bulk edibles. A. A. Knee. 1,813,935; July 14.
Ventilator: *See*—
Window ventilator.
Ventilator for milk cans. L. J. Schubert. 1,813,964; July 14.
Vermin destroying material, Making. W. E. Grove. 1,814,471; July 14.
Vibratory machine. R. T. Newton. 1,814,606; July 14.
Viscose, Manufacture of. G. W. Blanco and C. Henningsen. 1,814,542–3; July 14.
Viscosity reducer. S. Bramley-Moore. 1,814,400; July 14.
Vulcanization of rubber and similar materials and products obtained thereby, Controlling the. S. M. Cadwell. 1,814,286–8; July 14.
Wall bracket or article of similar nature. C. Shulman. Des. 84,660; July 14.
Wall construction. A. Winget. 1,814,202; July 14.
Wardrobe case, Foldable. J. Ritter, jr. 1,814,336; July 14.
Wardrobe case with foldable garment supports. J. Ritter, jr. 1,813,955; July 14.
Washer. L. J. Barwood. 1,814,502; July 14.
Washing machine. A. H. Labisky and O. E. Zahn. 1,814,714; July 14.
Washing machine. P. J. McCormick. 1,814,724; July 14.
Watch, Self winding. M. Reiner. 1,814,187; July 14.
Water heater, Electric. R. W. Linville. 1,814,319; July 14.
Water resistant, animal protein adhesive, and the product thereof, Making a. H. F. Rippey, C. N. Cone, G. Davidson, I. F. Laucks, and H. P. Banks. 1,814,768; July 14.
Water supply system, Deep well. A. Penn. 1,814,454; July 14.
Weeder. C. M. Hartwell. 1,814,216; July 14.
Weeder and cultivator, Combined. W. J. Free. 1,814,029; July 14.
Weeder attachment. J. Murphy. 1,814,404; July 14.

Weight, Counterbalance. N. Stevelman. 1,814,610; July 14.
Well appliance. J. W. Heeter. 1,814,800; July 14.
Wheel: *See*—
Demountable wheel. Rubber tire wheel.
Elastic wheel. Vehicle wheel.
Wheel and holder, Grinding. H. C. Beach. 1,814,782; July 14.
Winding and constructing the same. R. B. George. 1,813,994; July 14.
Winding device for hair wavers. A. G. Borden. 1,814,116; July 14.
Window. L. M. Caldwell. 1,814,289; July 14.
Window bracket. C. V. Evans. 1,814,793; July 14.
Window construction, Weatherproof casement. J. Kubelka. 1,814,936; July 14.
Window, Swinging sliding. M. Hevesi and R. Metzger. 1,814,753; July 14.
Window ventilator. H. P. Fisher. 1,814,590; July 14.
Windshield protector. C. E. Hartman. 1,814,034; July 14.
Windshield, Vehicle. A. T. Potter. 1,814,261; July 14.
Wiper, Oil indicator. W. E. Burkhardt. 1,814,075; July 14.
Wiper or cleaner for the dandy rolls of paper making machines. P. S. Sinclair. 1,814,864; July 14.
Wiper, Windshield. S. I. Kelley. 1,814,934; July 14.
Wire rope clamp. G. J. Keen. 1,814,933; July 14.
Wire tying machine. J. A. Rietmann and A. Radics. 1,814,188; July 14.
Wood joining. C. C. Jensen. 1,814,702; July 14.
Wood pulp, Manufacture of ground. A. R. Chambers. 1,813,988; July 14.
Wooden building strip and making same. M. L. Caton. 1,814,291; July 14.
Wrapping and banding machine. G. I. Hohl. 1,814,690; July 14.
Wrapping machine. A. S. Kux. 1,814,166; July 14.
Wrapping machine. H. E. Townsend. 1,813,974; July 14.
Wrench of yielding and adjustable structure. R. L. Cairncross and G. H. Goodell. 1,814,544; July 14.
Wringer: *See*—
Mop wringer.
Wringer with lever attachment, Mop. S. Schulman. 1,814,413; July 14.
Yarn and producing same, Cordage. J. A. Palmer. 1,814,958; July 14.
Yeast, Manufacturing. C. N. Frey, A. Schultz, and A. P. Harrison. 1,814,210; July 14.
Yellowing of materials with age, Reduction of. W. O. Snelling. 1,814,344; July 14.

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CLASSIFICATION OF PATENTS

ISSUED JULY 14, 1931

NOTE.—First number—class, second number—subclass, third number—patent number

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169— 46: 1,814,647
170— 163: 1,814,595
188: 1,814,709
176: 1,814,175
171— 95: 1,814,278
97: 1,813,929
1,814,684
118: 1,814,810
1,814,860
223: 1,814,061
172— 86: 1,814,945
120: 1,814,237
179: 1,814,015
1,814,799
230: 1,814,865
279: 1,814,243
249: 1,814,156
264: 1,814,102
266: 1,814,384
324: 1,815,013
174— 60: 1,813,902
1,814,791
175— 41: 1,814,533
183: 1,813,969
1,814,898
204: 1,814,006
1,814,509
1,814,869
315: 1,814,174
338: 1,814,329
339: 1,814,798
344: 1,814,563
356: 1,814,557
359: 1,813,994
361: 1,813,906
363: 1,814,063
176— 2: 1,813,973
72: 1,814,321
124: 1,814,499
177— 314: 1,814,255
351: 1,814,842
352: 1,814,786
373: 1,814,524
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187— 29: 1,814,501
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95: 1,814,610
188— 60: 1,814,841
77: 1,814,574
88: 1,814,264
89: 1,815,003
99: 1,814,666
152: 1,814,535
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242: 1,814,778
189— 46: 1,814,647
69: 1,814,936
190— 41: 1,813,955
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191— 38: 1,814,004
49: 1,814,448
60: 1,814,249
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114: 1,814,896
125: 1,814,061
193— 3: 1,814,618
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194— 97: 1,813,977
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101: 1,814,522
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196— 4: 1,814,298
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49: 1,814,042
65: 1,814,021
76: 1,814,989
122: 1,814,249
137: 1,814,000
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20: 1,814,131
33: 1,815,009
216: 1,814,171
219: 1,814,683
220: 1,814,277
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28: 1,814,943
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52: 1,814,739
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59: 1,814,245
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67: 1,814,777
81: 1,814,235
82: 1,814,246
87: 1,814,807
107: 1,814,826
135: R. 18,128
150: 1,814,847
159: 1,814,558
201— 76: 1,814,583
202— 19: 1,814,463
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215: 1,814,982
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166: 1,814,434
292: 1,814,126
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123: 1,814,692
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135: 1,814,084
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136: 1,814,090
167: 1,813,917
185: 1,814,998
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125: 1,814,769
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38: 1,814,135
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47: 1,814,141
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35: 1,814,103
39: 1,814,319
43: 1,814,754
45: 1,814,940
47: 1,814,225
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223— 18.6: 1,814,653
224— 26: 1,814,887
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226— 18: 1,813,993
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229— 5.5: 1,814,671
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22: 1,814,561
53: 1,814,685
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78: 1,814,773
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95: 1,814,120
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41: 1,814,926
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17: 1,814,846
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40: 1,814,223
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248— 1: 1,814,875
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280— 5: 1,814,008
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299— 17: 1,814,953
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301— 6: 1,814,198
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201: 1,814,993
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228: 1,814,743
312— 67: 1,814,795
74: 1,813,934
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79: 1,814,955

U. S. GOVERNMENT PRINTING OFFICE: 1931

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Alexander, John A., New York, N. Y. Radio and wireless television instruments, loud speakers, radio tubes, etc. 285,249; July 21; Serial No. 307,245; published May 5, 1931. Class 21.

Aluminum Company of America, Pittsburgh, Pa. Aluminum cable, steel reinforced aluminum cable, and condenser blades. 285,250–1; July 21; Serial Nos. 307,573–4; published May 5, 1931. Class 21.

American Girl Products Co., The. (See Statter, Humphrey, jr.)

Baker & Company, Inc., Newark, N. J. Eyeglass frames. 285,333; July 21. Class 26.

Baker-Vawter Company, Chicago, Ill., to Remington Rand Inc., Buffalo, N. Y., successor. Blank-books, loose sheets, and certain named stationery supplies. 36,592; renewed June 18, 1931.

Barkes, W. E., Products Co., Elkhart, Ind. Horseradish. 285,322; July 21. Class 46.

Barteldes, Armin, Denver, Colo. Dandelion killer. 285,244; July 21; Serial No. 311,593; published May 5, 1931. Class 6.

Best, Richard, Pencil Company, Inc., New York, N. Y. Lead pencils. 285,321; July 21. Class 37.

Betts & Mumpeton Inc., New York, N. Y. Toilet soaps. 285,229; July 21; Serial No. 284,559; published July 16, 1929. Class 4.

Bohn Aluminum & Brass Corporation, Detroit, Mich. Sink fixtures. 285,232; July 21; Serial No. 296,388; published May 5, 1931. Class 13.

Bonide Chemical Co. Inc., Utica, N. Y. Ointment and repellent. 285,277; July 21; Serial No. 312,408; published May 5, 1931. Class 6.

Brooklyn Elevator & Milling Company, New York, N. Y., to Brooklyn Elevator & Milling Company, Jersey City, N. J. Wheat flour, stock and poultry feed. 84,078; renewed Nov. 7, 1931.

Broome County Golden Guernsey Milk Co., Inc., Binghamton, N. Y. Milk. 285,334; July 21. Class 46.

Bruckner's, Albert, Sons, Jersey City, N. J. Berets, tam-o-shanters, hats, and caps. 285,335; July 21. Class 39.

Brunning, Charles, Company, Inc., New York, N. Y. Photo prints, photostats, and photographic reproductions. 285,210; July 21; Serial No. 311,719; published May 5, 1931. Class 38.

Butler-Kohaus, Inc., St. Louis, Mo. Incandescent electric lamp bulbs. 285,223; July 21; Serial No. 311,227; published May 5, 1931. Class 21.

California Wine Association, assignor to Fruit Industries, Limited, San Francisco, Calif. Wine. 81,780; renewed May 9, 1931.

California Wine Association, assignor to Fruit Industries, Limited, San Francisco, Calif. Hock-type wine. 81,781; renewed May 9, 1931.

California Wine Association, The, assignor to Fruit Industries, Limited, San Francisco, Calif. Claret wine. 82,960; renewed Aug. 8, 1931.

California Wine Association, assignor to Fruit Industries, Limited, San Francisco, Calif. Wine, pure California port. 82,961; renewed Aug. 8, 1931.

Chandler and Rudd Company, Cleveland, Ohio. Candy. 82,415; renewed June 27, 1931.

Chatfield Manufacturing Company, The, Cincinnati, Ohio, assignor to The Flintkote Company, Boston, Mass. Roofing paper and roofing felt. 82,572; renewed July 11, 1931.

Chatfield Paper Corporation, The, Cincinnati, Ohio. Butchers' wrapping paper. 285,298; July 21; Serial No. 312,411; published May 5, 1931. Class 37.

Choate, H., & Company, Winona, Minn. Women's wearing apparel. 285,331; July 21. Class 39.

Cliquot Club Bottling & Extract Co. to Cliquot Club Company, Millis, Mass., successor. Sarsaparilla. 36,450; renewed May 21, 1931.

Closgard Wardrobe Company, Inc., The, South Washington, Va. Wardrobe bags. 285,311; July 21. Class 2.

Cohen, Goldman & Co. Inc., New York, N. Y. Outer garments, underwear, shirts, etc. 285,299; July 21; Serial No. 312,415; published May 5, 1931. Class 39.

Cohen, Joseph H., doing business as The Perfection Motor Products Company, Bridgeport, Conn. Electric cigar lighters. 285,305; July 21. Class 21.

Cohn & Rosenberger, Inc., New York, N. Y. Pearls, necklaces, bracelets, etc. 285,209; July 21; Serial No. 311,469; published May 5, 1931. Class 28.

Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 285,243; July 21; Serial No. 311,513; published May 5, 1931. Class 4.

Colgate-Palmolive-Peet Company, Chicago, Ill. Antiseptic and germicide. 285,260; July 21; Serial No. 310,556; published May 5, 1931. Class 6.

Colorado Fuel and Iron Company, The, Denver, Colo. Nails, tacks, brads, and staples. 285,265; July 21; Serial No. 303,240; published May 5, 1931. Class 13.

Commercial Camera Co., by change of name to Photostat Corporation, Providence, R. I. Cameras and photographic developing apparatus. 83,479; renewed Sept. 19, 1931.

Compañia Ron Baccardi, S. A., Santiago, Cuba. Rum. 285,308; July 21. Class 49.

Connell, Albert E., doing business as The Daker Chemical Company. Therapeutic solutions. 285,267; July 21; Serial No. 311,826; published May 5, 1931. Class 6.

Consolidated Industries, Inc. (See Illinois Sewing Machine Company.)

Continental Oil Company, Ponca City, Okla. Lubricating oil. 285,216; July 21; Serial No. 310,107; published May 5, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating oil. 285,217; July 21; Serial No. 310,104; published May 5, 1931. Class 15.

Crete Mills, The, Crete, Nebr. Hog food and poultry foods, chick mash, etc. 285,227; July 21; Serial No. 235,252; published Feb. 7, 1928. Class 46.

Crowell Publishing Company, The, New York, N. Y. Magazine. 285,300; July 21; Serial No. 312,418; published May 5, 1931. Class 38.

Curtis Publishing Company, The, Philadelphia, Pa. House organs. 285,282–3; July 21; Serial No. 312,480–1; published May 5, 1931. Class 38.

Daker Chemical Company, The. (See Connell, Albert E.)

Dametz, Max, assignor to Pyramiden-Fliegenfanger-Fabrik Max Dametz m. b. H. Zeitz, Zeitz, Germany. Sticky fly-paper and other fly catching devices. 82,139; renewed June 6, 1931.

David, Herman, doing business as The R. Stern Company, New York, N. Y. Shoes, sandals, and slippers. 285,252; July 21; Serial No. 307,928; published May 5, 1931. Class 39.

Davis & Lawrence Co., New York, N. Y. Remedy for coughs and colds. 82,214; renewed June 13, 1931.

Davis Milling Company, The, St. Joseph, Mo., assignor, by mesne assignments, to The Quaker Oats Company, Chicago, Ill. Self rising flour. 83,966; renewed Oct. 24, 1931.

Deane Plaster Co., The, Yonkers, N. Y. Surgical adhesive plaster. 285,238; July 21; Serial No. 310,718; published May 5, 1931. Class 44.

Delco Radio Corporation, Dayton, Ohio. Radio receiving sets and parts thereof. 285,225; July 21; Serial No. 311,233; published May 5, 1931. Class 21.

Denver Mud Company, Inc., The, Denver, Colo. Cosmetic toilet clay preparation. 285,240; July 21; Serial No. 311,266; published May 5, 1931. Class 6.

Dermay Perfumers, Inc., New York, N. Y. Cleansing tissue papers. 285,289; July 21; Serial No. 312,096; published May 5, 1931. Class 37.

Deutsche Gasgluehlicht-Auer-Gesellschaft mit beschraenkter Haftung, Berlin, Germany. Oxygen inhalation apparatus. 285,254; July 21; Serial No. 308,482; published May 5, 1931. Class 44.

Diener, Richard, Oxnard, Calif. Horticultural growths. 285,324; July 21. Class 1.

Dorco Millinery Company, Chicago, Ill. Ladies' and misses' hats. 285,320; July 21. Class 39.

Doré, Antoinette. (See Modern Tissues Corporation.)

E. A. Laboratories, Inc., Brooklyn, N. Y. Electrically-actuated horns and their adjuncts. 285,302; July 21. Class 21.

Electric Equipment Corporation, The, Davenport, Iowa. Electric appliances. 285,208; July 21; Serial No. 311,372; published May 5, 1931. Class 21.

El Estado Products Company, Seattle, Wash. Face and vanishing creme. 285,234; July 21; Serial No. 298,092; published May 5, 1931. Class 6.

Faultless Manufacturing Company, The. (See Rosenfeld, E. & Co., assignor.)

Flintkote Company, The. (See Chatfield Manufacturing Company, The, assignor.)

Florsheim Shoe Company, The, Chicago, Ill. Boots and shoes. 285,253; July 21; Serial No. 308,158; published Mar. 3, 1931. Class 39.

Foster Chemical Co. (See Gregg, James D.)

Fret Chemical Co., Greensboro, N. C. Preparation for the treatment of disordered conditions of the stomach or bowels, etc. 285,278; July 21; Serial No. 312,423; published May 5, 1931. Class 6.

Fruit Industries, Limited. (See California Wine Association, The, assignor.)

Gardiner Manufacturing Company, Inc., Buffalo, N. Y. Washing solution for fabrics, etc. 285,247; July 21; Serial No. 305,751; published May 5, 1931. Class 4.

Geer, George J., assignor, by mesne assignments, to B. Priestley & Co., Inc., New York, N. Y. Woolen, worsted, silk, etc., piece goods. 83,728; renewed Oct. 10, 1931.

Gilbert & Barker Manufacturing Company, West Springfield, Mass. Oil burners. 285,242; July 21; Serial No. 311,475; published May 5, 1931. Class 34.

Glassberg, Jack, doing business as Universal Distributing Co., Newark, N. J. Photographic flash lamps. 285,291; July 21; Serial No. 312,183; published May 5, 1931. Class 21.

Gonzalo Boza & Co. Inc., New York, N. Y. Glazed kid leather. 285,235; July 21; Serial No. 298,807; published Apr. 28, 1931. Class 1.

Goodman, H., & Sons, Inc., New York, N. Y. Nonelectrical hair wavers, hair curlers, and hair pins. 285,287; July 21; Serial No. 311,096; published May 5, 1931. Class 40.

Goodrich Electric Company, Chicago, Ill. Unitary electric lighting fixtures. 285,325; July 21. Class 21.
Gordon Corporation, Ltd., Berkeley, Calif. Soap, washing powder, and other cleaning preparations. 285,262; July 21; Serial No. 310,993; published May 5, 1931. Class 4.
Gotham Silk Hosiery Company, Inc. (See Oppenheim, Oberndorf & Co., assignor.)
Gregg, James D., doing business as Foster Chemical Co., Liberty, N. C. Powder for use in the treatment of headache, etc. 285,279; July 21; Serial No. 312,428; published May 5, 1931. Class 6.
Grigsby-Grunow Company. (See Majestic Specialties Mfg. Co., assignor.)
Hahn, Wm., & Company, Washington, D. C. Shoes. 285,222; July 21; Serial No. 310,940; published May 5, 1931. Class 39.
Hall Milling Company. (See Kehlor Flour Mills Company, assignor.)
Harbin, Gladys G., Atlanta, Ga. Dropsy medicine. 285,281; July 21; Serial No. 312,560; published May 5, 1931. Class 6.
Harris, P. E., & Co. (See Hawk Fish Company.)
Hart Drug Corporation, Miami, Fla. Inhalants. 285,245; July 21; Serial No. 311,727; published May 5, 1931. Class 6.
Hawk Fish Company, by change of name to P. E. Harris & Co., Seattle, Wash. Canned salmon. 82,979–80; renewed Aug. 8, 1931.
Healatoe Laboratory, Harrisburg, Pa. Preparation for the treatment of ringworm. 285,255; July 21; Serial No. 309,521; published Apr. 21, 1931. Class 6.
Herbrand Co., The, Fremont, Ohio. Plier wrenches. 285,332; July 21. Class 23.
Hillyard Chemical Company, St. Joseph, Mo. Porcelain and enamel cleaning compound. 285,263; July 21; Serial No. 310,996; published May 5, 1931. Class 4.
Hochschild, Kohn & Co., Baltimore, Md. Gas ranges. 285,301; July 21. Class 34.
Homeyard, Maria L. K., doing business as The Mother Job Cure Laboratory and Liquifruta Laboratories, London, England. Proprietary cough medicine for human use. 285,250; July 21; Serial No. 309,618; published May 5, 1931. Class 6.
Houghton, E. F., & Co., Philadelphia, Pa. Chemical compound. 84,233–4; renewed Nov. 21, 1931.
Hudnut, Richard, New York, N. Y. Toilet preparations. 82/889; renewed Aug. 1, 1931.
Hunnewell Soap Company, The, Cincinnati, Ohio. Cleaning and scouring soaps. 285,307; July 21. Class 4.
Hurley, Horace O., to H. O. Hurley Company, Louisville, Ky., successor. Medicinal remedy. 82,331; renewed June 20, 1931.
I. G. Farbenindustrie Aktiengesellschaft Frankfort-on-the-Main, Germany. Stimulant. 285,271; July 21; Serial No. 312,186; published May 5, 1931. Class 6.
Illinois Sewing Machine Company, Chicago, to Consolidated Industries, Inc., Rockford, Ill., successor. Sewing machines. 36,950; renewed Aug. 20, 1931.
Imperial Tobacco Company (of Great Britain and Ireland) Limited. (See Player, John, & Sons Limited, assignor.)
Independent Lock Company, Fitchburg, Mass. Padlocks. 285,266; July 21; Serial No. 311,782; published May 5, 1931. Class 25.
Ironite Company. (See Rauhoff, John M., assignor.)
Isolantite Company of America, Inc., Belleville, N. J., now by change of name Isolantite, Inc. Ceramic insulators. 285,224; July 21; Serial No. 312,230; published May 5, 1931. Class 21.
Jersey-Creme Company, Fort Worth, Tex. Tonic beverage. 82,444; renewed June 27, 1931.
Jomol Petroleum Products, Philadelphia, Pa. Petroleum jelly. 285,274; July 21; Serial No. 312,232; published May 5, 1931. Class 6.
Junkers, Hugo, Dessau, Germany. Automobiles, motor boats, air ships, etc. 285,228; July 21; Serial No. 279,926; published May 5, 1931. Class 19.
Kappa Delta Pi., Tiffin, Ohio. Keys and badges. 285,288; July 21; Serial No. 312,052; published May 5, 1931. Class 28.
Kehlor Flour Mills Company, St. Louis, Mo., and East St. Louis, Ill., assignor to Hall Milling Company, St. Louis, Mo. Wheat flour. 84,008; renewed Oct. 24, 1931.
Key City Packing Co., Port Townsend, assignor, by mesne assignments, to Pacific American Fisheries, South Bellingham, Wash. Canned salmon. 82,800–3; renewed July 25, 1931.
Keystone Watch Case Company, The, Philadelphia, Pa., assignor to Keystone Watch Case Corporation, Riverside, N. J. Watches, watchcases, watch-movements, and parts of each thereof. 82,993; renewed Aug. 28, 1931.
Kom-Fut Arch Support Co., Inc., New York, N. Y. Arch supports. 285,320; July 21. Class 44.
Kresge, S. S., Company Detroit, Mich. Mouth harmonicas. 285,218; July 21; Serial No. 310,591; published May 5, 1931. Class 36.
Kress, S. H., & Co., New York, N. Y. Men's garters. 285,295; July 21; Serial No. 312,344; published May 5, 1931. Class 39.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Foods. 84,323; renewed Nov. 28, 1931.
Laboratoire de Pharmacologie, Inc. (See Vial.)
Lentheric, Incorporated, New York, N. Y. Perfumes, toilet waters, face powders, sachets, etc. 285,257; July 21; Serial No. 310,058; published May 5, 1931. Class 6.
Lewy Chemical Company, The, New York, N. Y. Insecticides. 285,272; July 21; Serial No. 312,189; published May 5, 1931. Class 6.
Lima Cord Sole and Heel Company, The, Lima, Ohio. Soles. 285,219; July 21; Serial No. 310,648; published May 5, 1931. Class 39.
Lima Cord Sole and Heel Company, The, Lima, Ohio. Soles for shoes. 285,220; July 21; Serial No. 310,649; published May 5, 1931. Class 39.
Majestic Specialties Mfg. Co., assignor to Grigsby-Grunow Company, Chicago, Ill. Electric clocks. 285,264; July 21; Serial No. 301,184; published Sept. 9, 1930. Class 27.
Marb-L-Cote, Inc., Chicago, Ill. Wall-coating material. 285,313; July 21. Class 16.
Maybaum Brothers, Inc., New York, N. Y. Pearls and precious stones and articles of jewelry. 285,211; July 21; Serial No. 311,744; published May 5, 1931. Class 28.
Merit Manufacturing Company, by change of name to Merit Clothing Company, Mayfield, Ky. Boys' outer suits, coats, vests, and pants. 84,021; renewed Oct. 31, 1931.
Midway Chemical Company, Chicago, Ill. Polish for furniture. 285,314; July 21. Class 16.
Miller, Campbell E., Butler, Pa. Shoes. 285,294; July 21; Serial No. 312,304; published May 5, 1931. Class 39.
Million Dollar Hosiery Co., New York, N. Y. Hosiery. 285,221; July 21; Serial No. 310,690; published Apr. 21, 1931. Class 39.
Mills Alloys, Inc., Los Angeles, Calif. Welding and brazing rods. 285,230; July 21; Serial No. 291,998; published July 1, 1930. Class 14.
Modern Tissues Corporation, doing business as Antoinette Doré, New York, N. Y. Toilet paper. 285,290; July 21; Serial No. 312,111; published May 5, 1931. Class 37.
Montana Flour Mills Co., Harlowton, to Montana Flour Mills Company, Great Falls, Mont. Wheat flour. 83,505; renewed Sept. 19, 1931.
Moresky, Minnie, New Castle, Pa. Malt syrup. 285,304; July 21. Class 46.
Mother Job Cure Laboratory and Liquifruta Laboratories, The. (See Homeyard, Maria L. K.)
Mountain View Orange and Lemon Growers Association, assignor to Mountain View Fruit Association, Upland, Calif. Oranges and lemons. 84,023; renewed Oct. 31, 1931.
Muratti, B., Sons & Co., Limited, Manchester, assignor, by mesne assignments, to United Kingdom Tobacco Company (1929) Limited, London, England. Smoking tobacco, chewing tobacco, cigars, etc. 37,112–13; renewed Sept. 24, 1931.
Murray and Nickell Manufacturing Company, Chicago, Ill. Henna, quick wave set, and wave set powder compound. 285,273; July 21; Serial No. 312,195; published May 5, 1931. Class 6.
N. V. Oprechte Haarlemmerolie Fabriek. (See Oprechte Haarlemmer Olie Fabriek (Voorheen-onder de firma G. de Koning Tilly.)
National Metal Co., The, to The National Metal Company, Limited, Glasgow, Scotland, successor. Antifriction metals. 37,019; renewed Sept. 3, 1931.
National Petroleum Publishing Company, Cleveland, Ohio. Periodical. 285,212; July 21; Serial No. 311,924; published May 5, 1931. Class 38.
New York Wholesale Grocery Co., Inc., New York, N. Y. Canned grapefruit, corn, etc. 285,315; July 21. Class 46.
Northeastern Company, The, Boston, to The Northeastern Company, Cambridge, Mass. Chemical wood preservative, disinfectant, and insecticide. 84,124; renewed Nov. 7, 1931.
Norwine Coffee Company, St. Louis, Mo. Coffee. 84,187; renewed Nov. 14, 1931.
Novelty Shoe Company, Chicago, Ill. Boots, shoes, and slippers. 285,306; July 21. Class 39.
Oppenheim, Oberndorf & Co., Baltimore, Md., assignor, by mesne assignments, to Gotham Silk Hosiery Company, Inc., New York, N. Y. Shirts. 82,464; renewed June 27, 1931.
Oprechte Haarlemmer Olie Fabriek (Vorheen-onder de firma G. de Koning Tilly) to N. V. Oprechte Haarlemmerolie Fabriek, Haarlem, Netherlands, successor. Haarlem oil. 81,819; renewed May 9, 1931.
O'Sullivan Rubber Company, Lowell, Mass., assignor, by mesne assignments, to O'Sullivan Rubber Company, New York, N. Y. Rubber heels. 83,274; renewed Aug. 29, 1931.
Pacific American Fisheries. (See Key City Packing Co., assignor.)
Papierfabrik Hahnemühle Gesellschaft mit beschränkter Haftung, Relliehausen, near Dassel, to Papierfabrik Hahnemühle, Germany. Filtering paper, filtering pasteboard, and filtering paper blocks. 84,188; renewed Nov. 14,1931.

Parade, Incorporated, Cleveland, Ohio. Magazine. 285,284; July 21; Serial No. 312,663; published May 5, 1931. Class 38.
Pedigo-Weber Shoe Co., St. Louis, Mo. Shoes. 285,330; July 21. Class 39.
Perfection Motor Products Company, The. (See Cohen, Joseph H.)
Photostat Corporation. (See Commercial Camera Co.)
Pioneer Suspender Company, Philadelphia, Pa. Apparel belts, suspenders, braces, etc. 285,213–15; July 21; Serial Nos. 311,971–3; published May 5, 1931. Class 39.
Pioneer Suspender Company, Philadelphia, Pa. Apparel belts, suspenders, braces, etc. 285,286–7; July 21; Serial Nos. 311,974–5; published May 5, 1931. Class 39.
Player, John, & Sons Limited, Nottingham, assignor to The Imperial Tobacco Company (of Great Britain and Ireland) Limited, Bedminster, England. Smoking tobacco, chewing tobacco, and cheroots, etc. 36,975; renewed Aug. 27, 1931.
Player, John, & Sons, Limited, Nottingham, assignor, by mesne assignments, to The Imperial Tobacco Company (of Great Britain and Ireland) Limited, Bedminster, England. Smoking tobacco, cigars, cheroots, etc. 37,159; renewed Oct. 1, 1931.
Player, John, & Sons, Limited, Nottingham, assignor to The Imperial Tobacco Company (of Great Britain and Ireland) Limited, Bedminster, England. Smoking tobacco, cigars, cheroots, etc. 37,350; renewed Nov. 26, 1931.
Postum Cereal Co., Limited, Battle Creek, Mich., assignor, by mesne assignments, to Postum Company, Inc., New York, N. Y. Cereal foods. 82,258; renewed June 13, 1931.
Precision Electrotype Company, San Francisco, Calif. Rubber and brass stamps and brands. 285,281; July 21; Serial No. 292,009; published May 5, 1931. Class 37.
Press Publishing Company, New York, N. Y. Comic strip or section for newspaper publication. 285,297; July 21; Serial No. 312,386; published May 5, 1931. Class 38.
Priestley, B., & Co., Inc. (See Geer, George J., assignor.)
Printz-Biederman Company, The, Cleveland, Ohio. Woolen textile fabrics. 285,316–17; July 21. Class 42.
Pyramiden-Fliegenfanger-Fabrik Max Dametz m. b. H. (See Dametz, Max, assignor.)
Quaker Oats Company, The. (See Davis Milling Company, The, assignor.)
Radbill Oil Company, Philadelphia, Pa. Motor lubricating oils. 285,323; July 21. Class 15.
Rauhoff, John M., assignor to Ironite Company, Chicago, Ill. Composition to be applied to cement and concrete structures. 83,943; renewed Oct. 24, 1931.
Remington Rand Inc. (See Baker-Vawter Company.)
Research Products Corporation, New York, N. Y. Mercury. 285,280; July 21; Serial No. 312,531; published May 5, 1931. Class 6.
Roessler & Hasslacher Chemical Company, The, New York, N. Y. Metal anodes. 285,318; July 21. Class 14.
Rogers Peet Company, New York, N. Y. Hats and caps. 285,270; July 21; Serial No. 311,977; published Apr. 21, 1931. Class 39.
Ronuk, Limited, Portslade, near Brighton, England. Detergent preparations. 285,238; July 21; Serial No. 311,202; published May 5, 1931. Class 4.
Rose Brand Wipers, Inc., New York, N. Y. Polishing cloths. 285,326; July 21. Class 29.
Rosenfeld, E., & Co., assignor, by mesne assignments, to The Faultless Manufacturing Company, Baltimore, Md. Pajamas, night-shirts, negligee and dress shirts. 82,176; renewed June 6, 1931.
Rubel Baking Co., The, Cincinnati, Ohio. Bread. 285,328; July 21. Class 46.
Russak, J., Kosten, Germany, to J. Russak, Fraustadt i. Schles, Germany. Bitters. 83,691; renewed Oct. 3, 1931.
Russo, A., & Co., Chicago, Ill. Macaroni. 285,312; July 21. Class 46.
Safety Equipment Service Company, The, Cleveland, Ohio. Shoes, leggings, gloves, etc. 285,303; July 21. Class 39.
Samaco Chemical Company. (See Sammons, Walter H.)
Sammons, Walter H., doing business as Samaco Chemical Company. 285,268; July 21; Serial No. 311,849; published May 5, 1931. Class 6.
Schachtelkäsefabrik Franz Zwick, Kellmunz (Schwaben), Germany. Cheese. 285,233; July 21; Serial No. 297,782; published May 5, 1931. Class 46.
Scott, O. M., & Sons Company, Marysville, Ohio. House organ. 285,292; July 21; Serial No. 312,270; published May 5, 1931. Class 38.
Scruggs-Vandervoort-Barney, St. Louis, Mo. Complexion powder, cleansing crème, tissue crème, astringent lotion, etc. 285,269; July 21; Serial No. 311,933; published May 5, 1931. Class 6.
Sharples Specialty Company, The, Philadelphia, Pa. Centrifugal machines and parts thereof. 285,327; July 21. Class 23.
Sinder's Cut Rate Stores, Inc., Jersey City, N. J. Lip stick, rouge, face powder, and skin cream. 285,236; July 21; Serial No. 300,545; published July 8, 1930. Class 6.
Societe des Etablissements Eugene Koenig (Eugene Koenig et Cie., Societe en Commandite par Actions). Marseille, France. Powder for washing and renewing wash leather gloves, etc. 285,246; July 21; Serial No. 304,931; published May 5, 1931. Class 4.
Somers, Harold, assignor to Harold Somers, Inc., Brooklyn, N. Y. Chemical preparations for killing flies. 82,180; renewed June 6, 1931.
Standard Oil Company of New Jersey, Wilmington, Del. Oils. 285,285; July 21; Serial No. 312,671; published May 5, 1931. Class 15.
Standard Oil Company of New Jersey, Wilmington, Del. Oils and lubricating greases. 285,293; July 21; Serial No. 312,274; published May 5, 1931. Class 15.
Statter, Humphrey, jr., doing business as The American Girl Products Co., Sioux City, Iowa. Sanitary napkin belts. 285,241; July 21; Serial No. 311,414; published May 5, 1931. Class 44.
Stern, R., Company, The. (See David, Herman.)
Sutliff & Case Co., Inc., Peoria, Ill. Anesthetic. 285,275; July 21; Serial No. 312,285; published May 5, 1931. Class 6.
Tar Products Corporation, Providence, R. I. Cleansing preparations for cement, etc. 285,248; July 21; Serial No. 306,750; published May 5, 1931. Class 4.
Tileston and Hollingsworth Company, Boston, Mass. Cover and text papers. 285,319; July 21. Class 37.
Tisch, Charles, Inc., Brooklyn, N. Y. Cabinet gas ranges, gas cookers, warm air furnaces, etc. 285,276; July 21; Serial No. 312,351; published May 5, 1931. Class 34.
Tissue Company, The, Saugerties, N. Y. Paper napkins and handkerchiefs. 285,296; July 21; Serial No. 312,352; published May 5, 1931. Class 37.
Traver Paper & Manufacturing Co., Chicago, Ill. Box and carton partitions or fillers. 285,310; July 21. Class 2.
Truscon Steel Company, doing business as The Truscon Laboratories, Hamtramck, Mich. Paint. 285,259; July 21; Serial No. 310,667; published May 5, 1931. Class 16.
Truscon Steel Company, doing business as The Truscon Laboratories, Hamtramck, Mich. Paint. 285,261; July 21; Serial No. 310,666; published May 5, 1931. Class 16.
United Elastic Corporation, Easthampton, Mass. Elastic fabrics. 285,309; July 21. Class 42.
United Kingdom Tobacco Company (1929) Limited. (See Muratti B., Sons & Co., Limited, assignor.)
Universal Distributing Co. (See Glassberg, Jack.)
Vandermyn, Armand J. P., doing business as Vandermyn Paint Company, Pittsburgh, Pa. Paints, varnishes, paste paints, and lacquers. 285,239; July 21; Serial No. 311,219; published May 5, 1931. Class 16.
Vial, Paris, France, to Laboratoire de Pharmacologie, Inc., New York, N. Y., successor. Remedy for diseases of the urinary organs. 83,870; renewed Oct. 17, 1931.
Waltham Watch Company, assignor to Waltham Watch Company, Waltham, Mass. Watch-movements, watches, and parts thereof. 83,873; renewed Oct. 17, 1931.
Waltham Watch Company, assignor to Waltham Watch Company, Waltham, Mass. Watch-movements, watches, and parts thereof. 83,952; renewed Oct. 24, 1931.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Boyd, James I., doing business as Boyd Creamery Co., Creston, Iowa. Crest-On. For Butter. 39,429; July 21.
Climax Cleaner Mfg. Company, The, Cleveland, Ohio. Clipper. For Ship Paints. 39,430; July 21.
Compania Azucarera Central Mabay, Havana, Cuba. Mabay. For Sugar. 39,431; July 21.
Finn, Mrs. May, Minneapolis, Minn. Mother Clair's. For Cough Syrup. 39,432; July 21.
Freihofer, Chas., Baking Co. Inc., Troy, N. Y. Freihofer's Pullman Bread. For Bread. 39,433; July 21.
Frontenac Breweries, Limited, Montreal, Canada. Frontenac—India Pale—Export Ale. For Ale. 39,434; July 21.
Hitt Fireworks Company, Seattle, Wash. Hitt's Danger Lights. For Illuminating Signal Lights Used for Night Celebrations, Regattas, Outings, Etc. 39,435; July 21.
Hoover Hosiery Company, Concord, N. C. 'Lo' Lene Hosiery. For Hosiery. 39,436; July 21.
Hylyte Laboratories, Inc., Chicago, Ill. Hylyte Improved Sulphuric Acid, More Power-Life and Action, Eliminates Sulphation Troubles. For Sulphuric Acid. 39,437; July 21.
Inland Motor Products Company, Des Moines, Iowa. Kleenzit. For Preparation for Removing Corrosion from Radiators. 39,438; July 21.
Lash's Products Company, San Francisco, Calif. Snow King. For Orangeade. 39,439; July 21.
Lewis, G. B. Company, Watertown, Wis. Arkitoy Wood Construction Set. For Toy Construction Sets. 39,440; July 21.
Lichtenstein, Alfred, Inc., New York, N. Y. Fit-to-Form Undies. For Undergarments for Women and Misses. 39,441; July 21.

McClain Brothers Company, Canton, Ohio. Veg-E-Tonic. For Chemical Compound for Plant Tonic. 39,442; July 21.

McClain Brothers Company, Canton, Ohio. Wormtox. For Chemical Compound for Destroying and Eradicating Vermin of All Kinds in the Soil. 39,443; July 21.

National Pot-Cleaner Company, Los Angeles, Calif. Kitchen King. For Metal Sponges. 39,444; July 21.

Premier Mushroom Company, West Chester, Pa. Certified. For Mushrooms. 39,445; July 21.

Rex Research Corporation, The, Toledo, Ohio. Fly-Tox. For Insecticide. 39,446; July 21.

Scott Paper Company, Chester, Pa. Sani-Tissue. For Toilet Paper. 39,447; July 21.

Scott Paper Company, Chester, Pa. Scottissue. For Paper Towels in Folded Form 39,448; July 21.

Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Seal Brand Tea. For Tea. 39,449; July 21.

Tow, Irving, Mount Vernon, N. Y. Dabs of Cotton. For Sterilized Cotton for Facial Uses. 39,450; July 21.

Union Bag & Paper Corporation, New York, N. Y. Fresh Roasted Coffee. For Coffee. 39,451–2; July 21.

Weldtite Products & Manufacturing Co., Dubois, Pa. Weldtite. For Rubber Cement. 39,453; July 21.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Awrey Bakeries, Detroit, Mich. Awrey Bakery Dainties. For Bakery Dainties. 13,298; July 21.

Beranek, James C., doing business as Douglas Coal Company, Chicago, Ill. My Cards are on the Table. For Coal. 13,299; July 21.

Bundy Incubator Company, The, Springfield, Ohio. Disease Conscious. For Incubators. 13,300; July 21.

Douglas Coal Company. (See Beranek, James C.)

Hills Bros., San Francisco, Calif. Controlled Roasting is the Flavor Secret—Adform 115A. For Coffee. 13,300; July 21.

Hills Bros., San Francisco, Calif. Hills Bros. Coffee—Adform 20. For Coffee. 13,301; July 21.

Hills Bros., San Francisco, Calif. Didn't I tell You . . . . Hills Bros. Coffee has a Flavor no other Coffee has—Adform 113. For Coffee. 13,302; July 21.

Inland Motor Products Company, Des Moines, Iowa. Sealzit. For Preparation for Stopping Leaks in Radiators. 13,304; July 21.

Johnson, S. T., Co., Oakland, Calif. Johnson Centri' Automatic Oil Burner. For Oil Burning Equipments. 13,305; July 21.

K. P. & B. Co., Decatur, Ill. The Magic Wand. For Cleaning Devices For General Household Purposes, especially adapted for Cleaning Painted and Papered Walls, etc. 13,306; July 21.

Martin Varnish Company, Chicago, Ill. Martin's Amber-Lyte Quick Drying Finishes. For Finishes for Walls, Houses, Porches, etc. 13,307; July 21.

Perkinson, Joel, New York, N. Y. Floorartist Floors Joel Perkinson F. A. For Floors. 13,308; July 21.

Postograph Company, The, Baltimore, Md. Postograph. For Printed Blanks. 13,309; July 21.

Procacci, James, deceased, doing business as Yum Yum Manufacturing Company; Maria Procacci, administratrix, Camden, N. J. Yum Yum. For Water Ices and Soft Drinks. 13,310; July 21.

Procacci, Maria, administratrix. (See Procacci, James.)

Sinclair Refining Co., New York, N. Y. Gain Check. For Lubricating Greases, Motor Oil and Gasoline. 13,311; July 21.

Stanco Incorporated, Wilmington, Del., and New York, N. Y. Quick Henry! The Flit (At the Beach). For Insecticides. 13,312; July 21.

Stanco Incorporated, Wilmington, Del., and New York, N. Y. Quick Henry! The Flit (On Parade). For Insecticides. 13,313; July 21.

Yum Yum Manufacturing Company. (See Procacci, James.)

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adelanto Cider Mill. (See Richardson, James R.)

American Bitumals Company, Wilmington, Del., and Oakland, Calif. Asphalt, pavement materials, asphaltic binders, etc. 313,525; July 21. Class 12.

American Polish Company, The, Chicago, Ill. Polishes. 312,405; July 21. Class 16.

Amitin Co. The. (See Dzwonczyk, John H.)

Ansonia Bootery, Inc., New York, N. Y. Shoes. 314,743; July 21. Class 39.

Aron, Michael, doing business as Met Cleaning Products Company, Bloomfield, N. J. Preparation for cleaning metal and woodwork and for removing paint, tar, etc. 315,434; July 21. Class 4.

Artloom Corporation, Philadelphia, Pa. Seamless Wilton rugs. 315,423–4; July 21. Class 42.

Associated Stationers Supply Company, Chicago, Ill. Printed forms, typewriter paper, and stenographer's note books. 312,037; July 21. Class 37.

Audak Company Inc., New York, N. Y. Horological instruments. 315,126; July 21. Class 27.

Automatic Florzone Heating Company, Conshohocken, Pa. Heating apparatus. 314,543–4; July 21. Class 34.

Bagnole, Joseph, doing business as Sun Rise Press, Roseland, N. J. Letter heads, blank forms and envelopes. 302,568; July 21. Class 37.

Baskind, Louis & Co., Inc., New York, N. Y. Shirts, pajamas, and underwear. 314,596; July 21. Class 39.

Batt Brothers, New York, N. Y. Cigarettes. 302,666; July 21. Class 17.

Bausch & Lomb Optical Company, Rochester, N. Y. Field and opera glasses. 315,728; July 21. Class 26.

Besançon, Elise A., New York, N. Y. Corsets and brassières. 312,359; July 21. Class 39.

Best, Richard, Pencil Company, Inc., New York, N. Y. Pencils. 313,626; July 21. Class 37.

Beta Theta Pi, New York, N. Y. Fraternity badges, lapel buttons, cuff links, etc. 310,084; July 21. Class 28.

Beyrer, Clarence K., South Bend, Ind. Hose holders. 315,341; July 21. Class 13.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 315,436–7; July 21. Class 42.

Boye, James H. Manufacturing Co., Chicago, Ill. Golf clubs and balls. 315,084; July 21. Class 22.

Burke, J. C., Bakersfield, Calif. Portable buildings. 313,645; July 21. Class 12.

California Tropical Foods, Ltd., Pasadena, Calif. Ice cream. 315,032; July 21. Class 46.

Call, D. W., doing business as Soonite Company, San Francisco, Calif. Powdered cleansing preparation. 313,957; July 21. Class 4.

Cattell, J. McKeen, doing business as The Science Press, New York, N. Y. Magazine. 314,445; July 21. Class 38.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 315,629; July 21. Class 42.

Central Waxed Paper Company, Chicago, Ill. Paper bread wrappers. 314,683; July 21. Class 37.

Chase Brass & Copper Co. Incorporated, Waterbury, Conn. Copper downspouts, metal dividing strips, brass railings, etc. 312,042; July 21. Class 12.

Chef and Steward Co., The, Chicago, Ill. Periodical. 315,102; July 21. Class 38.

Clayton, Herbert D., doing business as Clayton and Company, Hill City, Kans. Merry-go-rounds. 306,852; July 21. Class 22.

Clicquot Club Company, Millis, Mass. Beverages, syrups, extracts, etc. 315,898; July 21. Class 45.

Closet Shop, The. (See Herzog, Mrs. George.)

Cohn & Rosenberger, Inc., New York, N. Y. Display trays. 311,128; July 21. Class 2.

Cotter, R. E., Company, San Francisco, Calif. Dog food. 315,732; July 21. Class 46.

Cover, Benjamin A., jr., doing business as Tilton Manufacturing Company, New York, N. Y. Radio items and parts. 314,153; July 21. Class 21.

Cramerton Mills, Incorporated, Cramerton, N. C. Cotton piece goods. 315,487; July 21. Class 42.

Daily Credit Broadcast, Inc., New York, N. Y. Credit circular or pamphlet. 314,555; July 21. Class 38.

Dalby, Thomas, Company, Watertown, Mass. Underwear. 315,137; July 21. Class 39.

Davidson Biscuit Company, Mount Vernon, Ill. Bread, cookies, crackers, etc. 315,089; July 21. Class 46.

Davies & Sullivan Company, New York, N. Y. Coffee. 310,162; July 21. Class 46.

De Bevoise, Charles R., Company, Newark, N. J. Elastic fabrics. 315,675; July 21. Class 42.

De Luxe Saddlery Co., Baltimore, Md. Saddles, bridles, sample cases, knapsacks, etc. 314,488; July 21. Class 3.

Detroit Electric Specialties Co. (See Prybesky, Arthur S.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Di Santo, Joseph, doing business as Di Santo & Company, Duluth, Minn. Fresh artichokes, bread, cakes, etc. 314,985; July 21. Class 46.

Downey, T. P., Birmingham, Ala. Medicinal preparation. 311,284; July 21. Class 6.

Dunham, James H., & Co., New York, N. Y. Fabrics. 314,103; July 21. Class 42.

Du Pont Pathé Film Manufacturing Corporation, New York, N. Y. Photographic film. 314,899; July 21. Class 26.

Dzwonczyk, John H., doing business as The Amitin Co., Scranton, Pa. Tablets. 314,689; July 21. Class 6.

Eagle Macaroni Company, Chicago, Ill. Alimentary pastes. 315,391; July 21. Class 46.

Earnshaw Knitting Company, Newton, Mass. Bathing suits. 315,041; July 21. Class 39.

Elektrotechnische Fabrik Schmidt & Co., Berlin, Germany. Flash-lamps, lanterns, bicycle lamps, etc. 309,926; July 21. Class 21.

Elgin American Manufacturing Co., Elgin, Ill. Jewelry and flat and hollow tableware. 313,709; July 21. Class 28.

Elite Import Co. Inc., New York, N. Y. Glassware. 315,194; July 21. Class 33.

Emporia Machine Co. Inc., Emporia, Va. Plows. 314,903; July 21. Class 23.

Enameled Steel Sign Company, Chicago, Ill. Advertising signs. 278,785; July 21. Class 50.

Etablissements Schaeffer & Cie., Pfastatt-le-Chateau, France. Piece goods of cotton, linen, hemp, etc. 315,306–7; July 21. Class 42.

Fairfacts Company, The, New York, N. Y. Bath-room accessories. 309,337; July 21. Class 13.

Feltes, Henry. Paints, paint enamels, varnishes, etc. 314,605; July 21. Class 16.

Ferodo and Asbestos Incorporated, New Brunswick, N. J. Friction materials. 314,904; July 21. Class 35.

Fils de R. Picard & Cie., La Chaux-de-Fonds, Switzerland. Watches, watchcases, watch movements and parts of the same. 282,467; July 21. Class 27.

Floraderm Laboratories, Long Island City, N. Y. Face creams, lotions, toilet waters, etc. 314,049; July 21. Class 6.

Forest City Rubber Company, Cleveland, Ohio. Pads, foot straighteners and bandages. 313,782; July 21. Class 44.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 315,734–5; July 21. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 315,737–8; July 21. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 315,740; July 21. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 315,743; July 21. Class 42.

Fox, T. C., & Sons, Newfield, N. J. Medicinal poultry preparations. 313,110; July 21. Class 6.

French Maid Cocolat Company, Inc., New York, N. Y. Fudge powders. 311,093; July 21. Class 46.

Garrett, William H., doing business as Garrett Manufacturing Company, Houston, Tex. Glue. 315,771; July 21. Class 5.

Gas and Electric Heater Co., La Porte, Ind. Heaters. 302,941; July 21. Class 21.

General Cable Corporation, New York, N. Y. Tinsel, tinsel ribbon and cord, mica snow, etc. 285,458; July 21. Class 50.

Gevaert Photo-Producten Naamlooze Vennootschap, Oude-God, near Antwerp, Belgium. Sensitized photographic papers, plates, films, etc. 315,683–6; July 21. Class 26.

Gilmer, L. H., Co., Philadelphia, Pa. Sheaves for belt drives. 312,048; July 21. Class 23.

Golbur, Inc., Chicago, Ill. Potato chips. 314,940; July 21. Class 46.

Golden Eagle Milling Co., Petaluma, Calif. Prepared poultry feeds. 297,188; July 21. Class 46.

Greenebaum Brothers, Philadelphia, Pa. Waists, blouses, shirts, pyjamas, and underwear. 314,693; July 21. Class 39.

Greif, L., & Bro., Incorporated, Baltimore, Md. Top coats, overcoats, coats, etc. 315,092; July 21. Class 39.

Grigsby-Grunow Company, Chicago, Ill. Publication. 315,836; July 21. Class 38.

Gross, Benjamin & Edward J., Co. Inc., New York, N. Y. Finger rings and mountings therefor. 299,317; July 21. Class 28.

Guarantee Shoe Company, The, San Antonio, Tex. Shoes. 311,188; July 21. Class 39.

Haas Brothers Fabrics Corporation, New York, N. Y. Silk, cotton, etc., piece goods. 315,095; July 21. Class 42.

Hart, H. C., Mfg. Co., The, Unionville, Conn. Table knives, forks, and spoons, pliers, can openers, etc. 312,128; July 21. Class 23.

Hedley, Thomas, & Company Limited, Newcastle-on-Tyne, England. Olive oil. 313,544; July 21. Class 46.

Hertzwig, Olaf, Trading Co. Inc., New York, N. Y. Sardines, olive oil, and cheese. 310,167; July 21. Class 46.

Herzog, Mrs. George, doing business as The Closet Shop, New York, N. Y. Bed and bath linens, cloths, and napkins, etc. 283,334; July 21. Class 42.

Hiltebrandt, Dr., Zahnfabrik Aktiengesellschaft, Essen, Germany. Artificial teeth. 309,778; July 21. Class 44.

Hindustan Art Co., Inc., New York, N. Y. India prints of cotton or linen. 309,080; July 21. Class 42.

Hogue, Edward E., Los Angeles, Calif. Hosiery. 311,410; July 21. Class 39.

Hoover Hosiery Company, Concord, N. C. Hosiery. 315,051; July 21. Class 39.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, powder, etc. 314,609–11; July 21. Class 6.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, powder, etc. 314,613–14; July 21. Class 6.

Hubert, Maryan J., doing business as Hubert's Baking Co., Maspeth, N. Y. Toasted rolls. 314,366; July 21. Class 46.

Hurley-Townsend Corporation, New York, N. Y. Spark plugs. 315,052; July 21. Class 21.

Ideal Clamp Mfg. Co. Inc., Brooklyn, N. Y. Fruit juice extractors. 315,688; July 21. Class 23.

Indianapolis Paint & Color Co., Indianapolis, Ind. Paint cleaners. 315,201; July 21. Class 4.

J. H. Specialty Manufacturing Corp., New York, N. Y. Coil springs. 314,516; July 21. Class 13.

Janome Rayon Corporation, Brooklyn, N. Y. Underwear. 311,311; July 21. Class 39.

Jarvis & Jarvis, Inc., Palmer, Mass. Caster tires. 309,273; July 21. Class 35.

Jelke, John F., Company, Chicago, Ill. Oleomargarine. 315,839; July 21. Class 46.

Kames, Crawford J., Philadelphia, Pa. Columns or sections of daily newspapers. 315,459; July 21. Class 38.

Kaplan, Oscar B., doing business as The Kay Company, New York, N. Y. Malt syrup. 315,266; July 21. Class 46.

Kay Company, The. (See Kaplan, Oscar B.)

Keller-Dorian Paper Co., Inc., New York, N. Y. Cards and announcements. 315,640; July 21. Class 38.

Kirshner, Nathaniel M., Los Angeles, Calif. Finger rings, bracelets, belt buckles, etc. 313,662; July 21. Class 28.

Kiya, Seishin, Los Angeles, Calif. Tooth brushes. 312,584; July 21. Class 29.

Kleinert, I. B., Rubber Company, New York, N. Y. Shower curtains and window drapes in sets of waterproofed fabrics. 313,042; July 21. Class 50.

Kress, S. H., & Co., New York, N. Y. Playing cards. 314,918; July 21. Class 22.

Lamireaud, Omer, New York, N. Y. Instructive educational games. 315,150; July 21. Class 22.

Lane Bros. Co., Boston, Mass. Boots and shoes. 315,151; July 21. Class 39.

Lanteen Laboratories, Inc., Chicago, Ill. Applicators. 313,300; July 21. Class 44.

Lazzaroni, D., & Co., Saronno, Italy. Crackers. 285,978; July 21. Class 46.

Le Doyen Co., Frank J., Baltimore, Md. Dressing and polish for all finished white leather. 312,921; July 21. Class 4.

Leffingwell Rancho Company, Whittier, Calif. Fertilizers. 315,544; July 21. Class 10.

Leichmetallverwertungsgesellschaft m. b. H., Trier, Germany. Mineral raw products. 301,661; July 21. Class 1.

Lewis, Charles E., New York, N. Y. Department or section of a periodical. 312,955; July 21. Class 38.

Lewis, Robert B., doing business as State Line Oil Service, Unionville, N. Y. Compounded lubricated gasoline fuel. 312,609; July 21. Class 15.

Lowe, Joe, Co. Inc., Brooklyn, N. Y. Dehydrated whole eggs, egg yolk, and egg albumen. 249,011; July 21. Class 46.

Lubriplate Corp., New York, N. Y. Lubricating oils and greases. 314,389; July 21. Class 15.

Luxite Silk Products Co., Milwaukee, Wis. Underwear. 314,705; July 21. Class 39.

M and M Wood Working Company, Portland, Oreg. Doors and other mill work and ply wood. 308,260; July 21. Class 12.

M. S. M. Developing and Printing Co., Clifton, N. J. Photographic prints. 315,852–3; July 21. Class 38.

Macfadden Publications, Inc., New York, N. Y. Magazine. 315,753; July 21. Class 38.

Makransky, S., and Sons, Inc., Philadelphia, Pa. Suits, overcoats, and top coats. 315,495; July 21. Class 39.

Maple Grove Candies, Inc., St. Johnsbury, Vt. Maple sugar. 308,993–4; July 21. Class 46.

Matzka, Zoya, Rye Hill, Monroe, N. Y. Fruit juices. 298,581; July 21. Class 45.

Meade, Harry E., doing business as Mo-Ja Company, Tulsa, Okla. Beverages. 315,856; July 21. Class 46.

Meehan, Clarence M., Philadelphia, Pa. Special publications. 313,143; July 21. Class 38.

Met Cleaning Products Company. (See Aron, Michael.)

Methodist Book Concern, The, New York, N. Y. Periodical. 315,601; July 21. Class 38.

Miller, I., & Sons, Incorporated, Long Island City, N. Y. Hosiery. 312,347; July 21. Class 39.

Millett, J. C., Company, San Francisco, Calif. Malt syrup. 314,375; July 21. Class 46.

Milwaukee Glove Company, Milwaukee, Wis. Gloves and mittens. 315,169; July 21. Class 39.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Mme. Céleste, Better Form Foundation Garment, New York, N. Y. Corselets. 312,281; July 21. Class 39.
Mo-Ja Company. (See Meade, Harry E.)
Munson School for Private Secretaries. (See Smith, Juliet M.)
Muscle Shoals Laboratories, Inc., New York, N. Y. Toilet preparations. 314,390; July 21. Class 6.
N. V. Kuchenmeister's Internationale Ultraphoon-Maatschappij, Berlin, Germany. Phonograph and records and sound recording devices, etc. 308,373; July 21. Class 36.
National Carbon Company, Inc., New York, N. Y. Chemical preparations. 314,066; July 21. Class 6.
New York Hair Co., Inc., New York, N. Y. Permanent wave machines for human hair, and parts therefor. 314,820; July 21. Class 44.
Ohio Farm Bureau Service Company, The, Columbus, Ohio. Dairy feeds. 312,196; July 21. Class 46.
Page Steel and Wire Company, Adrian, Mich., and Bridgeport, Conn. Steel and iron rods, wire; single wire strand, etc. 315,552; July 21. Class 14.
Palmer, S. A., Limited, Leeds, England. Herbal medicine. 301,358; July 21. Class 6.
Pantex Pressing Machine, Inc., Pawtucket, R. I. Garment steaming and pressing machines and parts thereof. 310,067; July 21. Class 24.
Peek and Velsor, Inc., New York, N. Y. Botanical drugs. 313,668; July 21. Class 6.
Penn-Jersey Auto Stores, Inc., Easton, Pa. Gasoline and lubricating oils and greases. 314,459; July 21. Class 15.
Perey Manufacturing Company, Inc., New York, N. Y. Combination turnstiles and registering fare boxes. 312,720; July 21. Class 26.
Perfect, A. H., & Co., Fort Wayne, Ind. Canned fruits, vegetables, coffee, etc. 301,291; July 21. Class 46.
Perfected Bifocals, Inc., Indianapolis, Ind. Bifocal lenses. 315,722; July 21. Class 26.
Phi Kappa Tau Fraternity, The, Oxford, Ohio. Fraternity pins and badges. 311,885; July 21. Class 28.
Phillips Petroleum Company, Bartlesville, Okla. Gasolines. 314,861; July 21. Class 15.
Phillips Sales Company, Inc., Cambridge, Md. Canned vegetables and catsup. 299,795; July 21. Class 46.
Physical Culture Publishing Corporation, New York, N. Y. Magazine. 315,645; July 21. Class 38.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Painters' brushes. 313,554–8; July 21. Class 29.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Paints. 315,501; July 21. Class 16.
Protex Corporation of America, Springfield, Mass. Insecticide. 314,377; July 21. Class 6.
Prybesky, Arthur S., doing business as Detroit Electric Specialties Co., Detroit, Mich. Heating elements and water heaters. 314,717; July 21. Class 21.
Quigley Company, Inc., New York, N. Y. Cleaning compound. 314,964; July 21. Class 4.
Reau, Paul O. A., Glenay, par St. Varent, France. Paint. 313,205; July 21. Class 16.
Reddaway, Fenwick, Mfg., Co., Newark, N. J. Portable water pump. 311,958; July 21. Class 23.
Rentschler, Dr., & Co., Laupheim, Germany. Medicinal preparations. 311,073; July 21. Class 6.
Richardson, James R., doing business as Adelanto Cider Mill, Los Angeles, Calif. Beverages. 301,511; July 21. Class 45.
Ross, Chester W., Medford, Mass. Portable practice device for golf. 308,641; July 21. Class 22.
Rossen-Nessor Company, The, Akron, Ohio. Prophylactic rubber articles. 310,351; July 21. Class 44.
Sauer, John W., doing business as Secure-Lab, San Francisco, Calif. Cleaning compound and a metal preparation. 312,928; July 21. Class 4.
Scheidt, Adam, Brewing Company, Norristown, Pa. Malt syrup. 311,458; July 21. Class 46.
Schilling, A., & Co., San Francisco, Calif. Spices. 315,566; July 21. Class 46.
Schilling, A., & Co., San Francisco, Calif. Food flavoring extracts. 315,567; July 21. Class 46.
Science Press, The. (See Cattell, J. McKeen.)
Secure-Lab. (See Sauer, John W.)
Shiman, M. H., & Co., Inc., New York, N. Y. Finger rings. 312,164; July 21. Class 28.
Sigma Alpha Phi Sorority, Plainfield, Newark, Paterson, Montclair, and Closter, N. J.; New Canaan, Meriden, and Waterbury, Conn.; and Washington, D. C. Books, pamphlets, bulletins, and periodic magazines. 314,021; July 21. Class 38.
Signal Oil & Gas Company, Los Angeles, Calif. Gasoline. 313,008; July 21. Class 15.
Sinclair Refining Company, New York, N. Y. Kerosene. 315,162; July 21. Class 15.
Smith, Juliet M., doing busines as Munson School for Private Secretaries, San Francisco, Calif. Publication. 302,056; July 21. Class 38.
Social Science Publishing Company, Inc., Winfield, Kans. Periodical. 315,213; July 21. Class 38.
Somarco, Lucile, Brassiere, New York, N. Y. Brassiéres. corsets, bandeaux, etc. 314,525; July 21. Class 39.
Soonite Company. (See Call, D. W.)
Springfield Leather Products Company, The, Springfield, Ohio. Billfolds. 309,827; July 21. Class 3.
Stanco Incorporated, New York, N. Y. Liquid preparation. 305,289; July 21. Class 4.
Stanco Incorporated, New York, N. Y. Liquid preparation. 305,291; July 21. Class 4.
Stanco Incorporated, New York, N. Y. Liquid preparation. 305,293; July 21. Class 4.
Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton and rayon yarn. 313,568; July 21. Class 43.
Standard Oil Company of New York, New York, N. Y. Petroleum and products of petroleum. 311,346; July 21. Class 15.
Standard Stores, Incorporated, Boston, Mass. Radio electron tubes, chassis, receiving sets, etc. 314,255; July 21. Class 21.
Stanley Works, The, New Britain, Conn. Electric tools. 312,020; July 21. Class 21.
Star Expansion Bolt Company, New York, N. Y. Bolt anchors. 315,428; July 21. Class 13.
State Line Oil Service. (See Lewis, Robert B.)
Sterilek Company Inc., The, Brooklyn, N. Y. Sanitary napkins. 314,663; July 21. Class 44.
Sterling Products (Incorporated), Wheeling, W. Va. Analgesic. 314,774–5; July 21. Class 6.
Strawbridge & Clothier, Philadelphia, Pa. Shoes. 314,824; July 21. Class 39.
Street, R. R., & Co., Inc., Chicago, Ill. Dry cleaning soap. 314,724; July 21. Class 4.
Sun Rise Press. (See Bagnole, Joseph.)
Syndicate Poster & Equipment Co., Chicago, Ill. Signs and posters, window display signs, etc. 302,651; July 21. Class 38.
Syndicate Poster & Equipment Co., Chicago, Ill. Board games and puzzles. 315,214; July 21. Class 22.
Syndicate Poster & Equipment Co., Chicago, Ill. Ball projecting and teeing devices used in the game of golf. 315,215; July 21. Class 22.
Tasty Baking Company, Philadelphia, Pa. Pies. 315,373; July 21. Class 46.
Taub, Leon, Inc., New York, N. Y. Medicinal and pharmaceutical preparations. 314,470; July 21. Class 6.
Teitelbaum Baking Co., Inc., Brooklyn, N. Y. Bread and doughnuts and crullers. 282,685; July 21. Class 46.
Tilton Manufacturing Company. (See Cover, Benjamin A., jr.)
Timberlake, J. B., & Sons, Inc., Jackson, Mich. Frames used in the drying of stockings, etc. 314,218; July 21. Class 24.
Toland & Julien, Ventura, Calif. Fried potato chips. 293,164; July 21. Class 46.
Toland & Son, Inc., Baltimore, Md. Molding knives and saws, and knives and other special tools. 314,825; July 21. Class 23.
Townsend, W. C., & Company, Zanesville, Ohio. Quarried dressed stone. 313,481; July 21. Class 12.
Traveltone Pictures, Inc., San Diego, Calif. Motion picture films and motion pictures. 300,245; July 21. Class 26.
Travers, Owen, Savannah, Ga. Embrocation for muscular pain and soreness. 311,804; July 21. Class 6.
Trico Products Corporation, Buffalo, N. Y. Fluid operated horns. 308,402; July 21. Class 23.
Truscon Steel Company, Youngstown, Ohio. Structural units of metal. 302,358; July 21. Class 12.
Tucker, Isidor, Beacon, N. Y. Hair tonic. 310,031; July 21. Class 6.
Ulrich, George C., doing business as Ven-Zol Co., Portland, Oreg. Pile and household ointment. 314,347; July 21. Class 6.
Una Welding & Bonding Company, Cleveland, Ohio. Welders. 303,407; July 21. Class 21.
United Conveyor Corporation, Chicago, Ill. Conveyors and conveying systems. 308,273; July 21. Class 23.
U. S. Bottlers Machinery Co., Chicago, Ill. Magazine. 314,190; July 21. Class 38.
Van Camp Packing Co., Incorporated, The, Indianapolis, Ind. Cotton-seed oil. 301,533; July 21. Class 46.
Van Raalte Company, New York, N. Y. Hosiery. 313,687; July 21. Class 39.
Ven-Zol Co. (See Ulrich, George C.)
Vidalou, Manila, P. I. Dresses. 315,071; July 21. Class 39.
Vollrath Company, The, Sheboygan, Wis. Enameled metal ware. 292,473; July 21. Class 23.
Wagner Bros. Feed Corp., Brooklyn, N. Y. Deodorizer, disinfectant, bird and poultry tonic, etc. 313,875; July 21. Class 6.
Washington Planograph Company, The, Inc., Washington, D. C. Completely printed literature. 314,523; July 21. Class 38.
West, Ruth, New York, N. Y. Educational blocks. 315,072; July 21. Class 22.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Electric lighting fixture units. 308,676; July 21. Class 21.
White, Mark B., Hanover, Ill. Insulating material for walls and the like. 315,023; July 21. Class 12.
Whitehead, William C., Hopson, Tenn. Snake bite medicines. 311,580; July 21. Class 6.
Wholesale Radio Service Co. Inc., New York, N. Y. Radio receiving sets and parts thereof. 314,594; July 21. Class 21.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Horticultural growths. R. Diener. 285,324; July 21.
Leather, Glazed kid. Gonzalo Boza & Co. Inc. 285,235; July 21; Serial No. 298,807; published Apr. 28, 1931.

CLASS 2

Bags, Wardrobe. Closgard Wardrobe Company. 285,311; July 21.
Bottles, flasks, drums, and tanks, Metal gas. "Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft m. b. H. 285,226; July 21; Serial No. 309,682; published May 5, 1931.
Partitions or fillers, Box and carton. Traver Paper & Manufacturing Co. 285,310; July 21.

CLASS 4

Cleaning compound, Porcelain and enamel. Hillyard Chemical Company. 285,263; July 21; Serial No. 310,996; published May 5, 1931.
Cleansing preparations for cement, etc. Tar Products Corporation. 285,248; July 21; Serial No. 306,750; published May 5, 1931.
Detergent preparations. Ronuk, Limited. 285,238; July 21; Serial No. 311,202; published May 5, 1931.
Powder for washing and renewing wash leather gloves. Societe des Etablissements Eugene Koenig (Eugene Koenig et Cie., Societe en Commandite par Actions). 285,246; July 21; Serial No. 304,931; published May 5, 1931.
Soap. Colgate-Palmolive-Peet Company. 285,243; July 21; Serial No. 311,513; published May 5, 1931.
Soap, washing powder, and other cleaning preparations. Gordon Corporation, Ltd. 285,262; July 21; Serial No. 310,993; published May 5, 1931.
Soaps, Cleaning and scouring. Hunnewell Soap Company. 285,307; July 21.
Soaps, Toilet. Betts & Mumpton Inc. 285,229; July 21; Serial No. 284,559; published July 16, 1929.
Washing solution for fabrics. Gardiner Manufacturing Company. 285,247; July 21; Serial No. 305,751; published May 5, 1931.

CLASS 6

Anesthetic. Sutliff & Case Co. 285,275; July 21; Serial No. 312,285; published May 5, 1931.
Antiseptic and germicide. Colgate-Palmolive-Peet Company. 285,260; July 21; Serial No. 310,556; published May 5, 1931.
Bitters. J. Russak. 83,691; renewed Oct. 3, 1931.
Chemical compound. E. F. Houghton & Co. 84,233–4; renewed Nov. 21, 1931.
Chemical preparation for killing flies. H. Somers. 82,180; renewed June 6, 1931.
Chemical wood-preservative, disinfectant, and insecticide. Northeastern Company. 84,124; renewed Nov. 7, 1931.
Cosmetic toilet clay preparation. Denver Mud Company. 285,240; July 21; Serial No. 311,266; published May 5, 1931.
Creme, Face and vanishing. El Estado Products Company. 285,234; July 21; Serial No. 298,092; published May 5, 1931.
Dandelion killer. A. Barteldes. 285,244; July 21; Serial No. 311,593; published May 5, 1931.
Henna, quick wave set, and wave set powder compound. Murray and Nickell Manufacturing Company. 285,273; July 21; Serial No. 312,195; published May 5, 1931.
Inhalants. Hart Drug Corporation. 285,245; July 21; Serial No. 311,727; published May 5, 1931.
Insecticides. Lewy Chemical Company. 285,272; July 21; Serial No. 312,189; published May 5, 1931.
Lip stick, rouge, face powder, and skin cream. Sinder's Cut Rate Stores, Inc. 285,236; July 21; Serial No. 300,545; published July 8, 1930.
Medicinal remedy. H. O. Hurley. 82,331; renewed June 20, 1931.
Medicine. G. G. Harbin. 285,281; July 21; Serial No. 312,560; published May 5, 1931.
Medicine. Proprietory cough. M. L. K. Homeyard. 285,256; July 21; Serial No. 309,618; published May 5, 1931.
Mercury. Research Products Corporation. 285,280; July 21; Serial No. 312,531; published May 5, 1931.
Oil, Haarlem. Oprechte Haarlemmer Olie Fabriek (Voorheen-onder de firma G. de Koning Tilly). 81,819; renewed May 9, 1931.
Ointment and repellent. Bonide Chemical Co. 285,277; July 21; Serial No. 312,408; published May 5, 1931.
Ointments. W. H. Sammons. 285,268; July 21; Serial No. 311,849; published May 5, 1931.
Perfumes, toilet waters, face powders, sachets, etc. Lentheric, Incorporated. 285,257; July 21; Serial No. 310,058; published May 5, 1931.
Petroleum jelly. Jomol Petroleum Products. 285,274; July 21; Serial No. 312,232; published May 5, 1931.
Powder, cleansing creme, tissue creme, astringent lotion, etc., Complexion. Scruggs-Vandervoort-Barney. 285,269; July 21; Serial No. 311,938; published May 5, 1931.
Powder for use in the treatment of headache, colds, and neuralgia. J. D. Gregg. 285,279; July 21; Serial No. 312,428; published May 5, 1931.
Preparation for the treatment of disordered conditions of the stomach or bowels. Fret Chemical Co. 285,278; July 21; Serial No. 312,423; published May 5, 1931.
Preparation for the treatment of ringworm. Healatoe Laboratory. 285,255; July 21; Serial No. 309,521; published Apr. 21, 1931.
Remedy for coughs and colds. Davis & Lawrence Co. 82,214; renewed June 13, 1931.
Remedy for diseases of the uninary organs. Vial. 83,870; renewed Oct. 17, 1931.
Stimulant. I. G. Farbenindustrie Aktiengesellschaft. 285,271; July 21; Serial No. 312,186; published May 5, 1931.
Therapeutic solutions. A. E. Connell. 285,267; July 21; Serial No. 311,826; published May 5, 1931.
Toilet preparations. R. Hudnut. 82,889; renewed Aug. 1, 1931.

CLASS 11

Books, loose sheets, and certain named stationery supplies, Blank. Baker-Vawter Company. 36,592; renewed June 18, 1931.

CLASS 12

Composition to be applied to cement and concrete structures. J. M. Hauhoff. 83,943; renewed Oct. 24, 1931.
Roofing paper and roofing felt. Chatfield Manufacturing Company. 82,572; renewed July 11, 1931.

CLASS 13

Nails, tacks, brads, and staples. Colorado Fuel and Iron Company. 285,265; July 21; Serial No. 303,240; published May 5, 1931.
Sink fixtures. Bohn Aluminum & Brass Corporation. 285,232; July 21; Serial No. 296,388; published May 5, 1931.

CLASS 14

Metal anodes. Roessler & Hasslacher Chemical Company. 285,318; July 21.
Metals, Antifriction. National Metal Co. 37,019; renewed Sept. 3, 1931.
Rods, Welding and brazing. Mills Alloys, Inc. 285,230; July 21; Serial No. 291,998; published July 1, 1930.

CLASS 15

Oil, Lubricating. Continental Oil Company. 285,216; July 21; Serial No. 310,107; published May 5, 1931.
Oil, Lubricating. Continental Oil Company. 285,217; July 21; Serial No. 310,104; published May 5, 1931.
Oils. Standard Oil Company of New Jersey. 285,285; July 21; Serial No. 312,671; published May 5, 1931.
Oils and lubricating greases. Standard Oil Company of America. 285,293; July 21; Serial No. 312,274; published May 5, 1931.
Oils, Motor lubricating. Radbill Oil Company. 285,323; July 21.

CLASS 16

Coating material, Wall. Marb-L-Cote, Inc. 285,313; July 21.
Paint. Truscon Steel Company. 285,259; July 21; Serial No. 310,667; published May 5, 1931.
Paint. Truscon Steel Company. 285,261; July 21; Serial No. 310,668; published May 5, 1931.
Paints, varnishes, paste paints, and lacquers. A. J. P. Vandermyn. 285,239; July 21; Serial No. 311,219; published May 5, 1931.
Polish for furniture. Midway Chemical Company. 285,314; July 21.

CLASS 17

Tobacco, cigars, and cheroots, etc., Smoking and chewing. B. Muratti, Sons & Co. 37,112–18; renewed Sept. 24, 1931.
Tobacco, cigars, cheroots, etc., Smoking and chewing. John Player & Sons Limited. 36,975; renewed Aug. 27, 1931.
Tobacco, cigars, and cheroots, etc., Smoking and chewing. John Player & Sons, Limited. 37,159; renewed Oct. 1, 1931.
Tobacco, cigars, cheroots, etc., Smoking and chewing. John Player & Sons, Limited. 37,350; renewed Nov. 26, 1931.

CLASS 19

Automobiles, motor boats, airships, etc. H. Junkers. 285,228; July 21; Serial No. 279,926; published May 5, 1931.

CLASS 21

Bulbs, Incandescent electric lamp. Butler-Kohaus, Inc. 285,223; July 21; Serial No. 311,227; published May 5, 1931.
Cable, steel reinforced aluminum cable and condenser blades, Aluminum. Aluminum Company of America. 285,250–1; July 21; Serial Nos. 307,873–4; published May 5, 1931.

Electric appliances. Electric Equipment Corporation. 285,208; July 21; Serial No. 311,372; published May 5, 1931.
Electric lighting fixtures. Goodrich Electric Company. 285,325; July 21.
Horns and their adjuncts, Electrically actuated. E. A. Laboratories. 285,302; July 21.
Insulators, Ceramic. Isolantite Company of America, Inc. 285,224; July 21; Serial No. 312,230; published May 5, 1931.
Lamps, Photographic flash. J. Glassberg. 285,291; July 21; Serial No. 312,183; published May 5, 1931.
Lighters, Electric cigar. J. H. Cohen. 285,305; July 21.
Radio and wireless television instruments, loud speakers, radio tubes, etc. J. A. Alexander. 285,249; July 21; Serial No. 307,245; published May 5, 1931.
Radio receiving sets and parts thereof. Delco Radio Corporation. 285,225; July 21; Serial No. 311,233; published May 5, 1931.

CLASS 23

Centrifugal machines and parts thereof. Sharples Specialty Company. 285,327; July 21.
Plier wrenches. Herbrand Co. 285,332; July 21.
Sewing machines. Illinois Sewing Machine Company. 36,950; renewed Aug. 20, 1931.

CLASS 25

Padlocks. Independent Lock Company. 285,266; July 21; Serial No. 311,782; published May 5, 1931.

CLASS 26

Cameras and photographic developing apparatus. Commercial Camera Co. 83,479; renewed Sept. 19, 1931.
Eyeglass frames. Baker & Company. 285,333; July 21.

CLASS 27

Clocks, Electric. Majestic Specialties Mfg. Co. 285,264; July 21; Serial No. 301,184; published Sept. 9, 1930.
Watch-movements, watches, and parts thereof. Waltham Watch Company. 83,873; renewed Oct. 17, 1931.
Watch-movements, watches, and parts thereof. Waltham Watch Company. 83,952; renewed Oct. 24, 1931.
Watches, watchcases, watch-movements, and parts of each thereof. Keystone Watch Case Company. 82,993; renewed Aug. 8, 1931.

CLASS 28

Keys and badges. Kappa Delta Pi. 285,288; July 21; Serial No. 312,052; published May 5, 1931.
Pearls and precious stones, and articles of jewelry. Maybaum Brothers, Inc. 285,211; July 21; Serial No. 311,744; published May 5, 1931.
Pearls, necklaces, bracelets, etc. Cohn & Rosenberger, Inc. 285,209; July 21; Serial No. 311,469; published May 5, 1931.

CLASS 29

Cloths, Polishing. Rose Brand Wipers, Inc. 285,326; July 21.

CLASS 31

Filtering paper, filtering pasteboard, and filtering paper blocks. Papierfabrik Hahnemühle Gesellschaft mit beschränkter Haftung. 84,188; renewed Nov. 14, 1931.

CLASS 34

Burners, Oil. Gilbert & Barker Manufacturing Company. 285,242; July 21; Serial No. 311,475; published May 5, 1931.
Ranges, Gas. Hochschild, Kohn & Co. 285,301; July 21.
Ranges, gas cookers, warm air furnaces, etc., Cabinet gas. Charles Tisch, Inc. 285,276; July 21; Serial No. 312,351; published May 5, 1931.

CLASS 36

Harmonicas, Mouth. S. S. Kresge Company. 285,218; July 21; Serial No. 310,591; published May 5, 1931.

CLASS 37

Paper, Butchers' wrapping. Chatfield Paper Corporation. 285,298; July 21; Serial No. 312,411; published May 5, 1931.
Paper napkins and handkerchiefs. Tissue Company. 285,296; July 21; Serial No. 312,352; published May 5, 1931.
Paper, Toilet. Modern Tissues Corporation. 285,290; July 21; Serial No. 312,111; published May 5, 1931.
Papers, Cleansing tissue. Dermay Perfumers, Inc. 285,289; July 21; Serial No. 312,096; published May 5, 1931.
Papers, Cover and text. Tileston and Hollingsworth Company. 285,319; July 21.
Pencils, Lead. Richard Best Pencil Company. 285,321; July 21.
Stamps and brands, Rubber and brass. Precision Electrotype Company. 285,231; July 21; Serial No. 292,009; published May 5, 1931.

CLASS 38

Comic strip or section. Press Publishing Company. 285,297; July 21; Serial No. 312,386; published May 5, 1931.
House organ. O. M. Scott & Sons Company. 285,292; July 21; Serial No. 312,270; published May 5, 1931.
House organs. Curtis Publishing Company. 285,282–3; July 21; Serial Nos. 312,480–1; published May 5, 1931.
Magazine. Crowell Publishing Company. 285,300; July 21; Serial No. 312,418; published May 5, 1931.
Magazine. Parade, Incorporated. 285,284; July 21; Serial No. 312,668; published May 5, 1931.
Periodical. National Petroleum Publishing Company. 285,212; July 21; Serial No. 311,924; published May 5, 1931.
Photo prints, photostats, and photographic reproductions. Charles Brunning Company. 285,210; July 21; Serial No. 311,719; published May 5, 1931.

CLASS 39

Apparel, Women's wearing. H. Choate & Company. 285,331; July 21.
Belts, suspenders, braces, etc., Apparel. Pioneer Suspender Company. 285,213–15; July 21; Serial Nos. 311,971–3; published May 5, 1931.
Belts, suspenders, braces, etc., Apparel. Pioneer Suspender Company. 285,286–7; July 21; Serial Nos. 311,974–5; published May 5, 1931.
Berets, tam-o-shanters, hats, and caps. Albert Bruckner's Sons. 285,335; July 21.
Boots and shoes. Florsheim Shoe Company. 285,253; July 21; Serial No. 308,158; published Mar. 3, 1931.
Boots, shoes, and slippers. Novelty Shoe Company. 285,306; July 21.
Garments, underwear, and uppers for shoes, Outer. Cohen, Goldman & Co. Inc. 285,299; July 21; Serial No. 312,415; published May 5, 1931.
Garters, Men's. S. H. Kress & Co. 285,295; July 21; Serial No. 312,344; published May 5, 1931.
Hats and caps. Rogers Peet Company. 285,270; July 21; Serial No. 311,977; published Apr. 21, 1931.
Hats, Ladies' and misses'. Dorco Millinery Company. 285,329; July 21.
Heels, Rubber. O'Sullivan Rubber Company. 83,274; renewed Aug. 29, 1931.
Hosiery. Million Dollar Hosiery Co. 285,221; July 21; Serial No. 310,690; published Apr. 21, 1931.
Pajamas, night-shirts, negligee and dress shirts. E. Rosenfeld & Co. 82,176; renewed June 6, 1931.
Shirts. Oppenheim, Oberndorf & Co. 82,464; renewed June 27, 1931.
Shoes. Wm. Hahn & Company. 285,222; July 21; Serial No. 310,940; published May 5, 1931.
Shoes. C. E. Miller. 285,294; July 21; Serial No. 312,304; published May 5, 1931.
Shoes. Pedigo-Weber Shoe Co. 285,330; July 21.
Shoes, leggings, gloves, etc. Safety Equipment Service Company. 285,303; July 21.
Shoes, sandals, and slippers. H. David. 285,252; July 21; Serial No. 307,928; published May 5, 1931.
Soles. Lima Cord Sole and Heel Company. 285,219; July 21; Serial No. 310,648; published May 5, 1931.
Soles for shoes. Lima Cord Sole and Heel Company. 285,220; July 21; Serial No. 310,649; published May 5, 1931.
Suits, coats, vests, and pants, Boys' outer. Merit Manufacturing Company. 84,021; renewed Oct. 31, 1931.

CLASS 40

Hair waversh, hair curlers, and hair pins, Nonelectrical. H. Goodman & Sons, Inc. 285,237; July 21; Serial No. 311,096; published May 5, 1931.

CLASS 42

Fabrics, Elastic. United Elastic Corporation. 285,309; July 21.
Fabrics, Woolen textile. Printz-Biederman Company. 285,316-7; July 21.
Woolen, worsted, silk, etc., piece goods. G. J. Geer. 83,728; renewed Oct. 10, 1931.

CLASS 44

Arch supports. Hom-Fut Arch Support Co. 285,320; July 21.
Oxygen inhalation apparatus. Deutsche Gasgluehlicht-Auer-Gesellschaft Mit Beschraenkter Haftung. 285,254; July 21; Serial No. 308,482; published May 5, 1931.
Sanitary napkin belts. H. Statter, jr. 285,241; July 21; Serial No. 311,414; published May 5, 1931.
Surgical adhesive plaster. Deane Plaster Co. 285,258; July 21; Serial No. 310,718; published May 5, 1931.

CLASS 45

Beverage, Tonic. Jersey-Creme Company. 82,444; renewed June 27, 1931.
Sarsaparilla. Cliquot Club Bottling & Extract Co. 36,450; renewed May 21, 1931.

CLASS 46

Bread. Rubel Baking Co. 285,328; July 21.
Candy. Chandler and Rudd Company. 82,415; renewed June 27, 1931.
Canned grapefruit, corn, etc. New York Wholesale Grocery Co. 285,315; July 21.
Canned salmon. Hawk Fish Company. 82,979–80; renewed Aug. 8, 1931.

Canned salmon. Key City Packing Co. 82,800–3; renewed July 25, 1931.
Cereal foods. Postum Cereal Co. 82,258; renewed June 13, 1931.
Cheese. Schachtelkäsefabrik Franz Zwick. 285,233; July 21; Serial No. 297,782; published May 5, 1931.
Coffee. Norwine Coffee Company. 84,187; renewed Nov. 14, 1931.
Flour, Self rising. Davis Milling Company. 83,966; renewed Oct. 24, 1931.
Flour, stock and poultry feed, Wheat. Brooklyn Elevator & Milling Company. 84,078; renewed Nov. 7, 1931.
Flour, Wheat. Kehlor Flour Mills Company. 84,008; renewed Oct. 24, 1931.
Flour, Wheat. Montana Flour Mills Co. 83,505; renewed Sept. 19, 1931.
Food, poultry foods, chick mash, etc., Hog. Crete Mills. 285,227; July 21; Serial No. 235,252; published Feb. 7, 1928.
Foods. Kroger Grocery & Baking Co. 84,323; renewed Nov. 28, 1931.
Horseradish. W. E. Barkes Products Co. 285,322; July 21.
Macaroni. A. Russo & Co. 285,312; July 21.
Milk. Broome County Golden Guernsey Milk Co. 285,334; July 21.
Oranges and lemons. Mountain View Orange and Lemon Growers Association. 84,023; renewed Oct. 31, 1931.
Syrup, Malt. M. Moresky. 285,304; July 21.

CLASS 47

Wine. California Wine Association. 81,780; renewed May 9, 1931.
Wine, Claret. California Wine Association. 82,960; renewed Aug. 8, 1931.
Wine, Hock-type. California Wine Association. 81,781; renewed May 9, 1931.
Wine, pure California port. California Wine Association. 82,961; renewed Aug. 8, 1931.

CLASS 49

Rum. Compañia Ron Baccardí, S. A. 285,308; July 21.

CLASS 50

Fly-paper and other fly catching devices, Sticky. M. Dametz. 82,139; renewed June 6, 1931.

ALPHABETICAL LIST OF LABELS

Arkitoy Wood Construction Set. For Toy Construction Sets. G. B. Lewis Company. 39,440; July 21.
Certified. For Mushrooms. Premier Mushroom Company. 39,445; July 21.
Chase and Sanborn's Seal Brand Tea. For Tea. Standard Brands Incorporated. 39,449; July 21.
Clipper. For Ship Paints. Climax Cleaner Mfg. Company. 39,430; July 21.
Crest-On. For Butter. J. I. Boyd. 39,429; July 21.
Dabs of Cotton. For Sterilized Cotton for Facial Uses. I. Tow. 39,450; July 21.
Fit-to-Form Undies. For Undergarments for Women and Misses. Alfred Lichtenstein, Inc. 39,441; July 21.
Fly-Tox. For Insecticide. Rex Research Corporation. 39,446; July 21.
Freihofer's Pullman Bread. For Bread. Chas. Freihofer Baking Co. Inc. 39,433; July 21.
Fresh Roasted Coffee. For Coffee. Union Bag & Paper Corporation. 39,451–2; July 21.
Frontenac—India Pale—Export Ale. For Ale. Frontenac Breweries, Limited. 39,434; July 21.
Hitts Danger Lights. For Illuminating Signal Lights Used for Night Celebrations, Regattas, Outings, Etc. Hitt Fireworks Company. 39,435; July 21.
Hylyte Improved Sulphuric Acid. More Power-Life and Action, Eliminates Sulphation Troubles. For Sulphuric Acid. Hylyte Laboratories, Inc. 39,437; July 21.
Kitchen King. For Metal Sponges. National Pot-Cleaner Company. 39,444; July 21.
Kleenzit. For Preparation for Removing Corrosion from Radiators. Inland Motor Products Company. 39,438; July 21.
'Lo' Lene Hosiery. For Hosiery. Hoover Hosiery Company. 39,436; July 21.
Mabay. For Sugar. Compania Azucarera Central Mabay. 39,431; July 21.
Mother Clair's. For Cough Syrup. Mrs. M. Finn. 39,432; July 21.
Sani-Tissue. For Toilet Paper. Scott Paper Company. 39,447; July 21.
Scottissue. For Paper Towels in Folded Form. Scott Paper Company. 39,448; July 21.
Snow King. For Orangeade. Lash's Products Company. 39,439; July 21.
Veg-E-Tonic. For Chemical Compound for Plant Tonic. McClain Brothers Company. 39,442; July 21.
Weldtite. For Rubber Cement. Weldtite Products Manufacturing Co. 39,453; July 21.
Wormtox. For Chemical Compound for Destroying and Eradicating Vermin of All Kinds in the Soil. McClain Brothers Company. 39,443; July 21.

ALPHABETICAL LIST OF PRINTS

Awrey Bakery Dainties. For Bakery Dainties. Awrey Bakeries. 13,298; July 21.
Controlled Roasting is the Flavor Secret—Adform 115A. For Coffee. Hills Bros. 13,303; July 21.
Didn't I Tell You . . . . . Hills Bros. Coffee has a Flavor no other Coffee has—Adform 113. For Coffee. Hills Bros. 13,302; July 21.
Disease Conscious. For Incubators. Bundy Incubator Company. 13,300; July 21.
Floorartist Floors Joel Perkinson F. A. For Floors. J. Perkinson. 13,308; July 21.
Gain Check. For Lubricating Greases, Motor Oil and Gasoline. Sinclair Refining Co. 13,311; July 21.
Hills Bros Coffee—Adform 20. For Coffee. Hills Bros. 13,301; July 21.
Johnson Centri' Automatic Oil Burner. For Oil Burning Equipments. S. T. Johnson Co. 13,305; July 21.
Martin's Amber-Lyte Quick Drying Finishes. For Finishes for Walls, Houses, Porches, etc. Martin Varnish Company. 13,307; July 21.
My Cards are on the Table. For Coal. J. C. Beranek. 13,299; July 21.
Postograph. For Printed Blanks. Postograph Company. 13,309; July 21.
Quick Henry! The Flit (At the Beach). For Insecticides. Stanco Incorporated. 13,312; July 21.
Quick Henry! The Flit (On Parade). For Insecticides. Stanco Incorporated. 13,313; July 21.
Sealzit. For Preparation for Stopping Leaks in Radiators. Inland Motor Products Company. 13,304; July 21.
The Magic Wand. For Cleaning Devices for General Household Purposes, especially adapted for Cleaning Painted and Papered Walls, etc. K. P. & B. Co. 13,306; July 21.
Yum Yum. For Water Ices and Soft Drinks. J. Procacci. 13,310; July 21.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 21ST DAY OF JULY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Kamrath, Herbert G., assignor.)
A C Spark Plug Company. (See Smith, Frank D., jr., assignor.)
A C Spark Plug Company. (See Zubaty, Joseph, assignor.)
Abraham, Gabriel, New York, N. Y. Garter. 1,815,456; July 21.
Ackerman, Michael H., Mansfield, assignor of one-half to L. C. Sickel, Caledonia, Ohio. Valve. 1,815,537; July 21.
Ackerman, Michael H., Mansfield, assignor of one-half to L. C. Sickel, Caledonia, Ohio. Automatic valve. 1,815,538; July 21.
Adam, Frederick B., St. Louis, Mo. Panel board. 1,815,038; July 21.
Aerovox Wireless Corporation. (See Georgiev, Alexander, assignor.)
Ainslie, Donald F., Bishop, Calif. Plow attachment. 1,815,539; July 21.
Ainsworth Manufacturing Corporation. (See Potter, Albert T., assignor.)
Aktiengesellschaft Brown, Boveri and Cie. (See Kübler, Johannes, assignor.)
Albers, Gerhard H. (See Albers, John R. and G. H.)
Albers, John R. and G. H., Cherokee, Iowa. Air foil lift control. 1,815,489; July 21.
Albert, August, Munich, and J. Pfieger, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, New York, N. Y. Organic mercury compound. 1,815,604; July 21.
Albertoll, John E., San Francisco, Calif. Distributing system for objects. 1,815,029; July 21.
Albertson, Luther D., assignor of one-fourth to J. W. Davidson, one-fourth to E. Beanblossom, one-fourth to A. Stover, one-sixteenth to G. C. Simler, three-thirty-seconds to O. W. Hottel, and three-thirty-seconds to C. W. Miles, Corydon, Ind. Grass trimmer. 1,815,817; July 21.
Alexander, Frederick W., assignor of a half share to Lewis & Tylor Limited, Cardiff, Wales. Fabric belting. 1,815,879; July 21.
Alexander, William O., Pawhuska, Okla. Demountable tire rim. 1,815,818; July 21.
Alford, William C. (See Cassetty, W. M., jr., Ross, and Alford.)
Aljac Art Metal Products Corporation. (See Cricchio, Paul, assignor.)
Allen, George W., and A. Waters, Malvern, Victoria, Australia. Gas oven electric heater. 1,815,088; July 21.
Allen, Lee E., assignor to Pennsylvania Engineering Works, New Castle, Pa. Hot metal mixer. 1,815,605; July 21.
Allerding, Cletus N., Mansfield, Ohio. Folding chair. 1,815,643; July 21.
Allmänna Svenska Elektriska Aktiebolaget. (See Herlitz, Ivar, assignor.)
Almanrode, David S., Milwaukee, Wis. Thermostatic controlling device. 1,815,030; July 21.
Alsaker, Alfred, and M. Skau, assignors to The Delta Star Electric Company, Chicago, Ill. Switch. 1,815,282; July 21.
Alsaker, Alfred, and M. Skau, assignors to The Delta Star Electric Company, Chicago, Ill. Switch. 1,815,283; July 21.
Alsaker, Alfred, assignor to The Delta-Star Electric Company, Chicago, Ill. Switch. 1,815,392; July 21.
Alsdorf, Frederick C., Chicago, Ill. Manufacturing plastic asphaltic compositions for pavements. 1,815,089; July 21.
Alvey Manufacturing Company. (See Dietz, Frank J., assignor.)
American Anode, Inc. (See Gábor, F., Klein, and Szegvári, assignors.)
American Arch Company. (See Willett, Alfred H., assignor.)
American Bemberg Corporation. (See Hartmann, August, assignor.)
American Brass Company, The. (See Morell, Pascal J., assignor.)
American Can Company. (See Tolcik, John A., assignor.)
American Cyanamid Company. (See Kemmer, Frank R., assignor.)
American Electro Metal Corporation. (See Schwarzkopf, Paul, assignor.)
American Laundry Machinery Company, The. (See Otis, Charles M., assignor.)
American Lithographic Company. (See Newberry, Fenton S., assignor.)
American Lurgi Corporation. (See Engelhardt, Alfred, assignor.)
American Manganese Steel Company. (See Fahrenwald, Frank A., assignor.)
American Telephone and Telegraph Company. (See Crisson, George, assignor.)
American Telephone and Telegraph Company. (See Hoyt, Ray S., assignor.)
Andersen, Oscar W., Oak Park, assignor to Pettibone Mulliken Company, Chicago, Ill. Dipper tooth. 1,815,819; July 21.
Andersen, Oscar W., Oak Park, assignor to Pettibone Mulliken Company, Chicago, Ill. Dipper tooth. 1,815,820; July 21.
Anderson, Bertil. (See Carlson, Enoch W., assignor.)
Anderson, Harley E., assignor to Gustin-Bacon Manufacturing Company, Kansas City, Mo. Rod or pipe clamp. 1,815,644; July 21.
Anderson, Raymond M., assignor to G. M. Holley, Detroit, Mich. Downdraft carburetor. 1,815,645; July 21.
Anderson, Robert G., Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Removable pedestal liner. 1,815,457; July 21.
Anderson, Robert J., Whitman, assignor to National Fireworks, Inc., West Hanover, Mass. Marine signal. 1,815,226; July 21.
Andrews, Harry C., assignor to Killark Eelectric Manufacturing Company, St. Louis, Mo. Wall-box for electrical devices. 1,815,393; July 21.
Angell, Edward C., New York, N. Y. Apparatus for making paper containers. 1,815,136; July 21.
Angell, Edward C., New York, N. Y. Apparatus for sealing containers. 1,815,284; July 21.
Anschicks, Rudolph J., assignor to Protectoseal Company of America, Chicago, Ill. Apparatus for handling volatile liquids. 1,815,342; July 21.
Armstrong, Joseph V., and J. F. Ribbeck, Akron, N. Y. Winding mechanism. 1,815,729; July 21.
Armstrong, McKinley, San Pedro, Calif. Wrench. 1,815,755; July 21.
Atlantic Refining Company, The. (See Henderson, L. M., and Cowles, assignors.)
Atlas Bolt & Screw Company, The. (See Schellentrager, Eugene W., assignor.)
Atmospheric Nitrogen Corporation. (See de Jahn, Fredrik W., assignor.)
Audio-Cinema, Incorporated. (See Goldman, Frank L., assignor.)
Aulenback, James R., Worcester, Mass. Boring tool. 1,815,756; July 21.
Austin, Percival C. (See Bates, J. S., Chalmers, and Austin.)
Auter, José P., Gerona, Spain. Gas burner. 1,815,176; July 21.
Autographic Register Company. (See Johnson, Arthur A., assignor.)
Automatic Sprinkler Company of America. (See Hamilton, John R., assignor.)
Automotive Engineering Corporation. (See Marcum, Arthur I., assignor.)
Babbitt, Bethel J., Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and material for sealing containers. 1,815,695; July 21.
Babbitt, Carrie, Brooklyn, N. Y. Combined sewing implement and pin holder. Des. 84,669; July 21.
Babcock & Wilcox Company, The. (See Sadler, Cornelius R., assignor.)
Baby Grands, Inc. (See Goldstein, Emanuel, assignor.)
Bacon, Leone G., Kent, Ohio. Signal. 1,815,662; July 21.
Badger, E. B., & Sons Company. (See Dickson, John V. E., assignor.)
Badger, E. B., & Sons Company. (See Peters, William A., jr., assignor.)
Bahr, August T. J., Kansas City, Mo., assignor to Bahr Starting Gate Corporation, Chicago, Ill. Starting machine. 1,815,757; July 21.
Bahr Starting Gate Corporation. (See Bahr, August T. J., assignor.)
Bakelite Corporation. (See Byck, L. C., and Peakes, assignors.)
Baker, Charles R., Evanston, Ill. Burner. 1,815,039; July 21.
Baker, Erle K., Chicago, Ill., assignor to Motor Wheel Corporation, Lansing, Mich. Wheel mounting means. 1,815,821; July 21.
Baker Perkins Company. (See Feige, Harry, assignor.)
Baker, Stephen D., New York, N. Y. Post for a towel bar or similar article. Des. 84,670; July 21.

Baker, Stephen D., New York, N. Y. Bathroom bracket or similar article. Des. 84,671; July 21.

Baker, Stephen D., New York, N. Y. Bathroom hook. Des. 84,672; July 21.

Baker, Stephen D., New York, N. Y. Bathroom bracket. Des. 84,673; July 21.

Balachowsky, Dmitry, and P. Caire, Paris, France, assignors to Societe des Brevets Catalex, Geneva, Switzerland. Gas mixing apparatus. 1,815,177; July 21.

Balachowsky, Dmitry, and P. Caire, Paris, France, assignors to Société Brevets Catalex, Geneva, Switzerland. Producing a combustible charge for use in internal combustion engines. 1,815,178; July 21.

Ball, Albert P., assignor to Briggs Manufacturing Company, Detroit, Mich. Molding assembly. 1,815,696; July 21.

Ball, Harry V., Concord, Mass., and A. J. Horton, White Plains, assignors to R. Hoe & Co., Inc., New York, N. Y. Web roll controlling mechanism. 1,815,179; July 21.

Balz-Erzröstung Gesellschaft mit beschrankter Haftung. (See Balz, Georg, assignor.)

Balz, Georg., Tubingen, assignor to Balz-Erzröstung Gesellschaft mit beschrankter Haftung, Gleiwitz, Germany. Roasting zinc blende and the like. 1,815,040; July 21.

Bark, William, Gary, Ind., assignor to National Tube Company. Tube piercing and expanding plug. 1,815,426; July 21.

Bark, William, and J. V. Mazurie, Gary, Ind., assignors to National Tube Company. Plug bar for tube making machines. 1,815,427; July 21.

Barnes, James W., Homestead, assignor, by mesne assignments, to National Postage Stamp Machine Corporation, Pittsburgh, Pa. Stamp vending machine. 1,815,343; July 21.

Barrass, Juddson E., Uniontown, Ohio, assignor to The Hoover Company. Handle switch. 1,815,041; July 21.

Barrett, Charles E., assignor to Alexander Smith & Sons Carpet Company, Yonkers, N. Y. Indicator for carpet looms. 1,815,822; July 21.

Barry, James J., and W. T. Murray, Gloucester, Mass., assignors, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Preparing food products. 1,815,227; July 21.

Barry, Nicholas, Muscatine, Iowa. Solid pressed steel pulley. 1,815,663; July 21.

Bartels, Elmer L., assignor to Gleaner Combine Harvester Corporation, Independence, Mo. Straw spreader. 1,815,042; July 21.

Barth, Hans, New York, N. Y. Piano. 1,815,228; July 21.

Bartlett, C. O., & Snow Company, The. (See Jones, Edward N., assignor.)

Barton, Roger, Chicago, Ill., assignor to Central Scientific Company. Electroscope. 1,815,606; July 21.

Barton, Theophilus F., Upper Montclair, N. J., assignor to General Electric Company. System of electrical distribution. 1,815,823; July 21.

Barton, Theophilus F., Upper Montclair, N. J., assignor to General Electric Company. Electric power system. 1,815,824; July 21.

Bassick Company, The. (See Herold, Walter F., assignor.)

Bate, John W., assignor to Walker Manufacturing Company, Racine, Wis. Screw jack. 1,815,885; July 21.

Bates, John, Beaumaris, Victoria, Australia. Hand operated load lifting device. 1,815,825; July 21.

Bates, John S., H. S. Chalmers, and P. C. Austin, Bathurst, New Brunswick, Canada; said Chalmers and Austin assignors to said Bates. Causticizing. 1,815,646; July 21.

Bauckman, Flora M., West Somerville, Mass. Breast support. 1,815,697; July 21.

Baughman, George W., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Track circuits for alternating current electric railways. 1,815,031; July 21.

Beanblossom, Emmett, et al. (See Albertson, Luther D., assignor.)

Beck, Ernest T., assignor to International Silver Company, Meriden, Conn. Spoon or other article of tableware. Des. 84,674; July 21.

Beck, Robert L., et al. (See Law, Theodore L., assignor.)

Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Fuel gas distributing system for coke ovens. 1,815,285; July 21.

Becket, Alan L., East Orange, N. J. Attachment plug. 1,815,043; July 21.

Beebe, John D., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Insulator. 1,815,044; July 21.

Beers, Harry F., Pelham, N. Y. Air-tight door for cabinets. 1,815,607; July 21.

Behncke, Hermann. (See Marx, K., Behncke, and Zobel.)

Bell Punch and Printing Co. Limited, The. (See Webb, Christopher F., assignor.)

Bell Telephone Laboratories, Incorporated. (See Englund, Carl R., assignor.)

Bell Telephone Laboratories, Incorporated. (See Ives, Herbert E., assignor.)

Bell Telephone Laboratories, Incorporated. (See Ogg, Robert A., assignor.)

Bellay, Julien, Brussels, Belgium. Device for continuously producing pure hydrogen. 1,815,090; July 21.

Bennett, Claude C., assignor to A. E. Feragen, Inc., Seattle, Wash. Axle press. 1,815,180; July 21.

Bennett, George L., Cleveland Heights, Ohio. Tread for shoe heels. 1,815,091; July 21.

Bennett Pumps Corporation. (See Bennett, T. B., and Prescott, assignors.)

Bennett, Roze E., assignor of one-half to W. H. Sutcliffe and L. Parker, Miami, Fla. Brassière. 1,815,664; July 21.

Bennett, Thomas B., and L. A. Prescott, assignors to Bennett Pumps Corporation, Muskegon, Mich. Two sided dispensing pump. 1,815,698; July 21.

Bergmann, Philip, assignor to Columbia Steel Equipment Company, Philadelphia, Pa. Posting tray. 1,815,826; July 21.

Berkshire Knitting Mills. (See Hemmerich, Hugo, assignor.)

Bernady, Raoul, Istres, assignor to Societe d'Etudes et de Construction d'Apparells de Telemecanique, Paris France. Method and device for the automatic starting of aeroplanes. 1,815,092; July 21.

Berthold, Rudolf G., Berlin-Siemensstadt, and R. Strigel, Berlin-Charlottenburg, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electron tube. 1,815,229; July 21.

Beth, Hugo W. H. (See Larsson, T., and Beth.)

Bevard, Emery. (See Petersen, J. W., and Bevard.)

Bienaimé, Robert, Paris, France. Locking device. 1,815,181; July 21.

Bigelow Sanford Carpet Co. (See Faraday, Cornelia B., assignor.)

Bignami, Isidoro, E. Galassini, E. Franchi, and G. Pons, assignors to Societa Alti Forni, Fonderie, Acciaierie e Ferriere Franchi-Gregorini, Brescia, Italy. Centrifugal tube casting apparatus. 1,815,093; July 21.

Birdsall, Albert H., assignor of one-third to G. W. Mills, jr., Brooklyn, N. Y. Making a composition sheet or slab. 1,815,608; July 21.

Bjorkman, Axel W., Brooklyn, assignor to Otis Elevator Company, New York, N. Y. Chuck. 1,815,609; July 21.

Black, John C., Los Angeles, Calif., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Digester for cracking hydrocarbon oils. 1,815,428; July 21.

Black, John P., and E. A. Green, assignors of one-third to Humber Limited, Coventry, England. Fastening device. 1,815,540; July 21.

Blair, William R., Washington, D. C. Seagoing craft. 1,815,286; July 21.

Blake, Montford, et al. (See Law, Theodore L., assignor.)

Bleyer, Lloyd G., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis. Traveling water screen. 1,815,137; July 21.

Blondin, Joseph, Los Angeles, Calif. Synchronous running gear for airplanes. 1,815,182; July 21.

Blood, Louis H., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Broaching machine. 1,815,647; July 21.

Blount, John W., Pittsburgh, Pa. Piston ring. 1,815,138; July 21.

Blumenthal, Julius J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Lighting fixture or article of similar nature. Des. 84,675; July 21.

Blunt, Royden A., Baltimore, Md. Bottle. Des. 84,676; July 21.

Blunt, Royden A., Baltimore, Md. Bottle. Des. 84,677; July 21.

Boddie, Clarence A., and R. C. Curtis, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Radio signaling system. 1,815,045; July 21.

Bodmer, Ernst, assignor to Durand & Huguenin S. A., Basel, Switzerland. Preparation of mordant disazodyestuffs. 1,815,827; July 21.

Bohannon, Robert L., Berkeley, assignor of fifty-one one-hundredths to A. A. Thiel, Oakland, Calif. Animal trap. 1,815,541; July 21.

Bolton, James D., Los Angeles, Calif. Can opener. 1,815,094; July 21.

Boltz, Fred S., Mansfield, Mass. Catch basin for soil water heat reclaimers. 1,815,542; July 21.

Boltz, Fred S., Mansfield, Mass. Tank. 1,815,543; July 21.

Bonat, Harry, et al. (See Mack, Carl, assignor.)

Bonat, Samuel, et al. (See Mack, Carl, assignor.)

Bonat, Samuel, & Bro. (See Mack, Carl.)

Bonney, Alfred, jr., Verona, N. J., assignor to Westinghouse Lamp Company. Incandescent electric lamp bulb. Des. 84,723; July 21.

Bonney-Floyd Company, The. (See Edmunds, Glenn E., assignor.)

Bonsor, Walter, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for positioning and holding work for material working apparatus. 1,815,699; July 21.

Boosey, Edward W. N., Detroit, Mich. Pressure relief valve. 1,815,394; July 21.

Boston Wire Stitcher Company. (See Maynard, Arthur H., assignor.)

Bosworth, Thomas E., Providence, R. I., assignor to Universal Optical Corporation. Spectacle frame. Des. 84,678; July 21.

Bouchard, Louis O., Philadelphia, Pa., assignor of two-thirds to C. Gwynne Douglas, Inc., and one-third to Paper Novelty Corporation. Decorative wreath. 1,815,610; July 21.

Boughton, Solon J., Shaker Heights, Ohio. Change speed gearing. 1,815,032; July 21.

Boughton, Solon J., Shaker Heights, Ohio. Change speed transmission. 1,815,033; July 21.

Boughton, Solon J., Shaker Heights, Ohio. Transmission. 1,815,034; July 21.

Boullion, Constant, assignor to The Hendey Machine Company, Torrington, Conn. Follow rest. 1,815,490; July 21.

Bowling, Francis A., Gettysburg, Pa. Aircraft. 1,815,758; July 21.

Boynton, Stanley E., Elizabeth, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Assembling fixture. 1,815,230; July 21.

Braasch, August D., L. McDo. and J. Twells, Stockton, assignors, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif. Pick up guard. 1,815,491; July 21.

Bradley, Alonzo B., et al. (See Richardson, Henry F., assignor.)

Bradley, Claude, Seattle, Wash. Constructing with concrete. 1,815,492; July 21.

Bradley, S. R., et al. (See Richardson, Henry F., assignor.)

Brandt, Eugène, Geneva, Switzerland. Nut locking device. 1,815,095; July 21.

Bresch, Albert, St. Louis, Mo. Walking figure wheeled toy. 1,815,287; July 21.

Brewbaker, Milo W., Chicago, Ill. Stilt. 1,815,544; July 21.

Bridgwater Machine Company, The. (See Mason, Freeman D., assignor.)

Briesewitz, Kurt. (See Schleicher, F., Schwaebel, and Briesewitz.)

Briggs Manufacturing Company. (See Ball, Albert P., assignor.)

Brightwell, Walter J., Kilgore, Tex. Air compressing machine. 1,815,828; July 21.

Brill, J. C., Company, The. (See Deal, Edwin T., assignor.)

Brincil, Joseph, Reading, Pa. Bushing bearing and making it. 1,815,344; July 21.

Bristol, Wm. H., Talking Picture Corporation. (See Garrigus, Clarence G., assignor.)

Broadbent, Frederick G. (See Willshaw, H., Norcross, and Broadbent.)

Brodersen, Karl. (See Wesche, H., Brodersen, and Ext.)

Brooks, Charles A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,815,458; July 21.

Brown Company. (See Richter, George A., assignor.)

Brown, Donald, Heaton, Newcastle-upon-Tyne, England. Steering gear for motor road vehicles and the like. 1,815,231; July 21.

Brown, Herbert C. (See Capell, Carl F., assignor.)

Brown, John W., jr., assignor to The Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Meat chopper. 1,815,829; July 21.

Brown, Lester W. and M. E., Seattle, Wash. Rocker toy. 1,815,183; July 21.

Brown, Marguerite E. (See Brown, Lester W. and M. E.)

Brown, Newell, Selma, Iowa. Hog ringing device. 1,815,545; July 21.

Brown, Ray W., Altadena, Calif., assignor, by mesne assignments, to H. D. Wilson, Pittsburgh, Pa. Nonjamming taper shank tool. 1,815,611; July 21.

Browne-Morse Company. (See Soper, Raymond H., assignor.)

Brownlee, Thomas, Clifton, N. J., assignor, by mesne assignments, to National Net & Twine Co. Inc., Boston, Mass. Tying weaver's knots. 1,815,546; July 21.

Brügmann, William F., Evanston, Ill. Printer's register hook. 1,815,232; July 21.

Brunswick-Balke-Collender Co., The. (See Wardrop, Grover O., assignor.)

Bruson, Herman A., Germantown, assignor to Rohm & Haas Company, Philadelphia, Pa. Condensation product and method of preparing. 1,815,886; July 21.

Bryan, Charles F., North Plainfield, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Wiper mechanism for intaglio plate printing machines. 1,815,700; July 21.

Buchtel, Benjamin J. (See Nulsen, M. E., and Buchtel.)

Buckner, William A., Fresno, Calif. Slow motion rotary sprinkler. 1,815,395; July 21.

Buckner, William A., Fresno, Calif. Slow motion rotary sprinkler. 1,815,880; July 21.

Buehler, Philip J., Hokah, Minn. Expansible parting strip. 1,815,759; July 21.

Bull Dog Electric Products Company. (See Frank, Harrison J. L., assignor.)

Bullock, Henry E. (See Turzicky, Francis, assignor.)

Burke Electric Company. (See Burke, James, assignor.)

Burke, James, Erie, Pa., assignor to Burke Electric Company. Terminal block. 1,815,233; July 21.

Burns, John L., assignor, by mesne assignments, to Franklin Development Corporation, Syracuse, N. Y. Flexible clutch plate. 1,815,760; July 21.

Buroff, Michail, Moscow, Union of Socialist Soviet Republics. Device for treating fibers. 1,815,493; July 21.

Burr, Gordon A., Wilkinsburg, and J. H. Frakes, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Outlet-bushing structure. 1,815,046; July 21.

Burton, Henry, Gardena, Calif. Engine starter. 1,815,047; July 21.

Bush, A. G. (See Criner, Harry J., assignor.)

Butscher, Carl T., Milwaukee, Wis. Ash receiver. 1,815,701; July 21.

Byck, Lawrence C., and G. L. Peakes, Perth Amboy, N. J., assignors to Bakelite Corporation, New York, N. Y. Decorated article and producing the same. 1,815,234; July 21.

Byrnes, Clarence P., Sewickley, Pa. Glass grinding. 1,815,547; July 21.

C & C Developing Company. (See Jakosky, John J., assignor.)

Cahn, Tillman, Elkins Park, Pa., assignor to Pioneer Suspender Company. Garter. 1,815,702; July 21.

Cahn, Tillman, Elkins Park, Pa., assignor to Pioneer Suspender Company. Adjustment slide. 1,815,703; July 21.

Caire, Philippe. (See Balachowsky, D., and Caire.)

Cambridge Laboratories, Inc. (See Smith, Charles G., assignor.)

Camp, Clarence A., Oakland, Calif. Fire extinguisher. 1,815,494; July 21.

Camp, Percy B., Maywood, Ill. Brake mechanism. 1,815,235; July 21.

Canaday, Jesse L., Memphis, Tenn. Garage. 1,815,429; July 21.

Canadian Electro Products Company. (See Matheson, Howard W., assignor.)

Cannon, Alfred C. (See Gerow, J. A., and Cannon.)

Cannon, William D. (See Milnor, J. W., and Cannon.)

Capell, Carl F., Santa Monica, assignor of one-fourth to H. C. Brown, Los Angeles, Calif. Oscillating signal. 1,815,139; July 21.

Carlisle, Harry J., Kenya Colony, East Africa. Container for storing gramophone records. 1,815,830; July 21.

Carlson, Enoch W., assignor of one-half to B. Anderson, Jamestown, N. Y. Ladder. 1,815,236; July 21.

Cartier, Inc. (See Cartier, Pierre C., assignor.)

Cartier, Pierre C., assignor to Cartier, Inc., New York, N. Y. Safety razor case. 1,815,459; July 21.

Case, Lawrence W., Manchester, Conn. Process and apparatus for making paper. 1,815,237; July 21.

Casper, Anthony B., assignor to Houde Engineering Corporation, Buffalo, N. Y. Shock absorber. 1,815,184; July 21.

Cassetty, William M., jr., F. L. Ross, and W. C. Alford, assignors to Darklite Corporation, Nashville, Tenn. Light projector. 1,815,831; July 21.

Cataline, Benton, and E. C. Richard, Flint, assignors to General Motors Corporation, Detroit, Mich. Valve spring. 1,815,612; July 21.

Caterpillar Tractor Co. (See Braasch, A. D., McDow, and Twells, assignors.)

Cather, Charles E., Worcester, assignor to United States Envelope Company, Springfield, Mass. Two compartment envelope. 1,815,396; July 21.

Cedervall, Carl W., Gottenborg, Sweden. Stuffing box for ships' propeller shafts. 1,815,096; July 21.

Celanese Corporation of America. (See Moss, William H., assignor.)

Central Scientific Company. (See Barton, Roger, assignor.)

Cerini, Leonardo, Castellanza, Italy. Treatment of vegetable fibers of osmotic diaphragms. 1,815,761; July 21.

Chab, Joseph, Dorchester, Nebr. Aeroplane parachute. 1,815,430; July 21.

Chain Belt Company. (See Bleyer, Lloyd G., assignor.)

Chalmers, Harris S. (See Bates, J. S., Chalmers, and Austin.)

Chambers, Harrington, Flushing, Long Island, N. Y. Stair construction. 1,815,048; July 21.

Chaplick, Zigman, Chicago, Ill. Ash receiver. Des. 84,679; July 21.

Chapman, William A., E. J. Machemer, and F. J. Paul, Silver Creek, assignors to Huntley Manufacturing Co., Brocton, N. Y. Coring machine. 1,815,730; July 21.

Chappell, Marvin L., Los Angeles, assignor to Standard Oil Company of California, San Francisco, Calif. Treating hydrocarbon oils with metallic halides. 1,815,460; July 21.

Charlton, Ernest E., Schenectady, N. Y., assignor to General Electric Company. Electric discharge device. 1,815,762; July 21.

Chase, Delmar D., Schenectady, N. Y., assignor to General Electric Company. Dynamo-electric machine winding. 1,815,832; July 21.

Chase, George C., South Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Full-cycle positioning mechanism. Re18,130; July 21.

Cheney Company, The. (See Koeppe, Robert J., assignor.)

Cherry, George L., La Grange, Ill., assignor to Western Electric Company Incorporated, New York, N. Y. Cleaning device. 1,815,238; July 21.

Chittim, Carl C., Springfield, Mo. Folding double cot. 1,815,495; July 21.

Christensen, Godfrey, assignor to Golden State Milk Products Company, San Francisco, Calif. Case washing machine. 1,815,239; July 21.

Chryst, William A., assignor to Delco-Remy Corporation, Dayton, Ohio. Ignition apparatus. 1,815,496; July 21.

Cincinnati Milling Machine Company, The. (See Blood, Louis H., assignor.)

Clark, Cyrus Co. (See Gall, Aloise, assignor.)

Cleanse, Robert L., Sewickley, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for drawing sheet glass. 1,815,288; July 21.
Clayton, Andrew B., Union, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Ruffling mechanism for sewing machines. 1,815,881; July 21.
Clayton, Ross H. (See Hill, I., and Clayton.)
Clegg, William H., Philadelphia, Pa. Internal combustion engine cooling system. 1,815,240; July 21.
Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Subdivided service system of radio broadcast distribution. 1,815,833; July 21.
Cleveland Trust Company, The. (See Gulick, Edward J., assignor.)
Cobb, Paul, Hope, Ark. Adjustable swing hanger. 1,815,185; July 21.
Coggeshall, Allan, et al. (See Richardson, Henry F., assignor.)
Cohen, Earl. (See Friedman, Abraham, assignor.)
Cohn, Leo, Los Angeles, Calif. Bracelet. Des. 84,680; July 21.
Coldwell, Clarence B. (See Wilkin, J. T., and Coldwell.)
Cole, James R., Tulsa, Okla. Deflector. 1,815,035; July 21.
Cole, James R., Tulsa County, Okla. Stuffing box and packing therefor. 1,815,036; July 21.
Cole, Raymond A., assignor to Norton Company, Worcester, Mass. Work size mechanism for grinding machines. 1,815,049; July 21.
Coles, Henry L., assignor to Guardian Metals Company, Hamilton, Ohio. Casting metals. 1,815,186; July 21.
Coles, Henry L., assignor to Guardian Metals Company, Hamilton, Ohio. Safe and vault member and construction. 1,815,187; July 21.
Coles, Peyton S., Atlanta, Ga. Windshield. 1,815,834; July 21.
Colladay, Edward F. (See Clement, Edward E., assignor.)
Colley, George F., Memphis, Tenn. Tool. 1,815,665; July 21.
Colman, Howard D., Rockford, Ill. Overload release mechanism. 1,815,345; July 21.
Colman, Howard D., Rockford, Ill. Motor driven operator. 1,815,397; July 21.
Colman, Howard D., Rockford, Ill. Motor control mechanism. 1,815,398; July 21.
Colson, Edwin H., Oakland, Nebr. Runner cleaner for planters. 1,815,497; July 21.
Columbia Steel Equipment Company. (See Bergmann, Philip, assignor.)
Coming Glass Works. (See Taylor, William C., assignor.)
Compagnie Internationale pour la Fabrication des Essences et Petroles. (See Joseph, Alfred, assignor.)
Comstock, Gregory J., Pittsburgh, assignor to Firth-Sterling Steel Company, McKeesport, Pa. Composition of matter. 1,815,613; July 21.
Conner Crouse Corporation. (See Crouse, George B., assignor.)
Connersville Blower Company, The. (See Wilkins, J. T., and Coldwell, assignors.)
Connor, John H., Boston, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me. Leather working machine. 1,815,140; July 21.
Continental Can Company. (See O'Neil, James H., assignor.)
Continental Can Company. (See O'Neil, J. H., and Flock, assignors.)
Cook, Howard D., Elyria, and W. L. Scott, Lorain, Ohio. Furnace charging apparatus. 1,815,666; July 21.
Cooke, George T., South Norwalk, Conn. Rod support and holder. 1,815,704; July 21.
Copeland Products Inc. (See Scullen, Hugh J., assignor.)
Copper Plate Sheet & Tube Company. (See Watkins, William E., assignor.)
Cosin, Joseph J., Newark, N. J. Powder puff and manufacturing the same. 1,815,763; July 21.
Covell, Harold S., Holland, Mich., assignor to Hart & Cooley Manufacturing Company. Furnace register. 1,815,346; July 21.
Covington, General L., Chehalis, Wash. Gold-saving apparatus. 1,815,548; July 21.
Cowles, Henry C., jr. (See Henderson, L. M., and Cowles.)
Cowles, Theodore B., and C. M. Park, Madison, Wis. Gravity feed control. 1,815,847; July 21.
Cowley, James T., assignor to The Lamson Company, Syracuse, N. Y. Power controller. 1,815,188; July 21.
Cox, Willis T., Rivera, Calif. Automatic battery filler. 1,815,348; July 21.
Craig, Bessie C. (See Craig, Edmond D., assignor.)
Craig, Edmond D., assignor to B. C. Craig, Savannah, Ga. Sanitary poultry and pet stock manure disposal base. 1,815,467; July 21.
Crandall, Irvin C. (See Emerson, A. C., and Crandall.)
Crane, Charles R., 2d, assignor to Crane Co., Chicago, Ill. Enamelled iron plumbing fixture. 1,815,705; July 21.
Crane Co. (See Crane, Charles R., assignor.)
Cregier, A. M., et al. (See Richardson, Henry F., assignor.)
Cressaty, Geo. M. (See Greby, Ernest, assigner.)
Cricchio, Paul, Bronx, N. Y., assignor to Aljac Art Metal Products Corporation, Brooklyn, N. Y. Lamp. Des. 84,681; July 21.
Criner, Harry J., assignor of one-half to A. G. Bush, Davenport, Iowa. Clothes wringer. 1,815,189; July 21.
Criner, Harry J., assignor of one-half to A. G. Bush, Davenport, Iowa. Driving mechanism for combined washers and driers. 1,815,190; July 21.
Crisson, George, East Orange, N. J., assignor to American Telephone and Telegraph Company. Transmission system. 1,815,241; July 21.
Cross, Garrett P. S., Grand Rapids, Mich., assignor to United Shoe Machinery Corporation, Paterson, N. J. Controlling system. 1,815,289; July 21.
Crouse, George B., Woodcliff, N. J., assignor to Conner Crouse Corporation, New York, N. Y. Voltage regulator. 1,815,141; July 21.
Crouse, George B., Woodcliff, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. Y. Electric converter. 1,815,498; July 21.
Crown Stove Works. (See Rogers, John C., assignor.)
Curnutt, Elmer, Garnett, Kans. Hydraulic oil well lift. 1,815,399; July 21.
Curtis, Richard C. (See Boddie, C. A., and Curtis.)
Cutler-Hammer, Inc. (See Tregoning, William C., assignor.)
Damon, Francisque, Lyon, France. Varicose stocking. 1,815,667; July 21.
Damonte, John P., New Orleans, La. Worm gear. 1,815,835; July 21.
Darco Corporation. (See Power, James T., assignor.)
Darklite Corporation. (See Cassetty, W. M. jr., Ross, and Alford, assignors.)
Dart, Robert H., Sacramento, Calif. Automobile jack. 1,815,869; July 21.
Davidson, Clinton, San Francisco, Calif. Hydrocarbon motor carburetor. 1,815,097; July 21.
Davidson, John W. et al. (See Albertson, Luther D., assignor.)
Davidson, Louis, Philadelphia, Pa. Boiler. 1,815,882; July 21.
Davidson, Walter C., North Canton, Ohio., assignor to The Hoover Company. Suction cleaner. 1,815,242; July 21.
Davis, Charles, et al. (See Haworth, De Witt C., assignor.)
Davis, Floyd E., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Six wheel chassis for motor vehicles. 1,815,431; July 21.
Davis, John H., Watertown, assignor to Renaud et Cie. of America, Boston, Mass. Bottle. Des. 84,683; July 21.
Davis, John H., Watertown, assignor to Renaud et Cie. of America, Boston, Mass. Bottle. Des. 84,683; July 21.
Davis, William H. (See Neal, Walter V., assignor.)
Davis, William I.; Campbell, assignor, by mesne assignments, to E. D. Grace, Poplar Bluffs, Mo. Individual mausoleum. 1,815,883; July 21.
Deal, Edwin T., Aldan, assignor to The J. G. Brill Company, Philadelphia, Pa. Chair. 1,815,836; July 21.
Dearborn, Richard J., Summit, N. J., and W. K. Holmes, Port Arthur, Tex., assignors to The Texas Company, New York, N. Y. Treating hydrocarbon oil. 1,815,050; July 21.
Decombe, Georges, Lyon, France. Demountable metallic reel for cables. 1,815,499; July 21.
Dedman, Bryant, Glen Ellyn, Ill. Casing hook for oil wells. 1,815,290; July 21.
De Florez, Luis, Pomfret, Conn., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Apparatus and method for fuel control. 1,815,051; July 21.
De Florez, Luis, Pomfret, Conn., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Regulating system for fluid supplies. 1,815,870; July 21.
Deisch, Bert A., assignor to McDonald Machine Co., Chicago, Ill. Can testing machine. 1,815,837; July 21.
De Jahn, Fredrik W., New York, assignor to Atmospheric Nitrogen Corporation, Syracuse, N. Y. Making ammonia by catalysis. 1,815,243; July 21.
Delco-Remy Corporation. (See Chryst, William A., assignor.)
De Le Fond, Charles. (See Doesken, Henry, assignor.)
Del Mar, William A., Greenwich, Conn., assignor to Habirshaw Cable & Wire Corporation, New York, N. Y. Impregnating cables. 1,815,706; July 21.
Delta Star Electric Company, The. (See Alsaker, A., and Skau, assignors.)
De Madaler, Arthur, Rochester, assignor, by mesne assignments, to Visionola Mfg. Corporation, New York, N. Y. Synchronized motion picture and sound reproducing machine. 1,815,693; July 21.
De Madaler, Arthur, Hampton Bays, assignor, by mesne assignments, to Visionola Mfg. Corporation, New York, N. Y. Synchronously operated motion picture and sound reproduction apparatus. 1,815,694; July 21.
De Mattia, Barthold, Passaic, N. J. Ball mold press. 1,815,400; July 21.
De Mers, Clayton D., assignor to Taylor Instrument Companies, Rochester, N. Y. Drier control. 1,815,648; July 21.
Denney, Harvey J., Westlake, La. Pipe puller. 1,815,462; July 21.
Denney, Harvey J., Westlake, and J. Gaunt, Lake Charles, La. Sucker rod guide. 1,815,461; July 21.
Deppé, William P., Brightwaters, N. Y. Internal combustion engine. 1,815,432; July 21.

Deppeler, John H., Weehawken, N. J. Alumino-thermic steel. 1,815,052; July 21.
De Walt Products Corporation. (See De Walt, Raymond E., assignor.)
De Walt, Raymond E., assignor to De Walt Products Corporation, Leola, Pa. Sawing machine. 1,815,037; July 21.
Dickey, Laurence P., Mountain Lakes, N. J., assignor to August Goertz & Co., Inc. Vanity box. 1,815,463; July 21.
Dicks, Thomas A., assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa. Propeller. 1,815,191; July 21.
Dicks, Thomas A., assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa. Propeller. 1,815,192; July 21.
Dickson, John V. E., West New York, N. J., assignor, by mesne assignments, to E. B. Badger & Sons Company, Boston, Mass. Fractionation of mixed fluids. 1,815,127; July 21.
Dickson, John V. E., Houston, Tex., assignor, by mesne assignments, to E. B. Badger & Sons Company, Boston, Mass. Distillation of mineral oils. 1,815,128; July 21.
Dietz, Frank J., Baltimore, Md., assignor to Alvey Manufacturing Company, St. Louis, Mo. Automatic blocking device for conveyer systems. 1,815,549; July 21.
Di Matteo, Louis, Bridgeport, Conn. Automatically illuminating dial telephones. 1,815,550; July 21.
Doan, Elmer M., San Diego, Calif. Stud extractor. 1,815,500; July 21.
Dobson and Barlow Limited. (See Schofield, Charles, assignor.)
Dodge, Charles H., assignor to The Globe Company, Chicago, Ill. Truck. 1,815,244; July 21.
Doesken, Henry, assignor of one-half to C. De Le Fond, Los Angeles, Calif. Vehicle operated gate. 1,815,193; July 21.
Dolmage, Mibran M., Washington, D. C. Negative capacity device. 1,815,838; July 21.
Doner, Martin J., Los Angeles, Calif. Right and left turn vehicle signal. 1,815,614; July 21.
Donle, Harold P., Meriden, Conn., assignor to Radio Inventions, Inc., New York, N. Y. Rectifier. 1,815,369; July 21.
Donle, Harold P., Meriden, Conn., assignor to Radio Inventions, Inc., New York, N. Y. Rectifier. 1,815,370; July 21.
Donnelley, R. R., & Sons Company. (See Frazier, Philip A., assignor.)
Doughty, Glenn A., and H. A. Johnston, Anaheim, Calif. Balanced high pressure valve. 1,815,349; July 21.
Douglas, C. Gwynne, Inc., et al. (See Bouchard, Louis O., assignor.)
Douglas, Donald Q. (See Douglas, Wallace R., W. H., and D. Q.)
Douglas, Harry A., Bronson, Mich. Combined steering and lighting mechanism for vehicles. 1,815,871; July 21.
Douglas, Wallace R., W. H., and D. Q., Crete, Nebr. Voting booth. 1,815,142; July 21.
Douglas, William H. (See Douglas, Wallace R., W. H., and D. Q.)
Dow Chemical Company, The. (See Heath, Sheldon B., assignor.)
Dowd, Archie J., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Coil and manufacturing coils. 1,815,245; July 21.
Drake-Avery Company. (See Hinrich, Robert M., assignor.)
Driedger, John, Vonda, Saskatchewan, Canada. Stooking machine. 1,815,053; July 21.
Driggs, Frank H., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Producing tantalum and other rare refractory metals by electrolysis of fused compounds. 1,815,054; July 21.
Druart, Henri, Lomme, France. Rotary machine for continuously making compressed slabs or floor tiles with colored designs. 1,815,668; July 21.
Druckenmiller, Joseph E., Edge Hill, Pa. Bath room equipment. 1,815,291; July 21.
Dunagan, Thomas A., Los Angeles, Calif. Fish-tape reel and puller. 1,815,433; July 21.
Dunbar, Thomas L. (See Neil, Percy W., assignor.)
Duncan, Archibald A., Akron, Ohio. Telephone receiver. 1,815,194; July 21.
Duncan, Harry F., Chevy Chase, and G. E. Stone, Baltimore, Md. Building. Des. 84,684; July 21.
Dunham Bearing & Manufacturing Co. (See Dunham, Orson W., assignor.)
Dunham, Orson W., assignor to Dunham Bearing & Manufacturing Co., Webb City, Mo. Elevator pit bearing. 1,815,292; July 21.
Dunlop Tire and Rubber Corporation. (See Willshaw, H., Norcross, and Broadbent, assignors.)
Dunn, Harry W., Brooklyn, N. Y. Dark room shade construction. 1,815,551; July 21.
Du Pont Cellophane Company. (See Snyder, James E., assignor.)
Durand & Huguenin S. A. (See Bodmer, Ernst, assignor.)
Durkan, Thomas M. (See Shlesinger, B. E., and Durkan.)
Dur-O-Lite Pencil Company. (See Lynn, John P., assignor.)
Earhart, Albert C., Shaker Heights, Ohio. Bolt substitute. 1,815,098; July 21.
Eckel, Henry, and H. Schuenhoff, Hamilton, Ontario, Canada. Life saving device for submarines. 1,815,350; July 21.
Eckhardt, Walter L., Philadelphia, Pa. Sound generator for automobiles. 1,815,552; July 21.
Eckhardt, Walter L., Philadelphia, Pa. Sound generator. 1,815,553; July 21.
Edelmann, Joseph A., Union, N. J. Tire spreader. 1,815,764; July 21.
Edgarton, William L., Berwyn, Ill. Inking pad. 1,815,371; July 21.
Edison, W. L., Manufacturing Corporation, The. (See Edison, William L., assignor.)
Edison, William L., assignor to The W. L. Edison Manufacturing Corporation, Wilmington, Del. Signaling system. 1,815,055; July 21.
Edmunds, Glenn E., assignor to The Bonney-Floyd Company, Columbus, Ohio. Replaceable excavator tooth. 1,815,649; July 21.
Egli, Constant A., Weehawken, N. J. Lamp stand. Des. 84,685; July 21.
Eichenberg, E. E. (See Gray, Joseph H., assignor.)
Eichholz, Willy, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Derivatives of benzanthrone. 1,815,143; July 21.
Eifel, Joseph, Chicago, Ill. Loose sheet holder. 1,815,851; July 21.
Eisele, Martin, Graymont, Ill. Pneumatic feeding device for thrashers. Re18,131; July 21.
Elliott, Lloyd B., assignor to Atlas Indicator Works, Incorporated, Chicago, Ill. Amusement device. Des. 84,686; July 21.
Ellis Adding Typewriter Company. (See Ens, Emil J., assignor.)
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Sulphured composition adapted as a binder for hood caps and for other purposes. 1,815,615; July 21.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Embree, Herbert, Hamilton, Ontario, Canada. Hose clamp. 1,815,145; July 21.
Emerson, Arthur C., and I. C. Crandall, Superior, Wis. Automobile heater. 1,815,401; July 21.
Engelbardt, Alfred, Wiesdorf, near Cologne, Germany, assignor, by mesne assignments, to America Lurgi Corporation, New York, N. Y. Separating organic gases or vapors of organic products. 1,815,554; July 21.
Englund, Carl R., Freehold, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Radio direction finder. 1,815,246; July 21.
Ens, Emil J., assignor to Ellis Adding Typewriter Company, Newark, N. J. Automatic accumulator selector for calculating machines. 1,815,352; July 21.
Enterprise Manufacturing Company of Pennsylvania, The. (See Brown, John W., jr., assignor.)
Epstein, Albert K. (See Reynolds, M. C., and Epstein.)
Erber, Bernhard, Vienna, Austria. Producing openings, passages and the like in molten or pressed glass bodies. 1,815,146; July 21.
Evans, Harold A., assignor, by mesne assignments, to Parco Specialty Co., Lynn, Mass. Blind eyeleting and product produced thereby. 1,815,484; July 21.
Everett, L. F. (See Smith, Arthur C., assignor.)
Excel Taping Machine Co. (See Packard, Walter F., assignor.)
Ext, Werner. (See Wesche, H., Brodersen, and Ext.)
Eynon, George A., Parma, Ohio. Carburetor. 1,815,650; July 21.
Fahrenwald, Frank A., Chicago, assignor to American Manganese Steel Company, Chicago Heights, Ill. Welding rod. 1,815,464; July 21.
Fairley, Tallaferro J., Sterlington, La., assignor to Louisiana Pine Products Company, Inc. Refining tar. 1,815,293; July 21.
Fantel, Henry, New York, N. Y. Combination lamp and clock support. 1,815,465; July 21.
Faraday, Cornelia B., New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 84,687; July 21.
Favata, Joseph, jr., Buffalo, N. Y. Holder for flower pots and cut flowers. 1,815,195; July 21.
Favro, Silvio, Portland, Oreg. Measuring device. 1,815,468; July 21.
Febles, Ramon. (See Small, J. W., and Febles.)
Feige, Harry, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Traveling tray oven. 1,815,555; July 21.
Feldman, Hiram H., Pittsburgh, Pa. Bedstead. 1,815,616; July 21.
Feldmuhle Papier- und Zellstoffwerge Aktiengesellschaft. (See Krull, Hans., assignor.)
Feller, Gottfried, Milwaukee, Wis. Antirattler. 1,815,247; July 21.
Fellner, Alphonse E., Belleille, Ill. Detachable manifold cover plate for ranges. 1,815,556; July 21.
Feragen, A. E., Inc. (See Bennett, Claude C., assignor.)
Ferguson, Berlin S., assignor to The Marion Steam Shovel Company, Marion, Ohio. Propelling mechanism for traction operated machines. 1,815,839; July 21.
Fieldstein, Jacob L., Springfield, Mass. Display tray. 1,815,651; July 21.
Fils, H. Mormentyn, Calais, France. Lace. Des. 84,710; July 21.
Finch, Raymond C., assignor to Postindex Company, Inc., Jamestown, N. Y. Paper file. 1,815,765; July 21.
Finzer, Charles S. (See Finzer, Edward G. and C. S.)

Finzer, Edward G. and C. S., Sugar Creek, Ohio. Clay texturing machine. 1,815,469; July 21.
Firth-Sterling Steel Company. (See Comstock, Gregory J., assignor.)
Fischer, Hellmut, Berlin-Friedenau, Germany, assignor, by mesne assignments, to Metal & Thermit Corporation, New York, N. Y. Production of industrially valuable beryllium salts from beryllium bearing minerals. 1,815,056; July 21.
Fisher, Roy, Los Angeles, Calif. Mail carrying aeroplane. 1,815,466; July 21.
Fisher, Wilbur E., Evansville, Ind. Fishing line alarm. 1,815,402; July 21.
Fitzky, Wilhelm. (See Wagner, H., Kissling, Hotz, and Fitzky.)
Flook, George. (See O'Neil, J. H., and Flook.)
Floyd, Carol, assignor to Dr. P. Phillips Company, Orlando, Fla. Can filling machine. 1,815,766; July 21.
Foote, George A., Miami, Okla. Automatic belt guide. 1,815,099; July 21.
Ford, Carrie W. (See Manville, George D., assignor.)
Foster, Albert F., Philadelphia, Pa., assignor to F. F. Slocomb & Co. Inc., Wilmington, Del. Attachment for sheet measuring machines. 1,815,248; July 21.
Fox, Martin, assignor to The Seng Company, Chicago, Ill. Chair. 1,815,617; July 21.
Frakes, James H. (See Burr, G. A., and Frakes.)
Franchi, Emilio. (See Bignami, I., Galassini, Franchi, and Pons.)
Francis, Daniel R., assignor to The Waterbury Tool Company, Waterbury, Conn. Automatically controlled mechanisms for traveling webs of materials. 1,815,100; July 21.
Francis, Henry, and F. Oliver, Hull, England. Draw off arrangement for liquid containers. 1,815,501; July 21.
Frank, Harrison J. L., assignor to Bull Dog Electric Products Company, Detroit, Mich. Wiring trough flange. 1,815,840; July 21.
Frankford, Frank P., Ridgefield Park, N. J. Vehicle control apparatus. 1,815,557; July 21.
Franklin Development Corporation. (See Burns, John L., assignor.)
Fraser, Frank, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass. 1,815,884; July 21.
Frazier, Philip A., assignor to R. R. Donnelley & Sons Company, Chicago, Ill. Machine for pressing books. 1,815,372; July 21.
Freeman-Daughaday Company. (See Lindquist, Albert W., assignor.)
French, George F., Manchester, England. Curtain rail support. 1,815,249; July 21.
French, George F. and R., Manchester, England. Ladder web for Venetian blinds. 1,815,196; July 21.
French, Roger. (See French, George F. and R.)
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,689; July 21.
Frey, Charles N. (See Gore, H. C., and Frey.)
Friberg, Bengt F., assignor to Laclede Steel Company, St. Louis, Mo. Joint for concrete slabs. 1,815,373; July 21.
Friedman, Abraham, assignor to E. Cohen, doing business as Novelty Manufacturing Company, Los Angeles, Calif. Table. Des. 84,688; July 21.
Friess, Gustave A., Forest Hills, N. Y. Printing device. 1,815,731; July 21.
Frigidaire Corporation. (See Kettering, Charles F., assignor.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frosted Foods Company. (See Barry, J. J., and Murray, assignors.)
Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Jar. Des. 84,690; July 21.
Fusmer, Leon H., Canajoharie, N. Y. Automobile plate holder. 1,815,767; July 21.
G. Polysius Aktiengesellschaft. (See Goebels, Paul, assignor.)
G & G Atlas Systems, Inc. (See Scanlan, Joseph M., assignor.)
Gábor, Francis, and P. Klein, Budapest, Hungary, and A. Szegvári, Akron, Ohio, assignors, by mesne assignments, to American Anode, Inc. Production of homogeneous rubber deposits from rubber latex. 1,815,057; July 21.
Gabriel Company, The. (See Grant, Frank L., assignor.)
Gaiser, John, near Centerville, Ohio. Connecting plows to tractors. 1,815,470; July 21.
Galassini, Ercole. (See Bignami, I., Galassini, Franchi, and Pons.)
Galbreath, Harold P., et al. (See Martin, William O., assignor.)
Gall, Aloise, Orange, N. J., assignor to Cyrus Clark Co., Incorporated, New York, N. Y. Textile fabric or similar sheet material. Des. 84,691; July 21.
Gamel, Harvey W., Los Angeles, and C. D. Holmes, Long Beach, Calif. Cleaning device. 1,815,197; July 21.
Gammeter, John R., Akron, Ohio. Floor covering or mat and making the same. 1,815,558; July 21.
Garrigus, Clarence G., Bristol, assignor to Wm. H. Bristol Talking Picture Corporation, Waterbury, Conn. Vibration eliminator for phonograph turntables. 1,815,559; July 21.
Gasoline Products Company. (See Black, John C., assignor.)
Gastgivar, Otto T., Gardner, Mass. Picture frame. 1,815,841; July 21.
Gaunt, Joseph. (See Denney, H. J., and Gaunt.)
Gawsworth Patents Limited, et al. (See Shimwell, Oliver, assignor.)
Gay, Frazer W., Newark, N. J., assignor to General Electric Company. Electric transformer and system of distribution. 1,815,842; July 21.
Gaylord, Harlow F., Congress Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for rewinding rolls of material. 1,815,250; July 21.
Gehm, Arthur, Pittsburgh, Pa. Massage instrument. 1,815,560; July 21.
General Aniline Works, Inc. (See Eichholz, Willy, assignor.)
General Aniline Works, Inc. (See Herz, R., and Hechtenberg, assignors.)
General Aniline Works, Inc. (See Krzikalla, H., and Kaemmerer, assignors.)
General Aniline Works, Inc. (See Sohst, Otto, assignor.)
General Aniline Works, Inc. (See Wagner, H., Kissling, Hotz, and Fitzky, assignors.)
General Cable Corporation. (See Horn, George B., assignor.)
General Electric Company. (See Barton, Theophilus F., assignor.)
General Electric Company. (See Charlton, Ernest E., assignor.)
General Electric Company. (See Chase, Delmar D., assignor.)
General Electric Company. (See Gay, Frazer W., assignor.)
General Electric Company. (See Koref, F., and Moers, assignors.)
General Electric Company. (See Ledig, Willy, assignor.)
General Electric Company. (See Liddiard, Hugh W. C., assignor.)
General Electric Company. (See Mathews, Paul, jr., assignor.)
General Electric Company. (See Mayr, Otto, assignor.)
General Electric Company. (See Pohl, Robert, assignor.)
General Electric Company. (See Probst, Heinrich, assignor.)
General Electric Company. (See Ryan, Walter D., assignor.)
General Electric Company. (See Seeley, Harold T., assignor.)
General Electric Company. (See Widerõe, R., and Mayr, assignors.)
General Electric Company. (See Winne, Henry A., assignor.)
General Manifold and Printing Company, The. (See Lewis, Edward Z., assignor.)
General Motors Corporation. (See Cataline, B., and Richard, assignors.)
General Motors Research Corporation. (See Hallett, George E. A., assignor.)
General Motors Research Corporation. (See Hutchinson, Roland V., assignor.)
General Motors Research Corporation. (See Lee, C. L., and Sterling, assignors.)
Genser Manufacturing Company. (See Genser, Max, assignor.)
Genser, Max, assignor to Genser Manufacturing Company, Inc., Providence, R. I. Attaching pin tongue mountings to jewelry. 1,815,058; July 21.
Georgiev, Alexander, Brooklyn, N. Y., assignor to Aerovox Wireless Corporation. Electrolyte. 1,815,768; July 21.
Gerow, John A., and A. C. Cannon, El Segundo, Calif. Flagpole holder. 1,815,353; July 21.
Gerth, Felix, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. High frequency transformer or the like. 1,815,707; July 21.
Getchell, Benjamin E., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Automatic safety switch. 1,815,561; July 21.
Gilbert, Alfred C., New Haven, Conn. Constructional toy. 1,815,708; July 21.
Gilchrist, Thomas O., and D. Murphy, Lorain, Ohio, assignors to Reserve Holding Company, Chicago, Ill. Automatic telephone system. 1,815,198; July 21.
Gildner, Harold, Sheboygan, Wis. Safety device for automobiles. 1,815,294; July 21.
Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)
Gilligan, George H., assignor to U. S. Ring Traveler Company, Providence, R. I. Lubricating spinning and twisting rings. 1,815,502; July 21.
Gisholt Machine Company. (See Godfriaux, Louis E., assignor.)
Gisholt Machine Company. (See Miller, Ralph J., assignor.)
Gleaner Combine Harvester Corporation. (See Bartels, Elmer L., assignor.)
Gleason Works. (See Shlesinger, B. B., and Durkan, assignors.)
Globe Company, The. (See Dodge, Charles H., assignor.)
Goddu, George, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for inserting fastenings. 1,815,295; July 21.
Goddu, George, Winchester, assignor, by mesne assignments, to The Littleway Process Company, Boston, Mass. Manufacture of shoes. 1,815,296; July 21.

Goddu, George, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping uppers over lasts. 1,815,297; July 21.
Goddu, George, Winchester, assignor, by mesne assignments, to The Littleway Process Company, Boston, Mass. Manufacture of shoes. 1,815,298; July 21.
Godfriaux, Louis E., assignor to Gisholt Machine Company, Madison, Wis. Hydraulic chuck. 1,815,562; July 21.
Goebels, Paul, assignor to Firm G. Polysius Aktiengesellschaft, Dessau, Germany. Apparatus for conveying bulk-goods. 1,815,403; July 21.
Goertz, August, & Co. (See Dickey, Laurence P., assignor.)
Goldberg, Jacob M. (See Goldberg, Louis B., N., W., and J. M.)
Goldberg, Louis B., N., W., and J. M., Denver, Colo. Spring hinge for foldable awning supports. 1,815,199; July 21.
Goldberg, Nathan. (See Goldberg, Louis B., N., W., and J. M.)
Goldberg, William. (See Goldberg, Louis B., N., W., and J. M.)
Goldburg, Irving, Suffern, N. Y. Shade apparatus. 1,815,769; July 21.
Golden State Milk Products Company. (See Christensen, Godfrey, assignor.)
Goldman, Frank L., Mount Vernon, assignor, by mesne assignments, to Audio-Cinema, Incorporated, Long Island City, N. Y. Producing motion picture films. 1,815,251; July 21.
Goldstein, Emanuel, assignor to Baby Grands, Inc., New York, N. Y. Diaper. 1,815,059; July 21.
Goldstein, Jacob, Wilkes-Barre, Pa. Bait box. 1,815,101; July 21.
Goodrich, B. F., Company, The. (See Beebe, John D., assignor.)
Goodrich, B. F., Company, The. (See Reed, Marion C., assignor.)
Gookin, William C., Corydon, Iowa. Beet topper. 1,815,503; July 21.
Gore, Herbert C., Scarsdale, and C. N. Frey, New York, N. Y., assignors, by mesne assignments, to Standard Brands Incorporated, Dover, Del. Measuring proteolytic activity. 1,815,709; July 21.
Görner, Arthur, assignor to the Firm Pluschweberei Grefrath Aktiengesellschaft, Grefrath near Krefeld, Germany. Device for printing colored patterns on plush and like fabrics. 1,815,504; July 21.
Gouldbourn, Joseph, and R. B. Woodcock, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on welting. 1,815,471; July 21.
Grab, Gustav A., assignor to Willamette-Ersted Company, Portland, Oreg. Fork for motor vehicles. 1,815,770; July 21.
Grace, Esco D. (See Davis, William I., assignor.)
Graham, Harold M., assignor to Ross Heater & Mfg. Co. Inc., Buffalo, N. Y. Heat exchanger. 1,815,618; July 21.
Granat, Joseph, San Francisco, Calif. Finger ring. Des. 84,692; July 21.
Granat, Joseph, San Francisco, Calif. Finger ring. Des. 84,693; July 21.
Grand Rapids Fibre Cord Company. (See Sackner, Wade E., assignor.)
Grant, Frank L., assigno to The Gabriel Company, Cleveland, Ohio. Ball and socket connection. 1,815,771; July 21.
Grant, Gerald M. M., Los Angeles, Calif. Piston ring. 1,815,354; July 21.
Graves, Charles A., East Cleveland, Ohio. Sign. Des. 84,694; July 21.
Gray, Joseph H., assignor of one-fourth to E. Eichenberg, Houston, Tex. Motor vehicle attachment. 1,815,772; July 21.
Gray, Joseph H., Houston, Tex., assignor of one-half to J. C. Hurley. Motor vehicle attachment. 1,815,773; July 21.
Greby, Ernest, Isey-les-Moulineaux, assignor, by mesne assignments, to G. M. Cressaty, Paris, France. Automatic temperature regulator. 1,815,299; July 21.
Green, Edward A. (See Black, J. P., and Green.)
Greenebaum, Samuel, Kansas City, Mo. Covering. 1,815,404; July 21.
Grigsby, Owen E., Park Ridge, assignor to Ryan Manufacturing Corporation, Chicago, Ill. Power adjusted road grader. 1,815,252; July 21.
Gring, George W., Berkeley, Calif. Insect poison feeder. 1,815,652; July 21.
Grivin, Adolphe, Long Island City, assignor to Sea Island Mills, Inc., New York, N. Y. Textile fabric or similar article. Des. 84,695; July 21.
Grivin, Adolphe, Long Island City, assignor to Sea Island Mills, Inc., New York, N. Y. Textile fabric or similar article. Des. 84,696; July 21.
Gross, Edward B., Buffalo, N. Y. Space guard for dry cleaning machines or the like. 1,815,732; July 21.
Guardian Metals Company. (See Coles, Henry L., assignor.)
Guillemin, Ernst A., Brookline, Mass., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for detecting a difference in the thickness of materials. 1,815,710; July 21.
Gulbransen Company. (See Loar, Lloyd, assignor.)
Gulick, Edward J., Elkhart, Ind., assignor, by mesne assignment, to The Cleveland Trust Company. Piston. 1,815,733; July 21.
Gurney, Erving R. (See Josephs, L. C., jr., and Gurney.)
Gustin-Bacon Manufacturing Company. (See Anderson, Harley E., assignor.)
Guthrie, Robert G., and O. J. Wozasek, assignors to Peoples Gas By-Products Corporation, Chicago, Ill.; said Wozasek now by change of name O. J. Wilbor. Bright annealing of metals. 1,815,505; July 21.
"H. H." Carburetter Company Limited. (See Hutchison, Hugh, assignor.)
Haas, Carl F., South Bend, Ind., assignor to Westinghouse Electric and Manufacturing Company. Cap for a lamp standard. Des. 84,697; July 21.
Habirshaw Cable & Wire Corporation. (See Del Mar, William A., assignor.)
Hall, Walter H., Winchendon, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Wood heel jack. 1,815,734; July 21.
Hallett, George E. A., assignor to General Motors Research Corporation, Detroit, Mich. Control mechanism for brake booster cylinders. 1,815,619; July 21.
Hamburger, Rudolf, New York, N. Y. Device for assisting in the launching and landing of aeroplanes. 1,815,200; July 21.
Hamilton, John R., Cleveland Heights, assignor to Automatic Sprinkler Company of America, Cleveland, Ohio. Sprinkler system. 1,815,355; July 21.
Handley, George F., Glendale, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,815,506; July 21.
Hänel, Curt, Berlin, Germany. Apparatus for printing and registering fare tickets and the like. 1,815,253; July 21.
Hanlon, John W. (See Hanlon, John H. and J. W.)
Hanlon, John H., Somerville, and J. W. Hanlon, Milton, assignors to Hanlon Locomotive Sander Company, Winchester, Mass. Track sander. 1,815,472; July 21.
Hanlon Locomotive Sander Company. (See Hanlon, John H. and J. W., assignors.)
Hardenburg, H. B., Corporation. (See Weinberg, Abraham, assignor.)
Harding Glass Company. (See Harding, W. E., and Weekley, assignors.)
Harding, Roswell W., Sedgwick, Me., and J. P. Richards, Brookline, Mass. Traction tread. 1,815,435; July 21.
Harding, Wayne E., and C. C. Weekley, Fort Smith, Ark., assignors to Harding Glass Company. Method of and apparatus for drawing sheet glass. 1,815,473; July 21.
Harris, Barnett W., New York, N. Y. Hypodermic bullet. 1,815,300; July 21.
Harris, Benjamin, New York, N. Y. Combined easel and medallion. 1,815,486; July 21.
Harris, George W., Fergus Falls, Minn. Dental wax eliminator. 1,815,060; July 21.
Harris, Gordon D., Sound Beach, Conn., assignor to The Industrial Dryer Corporation. Conditioning materials. 1,815,669; July 21.
Harris, James N., Queens Village, N. Y. Apparatus for displaying rugs and the like. 1,815,311; July 21.
Harsch, John W., Ambler, and W. R. Schofield, jr., Philadelphia, assignors to Leeds & Northrup Company, Philadelphia, Pa. Control system. 1,815,061; July 21.
Hart & Cooley Manufacturing Company. (See Covell, Harold S., assignor.)
Härter, Ludwig, Berlin-Wannsee, Germany. Rubber tire. 1,815,507; July 21.
Hartford-Empire Company. (See Westin, Daniel B., assignor.)
Hartmann, August, Barmen, Germany, assignor to the Firm American Bemberg Corporation. New York, N. Y. Obtaining copper sulphate from the waste liquors in the production of cuprammonium silk. 1,815,201; July 21.
Hartwick, Richard. (See Jeglum, O. F., and Hartwick.)
Harward, George W., Eldon, Iowa. Locking mechanism for reverse gears of locomotives. 1,815,301; July 21.
Hauser, Adalbert, New York, N. Y. Automatically controlled pumping apparatus. 1,815,148; July 21.
Haworth, De Witt C., Bandon, assignor of one-fourth to C. Davis, one-fourth to C. L. Zentner, Bandon, and one-fourth to J. T. Sullivan, Marshfield, Oreg. Wood slicing machine. 1,815,670; July 21.
Hazleton Manufacturing Co. (See Markle, George B., jr., assignor.)
Heard, William H., Bideford, England. Clip for holding papers together. 1,815,774; July 21.
Heath, Sheldon B., assignor to The Dow Chemical Company, Midland, Mich. Crystallization process. 1,815,735; July 21.
Hechtenberg, Wilhelm. (See Herz, R., and Hechtenberg.)
Hedenstrom, Earnest A. (See Ronning, A., Hedenstrom, and Ronning.)
Heise, George W., Lakewood, Ohio, assignor to National Carbon Co., Inc. Electric cell. 1,815,508; July 21.
Heise, Roscoe S., Dayton, Ohio. Oven construction. 1,815,312; July 21.
Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 84,698; July 21.
Henderson, Lawrence M., Narberth, and H. C. Cowles, jr., assignors to The Atlantic Refining Company, Philadelphia, Pa. Sweetening petroleum distillates. 1,815,563; July 21.

Hendey Machine Company, The. (See Bouillon, Constant, assignor.)
Henry, Donald E. (See Reutschler, H. C., and Henry.)
Hensel, Samuel T., Denver, Colo. Sirup percolator. 1,815,711; July 21.
Herlitz, Ivar, Magnet, Ludvika, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasturas, Sweden. Differential protective system for electrical machinery and apparatus. 1,815,712; July 21.
Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Caster. 1,815,062; July 21.
Hershey, Orville S., and E. J. Van Sickel, Chicago, assignors, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill. Distributor and lock therefor. 1,815,313; July 21.
Herz, Richard, Frankfort-on-the-Main, and W. Hechtenberg, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat sulfur dyestuffs and making same. 1,815,144; July 21.
Herz, Richard, Frankfort-on-the-Main, and W. Hechtenberg, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. 2-(4'-hydroxy-aryl-amino)-aryl-amino-naphthalenes. 1,815,775; July 21.
Hewitt, Mattie J., New Orleans, La. Portable refrigerator. 1,815,405; July 21.
Hickman, Ross, Wichita Falls, Tex. Preventing freezing of water pipes. 1,815,474; July 21.
Higdem, Herman, Seattle, Wash. Inner sole for shoes. 1,815,843; July 21.
High, Jurjen S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Translating device. 1,815,564; July 21.
Hill, Herbert, Bradford, England. Spring wheel for automobiles and other vehicles. 1,815,147; July 21.
Hill, Irving, and R. H. Clayton, assignors to Lawrence Paper Manufacturing Company, Lawrence, Kans. Egg shipping case. 1,815,565; July 21.
Hinrich, Robert M., assignor to Drake-Avery Company, Detroit, Mich. Machine for bending sheet metal. 1,815,102; July 21.
Hitchcock, Richard C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control device. 1,815,560; July 21.
Hitt, Samuel E., Elyria, Ohio. Cabin for air and water craft. 1,815,103; July 21.
Hoe, R. & Co. (See Ball, H. V., and Horton, assignors.)
Hoe, R. & Co. (See Bryan, Charles F., assignor.)
Hoecher, Paul V., assignor of one-half to J. C. Oliver, Chicago, Ill. Electric socket construction. 1,815,509; July 21.
Hoffman, George D., assignor to Hoffman Specialty Company, of California, Limited, Pasadena, Calif. Casing for electric air heaters. Des. 84,699; July 21.
Hoffman Specialty Company of California, Limited. (See Hoffman, George D., assignor.)
Hogstad, Anton, jr., St. Paul, assignor to The Northwest Paper Company, Cloquet, Minn. Producing alkaloids. 1,815,302; July 21.
Holley, George M. (See Anderson, Raymond M., assignor.)
Holm, Peter A., Sioux City, Iowa. Gasoline measure. 1,815,713; July 21.
Holmes, Charles D. (See Gamel, H. W., and Holmes.)
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,815,827; July 21.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,815,873; July 21.
Holmes, Will K. (See Dearborn, R. J., and Holmes.)
Holt, Samuel, Ridgewood, N. Y., assignor to Norton Company, Worcester, Mass. Lapping machine. 1,815,104; July 21.
Hoover Company, The. (See Barrass, Juddson E., assignor.)
Hoover Company, The. (See Davidson, Walter C., assignor.)
Hoover Company, The. (See Nulsen, M. E., and Buchtel, assignors.)
Hoover Company, The. (See Shank, Charles L., assignor.)
Hoover Company, The. (See White, Harry B., assignor.)
Horn, George B., Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y. Electrical induction coil and manufacture thereof. 1,815,620; July 21.
Horsch, Walter H. (See Rudolph, H. V., and Horsch.)
Horton, Albert J. (See Ball, H. V., and Horton.)
Hotstream Heater Company, The. (See Morrow, Clarence H., assignor.)
Hottel, Oliver W., et al. (See Albertson, Luther D., assignor.)
Hotter, Oscar, Hochstadt, Germany. Construction of spring seats and mattresses. 1,815,510; July 21.
Hotz, Ernst. (See Wagner, H., Kissling, Hotz, and Fitzky.)
Houde Engineering Corporation. (See Casper, Anthony B., assignor.)
Howey, Walter, New York, N. Y. Cylindrical scanning. 1,815,105; July 21.
Hoyt, Ray S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Shunt type impedance equalizer for any smooth line. 1,815,254; July 21.
Hoyt, Ray S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Impedance equalizer for any smooth line. 1,815,255; July 21.
Hoyt, Ray S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Series type impedance equalizer for any smooth line. 1,815,256; July 21.
Huettner, Rudolf. (See Pauckner, G., and Huettner.)
Huffman, Louis, assignor to Toronto Type Foundry Company, Limited, Toronto, Ontario, Canada. Manifolding book. Re18,134; July 21.
Hughes Tool Company. (See Ricker, Norman H., assignor.)
Humber Limited. (See Black, J. P., and Green, assignors.)
Humphrey, Herbert S., Kalamazoo, Mich., assignor to Ruud Manufacturing Company, Pittsburgh, Pa. Water heater. 1,815,257; July 21.
Hunter, Thomas W., Alhambra, Calif. Oil burner. 1,815,374; July 21.
Huntington, J. T., Lansing, Mich. Thermostatic valve. 1,815,356; July 21.
Huntley Manufacturing Co. (See Chapman, W. A., Machemer, and Paul, assignors.)
Hurley, Joseph C. (See Gray, Joseph H., assignor.)
Hurley, Roy T., Dobbs Ferry, assignor to Hurley-Townsend Corporation, New York, N. Y. Making spark plugs. 1,815,714; July 21.
Hurley, Roy T., Dobbs Ferry, N. Y., assignor to Moto Meter Gauge & Equipment Corporation. Mounting for traffic warning devices. 1,815,844; July 21.
Hurley-Townsend Corporation. (See Hurley, Roy T., assignor.)
Hutchinson, Roland V., Lansing, assignor to General Motors Research Corporation, Detroit, Mich. Supercharger drive. 1,815,621; July 21.
Hutchison, Hugh, Cambuslang, assignor to "H. H." Carburetter Company Limited, Glasgow, Scotland. Carburetor. 1,815,406; July 21.
Hydraulic Brake Company. (See Loughead, Malcolm, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kröner, Gerhard, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Marx, K., Behncke, and Zobel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pauckener, G., and Huettner, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schleicher, F., Schwaebel, and Briesewitz, assignors.)
Illinois Tool Works. (See Olson, Carl G., assignor.)
Industrial Dryer Corporation, The. (See Harris, Gordon D., assignor.)
Ingersoll-Rand Company. (See Smith, William A., jr., assignor.)
International Communications Laboratories Incorporated. (See Putnam, Ralph E. A., assignor.)
International Harvester Comapny. (See Pinson, James H., assignor.)
International Harvester Company. (See Raney, C. R., and Mitchell, assignors.)
International Harvester Company. (See Robinson, Charles W., assignor.)
International Harvester Company. (See Scarlett, Arthur A., assignor.)
International Harvester Company. (See Smith, Ernest C., assignor.)
International Harvester Company. (See Uherek, Charles A., assignor.)
International Motor Company. (See Anderson, Robert G., assignor.)
International Motor Company. (See Davis, Floyd E., assignor.)
International Motor Company. (See Josephs, Lyman C., jr., assignor.)
International Motor Company. (See Josephs, L. C., jr., and Gurney, assignors.)
International Motor Company. (See Leipert, August H., assignor.)
International Motor Company. (See Masury, Alfred F., assignor.)
International Motor Company. (See Masury, A. F., and Queeney, assignors.)
International Motor Company. (See Schmal, Alois H., assignor.)
International Silver Company. (See Beck, Ernest T., assignor.)
International Ticket Scale Corporation. (See Slezak, Vincent F., assignor.)
Irwin, Lawrence C., Brooklyn, assignor to Charles J. Tagliabue Mfg. Co., New York, N. Y. Bulb assembly for temperature responsive devices. 1,815,567; July 21.
Ives, Eben C., St. Paul, Minn. Chime mechanism. 1,815,202; July 21.
Ives, Herbert E., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Image producing system. 1,815,203; July 21.
Jackson, Paul F. (See Johnson, D. E., and Jackson.)
Jackson, Simon P., Kinston, N. C. Tobacco cutter. 1,815,845; July 21.
Jacqmein, Fred L., Monroe, N. Y. Fly box. 1,815,568; July 21.
Jaicks, Wilson A., Chicago, Ill. Mixing concrete. 1,815,357; July 21.
Jakosky, John J., Los Angeles, Calif., assignor to C & C Developing Company, Kansas City, Mo. Apparatus for electrical treatment of fluids. 1,815,149; July 21.

Jamieson, Joseph, Balmain, near Sydney, New South Wales, Australia. Apparatus for cutting metal and other materials. 1,815,736; July 21.
Jamison, Frank E., Kansas City, Kans. Multi-color printing press. 1,815,622; July 21.
Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)
Jeffrey Manufacturing Company, The. (See Liggett, William K., assignor.)
Jeglum, Ole F. Malta, and R. E. Hartwick, Regina; said Hartwick assignor to R. N. Rude, Malta, Mont. Detachable spade lug for tractors. 1,815,150; July 21.
Jenkins, William M., Dalhart, Tex. Equipment of air brakes on locomotives. 1,815,671; July 21.
Jensen, Edward M., Seattle, Wash. Color lighting device. 1,815,874; July 21.
John, Elmer N., Wauwatosa, assignor to Reliable Knitting Works, Milwaukee, Wis. Knitted hat. Des. 84,700; July 21.
Johnk, Leonard F. (See Olson, O. N., and Johnk.)
Johnson, Arthur A., Bridgeport, Conn., assignor to Autographic Register Company, Hoboken, N. J. Manifolding register. 1,815,063; July 21.
Johnson, Bruce B., Long Beach, Calif. Cooking vessel. 1,815,569; July 21.
Johnson, David E., and P. F. Jackson, Dayton, Ohio. Device for testing vacuum tubes. 1,815,375; July 21.
Johnson, John E., Aurora, Ill. Die-sinking and engraving machine. 1,815,204; July 21.
Johnston, Herbert A. (See Doughty, G. A., and Johnston.)
Jones, Boone, Cushing, Okla. Instrument for recording deviations and vertical corrections in boreholes. 1,815,672; July 21.
Jones, Charles L., Pelham, N. Y. Heat transfer apparatus. 1,815,570; July 21.
Jones, Edward N., Pittsburgh, Pa., assignor to The C. O. Bartlett & Snow Company, Cleveland, Ohio. Dumping truck. 1,815,653; July 21.
Jones, Leander J., High Point, N. C. Hose coupling. 1,815,407; July 21.
Jones, Winfield S., Brea, Calif. Rotary spear. 1,815,376; July 21.
Jordan, James K., Atlanta, Ga. Dental floss holder. 1,815,408; July 21.
Joseph, Alfred, Enghien, assignor to Compagnie Internationale pour la Fabrication des Essences et Petroles, Paris, France. Process and apparatus for the purification of continuously flowing gases in the manufacture of liquid fuels. 1,815,846; July 21.
Josephs, Lyman C., jr., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Front drive power unit. 1,815,437; July 21.
Josephs, Lyman C., jr., and E. R. Gurney, Allentown, Pa., assignors to International Motor Company, New York, N. Y. Chain drive for motor vehicles. 1,815,438; July 21.
Josten, Bernard J., St. Louis, Mo. Hand bag construction. 1,815,106; July 21.
Judelson, Louis, New York, N. Y. Winding drum for wall driers. 1,815,737; July 21.
Kadow, August, assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass furnace. 1,815,258; July 21.
Kaemmerer, Hans. (See Krzikalla, H., and Kaemmerer.)
Kambo, Luigi, Rome, Italy. Variable speed gear. 1,815,475; July 21.
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Crankcase ventilation. 1,815,623; July 21.
Kaster Specialty Manufacturing Company. (See Stark, Louis, assignor.)
Keene, James A., London, England. Loose leaf book. 1,815,511; July 21.
Kehoe, William E., San Francisco, Calif. Combination base and column for display stands. Des. 84,701; July 21.
Kehoe, William E., San Francisco, Calif. Combination base and column for display stands. Des. 84,702; July 21.
Keillor, Joseph D., Aylmer, Ontario, Canada. Cuff link. 1,815,624; July 21.
Keim, Walter, Stuttgart, Germany. Regulating and test cock for boiler piping. 1,815,151; July 21.
Kell, Doktor K., et al. (See Szombathy, Kálmán, assignor.)
Keller Mechanical Engineering Corporation. (See Shaw, John C. and R. D., assignors.)
Kelley, Milton W., Austin, Tex. Drying rack. 1,815,673; July 21.
Kellogg, Homer G., assignor to Motor Products Corporation, Detroit, Mich. Garnish molding. 1,815,715; July 21.
Kells, Harold, and C. F. Meilink, assignors to The Meilink Steel Safe Company, Toledo, Ohio. Burglarproof lock. 1,815,314; July 21.
Kelly, Leland, Port Republic, N. J. Fuel control device for gasoline and oil engines. 1,815,259; July 21.
Kemmer, Frank R., Larchmont, assignor to American Cyanamid Company, New York, N. Y. Producing zinc. 1,815,260; July 21.
Kemp, Edward F., Somerville, Mass. Package. 1,815,261; July 21.
Kennedy, Edward, New York, N. Y. Plumbing system. 1,815,205; July 21.
Kenney Manufacturing Company. (See Smith, Walter E., assignor.)
Ker, John O., Ottawa, Ontario, Canada. Meat marker. 1,815,716; July 21.
Kettering, Charles F., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,815,315; July 21.
Kidd, Alvin S., assignor to Madison-Kipp Corporation, Madison, Wis. Die casting machine. 1,815,776; July 21.
Killark Electric Manufacturing Company. (See Andrews, Harry C., assignor.)
Kimball, A., Company. (See Plass, Robert H., assignor.)
Kimball, Wallace D., and A. E. Rideout, New York, N. Y., assignors, by mesne assignments, to Standard-Knapp Corporation, New York. Carton sealing machine. 1,815,571; July 21.
King, George B., Edgbaston, Birmingham, England. Gramophone. 1,815,777; July 21.
Kingsbury, Charles G., San Francisco, Calif. Ladder. 1,815,316; July 21.
Kinney, Ansel M., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Compounding rubber. 1,815,778; July 21.
Kirkpatrick, Matthew C., Rock Hill, S. C. Harness retractor for looms. 1,815,847; July 21.
Kissling, Albert. (See Wagner, H., Kissling, Hotz, and Fitzky.)
Klein, Carl E., Willow Grove, Pa. Counterbalance for stove doors. 1,815,848; July 21.
Klein, Frederick, College Point, assignor to Warp Twisting-In Machine Company, Brooklyn, N. Y. Mechanism for knotting together strands. 1,815,849; July 21.
Klein, Henry, and Company. (See Prevost, Sterrett R., assignor.)
Klein, Paul. (See Gábor, F., Klein, and Szegvári.)
Klein, Paul M., Cedarhurst, N. Y. Heat generator. 1,815,317; July 21.
Klipstein, James H., Marshall, Va. Griddle cake turner. 1,815,850; July 21.
Kloen, Max, Jamaica, N. Y. Hydro-speed ship. 1,815,303; July 21.
Klotz, Heinrich, Wheeling, W. Va. Electrical control mechanism. 1,815,152; July 21.
Knohl, Friedrich K. (See Stamm, A. F., and Knohl.)
Knüttel, Ernst, Kalkberge/Mark, Germany. Centrifugal apparatus. 1,815,409; July 21.
Koch, William C., St. Paul, Minn. Vaporizer. 1,815,318; July 21.
Koehring Company. (See Sheck, O., and Tranaas, assignors.)
Koeppe, Robert J., assignor to The Cheney Company, Chicago, Ill. Combined radio cabinet and clock. Des. 84,703; July 21.
Kopetka, Joseph P., Bloomfield, Nebr. Hog feeder. 1,815,512; July 21.
Koppers Company, The. (See Becker, Joseph, assignor.)
Koref, Fritz, and K. Moers, Berlin, Germany, assignors to General Electric Company. Coiled filaments and making them. 1,815,779; July 21.
Krag, Erik L., Chicago, Ill. Bookstand. 1,815,304; July 21.
Kramer, Andrew A., Kansas City, Mo. Vehicle tank. 1,815,625; July 21.
Kranz, Hermann E., Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for measuring variations in thickness of metallic bodies. 1,815,717; July 21.
Kraus, Frank H., Wisconsin Rapids, Wis. Loader. 1,815,780; July 21.
Kroch, Emeric, New York, N. Y. Producing carbon black. 1,815,851; July 21.
Kröner, Gerhard, Cologne-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the Main, Germany. Manufacture of finely divided active carbon. 1,815,781; July 21.
Krull, Hans, assignor to the Firm Feldmuhle, Papier- und Zellstoffwerke Aktiengesellschaft, Scholwin, near Stettin, Germany. Manufacture of cellulose films. 1,815,513; July 21.
Krzikalla, Hans, and H. Kaemmerer, Manheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New azo dyestuffs and metal compounds thereof. 1,815,782; July 21.
Kübler, Johannes, Baden, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Arrangement for disconnecting and removing series connected transformers from the circuit without causing disturbance. 1,815,153; July 21.
La Bauve, Duclise J. (See Siess, R. E., and La Bauve.)
Laclede Steel Company. (See Friberg, Bengt F., assignor.)
Lafenille, Fernand, Paris, France. Crystallizer cooker. 1,815,852; July 21.
Lake, Allan F., Oakland, Calif., assignor to Lake Manufacturing Co., Inc. Alternating current bell. 1,815,853; July 21.
Lake Manufacturing Co. (See Lake, Allan F., assignor.)
Lamond, John, assignor to Pittsburgh Pipe & Coupling Company, Allison Park, Pa. Apparatus for making pipe couplings. 1,815,107; July 21.
La Mont Corporation. (See La Mont, Walter D., assignor.)
La Mont, Walter D., New Rochelle, assignor to La Mont Corporation, New York, N. Y. Steam generator or the like. 1,815,439; July 21.

Lamson Company, The. (See Cowley, James T., assignor.)
Lane, Alfred M., St. Louis, Mo. Metal window. 1,815,718; July 21.
Lane, Alfred M., St. Louis, Mo. Metallic window sash. 1,815,719; July 21.
Laplerre, George J., assignor of one-half to G. V. Morin, Pawtucket, R. I. Illuminated license plate construction. 1,815,854; July 21.
Larsen, Einer W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Feeding mechanism. 1,815,262; July 21.
Larsen, Einer W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Feeding mechanism. 1,815,263; July 21.
Larsen, Einer W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Supporting device. 1,815,264; July 21.
Larson, Clarence L., Seattle, Wash. Label attaching device. 1,815,154; July 21.
Larson, John, Bronx, N. Y. Milk bottle holder. 1,815,514; July 21.
Larsson, Thure, and H. W. H. Beth, assignors to Norton Company, Worcester, Mass. Grinding wheel. 1,815,108; July 21.
Lauritano, Henry, Springfield Gardens, N. Y. Meter installation. 1,815,855; July 21.
Law, Theodore L., Lorain, assignor of one-half to Montford Blake and one-half to R. L. Beck, Cleveland, Ohio. Adhesion preventing substance and using same. 1,815,305; July 21.
Lawaczeck, Franz., Munich, Germany. Producing ammonia. 1,815,410; July 21.
Lawrence Development Co. (See Lawrence, George R., assignor.)
Lawrence, George R., Chicago, Ill., assignor to Lawrence Development Co., Detroit, Mich. Air system. 1,815,306; July 21.
Lawrence Paper Manufacturing Company. (See Hill, I., and Clayton, assignors.)
Lawrence, Stanley O., Chicago, Ill. Sealing device for soft metal tubes. 1,815,319; July 21.
Lazar, Israel, Montreal, Quebec, Canada. Folder. 1,815,654; July 21.
Leano, Celerino, Manila, P. I. Denominator machine. 1,815,515; July 21.
Ledbetter, James C., New York, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Garment or ironing press. 1,815,783; July21.
Ledig Willy, Berlin, Germany, assignor to General Electric Company. Winding head for filament mounting machines. 1,815,784; July 21.
Lee, Charles L., Dayton, Ohio, and C. H. Sterling, assignors to General Motors Research Corporation, Detroit, Mich. Finishing spline shafts. 1,815,626; July 21.
Lee, Frederick W., Washington, D. C., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,815,516; July 21.
Leeds & Northrup Company. (See Harsch, J. W., and Schofield, assignors.)
Leffel, Robert, Louisville, Ky., assignor to Standard Sanitary Manufacturing Company. Drinking fountain. 1,815,476; July 21.
Legg, Joseph W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Operating mechanism for a record receiving member. 1,815,064; July 21.
Leimberger, Robert C., Cincinnati, Ohio, assignor, by mesne assignments, to United Autographic Register Co., Chicago, Ill. Roll stationery support. 1,815,785; July 21.
Leipert, August H., College Point, assignor to International Motor Company, New York, N. Y. Vehicle for collecting ashes. 1,815,440; July 21.
Leveque, Bernard T., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,815,307; July 21.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Method and apparatus for mining coal. 1,815,856; July 21.
Levin, Rubie G. (See Schenk, Martin J., assignor.)
Levitt, Benjamin A., Newark, N. J. Powder puff. 1,815,320; July 21.
Levitt, Max, Brooklyn, N. Y. Lady's coat. Des. 84,704; July 21.
Levitt, Max, Brooklyn, N. Y. Lady's coat. Des. 84,705; July 21.
Lewellen, Darcy E. and E. F., Columbus, Ind. Control mechanism for machines. 1,815,155; July 21.
Lewellen, Emmons F. (See Lewellen, Darcy E. and E. F.)
Lewis, Edward Z., Chicago, Ill., assignor to The General Manifold and Printing Company. Meal check. 1,815,156; July 21.
Lewis, Longworth B., Montross, Va. Glare shield. 1,815,411; July 21.
Lewis & Tylor, Limited. (See Alexander, Frederick W., assignor.)
Libbey-Owens-Ford Glass Company. (See Fraser, Frank, assignor.)
Libbey-Owens-Ford Glass Company. (See Reece, Joseph A., assignor.)
Liddiard, Hugh W. C., Rugby, England, assignor to General Electric Company. System of electric control. 1,815,857; July 21.
Liebeck, Harry, Swarthmore, Pa., assignor to Scott Paper Company. Disintegrating pulp stock. 1,815,308; July 21.
Lifschultz, Louis S., Michell, S. Dak. Display rack. 1,815,858; July 21.
Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Tractor. 1,815,674; July 21.
Lighting Appliance Company. (See Blumenthal, Julius J., assignor.)
Lindfelt, Edward C., Des Moines, Iowa. Handball glove. 1,815,412; July 21.
Lindquist, Albert W., Providence, R. I., assignor to Freeman-Daughaday Company. Necktie holder. 1,815,477; July 21.
Litteway Process Company, The. (See Goddu, George, assignor.)
Loar, Lloyd, assignor to Gulbransen Company, Chicago, Ill. Piano bridge. 1,815,265; July 21.
Lockwood, Henry W., Charleston, S. C. Fender. 1,815,413; July 21.
Loebl, Jerrold, assignor to John R. Thompson Co., Chicago, Ill. Table top. Des. 84,706; July 21.
Logan, A. J., Company. (See Schiffhouer, Joseph H., assignor.)
Long, James W., North Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Printing telegraph control circuit. 1,815,786; July 21.
Long, John, Tipton, Iowa. Interlocking bolts and nuts. 1,815,517; July 21.
Lord, Robert W., Portsmouth, N. H. Strap clamp and block. 1,815,414; July 21.
Lorenz, C., Aktiengesellschaft. (See Gerth, Felix, assignor.)
Lorenz, C., Aktiengesellschaft. (See Schmidt, Karl, assignor.)
Lorenzen, Henry, Crete, Ill. Window latch. 1,815,787; July 21.
Loughead, Malcolm, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif. Fluid operated brake. 1,815,157; July 21.
Louisiana Pine Products Company. (See Fairley, Tallaferro J., assignor.)
Lovett, Hopson P., Columbia, S. C. Loom cam shaft bearing lifter and supporter. 1,815,789; July 21.
Lowman Folding Box Corporation. (See Lowman, Melle E., assignor.)
Lowman, Melle E., assignor to Lowman Folding Box Corporation, Syracuse, N. Y. Folding box. 1,815,788; July 21.
Lucy, Thomas A., Birmingham, Ala. Building construction. 1,815,065; July 21.
Luers, John M., Detroit, Mich. Tool. 1,815,518; July 21.
Lynn, John P., assignor to Dur-O-Lite Pencil Company, Chicago, Ill. Pencil. 1,815,309; July 21.
MacDonald, Isaac, Buffalo, N. Y. Automobile parking and storage apparatus. 1,815,738; July 21.
Machemer, Edward J. (See Chapman, W. A., Machemer, and Paul.)
Mack, Carl, assignor, by mesne assignments, to S. Bonat and H. Bonat, constituting the Firm of Samuel Bonat & Bro., New York, N. Y. Hair winder. 1,815,266; July 21.
Mackall, James H., Akron, Ohio. Garter construction and the like. 1,815,267; July 21.
Madison-Kipp Corporation. (See Kidd, Alvin S., assignor.)
Magat, Charles, Paris, France. Alimentary substance and its manufacture. 1,815,519; July 21.
Magazine Repeating Razor Company. (See Schick, Jacob, assignor.)
Malcher, Otto, Chicago, Ill. Registering scale. 1,815,310; July 21.
Mansur, Cecil T., Hardin, Mo. Starting switch for automobile engines. 1,815,415; July 21.
Manville, George D., assignor of one-fourth to C. W. Ford, Los Angeles, Calif. Chimney breast-wall bed. 1,815,358; July 21.
Marcum, Arthur L., Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation. Road vehicle. 1,815,416; July 21.
Marelli, Attilio, Union City, N. J. Milk bottle lock. 1,815,720; July 21.
Marin, Joseph M. I., and D. S. Rubens, Jersey City, N. J. Necktie. 1,815,675; July 21.
Mariner & Hoskins, Inc. (See Respess, William R., assignor.)
Marion Steam Shovel Company, The. (See Ferguson, Berlin S., assignor.)
Markle, George B., jr., assignor to Hazleton Manufacturing Co., Hazleton, Pa. Casket. Des. 84,707; July 21.
Marsat, Antoine J. B., Verrieres-le-Buisson, France. Machine serving to determine or verify the position of the filaments of an electric lamp. 1,815,109; July 21.
Marsh, Howard E., Lompoc, Calif. Mechanism for actuating windshield wipers and the like. 1,815,158; July 21.
Martin, Thomas, assignor to Sprague-Sells Corporation, Hoopeston, Ill. Machine for measuring and feeding granular material. 1,815,821; July 21.

Martin, William O., Paris, Ark., assignor of one-half to I. H. Nakdimen and one-half to H. P. Galbreath, Fort Smith, Ark. Slack adjuster. 1,815,859; July 21.
Marx, Karl, H. Behncke, and H. Zobel, Dessau in Anhalt, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of finely subdivided metals. 1,815,790; July 21.
Mason, Freeman D., assignor to The Bridgwater Machine Company, Akron, Ohio. Collapsible tire building core. 1,815,359; July 21.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Shock insulated mounting for aircraft and radial motors in busses. 1,815,442; July 21.
Masury, Alfred F., New York, N. Y., and F. E. Queeney, Teaneck, N. J., assignors to International Motor Company, New York, N. Y. Drive for motor vehicles. 1,815,441; July 21.
Matheson, Howard W., Montreal, Quebec, assignor to Canadian Electro Products Company, Limited, Montreal, Canada. Plastic and soluble derivative of cellulose. 1,815,655; July 21.
Mathews, Paul, jr., Bedford, England, assignor to General Electric Company. Automatic control equipment. 1,815,791; July 21.
Mathews, Sadie L., St. Louis, Mo. Automatic burglar alarm for automobiles. 1,815,206; July 21.
Mayberry, Bertha M. (See Mayberry, Fred L., assignor.)
Mayberry, Fred L., assignor to B. M. Mayberry, New Castle, Pa. Amusement ride. 1,815,860; July 21.
Maynard, Arthur H., Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me. Stapling machine. 1,815,066; July 21.
Mayr, Otto. (See Wideröe, R., and Mayr.)
Mayr, Otto, Karlshorst, Germany, assignor to General Electric Company. Protective apparatus. 1,815,861; July 21.
Mays, James J., assignor to Oil City Boiler Works, Oil City, Pa. Steam boiler and forming the same. 1,815,627; July 21.
Mazurie, James V. (See Bark, W., and Mazurie.)
McConnel, Frederic W., Martley, England. Internal combustion engine. 1,815,572; July 21.
McCue, Charles T., assignor to Universal Button Fastening & Button Company, Detroit, Mich. Attachment of fasteners. 1,815,792; July 21.
McCue, Charles T., assignor to Universal Button Fastening & Button Company, Detroit, Mich. Attaching machine. 1,815,862; July 21.
McDonald Machine Co. (See Deisch, Bert A., assignor.)
McDow, Lester, (See Braasch, A. D., McDow, and Twells.)
McGraw, George P., Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for manufacturing articles. 1,815,721; July 21.
McIntyre, Sydney S., Sedro-Woolley, Wash. Control for a plurality of variable pressure valves. 1,815,628; July 21.
McKenna, John B., Los Angeles, Calif. Water tube boiler. 1,815,877; July 21.
McKnight, Edward, Amsterdan, N. Y. Fabric take-up for looms. 1,815,793; July 21.
McLeod, Warren H., Boulder, Colo. Golf tee and manufacturing the same. 1,815,520; July 21.
McManis, Fred, assignor to W-K-M Company, Houston, Tex. Device for cleaning the outside of pipes. 1,815,573; July 21.
McMurray, Harrie D., Sioux City, Iowa. Vehicle body trunk. 1,815,656; July 21.
McQuirk, Phil S., Audubon, Iowa. Plaster belt. 1,815,110; July 21.
Meader, John F., New York, N. Y. Gas combustion apparatus. 1,815,322; July 21.
Medveczky, Julius F., Redwood City, Calif. Watering flowerpots. 1,815,676; July 21.
Meilink, Charles F. (See Kells, H., and Meilink.)
Meilink Steel Safe Company, The. (See Kells, H., and Meilink, assignors.)
Menkus, Ben. (See Menkus, Morris and B.)
Menkus, Morris and B., Los Angeles, Calif. Toy. 1,815,378; July 21.
Mercer, Henry H., Claremont, N. H., assignor to Sullivan Machinery Company. Lubricator. 1,815,111; July 21.
Metal Forms Corporation. (See Wotnoske, Fred C., assignor.)
Metal & Thermit Corporation. (See Fischer, Heilmut, assignor.)
Metzler, Kurt, Grossenhain, Germany. Tool grinding machine. 1,815,112; July 21.
Miles, Cecil W., et al. (See Albertson, Luther, D., assignor.)
Miller, Conda, Woodbury, Pa. Plow hitch. 1,815,794; July 21.
Miller, Harry A., Edmond, Okla. Locking device for gear shift levers. 1,815,417; July 21.
Miller, Ralph J., assignor to Gishold Machine Company, Madison, Wis. Stock bar feeder. 1,815,574; July 21.
Miller, Simon, & Co. (See Stetter, Frits C., assignor.)
Mills, Chester B., deceased; L. H. Mills, Brooklyn, and The National City Bank of New York, New York, N. Y., coexecutors, assignors, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Indicating device. 1,815,575; July 21.
Mills, George W., jr. (See Birdsall, Albert H., assignor.)
Mills, John B., assignor to Ohmer Fare Register Company, Dayton, Ohio. Indicator. 1,815,722; July 21.
Mills, Luella H., et al., coexecutors. (See Mills, Chester B., assignors.)
Milnor, Joseph W., Maplewood, and W. D. Cannon, Metuchen, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Artificial line network. 1,815,629; July 21.
Minter, William S. (See Potts, C., and Minter.)
Mir, Lewis, Jersey City, N. J. Swab making machine. 1,815,478; July 21.
Mitchell, Melville J. (See Raney, C. R., and Mitchell.)
Mitchell, Wells, Los Angeles, Calif. Self teaching of walking and dancing. 1,815,443; July 21.
Miyagi, Shinsho, Tokyo, Japan. Apparatus for setting seed shell fish. 1,815,521; July 21.
Moers, Kurt. (See Koreg, F., and Moers.)
Moffat, John H., Indianapolis, Ind. Vehicle parking and locking device. 1,815,207; July 21.
Monin, George, Los Angeles, Calif. Wedding ring. Des. 84,708; July 21.
Monin, George, Los Angeles, Calif. Wedding ring. Des. 84,709; July 21.
Monroe Calculating Machine Company. (See Chase, George C., assignor.)
Moore Dry Kiln Company. (See Rankin, Joseph A., assignor.)
Moraz, Henri, Thoune, Switzerland. Cinematographic device. 1,815,208; July 21.
Morell, Pascal J., assignor to The American Brass Company, Waterbury, Conn. Zinc base alloy. 1,815,479; July 21.
Morin, George V. (See Laplerre, George J., assignor.)
Morris, Albert W., Drexel Hill, and S. P. Wetherill, jr., Haverford, assignors to Wetherill-Morris Engineering Company, Philadelphia, Pa. Casting metals. 1,815,360; July 21.
Morris, Albert W., Drexel Hill, and S. P. Wetherill, jr., Haverford, assignors to Wetherill-Morris Engineering Company, Philadelphia, Pa. Apparatus for casting metal. 1,815,361; July 21.
Morrow, Clarence H., assignor to The Hostream Heater Company, Cleveland, Ohio. Coupling means for heaters. 1,815,273; July 21.
Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America. Uniting articles and products thereof. 1,815,444; July 21.
Moto Meter Gauge & Equipment Corporation. (See Hurley, Roy T., assignor.)
Motor Products Corporation. (See Kellogg, Homer G., assignor.)
Motor Wheel Corporation. (See Baker, Erle K., assignor.)
Muller, Jacques, La Garenne Colombes, France. Apparatus for delivering measured quantities of liquid. 1,815,875; July 21.
Müller, Michael, Berlin-Charlottenburg, assignor to Siemens Bauunion G. m. b. H. Kommanditgesellschaft, Siemensstadt, near Berlin, Germany. Chemically solidifying earth. 1,815,876; July 21.
Murphy, Durward. (See Gilchrist, T. O., and Murphy.)
Murray, William T. (See Barry, J. J., and Murray.)
Nachtsheim, Peter, New York, N. Y. Valve. 1,815,113; July 21.
Nakdimen, Iser H., et al. (See Martin, William O., assignor.)
National Bureau of Location and Statistics. (See Rebentisch, Grover A., assignor.)
National Carbon Company. (See Crouse, George B., assignor.)
National Carbon Co. (See Heise, George W., assignor.)
National Cash Register Company, The. (See Robertson, William H., assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National City Bank of New York City, The, et al., coexecutors. (See Mills, Chester B., assignor.)
National Fireworks, Inc. (See Anderson, Robert J., assignor.)
National Net & Twine Co. Inc. (See Brownlee, Thomas, assignor.)
National Postage Stamp Machine Corporation. (See Barnes, James W., assignor.)
National Tank Seal Company. (See Tucker, Robert R., assignor.)
National Tube Company. (See Bark, William, assignor.)
National Tube Company. (See Bark, W., and Mazurie, assignors.)
Natta, Giulio, Milan, Italy. Manufacture of methanol. 1,815,677; July 21.
Neal, Walter V., assignor of one-half to W. H. Davis, Lynn, Mass. Cement applying machine. 1,815,480; July 21.
Nell, Percy W., Quebec, Quebec, Canada, assignor to T. L. Dunbar, Watertown, N. Y. Process and apparatus for digesting fibrous material. 1,815,576; July 21.
Nelson, Herman, Corporation, The. (See Shurtleff, Wilfred, assignor.)
Nenzel, Joseph F., Los Angeles, Calif. Switch. 1,815,577; July 21.
Nesbit, T. M., jr. (See Proctor, Hubert M., assignor.)
Newberry, Fenton S., New Rochelle, assignor to American Lithographic Company, Inc., New York, N. Y. Saddling literation upon bottles. 1,815,268; July 21.

Nikonow, John P., New York, N. Y. Key holder. 1,815,209; July 21.
Niles, Harry F., Chicago, Ill. Envelope. 1,815,323; July 21.
Noble, Warren, Detroit, Mich. Internal combustion engine. 1,815,445; July 21.
Noe, Roy H., Memphis, Tenn. Exerciser. 1,815,863; July 21.
Norcross, Thomas. (See Willshaw, H., Norcross, and Broadbent.)
Nordell, Carl H., Chicago, Ill. Separating comminuted matter from the liquid in which it is immersed. 1,815,159; July 21.
Northwest Paper Company, The. (See Hogstad, Anton, jr., assignor.)
Norton Company. (See Cole, Raymond A., assignor.)
Norton Company. (See Holt, Samuel, assignor.)
Norton Company. (See Larsson, T., and Beth, assignors.)
Novelty Manufacturing Company. (See Friedman, Abraham.)
Nuisen, Marvin E., and B. J. Buchtel, Canton, Ohio, assignors to The Hoover Company. Suction sweeper. 1,815,067; July 21.
Nydegger, Roland R., Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for supplying material. 1,815,269; July 21.
Oakes Products Corporation. (See Hershey, O. S., and Van Sickel, assignors.)
O'Brien, Falconer, assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Spring structure. 1,815,210; July 21.
O'Brien, Falconer, assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Spring structure. 1,815,211; July 21.
O'Brien, Jeremiah J., Pittsburgh, Pa. Rolling mill. 1,815,578; July 21.
O'Bryan, William G., Seaside, Calif. Radially expansive piston ring device and fusible locking means therefor. 1,815,418; July 21.
Ogg, Robert A., Towaco, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Terminal connecter. 1,815,212; July 21.
Ohmer Fare Register Company. (See Mills, John B., assignor.)
Ohrberg, John F., Moline, Ill. Vibratory exercising and massaging machine. 1,815,630; July 21.
Oil City Boiler Works. (See Mays, James J., assignor.)
Oliver, Francis. (See Francis, H., and Oliver.)
Oliver, James C. (See Hoecker, Paul V., assignor.)
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Making milling cutters. 1,815,324; July 21.
Olson, Ole N., and L. F. Johnk, Moorhead, Minn., said Johnk assignor to said Olson. Carburetor choke control. 1,815,631; July 21.
O'Neil, James H., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Automatic can testing machine. 1,815,523; July 21.
O'Neil, James H., and G. Flook, Syracuse, assignors to Continental Can Company, Inc., New York, N. Y. Automatic can testing machine. 1,815,522; July 21.
O'Neill, John W., Chicago, Ill. Radium emanator. 1,815,213; July 21.
Oppenheim, Rudolph S., Seattle, Wash. Recovery of protein matter from liquids containing the same. 1,815,160; July 21.
Ostburg, Ralph A., jr., Winchester, Mass. Practice keyboard. 1,815,579; July 21.
Otis, Charles M., Rochester, N. Y., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Casing doorlock. 1,815,724; July 21.
Otis Elevator Company. (See Bjorkman, Axel W., assignor.)
Otte, Otho M., Tarentum, assignor to W. T. Pierce, Reading, Pa. Fastening means for doors. 1,815,580; July 21.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Sound recording and reproducing apparatus. 1,815,481; July 21.
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Owens-Illinois Glass Company. (See Kadow, August, assignor.)
Owens, Robert H., assignor to The P. H. & F. M. Roots Company, Connersville, Ind. Instrument. 1,815,161; July 21.
Packard, Walter F., Marlboro, assignor to Excel Taping Machine Co., Lynn, Mass. Shoe upper and method of manufacture. 1,815,446; July 21.
Paddock, Ralph J. (See Sohn, E., and Paddock.)
Pannier Brothers Stamp Company. (See Pannier, William J., jr., assignor.)
Pannier, William J., jr., assignor to Pannier Brothers Stamp Company, Pittsburgh, Pa. Metallic tag strip. 1,815,632; July 21.
Paper Novelty Corporation, et al. (See Bouchard, Louis O., assignor.)
Paramount Publix Corporation. (See Waller, Fred, assignor.)
Paramount Textile Machinery Co. (See Prosser, T. W., and Wahlbeck, assignors.)
Paratex Corporation, The. (See Robertson, J. B. and G., assignors.)
Parco Specialty Co. (See Evans, Harold A., assignor.)
Park, Charles M. (See Cowles, T. B., and Park.)
Parker, Louisa, et al. (See Bennett, Roze E., assignor.)
Parks & Woolson Machine Company. (See Richardson, Charles G., assignor.)
Parr-Ross Laboratories, Inc. (See Parson, John, assignor.)
Parsons, John, Montclair, N. J., assignor to Parr-Ross Laboratories, Inc., New York, N. Y. Self lighting cigarette and ignition band therefor. 1,815,162; July 21.
Parsons, Philip D., Swarthmore, Pa., assignor to Scott Paper Company. Toilet paper dispensing device. 1,815,068; July 21.
Pathometric Laboratories, Inc. (See Wigelsworth, Arthur E., assignor.)
Patrick, Ella, Olathe, Colo. Cooling device. 1,815,864; July 21.
Patrol Valve Company, The. (See Te Pas, Edmund J., assignor.)
Pauckner, Gustav, Ludwigshafen-on-the-Rhine, and R. Huettner, Oppau, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of phosphoric acid and hydrogen. 1,815,581; July 21.
Paul, Frederick J. (See Chapman, W. A., Machemer, and Paul.)
Peakes, Gilbert L. (See Byck, L. C., and Peakes.)
Pedersen, John D., Jackson, Wyo. Reversible clip for ammunition. 1,815,524; July 21.
Pennsylvania Engineering Works. (See Allen, Lee E., assignor.)
Peoples Gas By-Products Corporation. (See Guthrie, R. G., and Wozasek, assignors.)
Perey, Frank J., Waldwick, N. J. Turnstile. 1,815,130; July 21.
Perkins, Frederick, assignor to Perkins Marine Lamp Corporation, New York, N. Y. Marine lamp. 1,815,582; July 21.
Perkins, George G., Lynn, Mass. Seam forming and staying machine. 1,815,325; July 21.
Perkins Marine Lamp Corporation. (See Perkins, Frederick, assignor.)
Peters, William A., jr., Seattle, Wash., assignor to E. B. Badger & Sons Company, Boston, Mass. Distillation of mineral oils. 1,815,129; July 21.
Petersen, John W., and E. Bevard, Estherville, Iowa. Shield attachment for claw bars. 1,815,114; July 21.
Peterson, Johann G., West Hartford, Conn. Electric switch. 1,815,633; July 21.
Peterson, Johann G., West Hartford, Conn. Electric switch. 1,815,634; July 21.
Peterson, Johann G., West Hartford, Conn. Electric switch. 1,815,635; July 21.
Peterson, John W., Sioux City, Iowa. Shaving mug. 1,815,482; July 21.
Petro, Joseph J., New York, N. Y. Pocket cigarette case and dispenser. 1,815,069; July 21.
Pettibone Mulliken Company. (See Andersen, Oscar W., assignor.)
Pfeiffer, Wilhelm, Kanden-on-the-Eger, assignor of one-third to Kurt Reiss, Saaz-on-the-Eger, Czechoslovakia. Heating installation. 1,815,115; July 21.
Pfleger, Johannes. (See Albert, A., and Pfleger.)
Phillips, P., Dr., Company. (See Floyd, Carol, assignor.)
Pierce, William T. (See Otte, Otho M., assignor.)
Pike, Robert D., Oakland, Calif. Volatilization of phosphorus. 1,815,379; July 21.
Pilgrim, Ford A. (See Zublin, J. A., and Pilgrim.)
Pilling, Charles J., Lansdowne, and B. F. Wiegand, assignors to The George P. Pilling & Son Company, Philadelphia, Pa. Suture forceps. 1,815,725; July 21.
Pilling, George P., & Son Company, The. (See Pilling, C. J., and Wiegand, assignors.)
Pinson, James H., Richmond, Ind., assignor to International Harvester Company. Motor bracket for cream separators. 1,815,362; July 21.
Pioneer Suspender Company. (See Cahn, Tillman, assignor.)
Pittsburgh Pipe & Coupling Company. (See Lamond, John, assignor.)
Pittsburgh Plate Glass Company. (See Clause, Robert L., assignor.)
Pittsburgh Screw and Bolt Corporation. (See Dicks, Thomas A., assignor.)
Plass, Robert H., Upper Montclair, N. J., assignor to A. Kimball Company, New York, N. Y. Price ticket tie-on machine. 1,815,214; July 21.
Platt Brothers & Company Limited, et al. (See Shimwell, Oliver, assignor.)
Pluschweberei Grefrath Aktiengesellschaft. (See Görner, Arthur, assignor.)
Pohl, Robert, Berlin-Charlottenburg, Germany, assignor to General Electric Company. Turbo-generator. 1,815,795; July 21.
Pomeranz, Jacob J. (See Tanasso, V., and Pomeranz.)
Pons, Giulio. (See Bignami, I., Galassini, Franchi, and Pons.)
Porter, Harry F., Rochester, and D. M. Scott, Buffalo, N. Y. Magnetic device. 1,815,380; July 21.
Postindex Company. (See Finch, Raymond C., assignor.)
Potter, Albert T., assignor, by mesne assignments, to Ainsworth Manufacturing Corporation, Detroit, Mich. Operating device for windshields. 1,815,381; July 21.
Potts, C. & G., Company. (See Potts, C., and Minter, assignors.)

Potts, Clayton, and W. S. Minter, assignors to C. & G. Potts Company, Indianapolis, Ind. Brick mold rapping mechanism. 1,815,583; July 21.
Power, James T., assignor to Darco Corporation, Wilmington, Del. Activating carbon. 1,815,525; July 21.
Praetzel, Hans, Leipzig, Germany. Apparatus for feeding paper sheets. 1,815,419; July 21.
Prahar, Louise, Baldwin, N. Y. Toy animal. 1,815,070; July 21.
Prater, Ralph, Oak Park, Ill. Grinder. 1,815,326; July 21.
Prescott, Le Roy A. (See Bennett, T. B., and Prescott.)
Prevost, Sterett R., Elizabeth, N. J., assignor to Henry Klein and Company, Inc., Elmhurst, N. Y. Desk and wall clock case. 1,815,796; July 21.
Price, William B., assignor to Scovill Manufacturing Company, Waterbury, Conn. Nonferrous alloy. 1,815,071; July 21.
Prinzler, Carl J., assignor to Vonnegut Hardware Company, Indianapolis, Ind. Doorbolt mechanism. 1,815,584; July 21.
Probst, Heinrich, Berlin, Germany, assignor to General Electric Company. Switching station. 1,815,797; July 21.
Proctor, Hubert M., assignor of one-half to T. M. Nesbit, jr., Birmingham, Ala. Stud wrench. 1,815,363; July 21.
Prosperity Company, The. (See Ledbetter, James C., assignor.)
Prosser, Thomas W., and J. H. Wahlbeck, Kankakee, assignors to Paramount Textile Machinery Co., Chicago, Ill. Hosiery finishing apparatus. 1,815,865; July 21.
Protectoseal Company of America. (See Anschicks, Rudolph J., assignor.)
Putnam, Ralph E. A., Mountain Lakes, N. J., assignor to International Communications Laboratories Incorporated. Submarine cable system. 1,815,657; July 21.
Queeney, Frank E. (See Masury, A. F., and Queeney.)
Radio Corporation of America. (See Round, Henry J., assignor.)
Radio Inventions, Inc. (See Donle, Harold P., assignor.)
Radio Inventions, Inc. (See Young, Frank A., assignor.)
Raney, Clemma R., Riverside, and M. J. Mitchell, Chicago, Ill., assignors to International Harvester Company. Pick-up attachment for harvester thrashers. 1,815,327; July 21.
Rankin, Joseph A., Samoa, Calif., assignor to Moore Dry Kiln Company of Oregon. Dry kiln. 1,815,798; July 21.
Raymond, Arthur B., Montclair, N. J. Piston. 1,815,799; July 21.
Rebentisch, Grover A., assignor to National Bureau of Location and Statistics, Portland, Oreg. Combination marking plate and reflecting light standard. Des. 84,711; July 21.
Rector, Anson E., Savannah, N. Y. Combination brake and accelerator. 1,815,270; July 21.
Redirected Light Corporation of America. (See Whalen, Edward J., assignor.)
Reece, Joseph A., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for producing sheet glass. 1,815,726; July 21.
Reed, Marion C., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,815,072; July 21.
Reese, Algernon B., New York, N. Y. Ophthalmoscope. 1,815,866; July 21.
Reiss, Kurt. (See Pfeiffer, Wilhelm, assignor.)
Reliable Knitting Works. (See Joha, Elmer N., assignor.)
Remington, Alfred M., assignor to Simonds Saw and Steel Company, Fitchburg, Mass. Saw gauge. 1,815,215; July 21.
Renaud et Cie. of America. (See Davis, John H., assignor.)
Rentschler, Harvey C., East Orange, and D. E. Henry, Bloomfield, N. J., assignors to Westinghouse Lamp Company. Uranium photo-electric tube. 1,815,073; July 21.
Republic Steel Corporation. (See Schmitz, Fred A., assignor.)
Republic Steel Corporation. (See Sindelar, Thomas A., assignor.)
Reserve Holding Company. (See Gilchrist, T. O., and Murphy, assignors.)
Reserve Holding Company. (See Steblik, Rudolph F., assignor.)
Respess, William R., St. George, N. Y., assignor to Mariner & Hoskins, Inc., Chicago, Ill. Container. 1,815,800; July 21.
Reynolds, Marvin C., and A. K. Epstein, Chicago, Ill. Food product and process. 1,815,727; July 21.
Reynolds, Marvin C., and A. K. Epstein, Chicago, Ill. Margarine and process. 1,815,739; July 21.
Ribbeck, John F. (See Armstrong, J. V., and Ribbeck.)
Rice, Edward E., Irvine, Ky. Coin controlled liquid vending apparatus. 1,815,740; July 21.
Richard, Eugene C. (See Cataline, B., and Richard.)
Richards, John J. (See Harding, R. W., and Richards.)
Richardson, Charles G., assignor to Parks & Woolson Machine Company, Springfield, Vt. Cloth shearing machine. 1,815,585; July 21.
Richardson, Henry F., Northport, assignor of one-fourth to A. Coggeshall, Pleasantville, one-sixth to S. R. Bradley, Nyack, one-sixth to A. M. Cregier, Orangeburg, one-sixth to A. B. Bradley, New York, N. Y., and one-fourth to himself. Underfloor wiring duct system. 1,815,447; July 21.
Richardson, Henry F., Northport, assignor of one-fourth to A. Coggeshall, Pleasantville, one-sixth to S. R. Bradley, Nyack, one-sixth to A. M. Cregier, Orangeburg, and one-sixth to A. B. Bradley, New York, N. Y. Floor riser. 1,815,741; July 21.
Richter, George A., assignor to Brown Company, Berlin, N. H. Recovering and utilizing the valuable compounds in spent cooking liquors. 1,815,328; July 21.
Ricker, Norman H., assignor to Hughes Tool Company, Houston, Tex. Catcher for swab plungers. 1,815,364; July 21.
Rideout, Arthur E. (See Kimball, W. D., and Rideout.)
Robertson, George. (See Robertson, James B. and G.)
Robertson, James B., Paterson, and G. Robertson, Ridgewood, assignors to The Paratex Corporation, Paterson, N. J. Making rugs. 1,815,586; July 21.
Robertson, William H., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,815,329; July 21.
Robinson, Charles W., Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill. Duplex grain drill structure. 1,815,330; July 21.
Robinson, Charles W., Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill. Power actuated agricultural implement. 1,815,331; July 21.
Robinson, Hubert C., Dallas, Tex. Oil burner. 1,815,116; July 21.
Robinson, Raymond L. (See Stickley, C., and Robinson.)
Robson, Duer C., and J. N. Selvig, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Strand reeling apparatus. 1,815,728; July 21.
Roeder, Julius, and W. Wellmann, Witten, Germany. Rolling mill and process for rolling tubes. 1,815,867; July 21.
Rogers, John C., assignor to Crown Stove Works, Cicero, Ill. Supporting bracket for door and drawer handles. Des. 84,712; July 21.
Rogers, Joseph W., Bodines, Pa. Trailer hitch. 1,815,678; July 21.
Rohm & Haas Company. (See Bruson, Herman A., assignor.)
Ronning, Adolph. (See Ronning, Andrean G. and A.)
Ronning, Adolph, and A. G. Ronning, deceased; A. Ronning and J. A. Ronning, Minneapolis, Minn., executors. Combination tractor implement. 1,815,273; July 21.
Ronning, Adolph, and A. G. Ronning, deceased; A. Ronning and J. A. Ronning, Minneapolis, Minn., executors. Combination tractor harvester. 1,815,274; July 21.
Ronning, Adolph, E. A. Hendenstrom, and A. G. Ronning, deceased; A. Ronning, Minneapolis, and J. A. Ronning, St. Paul, Minn., executors. Tractor-harvester. 1,815,272; July 21.
Ronning, Adolph, and A. G. Ronning, deceased; A. Ronning and J. A. Ronning, executors, Minneapolis, Minn. Combination tractor harvester. 1,815,587; July 21.
Ronning, Adolph, et al., executors. (See Ronning, Adolph and A. G.)
Ronning, Adolph, et al., executors. (See Ronning, A., Hedenstrom, and Ronning.)
Ronning, Adolph, et al., trustees. (See Ronning, Andrean G. and A.)
Ronning, Andrean G. (See Ronning, Adolph and A. G.)
Ronning, Andrean G. (See Ronning, A., Hedenstrom, and Ronning.)
Ronning, Andrean G. (See Ronning, Andrean and A. G.)
Ronning, Andrean G., deceased, and A. Ronning, assignors by mesne assignments, to A. Ronning; A. Ronning and J. A. Ronning, trustees, Minneapolis, Minn. Tractor. 1,815,271; July 21.
Ronning, Jacob A., et al., executors. (See Ronning, Adolph and A. G.)
Ronning, Jacob A., et al., executors. (See Ronning, A., Hedenstrom, and Ronning.)
Ronning, Jacob A., et al., trustees. (See Ronning, Andrean G., and A.)
Roots, P. H. & F. M., Company, The. (See Owens, Robert H., assignor.)
Ross, Frank L. (See Cassetty, W. M., jr., and Ross and Alford.)
Ross Heater & Mfg. Co. Inc. (See Graham, Harold M., assignor.)
Round, Henry J., London, England, assignor to Radio Corporation of America. Heating filaments. 1,815,131; July 21.
Royal Railway Improvements Corporation. (See Sauvage, William H., assignor.)
Royal Typewriter Company. (See Handley, George F., assignor.)
Royce, Willard K., Clackamas, Oreg. Fastener. 1,815,588; July 21.
Ruben Patents Company. (See Ruben, Samuel, assignor.)
Ruben, Samuel, assignor to Ruben Patents Company, New York, N. Y. Electrical relay. 1,815,483; July 21.
Rubens, Daisy S. (See Marin, J. M. I., and Rubens.)
Rude, Ray N. (See Jeglum, O. F., and Hartwick, assignors.)
Rudolph, Harold V., Wilkinsburg, Pa., and W. H. Horsch, Wheaton, Ill., assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,815,448; July 21.
Ruschmeyer, William J. H., Toledo, Ohio. Bank vault safe. 1,815,281; July 21.

Russell, Cass B., Detroit, Mich., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,815,602; July 21.

Russell, Samuel G., assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,815,382; July 21.

Ruth, Emil W., Fruitville, Lancaster, Pa. Feeding device. 1,815,679; July 21.

Ruud Manufacturing Company. (See Humphrey, Herbert S., assignor.)

Ryan Manufacturing Corporation. (See Grigsby, Owen E., assignor.)

Ryan, Walter D., Schenectady, N. Y., assignor to General Electric Company. Light projector. 1,815,801; July 21.

S. & T. Metal Company. (See Shoemaker, Robert J., assignor.)

Sanchy, Thomas, New York, N. Y. Batik wax lining tool. 1,815,589; July 21.

Sackner, Wade E., assignor to Grand Rapids Fibre Cord Company, Grand Rapids, Mich. Paper finishing cord. 1,815,163; July 21.

Sadler, Cornelium R., Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Closing in the ends of a conduit. 1,815,275; July 21.

Salter, Leslie, Vallejo, Calif. Pontoon diver. 1,815,680; July 21.

Sanford Mills. (See Spendlove, Robert, assignor.)

Sauvage, William H., assignor, by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y. Adjustable tie rod. 1,815,420; July 21.

Scanlan, Joseph M., Great Neck, assignor to G & G Atlas Systems, Inc., New York, N. Y. Pneumatic carrier system. 1,815,590; July 21.

Scarlett, Arthur A., Hamilton, Ontario, Canada, assignor to International Harvester Company, Chicago, Ill. Caster wheel lock for plows. 1,815,332; July 21.

Schaake, William, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Trolley pole. 1,815,591; July 21.

Schaefer, David, Brooklyn, N. Y. Chandelier. 1,815,074; July 21.

Schaeffer, John, Enid, Okla. Burial vault. 1,815,526; July 21.

Schellberg, Oscar B., New York, N. Y. Valve mechanism for proctotherapy apparatus. 1,815,449; July 21.

Schellentrager, Eugene W., Cleveland Heights, assignor to The Atlas Bolt & Screw Company, Cleveland, Ohio. Recording machine. 1,815,681; July 21.

Schenk, Martin J., Hialeah, Fla., assignor of forty-nine one-hundredths to Rubie G. Levin, Chicago, Ill. Lubrication system for internal combustion engines. 1,815,868; July 21.

Schick, Jacob, Stamford, Conn., assignor to Magazine Repeating Razor Company. Making blades. 1,815,592; July 21.

Schiffhouer, Joseph H., assignor to A. J. Logan Company, Pittsburgh, Pa. Adjustable coiled spring bed. 1,815,742; July 21.

Schleicher, Franz, Wiesdorf-on-the-Rhine, G. Schwaebel, Leverkusen-on-the-Rhine, and K. Briesewitz, Cologne-Deutz, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Dehydrating vapor mixtures containing acetic anhydride and water. 1,815,802; July 21.

Schmal, Alois H., Rahway, N. J., assignor to International Motor Company, New York, N. Y. Steering gear adjusting device. 1,815,450; July 21.

Schmidt, Karl, Berlin-Lichtenrade, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Arrangement for lighting trains. 1,815,452; July 21.

Schmitz, Fred A., Canton, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Roller leveler. 1,815,484; July 21.

Schmitz, Paul, et al. (See Szombathy, Kálmán, assignor.)

Schneider, Heinrich, Erfurt, Germany. Footwear. 1,815,164; July 21.

Schneider, John, Roselle Park, N. J. Pencil casing. 1,815,451; July 21.

Schofield, Charles, assignor to Dobson and Barlow Limited, Bolton, England. Machine for opening, scutching, and similarly treating cotton and other fibrous materials. 1,815,593; July 21.

Schofield, William R., jr. (See Harsch, J. W., and Schofield.)

Schuenhoff, Harry. (See Eckel, H., and Schuenhoff.)

Schwaebel, Georg. (See Schleicher, F., Schwaeber, and Briesewitz.)

Schwarzkopf, Paul, Berlin, Germany, assignor to American Electro Metal Corporation, New York, N. Y. Preparation of chemically pure tungsten and molybdenum trioxide. 1,815,132; July 21.

Schwieger, Alfred, administrator. (See Schwieger, Charles.)

Schwieger, Charles, deceased, Lage, Germany, by A. Schwieger, administrator, San Francisco, Calif., assignor, by mesne assignments, to Schwieger Chemical Co. Manufacturing sugar. 1,815,276; July 21.

Schwieger Chemical Co. (See Schwieger, Charles, assignor.)

Scofield, Theodore J., Jackson, Mich., assignor to The Sparks-Withington Company. Control knob for condensers. 1,815,165; July 21.

Scott, Donald M. (See Porter, H. F., and Scott.)

Scott Paper Company. (See Liebeck, Harry, assignor.)

Scott Paper Company. (See Parsons, Philip D., assignor.)

Scott, William, Medford, assignor to Self Feeding Carburetor Company, Inc., Boston, Mass. Carburetor. 1,815,485; July 21.

Scott, William L. (See Cook, H. D., and Scott.)

Scovill Manufacturing Company. (See Price, William B., assignor.)

Scruggs, Ramon S., Los Angeles, Calif. Edible receptacle. 1,815,527; July 21.

Scullen, Hugh J., Detroit, Mich., assignor to Copeland Products Inc. Refrigerating system. 1,815,383; July 21.

Sea Island Mills, Inc. (See Grivin, Adolphe, assignor.)

Searles, Joseph H., Los Angeles, Calif. Square and mitre attachment for saws. 1,815,216; July 21.

Seeley, Harold T., Yeadon, Pa., assignor to General Electric Company. Automatic control equipment. 1,815,803; July 21.

Segler, William J. (See Walkup, B. L., and Segler.)

Self Feeding Carburetor Company. (See Scott, William, assignor.)

Selvig, John N. (See Robson, D. C., and Selvig.)

Seng Company, The. (See Fox, Martin, assignor.)

Serrurier, Iwan, Altadena, Calif. Film viewing machine. 1,815,486; July 21.

Sersen, Fred J., Brooklyn, assignor of one-half to J. H. Thomas, New York, N. Y. Stud and partition construction for buildings. 1,815,075; July 21.

Severy, Victor H., Los Angeles, Calif. Check protector. 1,815,076; July 21.

Shakespeare Company. (See Russell, Samuel G., assignor.)

Shampay, Pascal J., Indianapolis, Ind. Rug rolling machine. 1,815,333; July 21.

Shank, Charles L., North Canton, Ohio, assignor to The Hoover Company. Suction cleaner agitator. 1,815,077; July 21.

Shaw, John C., and R. D., assignors to Keller Mechanical Engineering Corporation, Brooklyn, N. Y. Screw driver screw holding device. 1,815,594; July 21.

Shaw, Robert D. (See Shaw, John C., and R. D.)

Sheck, Oscar, and E. Tranaas, assignors to Koehring Company, Milwaukee, Wis. Control mechanism for distributing buckets. 1,815,682; July 21.

Shelby, Peter, jr., Fenton, Mich. Rim extension for tractor wheels. 1,815,117; July 21.

Sheridan, Leslie M., Copperclift, Ontario, Canada. Variable speed mechanism. 1,815,334; July 21.

Sherman, Francis H., Palmer, Mass. Packaging means. 1,815,683; July 21.

Shimwell, Oliver, assignor to Gawsworth Patents Limited, Manchester, and Platt Brothers & Company, Limited, Oldham, England. Shuttleless loom for weaving. 1,815,118; July 21.

Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,815,335; July 21.

Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,815,453; July 21.

Shipley, Thomas, assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,815,421; July 21.

Shlesinger, Bernard E., Irondequoit, and T. M. Durkan, assignors to Gleason Works, Rochester, N. Y. Method and apparatus for grinding gears. 1,815,336; July 21.

Shlesinger, William H., Brooklyn, N. Y. Lamp. Des. 84,713; July 21.

Shoemaker, Robert J., assignor to S. & T. Metal Company, Chicago, Ill. Lead alloy. 1,815,528; July 21.

Shotter, George F., New Southgate, England. Electrical testing apparatus. 1,815,217; July 21.

Shurtleff, Wilfred, assignor to The Herman Nelson Corporation, Moline, Ill. Fan construction. 1,815,529; July 14.

Sickel, Louis C. (See Ackerman, Michael H., assignor.)

Siemens Baunnion G. m. b. H. Kommanditgesellschaft. (See Müller, Michael, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Berthold, R. G., and Strigel, assignors.)

Siess, Robert E., and D. J. La Bauve, Lake Charles, La. Ratchet wrench. 1,815,804; July 21.

Simler, George C., et al. (See Albertson, Luther D., assignor.)

Simonds Saw and Steel Company. (See Remington, Alfred M., assignor.)

Simpson, Arthur E., Los Angeles, Calif. Insect control device. 1,815,595; July 21.

Simpson, Robert D., Columbus, Ohio. Oscillatory liquid distributor. 1,815,658; July 21.

Sindelar, Thomas A., Canton, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Apparatus for slitting metal sheets. 1,815,487; July 21.

Singer Manufacturing Company, The. (See Clayton, Andrew B., assignor.)

Skau, Meinich. (See Alsaker, A., and Skau.)

Sklar, Samuel B. (See Weiner, J., and Sklar.)

Skvorecz, Rudolf, Somerville, assignor of ten per cent to L. W. Walling, Hazlet, N. J. Shaving brush. 1,815,119; July 21.

Slee, Arthur L., San Francisco, Calif. Folding bed davenport. 1,815,120; July 21.

Slezak, Vincent F., assignor to International Ticket Scale Corporation, New York, N. Y. Coin-controlled scale. Des. 84,714; July 21.

Slocomb, F. F., & Co. Inc. (See Foster, Albert F., assignor.)

Small, James W., Brooklyn, N. Y., and R. Febles, Passaic, N. J. Apparatus for casing cured leaf tobacco. 1,815,805; July 21.

Smith, Alexander, & Sons Carpet Company. (See Barrett, Charles E., assignor.)

Smith, Arthur C., assignor of one-half to L. T. Everett, Alleyton, Tex. Pressure switch. 1,815,806; July 21.

Smith, Charles G., Medford, assignor, by mesne assignments, to Cambridge Laboratories, Inc., Cambridge, Mass. Gas pump. 1,815,121; July 21.

Smith, Ernest C., Chicago, Ill., assignor to International Harvester Company. Spreader body. 1,815,337; July 21.

Smith, Frank D., jr., assignor to A C Spark Plug Company, Flint, Mich. Heat indicator. 1,815,636; July 21.

Smith, Herbert B., Murrumbeena, Victoria, assignor of one-third to J. B. Splatt, and one-third to W. D. Taylor, Victoria, Australia. Trapping insects. 1,815,122; July 21.

Smith, James N., Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Electrolytic cell. 1,815,078; July 21.

Smith, James N., Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Electrolytic cell. 1,815,079; July 21.

Smith, James N., Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Electrode for apparatus for electrolysis of water. 1,815,080; July 21.

Smith, Walter E., Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I. Center ornament for drapery rods or the like. Des. 84,715; July 21.

Smith, Walter E., Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I. End ornament for drapery rods or the like. Des. 84,716; July 21.

Smith, William A., jr., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,815,166; July 21.

Smith, Winfield S., Ossining, N. Y. Closure operator. 1,815,123; July 21.

Snyder & Black, Incorporated. (See Viscount, Joseph L., assignor.)

Snyder, James E., Kenmore, assignor to Dupont Cellophane Company, Inc., New York, N. Y. Affixing labels. 1,815,365; July 21.

Societa Alti Forni Fonderie, Acciaierie e Ferriere Franchi-Gregorini. (See Bignami, I., Galassini, Franchi, and Pons, assignors.)

Societe des Brevete Catalex. (See Balachowsky, D., and Caire, assignors.)

Societe d'Etudes et de Construction d'Appareils de Telemecanique. (See Bernady, Raoul, assignor.)

Sohn, Erwin, and R. J. Paddock, Bellevue, assignors to Standard Sanitary Mfg. Co., Pittsburgh, Pa. Chromium plating. 1,815,081; July 21.

Sohst, Otto, Hochst-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New azo dyestuffs and preparing them. 1,815,133; July 21.

Songey, Sylvester E., Chicago, Ill. Bolt. 1,815,422; July 21.

Soper, Raymond H., assignor to Browne-Morse Company, Muskegon, Mich. Furniture top. 1,815,167; July 21.

Sparks-Withington Company, The. (See Scofield, Theodore J., assignor.)

Spear, Jay P., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for supporting and handling objects. 1,815,218; July 21.

Spencer, Charles H., Glendale, Calif., assignor, by mesne assignments, to Sub-Soil Aeration Company. Treating soils to promote plant growth. Re18,132; July 21.

Spendlove, Robert, assignor to Sanford Mills, Sanford, Me. Pile wire loom stopping mechanism. 1,815,277; July 21.

Sperry Gyroscope Company. (See Mills, Chester B.)

Sperry, James E., Gresham, Nebr. Airplane construction. 1,815,124; July 21.

Sperry-Sun Well Surveying Company. (See Williston, Samuel H., assignor.)

Spiegel, Max., Philadelphia, Pa. Combined door bell and alarm. 1,815,659; July 21.

Splatt, Joseph B., et al. (See Smith, Herbert B., assignor.)

Sprague, Goldwin S., Newton, Mass. Ski binding. 1,815,168; July 21.

Sprague-Sells Corporation. (See Martin, Thomas, assignor.)

Stamm, Alexander F., Detroit, Mich., and F. K. Knohl, Fort Wayne, Ind., assignors to Dee Stamm. Torsional vibration damper. 1,815,807; July 21.

Stamm, Alexander F., Detroit, Mich., Vibration damper. 1,815,808; July 21.

Stamm, Dee. (See Stamm, A. F., and Knohl, assignors.)

Standard Brands Incorporated. (See Gore, H. C., and Frey, assignors.)

Standard-Knapp Corporation. (See Kimball, W. D., and Rideout, assignors.)

Standard Oil Company. (See Kinney, Ansel M., assignor.)

Standard Oil Company. (See Watts, George W., assignor.)

Standard Oil Company. (See Wilson, Robert E., assignor.)

Standard Oil Company of California. (See Chappell, Marvin L., assignor.)

Standard Sanitary Manufacturing Company. (See Leffel, Robert, assignor.)

Standard Sanitary Mfg. Co. (See Sohn, E., and Paddock, assignors.)

Stark, Louis, Brooklyn, assignor to Kaster Specialty Manufacturing Company, Inc., New York, N. Y. Antirattling device for doors and the like. 1,815,596; July 21.

Steele, Alexis P., Statesville, N. C. Brick and tile machine. 1,815,809; July 21.

Steele, Alexis P., Statesville, N. C. Brick and tile machine. 1,815,810; July 21.

Steen, Henry, Vashon, Wash. Newspaper receptacle. 1,815,219; July 21.

Stehlik, Rudolph F., assignor to Reserve Holding Company, Chicago, Ill. Multioffice telephone system. 1,815,169; July 21.

Steinberg, Jacob, Brooklyn, N. Y. Mine railroad car. 1,815,082; July 21.

Sterling, Claude H. (See Lee, C. L., and Sterling.)

Stetter, Fritz C., Irvington, assignor to Simon Miller & Co., Newark, N. J., a copartnership composed of M. Miller and E. Miller. Link bracelet. Des. 84,717; July 21.

Stickley, Carl, and R. L. Robinson, Davenport, Iowa. Aeroplane. 1,815,597; July 21.

Stone, Alfred, London, England. Article for protecting the wrists and arms against cold. 1,815,530; July 21.

Stone, George E. (See Duncan, H. F., and Stone.)

Stover, Albert, et al. (See Albertson, Luther D., assignor.)

Strack, Charles and E. C., Random Lake, Wis. Tire chain. 1,815,278; July 21.

Strack, Elton C. (See Strack, Charles and E. C.)

Stratford, Charles W., Kansas City, Mo. System for treating petroleum oils. 1,815,366; July 21.

Strauss, Joseph B., Chicago, Ill. Dirigible flying machine. 1,815,338; July 21.

Strigel, Robert. (See Berthold, R. G., and Strigel.)

Strong, William T., Norman, Okla. Tool. 1,815,220; July 21.

Stroup, Charles L., Oak Park, Ill. Insulating member for high tension construction. 1,815,598; July 21.

Stuciffe, W. H., et al. (See Bennett, Roze E., assignor.)

Stutz-Benz, Emil, Landsberg-on-the-Warthe, Germany. Stopping device for spinning and doubling machines. 1,815,743; July 21.

Sub-soil Aeration Company. (See Spencer, Charles H., assignor.)

Sullivan, James E., assignor to The Sullivan Printing Works Company, Cincinnati, Ohio. Sheet dividing and compiling mechanism. 1,815,744; July 21.

Sullivan, J. T., et al. (See Haworth, De Witt C., assignor.)

Sullivan Machinery Company. (See Holmes, Morris P., assignor.)

Sullivan Machinery Company. (See Mercer, Henry H., assignor.)

Sullivan Printing Works Company, The. (See Sullivan, James E., assignor.)

Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,815,170; July 21.

Sweeney, Joseph H., Nashville, Tenn. Body headrest for undertakers' use. 1,815,171; July 21.

Sweetland, Ernest J., Hazelton, Pa. Method and apparatus for rapidly draining crank case oil. 1,815,221; July 21.

Swift, Justin R., Chicago, Ill. Gang saw. 1,815,222; July 21.

Szegvári, Andrew. (See Gábor, F., Klein, and Szegvári.)

Szombathy, Kálmán, Kakospalota, Hungary, assignor of one-third to P. Schmitz and one-third to D. K. Kell, Dortmund, Germany. Gaining pure tarfree sulphur from used gas-purifying mass. 1,815,811; July 21.

Tagliabue, Charles J., Mfg. Co. (See Irwin, Lawrence C., assignor.)

Takamine Ferment Company. (See Takamine, Jokichi, jr., assignor.)

Takamine, Hilda, executrix. (See Takamine, Jokichi, jr.)

Takamine, Jokichi, jr., deceased, Ridgewood, N. J., H. Takamine executrix, assignor to Takamine Ferment Company. Degumming silk. 1,815,279; July 21.

Tanasso, Vincent, New York, and J. J. Pomeranz, Brooklyn, N. Y. Bar material for ophthalmic mountings. Des. 84,718; July 21.

Taylor Instrument Companies. (See DeMers, Clayton D., assignor.)

Taylor, William C., assignor to Corning Glass Works, Corning, N. Y. Glass. 1,815,812; July 21.

Taylor, William D., et al. (See Smith, Herbert B., assignor.)

Templeton, Walter B., Chicago, Ill. Band end connection. 1,815,684; July 21.

Te Pas, Edmund J., Lakewood, Ohio, assignor to The Patrol Valve Company, Cleveland, Ohio. Fluid control system. Re18,135; July 21.

Texas Company, The. (See Dearborn, R. J., and Holmes, assignors.)

Texas Company, The. (See de Florez, Luis, assignor.)

Thanet, Kent, Los Angeles, Calif. Spark plug. 1,815,423; July 21.

Thiel, August A. (See Bohannon, Robert L., assignor.)

Thomas, John H. (See Sersen, Fred J., assignor.)

Thompson, John R., Co. (See Loebl, Jerrold, assignor.)

Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,815,745; July 21.

Thum, Martin, Rochester, N. Y. Furniture. 1,815,877; July 21.
Tilden, Robbins and T. A., High Point, N. C. Repeating connecter switch. 1,815,223; July 21.
Tilden, Thomas A. (See Tilden, Robbins and T. A.)
Timken-Detroit Axle Company, The. (See Trbojevich, Nikola, assignor.)
Tolcik, John A., West Orange, N. J., assignor to American Can Company, New York, N. Y. Electric soldering means. 1,815,280; July 21.
Tomaso, Salvatore D., Chicago, Ill. Street indicator. 1,815,424; July 21.
Toronto Type Foundry Company, Limited. (See Huffman, Louis, assignor.)
Townsend, Frank B., Penn Yan, N. Y. Wire handle for fruit baskets. 1,815,125; July 21.
Tracy, Michael J., St. Louis, Mo. Safety flushing apparatus. 1,815,384; July 21.
Tranaas, Emil. (See Sheck, O., and Tranaas.)
Travis, Simeon E., jr., Hattiesburg, Miss., assignor to The Weldmech Steel Products Co. Metallic truck body. 1,815,813; July 21.
Trbojevich, Nikola, Highland Park, assignor to The Timken-Detroit Axle Company, Detroit, Mich. Worm gearing. 1,815,685; July 21.
Tregoning, William C., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric pull switch mechanism. 1,815,172; July 21.
Tregoning, William C., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Pull chain snap switch mechanism. 1,815,173; July 21.
Troyer, Daniel L., Cleveland, Ohio. Pencil holder. 1,815,746; July 21.
Trumbull Electric Manufacturing Company, The. (See Getchell, Benjamin E., assignor.)
Tucker, Robert R., assignor to National Tank Seal Company, Tulsa, Okla. Oil tank construction. 1,815,531; July 21.
Tuorto, Louis L., Pequanac, N. J. Compound for cleaning and polishing surfaces. 1,815,599; July 21.
Turner, Eldon A., Graniteville, Mass. Auxiliary extensible wing for airplanes. 1,815,814; July 21.
Turner Tanning Machinery Company, The. (See Connor, John H., assignor.)
Turzicky, Francis, assignor to H. E. Bullock, Chicago, Ill. Automotive vehicle. 1,815,339; July 21.
Twells, John. (See Braasch, A. D., McDow, and Twells.)
Uherek, Charles A., Chicago, Ill., assignor to International Harvester Company. Circuit breaker. 1,815,340; July 21.
Union Switch & Signal Company, The. (See Baughman, George W., assignor.)
Union Switch & Signal Company, The. (See Brooks, Charles A., assignor.)
Union Switch & Signal Company, The. (See Lee, Frederick W., assignor.)
Union Switch & Signal Company, The. (See Rudolph, H. V., and Horsch, assignors.)
Union Switch & Signal Company, The. (See Young, Henry S., assignor.)
United Autographic Register Co. (See Leimberger, Robert C., assignor.)
United Shoe Machinery Corporation. (See Cross, Garrett P. S., assignor.)
United Shoe Machinery Corporation. (See Goddu, George, assignor.)
United Shoe Machinery Corporation. (See Gouldbourn, J., and Woodcock, assignors.)
United Shoe Machinery Corporation. (See Hall, Walter H., assignor.)
United Shoe Machinery Corporation. (See Leveque, Bernard T., assignor.)
United States Envelope Company. (See Cather, Charles E., assignor.)
U. S. Ring Traveler Company. (See Gilligan, George H., assignor.)
Universal Button Fastening & Button Company. (See McCue, Charles T., assignor.)
Universal Draft Gear Attachment Co. (See Wrigley, Henry I., assignor.)
Universal Engineering Company. (See Zublin, J. A., and Pilgrim, assignors.)
Universal Optical Corporation. (See Bosworth, Thomas E., assignor.)
Urbinati, Mario, Rome, Italy. Phase changing transformer. 1,815,454; July 21.
Van Madaler, Ferdinand, Hampton Bays, assignor, by mesne assignments, to Visionola Mfg. Corporation, New York, N. Y. Sound recording mechanism. 1,815,692; July 21.
Van Schaack Bros. Chemical Works, Inc. (See Van Schaack, Robert H., jr., assignor.)
Van Schaack, Robert H., jr., Evanston, assignor to Van Schaack Bros., Chemical Works, Inc., Chicago, Ill. Esters of secondary alcohols. 1,815,878; July 21.
Van Sickel, Ernest J. (See Hershey, O. S., and Van Sickel.)
Vanpel, Albert, Berlin-Grunewald, Germany, assignor to Westinghouse Electric & Manufacturing Company. Transmission line structure. 1,815,600; July 21.
Vesey, Henry A., Fort Smith, Ark. Wire dispensing means. 1,815,532; July 21.
Victor, Joseph B., Chicago, Ill., assignor to Victor Manufacturing & Gasket Co. Gasket. 1,815,601; July 21.
Victor Manufacturing & Gasket Company. (See Russell, Cass B., assignor.)
Victor Manufacturing & Gasket Co. (See Victor, Joseph B., assignor.)
Viele, Sylvester M., Altoona, Pa. Switch. 1,815,637; July 21.
Vincent, James A., Providence, R. I. Tire chuck. 1,815,533; July 21.
Viscount, Joseph L., assignor to Snyder & Black, Incorporated, New York, N. Y. Display carton. 1,815,224; July 21.
Visionola Mfg. Corporation. (See De Madaler, Arthur, assignor.)
Visionola Mfg. Corporation. (See von Madaler, Ferdinand, assignor.)
Vonnegut Hardware Company. (See Prinzler, Carl J., assignor.)
Vossloh, Karl, Werdohl, Germany. Rail fastening device. 1,815,815; July 21.
W-K-M Company. (See McManis, Fred, assignor.)
Wagner, Hermann, Bad-Soden-am-Taunus, A. Kissling, Frankfort-on-the-Main-Hochst, E. Hotz, Hattersheim, near Frankfort-on-the-Main, and W. Fitzky, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. 2-halogen-3-chloro-4-amino-1-methylbenzene-5-sulphonic acids and preparing them. 1,815,747; July 21.
Wagner, Hermann, Bad-Soden-am-Taunus, A. Kissling, Frankfort-on-the-Main-Hochst, E. Hotz, Hattersheim, near Frankfort-on-the-Main, and W. Fitzky, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. 2-halogen-3-chloro-4-amino-1-methylbenzene-6-sulphonic acids and preparing them. 1,815,748; July 21.
Wahlbeck, John H. (See Prosser, Thomas W., and Wahlbeck.)
Walker Manufacturing Company. (See Bate, John W., assignor.)
Walker, Thomas M., Kerlin, Ark. Slip socket tool joint. 1,815,660; July 21.
Walkup, Bascom L., and W. J. Segler, Mexia, Tex. Device for attaching oil well tubing catchers to oil well tubing. 1,815,425; July 21.
Wallace, R., & Sons Manufacturing Company. (See Warren, William S., assignor.)
Waller, Fred, Huntington, N. Y., assignor, by mesne assignments, to Paramount Publix Corporation. Producing motion pictures. 1,815,455; July 21.
Walling, Leon W. (See Skvorecz, Rudolf, assignor.)
Wardrop, Grover O., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Co., Chicago, Ill. Kickback for bowling alleys. 1,815,686; July 21.
Warner, John F., Muncie, Ind. Garage door. 1,815,749; July 21.
Warp Twisting-In Machine Company. (See Klein, Frederick, assignor.)
Warren, William S., Meriden, assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon or similar article. Des. 84,719; July 21.
Waterbury Tool Company, The. (See Francis, Daniel R., assignor.)
Waters, Ambrose. (See Allen, G. W., and Waters.)
Watkins, William E., assignor to Copper Plate Sheet & Tube Company, New York, N. Y. Plating metal. 1,815,638; July 21.
Watts, Edmund H., London, England. Cargo ship. 1,815,687; July 21.
Watts, George W., assignor to Standard Oil Company, Whiting, Ind. Tube hanger. 1,815,750; July 21.
Weatherhead, Albert J., jr., Cleveland, Ohio. Cover for receptacles. 1,815,603; July 21.
Webb, Christopher F., Kenton, assignor, by mesne assignments, to The Bell Punch and Printing Co. Limited, Uxbridge, Middlesex, England. Printing machine. 1,815,534; July 21.
Weekley, Cecil C. (See Harding, W. E., and Weekley.)
Weinberg, Abraham, assignor to H. B. Hardenburg Corporation, Linden, N. J., Bill fold. 1,815,083; July 21.
Weiner, Julius, Philadelphia, Pa., and S. B. Sklar, Minneapolis, Minn. Expansion compensating device for valve actuating mechanism. 1,815,134; July 21.
Weitzel, Henry C., Shiner, Tex. Spray nozzle. 1,815,535; July 21.
Weitzman, Louis, New York, N. Y. Automobile trunk or the like. Des. 84,720; July 21.
Weitzman, Louis, New York, N. Y. Automobile trunk or the like. Des. 84,721; July 21.
Weldmech Steel Products Co. (See Travis, Semeon E., jr., assignor.)
Wellmann, Wilhelm. (See Roeder J., and Wellmann.)
Wesche, Hans, K. Brodersen, Dessau in Anhalt, and W. Ext, Kiel-Kronshagen, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Insecticide. 1,815,816; July 21.
Western Electric Company. (See Babbitt, Bethel J., assignor.)
Western Electric Company. (See Bonsor, Walter, assignor.)
Western Electric Company. (See Boynton, Stanley E., assignor.)
Western Electric Company. (See Cherry, George L., assignor.)
Western Electric Company. (See Dowd, Archie J., assignor.)

Western Electric Company. (See Gaylord, Harlow F., assignor.)
Western Electric Company. (See Guillemin, Ernest A., assignor.)
Western Electric Company. (See Kranz, Hermann E., assignor.)
Western Electric Company. (See Larsen, Einer W., assignor.)
Western Electric Company. (See McGraw, George P., assignor.)
Western Electric Company. (See Nydegger, Roland R., assignor.)
Western Electric Company. (See Robson, D. C., and Selvig, assignors.)
Western Electric Company. (See Spear, Jay P., assignor.)
Western Electric Company. (See Wilson, Roger V., assignor.)
Western Union Telegraph Company, The. (See Long, James W., assignor.)
Western Union Telegraph Company, The. (See Milnor, J. W., and Cannon, assignors.)
Westin, Daniel B., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for handling glassware. Re18,133; July 21.
Westinghouse Electric and Manufacturing Company. (See Boddie, C. A., and Curtis, assignors.)
Westinghouse Electric and Manufacturing Company. (See Burr, G. A., and Frakes, assignors.)
Westinghouse Electric and Manufacturing Company. (See Haas, Carl F., assignor.)
Westinghouse Electric & Manufacturing Company. (See High, Jurjen S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hitchcock, Richard C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Legg, Joseph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schaake, William, assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, James N., assignor.)
Westinghouse Electric & Manufacturing Company. (See Vaupel, Albert, assignor.)
Westinghouse Lamp Company. (See Bonney, Alfred, jr.)
Westinghouse Lamp Company. (See Driggs, Frank H., assignor.)
Westinghouse Lamp Company. (See Rentschler, H. C., and Henry, assignors.)
Wetherill-Morris Engineering Company. (See Morris, A. W., and Wetherill, assignors.)
Wetherill, Samuel P., jr. (See Morris, A. W., and Wetherill.)
Whalen, Edward J., assignor to Redirected Light Corporation of America, Syracuse, N. Y. Headlamp construction. 1,815,751; July 21.
White, Harry B., Canton, Ohio, assignor to The Hoover Company. Suction cleaner agitator. 1,815,084; July 21.
White, Harry B., Canton, Ohio, assignor to The Hoover Company. Cleaner. 1,815,225; July 21.
Widerøe, Rolf, and O. Mayr, Karlsborst, Germany, assignors to General Electric Company. Protective apparatus. 1,815,752; July 21.
Wiedeke, Gustav, assignor to Gustav Wiedeke Company, Dayton, Ohio. Tube expander and the like. 1,815,174; July 21.
Wiedeke, Gustav, Company. (See Wiedeke, Gustav, assignor.)
Wiedmaier, Arthur A., Cleveland, assignor to The Wiedmaier Company, Cleveland Heights, Ohio. Transmission. 1,815,688; July 21.
Wiedmaier, Arthur A., assignor to The Wiedmaier Company, Cleveland Heights, Ohio. Transmission. 1,815,689; July 21.
Wiedmaier Company, The. (See Wiedmaier, Arthur A., assignor.)
Wiegand, Bruno F. (See Pilling, C. J., and Wiegand.)
Wigelsworth, Arthur E., assignor to Pathometric Laboratories, Inc., Chicago, Ill. Humidifying system. 1,815,385; July 21.
Wilbor, Oscar J. (See Guthrie, R. G., and Wozasek.)
Wiley, William R., Detroit, Mich. Catch for motor vehicle hoods. 1,815,690; July 21.
Wilkin, John T., and C. B. Coldwell, assignors to The Connersville Blower Company, Connersville, Ind. Flexible coupling. 1,815,639; July 21.
Willamette-Ersted Company. (See Grab, Gustav A., assignor.)
Willard, James A., Greensboro, N. C. Battery support. 1,815,488; July 21.
Willard, John M., Los Angeles, Calif. Clamping device. 1,815,386; July 21.
Willett, Alfred H., West Englewood, N. J., assignor to American Arch Company, New York, N. Y. Locomotive arch construction. 1,815,387; July 21.
Williams, Charles B., Shaker Heights, Ohio. Clothes wringer frame. Des. 84,722; July 21.
Williams, John P., Fresno, Calif. Direction signal for motor vehicles. 1,815,367; July 21.
Williams, Washington B., Kenwood, Md. Coal conveyer. 1,815,135; July 21.
Williston, Samuel H., Maracaibo, Venezuela, assignor, by mesne assignments, to Sperry-Sun Well Surveying Company, Philadelphia, Pa. Side wall sampler. 1,815,661; July 21.
Willshaw, Harry, T. Norcross, and F. G. Broadbent, Erdington, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y. Apparatus for vulcanizing tires. 1,815,085; July 21.
Wilson, Henry D. (See Brown, Ray W., assignor.)
Wilson, Robert E., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Antiknock compound. 1,815,753; July 21.
Wilson, Roger V., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Heat treating metal parts. 1,815,691; July 21.
Winkelmann, Robert, Heathside, Hertford Heath, Hertford, Great Britain. Automatic stop for gramophones. 1,815,536; July 21.
Winne, Harry A., Schenectady, N. Y., assignor to General Electric Company. System of electric control. 1,815,754; July 21.
Winthrop Chemical Company. (See Albert A., and Pfleger, assignors.)
Winthrop Chemical Company. (See Wesche, H., Brodersen, and Ext., assignors.)
Witt, Birdie V., Pasadena, Calif. Orchard heater. 1,815,388; July 21.
Wolf, Darwin M., Long Beach, Calif. Ship's telegraph recorder. 1,815,389; July 21.
Wood, Albert C., Philadelphia, Pa. Steam generator. 1,815,086; July 21.
Woodcock, Reginald B. (See Gouldbourn, J., and Woodcock.)
Wooldridge, Charles L., assignor to Charles L. Wooldridge, Inc., Pittsburgh, Pa. Stairway step. 1,815,126; July 21.
Wooldridge, Charles L., Inc. (See Wooldridge, Charles L., assignor.)
Wotnoske, Fred C., assignor to Metal Forms Corporation, Milwaukee, Wis. Spreader device for concrete forms. 1,815,368; July 21.
Wozasek, Oscar J. (See Guthrie, R. G., and Wozasek.)
Wrigley, Henry I., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Railway car frame. 1,815,175; July 21.
York Ice Machinery Corporation. (See Shipley, Thomas, assignor.)
Young, Frank A., Meriden, Conn., assignor, by mesne assignments, to Radio Inventions, Inc., New York, N. Y. Rectifier. 1,815,390; July 21.
Young, Henry S., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,815,640; July 21.
Young, L. A., Spring & Wire Corporation. (See O'Brien, Falconer, assignor.)
Zaharoff, Basil, Jamaica, N. Y. Aeroplane machine. 1,815,341; July 21.
Zentner, C. L., et al. (See Haworth, De Witt C., assignor.)
Zobel, Hans. (See Marx, K., Behncke, and Zobel.)
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Thermostatic control. 1,815,641; July 21.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Heat indicator. 1,815,642; July 21.
Zublin, John A., and F. A. Pilgrim, assignor to Universal Engineering Company, Los Angeles, Calif. Core drill with auxiliary reamer. 1,815,391; July 21.
Zuckerman, Roscoe C., Stockton, Calif. Blade mounting for underground crop diggers. 1,815,057; July 21.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 21ST DAY OF JULY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid and hydrogen, Production of phosphoric. G. Pauckner and R. Huettner. 1,815,681; July 21.
Adhesion preventing substance and using the same. T. L. Law. 1,815,305; July 21.
Aeroplane. C. Stickley and R. L. Robinson. 1,815,597; July 21.
Aeroplane machine. B. Zaharoff. 1,815,341; July 21.
Aeroplane, Mail carrying. R. Fisher. 1,815,466; July 21.
Aeroplanes, Device for assisting in the launching and landing of. R. Hamburger. 1,815,200; July 21.
Agricultural implement, Power actuated. C. W. Robinson. 1,815,331; July 21.
Air compressing machine. W. J. Brightwell. 1,815,828; July 21.
Aircraft. F. A. Bowling. 1,815,758; July 21.
Air foil lift control. J. R. and G. H. Albers. 1,815,489; July 21.
Airplane construction. J. E. Sperry. 1,815,124; July 21.
Airplanes, Auxiliary extensible wing for. E. A. Turner. 1,815,814; July 21.
Air system. G. R. Lawrence. 1,815,306; July 21.
Alarm: *See*—
Fishing line alarm.
Alarm for automobiles, Automatic burglar. S. L. Mathews. 1,815,206; July 21.
Alimentary substance and its manufacture. C. Magat. 1,815,519; July 21.
Alkaloids, Producing. A. Hogstad, jr. 1,815,302; July 21.
Alloy, Lead. R. J. Shoemaker. 1,815,528; July 21.
Alloy, Nonferrous. W. B. Price. 1,815,071; July 21.
Alloy, Zinc base. P. J. Morell. 1,815,479; July 21.
Ammonia by catalysis, Making. F. W. de Jahn. 1,815,243; July 21.
Ammonia, Producing. F. Lawaczeck. 1,815,410; July 21.
Amusement device. L. B. Elliott. Des. 84,686; July 21.
Amusement ride. F. L. Mayberry. 1,815,860; July 21.
Animal trap. R. L. Bohannon. 1,815,541; July 21.
Antiknock compound. R. E. Wilson. 1,815,753; July 21.
Antirattler. G. Feller. 1,815,247; July 21.
Antirattling device for doors and the like. L. Stark. 1,815,596; July 21.
Article for protecting the wrists and arms against cold. A. Stone. 1,815,530; July 21.
Articles and products thereof, Uniting. W. H. Moss. 1,815,444; July 21.
Articles, Method of and apparatus for manufacturing. G. P. McGraw. 1,815,721; July 21.
Ash receiver. C. T. Butscher. 1,815,701; July 21.
Ash receiver. Z. Chaplick. Des. 84,670; July 21.
Asphaltic compositions for pavements, Manufacturing. F. C. Aisdorf. 1,815,089; July 21.
Attaching machine. C. T. McCue. 1,815,862; July 21.
Automobile heater. A. C. Emerson and I. C. Crandall. 1,815,401; July 21.
Automobile jack. R. H. Dart. 1,815,869; July 21.
Axle press. C. C. Bennett. 1,815,180; July 21.
Bag construction, Hand. B. J. Jostes. 1,815,106; July 21.
Bait box. J. Goldstein. 1,815,101; July 21.
Ball and socket connection. F. L. Grant. 1,815,771; July 21.
Ball mold press. B. De Mattia. 1,815,400; July 21.
Band end connection. W. B. Templeton. 1,815,684; July 21.
Bar material for ophthalmic mountings. V. Tanasso and J. J. Pomeranz. Des. 84,718; July 21.
Base and column for display stands, Combination. W. E. Kehoe. Des. 84,701–2; July 21.
Basin for soil water heat reclaimer, Catch. F. S. Boltz. 1,815,542; July 21.
Bathroom bracket. S. D. Baker. Des. 83,673; July 21.
Bathroom bracket or similar article. S. D. Baker. Des. 84,671; July 21.
Bath room equipment. J. E. Druckenmiller. 1,815,291; July 21.
Bathroom hook. S. D. Baker. Des. 84,672; July 21.
Battery filter, Automatic. W. T. Cox. 1,815,348; July 21.
Battery support. J. A. Willard. 1,815,488; July 21.
Bearing and making it, Bushing. J. Brincil. 1,815,344; July 21.
Bearing, Elevator pit. O. W. Dunham. 1,815,292; July 21.
Beat topper. W. C. Gookin. 1,815,503; July 21.
Bed davenport, Folding. A. L. Slee. 1,815,120; July 21.
Bedstead. H. H. Feldman. 1,815,616; July 21.
Bell, Alternating current. A. F. Lake. 1,815,853; July 21.
Bell and alarm, Combined door. M. Spiegel. 1,815,659; July 21.
Belt guide, Automatic. G. A. Foote. 1,815,099; July 21.
Belting, Fabric. F. W. Alexander. 1,815,879; July 21.
Benzanthrone, Derivatives of. W. Eichholz. 1,815,143; July 21.

Beryllium salts from beryllium-bearing minerals, Production of industrially valuable. H. Fischer. 1,815,056; July 21.
Bill fold. A. Weinberg. 1,815,083; July 21.
Binding, Ski. G. S. Sprague. 1,815,168; July 21.
Blade mounting for underground crop diggers. R. C. Zuckerman. 1,815,087; July 21.
Blades, Making. J. Schick. 1,815,592; July 21.
Block: *See*—
Terminal block.
Blocking device for conveyer systems, Automatic. F. J. Dietz. 1,815,549; July 21.
Board: *See*—
Panel board.
Body headrest for undertakers' use. J. H. Sweeney. 1,815,171; July 21.
Boiler. L. Davidson. 1,815,882; July 21.
Boiler and forming the same, Steam. J. J. Mays. 1,815,627; July 21.
Bolt. S. E. Songey. 1,815,422; July 21.
Bolt substitute. A. C. Earhart. 1,815,098; July 21.
Bolts and nuts Interlocking. J. Long. 1,815,517; July 21.
Book, Loose leaf. J. A. Keene. 1,815,511; July 21.
Book, Manifolding. L. Huffman. Re18,134; July 21.
Book stand. E. L. Krag. 1,815,304; July 21.
Booth, Voting. W. R., W. H., and D. Q. Douglas. 1,815,142; July 21.
Bottle. R. A. Blunt. Des. 84,676–7; July 21.
Bottle. J. H. Davis. Des. 84,682–3; July 21.
Bottle lock, Milk. A. Marelli. 1,815,720; July 21.
Box: *See*—
Bait box. Folding box.
Fly box. Vanity box.
Box and packing therefor, Stuffing. J. R. Cole. 1,815,036; July 21.
Box for ships' propeller shafts, Stuffing. C. W. Cedervall. 1,815,096; July 21.
Bracelet. L. Cohn. Des. 84,680; July 21.
Bracelet, Link. F. C. Stetter. Des. 84,717; July 21.
Bracket for cream separators, Motor. J. H. Pinson. 1,815,362; July 21.
Bracket for door and drawer handles, Supporting. J. C. Rogers. Des. 84,712; July 21.
Brake: *See*—
Fluid operated brake.
Brake and accelerator, Combination. A. E. Rector. 1,815,270; July 21.
Brake mechanism. P. B. Camp. 1,815,235; July 21.
Brake on locomotives, Equipment of air. W. M. Jenkins. 1,815,671; July 21.
Brassière. R. E. Bennett. 1,815,664; July 21.
Brick and tile machine. A. P. Steele. 1,815,809–10; July 21.
Brick mold rapping mechanism. C. Potts and W. S. Minter. 1,815,583; July 21.
Broaching machine. L. H. Blood. 1,815,647; July 21.
Brush, Shaving. R. Skvorecz. 1,815,119; July 21.
Building. H. F. Duncan and G. E. Stone. Des. 84,684; July 21.
Building construction. T. A. Lucy. 1,815,065; July 21.
Bulb assembly for temperature responsive device. L. C. Irwin. 1,815,567; July 21.
Burglar-proof lock. H. Kells and C. F. Meilink. 1,815,314; July 21.
Burner: *See*—
Gas burner. Oil burner.
Burner. C. R. Baker. 1,815,039; July 21.
Bushing structure, Outlet. G. A. Burr and J. H. Frakes. 1,815,016; July 21.
Cabin for air and water craft. S. E. Hitt. 1,815,103; July 21.
Cables, Impregnating. W. A. Del Mar. 1,815,706; July 21.
Cake turner, Griddle. J. H. Klipstein. 1,815,850; July 21.
Calculating machines, Automatic accumulator selector for. E. J. Ens. 1,815,352; July 21.
Can filling machine. C. Floyd. 1,815,766; July 21.
Can opener. J. D. Bolton. 1,815,094; July 21.
Can testing machine. B. A. Deisch. 1,815,837; July 21.
Can testing machine, Automatic. J. H. O'Neil and G. Flock. 1,815,522; July 21.
Can testing machine, Automatic. J. H. O'Neil. 1,815,523; July 21.
Cap for a lamp standard. C. F. Haas. Des. 84,697; July 21.
Car frame, Railway. H. I. Wrigley. 1,815,175; July 21.
Car, Mine railroad. J. Steinberg. 1,815,082; July 21.
Carbon, Activating. J. T. Power. 1,815,525; July 21.
Carbon black, Producing. E. Kroch. 1,815,851; July 21.

Carbon, Manufacture of finely divided active. G. Kroner. 1,815,781; July 21.
Carburetor. G. A. Eynon. 1,815,650; July 21.
Carburetor. H. Hutchison. 1,815,406; July 21.
Carburetor. W. Scott. 1,815,485; July 21.
Carburetor choke control. O. N. Olson and L. F. Johnk. 1,815,631; July 21.
Carburetor, Down draft. R. M. Anderson. 1,815,645; July 21.
Carburetor, Hydrocarbon motor. C. Davidson. 1,815,097; July 21.
Carpet. C. B. Faraday. Des. 84,687; July 21.
Carrier system, Pneumatic. J. M. Scanlan. 1,815,590; July 21.
Carton, Display. J. L. Visconnt. 1,815,224; July 21.
Carton sealing machine. W. D. Kimball and A. E. Rideout. 1,815,571; July 21.
Case: *See*—
Desk and wall clock case. Shipping case.
Razor case.
Case washing machine. G. Christensen. 1,815,239; July 21.
Cash register. W. H. Robertson. 1,815,329; July 21.
Cash register. B. M. Shipley. 1,815,335; July 21.
Cash register. B. M. Shipley. 1,815,458; July 21.
Casing for electric air heaters. G. D. Hoffman. Des. 84,699; July 21.
Casing, Pencil. J. Schneider. 1,815,451; July 21.
Casket. G. B. Markle, jr. Des. 84,707; July 21.
Caster. W. F. Herold. 1,815,062; July 21.
Catch for motor vehicle hoods. W. R. Wiley. 1,815,690; July 21.
Catcher for swab plungers. N. H. Ricker. 1,815,364; July 21.
Causticizing. J. S. Bates, H. S. Chalmers, and P. C. Austin. 1,815,646; July 21.
Cellulose, Plastics and soluble derivatives of. H. W. Matheson. 1,815,655; July 21.
Cement applying machine. W. V. Neal. 1,815,480; July 21.
Centrifugal apparatus. E. Knüttel. 1,815,409; July 21.
Chain, Tire. C. and E. C. Strack. 1,815,278; July 21.
Chair: *See*—
Folding chair.
Chair. E. T. Deal. 1,815,836; July 21.
Chair. M. Fox. 1,815,617; July 21.
Chandelier. D. Schaefer. 1,815,074; July 21.
Chassis for motor vehicles, Six wheel. F. E. Davis. 1,815,431; July 21.
Check, Meal. E. Z. Lewis. 1,815,156; July 21.
Check protector. V. H. Severy. 1,815,076; July 21.
Chime mechanism. E. C. Ives. 1,815,202; July 21.
Chimney breast wall bed. G. D. Manville. 1,815,358; July 21.
Chopper: *See*—
Meat chopper.
Chromium plating. E. Sohn and R. J. Paddock. 1,815,081; July 21.
Chuck. A. W. Bjorkman. 1,815,609; July 21.
Chuck, Hydraulic. L. E. Godfriaux. 1,815,562; July 21.
Cigarette and ignition band therefor, Self lighting. J. Parsons. 1,815,162; July 21.
Cigarette case and dispenser, Pocket. J. J. Petro. 1,815,069; July 21.
Cinematographic device. H. Moraz. 1,815,208; July 21.
Circuit breaker. C. A. Uherek. 1,815,340; July 21.
Circuit, Printing telegraph control. J. W. Long. 1,815,786; July 21.
Circuits for alternating current electric railways, Track. G. W. Baughman. 1,815,031; July 21.
Clamp: *See*—
Hose clamp. Rod or pipe clamp.
Clamp and block, Strap. R. W. Lord. 1,815,414; July 21.
Clamping device. J. M. Willard. 1,815,386; July 21.
Clay texturing machine. E. G. and C. S. Finzer. 1,815,469; July 21.
Cleaner: *See*—
Section cleaner.
Cleaner. H. B. White. 1,815,225; July 21.
Cleaner agitator, Suction. C. L. Shank. 1,815,077; July 21.
Cleaner agitator, Suction. H. B. White. 1,815,084; July 21.
Cleaner for planters, Runner. E. H. Colson. 1,815,497; July 21.
Cleaning device. G. L. Cherry. 1,815,238; July 21.
Cleaning device. H. W. Gamel and C. D. Holmes. 1,815,197; July 21.
Clip for ammunition, Reversible. J. D. Pedersen. 1,815,524; July 21.
Clip for holding paper together. W. H. Heard. 1,815,774; July 21.
Closure operator. W. S. Smith. 1,815,123; July 21.
Cloth shearing machine. C. G. Richardson. 1,815,585; July 21.
Clothes wringer. H. J. Criner. 1,815,189; July 21.
Clothes wringer frame. C. B. Williams. Des. 84,722; July 21.
Clutch plate, Flexible. J. L. Burns. 1,815,760; July 21.
Coal, Method and apparatus for mining. N. D. Levin. 1,815,856; July 21.
Coat, Lady's. M. Levitt. Des. 84,704–5; July 21.
Cock for boiler piping, Regulating and test. W. Keim. 1,815,151; July 21.
Coil and manufacturing coils. A. J. Dowd. 1,815,245; July 21.
Combustible charge for use in internal combustion engines, Producing a. D. Balachowsky and P. Caire. 1,815,178; July 21.
Comminuted matter from the liquid in which it is immersed, Separating. C. H. Nordell. 1,815,159; July 21.
Composition adapted as a binder for hood caps and for other purposes, Sulphured. C. Ellis. 1,815,615; July 21.
Composition of matter. G. J. Comstock. 1,815,613; July 21.
Composition sheet or slab, Making a. A. H. Birdsall. 1,815,608; July 21.
Compound for cleaning and polishing surfaces. L. L. Tuorto. 1,815,599; July 21.
Concrete, Constructing with. C. Bradley. 1,815,492; July 21.
Concrete, Mixing. W. A. Jaicks. 1,815,357; July 21.
Condensation product and method of preparing. H. A. Bruson. 1,815,886; July 21.
Conduit, Closing in the ends of a. C. R. Sadler. 1,815,275; July 21.
Connecter switch, Repeating. R. and T. A. Tilden. 1,815,223; July 21.
Container. W. R. Respess. 1,815,800; July 21.
Container for storing gramophone records. H. J. Carlisle. 1,815,830; July 21.
Containers, Apparatus for making paper. E. C. Angell. 1,815,136; July 21.
Containers, Apparatus for sealing. E. C. Angell. 1,815,284; July 21.
Containers, Draw off arrangement for liquid. H. Francis and F. Oliver. 1,815,501; July 21.
Containers, Method of and material for sealing. B. J. Babbitt. 1,815,695; July 21.
Control device. R. C. Hitchcock. 1,815,566; July 21.
Control equipment, Automatic. P. Mathews, jr. 1,815,791; July 21.
Control equipment, Automatic. H. T. Seeley. 1,815,803; July 21.
Control for a plurality of variable pressure valves. S. S. McIntyre. 1,815,628; July 21.
Control, Gravity feed. T. B. Cowles and C. M. Park. 1,815,347; July 21.
Control mechanism for brake booster cylinders. G. E. A. Hallett. 1,815,619; July 21.
Control mechanism for distributing buckets. O. Sheck and E. Tranaas. 1,815,682; July 21.
Control mechanism for machines. D. E. and E. F. Lewellen. 1,815,155; July 21.
Control system. J. W. Harsch and W. R. Schofield, jr. 1,815,061; July 21.
Controlled mechanisms for traveling webs of material, Automatically. D. R. Francis. 1,815,100; July 21.
Controlling system. G. P. S. Cross. 1,815,289; July 21.
Conveyer, Coal. W. B. Williams. 1,815,185; July 21.
Conveying bulk goods, Apparatus for. P. Goebels. 1,815,403; July 21.
Cooker, Crystallizer. F. Lafeuille. 1,815,852; July 21.
Cooking vessel. B. B. Johnson. 1,815,569; July 21.
Cooling device. E. Patrick. 1,815,864; July 21.
Cooling system, Internal combustion engine. W. H. Clegg. 1,815,240; July 21.
Copper sulphate from the waste liquors in the production of cuprammonium silk, Obtaining. A. Hartmann. 1,815,201; July 21.
Cord, Paper finishing. W. E. Sackner. 1,815,163; July 21.
Core drill with auxiliary reamer. J. A. Zublin and F. A. Pilgrim. 1,815,391; July 21.
Coring machine. W. A. Chapman, E. J. Machemer, and F. J. Paul. 1,815,730; July 21.
Cot, Folding double. C. C. Chittim. 1,815,495; July 21.
Counterbalance for stove door. C. E. Klein. 1,815,848; July 21.
Coupling: *See*—
Flexible coupling. Hose coupling.
Coupling means for heaters. C. H. Morrow. 1,815,722; July 21.
Couplings, Apparatus for making pipe. J. Lamond. 1,815,107; July 21.
Cover for receptacles. A. J. Weatherhead, jr. 1,815,603; July 21.
Cover plate for ranges, Detachable manifold. A. E. Fellner. 1,815,556; July 21.
Covering. S. Greenebaum. 1,815,404; July 21.
Crystallization process. S. B. Heath. 1,815,735; July 21.
Cutter: *See*—
Tobacco cutter.
Cutters, Making milling. C. G. Olson. 1,815,824; July 21.
Cycle positioning mechanism, Full. G. C. Chase. Re18,130; July 21.
Cylindrical scanning. W. Howey. 1,815,105; July 21.
Damper, Torsional vibration. A. F. Stamm and F. K. Knohl. 1,815,807; July 21.
Damper, Vibration. A. F. Stamm. 1,815,808; July 21.
Decorated article and producing the same. L. C. Byck and G. L. Peakes. 1,815,234; July 21.
Deflector. J. R. Cole. 1,815,035; July 21.
Denominator machine. C. Leano. 1,815,515; July 21.
Dental wax eliminator. G. W. Harris. 1,815,060; July 21.
Desk and wall clock case. S. R. Prevost. 1,815,796; July 21.
Diaper. E. Goldstein. 1,815,059; July 21.
Die casting machine. A. S. Kidd. 1,815,776; July 21.
Die sinking and engraving machine. J. E. Johnson. 1,815,204; July 21.

Digester for cracking hydrocarbon oils. J. C. Black. 1,815,428; July 21.
Dipper tooth. O. W. Anderson. 1,815,819–20; July 21.
Dirigible flying machine. J. B. Strauss. 1,815,338; July 21.
Display rack. L. S. Lifschultz. 1,815,858; July 21.
Displaying rugs and the like, Apparatus for. J. N. Harris. 1,815,311; July 21.
Distributing system for objects. J. E. Albertoli. 1,815,029; July 21.
Distributor and lock therefor. O. S. Hershey and E. J. Van Sickel. 1,815,313; July 21.
Door bolt mechanism. C. J. Prinzler. 1,815,584; July 21.
Door for cabinets, Air tight. H. F. Beers. 1,815,607; July 21.
Door, Garage. J. F. Warner. 1,815,749; July 21.
Door lock, Casing. C. M. Otis. 1,815,724; July 21.
Drier control. C. D. De Mers. 1,815,648; July 21.
Drill structure, Duplex grain. C. W. Robinson. 1,815,330; July 21.
Drinking fountain. R. Leffel. 1,815,476; July 21.
Drive for motor vehicles. A. F. Masury and F. E. Queeney. 1,815,441; July 21.
Drive for motor vehicles, Chain. L. C. Josephs, jr., and E. R. Gurney. 1,815,438; July 21.
Drive power unit, Front. L. C. Josephs, jr. 1,815,437; July 21.
Drive, Supercharger. R. V. Hutchinson. 1,815,621; July 21.
Driving mechanism for combined washers and driers. H. J. Criner. 1,815,190; July 21.
Drying rack. M. W. Kelley. 1,815,673; July 21.
Dyestuffs and making same, Fast sulphur. R. Herz and W. Hechtenberg. 1,815,144; July 21.
Dyestuffs and metal compounds thereof, New azo. H. Krzikalla and H. Kaemmerer. 1,815,782; July 21.
Dyestuffs and preparing them, New azo. O. Sohst. 1,815,133; July 21.
Dyestuffs, Preparation of mordant disazo. E. Bodmer. 1,815,827; July 21.
Earth, Chemically solidifying. M. Müller. 1,815,876; July 21.
Easel and medallion, Combined. B. Harris. 1,815,436; July 21.
Electric cell. G. W. Heise. 1,815,508; July 21.
Electric control, System of. H. W. C. Liddiard. 1,815,857; July 21.
Electric control, System of. H. A. Winne. 1,815,754; July 21.
Electric converter. G. B. Crouse. 1,815,498; July 21.
Electric discharge device. E. E. Charlton. 1,815,762; July 21.
Electric machine winding, Dynamo. D. D. Chase. 1,815,832; July 21.
Electric power system. T. F. Barton. 1,815,824; July 21.
Electric switch. J. G. Peterson. 1,815,633–5; July 21.
Electrical control mechanism. H. Klotz. 1,815,152; July 21.
Electrical distribution, System of. T. F. Barton. 1,815,823; July 21.
Electrical induction coil and manufacture thereof. G. B. Horn. 1,815,620; July 21.
Electrical testing apparatus. G. F. Shotter. 1,815,217; July 21.
Electrical translating apparatus. F. W. Lee. 1,815,516; July 21.
Electrode for apparatus for electrolysis of water. J. N. Smith. 1,815,080; July 21.
Electrolyte. A. Georgiev. 1,815,768; July 21.
Electrolytic cell. J. N. Smith. 1,815,078–9; July 21.
Electron tube. R. G. Berthold and R. Strigel. 1,815,229; July 21.
Electroscope. R. Barton. 1,815,606; July 21.
Engine: *See*—
Internal-combustion engine.
Envelope. H. F. Niles. 1,815,323; July 21.
Envelope, Two compartment. C. E. Cather. 1,815,396; July 21.
Esters of secondary alcohols. R. H. Van Schaack, jr. 1,815,878; July 21.
Excavator tooth, Replaceable. G. E. Edmunds. 1,815,649, July 21.
Exerciser. R. H. Noe. 1,815,863; July 21.
Extractor: *See*—
Stud extractor.
Eyeleting and product produced thereby, Blind. H. A. Evans. 1,815,434; July 21.
Fabric or a similar article, Embroidered textile. E. W. Freudenberg. Des. 84,689; July 21.
Fan construction. W. Shurtleff. 1,815,529; July 21.
Fastener. W. K. Royce. 1,815,588; July 21.
Fasteners, Attachment of. C. T. McCue. 1,815,792; July 21.
Fastening device. J. P. Black and E. A. Green. 1,815,540; July 21.
Fastening means for doors. O. M. Otte. 1,815,580; July 21.
Feeder, Hog. J. P. Kopetka. 1,815,512; July 21.
Feeder, Stock bar. R. J. Miller. 1,815,574; July 21.
Feeding device. E. W. Ruth. 1,815,679; July 21.
Feeding mechanism. E. W. Larsen. 1,815,262–3; July 21.
Fender. H. W. Lockwood. 1,815,413; July 21.
Fibers, Device for treating. M. Buroff. 1,815,493; July 21.
Fibrous material, Process and apparatus for digesting. P. W. Neil. 1,815,576; July 21.
Filament and making it, Coiled. F. Koref and K. Moers. 1,815,779; July 21.
Filaments, Heating. H. J. Round. 1,815,131; July 21.
File, Paper. R. C. Finch. 1,815,765; July 21.
Film viewing machine. I. Serrurier. 1,815,486; July 21.
Films, Manufacture of cellulose. H. Krull. 1,815,513; July 21.
Films, Producing motion picture. F. L. Goldman. 1,815,251; July 21.
Finger ring. J. Granat. Des. 84,692–3; July 21.
Fire extinguisher. C. A. Camp. 1,815,494; July 21.
Fish, Apparatus for setting seed shell. S. Miyagi. 1,815,521; July 21.
Fishing line alarm. W. E. Fisher. 1,815,402; July 21.
Fishing reel. S. G. Russell. 1,815,382; July 21.
Fixture, Assembling. S. E. Boynton. 1,815,230; July 21.
Flexible coupling. J. T. Wilkin and C. B. Coldwell. 1,815,639; July 21.
Floor covering or mat and making the same. J. R. Gammeter. 1,815,558; July 21.
Floor riser. H. F. Richardson. 1,815,741; July 21.
Flower pots, Watering. J. F. Medveczky. 1,815,676; July 21.
Fluid control system. E. J. Te Pas. Re18,135; July 21.
Fluid operated brake. M. Loughead. 1,815,157; July 21.
Fluids, Apparatus for electrical treatment of. J. J. Jakosky. 1,815,149; July 21.
Fluids, Fractionation of mixed. J. V. E. Dickson. 1,815,127; July 21.
Flushing apparatus, Safety. M. J. Tracy. 1,815,384; July 21.
Fly box. F. L. Jacqmein. 1,815,568; July 21.
Folder. I. Lazar. 1,815,654; July 21.
Folding box. M. E. Lowman. 1,815,788; July 21.
Folding chair. C. N. Allerding. 1,815,643; July 21.
Follow rest. C. Bouillon. 1,815,490; July 21.
Food product and apparatus. M. C. Reynolds. 1,815,727; July 21.
Food products, Preparing. J. J. Barry and W. T. Murray. 1,815,227; July 21.
Footwear. H. Schneider. 1,815,164; July 21.
Forcep, Suture. C. J. Pilling and B. F. Wiegand. 1,815,725; July 21.
Fork for motor vehicles. G. A. Grab. 1,815,770; July 21.
Fountain: *See*—
Drinking fountain.
Frame: *See*—
Jar frame.
Picture frame.
Freezing of water pipes, Preventing. R. Hickman. 1,815,474; July 21.
Fuel control, Apparatus and method for. L. de Florez. 1,815,051; July 21.
Fuel control device for gasoline and oil engines. L. Kelly. 1,815,259; July 21.
Fuel gas distributing system for coke ovens. J. Becker. 1,815,285; July 21.
Furnace: *See*—
Glass furnace.
Furnace charging apparatus. H. D. Cook and W. L. Scott. 1,815,666; July 21.
Furnace register. H. S. Covell. 1,815,346; July 21.
Furniture. M. Thum. 1,815,877; July 21.
Furniture top. R. H. Soper. 1,815,167; July 21.
Garage. J. L. Canaday. 1,815,429; July 21.
Garment or ironing press. J. C. Ledbetter. 1,815,783; July 21.
Garter. G. Abraham. 1,815,456; July 21.
Garter. T. Cahn. 1,815,702; July 21.
Garter construction and the like. J. H. Mackall. 1,815,267; July 21.
Gas burner. J. P. Auter. 1,815,176; July 21.
Gas combination apparatus. J. F. Meader. 1,815,322; July 21.
Gas mixing apparatus. D. Balachowsky and P. Caire. 1,815,177; July 21.
Gases in the manufacture of liquid fuels, Process and apparatus for the purification of continuously flowing. A. Joseph. 1,815,846; July 21.
Gases or vapors of organic products, Separating organic. A. Engelhardt. 1,815,554; July 21.
Gasket. C. B. Russell. 1,815,602; July 21.
Gasket. J. B. Victor. 1,815,601; July 21.
Gate: *See*—
Vehicle operated gate.
Gauge: *See*—
Saw gauge.
Gear adjusting device, Steering. A. H. Schmal. 1,815,450; July 21.
Gear for airplanes, Synchronous running. J. Blondin. 1,815,182; July 21.
Gear for motor road vehicles and the like, Steering. D. Brown. 1,815,231; July 21.
Gear, Variable speed. L. Kambo. 1,815,475; July 21.
Gear, Worm. J. P. Damonte. 1,815,835; July 21.
Gearing, Change speed. S. J. Boughton. 1,815,032; July 21.
Gearing, Worm. N. Trbojevich. 1,815,685; July 21.

Gears, Method and apparatus for grinding. B. E. Shlesinger. 1,815,336; July 21.
Generator: *See*—
Steam generator.
Sound generator.
Heat generator.
Turbo generator.
Generator or the like, Steam. W. D. La Mont. 1,815,439; July 21.
Glare shield. L. B. Lewis. 1,815,411; July 21.
Glass: *See*—
Laminated glass.
Glass. W. C. Taylor. 1,815,812; July 21.
Glass apparatus for drawing sheet. R. L. Clause. 1,815,288; July 21.
Glass bodies, Producing openings, passages and the like in molten or pressed. B. Erber. 1,815,146; July 21.
Glass furnace. A. Kadow. 1,815,258; July 21.
Glass grinding. C. P. Byrnes. 1,815,547; July 21.
Glass, Method and apparatus for producing sheet. J. A. Reece. 1,815,726; July 21.
Glass, Method of and apparatus for drawing sheet. W. E. Harding and C. C. Weekley. 1,815,473; July 21.
Glassware, Apparatus for handling. D. B. Westin. Re18,183; July 21.
Glove, Handball. E. C. Lindfelt. 1,815,412; July 21.
Gold saving apparatus. G. L. Covington. 1,815,548; July 21.
Golf tee and manufacturing the same. W. H. McLeod. 1,815,520; July 21.
Grader, Power adjusted road. O. E. Grigsby. 1,815,252; July 21.
Gramophone. G. B. King. 1,815,777; July 21.
Grass trimmer. L. D. Albertson. 1,815,817; July 21.
Grinder. R. Prater. 1,815,326; July 21.
Grinding machine, Tool. K. Metzler. 1,815,112; July 21.
Grinding machines, Work size mechanism for. R. A. Cole. 1,815,049; July 21.
Grinding wheel. T. Larsson and H. W. H. Beth. 1,815,108; July 21.
Guard for dry cleaning machines or the like, Space. E. B. Gross. 1,815,732; July 21.
Guard, Pick-up. A. D. Braasch, L. McDow, and J. Twells. 1,815,491; July 21.
Guide, Sucker rod. H. J. Denney and J. Gaunt. 1,815,461; July 21.
Hair winder. C. Mack. 1,815,266; July 21.
Handle for fruit baskets, Wire. F. B. Townsend. 1,815,125; July 21.
Handle switch. J. E. Barrass. 1,815,041; July 21.
Hanger: *See*—
Swing hanger.
Tube hanger.
Harvester, Combination tractor. A. Ronning and A. G. Ronning. 1,815,274; July 21.
Harvester, Combination tractor. A. and A. G. Ronning. 1,815,587; July 21.
Harvester, Tractor. A. Ronning, E. A. Hedenstrom and A. G. Ronning. 1,815,272; July 21.
Hat, Knitted. E. N. Joha. Des. 84,700; July 21.
Headlamp construction. E. J. Whalen. 1,815,751; July 14.
Heat exchanger. H. M. Graham. 1,815,618; July 21.
Heat generator. P. M. Klein. 1,815,317; July 21.
Heat indicator. F. D. Smith, jr. 1,815,636; July 21.
Heat indicator. J. Zubaty. 1,815,642; July 21.
Heat transfer apparatus. C. J. Jones. 1,815,570; July 21.
Heat treating metal parts. R. V. Wilson. 1,815,691; July 21.
Heater: *See*—
Automobile heater.
Oven heater.
Orchard heater.
Water heater.
Heating insulation. W. Pfeiffer. 1,815,115; July 21.
Hinge for foldable awning supports, Spring. L. B., N., W., and J. M. Goldberg. 1,815,199; July 21.
Hog ringing device. N. Brown. 1,815,545; July 21.
Holder, Automatic plate. L. H. Fusmer. 1,815,767; July 21.
Holder, Dental floss. J. K. Jordan. 1,815,408; July 21.
Holder, Flag pole. J. A. Gerow and A. C. Cannon. 1,815,353; July 21.
Holder for flower pots and cut flowers. J. Favata, jr. 1,815,195; July 21.
Holder, Key. J. P. Nikonow. 1,815,209; July 21.
Holder, Loose sheet. J. Eifel. 1,815,351; July 21.
Holder, Milk bottle. J. Larson. 1,815,514; July 21.
Holder, Necktie. A. W. Lindquist. 1,815,477; July 21.
Holder, Pencil. D. L. Troyer. 1,815,746; July 21.
Hook: *See*—
Register hook.
Hook for oil wells, Casing. B. Dedman. 1,815,290; July 21.
Hose clamp. H. Embree. 1,815,145; July 21.
Hose coupling. L. J. Jones. 1,815,407; July 21.
Hosiery finishing apparatus. T. W. Prosser and J. H. Wahlbeck. 1,815,865; July 21.
Hot metal mixer. L. E. Allen. 1,815,605; July 21.
Hydrogen, Device for continuously producing pure. J. Bellay. 1,815,090; July 21.
Hypodermic bullet. B. W. Harris. 1,815,300; July 21.
Humidifying system. A. E. Wigelsworth. 1,815,385; July 21.
Ignition apparatus. W. A. Chryst. 1,815,496; July 21.
Image producing system. H. E. Ives. 1,815,203; July 21.
Impedance equalizer for any smooth line. R. S. Hoyt. 1,815,255; July 21.
Indicating device. C. B. Mills. 1,815,575; July 21.
Indicator: *See*—
Heat indicator.
Street indicator.
Indicator. J. B. Mills. 1,815,722; July 21.
Indicator for carpet looms. C. E. Barrett. 1,815,822; July 21.
Inking pad. W. L. Edgarton. 1,815,871; July 21.
Insect control device. A. E. Simpson. 1,815,595; July 21.
Insect poison feeder. G. W. Gring. 1,815,652; July 21.
Insects, Trapping. H. B. Smith. 1,815,122; July 21.
Insecticide. H. Wesche, K. Brodersen, and W. Ext. 1,815,816; July 21.
Instrument. R. H. Owens. 1,815,161; July 21.
Instrument for recording deviations and vertical corrections in bore holes. B. Jones. 1,815,672; July 21.
Insulating member for high tension construction. C. L. Stroup. 1,815,598; July 21.
Insulator. J. D. Beebe. 1,815,044; July 21.
Internal combustion engine. W. P. Deppé. 1,815,432; July 21.
Internal combustion engine. F. W. McConnel. 1,815,572; July 21.
Internal combustion engine. W. Noble. 1,815,445; July 21.
Iron plumbing fixture, Enameled. C. R. Crane, 2d. 1,815,705; July 21.
Jack: *See*—
Automobile jack.
Wood heel jack.
Screw jack.
Jar. E. W. Fuerst. Des. 84,690; July 21.
Joint: *See*—
Tool joint.
Joint for concrete slabs. B. F. Friberg. 1,815,373; July 21.
Keyboard, Practice. R. A. Ostburg, jr. 1,815,579; July 21.
Kickback for bowling alleys. G. O. Wardrop. 1,815,686; July 21.
Kiln, Dry. J. A. Rankin. 1,815,798; July 21.
Knob for condenser, Control. T. J. Scofield. 1,815,165; July 21.
Knotting together strands, Mechanism for. F. Klein. 1,815,849; July 21.
Knots, Tying weaver's. T. Brownlee. 1,815,546; July 21.
Label attaching device. C. L. Larson. 1,815,154; July 21.
Labels, Affixing. J. E. Snyder. 1,815,365; July 21.
Lace. H. M. Fils. Des. 84,710; July 21.
Ladder. E. W. Carlson. 1,815,236; July 21.
Ladder. C. G. Kingsbury. 1,815,316; July 21.
Ladder web for Venetian blinds. G. F. and R. French. 1,815,196; July 21.
Laminated glass. F. Fraser. 1,815,884; July 21.
Lamp. P. Cricchio. Des. 84,681; July 21.
Lamp. W. H. Shiesinger. Des. 84,718; July 21.
Lamp bulb, Incandescent electric. A. Bonney, jr. Des. 84,723; July 21.
Lamp, Marine. F. Perkins. 1,815,582; July 21.
Lamp stand. C. A. Ezli. Des. 84,685; July 21.
Lapping machine. S. Holt. 1,815,104; July 21.
Latch, Window. H. Lorenzen. 1,815,787; July 21.
Leather working machine. J. H. Connor. 1,815,140; July 21.
License plate construction, Illuminated. G. J. Lapierre. 1,815,854; July 21.
Lift, Hydraulic oil well. E. Curnutt. 1,815,399; July 21.
Light projector. W. M. Cassetty, jr., F. L. Ross, and W. C. Alford. 1,815,831; July 21.
Light projector. W. D. Ryan. 1,815,801; July 21.
Lighting device, Color. E. M. Jensen. 1,815,874; July 21.
Lighting fixture or article of similar nature. J. J. Blumenthal. Des. 84,675; July 21.
Link, Cuff. J. D. Keillor. 1,815,624; July 21.
Liquid, Apparatus for delivering measured quantities of. J. Muller. 1,815,875; July 21.
Liquid distributor, Oscillatory. R. D. Simpson. 1,815,658; July 21.
Liquid vending apparatus, Coin controlled. E. E. Rice. 1,815,740; July 21.
Liquids, Apparatus for handling volatile. R. J. Anschicks. 1,815,842; July 21.
Liquors, Recovering and utilizing the valuable compounds in spent cooking. G. A. Richter. 1,815,328; July 21.
Literation upon bottles, Saddling. F. S. Newbery. 1,815,268; July 21.
Load lifting device, Hand operated. J. Bates. 1,815,825; July 21.
Loader. F. H. Kraus. 1,815,780; July 21.
Lock: *See*—
Bottle lock.
Door lock.
Burglar-proof lock.
Lock for plows, Caster wheel. A. A. Scarlett. 1,815,832; July 21.
Locking device. R. Blenaimé. 1,815,181; July 21.
Locking device for gear shift levers. H. A. Miller. 1,815,417; July 21.
Locking device, Nut. E. Brandt. 1,815,095; July 21.
Locking mechanism for reverse gears of locomotives. G. W. Harward. 1,815,301; July 21.
Locomotive arch construction. A. H. Willett. 1,815,387; July 21.
Loom cam shaft bearing lifter and supporter. H. P. Lovett. 1,815,789; July 21.
Loom for weaving, Shuttleless. O. Shimwell. 1,815,118; July 21.

Loom stopping mechanism, Pile wire. R. Spendlove. 1,815,277; July 21.
Looms, Fabric take-up for. E. McKnight. 1,815,793; July 21.
Looms, Harness retractor for. M. C. Kirkpatrick. 1,815,847; July 21.
Lubricating spindle and twisting rings. G. H. Gilligan. 1,815,502; July 21.
Lubrication system for internal combustion engines. M. J. Schenk. 1,815,868; July 21.
Lubricator. H. H. Mercer. 1,815,111; July 21.
Machine for bending sheet metal. R. M. Hinrich. 1,815,102; July 21.
Machine for continuously making compressed slabs or floor tiles with colored designs, Rotary. H. Druart. 1,815,668; July 21.
Machine for inserting fastenings. G. Goddu. 1,815,295; July 21.
Machine for measuring and feeding granular material. T. Martin. 1,815,321; July 21.
Machine for opening, scutching, and similarly treating cotton and other fibrous materials. C. Schofield. 1,815,593; July 21.
Machine for operating on welting. J. Gouldbourn and R. B. Woodcock. 1,815,471; July 21.
Machine for pressing books. F. A. Frazier. 1,815,372; July 21.
Machine for shaping uppers over lasts. G. Goddu. 1,815,297; July 21.
Machine serving to determine or verify the position of the filament of an electric lamp. A. J. B. Marsat. 1,815,109; July 21.
Magnetic device. H. F. Porter and D. M. Scott. 1,815,380; July 21.
Manifolding register. A. A. Johnson. 1,815,063; July 21.
Manure disposal base, Sanitary poultry and pet stock. E. D. Craig. 1,815,467; July 21.
Margarin and process, Improved. M. C. Reynolds and A. K. Epstein. 1,815,739; July 21.
Marine signal. R. J. Anderson. 1,815,226; July 21.
Marker, Meat. J. O. Ker. 1,815,716; July 21.
Marking plate and reflecting light standard, Combination. G. A. Rebentisch. Des. 84,711; July 21.
Massage instrument. A. Gehm. 1,815,560; July 21.
Material, Apparatus for supplying. R. R. Nydegger. 1,815,269; July 21.
Materials, Apparatus for detecting a difference in the thickness of. E. A. Guilemin. 1,815,710; July 21.
Materials, Conditioning. G. D. Harris. 1,815,669; July 21.
Mausoleum, Individual. W. I. Davis. 1,815,883; July 21.
Measure, Gasoline. P. A. Holm. 1,815,713; July 21.
Measuring device. S. Favro. 1,815,468; July 21.
Measuring proteolytic activity. H. C. Gore and C. N. Frey. 1,815,709; July 21.
Meat chopper. J. W. Brown, jr. 1,815,829; July 21.
Mercury compound, Organic. A. Albert and J. Pfleger. 1,815,604; July 21.
Metal, Apparatus for casting. A. W. Morris and S. P. Wetherill, jr. 1,815,361; July 21.
Metal and other materials, Apparatus for cutting. J. Jamieson. 1,815,736; July 21.
Metal, Plating. W. E. Watkins. 1,815,638; July 21.
Metal Sheets, Apparatus for slitting. T. Sindelar. 1,815,487; July 21.
Metals, Bright annealing of. R. G. Guthrie and O. J. Wozasek. 1,815,505; July 21.
Metals, Casting. H. L. Coles. 1,815,186; July 21.
Metals, Casting. A. W. Morris and S. P. Wetherill, jr. 1,815,360; July 21.
Metals, Manufacturing of finely subdivided. K. Marx, H. Behncke, and H. Zobel. 1,815,790; July 21.
Metallic bodies, Apparatus for measuring variations in thickness of. H. E. Kranz. 1,815,717; July 21.
Metallic tag strip. W. J. Pannier, jr. 1,815,632; July 21.
Meter, Installation. H. Lauritano. 1,815,855; July 21.
Methanol, Manufacture of. C. Natta. 1,815,677; July 21.
Mill and process for rolling tubes, Rolling. J. Roeder and W. Wellmann. 1,815,867; July 21.
Mining machine. M. P. Holmes. 1,815,872–3; July 21.
Mixer: *See*—
Hot metal mixer.
Molding assembly. A. P. Ball. 1,815,696; July 21.
Molding, Garnish. H. G. Kellogg. 1,815,715; July 21.
Motor control mechanism. H. D. Colman. 1,815,398; July 21.
Motor driven operator. H. D. Colman. 1,815,397; July 21.
Mounting for aircraft and radial motors in busses, Shock insulated. A. F. Masury. 1,815,442; July 21.
Mounting for traffic warning devices. R. T. Hurley. 1,815,844; July 21.
Mountings to jewelry, Attaching pin tongue. M. Genser. 1,815,058; July 21.
Mug, Shaving. J. W. Peterson. 1,815,482; July 21.
Necktie. J. M. I. Marin and D. S. Rubens. 1,815,675; July 21.
Negative capacity device. M. M. Dolmage. 1,815,838; July 21.
Network, Artificial line. J. W. Milnor and W. D. Cannon. 1,815,629; July 21.
Nozzle, Spray. H. C. Weitzel. 1,815,535; July 21.
Oil burner. T. W. Hunter. 1,815,374; July 21.
Oil burner. H. C. Robinson. 1,815,116; July 21.
Oil, Method and apparatus for rapidly draining crank case. E. J. Sweetland. 1,815,221; July 21.
Oils, Distillation of mineral. J. V. E. Dickson. 1,815,128; July 21.
Oils, Distillation of mineral. W. A. Peters, jr. 1,815,129; July 21.
Oils, Treating hydrocarbon. R. J. Dearborn and W. R. Holmes. 1,815,050; July 21.
Oils with metallic halides, Treating hydrocarbon. M. L. Chappell. 1,815,460; July 21.
Operating mechanism for a record receiving member. J. W. Legg. 1,815,064; July 21.
Ophthalmoscope. A. B. Reese. 1,815,806; July 21.
Orchard heater. B. V. Witt. 1,815,388; July 21.
Ornament for drapery rods or the like, Center. W. E. Smith. Des. 84,715; July 21.
Ornament for drapery rods or the like, End. W. E. Smith. Des. 84,716; July 21.
Oscillating signal. C. F. Capell. 1,815,139; July 21.
Oven construction. R. S. Heise. 1,815,312; July 21.
Oven electric heater, Gas. G. W. Allen and A. Waters. 1,815,088; July 21.
Oven, Traveling tray. H. Feige. 1,815,555; July 21.
Package. E. F. Kemp. 1,815,261; July 21.
Packaging means. F. H. Sherman. 1,815,683; July 21.
Pad: *See*—
Inking pad.
Panel board. F. B. Adam. 1,815,038; July 21.
Paper dispensing device, Toilet. P. D. Parsons. 1,815,068; July 21.
Paper, Process and apparatus for making. L. W. Case. 1,815,237; July 21.
Paper sheets, Apparatus for feeding. H. Praetzel. 1,815,419; July 21.
Parachute, Aeroplane. J. Chab. 1,815,430; July 21.
Parking and locking device, Vehicle. J. H. Moffat. 1,815,207; July 21.
Parking and storage apparatus, Automobile. I. MacDonald. 1,815,738; July 21.
Patterns on plush and like fabrics, Device for printing colored. A. Görner. 1,815,504; July 21.
Pedestal liner, Removable. R. G. Anderson. 1,815,457; July 21.
Pencil. J. P. Lynn. 1,815,309; July 21.
Percolator, Sirup. S. T. Hensel. 1,815,711; July 21.
Petroleum distillates, Sweetening. L. M. Henderson and H. C. Cowles, jr. 1,815,563; July 21.
Petroleum oils, System for treating. C. W. Stratford. 1,815,366; July 21.
Phosphorus, Volatilization of. R. D. Pike. 1,815,379; July 21.
Photo-electric tube, Uranium. H. C. Rentschler and D. E. Henry. 1,815,073; July 21.
Piano. H. Barth. 1,815,228; July 21.
Piano bridge. L. Loar. 1,815,265; July 21.
Picture and sound reproducing machine, Synchronized motion. A. De Madaler. 1,815,693; July 21.
Picture and sound reproduction apparatus, Synchronously operated motion. A. De Madaler. 1,815,694; July 21.
Picture frame. O. T. Gastgivar. 1,815,841; July 21.
Pictures, Producing motion. F. Waller. 1,815,455; July 14.
Pipe puller. H. J. Denney. 1,815,462; July 21.
Pipes, Device for cleaning outside of. F. McManis. 1,815,573; July 21.
Piston. E. J. Gulick. 1,815,733; July 21.
Piston. A. B. Raymond. 1,815,799; July 21.
Piston ring. J. W. Blount. 1,815,138; July 21.
Piston ring. G. M. M. Grant. 1,815,354; July 21.
Piston ring device and fusible locking means therefor, Radially expansive. W. G. O'Bryan. 1,815,418; July 21.
Plaster belt. P. S. McQuirk. 1,815,110; July 21.
Plow attachment. D. F. Ainslie. 1,815,539; July 21.
Plow hitch. C. Miller. 1,815,794; July 21.
Plows to tractors, Connecting. J. Gaiser. 1,815,470; July 21.
Plug, Attachment. A. L. Becket. 1,815,043; July 21.
Plug bar for tube making machines. W. Bark and J. V. Mazuric. 1,815,427; July 21.
Plug, Tube piercing and expanding. W. Bark. 1,815,426; July 21.
Plumbing system. E. Kennedy. 1,815,205; July 21.
Pole, Trolley. W. Schaake. 1,815,591; July 21.
Pontoon diver. L. Salter. 1,815,680; July 21.
Positioning and holding work for material working apparatus, Apparatus for. W. Bonsor. 1,815,699; July 21.
Post for a towel bar or similar article. S. D. Baker. Des. 84,670; July 21.
Powder puff. B. A. Levitt. 1,815,320; July 21.
Powder puff and manufacturing the same. J. J. Cosin. 1,815,763; July 21.
Power controller. J. T. Cowley. 1,815,188; July 21.
Press: *See*—
Axle press. Garment or ironing press.
Ball mold press. Printing press.
Pressure switch. A. C. Smith. 1,815,806; July 21.
Price ticket tie on machine. R. H. Plass. 1,815,214; July 21.
Printing device. G. A. Priess. 1,815,731; July 21.
Printing machine. C. F. Webb. 1,815,534; July 21.
Printing press, Multicolor. F. E. Jamison. 1,815,622; July 21.
Propeller. T. A. Dicks. 1,815,191–2; July 21.
Propelling mechanism for traction operated machines. B. S. Ferguson. 1,815,839; July 21.
Protective apparatus. O. Mayr. 1,815,861; July 21.

Protective apparatus. R. Wideröe and O. Mayr. 1,815,752; July 21.
Protective system for electrical machinery and apparatus, Differential. I. Herlitz. 1,815,712; July 21.
Protein matter from liquids containing the same, Recovery of. R. S. Oppenheim. 1,815,160; July 21.
Puller: *See*—
Pipe puller.
Pulley, Solid pressed steel. N. Barry. 1,815,663; July 21.
Pulp stock, Disintegrating. H. Liebeck. 1,815,308; July 21.
Pump, Gas. C. G. Smith. 1,815,121; July 21.
Pump, Two sided dispensing. T. B. Bennett and L. A. Prescott. 1,815,698; July 21.
Pumping apparatus, Automatically controlled. A. Hauser. 1,815,148; July 21.
Rack: *See*—
Displaying rack. Drying rack.
Radio broadcast distribution, Sub-divided service system of. E. E. Clement. 1,815,833; July 21.
Radio cabinet and clock, Combined. R. J. Koeppe. Des. 84,703; July 21.
Radio direction finder. C. R. Englund. 1,815,246; July 21.
Radio signaling system. C. A. Boddie and R. C. Curtis. 1,815,045; July 21.
Radium emanator. J. W. O'Neill. 1,815,213; July 21.
Rail fastening device. K. Vossloh. 1,815,815; July 21.
Railway signaling. C. A. Brooks. 1,815,458; July 21.
Ratchet wrench. R. E. Siess and D. J. La Bauve. 1,815,804; July 21.
Razor case, Safety. P. C. Cartier. 1,815,459; July 21.
Razor, Safety. R. E. Thompson. 1,815,745; July 21.
Receptacle, Edible. R. S. Scruggs. 1,815,527; July 21.
Receptacle, Newspaper. H. Steen. 1,815,219; July 21.
Recorder: *See*—
Telegraph recorder.
Recording machine. E. W. Schellentrager. 1,815,681; July 21.
Rectifier. H. P. Donle. 1,815,369–70; July 21.
Rectifier. F. A. Young. 1,815,890; July 21.
Reel: *See*—
Fishing reel.
Reel and puller, Fish-tape. T. A. Dunagan. 1,815,433; July 21.
Reel for cables, Demountable metallic. G. Decombe. 1,815,499; July 21.
Refrigerating apparatus. C. F. Kettering. 1,815,315; July 21.
Refrigerating apparatus. O. M. Summers. 1,815,170; July 21.
Refrigerating system. H. J. Scullen. 1,815,383; July 21.
Refrigeration. T. Shipley. 1,815,421; July 21.
Refrigerator, Portable. M. J. Hewitt. 1,815,405; July 21.
Register: *See*—
Cash register. Manifolding register.
Furnace register.
Register book, Printer's. W. F. Brügmann. 1,815,232; July 21.
Regulating system for fluid supply. L. De Florez. 1,815,870; July 21.
Regulator: *See*—
Temperature regulator. Voltage regulator.
Relay, Electrical. S. Ruben. 1,815,483; July 21.
Release mechanism, Overland. H. D. Colman. 1,815,345; July 21.
Rim, Demountable tire. W. O. Alexander. 1,815,818; July 21.
Rim extension for tractor wheels. P. Shelby, jr. 1,815,117; July 21.
Ring: *See*—
Piston ring.
Rocker toy. L. W. Brown and M. E. Brown. 1,815,183; July 21.
Rod: *See*—
Tie rod. Welding rod.
Rod or pipe clamp. H. E. Anderson. 1,815,644; July 21.
Rod support and holder. G. T. Cooke. 1,815,704; July 21.
Roller leveler. F. A. Schmitz. 1,815,484; July 21.
Rolling mill. J. J. O'Brien. 1,815,578; July 21.
Rolls of material, Apparatus for rewinding. H. F. Gaylord. 1,815,250; July 21.
Rotary sprinkler, Slow motion. W. A. Buckner. 1,815,395; July 21.
Rotary sprinkler, Slow motion. W. A. Buckner. 1,815,880; July 21.
Rubber composition and preserving rubber. M. C. Reed. 1,815,072; July 21.
Rubber, Compounding. A. M. Kinney. 1,815,778; July 21.
Rubber deposits from rubber latex, Production of homogeneous. F. Gábor and P. Klein. 1,815,057; July 21.
Ruffling mechanism for sewing machines. A. B. Clayton. 1,815,881; July 21.
Rug rolling machine. P. J. Shampay. 1,815,333; July 21.
Rugs, Making. J. B. and G. Robertson. 1,815,586; July 21.
Safe and vault member and construction. H. L. Coles. 1,815,187; July 21.
Safe, Bank vault. W. J. H. Ruschmeyer. 1,815,281; July 21.
Safety device for automobiles. H. Gildner. 1,815,294; July 21.
Safety switch, Automatic. B. E. Getchell. 1,815,561; July 21.
Sampler, Side wall. S. H. Williston. 1,815,661; July 21.
Sash, Metallic window. A. M. Lane. 1,815,719; July 21.
Saw, Gang. J. R. Swift. 1,815,222; July 21.
Saw gauge. A. M. Remington. 1,815,215; July 21.
Sawing machine. R. E. De Walt. 1,815,037; July 21.
Saws, Square and mitre attachment for. J. H. Searles. 1,815,216; July 21.
Scale, Coin-controlled. V. F. Siesak. Des. 84,714; July 21.
Scale, Registering. O. Malcher. 1,815,310; July 21.
Screw driver screw holding device. J. C. and R. D. Shaw. 1,815,594; July 21.
Screw jack. J. W. Bate. 1,815,885; July 21.
Seagoing craft. W. R. Blair. 1,815,286; July 21.
Sealing device for soft metal tubes. S. O. Lawrence. 1,815,319; July 21.
Seam forming and staying machine. G. G. Perkins. 1,815,325; July 21.
Seats and mattresses, Construction of spring. O. Hotter. 1,815,510; July 21.
Sewing implement and pin holder, Combined. C. Babbitt. Des. 84,669; July 21.
Sewing machine. B. T. Leveque. 1,815,807; July 21.
Shade apparatus. I. Goldburg. 1,815,769; July 21.
Shade construction, Dark room. H. W. Dunn. 1,815,551; July 21.
Shafts, Finishing spline. C. L. Lee and C. H. Sterling. 1,815,626; July 21.
Sheet dividing and compiling mechanism. J. E. Sullivan. 1,815,744; July 21.
Sheet measuring machines, Attachment for. A. F. Foster. 1,815,248; July 21.
Shield attachment for claw bars. J. W. Petersen and E. Bevard. 1,815,114; July 21.
Ship, Cargo. E. H. Watts. 1,815,687; July 21.
Ship, Hydro-speed. M. Kloen. 1,815,803; July 21.
Shipping case, Egg. I. Hill and R. H. Clayton. 1,815,565; July 21.
Shock absorber. A. B. Casper. 1,815,184; July 21.
Shoe upper and method of manufacture. W. F. Packard. 1,815,446; July 21.
Shoes, Manufacture of. G. Goddu. 1,815,296; July 21.
Shoes, Manufacture of. G. Goddu. 1,815,298; July 21.
Sign. C. A. Graves. Des. 84,694; July 21.
Signal: *See*—
Marine signal. Vehicle signal.
Oscillating signal.
Signal. L. G. Bacon. 1,815,662; July 21.
Signal for motor vehicles, Direction. J. P. Williams. 1,815,367; July 21.
Signaling system. W. L. Edison. 1,815,055; July 21.
Silk, Degumming. J. Takamine, jr. 1,815,279; July 21.
Slack adjuster. W. O. Martin. 1,815,859; July 21.
Slicing machine, Wood. D. W. C. Haworth. 1,815,670; July 21.
Slide, Adjustment. T. Cahn. 1,815,703; July 21.
Socket construction, Electric. P. V. Hoecher. 1,815,509; July 21.
Soils to promote plant growth, Treating. C. H. Spencer. Re18,132; July 21.
Soldering means, Electric. J. A. Tolcik. 1,815,280; July 21.
Sole for shoes, Inner. H. Higdem. 1,815,843; July 21.
Sound generator. W. L. Eckhardt. 1,815,553; July 21.
Sound generator for automobiles. W. L. Eckhardt. 1,815,552; July 21.
Sound recording and reproducing apparatus. F. H. Owens. 1,815,481; July 21.
Sound recording mechanism. F. von Madaler. 1,815,692; July 21.
Spark plug. K. Thanet. 1,815,423; July 21.
Spark plugs, Making. R. T. Hurley. 1,815,714; July 21.
Spear, Rotary. W. S. Jones. 1,815,376; July 21.
Spectacle frame. T. E. Bosworth. Des. 84,678; July 21.
Speed mechanism, Variable. L. M. Sheridan. 1,815,334; July 21.
Speed transmission, Change. S. J. Boughton. 1,815,033; July 21.
Spoon or other article of tableware. E. T. Beck. Des. 84,674; July 21.
Spoon or similar article. W. S. Warren. Des. 84,719; July 21.
Spreader body. E. C. Smith. 1,815,337; July 21.
Spreader device for concrete forms. F. C. Wotnoske. 1,815,368; July 21.
Spring: *See*—
Valve spring.
Spring bed, Adjustable coiled. J. H. Schiffhouer. 1,815,742; July 21.
Spring structure. F. O'Brien. 1,815,210–11; July 21.
Sprinkler: *See*—
Rotary sprinkler.
Sprinkler system. J. R. Hamilton. 1,815,855; July 21.
Stair construction. H. Chambers. 1,815,048; July 21.
Stairway step. C. L. Wooldridge. 1,815,126; July 21.
Stamp vending machine. J. W. Barnes. 1,815,843; July 21.
Stand: *See*—
Book stand.
Stapling machine. A. H. Maynard. 1,815,066; July 21.
Starter, Engine. H. Burton. 1,815,047; July 21.
Starting machine. A. T. J. Bahr. 1,815,757; July 21.

Starting of aeroplanes, Method and device for the automatic. R. Bernady. 1,815,092; July 21.
Steam generator. A. C. Wood. 1,815,086; July 21.
Steel, Alumino thermic. J. H. Deppeler. 1,815,052; July 21.
Steering and lighting mechanism for vehicles, Combined. H. A. Douglas. 1,815,871; July 21.
Stilt. M. W. Brewbaker. 1,815,544; July 21.
Stocking. H. Hemmerich. Des. 84,698; July 21.
Stocking, Varicose. F. Damon. 1,815,667; July 21.
Stooking machine. J. Driedger. 1,815,053; July 21.
Stop for gramophones, Automatic. R. Winkelmann. 1,815,536; July 21.
Stopping device for spinning and doubling machines. E. Stutz-Benz. 1,815,743; July 21.
Strand reeling apparatus. D. C. Robson and J. N. Selvig. 1,815,728; July 21.
Straw spreader. E. L. Bartels. 1,815,042; July 21.
Street indicator. S. D. Tomaso. 1,815,424; July 21.
Strip, Expansible parting. F. J. Buehler. 1,815,759; July 21.
Stud and partition construction for buildings. F. J. Sersen. 1,815,075; July 21.
Stud extractor. E. M. Doan. 1,815,500; July 21.
Stud wrench. H. M. Proctor. 1,815,363; July 21.
Submarine cable system. R. E. A. Putnam. 1,815,657; July 21.
Submarines, Life saving device for. H. Eckel and H. Schuenhoff. 1,815,350; July 21.
Suction cleaner. W. C. Davidson. 1,815,242; July 21.
Sugar, Manufacturing. C. Schwieger. 1,815,276; July 21.
Sulphur from used gas purifying mass, Gaining pure tarfree. K. Szombathy. 1,815,811; July 21.
Support, Breast. F. M. Bauckman. 1,815,697; July 21.
Support, Combination lamp and clock. H. Fantel. 1,815,465; July 21.
Support, Curtain rail. G. F. French. 1,815,249; July 21.
Support, Roll stationery. R. C. Leimberger. 1,815,785; July 21.
Supporting and handling objects, Apparatus for. J. P. Spear. 1,815,218; July 21.
Supporting device. E. W. Larsen. 1,815,264; July 21.
Swab making machine. L. Mix. 1,815,478; July 21.
Sweeper, Suction. M. E. Nelsen and B. J. Buchtel. 1,815,067; July 21.
Swing hanger, Adjustable. P. Cobb. 1,815,185; July 21.
Switch: *See*—
Connecter switch.
Electric switch.
Handle switch.
Pressure switch.
Safety switch.
Switch. A. Alsaker. 1,815,392; July 21.
Switch. A. Alsaker and M. Skau. 1,815,282–3; July 21.
Switch. J. F. Nenzel. 1,815,577; July 21.
Switch. S. M. Viele. 1,815,631; July 21.
Switch for automobile engines, Starting. C. T. Mansur. 1,815,415; July 21.
Switch mechanism, Electric pull. W. C. Tregoning. 1,815,172; July 21.
Switch mechanism, Pull chain snap. W. C. Tregoning. 1,815,173; July 21.
Switching station. H. Probst. 1,815,797; July 21.
Table. A. Friedman. Des. 84,688; July 21.
Table top. J. Loehl. Des. 84,706; July 21.
Tank: *See*—
Vehicle tank.
Tank. F. S. Boltz. 1,815,543; July 21.
Tank construction, Oil. R. R. Tucker. 1,815,531; July 21.
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U. S. GOVERNMENT PRINTING OFFICE: 1931

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

A-B Stove Company, Battle Creek, Mich. Gas and gasolene ovens, stoves, ranges, and burners. 83,800; renewed Oct. 17, 1931.

Abelson, Meyer H., Wilkes-Barre, Pa. Candies. 285,571; July 28; Serial No. 312,227; published May 12, 1931. Class 46.

Abramson, Elmer, St. Louis, Mo. Bags. 285,510; July 28; Serial No. 308,150; published May 12, 1931. Class 2.

Acco Products, Inc., Long Island City, N. Y. Filing device and filing cabinets. 285,397; July 28; Serial No. 310,629; published May 12, 1931. Class 32.

Aceta G. m. b. H., Berlin-Lichtenberg, Germany. Threads and yarns. 285,515; July 28; Serial No. 311,352; published May 19, 1931. Class 43.

Acme Backing Corporation, Brooklyn, N. Y. Processed fabric backing material used in the manufacture of laminated fabrics. 285,536; July 28; Serial No. 310,200; published May 12, 1931. Class 50.

Acme Milling Company, assignor to Acme-Evans Company, Indianapolis, Ind. Wheat flour. 36,615; renewed June 18, 1931.

Addressograph Co., Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., and Cleveland, Ohio. Machines. 37,119; renewed Sept. 24, 1931.

Afro-Werk Adolf Frost & Co., Taucha, near Leipzig, Germany. Tablets of any kind with peppermint and fruit taste, sugar wares, toffee, etc. 285,360; July 28; Serial No. 308,001; published May 12, 1931. Class 46.

Alaska Chemical Company, New York, N. Y., to Alaska Chemical Company, North Bergen, N. J. Furs and skins. 84,300; renewed Nov. 28, 1931.

Alfe, Salvatore, doing business as S. Alfe Cigar Company, Philadelphia, Pa. Cigars. 285,608; July 28; Serial No. 310,966; published May 19, 1931. Class 17.

Allen, A. E., & Co., Ltd., Nottingham, England. Stockings and socks. 285,551; July 28; Serial No. 298,560; published May 12, 1931. Class 39.

Alliance Manufacturing Company, The, Alliance, Ohio. Shears and prunes. 285,552; July 28; Serial No. 298,263; published May 12, 1931. Class 23.

Alpha Tank & Sheet Metal Mfg. Co., St. Louis, Mo. Chemical stills, spray water cooling towers, etc. 285,550; July 28; Serial No. 299,819; published May 12, 1931. Class 23.

Aluminum Company of America, Pittsburgh, Pa. Collapsible tubes. 285,365; July 28; Serial No. 312,830; published May 19, 1931. Class 2.

Aluminum Company of America, Pittsburgh, Pa. Collapsible tubes. 285,366; July 28; Serial No. 312,829; published May 12, 1931. Class 2.

American Bleached Goods Company, Inc., New York, N. Y. Cotton piece goods. 285,472; July 28; Serial No. 312,033; published May 19, 1931. Class 42.

American Maize-Products Company, New York, N. Y. Corn salad oil. 285,470; July 28; Serial No. 312,036; published May 19, 1931. Class 46.

American Maize-Products Company, New York, N. Y. Syrup, corn oils, and cornstarch. 285,471; July 28; Serial No. 312,034; published May 19, 1931. Class 46.

American Manufacturing Company, The, Charleston, W. Va., and New York, N. Y., assignor to American Manufacturing Company, Brooklyn, N. Y. Jute bagging. 82,745; renewed July 25, 1931.

American Manufacturing Company, The, Charleston, W. Va., and New York, N. Y., assignor to American Manufacturing Company, Brooklyn, N. Y. Bagging. 83,204; renewed Aug. 29, 1931.

American Paper Goods Company, The, Montclair, N. J., and Kensington, Conn., to The American Paper Goods Company, Kensington, Conn. Envelopes and linen paper. 84,157; renewed Nov. 14, 1931.

Araban Coffee Co., Inc., Boston, Mass. Coffee. 285,370, July 28; Serial No. 312,745; published May 12, 1931. Class 46.

Aronson-Caplin Company, Inc., New York, N. Y. Slips, bloomers, petticoats, etc. 285,357; July 28; Serial No. 307,760; published May 12, 1931. Class 39.

Art and Novelty Supply Company, Minneapolis, Minn. Plaques and miniature statuary. 285,615; July 28. Class 50.

Asbury Mills, The, New York, N. Y. Bathing suits and frocks. 285,613; July 28. Class 39.

Ashton & Parsons Ltd., assignor to Phosferine (Ashton & Parsons) Limited, London, England. Medicine. 37,375; renewed Nov. 26, 1931.

Associated Apparel Industries, Inc., Chicago, Ill. Elastic webbing. 285,493; July 28; Serial No. 312,686; published May 19, 1931. Class 42.

Bailey Company, Cleveland, Ohio. Men's and boys' clothing. 285,389; July 28; Serial No. 311,911; published May 19, 1931. Class 39.

Bailey, Stacy P., New York, N. Y. Dresses, coats, hats, etc. 285,590; July 28; Serial No. 306,124; published May 12, 1931. Class 39.

Baker, Edith K., Fort Myers, Fla. Conserves, marmalades, jellies, etc. 285,455; July 28; Serial No. 311,814; published May 19, 1931. Class 46.

Bamber, William, Banstead, Surrey, England. Constructional toys. 285,437; July 28; Serial No. 311,465; published May 19, 1931. Class 22.

Barclay & Barclay, assignor, by mesne assignments, to Lanman & Kemp-Barclay & Co. Incorporated, New York, N. Y. Soap. 83,629-30; renewed Oct. 3, 1931.

Barr & Creelman Co., Rochester, N. Y. Bath tubs, lavatory basins, toilet tanks, etc. 285,526; July 28; Serial No. 310,907; published May 19, 1931. Class 13.

Bauer Type Foundry, The, Inc., New York, N. Y. Printing type. 285,618; July 28. Class 14.

Bauermeister, Chas. W., Co., Terre Haute, Ind. Canned fruits and vegetables, canned fish, peanut butter, etc. 285,411; July 28; Serial No. 311,643; published May 19, 1931. Class 46.

Beach & Arthur, Inc., Indianapolis, Ind. Paper plates. 285,375; July 28; Serial No. 312,541; published May 12, 1931. Class 2.

Beacon Falls Rubber Shoe Company, Beacon Falls, assignor to The Goodyear's India Rubber Glove Mfg. Company, Naugatuck, Conn. Boots, shoes, and slippers. 83,317; renewed Sept. 5, 1931.

Beatrice Creamery Company, Chicago, Ill. Butter, eggs, raw cream, and dressed poultry. 285,343; July 28, Serial No. 307,576; published May 12, 1931. Class 46.

Beecher-Peck & Lewis, Detroit, Mich. Paper for wrapping meats. 285,500; July 28; Serial No. 312,941; published May 12, 1931. Class 37.

Beer & Davies, New York, N. Y. Eggs. 285,521; July 28; Serial No. 312,972; published May 12, 1931. Class 46.

Belknap Hardware & Manufacturing Company, Louisville, Ky. Shot guns and rifles. 285,477; July 28; Serial No. 309,767; published May 12, 1931. Class 9.

Bennett Pumps Corporation, Muskegon Heights, Mich. Portable liquid dispensing apparatus. 285,452; July 28; Serial No. 312,038; published May 19, 1931. Class 26.

Best, Richard, Pencil Company, Inc., New York, N. Y. Black lead and copying pencils. 285,616; July 28. Class 37.

Bethlehem Textiles Company, Bethlehem, Pa. Bloomers. 285,420; July 28; Serial No. 311,994; published May 5, 1931. Class 39.

Beyer, Erich, Chicago, Ill. Animal watering troughs. 285,498; July 28; Serial No. 312,885; published May 19, 1931. Class 50.

Bird, J. A. & W., & Co., assignor, by mesne assignments, to The Flintkote Company, Boston, Mass. Roofing felt. 36,828; renewed July 30, 1931.

Birk, Marjorie A., New York, N. Y. Sets of natural or artificial hairs, adhesives, and adhesive removers. 285,423; July 28; Serial No. 312,884; published May 12, 1931. Class 40.

Bishop Company, The, North Attleboro, Mass. Ophthalmic mountings and parts thereof. 285,412; July 28; Serial No. 313,119; published May 19, 1931. Class 26.

Bloomer Bros. Company, Newark, N. J. Containers. 285,378; July 28; Serial No. 312,472; published May 12, 1931. Class 2.

Blumenthal, Sidney, & Co., Inc., New York, N. Y. Pile fabrics in the piece. 285,483; July 28; Serial No. 312,509; published May 12, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 285,514; July 28; Serial No. 311,360; published May 19, 1931. Class 42.

Bolon, John F., doing business as John F. Bolon Cigar Company, Bethesda, Ohio. Cigars and stogies. 285,617; July 28. Class 17.

Bona Allen, Incorporated, Buford, Ga. Boots and shoes. 285,390; July 28; Serial No. 311,816; published May 12, 1931. Class 39.

Bonney Forge & Tool Works, Allentown, Pa. Unions for welded and threaded connections. 285,462; July 28; Serial No. 312,473; published May 12, 1931. Class 14.

Botany Worsted Mills, Passaic, N. J. Woolen piece goods. 285,518-19; July 28; Serial Nos. 311,175-6; published May 12, 1931. Class 42.

Botany Worsted Mills, Passaic, N. J. Woolen piece goods. 285,520; July 28; Serial No. 311,173; published May 12, 1931. Class 42.

Bowen, Walter W., doing business as Wafelteen Syrup Co., Miami, Fla. Table syrup. 285,461; July 28; Serial No. 309,224; published May 19, 1931. Class 46.

Brach, E. J., & Sons, Chicago, Ill. Candy. 285,444; July 28; Serial No. 311,949; published May 19, 1931. Class 46.

Brand & Oppenheimer, Incorporated, New York, N. Y. Cotton piece goods. 285,345; July 28; Serial No. 307,147; published May 19, 1931. Class 42.

Brandram Brothers & Co. Ltd., London, England. White lead, saltpetre, brimstone roll, and flower of sulfur. 36,892; renewed Aug. 13, 1931.

British Enka Artificial Silk Company Limited, London, England. Braid made of cellulose. 285,400; July 28; Serial No. 310,751; published May 19, 1931. Class 40.
British Enka Artificial Silk Company Limited, London, England. Braid made of cellulose. 285,405; July 28; Serial No. 311,419; published May 19, 1931. Class 40.
British Enka Artificial Silk Company Limited, London, England. Imitation straw and horsehair made of cellulose. 285,512; July 28; Serial No. 311,418; published May 12, 1931. Class 1.
British Enka Artificial Silk Company Limited, London, England. Piece goods made of cellulose. 285,574; July 28; Serial No. 303,947; published May 19, 1931. Class 42.
British Enka Artificial Silk Company Limited, London, England. Piece goods made of cellulose. 285,575; July 28; Serial No. 303,946; published May 5, 1931. Class 42.
Brophy, Arthur, Santa Cruz, Calif. Hook for doors. 285,385; July 28; Serial No. 312,254; published May 12, 1931. Class 13.
Brown & Williamson Tobacco Corporation, Louisville, Ky. Cigarette paper and cigarette booklets. 285,486; July 28; Serial No. 312,597; published May 12, 1931. Class 17.
Brown Mfg. Co., Greeneville, Tenn., to Brown Mfg. Co., Le Roy, N. Y. Balms. 37,370; renewed Nov. 26, 1931.
Brown, Sidney W., doing business as Old Gold Ginger Ale Co., Long Beach, Calif. Non-alcoholic beverage. 285,351; July 28; Serial No. 306,166; published May 12, 1931. Class 45.
Brown, Wm. H., Son & Co., to Matthew W. Ryan Sons & Co. Inc., New York, N. Y., successor. Cotton goods. 79,890; renewed Oct. 18, 1930.
Bruce Products Corporation, Detroit, Mich. Metal cleaning compounds, buffs, polishing wheels, etc. 285,337; July 28; Serial No. 307,839; published May 12, 1931. Class 4.
Brunner, Emma, Wittenberg, assignor to Anna M. Meyer, Marathon, Wis. Liniments. 83,135; renewed Aug. 22, 1931.
Butler Paper Corporations, Chicago, Ill. Paper. 285,377; July 28; Serial No. 312,519; published May 12, 1931. Class 37.
California Art Supply Co., Palo Alto, Calif. Art and modeling clay. 285,583; July 28; Serial No. 300,464; published May 12, 1931. Class 1.
Cammann Manufacturing Company, Inc., Waltham, Mass. Kitchen appliances for beating, mixing, stirring and the like. 285,417; July 28; Serial No. 312,475; published May 12, 1931. Class 23.
Cape Ann Isinglass Company, Marblehead, Mass. Clarifier for beer. 285,443; July 28; Serial No. 311,953; published May 12, 1931. Class 48.
Carlisle Ribbon Mills, Inc., Paterson, N. J. Silk warp belting ribbon. 285,480; July 28; Serial No. 309,459; published May 5, 1931. Class 42.
Carreras Limited, London, England. Tobacco, cigars, cigarettes and snuff. 83,391; renewed Sept. 12, 1931.
Carson Pirie Scott & Co., Chicago, Ill. Cotton piece goods. 285,541; July 28; Serial No. 297,848; published May 19, 1931. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics made of cellulose derivatives. 285,487–8; July 28; Serial Nos. 312,599–600; published May 19, 1931. Class 42.
Chad Valley Co. Ltd., The, Harborne, England. Paper box files, rubber stamps, hand blotters, etc. 285,601; July 28; Serial No. 280,653; published May 12, 1931. Class 37.
Chadbourne, E. M., Company, San Francisco, Calif., to Edward M. Chadbourne, Pensacola, Fla., successor. Composition paving material and pavements containing bituminous matter. 82,962; renewed Aug. 8, 1931.
Chamberlain, F. B., Co., St. Louis, Mo., to F. B. Chamberlain Company, East St. Louis, Ill., and St. Louis, Mo. Rolled oats. 83,635; renewed Oct. 3, 1931.
Charlotte Chemical Laboratories, Inc., Charlotte, N. C. Cleaning powder, etc. 285,546; July 28; Serial No. 296,480; published May 12, 1931. Class 4.
Chemische Fabrik Eisendrath Gesellschaft mit beschränkter Haftung, Mettmann/Rhld, Germany. Pastes, liquids, and powders for polishing shoes, polishing and cleaning preparations for leather, etc. 285,545; July 28; Serial No. 296,481; published May 12, 1931. Class 4.
Chum Razor Blade Corp., Detroit, Mich. Razors and razor blades. 285,391; July 28; Serial No. 312,331; published May 12, 1931. Class 23.
Churchill, A. J., Los Angeles, Calif. Canned compressed cooked meat and chicken loaf. 285,533; July 28; Serial No. 310,441; published Apr. 21, 1931. Class 46.
Cincinnati Wholesale Grocery Company, The, Cincinnati, Ohio. Canned fruits, canned vegetables, rice, etc. 285,535; July 28; Serial No. 310,251; published May 12, 1931. Class 46.
Clark & Glendon Inc., New York, N. Y. Damask fabrics. 285,549; July 28; Serial No. 293,616; published May 19, 1931. Class 42.
Clarkson, Inc., Suffern, N. Y. Cleaning fluid. 285,577; July 28; Serial No. 303,276; published May 12, 1931. Class 4.
Cluett, Peabody & Co., Inc. (See Tim & Co., assignor.)
Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Revolvers. 285,374; July 28; Serial No. 312,549; published May 12, 1931. Class 9.
Combustioneer, Inc., Goshen, Ind. Fuel-handling equipment. 285,352–3; July 28; Serial Nos. 306,950–1; published May 12, 1931. Class 34.
Compañia de Tierras, Maderas y Ferrocarriles "La Forestal" Ltda., Buenos Aires, Argentina. Tannin extracts. 285,342; July 28; Serial No. 307,584; published Mar. 24, 1931. Class 6.
Consolidated Companaies, Inc., Plaquemine, La. Canned fruits and vegetables, jellies, pickles, etc. 285,548; July 28; Serial No. 294,959; published May 12, 1931. Class 46.
Conway, Jesse B., Los Angeles, Calif. Medicinal plasters. 83,049; renewed Aug. 15, 1931.
Corbett & North, Inc., New York, N. Y. Wearing apparel. 285,431; July 28; Serial No. 311,561; published May 12, 1931. Class 39.
Cortland Line Company, Cortland, N. Y. Fish lines. 285,372; July 28; Serial No. 312,698; published May 12, 1931. Class 22.
Cromwell Silver Mfg. Corp., New York, N. Y. Fruit bowls, bread trays, candy dishes, nut bowls, etc. 285,567; July 28; Serial No. 312,095; published May 19, 1931. Class 13.
Cunningham, Edward P., Incorporated, New York, N. Y. Hats. 285,421; July 28; Serial No. 311,827; published May 12, 1931. Class 39.
Daimler-Benz Aktiengesellschaft, Berlin, Germany. Automotive vehicles, parts and accessories, trimming, etc. 285,557; July 28; Serial No. 288,586; published May 12, 1931. Class 19.
Dannemiller Grocery Company, The, Canton, Ohio. Canned goods. 285,508; July 28; Serial No. 308,360; published May 12, 1931. Class 46.
Dassonville, Michel, Paris, France. Knitted, netted, and textile fabrics. 285,354; July 28; Serial No. 306,001; published May 19, 1931. Class 42.
Dassonville, Michel, Paris, France. Thread and yarn. 285,559; July 28; Serial No. 305,998; published May 19, 1931. Class 43.
Decker, Alfred, & Cohn, Inc., Chicago, Ill. Overcoats and suits. 285,406; July 28; Serial No. 311,325; published May 5, 1931. Class 39.
Deco Export Co. Inc., The. (See Dreyfus Export Co.)
De Land, C. M., New York, N. Y. Woolen piece goods. 285,517; July 28; Serial No. 311,215; published May 19, 1931. Class 42.
De Vasher Manufacturing and Supply Company, Kansas City, Mo. Laundry washing machines. 81,790; renewed May 9, 1931.
Diamond Machine Co., Providence, R. I. Grinding and polishing machinery. 37,267; renewed Oct. 29, 1931.
Di Bartolomeo, Antonio, Camden, N. J. Maltless beverage. 285,341; July 28; Serial No. 307,657; published May 12, 1931. Class 45.
Dobbs & Co., New York, N. Y. Hats. 285,390; July 28; Serial No. 310,935; published May 12, 1931. Class 39.
Dobbs & Co., New York, N. Y. Hats. 285,415; July 28; Serial No. 312,333; published May 12, 1931. Class 39.
Dorr Company, The, New York, N. Y. Apparatus for the treatment of solids suspended in liquids, clarifiers for sewage, pumps, etc. 285,418; July 28; Serial No. 312,334; published May 12, 1931. Class 23.
Dow Chemical Company, The, Midland, Mich. Cleaning compositions. 285,606; July 28; Serial No. 270,310; published May 19, 1931. Class 4.
Dreyfus Export Co., to The Deco Export Co., Inc., New York, N. Y., successor. Shoes, hosiery, and outershirts. 81,968; renewed May 23, 1931.
Drink-Apep Company. (See Pettit & Whitacre, Inc.)
Dun, M. K., Inc., New York, N. Y. Shoes. 285,422; July 28; Serial No. 311,820; published May 12, 1931. Class 39.
Du Pont, E. I., de Nemours Powder Co., Hoboken, N. J., and Wilmington, Del., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Smokeless powder. 83,435; renewed Sept. 12, 1931.
Du Pont Rayon Company, Buffalo, N. Y. Yarns, threads, and filaments. 285,464; July 28; Serial No. 312,336; published May 19, 1931. Class 43.
Durex Abrasives Corporation, Jersey City, N. J. Abrasives. 285,448; July 28; Serial No. 311,866; published May 12, 1931. Class 4.
Duro Metal Products Company, Chicago, Ill. Automotive tools. 285,395; July 28; Serial No. 310,330; published May 19, 1931. Class 23.
Eagle, C. K., & Co., Inc., New York, N. Y. Silk piece goods. 285,531; July 28; Serial No. 310,599; published May 5, 1931. Class 42.
Eagle Pencil Company, assignor to Eagle Pencil Company, New York, N. Y. Pencils, steel pens, and penholders. 83,822; renewed Oct. 17, 1931.
Eagle White Lead Company, The, by change of name to The Eagle-Picher Lead Company, Cincinnati, Ohio. Babbit metal. 84,612–3; renewed Dec. 26, 1931.
Echols Bros. Radiator Works, Fort Worth, Tex. Acetylene gas generators. 285,382; July 28; Serial No. 312,367; published May 19, 1931. Class 34.
Electric Cable Co., The, Bridgeport, Conn., assignor to Habirshaw Cable & Wire Corporation, New York, N. Y. Insulated wires and cables. 82,504; renewed July 4, 1931.

Elgin American Manufacturing Co., Elgin, Ill. Vanity cases, compact boxes, powder containers, etc. 285,581; July 28; Serial No. 302,460; published Feb. 10, 1931. Class 2.
Elish, Harry M., doing business as Harry Elish Paper Company, New York, N. Y. Gummed paper. 285,478; July 28; Serial No. 309,680; published May 12, 1931. Class 37.
Ely & Walker Dry Goods Company, St. Louis, Mo. Underwear. 285,426; July 28; Serial No. 312,045; published May 5, 1931. Class 39.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reel cases. 285,347; July 28; Serial No. 306,734; published May 19, 1931. Class 22.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. 285,597; July 28; Serial No. 313,237; published May 19, 1931. Class 22.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing floats. 285,598; July 28; Serial No. 313,236; published May 19, 1931. Class 22.
Eskimo Pie Corporation, doing business through its subsidiary, New York Eskimo Pie Corporation, Louisville, Ky. Ice cream and candy confection. 285,576; July 28; Serial No. 303,600; published May 12, 1931. Class 46.
Essanay Dress Company. (See Scharf, Joseph H.)
Essex Rubber Company Inc., Trenton, N. J. Rubber play balls and swimming tubes. 285,376; July 28; Serial No. 312,513; published May 19, 1931. Class 22.
Esterbrook Steel Pen Manufacturing Company, The, Camden, N. J. Pens. 285,569; July 28; Serial No. 312,984; published May 12, 1931. Class 37.
Eureka Metal Products Corporation, Buffalo, N. Y. Cable clamps. 285,446; July 28; Serial No. 311,914; published May 12, 1931. Class 13.
Europa Malt Syrup Co. (See Pabst Corporation.)
Faber, Eberhard, New York, N. Y., assignor to Eberhard Faber Pencil Company, Brooklyn, N. Y. Rubber bands. 84,366; renewed Dec. 5, 1931.
Faehndrich, William, Inc., New York, N. Y. Cheese. 285,496; July 28; Serial No. 312,844; published May 12, 1931. Class 46.
Faehndrich, William, Inc., New York, N. Y. Cheese. 285,523; July 28; Serial No. 312,843; published May 12, 1931. Class 46.
Feltus, A. M., jr., Vicksburg, Miss. Golf balls for miniature golf courses. 285,566; July 28; Serial No. 312,127; published May 12, 1931. Class 22.
Fey, Arthur W., Hazleton, Pa. Marshmallow whip. 285,468; July 28; Serial No. 312,143; published May 19, 1931. Class 46.
Fiege Company, The, Green Bay, Wis. Cable and wire rope and clamps and turnbuckle assemblies. 285,447; July 28; Serial No. 311,868; published May 12, 1931. Class 13.
Fintex Corporation, The, Cleveland, Ohio. Men's clothing. 285,409; July 28; Serial No. 311,869; published May 12, 1931. Class 39.
Firth-Sterling Steel Company, McKeesport, Pa. Cutting steel. 84,223; renewed Nov. 21, 1931.
Fischbeck Soap Company, San Francisco, Calif. Washing powder. 84,478; renewed Dec. 19, 1931.
Fischer's Surfa-Saver, Inc., Cincinnati, Ohio. Soap. 285,434; July 28; Serial No. 311,603; published May 12, 1931. Class 4.
Fish, Albert A., doing business as Richards Manufacturing Company, Philadelphia, Pa. Mixture control valves for carbureters. 285,393; July 28; Serial No. 312,179; published May 19, 1931. Class 23.
Fitler, Edwin H., Co., The, Philadelphia, Pa. Manila rope. 285,593; July 28; Serial No. 313,340; published May 19, 1931. Class 7.
Fitler, Edwin H., Co., The, Philadelphia, Pa. Bundling twine. 285,594; July 28; Serial No. 313,339; published May 19, 1931. Class 7.
Flintkote Company, The. (See Bird, J. A. & W., & Co., assignor.)
Funsten, R. E., Dried Fruit & Nut Co., by change of name to R. E. Funsten Company, St. Louis, Mo. Fresh cracked pecans. 84,618; renewed Dec. 26, 1931.
Garlock Packing Co., The, assignor to The Garlock Packing Company, Palmyra, N. Y. Rod and joint packing. 87,832; renewed Nov. 19, 1931.
General Electric Company. (See Phelps, William J., assignor.)
George, Benjamin B., Cincinnati, Ohio. Cooked icing. 285,466; July 28; Serial No. 312,246; published May 12, 1931. Class 46.
Gilbert, A. C., Company, The. (See Meccano Limited, assignor.)
Globe American Corporation, Kokomo, Ind. Brooders. 285,489; July 28; Serial No. 312,642; published May 12, 1931. Class 50.
Golden Eagle Soap Company, San Francisco, Calif. Soap. 285,336; July 28; Serial No. 307,943; published May 19, 1931. Class 4.
Goodyear's India Rubber Glove Company, The. (See Beacon Falls Rubber Shoe Company, assignor.)
Gordon, Harry R., doing business as The Harry R. Gordon Co., Inc., New York, N. Y. Sugar and prepared flour. 285,505; July 28; Serial No. 308,887; published May 12, 1931. Class 46.
Grand Rapids Cabinet Company, Grand Rapids, Mich. Refrigerator cabinets. 285,501; July 28; Serial No. 313,082; published May 12, 1931. Class 31.
Great Lakes Aircraft Corporation, Cleveland, Ohio. Airplanes. 285,572; July 28; Serial No. 312,218; published May 12, 1931. Class 19.
Guidetti, Ferruccio, New York, N. Y. Water closets, bidets, lavatories, etc. 285,350; July 28; Serial No. 306,297; published May 19, 1931. Class 13.
Gulf States Steel Company, Birmingham, Ala. Wire rods, wire, pig iron, ingots, etc. 285,580; July 28; Serial No. 302,465; published July 29, 1930. Class 14.
Gummed Products Company, The, Troy, Ohio. Gummed paper and fabric tapes. 285,479; July 28; Serial No. 309,587; published May 12, 1931. Class 37.
Gwaltney, P. D., Jr., & Co., Inc., Smithfield, Va. Cured meats. 285,509; July 28; Serial No. 308,202; published May 12, 1931. Class 46.
Habirshaw Cable & Wire Corporation. (See Electric Cable Co., The, assignor.)
Hahn Department Stores, Inc., Wilmington, Del. Hosiery. 285,388; July 28; Serial No. 311,915; published May 19, 1931. Class 39.
Hallis-Kariebach, Helan, New York, N. Y. Clothes costumers. 285,398; July 28; Serial No. 311,833; published May 19, 1931. Class 32.
Hair Net Packers, Inc., New York, N. Y. Hair nets. 285,348; July 28; Serial No. 306,720; published May 12, 1931. Class 42.
Hampton Roads Paper Company, Inc., Norfolk, Va. Writing paper, pads, and tablets. 84,180; renewed Nov. 14, 1931.
Handy Andy Specialty Co., Inc., Long Island City, N. Y. Fruit juice extractors. 285,358; July 28; Serial No. 307,162; published May 12, 1931. Class 23.
Hansen, Thorkild N., Chicago, Ill. Powder used in the preparation of food drinks. 285,339; July 28; Serial No. 307,774; published May 19, 1931. Class 46.
Hanson-Van Winkle-Munning Company, Matawan, N. J. Buffing compounds. 285,490; July 28; Serial No. 312,647; published May 19, 1931. Class 4.
Harshaw Chemical Company, The, Cleveland, Ohio. Chocolate flavored food preparations. 285,516; July 28; Serial No. 311,334; published May 12, 1931. Class 46.
Hartford Products Corporation, Hartford, Conn. Razor stroppers. 285,503; July 28; Serial No. 313,037; published May 19, 1931. Class 4.
Harvey, Leo M., doing business as Harvey Machine Company, Los Angeles, Calif. Fruit and nut clippers and shears. 285,416; July 28; Serial No. 312,709; published May 19, 1931. Class 23.
Hemmerdinger, J. H., & Son, Inc., Brooklyn, N. Y. Shoe soles. 285,429; July 28; Serial No. 311,684; published May 12, 1931. Class 39.
Henckels, I. A., assignor, by mesne assignments, to J. A. Henckels, Solingen, Germany. Iron, steel, and manufacturers. 36,588; renewed June 11, 1931.
Herff-Jones Co., Indianapolis, Ind. Golf tee holder. 285,513; July 28; Serial No. 311,407; published May 12, 1931. Class 22.
Hettrick Manufacturing Company, The, Toledo, Ohio. Waterproofed fabric. 285,582; July 28; Serial No. 302,391; published Sept. 2, 1930. Class 50.
Hilborn, J., & W. E. Reed, Inc., New York, N. Y. Hosiery and sweaters. 285,403; July 28; Serial No. 309,600; published May 19, 1931. Class 39.
Holloway, M. J., & Company, Chicago, Ill. Candy bars. 285,527; July 28; Serial No. 310,865; published May 12, 1931. Class 46.
Hollywood Products Company, Ltd., Glendale, Hollywood, and Los Angeles, Calif. Beverages and syrups, extracts, and concentrates for preparing the same. 285,363; July 28; Serial No. 312,914; published May 12, 1931. Class 45.
Homan & Biehl, Chicago, Ill. Paper covers for closet seats. 285,564; July 28; Serial No. 304,200; published May 12, 1931. Class 37.
Home Billiardette Table Company, Inc., The, Chicago, Ill. Pool tables. 285,440; July 28; Serial No. 311,781; published May 19, 1931. Class 22.
Home-Wood Cheese Co. (See Zuercher, Charles R., jr.)
Hood Rubber Co., East Watertown and Boston, Mass., assignor to Hood Rubber Company, Inc., Wilmington, Del. Rubber boots and shoes, rubber overshoes, and rubber soled shoes. 82,330; renewed June 20, 1931.
Hooper, Claude E., New York, N. Y. Games employing boards or charts, and boards and charts for playing games. 285,368–9; July 28; Serial Nos. 312,758–9; published May 19, 1931. Class 22.
Hoosier Manufacturing Company, The, Newcastle, Ind. Furniture. 285,450; July 28; Serial No. 311,477; published May 19, 1931. Class 32.
Hopper Paper Company, Taylorville, Ill. Writing paper. 285,364; July 28; Serial No. 312,881; published May 12, 1931. Class 37.
Hudson Valley Fuel Corporation, Troy, N. Y. Sulphate of ammonia for fertilizer. 285,499; July 28; Serial No. 312,918; published May 19, 1931. Class 10.
Hume-Sinclair Coal Mining Company, Kansas City, Mo. Coal. 285,481; July 28; Serial No. 312,482; published May 19, 1931. Class 1.
Hydropel Process Company, Boston, Mass. Woolen, silk, rayon, etc., piece goods and piece goods containing a mixture of same. 285,485; July 28; Serial No. 312,586; published May 19, 1931. Class 42.

Hydropel Process Company, Boston, Mass. Waterproofed fabrics. 285,497; July 28; Serial No. 312,884; published May 12, 1931. Class 50.

International Merchandising Syndicate, Inc., New York, N. Y. Mattress ticking. 285,585; July 28; Serial No. 300,281; published May 19, 1931. Class 42.

Iron Jelloid Co., The. (See Warrick, Frederic W., assignor.)

Ivins', J. S., Son, Inc., Philadelphia, Pa. Cookies, cakes and crackers. 285,540; July 28; Serial No. 297,916; published May 19, 1931. Class 46.

Junkers, Hugo, Dessau, Germany. Gas heaters and stoves, ventilating fans and coolers, oil and gas burners, etc. 285,602; July 28; Serial No. 279,932; published May 19, 1931. Class 34.

Juvenile Shoe Corporation of America, The, Aurora, Mo. Boots and shoes. 285,408; July 28; Serial No. 312,102; published May 19, 1931. Class 39.

Kahn, Maxwell M., doing business as Maxwell Rubber Products, Belleville, N. J. Toy animals and other toy figures. 285,373; July 28; Serial No. 312,653; published May 19, 1931. Class 22.

Kelley-Clarke Company, Seattle, Wash. Canned salmon. 82,521; renewed July 4, 1931.

Kemet Laboratories Company, Inc., New York, N. Y. Metals and/or alloys. 285,561; July 28; Serial No. 304,919; published May 12, 1931. Class 14.

Keney, Victor, Woodside, Long Island, N. Y. Doll eyes and lashes, dolls, face masks, and animal toys. 285,596; July 28; Serial No. 313,245; published May 19, 1931. Class 22.

Keystone Watch Case Co., The, Philadelphia, Pa., assignor to Keystone Watch Case Corporation, Riverside, N. J. Watches, watch-cases and watch-movements. 84,494; renewed Dec. 19, 1931.

King Features Syndicate, Inc., New York, N. Y. Cartoon strip. 285,410; July 28; Serial No. 311,686; published May 12, 1931. Class 38.

Kirkman Engineering Corporation, New York, N. Y. Electrical fuses. 285,524; July 28; Serial No. 310,941; published May 12, 1931. Class 21.

Klee & Coleman, Indianapolis, Ind. Maltless beverages and sirups and extracts for making the same. 285,600; July 28; Serial No. 313,193; published May 19, 1931. Class 45.

Klin, Edwin J., Chicago, Ill. Golf clubs. 285,599; July 28; Serial No. 313,194; published May 19, 1931. Class 22.

Koeppen, Ernst, Carlstadt, N. J. Kitchen utensils. 285,371; July 28; Serial No. 312,711; published May 12, 1931. Class 13.

Kold Kub Company, Dallas, Tex. Frozen confections. 285,579; July 28; Serial No. 302,903; published May 12, 1931. Class 46.

Kotzin, Theodore, Los Angeles, Calif. Knickers. 285,589; July 28; Serial No. 306,651; published May 5, 1931. Class 39.

Kraemer, A. L., Co., Chicago, Ill. School papers of all kinds. 285,454; July 28; Serial No. 311,839; published May 5, 1931. Class 37.

Kraft-Phenix Cheese Corporation, Chicago, Ill. French dressing, mayonnaise, etc. 285,539; July 28; Serial No. 298,402; published May 12, 1931. Class 46.

Kresge Department Store Corporation, Newark, N. J. Men's clothing. 285,433; July 28; Serial No. 311,481; published May 12, 1931. Class 39.

Krim, Max, doing business as Krim Beverage Company, Lebanon, Pa. Maltless beverages and syrups and extracts for making the same. 285,344; July 28; Serial No. 307,499; published May 12, 1931. Class 45.

Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Canned soups, relishes, spices, etc. 285,603; July 28; Serial No. 279,480; published May 12, 1931. Class 46.

Kurz, H. C., A. G., Nuremberg, Germany. Lead pencils, crayons, slate pencils, etc. 285,494; July 28; Serial No. 312,808; published May 12, 1931. Class 37.

Lake Publishing Company, Leary, Ind. Booklets of word puzzles. 285,338; July 28; Serial No. 307,780; published May 12, 1931. Class 38.

Lambert Marketing Company, Sacramento, Calif. Fresh vegetables. 183,362; July 28; Serial No. 312,920; published May 12, 1931. Class 46.

Lanman & Kemp-Barclay & Co. Incorporated. (See Barclay & Barclay, assignor.)

Larkin Specialty Manufacturing Co., San Francisco, Calif. Smokers' articles. 285,542; July 28; Serial No. 297,810; published May 12, 1931. Class 8.

Larkin Specialty Manufacturing Co., San Francisco, Calif. Smokers' articles. 285,543; July 28; Serial No. 297,809; published May 12, 1931. Class 8.

Lavietes, David P., doing business as Pequot Soap Works, Inc., Brooklyn, N. Y. Laundry soap. 285,482; July 28; Serial No. 312,483; published May 19, 1931. Class 4.

Lee Paper Company, Vicksburg, Mich. Book, cover, and writing papers. 285,621; July 28. Class 37.

Legg, A. C., Packing Co. Inc., Birmingham, Ala. Seasoning for sausages, meats, or other foods. 285,453; July 28; Serial No. 311,840; published May 12, 1931. Class 46.

Lesher, Whitman & Co., Inc., New York, N. Y. Bedspreads, made-up window draperies, and a fabric. 285,435; July 28; Serial No. 311,529; published May 19, 1931. Class 42.

Lichten Bros., New York, N. Y. Hosiery. 285,626; July 28. Class 39.

Lovett, Howard E., Pittsburgh, Pa. Metal boxes. 285,449; July 28; Serial No. 311,842; published May 19, 1931. Class 2.

Lowe, Joe, Corporation, Brooklyn, N. Y. Edible fats. 285,469; July 28; Serial No. 312,054; published May 19, 1931. Class 46.

Lujo Pharmacal Co. (See Weiner, Louis I.)

Lundholm, Carl H., Stockholm, Sweden. Parachutes, parachute casings, and harnesses for parachutes. 285,530; July 28; Serial No. 310,771; published May 12, 1931. Class 19.

Luther Grinder & Tool Company, Milwaukee, Wis. Sharpening grinders. 285,394; July 28; Serial No. 311,389; published May 19, 1931. Class 23.

Magazine Antiques, Inc., The, New York, N. Y. Magazine. 285,463; July 28; Serial No. 312,442; published May 12, 1931. Class 38.

Mantas, George K., Brooklyn, N. Y. Apparatus for table golf. 285,460; July 28; Serial No. 311,787; published May 19, 1931. Class 22.

Marathon Razor Blade Co., Inc., Irvington, N. J. Razors, pen knives, scissors, etc. 285,392; July 28; Serial No. 312,263; published May 19, 1931. Class 23.

Marshall Field & Company, Chicago, Ill. Handkerchiefs. 285,465; July 28; Serial No. 312,258; published May 12, 1931. Class 42.

Maskey, Anna, doing business as Maskey's, San Francisco, Calif. Candies. 285,537; July 28; Serial No. 310,132; published May 5, 1931. Class 46.

Maxwell Rubber Products. (See Kahn, Maxwell M.)

Mayam Limited, London, England. Chewing gum. 285,534; July 28; Serial No. 310,344; published May 12, 1931. Class 46.

Mayer, William C., Jefferson, Wis. Golf game. 285,568; July 28; Serial No. 312,056; published May 12, 1931. Class 22.

Mayflower Beverage Co., Inc., Jamaica Plain, Mass. Nonalcoholic maltless beverages, syrups and extracts for making same, and ginger ale. 285,586; July 28; Serial No. 300,214; published May 19, 1931. Class 45.

McCreery Manufacturing Company, Portland, Oreg. Union suit under garments. 285,402; July 28; Serial No. 310,434; published May 5, 1931. Class 39.

McIlhenny Company, New Iberia, La. Pepper sauce. 285,491; July 28; Serial No. 312,658; published May 12, 1931. Class 46.

Meccano Limited, Liverpool, England, assignor to The A. C. Gilbert Company, New Haven, Conn. Mechanical toys. 83,171; renewed Aug. 22, 1931.

Melville Shoe Corporation, New York, N. Y. Hosiery. 285,386; July 28; Serial No. 311,968; published May 5, 1931. Class 39.

Menasha Products Company, The, Chicago, Ill. Paper napkins. 285,560; July 28; Serial No. 305,232; published May 12, 1931. Class 37.

Mercian, J. Howard, assignor to Meyer & Lange, Inc., New York, N. Y. Canned sardines. 84,403; renewed Dec. 12, 1931.

Meyer, Anna M. (See Brunner, Emma, assignor.)

Meyer, George M., doing business as Meyer Food Products Co., Cincinnati, Ohio. Horse radish, horse radish and mustard, Mexican style horse radish. 285,439; July 28; Serial No. 311,439; published May 19, 1931. Class 46.

Meyer & Lange, Inc. (See Mercian, J. Howard, assignor.)

Midway Chemical Company, Chicago, Ill. Metal polish. 285,622; July 28. Class 4.

Ming, Inc., New York, N. Y. Tea. 285,367; July 28; Serial No. 312,764; published May 12, 1931. Class 46.

Mundorff, Harry A., & Harry A. Mundorff, jr., Wilmington, Del. Maltless beverages and sirups and extracts. 285,623; July 28. Class 45.

Munsingwear Corporation, The, Minneapolis Minn. Underwear. 285,428; July 28; Serial No. 312,113; published May 5, 1931. Class 39.

Muralo Co., The, assignor to The Muralo Company, Inc., New Brighton, N. Y. Cold, water paints or wall finishes. 37,261; renewed Oct. 29, 1931.

Naamlooze Vennootschap Eau de Cologne Fabriek Voorheen J. C. Boldoot, by change of name to Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands. Eau de Cologne, soaps, waters, and lotions. 37,271–2; renewed Nov. 5, 1931.

Naamlooze Vennootschap Eau de Cologne Fabriek Voorheen J. C. Boldoot, by change of name to Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands. Eau de Colognes, soaps, waters, and lotions. 37,451; renewed Dec. 10, 1931.

Naamlooze Vennootschap Eau de Cologne Fabriek Voorheen J. C. Boldoot, by change of name to Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherland. Eau de Colognes, soaps, waters, and lotions. 37,469; renewed Dec. 17, 1931.

National Carbon Coated Paper Company, The, Sturgis, Mich. Writing paper. 285,361; July 28; Serial No. 312,998; published May 12, 1931. Class 37.

New Balance Arch Company, Inc., North Cambridge, Mass. Boots and shoes. 285,427; July 28; Serial No. 312,115; published May 19, 1931. Class 39.

New England Fish Company, Portland, Me., and Boston, Mass., to New England Fish Company, Boston, Mass. Fish. 82,816; renewed July 25, 1931.

New England Fish Company, Seattle, Wash. Fish and seafoods. 285,558; July 28; Serial No. 284,413; published May 19, 1931. Class 46.

Newman, I., & Sons, Inc., New York, N. Y. Device or apparatus for determining basic types of the human figure to assist in the designing of foundation garments. 285,413; July 28; Serial No. 313,090; published May 19, 1931. Class 26.

New York Eskimo Pie Corporation. (See Eskimo Pie Corporation.)

Nonspi Company, The. (See R. L. Company, The, assignor.)

Old Gold Ginger Ale Co. (See Brown, Sidney W.)

Omaha Cap Manufacturing Company, Omaha, Nebr. Caps. 285,605; July 28; Serial No. 277,037; published May 19, 1931. Class 39.

Omaha Steel Works, Omaha, Nebr. Steel castings. 285,474; July 28; Serial No. 319,986; published May 19, 1931. Class 14.

Oneida Community, Limited, Oneida, N. Y. Spoons. 82,907; renewed Aug. 1, 1931.

Oral Hygiene, Inc. (See Smith, Lee S., & Son Co.)

Orent, Jacob L., Brooklyn, N. Y. Fur coats. 285,432; July 28; Serial No. 311,484; published May 19, 1931. Class 39.

Pabst Corporation, doing business as Europa Malt Syrup Co., Milwaukee, Wis. Malt syrup. 285,495; July 28; Serial No. 312,812; published May 19, 1931. Class 46.

Pacific Products, Inc., San Francisco, Calif. Mineral water. 285,555; July 28; Serial No. 292,951; published May 19, 1931. Class 45.

Package Paper Company, Holyoke, Mass. Lace reproductions on transparent paper or paper substitutes. 285,562; July 28; Serial No. 304,628; published May 12, 1931. Class 37.

Palmer Lime & Cement Company, New York, N. Y. Whiting. 285,624; July 28. Class 16.

Paraffine Companies, Inc., The, San Francisco, Calif. Paint brushes. 285,544; July 28; Serial No. 297,760; published May 19, 1931. Class 29.

Paramount Pen Co., Inc., Weehawken, N. J. Fountain pens and pencils. 285,570; July 28; Serial No. 312,236; published May 12, 1931. Class 37.

Peerless Oyster Company, Baltimore, Md. Poultry food. 84,518; renewed Dec. 19, 1931.

Peerless Rubber Manufacturing Company, New Durham, N. J., and New York, N. Y., assignor to United States Rubber Company, New York, N. Y. Packing. 82,908; renewed Aug. 1, 1931.

Penketh Tanning Company Limited, The, Penketh, near Warrington, England. Sole leather. 83,433; renewed Sept. 12, 1931.

Penney, J. C., Company, Wilmington, Del., and New York, N. Y. Hats. 285,401; July 28; Serial No. 310,528; published May 12, 1931. Class 39.

Pequot Soap Works, Inc. (See Lavietes, David P.)

Petersburg Mill Company, Petersburg, Tenn. Wheat flour. 285,630; July 28. Class 46.

Pettit & Whitacre, Inc., doing business as Drink-Apep Company, North Merchantville, N. J. Herb drink or tonic. 285,436; July 28; Serial No. 311,485; published May 12, 1931. Class 45.

Phar's Tire and Rubber Company, The, Newark, Ohio. Pneumatic rubber tires. 285,612; July 28. Class 35.

Phelps, William J., Detroit, Mich., assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y. Incandescent electric lamps. 37,162; renewed Oct. 1, 1931.

Phosferine (Ashton & Parsons) Limited. (See Ashton & Parsons Ltd., assignor.)

Pillsbury Flour Mills Company, Minneapolis, Minn. Wheat flour. 285,538; July 28; Serial No. 310,069; published May 12, 1931. Class 46.

Pillsbury Flour Mills Company, Minneapolis, Minn. Wheat flour. 285,565; July 28; Serial No. 310,068; published May 12, 1931. Class 46.

Pioneer Sales Co., Philadelphia, Pa. Malt extract. 285,476; July 28; Serial No. 309,867; published May 19, 1931. Class 46.

Plastergon Wall Board Co., Tonawanda, N. Y., to The Plastergon Wall Board Co., Buffalo, N. Y. Wall boards. 84,522; renewed Dec. 19, 1931. Class 12.

Poirier, Marie, doing business as M. N. Poirier Co., New York, N. Y. Silver polish. 285,628; July 28. Class 4.

Polar Ware Company, Sheboygan, Wis. Vitreous enamel pots, pans and kettles, etc. 285,528; July 28; Serial No. 310,836; published May 19, 1931. Class 13.

Pollak, Henry, Inc., New York, N. Y. Felt hats, untrimmed. 285,359; July 28; Serial No. 307,110; published May 12, 1931. Class 39.

Pollak, Henry, Inc., New York, N. Y. Felt hats, untrimmed. 285,588; July 28; Serial No. 307,108; published May 12, 1931. Class 39.

Prince Lauten Corp., New York, N. Y. Cotton fabrics. 285,610; July 28; Serial No. 311,157; published May 12, 1931. Class 42.

Princess Pat Products Limited, Toronto, Ontario, Canada. Hair nets. 285,573; July 28; Serial No. 312,161; published May 19, 1931. Class 42.

Propper-McCallum Hosiery Co., Inc., New York, N. Y. Hosiery. 285,387; July 28; Serial No. 311,927; published May 5, 1931. Class 39.

Propper-McCallum Hosiery Co., Inc., New York, N. Y. Hosiery. 285,424; July 28; Serial No. 312,814; published May 19, 1931. Class 39.

Pulitzer Publishing Company, St. Louis, Mo. Column or section of a newspaper. 285,584; July 28; Serial No. 300,298; published May 12, 1931. Class 38.

Pure Oil Company, The. (See Tiona Oil Company, assignor.)

Purex Corporation, Ltd., Los Angeles, Calif. Liquid cleaning preparation. 285,619; July 28. Class 4.

Puritan Mills, Atlanta, Ga. Dairy feeds. 285,547; July 28; Serial No. 296,147; published May 13, 1930. Class 46.

R C A Victor Company, Inc. (See Victor Talking Machine Company, assignor.)

R. L. Company, The, Kansas City, Mo., assignor to The Nonspi Company, St. Louis, Mo. Antiseptic liquid for preventing perspiration. 84,129; renewed Nov. 7, 1931.

Rand Shoe Company, New Orleans, La. Leather shoes and boots. 285,553; July 28; Serial No. 296,198; published May 19, 1931. Class 39.

Richards Manufacturing Company. (See Fish, Albert A.)

Richardson, Artemus P., assignor to Thos. D. Richardson Company, Philadelphia, Pa. Plaited cream mint and other candy. 37,225; renewed Oct. 22, 1931.

Rinehardt, Frank M., Badin, N. C. Soaps. 285,445; July 28; Serial No. 311,932; published May 12, 1931. Class 4.

Riverside Heights Orange Growers Association, Riverside, Calif. Fresh citrus fruits. 285,604; July 28; Serial No. 279,238; published May 12, 1931. Class 46.

Robbins, John E., assignor, by mesne assignments, to Elizabeth Robbins, Greensburg, Ind. Medicated salt for stock. 82,472; renewed June 27, 1931.

Rockola, David Co., Chicago, Ill. Weighing scales. 285,414; July 28; Serial No. 312,390; published May 19, 1931. Class 26.

Roesing, John, Chicago, Ill. Whiskey. 285,504; July 28; Serial No. 313,005; published May 12, 1931. Class 49.

Roethlisberger & Co. Inc., New York, N. Y. Cheese. 285,459; July 28; Serial No. 311,789; published May 19, 1931. Class 46.

Rosenberg, Harry, doing business as Rosenberg's Department Store, Detroit, Mich. Hosiery. 285,627; July 28. Class 39.

Ross, Sydney, Co., The, Newark, N. J. Toilet soap. 285,346; July 28; Serial No. 300,966; published May 12, 1931. Class 4.

Royal Manufacturing Company, Toledo, Ohio. Golf clubs and balls. 285,492; July 28; Serial No. 312,666; published May 12, 1931. Class 22.

Russell Manufacturing Company, The, Middletown, Conn. Belting made of rubber for power transmission, etc. 285,396; July 28; Serial No. 312,573; published May 19, 1931. Class 35.

Rutecki, Valeria, Philadelphia, Pa. Food preparation in liquid form. 285,506; July 28; Serial No. 308,493; published May 19, 1931. Class 46.

Ryan, Matthew W., & Co. Inc. (See Brown, Wm. H., Son & Co.)

Safety Filler Corporation, Chicago, Ill. Egg fillers. 285,629; July 28. Class 2.

Sauer, Friedrich, G. m. b. H., Gotha, Germany. Yeast preparations. 285,507; July 28; Serial No. 308,392; published May 12, 1931. Class 46.

Savignon, Henri, Boussard Freres et Dieux Societe en nom Collectif, Paris, France. Wines. 285,380; July 28; Serial No. 312,375; published May 12, 1931. Class 47.

Savignon, Henri, Boussard Freres et Dieux, Societe en nom Collectif, Paris, France. Unfermented grape juice. 285,381; July 28; Serial No. 312,374; published May 12, 1931. Class 45.

Scharf, Joseph H., doing business as Essanay Dress Company, New York, N. Y. Misses' dresses. 285,441; July 28; Serial No. 309,236; published May 5, 1931. Class 39.

Schmid, Julius, Inc., Astoria, to Julius Schmid, Inc., New York, N. Y. Rouge. 82,112; renewed May 30, 1931.

Sego Milk Products Company. (See Utah Condensed Milk Co.)

"Selas" Gesellschaft mit beschränkter Haftung, Berlin, Germany, assignor to The Selas Company, Philadelphia, Pa. Machinery. 84,344; renewed Nov. 28, 1931.

Sherman, R. I., Mfg. Co., The, Boston, Mass., to Roger I. Sherman, Plymouth, Mass., successor. Grocery specialties. 36,337; renewed Apr. 30, 1931.

Silva, John R., doing business as John R. Silva & Co., Brooklyn, N. Y. Coffee, olive oil, cocoa, tea, etc. 285,340; July 28; Serial No. 307,743; published May 19, 1931. Class 46.

Simmons, Theodore N., doing business as T. N. Simmons & Company, Stamford, Conn. Preparation for making desserts and sauces. 285,614; July 28. Class 46.

Simon Millinery Supply Company, San Francisco, Calif. Hats. 285,355; July 28; Serial No. 305,055; published May 12, 1931. Class 39.

Simon Millinery Supply Company, San Francisco, Calif. Hats. 285,592; July 28; Serial No. 305,056; published May 12, 1931. Class 39.

Slater, S., & Sons, Inc., New York, N. Y. Pile fabrics and/or combinations thereof. 285,525; July 28; Serial No. 310,957; published May 19, 1931. Class 42.

Smith, Lee S., & Son Co., to Oral Hygiene, Inc., Pittsburgh, Pa., successor. Periodical. 83,016; renewed Aug. 8, 1931.

Smooke, Maurice, doing business as Standard Handkerchief Mfg. Co., New York, N. Y. Handkerchiefs. 285,563; July 28; Serial No. 304,588; published Oct. 7, 1930. Class 42.

Società Generale Delle Conserve Alimentari Cirio, San Giovanni a Teduccio, near Naples, Italy. Tomato extract. 84,049; renewed Oct. 31, 1931.
Sone & Fleming Manufacturing Co. (Limited), assignor to Standard Oil Company of New York, New York, N. Y. Illuminating oils. 8,674; renewed Sept. 27, 1931.
Sonneborn, L., Sons, Inc., New York, N. Y. Paints. 83,697; renewed Oct. 3, 1931.
Sonneborn, L., Sons, Inc., New York, N. Y. Asphalt compositions and paints. 84,050; renewed Oct. 31, 1931.
Spence, Dellas J., doing business as Taneycomo Fish Bait Company, Branson, Mo. Prepared fish bait. 285,379; July 28; Serial No. 312,393; published May 19, 1931. Class 22.
Spratt's Patent Limited, London, England. Preparations for feeding pheasants and other game-birds and poultry. 82,838; renewed July 25, 1931.
Spratt's Patent Limited, London, England. Food for dogs and cats. 83,522; renewed Sept. 19, 1931.
Stametco Broom & Mfg. Co. Inc., St. Paul, Minn. Brooms and mop attachments for brooms. 285,349; July 28; Serial No. 306,291; published May 19, 1931. Class 29.
Standard Handkerchief Mfg. Co. (See Smooke, Maurice.)
Standard Oil Company, Whiting, Ind. Petroleum pitch. 84,416; renewed Dec. 12, 1931.
Standard Oil Company of New York. (See Sone & Fleming Manufacturing Co. (Limited), assignor.)
Standard Oil Company of New York, New York, N. Y. Naptha and gasolene. 83,100; renewed Aug. 15, 1931.
Standard Overall Company, The, Baltimore, Md. Shirts, overalls, and pants. 285,419; July 28; Serial No. 311,983; published May 12, 1931. Class 39.
Standard Varnish Works, New York, N. Y. Insulating varnishes. 37,362; renewed Nov. 26, 1931.
Steam and Combustion Company, Chicago, Ill. Burners, such as gas burners, oil conversion burners, etc. 285,578; July 28; Serial No. 303,220; published May 12, 1931. Class 34.
Sterling Products Co., Evansville, Ind. Malt extract. 285,522; July 28; Serial No. 312,064; published May 19, 1931. Class 46.
Stevens, Chas. A., & Bros., Chicago, Ill. Corsets. 84,545; renewed Dec. 19, 1931.
Stewart Curtis Packers, Inc., Los Angeles, Calif. Canned and bottled olives. 285,635; July 28. Class 46.
Straus, Royer & Strass, Inc., Baltimore, Md. Dresses, shirts, shorts, blouses, etc. 285,425; July 28; Serial No. 312,500; published May 19, 1931. Class 39.
Stuart Bros. Corporation, Bartow, Fla. Fresh citrus fruits. 285,532; July 28; Serial No. 310,496; published May 19, 1931. Class 46.
Summit Thread Company, East Hampton, Conn., and Boston, Mass. Threads. 285,442; July 28; Serial No. 311,984; published May 5, 1931. Class 43.
Swift and Company, Chicago, Ill. Soaps. 37,359; renewed Nov. 26, 1931.
Taneycomo Fish Bait Company. (See Spence, Dellas J.)
Technical Economist Corporation, New York, N. Y. Apparatus for drying wood pulp. 285,607; July 28; Serial No. 262,134; published June 12, 1928. Class 23.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,273–80; renewed Nov. 21, 1931.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,284; renewed Nov. 21, 1931.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,286; renewed Nov. 21, 1931.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,290–5; renewed Nov. 21, 1931.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,347; renewed Nov. 28, 1931.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,349; renewed Nov. 28, 1931.
Thread Mills Company, The, Monticello, Ind. Thread and yarn. 285,467; July 28; Serial No. 312,105; published May 12, 1931. Class 43.
Thum, O. & W., Company, The, Grand Rapids, Mich. Sticky fly paper. 285,609; July 28; Serial No. 310,959; published May 19, 1931. Class 50.
Tim & Co., New York and Troy, N. Y., assignor to Glnett, Peabody & Co., Inc., Troy, N. Y. Textile collars. 84,552; renewed Dec. 19, 1931.
Timme, E. F., & Son, New York, N. Y. Pile fabrics. 285,484; July 28; Serial No. 312,581; published May 19, 1931. Class 42.
Tiona Oil Company, Binghamton, N. Y., assignor to The Pure Oil Company, Chicago, Ill. Lubricating oils. 84,440; renewed Dec. 12, 1931.
Train, John, Pipestone, Minn. Card games. 285,458; July 28; Serial No. 311,803; published May 19, 1931. Class 22.
Treffinger, Henry, New York, N. Y. Horse-radish, pickled beets, pickled tomatoes, chowchow, etc. 285,556; July 28; Serial No. 292,340; published Dec. 16, 1930. Class 46.
United Electric Company, The, Canton, Ohio. Vacuum cleaners. 82,847; renewed July 25, 1931.
United States Rubber Company. (See Peerless Rubber Manufacturing Company, assignor.)
United States Rubber Company, New York, N. Y. Boots and shoes. 285,430; July 28; Serial No. 311,031; published May 19, 1931. Class 39.
Universal Full Fashioned Hosiery Co., Inc., Paterson, N. J. Hosiery. 285,404; July 28; Serial No. 311,453; published May 12, 1931. Class 39.
Utah Condensed Milk Co., Richmond, Utah, by change of name to Sego Milk Products Company, Salt Lake City, Utah. Condensed milk. 84,441; renewed Dec. 12, 1931.
Van Beuren Corporation, The, New York, N. Y. Motion picture films. 285,350; July 28; Serial No. 308,046; published May 19, 1931. Class 26.
Verellen Limited, Antwerp, Belgium. Cigars, cigarillos, cigarettes, and tobacco. 285,475; July 28; Serial No. 309,910; published May 12, 1931. Class 17.
Victor Talking Machine Company, assignor to R C A Victor Company, Inc., Camden, N. J. Talking machines and parts thereof. 84,199; renewed Nov. 14, 1931.
Vitelli & Company, New York, N. Y. Canned peeled tomatoes and canned tomato sauce. 285,457; July 28; Serial No. 311,807; published May 12, 1931. Class 46.
Von Barby, Maria, Weimar, Germany. Remedy for gall stones. 82,747; renewed July 25, 1931.
Wafelteen Syrup Co. (See Bowen, Walter W.)
Wall, Ruben E., doing business as Whoopee Pipes, Buffalo, N. Y. Smoking pipes. 285,502; July 28; Serial No. 313,064; published May 19, 1931. Class 8.
Warrick, Frederic W., assignor to The Iron Jelloid Co., Limited, London, England. Capsules, pills, and medicated jujubes. 83,874; renewed Oct. 17, 1931.
Wasson, Augusta, Whitestone, Long Island, N. Y. Dolls. 285,611; July 28; Serial No. 311,012; published May 19, 1931. Class 23.
Waterhouse Woolen Company, Chicago, Ill. Unfinished worsted woolen cloth. 285,511; July 28; Serial No. 308,149; published May 5, 1931. Class 42.
Webster, Warren, & Company, Camden, N. J. Steam heating and ventilating apparatus. 84,148; renewed Nov. 7, 1931.
Wedler-Shuford Co., The, St. Louis, Mo. Infant's textile napkins. 285,473; July 28; Serial No. 312,022; published May 19, 1931. Class 42.
Wehrle Company, The, Newark, Ohio. Stoves and ranges. 285,529; July 28; Serial No. 310,815; published May 19, 1931. Class 34.
Well Clothing Co., St. Louis, Mo. Wearing apparel. 285,591; July 28; Serial No. 305,257; published May 5, 1931. Class 39.
Weiner, Louis I., doing business as Lujo Pharmacal Co., New York, N. Y. Suppositories. 285,620; July 28. Class 6.
West Coast Grocery Company, Tacoma, Wash. Canned fruits, canned vegetables, food flavoring extracts, etc. 285,456; July 28; Serial No. 311,809; published May 12, 1931. Class 46.
West Coast Knitting Mills, Los Angeles, Calif. Swimming suits. 285,407; July 28; Serial No. 311,294; published May 19, 1931. Class 39.
Western Grocery Company, Marshalltown, Iowa. Canned hominy. 82,487; renewed June 27, 1931.
Wholesale Radio Service Co., Inc., Wilmington, Del., and New York, N. Y. Sporting and athletic goods. 285,438; July 28; Serial No. 311,455; published May 19, 1931. Class 22.
Whoopee Pipes. (See Wall, Ruben E.)
Will & Baumer Company, The, by change of name to The Will & Baumer Candle Co., Inc., Syracuse, N. Y. Candles. 83,958; renewed Oct. 24, 1931.
Williams, J. B., Company, The, Glastonbury, Conn. Hair and beard preparations, except soap. 37,452; renewed Dec. 10, 1931.
Williams, J. B., Company, The, Glastonbury, Conn. Soap. 84,560; renewed Dec. 19, 1931.
Williams, J. B., Company, The, Glastonbury, Conn. Toilet powders. 84,709; renewed Dec. 26, 1931.
Wilson-Jones Company, Chicago, Ill. Visible card index cabinet. 285,451; July 28; Serial No. 312,077; published May 19, 1931. Class 32.
Wittel, William F., Irvington, N. J. Fences and parts thereof. 285,384; July 28; Serial No. 312,278; published May 12, 1931. Class 13.
Wolverine Supply & Manufacturing Company, Pittsburgh, Pa. Toy sets. 285,595; July 28; Serial No. 313,263; published May 19, 1931. Class 22.
Woolsey, C. A., Paint & Color Company, Jersey City, N. J. Cold water paint. 82,545; renewed July 4, 1931.
Woolsey, C. A., Paint & Color Company, Jersey City, N. J. Interior paint. 82,546; renewed July 4, 1931.
Wright, Wm. E., & Sons Company, Orange, N. J. Bias fold tapes and trimmings of fabric. 285,554; July 28; Serial No. 295,591; published May 12, 1931. Class 40.
Zuercher, Charles R., jr., doing business as Home-Wood Cheese Co., Chicago, Ill. Cheese. 285,587; July 28; Serial No. 299,027; published Oct. 7, 1930. Class 46.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Beech-Nut Packing Company, Canajoharie, N. Y. Autogiro. For Chewing Gum. 39,454; July 28.
Fortnum & Mason Inc., New York, N. Y. Fortnum & Mason's, Grapefruit. Renowned for Quality. For Canned Grapefruit. 39,455; July 28.
Fortnum & Mason Inc., New York, N. Y. Fortnum & Mason's, Inc., Salted Cashews, 607 Madison Ave., New York. For Salted Cashews. 39,456; July 28.
Fortnum & Mason Inc., New York, N. Y. Fortnum & Mason's, Fancy Crab Meat. Renowned for Quality. For Canned Crab Meat. 39,457; July 28.
Harbourts Drug Company, Trenton, N. J. Tus. For Medicinal Preparation for Coughs. 39,458; July 28.
Hollywood Candy Co. (See Martoccio, F. A., Company.)
Kahn, Jacob, doing business as Lily White Mfg. Co., Brooklyn, N. Y. Lily White. For Shoe Whitener and Cleaner. 39,459; July 28.
Kurtz Bros. Corporation, Philadelphia, Pa. King Macaroni. For Macaroni. 39,460; July 28.
Lees Manufacturing Co., The, Westport, Conn. Octagon Rayon Ribbon-Cord. For Cord. 39,461; July 28.
Lees Manufacturing Co., The, Westport, Conn. Octagon Tinsel Ribbon-Cord. For Cord. 39,462; July 28.
Leon, Philip, New York, N. Y. Lion Head. For Sheets and Pillow Cases. 39,463; July 28.
Lily White Mfg. Co. (See Kahn, Jacob.)
Martoccio, F. A., Company, doing business as Hollywood Candy Co., Minneapolis, Minn. Zero. For Candy Bars. 39,464; July 28.
Paraffine Companies, Inc., The, San Francisco, Calif. Pabco Guaranty 5 Rug. For Rugs. 39,465; July 28.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

B. V. D. Company, Inc., The, New York, N. Y. 'Johnny' Weissmuller—the Ace Swimmer of All Time. For Bathing Suits. 13,314; July 28.
Betterly, Warren, Waterbury, Conn. Fire-Brite Anthracite. For Anthracite Coal. 13,315; July 28.
F. & N. Lawn Mower Company, The, Richmond, Ind. Novo, The Unbreakable Lawn Mower. For Lawn Mowers. 13,316; July 28.
Vacuum Oil Company, New York, N. Y. Mobiloil Master Service. For Automobile Lubricants. 13,317; July 28.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Acheson Oildag Company, Port Huron, Mich. Lubricants. 315,174; July 28. Class 15.
Adler, Harry, Coat Co. Inc., New York, N. Y. Coats. 315,622; July 28. Class 39.
Agfa Ansco Corporation, Binghamton, N. Y. Sensitized photographic film. 314,831; July 28. Class 26.
Alco Feed Mills, Atlanta, Ga. Feeds. 307,026; July 28. Class 46.
American Character Doll Co. Inc., New York, N. Y. Dolls. 316,147; July 28. Class 22.
American Mint Corporation, New York, N. Y. Candy and candy tablets. 315,298; July 28. Class 46.
Amtorg Trading Corporation, New York, N. Y. Canned fish. 308,570; July 28. Class 46.
Angelus, Louis, doing business as Nuzone Products Co., New York, N. Y. Cleansing compounds for hats. 312,253; July 28. Class 4.
Ansonia O & C Company, The, Ansonia, Conn. Elastic webbing. 315,623; July 28. Class 42.
Argol Chemicals, Inc., The, Baltimore, Md. Cleansing compound. 311,592; July 28. Class 4.
Arthur Stores, Incorporated, The, Union, S. C. Silk hosiery. 315,236; July 28. Class 39.
Associated Silver Company, Chicago, Ill. Boxes and chests. 313,070; July 28. Class 2.
Atlas Mills. (See Goldman, Charles.)
Becker, J. W., doing business as Hormona Co., San Francisco, Calif. General gland tonic. 306,632; July 28. Class 6.
Benn, Joseph, Corporation, Greystone, R. I., and New York, N. Y. Mohair suitings. 314,636; July 28. Class 42.
Berkeley Company, The. (See Hazle, Stephen B.)
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 315,779–80; July 28. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 315,782; July 28. Class 42.
Boker, H., & Co., Inc., New York, N. Y. Toy construction wood building blocks. 294,462; July 28. Class 22.
Bosworth, Harry J., Company, Chicago, Ill. Tooth brushes. 313,701–4; July 28. Class 29.
Bowditch Mills, Inc., Pascoag, R. I. Fibers for decorating cloth, etc. 314,944; July 28. Class 1.
Boyle, Frank J., New York, N. Y. Humidors for cigars, etc. 315,582; July 28. Class 8.
Bre-Carbo Mfg. Co., New York, N. Y. Preparation for the treatment of constipation. 314,890; July 28. Class 6.
Brill, H. C., Company, Inc., Newark, N. J. Cake. 315,243; July 28. Class 46.
Brooklyn Beverage Dealers Association, Inc., Brooklyn and New York, N. Y. Malt beverages. 311,855; July 28. Class 48.
Bulova Watch Company, Inc., New York, N. Y. Watches. 315,822; July 28. Class 27.
Cabinet Mfg. Co., Quincy, Ill. Shirts. 315,133; July 28. Class 39.
Capital City Baking Co., Harrisburg, Pa. Bread. 315,988; July 28. Class 46.
Carter, William, Company, The, Needham Heights, Mass. Corsets, girdles, and foundation garments. 315,962; July 28. Class 39.
Cascadon Laboratories. (See Zally, Anthony K.)
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 315,897; July 28. Class 42.
Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 313,833; July 28. Class 4.
Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving cream. 315,730–1; July 28. Class 4.
Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving cream. 315,989; July 28. Class 4.
Columbus McKinnon Chain Corporation, Tonawanda, N. Y. Chain hoist. 315,135; July 28. Class 23.
Commercial Chemical Company of Tennessee, Memphis, Tenn. Calcium arsenate. 313,108; July 28. Class 6.
Condossis Tobacco Corporation, New York, N. Y. Cigars, cigarettes, etc. 315,036; July 28. Class 17.
Cone Export and Commission Company, New York, N. Y. Cotton goods. 296,220; July 28. Class 42.
Crane Co., Chicago, Ill. Globe and check valve. 314,898; July 28. Class 13.
Czechslovak Musical Instruments Company, New York, N. Y. Violins, violas, cellos, etc. 308,532; July 28. Class 36.
Da-Lee Candy Co. (See Plotke, David.)
De Gilio, Nicholas, San Francisco, Calif. Beverage filters. 315,659; July 28. Class 31.
Demi-Tasse Manufacturing Co., Brooklyn, N. Y. Maltless beverages. 315,529; July 28. Class 45.
Dighton Manufacturing Company, North Dighton, Mass. Blanket and other textile bindings. 313,423; July 28. Class 40.
Dooly Manufacturing Co., Inc., The, Philmont, N. Y. Glues. 316,122; July 28. Class 5.
Dortch, Ambrose M., Spokane, Wash. Cookies. 314,687; July 28. Class 46.
Earl Fruit Company, San Francisco, Calif. Fresh fruits. 315,530; July 28. Class 46.
Eberle Tanning Company, Westfield, Pa. Leather. 315,254–5; July 28. Class 1.
Ebinger, D. A., Sanitary Manufacturing Company, The, Columbus, Ohio. Enameled ware. 302,373; July 28. Class 13.
Ebner Shoe Company, Milwaukee, Wis. Shoes, oxfords, slippers, etc. 315,677; July 28. Class 39.
Edward Valve and Manufacturing Co., The, East Chicago, Ind. Periodical. 314,027; July 28. Class 38.
Elgin National Watch Company, Chicago and Elgin, Ill. Watches, watch movements, etc. 305,348; July 28. Class 27.
Enterprise Manufacturing Company, The, Akron, Ohio. Artificial bait. 316,196; July 28. Class 22.
En-Ve Incorporated, Detroit, Mich. Cleansing cream and toilet powder. 294,716; July 28. Class 6.
Felsenthal, Ben, & Co., Inc., New York, N. Y. Jewelry and costume jewelry. 315,679; July 28. Class 28.
Fisher, Samuel S., St. Paul, Minn. Salted nuts. 274,041; July 28. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Fleisher Yarns, Inc., New York, N. Y. Yarns. 315,308; July 28. Class 43.
Forest City Bronze Company. (See Long, Benjamin J.)
Frost, George, Company, Boston, Mass. Garters. 314,795; July 28. Class 39.
Glass, Henry, & Co., New York, N. Y. Piece goods. 315,048–9; July 28. Class 42.
Globe Machine & Stamping Company, Cleveland, Ohio. Radiator shutters, Automobile. 314,954; July 28. Class 19.
Gold Dust Corporation, New York, N. Y. Soap. 315,393; July 28. Class 4.
Goldman, Charles, doing business as Atlas Mills, New York, N. Y. Textile fabrics. 315,394; July 28. Class 42.
Gordon-Allen Ltd., Oakland, Calif. Soap. 315,595; July 28. Class 4.
Gorov, Joshua, Los Angeles, Calif. Candy. 314,991; July 28. Class 46.
Greiner Chemical Corporation, The, Fort Wayne, Ind. Plant food and fertilizing preparation. 314,756; July 28. Class 10.
Guerin & Lorimer, New York, N. Y. Metal polish. 315,395; July 28. Class 4.
Gumpert, S., Co. Inc., Brooklyn, N. Y. Cup cakes, cookies, and pastries. 315,615; July 28. Class 46.
Hahn Department Stores, Inc., Wilmington, Del. Shoes. 315,261; July 28. Class 39.
Halsell, Harold, Company, Oklahoma City, Okla. Cartoon strips. 314,501; July 28. Class 38.
Harper, Martha Matilda, Inc., Rochester, N. Y. Acne or pimple lotion, bluing, etc. 312,782; July 28. Class 6.
Hazle, Stephen B., doing business as The Berkeley Company, Richmond, Va. Prophylactic rubber articles. 312,150; July 28. Class 44.
Heller-Deltah Company, Inc., New York, N. Y. Perfumes, toilet waters, etc. 291,616–7; July 28. Class 6.
Helzberg, Barnett C., doing business as Helzberg's Diamond Shop, Kansas City, Kans. Diamonds. 315,634; July 28. Class 28.
Himmah & Moffitt, Salinas, Calif. Fresh vegetables. 315,516; July 28. Class 46.
Hiss, John M., Columbus, Ohio. Shoes. 309,477; July 28. Class 39.
Holland-Hessol Co. Inc., New York, N. Y. Petticoats, pajamas, etc. 313,919; July 28. Class 39.
Hoover Co., The, San Francisco, Calif. Diaper covers. 315,536; July 28. Class 39.
Hormona Co. (See Becker, J. W.)
Hygrade Lamp Company, Boston, Mass. Electron radio tubes. 315,144; July 28. Class 21.
International Fruit Corporation, Orlando, Fla. Fresh citrus fruits. 313,239; July 28. Class 46.
International Shoe Co., St. Louis, Mo. Boots and shoes. 315,690; July 28. Class 39.
International Shoe Company, St. Louis, Mo. Boots and shoes. 316,009; July 28. Class 39.
International Sugar Feed No. Two Company, Memphis, Tenn. Stock food. 314,113–14; July 28. Class 46.
Jackson & Jackson Company, Salisbury, Md. Shirts. 315,912; July 28. Class 39.
K. and G. Manufacturing Company. (See King, C. M.)
Kelly and Mount, Baldwinsville, N. Y. Gasoline and motor fuel oils. 315,312; July 28. Class 15.
Kahn, Jacob, doing business as Lily White Mfg. Co., Brooklyn, N. Y. Shoe whitener and cleaner. 314,369; July 28. Class 4.
Kelly and Mount, Baldswinsville, N. Y. Gasoline and motor fuel oils. 315,312; July 28. Class 15.
Kendall Company, The, Walpole, Mass. Cheese cloth. 310,017; July 28. Class 42.
King, C. M., doing business as K. and G. Manufacturing Company, Birmingham, Ala. Wheel pullers and ignition cable extractors. 315,269; July 28. Class 23.
Kingsport Press, Inc., Kingsport, Tenn. Airbrush finished book covers. 315,598–9; July 28. Class 37.
Krank, A. J., Company, St. Paul, Minn. Face creams, cleansing creams, etc. 301,114; July 28. Class 6.
Kresge Department Store Corporation, Newark, N. J. Soap. 315,539; July 28. Class 4.
Kresge Department Store Corporation, Newark, N. J. Shoes. 315,542; July 28. Class 39.
Lancor, Joseph H., doing business as Lancor Manufacturing Company, Providence, R. I. Hair clasps, lingerie clasps, etc. 314,059; July 28. Class 28.
Lee, Frank H., Company, The, Danbury, Conn. Felt hats. 311,388; July 28. Class 39.
Leinenkugel, Jacob, Brewing Co., Inc., Chippewa Falls, Wis. Ginger ale. 314,412; July 28. Class 45.
Leo's Shoes, Inc., Brooklyn, N. Y. Shoes. 316,010; July 28. Class 39.
Lesher, Whitman & Co., Inc., New York, N. Y. Piece goods. 315,406; July 28. Class 42.
Lily White Mfg. Co. (See Kahn, Jacob.)
Liquori, Celeste A., New York, N. Y. Candy. 315,464; July 28. Class 46.
Long, Benjamin J., doing business as Forest City Bronze Company, Cleveland, Ohio. Weather strip. 309,824; July 28. Class 12.
Marros, Arthur, New York, N. Y. Canary birds. 314,024; July 28. Class 1.
May Department Stores Company, The, St. Louis, Mo. Shirts. 314,998; July 28. Class 39.
McLaurin-Jones Co., Brookfield, Mass. Decalcomania paper. 316,045; July 28. Class 37.
Meadowland Confections Limited, London, England. Confectionery. 311,039; July 28. Class 46.
Miami Avocado & Citrus Growers Inc., Avocado Park Groves, Miami, Fla. Fresh citrus fruit. 313,215; July 28. Class 46.
Michael, Julius, Brooklyn, N. Y. Safety razor sharpening device. 302,128; July 28. Class 4.
Midway Chemical Company, Chicago, Ill. Shoe polish. 314,572; July 28. Class 4.
Miller, Irving, Company, New York, N. Y. Clocks. 316,046; July 28. Class 27.
Monroe Bottling Company. (See Szwajkos, John K.)
Mooring, Ward, Bryan, Tex. Alfalfa leaf meal, etc. 315,864; July 28. Class 46.
Motor Melody Corporation, Chicago, Ill. Radio receiving sets. 314,855; July 28. Class 21.
Mountain States Mixed Feed Company, Denver, Colo. Baby chick starter mash, etc. 313,926; July 28. Class 46.
Mountain States Mixed Feed Company, Denver, Colo. Baby chick starter mash, etc. 313,928–9; July 28. Class 46.
Mountain States Mixed Feed Company, Denver, Colo. Baby chick starter mash, etc. 313,931; July 28. Class 46.
Murdock Mfg. & Supply Company, The, Cincinnati, Ohio. Shut off valves and steam valves. 315,549; July 28. Class 13.
Newton Products Company, The, Cincinnati, Ohio. Nuts, peanut butter, vinegar, etc. 301,054; July 28. Class 46.
New York Pattern Company, Inc., The, New York, N. Y. Paper patterns. 315,551; July 28. Class 26.
Novo Engine Company, Lansing, Mich. Pumps. 314,167; July 28. Class 23.
Nuzone Products Co. (See Angelus, Louis.)
Oakes, Thomas, & Co., Bloomfield, N. J. Woolen and worsted cloths. 312,858; July 28. Class 42.
Oakes, Thomas, & Co., Bloomfield, N. J. Woolen and worsted cloths. 312,860; July 28. Class 42.
Oakland Lumber Company, Orgas, W. Va. Rough lumber. 313,751; July 28. Class 12.
Ohio and Michigan Paper Company, The, Toledo, Ohio. Wrapping paper, toilet paper, etc. 303,778; July 28. Class 37.
Oklahoma Portland Cement Company, Oklahoma City, Okla. Quick hardening oil well cement. 308,501; July 28. Class 12.
Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics. 315,318; July 28. Class 42.
Pacific Egg Producers Cooperative, Inc., New York, N. Y. Eggs. 312,247; July 28. Class 46.
Pacific Products, Inc., San Francisco, Calif. Maltless beverages. 315,321–3; July 28. Class 45.
Paddock Cork Company, Inc., New York and Brooklyn, N. Y. Cork stoppers. 315,365; July 28. Class 50.
Page Steel and Wire Company, Adrian, Mich., and Bridgeport, Conn. Steel and iron magnet core wire. 315,554; July 28. Class 21.
Palmer, A. N., Company, The, New York, N. Y. Penholders. 314,713; July 28. Class 37.
Pennsylvania Textile Mills, Inc., New York, N. Y. Pile fabrics. 315,414; July 28. Class 42.
Perlstein, H., Philadelphia, Pa. Cut glass, ornamental glass, etc. 313,969; July 28. Class 33.
Pittsburgh Steel Company, Pittsburgh, Pa. Wire fencing. 316,132; July 28. Class 13.
Plotke, David, doing business as Da-Lee Candy Co., Chicago, Ill. Candy bars. 314,862; July 28. Class 46.
Procter & Gamble Company, The, Cincinnati, Ohio. Soap. 306,070; July 28. Class 4.
Rasmussen, Geo., Co., Chicago, Ill. Maltless beverages. 315,502; July 28. Class 45.
Regelson and Rostow, New Haven, Conn. Prophylactic rubber articles. 315,648; July 28. Class 44.
Remington Rand Inc., Buffalo, N. Y. Bound books for accounts and records, etc. 308,036; July 28. Class 37.
Rhodey Corporation, The, Baltimore, Md. Plant stimulant tablets. 315,887; July 28. Class 10.
Rialto Corporation, The, Long Beach, Calif. Canned fish, canned pimientos. 282,747; July 28. Class 46.
Rimmer, Herbert A., Glasgow, Scotland. Indoor and outdoor game played with shuttle-cocks. 313,446; July 28. Class 22.
Robinson Milling Company, The, Salina, Kans. Wheat flour. 315,278; July 28. Class 46.
Royal Baking Powder Company, New York, N. Y. Gelatine desserts. 315,013; July 28. Class 46.
Royal Baking Powder Company, New York, N. Y. Gelatin desserts. 315,014; July 28. Class 46.
Salina Products Corporation, Syracuse, N. Y. Malt syrup and malt extract. 314,536; July 28. Class 46.
Salvato, Charles, doing business as Charles Salvato & Company, Brooklyn, N. Y. Uniforms. 314,656; July 28. Class 39.
Sanford Mills, The, Sanford, Me. Mixed angora, hair and cotton fabric. 315,280; July 28. Class 42.
Scheinert Bros., Inc., New York, N. Y. Show case adhesive cement. 313,390; July 28. Class 5.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Sclafani Brothers, Brooklyn, N. Y. Canned vegetables and fish. 312,315; July 28. Class 46.
Sears, Roebuck and Co., Chicago, Ill. Men's hosiery. 313,259; July 28. Class 39.
Sears, Roebuck and Co., Chicago, Ill. Felt base rug and floor covering. 314,721; July 28. Class 20.
Sears, Roebuck and Co., Chicago, Ill. Pencils and fountain pens. 315,875; July 28. Class 37.
Shor, Isador, doing business as I. Shor, New York, N. Y. Jewelry saws. 315,067; July 28. Class 23.
Societe Anonyme des Caves & des Producteurs Reunis de Roquefort, Roquefort, France. Cheese. 315,936; July 28. Class 46.
Southern Mills, Incorporated, Atlanta, Ga. Cotton flannel and cotton padding. 313,809; July 28. Class 42.
Standard Fruit and Steamship Company, New Orleans, La. Bananas. 315,118; July 28. Class 46.
Standard Oil Company, The, Cleveland, Ohio. Gasoline. 313,060; July 28. Class 15.
Standard Oil Company of New Jersey, Wilmington, Del. Asphalt and asphalt pipe coating. 315,705; July 28. Class 12.
Stresen-Reuter, Fred'k A., Inc., Chicago, Ill. Paint colors for screen process work. 312,207; July 28. Class 16.
Sturman Dress Co., Inc., New York, N. Y. Dresses, gowns, frocks, etc. 313,453; July 28. Class 39.
Szwajkos, John K., doing business as Monroe Bottling Company, Rochester, N. Y. Maltless beverages and flavors and extracts used in the preparation of same. 315,661; July 28. Class 45.
Tide Water Oil Company, Bayonne, N. J., and New York, N. Y. Lubricating oils and greases. 315,507; July 28. Class 15.
Timely Fabrics Corporation, New York, N. Y. Silk, cotton, and rayon piece goods. 315,374–5; July 28. Class 42.
Teichman, John G., Durand, Mich. Plastic compound. 314,941; July 28. Class 16.
Trees Candy Co. (See Zimetbaum, Samuel.)
Tumbler, J. A., Laboratories, Baltimore, Md. Cleaning compound for automobiles. 306,547; July 28. Class 4.
Turner, B., & Sons Limited, Warwick, England. Fish hooks, snelled hooks, etc. 304,435; July 28. Class 22.
Ullman Manufacturing Company, The, Brooklyn, N. Y. Sets of crayons. 314,971; July 28. Class 37.
United American Bosch Corporation, Springfield, Mass. Radio receiving sets. 315,652; July 28. Class 21.
United Furniture Company, The, Lexington, N. C. Bedroom furniture. 310,964; July 28. Class 32.
United States Cigar Co. Inc., York, Pa. Cigars. 313,981–2; July 28. Class 17.
Vandam, Albert H., Co. Inc., New York, N. Y. Cotton piece goods. 316,022; July 28. Class 42.
Van Dyk, James, Company, New York, N. Y. Coffee. 314,972; July 28. Class 46.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Containers made of iron. 315,217; July 28. Class 2.
Vernon, S. E. & M., Inc., New York, N. Y. Loose leaf binders and blank books. 315,948; July 28. Class 37.
Viviny Perfumers, Inc., West Haven, Conn. Shaving cream. 315,662; July 28. Class 4.
Washington Co-Operative Egg & Poultry Association, Seattle, Wash. Cooked chicken with noodles. 314,387; July 28. Class 46.
Watson Co., The, Attleboro, Mass. Sterling silver flatware, etc. 315,226; July 28. Class 28.
Waynick, Jess M., doing business as J. M. Waynick Paint Mfg. Co., Los Angeles, Calif. Paints, thinners, white lead, etc. 301,537; July 28. Class 16.
Weidlich Sterling Spoon Co., Bridgeport, Conn. Table silver ware. 315,663; July 28. Class 28.
Withers Brothers, Los Angeles, Calif. Fresh fruits, vegetables. 315,073; July 28. Class 46.
Wolverine Brass Works, Grand Rapids, Mich. Moulded rubber valve ball. 315,228; July 28. Class 13.
Wood, J. R., & Sons, Inc., New York, N. Y. Jewelry. 314,880; July 28. Class 28.
Woodbury Shoe Mfg. Co., Derry, N. H. Boots, shoes, sandals, and slippers. 315,577; July 28. Class 39.
Worcester Salt Company, New York, N. Y. Salt. 315,289; July 28. Class 6.
Y-Age-Cosmetics, Inc., New York, N. Y. Face creams, manicure and hair preparations, etc. 314,938; July 28. Class 6.
Yorke Shirt Company, The, Glens Falls and New York, N. Y. Collars. 314,782; July 28. Class 39.
Zally, Anthony K., doing business as Cascadon Laboratories, Jersey City, N. J. Preparation for the treatment of dyspepsia, etc. 314,783; July 28. Class 6.
Zeiss, Carl, Jena, Germany. Optical objectives. 306,679; July 28. Class 26.
Zimethaum, Samuel, doing business as Trees Candy Co., Newark, N. J. Candy. 314,973; July 28. Class 46.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Clay, Art and modeling. California Art Supply Co. 285,583; July 28; Serial No. 300,464; published May 12, 1931.
Coal. Hume-Sinclair Coal Mining Company. 285,481; July 28; Serial No. 312,482; published May 19, 1931.
Furs and skins. Alaska Chemical Company. 84,300; renewed Nov. 28, 1931.
Leather. Sole. Penketh Tanning Company Limited. 83,433; renewed Sept. 12, 1931.
Petroleum pitch. Standard Oil Company. 84,416; renewed Dec. 12, 1931.
Straw and horsehair made of cellulose, Imitation. British Enka Artificial Silk Company Limited. 285,512; July 28; Serial No. 311,418; published May 12, 1931.

CLASS 2

Bags. E. Abramson. 285,510; July 28; Serial No. 308,150; published May 12, 1931.
Boxes, Metal. H. E. Lovett. 285,449; July 28; Serial No. 311,842; published May 19, 1931.
Containers. Bloomer Bros. Company. 285,378; July 28; Serial No. 312,472; published May 12, 1931.
Egg fillers. Safety Filler Corporation. 285,629; July 28.
Iron, steel and manufactures. I. A. Henckels. 36,588; renewed June 11, 1931.
Plates, Paper. Beach & Arthur, Inc. 285,375; July 28; Serial No. 312,541; published May 12, 1931.
Tubes, Collapsible. Aluminum Company of America. 285,365; July 28; Serial No. 312,830; published May 19, 1931.
Tubes, Collapsible. Aluminum Company of America. 285,366; July 28; Serial No. 312,829; published May 12, 1931.
Vanity cases, compact boxes, powder containers, etc. Elgin American Manufacturing Co. 285,581; July 28; Serial No. 302,460; published Feb. 10, 1931.

CLASS 4

Abrasives. Durex Abrasives Corporation. 285,448; July 28; Serial No. 311,866; published May 12, 1931.
Buffing compounds. Hanson-Van Winkle-Munning Company. 285,490; July 28; Serial No. 312,647; published May 19, 1931.
Cleaning compositions. Dow Chemical Company. 285,606; July 28; Serial No. 270,310; published May 19, 1931.
Cleaning compounds, buffs, polishing wheels, etc., Metal. Bruce Products Corporation. 285,337; July 28; Serial No. 307,839; published May 12, 1931.
Cleaning fluid. Clarkson, Inc. 285,577; July 28; Serial No. 303,276; published May 12, 1931.
Cleaning material, etc. Charlotte Chemical Laboratories, Inc. 285,546; July 28; Serial No. 296,480; published May 12, 1931.
Cleaning powder for floors, windows, etc.; a detergent, a grease and oil remover, etc. Charlotte Chemical Laboratories, Inc. 285,546; July 28; Serial No. 296,480; published May 12, 1931.
Cleaning preparation, Liquid. Purex Corporation, Ltd. 285,619; July 28.
Eau de Cologues, soaps, waters, and lotions. Naamlooze Vennootschap Eau de Cologne Fabriek Voorheen J. C. Boldoot. 37,271–2; renewed Nov. 5, 1931.
Eau de Colognes, soaps, waters, and lotions. Naamlooze Vennootschap Eau de Cologne Fabriek Voorheen J. C. Boldoot. 37,451; renewed Dec. 10, 1931.
Eau de Colognes, soaps, waters, and lotions. Naamlooze Vennootschap Eau de Cologne Fabriek Voorheen J. C. Boldoot. 37,469; renewed Dec. 17, 1931.
Metal polish. Midway Chemical Company. 285,622; July 28.
Pastes, liquids, and powders for polishing shoes, leather finishing preparations, etc. Chemische Fabrik Elsendrath Gesellschaft mit beschränkter Haftung. 285,545; July 28; Serial No. 296,481; published May 12, 1931.
Polish, Silver. M. Poirier. 285,628; July 28.
Soap. Barclay & Barclay. 83,629–30; renewed Oct. 3, 1931.
Soap. Fischer's Surfa-Saver, Inc. 285,434; July 28; Serial No. 311,603; published May 12, 1931.
Soap. Golden Eagle Soap Company. 285,836; July 28; Serial No. 307,943; published May 19, 1931.
Soap. J. B. Williams Company. 84,560; renewed Sept. 19, 1931.
Soap, Laundry. D. P. Laviettes. 285,482; July 28; Serial No. 312,483; published May 19, 1931.
Soap, Toilet. Sydney Ross Co. 285,346; July 28; Serial No. 306,966; published May 12, 1931.
Soaps. F. M. Rinehardt. 285,445; July 28; Serial No. 311,932; published May 12, 1931.
Soaps. Swift and Company. 37,359; renewed Nov. 26, 1931.

Stroppers, Razor. Hartford Products Corporation. 285,503; July 28; Serial No. 313,037; published May 19, 1931.
Washing powder. Fischbeck Soap Company. 84,478; renewed Dec. 19, 1931.

CLASS 6

Antiseptic liquid for preventing perspiration. R. L. Company. 84,129; renewed Nov. 7, 1931.
Balms. Brown Mfg. Co. 37,370; renewed Nov. 26, 1931.
Capsules, pills and medicated jujubes. F. W. Warrick. 83,874; renewed Oct. 17, 1931.
Lead, saltpetre, brimstone roll, and flower of sulfur, White. Brandram Brothers & Co. Ltd. 36,892; renewed Aug. 13, 1931.
Liniments. E. Brunner. 83,135; renewed Aug. 22, 1931.
Medicinal plasters. J. B. Conway. 83,049; renewed Aug. 15, 1931.
Medicine. Ashton & Parsons Ltd. 37,375; renewed Nov. 26, 1931.
Powders, Toilet. J. B. Williams Company. 84,709; renewed Dec. 26, 1931.
Preparations, Hair and beard. J. B. Williams Company. 37,452; renewed Dec. 10, 1931.
Remedy for gall stones. M. von Barby. 82,747; renewed July 25, 1931.
Rouge. Julius Schmid, Inc. 82,112; renewed May 30, 1931.
Salt, Medicated. J. E. Robbins. 82,472; renewed June 27, 1931.
Suppositories. L. I. Weiner. 285,620; July 28.
Tannin extracts. Compania de Tierras, Maderas y Ferrocarriles "La Forestal" Ltda. 285,342; July 28; Serial No. 307,584; published Mar. 24, 1931.

CLASS 7

Rope, Manila. Edwin H. Fitler Co. 285,593; July 28; Serial No. 313,340; published May 19, 1931.
Twine, Bundling. Edwin H. Fitler Co. 285,594; July 28; Serial No. 313,339; published May 19, 1931.

CLASS 8

Pipes, Smoking. R. E. Wall. 285,502; July 28; Serial No. 313,064; published May 19, 1931.
Smokers' articles. Larkin Specialty Manufacturing Co. 285,542–3; July 28; Serial Nos. 297,809–10; published May 12, 1931.

CLASS 9

Guns and rifles, Shot. Belknap Hardware & Manufacturing Company. 285,477; July 28; Serial No. 309,767; published May 12, 1931.
Powder, Smokeless. E. I. du Pont de Nemours Powder Co. 83,435; renewed Sept. 12, 1931.
Revolvers. Colt's Patent Fire Arms Manufacturing Co. 285,374; July 28; Serial No. 312,549; published May 12, 1931.

CLASS 10

Sulphate of ammonia for fertilizer. Hudson Valley Fuel Corporation. 285,499; July 28; Serial No. 312,918; published May 19, 1931.

CLASS 12

Paving material and pavements containing bituminous matter, Compositon. E. M. Chadbourne. 82,962; renewed Aug. 8, 1931.
Roofing felt. J. A. & W. Bird & Co. 36,828; renewed July 30, 1931.
Wall-boards. Plastergon Wall Board Co. 84,522; renewed Dec. 19, 1931.
Whiting. Palmer Lime & Cement Company. 285,624; July 28.

CLASS 13

Bathtubs, lavatory basins, toilet tanks, etc. Barr & Creelman Co. 285,526; July 28; Serial No. 310,907; published May 19, 1931.
Bowls, bread trays, candy dishes, nut bowls, etc., Fruit. Cromwell Silver Mfg. Corp. 285,567; July 28; Serial No. 312,095; published May 19, 1931.
Clamps and turnbuckle assemblies. Flege Company. 285,447; July 28; Serial No. 311,868; published May 12, 1931.
Clamps, Cable. Eureka Metal Products Corporation. 285,446; July 28; Serial No. 311,914; published May 12, 1931.
Closets, bidets, lavatories, etc., Water. F. Guidetti. 285,350; July 28; Serial No. 306,297; published May 19, 1931.
Fences and parts thereof. W. F. Wittel. 285,384; July 28; Serial No. 312,278; published May 12, 1931.
Hook for screen doors. A. Brophy. 285,385; July 28; Serial No. 312,254; published May 12, 1931.
Pots, pans, and kettles, etc., Vitreous enamel. Polar Ware Company. 285,528; July 28; Serial No. 310,836; published May 19, 1931.
Utensils, Kitchen. E. Koeppen. 285,371; July 28; Serial No. 312,711; published May 12, 1931.

CLASS 14

Babbit metal. Eagle White Lead Company. 84,612–3; renewed Dec. 26, 1931.
Metals and/or alloys. Kemet Laboratories Company. 285,561; July 28; Serial No. 304,919; published May 12, 1931.
Steel castings. Omaha Steel Works. 285,474; July 28; Serial No. 309,986; published May 19, 1931.
Steel, High speed cutting. Firth-Sterling Steel Company. 84,223; renewed Nov. 21, 1931.
Type, Printing. Bauer Type Foundry, Inc. 285,618; July 28.
Unions for welded and threaded connections. Bonney Forge & Tool Works. 285,462; July 28; Serial No. 312,473; published May 12, 1931.
Wire rods, wire, pig iron, ingots, etc. Gulf States Refining Company. 285,580; July 28; Serial No. 302,465; published July 29, 1930.

CLASS 15

Candles. Will & Baumer Company. 83,958; renewed Oct. 24, 1931.
Naphtha and gasolene. Standard Oil Company of New York. 83,100; renewed Aug. 15, 1931.
Oils, Lubricating. Texas Company. 84,273–80; renewed Nov. 21, 1931.
Oils, Lubricating. Texas Company. 84,284; renewed Nov. 21, 1931.
Oils, Lubricating. Texas Company. 84,286; renewed Nov. 21, 1931.
Oils, Lubricating. Texas Company. 84,290–5; renewed Nov. 21, 1931.
Oils, Lubricating. Texas Company. 84,347; renewed Nov. 28, 1931.
Oils, Lubricating. Texas Company. 84,349; renewed Nov. 28, 1931.
Oils, Lubricating. Tiona Oil Company. 84,440; renewed Dec. 12, 1931.
Oils, Illuminating. Sone & Fleming Manufacturing Co. (Limited). 8,674; re-renewed Sept. 27, 1931.

CLASS 16

Asphalt compositions and paints. L. Sonneborn Sons, Inc. 84,050; renewed Oct. 31, 1931.
Paint, Cold water. C. A. Woolsey Paint & Color Company. 82,545; renewed July 4, 1931.
Paint, Interior. C. A. Woolsey Paint & Color Company. 82,546; renewed July 4, 1931.
Paints. L. Sonneborn Sons, Inc. 83,097; renewed Oct. 3, 1931.
Paints or wall finishes. Muralo Co. 37,261; renewed Oct. 29, 1931.
Varnishes, Insulating. Standard Varnish Works. 37,362; renewed Nov. 26, 1931.

CLASS 17

Cigarette paper and cigarette booklets. Brown & Williamson Tobacco Corporation. 285,486; July 28; Serial No. 312,597; published May 12, 1931.
Cigars. S. Alfe. 285,608; July 28; Serial No. 310,966; published May 19, 1931.
Cigars and stogies. J. F. Bolon. 285,617; July 28.
Cigars, cigarillos, cigarettes, and tobacco. Verellen Limited. 285,475; July 28; Serial No. 309,910; published May 12, 1931.
Tobacco, cigars, cigarettes, and snuff. Carreras Limited. 83,391; renewed Sept. 12, 1931.

CLASS 19

Airplanes. Great Lakes Aircraft Corporation. 285,572; July 28; Serial No. 312,213; published May 12, 1931.
Parachutes, parachute casings, and harnesses for parachutes. C. H. Lundholm. 285,530; July 28; Serial No. 310,771; published May 12, 1931.
Vehicles, parts and accessories, trimming, etc., Automotive. Daimler-Benz Aktiengesellschaft. 285,557; July 28; Serial No. 288,586; published May 12, 1931.

CLASS 21

Electric lamps, Incandescent. W. J. Phelps. 37,162; renewed Oct. 1, 1931.
Electrical fuses. Kirkman Engineering Corporation. 285,524; July 28; Serial No. 310,941; published May 12, 1931.
Insulated wires and cables, Rubber covered. Electric Cable Co. 82,504; renewed July 4, 1931.

CLASS 22

Apparatus for table golf. G. K. Mantas. 285,460; July 28; Serial No. 311,787; published May 19, 1931.
Balls and swimming tubes, Rubber play. Essex Rubber Company Inc. 285,376; July 28; Serial No. 312,513; published May 19, 1931.
Doll eyes and lashes, dolls, face masks, and animal toys. V. Keney. 285,596; July 28; Serial No. 313,245; published May 19, 1931.
Dolls. A. Wasson. 285,611; July 28; Serial No. 311,012; published May 19, 1931.
Fish bait, Prepared. D. J. Spence. 285,379; July 28; Serial No. 312,393; published May 19, 1931.
Fish lines. Cortland Line Company. 285,372; July 28; Serial No. 312,698; published May 12, 1931.

Fishing floats. Enterprise Manufacturing Company. 285,598; July 28; Serial No. 313,236; published May 19, 1931.
Fishing reel cases. Enterprise Manufacturing Company. 285,347; July 28; Serial No. 306,734; published May 19, 1931.
Fishing reels. Enterprise Manufacturing Company. 285,597; July 28; Serial No. 313,237; published May 19, 1931.
Games, Card. J. Train. 285,458; July 28; Serial No. 311,803; published May 19, 1931.
Games employing boards or charts, and boards and charts for playing games. C. E. Hooper. 285,368–9; July 28; Serial Nos. 312,758–9; published May 19, 1931.
Golf balls for miniature golf courses. A. M. Feltus, jr. 285,566; July 28; Serial No. 312,127; published May 12, 1931.
Golf clubs. E. J. Klin. 285,599; July 28; Serial No. 313,194; published May 19, 1931.
Golf clubs and golf balls. Royal Manufacturing Company. 285,492; July 28; Serial No. 312,666; published May 12, 1931.
Golf game, Indoor miniature. W. C. Mayer. 285,568; July 28; Serial No. 312,056; published May 12, 1931.
Golf tee holder. Herff-Jones Co. 285,513; July 28; Serial No. 311,407; published May 12, 1931.
Pool tables. Home Billiardette Table Company. 285,440; July 28; Serial No. 311,781; published May 19, 1931.
Sporting and athletic goods. Wholesale Radio Service Co. 285,438; July 28; Serial No. 311,455; published May 19, 1931.
Toy animals and other toy figures. M. M. Kahn. 285,373; July 28; Serial No. 312,653; published May 19, 1931.
Toy sets. Wolverine Supply & Manufacturing Company. 285,595; July 28; Serial No. 313,263; published May 19, 1931.
Toys, Constructional. W. Bamber. 285,437; July 28; Serial No. 311,465; published May 19, 1931.
Toys, Mechanical. Mecanno Limited. 83,171; renewed Aug. 22, 1931.

CLASS 23

Apparatus for the treatment of solids suspended in liquids. Dorr Company. 285,418; July 28; Serial No. 312,334; published May 12, 1931.
Clippers and shears, Fruit and nut. L. M. Harvey. 285,416; July 28; Serial No. 312,709; published May 19, 1931.
Drying wood pulp, Apparatus for. Technical Economist Corporation. 285,607; July 28; Serial No. 262,134; published June 12, 1928.
Extractors, Fruit juice. Handy Andy Specialty Co. 285,358; July 28; Serial No. 307,162; published May 12, 1931.
Grinders, Sharpening. Luther Grinder & Tool Company. 285,394; July 28; Serial No. 311,389; published May 19, 1931.
Grinding and polishing machinery. Diamond Machine Co. 37,267; renewed Oct. 29, 1931.
Kitchen appliances for beating, mixing, stirring, and the like. Cammann Manufacturing Company. 285,417; July 28; Serial No. 312,475; published May 12, 1931.
Machinery. "Selas" Gesellschaft mit beschränkter Haftung. 84,344; renewed Nov. 28, 1931.
Machines. Addressograph Co. 37,119; renewed Sept. 24, 1931.
Razors and razor blades. Chum Razor Blade Corp. 285,391; July 28; Serial No. 312,331; published May 12, 1931.
Razors, pen knives, scissors, etc. Marathon Razor Blade Co. 285,392; July 28; Serial No. 312,263; published May 19, 1931.
Shears and pruners. Alliance Manufacturing Company. 285,552; July 28; Serial No. 298,263; published May 12, 1931.
Stills, spray water cooling towers, etc., Chemical. Alpha Tank & Sheet Metal Mfg. Co. 285,550; July 28; Serial No. 299,819; published May 12, 1931.
Tools, Automotive. Duro Metal Products Company. 285,395; July 28; Serial No. 310,330; published May 19, 1931.
Vacuum cleaners. United Electric Company. 82,847; renewed July 25, 1931.
Valves for carbureters, Mixture control. A. A. Fish. 285,393; July 28; Serial No. 312,179; published May 19, 1931.

CLASS 24

Laundry washing machines. De Vasher Manufacturing and Supply Company. 81,790; renewed May 9, 1931.

CLASS 26

Device or apparatus for determining basic types of the human figure to assist in the designing of foundation garments. I. Newman & Sons, Inc. 285,413; July 28; Serial No. 313,090; published May 19, 1931.
Dispensing apparatus, Portable liquid. Bennett Pumps Corporation. 285,452; July 28; Serial No. 312,038; published May 19, 1931.
Films, Motion picture. Van Beuren Corporation. 285,356; July 28; Serial No. 308,046; published May 19, 1931.
Ophthalmic mountings and parts thereof. Bishop Company. 285,412; July 28; Serial No. 313,119; published May 19, 1931.
Scales, Weighing. D. C. Rockola. 285,414; July 28; Serial No. 312,390; published May 19, 1931.

CLASS 27

Watches, watch-cases and watch-movements. Keystone Watch Case Co. 84,494; renewed Dec. 19, 1931.

CLASS 28

Spoons. Oneida Community, Limited. 82,907; renewed Aug. 1, 1931.

CLASS 29

Brooms and mop attachments for brooms. Stametco Broom & Mfg. Co. Inc. 285,349; July 28; Serial No. 306,291; published May 19, 1931.
Brushes, Paint. Paramine Companies. 285,544; July 28; Serial No. 297,760; published May 19, 1931.

CLASS 31

Refrigerator cabinets. Grand Rapids Cabinet Company. 285,501; July 28; Serial No. 313,082; published May 12, 1931.

CLASS 32

Cabinet, Visible card index. Wilson-Jones Company. 285,451; July 28; Serial No. 312,077; published May 19, 1931.
Costumers, Clothes. H. Hailis-Karlebach. 285,398; July 28; Serial No. 311,333; published May 19, 1931.
Filing device and filing cabinets therefor. Acco Products, Inc. 285,397; July 28; Serial No. 310,629; published May 12, 1931.
Furniture. Hoosier Manufacturing Company. 285,450; July 28; Serial No. 311,477; published May 19, 1931.
Heaters and stoves, ventilating fans and coolers, hearths, etc. H. Junkers. 285,602; July 28; Serial No. 279,932; published May 19, 1931.

CLASS 34

Burners and parts thereof. Steam and Combustion Company. 285,578; July 28; Serial No. 303,220; published May 12, 1931.
Fuel-handling equipment, Combustioneer, Inc. 285,352–3; July 28; Serial Nos. 306,050–1; published May 12, 1931.
Generators, Acetylene gas. Echols Bros. Radiator Works. 285,382; July 28; Serial No. 312,367; published May 19, 1931.
Heating and ventilating apparatus, Steam. Warren Webster & Company. 84,148; renewed Nov. 7, 1931.
Ovens, stoves, ranges, and burners, Gas and gasolene. A-B Stove Company. 83,800; renewed Oct. 17, 1931.
Stoves annd ranges. Wehrle Company. 285,529; July 28; Serial No. 310,815; published May 19, 1931.

CLASS 35

Belting. Russell Manufacturing Company. 285,396; July 28; Serial No. 312,573; published May 19, 1931.
Packing. Peerless Rubber Manufacturing Company. 82,908; renewed Aug. 1, 1931.
Packing, Rod and joint. Garlock Packing Co. 37,332; renewed Nov. 19, 1931.
Tires, Pneumatic rubber. Pharis Tire and Rubber Company. 285,612; July 28.

CLASS 36

Talking machines and parts thereof. Victor Talking Machine Company. 84,199; Renewed Nov. 14, 1931.

CLASS 37

Envelops and linen paper. American Paper Goods Company. 84,157; renewed Nov. 14, 1931.
Lace reproductions on transparent paper or paper substitutes. Package Paper Company. 285,562; July 28; Serial No. 304,628; published May 12, 1931.
Paper. Butler Paper Corporation. 285,377; July 28; Serial No. 312,510; published May 12, 1931.
Paper and fabric tapes, Gummed. Gummed Products Company. 285,479; July 28; Serial No. 309,587; published May 12, 1931.
Paper box files, rubber stamps, hand blotters, etc. Chad Valley Co. Ltd. 285,601; July 28; Serial No. 280,693; published May 12, 1931.
Paper covers for closet seats. Homan & Biehl. 285,564; July 28; Serial No. 304,200; published May 12, 1931.
Paper for wrapping meats. Beecher-Peck & Lewis. 285,500; July 28; Serial No. 312,941; published May 12, 1931.
Paper, Gummed. H. M. Elish. 285,478; July 28; Serial No. 309,680; published May 12, 1931.
Paper napkins. Menasha Products Company. 285,560; July 28; Serial No. 305,232; published May 12, 1931.
Paper, pads, and tablets. Hampton Roads Paper Company. 84,180; renewed Nov. 14, 1931.
Paper, Writing. Hopper Paper Company. 285,364; July 28; Serial No. 312,881; published May 12, 1931.
Paper, Writing. National Carbon Coated Paper Company. 285,361; July 28; Serial No. 312,998; published May 12, 1931.
Papers, Book, cover, and writing. Lee Paper Company. 285,621; July 28.
Papers of all kinds, School. A. L. Kraemer Co. 285,454; July 28; Serial No. 311,839; published May 5, 1931.
Pencils. Richard Best Pencil Company. 285,616; July 28.

Pencils, crayons, slate pencils, etc., Lead. H. C. Kurz, A. G. 285,494; July 28; Serial No. 312,808; published May 12, 1931.
Pencils, steel pens, and penholders. Eagle Pencil Company. 83,822; renewed Oct. 17, 1931.
Pens. Esterbrook Steel Pen Manufacturing Company. 285,569; July 28; Serial No. 312,984; published May 12, 1931.
Pens and pencils, Fountain. Paramount Pen Co. 285,570; July 28; Serial No. 312,236; published May 12, 1931.
Rubber bands. E. Faber. 84,566; renewed Dec. 5, 1931.

CLASS 38

Booklets of word puzzles. Lake Publishing Company. 285,338; July 28; Serial No. 307,780; published May 12, 1931.
Cartoon strip. King Features Syndicate, Inc. 285,410; July 28; Serial No. 311,680; published May 12, 1931.
Column or section of a newspaper. Pulitzer Publishing Company. 285,584; July 28; Serial No. 300,298; published May 12, 1931.
Magazine. Magazine Antiques, Inc. 285,463; July 28; Serial No. 312,442; published May 12, 1931.
Periodical. Lee S. Smith & Son Co. 83,016; renewed Aug. 8, 1931.

CLASS 39

Apparel, Wearing. Weil Clothing Co. 285,591; July 28; Serial No. 305,257; published May 5, 1931.
Bloomers. Bethlehem Textiles Company. 285,420; July 28; Serial No. 311,994; published May 5, 1931.
Boots and shoes. Bona Allen, Incorporated. 285,390; July 28; Serial No. 311,816; published May 12, 1931.
Boots and shoes. Juvenile Shoe Corporation of America. 285,408; July 28; Serial No. 312,102; published May 19, 1931.
Boots and shoes. New Balance Arch Company. 285,427; Serial No. 312,115; published May 19, 1931.
Boots and shoes. United States Rubber Company. 285,430; July 28; Serial No. 311,631; published May 19, 1931.
Boots and shoes, overshoes, and rubber soles shoes, Rubber. Hood Rubber Co. 82,330; renewed June 20, 1931.
Boots, shoes, and slippers. Beacon Falls Rubber Shoe Company. 83,317; renewed Sept. 5, 1931.
Caps. Omaha Cap Manufacturing Company. 285,605; July 28; Serial No. 277,637; published May 19, 1931.
Clothing, Men's. Fintex Corporation. 285,409; July 28; Serial No. 311,869; published May 12, 1931.
Clothing, Men's. Kresge Department Store Corporation. 285,433; July 28; Serial No. 311,481; published May 12, 1931.
Clothing, Men's and boys'. Bailey Company. 285,389; July 28; Serial No. 311,911; published May 19, 1931.
Coats, Fur. J. L. Orent. 285,432; July 28; Serial No. 311,484; published May 19, 1931.
Collars, Textile. Tim & Co. 84,552; renewed Dec. 19, 1931.
Corsets. Chas. A. Stevens & Bros. 84,545; renewed Dec. 19, 1931.
Dresses, coats, hats, etc. S. P. Bailey. 285,590; July 28; Serial No. 306,124; published May 12, 1931.
Dresses, Misses'. J. H. Schaaf. 285,441; July 28; Serial No. 309,236; published May 5, 1931.
Dresses, shirts, shorts, blouses, etc. Straus, Royer & Strass, Inc. 285,425; July 28; Serial No. 312,500; published May 19, 1931.
Hats. Edward P. Cunningham, Incorporated. 285,421; July 28; Serial No. 311,827; published May 12, 1931.
Hats. Dobbs & Co. 285,399; July 28; Serial No. 310,935; published May 12, 1931.
Hats. Dobbs & Co. 285,415; July 28; Serial No. 312,833; published May 12, 1931.
Hats. J. C. Penney Company. 285,401; July 28; Serial No. 310,528; published May 12, 1931.
Hats. Simon Millinery Supply Company. 285,395; July 28; Serial No. 305,055; published May 12, 1931.
Hats. Simon Millinery Supply Company. 285,396; July 28; Serial No. 305,056; published May 12, 1931.
Hats, Felt. Henry Pollak, Inc. 285,350; July 28; Serial No. 307,110; published May 12, 1931.
Hats, Felt. Henry Pollak Inc. 285,588; July 28; Serial No. 307,108; published May 12, 1931.
Hosiery. Hahn Department Stores, Inc. 285,388; July 28; Serial No. 311,915; published May 19, 1931.
Hosiery. Lichten Bros. 285,626; July 28.
Hosiery. Melville Shoe Corporation. 285,386; July 28; Serial No. 311,968; published May 5, 1931.
Hosiery. Propper-McCallum Hosiery Co. 285,387; July 28; Serial No. 311,927; published May 5, 1931.
Hosiery. Propper-McCallum Hosiery Co. 285,424; July 28; Serial No. 312,814; published May 19, 1931.
Hosiery. H. Rosenberg. 285,627; July 28.
Hosiery. Universal Full Fashioned Hosiery Co. 285,404; July 28; Serial No. 311,453; published May 12, 1931.
Hosiery and sweaters. J. Hilborn & W. E. Reed, Inc. 285,403; July 28; Serial No. 309,600; published May 19, 1931.
Knickers. T. Kotzin. 285,589; July 28; Serial No. 306,651; published May 5, 1931.
Overcoats and suits. Alfred Decker & Cohn, Inc. 285,406; July 28; Serial No. 311,325; published May 5, 1931.
Shirts overalls, and pants. Standard Overall Company. 285,419; July 28; Serial No. 311,983; published May 12, 1931.
Shoe soles. J. H. Hemmerdinger & Son, Inc. 285,429; July 28; Serial No. 311,684; published May 12, 1931.
Shoes. M. K. Dun Inc. 285,422; July 28; Serial No. 311,829; published May 12, 1931.
Shoes and boots, Leather. Rand Shoe Company. 285,553; July 28; Serial No. 296,198; published May 19, 1931.
Shoes, hosiery, and outershirts. Dreyfus Export Co. 81,968; renewed May 23, 1931.
Slips, bloomers, petticoats, etc. Aronson-Caplin Company. 285,357; July 28; Serial No. 307,760; published May 12, 1931.
Stockings and socks. A. E. Allen & Co. 285,551; July 28; Serial No. 298,560; published May 12, 1931.
Suits and frocks, Bathing. Asbury Mills. 285,613; July 28.
Suits, Swimming. West Coast Knitting Mills. 285,407; July 28; Serial No. 311,294; published May 19, 1931.
Sweaters and blouses. Corbett & North, Inc. 285,431; July 28; Serial No. 311,561; published May 12, 1931.
Undergarments, Union suit. McCreery Manufacturing Company. 285,402; July 28; Serial No. 310,434; published May 5, 1931.
Underwear. Ely & Walker Dry Goods Company. 285,426; July 28; Serial No. 312,045; published May 5, 1931.
Underwear. Munsingwear Corporation. 285,428; July 28; Serial No. 312,113; published May 5, 1931.

CLASS 40

Braid made of cellulose. British Enka Artificial Silk Company Limited. 285,400; July 28; Serial No. 310,751; published May 19, 1931.
Braid made of cellulose. British Enka Artificial Silk Company Limited. 285,405; July 28; Serial No. 311,419; published May 19, 1931.
Sets of natural or artificial hairs, adhesives, and adhesive removers. M. A. Birk. 285,423; July 28; Serial No. 312,834; published May 12, 1931.
Tapes and trimmings of fabric Bias fold. Wm. E. Wright & Sons Company. 285,554; July 28; Serial No. 295,591; published May 12, 1931.

CLASS 42

Bagging. American Manufacturing Company. 83,204; renewed Aug. 29, 1931.
Bedspreads, made-up window draperies, and a fabric. Lesber, Whitman & Co. 285,435; July 28; Serial No. 311,529; published May 19, 1931.
Cotton fabrics. Prince Lauten Corp. 285,610; July 28; Serial No. 311,157; published May 12, 1931.
Cotton goods. Wm. H. Brown Son & Co. 79,890; renewed Oct. 18, 1930.
Cotton piece goods. American Bleached Goods Company. 285,472; July 28; Serial No. 312,033; published May 19, 1931.
Cotton piece goods. Brand & Oppenheimer, Incorporated. 285,345; July 28; Serial No. 307,147; published May 19, 1931.
Cotton piece goods. Carson Pirie Scott & Co. 285,541; July 28; Serial No. 297,848; published May 19, 1931.
Damask fabrics. Clark & Grendon Inc. 285,549; July 28; Serial No. 293,616; published May 19, 1931.
Elastic webbing. Associated Apparel Industries, Inc. 285,493; July 28; Serial No. 312,686; published May 19, 1931.
Fabrics, Knitted, netted, and textile. M. Dassonville. 285,354; July 28; Serial No. 306,001; published May 19, 1931.
Fabrics made of cellulose derivatives. Celanese Corporation of America. 285,487–8; July 28; Serial Nos. 312,599–600; published May 19, 1931.
Goods made of cellulose, Piece. British Enka Artificial Silk Company Limited. 285,574; July 28; Serial No. 303,947; published May 19, 1931.
Hair nets. Hair Net Packers, Inc. 285,348; July 28; Serial No. 306,720; published May 12, 1931.
Hair nets. Princess Pat Products Limited. 285,573; July 28; Serial No. 312,161; published May 19, 1931.
Handkerchiefs. Marshall Field & Company. 285,465; July 28; Serial No. 312,258; published May 12, 1931.
Handkerchiefs. M. Smooke. 285,563; July 28; Serial No. 304,588; published Oct. 7, 1930.
Jute Bagging. American Manufacturing Company. 82,745; renewed July 25, 1931.
Piece goods made of cellulose. British Enka Artificial Silk Company Limited. 285,575; July 28; Serial No. 303,946; published May 5, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 285,483; July 28; Serial No. 312,509; published May 12, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 285,514; July 28; Serial No. 311,360; published May 19, 1931.
Pile fabrics. E. F. Timme & Son. 285,484; July 28; Serial No. 312,581; published May 19, 1931.
Pile fabrics and/or combinations thereof. S. Slater & Sons, Inc. 285,525; July 28; Serial No. 310,957; published May 19, 1931.
Ribbon. Silk warp belting. Carlisle Ribbon Mills, Inc. 285,480; July 28; Serial No. 309,459; published May 5, 1931.
Silk piece goods. C. K. Eagle & Co. 285,531; July 28; Serial No. 310,599; published May 5, 1931.
Textile napkins, Infants'. Wedler-Shuford Co. 285,473; July 28; Serial No. 312,022; published May 19, 1931.

Ticking, Mattress. International Merchandising Syndicate, Inc. 285,585; July 28; Serial No. 300,281; published May 19, 1931.
Woolen cloth, Unfinished worsted. Waterhouse Woolen Company. 285,511; July 28; Serial No. 308,149; published May 5, 1931.
Woolen piece goods. Botany Worsted Mills. 285,518–19; July 28; Serial Nos. 311,175–6; published May 12, 1931.
Woolen piece goods. Botany Worsted Mills. 285,520; July 28; Serial No. 311,173; published May 12, 1931.
Woolen piece goods. C. M. De Land. 285,517; July 28; Serial No. 311,215; published May 19, 1931.
Woolen, silk, rayon, etc., piece goods and piece goods containing a mixture of same. Hydropel Process Company. 285,485; July 28; Serial No. 312,586; published May 19, 1931.

CLASS 43

Thread aand yarn. M. Dassonville. 285,559; July 28; Serial No. 305,998; published May 19, 1931.
Thread and yarn. Thread Mills Company. 285,467; July 28; Serial No. 312,165; published May 12, 1931.
Threads. Summit Thread Company. 285,442; July 28; Serial No. 311,984; published May 5, 1931.
Threads and yarns. Aceta G. m. b. H. 285,515; July 28; Serial No. 311,352; published May 19, 1931.
Yarns, threads, and filaments. Du Pont Rayon Company. 285,464; July 28; Serial No. 312,336; published May 19, 1931.

CLASS 45

Beverage, Maltless. A. Di Bartolomeo. 285,341; July 28; Serial No. 307,657; published May 12, 1931.
Beverage, Non-alcoholic. S. W. Brown. 285,351; July 28; Serial No. 306,166; published May 12, 1931.
Beverages and sirups and extracts for making the same, Maltless. Harry A. Mundorff & Harry A. Mundorff, jr. 285,623; July 28.
Beverages and syrups and extracts for making the same, Maltless. M. Krim. 285,344; July 28; Serial No. 307,499; published May 12, 1931.
Beverages and syrups, extracts, and concentrates for preparing the same. Hollywood Products Company. 285,363; July 28; Serial No. 312,914; published May 12, 1931.
Beverages, Maltless. Klee & Coleman. 285,600; July 28; Serial No. 313,193; published May 19, 1931.
Beverages, syrups, and extracts for making same, and ginger ale, Maltless. Mayflower Beverage Co. 285,586; July 28; Serial No. 300,214; published May 19, 1931.
Drink or tonic, Herb. Pettit & Whitacre, Inc. 285,436; July 28; Serial No. 311,485; published May 12, 1931.
Grape juice, Unfermented. Henri Savignon, Boussard Freres et Dieux, Societe en nom Collectif. 285,381; July 28; Serial No. 312,374; published May 12, 1931.
Water, Mineral. Pacific Products, Inc. 285,555; July 28; Serial No. 292,951; published May 19, 1931.

CLASS 46

Butter, eggs, raw cream, and dressed poultry. Beatrice Creamery Company. 285,343; July 28; Serial No. 307,576; published May 12, 1931.
Candies. M. H. Abelson. 285,571; July 28; Serial No. 312,227; published May 12, 1931.
Candies. A. Maskey. 285,537; July 28; Serial No. 310,132; published May 5, 1931.
Candy. E. J. Brach & Sons. 285,444; July 28; Serial No. 311,949; published May 19, 1931.
Candy bars. M. J. Holloway & Company. 285,527; July 28; Serial No. 310,865; published May 12, 1931.
Canned, compressed cooked meat and chicken loaf. A. J. Churchill. 285,533; July 28; Serial No. 310,441; published Apr. 21, 1931.
Canned fruits and vegetables, canned fish, peanut butter, etc. Chas. W. Bauermeister Co. 285,411; July 28; Serial No. 311,643; published May 19, 1931.
Canned fruits and vegetables, jellies, pickles, etc. Consolidated Companies. 285,548; July 28; Serial No. 294,959; published May 12, 1931.
Canned fruits, canned vegetables, food flavoring extracts, etc. West Coast Grocery Company. 285,456; July 28; Serial No. 311,809; published May 12, 1931.
Canned fruits, canned vegetables, rice, etc. Cincinnati Wholesale Grocery Company. 285,535; July 28; Serial No. 310,251; published May 12, 1931.
Canned goods. Dannemiller Grocery Company. 285,508; July 28; Serial No. 308,360; published May 12, 1931.
Canned hominy. Western Grocery Company. 82,487; renewed June 27, 1931.
Canned peeled tomatoes and tomato sauce. Vitelli & Company. 285,457; July 28; Serial No. 311,807; published May 12, 1931.
Canned salmon. Kelley-Clarke Company. 82,521; renewed July 4, 1931.
Canned sardines. J. H. Mercian. 84,403; renewed Dec. 12, 1931.
Canned soups, relishes, spices, etc. Kroger Grocery & Baking Co. 285,603; July 28; Serial No. 279,480; published May 12, 1931.
Cheese. William Faehndrich, Inc. 285,496; July 28; Serial No. 312,844; published May 12, 1931.
Cheese. William Faehndrich, Inc. 285,523; July 28; Serial No. 312,843; published May 12, 1931.
Cheese. Roethlisberger & Co. Inc. 285,459; July 28; Serial No. 311,789; published May 19, 1931.
Cheese. C. R. Zuercher, jr. 285,587; July 28; Serial No. 299,027; published Oct. 7, 1930.
Coffee. Araban Coffee Co. 285,370; July 28; Serial No. 312,745; published May 12, 1931.
Coffee, olive oil, cocoa, tea, etc. J. R. Silva. 285,340; July 28; Serial No. 307,743; published May 19, 1931.
Confections, Frozen. Kold Kub Company. 285,579; July 28; Serial No. 302,903; published May 12, 1931.
Conserves, marmalades, jellies, etc. E. K. Baker. 285,455; July 28; Serial No. 311,814; published May 19, 1931.
Cookies, cakes, and crackers. J. S. Ivins' Son, Inc. 285,540; July 28; Serial No. 297,916; published May 19, 1931.
Corn salad oil. American Maize-Products Company. 285,470; July 28; Serial No. 312,036; published May 19, 1931.
Cream mint and other candy, Plaited. A. P. Richardson. 87,225; renewed Oct. 22, 1931.
Dressing, mayonnaise, etc., French. Kraft-Phenix Cheese Corporation. 285,539; July 28; Serial No. 298,402; published May 12, 1931.
Eggs. Beer & Davies. 285,521; July 28; Serial No. 312,972; published May 12, 1931.
Extract, Malt. Pioneer Sales Co. 285,476; July 28; Serial No. 309,867; published May 19, 1931.
Extract, Malt. Sterling Products Co. 285,522; July 28; Serial No. 312,964; published May 19, 1931.
Fats, Edible. Joe Lowe Corporation. 285,469; July 28; Serial No. 312,054; published May 19, 1931.
Feeds, Dairy. Puritan Mills. 285,547; July 28; Serial No. 296,147; published May 13, 1930.
Fish. New England Fish Company. 82,816; renewed July 25, 1931.
Fish and seafoods. New England Fish Company. 285,558; July 28; Serial No. 284,413; published May 19, 1931.
Flour, Wheat. Acme Milling Company. 36,615; renewed June 18, 1931.
Flour, Wheat. Petersburg Mill Company. 285,630; July 28.
Flour, Wheat. Pillsbury Flour Mills Company. 285,538; July 28; Serial No. 310,069; published May 12, 1931.
Flour, Wheat. Pillsbury Flour Mills Company. 285,565; July 28; Serial No. 310,068; published May 12, 1931.
Food for dogs and cats. Spratt's Patent Limited. 83,522; renewed Sept. 19, 1931.
Food, Poultry. Peerless Oyster Company. 84,518; renewed Dec. 12, 1931.
Food preparation in liquid form. V. Rutecki. 285,506; July 28; Serial No. 308,493; published May 19, 1931.
Food preparations, Chocolate flavored. Harshaw Chemical Company. 285,516; July 28; Serial No. 311,334; published May 12, 1931.
Fruits, Fresh citrus. Riverside Heights Orange Growers Association. 285,604; July 28; Serial No. 279,238; published May 12, 1931.
Fruits, Fresh citrus. Stuart Bros. Corporation. 285,532; July 28; Serial No. 310,496; published May 19, 1931.
Grocery specialties. R. I. Sherman Mfg. Co. 36,337; renewed Apr. 30, 1931.
Gum, Chewing. Mayam Limited. 285,534; July 28; Serial No. 310,344; published May 12, 1931.
Horse radish, horseradish and mustard, and Mexican style horse radish. G. M. Meyer. 285,439; July 28; Serial No. 311,439; published May 19, 1931.
Horse radish, pickles, pickled tomatoes, chowchow, etc. H. Treffinger. 285,556; July 28; Serial No. 292,340; published Dec. 16, 1930.
Ice cream and candy confection. Eskimo Pie Corporation. 285,576; July 28; Serial No. 303,600; published May 12, 1931.
Icing, Cooked. B. B. George. 285,466; July 28; Serial No. 312,246; published May 12, 1931.
Marshmallow whip. A. W. Fey. 285,468; July 28; Serial No. 312,142; published May 19, 1931.
Meats, Cured. P. D. Gwaltney, Jr., & Co. 285,509; July 28; Serial No. 308,202; published May 12, 1931.
Milk, Condensed. Utah Condensed Milk Co. 84,441; renewed Dec. 12, 1931.
Oats, Rolled. F. B. Chamberlain Co. 83,635; renewed Oct. 3, 1931.
Olives. Stewart Curtis Packers, Inc. 285,625; July 28.
Pecans, Fresh cracked. R. E. Funsten Dried Fruit & Nut Co. 84,618; renewed Dec. 26, 1931.
Pepper sauce. McIlhenny Company. 285,491; July 28; Serial No. 312,658; published May 12, 1931.
Powder used in the preparation of food drinks. T. N. Hansen. 285,339; July 28; Serial No. 307,774; published May 19, 1931.
Preparation for making desserts and sauces. T. N. Simmons. 285,614; July 28.
Preparations for feeding pheasants and other game-birds and poultry. Spratt's Patent Limited. 82,838; renewed July 25, 1931.
Seasoning for sausages, meats, or other foods. A. C. Legg Packing Co., Inc. 285,453; July 28; Serial No. 311,840; published May 12, 1931.
Sugar and prepared flour. H. R. Gordon. 285,505; July 28; 308,887; published May 12, 1931.
Syrup, Malt. Pabst Corporation. 285,495; July 28; Serial No. 312,812; published May 19, 1931.
Syrup, Table. W. W. Bowen. 285,461; July 28; Serial No. 309,224; published May 19, 1931.
Syrups, corn oils, and cornstarch. American Maize-Products Company. 285,471; July 28; Serial No. 312,034; published May 19, 1931.

Tablets with peppermint and fruit taste, sugar wares of any kind, toffee, etc. Afro-Werk Adolf Frost & Co. 285,360; July 28; Serial No. 308,001; published May 12, 1931.
Tea. Ming, Inc. 285,367; July 28; Serial No. 312,764; published May 12, 1931.
Tomato extract. Societa Generale Delle Conserve Allmentari Cirio, San Giovanni a Teduccio. 84,049; renewed Oct. 31, 1931.
Vegetables, Fresh. Lambert Marketing Company. 285,362; July 28; Serial No. 312,020; published May 12, 1931.
Yeast preparations. Friedrich Sauer G. m. b. H. 285,507; July 28; Serial No. 308,892; published May 12, 1931.

CLASS 47

Wines. Henri Savignon, Boussard Freres et Dieux Societe en nom Collectif. 285,380; July 28; Serial No. 312,375; published May 12, 1931.

CLASS 48

Clarifier for beer. Cape Ann Isinglass Company. 285,443; July 28; Serial No. 311,953; published May 12, 1931.

CLASS 49

Whiskey. J. Roesing. 285,504; July 28; Serial No. 313,005; published May 12, 1931.

CLASS 50

Brooders. Globe American Corporation. 285,489; July 28; Serial No. 312,642; published May 12, 1931.
Canvas, Waterproofed. Hettrick Manufacturing Company. 285,582; July 28; Serial No. 302,391; published Sept. 2, 1930.
Fabric backing material used in the manufacture of Laminated fabrics, Processed. Acme Backing Corporation. 285,536; July 28; Serial No. 310,200; published May 12, 1931.
Fly paper, Sticky. G. & W. Thum Company. 285,609; July 28; Serial No. 310,959; published May 19, 1931.
Plaques and miniature statuary, Art and Novelty Supply Company. 285,615; July 28.
Watering troughs, Animal. E. Beyer. 285,498; July 28; Serial No. 312,885; published May 19, 1931.
Waterproofed fabrics. Hydropel Process Company. 285,497; July 28; Serial No. 312,884; published May 12, 1931.

ALPHABETICAL LIST OF LABELS

Autogiro. For Chewing Gum. Beech-Nut Packing Company. 39,454; July 28.
Fortnum & Mason's, Fancy Crab Meat, Renowned for Quality. For Canned Crab Meat. Fortnum & Mason Inc. 39,457; July 28.
Fortnum & Mason's, Grapefruit, Renowned for Quality. For Canned Grapefruit. Fortnum & Mason Inc. 39,455; July 28.
Fortnum & Mason's, Inc., Salted Cashews, 697 Madison Ave., New York. For Salted Cashews. Fortnum & Mason Inc. 39,456; July 28.
King Macaroni. For Macaroni. Kurtz Bros. Corporation. 39,460; July 28.
Lily White. For Shoe Whitener and Cleaner. J. Kahn. 39,459; July 28.
Lion Head. For Sheets and Pillow Cases. P. Leon. 39,463; July 28.
Octagon Rayon Ribbon-Cord. For Cord. Lees Manufacturing Co. 39,461; July 28.
Octagon Tinsel Ribbon-Cord. For Cord. Lees Manufacturing Co. 39,462; July 28.
Pabco Guaranty 5 Rug. For Rugs. Paraffine Companies, Inc. 39,465; July 28.
Tus. For Medicinal Preparation for Coughs. Harbourts Drug Company. 39,458; July 28.
Zero. For Candy Bars. F. A. Martoccio Company. 39,464; July 28.

ALPHABETICAL LIST OF PRINTS

Fire-Brite Anthracite. For Anthracite Coal. W. Betterly. 13,315; July 28.
'Johnny' Weissmuller—the Ace Swimmer of All Time. For Bathing suits. B. V. D. Company. 13,314; July 28.
Mobiloil Master Service. For Automobile Lubricants. Vacuum Oil Company. 13,317; July 28.
Novo, The Unbreakable Lawn Mower. For Lawn Mowers. F. & N. Lawn Mower Company. 13,316; July 28.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 28TH DAY OF JULY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A C Spark Plug Company. (See Helgeby, Ralph O., assignor.)
A C Spark Plug Company. (See McKindly, C. W., and Willits, assignors.)
Acree, Solomon F., Eureka, Mont. Tan extract and making same. 1,816,138; July 28.
Acree, Solomon F., Madison, Wis., assignor of one-tenth to A. B. Foster, Washington, D. C. Method of converting wood into sugar and other products. 1,816,135; July 28.
Acree, Solomon F., Syracuse, N. Y., assignor of one-tenth to A. B. Foster, Washington, D. C. Converting wood into sugar and other products. 1,816,136; July 28.
Acree, Solomon F., Syracuse, N. Y., assignor of one-tenth to A. B. Foster, Washington, D. C. Converting wood into mucic acid. 1,816,137; July 28.
Adams, Charles W., assignor to United States Graphite Company, Saginaw, Mich. Bearing. 1,816,758; July 28.
Adams, Mathias J., Turkey River, Iowa. Spoke-tenon and felly-clip. 1,816,201; July 28.
Adams, Peter P., Turkey River, Iowa. Vehicle wheel. 1,816,351; July 28.
Adams, William H., assignor to Eastern Finishing Works, Kenyon, R. I. Printed textile fabric. Des. 84,724; July 28.
Adelmann, Hans, New Rochelle, N. Y. Illuminating sign. 1,816,459; July 28.
Adler, Alexander, Yonkers, N. Y. Lingerie pad. 1,816,714; July 28.
Adler, Charles, jr., assignor to The Adler Safety Control Company, Baltimore, Md. Traffic signal casing. Des. 84,725; July 28.
Adler, Charles, jr., assignor to The Adler Safety Control Company, Baltimore, Md. Combined head and casing for traffic signals. Des. 84,726; July 28.
Adler, Charles, jr., assignor to The Adler Safety Control Company, Baltimore, Md. Combined support and casing for traffic signals. Des. 84,727; July 28.
Adler Safety Control Company, The. (See Adler, Charles, jr., assignor.)
Agar, Calvin A., West Orange, N. J. Process and machine for making spacing members for shipping containers. 1,815,887; July 28.
Agfa Ansco Corporation. (See Mauerhoff, Emil, assignor.)
Air Way Electric Appliance Corporation. (See Riebel, Frederick, jr., assignor.)
Akron Rubber Mold & Machine Co. (See Sethman, Retus W., assignor.)
Aktiebolaget Atmos et al. (See Blomquist, Johan V., assignor.)
Aktiebolaget Malcus Holmquist. (See Bladh, S. G., and Brofelth, assignors.)
Aktiebolaget Naridska Armaturfabrikerna. (See Weibull, Ernst H. W., assignor.)
Alemite Corporation. (See Butler, Clyde G., assignor.)
Algeo, Albert M., and J. W. Ross, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Control mechanism for glass feeders. 1,816,275; July 28.
Allen, Edward B., Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Thread-cutting mechanism for sewing machines. 1,816,308; July 28.
Aller, Conrad F., Stockholm, Sweden, assignor to The De Laval Separator Company, New York, N. Y. Centrifugal separator bearing. 1,816,460; July 28.
Allis-Chalmers Manufacturing Company. (See Secor, John A., assignor.)
Aluminum Industrie Aktiengesellschaft. (See Treadwell, William D., assignor.)
Amalgamated Roofing Company. (See Maclean, Robert, assignor.)
American Bicheroux Company, The. (See Hilgers, Ernst, assignor.)
American Bicheroux Company, The. (See Spiekermann, Wilhelm, assignor.)
American Bicheroux Company, The. (See von Reis, Lambert, assignor.)
American Can Company. (See Hothersall, John M., assignor.)
American Chain Company. (See Reyburn, John R., assignor.)
American Concrete Pipe Company. (See Jenkins, Howard H., assignor.)
American Hardware Corporation, The. (See Moore, Wallace F., assignor.)
American Lace Mfg. Co., The. (See Hucknall, Hage W., assignor.)
American La France and Foamite Corporation. (See Witter, Willis D., assignor.)
American Manganese Steel Company. (See Young, Donald H., assignor.)
American Optical Company. (See Glancy, Anna E., assignor.)
American Optical Company. (See Tully, George L., assignor.)
American Telephone and Telegraph Company. (See Green, Estill I., assignor.)
American Telephone and Telegraph Company. (See Kittredge, Linus E.)
American Telephone and Telegraph Company. (See Parker, Ralzemond D., assignor.)
American Telephone and Telegraph Company. (See Weaver, Allan, assignor.)
American Thermos Bottle Company, The. (See Fink, C. G., and King, assignors.)
American Welding & Manufacturing Company, The. (See Klaus, F. R., and Seiberling, assignors.)
American Wilderman Porous Ebonite Company, The. (See Wilderman, Meyer, assignor.)
American Wringer Co. (See Keitle, George R., assignor.)
Amundsen, Ivar, Oslo, Norway. Refrigerator of the adsorption type. 1,815,961; July 28.
Anaconda Copper Mining Company et al. (See Smith, W. C., and Mack, assignors.)
Andersen, Andrew C., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Window regulator mechanism. 1,816,166; July 28.
Anderson, Johan A., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Winding machine. 1,816,352; July 28.
Anderson, John C., Keyport, N. J. Conveyer belt. 1,816,559; July 28.
Anderson, John C., Keyport, N. J. Conveyer belt. 1,816,560; July 28.
Anderson, John C., Keyport, N. J. Conveyer belt. 1,816,561; July 28.
Anderson, John E., assignor to Plibrico Jointless Firebrick Company, Chicago, Ill. Furnace construction. 1,815,891; July 28.
Anderson, Merrill, New York, N. Y. Advertising, educational, or amusement device or the like. 1,816,353; July 28.
Anderson, Myron E., Coeur d'Alene, Idaho. Pack frame. 1,816,510; July 28.
Andresen, Hans, Vancouver, British Columbia, Canada. Two cycle internal combustion engine. 1,816,276; July 28.
Andrews, Charles W., assignor to H. A. Brassert & Company, Chicago, Ill. Charging bell construction. 1,815,892; July 28.
Andrews, Frank W., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,815,962; July 28.
Anthony, David S., Sioux City, Iowa. Handle construction. 1,816,277; July 28.
Apt Novelty Company Inc. (See Shulman, Charles, assignor.)
Armstrong Cork Company. (See Webster, Harry A., assignor.)
Art Metal Company, The. (See Glatthar, George E., assignor.)
Arthur, Van D. (See Traylor, W., and Arthur.)
Associated Telephone and Telegraph Company. (See Woodhead, Harry S., assignor.)
Aster, Johanna E., New York, N. Y. Cigar and cigarette holder and similar article. 1,816,139; July 28.
Astrup Company, The. (See Heiser, Henry C., assignor.)
Athimon, Francis, Paris, France. Servo-brake. 1,816,067; July 28.
Atkinson, Wade & Company. (See Fauser, Gustave M., assignor.)
Atlantic Refining Company, The. (See Pierce, David E., assignor.)
Austin, Ralph W., Weymouth, Mass. Fire extinguisher. 1,815,963; July 28.
Automatic Electric Inc. (See Hershey, Harry E., assignor.)
Automatic Paper Machinery Co. Inc. (See Marcalus, Nicholas, assignor.)
Avery, W. & T., Limited. (See Timson, William, assignor.)
Babcock & Wilcox Company, The. (See Boerstra, Jacobus, assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Bahr, William E., Indianhead, Md. Ship raising apparatus. 1,816,759; July 28.

Bailey, Claude B., Wyandotte, assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Gasket. 1,815,893; July 28.

Baily, Thaddeus F., Alliance, Ohio. Recovering metals and oxides from boiler ash. 1,815,888; July 28.

Bain, Walter M., Camas, Wash. Coloring paraffin wax and the like. 1,816,140; July 28.

Baird, Hollis S., assignor to Shortwave & Television Corporation, Boston, Mass. Short wave reception. 1,816,461; July 28.

Baird, Hollis S., assignor to Shortwave & Television Corporation, Boston, Mass. Signal amplifying system and method. 1,816,462; July 28.

Baird, John L., London, assignor to Television Limited, London, W. C. 2, England. Driving television or other apparatus at a predetermined speed. 1,816,106; July 28.

Bakelite Gesellschaft mit Beschrankter Haftung. (See Seebach, Fritz, assignor.)

Baker, Arthur J., assignor to The Willys-Overland Company, Toledo, Ohio. Timing gear. 1,815,894; July 28.

Baker, Stephen D., New York, N. Y. Bathroom toothbrush holder. Des. 84,728; July 28.

Baldwin, Luther C., assignor, by mesne assignments, to U. S. Bobbin & Shuttle Company 1929, Providence, R. I. Shuttle eye and making the same. 1,816,167; July 28.

Ball, Percy B., assignor to The Watson Company, Attleboro, Mass. Fork or similar article. Des. 84,729; July 28.

Bancroft Holdings Limited. (See Johns, Henry S., assignor.)

Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Double multicolor web perfecting rotary printing press. 1,816,354; July 28.

Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Rotary printing press. 1,816,355; July 28.

Barker, William T., jr., assignor to Hartford-Empire Company, Hartford, Conn. Delivery apparatus for molten glass. 1,816,309; July 28.

Barker, William T., jr., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for feeding molten glass. 1,816,463; July 28.

Barnes, Howard T., Montreal, Quebec, Canada, assignor to Union Carbide Company. Treating ice. 1,816,511; July 28.

Barnes Scale Company. (See King, Bert W., assignor.)

Barnes, Thomas E., Utica, N. Y. Liquid dispensing spout. 1,816,107; July 28.

Barnhart, Henry T., assignor to Cove Tower Company, Hollidays Cove, W. Va. Tower. 1,816,715; July 28.

Barnowitz, Harry, Brooklyn, N. Y. Educational game apparatus. 1,816,760; July 28.

Bar-Ray Products, Inc. (See Lapof, Samuel, assignor.)

Barrett, Frederick W. (See Brassert, H. A., and Barrett.)

Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Draft key retainer. 1,816,336; July 28.

Bauer Brothers Company, The. (See Iglehart, Richard S., assignor.)

Bauer, Hugo. (See Kolle, W., Hallensleben, Streitwolf, and Bauer.)

Bay State Optical Company. (See Nerney, George E., assignor.)

Beadsley & Piper Company, The. (See Piper, Walter F., assignor.)

Beal, Arthur F. (See Witherspoon, S. C., and Beal.)

Beardsley & Piper Company, The. (See Beardsley, E. O., and Piper, assignors.)

Beardsley, Elmer O., and W. F. Piper, assignors to The Beardsley & Piper Company, Chicago, Ill. Portable molding machine. 1,815,909; July 28.

Beardsley, Elmer O., and W. F. Piper, assignors to The Beardsley & Piper Company, Chicago, Ill. Portable molding machine. 1,816,000; July 28.

Beddison, Francis L., East St. Kilda, Victoria, Australia. Automatically changing sign or advertising device. 1,816,716; July 28.

Beers, Henry S., Westport, Conn., assignor to The Turbo-Mixer Corporation, New York, N. Y. Mixing apparatus. 1,816,362; July 28.

Beetem, Frank G., Philadelphia, Pa. Electrolytic rectifier. 1,816,038; July 28.

Beggs, Frank B., Sherrill, N. Y. Adjustable skirt for shirts. 1,816,068; July 28.

Behnke, Guy E., assignor to Reed Roller Bit Company, Houston, Tex. Roller bit. 1,816,203; July 28.

Behnke, Guy E., assignor to Reed Roller Bit Company, Houston, Tex. Drill cutter mounting. 1,816,204; July 28.

Bell, Arthur W., Chicago, and E. E. Eldredge, Wilmette, assignors, by mesne assignments, to Kraft-Phenix Cheese Corporation, Chicago, Ill. Packaging method and apparatus. 1,816,202; July 28.

Bell Telephone Laboratories, Incorporated. (See Carpenter, W. W., Dahl, Davis, and Kittredge, assignors.)

Bell Telephone Laboratories, Incorporated. (See Draper, John B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Mathes, Robert C., assignor.)

Bell Telephone Laboratories, Incorporated. (See McNeill, George A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Powell, Albert C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Stacy, Leland J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Zupa, Frank A., assignor.)

Belt, Fred R., Chicago, Ill. Igniter. Des. 84,730; July 28.

Belt, Thomas A. E., Schenectady, N. Y., assignor to General Electric Company. Electrical distribution system. 1,816,717; July 28.

Bendix Aviation Corporation. (See Morris, William L., assignor.)

Bendix Aviation Corporation. (See Perrot, Henri, assignor.)

Bennett Cleo, North Tonawanda, N. Y. Doll or similar article. Des. 84,731; July 28.

Bennett Cleo, North Tonawanda, N. Y. Doll or similar article. Des. 84,732; July 28.

Bennett, Ernest W., Ottumwa, Iowa. Woodworking machine. 1,816,069; July 28.

Bennett, Irving T. (See Murray, T. E., jr., and Bennett.)

Bennison, William E., Wandsworth, London, England, assignor to R. Hoe & Co. Inc., New York, N. Y. Plate printing machine. 1,815,895; July 28.

Berger Bros. Company. (See Shaw, Herbert, assignor.)

Bergwerksverband zur Verwertung von Schutzrechten der Kohlentechnik, Gesellschaft mit beschränkter Haftung. (See Gluud, W., Keller, Schönfelder, and Klempt, assignors.)

Bernardin Bottle Cap Company. (See Spahn, August C., assignor.)

Berresford, Arthur W., assignor to Kelvinator Corporation, Detroit, Mich. Freezing tray heating device. 1,816,711; July 28.

Berry, Otto C., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind. Carburetor. 1,816,070; July 28.

Berry, Robert C., assignor of one-fourth to A. J. Klaisler, Indianapolis, Ind. Clutch. 1,816,808; July 28.

Berthold, Rudolf G., assignor to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Berlin-Siemensstadt, Germany. Gas discharge tube switch. 1,816,168; July 28.

Berthon, Rudolphe, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y. Printing device for colored films. 1,816,039; July 28.

Bertsch, Heinrich, assignor to H. Th. Böhme Aktiengesellschaft, Chemnitz, Saxony, Germany. Sulphonation of oils or fatty matters. 1,816,071; July 28.

Biedermann, Paul R. G., Los Angeles, Calif. Valve and seat therefor. 1,816,205; July 28.

Biggert, Florence C., jr., Crafton, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Gauging material. 1,816,464; July 28.

Bissonette, Edwin S., deceased; The Guardian Trust Company and P. M. Bissonette, executors, assignors to The Guardian Equipment Company, Cleveland, Ohio. Fire control mechanism. 1,815,889; July 28.

Bissonette, Pearl M., et al., executors. (See Bissonette, Edwin S.)

Bittner, Herman, Greenfield, Iowa. Saw operating attachment for tractors. 1,816,246; July 28.

Blackmore, Lloyd, assignor to General Motors Corporation, Detroit, Mich. Tire carrier lock. 1,816,563; July 28.

Bladh, Sven G., Malmo, and G. E. Brofelth, assignors to Aktiebolaget Malcus Holmquist, Halmstad, Sweden. Soot brush. 1,816,761; July 28.

Blair, Rollin B., and A. M. Ronch, assignors to O. B. McClintock Company, Minneapolis, Minn. Alarm actuating device. 1,815,941; July 28.

Blickman, Manuel. (See Blickman, Saul and M.)

Blickman, S., Inc. (See Blickman, Saul and M., assignors.)

Blickman, Saul and M., New York, N. Y., assignors to S. Blickman, Inc., Weehawken, N. J. Table construction. 1,816,247; July 28.

Blomquist, Johan V., assignor to Aktiebolaget Atmos Stockholm, Sweden, and Societe Alsacienne De Constructions Macaniques, Mulhouse, France. Rotating steam boiler. 1,816,712; July 28.

Blumenfeld, Mose E., Savannah, Ga. Rubber sponge. 1,816,108; July 28.

Boas, Ernst P., and B. Liebowitz, New York, N. Y. Cardiotachometer. 1,816,465; July 28.

Bodde, Theodore, Niagara Falls, assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Train control system. 1,815,942; July 28.

Boedecker, Friedrich, Berlin-Dahlem, assignor to the Firm J. D. Riedel-E. de Haen Aktiengesellschaft, Berlin-Britz, Germany. Manufacture of aromatic hydroxy aldehydes. 1,816,248; July 28.

Boeing Airplane Company. (See Canney, Frank R., assignor.)

Boeing Airplane Company. (See Minshall, Robert J., assignor.)

Boerstra, Jacobus, Haarlem, Netherlands, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Air heater. 1,816,466; July 28.

Bogart, Fred H. (See Burrell, E. P., and Bogart.)

Böhme, H. Th., Aktiengesellschaft. (See Bertsch, Heinrich, assignor.)

Bohnsack, John A., Cleveland Heights, assignor to The E. F. Hauserman Company, Cleveland, Ohio. Panel unit. 1,816,512; July 28.

Bommer, Emil, Brooklyn, N. Y. Door closer and check. 1,816,169; July 28.

Bond Foundry & Machine Company. (See Bowen, James, assignor.)

Bond, Raymond W., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Dispensing apparatus of the visible type. 1,816,513; July 28.

Bond, William L., Schenectady, N. Y., assignor to General Electric Company. Shielded radio receiving apparatus and the like. 1,816,718; July 28.

Booth, Augustus D., assignor to The Chase Foundry and Mfg. Company, Columbus, Ohio. Coupler. 1,816,206; July 28.

Booth, Clement, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,816,170; July 28.

Booth, Clement, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Valve grinder. 1,816,171; July 28.

Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Lubricant protecting structure for internal brakes of vehicle wheels. 1,816,172; July 28.

Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Lubricant protecting structure for internal brakes of vehicle wheels. 1,816,173; July 28.

Booty, Philip C. P., assignor of one-half to Michael T. Daley, Chicago, Ill. Container. 1,816,141; July 28.

Borchert, Fred L., Rockford, Ill. Capping machine. 1,816,001; July 28.

Borgo, Michael P., Long Beach, and L. S. Sorenson, Lynwood, Calif. Well device. 1,816,207; July 28.

Bosworth, George P., assignor to Hemphill Company, Central Falls, R. I. Yarn controlling mechanism for knitting machines. 1,816,630; July 28.

Bottoms, Paschal L., Amarillo, Tex. Scaffold. 1,816,514; July 28.

Boughton, Solon J., assignor to The Willys-Overland Company, Toledo, Ohio. Brake control apparatus. 1,815,896; July 28.

Boulton & Paul Limited. (See North, John D., assignor.)

Bourne, Roland B., assignor, by mesne assignments, to The Maxim Silencer Company, Hartford, Conn. Silencer. 1,816,109; July 28.

Bowen, James, assignor to Bond Foundry & Machine Company, Mannheim, Pa. Antifriction bearing for line shafts and the like. 1,816,002; July 28.

Bowser, S. F., & Company. (See Bond, Raymond W., assignor.)

Boye, Charles, Warren, assignor to The Stevens Metal Products Company, Niles, Ohio. Forming internal flanges on tubular bodies. 1,816,357; July 28.

Boyens, Paul J., et al. (See Ryan, Thomas H., assignor.)

Boyer, Edwin W., Thornton, Ind. Chick feeder. 1,815,964; July 28.

Boyer, Sylvester, Lynn, Mass., assignor to General Electric Company. Dielectric material. 1,816,762; July 28.

Boynton, Arthur J., assignor to H. A. Brassert & Company, Chicago, Ill. Apparatus for charging blast furnaces. 1,815,897; July 28.

Bradford, Winslow P., Buffalo, N. Y. Arch support for shoes. 1,816,763; July 28.

Bradley, Harry L., et al. (See Power, Laurence E., assignor.)

Bradley, Lynde, et al. (See Power, Laurence E., assignor.)

Brady, Thomas, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Electromechanical interlock. 1,816,072; July 28.

Brady, William. (See Hachenberg, Louis, assignor.)

Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Operating suction actuated devices of automotive vehicles. 1,816,467; July 28.

Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)

Brainard, George C., and G. T. Gourley, assignors to The General Fireproofing Company, Youngstown, Ohio. Bookkeeper's desk. 1,816,249; July 28.

Brancko, Frank L. et al. (See Colombo, John, assignor.)

Brandt Automatic Cashier Co. (See Brandt, Edward J., assignor.)

Brandt, Edward J., assignor to Brandt Automatic Cashier Co., Watertown, Wis. Adjustable spout. 1,816,515; July 28.

Brassert, H. A., & Company. (See Andrews, Charles W., assignor.)

Brassert, H. A., & Company. (See Boynton, Arthur J., assignor.)

Brassert, H. A., & Company. (See Brassert, Herman A., assignor.)

Brassert, H. A., & Company. (See Brassert, H. A., and Barrett, assignors.)

Brassert H. A., & Company. (See Grilli, J. P., and Wetherbee, assignors.)

Brassert, Herman A., and F. W. Barrett, assignors to H. A. Brassert & Company, Chicago, Ill. Apparatus for cleaning gases. 1,815,898; July 28.

Brassert, Herman A., assignor to H. A. Brassert & Company, Chicago, Ill. Treatment of iron ore. 1,815,899; July 28.

Brassert, Herman A., assignor to H. A. Brassert & Company, Chicago, Ill. Construction of hot-blast stoves. 1,815,900; July 28.

Braun, Philip N., assignor to The Prosperity Company Inc., Syracuse, N. Y. Drying attachment for pressing machines. 1,816,208; July 28.

Brewster, Bryan W., Fullerton, Calif. Brake construction for draw works. 1,816,310; July 28.

Bridgeport Machine Company, The. (See Swan, Fred, assignor.)

Briquet Engineering Company. (See Willard, Robert E., assignor.)

Brockway, George G., Warren, Pa., assignor to Nichols Copper Company, New York, N. Y. Glass melting-preheater and mixer. 1,815,890; July 28.

Brofelth, Gustaf E. (See Bladh, S. G., and Brofelth.)

Brown Company. (See Richter, George A., assignor.)

Brown, Earl W., Willow Springs, Ill. Top-entrance beehive. 1,816,631; July 28.

Brown, Harvey W. (See Hilton, Ralph W., assignor.)

Brown Instrument Company, The. (See Brown, Richard P., assignor.)

Brown, Richard P., assignor to The Brown Instrument Company, Philadelphia, Pa. Blast furnace control system. 1,816,174; July 28.

Brown, Richard P., assignor to The Brown Instrument Company, Philadelphia, Pa. Combustion control. 1,816,311; July 28.

Bruce, Alfred W., New York, N. Y. Locomotive boiler. 1,816,468; July 28.

Brucker, Albert P., et al. (See Tipton, John A., assignor.)

Buchan, Hugh G., assignor to Buchan Telephone Records Co., Philadelphia, Pa. Sticker for filing prints in binders. 1,816,175; July 28.

Buchan Telephone Records Co. (See Buchan, Hugh G., assignor.)

Bucherer, Hans T., Charlottenburg, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Producing or developing azo dyes. 1,815,965; July 28.

Buckeye Blower Company. (See Harnett, Lewis D., assignor.)

Bucklen, Herbert E., Elkhart, Ind., assignor to H. E. Bucklen Corporation. Electric windmill. 1,816,632; July 28.

Bucklen, Herbert E., Corporation. (See Bucklen, Herbert E., assignor.)

Budd, Edward G., Manufacturing Co. (See Eksergian, Carolus L., assignor.)

Budd, Edward G., Manufacturing Company. (See Ledwinka, Joseph, assignor.)

Budd Manufacturing Company. (See Ledwinka, Joseph, assignor.)

Buffalo Brake Beam Company. (See Crone, Seth A., assignor.)

Bulkeley, Claude A., Kenmore, assignor to Niagara Blower Company, Buffalo, N. Y. Clip. 1,816,469; July 28.

Bull, Arthur A., assignor to Handy Cleaner Corporation, Detroit, Mich. Air cleaner. 1,816,633; July 28.

Burford, Russell D., Chicago, Ill. Spring device. 1,816,358; July 28.

Burghart, Lloyd M., Baltimore, Md., assignor to U. S. Industrial Alcohol Co., New York, N. Y. Manufacture of cellulose acetate. 1,816,564; July 28.

Burmeister, Norma M., Chicago, Ill. Powder puff. 1,816,565; July 28.

Burnham, Elmer J., Scotia, N. Y., assignor to General Electric Company. Electrical regulating system. 1,816,713; July 28.

Burrell, Edward P. (See Van Hamersveld, J. J. N., and Burrell.)

Burrell, Edward P. and F. H. Bogart, Cleveland Heights, assignors to the Warner & Swasey Company, Cleveland, Ohio. Chuck operating mechanism for machine tools. 1,816,209; July 28.

Burstein, Charles S., and N. Sattler, New York, N. Y. Combination apron and mitten. 1,816,566; July 28.

Burton, Frank F., Mount Carmel, assignor to Winchester Repeating Arms Company, New Haven, Conn. Locking-bolt latch for breakdown firearms. 1,816,312; July 28.

Burton, Frank F., Mount Carmel, assignor to Winchester Repeating Arms Company, New Haven, Conn. Breakdown firearm. 1,816,313; July 28.

Busch, Albert, Brunswick, assignor to J. A. Wilfing, Berlin, Germany. Manufacture of esters of 2-phenyl-quinoline-4-carboxylic acid. 1,816,003; July 28.

Buschman, Edward, Chicago, Ill. Battery terminal. 1,816,719; July 28.

Butler, Clyde G., Cincinnati, Ohio, assignor, by mesne assignments to Alemite Corporation, Chicago, Ill. Grease gun coupling. 1,816,567; July 28.

Calco Chemical Company, The. (See Sumner, Richard E., assignor.)

Cambay, Charles A., Paris, France. Automatic coin controlled telephone apparatus. 1,816,073; July 28.

Campbell, Frank X., Bronx, N. Y. Mirror. 1,815,966; July 28.

Canellis, Nicholas G. (See Gallagher, Frank H., assignor.)

Canney, Frank R., assignor to Boeing Airplane Company, Seattle, Wash. Cabin ventilator. 1,816,314; July 28.

Cannon, John W., Plainfield, N. J. Heater for boilers of the vertical type. 1,816,110; July 28.

Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic apparatus. 1,815,967; July 28.

Carborundum Company, The. (See Easter, George J., assignor.)
Carlin, Julius E., Freehold, N. J. Screw-driver. 1,816,359; July 28.
Carlsen, Leonard O. (See Hill, M. H., and Carlsen.)
Carlson, Anthony E., Los Angeles, Calif., assignor to Reed Roller Bit Company, Houston, Tex. Drill bit. 1,816,568; July 28.
Carlson, Cecil G., Willmar, Minn. Radiator for heating. 1,816,250; July 28.
Carlson, Philip E. (See Ulrich, Carl J., assignor.)
Carpenter, Warren W., Queens Village, N. Y., J. F. Dahl, Newark, N. J., R. C. Davis, New York, and L. E. Kittredge, Brooklyn, N. Y.; said Carpenter, Dahl, and Davis assignors to Bell Telephone Laboratories, Incorporated, and said Kittredge assignor to American Telephone and Telegraph Company. Telephone exchange system. 1,816,634; July 28.
Carson, Hiram J., Cedar Rapids, Iowa. Gas fired water heater. 1,816,419; July 28.
Casella, Secondo L., assignor to Bernard Ulmann Co., Inc., New York, N. Y. Skein winding machine. 1,816,420; July 28.
Castorina, Vincenzo. West New York, N. J. Vehicle tire. 1,816,176; July 28.
Caterpillar Tractor Co. (See Smith, Horatio W., assignor.)
Cawley, Aloysius J., assignor to Radio Corporation of America, New York, N. Y. Electrical sound reproducing process. 1,816,360; July 28.
Cerro De Pasco Copper Corporation, The, et al. (See Smith, W. C., and Mack, assignors.)
Chambers, Max., and A. F. Sisk, Preston, Md. Packing machine. 1,816,251; July 28.
Chandler, R. Gordon. (See Hughes, Benjamin I., assignor.)
Chase Foundry and Mfg. Company, The. (See Booth, Augustus D., assignor.)
Checker Cab Manufacturing Corporation. (See Johnson, Roy W., assignor.)
Chemical Products Company. (See Lloyd, S. J., and Kennedy, assignors.)
Chong, Jue L., S. L. Chong, and L. L. Chong, Isleton, Calif. Cutting tool unit for ground working implements. 1,816,210; July 28.
Chong, Look L. (See Chong, Jue L., S. L., and L. L.)
Chong, Sam L. (See Chong, J. L., S. L., and L. L.)
Chuchita, John, Olyphant Borough, Pa. Invalid car. 1,815,968; July 28.
Church, Lewis H., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,816,667; July 28.
Church, Lewis H., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,816,668; July 28.
Church, Lewis H., Roselle, assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,816,669; July 28.
Church, Lewis H., assignor to The Thomas & Betts Co., Elizabeth, N. J. Capped elbow. 1,816,670; July 28.
Cincinnati Grinders Incorporated. (See Booth, Clement, assignor.)
Clark, James, and J. E. Walborn, assignors to S. R. Dresser Manufacturing Company, Bradford, Pa. Wrought metal repair device for pipe lines. 1,816,421; July 28.
Clark, James H., Modesto, Calif. Tractor cutter. 1,816,074; July 28.
Clark, James R., assignor to The Yowman & Erbe Manufacturing Company, Rochester, N. Y. Yielding retainer for visible index card holders. 1,816,635; July 28.
Clark, James R., assignor to The Yowman & Erbe Manufacturing Company, Rochester, N. Y. Yielding retainer for visible index card holders. 1,816,636; July 28.
Clark, James R., assignor to The Yowman & Erbe Manufacturing Company, Rochester, N. Y. Yielding retainer for visible index card holders. 1,816,637; July 28.
Clark, William A., Oakland, Calif. Helicopter. 1,816,315; July 28.
Clement, John, Albany, Tex. Piston and cylinder oiling system for internal combustion engines. 1,816,516; July 28.
Clifford Manufacturing Co. (See Clifford, Walter B., assignor.)
Clifford, Walter B., assignor to Clifford Manufacturing Co., Boston, Mass. Steam trap. 1,816,142; July 28.
Cline, L. O. (See Marron, Richard F., assignor.)
Clipsham, Kenneth M. (See Jackson, M. B., and Clipsham.)
Cloutier, Arthur N. (See Lawson, R. H., and Cloutier.)
Coleman, Jacques G., Woodmere, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Knife. 1,816,422; July 28.
Collier, Henry D., assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif. Fitting for fluid containers. 1,816,004; July 28.
Colombo, John, Auburn, N. Y., assignor to three-fourths to G. Siciliano, S. Piro, and F. Lo Brancko, York, Pa. Vehicle fender and brake. 1,816,005; July 28.
Columbia Axle Company, The. (See Ragan, Frederick H., assignor.)
Combs, Edward L., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Radiocabinet. Des. 84,733; July 28.
Comptoir General De Vente De La Montre Roskopf Societe Anonyme Vre. Chs. Leon Schmid & Cie. (See Jeanneret, Abram L., assignor.)
Condit Electrical Manufacturing Corporation. (See Mann, William R., assignor.)
Condit Electrical Manufacturing Corporation. (See Wood, Morris B., assignor.)
Conner, Milton A. (See Gangloff, W. C., and Conner.)
Consortium Fuer Elektrochemische Industrie. (See Herrmann, W. O., and Deutsch, assignor.)
Container Corporation of America. (See Walter, Harrison B., assignor.)
Cook Electric Company. (See Folds, George R., assignor.)
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Cook Electric Company. (See Schultz, Roy M., assignor.)
Cook, Kenneth B. (See Foster, B. H., and Cook.)
Coones, Charles W., San Diego, Calif. Coin controlled selecting mechanism. 1,816,278; July 28.
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Sharp freezing unit. 1,816,211; July 28.
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerating unit. 1,816,638; July 28.
Corbus, Frederick G., assignor to D. M. Newbold, Philadelphia, Pa. Water heater. 1,816,177; July 28.
Cordy, Harry, Los Angeles, Calif. Landing gear for airplanes. 1,816,143; July 28.
Cornic, Yves, Asnieres, France. Artificial sponge and manufacture thereof. 1,816,764; July 28.
Cottrell, E. B., & Sons Company. (See Barber, Howard M., assignor.)
Coty, Alfred C. (See Coty, Thomas E. and A. C.)
Coty, Thomas E. and A. C., Watertown, N. Y. Tuber for multiwall bags. 1,816,361; July 28.
Coubrough, George B., Long Beach, Calif., assignor to Walter E. Lummus, Lynn, Mass. Method and apparatus for liquefying vapor mixtures. 1,816,212; July 28.
Courtenay, William A., Jr., Chester, assignor to Sun Oil Company, Philadelphia, Pa. Vending machine. 1,816,470; July 28.
Courtney, Nicholas P., Passaic, N. J. Receptacle opener. 1,815,901; July 28.
Cove Tower Company. (See Barnhart, Henry T., assignor.)
Crane Co. (See Zinkil, R. H., and Osterhage, assignors.)
Crawford, Alfred, assignor to Crawford Manufacturing Company, New Brunswick, N. J. Thread guide for stop motions. 1,816,765; July 28.
Crawford Manufacturing Company. (See Crawford, Alfred, assignor.)
Creed, George E., assignor to De Gestetner, Limited, London, England. Duplicating machine. 1,816,720; July 28.
Cribben & Sexton Company. (See Wilkinson, G. D., and Pellegrin, assignors.)
Crone, Seth A., East Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y. Safety support for brake rods. 1,816,639; July 28.
Crowley, Joseph P., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass drawing apparatus. 1,816,040; July 28.
Crowson, Edward J. (See Leary, John E., assignor.)
Cunningham, C. A., Co. (See Hutchings, Albert J., assignor.)
Curotto, Julio R., Habana, Cuba. Printing machine. 1,816,721; July 28.
Curzon, John S., Salt Lake City, assignor to Joseph Kastlic, Helper, Utah. Dump car. 1,816,279; July 28.
Dahl, Jack F. (See Carpenter, W. W., Dahl, Davis, and Kittredge.)
Daley, Michael T. (See Booty, Philip C. P., assignor.)
Dallas, Alva W., Trenton, N. J. Closet bowl. 1,816,362; July 28.
Darnall, William M., Lakewood, Ohio. Testing apparatus. 1,816,178; July 28.
Davidson, John C., Kay Springs, Nebr. License holder. 1,816,671; July 28.
Davis, Richard G. (See Carpenter, W. W., Dahl, Davis, and Kittredge.)
Dawson, Haller H., and I. H. Freese, Clarksburg, L. P. Dawson, executrix of said Haller H. Dawson, deceased, assignors to Hazel-Atlas Glass Co., Wheeling, W. Va. Fitter or shaper for glass articles. 1,816,280; July 28.
Dawson, Lula P., executrix. (See Dawson, H. H., and Freese.)
Dean Brothers Company. (See Dean, Stuart, assignor.)
Dean, Stuart, assignor to Dean Brothers Company, Indianapolis, Ind. Pump mechanism. 1,816,517; July 28.
De Andia-Yrarrazaval, Gabriel G., Paris, France. Sound amplifying horn. 1,816,722; July 28.
De Both, Franciscus C. J., deceased; J. J. D. de Both, administrator, Nymegen, Netherlands; J. P. M. de Both now administrator of Franciscus C. J. de Both. Scouring and polishing asphaltic plates. 1,816,363; July 28.
De Both, Jacobus J. D., administrator. (See de Both, Franciscus C. J.)
De Both, Johannes P. M., now administrator. (See de Both, Franciscus C. J.)
De Cew, Judson A., Mount Vernon, assignor to Process Engineers, Inc., New York, N. Y. Treating wood pulp fibers and paper product made therefrom. 1,816,423; July 28.

Deere & Company. (See Livesay, Robert C., assignor.)
Deere & Company. (See Paradise, Louis A., assignor.)
De Ferranti, Sebastian Z., and J. Turner, Hollinwood, England, assignors to Ferranti Inc., New York, N. Y. Radiator or cooler. 1,816,111; July 28.
Deffenbaugh, Charles W., Cumberland, Md. Connecting means for eccentric arms. 1,816,364; July 28.
Deisch, Noel, Washington, D. C., assignor of one-half to T. E. Stone, jr., Scarsdale, N. Y. Signaling or indicating device. 1,816,112; July 28.
Delanoy, Frederick W. (See Parker, W. H., and Delanoy.)
De Laval Separator Company, The (See Aller, Conrad F., assignor.)
De Laval Separator Company, The. (See Hapgood, Cyrus H., assignor.)
Dellinger, Martin C. (See Kulp, H. W., and Dellinger.)
Donehie, William A., Los Angeles, Calif. Removable body mechanism for trucks. 1,816,041; July 28.
De Niederhäusern, Georges, assignor to the Firm: Durand & Huguenin S. A., Basel, Switzerland. Dyeing and printing cellulose esters. 1,816,766; July 28.
Dennison Manufacturing Company. (See Kallander, Ernest L., assignor.)
Des Champs, James W., Sumter, S. C. Pump. 1,816,316; July 28.
Deutsch, Hans. (See Herrmann, W. O., and Deutsch.)
Deutsch, Leo, Beaver, and G. J. Genung, Rochester, Pa., assignors, by mesne assignments, to The Wayne Pump Company, Baltimore, Md. Fluid dispensing apparatus. 1,816,569; July 28.
Deutscher Versicherungs-Verkehr A.-G., et al. (See Toewe, Fritz, assignor.)
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Boat. 1,816,365; July 28.
Dick, Samuel M., Pasadena, Calif. Liquid carbonator. 1,816,144; July 28.
Dicks, Thomas A., assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa. Propeller. 1,816,317; July 28.
Diederichs, Carl A., Pittsburgh, Pa. Endless Circuit toy game. 1,816,471; July 28.
Dillman, Berry B., Great Falls, Mont. Portable bridge. 1,816,672; July 28.
Dinner, Heinrich, Ennenda, assignor to the Firm: Sulzer Frères Société Anonyme, Winterthur, Switzerland. Four stroke internal combustion engine with airless injection of the fuel. 1,816,366; July 28.
Dirkes, Robert F., Jamaica, assignor to The Western Union Telegraph Company, New York, N. Y. Synchronous communication system. 1,815,969; July 28.
Dobrinski, Paul, Makoti, N. Dak. Drill stem. 1,816,767; July 28.
Dorn, R. J., Co. (See Willis, Martin, assignor.)
Dorozi, István. (See Dorogi, Lajos and I.)
Dorogi, Lajos and I., Budapest, Hungary. Hollow inflatable sheet rubber bodies and producing the same. 1,816,472; July 28.
Douglass, William A., Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Concentrating ores and minerals by flotation. 1,816,145; July 28.
Down, Sidney G., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Air spring for motor vehicles. 1,816,075; July 28.
Down, Sidney G., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake expansion tube. 1,816,076; July 28.
Drackett Chemical Company, The. (See Gangloff, Wilmer C., assignor.)
Drackett Chemical Company, The. (See Gangloff, W. C., and Conner, assignors.)
Dragon Fly Aero Corporation. (See Wardell, William, assignor.)
Drake, Clifford W. (See Magness, G. C., and Drake.)
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Drawing sheet glass. 1,816,179; July 28.
Drake, John L., Toledo, and L. C. Mambourg, Lancaster, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for producing sheet glass. 1,816,180; July 28.
Draper, John B., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Testing system. 1,816,570; July 28.
Dresser, S. R., Manufacturing Company. (See Clark, J., and Walborn, assignors.)
Drissner, Alfred E., assignor to The National Acme Company, Cleveland, Ohio. Tool slide or reaming attachment. 1,816,571; July 28.
Dubilier Condenser Corporation. (See Dubilier, William, assignor.)
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,816,640; July 28.
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,816,641; July 28.
Dudley Lock Corporation. (See Full, George D., assignor.)
Dugelay, Paul, Le Bourget, assignor to Societe Francaise des Pompes et Machines Worthington, Paris, France. Feed water heater. 1,816,518; July 28.
Duke Manufacturing Co. (See Duke, Marsh P., ass'gnor.)
Duke, Marsh P., University City, assignor to Duke Manufacturing Co., St. Louis, Mo. Bin. 1,816,213; July 28.
Dull, Raymond W., Chicago, Ill., and E. Goertz, Indianapolis, Ind., assignors to Link-Belt Company, Chicago, Ill. Silent chain drive. 1,816,478; July 28.
Duluth Show Case Company. (See Stack, John, assignor.)
Dunoyer, Louis D. J. A., Neuilly-sur-Seine, France. Securing means for laboratory or workshop apparatus. 1,816,723; July 28.
Duplate Corporation. (See Sherts, J. H., and Willits, assignors.)
Du Pont, E. I., de Nemours & Company. (See Douglass, William A., assignor.)
Du Pont, E. I., de Nemours & Company. (See Keats, John L., assignor.)
Durand & Huguenin S. A. (See de Niederhäusern, Georges, assignor.)
Dutchess Tool Company. (See Van Houten, Frank H., assignor.)
Eagle Manufacturing Company. (See Paull, Samuel O., assignor.)
Easter, George J., assignor to The Carborundum Company, Niagara Falls, N. Y. Manufacture of zirconium compound refractories. 1,816,006; July 28.
Eastern Corporation. (See Miltenberger, Eugene F., assignor.)
Eastern Finishing Works. (See Adams, William H., assignor.)
Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Hour glass bearing. 1,816,474; July 28.
Eclipse Petrol Economiser System Company, The. (See Godward, Ernest R., assignor.)
Economy Fuse and Manufacturing Company. (See Kurath, Franz, assignor.)
Ecremeuses Melotte, Societe Anonyme. (See Henrard, Fernand, assignor.)
Edison General Electric Appliance Company. (See Patten, Raymond R., assignor.)
Edison, Thomas A., Incorporated. (See Schallis, Charles A., assignor.)
Egan Cotton Mills. (See Willingham, Baynard, assignor.)
Eggerss, Hans A., Van Wert, Ohio. Container structure. 1,815,970; July 28.
Eisenberg, Charles G., jr., assignor to The Heil Co., Milwaukee, Wis. Load equalizing truck body. 1,816,042; July 28.
Eksergian, Carolus L., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Portable clinching tool. 1,816,318; July 28.
Eksergian, Carolus L., Detroit, Mich., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automatic feeding apparatus for sheet metal working machines. 1,816,319; July 28.
Eldredge, Elmer E. (See Bell, A. W., and Eldredge.)
Electric Boat Company. (See Griesbaber, Hugo E., assignor.)
Electric Boat Company. (See Kolb, Frederick V., assignor.)
Electric Service Supplies Company. (See Osborne, David H., assignor.)
Electro Anti-Corrosion Corporation. (See Kirkaldy, Alexander, assignor.)
Electro Chemical Company. (See Hardoen, Robert H., assignor.)
Electrol Incorporated. (See Feeley, Joseph P., ass'gnor.)
Electrolux Servel Corporation. (See Taylor, Robert S., assignor.)
Elektrische Lot- und Schweiss-Gesellschaft mit beschrankter Haftung. (See Helle, Carl, assignor.)
Elia, Giovanni E., Rome, Italy. Torpedo. 1,816,768; July 28.
Eliel, Elizabeth S. (See Eliel, Leon T., assignor.)
Eliel, Leon T., Pasadena, Calif., assignor to E. S. Eliel. Method of and apparatus for making maps. 1,816,181; July 28.
Eliel, Leon T., Pasadena, Calif., assignor to E. S. Eliel. Folding mirror stereoscope. 1,816,214; July 28.
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Solubilized nitrocellulose. 1,816,146; July 28.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, Lockwood B., and F. M. Holden, assignors to General Motors Corporation, Detroit, Mich. Oil-reclaiming mechanism. 1,816,573; July 28.
Ellzey, Esco F., Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Device for administering medicaments. 1,816,902; July 28.
Elsey, Howard M., Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company. Glass seal. 1,816,424; July 28.
Emery, Frank, Summerdale, Pa. Stocking. 1,816,475; July 28.
Emmer, Hans J., Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Production of dibenzanthrone. 1,816,281; July 28.
Enterprise Holding Company. (See Johnson, John O., assignor.)
Eule, Martin, Berlin Spandau, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. High pressure tubular boiler. 1,816,520; July 28.

Evans, George S., Bronxville, assignor to The Mathieson Alkali Works, Inc., New York, N. Y. Refining molten metals. 1,816,007; July 28.
Everett, Zelma R., and K. F. V. Nygaard, Philadelphia, Pa. Sterile container for clinical thermometers. 1,816,425; July 28.
Ewing, Lon R., Kokomo, and T. J. Mechling, Burlington, Ind. Harvesting machine. 1,816,519; July 28.
Fallor, Charles W., Forest Hills, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,816,182; July 28.
Fales Chemical Company, The. (See Fales, Harold A., assignor.)
Fales, Harold A., Leonia, N. J., assignor to The Fales Chemical Company, Inc., Cornwall Landing, N. Y. Caustic alkali stick. 1,816,043; July 28.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake cylinder device. 1,816,077; July 28.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,816,078; July 28.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,816,079; July 28.
Fauser, Gustave M., Ardsley on Hudson, assignor to Atkinson, Wade & Company, Inc., New York, N. Y. Textile fabric or similar article. Des. 84,734; July 28.
Feeley, Joseph P., New York, assignor to Electrol Incorporated, St. Louis, Mo. Mechanical advertising device. 1,816,521; July 28.
Feld, Herman, Middle Village, N. Y. Electrically heated tool. 1,816,113; July 28.
Ferguson, Milford B., Brooklyn, N. Y., assignor to Package Machinery Company, Springfield, Mass. Twisting mechanism for wrapping machines. 1,816,080; July 28.
Ferranti Inc. (See de Ferranti, S. Z., and Turner, assignors.)
Ferris, Seymour W., Lansdowne, Pa. Dewaxing oil. 1,816,367; July 28.
Fetter, Harry H., Washington, D. C. Indentification system for keys. 1,816,642; July 28.
Fink, Colin G., and W. G. King, jr., New York, N. Y., assignors to The American Thermos Bottle Company, Norwich, Conn. Manufacture of double-walled receptacles. 1,816,476; July 28.
Finlay, Robert H. F., Belfast, Ireland. Trousers press. 1,816,724; July 28.
Fioruzzi, Vittorio, Piacenza, Italy. Apparatus for breeding silkworms. 1,816,368; July 28.
Firestone Footwear Company. (See Stevens, William C., assignor.)
Firestone Tire and Rubber Company, The. (See Putt, Edward D., assignor.)
Firestone Tire & Rubber Company, The. (See Uschmann, Curt, assignor.)
Fischer-Hinnen, Jacques, deceased, Oerlikon, by Landis & Gyr, A.-G., assignee, Zug, Switzerland. Electrical ignition device. Re18,136; July 28.
Fisk, Ernest T., Sydney, New South Wales, Australia. Sound suppressing ventilator fitment for wall apertures. 1,816,769; July 28.
Flagler, Sidney V., assignor, by mesne assignments, to G. Lipechutz, Chicago, Ill. Switch plate. 1,816,803; July 28.
Flauder, Alfred J., Trumbull, Conn. Athletic trophy. Des. 84,735; July 28.
Florman, Irving, New York, N. Y. Cigar and cigarette lighter. Des. 84,736; July 28.
Flynn, Edward, Tiffin, Ohio. Radiator. 1,816,320; July 28.
Flynn, John B. (See Schnell, W. and Flynn.)
Foco, Bruno, Turin, Italy. Spring washer. 1,816,673; July 28.
Folds, George R., Evanston, assignor to Cook Electric Company, Chicago, Ill. Cable terminal. 1,816,008; July 28.
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Ignition system. 1,816,215; July 28.
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Airplane. 1,816,216; July 28.
Ford Motor Company. (See Ford, Henry, assignor.)
Ford Motor Company. (See Hicks, Harold A., assignor.)
Ford Motor Company. (See Kamphausen, Carl C., assignor.)
Ford Motor Company. (See Riemenschneider, Ernest, assignor.)
Forsyth, George H., Chicago, Ill., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich. Disk wheel. 1,816,643; July 28.
Fortner, Fred, Gladwin, Mich. Basket reed connecting machine. 1,816,674; July 28.
Foss, Orlando W., Melrose, Mass. Collapsible padded box. 1,816,321; July 28.
Foster, Arthur B. (See Acree, Solomon F., assignor.)
Foster, Boutwell H., Maplewood, N. J., and K. B. Cook, Winnsboro, S. C., assignors to The Mechanical Rubber Rubber Company, Cleveland, Ohio. Pile or tufted sheet fibrous material. 1,816,574; July 28.
Foster Wheeler Corporation. (See Sieder, Everett N., assignor.)
Fouse, William J., Austwell, Tex. Indicator for cotton presses. 1,816,252; July 28.
Fowler, Dottie D., Seattle, Wash. Crochet rack. 1,816,081; July 28.
Fox, John H., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass surfacing apparatus. 1,815,971; July 28.
Franco, Attilio, Milan, Italy. Heating apparatus for railway cars. 1,816,369; July 28.
Freeman, Edison S., Miami, Fla. Fishing lure. 1,816,725; July 28.
Freese, Ira H. (See Dawson, H. H., and Freese.)
Frick, Chester A., assignor to Glascock Brothers Mfg. Company, Muncie, Ind. Bottle cooling box. 1,816,426; July 28.
Frick, Chester A., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind. Bottle dispensing refrigerator. 1,816,427; July 28.
Friedman, Emery G., Brownsville, Tex. Oil sampler. 1,816,726; July 28.
Frigidaire Corporation. (See Andrews, Frank W., assignor.)
Frink, Robert L., Lancaster, Ohio. Retaining and sealing furnace structures. 1,816,322; July 28.
Fry, Orlander W., assignor to O. R. Fuller Co., Los Angeles, Calif. Vehicle spring. 1,816,009; July 28.
Full, George D., Winnetka, assignor to Dudley Lock Corporation, Chicago, Ill. Permutation lock for door latch. 1,816,575; July 28.
Fuller Lehigh Company. (See Knemmerling, Gustav H., assignor.)
Fuller, O. R., Co. (See Fry, Orlander W., assignor.)
Fulton Company, The. (See Thorp, Joel R., assignor.)
Fundom, Earl H., Lima, Ohio, assignor to Pettibone Mulliken Company, Chicago, Ill. Dipper bucket. 1,816,522; July 28.
Furtow, Albert M., Mount Clemens, Mich. Wheel rim and tire lock. 1,816,147; July 28.
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,816,428; July 28.
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments to Gillette Safety Razor Company, Boston, Mass. Blade holder. 1,816,477; July 28.
Galassi, Pasquale, New York, N. Y. Sectional dividing strip for floors. 1,816,727; July 28.
Gallagher, Frank H., assignor to N. G. Canellis, Chicago, Ill. Cooling and ventilating airplane fans. 1,816,183; July 28.
Gallagher, John, Philadelphia, Pa. Wave motor. 1,816,044; July 28.
Gambino, Andrew. (See Steiner, L., and Gambino.)
Gangloff, Wilmer C., assignor to The Drackett Chemical Company, Cincinnati, Ohio. Prepared ingot material for use in drain opening compounds and making it. 1,816,805; July 28.
Gangloff, Wilmer C., Cincinnati, and M. A. Conner, Mariemont, assignors to The Drackett Chemical Company, Cincinnati, Ohio. Machine for developing aluminum into particles. 1,816,806; July 28.
Ga Nung, Howard D., Llanerch, Pa., E. Smith, Atlantic City, N. J., and D. B. Wilson, Philadelphia, Pa. Carbureted water gas apparatus. 1,816,478; July 28.
Gee, William J. (See Orester, J., and Gee.)
Geertz, Eric. (See Dull, R. W., and Geertz.)
Gégauff, Charles, Mulhouse, France. Combing machine. 1,816,644; July 28.
Geiger, Julius, G. m. b. H. (See Winny, Franz, assignor.)
Geller, Leon W., Hamburg, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Eliminating excess diazo compounds. 1,815,903; July 28.
Geistharp, Frederick, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making plate glass. 1,815,972; July 28.
General Aniline Works, Inc. (See Bucherer, Hans T., assignor.)
General Aniline Works, Inc. (See Emmer, Hans J., assignor.)
General Aniline Works, Inc. (See Schoeller, Conrad, assignor.)
General Aniline Works, Inc. (See Steiger, Norbert, assignor.)
General Electric Company. (See Belt, Thomas A. E., assignor.)
General Electric Company. (See Bond, William L., assignor.)
General Electric Company. (See Boyer, Sylvester, assignor.)
General Electric Company. (See Burnham, Elmer J., signor.)
General Electric Company. (See Grassot, Emile, assignor.)
General Electric Company. (See Hull, John I., assignor.)
General Electric Company. (See Illovich, Avram D., assignor.)
General Electric Company. (See Langmuir, Irving, assignor.)
General Electric Company. (See Ledig, W., and Loeb, assignors.)
General Electric Company. (See Moore, Daniel M., assignor.)
General Electric Company. (See Moss, Sanford A., assignor.)
General Electric Company. (See Pallin, George, assignor.)
General Electric Company. (See Petersen, W., and Troger, assignors.)
General Electric Company. (See Pohl, Robert, assignor.)

General Electric Company. (See Shaw, Percy G., assignor.)
General Electric Company. (See Upp, J. W., and Rankin, assignors.)
General Electric Company. (See Woodworth, John L., assignor.)
General Fire Extinguisher Company. (See Knight, Ira W., assignor.)
General Fire Extinguisher Company. (See Loepsinger, Albert J., assignor.)
General Fireproofing Company, The. (See Brainard, G. C., and Gourley, assignors.)
General Motors Corporation. (See Blackmore, Lloyd, assignor.)
General Motors Corporation. (See Ellis, L. B., and Holden, assignors.)
General Motors Corporation. (See Golden, Harry S., assignor.)
General Motors Corporation. (See Lee, William S., assignor.)
General Spring Corporation. (See Wood, Joseph K., assignor.)
Genung, George J. (See Deutsch, L., and Genung.)
Geske, Carl, Grand Rapids, assignor to Winters & Crampton Manufacturing Company, Grandville, Mich. Refrigerator latch. 1,816,184; July 28.
Gestetner, D., Limited. (See Creed, George E., assignor.)
Getchell, Benjamin E., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Electric switch. 1,816,429; July 28.
Gillette Safety Razor Company. (See Coleman, Jacques G., assignor.)
Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)
Gillette-Vibber Company. (See Noble, Edward J., assignor.)
Gilligan, George H., assignor to U. S. Ring Traveler Company, Providence, R. I. Ring traveler. 1,816,479; July 28.
Giordano, Joseph, West Nyack, N. Y. Spray nozzle. 1,816,645; July 28.
Girard Model Works Inc., The. (See Smith, Anthony N., assignor.)
Girshowitch, Naum G., New York, N. Y. Annealing furnace. 1,816,253; July 28.
Glancy, Anna E., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,816,728; July 28.
Glascock Brothers Mfg. Company. (See Frick, Chester A., assignor.)
Glascock Brothers Manufacturing Company. (See White, Albert R., assignor.)
Glascock Brothers Manufacturing Company. (See Wingate, Clayton B., assignor.)
Glatthar, George E., Cleveland Heights, assignor to The Art Metal Company, Cleveland, Ohio. Lamp. Des. 84,737; July 28.
Glatthar, George E., Cleveland Heights, assignor to The Art Metal Company, Cleveland, Ohio. Lamp. Des. 84,738; July 28.
Gleason Works. (See Hill, Maxwell H., assignor.)
Gleason Works. (See Hill, M. H., and Carlsen, assignors.)
Glenn, Coulter E., Evans City, Pa. Automobile luggage carrier. 1,815,943; July 28.
Globar Corporation. (See Shaw, Harold N., assignor.)
Glück, Ludovic, Arad, Rumania. Safety device for containers holding liquids which develop explosive gases. 1,816,323; July 28.
Glund, Wilhelm. K. Keller, R. Schönfelder and W. Klempt, assignors to the Firm: Berguwerksverband zur Verwertung von Schutzrechten der Kohlentechnik, Gesellschaft mit beschränkter Haftung, Dortmond-Eving, Germany. Production of hydrogen. 1,816,523; July 28.
Godefroy, Henri, assignor to Société Godefroy Freres, Paris, France. Automatic developer for photographic paper in sheets. 1,816,646; July 28.
Godward, Ernest R., New York, N. Y., assignor to The Eclipse Petrol Economizer System Companying, Limited, Christchurch, New Zealand. Vaporizer. 1,816,430; July 28.
Goldberg, Max W., assignor by mesne assignments to Pouring device. 1,816,185; July 28.
Golden, Harry S., Flint, assignor to General Motors Corporation, Detroit, Mich. Starting crank hole closure. 1,816,576; July 28.
Goldsmith, Alfred N., New York, N. Y., assignor to Radio Corporation of America. Automatic switching device for electric phonographs. 1,816,577; July 28.
Goodman, Jacob, Brooklyn, N. Y. Hair waver. 1,816,480; July 28.
Goriup, Frank J., assignor to Wolverine Supply & Manufacturing Company, Pittsburgh, Pa. Musical toy. 1,816,647; July 28.
Gossart, Firmin, Paris, France. Illuminated show case. 1,816,524; July 28.
Gourley, Glenn T. (See Brainard, G. C., and Gourley.)
Gradl Josef, Huckingen-on-the-Rhine, assignor to the Firm Manesmannrohren-Werke, Dusseldorf, Germany. Welded spigot and socket joint. 1,816,770; July 28.
Grassot, Emile, Meudon, France, assignor by mesne assignments, to General Electric Company. Selective relay responsive to unbalanced electric quantities. 1,816,675; July 28.
Grassot, Emile, Meudon, France, assignor by mesne assignments, to General Electric Company. Device responsive to unbalance in polyphase circuit voltages 1,816,676; July 28.
Grassot, Emile, Meudon, France, assignor by mesne assignments, to General Electric Company. Device responsive to unbalance in polyphase circuit voltages and currents. 1,816,729; July 28.
Grassott, Emile, Paris, France, assignor by mesne assignments, to General Electric Company. Selective relay responsive to unbalance on electric systems. 1,816,771; July 28.
Grassot, Emile, Meudon, France, assignor to General Electric Company. Relay. 1,816,772; July 28.
Grassot, Emile, Meudon, France, assignor to General Electric Company. Device responsive to unbalance in polyphase circuit voltages. 1,816,773; July 28.
Grauel, Edwin L., Cincinnati, Ohio. Match package. 1,815,973; July 28.
Grauel, Edwin L., Cincinnati, Ohio. Match package. 1,815,974; July 28.
Grauel, Edwin L., Cincinnati, Ohio. Match package holder. 1,815,975; July 28.
Gray, Charles B., Millbourne, Pa. Punch connecting mechanism. 1,816,648; July 28.
Graybill, William J., York, assignor to H. B. Waltman, Springettsburg, Pa. Pan greasing machine. 1,816,148; July 28.
Green, Estill I., East Orange, N. J., assignor to American Telephone and Telegraph Company. Coupling between carrier and transmission lines. 1,815,976; July 28.
Greist, Hubert M. and H. F. Thurber, assignors to Greist Manufacturing Company, New Haven, Conn. Lamp shade. Des. 84,739; July 28.
Greist Manufacturing Company. (See Greist, H. M., and Thurber, assignors.)
Grieshaber, Hugo F., New London, assignor to Electric Boat Company, Groton, Conn. Submarine boat. 1,815,904; July 28.
Griessbach, Robert. (See Mittasch, A., Lucas, and Griessbach.)
Grilli, John P., and H. L. Wetherbee, assignor to H. A. Brassert & Company, Chicago, Ill. Checkerwork. 1,815,905; July 28.
Grindal, Morten, Motala, Verkstad, Sweden. Packing sand in foundry molds and cores. 1,816,774; July 28.
Gritt, Frank A., assignor to Gritt, Inc., Indianapolis, Ind. Lamp. Des. 84,740; July 28.
Gritt, Inc. (See Gritt, Frank A., assignor.)
Gros, Henry G., Oakville, assignor to The Waterbury Tool Company, Waterbury, Conn. Mooring apparatus for aircraft. 1,816,010; July 28.
Grossman, Frank, Brooklyn, N. Y. Sport shoe or similar article. Des. 84,741; July 28.
Grossman, Frank, Brooklyn, N. Y. Sport shoe or similar article. Des. 84,742; July 28.
Guardian Equipment Company, The. (See Bissonette, Edwin S., assignor.)
Guardian Trust Company, et al, executors. (See Bissonette, Edwin S.)
Guild, Waldo J. (See Heald, R. N., and Guild.)
Gumaer, Percy W., West Englewood, assignor to Hopkins Corporation, Jersey City, N. J. Loud speaker. 1,815,944; July 28.
Gurnee, Isaac Q., Butler, N. J. Mold. 1,816,011; July 28.
Gutensohn, Richard, Frankfort-Hochst-on-the-Main, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Washing gases and vapors. 1,816,525; July 28.
Guy, Henry L., Hale, England, assignor to Westinghouse Electric & Manufacturing Company. Vapor condenser. 1,816,140; July 28.
Haag, Albert R., Peoria, Ill. Gearing for washing machine agitators. 1,815,906; July 28.
Hachenberg, Louis, Throggsneck, assignor of one-half to W. Brady, Ossining, N. Y. Window cleaning device. 1,816,370; July 28.
Haegermann, Friedrich, Peine, Germany. Prize trophy. 1,816,114; July 28.
Haentjens, Otto, Hazleton, Pa. Multistage centrifugal pump. 1,816,775; July 28.
Haley, Reuben, Beaver, Pa. Bubbled colored glass articles. 1,816,045; July 28.
Hall, Louis M., Fort Thomas, Ky., assignor to The Monarch Tool & Manufacturing Company, Cincinnati, Ohio. Time controlled coin device for radiocircuits. 1,816,526; July 28.
Hallensleben, Julius. (See Kolle, W., Hallensleben, Streitwolf, and Bauer.)
Halstead, Stanley M., A. I. Wickland, and W. C. Tustin, San Jose, Calif., assignors to Wayne Company, Fort Wayne, Ind. Elevator. 1,815,907; July 28.
Hamlin, Benjamin M., assignor to Wheary Trunk Company, Racine, Wis. Hand luggage. 1,815,908; July 28.
Hammann, Frederick B., assignor to W. W. Varney, Baltimore, Md. Wind musical instrument pad. 1,816,578; July 28.
Hammarstrand, Anders T., Djursholm, and N. M. Lagerkrans, Enskede, Stockholm, Sweden. Coin controlled savings clock. 1,816,649; July 28.
Hammond, John H., jr., Gloucester, Mass. Radio communication system. 1,816,579; July 28.

Hammond, Thomas S. (See Sklar, Samuel B., assignor.)
Handy Cleaner Corporation. (See Bull, Arthur A., assignor.)
Hanna Engineering Works. (See Hanna, John C., assignor.)
Hanna, John C., assignor to Hanna Engineering Works, Chicago, Ill. Geared roller wedge riveter. 1,816,677; July 28.
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Cleansing device for rock drills. 1,816,324; July 28.
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Drilling apparatus. 1,816,481; July 28.
Hapgood, Cyrus H., Nutley, N. J., assignor to The De Laval Separator Company, New York, N. Y. Milking machine. 1,816,482; July 28.
Hardin, Harvey H., Maitland, assignor of one-half to E. G. Hillsabeck, Graham, Mo. Airplane propeller. 1,816,730; July 28.
Hardoen, Robert H., Xenia, Ohio, assignor to The Electro Chemical Company, Dayton, Ohio. Electronic rectifier. 1,815,909; July 28.
Haring, Jacob L. (See Stephens, H. H., and Haring.)
Harnett, Lewis D., Columbus, Ohio, assignor, by mesne assignments, to Buckeye Blower Company. Combustible damper control for unit heaters. 1,816,217; July 28.
Harrison, Charles P. (See Steiner, A. P., Stoner, and Harrison.)
Hart, John F., Rockford, Ill. Can opener. 1,815,910; July 28.
Harter, Noah S., Waukegan, Ill. Wire fence fabric. Des. 84,743; July 28.
Hartford-Empire Company. (See Barker, William T., jr., assignor.)
Hartman, Anton. (See Nischke, Henry, assignor.)
Haslun, Joseph, New York, and N. E. and W. I. Haslun, Yonkers, N. Y. Sign. 1,816,776; July 28.
Haslun, Norman E. (See Haslun, J., N. E., and W. I.)
Haslun, William I. (See Haslun, J., N. E., and W. I.)
Hastings, Odie L., Shreveport, La. Pump piston. 1,816,527; July 28.
Hauge, Oscar, San Mateo, Calif., assignor to National Biscuit Company. Pastry cone baking machine. 1,815,911; July 28.
Hauserman, C. F., Company, The. (See Bohnsack, John A., assignor.)
Hawley, John B., jr., Minneapolis, Minn. Oil well pump. 1,816,731; July 28.
Haysel, Arthur R., assignor of forty-nine one-hundredths to C. Thompson and G. K. Thompson, copartners in trade doing business under the firm name and style of Chas. & Geo. K. Thompson, Los Angeles, Calif. Mixer head. 1,816,528; July 28.
Hazel-Atlas Glass Co. (See Algeo, A. M., and Ross, assignors.)
Hazel-Atlas Glass Co. (See Dawson, H. H., and Freese, assignors.)
Heald Machine Company, The. (See Heald, Roger N., and Guild, assignors.)
Heald Machine Company, The. (See Page, Dwight C., assignor.)
Heald, Roger N., and W. J. Guild, assignors to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,816,082; July 28.
Heath, William S. G., Edgefield, S. C. Automobile tag securing and identification means. 1,816,254; July 28.
Heaton, Elsa G., Des Moines, Iowa. Egg candling and grading machine. 1,816,483; July 28.
Hefti, Wilhelm, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Ship propelled by internal combustion engines. 1,816,371; July 28.
Heil Co., The. (See Eisenberg, Charles G., jr., assignor.)
Heil Co., The. (See Thwaits, Frederick G., assignor.)
Heins, Harry J., Jersey City, N. J., assignor to Knyscheerer Corporation, New York, N. Y. Water sterilizing filling device. 1,816,012; July 28.
Heinz, Arthur A., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich. Breather and overflow device. 1,816,580; July 28.
Heiser, Henry C., Fairview Village, assignor to The Astrup Company, Cleveland, Ohio. Adjustable awning arm. 1,816,013; July 28.
Held, Theodor, assignor to the Firm Ringfeder G. m. b. H., Uerdingen, Germany. Friction spring. 1,816,325; July 28.
Helf, George, Milwaukee, Wis. Gas regulator. 1,816,431; July 28.
Helgeby, Ralph O., assignor to A C Spark Plug Company, Flint, Mich. Speedometer temperature compensator. 1,816,581; July 28.
Helle, Carl, assignor to Elektrische Lot- und Schweitz-Gesellschaft mit beschrankter Haftung, Brupswick, Germany. Soldering apparatus. 1,816,115; July 28.
Hemphill Company. (See Bosworth, George P., assignor.)
Hemphill Company. (See Lawson, R. H., and Cloutier, assignors.)
Henkel, Hermann. (See Herner, W., and Henkel.)
Henrard, Fernand, Brussels, assignor to Ecremeuses Melotte, Societe Anonyme, Remicourt, Belgium. Milking apparatus. 1,816,116; July 28.
Henry, Charles A., West Burlington, and C. A. Oppfelt, Burlington, Iowa. Method and apparatus for forming arch tubes. 1,816,218; July 28.
Heron, Donald D., Pittsburgh, Pa. Tooth exerciser. 1,816,582; July 28.
Herrmann, Willy O., and H. Deutsch, assignors to Consortium fuer Elektrochemische Industrie, Munich, Germany. Production of aectaldehyde. 1,816,326; July 28.
Hershey, Harry E., Oak Park, assignor to Automatic Electric Inc., Chicago, Ill. Supervisory system. 1,816,186; July 28.
Hertzberg, Harry, Brooklyn, N. Y. Dry mop. 1,816,529; July 28.
Hertzberg, Harry, Brooklyn, N. Y. Squeezee mop with wringer. 1,816,530; July 28.
Herz, Ferdinand B., assignor to Long Manufacturing Company, Detroit, Mich. Radiator unit. 1,816,372; July 28.
Hessen, Richard, Bautzen, Germany. Manufacture of condensation products from phenol and formaldehyde. 1,816,255; July 28.
Heyner, Willi, Berlin, and H. Henkel, Neukoll, near Berlin, Germany. Method and tool for securing wire-screw threads to wooden members. 1,816,282; July 28.
Hicks, Harold A., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Airplane. 1,816,219; July 28.
Hiering, William C., assignor to J. E. Mergott Company, Newark, N. J. Hand bag. 1,815,912; July 28.
Higgins, Harry A., assignor to Long Manufacturing Company, Detroit, Mich. Radiator. 1,816,373; July 28.
Hilgers, Ernst, Dusseldorf-Oberkassel, Germany, assignor by mesne assignments, to The American Bicheroux Company. Process and machine for rolling raw plate glass. 1,816,374; July 28.
Hill, Maxwell H., assignor to Gleason Works, Rochester, N. Y. Gear cutting machine. 1,816,375; July 28.
Hill, Maxwell H., and L. O. Carlsen, assignors to Gleason Works, Rochester, N. Y. Gear cutting machine. 1,816,376; July 28.
Hill, William H., Canton, Ohio. Internal combustion engine. 1,816,432; July 28.
Hillsabeck, Ernest G. (See Hardin, Harvey H., assignor.)
Hilton, Ralph W., assignor of one-half to H. W. Brown, Wichita, Kans. Wing spar for aeroplanes. 1,816,678; July 28.
Hise, George L., Ambridge, Pa. Conveyer. 1,816,327; July 28.
Hitner, Harry F., Oakmont, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making glass. 1,815,977; July 28.
Hitner, Harry F., Oakmont, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making glass. 1,815,978; July 28.
Hlavac, Anthony. (See Howsam, H. C., and Hlavac.)
Hnatek, Adolf, Vienna, Austria. Natural color cinematography. 1,816,083; July 28.
Hobracht, Paul, Dusseldorf, Germany. Machine for bending and tempering leaf-springs. 1,816,377; July 28.
Hoe, R., & Co. (See Bennison, William E., assignor.)
Hoffert, Wilfred H., assignor to National Benzole Association, London, England. Liquid fuel for use in internal combustion engines and the production thereof. 1,816,811; July 28.
Hogan, Edward F., assignor to Q. R. S. De Vry Corporation, Chicago, Ill. Split clamp for mounting insulator to face of sign or other object. 1,815,913; July 28.
Holden, Fenn M. (See Ellis, L. B., and Holden.)
Hollbaugh, Delbert G., Indianapolis, Ind. Food article. 1,816,283; July 28.
Holloway, John H., Lafayette, Ind. Carburetor. 1,816,531; July 28.
Holloway, John H., Lafayette, Ind. Indicating and recording instrument for testing piston rings and the like. 1,816,532; July 28.
Holmes, Earl K. (See Lewis, J. A., and Holmes.)
Holmes, Earl K., assignor, by mesne assignments, to Steel and Tubes, Inc. Cleveland, Ohio. Drawbench tongs. 1,816,484; July 28.
Holtz, John B., Los Angeles, Calif., assignor to Invention Development Corporation. Carson City, Nev. Advertising pedestal for weighing machine. Des. 84,744; July 28.
Honkins Corporation. (See Gumaer, Percy W., assignor.)
Hopkins Corporation. (See Hopkins, Marcus C., assignor.)
Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J. Loud speaker. 1,815,945; July 28.
Hotchner, Fred., Los Angeles, Calif. Changeable luminous display. 1,816,220; July 28.
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Apparatus for punching shapes from sheet metal. 1,816,150; July 28.
Hough Shade Corporation. (See Steffen, Le Roy J., assignor.)
Houseman, Harold E., Edge Moor, assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Plated knitted fabric. 1,816,221; July 28.
Howsam, Hilyard C., and A. Hlavac, Chicago, assignors to E. J. Hubbard, Berwyn, Ill. Reenforcement applying apparatus. 1,816,151; July 28.
Hubbard, Eber J. (See Howsam, H. C., and Hlavac, assignors.)
Huck, Louis C., Pleasant Ridge, Mich. Brake. 1,816,256; July 28.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,745; July 28.

Huff, Wilbert J., and C. G. Milbourne, Baltimore, Md.; said Milbourne assignor to said Huff. Purifying gases. 1,816,583; July 28.
Hughes, Benjamin I., Knoxville, Tenn., assignor to R. Gordon Chandler. Wallet. 1,816,284; July 28.
Hull, Foster J., assignor to Pangborn Corporation Hagerstown, Md. Sand blast pressure tank. 1,816,583; July 28.
Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Frequency changer. 1,816,777; July 28.
Hume, Walter R., Melbourne, Victoria, Australia. Shaping the meeting edges of curved blanks in the manufacture of sheet metal pipes and the like. 1,816,534; July 28.
Humphries, Chad H., assignor to J. C. Patten, Indianapolis, Ind. Composition for cadmium plating baths. 1,816,152; July 28.
Hussar, William B., St. Louis, Mo. Switch box support. 1,816,584; July 28.
Hussong Dyeing Machine Company. (See Tweedale, Joseph T., assignor.)
Hutchings, Albert J., Alston, assignor to C. A. Cunningham Co., Boston, Mass. Anchor. 1,816,433; July 28.
Hyde, Arthur M. (See Schaffer, Jacob M., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Gutensohn, Richard, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Koppe, Paul, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Lindner, F., and Link, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., Lucas, and Griessbach, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., and Muller, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pansegrau, Ernst, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Richter, Erich, assignor.)
Iglehart, Richard S., assignor to The Bauer Brothers Company, Springfield, Ohio. Locking device. 1,816,222; July 28.
Illovici, Avram D., Paris, France, assignor by mesne assignments to General Electric Company. Electric measuring and protecting device. 1,816,778; July 28.
Individual Drinking Cup Company. (See Ringler, William A., assignor.)
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
International Nickel Company, The. (See Wise, Edmund M., assignor.)
Invention Development Corporation. (See Holtz, John B., assignor.)
Irmer, Charles B. (See Moerk, F. N., and Irmer.)
Jackson, George L., Louisville, Ky., assignor to The Kird & Blum Manufacturing Company, Cincinnati, Ohio. Automatic cut-off. 1,816,223; July 28.
Jackson, John W., North Augusta, S. C. Lighting arrangement for automobiles. 1,816,224; July 28.
Jackson, Maunsell B., and K. M. Clipsham, Toronto, Ontario, assignors to Leaside Engineering Co., Limited, Leaside, Ontario, Canada. Engine starter. 1,815,914; July 28.
Jacocks, George T. (See Laird, W. G., and Jacocks.)
James, Enos P., San Diego, Calif. Drum snare. 1,816,328; July 28.
Jancsy, Henry G., Everett, Mass. Refrigerating apparatus. 1,816,585; July 28.
Jarvis, W. B., Company. (See Ruppel, Frederick C., assignor.)
Jeanneret, Abram L., assignor to Comptoir General de Vente de la Montre Roskopf Societe Anonyme vve. Chs. Leon Schmid & Cie., La Chaux-De-Fonds, Switzerland. Lighting device for key rings. 1,816,779; July 28.
Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)
Jenkins, Howard H., assignor to American Concrete Pipe Company, Los Angeles, Calif. Sectional form for making reenforced piles. 1,816,586; July 28.
Joachimson, Martin, New York, N. Y. Device for spreading butter. 1,816,535; July 28.
Joachimson, Martin, New York, N. Y. Machine for making sandwiches. 1,816,536; July 28.
Johannes, Hubert G., Milwaukee, Wis., assignor to Albert Pick-Barth Company, Inc., Chicago, Ill. Mixing device. 1,816,046; July 28.
Johantgen, Oliver D., assignor to Victor Adding Machine Company, Chicago, Ill. Calculating machine. 1,816,014; July 28.
Johns, Henry S., assignor to Bancroft Holdings Limited, Hamilton, Ontario, Canada. Bag filling and weighing machine. 1,816,587; July 28.
Johns, Henry S., assignor to Bancroft Holdings Limited, Hamilton, Ontario, Canada. Plaster mixing machine. 1,816,588; July 28.
Johnson, Arthur B., Minneapolis, Minn. Sawing and resawing machine. 1,816,485; July 28.
Johnson, Arthur L., Oak Park, assignor to Johnson Chair Co., Chicago, Ill. Chair. 1,816,486; July 28.
Johnson Chair Co. (See Johnson, Arthur L., assignor.)
Johnson, Erling, assignor to the firm Odda Smelteverk A/S, Odda, Norway. Converting phosphate rock into soluble compounds and of separating its content of lime and phosphoric acid. 1,816,285; July 28.
Johnson, John, Wimbledon, London, England. Water tube boiler. 1,816,780; July 28.
Johnson, John O., White Bear, assignor to Enterprise Holding Company, Minneapolis, Minn. Snowplow with side chute. 1,816,589; July 28.
Johnson, Lane, Ingram, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Flying shears. 1,816,187; July 28.
Johnson, Roy W., Columbus, Ohio, assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Pillar roof lamp. Des. 84,746; July 28.
Johnson, Roy W., Columbus, Ohio, assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Lens for vehicle lamps. Des. 84,747; July 28.
Johnson, Roy W., Columbus, Ohio, assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Lens for vehicle lamps. Des. 84,748; July 28.
Johnston, John A., Provo, Utah. Poultry fountain. 1,816,781; July 28.
Johnston, Robert T., New Brunswick, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Mechanism for making roofing. 1,816,329; July 28.
Jones, Alfred L., Green City, Mo. Cattle guard. 1,816,807; July 28.
Jordan, Connie B., Myrtlewood, Ala. Toy. 1,816,378; July 28.
Jordan, Hans., Berlin-Steglitz, assignor to the Firm Schering-Kohlbaum Aktiengesellschaft, Berlin, Germany. Alkyl-isopropylene-phenols and making same. 1,816,286; July 28.
Jordan, Hans, Berlin-Steglitz, assignor to Schering-Kohlbaum Aktiengesellschaft, Berlin, Germany. Producing alkyl-isopropylene-phenols. 1,816,287; July 28.
Kaemmerling, Gustav H., Allentown, Pa., assignor, by mesne assignments, to Fuller Lehigh Company. Apparatus for burning fuel. 1,816,434; July 28.
Kahler, Paul F., and S. S. Wicker, Chicago, Ill. Missile projecting device. 1,816,679; July 28.
Kahn, Julius, assignor to Truscon Steel Company, Youngstown, Ohio. Window structure. 1,816,537; July 28.
Kallander, Ernest L., assignor to Dennison Manufacturing Company, Framingham, Mass. Gauging thickness of surface coating. 1,815,915; July 28.
Krnphausen, Carl C., Ferndale, assignor to Ford Motor Company, Dearborn, Mich. Burring machine. 1,816,225; July 28.
Karfiol, Edward, Brooklyn, N. Y. Dolly. Des. 84,749; July 28.
Kastlic, Joseph. (See Curzon, John S., assignor.)
Keats, John L., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Enamel. 1,816,330; July 28.
Keebler, Elmer, assignor to Mechanical Manufacturing Company, Chicago, Ill. Bumping post. 1,815,917; July 28.
Keeler Brass Company. (See Uhlmann, Otto E., assignor.)
Keenan, Walter M., New York, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Company. Automobile storage. 1,816,590; July 28.
Keller, Konrad. (See Gluud, W., Keller, Schönfelder, and Klempt.)
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Keltie, George R., assignor to American Wringer Co., Inc., Woonsocket, R. I. Rotation indicating wringer roll. 1,815,916; July 28.
Kelvinator Corporation. (See Berresford, Arthur W., assignor.)
Kelvinator Corporation. (See Pope, Harold L., assignor.)
Kelvinator Corporation. (See Replogle, John R., assignor.)
Kennedy, Absalom M. (See Lloyd, S. J., and Kennedy.)
Kerlin, James R., Los Angeles, Calif. Wrench. 1,816,015; July 28.
Kern, Berrard, Syracuse, N. Y. Carpet and floor cleaner. 1,816,538; July 28.
Kern, Fred T., Milwaukee, Wis., Car puller. 1,816,188; July 28.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler. 1,816,650; July 28.
Keuffel, Carl W., Weehawken, assignor to Keuffel & Esser Company, Hoboken, N. J. Photometer. 1,816,047; July 28.
Keuffel & Esser Company. (See Keuffel, Carl W., assignor.)
Kienzle Uhrenfabriken Aktiengesellschaft et al. (See Toewe, Fritz, assignor.)
King, Bert W., assignor to Barnes Scale Company, Detroit, Mich. Scale. 1,816,189; July 28.
King, Clarence W., Shreveport, La. Catapulting device. 1,816,288; July 28.
King, Lochiel M., Alameda, Calif. Roadway traffic guide. 1,816,379; July 28.
King, Walter G., jr., (See Fink, C. C., and King.)
Kinney, Justus R., Jamaica Plain, Mass. Antiglare device for motor cars. 1,816,048; July 28.
Kirby, James B., West Richfield, Ohio. Screw retainer. 1,816,591; July 28.
Kirk & Blum Manufacturing Company, The. (See Jackson, George L., assignor.)
Kirkaldy, Alexander, Yorktown Heights, assignor to Electro Anti-Corrosion Corporation, New York, N. Y. Electrolytic system for the protection of condensers. 1,816,487; July 28.

Kislyn Corporation. (See Berthon, Rodolphe, assignor.)
Kittredge, Linus E. (See Carpenter, W. W., Dahl, Davis, and Kittredge.)
Kinisler, Andrew J. (See Berry, Robert C., assignor.)
Klaus, Fred R., Warren, and G. W. Seiberling, Akron, assignors to The American Welding & Manufacturing Company, Warren, Ohio. Dual wheel. 1,816,380; July 28.
Kleinsmith, Frederick, Indianapolis, Ind. Automobile license tag holder. 1,816,249; July 28.
Klempt, Walter. (See Gluud, W., Keller, Schönfelder, and Klempt.)
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Klimis, Apostolos, Baltimore, Md., assignor to The Klimis Auto-Photographic Machine Company, Incorporated. Automatic photographic apparatus. 1,816,290; July 28.
Klimis Auto-Photographic Machine Company, The. (See Klimis, Apostolos, assignor.)
Kline, George P., assignor to Williams, White & Co., Moline, Ill. Rim-forming machine and forming rims. 1,816,117; July 28.
Knapen, Achille, Brussels, Belgium. Means to recuperate the atmosphe ic moisture. 1,816,592; July 28.
Knapp, Leland G., assignor to Montgomery Ward & Co., Inc., Chicago, Ill. Washing machine. 1,816,593; July 28.
Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,816,257; July 28.
Knight, Ira W., assignor to General Fire Extinguisher Company, Providence, R. I. Frangible link. 1,816,016; July 28.
Knight, Morris C., Alexandria Bay, N. Y. Ice and water boat. 1,816,118; July 28.
Knight, Ralph F., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Measuring machine. 1,816,153; July 28.
Knowles, Alexander S., assignor to Tar and Petroleum Process Company, Chicago, Ill. Coking petroleum residues. 1,815,918; July 28.
Kny-Scheerer Corporation. (See Heins, Harry J., assignor.)
Kolb, Frederick V., New London, assignor to Electric Boat Company, Groton, Conn. Electrical connection for submarines. 1,816,435; July 28.
Kolle, Wilhelm, Frankfort-on-the-Main, J. Hallensleben, Hochst-on-the-Main, K. Streitwolf, and H. Bauer, Frankfort-on-the-Main, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, New York, N. Y. Water soluble organic arsenic and antimony compounds and process of making the same. 1,815,979; July 28.
Koller, Robert, Baden, Switzerland. Apparatus for the automatic presentation of objects for sale. 1,816,732; July 28.
Koppe, Paul, Neurocssen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of pure sulphur. 1,816,084; July 28.
Koppers Company, The. (See Speer, Frederick W., jr.)
Kortepeter, Ralph E., assignor, by mesne assignments, to Sperry Gyroscope Company Inc., Brooklyn, N. Y. Battle order instrument. 1,816,406; July 28.
Krabiel, William C., Winterset, Iowa. Furring strip anchor and using the same. 1,816,226; July 28.
Kraft-Phenix Cheese Corporation. (See Bell, A. W., and Eldredge, assignors.)
Krell, Joseph, Berlin-Zehlendorf, Germany. Printing machine. 1,816,733; July 28.
Kristensson, August. (See Thorssell, C. T., and Kristensson.)
Krupp, Fried. Grusonwerk Aktiengesellschaft. (See Ulrich, Georg, assignor.)
Kruschwitz, William F., Methuen, Mass. Laundry sorting and assembling device. 1,816,331; July 28.
Küchenmeister, Heinrich, Berlin, Germany. Sound reproducing device. 1,816,782; July 28.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Valve-spring lifter. 1,815,980; July 28.
Kurath, Franz, assignor to Economy Fuse and Manufacturing Company, Chicago, Ill. Electrical coil and manufacturing same. 1,816,680; July 28.
Kurtz, William S., Ephrata, assignor to Noggle Shirt Company, Inc., Manheim, Pa. Shirt collar. 1,816,119; July 28.
Kuyser, Jan A., Sale, England, assignor to Westinghouse Electric & Manufacturing Company. Turbo-generator ventilation. 1,816,489; July 28.
Lagerkrans, Nils M. (See Hammarstrand, A. T., and Lagerkrans.)
Laird, Wilbur G., New York, and G. T. Jacocks, Larchmont, N. Y. Radiator. 1,816,437; July 28.
Lake, Golladay, Grensda, Miss. Cigar and cigarette holder. 1,815,919; July 28.
Lake, Harry E., assignor to Preferred Utilities Manufacturing Corporation, New York, N. Y. Vent protector. 1,815,920; July 28.
Lake, William B., Braintree, England. Opening and closing windows. 1,816,258; July 28.
Lamer, Samuel, Pittsburgh, assignor of one-third to J. Shrak, Pittsburgh, Pa. Foot lever motor. 1,816,681; July 28.
Land, Arthur A. G., Chicago, Ill. Wire fence or grille fabric. 1,816,381; July 28.
Lande, Hjalmar, Minneapolis, Minn. Lock. 1,816,259; July 28.
Landis & Gyr, A.-G. (See Fischer-Hinnen, Jacques, assignor.)
Landis Tool Company. (See Steiner, A. P., Stoner, and Harrison, assignors.)
Lange, Karl W., et al. (See Toewe, Fritz, assignor.)
Langer, Arthur, Vienna, Austria. Extracting of iron. 1,815,946; July 28.
Langhammer, Paul, assignor to Package Machinery Company, Springfield, Mass. Wrapping machine and process. 1,816,085; July 28.
Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Electron discharge device. 1,816,682; July 28.
Lapof, Samuel, Brooklyn, assignor to Bar-Ray Products, Inc., New York, N. Y. Partition block. 1,815,921; July 28.
Lapof, Samuel, Brooklyn, assignor to Bar-Ray Products, Inc., New York, N. Y. Lath for use in constructing surfaces impervious to X-rays. 1,815,922; July 28.
Largura, Twolik R., Michigan City, Ind. Brick making machine. 1,816,572; July 28.
Larner, Chester W., Philadelphia, Pa. Article of personal equipment. 1,816,049; July 28.
Latty, Xavier, Paris, France. Railroad track weeding car. 1,816,086; July 28.
Lawlor, Simeon C., Chicago, Ill. Window pole. 1,815,923; July 28.
Lawson, Robert H., Pawtucket, and A. N. Cloutier, Lonsdale, assignors to Hemphill Company, Central Falls, R. I. Attachment for running-on knitted fabrics. 1,816,809; July 28.
Lawton, Oscar S. (See Phillips, A. S., and Lawton.)
Lea, Jesse W., Jackson, La. Bumper. 1,816,120; July 28.
Leary, John E., assignor of one-half to E. J. Crowson, Fitchburg, Mass. Combination lock. 1,816,382; July 28.
Leaside Engineering Co. (See Jackson, M. B., and Clipsham, assignors.)
Lebrun, Alphonse I. (See Pallemaerts, F. A. F., and Leburn.)
Ledig, Willy, and Walter-Winfried Loebe, Berlin, Germany, assignors to General Electric Company. Filament mounting machine. 1,816,683; July 28.
Ledwinka, Joseph, assignor to Budd Manufacturing Company, Philadelphia, Pa. Vehicle curtain rod socket. 1,816,332; July 28.
Ledwinka, Joseph., assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Cowl construction for vehicle bodies. 1,816,333; July 28.
Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Method of and apparatus for making sheets and irregular surface contours. 1,816,594; July 28.
Lee Engineering Research Corporation. (See Lee, Royal, assignor.)
Lee, Robert E., Fort Worth, Tex. Repressuring and flowing of wells. 1,816,260; July 28.
Lee, Royal, assignor to Lee Engineering Research Corporation, Milwaukee, Wis. Attrition mill. 1,816,050; July 28.
Lee, William S., assignor to General Motors Corporation, Detroit, Mich. Brake expanding mechanism. 1,816,595; July 28.
Leffel, James, & Company, The. (See Sparks, Albert F., assignor.)
Lenhardtson, Emilio, Buenos Aires, Argentina. Suspension of vehicles. 1,815,924; July 28.
Lerman, Benjamin, Chicago, Ill. Shirt form. 1,816,539; July 28.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal mining machine. 1,816,981; July 28.
Levy, Leonard A., assignor to Mieres, Limited, London, England. Electrode for electric batteries, electrolytic cells, and the like. 1,816,734; July 28.
Lewis, James A., and E. K. Holmes, assignor, by mesne assignments, to Steel and Tubes, Inc., Cleveland, Ohio. Swaging apparatus. 1,816,488; July 28.
Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,815,947; July 28.
Libbey-Owens-Ford Glass Company. (See Crowley, Joseph P., assignor.)
Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)
Libbey-Owens-Ford Glass Company. (See Drake, J. L., and Mambourg, assignors.)
Libbey-Owens-Ford Company. (See Zellers, James T., assignor.)
Liebowitz, Benjamin. (See Boas, E. P., and Liebowitz.)
Liechty, Brigham J., Springville, Utah. Poultry drinking fountain. 1,816,684; July 28.
Lindner, Felix, and F. Link, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of carbamides including urea. 1,816,087; July 28.
Line Material Company. (See Steinmayer, Alwin G., assignor.)
Link-Belt Company. (See Dull, R. W., and Geertz, assignors.)
Link-Belt Company. (See Sayers, William W., assignor.)
Link, Friedrich. (See Lindner, F., and Link.)
Linley, George A., Trumbull, Conn. Roll-holder for rivet spinning machines. 1,816,490; July 28.
Lipper, Clarence, assignor to Lipper Manufacturing Co., Inc., Philadelphia, Pa. Textile fabric. Re18,139; July 28.

Lipper Manufacturing Co. (See Lipper, Clarence, assignor.)
Lipschutz, George. (See Flagler, Sidney V., assignor.)
Little, Earl W., Indianapolis, Ind. Assembling cage tops. 1,815,982; July 28.
Livesay, Robert C., assignor to Deere & Company, Moline, Ill. Grain shocker. 1,816,438; July 28.
Lloyd, Stewart J., and A. M. Kennedy, University, Ala., assignors to Chemical Products Company. Treating phosphate material. 1,816,051; July 28.
Loebe, Walther-Winfried. (See Ledig, W., and Loebe.)
Loepsinger, Albert J., assignor to General Fire Extinguisher Company, Providence, R. I. Link. 1,816,017; July 28.
Lombardini, Luigi, Turin, Italy. Wing pocket for visible index card holders. 1,816,261; July 28.
Long Manufacturing Company. (See Herz, Ferdinand B., assignor.)
Long Manufacturing Company. (See Higgins, Harry A., assignor.)
Loomis, Chauncey C., Yonkers, and H. E. Stump, Brooklyn, N. Y., assignor, by mesne assignments, to United States Rubber Company. Concentration of latex by centrifugal action. 1,816,018; July 28.
Lowenstein, Gothard, Brooklyn, N. Y. Traveling turntable. 1,816,685; July 28.
Lowman, Eugene A., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,815,948; July 28.
Lucas, Richard. (See Mittasch, A., Lucas, and Griessbach.)
Lummus, Walter E. (See Coubrough, George B., assignor.)
M S Co. (See Nittel, Frederick W., assignor.)
Mack, Peter, jr. (See Smith, W. C., and Mack.)
Maclean, Robert, assignor to Amalgamated Roofing Company, Chicago, Ill. Method and means for saturating fibrous materials in the production of prepared roofing materials. 1,816,596; July 28.
Mac-Roh Sales & Mfg. Company. (See Rohwedder, Otto F., assignor.)
Madsen, Charles P., New York, N. Y., assignor, by mesne assignments, to W. W. Varney, Baltimore, Md. Sound generating means. 1,816,597; July 28.
Magill, Charles T., Clarkdale, Ariz. Speed reduction signal. 1,816,540; July 28.
Magness, Grover C., and C. W. Drake, Mitchell, La. Variable speed transmission unit. 1,816,735; July 28.
Maillard, Joseph E. B., Nogent-le-Roi, France. Distributor for pulverulent and pasty products. 1,816,383; July 28.
Majewski, Joseph M., jr., Kansas City, Mo. Tablet. Des. 84,750; July 28.
Mambourg, Luke C. (See Drake, J. L., and Mambourg.)
Mann, William R., Sharon, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and contact structure therefor. 1,816,052; July 28.
Mannesmannrohren-Werke, the firm. (See Gradl, Josef, assignor.)
Manning, Bowman & Co. (See Tassie, Benjamin M., assignor.)
Mapel, Thomas H., Bloomington, Ill. Time light system. 1,816,686; July 28.
Marcalus, Nicholas, Elizabeth, N. J., assignor to Automatic Paper Machinery Co. Inc. Box for dispensing rolled paper. 1,816,384; July 28.
Marischal, Omer, St. Die, France. Adjustable level. 1,815,949; July 28.
Marron, Richard F., assignor of one-third to L. O. Cline, Los Angeles, Calif. Wheel securing means. 1,816,687; July 28.
Martin, Albert L., Shaker Heights, assignor to The Vichek Tool Company, Cleveland, Ohio. Merchandise display box. 1,816,598; July 28.
Martin, George L., Madawaska, Me. Bucket attachment for excavating machines. 1,816,291; July 28.
Marxen, Fred W., Robbinsdale, assignor of one-sixth to O. O. Mattson and one-sixth to A. B. Wallace, Minneapolis, Minn. Valve lifting and timing device for internal combustion engines. 1,816,019; July 28.
Maschinenfabrik Moenus A.-G. (See Ruhr, Richard, assignor.)
Mason, William C., Albany, N. Y. Visor. 1,816,783; July 28.
Masters, Paul G., assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa. Installation of corrugated glass. 1,816,439; July 28.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signal transmission system. 1,816,599; July 28.
Mathieson Alkali Works, The. (See Evans, George S., assignor.)
Matthael, Curt., Offenbach, Germany. Device for unwinding coiled wires, band iron and the like. 1,816,385; July 28.
Matthews, Frank L., Balboa, Calif. Oar and paddle holder and lock. 1,816,334; July 28.
Mattson, Olof O., et al. (See Marxen, Fred W., assignor.)
Mauerhoff, Emil., Dessau, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Silver halid emulsion and making the same. 1,815,983; July 28.
Maxim Silencer Company, The. (See Bourne, Roland B., assignor.)
Maxwell, Robert M., Kansas City, Mo. Awning bracket. 1,815,925; July 28.
May, John W., Belmont, Mass. Shoe and shoemaking. 1,816,386; July 28.
McCandless, Lyon., and J. D. Sartakoff, Rochester, Pa., assignors, by mesne assignments, to The Wayne Pump Company, Baltimore, Md. Liquid dispensing apparatus. 1,815,926; July 28.
McCarroll, Charles, Kingsport, Tenn. Aeroplane control. 1,816,688; July 28.
McCarthy, Charles J., et al. (See Ryan, Thomas H., and Boyens, assignors.)
McClintock, O. B., Company. (See Blair, R. B., and Roach, assignors.)
McCord Radiator & Mfg. Co. (See Bailey, Claude B., assignor.)
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Reservoir release valve. 1,816,088; July 28.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,816,089; July 28.
McDermott, John W., San Francisco, Calif. Heel protector. 1,816,784; July 28.
McDougall, George F., Portland, Oreg. Steam trap. 1,816,541; July 28.
McGavin, Charles T., Los Angeles, Calif. Method and apparatus for handling and storing vehicles. 1,816,053; July 28.
McGlaughlin, John P., Crugers, N. Y. Filtering device. 1,816,785; July 28.
McKinley, Charles W., Flint, and G. H. Willits, Pleasant Ridge, assignors to A C Spark Plug Company, Flint, Mich. Oil filter mounting. 1,816,600; July 28.
McLamarrah, Robert R., Woonsocket, S. Dak. Automobile trailer hitch. 1,816,121; July 28.
McLaughlin, George E., Peabody, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me. Machine for operating upon hides, skins, and leather. 1,816,154; July 28.
McLean, Charles D., Fenton, Mich. Incubator. 1,815,927; July 28.
McLellan, David M. (See Rowley, D. D., and McLellan.)
McNab, Alexander, Bridgeport, Conn. Boiler circulator. 1,816,335; July 28.
McNeill, George A., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electron discharge device. 1,816,601; July 28.
McNutt, Joseph D., assignor, by mesne assignments, to Winchester Repeating Arms Company, New Haven, Conn. Priming mixture. Re18,137; July 28.
McWilliams, James B., assignor to Railway Maintenance Corporation, Pittsburgh, Pa. Railway ballast handling machine. 1,815,950; July 28.
Mechanical Manufacturing Company. (See Keebler, Elmer, assignor.)
Mechanical Rubber Company, The. (See Foster, B. H., and Cook, assignors.)
Mechling, Thomas J. (See Ewing, L. R., and Mechling.)
Mellin, Max., Wiesdorf-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Dispensing device for small commodities. 1,816,542; July 28.
Menninger, Elmore W., Los Angeles, Calif. Furring construction. 1,816,387; July 28.
Mergenthaler Linotype Company. (See Southern, Hugh A., assignor.)
Mergott, J. B., Company. (See Hiering, William C., assignor.)
Metal Castings Holding Corporation, The. (See Quinn, Nelson J., assignor.)
Metropolitan Engineering Company. (See Kennan, Walter M., assignor.)
Metropolitan Sewing Machine Corp. (See Weis, John P., assignor.)
Meyer, Alfred F., Yale, Okla. Fishing rig for deep wells. 1,816,602; July 28.
Meyer, Frank A., Norwood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic stop governor. 1,816,020; July 28.
Meyerson, Max, New York, N. Y. Temporary binder. 1,816,021; July 28.
Michelin, André J., Paris, assignor to Michelin et Cie., Clermont-Ferrand, France. Automatic device for raising the wheels at the desired level in case of puncture of the pneumatic tire. 1,816,543; July 28.
Michelin et Cie. (See Michelin, André J., assignor.)
Mieres, Limited. (See Levy, Leonard A., assignor.)
Milbourne, Charles G. (See Huff, W. J., and Milbourne.)
Milcor Steel Company. (See Siebenlist, Anthony G., assignor.)
Miller, Henry C., and G. P. Sumner, deceased, London, M. Sumner, executrix, Acton, England; said executrix assignor to said Henry C. Miller. Hydraulic jack. 1,816,736; July 28.
Mills, Bertram M., Pawtucket, R. I. Air moistener. 1,815,951; July 28.
Miltenberger, Eugene F., Red Bank, N. J., assignor to Eastern Corporation, New York, N. Y. Mold carrying conveyer. 1,816,336; July 28.
Minnium, Byron B., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill. Radio receiving apparatus. 1,816,227; July 28.
Minsball, Robert J., assignor to Boeing Airplane Company, Seattle, Wash. Sliding oleo landing hook. 1,816,228; July 28.

Mirlink, James, Bradley, Ohio. Attachment for submarines and ships. 1,816,689; July 28.
Mittasch, Alwin, Ludwigshafen-on-the-Rhine, and C. Müller, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of iron carbonyl. 1,816,122; July 28.
Mittasch, Alwin, Ludwigshafen-on-the-Rhine, R. Lucas, Mannheim, and R. Griessbach, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing finely divided metal oxides. 1,816,388; July 28.
Moberg, Charles G., Brownlee, Saskatchewan, Canada. Grader blade. 1,816,389; July 28.
Möbus, Wilhelm, Dusseldorf, Germany. Nebulizing and antiblackfiring device for internal combustion engines. 1,816,390; July 28.
Modern Equipment Company. (See Goldberg, Max W., assignor.)
Moerk, Frank N., and C. B. Irmer, Philadelphia, Pa. Control system. 1,816,603; July 28.
Mohr, Anders N. F., Stewart, Minn. Railroad lock switch. 1,816,337; July 28.
Monarch Tool & Manufacturing Company, The. (See Hall, Louis M., assignor.)
Montgomery Ward & Co. (See Knapp, Leland G., assignor.)
Moore, Arlington, assignor to Moore Inventions Corporation, Worcester, Mass. Externally soldered can closure and making same. 1,816,440; July 28.
Moore, Clarence W., Roslyn, Pa., assignor to O. H. Peiper and A. F. Pieper, Rochester, N. Y. Dental unit. 1,815,953; July 28.
Moore, Daniel M., East Orange, N. J., assignor to General Electric Company. Gaseous conduction lamp. 1,816,690; July 28.
Moore Inventions Corporation. (See Moore, Arlington, assignor.)
Moore, Tom. (See Steele, Lawrence L., assignor.)
Moore, Wallace F., assignor to The American Hardware Corporation, New Britain, Conn. Door closer. 1,816,391; July 28.
Moore, Wallace F., assignor to The American Hardware Corporation, New Britain, Conn. Door closer. 1,816,392; July 28.
Moore & White Company, The. (See White, Joseph A., assignor.)
Morey, Harry J. and C. L. Nicholson, Syracuse, assignors to Pass & Seymour, Inc., Solvay, N. Y. Electric lamp receptacle. 1,816,292; July 28.
Morris, Albert W., Drexel Hill, and S. P. Wetherill, jr., Haverford, assignors to Wetherill-Morris Engineering Company, Philadelphia, Pa. Control mechanism. 1,816,491; July 28.
Morris, Earl H., Brookport, Ill. Plummet. 1,816,786; July 28.
Morris, Ira A., Liberty, Tex. Trailer. 1,816,393; July 28.
Morris, William L., assignor to Bendix Aviation Corporation, Chicago, Ill. Grease feeder. 1,816,022; July 28.
Morriss, Edward T., Letchworth, England. Perambulator and the like. 1,815,952; July 28.
Morter, Earl W., Washington Courthouse, Ohio. Ear trimming device. 1,815,984; July 28.
Morton, Mortimer, Los Angeles, Calif. Toy windmill. 1,816,229; July 28.
Moss, Sanford A., Lynn, Mass., assignor to General Electric Company. Supercharger for internal combustion engines. 1,816,737; July 28.
Moss, Sanford A., Lynn, Mass., assignor to General Electric Company. Control mechanism for supercharger. 1,816,787; July 28.
Mossberg, Frank, assignor to Mossberg Pressed Steel Corporation, Attleboro, Mass. Reel. 1,816,651; July 28.
Mossberg Pressed Steel Corporation. (See Mossberg, Frank, assignor.)
Müller, Carl. (See Mittasch, A., and Müller.)
Müller, Oskar A., Zurich, Switzerland. Working up materials containing lignin and cellulose. 1,816,394; July 28.
Murphy, Daniel H., West Hartford, Conn. Portable support for massage apparatus. 1,815,928; July 28.
Murray Radiator Corporation. (See Murray, Thomas E., jr., assignor.)
Murray Radiator Corporation. (See Murray, T. E., jr., and Bennett, assignors.)
Murray Radiator Corporation. (See Usina, Domingo A., assignor.)
Murray, Thomas E., jr., Brooklyn, N. Y., assignor to Murray Radiator Corporation. Casing or cover for radiators. 1,816,604; July 28.
Murray, Thomas E., jr., Brooklyn, N. Y., assignor to Murray Radiator Corporation. Radiator. 1,816,605; July 28.
Murray, Thomas E., jr., Brooklyn, N. Y., assignor to Murray Radiator Corporation. Radiator. 1,816,607; July 28.
Murray, Thomas E., jr., and I. T. Bennett, Brooklyn, N. Y., assignors to Murray Radiator Corporation. Radiator and other welded structure. 1,816,606; July 28.
Musher, Sidney, Washington, D. C. Food product. 1,816,338; July 28.
Musher, Sidney, Baltimore, Md. Food product. 1,816,339; July 28.
Myers, F. E., and Bro. Company, The. (See Myers, Philip A., assignor.)
Myers, Philip A., assignor to The F. E. Myers and Bro. Company, Ashland, Ohio. Power head for pumps. 1,816,190; July 28.
Myers, Philip A., assignor to The F. E. Myers & Bro. Company, Ashland, Ohio. Power head. 1,816,191; July 28.
Naamlooze Vennootschap Internationale Octrooi Maatschappij "Octropa." (See Van Niel, Cornelis B., assignor.)
Nagano, Yasuhike, Los Angeles, Calif. Nut lock. 1,816,192; July 28.
Nakashian, Karnik, Brooklyn, N. Y. Rubber binding for uniform suits and the like. 1,816,652; July 28.
National Accessories Corporation. (See Russell, John K., assignor.)
National Acme Company, The. (See Drissner, Alfred E., assignor.)
National Aniline & Chemical Company. (See Ellzey, Esco F., assignor.)
National Aniline & Chemical Co. (See Geller, Leon W., assignor.)
National Benzole Association. (See Hoffert, Wilfred H., assignor.)
National Biscuit Company. (See Hauge, Oscar, assignor.)
National Cash Register Company, The. (See Robertson, William H., assignor.)
Nelsch, William H., St. Louis, Mo. Airplane construction. 1,816,653; July 28.
Nerney, George E., assignor to Bay State Optical Company, Attleboro, Mass. Ophthalmic mounting. Des. 84,751; July 28.
Netherland, Edward W., and J. R. Walker, Columbus, Ga. Stop motion mechanism. 1,816,738; July 28.
Newbold, David M. (See Corbus, Frederick G., assignor.)
Newman, Fred R., St. Louis, Mo. Dehairing machine. 1,815,929; July 28.
Niagara Blower Company. (See Bulkeley, Claude A., assignor.)
Nichols Copper Company. (See Brockway, George G., assignor.)
Nicholson, Coleman L. (See Morey, H. J., and Nicholson.)
Nielsen, Albert E., Oslo, Norway. Manufacture of cellulose. 1,816,730; July 28.
Nischke, Henry, South Milwaukee, assignor of one-half to A. Hartman, Wescott, Wis. Antislipping device for vehicle wheels. 1,816,395; July 28.
Nittel, Frederick W., Attleboro Falls, assignor to M S Co., Attleboro, Mass. Chain bracelet. 1,816,810; July 28.
Noble, Edward J., assignor to Gillette-Vibber Company, Incorporated, New London, Conn. Rigid conduit ground connecter. 1,816,608; July 28.
Noggle Shirt Company. (See Kurtz, William S., assignor.)
North, John D., assignor to Boulton & Paul Limited, Norwich, England. Cowling for air cooled internal combustion engines. 1,816,544; July 28.
Notzke, Walter H., Pekin, Ill. Coaster. 1,816,691; July 28.
Novotny, Emil E., Logan, Philadelphia, and C. J. Romieux, West Philadelphia, assignors to J. S. Stokes, Huntingdon Valley Post Office, Pa. Condensation product of phenols and starches. 1,815,930; July 28.
Nygaard, Karl F. V. (See Everett, Z. R., and Nygaard.)
Nystrom, Ernest H., Quincy, Mass. Reserve music-holding attachment for music racks. 1,816,840; July 28.
O & S Bearing Company. (See Skillman, Newton, assignor.)
Oberhuber, William F., Drexel Hill, Pa. Making high pressure steam joints. 1,816,293; July 28.
Odda Smelteverk A/S. (See Johnson, Erling, assignor.)
Odell, Herbert B., Toronto, Ontario, Canada. Turnstile. 1,816,193; July 28.
Ogren, Carl F., assignor to Thermoid Rubber Company, Trenton, N. J. Flexible armored hose. 1,816,740; July 28.
Ohio Brass Company, The. (See Way, Clarence J., assignor.)
Opie, Ernest J., Menands, assignor to Ramsey Chain Co., Inc., Albany, N. Y. Automatic chain or belt tightener. 1,815,954; July 28.
Oppenländer, Emil, Waiblingen, near Stuttgart, Germany. Combined insect catching lamp and killing device. 1,816,396; July 28.
Oppfelt, Carl A. (See Henry, C. A., and Oppfelt.)
Orester, Jacob, and W. J. Gee, Syracuse, N. Y. Tag or sign holder. 1,816,741; July 28.
Osborn, Frederick J., and N. F. Wood, Gosport, England. Frame for vehicles. 1,816,788; July 28.
Osborne, David H., Jeffersonville, assignor to Electric Service Supplies Company, Philadelphia, Pa. Manufacturing insulators. 1,816,023; July 28.
Osterhage, Otto C. (See Zinkil, R. H., and Osterhage.)
Otis Elevator Company. (See Brady, Thomas, assignor.)
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Sound recording and reproducing apparatus. 1,816,397; July 28.
Package Machinery Company. (See Ferguson, Milford B., assignor.)
Package Machinery Company. (See Langhammer, Paul, assignor.)
Page, Dwight C., assignor to The Heald Machine Company, Worcester, Mass. Apparatus for grinding. 1,816,090; July 28.
Pallin, George, Manchester, England, assignor to General Electric Company. Switch operating mechanism. 1,816,789; July 28.

Pallemaerts, Frits A. F., and A. I. Lebrun, assignors to Union Chimique Belge, Societe Anonyme, Brussels, Belgium. Production of ammonium sulphate. 1,816,123; July 28.
Palmgren, Nils G., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Selector testing circuit. 1,816,790; July 28.
Pangborn Corporation. (See Hull, Foster J., assignor.)
Pansegrau, Ernst, Krefeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of oxygenated organic compounds. 1,815,985; July 28.
Pantelakis, Tonys., Logan, W. Va. Automatic cut-off for gas stoves. 1,816,791; July 28.
Paradise, Louis A., assignor to Deere & Company, Moline, Ill. Coupling key. 1,816,492; July 28.
Paramount Textile Machinery Co. (See Prosser, Thomas W., assignor.)
Parker, Ralzemond D., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Telegraph reading machine. 1,815,986; July 28.
Parker, Walter H., and F. W. Delanoy, Rochester, Pa., assignor, by mesne assignments, to The Wayne Pump Company, Baltimore, Md. Liquid dispensing apparatus. 1,816,609; July 28.
Pass & Seymour, Inc. (See Morey, H. J., and Nicholson, assignors.)
Patent and Licensing Corporation, The. (See Johnston, Robert T., assignor.)
Patten, James C. (See Humphries, Chad H., assignor.)
Patten, Raymond E., Oak Park, Ill., assignor to Edison General Electric Appliance Company. Waffle iron. Des. 84,752; July 28.
Patterson, John F., assignor to The Warren City Tank & Boiler Company, Warren, Ohio. Storage tank of the floating deck type. 1,816,124; July 28.
Paull, Samuel O., assignor to Eagel Manufacturing Company, Wellsburg, W. Va. Hand oiler. 1,816,792; July 28.
Pearson, Samuel D., New Castle, Pa. Building brick. Des. 84,753; July 28.
Peet, Charles H., Bristol, Pa., assignor to Rohm and Haas Company. Insecticide, fungicide, and disinfectant. 1,816,441; July 28.
Pelkey, Louis N., Howell, Mich. Block cleaning machine. 1,816,054; July 28.
Pellegrin, Elmer D. (See Wilkinson, G. D., and Pellegrin.)
Pennsylvania Wire Glass Company. (See Masters, Paul G., assignor.)
Perkins Cementing, Inc. (See Wickersham, Newton W., assignor.)
Perkins, Ralph, trustee. (See Smith, James W., assignor.)
Perrot, Henri, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Brake-applying means. 1,816,155; July 28.
Persons, Lawrence M., assignor to Cook Electric Company, Chicago, Ill. Forming bellows. 1,816,610; July 28.
Peters, Henry W., Boston, Mass. Making finger rings and the like. 1,815,988; July 28.
Petersen, Antonettie M. E. (See Petersen, Nels P., assignor.)
Petersen, Nels P., assignor to Antonettie M. E. Petersen, Los Angeles, Calif. Fruit vending machine. 1,816,341; July 28.
Petersen, Victor, Omaha, Nebr. Door silencer device. 1,816,024; July 28.
Petersen, Waldemar, Berlin, and Richard Tröger, Berlin-Zehlendorf, Germany, assignor to General Electric Company. Steam generating plant for the generation of high pressure steam. 1,816,793; July 28.
Peterson, Charles W., Cincinnati, Ohio. Conical diaphragm for loud speakers. 1,819,987; July 28.
Pettibone Mulliken Company. (See Fundom, Earl H., assignor.)
Pfeifer, Walter S., Milwaukee, Wis. Drier. 1,816,055; July 28.
Phelps, John S., Whittier, Calif. Box stamping machine. 1,816,493; July 28.
Philadelphia Storage Battery Company. (See Combs, Edward L., assignor.)
Phillips, Abraham S., New York, N. Y., and O. S. Lawton, New Bedford, Mass., assignors to John M. Van Heusen, New York, N. Y. Woven fabric for collars and cuffs. 1,816,611; July 28.
Phillips, Maurice M., Pittsburgh, Pa. Wireless receiving circuit. Re18,140; July 28.
Phillips, Thomas., San Francisco, Calif. Fastening device. 1,816,692; July 28.
Phloney, Edward D., Mount Vernon, N. Y. Container for fire extinguishing apparatus. 1,816,342; July 28.
Photostat Corporation. (See Caps, Arthur W., assignor.)
Pick-Barth, Albert, Company. (See Johannes, Hubert G., assignor.)
Pieper, Alphonse F., et al. (See Moore, Clarence W., assignor.)
Pieper, Oscar H., et al. (See Moore, Clarence W., assignor.)
Pierce, David E., Wilmington, Del., assignor to The Atlantic Refining Company, Philadelphia, Pa. Oil purifying system. 1,816,294; July 28.
Pieters, Julien., Paris, France. Vertical distillation retort. 1,816,794; July 28.
Piper, Walter F. (See Beardsley, E. O., and Piper.)
Piper, Walter F., assignor to The Beardsley & Piper Company, Chicago, Ill. Machine for filling flasks for foundling. 1,816,612; July 28.
Pippin, John W., Hebbronville, Tex. Automatic tire inflation mechanism. 1,816,693; July 28.
Piro, Samuel, et al. (See Colombo, John, assignor.)
Pitter Trust. (See Pitter, Walter C., assignor.)
Pitter, Walter C., Eltham, England, assignor to Pitter Trust, a common-law trust. Speed changing gear and clutch therefor. 1,816,295; July 28.
Pittsburgh Plate Glass Company. (See Fox, John H., assignor.)
Pittsburgh Plate Glass Company. (See Gelstarp, Frederick, assignor.)
Pittsburgh Plate Glass Company. (See Hitner, Harry F., assignor.)
Pittsburgh Screw and Bolt Corporation. (See Dicks, Thomas A., assignor.)
Pittsburgh Screw and Bolt Corporation. (See Shrum, Peter J., assignor.)
Plechl, Otto. (See Ritter, A., and Plechl.)
Plibrico Jointless Firebrick Company. (See Anderson, John E., assignor.)
Pohl, Robert, Berlin, Germany, assignor to General Electric Company. Dynamo electric machine. 1,816,795; July 28.
Poling, Cloyd C., Dormont, Pittsburgh, Pa. Cigarette snuffer. 1,815,955; July 28.
Pope, Harold L., Grand Rapids, assignor to Kelvinator Corporation, Detroit, Mich. Removable shelf support for refrigerators. 1,816,604; July 28.
Pope, Reymond H., Baton Rouge, La. Gauge for measuring endless belts. 1,816,695; July 28.
Porter, Wayland R., Hanover, N. H. Crayon holder. 1,816,545; July 28.
Pouvailsmith Corporation. (See Smith, Grant E., assignor.)
Powell, Albert C., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,816,613; July 28.
Power, Laurence E., assignor, by mesne assignments, of one-half to L. Bradley and one-half to H. L. Bradley, Milwaukee, Wis. Forming resistor units. 1,816,194; July 28.
Powers, Harry J., Chicago, Ill. Hoisting mast. 1,816,654; July 28.
Prather, George W., Santa Cruz, Calif. Wheel testing machine. Re18,138; July 28.
Pratt & Whitney Company. (See Thacher, John J., assignor.)
Pratt, William E. (See Van Fleet, Elon J., assignor.)
Preferred Utilities Manufacturing Corporation. (See Lake, Harry E., assignor.)
Preston, Alfred D., Camberwell, Victoria, Australia. Rail fastening means. 1,816,696; July 28.
Process Engineers, Inc. (See De Cew, Judson A., assignor.)
Prosperity Company, Inc., The. (See Braun, Philip N., assignor.)
Prosperity Company, Inc., The. (See Steele, Harry A., assignor.)
Prosser, Thomas W., assignor to Paramount Textile Machinery Co., Kankakee, Ill. Hosiery drying and shaping structure. 1,816,296; July 28.
Putt, Edward D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Machine for grinding or buffing annular articles. 1,816,494; July 28.
Pyle-National Company, The (See Westcott, Philip S., assignor.)
Q. R. S. De Vry Corporation. (See Hogan, Edward F., assignor.)
Queneau, Augustin L. J., New York, N. Y. Producing tin. 1,816,742; July 28.
Queneau, Augustin L. J., New York, N. Y. Recovery of metals from ores. 1,816,743; July 28.
Quinn, Nelson J., Toledo, assignor to The Metal Castings Holding Corporation, Cleveland, Ohio. Permanent mold. 1,816,744; July 28.
Radio Corporation of America. (See Cawley, Aloysius J., assignor.)
Radio Corporation of American. (See Goldsmith, Alfred N., assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Ragan, Frederick H., assignor to The Columbus Axle Company, Cleveland, Ohio. Chucking mechanism. 1,816,055; July 28.
Railway Maintenance Corporation. (See McWilliams, James B., assignor.)
Ralph, Edward D., Jamaica, N. Y. Method of and apparatus for constructing artificial dentures. 1,815,956; July 28.
Ramsey Chain Co. (See Opie, Ernest J., assignor.)
Ranger, Richard H., Brooklyn, N. Y., assignors to Radio Corporation of America. Wave antenna. 1,816,614; July 28.
Rankin, William K. (See Upp, J. W., and Rankin.)
Raschig, Dr. F. (See Raschig, Friedrich, assignor.)
Raschig, Friedrich, assignor to the Firm Dr. F. Raschig, Ludwigshafen-on-the-Rhine, Germany. Manufacture of disinfectants. 1,816,297; July 28.
Rasmussen, Sverre, New York, N. Y. Horn or amplifier. 1,816,546; July 28.
Ray, Arthur B., Bayside, N. Y. Solidified fuel and making the same. 1,816,125; July 28.

Rayner, Edwin B., Piqua, Ohio. Railway track stringer connection. 1,816,697; July 28.
Raytheon Inc. (See Smith, Charles G., assignor.)
Redfield, John H., Denver, Colo. Telescoping mounting for guns. 1,816,195; July 28.
Reed, John W., Greensburg, Pa. Shirt. 1,816,745; July 28.
Reed Roller Bit Company. (See Behnke, Guy E., assignor.)
Reed Roller Bit Company. (See Carlson, Anthony E., assignor.)
Reefer, Eugene J., assignor to Reefer's No-Moth, Inc., New York, N. Y. Deodorizing device. 1,816,442; July 28.
Reefer's No-Moth, Inc. (See Reefer, Eugene J., assignor.)
Regan Safety Devices Company, The. (See Bodde, Theodore, assignor.)
Reifurth, Otto, Immigrath, Germany. Manufacture of hollow sheet metal shapes. 1,816,298; July 28.
Replogle, John R., assignor to Kelvinator Corporation, Detroit, Mich. Refrigerated cabinet. 1,816,698; July 28.
Reyburn, John R., Fairfield, Conn., assignor to American Chain Company, Inc. Connecting device for chains. 1,816,230; July 28.
Richard, Edward J., Aberdeen, Wash. Cylindrical cutting shears. 1,816,056; July 28.
Richard, George A., Hill City, Minn. Heel pad. 1,816,495; July 28.
Richardson, Harry C., North Salem, N. Y., assignor to Warren Telechron Company. Clock case. Des. 84,754; July 28.
Richter, Erich, Wolfone, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cigarette tip coil. 1,816,398; July 28.
Richter, George A., assignor to Brown Company, Berlin, N. H. Refining raw cellulose pulp. 1,816,343; July 28.
Riebel, Frederick, jr., assignor to Air Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,816,156; July 28.
Riedel, J. D.-E. de Haen Aktiengesellschaft. (See Boedecker, Friedrich, assignor.)
Riemenschneider, Ernest, Detroit, assignor to Ford Motor Company, Dearborn, Mich. Welding machine. 1,816,231; July 28.
Ringfeder G. m. b. H. (See Held, Theodor., assignor.)
Ringler, William A., Philadelphia, assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Drinking cup. 1,816,547; July 28.
Ritter, Adolf, Vienna, and O. Plechl, Pfaffstatten, Austria. Remote supervisory control system. 1,816,496; July 28.
Ritter, Nathan., Brooklyn, N. Y. Safety child harness. 1,816,262; July 28.
Rivkin, Menaham, Philadelphia, Pa. Four-wheel radial truck. 1,816,746; July 28.
Roach, Arthur M. (See Blair, R. B., and Roach.)
Robbins, Maurice, Boston, Mass. Collar. 1,816,699; July 28.
Robertson, William H., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,816,263; July 28.
Robidoux, Louis, Flint, Mich., assignor to T. Robidoux, Providence County, R. I. Simplified rule. 1,816,548; July 28.
Robidoux, Theresa. (See Robidoux, Louis, assignor.)
Robison, Volney E., Bellingham, Wash. Wrist attachable blotter. 1,816,232; July 28.
Rockstrok-Werke Aktiengesellschaft. (See Rossger, Walter, assignor.)
Rogers, Mike W., sr., Lexington, Ky. Display rack. 1,816,747; July 28.
Rohm and Haas Company. (See Peet, Charles H., assignor.)
Rohwedder, Otto F., assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa. Sliced-bread package. 1,816,399; July 28.
Rohwedder, Otto F., assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa. Sliced bread package. 1,816,400; July 28.
Rolland, Louis, assignor to Société Metallurgique De l'Ariege, Paris, France. Shock absorbing device. 1,816,401; July 28.
Romain, Burchard P., South Orange, assignor to Weston Electrical Instrument Corporation, Newark, N. J. Speed indicator. 1,816,748; July 28.
Romieux, Charles J. (See Novotny, E. E., and Romieux.)
Rose, Alfred G., assignor of one-half to Rose Brothers (Gainsborough) Limited, Gainsborough, England. Apparatus for folding and closing the ends of bags or the like. 1,816,126; July 28.
Rosebrook, Guy L., Roselle Park, N. J. Service station. Des. 84,755; July 28.
Rose Brothers (Gainsborough) Limited. (See Rose, Alfred G., assignor.)
Rosen, Abraham W., New York, N. Y. Automobile mirror. 1,816,700; July 28.
Rosen, Frank. (See Stange, Bruno, assignor.)
Ross, James W. (See Algeo, A. M., and Ross.)
Rössger, Walter, Heidenau-Sud, assignor to the Firm Rockstroh-Werke Aktiengesellschaft, Heidenau, Germany. Rotary offset printing machine. 1,816,796; July 28.
Rowley, Donald D., and D. M. McLellan, Buffalo, N. Y. Screen for automobiles. 1,816,196; July 28.
Rubber Latex Research Coroporation. (See Wescott, William B., assignor.)
Ruben, Samuel, New York, N. Y., assignor to Ruben Tube Company, Englewood, N. J. Vacuum tube. 1,815,931; July 28.
Ruben Tube Company. (See Ruben, Samuel, assignor.)
Ruemelin, Richard, Milwaukee, Wis. Clamp. 1,816,197; July 28.
Ruess, Robert E., Philadelphia, Pa. Automatic switch. 1,815,989; July 28.
Ruhr, Richard, Offenbach-on-the-Main, assignor to the Firm Maschinenfabrik Moenus A.-G., Frankfort-on-the-Main, Germany. Sole laying press. 1,816,264; July 28.
Ruppel, Frederick C., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Handle for latches, control devices, and the like. Des. 84,756; July 28.
Russell, John K., assignor to National Accessories Corporation, Los Angeles, Calif. Lamp bracket. 1,816,233; July 28.
Ruud, Otto S., Oslo, Norway. Device for regulating the size of the combustion chamber in combustion motors. 1,816,402; July 28.
Ryan, Thomas H., assignor of one-sixth to P. J. Boyens and one-sixth to C. J. McCarthy, San Francisco, Calif. Power transmission device. 1,816,615; July 28.
Rynearson, Luther E., Los Angeles, Calif. Glare shield attachment for headlights. 1,816,209; July 28.
Sahlik, Ignaz, Stramberg, Czechoslovakia. Liquid feeding apparatus. 1,816,025; July 28.
Safety Mining Company. (See Kneeland, Frank H., assignor.)
Saffold, Clara, Los Angeles, Calif. Smoker's stand. Des. No. 84,757; July 28.
Sager, Solomon M., Chicago, Ill. Combination ink bottle. 1,816,057; July 28.
Sample, Clarence J., St. Louis, Mo. Trestle. 1,816,198; July 28.
Samson-United Corporation. (See Samuels, Abe O., assignor.)
Samuels, Abe O., assignor to Samson-United Corporation, Rochester, N. Y. Electric hot plate. Des. 84,758; July 28.
Samuels, Abe O., assignor to Samson-United Corporation, Rochester, N. Y. Electric waffle iron. Des. 84,759; July 28.
Santos, Juan D., New York, N. Y. Flying machine. 1,816,616; July 28.
Sapier, Abraham, assignor to Universal Stamping & Mfg. Co., Chicago, Ill. Projecting machine. 1,816,234; July 28.
Sartakoff, Jack, D. (See McCandless, L., and Sartakoff.)
Sattler, Nathan. (See Burstein, C. S., and Sattler.)
Savani, Luigi, assignor to Societa Italiana Ernesto Breda per Costruzioni Meccaniche, Milan, Italy. Portable firearm for casting bombs and grenades by means of ordinary bullet cartridges. 1,816,265; July 28.
Savoy, Jack, Glenmora, La. Razor strop sterilizer. 1,816,127; July 28.
Sayers, William W., assignor to Link-Belt Company, Chicago, Ill. Traveling back post for power hose. 1,816,701; July 28.
Schaer, Charles, Langenthal, assignor to the Firm Sulzer Freres Societe Anonyme, Winterthur, Switzerland. High pressure reciprocating piston compressor. 1,816,403; July 28.
Schaffer, Jacob M., Washington, D. C., assignor to A. M. Hyde, Secretary of Agriculture of the United States of America. Preparing antigens. 1,816,026; July 28.
Schallis, Charles A., Ernestville, Lincoln Park, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Combined cooker and toaster or like article. Des. 84,760; July 28.
Schering-Kohlbaum Aktiengesellschaft. (See Jordan, Hans., assignor.)
Schleifer, Wilhelm, Vienna, Austria. Tab for registration cards or the like. 1,816,344; July 28.
Schmeisser, Hugo., Suhl, Germany. Repeating air gun 1,816,091; July 28.
Schmitter, Louis, Fontaines, Switzerland. Brush for cleaning artificial teeth. 1,816,092; July 28.
Schnell, William, and J. B. Flynn, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Radiator cap. 1,816,190; July 28.
Schoeller, Conrad, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Dyeing and printing natural fiber with sulphur and vat dyestuffs. 1,815,990; July 28.
Schönfelder, Robert. (See Gluud, W., Keller, Schönfelder, and Klempt.)
Schroeder, Walter, Davenport, Iowa. Fishing appliance. 1,816,235; July 28.
Schucany, Walther, Dortmund, Germany. Regenerative gas-fired open-hearth furnace. 1,816,497; July 28.
Schueler, Julian L., Kokomo, Ind. Galvanizing. 1,816,617; July 28.
Schultz, Roy M., assignor to Cook Electric Company, Chicago, Ill. Draft controller. 1,816,027; July 28.
Schwarz, Alfred, Upper Montclair, N. J. Safety razor. 1,816,404; July 28.
Schweizer, Lilly, New York, N. Y. Garment supporter. 1,816,656; July 28.
Schwob Freres & Cie, S. A. (See Verger, Georges A., assignor.)
Scott and Williams, Inc. (See Wilson, Joseph H., assignor.)
Scott, Lyle B., Estelline, S. Dak. Brake for automobiles. 1,816,093; July 28.

Scott, Philip L., Chicago, Ill., assignor to Super-Diesel Tractor Corporation, La Porte, Ind. Injector. 1,816,157; July 28.
Sealey, Fred E., Vermillion, S. Dak. Wheel scraper. 1,815,991; July 28.
Secor, John A., La Porte, Ind., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Preparing fuel charge for internal combustion engines. 1,816,345; July 28.
Seebach, Fritz, Erkner, near Berlin, assignor to Bakelite Gesellschaft Mit Beschrankter Haftung, Berlin-Charlottenburg, Germany. Hardenable oil varnish and method of preparing same. 1,816,128; July 28.
Segal, Hyman R., assignor to Segal Safety Razor Corporation, New York, N. Y. Safety razor. 1,816,657; July 28.
Segal, Hyman R., assignor to Segal Safety Razor Corporation, New York, N. Y. Automatic safety razor. 1,816,658; July 28.
Segal, Hyman R., assignor to Segal Safety Razor Corporation, New York, N. Y. Razor. 1,816,659; July 28.
Segal Safety Razor Corporation. (See Segal, Hyman R., assignor.)
Seiberling, George W. (See Klaus, F. R., and Seiberling.)
Sethman, Retus W., assignor to Akron Rubber Mold & Machine Co., Akron, Ohio. Valve couplings. 1,816,804; July 28.
Shaw, Harold N., Milwaukee, Wis., assignor, by mesne assignments, to Globar Corporation, Niagara Falls, N. Y. 1,816,660; July 28.
Shaw, Herbert, assignor to Berger Bros. Company, Philadelphia, Pa. Pipe fastener. 1,816,443; July 28.
Shaw, Percy G., Bridgeport, Conn., assignor to General Electric Company. Snap switch. 1,816,749; July 28.
Sherts, James H., Brackenridge, and J. Willits, Ford City, Pa., assignors to Duplate Corporation. Making curved composite glass plates. 1,815,992; July 28.
Shoe Form Co. (See De Witt, William J., assignor.)
Shogran, Leonard, Chicago, Ill. Artificial flower making device. 1,816,266; July 28.
Shortwave & Television Corporation. (See Baird, Hollis S., assignor.)
Shrum, Peter J., Monaca Heights, Pa., assignor to Pittsburgh Screw and Bolt Corporation. Flange protector. 1,815,957; July 28.
Shulman, Charles, assignor to Apt Novelty Company Inc., New York, N. Y. Statuette or article of similar nature. Des. 84,761; July 28.
Shuyler, Reynold, Bethel, Kans. Apparatus for cooling and conditioning grain. 1,816,236; July 28.
Siciliano, Guiseppi, et al. (See Colombo, John, assignor.)
Siebenlist, Anthony G., assignor, by mesne assignments, to Milcor Steel Company, Milwaukee, Wis. Making metal window structures. 1,816,498; July 28.
Sieder, Everett N., Elizabeth, N. J., assignor to Foster Wheeler Corporation, New York, N. Y. Oil cooling. 1,815,932; July 28.
Siemens-Schuckertwerke Aktiengesellschaft. (See Eule, Martin, assignor.)
Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung. (See Berthold, Rudolf G., assignor.)
Sikorsky Aviation Corporation. (See Sikorsky, Igor I., assignor.)
Sikorsky, Igor I., College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del. Aircraft especially of the amphibion type including means for mounting engines thereon. 1,816,129; July 28.
Sikorsky, Igor I., Lordship, Conn., assignor to Sikorsky Aviation Corporation, Wilmington, Del. Aircraft including wing panel and fuel tank assembly for same. 1,816,130; July 28.
Silverstein, William I., Brooklyn, N. Y. Reversible cap. 1,816,346; July 28.
Simmons Company. (See Zierner, Hugo P., assignor.)
Simon, Isidore, Chicago, Ill. Molded article. 1,816,200; July 28.
Simpson, Francis M., and R. Terry, Stroud, Okla.; said Terry assignor to said Simpson. Heat conserving attachment for upright boilers. 1,816,158; July 28.
Singer Manufacturing Company, The. (See Allen, Edward B., assignor.)
Sisk, Albert F. (See Chambers, M., and Sisk.)
Skillman, Newton, Highland Park, assignor to O & S Bearing Co., Detroit, Mich. Transmission housing. 1,816,661; July 28.
Sklar, Samuel B., Minneapolis, Minn., assignor of one-half to T. S. Hammond, Chicago, Ill. Acoustic element. 1,816,618; July 28.
Skrak, Joseph. (See Lamer, Samuel, assignor.)
Slovinski, Theodore, Grand Rapids, Mich. Hose coupling. 1,816,058; July 28.
Small, Joseph L., Winnisquam, N. H. Fire escape ladder. 1,816,702; July 28.
Smith, Anthony N., assignor to The Girard Model Works Inc., Girard, Pa. Registering bank. 1,816,347; July 28.
Smith, Charles G., Medford, assignor to Raytheon Inc., Cambridge, Mass. Gaseous conduction device. 1,816,619; July 28.
Smith, Earl. (See Ga Nung, H. D., Smith, and Wilson.)
Smith, Edward W., Philadelphia, Pa. Rotary casting machine. 1,816,059; July 28.
Smith, Grant E., assignor to Pouvailsmith Corporation, Poughkeepsie, N. Y. Making steering wheels. 1,816,444; July 28.
Smith, Grant E., assignor to Pouvailsmith Corporation, Poughkeepsie, N. Y. Steering wheel and making the same. 1,816,445; July 28.
Smith, James W., assignor to R. Perkins, trustee, Cleveland, Ohio. Evaporator section. 1,816,159; July 28.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,816,348; July 28.
Smith, John H., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser. 1,816,160; July 28.
Smith, Horatio W., Stockton, assignor to Caterpillar Tractor Co., San Leandro, Calif. Power-driven conveyer. 1,816,405; July 28.
Smith, Walter C., Moylan, Pa., and P. Mack, jr., La Fundicion, Peru, assignors of one-half to The Cerro De Pasco Copper Corporation, New York, N. Y., and one-half to Anaconda Copper Mining Company, Anaconda, Mont. Refining bismuth. 1,816,620; July 28.
Sobolik, Edward L., David City, Nebr. Crank case and oil pump heater. 1,816,662; July 28.
Societa Italiana Ernesto Breda per Costrugioni Meccaniche. (See Savani, Luigi, assignor.)
Societe Alsacienne De Constructions Mecaniques et al. (See Blomquist, Johan V., assignor.)
Societe Francaise des Pompes et Machines Worthington. (See Dugelay, Paul, assignor.)
Societe Godefroy Freres. (See Godefroy, Henri, assignor.)
Société Metallurgique De L'Ariege. (See Roland, Louis, assignor.)
Sorensen, Henry, San Francisco, Calif. Reenforced concrete dam. 1,816,797; July 28.
Sorenson, Lee S. (See Borgo, M. P., and Sorenson.)
Southern, Gladys R., guardian. (See Southern, Hugh A., incompetent.)
Southern, Hugh A., Los Angeles, incompetent; G. R. Southern, guardian, Inglewood, Calif., assignor to Mergenthaler Linotype Company. Typographical composing machine. 1,816,094; July 28.
Spahn, August C., assignor to Bernardin Bottle Cap Company, Evansville, Ind. Closure cap. 1,816,499; July 28.
Sparks, Albert F., assignor to The James Leffel & Company, Springfield, Ohio. Hydraulic turbine bearing: cooling mechanism. 1,816,237; July 28.
Speidel, Edwin F. M., Cranston, R. I. Chain. Re18,141; July 28.
Spencer Air-Craft Motors, Incorporated. (See Spencer, Louis R., assignor.)
Spencer, Frank E., Lynchburg, Mo. Planter attachment. 1,816,131; July 28.
Spencer, Louis R., West Hartford, assignor to Spencer Air-Craft Motors, Incorporated, Hartford, Conn. Aeroplane engine. 1,816,406; July 28.
Sprague, William, Monticello, Ill. Combined rake cleaner and depth gauge. 1,816,703; July 28.
Sperr, Frederick W., jr., assignor to The Koppers Company, Pittsburgh, Pa. Elimination of hydrogen sulfide in fuel gas. 1,815,933; July 28.
Sperry Gyroscope Company. (See Kortepeter, Ralph E., assignor.)
Spiekermann, Wilhelm, Hersogenrath, Germany, assignor, by mesne assignments, to The American Bicheroux Company. Take-off and lehring conveyer for sheet glass forming machines. 1,816,407; July 28.
Stack, John, Chicago, Ill., assignor to Duluth Show Case Company, Duluth, Minn. Partition clip. 1,816,060; July 28.
Stacy, Leland J., Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Testing system. 1,816,621; July 28.
Standard Oil Company of California. (See Collier, Henry D., assignor.)
Standard-Trump Bros. Machine Company. (See Housman, Harold E., assignor.)
Stanford, Homer R., Washington, D. C. Apparatus for the conservation of shore line and the deflection of currents of water. 1,816,095; July 28.
Stange, Bruno, West New York, N. J., assignor to F. Rosen, trading as Victory Lamp Company, Philadelphia, Pa. Lighting fixture wall bracket or article of analogous nature. Des. 84,762; July 28.
Stange, Bruno, West New York, N. J., assignor to F. Rosen, trading as Victory Lamp Company, Philadelphia, Pa. Ceiling lighting fixture. Des. 84,763; July 28.
Stange, Bruno, West New York, N. J., assignor to F. Rosen, trading as Victory Lamp Company, Philadelphia, Pa. Ceiling lighting fixture. Des. 84,764; July 28.
Stange, Bruno, West New York N. J., assignor to F. Rosen, trading as Victory Lamp Company, Philadelphia, Pa. Lighting fixture. Des. 84,765; July 28.
Stapf, Robert J., Northfield, Minn. Grapple. 1,816,446; July 28.
Starkey, William C., Indianapolis, Ind. Drill for wells. 1,816,549; July 28.
State, Will C., Akron, Ohio. Coal pulverizer. 1,816,408; July 28.
Steel and Tubes, Inc. (See Holmes, Earl K., assignor.)
Steel and Tubes, Inc. (See Lewis, J. A., and Holmes, assignors.)
Steel Wheel Corporation. (See Forsyth, George H., assignor.)

Steele, Harry A., assignor to The Prosperity Company Inc., Syracuse, N. Y. Spring pad construction. 1,816,238; July 28.

Steele, Lawrence L., assignor of one-half to T. Moore, Washington, D. C. Process of and apparatus for applying a protective coating to motion picture films. 1,816,409; July 28.

Steffen, Le Roy J., Evanston, Ill., assignor to Hough Shade Corporation. Venetian blind. 1,816,500; July 28.

Steiger, Norbert, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Indigoid vat dyestuffs. 1,816,550; July 28.

Steiner, Amos P., P. Stoner, and C. P. Harrison, assignors to Landis Tool Company, Waynesboro, Pa. Crank grinding machine. 1,816,750; July 28.

Steiner, Louis, and A. Gambino, Brooklyn, N. Y. Vending machine casing. Des. 84,766; July 28.

Steinhorst, Wilhelm, Leipzig, Germany. Nut lock. 1,816,551; July 28.

Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Expulsion fuse. 1,815,958; July 28.

Stephens, Harry H., and J. L. Haring, Glen Rock, N. J. Centrifugal machine. 1,815,934; July 28.

Stevens Metal Products Company, The. (See Boye, Charles, assignor.)

Stevens, William C., Akron, Ohio, assignor, by mesne assignments, to Firestone Footwear Company, Boston, Mass. Separable fastener. 1,816,501; July 28.

Stewart, Carlton D., Berkeley, Calif., assignor to Westinghouse Air Brake Company, Wilmerding, Pa. Oiling device. 1,816,096; July 28.

Stokes, Clotus P., and J. Tamsett, Muncie, Ind. Wheel. 1,816,300; July 28.

Stokes, John S. (See Novotny, E. E., and Romieux, assignors.)

Stone, Thos. E., jr. (See Deisch, Noel, assignor.)

Stoner, Paul. (See Steiner, A. P., Stoner, and Harrison.)

Storm, Adolph, assignor to Storm Manufacturing Co., Inc., Minneapolis, Minn. Testing device for cylinders. 1,816,061; July 28.

Storm Manufacturing Co. (See Storm, Adolph, assignor.)

Story & Clark Radio Corp. (See Minnium, Bryon B., assignor.)

Strauss, Joseph B., Chicago, Ill. Reconnoitering device. 1,815,935; July 28.

Strauss, Joseph B., Chicago, Ill. Mooring mast for airships. 1,815,936; July 28.

Strauss, Joseph B., Chicago, Ill. Internal combustion engine. 1,816,161; July 28.

Streitwolf, Karl. (See Kolle, W., Hallensleben, Streitwolf, and Bauer.)

Strindlund, John, Hurum, Norway. Rotary dewatering sieve. 1,816,132; July 28.

Stump, Horace E. (See Loomis, C. C., and Stump.)

Sulzer Frères Société Anonyme. (See Dinner, Heinrich, assignor.)

Sulzer Frères Société Anonyme. (See Hefti, Wilhelm, assignor.)

Sulzer Frères Société Anonyme. (See Schaer, Charles, assignor.)

Sumner, George P. (See Miller, H. C., and Sumner.)

Sumner, May, executrix. (See Miller, Henry C., and Sumner.)

Sumner, Richard E., Plainfield, assignor to The Calco Chemical Company, Inc., Bound Brook, N. J. Shellac composition. 1,816,447; July 28.

Sumner, Thomas B., Everett, Wash. Sawmill hog. 1,816,097; July 28.

Sundell, Carl J., Chicago, Ill. Hose clamp. 1,816,301; July 28.

Sun Oil Company. (See Courtenay, William A., jr., assignor.)

Super-Diesel Tractor Corporation. (See Scott, Philip L., assignor.)

Swan, Fred, assignor to The Bridgeport Machine Company, Wichita, Kans. Underreamer. 1,815,937; July 28.

Symington Company, The. (See Barrows, Donald S., assignor.)

Syren, Victor, Brooklyn, N. Y. Universal necktie press. 1,816,349; July 28.

Tabor Manufacturing Company, The. (See Wallace, Frank R., assignor.)

Tamsett, Joseph. (See Stokes, C. P., and Tamsett.)

Tar and Petroleum Process Company. (See Knowles, Alexander S., assignor.)

Tassie, Benjamin M., assignor to Manning, Bowman & Co., Meriden, Conn. Water bottle or similar article. Des. 84,767; July 28.

Tate, John J., Albion, Wash. Grain drill. 1,816,062; July 28.

Taylor, Robert S., Evansville, Ind., assignor to Electrolux Servel Corporation, New York, N. Y. Tray front. 1,816,622; July 28.

Telefon Aktiebolaget L. M. Ericsson. (See Palmgren, Nils G., assignor.)

Television Limited. (See Baird, John L., assignor.)

Terman, Frederick E., Stanford University, Calif. Coil construction. 1,816,448; July 28.

Ternstedt Manufacturing Company. (See Andersen, Andrew C., assignor.)

Ternstedt Manufacturing Company. (See Schnell, W., and Flynn, assignors.)

Terry, Robert. (See Simpson, F. M., and Terry.)

Thacher, John J., Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Treadle operated centering machine. 1,816,410; July 28.

Theel, William H., Chicago, Ill. Traffic marker. 1,816,502; July 28.

Thermoid Rubber Company. (See Ogren, Carl F., assignor.)

Thomas & Betts Co., The. (See Church, Lewis H., assignor.)

Thomas & Betts Co., The. (See Thomas, George C., jr., assignor.)

Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,816,664; July 28.

Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,816,665; July 28.

Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,816,666; July 28.

Thompson, Benjamin H., Ardara, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Steam driven fluid compressor. 1,816,098; July 28.

Thompson, Beriah M., Cheyenne, Wyo. Apparatus for cleaning boilers. 1,815,993; July 28.

Thompson, Charles, et al. (See Haysel, Arthur R., assignor.)

Thompson, Chas. and Geo. K. (See Haysel, Arthur R., assignor.)

Thompson, Chester A., Barre, Vt., assignor to Vermont Marble Company, Proctor, Vt. Monument. Des. 84,768; July 28.

Thompson, Clair H., Los Angeles, Calif. Rack for handling locomotive cabs. 1,816,350; July 28.

Thompson, George K., et al. (See Haysel, Arthur R., assignor.)

Thompson, George K., Randolph, Ill. Adjustable post brace. 1,815,994; July 28.

Thompson, Howard A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,816,302; July 28.

Thomson, Samuel G., Flushing, N. Y. Railway rail and rail-joint. 1,816,099; July 28.

Thornburgh, William N., Chicago, Ill. Dust guard for journal boxes. 1,816,704; July 28.

Thorp, Joel R., assignor to The Fulton Company, West Allis, Wis. Protective device. 1,816,267; July 28.

Thorp, Joel R., assignor to The Fulton Company, West Allis, Wis. Locking device. 1,816,268; July 28.

Thorssell, Carl T., and A. Kristensson, Cassel, Germany. Production of potassium nitrate. 1,816,303; July 28.

Thurber, Harry F. (See Greist, H. M., and Thurber.)

Thwaits, Frederick G., Wauwatosa, assignor to The Heil Co., Milwaukee, Wis. Running board and hose carrier. 1,816,028; July 28.

Tillinger, Julius, Providence, R. I. Rubbish or garbage receptacle. 1,816,411; July 28.

Timson, William, assignor to W. & T. Avery, Limited, Birmingham, England. Weighing apparatus. 1,815,995; July 28.

Tipton, Charles W., et al. (See Tipton, John A., assignor.)

Tipton, John A., Muskogee, Okla., assignor of one-third to C. W. Tipton, Houston, Tex., and one-third to A. P. Brucker, Muskogee, Okla. Gas mixing device. 1,816,412; July 28.

Toewe, Fritz, Villingen, assignor to Kienzle Uhrenfabriken Aktiengesellschaft, Schwenningen. Karl W. Lange, Berlin-Wilmersdorf, and Deutscher Versicherungs-Verkehr, A.-G., Berlin-Dahlem, Germany. Apparatus for recording the distances travelled by conveyances. 1,816,751; July 28.

Tolman, George S., jr., Braintree, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Metallic fastening. 1,816,162; July 28.

Topp, Charles L., Center Township, Wis. Muskrat trap. 1,816,269; July 28.

Townsend, William S., Rochester, Pa., assignor, by mesne assignments, to The Wayne Pump Company, Baltimore, Md. Liquid dispensing apparatus. 1,816,623; July 28.

Trautmann, Otto C., New York, N. Y. Condensing apparatus. 1,816,133; July 28.

Traylor, William, and V. D. Arthur, Fortville, Ind. Display rack. 1,816,705; July 28.

Treadwell, William D., Zurich, assignor to Aluminum Industrie Aktiengesellschaft, Neuhausen, Switzerland. Electrolytic refining of metallic aluminum. 1,816,304; July 28.

Troger, Richard. (See Petersen, W., and Tröger.)

Trogner, Arthur M., Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y. Fluid flow conduit. 1,815,938; July 28.

Trotman, Walter G., South Hadley Falls, Mass. Dandy roll. 1,815,939; July 28.

Trumbull Electric Manufacturing Company, The. (See Getchell, Benjamin E., assignor.)

Truscon Steel Company. (See Kahn, Julius, assignor.)

Truscon Steel Company. (See White, Herbert E., assignor.)

Trusler, Edmund B., Connersville, Ind. Gear timing system. 1,816,552; July 28.

Tully, George L., assignor to American Optical Company, Southbridge, Mass. Goggles. 1,816,752; July 28.

Turbo-Mixer Corporation, The. (See Beers, Henry S., assignor.)

Turner, John. (See de Ferranti, S. Z., and Turner.)

Turner Tanning Machinery Company, The. (See McLaughlin, George E., assignor.)

Tustin, Wayne C. (See Halstead, S. M., Wickland, and Tustin.)

Tuthill, James B. (See Wilsey, Irven H., assignor.)

Tuttle, Henry A., deceased, Upton, Mass.; Jennie L. Tuttle, executrix. Shock absorber. 1,816,029; July 28.

Tuttle, Jennie L., executrix. (See Tuttle, Henry A.)

Tweedale, Joseph T., Yardville, assignor to Hussong Dyeing Machine Company, Groveville, N. J. Dyeing machine head. 1,816,798; July 28.

Uff, Ernest, Chester Pa. Loom beam structure. 1,816,503; July 28.

Uhlmann, Otto E., assignor to Keeler Brass Company, Grand Rapids, Mich. Handle for a door of an automobile or the like. Des. 84,769; July 28.

Uhlmann, Otto E., assignor to Keeler Brass Company, Grand Rapids, Mich. Handle for a door of an automobile or the like. Des. 84,770; July 28.

Ullrich, Georg, assignor to the firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg, Germany. Magnetic separating machine. 1,816,305; July 28.

Ulmann, Bernard, Co. (See Casella, Secondo L., assignor.)

Ulrich, Carl J., assignor of one-half to P. E. Carlson, Minneapolis, Minn. Doorlock actuating mechanism. 1,816,504; July 28.

Ulrick, Hans G., Bustenari, Roumania. Method of and explosive member for the blasting of blast-holes. 1,816,100; July 28.

Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)

Uniack, Aloysius J., Los Angeles, Calif. Check book. 1,816,306; July 28.

Union Carbide Company. (See Barnes, Howard T., assignor.)

Union Chimique Belge, Societe Anonyme. (See Pallemaerts, F. A. F., and Lebrun, assignors.)

Union Switch & Signal Company, The. (See Fallor, Charles W., assignor.)

Union Switch & Signal Company, The. (See Lewis, Lloyd V., assignor.)

Union Switch & Signal Company, The. (See Lowman, Eugene A., assignor.)

Union Switch & Signal Company, The. (See Thompson, Howard A., assignor.)

Union Switch & Signal Company, The. (See Young, Henry S., assignor.)

United Engineering & Foundry Company. (See Biggert, Florence C., jr., assignor.)

United Engineering & Foundry Company. (See Johnson, Lane, assignor.)

United Shoe Machinery Corporation. (See Knight, Ralph F., assignor.)

United Shoe Machinery Corporation. (See Tolman, George S., jr., assignor.)

U. S. Bobbin & Shuttle Company 1929. (See Baldwin, Luther C., assignor.)

United States Graphite Company. (See Adams, Charles W., assignor.)

U. S. Industrial Alcohol Co. (See Burghart, Lloyd M., assignor.)

U. S. Ring Traveler Company. (See Gilligan, George H., assignor.)

United States Rubber Company. (See Loomis, C. C., and Stump, assignors.)

Universal Stamping & Mfg. Co. (See Sapier, Abraham, assignor.)

Universal Winding Company. (See Anderson, Johan A., assignor.)

Upp, John W., and W. K. Rankin, Schenectady, N. Y., assignors to General Electric Company. Electric switch. 1,816,799; July 28.

Usehmann, Curt, assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Engraving machine. 1,816,505; July 28.

Usina, Domingo A., Nutley, N. J., assignor, by mesne assignments, to Murray Radiator Corporation. Radiator. 1,816,624; July 28.

Utts, William A., sr., Cleveland, Ohio. Counter balance moistener. 1,816,553; July 28.

Van Fleet, Elon J., Joliet, assignor to W. E. Pratt, Chicago, Ill. Lifting jack. 1,816,625; July 28.

Van Hamersveld, John J. N., Cleveland Heights, and E. P. Burrell, Shaker Heights, assignors to The Warner & Swasey Company, Cleveland, Ohio. Chuck closing and opening mechanism. 1,816,239; July 28.

Van Heusen, John M. (See Phillips, A. S., and Lawton, assignors.)

Van Houten, Frank H., assignor to Dutchess Tool Company, Beacon, N. Y. Automatic dough divider. 1,816,753; July 28.

Van Nell, Cornelis B., Delft, assignor, by mesne assignments, to Naamlooze Vennootschap: Internationale Octrooi Maatschappij "Octropa", Rotterdam, Netherlands. Manufacturing aromatic and durable butter. 1,816,800; July 28.

Varney, William N. (See Hammann, Frederick B., assignor.)

Varney, William W. (See Madsen, Charles P., assignor.)

Vauclain, Charles P., Drexel Hill, Pa. Axle box bearing. 1,816,801; July 28.

Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,816,449; July 28.

Venzie, Frederick M., Philadelphia, Pa. Ceiling construction. 1,816,450; July 28.

Verger, Georges A., Paris, France, assignor, by mesne assignments, to Schwob Freres & Cie. S. A., La Chaux-de-Fonds Switzerland. Opening case for watches or like articles. 1,816,101; July 28.

Vermont Marble Company. (See Thompson, Chester A., assignor.)

Verts, Sydenham C., Beach Haven, N. J. Vehicle seat. 1,816,802; July 28.

Viard, Georges, Paris, France. Diaphonometric means. 1,816,663; July 28.

Victor Adding Machine Company. (See Johantgen, Oliver D., assignor.)

Victory Lamp Company. (See Stange, Bruno.)

Vichek Tool Company, The. (See Martin, Albert L., assignor.)

Von Reis, Lambert, Herzogenrath, Germany, assignor by mesne assignments, to The American Bicheroux Company. Roll for rolling glass plates from molten glass. 1,816,307; July 28.

Von-Waldenburg-Straus-Scharine, Eduard W., Lubeck, Germany. Filtering apparatus. 1,816,064; July 28.

Wagenhorst, James H., Detroit, Mich. Arc lamp. 1,816,554; July 28.

Walt, Henry H., Chesterton, Ind. Dynamo cooling system. 1,816,506; July 28.

Walborn, Joseph E. (See Clark, J., and Walborn.)

Walford, Lester J., Lansing, Mich. Exhaust silencer. 1,816,245; July 28.

Walker, John R. (See Netherland, Edward W., and Walker.)

Wallace, Audley B., et al. (See Marxen, Fred W., assignor.)

Wallace, Frank R., assignor to The Tabor Manufacturing Company, Philadelphia, Pa. System of electrical distribution for controlling burners. 1,816,451; July 28.

Walter, Harrison B., assignor to Container Corporation of America, Chicago, Ill. Container. 1,816,706; July 28.

Walters, Frederick C., Eugene, Oreg. Go-around sawmill. 1,816,270; July 28.

Waltman, Harrison B. (See Graybill, William J., assignor.)

Ward, Ernest A., Higginsville, Mo. Spray gun and cleaning means therefor. 1,816,555; July 28.

Wardell, William, Los Angeles, Calif., assignor, by mesne assignments, to Dragon Fly Aero Corporation, Ltd. Vertically raising and lowering aeroplanes. 1,816,707; July 28.

Warner & Swasey Company, The. (See Burrell, E. P., and Bogart, assignors.)

Warner & Swasey Company, The. (See Van Hamersveld, J. J. N., and Burrell, assignors.)

Warren City Tank & Boiler Company, The. (See Patterson, John F., assignor.)

Warren Telechron Company. (See Richardson, Harry C., assignor.)

Watcher, John A., Jackson, Minn. Sectional smoke flue. 1,816,271; July 28.

Waterbury Tool Company, The. (See Gros, Henry G., assignor.)

Waters, Albert, Glen Iris, and S. J. Waters, Toorak, Victoria, Australia. Electrically moved display apparatus. 1,816,102; July 28.

Waters, Sylvester J. (See Waters, A. and S. J.)

Watson Company, The. (See Ball, Percy B., assignor.)

Way, Clarence J., assignor to The Ohio Brass Company, Mansfield, Ohio. Hanger. 1,816,413; July 28.

Wayne Company. (See Halstead, S. M., Wickland, and Tustin, assignors.)

Wayne Pump Company, The. (See Deutsch, L., and Genung, assignors.)

Wayne Pump Company, The. (See McCandless, L., and Sartakoff, assignors.)

Wayne Pump Company, The. (See Parker, W. H., and Delaney, assignors.)

Wayne Pump Company, The. (See Townsend, William S., assignor.)

Weaver, Allan, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Telegraph reading machine. 1,815,996; July 28.

Webster, Harry A., assignor to Armstrong Cork Company, Lancaster, Pa. Printing of floor covering and the like. 1,816,103; July 28.

Weeks, Carl, Des Moines, Iowa. Holder for nonfluid cosmetics. 1,816,240; July 28.

Weeks, Carl, Des Moines, Iowa. Powder holder. 1,816,241; July 28.

Weibull, Ernst H. W., Saltsjobaden, assignor to Aktiebolaget Nordiska Armaturfabrikerna, Stockholm, Sweden. Hammering tool. 1,816,104; July 28.

Weidman, Frank A., Esperance, N. Y. Flash light. 1,816,065; July 28.

Weis, Albert H., Nyack, N. Y. Elastic strip attachment for sewing machines. 1,816,627; July 28.

Weis, John P., assignor to Metropolitan Sewing Machine Corp., Nyack, N. Y. Upside down sewing machine. 1,816,626; July 28.

Welch, George R., Detroit, Mich. Intake manifold for internal combustion engines. 1,816,163; July 28.

Wescott, William B., assignor to Rubber Latex Research Corporation, Boston, Mass. Rubber emulsion and making the same. 1,816,242; July 28.
Weslake, Henry. (See Whatmough, W. A., and Weslake.)
Westcott, Philip S., assignor to The Pyle-National Company, Chicago, Ill. Electric connecter. 1,816,063; July 28.
Western Union Telegraph Company, The. (See Dirkes, Robert F., assignor.)
Westinghouse Air Brake Company, The. (See Down, Sidney G., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See Stewart, Carlton D., assignor.)
Westinghouse Air Brake Company, The. (See Thompson, Benjamin H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Eaton, George M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Elsey, Howard M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Guy, Henry L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kuyser, Jan A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Meyer, Frank A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, John H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wilde, Oskar, assignor.)
Westinghouse Electric & Manufacturing Company. (See Williams, Harold W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wolfert, Edward R., assignor.)
Weston Electrical Instrument Corporation. (See Romain, Burchard P., assignor.)
Westover, John B., Houston, Tex. Clock case. Des. 84,771; July 28.
Wetherbee, Harry L. (See Grilli, J. P., and Wetherbee.)
Wetherill-Morris Engineering Company. (See Morris, A. W., and Wetherill, assignors.)
Wetherill, Samuel P., jr. (See Morris, A. W., and Wetherill.)
Whatmough, Wilfred A., New Barnet, and H. Weslake, Kensington, England. Spray carburetor. 1,816,756; July 28.
Wheary Trunk Company. (See Hamlin, Benjamin M., assignor.)
Wheeler-Schebler Carburetor Co. (See Berry, Otto C., assignor.)
White, Albert R., Cleveland, Ohio, assignor to Glascock Brothers Manufacturing Company, Muncie, Ind. Dispensing apparatus. 1,816,452; July 28.
White, Herbert E., assignor to Truscon Steel Company, Youngstown, Ohio. Metallic deck structure. 1,816,556; July 28.
White, Joseph A., Melrose Park, assignor to The Moore & White Company, Philadelphia, Pa. Fourdrinier machine. 1,816,754; July 28.
White, William A., Hebburn, England. Heat transferrer. 1,816,757; July 28.
Whitlock, John W., Rising Sun, Ind. Propeller. 1,816,414; July 28.
Whiton, Lucius E., New London, Conn. Chuck. 1,816,105; July 28.
Wicker, Stanley S. (See Kahler, P. F., and Wicker.)
Wickersham, Newton W., assignor to Perkins Cementing, Inc., Los Angeles, Calif. Well cementing plug. 1,816,243; July 28.
Wickland, Anton I. (See Halstead, S. M., Wickland, and Tustin.)
Widell, Carl G., Stockholm, Sweden. Evaporating receptacle for heat-radiators. 1,816,415; July 28.
Wilcox, Charles E., Long Beach, Calif. Elevator. 1,816,030; July 28.
Wilde, Oskar., Vienna, Austria, assignor to Westinghouse Electric & Manufacturing Company. Oil bearing lubrication. 1,816,507; July 28.
Wilderman, Meyer, Hampstead, London, England, assignor, by mesne assignments, to The American Wilderman Porous Ebonite Company, Inc., Philadelphia, Pa. Making porous filters, diaphragms, and the like. 1,815,959; July 28.
Wildhaber, Ernest, Brooklyn, N. Y. Gearing. 1,816,272; July 28.
Wildhaber, Ernest, Brooklyn, N. Y. Gearing. 1,816,273; July 28.
Wilkinson, George D., Oak Park, and E. D. Pellegrin, Des Plaines, Ill., assignors to Cribben & Sexton Company, Chicago, Ill. Range. Des. 84,772; July 28.
Willard, Robert E., assignor, by mesne assignments, to Briquet Engineering Company, Minneapolis, Minn. Binder sprayer. 1,816,453; July 28.
Williams, Clyde D., Woodside, Md. Keyboard for perforating, adding, and calculating machines. 1,815,997; July 28.
Williams, Frank C., Philadelphia, and G. H. Williams, Harrisburg, Pa. Train stopping and speed controlling mechanism. 1,816,628; July 28.
Williams, Gabriel C., Alligator, Miss. Backband buckle. 1,816,066; July 28.
Williams, George H. (See Williams, Frank C. and G. H.)
Williams, Harold W., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,816,454; July 28.
Williams, White & Co. (See Kline, George P., assignor.)
Willingham, Baynard, College Park, assignor to Egan Cotton Mills, Atlanta, Ga. Knitting machine. 1,816,416; July 28.
Willis, Carter A., G. J., and R. M., assignors to The Willis Drilling Machine and Manufacturing Company, Chanute, Kans. Drill machine. 1,816,708; July 28.
Willis Drilling Machine and Manufacturing Company, The. (See Willis, C. A., G. J., and R. M., assignors.)
Willis, Gordon J. (See Willis, C. A., G. J., and R. M.)
Willis, Martin, assignor to R. J. Dorn Co., Inc., New Orleans, La. Trolley. 1,816,031; July 28.
Willis, Reuben M. (See Willis, C. A., G. J., and R. M.)
Willits, George H. (See McKinley, C. W., and Willits.)
Willits, John. (See Sherts, J. H., and Willits.)
Willys-Overland Company, The. (See Baker, Arthur J., assignor.)
Willys-Overland Company, The. (See Boughton, Solon J., assignor.)
Wilsey, Irven H., Chicago, Ill. Laundry machine. 1,816,033; July 28.
Wilsey, Irven H., assignor to J. B. Tuthill, Chicago, Ill. Rotary pump. 1,816,508; July 28.
Wilson, Dillon B. (See Ga Nung, H. D., Smith, and Wilson.)
Wilson, Joseph H., Lookout Mountain, Tenn., assignor to Scott and Williams, Inc., New York, N. Y. Knitted fabric. 1,816,709; July 28.
Winchester Repeating Arms Company. (See Burton, Frank F., assignor.)
Winchester Repeating Arms Company. (See McNutt, Joseph D., assignor.)
Wingate, Clayton B., Albany, assignor to Glascock Brothers Manufacturing Company, Muncie, Ind. Bottle cooler. 1,816,455; July 28.
Winthrop Chemical Company. (See Kolle, W., Hallensleben, Streitwolf, and Bauer, assignors.)
Winthrop Chemical Company. (See Mellin, Max, assignor.)
Winny, Franz, Stuttgart-Betnang, assignor to the Firm: Julius Geiger G. m. b. H., Stuttgart, Germany. Gauge. 1,816,244; July 28.
Winters & Crampton Manufacturing Company. (See Geske, Carl, assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wise, Edmund M., Cincinnati, Ohio, assignor, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y. Treatment of nonferrous alloys. 1,816,509; July 28.
Witherspoon, Samuel C., Edgewood, Md., and A. F. Beal, Washington, D. C. Weather-proof coating for rubber. 1,815,998; July 28.
Witter, Willis D., Utica, N. Y., assignor, by mesne assignments, to American La France and Foamite Corporation. Fire extinguisher. 1,816,417; July 28.
Wolfert, Edward R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Voltage compensating means. 1,816,418; July 28.
Wolverine Supply & Manufacturing Company. (See Goriup, Frank J., assignor.)
Wood, David W., Brazil, Ind. Door latch. 1,816,134; July 28.
Wood, Floyd R., Grand Rapids, Mich. Engine starting device. 1,816,032; July 28.
Wood, Joseph K., Mount Vernon, assignor to General Spring Corporation, New York, N. Y. Support. 1,816,164; July 28.
Wood, Morris B., Somerville, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Outdoor switch house. 1,816,034; July 28.
Wood, Norman F. (See Osborn, F. J., and Wood.)
Woodbridge, Joseph L., Philadelphia, Pa. Storage battery. 1,816,035; July 28.
Woodhead, Harry S., Liverpool, England, assignor to Associated Telephone and Telegraph Company, Chicago, Ill. Electromagnetic relay. 1,816,165; July 28.
Woodworth, John L., Schenectady, N. Y., assignor to General Electric Company. Selective control system. 1,816,755; July 28.
Wörner, Anton, Vaihingen-on-the-Fildern, Germany. Pressed collector. 1,816,629; July 28.
Wülfing, Johann A. (See Busch, Albert, assignor.)
Yeakley, Melvin A., Canton, Ohio. Wabbler holding mechanism. 1,816,274; July 28.
Yellow Truck & Coach Manufacturing Company. (See Heinz, Arthur A., assignor.)
Yoeman, John B., Spokane, Wash. Game board. Des. 84,773; July 28.
Young, Donald H., Berkeley, Calif., assignor to American Manganese Steel Company, Chicago, Ill. Reversible excavator tooth with socketed tip. 1,816,710; July 28.
Young, Henry S., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway track circuit apparatus. 1,815,960; July 28.
Yowman & Erbe Manufacturing Company, The. (See Clark, James R., assignor.)
Zahodiskin, Victor F., Cincinnati, Ohio. Internal combustion engine starting mechanism. 1,816,557; July 28.

Zellers, James T., Shreveport, La., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass drawing apparatus. 1,816,036; July 28.
Zellers, James T., Shreveport, La., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass drawing apparatus. 1,816,037; July 28.
Zimmerman, Max, Lockport, N. Y. Making straw pulp for straw board. 1,816,456; July 28.
Zimmerman, Max, Lockport, N. Y. Making straw pulp for straw board. 1,816,457; July 28.
Zinkil, Roy H., and O. C. Osterhage, assignors to Crane Co., Chicago, Ill. Lever action waste. 1,816,458; July 28.
Zoerner, Hugo P., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Mirror frame construction. 1,815,940; July 28.
Zupa, Frank A., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electromagnetic device. 1,816,558; July 28.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 28TH DAY OF JULY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Acetaldehyde, Production of. W. O. Herrmann and H. Deutsch. 1,816,326; July 28.
Acoustic element. S. B. Sklar. 1,816,618; July 28.
Advertising device, Mechanical. J. P. Feeley. 1,816,521; July 28.
Advertising educational or amusement device or the like. M. Anderson. 1,816,353; July 28.
Advertising pedestal for weighing machine. J. B. Holtz. Des. 84,744; July 28.
Aeroplane control. C. McCarroll. 1,816,688; July 28.
Aeroplane engine. L. R. Spencer. 1,816,406; July 28.
Aeroplanes, Vertically raising and lowering. W. Wardell. 1,816,707; July 28.
Air cleaner. A. A. Bull. 1,816,633; July 28.
Aircraft especially of the amphibion type including means for mounting engines thereon. I. I. Sikorsky. 1,816,129; July 28.
Aircraft including wing panel and fuel tank assembly for same. I. I. Sikorsky. 1,816,130; July 28.
Air gun, Repeating. H. Schmeisser. 1,816,091; July 28.
Air heater. J. Boerstra. 1,816,466; July 28.
Air moistener. B. M. Mills. 1,815,951; July 28.
Airplane. H. Ford. 1,816,216; July 28.
Airplane. H. A. Hicks. 1,816,219; July 28.
Airplane construction. W. H. Nelsch. 1,816,653; July 28.
Airplane propeller. H. H. Hardin. 1,816,730; July 28.
Alarm, Actuating device. R. B. Blair and A. M. Roach. 1,815,941; July 28.
Alkali stick, Caustic. H. A. Bales. 1,816,043; July 28.
Alkyl-isopropylene-phenols and making same. H. Jordan. 1,816,286; July 28.
Alkyl-isopropylene-phenols. Producing. H. Jordan. 1,816,287; July 28.
Alloys, Treatment of nonferrous. E. M. Wise. 1,816,509; July 28.
Ammonium sulphate, Production of. F. A. F. Pallemaerts and A. I. Lebrun. 1,816,123; July 28.
Anchor. A. J. Hutchings. 1,816,433; July 28.
Anchor and using the same, Furring strip. W. C. Krabiel. 1,816,226; July 28.
Annealing furnace. N. G. Girshovitch. 1,816,253; July 28.
Antigens, Preparing. J. M. Schaffer. 1,816,026; July 28.
Antiglare device for motor cars. J. R. Kinney. 1,816,048; July 28.
Antislipping device for vehicle wheels. H. Nischke. 1,816,395; July 28.
Apparatus for the automatic presentation of objects for sale. R. Koller. 1,816,732; July 28.
Apron and mitten, Combination. C. S. Burstein and N. Sattler. 1,816,566; July 28.
Arch support for shoes. W. P. Bradford. 1,816,763; July 28.
Arsenic and antimony compound and making the same, Water soluble organic. W. Kolle, J. Hallensleben, K. Streitwolf, and H. Bauer. 1,815,979; July 28.
Article of personal equipment. C. W. Larner. 1,816,049; July 28.
Asphaltic plates, Scouring and polishing. F. C. J. De Both. 1,816,363; July 28.
Atmospheric moisture, Means to recuperate the. A. Knapen. 1,816,592; July 28.
Attrition mill. R. Lee. 1,816,050; July 28.
Automatic switch. R. E. Ruess. 1,815,589; July 28.
Automobile storage. W. M. Keenan. 1,816,590; July 28.
Awning arm, Adjustable. H. C. Heiser. 1,816,013; July 28.
Awning bracket. R. M. Maxwell. 1,815,925; July 28.
Bag: *See*—
Hand bag.
Bag filling and weighing machine. H. S. Johns. 1,816,587; July 28.
Baking machine, Pastry cone. O. Hauge. 1,815,911; July 28.
Bank, Registering. A. N. Smith. 1,816,347; July 28.
Basket reed connecting machine. F. Fortner. 1,816,674; July 28.
Battery: *See*—
Storage battery.
Battery terminal. E. Buschman. 1,816,719; July 28.
Battle order instrument. R. K. Kortepeter. 1,816,436; July 28.
Bearing. C. W. Adams. 1,816,758; July 28.
Bearing, Axle box. C. P. Vaudain. 1,816,801; July 28.
Bearing, Centrifugal separator. C. F. Aller. 1,816,460; July 28.
Bearing for line shafts and the like, Antifriction. J. Bowen. 1,816,002; July 28.
Bearing, Hour glass. G. M. Eaton. 1,816,474; July 28.
Bearings cooling mechanism, Hydraulic turbine. A. F. Sparks. 1,816,237; July 28.
Beehive, Top entrance. E. W. Brown. 1,816,631; July 28.
Bell structure, Charging. C. W. Andrews. 1,815,892; July 28.
Bellows, Forming. L. M. Persons. 1,816,610; July 28.
Belt, Conveyer. J. C. Anderson. 1,816,559–61; July 28.
Bin. M. P. Duke. 1,816,213; July 28.
Binder, Temporary. M. Meyerson. 1,816,021; July 28.
Binding for uniform suits and the like, Rubber. K. Nakarashian. 1,816,652; July 28.
Bismuth, Refining. W. C. Smith and P. Mack, jr. 1,816,620; July 28.
Bit: *See*—
Drill bit. Roller bit.
Blast holes, Method of and explosion member for the blasting of. H. G. Ulrik. 1,816,100; July 28.
Blind, Venetian. L. J. Steffen. 1,816,500; July 28.
Block: *See*—
Partition block.
Block cleaning machine. L. N. Pelkey. 1,816,054; July 28.
Blotter, Wrist attachable. V. E. Robison. 1,816,232; July 28.
Board and hose carrier, Running. F. G. Thwaits. 1,816,028; July 28.
Boat. W. J. De Witt. 1,816,365; July 28.
Boat, Ice and water. M. C. Knight. 1,816,118; July 28.
Boat, Submarine. H. F. Grieshaber. 1,815,904; July 28.
Body mechanism for trucks, Removable. W. A. Denehie. 1,816,041; July 28.
Boiler: *See*—
Locomotive boiler. Water tube boiler.
Steam boiler.
Boiler. H. J. Kerr. 1,816,650; July 28.
Boiler circulator. A. McNab. 1,816,335; July 28.
Boilers, Apparatus for cleaning. B. M. Thompson. 1,815,993; July 28.
Bottle, Combination ink. S. M. Sager. 1,816,057; July 28.
Bottle cooler. C. B. Wingate. 1,816,455; July 28.
Bottle cooling box. C. A. Frick. 1,816,426; July 28.
Bottle or similar article, Water. B. M. Tassie. Des. 84,767; July 28.
Bowl, Closet. A. W. Dallas. 1,816,362; July 28.
Box: *See*—
Bottle cooling box. Padded box.
Display box.
Box for dispensing rolled paper. N. Marcalus. 1,816,384; July 28.
Box stamping machine. J. S. Phelps. 1,816,493; July 28.
Brace: *See*—
Post brace.
Bracelet, Chain. F. W. Nittel. 1,816,810; July 28.
Bracket: *See*—
Awning bracket. Lamp bracket.
Brake: *See*—
Fluid pressure brake. Servo-brake.
Brake. L. C. Huck. 1,816,256; July 28.
Brake applying means. H. Perrot. 1,816,155; July 28.
Brake construction for draw works. B. W. Brewster. 1,816,310; July 28.
Brake control apparatus. S. J. Boughton. 1,815,896; July 28.
Brake cylinder device. C. C. Farmer. 1,816,077; July 28.
Brake expanding mechanism. W. S. Lee. 1,816,595; July 28.
Brake expansion tube. S. G. Down. 1,816,076; July 28.
Brake for automobiles. L. B. Scott. 1,816,093; July 28.
Bread package, Sliced. O. F. Rohwedder. 1,816,399–400; July 28.
Breather and overflow device. A. A. Heinz. 1,816,580; July 28.
Brick, Building. S. D. Pearson. Des. 84,753; July 28.
Brick making machine. T. R. Largura. 1,816,572; July 28.
Bridge, Portable. B. B. Dillman. 1,816,672; July 28.
Brush for cleaning artificial teeth. L. Schmitter. 1,816,092; July 28.
Brush, Soot. S. G. Bladh and G. E. Brofelth. 1,816,761; July 28.
Bucket attachment for excavating machines. G. L. Martin. 1,816,291; July 28.
Bucket, Dipper. E. H. Fundom. 1,816,522; July 28.
Buckle, Back band. G. C. Williams. 1,816,066; July 28.
Building structure. F. M. Venzie. 1,816,449; July 28.
Bumper. J. W. Lea. 1,816,120; July 28.
Bumping post. E. Keebler. 1,815,917. July 28.
Burring machine. C. C. Kamphausen. 1,816,225; July 28.
Butter, Device for spreading. M. Joachimson. 1,816,535; July 28.

Butter, Manufacturing aromatic and durable. C. B. Van Niel. 1,816,800; July 28.
Cabin ventilator. F. R. Canney. 1,816,314; July 28.
Cabinet, Refrigerated. J. R. Repogle. 1,816,698; July 28.
Cable connecter. L. H. Church. 1,816,667–9; July 28.
Cable connecter. G. C. Thomas, jr. 1,816,664–6; July 28.
Cable terminal. G. R. Folds. 1,816,008; July 28.
Calculating machine. O. D. Johantgen. 1,816,014; July 28.
Can closure and making same, Externally soldered. A. Moore. 1,816,440; July 28.
Cap, Reversible. W. I. Silverstein. 1,816,846; July 28.
Capping machine. F. L. Borchert. 1,816,001; July 28.
Car, Dump. J. S. Curzon. 1,816,279; July 28.
Car, Invalid. J. Chuchta. 1,815,968; July 28.
Car puller. F. T. Kern. 1,816,188; July 28.
Car, Railroad track weeding. X. Latty. 1,816,086; July 28.
Carbamides including urea, Production of. F. Lindner and F. Link. 1,816,087; July 28.
Carburetor. O. C. Berry. 1,816,070; July 28.
Carburetor. J. H. Holloway. 1,816,531; July 28.
Carburetor, Spray. W. A. Whatmough and H. Weslake. 1,816,756; July 28.
Cardiotachometer. E. P. Boas and B. Liebowitz. 1,816,465; July 28.
Carpet and floor cleaner. B. Kern. 1,816,538; July 28.
Carrier: *See*—
Board and hose carrier. Luggage carrier.
Cartridge, Blasting. F. H. Kneeland. 1,816,257; July 28.
Case: *See*—
Show case.
Cases for watches or like articles, Opening. G. A. Verger. 1,816,101; July 28.
Cash register. W. H. Robertson. 1,816,263; July 28.
Casing or cover for radiators. T. E. Murray, jr. 1,816,604; July 28.
Casing, Traffic signal. C. Adler, jr. Des. 84,725; July 28.
Casing, Vending machine. L. Steiner and A. Gambino. Des. 84,766; July 28.
Casting machine, Rotary. E. W. Smith. 1,816,059; July 28.
Catapulting device. C. W. King. 1,816,288; July 28.
Ceiling construction. F. M. Venzie. 1,816,450; July 28.
Cellulose acetate, Manufacture of. L. M. Burghart. 1,816,564; July 28.
Cellulose esters, Dyeing and printing. G. de Niederhäusern. 1,816,766; July 28.
Cellulose, Manufacture of. A. E. Mielsen. 1,816,739; July 28.
Cellulose pulp, Refining raw. G. A. Richter. 1,816,343; July 28.
Centering machine, Treadle operated. J. J. Thacher. 1,816,410; July 28.
Centrifugal machine. H. H. Stephens and J. L. Haring. 1,815,934; July 28.
Chain. E. F. M. Speidel. Re18,141; July 28.
Chain or belt tightener, Automatic. E. J. Opie. 1,815,954; July 28.
Chair. A. L. Johnson. 1,816,486; July 28.
Check book. A. J. Uniack. 1,816,306; July 28.
Checkerwork. J. P. Grilli and H. L. Wetherbee. 1,815,905; July 28.
Chuck. L. E. Whiton. 1,816,105; July 28.
Chuck closing and opening mechanism. J. J. N. Van Hamersveld and E. P. Burrell. 1,816,239; July 28.
Chuck operating mechanism for machine tools. E. P. Burrell and F. H. Bogart. 1,816,209; July 28.
Chucking mechanism. F. H. Ragan. 1,816,655; July 28.
Cigarette snuffer. C. C. Poling. 1,815,955; July 28.
Cinematography, Natural color. A. Hnatek. 1,816,083; July 28.
Circuit apparatus, Railway track. H. S. Young. 1,815,960; July 28.
Circuit, Selector testing. N. G. Palmgren. 1,816,790; July 28.
Circuit voltages, Device responsive to unbalance in polyphase. E. Grassot. 1,816,773; July 28.
Circuit voltages and currents, Device responsive to unbalance in polyphase. E. Grassot. 1,816,729; July 28.
Circuit, Wireless receiving. M. M. Phillips. Re18,140; July 28.
Clamp: *See*—
Hose clamp.
Clamp. R. Ruemelin. 1,816,197; July 28.
Clamp for mounting insulator to face of sign or other object, Split. E. F. Hogan. 1,815,918; July 28.
Cleaner: *See*—
Air cleaner. Vacuum cleaner.
Carpet and floor cleaner.
Cleaner and depth gauge, Combined rake. W. Sprague. 1,816,703; July 28.
Cleansing device for rock drills. C. C. Hansen. 1,816,324; July 28.
Clip: *See*—
Partition clip.
Clip. C. A. Bulkeley. 1,816,469; July 28.
Clock case. H. C. Richardson. Des. 84,754; July 28.
Clock case. J. B. Westover. Des. 84,771; July 28.
Clock, Coin controlled savings. A. T. Hammarstrand and N. M. Lagerkrans. 1,816,649; July 28.
Closure cap. A. C. Spahn. 1,816,499; July 28.
Closure, Starting crank hole. H. S. Golden. 1,816,576; July 28.

Clutch. R. C. Berry. 1,816,808; July 28.
Coal mining machine. N. D. Levin. 1,815,981; July 28.
Coal pulverizer. W. C. State. 1,816,408; July 28.
Coaster. W. H. Notzke. 1,816,691; July 28.
Coating for rubber, Weatherproof. S. C. Witherspoon and A. F. Beal. 1,815,998; July 28.
Coating to motion picture films, Process of and apparatus for applying a protective. L. L. Steele. 1,816,409; July 28.
Coil and manufacturing same, Electrical. F. Kurath. 1,816,680; July 28.
Coil, Cigarette tip. E. Richter. 1,816,398; July 28.
Coil construction. F. E. Terman. 1,816,448; July 28.
Coin controlled selecting mechanism. C. W. Coones. 1,816,278; July 28.
Collar. M. Robbins. 1,816,699; July 28.
Collar, Shirt. W. S. Kurtz. 1,816,119; July 28.
Collector, Pressed. A. Wörner. 1,816,629; July 28.
Combination lock. J. E. Leary. 1,816,382; July 28.
Combing machine. C. Gégauff. 1,816,644; July 28.
Combustion control. R. P. Brown. 1,816,311; July 28.
Communication system, Synchronous. R. F. Dirkes. 1,815,969; July 28.
Composition for cadmium plating baths. C. H. Humphries. 1,816,152; July 28.
Compressor, High pressure reciprocating piston. C. Schaer. 1,816,403; July 28.
Compressor, Steam driven fluid. B. H. Thompson. 1,816,098; July 28.
Condensation products from phenol and formaldehyde, Manufacture of. R. Hessen. 1,816,255; July 28.
Condensation products of phenols and starches. E. E. Novotny and C. J. Romineux. 1,815,930; July 28.
Condenser. J. H. Smith. 1,816,160; July 28.
Condenser, Electrical. W. Dubilier. 1,816,640–1; July 28.
Condenser, Vapor. H. L. Guy. 1,816,149; July 28.
Condensing apparatus. O. C. Trautmann. 1,816,133; July 28.
Conduit ground connecter, Rigid. E. J. Noble. 1,816,608; July 28.
Connecter, Electric. P. S. Westcott. 1,816,063; July 28.
Connecting device for chains. J. R. Reyburn. 1,816,280; July 28.
Connecting means for eccentric arms. C. W. Deffenbaugh. 1,816,364; July 28.
Container. P. C. P. Booty. 1,816,141; July 28.
Container. H. B. Walter. 1,816,706; July 28.
Container for clinical thermometers, Sterile. Z. R. Everett and K. F. V. Nygaard. 1,816,425; July 28.
Container for fire extinguishing apparatus. E. D. Phinney. 1,816,342; July 28.
Container structure. H. A. Eggerss. 1,815,970; July 28.
Containers, Process and machine for making spacing members for shipping. C. A. Agar. 1,815,887; July 28.
Control mechanism. A. W. Morris and S. P. Wetherill, jr. 1,816,491; July 28.
Control mechanism for glass feeders. A. M. Algeo and J. W. Ross. 1,816,275; July 28.
Control mechanism for superchargers. S. A. Moss. 1,816,787; July 28.
Control system. F. N. Moerk and C. B. Irmer. 1,816,603; July 28.
Control system. H. W. Williams. 1,816,454; July 28.
Control system, Remote supervisory. A. Ritter and O. Plechl. 1,816,496; July 28.
Control system, Selective. J. L. Woodworth. 1,816,755; July 28.
Conveyer. G. L. Hise. 1,816,327; July 28.
Conveyer for sheet glass forming machines, Take-off and lehring. W. Spiekermann. 1,816,407; July 28.
Conveyer, Mold carrying. E. F. Miltenberger. 1,816,336; July 28.
Conveyer, Power driven. H. W. Smith. 1,816,405; July 28.
Cooker and toaster or like article, Combined. C. A. Schallis. Des. 84,760; July 28.
Cooler: *See*—
Bottle cooler.
Cooling and ventilating airplane fans. F. H. Gallagher. 1,816,183; July 28.
Cooling system, Dynamo. H. H. Wait. 1,816,506; July 28.
Coupler. A. D. Booth. 1,816,206; July 28.
Coupling: *See*—
Grease can coupling. Valve coupling.
Hose coupling.
Coupling between carrier and transmission lines. E. I. Green. 1,815,976; July 28.
Coupling key. L. A. Paradise. 1,816,492; July 28.
Crank case and oil pump heater. E. L. Sobolik. 1,816,662; July 28.
Crochet rack. D. D. Fowler. 1,816,081; July 28.
Cup: *See*—
Drinking cup.
Currents or voltages, Device responsive to unbalanced electric. E. Grassot. 1,816,676; July 28.
Cut-off, Automatic. G. L. Jackson. 1,816,223; July 28.
Cut-off for gas stoves, Automatic. T. Pantelakis. 1,816,791; July 28.
Cutter: *See*—
Tractor cutter.
Cutting shears, Cylindrical. E. J. Richard. 1,816,056; July 28.
Dam, Reenforced concrete. H. Sorensen. 1,816,797; July 28.

Damper control for unit heaters, Combustible. L. D. Harnett. 1,816,217; July 28.
Dandy roll. W. G. Trotman. 1,815,939; July 28.
Deck structure, Metallic. H. E. White. 1,816,556; July 28.
De-hairing machine. F. R. Newman. 1,815,929; July 28.
Delivery apparatus for molten glass. W. T. Barker, jr. 1,816,309; July 28.
Dental unit. C. W. Moore. 1,815,953; July 28.
Dentures, Method and apparatus for constructing artificial. E. D. Ralph. 1,815,956; July 28.
Deodorizing device. E. J. Reefer. 1,816,442; July 28.
Desk, Bookkeeper's. G. C. Brainard and G. T. Gourley. 1,816,249; July 28.
Developer for photographic paper in sheets, Automatic. H. Godefroy. 1,816,646; July 28.
Diaphonometric means. G. Viard. 1,816,663; July 28.
Diaphragm for loud speakers, Conical. C. W. Peterson. 1,815,987; July 28.
Diazo compounds, Eliminating excess. L. W. Geller. 1,815,903; July 28.
Dibenzanthrone, Production of. H. J. Emmer. 1,816,281; July 28.
Dielectric material. S. Boyer. 1,816,762; July 28.
Discharge tube switch, Gas. R. G. Berthold. 1,816,168; July 28.
Disinfectants, Manufacture of. F. Raschig. 1,816,297; July 28.
Disk wheel. G. H. Forsyth. 1,816,643; July 28.
Dispensing apparatus. A. R. White. 1,816,452; July 28.
Dispensing apparatus of the visible type. R. W. Bond. 1,816,513; July 28.
Dispensing apparatus, Liquid. L. McCandless and J. D. Sartakoff. 1,815,926; July 28.
Dispensing device for small commodities. M. Mellin. 1,816,542; July 28.
Display apparatus, Electrically moved. A. Waters and S. J. Waters. 1,816,102; July 28.
Display box, Merchandise. A. L. Martin. 1,816,598; July 28.
Display rack. M. W. Rogers, sr. 1,816,747; July 28.
Display rack. W. Traylor and V. D. Arthur. 1,816,705; July 28.
Distances traveled by conveyances, Apparatus for recording the. F. Toewe. 1,816,751; July 28.
Distributor for pulverulent and pasty products. J. E. B. Maillard. 1,816,383; July 28.
Doily. E. Karfiol. Des. 84,749; July 28.
Doll or similar article. C. Bennett. Des. 84,731–2; July 28.
Door closer. W. F. Moore. 1,816,391–2; July 28.
Door closer and check. E. Hommer. 1,816,169; July 28.
Doorlock actuating mechanism. C. J. Ulrich. 1,816,504; July 28.
Door silencer device. V. Petersen. 1,816,024; July 28.
Dough divider, Automatic. F. H. Van Houten. 1,816,753; July 28.
Draft controller. R. M. Schultz. 1,816,027; July 28.
Drier. W. S. Pfeiffer. 1,816,055; July 28.
Drill: *See*—
Grain drill.
Drill bit. A. E. Carlson. 1,816,568; July 28.
Drill for wells. W. C. Starkey. 1,816,549; July 28.
Drill machine. C. A., G. J., and R. M. Willis. 1,816,708; July 28.
Drill stem. P. Dobrinski. 1,816,767; July 28.
Drilling apparatus. C. C. Hansen. 1,816,481; July 28.
Drinking cup. W. A. Ringler. 1,816,547; July 28.
Drinking fountain, Poultry. B. J. Liechty. 1,816,684; July 28.
Drive, Silent chain. R. W. Dull and E. Geertz. 1,816,473; July 28.
Drum snare. E. P. James. 1,816,328; July 28.
Drying attachment for pressing machines. P. N. Braun. 1,816,208; July 28.
Dual wheel. F. R. Klaus and G. W. Seiberling. 1,816,380; July 28.
Duplicating machine. G. E. Creed. 1,816,720; July 28.
Dyeing machine head. J. T. Tweedale. 1,816,798; July 28.
Dyes, Producing or developing azo. H. T. Bucherer. 1,815,965; July 28.
Dyestuffs, Indigoid vat. N. Steiger. 1,816,550; July 28.
Edges of curved blanks in the manufacture of sheet metal pipes and the like, Shaping the meeting. W. R. Hume. 1,816,534; July 28.
Egg candling and grading machine. E. G. Heaton. 1,816,483; July 28.
Elbow, Capped. L. H. Church. 1,816,670; July 28.
Electric machine, Dynamo. R. Pohl. 1,816,795; July 28.
Electric switch. B. E. Getchell. 1,816,429; July 28.
Electric switch. J. W. Upp and W. K. Rankin. 1,816,799; July 28.
Electrical connection for submarines. F. V. Kolb. 1,816,435; July 28.
Electrical distribution for controlling burners, System of. F. R. Wallace. 1, 816,451; July 28.
Electrical distribution system. T. A. E. Belt. 1,816,717; July 28.
Electrical regulating system. E. J. Burnham. 1,816,713; July 28.
Electrodes for electric batteries, electrolytic cells and the like. L. A. Levy. 1,816,784; July 28.
Electrolytic rectifier. F. G. Beetem. 1,816,038; July 28.
Electrolytic refining of metallic alluminum. W. D. Treadwell. 1,816,304; July 28.
Electrolytic system for the protection of condensers. A. Kirkaldy. 1,816,487; July 28.
Electromagnetic device. F. A. Zupa. 1,816,558; July 28.
Electron discharge device. I. Langmuir. 1,816,682; July 28.
Electron discharge device. G. A. McNeill. 1,816,601; July 28.
Elevator. S. M. Halstead, A. I. Wieland, and W. C. Tustin. 1,815,907; July 28.
Elevator, C. E. Wilcox. 1,816,030; July 28.
Enamel. J. L. Keats. 1,816,830; July 28.
Engine: *See*—
Aeroplane engine. Internal-combustion engine.
Engine with airless injection of the fuel, Four stroke internal combustion. H. Dinner. 1,816,366; July 28.
Engines, Cowling for air-cooled internal combustion. J. D. North. 1,816,544; July 28.
Engines, Nebulizing and anti-backfiring device for internal combustion. W. Möbus. 1,816,390; July 28.
Engraving machine. C. Uschmann. 1,816,505; July 28.
Esters of 2-phenyl-quinoline-4-carboxylic acid. Manufacture of. A. Busch. 1,816,003; July 28.
Evaporator section. J. W. Smith. 1,816,159; July 28.
Excavator tooth with socketed tip, Reversible. D. H. Young. 1,816,710; July 28.
Exhaust silencer. L. J. Wolford. 1,816,245; July 28.
Fabric: *See*—
Knitted fabric. Textile fabric.
Fabric for collars and cuffs, Woven. A. S. Phillips and O. S. Lawton. 1,816,611; July 28.
Fabrics, Method of and attachment for running on knitted. R. H. Lawson and A. N. Cloutier. 1,816,809; July 28.
Fastener, Pipe. H. Shaw. 1,816,443; July 28.
Fastener, Separable. W. C. Stevens. 1,816,501; July 28.
Fastening device. T. Phillips. 1,816,692; July 28.
Fastening means, Rail. A. D. Preston. 1,816,696; July 28.
Fastening, Metallic. G. S. Tolman, jr. 1,816,162; July 28.
Feeder, Chick. E. W. Boyer. 1,815,964; July 28.
Fence or grille fabric, Wire. A. A. G. Land. 1,816,381; July 28.
Fender and brake, Vehicle. J. Colombo. 1,816,005; July 28.
Fiber with sulphur and vat dyestuffs, Dyeing and printing natural. C. Schoeller. 1,815,990; July 28.
Fibrous materials in the production of prepared roofing materials, Saturating. R. MacLean. 1,816,596; July 28.
Filament mounting machine. W. Ledig and W.-W. Loebe. 1,816,683; July 28.
Filtering apparatus. E. W. Von Waldenburg-Straus-Scharine. 1,816,064; July 28.
Filtering device. J. P. McGlaughlin. 1,816,785; July 28.
Filters, diaphragms, and the like, Making porous. M. Wilderman. 1,815,959; July 28.
Firearm, Breakdown. F. F. Burton. 1,816,313; July 28.
Firearm for casting bombs and grenades by means of ordinary bullet cartridges, Portable. L. Savani. 1,816,265; July 28.
Fire control mechanism. E. S. Bissonette. 1,815,889; July 28.
Fire extinguisher. R. W. Austin. 1,815,963; July 28.
Fire extinguisher. W. D. Witter. 1,816,417; July 28.
Fishing appliance. W. Schroeder. 1,816,235; July 28.
Fishing lure. E. S. Freeman. 1,816,725; July 28.
Fishing rig for deep wells. A. F. Meyer. 1,816,602; July 28.
Fitting for fluid containers. H. D. Collier. 1,816,004; July 28.
Flanges on tubular bodies, Forming internal. C. Boye. 1,816,357; July 28.
Flashlight. F. A. Weidman. 1,816,065; July 28.
Floor covering and the like, Printing of. H. A. Webster. 1,816,103; July 28.
Floors, Sectional dividing strip for. P. Galassi. 1,816,727; July 28.
Flow conduit, Fluid. A. M. Trogner. 1,815,938; July 28.
Flower making device, Artificial. L. Shogran. 1,816,266; July 28.
Flue, Sectional smoke. J. A. Watcher. 1,816,271; July 28.
Fluid dispensing apparatus. L. Deutsch and G. J. Genung. 1,816,569; July 28.
Fluid pressure brake. C. C. Farmer. 1,816,078–9; July 28.
Fluid pressure brake. J. C. McCune. 1,816,080; July 28.
Flying machine. J. de J. Santos. 1,816,616; July 28.
Flying shears. L. Johnson. 1,816,187; July 28.
Folding and closing the ends of bags or the like, Apparatus for. A. G. Rose. 1,816,126; July 28.
Food article. D. G. Holibaugh. 1,816,283; July 28.
Food product. S. Musbel. 1,816,338–9; July 28.
Food lever motor. S. Lamer. 1,816,681; July 28.
Fork or similar article. P. B. Ball. Des. 84,729; July 28.
Form for making reenforced piles, Sectional. H. H. Jenkins. 1,816,586; July 28.
Form, Shirt. B. Lerman. 1,816,539; July 28.
Fountain: *See*—
Drinking fountain. Poultry fountain.
Fourdrinier machine. J. A. White. 1,816,754; July 28.
Frame: *See*—
Pack frame.
Frame for vehicles. F. J. Osborn and N. F. Wood. 1,816,788; July 28.
Freezing unit, Sharp. L. G. Copeman. 1,816,211; July 28.
Frequency changer. J. I. Hull. 1,816,777; July 28.
Friction spring. T. Held. 1,816,325; July 28.

Fruit vending machine. N. P. Petersen. 1,816,341; July 28.
Fuel and making the same, Solidified. A. B. Ray. 1,816,125; July 28.
Fuel, Apparatus for burning. G. H. Kaemmerling. 1,816,434; July 28.
Fuel charge for an internal combustion engine, Preparing. J. A. Secor. 1,816,345; July 28.
Fuel for use in internal combustion engines and the production thereof, Liquid. W. H. Hoffert. 1,816,811; July 28.
Furnace: *See*—
Annealing furnace. Open hearth furnace.
Furnace construction. J. E. Anderson. 1,815,891; July 28.
Furnace control system, Blast. R. P. Brown. 1,816,174; July 28.
Furnace structures, Retaining and sealing. R. L. Frink. 1,816,322; July 28.
Furnaces, Apparatus for charging blast. A. J. Boynton. 1,815,897; July 28.
Furring construction. E. W. Menninger. 1,816,387; July 28.
Fuse, Expulsion. A. G. Steinmayer. 1,815,958; July 28.
Galvanizing. J. L. Schueler. 1,816,617; July 28.
Game apparatus, Educational. H. Barnowitz. 1,816,760; July 28.
Game board. J. B. Yeoman. Des. 84,773; July 28.
Gas apparatus, Carbureted water. H. D. Ga Nung. 1,816,478; July 28.
Gas mixing device. J. A. Tipton. 1,815,412; July 28.
Gas regulator. G. Helf. 1,816,431; July 28.
Gaseous conduction device. C. G. Smith. 1,816,619; July 28.
Gases and vapors, Washing. R. Gutensohn. 1,816,525; July 28.
Gases, Apparatus for cleaning. H. A. Brassert, and F. W. Barrett. 1,815,898; July 28.
Gases, Purifying. W. J. Huff and G. Milbourne. 1,816,533; July 28.
Gasket. C. B. Bailey. 1,815,893; July 28.
Gauge. F. Winny. 1,816,244; July 28.
Gauge for measuring endless belts. R. H. Pope. 1,816,695; July 28.
Gear and clutch therefor, Speed changing. W. C. Pitter. 1,816,295; July 28.
Gear cutting machine. M. H. Hill. 1,816,375; July 28.
Gear cutting machine. M. H. Hill and L. O. Carlsen. 1,816,376; July 28.
Gear for airplanes, Landing. H. Cordy. 1,816,143; July 28.
Gear, Timing. A. J. Baker. 1,815,894; July 28.
Gear timing system. E. B. Trusler. 1,816,552; July 28.
Gearing. E. Wildhaber. 1,816,272–3; July 28.
Gearing for washing machine agitators. A. R. Haag. 1,815,906; July 28.
Glare shield attachment for headlights. L. E. Rynearson. 1,816,299; July 28.
Glass, Apparatus for feeding molten. W. T. Barker, jr. 1,816,463; July 28.
Glass, Apparatus for making. H. F. Hitner. 1,815,977–8; July 28.
Glass, Apparatus for making plate. F. Geistharp. 1,815,972; July 28.
Glass, Apparatus for producing sheet. J. L. Drake and L. C. Mambourg. 1,816,180; July 28.
Glass articles, Bubbled colored. R. Haley. 1,816,045; July 28.
Glass articles, Fitter or shaper for. H. H. Dawson and I. H. Freese. 1,816,280; July 28.
Glass drawing apparatus. J. P. Crowley. 1,816,040; July 28.
Glass drawing apparatus, Sheet. J. T. Zellers. 1,816,036–7; July 28.
Glass, Drawing sheet. J. L. Drake. 1,816,179; July 28.
Glass, Installation of corrugated. P. G. Masters. 1,816,439; July 28.
Glass melting preheater and mixer. G. G. Brockway. 1,815,890; July 28.
Glass plates, Making curved composite. J. H. Sherts and J. Willits. 1,815,992; July 28.
Glass, Process and machine for rolling raw plate. E. Hilgers. 1,816,374; July 28.
Glass seal. H. M. Elsey. 1,816,424; July 28.
Glass surfacing apparatus. J. H. Fox. 1,815,971; July 28.
Goggles. G. L. Tully. 1,816,752; July 28.
Governor, Automatic stop. F. A. Meyer. 1,816,020; July 28.
Grader blade. C. G. Moberg. 1,816,389; July 28.
Grain, Apparatus for cooling and conditioning. R. Shuyler. 1,816,286; July 28.
Grain drill. J. J. Tate. 1,816,062; July 28.
Grain shocker. R. C. Livesay. 1,816,488; July 28.
Grapple. R. J. Stapf. 1,816,446; July 28.
Grease can coupling. C. G. Butler. 1,816,567; July 28.
Grease feeder. W. L. Morris. 1,816,022; July 28.
Grinder, Valve. C. Booth. 1,816,171; July 28.
Grinding, Apparatus for. D. C. Page. 1,816,090; July 28.
Grinding machine. R. N. Heald and W. J. Guild. 1,816,082; July 28.
Grinding machine, Crank. A. P. Steiner, P. Stoner, and C. P. Harrison. 1,816,750; July 28.
Grinding machinery. C. Booth. 1,816,170; July 28.
Guard, Cattle. A. L. Joues. 1,816,807; July 28.
Guard for journal boxes, Dust. W. N. Thornburgh. 1,816,704; July 28.
Guide for stop motions, Thread. A. Crawford. 1,816,765; July 28.
Hair waver. J. Goodman. 1,816,480; July 28.
Hand bag. W. C. Hiering. 1,815,912. July 28.
Handle construction. D. S. Anthony. 1,816,277; July 28.
Handle for a door of an automobile or the like. O. E. Uhlmann. Des. 84,769–70; July 28.
Handle for latches, control devices and the like. F. C. Ruppel. Des. 84,756; July 28.
Hanger. C. J. Way. 1,816,413; July 28.
Harness, Safety child. N. Ritter. 1,816,262; July 28.
Harvesting machine. L. R. Ewing and T. J. Mechling. 1,816,519; July 28.
Head and casing for traffic signals, Combined. C. Adler, jr. Des. 84,726; July 28.
Heat conserving attachment for upright boilers. F. M. Simpson and R. Terry. 1,816,158; July 28.
Heat transferrer. W. A. White. 1,816,757; July 28.
Heater: *See*—
Air heater. Water heater.
Crank case and oil pump heater.
Heater for boilers of the vertical type. J. W. Cannon. 1,816,110; July 28.
Heating apparatus for railway cars. A. Franco. 1,816,369; July 28.
Heating appliance, Electrical. H. N. Shaw. 1,816,660; July 28.
Heating device, Freezing tray. A. W. Berresford. 1,816,711; July 28.
Heel pad. G. A. Richard. 1,816,495; July 28.
Heel protector. J. W. McDermott. 1,816,784; July 28.
Helicopter. W. A. Clark. 1,816,315; July 28.
Hoes, Traveling back post for power. W. W. Sayers. 1,816,701; July 28.
Hoisting mast. H. J. Powers. 1,816,654; July 28.
Holder and similar article, Cigar and cigarette. J. E. Aster. 1,816,139; July 28.
Holder, Automobile license tag. F. Kleinsmith. 1,816,289; July 28.
Holder, Bathroom toothbrush. S. D. Baker. Des. 84,728; July 28.
Holder, Blade. H. J. Gaisman. 1,816,477; July 28.
Holder, Cigar and cigarette. G. Lake. 1,815,919; July 28.
Holder, Crayon. W. R. Porter. 1,816,545; July 28.
Holder for non-fluid cosmetics. C. Weeks. 1,816,240; July 28.
Holder, License. J. C. Davidson. 1,816,671; July 28.
Holder, Match package. E. L. Grauel. 1,815,975; July 28.
Holder, Powder. C. Weeks. 1,816,241; July 28.
Holder, Tag or sign. J. Orester and W. J. Gee. 1,816,741; July 28.
Holder, Wing pocket for visible index card. L. Lombardini. 1,816,261; July 28.
Hook: *See*—
Landing hook.
Horn or amplifier. S. Rasmussen. 1,816,546; July 28.
Horn, Sound amplifying. G. G. de Andia-Yrarrázaval 1,816,722; July 28.
Hose clamp. C. J. Sundell. 1,816,301; July 28.
Hose coupling. T. Slovinski. 1,816,058; July 28.
Hose, Flexible armored. C. F. Ogren. 1,816,740; July 28.
Hosiery drying and shaping structure. T. W. Prosser. 1,816,296; July 28.
Hot plate, Electric. A. O. Samuels. Des. 84,758; July 28.
House: *See*—
Switch house.
Housing, Transmission. N. Skillman. 1,816,661; July 28.
Hydraulic jack. H. C. Miller and G. P. Sumner. 1,816,736; July 28.
Hydrogen, Production of. W. Clund, K. Keller, R. Schönfelder, and W. Klempt. 1,816,528; July 28.
Hydrogen sulfide in fuel gas, Elimination of. F. W. Sperr, jr. 1,815,933; July 28.
Hydroxy aldehydes, Manufacture of aromatic. F. Boedecker. 1,816,248; July 28.
Ice, Treating. H. T. Barnes. 1,816,511; July 28.
Identification system for keys. H. H. Fetter. 1,816,642; July 28.
Igniter. F. R. Belt. Des. 84,730; July 28.
Ignition device, Electrical. J. Fischer-Hinnen. Des. 18,186; July 28.
Ignition system. H. Ford. 1,816,215; July 28.
Incubator. C. D. McLean. 1,815,927; July 28.
Indicating and recording instrument for testing piston rings and the like. J. H. Holloway. 1,816,532; July 28.
Indicator: *See*—
Speed indicator.
Indicator for cotton presses. W. J. Fouse. 1,816,252; July 28.
Ingot material for use in drain opening compounds and making it, Prepared. W. C. Gangloff. 1,816,805; July 28.
Injector. P. L. Scott. 1,816,157; July 28.
Insecticide, fungicide, and disinfectant. C. H. Peet. 1,816,441; July 28.
Insulators, Manufacturing. D. H. Osborne. 1,816,023; July 28.
Interlock, Electromechanical. T. Brady. 1,816,072; July 28.
Internal combustion engine. W. H. Hill. 1,816,432; July 28.

Internal combustion engine. J. B. Strauss. 1,816,161; July 28.
Internal combustion engine, Two cycle. H. Andresen. 1,816,276; July 28.
Iron carbonyl, Manufacture of. A. Mittasch and C. Muller. 1,816,122; July 28.
Iron, Extracting of. A. Langer. 1,815,946; July 28.
Iron ore, Treatment of. H. A. Brassert. 1,815,899; July 28.
Jack: *See*—
Hydraulic jack. Lifting jack.
Joint: *See*—
Spigot and socket joint.
Joints, Making high pressure steam. W. F. Oberhuber. 1,816,293; July 28.
Key: *See*—
Coupling key.
Key board for perforating, adding, and calculating machines. C. D. Williams. 1,815,997; July 28.
Key retainer, Draft. D. S. Barrows. 1,816,356; July 28.
Knife. J. G. Coleman. 1,816,422; July 28.
Knitted fabric. J. H. Wilson. 1,816,709; July 28.
Knitted fabric, Plaited. H. E. Houseman. 1,816,221; July 28.
Knitting machine. B. Willingham. 1,816,416; July 28.
Knitting machines, Yarn controlling mechanism for. G. P. Bosworth. 1,816,630; July 28.
Lace. H. W. Hucknall. Des. 84,745; July 28.
Ladder, Fire escape. J. L. Small. 1,816,702; July 28.
Lamp. G. E. Glatthar. Des. 84,737–8; July 28.
Lamp. F. A. Gritt. Des. 84,740; July 28.
Lamp and killing device, Combined insect catching. E. Oppenländer. 1,816,396; July 28.
Lamp, Arc. J. H. Wagenhorst. 1,816,554; July 28.
Lamp bracket. J. K. Russell. 1,816,233; July 28.
Lamp, Gaseous conduction. D. M. Moore. 1,816,690; July 28.
Lamp, Pillar roof. R. W. Johnson. Des. 84,746; July 28.
Landing hook, Sliding oleo. R. J. Minshall. 1,816,228; July 28.
Latch, Door. D. W. Wood. 1,816,134; July 28.
Latch for breakdown firearms, Locking-bolt. F. F. Burton. 1,816,812; July 28.
Latch, Refrigerator. O. Geske. 1,816,184; July 28.
Latex by centrifugal action, Concentration of. C. C. Loomis and H. E. Stump. 1,816,018; July 28.
Lath for use in constructing surfaces impervious to X-rays. S. Lapof. 1,815,922; July 28.
Laundry machine. I. H. Wilsey. 1,816,033; July 28.
Laundry sorting and assembling device. W. F. Kruschwitz. 1,816,331; July 28.
Lens for vehicle lamps. R. W. Johnson. Des. 84,747–8; July 28.
Level, Adjustable. O. Marischal. 1,815,949; July 28.
Lever action waste. R. H. Zinkil and O. C. Osterhage. 1,816,458; July 28.
Lifter: *See*—
Valve spring lifter.
Lifting jack. E. J. Van Fleet. 1,816,625; July 28.
Light system, Time. T. H. Mapel. 1,816,686; July 28.
Lighter, Cigar and cigarette. I. Florman. Des. 84,736; July 28.
Lighting arrangement for automobiles. J. W. Jackson. 1,816,224; July 28.
Lighting device for key rings. A. L. Jeanneret. 1,816,779; July 28.
Lighting fixture, Ceiling. B. Stange. Des. 84,763–5; July 28.
Lighting fixture wall bracket or article of analogous nature. B. Stange. Des. 84,762; July 28.
Lingerie pad. A. Adler. 1,816,714; July 28.
Link. A. J. Loepsinger. 1,816,017; July 28.
Link, Frangible. I. W. Knight. 1,816,016; July 28.
Liquid carbonator. S. M. Dick. 1,816,144; July 28.
Liquid dispensing apparatus. W. H. Parker and F. W. Delanoy. 1,816,609; July 28.
Liquid dispensing apparatus. W. S. Townsend. 1,816,623; July 28.
Liquid feeding apparatus. I. Sabilk. 1,816,025; July 28.
Lock: *See*—
Combination lock. Rim and tire lock.
Nut lock. Tire carrier lock.
Lock. H. Lande. 1,816,259; July 28.
Lock for door latches, Permutation. G. D. Full. 1,816,575; July 28.
Lock switch, Railroad. A. N. F. Mohr. 1,816,337; July 28.
Locking device. R. S. Inglehart. 1,816,222; July 28.
Locking device. J. R. Thorp. 1,816,268; July 28.
Locomotive boiler. A. W. Bruce. 1,816,468; July 28.
Loom beam structure. E. Uffe. 1,816,503; July 28.
Loud speaker. P. W. Gumaer. 1,815,944; July 28.
Loud speaker. M. C. Hopkins. 1,815,945; July 28.
Lubricant protecting structure for internal brakes of vehicle wheel. W. N. Booth. 1,816,172-3; July 28.
Lubrication, Oil bearing. O. Wilde. 1,816,507; July 28.
Luggage carrier, Automobile. C. E. Glenn. 1,815,943; July 28.
Luggage, Hand. B. M. Hamlin. 1,815,908; July 28.
Luminous display, Changeable. F. Hotchner. 1,816,220; July 28.
Machine for bending and tempering leaf-springs. P. Hobracht. 1,816,377; July 28.
Machine for developing aluminum into particles. W. C. Gangloff and M. A. Conner. 1,816,806; July 28.
Machine for filling flasks for founding. W. F. Piper. 1,816,612; July 28.
Machine for grinding or buffing annular articles. E. D. Putt. 1,816,494; July 28.
Machine for making sandwiches. M. Joachimson. 1,816,536; July 28.
Machine for operating upon hides, skins, and leather. G. E. McLaughlin. 1,816,154; July 28.
Magnetic separating machine. G. Ullrich. 1,816,305; July 28.
Manifold for internal combustion engines, Intake. G. R. Welch. 1,816,163; July 28.
Maps, Method of and apparatus for making. L. T. Eliel. 1,816,181; July 28.
Marker, Traffic. W. H. Theel. 1,816,502; July 28.
Mast for airships, Mooring. J. B. Strauss. 1,816,036; July 28.
Match package. E. L. Grauel. 1,815,973-4; July 28.
Material, Gauging. F. C. Biggert, jr. 1,816,464; July 28.
Materials containing lignin and cellulose, Working up. O. A. Müller. 1,816,394; July 28.
Measuring and protecting device, Electric. A. D. Iliovici. 1,816,778; July 28.
Measuring machine. R. F. Knight. 1,816,153; July 28.
Medicaments, Device for administering. E. F. Ellzey. 1,815,902; July 28.
Metal oxides, Producing finely divided. A. Mittasch, R. Lucas, and R. Greissbach. 1,816,388; July 28.
Metal shapes, Manufacture of hollow sheet. O. Reifurth. 1,816,298; July 28.
Metal working machines, Automatic feeding apparatus for sheet. C. L. Eksergian. 1,816,319; July 28.
Metals and oxides from boiler ash, Recovering. T. F. Baily. 1,815,888; July 28.
Metals from ores, Recovery of. A. L. J. Queneau. 1,816,743; July 28.
Metals, Refining molten. G. S. Evans. 1,816,907; July 28.
Milking apparatus. F. Henrard. 1,816,116; July 28.
Milking machine. C. H. Hapgood. 1,816,482; July 28.
Mill: *See*—
Attrition mill.
Mirror. F. X. Campbell. 1,815,966; July 28.
Mirror, Automobile. A. W. Rosen. 1,816,700; July 28.
Mirror frame construction. H. P. Zoerner. 1,815,940; July 28.
Mirror stereoscope, Folding. L. T. Eliel. 1,816,214; July 28.
Missile projecting device. P. F. Kahler and S. S. Wicker. 1,816,679; July 28.
Mixer head. A. R. Haysel. 1,816,528; July 28.
Mixing apparatus. H. S. Beers. 1,816,562; July 28.
Mixing device. H. G. Johannes. 1,816,046; July 28.
Moistener, Counter balance. W. A. Uttz, sr. 1,816,553; July 28.
Mold: *See*—
Permanent mold.
Mold. I. O. Gurnee. 1,816,011; July 28.
Molded article. I. Simon. 1,816,200; July 18.
Molding machine, Portable. E. O. Beardsley and W. F. Piper. 1,815,999–000; July 28.
Monument. C. A. Thompson. Des. 84,768; July 28.
Mooring apparatus for aircraft. H. G. Gros. 1,816,010; July 28.
Mop, Dry. H. Hertzberg. 1,816,529; July 28.
Mop with wringer, Squeegee. H. Hertzberg. 1,816,530; July 28.
Motor: *See*—
Foot lever motor. Wave motor.
Motors, Device for regulating the size of the combustion chamber in combustion. O. S. Ruud. 1,816,402; July 28.
Mounting, Drill cutter. G. E. Behnke. 1,816,204; July 28.
Mounting for guns, Telescope. J. H. Redfield. 1,816,195; July 28.
Mounting, Oil filter. C. W. McKinley and G. H. Willits. 1,816,600; July 28.
Music holding attachment for music racks, Reserve. E. H. Nystrom. 1,816,340; July 28.
Musical instrument pad, Wind. F. B. Hammann. 1,816,578; July 28.
Musical toy. F. J. Goriup. 1,816,647; July 28.
Muskrat trap. C. L. Topp. 1,816,269; July 28.
Necktie press, Universal. V. Syren. 1,816,349; July 28.
Nitrocellulose, Solubilized. C. Ellis. 1,816,146; July 28.
Nozzle, Spray. J. Giordano. 1,816,645; July 28.
Nut lock. Y. Nagano. 1,816,192; July 28.
Nut lock. W. Steinhorst. 1,816,551; July 28.
Oar and paddle holder and lock. F. L. Matthews. 1,816,334; July 28.
Oil cooling. E. Sieder. 1,815,932; July 28.
Oil, Dewaxing. S. W. Ferris. 1,816,367; July 28.
Oil purifying system. D. E. Pierce. 1,816,294; July 28.
Oil reclaiming mechanism. L. B. Ellis and F. M. Holden. 1,816,573; July 28.
Oil sampler. E. G. Friedman. 1,816,726; July 28.
Oils or fatty matters, Sulphonation of. H. Bertsch. 1,816,071; July 28.
Oiler, Hand. S. O. Paull. 1,816,792; July 28.
Oiling device. C. D. Stewart. 1,816,096; July 28.
Oiling system for internal combustion engines, Piston and cylinder. J. Clement. 1,816,516; July 28.
Opener, Can. J. F. Hart. 1,815,910; July 28.
Opener, Receptacle. N. P. Courtney. 1,815,902; July 28.
Open-hearth furnace, Regenerative gas fired. W. Schucany. 1,816,497; July 28.

Opening and closing windows. W. B. Lake. 1,816,258; July 28.
Ophthalmic lens. A. E. Glancy. 1,816,728; July 28.
Ophthalmic mounting. G. E. Nerney. Des. 84,751; July 28.
Ores and minerals by flotation, Concentrating. W. A. Douglass. 1,816,145; July 28.
Oxygenated organic compounds, Manufacture of. E. Pansegrau. 1,815,985; July 28.
Pack frame. M. E. Anderson. 1,816,510; July 28.
Packaging method and apparatus. A. W. Bell and E. E. Eldredge. 1,816,202; July 28.
Packing machine. M. Chambers and A. F. Sisk. 1,816,251; July 28.
Pad: *See*—
Heel pad. Musical instrument pad.
Lingerie pad.
Padded box, Collapsible. O. W. Foss. 1,816,321; July 28.
Pan greasing machine. W. J. Graybill. 1,816,148; July 28.
Panel unit. J. A. Bohnsack. 1,816,512. July 28.
Permanent mold. N. J. Quinn. 1,816,744; July 28.
Parrafin wax and the like, Coloring. W. M. Bain. 1,816,140; July 28.
Partition block. S. Lapof. 1,815,921; July 28.
Partition clip. J. Stack. 1,816,060; July 28.
Perambulator and the like. E. T. Morriss. 1,815,952; July 28.
Petroleum residues, Coking. A. S. Knowles. 1,815,918; July 28.
Phosphate material, Treating. S. J. Lloyd and A. M. Kennedy. 1,816,051; July 28.
Photographic apparatus. A. W. Caps. 1,815,967; July 28.
Photographic apparatus, Automatic. A. Klimis. 1,816,290; July 28.
Photometer. C. W. Keuffel. 1,816,047; July 28.
Pile or tufted sheet fibrous material. B. H. Foster and K. B. Cook. 1,816,574; July 28.
Piston, Pump. O. L. Hastings. 1,816,527; July 28.
Planter attachment. F. E. Spencer. 1,816,131; July 28.
Plaster mixing machine. H. S. Johns. 1,816,588; July 28.
Plug, Well cementing. N. W. Wickersham. 1,816,243; July 28.
Plummet. E. H. Morris. 1,816,786; July 28.
Pole, Window. S. C. Lawlor. 1,815,923; July 28.
Post: *See*—
Bumping post.
Post brace, Adjustable. G. K. Thompson. 1,815,994; July 28.
Potassium nitrate, Production of. C. T. Thorssell and A. Kristensson. 1,816,303; July 28.
Poultry fountain. J. A. Johnston. 1,816,781; July 28.
Pouring device. M. W. Goldberg. 1,816,185; July 28.
Powder puff. N. McD Burmeister. 1,816,565; July 28.
Power head. P. A. Myers. 1,816,191; July 28.
Power transmission device. T. H. Ryan. 1,816,615; July 28.
Press: *See*—
Necktie press. Sole laying press.
Printing press. Trousers press.
Pressure tank, Sand blast. F. J. Hull. 1,816,583; July 28.
Priming mixture. J. D. McNutt. Re.18,137; July 28.
Printing device for colored films. R. Berthon. 1,816,039; July 28.
Printing machine. J. R. Curotto. 1,816,721; July 28.
Printing machine. J. Krell. 1,816,733; July 28.
Printing machine, Plate. W. E. Bennison. 1,815,995; July 28.
Printing machine, Rotary offset. W. Rössger. 1,816,796; July 28.
Printing press, Double multicolor web perfecting rotary. H. M. Barber. 1,816,354; July 28.
Printing press, Rotary. H. M. Barber. 1,816,355; July 28.
Projecting machine. A. Sapier. 1,816,284; July 28.
Propeller. T. A. Dicks. 1,816,317; July 28.
Propeller. J. W. Whitlock. 1,816,414; July 28.
Protective device. J. R. Thorp. 1,816,267; July 28.
Protector, Flange. P. J. Shrum. 1,815,957; July 28.
Protector, Vent. H. E. Lake. 1,815,920; July 28.
Puller: *See*—
Car puller.
Pump. J. W. Des Champs. 1,816,316; July 28.
Pump mechanism. S. Dean. 1,816,517; July 28.
Pump, Multistage centrifugal. O. Haentjens. 1,816,775; July 28.
Pump, Oil well. J. B. Hawley, jr. 1,816,731; July 28.
Pump, Rotary. I. H. Wilsey. 1,816,508; July 28.
Pumps, Power head for. P. A. Myers. 1,816,190; July 28.
Punch connecting mechanism. C. B. Gray. 1,816,648; July 28.
Rack: *See*—
Crochet rack. Display rack.
Rack for handling locomotive cabs. C. H. Thompson. 1,816,550; July 28.
Radiator. E. Flynn. 1,816,320; July 28.
Radiator. H. A. Higgins. 1,816,373; July 28.
Radiator. W. G. Laird, and G. T. Jacocks. 1,816,437; July 28.
Radiator. T. E. Murray, jr. 1,816,605; July 28.
Radiator. T. E. Murray, jr. 1,816,607; July 28.
Radiator. D. A. Usina. 1,816,624; July 28.
Radiator and other welded structure. T. E. Murray, jr. and I. T. Bennett. 1,816,606; July 28.
Radiator cap. W. Schnell and J. B. Flynn. 1,816,199; July 28.
Radiator for heating. C. G. Carlson. 1,816,250; July 28.
Radiator or cooler. S. Z. de Ferranti and J. Turner. 1,816,111; July 28.
Radiator unit. F. B. Herz. 1,816,372; July 28.
Radiocabinet. E. L. Combs. Des. 84,733; July 28.
Radiocircuits, Time controlled coin device for. L. M. Hall. 1,816,526; July 28.
Radio communication system. J. H. Hammond, jr. 1,816,579; July 28.
Radio receiving apparatus. B. B. Minnium. 1,816,227; July 28.
Radio receiving apparatus and the like, Shielded. W. L. Bond. 1,816,718; July 28.
Railway ballast, Handling machine. J. B. McWilliams. 1,815,950; July 28.
Rail and rail-joint, Railway. S. G. Thomson. 1,816,099; July 28.
Range. G. D. Wilkinson and E. D. Pellegrin. Des. 84,772; July 28.
Razor. H. R. Segal. 1,816,659; July 28.
Razor, Automatic safety. H. R. Segal. 1,816,658; July 28.
Razor, Safety. H. J. Gaisman. 1,816,428; July 28.
Razor, Safety. A. Schwarz. 1,816,404; July 28.
Razor, Safety. H. R. Segal. 1,816,657; July 28.
Receptacle, Electric lamp. H. J. Morey and C. L. Nicholson. 1,816,292; July 28.
Receptacle for heat radiators, Evaporating. C. G. Widell. 1,816,415; July 28.
Receptacle, Rubbish or garbage. J. Tillinger. 1,816,411; July 28.
Receptacles, Manufacture of double walled. C. G. Fink and W. G. King, jr. 1,816,476; July 28.
Reconnoitering device. J. B. Strauss. 1,815,935; July 28.
Rectifier, Electronic. R. H. Hardoen. 1,816,909; July 28.
Reel. F. Mossberg. 1,816,651; July 28.
Refractories, Manufacture of zirconium compound. G. J. Easter. 1,816,006; July 28.
Refrigerating apparatus. F. W. Andrews. 1,815,962; July 28.
Refrigerating apparatus. H. G. Jancsy. 1,816,585; July 28.
Refrigerating unit. L. G. Copeman. 1,816,638; July 28.
Refrigerator, Bottle dispensing. C. A. Frick. 1,816,427; July 28.
Refrigerator of the adsorption type. I. Amundsen. 1,815,961; July 28.
Register: *See*—
Cash register.
Regulator: *See*—
Gas regulator.
Reinforcement applying apparatus. H. C. Howsam and A. Hlavac. 1,816,151; July 28.
Relay. E. Grassot. 1,816,772; July 28.
Relay, Electrical. L. V. Lewis. 1,815,947; July 28.
Relay, Electromagnetic. H. S. Woodhead. 1,816,165; July 28.
Relay responsive to unbalance on electric systems, Selective. E. Grassot. 1,816,771; July 28.
Relay responsive to unbalanced electric quantities, Selective. E. Grassot. 1,816,675; July 28.
Repair device for pipe lines, Wrought metal. J. Clark and J. E. Walborn. 1,816,421; July 28.
Resistor units, Forming. L. E. Power. 1,816,194; July 28.
Retainer for visible index card holders, Yielding. J. R. Clark. 1,816,635–7; July 28.
Retort, Vertical distillation. J. Pieters. 1,816,794; July 28.
Rim and tire lock, Wheel. A. M. Furtow. 1,816,147; July 28.
Rim forming machine and method of forming rims. G. P. Kline. 1,816,117; July 28.
Ring traveler. G. H. Gilligan. 1,816,479; July 28.
Rings and the like, Making finger. H. W. Peters. 1,815,988; July 28.
Riveter, Geared roller wedge. J. C. Hanna. 1,816,677; July 28.
Rock into soluble compounds and of separating its content of lime and phosphoric acid, Converting phosphate. E. Johnson. 1,816,285; July 28.
Roll for rolling glass plates from molten glass. L. Von Reis. 1,816,307; July 28.
Roll, Rotation indicating wringer. G. B. Keltie. 1,815,916; July 28.
Roller bit. G. E. Behnke. 1,816,203; July 28.
Roofing, Mechanism for making. R. T. Johnston. 1,816,329; July 28.
Rubber bodies and producing the same, Hollow inflatable sheet. L. Dorogi and I. Dorogi. 1,816,472; July 28.
Rubber emulsions and making the same. W. B. Wescott. 1,816,242; July 28.
Rule, Simplified. L. Robidoux. 1,816,548; July 28.
Safety device for containers holding liquids which develop explosive gases. L. Glück. 1,816,823; July 28.
Sand in foundry molds and cores, Packing. M. Grindal. 1,816,774; July 28.
Sawing and resawing machine. A. B. Johnson. 1,816,485; July 28.
Sawmill, Go-around. F. C. Walters. 1,816,270; July 28.
Saw mill hog. T. B. Sumner. 1,816,097; July 28.
Saw operating attachment for tractors. H. Bittner. 1,816,246; July 28.

Scaffold. P. L. Bottoms. 1,816,514; July 28.
Scale. B. W. King. 1,816,189; July 28.
Scraper, Wheel. F. E. Sealey. 1,815,991; July 28.
Screen for automobiles. D. D. Rowley and D. M. McLellan. 1,816,196; July 28.
Screw driver. J. E. Carlin. 1,816,359; July 28.
Screw retainer. J. B. Kirby. 1,816,591; July 28.
Screw threads to wooden members. Method and tool for securing wire. W. Heyner and H. Henkel. 1,816,282; July 28.
Seat: *See*—
Vehicle seat.
Securing means for laboratory or workshop apparatus. L. D. J. A. Dunoyer. 1,816,723; July 28.
Service station. G. L. Rosebrook. Des. 84,755; July 28.
Servo brake. F. Athimon. 1,816,067; July 28.
Sewing machine, Elastic strip attachment for. A. H. Weis. 1,816,627; July 28.
Sewing machine, Upside down. J. P. Weis. 1,816,626; July 28.
Sewing machines, Thread cutting mechanism for. E. B. Allen. 1,816,308; July 28.
Shade, Lamp. H. M. Greist and H. F. Thurber. Des. 84,730; July 28.
Shapes from sheet metal, Apparatus for punching. J. M. Hothersall. 1,816,150; July 28.
Shears: *See*—
Cutting shears. Flying shears.
Sheets and irregular surface contours, Method of and apparatus for making. J. Ledwinka. 1,816,594; July 28.
Shelf support for refrigerators, Removable. H. L. Pope. 1,816,694; July 28.
Shellac composition. R. E. Sumner. 1,816,447; July 28.
Ship propelled by internal combustion engines. W. Hefti. 1,816,371; July 28.
Ship raising apparatus. W. E. Bahr. 1,816,759; July 28.
Shirt. J. W. Reed. 1,816,745; July 28.
Shirts, Adjustable skirt for. F. B. Beggs. 1,816,068; July 28.
Shock absorber. H. A. Tuttle. 1,816,029; July 28.
Shock absorbing device. L. Rolland. 1,816,401; July 28.
Shoe and shoe making. J. W. May. 1,816,386; July 28.
Shoe or similar article, Sport. F. Crossman. Des. 84,741–2; July 28.
Shoreline and the deflection of currents of water, Apparatus for the conservation of. H. R. Stanford. 1,816,095; July 28.
Short wave reception. H. S. Baird. 1,816,461; July 28.
Show case, Illuminated. F. Gossart. 1,816,524; July 28.
Shuttle eye and making the same. L. C. Baldwin. 1,816,167; July 28.
Sieve, Rotary dewatering. J. Strindlund. 1,816,132; July 28.
Sign. J., N. E., and W. I. Hamun. 1,816,776; July 28.
Sign, Illuminating. H. Adelmann. 1,816,459; July 28.
Sign or advertising device, Automatically changing. F. L. Beddison. 1,816,716; July 28.
Signal: *See*—
Speed reduction signal.
Signal amplifying system and method. H. S. Baird. 1,816,462; July 28.
Signal transmission system. R. C. Mathes. 1,816,599; July 28.
Signaling or indicating device. N. Deisch. 1,816,112; July 28.
Silencer. R. B. Bourne. 1,816,109; July 28.
Silkworms, Apparatus for breeding. V. Fioruzzi. 1,816,368; July 28.
Silver halid emulsion and making the same. E. Mauerhoff. 1,815,983; July 28.
Skein winding machine. S. L. Casella. 1,816,420; July 28.
Smoker's stand. C. Saffold. Des. 84,757; July 28.
Snap switch. P. G. Shaw. 1,816,749; July 28.
Snowplow with side chute. J. O. Johnson. 1,816,589; July 28.
Socket, Vehicle curtain rod. J. Ledwinka. 1,816,332; July 28.
Soldering apparatus. C. Helle. 1,816,115; July 28.
Sole laying press. R. Ruhr. 1,816,264; July 28.
Sound generating means. C. P. Madsen. 1,816,597; July 28.
Sound recording and reproducing apparatus. F. H. Owens. 1,816,397; July 28.
Sound reproducing device. H. Küchenmeister. 1,816,782; July 28.
Sound reproducing process, Electrical. A. J. Cawley. 1,816,360; July 28.
Speed indicator. B. P. Romain. 1,816,748; July 28.
Speed reduction signal. C. T. Magill. 1,816,540; July 28.
Speed transmission unit, Variable. G. C. Magness and C. W. Drake. 1,816,735; July 28.
Spigot and socket joint, Welded. J. Gradl. 1,816,770; July 28.
Spinning machines, Roll-holder for rivet. G. A. Linley. 1,816,490; July 28.
Spoke tennon and felly clip. M. J. Adams. 1,816,201; July 28.
Sponge and manufacture thereof, Artificial. Y. Cornic. 1,816,764; July 28.
Sponge, Rubber. M. E. Blumenfeld. 1,816,108; July 28.
Spout, Adjustable. E. J. Brandt. 1,816,515; July 28.
Spout, Liquid dispensing. T. E. Barnes. 1,816,107; July 28.
Spray gun and cleaning means therefor. E. A. Ward. 1,816,555; July 28.
Sprayer, Binder. R. E. Willard. 1,816,453; July 28.
Spring: *See*—
Friction spring. Vehicle spring.
Spring device. R. D. Burford. 1,816,358; July 28.
Spring for motor vehicles, Air. S. G. Down. 1,816,075; July 28.
Spring pad construction. H. A. Steele. 1,816,238; July 28.
Spring washer. B. Foco. 1,816,673; July 28.
Starter, Engine. M. B. Jackson and K. M. Clipsham. 1,815,914; July 28.
Starting device, Engine. F. R. Wood. 1,816,032; July 28.
Starting mechanism, Internal combustion engine. V. F. Zahodiskin. 1,816,557. July 28.
Statuette or article of similar nature. C. Shulman. Des. 84,761; July 28.
Steam boiler, Rotating. J. V. Blomquist. 1,816,712; July 28.
Steam generating plant for the generation of high pressure steam. W. Petersen and R. Tröger. 1,816,793; July 28.
Steam trap. W. B. Clifford. 1,816,142; July 28.
Steam trap. G. F. McDougall. 1,816,541; July 28.
Sterilizer, Razor strop. J. Savoy. 1,816,127; July 28.
Sticker for filing prints in binders. H. G. Buchan. 1,816,175; July 28.
Stocking. F. Emery. 1,816,475; July 28.
Stop motion mechanism. E. W. Netherland and J. R. Walker. 1,816,738; July 28.
Storage battery. J. L. Woodbridge. 1,816,035; July 28.
Stoves, Construction of hot blast. H. A. Brassert. 1,815,900; July 28.
Straw pulp for straw board, Making. M. Zimmerman. 1,816,456–7; July 28.
Submarines and ships, Attachment for. J. Mirlink. 1,816,689; July 28.
Sulphur, Production of pure. P. Koppe. 1,816,084; July 28.
Supercharger for internal combustion engines. S. A. Moss. 1,816,737; July 28.
Supervisory system. H. E. Hershey. 1,816,186; July 28.
Support. J. K. Wood. 1,816,164; July 28.
Support and casing for traffic signals, Combined. C. Adler, jr. Des. 84,727; July 28.
Support for brake rods, Safety. S. A. Crone. 1,816,639; July 28.
Support for massage apparatus, Portable. D. H. Murphy. 1,815,928; July 28.
Support, Garment. L. Schweizer. 1,816,656; July 28.
Support, Switch box. W. B. Huesar. 1,816,584; July 28.
Swaging apparatus. J. A. Lewis and E. K. Holmes. 1,816,488; July 28.
Switch: *See*—
Automatic switch. Lock switch.
Discharge tube switch. Snap switch.
Electric switch.
Switch and contact structure therefor, Electric. W. R. Mann. 1,816,052; July 28.
Switch house, Outdoor. M. B. Wood. 1,816,034; July 28.
Switch operating mechanism. G. Pallin. 1,816,789; July 28.
Switch plate. S. V. Flagler. 1,816,803; July 28.
Switching device for electric phonographs, Automatic. A. N. Goldsmith. 1,816,577; July 28.
Tab for registration cards or the like. W. Schleifer. 1,816,344; July 28.
Table construction. S. and M. Blickman. 1,816,247; July 28
Tablet. J. M. Majewski, jr. Des. 84,750; July 28.
Tag securing and identification means, Automobile. W. S. G. Heath. 1,816,254; July 28.
Tank: *See*—
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Tank of the floating deck type, Storage. J. F. Patterson. 1,816,124; July 28.
Tanning extract and mode of making. S. F. Acree. 1,816,138; July 28.
Telegraph reading machine. R. D. Parker. 1,815,986; July 28.
Telegraph reading machine. A. Weaver. 1,815,996; July 28.
Telephone apparatus. Automatic coin controlled. C. A. Cambay. 1,816,073; July 28.
Telephone exchange system. W. W. Carpenter, J. F. Dahl, R. C. Davis and L. E. Kittredge. 1,816,634; July 28.
Telephone system. A. C. Powell. 1,816,613; July 28.
Television or other apparatus at a predetermined speed. Driving. J. L. Baird. 1,816,106; July 28.
Temperature compensator, Speedometer. R. O. Helgeby. 1,816,581; July 28.
Testing apparatus. W. M. Darnall. 1,816,178; July 28.
Testing device for cylinders. A. Storm. 1,816,061; July 28.
Testing system. J. B. Draper. 1,816,570; July 28.
Testing system. L. J. Stacy. 1,816,621; July 28.
Textile fabric. C. Lipper. Re18,139; July 28.
Textile fabric or similar article. G. M. Fauser. Des. 84,734; July 28.
Textile fabric, Printed. W. H. Adams. Des. 84,724; July 28.
Thickness of surface coating, Gauging. E. L. Kallander. 1,815,915; July 28.

Tin, Producing. A. L. J. Queneau. 1,816,742; July 28.
Tire carrier lock. L. Blakmore. 1,816,563; July 28.
Tire inflation mechanism, Automatic. J. W. Pippin. 1,816,693; July 28.
Tire, Vehicle. V. Castorina. 1,816,176; July 28.
Tongs, Drawbench. E. K. Holmes. 1,816,484; July 28.
Tool, Electrically heated. H. Feld. 1,816,113; July 28.
Tool, Hammering. E. H. W. Weibull. 1,816,104; July 28.
Tool, Portable clinching. C. L. Eksergian. 1,816,318; July 28.
Tool slide or reaming attachment. A. E. Driesner. 1,816,571; July 28.
Tool unit for ground working implements, Cutting. J. L., S. L., and L. L. Chong. 1,816,210; July 28.
Tooth exerciser. D. D. Heron. 1,816,582; July 28.
Tops, Assembling cage. E. W. Little. 1,815,982; July 28.
Torpedo. G. E. Ella. 1,816,768; July 28.
Tower. H. T. Barnhart. 1,816,715; July 28.
Toy. C. B. Jordan. 1,816,378; July 28.
Toy game, Endless circuit. C. A. Diederichs. 1,816,471; July 28.
Toy windmill. M. Morton. 1,816,220; July 28.
Track stringer connection, Railway. E. B. Rayner. 1,816,697; July 28.
Tractor cutter. J. H. Clark. 1,816,074; July 28.
Traffic controlling apparatus, Railway. C. W. Fallor. 1,816,182; July 28.
Traffic controlling apparatus, Railway. E. A. Lowman. 1,815,948; July 28.
Traffic controlling apparatus, Railway. H. A. Thompson. 1,816,302; July 28.
Traffic guide, Roadway. L. M. King. 1,816,379; July 28.
Trailer. I. A. Morris. 1,816,393; July 28.
Trailer hitch, Automobile. R. R. McLamarrah. 1,816,121; July 28.
Train control system. T. Bodde. 1,815,942; July 28.
Train stopping and speed controlling mechanism. F. C. and G. H. Williams. 1,816,628; July 28.
Trap: *See*—
Muskrat trap. Steam trap.
Traveling turntable. G. Lowenstein. 1,816,685; July 28.
Tray front. R. S. Taylor. 1,816,622; July 28.
Trestle. C. J. Sample. 1,816,198; July 28.
Trimming device, Ear. E. W. Morter. 1,815,984; July 28.
Trolley. M. Willis. 1,816,031; July 28.
Trophy, Athletic. A. J. Flauder. Des. 84,735; July 28.
Trophy, Price. F. Haegermann. 1,816,114; July 28.
Trousers press. R. H. F. Finlay. 1,816,724; July 28.
Truck body, Load equalizing. C. G. Eisenberg, jr. 1,816,042; July 28.
Truck, Four wheel radial. M. Rivkin. 1,816,746; July 28.
Tube: *See*—
Brake expansion tube. Vacuum tube.
Tubes, Method and apparatus for forming arch. C. A. Henry and C. A. Oppfelt. 1,816,218; July 28.
Tuber for multiwall bags. T. E. and A. C. Coty. 1,816,361; July 28.
Tubular boiler, High pressure. M. Eule. 1,816,520; July 28.
Turnstile. H. B. Odell. 1,816,193; July 28.
Twisting mechanism for wrapping machines. M. B. Ferguson. 1,816,080; July 28.
Typewriting machine. J. A. B. Smith. 1,816,348; July 28.
Typographical composing machine. H. A. Southern. 1,816,094; July 28.
Underreamer. F. Swan. 1,815,937; July 28.
Unwinding coiled wires, band iron, and the like, Device for. C. Matthaei. 1,816,385; July 28.
Vacuum cleaner. F. Riebel, jr. 1,816,156; July 28.
Vacuum tube. S. Ruben. 1,815,931; July 28.
Valve and seat therefor. P. R. G. Biedermann. 1,816,205; July 28.
Valve coupling. R. W. Sethman. 1,816,804; July 28.
Valve lifting and timing device for internal combustion engines. F. W. Marxen. 1,816,019; July 28.
Valve, Reservoir release. J. C. McCune. 1,816,088; July 28.
Valve spring lifter. H. W. Kulp and M. C. Dellinger. 1,815,980; July 28.
Vapor mixtures, Method and apparatus for liquefying. G. B. Coubrough. 1,816,212; July 28.
Vaporizer. E. R. Godward. 1,816,430; July 28.
Varnish and preparing same, Hardenable oil. F. Seebach. 1,816,128; July 28.
Vehicle bodies, Cowl construction for. J. Ledwinka. 1,816,333; July 28.
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Vehicle spring. O. W. Fry. 1,816,009; July 28.
Vehicle wheel. P. P. Adams. 1,816,351; July 28.
Vehicles, Method and apparatus for handling and storing. C. T. McGavin. 1,816,053; July 28.
Vehicles, Operating suction actuated device of automotive. C. S. Bragg and V. W. Kliessath. 1,816,467; July 28.
Vehicles, Suspension of. E. Lenhardtson. 1,815,924; July 28.
Vending machine. W. A. Courtenay, jr. 1,816,470; July 28.
Ventilation, Turbo-generator. J. A. Kuyser. 1,816,489; July 28.
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Ventilator fitment for wall apertures, Sound suppressing. E. T. Fisk. 1,816,769; July 28.
Visor. W. C. Mason. 1,816,783; July 28.
Voltage compensating means. E. R. Wolfert. 1,816,418; July 28.
Wabbler holding mechanism. M. A. Yeakley. 1,816,274; July 28.
Waffle iron. R. E. Patten. Des. 84,752; July 28.
Waffle iron, Electric. A. O. Samuels. Des. 84,759; July 28.
Wallet. B. I. Hughes. 1,816,284; July 28.
Washer: *See*—
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Washing machine. L. G. Knapp. 1,816,593; July 28.
Water heater. F. G. Corbus. 1,816,177; July 28.
Water heater, Feed. P. Dugelay. 1,816,518; July 28.
Water heater, Gas fired. H. J. Carson. 1,816,419; July 28.
Water sterilizing filling device. H. J. Heins. 1,816,012; July 28.
Water tube boiler. J. Johnson. 1,816,750; July 28.
Wave antenna. R. H. Ranger. 1,816,614; July 28.
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Weighing apparatus. W. Timson. 1,815,995; July 28.
Welding machine. E. Riemenschneider. 1,816,231; July 28.
Well device. M. P. Borgo and L. S. Sorenson. 1,816,207; July 28.
Wells, Repressuring and flowing of. R. E. Lee. 1,816,260; July 28.
Wheel: *See*—
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Dual wheel.
Wheel. C. P. Stokes and J. Tamsett. 1,816,300; July 28.
Wheel and making the same, Steering. G. E. Smith. 1,816,445; July 28.
Wheel securing means. R. F. Marron. 1,816,687; July 28.
Wheel testing machine. G. W. Prather. Re18,138; July 28.
Wheels at the desired level in the case of puncture of the pneumatic tire, Automatic device for raising the. A. J. Michelin. 1,816,543; July 28.
Wheels, Making steering. G. E. Smith. 1,816,444; July 28.
Winding machine. J. A. Anderson. 1,816,352; July 28.
Windmill, Electric. H. E. Bucklen. 1,816,632; July 28.
Window cleaning device. L. Hachenberg. 1,816,370; July 28.
Window regulator mechanism. A. C. Andersen. 1,816,166; July 28.
Window structure. J. Kahn. 1,816,537; July 28.
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Wing spar for aeroplanes. R. W. Hilton. 1,816,678; July 28.
Wire fence fabric. N. S. Harter. Des. 84,743; July 28.
Wood into music acid, Converting. S. F. Acree. 1,816,137; July 28.
Wood into sugar and other products, Converting. S. F. Acree. 1,816,135; July 28.
Wood into sugar and other products, Converting. S. F. Acree. 1,816,136; July 28.
Wood pulp fibers and paper product made therefrom, Treating. J. A. De Cew. 1,816,423; July 28.
Woodworking machine. E. W. Bennett. 1,816,069; July 28.
Wrapping machine and process. P. Langhammer. 1,816,085; July 28.
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THE

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Notice Regarding Payment of Fees

All fees must be paid in advance. Payment of money required for Office fees *must* be made in specie, Treasury notes, national-bank notes, post-office money orders, or certified checks. Money orders and checks must be made payable to the "Commissioner of Patents." Money sent by mail to the Patent Office will be at the risk of the sender. (See Rule 194.)

Certified checks, bank drafts, express and foreign money orders must be immediately negotiable in this country and for the full amount of the fee required by the Patent Office. No allowance can be made by this Office for any charge for their collection or exchange. Postage stamps will not be accepted. Failure to comply with the above instructions will cause delay.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,668,269, S. B. Faison, Shingle, slate, and tile roofs, decided May 27, 1931, claim 1.

Pat. 1,672,067, P. F. Labre, Grounding receptacle and plug, decided June 15, 1931, claims 1, 2, 3, 4, 5, and 6.

Pat. 1,680,675, A. S. Gale, Magnetic system to control the stop and leveling of an elevator, decided June 13, 1931, claims 18, 19, 22, 24, 29, 31, 32, 40, 43, 44, and 55.

Pat. 1,701,477, W. J. Perelis, Treatment of mineral oils by heat, decided June 13, 1931, claims 1, 5, and 6.

Pat. 1,743,338, Wm. T. Field, Means for inserting valves, decided June 15, 1931, claim 4.

Pat. 1,765,884, R. C. Schemmel, Gasket, decided June 12, 1931, claims 1, 2, 3, 4, and 5.

Notices of Cancellation

U. S. Patent Office, *Washington, June 4, 1931.*

The National Gum Co., Inc., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, Greenleaf, Leon, and Forsyth Streets, Boston, Mass., to effect the cancellation of the trade-mark registration of The National Gum Co., Inc., of 44 Spring Street, Newark, N. J., No. 220,985, dated November 23, 1926, and the notice of such proceeding sent by registered mail to the said The National Gum Co., Inc., at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said The National Gum Co., Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

U. S. Patent Office, *Washington, June 4, 1931.*

American Pozzolana Company, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Master Builders Company, of Cleveland, Ohio, to effect the cancellation of the trade-mark registration of the American Pozzolana Company, of 210 Penway Building, Indianapolis, Ind., No. 130,612, dated May 4, 1920, and the notice of such proceeding sent by registered mail to the said American Pozzolana Company at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said American Pozzolana Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Condition of Applications Under Examination at Close of Business June 20, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 93,521; Trade-Mark Division, 1,177. Oldest new case, Oct. 20, 1930; oldest amended, Oct. 20, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	†Feb. 2	†Feb. 16	768
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Dec. 24	Dec. 27	1,445
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Jan. 14	†Mar. 25	896
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Dec. 24	†Jan. 2	821
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 24	Dec. 26	791
318	6. LEWERS, A. M., Carbon Chemistry	Nov. 20	Nov. 15	2,051
106	7. JARBOE, C. G., Optics; Photography	Nov. 20	Nov. 20	2,049
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 26	Nov. 21	1,596
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Dec. 26	Dec. 26	1,426
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	†Jan. 19	†Feb. 3	1,009
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Jan. 24	†Feb. 7	772
380	12. HENRY, C. C., Machine Elements	Oct. 23	Dec. 18	1,336
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 5	†Jan. 5	1,144
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Dec. 31	†Jan. 7	1,213
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 27	Nov. 26	2,591
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Mar. 6	†Mar. 13	844
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Nov. 8	Nov. 17	1,481
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 22	Dec. 25	1,126
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Oct. 30	Oct. 28	2,028
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Dec. 24	†Jan. 5	938
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Dec. 22	†Feb. 21	1,002
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Jan. 26	†Feb. 11	819
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 27	Oct. 20	1,065
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 20	Dec. 15	939
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Dec. 10	Dec. 13	1,531
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	†Jan. 3	†Jan. 7	967
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Dec. 21	Dec. 21	1,144
225	28. BENSON, A. R., Internal-Combustion Engines	Dec. 17	Dec. 6	1,739
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	†Jan. 22	†Feb. 21	575
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 22	†Mar. 28	903
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Oct. 20	Oct. 20	2,601
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 22	†Jan. 22	1,356
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 20	Dec. 22	2,538
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Feb. 20	†Feb. 21	818
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Apr. 6	†Apr. 3	952
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Nov. 3	Nov. 3	2,299
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Dec. 2	Dec. 6	1,572
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Mar. 24	†Mar. 23	542
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Dec. 30	Dec. 30	1,628
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Nov. 17	Dec. 24	2,965
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	†Jan. 21	†Jan. 23	738
223*	42. CUTTING, H. O., Electric Signaling	Dec. 10	Dec. 11	1,427
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 24	Dec. 29	1,653
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 20	Oct. 25	2,237
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Nov. 14	Nov. 14	2,193
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Dec. 31	†Jan. 10	1,159
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Dec. 26	Dec. 29	2,154
212*	48. ROEPKE, O. B., Electricity, General Applications	Dec. 8	Dec. 8	1,171
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Jan. 24	†Jan. 26	1,289
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 24	Oct. 30	2,503
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Oct. 28	Oct. 28	2,208
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 21	†Jan. 21	1,530
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 18	†Feb. 19	895
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Oct. 25	Oct. 27	2,791
102	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	†May 11	†May 6	175
	{Designs	†May 29	†June 10	279
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Nov. 19	Nov. 19	1,817
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 26	†Jan. 30	779
270*	58. DOWELL, E. F., Abrading; Typewriting	Nov. 17	Nov. 17	1,493
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	†Jan. 9	†Jan. 13	1,708
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Nov. 1	Oct. 30	2,032
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 23	Nov. 3	2,124
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Nov. 1	Nov. 1	2,510
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Oct. 31	Nov. 3	2,376
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks	†May 25	†June 1	1,040
	{Labels and Prints	†May 19	†June 16	137

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

Supreme Court of the United States

CARBICE CORPORATION OF AMERICA *v.* AMERICAN PATENTS DEVELOPMENT CORPORATION AND DRY ICE CORPORATION OF AMERICA

No. 54. Decided May 18, 1931

PATENTABILITY—REFRIGERATING TRANSPORTATION PACKAGE.

Patent No. 1,595,426, for a refrigerating transportation package, *Held* invalid in view of the prior art.

ON WRIT of certiorari to the United States Circuit Court of Appeals for the Second Circuit.

Mr. Samuel E. Darby for Carbice Corporation of America.

Mr. Charles Neave (*Mr. George C. Dean* and *Mr. Clarence D. Kerr* on the brief) for American Patents Development Corporation et al.

Mr. Justice BRANDEIS delivered the opinion of the Court.

The circuit court of appeals held the patent [No. 1,595,426] valid and infringed. 38 F.(2d) 62. In our opinion delivered March 9, 1931, we found it unnecessary to determine the validity of the patent, because we held that the bill should be dismissed on the ground that the owner of a patent may not limit its use so as to require that unpatented materials employed in practicing the invention shall be purchased only from the licensor. 283 U. S.—, 406 O. G. 3. On March 16, 1931, the Carbice Corporation petitioned that the Court rule also on the validity of the patent. The reason assigned was the inauguration by the Dry Ice Corporation of a campaign of intimidation against customers of the Carbice Corporation by releasing to the public press a statement that the validity of the patent as sustained by the court of appeals had not been disturbed; that the true patent monopoly had in no way been limited by this Court; that we had indicated that the proper way to enforce the patent monopoly is by directly suing those who use solid carbon dioxide in the patent combination without a license; and that the Dry Ice Corporation would immediately bring such a suit. A reargument, limited to the question of the validity of the patent, was ordered. The respondents petitioned for a rehearing on the issue determined in our former opinion. The latter petition was denied.

The refrigerating transportation package which is specified and claimed in the patent in suit is described in the earlier opinion. 283 U. S. ——. The alleged invention is for the locational arrangement of materials within a container. Whether a locational arrangement within a structure can ever be patented as a manufacture need not be determined. Nor need we consider whether the patent, as issued, contained a sufficient disclosure of the alleged invention. For the combination in suit lacks patentable invention and novelty. Each of the elements—refrigerant, material to be refrigerated, and container—performs its function in a known way. Long prior to the date of the claimed invention, it was known that solid carbon dioxide, which has a temperature of 110 degrees below zero, is a refrigerant; that when it "melts" it passes directly into a dry gas heavier than air, of like low temperature, which may serve as a refrigerant until its rises to that of the outside air. It was known also that a frozen article—be it ice cream or solid carbon dioxide—will remain frozen longer if insulated; and that paper is an insulator. It was not invention to conclude that a cake of the solid dioxide wrapped in paper would remain solid longer if also surrounded by ice cream, than if placed in more immediate proximity to the walls of the container and thus to the outer air; or to conclude that the gas, being heavier than air would, as generated, drive the air out of the container, and thus serve as an additional insulator. Compare *Hollister* v. *Benedict & Burnham Manufacturing Co.*, 113 U. S. 59, 72—73; *Dreyfus* v. *Searle*, 124 U. S. 60, 63, 42 O. G. 491; *Wilson* v. *Janes*, 3 Blatch., 227.

Moreover, the structural device of surrounding the refrigerant by the article to be refrigerated had been shown in the Mosler and Ladewig refrigerating butter box, United States Patent No. 236,906, issued January 25, 1881; and in Rumpel's portable lunch box, United States Patent No. 1,130,932, issued March 9, 1915. It is true that in these prior art structures the refrigerated materials were not completely surrounded by the refrigerant employed, as the top or bottom of the ice container was usually left exposed. This was done to permit access to the ice chamber for the purpose of removing water. Since carbon dioxide sublimes directly into a dry gas, such access obviously need not be provided, and the refrigerant may be surrounded on all four sides. This difference is unimportant. These references suffice to render the patent invalid also because of anticipation without considering the additional defense of prior use.

Supreme Court of the United States

PACIFIC NORTHWEST CANNING COMPANY *v.* SKOOKUM PACKER'S ASSOCIATION

No. 919. Decided June 1, 1931

ON PETITION for writ of certiorari to the United States Court of Customs and Patent Appeals.

On consideration of the petition for a writ of certiorari herein to the United States Court of Customs and Patent Appeals and of the argument of counsel thereupon had, it is now here ordered by this Court that the said petition be, and the same is hereby, denied for the want of jurisdiction.

U. S. Court of Customs and Patent Appeals

IN RE MARCUM

No. 2,606. Decided February 25, 1931

PATENTABILITY—DIRIGIBLE WHEEL MOUNTING AND STEERING APPARATUS.

Claims for a dirigible wheel mounting and steering apparatus for use on motor vehicles *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. William A. Strauch and *Mr. James A. Hoffman* for Marcum.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

This is an appeal from the decision of the Board of Appeals of the Patent Office refusing to allow appellant's claims 3, 4, 5 and 9, for a patent on a dirigible wheel mounting and steering apparatus for use on motor vehicles. As originally filed in the Patent Office, appellant's application contained a number of claims. Some were allowed by the Patent Office, but the only ones in issue here are the four which are above mentioned. The rejections were made by the Board on the following references: Whittelsey, 1,126,326, January 26, 1915; Hallner, 1,234,014, July 17, 1917.

The rejected claims are as follows:

3. A vehicle comprising a pair of axles; a pair of steering wheels supporting each axle; a frame; means comprising springs for supporting said frame from said axles in a manner to divide the load equally between said axles and permitting a motion substantially greater than the spring deflection of each axle with relation to said frame; steering means for said wheels; steering control means supported on said frame; and connections between said steering means and said control means compensating to a substantial degree for the relative movement of said wheels with relation to said frame.

4. A vehicle comprising a pair of axles; a pair of steering wheels supporting each axle; a frame; means comprising springs for supporting said frame from said axles in a manner to permit a motion of each axle about a fixed axis with relation to said frame substantially greater in amount than the deflection of said springs; steering members for said wheels supported from said wheels; a common frame-supported steering control mechanism; and a connection between said control mechanism and said steering members adapted to maintain the steering alignment of said wheels independently of the relative movements of said steering members and said control mechanism under road conditions.

5. A vehicle comprising a pair of axles; a pair of steering wheels supporting each of said axles; a frame; means for supporting said frame from said axles permitting substantial movement of each axle about a neutral axis with relation to said frame; steering means for each pair of wheels; a pair of arms pivoted to said frame; a pair of links connecting said steering means to said arms at points substantially intersected by said neutral axes when said wheels are in alignment; and a common control means supported on said frame simultaneously actuating said arms to effect steering of said wheels.

9. A vehicle comprising a frame, tandem axles supported on dirigible wheels, each axle being secured to said frame by a pair of springs that are pivotally mounted on said frame at their front ends, means to connect the rear ends of said springs to said frame, means attached to said wheels to steer them, and mechanism to actuate said means including rearwardly extending links swinging about pivots that are substantially in the vertical plane containing the spring pivots and secured to said last named means at points substantially in vertical planes containing the axes of the dirigible mounting of the wheels.

Two features of appellant's disclosure are claimed to be novel. He shows axles for the dirigible wheels with flat spring suspensions. The front ends of these springs are pivoted to the frame; the back ends are connected to pneumatic pistons moving in cylinders attached to the frame, thus permitting greater vertical movement of the said wheels than would be permitted by the springs alone. The pneumatic cylinders of each axle are interconnected by a conduit.

The other claimed novel feature is in the arrangement of the steering gear and rods. The steering gear is mounted on the frame and is connected by a steering arm and drag link to a steering arm mounted on the inner end of a shaft extending through the frame at the front pivot of the flat suspending spring. On the outer end of said shaft is another steering arm, parallel to the first. Connected thereto is a drag link which extends backward and is attached to a steering arm which moves the dirigible wheel; the effective length of this drag link is equal to the distance between the front pivot of the leaf spring and the center of the dirigible wheel. The other wheels are in a like manner controlled by steering arms and drag links, so that all will move in unison. By these means, it is claimed, wabbling of the dirigible wheels is prevented when rough places or obstructions are encountered by them.

The appellant also seeks a patent upon the application of this principle to four wheels and claims invention, in that respect, over any preceding disclosure.

We have examined the references, and, in our opinion, they are anticipations of the claims in issue. The means—

permitting a motion substantially greater than the spring deflection of each axle with relation to said frame,

mentioned in claims 3 and 4, is, in our opinion, fully shown by the reference Whittelsey, 1,126,326. The control mechanism adapted to maintain the steering alignment of the dirigible wheels, independent of the relative movements of the steering members, all as shown by claims 4, 5 and 9, although couched in a little different language in each count, is fully disclosed by the reference Hallner, 1,234,014. In fact, appellant practically admits, in his brief, that Hallner had disclosed this idea. He insists, however, that Hallner did not show his device in connection with four drive wheels and two axles, and that therefore there is novelty in such a showing.

We do not so understand the law. A mere duplication of parts is not invention. *Topliff* v. *Topliff*, 145 U. S. 156, 59 O. G. 1297; *In re Scott*, 25 App. D. C. 307, 117 O. G. 278; *In re Lower*, 49 App. D. C. 226, 272 O. G. 913; *Burnham* v. *Union Mfg. Co.*, 110 Fed. 765. If appellant merely took Hallner's idea, as applied to two wheels, and thereafter applied it to four or six wheels, this would not be invention unless the same might lie in his method of connecting the same. Inasmuch as we believe nothing novel is shown in this respect, we conclude that all appellant has shown is a mere duplication of parts. Nor are we able to see, in appellant's combination of old devices, any new and useful result.

The decision of the Board of Appeals should be, and is, affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MURRAY AND WILLIAMS

No. 2,601. Decided February 11, 1931

PATENTABILITY—DISC WHEELS.

Claims for a disc wheel *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Milans & Milans and *Messrs. Usina & Rauber* for Murray and Williams.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

The application on appeal relates to the production of vehicle wheels and has reference to a disc wheel made by fusing the disc by pressure "exerted simultaneously around the entire circumference" to the shoulder of the rim, which, the applicant contends, is a new manner of welding discs of this type and has certain distinct advantages over the prior art. The particular description of appellant's disclosure is sufficiently set out in the claims and by the decision of the tribunals below.

Claims 10 and 11, which are regarded as illustrative, follow:

10. A wheel having an annular part with an inward projection, which projection has a face transverse to the axis of the wheel, and having a part lying in a position transverse to the axis and welded to said transverse face of the projection, the parts being fused together along a transverse meeting plane.

11. A wheel having an annular part with an inward projection having a face transverse to the axis and a part lying in a position transverse to the axis and having a flange on its outer edge which is welded to said transverse face of the projection, the parts being fused together along a transverse meeting plane.

Upon appeal from the Examiner to the Board of Appeals, the claims were six in number, from 10 to 15 inclusive. They were all rejected by the Examiner on the references Charter, No. 1,361,227, December 7, 1920, and Wagenhorst, No. 1,509,382, September 23, 1924. The Board of Appeals concluded that the Examiner's action was proper except as to claim 14 which was not disclosed by the references and which claim the board allowed, and stated that as to claims 10, 11, 12, 13 and 15, the Charter reference was the "more pertinent."

Appellant in this court has pointed out the particulars in which he claims that his disclosure differs from the prior art. It is obvious from a reading of the decision of the Board of Appeals that these differences were fully appreciated but it was the view of the Board that they did not constitute patentable invention. With this conclusion we agree. The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE COLLINS

No. 2,582. Decided February 11, 1931

PATENTABILITY—INVENTION—OMISSION OF A PART AND ITS FUNCTION.

Claims for a portable fluid-pressure tool *Held* unpatentable over the prior art since applicant had merely omitted a portion of a prior art apparatus and its function.

APPEAL from the Patent Office. Affirmed.

Mr. Ira L. Nickerson for Collins.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals affirming the decision of the Primary Examiner denying claims 5, 6, 8, 9, 10, 11, and 14 for an alleged invention relating to improvements in portable or hand tools of the power driven type, adapted for rotating a working tool at high speed.

Claims 5 and 11 are illustrative. They read:

5. A portable fluid-pressure tool comprising a housing having a crank shaft journaled therein, a cylinder housing secured to said crank housing and having cross head guides extending within the latter, a transmission housing secured to said first named housing having a bearing for said shaft, and a spindle rotatably mounted in said transmission housing in substantial alignment with the perpendicular bisector of the axes of said guides and in substantial parallelism with said shaft.

11. A portable fluid-pressure tool comprising a casing having juxtaposed parallel cylinders, pistons in said cylinders operating a crank shaft within said casing, a housing secured to said casing, said shaft projecting into said housing and being journaled therein, a spindle rotatably mounted in said housing in substantial coincidence with the center line of said casing which if extended would pass between said shaft and said cylinders, a bearing in said casing for the inner end of said spindle, and means within said housing for transmitting the rotation of said shaft to said spindle.

The reference is: Whitelaw, 791,847, June 6, 1905.

It is claimed by appellant that he has reconstructed the tool disclosed in the reference into a more compact device, having greater simplicity, balance, and symmetry; that, by eliminating many of the parts disclosed in the reference, he has constructed a tool of greater strength and reliability; that the Whitelaw disclosure does not remotely suggest the modified structure disclosed in appellant's application; and that, due to its compactness, simplicity, balance, symmetry, greater strength, and reliability, appellant's alleged invention has gone into extensive use and is a success both mechanically and commercially.

The tribunals of the Patent Office rejected the involved claims on the ground that appellant had merely used one-half of the mechanism disclosed in the reference, that is, he had omitted two of the four cylinders and their "operatively connected parts," and had also slightly changed the position of the spindle, as shown in the reference, so that it is centrally disposed in relation to the tool; that, by omitting the two cylinders and their "operatively connected parts," appellant had done nothing more than omit them and their functions; and that changing the position of the spindle required nothing more than the exercise of mechanical skill. In this connection, the Board of Appeals said:

Claim 11 states that the spindle is in substantial coincidence with the center line of the casing. We believe this to be true in Whitelaw. Certainly it is located centrally of the casing as viewed in Figure 13. If it be located too far to the right as viewed in Figure 8 to give the proper balance to the device, we see no invention in shifting it slightly to the left from the position there shown. The lower bearings for the crank shafts in the reference are deemed the full equivalent of appellant's lower bearings. This claim is deemed unpatentable over the Whitelaw device as disclosed.

All of the claims on appeal have been rejected on Whitelaw on the theory that appellant has merely used but one half of the actuating mechanism disclosed in the reference and accordingly has shifted his spindle laterally so that it will be directly beneath the selected pair of vertically arranged cylinders. Appellant contends that it is not obvious how the Whitelaw device could be modified in the

manner suggested by the Examiner and especially so in view of the complicated valve arrangement located between the cylinders. He further urges that it would be more logical to split the Whitelaw device along a horizontal central plane, retaining a pair of horizontally arranged cylinders, rather than in the manner suggested by the Examiner.

In the Whitelaw device the parts have merely been duplicated. If one pair of the vertically arranged cylinders were omitted, as suggested by the Examiner, one of the crank shafts would be omitted and the valve 67, or 68, which admits the fluid to this pair of cylinders would also be omitted. We believe that it clearly would be non-inventive to omit these duplicated parts and certainly if they were omitted it would not be patentable to shift the spindle sidewise as viewed in Figure 13 so that it would still be vertically beneath the retained cylinders considered as a group.

We agree with the conclusion reached by the tribunals of the Patent Office, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MURRAY AND PHELPS

No. 2,605. Decided February 11, 1931

PATENTABILITY—PROCESS OF ELECTRIC WELDING.

Claims for a process of electric welding *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Milans and Milans, Messrs. Usina & Rauber for Murray and Phelps.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming that of the Examiner, rejecting claims 1, 2, 3, and 5 to 9 inclusive, of appellants' application, as defining nothing patentable over the prior art. The appeal as to claim 5 has been withdrawn by appellant, and therefore requires no consideration by us.

Claims 1 and 7 are illustrative and read as follows:

1. In electric welding by passing a current of extremely high amperage for a very short period of time, the method which consists in pressing the parts together with a pressure and current density in the ratio of about 8,000 pounds per square inch to 100,000 amperes per square inch.

7. In the electric welding of steel by passing a current of extremely high amperage for a very short period of time, the method which consists in pressing the parts together with a pressure which is continuous during the welding operation and is regulated according to the composition of the steel.

The reference relied upon by the Board of Appeals is: Murray, jr., Reissue #15,466, Oct. 10, 1922.

The alleged invention here in issue is described in the decision of the Board of Appeals as follows:

The invention sought to be patented in this application is alleged to be an improvement in the process covered by the reissue patent to Murray #15,466 of October 10, 1922, the original patents being numbered 1,281,636 and 1,281,637 of October 15, 1918.

This reissue patent is for a process of electric welding which consists in subjecting the bodies to be welded to a current of extremely high ampere strength and of very brief duration. As examples, it states that when a current density of 100,000 amperes is used the duration of the weld is approximately ¼ of a second and if the amperage is 50,000, the time is between two and three seconds. It is also stated and claimed that the time is in inverse proportion to the current density and that the current density is predetermined and regulated in proportion to the contact area and shape of the contacting surfaces.

It appears from the specification of the present case that by tests made in the operation of the process of the reissue patent under various current densities it has been found that the pressure applied should increase or diminish with the current density, approximately in the ratio of 8,000 lbs. per sq. in. of surface contact to 100,000 amperes per sq. in. or, for a limited take up and a certain current density, the pressure must be between a maximum which would take up the metal faster than it is heated to a welding temperature and a minimum which would take up the metal only after it is heated beyond the welding point. It has also been found that the pressure should be varied according to the composition of the material to be welded; that the time should be inversely proportioned to the square of the current density and that a better weld is secured by cutting off the current at about one-half the take up.

It is conceded that all of the elements of the claims are disclosed in the prior patent except the elements relating to pressure and it is that element that it is here contended constitutes invention.

The following statement is found in appellants' specification:

In a prior patent of Thomas E. Murray, jr., No. 1,281,636, dated October 15, 1918, there is described a method of welding metal parts together which consists in bringing them into contact and passing through the joint a current of extremely high amperage for a very short period of time.

Our present invention is directed to certain steps in the regulation and application of this class of welding processes by which improved results can be had.

We find, for example, that for the best results there should be during the operation a continuous pressure exerted on the parts and regulated within certain limits and according to certain factors, particularly according to the current density, time, extent of take-up, and composition of the metal; the invention being directed particularly, but not exclusively, to steel (or iron). We have found that the time of cutting off the current plays an important part in securing a good weld.

When high current densities are used, it is important to use high pressures to force the parts together as fast as it is heated to the proper temperature. Otherwise the metal will burn out or at least be badly oxidized at the weld.

Similarly when high pressures are used it is important to use high current densities. Otherwise the metal at the joint will be upset and forced outward faster than it becomes heated, or before it becomes heated to the proper temperature,—the result being a joint which is so weak as hardly to be called a weld. And in extreme cases the parts would not even be stuck together.

It follows that the converse is true. When low current densities are used it is important to use low pressure, and when low pressures are used it is important to use low current densities.

In summary, the pressure used should be in a balanced relation with the current density in order that the metal may heat to the welding temperature as fast as it is squeezed out at the edge by the pressure, and that it may be squeezed out progressively at the edge as fast as it is heated to the welding temperature.

Practice has shown, other elements of the problem being fixed, that such a balanced relation is obtained when a pressure of about 8,000 pounds per square inch (say within a range from 4,000 to 14,000 pounds) is used with a current density of about 100,000 amperes per square inch. Practice has also shown within the limits of our apparatus, that if either the pressure of the current density be changed from the above value, the other must be changed in the same ratio; that is, about 8,000 pounds pressure per square inch must be applied for every 100 000 amperes per square inch. The above relation has been checked from 8 000 to 22,000 pounds per square inch and from 100 000 to nearly 300,000 amperes per square inch; and apparently it would remain true over a still wider range.

We have found that for a given time interval there is a certain range of pressures above and below which a good weld is not obtained. • • •

Appellants in their brief contend that the prior art, including the Murray reissue patent, discloses nothing that suggests or leads to the idea of appellants, and that in the prior art the degree of pressure was not considered to be of any importance.

The brief states:

After using that process [the Murray reissue process] for several years these applicants made a discovery which is the principal basis of the present invention. They discovered to their surprise (and to that of the Primary Examiner) that the degree of pressure exerted on the parts affected the quality of the welds. This is an original discovery of these applicants. In their early work the users of the original Murray process treated the pressure between the parts to be welded as a point of no particular importance as long as it was heavy enough. This is the only known rule in welding,—that the operator must have at least enough pressure. How much more has been regarded as immaterial. But these applicants discovered that better and more reliable work could be done by regulating the pressure in its relation to the current and the time interval. The Murray reissue patent is based on the relation between two factors, current and time interval. The present invention is based on three factors, current, time interval and pressure.

Examination of the Murray reissue patent discloses that the foregoing statement is inaccurate. Pressure is referred to both in the specification and in one of the claims. The specification states:

As commonly practiced electric welding is a sticking together of opposing bodies by rendering their surfaces plastic or pasty and *pressing them into more or less close contact.* (Italics ours.)

Later the specification states:

• • • Increase of pressure leads to greater extrusion of metal at the joint which is intensified when the fluidity or plasticity of the metal is augmented.

Thus it is clearly stated that pressure is an important element in the art of electric welding. There must be a minimum and a maximum of pressure which those practicing the art must observe; that is, the pressure must be regulated if good results are to be secured, and this is plainly set out in the Murray reissue patent.

While there is no disclosure in said patent of any particularly desirable pressure between the minimum and maximum necessary to secure a good weld, it is clearly pointed out that pressure is an important element in practicing the art as taught therein; and if one in so doing secures a good weld, applying pressure that comes within the degrees covered by the claims here in issue, he is entitled to continue practicing the art with such pressure applied, and cannot be deprived thereof by any subsequent patent. We agree with the statement of the Board in its decision that:

If the claims were allowed, a skilled operator who had learned by experience to produce a good weld under the original Murray process would inevitably infringe these claims and would be prevented from practicing the process after the expiration of the reissue patent. It is our opinion that these claims cover only the inherent conditions which would exist when the old process is carried out successfully, and that they do not define patentable improvements but only involve what has been determined by ordinary engineering research as the best values of the several factors essential to its practice.

We think the above statement is applicable to all of the claims here in issue.

To grant appellants' claims would grant to them a monopoly upon certain efficient welds which a licensee under the Murray reissue patent would be entitled to make by virtue of his license, and the general public would be entitled to make after that patent had expired.

The decision of the Board of Appeals is affirmed.

Affirmed

U. S. Court of Customs and Patent Appeals

IN RE MANN AND KOPPELMAN

No. 2,621. Decided February 25, 1931

1. APPLICATIONS—COASSIGNORS—NO INTERFERENCE DECLARED.

Where two applications disclosing conflicting subject matter were owned by the same parties, no interference should have been declared between such applications since "there were no adverse interests, the beneficiaries of both applications being the same parties."

2. SAME—SAME—ELECTION.

Where the assignee of two copending applications containing conflicting subject matter elected to take out a patent upon one of them it was in legal effect a concession of priority of invention in such applicant of the invention disclosed in the two applications and this is true irrespective of the claims made in such application as distinguished from the disclosure thereof.

3. SAME—SAME—PATENTABILITY.

Claims for a packing device primarily for packing eggs *Held* unpatentable to M. and K. over the disclosure of the patent to K. and C. issued on a copending application owned by M. and K.

APPEAL from the Patent Office. Affirmed.

Mr. Stephen J. Cox and *Mr. J. Charles Walter* for Mann and Koppelman.

Mr. T. A. Hostetler for the Commissioner of Patents.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming a decision of the Examiner, rejecting all of the claims of appellants' application, nine in number.

Claims 1 and 3 are illustrative of the claims in issue and read as follows.

1. A packing medium comprising a felted sheet of relatively rigid, fibrous material having protuberances formed therein in the making thereof and integral therewith of substantially hollow truncated form with inner and outer upwardly converging walls the tops of which form a narrow extended contact and pressure receiving surface, said outer and inner walls normally extending to the base of the sheet.

3. A packing medium comprising a sheet of relatively rigid fibrous material having protuberances formed therein and therewith and integral therewith of substantially hollow truncated form with inner and outer upwardly converging curved walls the tops of which form a narrow extended contact and pressure receiving surface, said outer and inner walls normally extending to the base of the sheet.

The references cited by the tribunals of the Patent Office are: Koppelman & Cooper, 1,429,207, September 12, 1922; Miller, 1,026,359, May 14, 1912.

The claims above quoted sufficiently describe the invention.

The Board of Appeals held that the claims were anticipated by the Koppelman and Cooper reference, and apparently the Miller reference was not relied upon by the Board.

Among appellants' assignments of error is one that the Board of Appeals erred in deciding that said Koppelman and Cooper patent was a proper reference, and that the subject matter thereof is a part of the prior art. This is the first question before us for determination.

It appears that appellants' application here in issue was filed on October 21, 1921. On April 15, 1922, Koppelman, one of the appellants here, and one Cooper filed a joint application which resulted in the issue of said patent, 1,429,207, to Koppelman and Cooper on September 12, 1922, on a division of that application which was filed July 17, 1922.

It appears in the caption of the patent to Koppelman and Cooper, in the record, that it was issued to "Morris Koppelman and Simon Cooper of Brooklyn, New York, assignors of one-half to said Koppelman, and one-half to Leon Mann, of New York, N. Y." Therefore, the record shows that at the date of issue of said patent, it was owned by the appellants here, through assignment to them from Koppelman and Cooper previous thereto.

[1, 2] Under this state of facts it is obvious that no interference should be declared between the applications of Koppelman and Cooper and of appellants because there were no adverse interests, the beneficiaries of both applications being the same parties. In so far as both applications covered the same invention, and in so far as the disclosures in each specification show claim by the respective applicants of being the first inventors thereof, since no interference could properly be declared because of lack of adverse interests, it became a matter of election by appellants whether they would take out the patent as original inventors upon their application or, as assignees of Koppelman and Cooper, upon the application filed by the latter. Having elected to take out a patent upon the application of Koppelman and Cooper, it was in legal effect a concession of priority of invention in Koppelman and Cooper of the same invention disclosed in the two applications, and this is true irrespective of the claims made in the Koppelman and Cooper patent as distinguished from the disclosure of their application. There can not be two first inventors of the same invention, and if Koppelman and Cooper were the first inventors it is obvious that Mann and Koppelman could not be the first inventors. Therefore, in so far as both applications disclose the same invention, one application claiming that Koppelman and Cooper were the first inventors, and in the other Mann and Koppelman claiming to be the first inventors of the invention disclosed in the specifications of the two applications, appellants by their election have conceded priority of invention to Koppleman and Cooper, and they can not now make any claims upon the application before us that could have been made upon the Koppelman and Cooper disclosure.

A similar question was before the Court of Appeals of the District of Columbia in the case of *In re Dunbar*, 51 App. D. C. 251, 300 O. G. 201, in which it was held that, quoting from the syllabus:

> Where two applicants each assigned their copending applications to the same assignee by an assignment which left no interest in the applicant, the election of the assignee to take the patent on one application, which contained narrow claims reading on the disclosure in the other application, is binding on him, and precludes his right to the issuance of patent on the other application, containing broader claims covering the same features.

The opinion in that case quotes with approval a part of the decision of the Commissioner of Patents appealed from, as follows:

> By taking out the Dyson patent, an election was made on the question of priority between Dyson and Dunbar, and the common assignee is just as much bound by that election as if an interference had been declared and priority decided in favor of Dyson. The reason for the rule holding that interferences will not be declared between coassignors is that the presentation of the testimony on behalf of each assignor is in control of the common assignee, and that there are, therefore, no parties having adverse interests. If an assignee is to be allowed, after having made such election and taken out the patent, to repudiate the election and present the claims in another application, monopoly would obviously be extended.

To the same effect is a later decision by the Commissioner of Patents in the case of *Haight* v. *Nell*, 354 O. G. 247, C. D. 1927, 4.

In certain cases, where there are two applications by different inventors, but held by a common assignee, and there is a disclosure of the same basic invention in both applications, but in one of which it is asserted that the applicant is the inventor only of an improvement in the basic invention disclosed, a patent issued upon the improvement claim in such last named application is not a bar to a patent upon the other application; but the case before us is not one of that character.

This brings us to a consideration of the question of whether the claims here in issue read upon the disclosure in the Koppelman and Cooper patent, as held by the Patent Office tribunals.

The only question upon this branch of the case, as we view it, is whether the feature of the claims calling for the "outer and inner walls normally extending to the base of the sheet", as expressed in claims 1, 2, 3, 4, 5, 6, and 7, and "a central portion which is a part of the sheet and is substantially in the plane of the sheet into which the inner sides of said walls merge", as expressed in claims 8 and 9, constitutes a patentable distinction over the disclosure of the Koppelman and Cooper patent. All other features of the claims clearly read upon said disclosure.

In appellants' specification this feature of the claims above referred to is fully set forth, but it is also therein stated that "the reverse arch or concave portion may extend below the flat portion 9 of the sheet." We think, however, that the fair construction of the entire specification is that if the reverse arch does extend below the flat portion of the sheet, it must not be so far below that it will not, without crushing or deforming the arch, return upon pressure to a line with the base of the sheet.

The specification of the Koppelman and Cooper patent states:

> • • • If desired the holders may be made lower, and the middle portion 6 permitted to project below the base sheet so that each egg will be within the upper and lower edges of its cell or compartment, and will at the same time be separated from those above and below it and held. • • •

It also states that:

> • • • The bottom portion 6 is preferably slightly concavo-convex, but this is not absolutely essential, *nor is its exact position.* • • • (Italics ours.)

[3] We think that anyone practicing the art taught by the Koppelman and Cooper patent might naturally construct the device there shown by arranging that the central depression shall not be either above or below the plane of the sheet, but that it shall be upon such plane, in which case he would have essentially appellants' structure, and that if he did so no invention would be involved. If appellants' claims are allowed, any construction of the device shown by Koppelman and Cooper, carried out as above indicated, would conflict with appellants' claims. We are therefore of the opinion that in so far as appellants' claims differ from the construction specifically shown by Koppelman and Cooper, there is no invention involved because the modification is of such a character as is within the scope of the Koppelman and Cooper disclosure. While the Koppelman and Cooper claims are limited to a device for packing eggs and other fragile articles, the device may, generally speaking, be used for any purpose for which it is adapted. "The inventor of a machine is entitled to the benefit of all the uses to which it can be put, no matter whether he had conceived the idea of the use or not." *Roberts* v. *Ryer*, 91 U. S. 150, 10 O. G. 206.

In view of the conclusion we have reached it is unnecessary to discuss the Miller reference.

We find no error in the conclusions of the Board of Appeals and its decision is affirmed.

Affirmed.

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1,735,112. (See 1,306,116.)

1,739,280, M. B. Behrman, Razor and blade therefor; 1,773,614, G. Dalkowitz, Safety razor, filed Apr. 28, 1931, D. C. P. R., (San Juan), Doc. E 1657, *The American Safety Razor Corp. v. R. Rodriguez.*

1,742,830, Seaman & Braf, Piping and method of forming same; 1,756,036, same, Sewing machine, filed May 5, 1931, D. C., S. D. N. Y., Doc. E 59/317, *C. Seaman v. Garment Attachment Corp.*

1,756,036. (See 1,742,830.) 1,773,614. (See 1,739,280.)

1,776,269. (See 1,613,163.)

1,780,515, H. Berlin, Braided waved braid, filed Apr. 29, 1931, D. C., S. D. N. Y., Doc. E 59/276, *H. Berlin v. Glassheim Bros., Inc.*

1,785,822. (See 1,134,246.)

1,795,772, J. C. Goosman, Dual-effect compression method and apparatus for producing carbon-dioxide snow, filed Apr. 30, 1931, D. C., M. D. Pa., Doc. 807, *Solid Carbonic Co., Ltd. v. Frick Co., Inc.*

Re. 16,074, A. Wahle, Rotary pump, D. C., N. D. Ohio, E. Div., Doc. 3455, *Westco-Cheppewa Co. v. The Auto Prime Pump Co.* Patent held valid, claims 3 and 6 infringed Apr. 27, 1931.

Re. 17,921, O. J. Watts, Merry go round, filed Apr. 29, 1931, D. C. Kans., (Topeka), Doc. 1407–N, *O. J. Watts v. The Hainke Mfg. Co.*

Des. 82,616. (See 1,687,167.)

Des. 83,711, C. Wolfelt, Shoe, filed May 1, 1931, D. C., S. D. N. Y., Doc. E 59/294, *A. Geller Shoe Mfg. Co., Inc. v. Ansonia Bootery, Inc.* Doc. E 59/259, *A. Geller Shoe Mfg. Co., Inc., v. M. J. Saks Shoe Corp.* Consent decree for plaintiff May 7, 1931.

Des. 83,980, D. Lewis, Lady's handbag, filed Apr. 30, 1931, D. C., S. D. N. Y., Doc. E 59/290, *N. Lewis Wholesale Corp. v. R. M. Sommers, Inc.*

T. M. 158,787. (See T. M. 180,174.)

T. M. 180,174, Reid, Murdoch & Co., Baking powder and cream of tartar; T. M. 180,558, same, Canned fruits and preserves, etc.; T. M. 224,367, same, Cranberries, canned salmon, etc.; T. M. 158,787, same, Grapejuice, filed Apr. 20, 1931, D. C. Iowa (Keokuk), Doc. E 4068, *Reid, Murdoch & Co. v. Benner Tea Co.*

T. M. 180,558. (See T. M. 180,174.)

T. M. 224,367. (See T. M. 180,174.)

Changes in Classification

Order No. 3,196, June 19, 1931, directs:

In *class 179, Telephony* (Division 16), establish the following subclasses and definitions:

Systems
- 1.5 Secret,
- 5.5 Combined telephone and calling number recorder,
- Check-controlled
- 6.31 Time,
- Register
- 7.1 Time controlled,
- Central
- 8.5 Party line,
- Automatic
- Selective switches
- 27.51 Rotary single level,
- 27.52 Multidirectional,
- 27.53 Pancl type,
- 27.54 Cross bar.

Testing devices
- 175.1 Manual
- 175.11 Routine,
- 175.2 Automatic or semiautomatic
- 175.21 Selectors and connecters,
- 175.23 Directing switches,
- 175.24 Call indicators,
- 175.25 Wiring,
- 175.3 Long lines
- 175.31 Repeaters.

1.5. SYSTEMS, SECRET. Telephone systems including means for rendering the speech unintelligible during transmission and for rendering it intelligible at the receiver.

Note.—This subclass includes inventions disclosing and claiming secret radiotelephony and capable of use in either wired or wireless systems unless by the claims they are limited to wireless transmission in which case see appropriate subclasses in class 250, RADIANT ENERGY.

Search this class, subclass 15.

Search Class—
178—TELEGRAPHY, subclass 22, for similar systems in the telegraph art; and also subclass 44.

5.5. SYSTEMS, COMBINED TELEPHONE AND CALLING NUMBER RECORDER. Systems for recording the number of the calling party at the exchange or at the called subscriber's station.

Note.—This subclass is distinguished from class 234, RECORDERS, subclass 33.5, in that there must be some modification of or particular combination with the telephone system such as common battery operation. Where the recording device may without alteration be attached to any telephone, it should go in class 234, subclass 33.5.

Search this class, subclass 89.

6.31. SYSTEMS, CHECK-CONTROLLED, TIME. Check-controlled telephone systems in which the operation of the coin-controlling means is determined by the duration of the call or by the time of the day the call is made.

Note.—See class 161, TIME-CONTROLLING MECHANISM, subclass 19, and class 171, ELECTRICITY, GENERATION, subclass 272.

7.1. SYSTEMS, REGISTER, TIME-CONTROLLED. Counting is determined by the duration of the call or by the time of day the call is made.

Search Classes—
161—TIME-CONTROLLING MECHANISM, subclass 19.
171—ELECTRICITY, GENERATION, subclass 272.

8.5. SYSTEMS, REGISTER, CENTRAL, PARTY-LINE. Some party-line feature is included, such as selection of the meter individual to the calling party.

27.51. SYSTEMS, AUTOMATIC, SELECTIVE SWITCHES, ROTARY SINGLE-LEVEL. Mechanical construction of switches having features particular to telephony wherein connection is made by rotating the wiper over a single level.

Search Class—
200—ELECTRICITY, CIRCUIT MAKERS AND BREAKERS, subclass 105, for switches of this type not limited to telephony. Pawl and ratchet movements are found in class 74, MACHINE ELEMENTS, subclass 16.

27.52. SYSTEMS, AUTOMATIC, SELECTIVE SWITCHES, MULTIDIRECTIONAL. Mechanical construction of switches having features particular to telephony wherein connection is made by moving the wiper in more than one direction to select a contact. The movement may be any combination of vertical, rotary, radial, or other motions.

Search this class, subclasses 21 and 24.

27.53. SYSTEMS, AUTOMATIC, SELECTIVE SWITCHES, PANEL-TYPE. Switches of this type have carriers for the brushes which are moved vertically over banks of contacts.

27.54. SYSTEMS, AUTOMATIC, SELECTIVE SWITCHES, CROSS-BAR. These switches are also known as coordinate switches. Two bars arranged at right angles are selected for movement and contacts actuated at the point of intersection.

Search this class, subclasses 22 and 25.

175.1. TESTING DEVICES, MANUAL. Devices and instruments designed and arranged for testing manual telephone circuits and instruments electrically or mechanically.

175.11. TESTING DEVICES, MANUAL, ROUTINE. Devices and instruments designed and arranged for routine testing of manual telephone circuits and apparatus.

175.2. TESTING DEVICES, AUTOMATIC OR SEMI-AUTOMATIC. Devices and instruments designed and arranged for testing automatic or semiautomatic telephone circuits and apparatus, including call following by an observation operator.

175.21. TESTING DEVICES, AUTOMATIC OR SEMI-AUTOMATIC, SELECTORS AND CONNECTERS. The testing of selector and connecter switches used in automatic or semiautomatic telephone systems.

175.23. TESTING DEVICES, AUTOMATIC OR SEMI-AUTOMATIC, DIRECTING SWITCHES. The testing of directing switches used in automatic or semiautomatic telephone systems.

175.24. TESTING DEVICES, AUTOMATIC OR SEMI-AUTOMATIC, CALL INDICATORS. The testing of call indicators used in automatic or semiautomatic telephone systems including the associated impulse storing apparatus and also the indicating apparatus.

175.25. TESTING DEVICES, AUTOMATIC OR SEMI-AUTOMATIC, WIRING. The testing of all wiring including multiple wiring in automatic or semiautomatic telephone systems.

175.3. TESTING DEVICES, LONG LINES. Devices and instruments designed and arranged for testing long telephone lines.

Note.—See this class, subclass 78, and the subclasses indented thereunder, for apparatus and systems to prevent inductional disturbances.

175.31. TESTING DEVICES, LONG LINES, REPEATERS. Devices and instruments designed and arranged for testing the amplifying repeaters or the elements thereof used on long telephone lines.

The patents contained in these subclasses have been taken for the most part from various subclasses in class 179, Telephony.

Disclaimers

1,634,429.—*Ernest F. Mechlin*, Washington, D. C. DRAFT RIGGING. Patent dated July 5, 1927. Disclaimer filed June 16, 1931, by the assignee, *The Symington Company.*

Hereby enters this disclaimer to that part of the claim in said specification, which is in the following words, to wit:

"1. In a railway draft rigging, the combination with a coupler, of a hooded yoke, means pivotally connecting said yoke and coupler, a key intersecting said pivotal means and extending through the yoke and coupler, and means provided on said coupler and yoke for resisting buffing movement, said means being designed to permit relative pivotal action of the yoke and coupler when in engagement.

"2. In a railway draft rigging, the combination with a coupler, of a hooded yoke, a pin connecting said yoke and coupler, a key extending at an angle to said pin and adapted to retain the same in position, and means including co-acting bearing surfaces formed on the coupler and yoke for resisting buffing strains, said bearing surfaces being designed to permit relative pivotal movement of the yoke and coupler when in engagement.

"3. In a railway draft rigging, the combination with a slotted coupler having a bearing surface, of a slotted yoke provided with a co-acting bearing surface, a pin pivotally connecting said coupler and yoke, and a retaining member adapted to intersect said pin and arranged to pass through the slots in said yoke and coupler, the said bearing surfaces on the yoke and coupler being designed to permit relative pivotal movement thereof when they are engaged as the result of the buffing movement of the draft rigging.

"4. In a railway draft rigging, the combination with a coupler, of a hooded yoke, means pivotally connecting said coupler and yoke, a key extending through said yoke and coupler, and means provided on said coupler and yoke for engagement upon buffing movement of the draft rigging, said means comprising co-acting bearing portions arranged concentrically with respect to said pivotal means for permitting relative swinging movement of the yoke and coupler when engaged as a result of the buffing movement.

"5. In a railway draft rigging, the combination with a coupler, of a yoke provided with a hooded end, means including a pin pivotally connecting said coupler and yoke, means passing through said coupler and yoke for retaining said pin in position, and means including co-acting bearing surfaces provided on said hooded end and adjacent portions of the coupler, said bearing surfaces being adapted to permit relative pivotal movement of the coupler and yoke when engaged as the result of the buffing movement of the draft rigging.

"6. In a railway draft rigging, the combination with a coupler having a plurality of bearing portions adapted to transmit buffing strains to the draft rigging, of a yoke having a hooded end provided with a plurality of bearing portions adapted to co-act with the bearing portions on said coupler, a pin pivotally connecting the coupler and yoke, and a draft key intersecting said pin for retaining the same in position, the said co-acting bearing portions of the coupler and yoke being arranged to permit relative pivotal movement thereof when in engagement as the result of the buffing movement of the draft rigging.

"7. In a railway draft rigging, the combination with a coupler having longitudinally spaced bearing portions adapted to transmit buffing strains to the cushioning mechanism of the draft rigging, of a yoke provided with bearing portions adapted to co-act with some of the coupler bearing portions, means including a pivot member adapted to connect said coupler and yoke, and draft means disposed at an angle and adapted to intersect said pivot member for retaining the same in position.

"8. In a railway draft rigging, the combination with a slotted coupler provided with spaced bearing portions, of a yoke having a hooded end, one pair of walls of which are formed with slots and the other pair of walls of which are provided with bearing surfaces adapted to be engaged by the spaced bearing portions of said coupler upon buffing movement of the draft rigging, means for pivotally connecting said coupler and yoke, and a retaining key intersecting said pivotal means and extending through the slotted coupler and slotted walls of said yoke."

1,760,382.—*Clyde H. Teesdale*, Grand Rapids, Mich. CONTROLLING MEANS FOR ELECTRIC SWITCHES. Patent dated May 27, 1930. Disclaimer filed June 20, 1931, by the assignee, *Teesdale Manufacturing Company.*

Hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to-wit:

"8. In a device of the class described: a container adapted to hold a liquid, a float therein, an electric switch, connecting mechanism between the float and the switch for opening the switch by the movement of the float in one direction and for closing the switch by a movement of the

float in the opposite direction, and for again opening the switch by the continuing movement of the float in the last specified direction.

"9. In a device of the class described: a container adapted to hold a liquid, a float therein, a movable member, connecting mechanism between the float and the movable member, for moving said member to one position by the movement of the float in one direction, and for moving said member to another position by the movement of the float in the opposite direction, and for moving said member to its first-mentioned position by continued movement of the float in the last specified direction.

"10. In a device of the class described: an electric switch within an electric circuit, mechanism for operating said switch and a float connected to said mechanism for actuating said mechanism, said mechanism having two operative positions for opening the switch circuit and a third operative position for closing said switch circuit.

"11. In a device of the class described: a tiltable electric switch within an electric circuit, said switch having two operative positions for breaking the circuit through said tiltable switch, a third operative position for completing the circuit through said tiltable switch, and a float adapted to actuate the switch for making and breaking a circuit in said three operative positions."

1,757,247.—*Edward L. Hoffman*, Dayton, Ohio. Parachute. Patent dated May 6, 1930. Disclaimer filed June 22, 1931, by the *patentee*.

Hereby enters this disclaimer to that part of the claims in said specification which are in the following words, to-wit:

"1. A parachute comprising a sustaining canopy and suspension element therefor, said suspension element consisting entirely of fabric panels, the entire upper edge of each panel being attached directly to said sustaining canopy.

"2. A parachute comprising a canopy and suspension elements therefor, said suspension elements consisting entirely of a plurality of fabric panels attached directly to said canopy and to each other respectively."

"4. A parachute comprising a canopy having a plurality of air scoops in the supporting surface thereof and suspension elements formed entirely of a plurality of fabric diaphragms attached directly to said canopy adapted to support a load, said diaphragms being positioned in planes passing through the center of area of said canopy and the center of load.

"5. A parachute comprising a canopy having a plurality of divided air scoops in the supporting surface thereof and a plurality of load suspension elements consisting entirely of fabric panels, each of said elements being attached directly to said canopy at adjacent sides and extending inwardly and passing through the center of area of said canopy."

1,800,293.—*Frederick H. Hehemann*, Cincinnati, Ohio. VALVE AND PROCESS OF MAKING SAME. Patent dated April 14, 1931. Disclaimer filed June 22, 1931, by the assignee, *The Lunkenheimer Company*.

Hereby enters a disclaimer restricting claims 1, 2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16 and 17 as follows:

By restricting the element "bonnet" of said claim 1 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the space within the bonnet below the bushing";

By restricting the element "hollow body" of said claim 2 to "a hollow body having attaching means thereon extending laterally therefrom and extending vertically on the hollow body from adjacent the bushing in the hollow body to the bottom of the hollow body on either side of the hollow body below the bushing";

By restricting the element "bonnet" of said claim 4 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 5 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 6 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 7 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 8 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 10 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 11 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 12 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 13 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 14 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 15 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 16 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing";

By restricting the element "bonnet" of said claim 17 to "a bonnet having attaching means thereon extending laterally therefrom and extending vertically on the bonnet from adjacent the bushing in the bonnet to the bottom of the bonnet on either side of the chamber in the bonnet below the bushing".

TRADE-MARKS

OFFICIAL GAZETTE, JULY 7, 1931

[VOL. 408. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 309,180. SUNRAYED LIMESHELL PRODUCTS COMPANY, Boston, Mass. Filed Dec. 19, 1930.

SUNRAYED

POULTRY SHELL

No claim being made to the words "Poultry Shell" apart from the mark shown.

For Poultry Grit and Oyster Shells.

Claims use since Jan. 1, 1929.

Ser. No. 314,449. JOHN I. HAAS, INCORPORATED, Washington, D. C. Filed May 12, 1931.



Apart from the mark as shown on the drawing applicant disclaims the geographical notations "Washington" and "Washington, D. C."

For Hops.

Claims use since Apr. 1, 1931.

Ser. No. 315,008. OLYMPIC FOREST PRODUCTS COMPANY, Port Angeles, Wash. Filed May 25, 1931.

MONARCH

For Wood Pulp.

Claims use since Aug. 1, 1930.

Ser. No. 315,009. OLYMPIC FOREST PRODUCTS COMPANY, Port Angeles, Wash. Filed May 25, 1931.

PREMIER

For Wood Pulp.

Claims use since Aug. 1, 1930.

Ser. No. 315,010. OLYMPIC FOREST PRODUCTS COMPANY, Port Angeles, Wash. Filed May 25, 1931.

REGAL

For Wood Pulp.

Claims use since Aug. 1, 1930.

CLASS 2

Receptacles

Ser. No. 314,442. THE AMERICAN THERMOS BOTTLE COMPANY, Norwich, Conn. Filed May 12, 1931.

KEAPSIT

For Vacuum Bottles.

Claims use since Sept. 15, 1926.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 310,731. MAJESTIC LEATHER GOODS CO., INC., New York, N. Y. Filed Feb. 4, 1931.

VALETTE

For Travelling Bags, Luggage for Men and Women Comprising Oxford Bags, Club Bags, Gladstone Bags, Railroad Bags, Pullman Bags, Kit Bags, Suit Cases, Satchels, Grips, Dressing Cases, Hat Boxes, and Hand Wardrobe Trunks.
Claims use since Jan. 2, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 305,951. THE SNOWBALL COMPANY, St. Louis, Mo. Filed Sept. 22, 1930.

SNOBALL

For Shaving Cream.
Claims use since Aug. 28, 1930.

Ser. No. 313,951. F. OTTO ZEITZ, doing business as The Jewel-Brite Co., Chicago, Ill. Filed Apr. 27, 1931.



The words "Jewel Brite" are disclaimed apart from the other features of the mark.
For Preparation for Cleaning Jewelry.
Claims use since Feb. 10, 1928.

Ser. No. 314,264. AMERICAN CHEMICAL WORKS, INC., Covington, Ky. Filed May 7, 1931.

AMERITE

For Cleaning Compound for Use in Kitchen and Laundry.
Claims use since Dec. 1, 1930.

Ser. No. 314,550. H. TH. BÖHME A. G., Chemnitz, Germany. Filed May 14, 1931.

Taosap

For Soap Preparations.
Claims use since Feb. 10, 1931.

Ser. No. 314,619. IOWA SOAP COMPANY, Burlington, Iowa. Filed May 15, 1931.

CAMEL

For Toilet Soap.
Claims use since Apr. 15, 1931.

CLASS 5

Adhesives

Ser. No. 315,143. HOWE & FRENCH, INC., Boston, Mass. Filed May 28, 1931.



For Adhesive Liquid Cement.
Claims use since Apr. 29, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 299,233. GIOVANNI SPADARO, Philadelphia, Pa. Filed Apr. 21, 1930.

C - TRE

For Mouth Wash.
Claims use since Jan. 14, 1929.

Ser. No. 299,527. FRANK STIKAROFSKY, Norwood, Mass. Filed Apr. 26, 1930.

NIB-LA

For Hand Cream, Catarrh Jelly, Acid Sodium Phosphate, Face Powder, Deodorizing Cream, Vanishing Cream, Cold Cream, Laxative, Bath Salts, Eye Lotion, Cough Syrup, Tooth Paste, Hand Lotion, Insecticide, Bronchial Salve, Throat Gargle, and Preparation for the Destruction of Rats and Mice, Stain Removers—Namely, Chemicals for Removing Ink, Fruit, Rust, Tar, Grease, and Other Stains from Fabrics; and Lotion for Application to the Skin to Ward Off Mosquitoes.
Claims use since August, 1925.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 302,991. SAMUEL CHAMEIDES, doing business as Nu Glow Co., Glendale, Long Island, N. Y. Filed June 30, 1930.



For Nail Polish and Liquid Nail Polish Remover.
Claims use since May 28, 1930.

Ser. No. 304,392. CHARLES G. UNGER, doing business as Stanhope Laboratories, Brooklyn, N. Y. Filed Aug. 8, 1930.

STANHOPE
SANI-FUME

For Deodorant.
Claims use since Jan. 1, 1925.

Ser. No. 304,393. CHARLES G. UNGER, doing business as Stanhope Laboratories, Brooklyn, N. Y. Filed Aug. 8, 1930.

Amberol

For Shampoo.
Claims use since Mar. 1, 1922.

Ser. No. 305,633. CHARLES G. UNGER, doing business as Stanhope Laboratories, Brooklyn, N. Y. Filed Sept. 12, 1930.

Bellefaire

For Dusting Powder, Face Powder, Talcum Powder, and Toilet Powder.
Claims use since June 15, 1926.

Ser. No. 305,635. CHARLES G. UNGER, doing business as Stanhope Laboratories, Brooklyn, N. Y. Filed Sept. 12, 1930.

PHYSCOL

For Antiseptic Liquid Soap, Tincture of Green Soap.
Claims use since June 1, 1923.

Ser. No. 307,979. MOHAMMED I. KITCHLEW, Chicago, Ill. Filed Nov. 17, 1930.



Applicant is the owner of registered Trade-Mark No. 247,548. Applicant disclaims exclusive right to use of the words "Incense Most Inspiring" except in the combination shown.
For Incense.
Claims use since Apr. 5, 1930.

Ser. No. 308,018. KUR TRIER G. M. B. H., Amshausen, near Steinhagen, Germany. Filed Nov. 18, 1930.



The words "Appetizer", "Stomachic", and "Net Contents 12 fl. Ounces, Acetphenetidin 2 Grains per fl. oz. 38% of Alcohol by Volume, Made in Germany" are disclaimed.

For Medicinal Preparation for Use as an Appetizer and Stomachic.

Claims use since May, 1930.

Ser. No. 308,385. THE PARA DRUG AND RUBBER COMPANY, doing business as Medico Products Co., Cleveland, Ohio. Filed Nov. 28, 1930.

SYRUP OF PECTONE

The words "Syrup of" are hereby disclaimed for the purposes of this registration only.

For Medicinal Compound for Coughs and Sore Throat.

Claims use since July 1, 1930.

Ser. No. 310,230. SMITH, KLINE & FRENCH LABORATORIES, Philadelphia, Pa. Filed Jan. 21, 1931.

DEXTRETTES

For Medicinal Composition for the Treatment of Obesity, Circulatory and Digestive Disturbances.

Claims use since Jan. 6, 1931.

Ser. No. 310,822. H. B. DENTON & CO., Mt. Carmel, Ill. Filed Feb. 7, 1931.

THAX

For Liquid Skin Cleanser, Face Cream, Vanishing Cream, Cold Cream, Tissue Cream, Bleach Cream, Face Powder, Shaving Lotion, Talcum Powder, Dusting Powder, Astringent, Hair Dressing, Hair Tonic, Brilliantine, Cleansing Cream, Skin Tonic, Massage Cream, Shampoo, Waving Lotion, Perfume, Toilet Water, Tooth Paste, Tooth Powder, Rouge, Lip Stick, Eye Brow Pencil, Nail Polish, Deodorant, Skin Cream, Skin Balm, Bandoline, Almond Meal, Camphor Ice, Antiseptic, Laxative, Cold Medicine, Salve, Cough Medicine, Chill Medicine, Cod Liver Oil, Emulsion Cod Liver Oil, Mineral Oil for Medicinal Use, Corn Medicine, Earache Medicine, Tooth Ache Medicine, Foot Powder, Foot Balm, Aspirin Tablets, Headache Medicine, Throat Gargle, Cough Drops, Inhalent, Nasal Spray, Throat Tablets, Vegetal.

Claims use since Nov. 19, 1930.

Ser. No. 311,381. KACZANDER & DAROCZI, New York, N. Y. Filed Feb. 24, 1931.



Blackies

The lining on the drawing is used for shading purposes only.

For Medicated Candy Lozenges Being Beneficial in the Cases of Colds, Coughing, Sore Throats, Asthma, Hoarse Voice and the Like.

Claims use since Feb. 1, 1931.

Ser. No. 311,530. THE MARVEL COMPANY, New Haven, Conn. Filed Feb. 27, 1931.

MARVEL

O-Q-S

For Hygienic Powders and Suppositories for Use in Feminine Hygiene.

Claims use since Jan. 5, 1931.

Ser. No. 312,201. ROSS MANUFACTURING COMPANY, Kansas City, Mo. Filed Mar. 16, 1931.

Kleen-N-Heat

Applicant does not claim the exclusive right to the use of the words "Kleen" and "Heat", and they are disclaimed apart from the mark as shown.

For Boiler Cleaning Compound.

Claims use since Feb. 23, 1931.

Ser. No. 312,318. H. A. WOODS, INC., Evansville, Ind. Filed Mar. 19, 1931.



For Complexion Powder, Cleansing Cream, Tissue Cream, Astringent Lotion, Skin Tonic, Foundation Cream for a Powder Base, Pore Paste to Reduce the Pores, Rouge, Lipstick, Depilatory, Bleaching Cream, Acne Cream, Acne Lotion, Muscle Oil, Preparation for Removing Nail Polish; Preparation for Removing the Cuticle Around the Finger Nails, Liquifying Cream for the Skin, Eye Wrinkle Lotion, Brilliantine, Liquid Base Powder, Face and Complexion Cream, Perfume Extract, Toilet Water, Talcum Powder, Sachet Powder, Bath Salt, Face and Complexion Lotion, Permanent Wave Oil, Compact Refills for Rouge and Powder, Bath Dusting for the Skin after Bathing, Shampoo, Hand Lotion, After Shaving Lotion, Lilac Vegetal, Bandoline, Deodorant, Hair Tonic, White Lip Pomade, Eye Brow Pencil, Dental Cream, and Nail Polish.

Claims use since February, 1931.

Ser. No. 312,521. THE LUCKY HIT COMPANY, Hawarden, Iowa. Filed Mar. 25, 1931.



For Preparation for the Treatment of Eczema.

Claims use since Jan. 22, 1931.

Ser. No. 312,678. MILLER PRODUCTS COMPANY, Portland, Oreg. Filed Mar. 27, 1931.

Dormo
MILLER'S DORMANT EMULSION

No claim is made to the words "Dormant Emulsion" apart from the mark shown.

For Insecticide Preparation for the Destruction of Insect Pests.

Claims use since June 1, 1930.

Ser. No. 312,840. BUAT J. CLARK, doing business as Voix d'Or, South Minneapolis, Minn. Filed Apr. 2, 1931.

VOIX D'OR
"VOICE OF GOLD"

For Medicated Chewing Gum and Medicated Tablets for Relieving Unhealthy Conditions of the Mouth and Throat and for Use as an Internal Disinfectant.

Claims use since Mar. 28, 1931.

Ser. No. 312,957. THE NORWICH PHARMACAL COMPANY, Norwich, N. Y. Filed Apr. 4, 1931.

Norol

For Internal Lubricants, Laxatives, and Preparations for Treating Constipation.

Claims use since Aug. 1, 1915.

Ser. No. 313,051. NATIONAL ANILINE & CHEMICAL COMPANY, INC., New York, N. Y. Filed Apr. 7, 1931.

NACELAN

For Dyes, Dyestuffs, and Dye Colors.
Claims use since Mar. 13, 1931.

Ser. No. 313,085. JOHN E. KAMBISOS, San Francisco, Calif. Filed Apr. 8, 1931.



The figure shown on the drawing is strictly fanciful.
For Cough Drops.
Claims use since Aug. 1, 1930.

Ser. No. 313,625. ALCOA OIL COMPANY, East St. Louis, Ill. Filed Apr. 22, 1931.

ALORCO

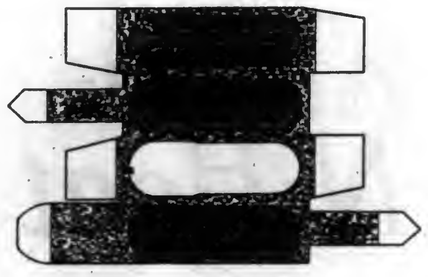
For Alumina, Activated Alumina, Aluminum Fluorides, Sodium Fluorides, Zinc Fluorides, Lead Fluorides, Magnesium Fluorides, Barium Fluorides, Calcium Oxide, Hydrated Calcium Oxide, Hydrated Calcium Sulfate, and Bauxite Ore Concentrates Such as Mono-Hydrates of Alumina, Di-Hydrates of Alumina and Tri-Hydrates of Alumina.
Claims use since Apr. 22, 1930.

Ser. No. 313,726. AMERICAN LECITHIN CORPORATION, Wilmington, Del., and Atlanta, Ga. Filed Apr. 24, 1931.

ALCOL

For Phosphatide or Lecithin and Compositions Containing same for Use in the Textile Industry—Namely, Compositions for Use as Spinning Oil, Carding Oil, Waterproofing Compositions, Water Resisting Compositions, Compositions for Flexibilising Textiles, Sizing Compositions, Wetting Out Agents, Mordanting and Dyeing Compositions, Cloth Finishing Compositions, Softening Agents for Textiles, Agents for Mildew-Proofing and Moth-Proofing Textiles, and Similar Agents to be Used for Treating Finished or Partly Finished Garments or Parts Thereof.
Claims use since Jan. 1, 1931.

Ser. No. 313,831. ANSALEM ORVILLE COBBS, doing business as Cobbs Mfg. Co., Des Moines, Iowa. Filed Apr. 27, 1931.



No claim is made to the exclusive use apart from the mark shown on the drawing of any word appearing thereon, except the words "Dam-it" and applicant's name, "Cobbs Mfg. Co." No claim is made to the representation of the label per se. The lining on the drawing represents the colors blue and yellow.
For Composition for Stopping the Leaks of Internal Combustion Engine Radiators.
Claims use since Oct. 15, 1929.

Ser. No. 313,866. S. PFEIFFER MFG. CO., St. Louis, Mo. Filed Apr. 27, 1931.

Savatan

For Medicinal Preparation for the Treatment of Disorders Due to Amenorrhea, Dysmenorrhea, and Menorrhagia.
Claims use since May 1, 1911.

Ser. No. 313,939. IRVING SELIGMAN, doing business as La Cie Reve, New York, N. Y. Filed Apr. 28, 1931.

Midream

For Face Powder, Talcum Powder, Lip Stick, Skin Lotion, Perfume, Toilet Water, Nail Polish, Shampoo, Hair Tonic, Face Cream.
Claims use since January, 1928.

Ser. No. 313,962. FORALINE PRODUCTS INC., Circleville, Ohio. Filed Apr. 29, 1931.



For Depilatory Compound.
Claims use since January, 1901.

Ser. No. 313,963. DR. CHARLES. G. HUBENTHAL, doing business as The Lopex Remedies and Products Co., Minneapolis, Minn. Filed Apr. 29, 1931.

LOPEX

The word is written with a large X with the other letters of the smaller type grouped around it forming the word "Lopex."
For Relief and Treatment of Gall Stones and Catarrhal Jaundice.
Claims use since July 15, 1922.

Ser. No. 314,004. JAMES M. JENSEN, Blackfoot, Idaho. Filed Apr. 30, 1931.

Jensen's RHEUMATISM TREATMENT

J R T

The words "Jensen's Rheumatism Treatment" are disclaimed apart from the other features of the mark shown in the drawing.
For Medicinal Preparation for the Relief of Rheumatism.
Claims use since Mar. 1, 1931.

Ser. No. 314,040. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed May 1, 1931.



Applicant, without waiver of its common law rights, makes no claim herein to the representation of a carton appearing on the drawing or to any of the words appearing on the said trade-mark, other than "Colgate," "Colgate's," and "Ribbon."
The vertical lining on the drawing on the five top panels denotes the color red; the vertical lining on the margins of these panels denotes the color salmon; the vertical lining on the bottom panel denotes the color salmon; the oblique lining on the drawing denotes the color green.
Applicant is the owner of registered Trade-Mark No. 269,967 which mark includes the word "Ribbon" as a feature.
For Dental Cream.
Claims use since June, 1927.

Ser. No. 314,077. MAX M. SAFRIN, doing business as Petrosylla Laboratories, Philadelphia, Pa. Filed May 1, 1931.

PETROSYLLA

For Laxative.
Claims use since Jan. 4, 1930.

Ser. No. 314,082. SOCIETE ANONYME JEAN PATOU, Paris, France. Filed May 1, 1931.

BAR A PARFUMS

The word "Parfums" is disclaimed.
For Perfumes, Toilet Water, Face Powder, Talcum Powder, Lip Rouge, Sachets, Brilliantine, Bath Salts, Lotion for the Skin and Hair, Face Cream.
Claims use since May 13, 1929.

Ser. No. 314,104. EASTERN RESEARCH LABORATORIES, Baltimore, Md. Filed May 2, 1931.

B&A
ASTRINGENT POWDER

No claim is made to the exclusive use of the words "Astringent Powder" apart from the mark shown in the drawing.
For Astringent Powder for Use Externally in General Body Hygiene.
Claims use since Apr. 29, 1931.

Ser. No. 314,201. GENERAL DYESTUFF CORPORATION, New York, N. Y. Filed May 5, 1931.

Suprafix

For Dyes and Dyestuffs.
Claims use since Apr. 14, 1931.

Ser. No. 314,267. BOSTON FLORAL SUPPLY & SNYDER CO. INC., Boston, Mass. Filed May 7, 1931.

PUBLIX

For Liquid Nail Polishes, Nail Polish Removers, and Liquid Cuticle Removers.
Claims use since Feb. 25, 1931.

Ser. No. 314,314. THE ILIFF-BRUFF CHEMICAL COMPANY, Hoopeston, Ill. Filed May 7, 1931.

CRYSALBA

For Anhydrous Calcium Sulphate Used as a Cleaning and Polishing Agent in Dentifrices.
Claims use since Dec. 22, 1930.

Ser. No. 314,315. PROVIDENT CHEMICAL WORKS, St. Louis, Mo. Filed May 7, 1931.

PYRAN

For Compound Embodying Calcium Sulphate Anhydrous and Calcium Phosphate Pyro to be Used as a Cleaning and Polishing Agent in Dentifrices.
Claims use since July 6, 1926.

Ser. No. 314,401. SIMON DRAUN, doing business as Draun Laboratories, Baltimore, Md. Filed May 11, 1931.

Exterminrat

For Preparation for the Extermination of Rats and Mice.
Claims use since Apr. 1, 1930.

Ser. No. 314,409. JOSEPH GOLDSMITH Jr., doing business as Anti-Cept Co., Los Angeles, Calif. Filed May 11, 1931.

ANTI-CEPT

For Antiseptic Douche Powder.
Claims use since Apr. 1, 1931.

Ser. No. 314,430. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif. Filed May 11, 1931.

MONITOR

For Animal Fly Sprays, Insecticides, Insect Repellents.
Claims use since Apr. 14, 1931.

Ser. No. 314,491. THE EPHEDRINE COMPANY, University City, Mo. Filed May 13, 1931.

FED
OINTISEPTIC

For Preparation for Relief of Catarrh, Nasal Sinus Trouble, Hay Fever, Head Colds, and Other Congestions of the Nasal Mucosa.
Claims use since Nov. 1, 1930.

Ser. No. 314,492. THE EPHEDRINE COMPANY, University City, Mo. Filed May 13, 1931.

FED-OINTISEPTIC

For Preparation for Relief of Catarrh, Nasal Sinus Trouble, Hay Fever, Head Colds, and Other Congestions of the Nasal Mucosa.
Claims use since Nov. 1, 1930.

Ser. No. 314,499. ELWOOD J. GOODIER, doing business as Universal Laboratories, Dallas, Tex. Filed May 13, 1931.

BLUE CHARM

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Creams, Nail Powders, Nail Bleaches, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since January, 1930.

Ser. No. 314,502. ZYOMUNT KOZLOWSKI, New York, N. Y. Filed May 13, 1931.

RESTORZIT

For Preparation for Restoring Natural Color to Gray Hair.
Claims use since Dec. 1, 1929.

Ser. No. 314,517. SPOONER, INC., New York, N. Y. Filed May 13, 1931.

Jean Royce

For Face and Body Powders, Talcum Powders, Perfumes, Toilet Waters, Rouge, Lip Sticks, Sachet Powders, Facial Creams, and Skin and Hair Lotions.
Claims use since July 1, 1930.

Ser. No. 314,522. ELMIRA WARE, Brooklyn, N. Y. Filed May 13, 1931.

MOZELL

For Hair Dressing Preparation.
Claims use since Dec. 20, 1921.

Ser. No. 314,546. H. TH. BÖHME A. G., Chemnitz, Germany. Filed May 14, 1931.

Denwe

For Chemical Dye Aids—Namely, Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Tanning Preparations.
Claims use since Dec. 9, 1930.

Ser. No. 314,547. H. TH. BÖHME A. G., Chemnitz, Germany. Filed May 14, 1931.

Hemerol

For Chemical Dye Aids—Namely, Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Tanning Preparations.
Claims use since Jan. 20, 1931.

Ser. No. 314,548. H. TH. BÖHME A. G., Chemnitz, Germany. Filed May 14, 1931.

Ondal

For Chemical Dye Aids—Namely, Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Tanning Preparations.
Claims use since Jan. 8, 1931.

Ser. No. 314,549. H. TH. BÖHME A. G., Chemnitz, Germany. Filed May 14, 1931.

Sirial

For Chemical Dye Aids—Namely, Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Tanning Preparations.
Claims use since Dec. 9, 1930.

Ser. No. 314,642. GOODRICH CHEMICAL COMPANY, Park Ridge, N. J. Filed May 16, 1931.

CLYMOCOL

For Disinfectant.
Claims use since May 11, 1931.

Ser. No. 314,758. VIA B. HAGGARD, Blackwell, Okla. Filed May 19, 1931.

VIOPTIK

For Medicinal Preparation for the Treatment of the Eyes.
Claims use since May 16, 1931.

Ser. No. 314,771. PREMIER PRODUCTS CORP., LTD., Los Angeles, Calif. Filed May 19, 1931.

Marvay

For Facial Cleansing Powder.
Claims use since Jan. 14, 1931.

Ser. No. 314,832. HARRY ALTROGGE, Dallas, Tex. Filed May 21, 1931.

OLIVAL



For Liquid Shampoo.
Claims use since 1930.

Ser. No. 314,892. CARBOLAC CORPORATION OF AMERICA, Parkersburg, W. Va. Filed May 22, 1931.

CARBOLAC

For Chemical Preparation to be Added to Internal Combustion Engine Fuel to Increase the Efficiency of the Latter and the Engine Using the Same.
Claims use since August, 1927.

Ser. No. 315,155. MERRELETE REMEDIES, Chatham, Ontario, Canada. Filed May 28, 1931.

MERRELETE

For Medicine for the Treatment of Pyorrhea.
Claims use since November, 1930.

Ser. No. 315,212. NAZIK SHAPAZIAN, Washington, D. C. Filed May 29, 1931.

NAZILE

For Medicinal Ointment for Burns, Pimples, Sprains, Blisters, Blackheads, and Other Skin Affections.
Claims use since Jan. 1, 1924.

CLASS 11
Inks and Inking Materials

Ser. No. 301,123. THE PARKER PEN COMPANY, Janesville, Wis. Filed May 23, 1930.

PARADOX

For Writing Ink.
Claims use since May 1, 1930.

Ser. No. 311,185. A. B. DICK COMPANY, Chicago, Ill. Filed Feb. 18, 1931.

MIMEO TONE

For Duplicating Machine Ink.
Claims use since Jan. 31, 1931.

Ser. No. 313,095. T. J. RONAN CO. INC., Brooklyn, N. Y. Filed Apr. 8, 1931.

STAMPALL

For Preparation for Stamping Fabrics Containing a Dry Color—Namely, Ultra-Marine Blue and Lanum Anhydrus.
Claims use since Jan. 1, 1921.

CLASS 13
Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 314,678. THE V. D. ANDERSON COMPANY, Cleveland, Ohio. Filed May 18, 1931.

Silvertop

For Steam Traps
Claims use since Apr. 15, 1931.

Ser. No. 315,034. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo. Filed May 26, 1931.

PUEBLO

For Wire Fence.
Claims use since Jan. 1, 1918.

CLASS 14
Metals and Metal Castings and Forgings

Ser. No. 296,350. KLOSTERS AKTIEBOLAG, Langshyttan, Sweden. Filed Feb. 21, 1930.

KLOSTER

For Steel in Bars and Coils.
Claims use since May 14, 1926.

Ser. No. 314,933. I. STERN & CO., New York, N. Y. Filed May 22, 1931.

PALARGAU

For Alloy, Sheet or Wire, Semi or Fully Finished Material Composed of Palladium, Silver, and Gold.
Claims use since Apr. 21, 1931.

Ser. No. 315,005. MUELLER BRASS CO., Port Huron, Mich. Filed May 25, 1931.

STREAMLINE

For Solder.
Claims use since Dec. 18, 1930.

CLASS 15
Oils and Greases

Ser. No. 313,249. METALIFE, INC., St. Louis, Mo. Filed Apr. 11, 1931.

METALIFE

For Motor Lubricating Oils.
Claims use since Oct. 1, 1930.

Ser. No. 313,569. WADHAMS OIL COMPANY, Milwaukee, Wis. Filed Apr. 20, 1931.

Wadhams "Big W"



The vertical lines of the drawing indicate the color red. The exclusive right to use of a large letter "W" is hereby disclaimed for purposes of registration, except in the association shown.
For Lubricating Oils.
Claims use since Jan. 30, 1929.

Ser. No. 313,611. ROCK ISLAND REFINING COMPANY, Duncan, Okla. Filed Apr. 21, 1931.

ROCK ISLAND
ROCKILENE
GASOLINE

The words "Rock Island Gasoline" are not claimed apart from the other features of the mark.
For Gasoline.
Claims use since Mar. 1, 1930.

Ser. No. 313,685. TECHNICAL LUBRICANTS COMPANY, Kansas City, Mo. Filed Apr. 22, 1931.

Tec-Lube

For Lubricating Oils, Lubricating Greases, Lubricating Oil Compounds, and Lubricating Grease Compounds.
Claims use since Nov. 10, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 312,233. LAC-R-GLO PRODUCTS CO., Seattle, Wash. Filed Mar. 17, 1931.

Lac-R-Glo

For Transparent Refinishing Liquid in the Nature of Varnish to be Applied Over Lacquered or Other Finished Surfaces of Automobiles, Furniture, Woodwork and Metal and for Such a Liquid with Color Added.
Claims use since Sept. 3, 1930.

Ser. No. 312,234. LAC-R-GLO PRODUCTS CO., Seattle, Wash. Filed Mar. 17, 1931.

Lac-R-New

For Transparent Refinishing Liquid in the Nature of Varnish to be Applied over Lacquered or Other Finished Surfaces of Automobiles, Furniture, Woodwork and Metal and for Such a Liquid with Color Added.
Claims use since Jan. 19, 1931.

CLASS 17

Tobacco Products

Ser. No. 315,035. CORTEZ CIGAR CO., Savannah, Ga. Filed May 26, 1931.

KEY KLIPS

For Cigars.
Claims use since February, 1924.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 314,219. CHANDLER WELLS, Buffalo, N. Y. Filed May 5, 1931.

RAISANTOW

For Tow Frames for Automobiles.
Claims use since Apr. 4, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 283,333. MRS. GEORGE HERZOG, doing business as The Closet Shop, New York, N. Y. Filed May 1, 1929.

CLOSET SHOP
MRS.
GEORGE HERZOG
730 MADISON AVENUE
NEW YORK

The words "730 Madison Avenue, New York," appearing on said specimen labels are hereby disclaimed apart from the mark shown.
For Electric Lighting Fixtures, Both Wall and Standard Style.
Claims use since Apr. 12, 1927.

Ser. No. 310,798. CUTLER-HAMMER, INC., Milwaukee, Wis. Filed Feb. 6, 1931.

C-H

For Electrical Apparatus, Machines, and Supplies, Consisting of: Controllers for Dynamo-Electric Machines—To-Wit, Starting, Stopping and Speed Regulating Apparatus for Motors, and Voltage and Current Regulating Apparatus for Generators, and Like Control Apparatus for Rotary Converters; Current Breakers; Magnetic Brakes for Various Types of Machines, Lifting and Separating Magnets and Controls Therefor; Solenoids, Safety Switches, Meter Service and Entrance Switches; Float, Pressure and Other Special Switches; Insulating Bases and Supports for Switches, Automatic Valve Control Units, Solenoid-Operated Valves, Fuse Panels, Terminal Lugs; Wiring Fixtures and Conduit Fittings, Consisting of Switches, Switch Boxes and Covers, Attachment Plugs, Taps, Receptacles, Caps, Lamp Sockets, Shade Holders, Wall Plates, and Cord Connectors; Elevator Control Apparatus, Consisting of Limit Switches, Door Switches, Transfer Switches, and Floor Selector Switches; Speed Regulating and Other Current Control Resistors, Rheostats, Relays, Contactors, Switch Panels, Push Button Switches for Machine Tool Controllers; Motor Starters, Speed Controllers and Regulators Especially Adapted for Marine Service; Resistance Units for Space Heaters, Industrial Heaters, Ovens, and Immersion Water Heaters; Theatre and Spotlight Dimmers, Battery Chargers; Starters and Speed Regulators for Fire Pumps, Printing Presses, Paper Making Machines, Oil Well Drillers and Pumps; and Crane and Hoist Controls.
Claims use since May 2, 1918.

Ser. No. 311,242. LEYSE ALUMINUM COMPANY, Kewaunee, Wis. Filed Feb. 19, 1931.

PRISCILLA

For Electric Percolators.
Claims use since November, 1924.

Ser. No. 312,649. JABURG BROTHERS, INC., New York, N. Y. Filed Mar. 28, 1931.

JAY J BEE

For Electrical Machines and Apparatus Consisting of Broilers, Urns, Toasters, Water Heaters, Mixers, Grinders, Slicers, Ovens, Dough Rollers and Dividers, Peelers and Graters, Wrapping Machines for Bread and the Like, Blowers, Oven Illuminators, Electric Motors and Transformers.
Claims use since April, 1915.

Ser. No. 313,075. CUTLER-HAMMER, INC., Milwaukee, Wis. Filed Apr. 8, 1931.

STARTER

The word "Starter", the words "Across the Line" and the exclusive use of a label colored orange are disclaimed apart from the mark as shown in the drawing. The drawing is lined to indicate the colors blue and orange.
For Starting Switches for Electrical Motors.
Claims use since Oct. 15, 1925.

Ser. No. 313,328. THE CARBON PRODUCTS COMPANY, Lancaster, Ohio. Filed Apr. 14, 1931.

WINNER

For Dry Cells and Batteries, Comprising Cells and Batteries for Flashlights, Dry "A", "B", "C" Batteries for Radio; Dry Cells for Radio, Ignition and Telephones; Dry Cells of Multiple Types and Batteries of Dry Cells Connected Either in Series or Parallel.
Claims use since Sept. 12, 1928.

Ser. No. 314,660. SILVER-MARSHALL, INC., Chicago, Ill. Filed May 16, 1931.

BEARCAT

For Radio Receiving Sets, Kits for Radio Receiving Sets, Electric Pick-Ups for Phonographs, and Accessories and Parts, Consisting of Aerials, Battery Eliminators, Binding Posts, Chokes, Coils, Coil Sets, Condensers, Dials, Grid Leaks, Jacks, Loud Speakers, Panel Boards, Potentiometers, Radio Amplifying Units, Radio Rectifying Units, Rheostats, Shields, Transformers, Electron Tubes, Tube Sockets, Tuning Units, Choke Coils, and Wire and Cable for Radio Sets and Apparatus.
Claims use since Apr. 30, 1930.

Ser. No. 314,686. DELTA ELECTRIC COMPANY, Marion, Ind. Filed May 18, 1931.

MARIONETTE

For Electric Lamps.
Claims use since Apr. 11, 1931.

Ser. No. 314,833. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio, Chicago, Ill., Pittsburgh, Pa., New York, N. Y., Worcester, Mass., and Hoboken, N. J. Filed May 21, 1931.

AMERITE

For Insulated Wire and Cables and Particularly Rubber Covered Wire and Cables.
Claims use since Mar. 18, 1913.

Ser. No. 314,834. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass., and Hoboken, N. J. Filed May 21, 1931.

AMPARAK

For Insulated Wire and Cables, and Particularly Rubber Covered Wire and Cables.
Claims use since Mar. 27, 1914.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 294,371. WILSON-WESTERN SPORTING GOODS COMPANY, Chicago, Ill. Filed Jan. 3, 1930.

VogueSet

The word "Set" is disclaimed apart from the mark as shown.
For Golf Clubs.
Claims use since Dec. 13, 1929.

Ser. No. 310,544. STANLEY W. LAWTON, Miami, Fla. Filed Jan. 29, 1931.



Applicant disclaims the words "Golf Bowling" and the representation of the game as shown in the drawing.
For Miniature Ten-Pin Golf Bowling Game.
Claims use since Nov. 1, 1929.

Ser. No. 311,696. PHILLIPS & UPPERCU, New York, N. Y. Filed Mar. 3, 1931.



No claim is made to the representation of the game shown on the drawing, nor to the words "Trade Mark."
For Table-Board Games of Skill Played with Pieces and Having Guides for Effecting the Direction of Such Pieces.
Claims use since Jan. 1, 1929.

Ser. No. 314,237. GLOBE-UNION. MFG. CO., Milwaukee, Wis. Filed May 6, 1931.

GLOBE

For Golf Clubs, Roller Skates, and Ice Skates.
Claims use since Mar. 13, 1931.

Ser. No. 314,391. PADDY'S PUP CO., Los Angeles, Calif. Filed May 9, 1931.

PADDY'S PUP

For Toy Animals.
Claims use since Mar. 14, 1931.

Ser. No. 314,587. BERNHARD STERNAU, Islip Terrace, N. Y. Filed May 14, 1931.



For a Table Board Game Played with Pieces.
Claims use since Apr. 21, 1931.

Ser. No. 314,697. ARTHUR E. HUBBARD, Fort Worth, Tex. Filed May 18, 1931.

KLEEN-SHOT PAPERTEES

The word "Papertees" is claimed only as associated with the trade-mark shown.
For Golf Tees.
Claims use since Apr. 15, 1931.

Ser. No. 315,305. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed June 2, 1931.

NORKA

For Fishing Reels.
Claims use since Nov. 1, 1911.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 292,823. OIL WELL SUPPLY COMPANY, Pittsburgh, Pa., assignor to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Nov. 23, 1929.

"OILWELL"

EST'D. 1862

C O

TRADE MARK

No claim is made to the words "Trade Mark" and "Oil-well" apart from the mark as shown.
For Machinery and Tools Used in the Industry of Well Drilling and the Operation of Oil and Gas Wells—Namely, Oil-Well Rigs, Oil-Well Derricks, Portable Drilling-Machines, Portable Well-Pulling Machines, Drive-Well and Test-Boring Machines, Core-Drills, Outfits for Sinking Wells of Large Diameter Through Soft Formations, Steel Crown-Blocks, Sand-Reels, Steam-Engines, Gas-Engines; Boiler and Engine Fittings—Namely, Tube-Expanders, Flue-Cleaners, Steam-Whistles, Inspirators, and Injectors; Steam-Pumps, Rotary Pumps, Jet-Pumps, Slush-Pumps, Force-Pumps, Ejectors, Pitcher-Spout Pumps, Hydraulic Rams, Drilling and Finishing Tools for Cable Systems, Rotary-Well-Drilling Tools; Well Equipment—Namely, Elevators and Casing-Heads; Oil-Well Packers, Pumping Machinery and Equipment; Oil-Well Pipe Tools—Namely, Pipe-Benders, Pipe-Cutters, Pipe-Threading Machines, Stocks and Dies, Tongs, Wrenches, Pipe-Drills, and Pipe-Tapping Machines; Oil-Well Blacksmith-Tools, and Pulley-Blocks.
Claims use since 1911.

Ser. No. 300,368. THE SCOTT AND FETZER COMPANY, Cleveland, Ohio. Filed May 12, 1930.

SwēpAir

For Carpet Sweepers and Suction Cleaners.
Claims use since Apr. 4, 1930.

Ser. No. 310,177. KLAUER MANUFACTURING COMPANY, Dubuque, Iowa. Filed Jan. 20, 1931.

SNOGO

For Snow Plows.
Claims use since January, 1928.

Ser. No. 311,002. THE MCNEIL BOILER COMPANY, Akron, Ohio. Filed Feb. 12, 1931.

SURE — TRAC

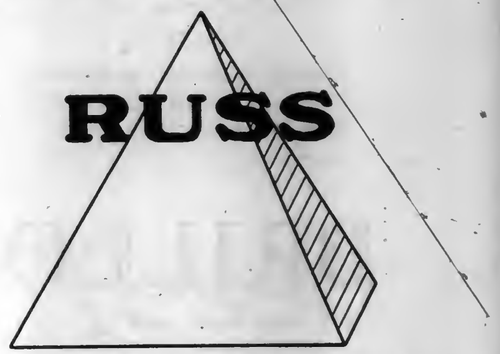
For Traction Devices for Vehicles—Namely, Vehicle Endless Track and Wheel Assembles and Parts Thereof.
Claims use since 1927.

Ser. No. 312,006. SHINJIRO HORII, Tokyo, Japan. Filed Mar. 11, 1931.

MYRIAGRAPH

For Multigraphs, Rotary Printing Machines Using Stencil Sheets, and Parts Thereof.
Claims use since Nov. 3, 1908.

Ser. No. 312,313. THE RUSS MANUFACTURING COMPANY, Cleveland, Ohio. Filed Mar. 19, 1931.



For Soda Fountains and Mechanical Carbonators for Use in Connection with Soda Fountains.
Claims use since December, 1929.

Ser. No. 314,212. W. J. SAVAGE COMPANY, INCORPORATED, Knoxville, Tenn. Filed May 5, 1931.



No claim is made to the words "Bag Closing Machine" apart from the mark as shown.

For Bag Closing Machines.

Applicant claims ownership of registered Trade-Mark No. 140,590, issued Mar. 12, 1921.

Claims use since Mar. 1, 1931.

Ser. No. 314,684. THE CLEVELAND GRAPHITE BRONZE COMPANY, Cleveland, Ohio. Filed May 18, 1931.

"SILVERLOY"

For Cylindrical and Semi-Cylindrical Bearings Used for Crank Shaft Bearings.

Claims use since May 1, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 314,945. BRILLO MANUFACTURING CO., Brooklyn, N. Y. Filed May 23, 1931.

BRILLO

For Pressing Pads.

Claims use since Dec. 2, 1929.

CLASS 25

Locks and Safes

Ser. No. 314,692. THE GENERAL FIREPROOFING COMPANY, Youngstown, Ohio. Filed May 18, 1931.



For Safes, Filing Safes, Note Cases, and Bond Boxes, Said Note Cases and Bond Boxes Being Provided with Covers and Locks.

Claims use since Apr. 29, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 309,790. THEATRE SERVICE CORPORATION, New York, N. Y. Filed Jan. 9, 1931.

A Screen Broadcast

Applicant disclaims any exclusive right to the word "Screen" apart from the mark shown on the drawing.

For Moving Picture Films.

Claims use since April, 1930.

Ser. No. 313,266. INTERNATIONAL PROJECTOR CORPORATION, New York, N. Y. Filed Apr. 10, 1931.

POCKETTE

No exclusive right to the use of the name "Pockette" as a describing term is claimed.

For Cameras and Parts Thereof and Accessories Thereto, Combinations of Picture Recording and Sound Recording Apparatus, Combinations of Picture Reproducing and Sound Reproducing Apparatus, Combinations of Sound Recording Apparatus and View Reproducing Apparatus, and Any and All Combinations of Sound Picture Recording and Reproducing Apparatus for Entertainment, Educational, and Industrial Purposes.

Claims use since Mar. 30, 1931.

Ser. No. 314,003. THE HAYS CORPORATION, Michigan City, Ind. Filed Apr. 30, 1931.



HAYS INSTRUMENTS

The Prescription for Your Combustion Ailments

The lining in the drawing designates the color red. No claim is made to the words "Hays Instruments" apart from the mark as shown.

For Combustion Instruments—Namely, Fine Gas Analyzers, CO_2 and Draft Recorders, Pointer Type Draft Gages, Vertical Tube Draft Gages, Manometers, Inclined Tube Draft Gages, Portable Draft Gages, Vernier Scale Draft Gages, Combustion Test Sets, and Gas Collectors.

Claims use since Apr. 1, 1931.

Ser. No. 314,258. VISUAL DEMONSTRATION SYSTEM, INC., Buffalo, N. Y. Filed May 6, 1931.

VISUALETTE

For Apparatus for Projecting Still Pictures from Films.

Claims use since Feb. 10, 1931.

Ser. No. 314,621. INTERNATIONAL NEWSREEL CORPORATION, New York, N. Y. Filed May 15, 1931.

THE GLOBE TROTTER

For Motion Picture Films.

Claims use since May 9, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 304,099. FOSTER-GRANT CO. INC., Leominster, Mass. Filed Aug. 1, 1930.

PYRALART

For Chokers, Pendants, Neck Chains, Brooches, Ear-Rings, Finger Rings, Bracelets, and Fobs.

Claims use since January, 1930.

Ser. No. 313,550. JACOB J. KAGAN, Los Angeles, Calif. Filed Apr. 20, 1931.



LOVE BIRD

For Finger Rings and Mountings Therefor.

Claims use since Dec. 4, 1930.

Ser. No. 313,552. MAHZEL LIMITED, London, England. Filed Apr. 20, 1931.

מזל

MAHZEL

The Hebrew characters on the drawing represent the letters "M. Z. L." and stand for the word "Mahzel" meaning "luck" or "good fortune."

For Articles of Jewelry for Personal Adornment—Namely, Finger Rings, Pins, Pendants, Bracelets, Necklets, Bangles, Tiaras, Watch Chains, and Cuff Links.

Claims use since September, 1927.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 313,716. MCKESSON & ROBBINS, INCORPORATED, Bridgeport and Fairfield, Conn. Filed Apr. 23, 1931.

Kesso

For Tooth Brushes.

Claims use since Feb. 15, 1931.

Ser. No. 315,074. S. B. WRIGHT, doing business as Wright Products, Chicago, Ill. Filed May 26, 1931.

DUPLEX

For Leather Sheep Lined Shoe Polisher.
Claims use since Feb. 7, 1928.

CLASS 31

Filters and Refrigerators

Ser. No. 315,076. DAY & NIGHT WATER HEATER CO., LTD., Monrovia, Calif. Filed May 26, 1931.



For Water Coolers.
Claims use since Oct. 1, 1929.

CLASS 32

Furniture and Upholstery

Ser. No. 314,101. R. H. DAMPER & Co., San Jose, Calif. Filed May 2, 1931.

DE-FY-ANT

For Rotating Shelf Structures to be Mounted in Cabinets.
Claims use since June 1, 1927.

Ser. No. 314,496. FRESH AIR CHAIR COMPANY, Rochester, N. Y. Filed May 13, 1931.

FRESH AIRE

For Household Chairs.
Claims use since Apr. 10, 1931.

Ser. No. 314,506. MARQUARDT COMPANY, Milwaukee, Wis. Filed May 13, 1931.

RED E BED

The lining of the letter "E" indicates the color red for the purposes of the drawing. The word "Bed" is disclaimed apart from the mark as shown.
For Davenports and Beds Including Folding Beds, Closet Beds, and Convertible Bed Davenports.
Claims use since May 4, 1931.

CLASS 33

Glassware

Ser. No. 315,161. WILLIAM SCHNORR, doing business as Indianapolis Medical Glass Works, Indianapolis, Ind. Filed May 28, 1931.



For Glass Ampoules.
Claims use since May 22, 1931.

CLASS 34

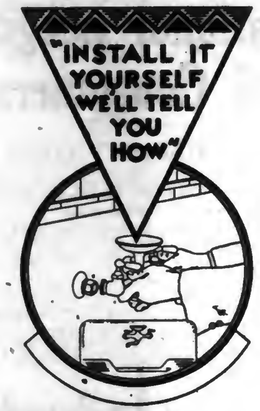
Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 294,097. UNITED STATES REGISTER CO., Battle Creek, Mich. Filed Dec. 26, 1929.

USCO

For Grilles or Registers for Ventilating or Heating Purposes.
Claims use since Oct. 1, 1929.

Ser. No. 314,035. BARR & CREELMAN CO., Rochester, N. Y. Filed May 1, 1931.



For the purposes of this registration no claim is made to the exclusive right to the use of the slogan contained within the triangular figure. The lining on the drawing is for shading and contrast purposes only.
For Boiler Expansion Tanks, Gasoline Blow Torches, Water Storage Heaters and Tanks, Range and Furnace Boilers, Boiler Stands, Gas Water Heaters, Laundry Stoves, Water Tank Heating Stoves, and Steam and Hot Water Radiators.
Claims use since April, 1930.

Ser. No. 314,249. ROBERTSON & CO., INC., Cleveland, Ohio. Filed May 6, 1931.

JUNIOR

For Kilns.
Claims use since Apr. 23, 1931.

CLASS 37

Paper and Stationery

Ser. No. 302,156. ENSO-GUTZEIT OSAKEYHTIÖ, Kotka, Finland. Filed June 4, 1930.



For Paper—Namely, Wrapping Paper, Manila Paper, Document, Print Paper, Book Paper, Cover Paper, Writing Paper, Bond Paper, Toilet-Paper, and Thin High-Finished Transparent Paper Suitable for Photograph Covers, Fly-Leaves, Fancy Box Covers, and Half-Tone Printing, Bristol Boards, Card-Boards, Pasteboards, and Mill Boards.
Claims use since Feb. 24, 1020.

Ser. No. 303,777. THE OHIO AND MICHIGAN PAPER COMPANY, Toledo, Ohio. Filed July 24, 1930.

Independent

For Wrapping Paper, Toilet Paper, Bond and Book Paper, and Correspondence and Mailing Envelopes.
Claims use since Feb. 1, 1930.

Ser. No. 304,100. FOSTER-GRANT CO. INC., Leominster, Mass. Filed Aug. 1, 1930.

PYRALART

For Bridge Pads, Bridge Pencil Cases, Photo Albums, Snap-Shot Albums, Autograph Albums, Memo Books, Address Books, Daily Notes Books, Engagement Books, Diaries, Telephone Indexes, Letter Openers, Desk Pads, Desk Memos, Desk Sets, and Pen Stands.
Claims use since January, 1930.

Ser. No. 312,007. SHINJIRO HORII, Tokyo, Japan. Filed Mar. 11, 1931.

MYRIASTENCIL

For Stencil Sheets.
Claims use since Apr. 27, 1922.

Ser. No. 314,780. JOSEPH A. VOGEL, Wilmington, Del. Filed May 19, 1931.

"RADIOPLAUSE"

For Cards and Folders Sold to the Trade and Public at Large as Such.
Claims use since May 14, 1931.

CLASS 38

Prints and Publications

Ser. No. 313,922. THE JOHNSTOWN TRIBUNE PUBLISHING COMPANY, Johnstown, Pa. Filed Apr. 28, 1931.

"The Goldfish Bowl"

Statesmen Passing in Review at Harrisburg Have Little More Privacy Than the Fabled Gilded Swimmers—What They Are Doing, and Why, and to Whom

Applicant disclaims the words "Statesmen Passing in Review at Harrisburg Have Little More Privacy Than the Fabled Gilded Swimmers—What They are Doing and Why and to Whom" apart from the mark shown in the drawing.
For Newspaper Column.
Claims use since Apr. 13, 1931.

Ser. No. 314,400. DETROIT DAILY MIRROR, INC., Detroit, Mich. Filed May 11, 1931.

DETROIT DAILY MIRROR

For Daily Newspaper.
Claims use since Apr. 6, 1931.

Ser. No. 314,446. J. MCKEEN CATTELL, doing business as The Science Press, New York, N. Y. Filed May 12, 1931.

SCIENTIFIC MONTHLY

For Magazine.
Claims use since Dec. 31, 1915.

Ser. No. 314,477. HIRAM L. WILLIAMSON, Springfield, Ill. Filed May 12, 1931.

National
PRINTER JOURNALIST
and
THE UNITED STATES PUBLISHER

For Periodical.
Claims use since Feb. 1, 1931.

Ser. No. 314,497. GERNSBACK PUBLICATIONS, INC., New York, N. Y. Filed May 13, 1931.

Interplanetary Stories

WONDER Stories Quarterly

No claim being made to the words "Interplanetary Stories" apart from the word shown.
For Quarterly Publication.
Claims use since Sept. 1, 1929.

Ser. No. 314,508. NATIONAL LEAGUE OF CONSUMERS, Michigan City, Ind. Filed May 13, 1931.

National League of Consumers

BUY DISCOUNT FIRST

The words "Buy Discount First" are disclaimed apart from the mark shown on the drawing.
For Merchants' Trade Discount in Book Form.
Claims use since Oct. 15, 1930.

Ser. No. 314,617. H. R. HOWELL PUBLISHING CO., INC., New York, N. Y. Filed May 15, 1931.

Beauty Industry
THE SALESPAPER OF BEAUTY GOODS

The words "The Salespaper of Beauty Goods" are disclaimed apart from the mark as shown.
For Periodical.
Claims use since May 6, 1931.

Ser. No. 314,763. INTERNATIONAL NEWSREEL CORPORATION, New York, N. Y. Filed May 19, 1931.

THE GLOBE TROTTER

For Newspaper Section.
Claims use since May 9, 1931.

Ser. No. 314,849. HELIOTONE REPRODUCTION SERVICE, Chicago, Ill. Filed May 21, 1931.

HELIOTONE

For Reproductions in the Form of Prints.
Claims use since May 15, 1931.

Ser. No. 314,893. CENTRAL PRESS ASSOCIATION, INC., New York, N. Y. Filed May 22, 1931.

DID YOU KNOW?

For Newspaper Section.
Claims use since Mar. 16, 1931.

Ser. No. 314,958. GEORGE P. METZGER, New York, N. Y. Filed May 23, 1931.

ANAGRAPHS

For Newspaper and/or Magazine Columns.
Claims use since Apr. 9, 1931.

Ser. No. 314,977. AUTOGIRO COMPANY OF AMERICA, Wilmington, Del., and Philadelphia, Pa. Filed May 25, 1931.

AUTOGIRO NEWS

For Monthly Publication.
Claims use since Jan. 26, 1931.

Ser. No. 315,029. BURROUGHS, INCORPORATED, Los Angeles, Calif. Filed May 26, 1931.

The Community Shopper

For Publication Issued Weekly.
Claims use since May 7, 1931.

Ser. No. 315,270. THE LETTER BOOK CO., Chicago, Ill. Filed June 1, 1931.

The Letter-Book

For Publication Issued from Time to Time.
Claims use since Oct. 4, 1930.

Ser. No. 315,378. THE MCNAUGHT SYNDICATE, INC., New York, N. Y. Filed June 3, 1931.

DIXIE DUGAN

For Comic Strips Printed and Published Periodically in Various Newspapers.
Claims use since Oct. 21, 1929.

Ser. No. 315,379. THE MCNAUGHT SYNDICATE, INC., New York, N. Y. Filed June 3, 1931.

SHOW GIRL

For Comic Strips Printed and Published Periodically in Various Newspapers.
Claims use since Oct. 21, 1929.

CLASS 39
Clothing

Ser. No. 295,582. TIMPANELLI SHOE COMPANY, INC., New York, N. Y. Filed Feb. 4, 1930.

Panelli

For Boots and Shoes of Leather, Rubber, or Fabric or Combinations Thereof.
Claims use since May 1, 1928.

Ser. No. 299,438. GIBBERMAN BROS. & CO., Chicago, Ill. Filed Apr. 25, 1930.

Sincerity Clothes

No claim is made to the word "Clothes" apart from the mark as shown in the drawing.
For Men's and Boys' Coats, Vests, Trousers, and Overcoats.
Claims use since October, 1905.

Ser. No. 306,064. THE O-C MANUFACTURING COMPANY, Jersey City, N. J. Filed Sept. 25, 1930.

"OLYMPIC CHAMPION"

For Bathing Suit Belts, Athletic Flannel and Elastic Headbands, Bathing Girdles, Polo Shirts, Sweat Pants, Sweat Shirts, and Athletic Shirts and Running Pants for Men, Women, and Children.
Claims use since March, 1912.

Ser. No. 306,914. E. T. WRIGHT & COMPANY, INC., Rockland, Mass. Filed Oct. 18, 1930.

Wright ARCH PRESERVER SHOE

No claim is made to the exclusive use of the word "Shoe" apart from the mark as shown in the drawing.
For Men's and Boys' Leather and Canvas Boots and Shoes.
Claims use since Apr. 15, 1930.

Ser. No. 307,986. PANTHER RUBBER MANUFACTURING COMPANY, Stoughton, Mass. Filed Nov. 17, 1930.

SUPERIOR Q QUALITY

No claim is made to the exclusive right to the phrase "Superior Quality" apart from the mark shown.
For Rubber Heels.
Claims use since Feb. 1, 1928.

Ser. No. 310,641. FOREMOST SPORTSWEAR INC., New York, N. Y. Filed Feb. 2, 1931.

Foremost Sportswear

The descriptive word "Sportswear" is disclaimed apart from the other features of the mark shown in the drawing.
For Women's, Ladies', Misses', and Children's Dresses, Skirts, Blouses, and Suits.
Claims use since Nov. 26, 1928.

Ser. No. 311,402. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Feb. 24, 1931.

Windtex

For Ladies', Men's, Girls' and Boys' Raincoats of Rubber and Fabric.
Claims use since August, 1928.

Ser. No. 311,768. AJAX HOSIERY MILLS, Phoenixville, Pa. Filed Mar. 5, 1931.

Lacette

For Stockings.
Claims use since Feb. 21, 1931.

Ser. No. 311,825. COMMONWEALTH SHOE & LEATHER COMPANY, Whitman, Mass. Filed Mar. 6, 1931.

Mansfield

No claim is made to the word "Mansfield" except in association with the mark as shown in the drawing.
For Boots and Shoes of Leather, Fabric, or Combinations Thereof.
Claims use since Jan. 19, 1931.

Ser. No. 313,348. HARRY MACKENZIE, Jamaica Plain (Boston), Mass. Filed Apr. 14, 1931.

BUNNYALLS

For Children's Rompers and Play Suits.
Claims use since Apr. 10, 1931.

Ser. No. 313,705. BEST & CO., INC., New York, N. Y. Filed Apr. 23, 1931. Under section 5b of the act of 1905 as amended in 1920.

Best & Co.

For Men's, Women's, and Children's Hats, Caps, Shoes of Leather, Rubber, and Fabric, Slippers, Puttees, Gloves of Kid, Leather, and/or Fabric, Leggings, Overgaiters, Spats, Sweaters, Stockings, Socks, Underwear of Knitted, Netted, and Textile Fabrics, Bathing Suits, Bath Robes, Pajamas, Nightgowns, Riding Habits, Apparel Belts, Collars, Cuffs, Neckties, Scarfs, and Mufflers; Women's and Children's Brassières, Stepins of the Underdrawer type, Chemises, Bloomers, Slips, Petticoats, Vests, Vestees, Dresses, Shirt Waists, Under and Outer Skirts, Corsets, Negligees, Aprons, Rompers, Wrappers, Outer Coats of Fabric and/or Fur or Any Combinations Thereof, Neck Pieces of Fabric or Fur and any Combinations Thereof, Suits, Garters, and Garter Belts and Hosiery Supporters; Men's and Boys' Overcoats, Suits, Trousers, Vests, Suspenders, Dress Shirts, Work Shirts, Jumpers, Overalls, Union Suits, Smoking Jackets, and Lounging Robes.
Claims use since Jan. 1, 1923.

Ser. No. 314,142. H. D. BOB COMPANY INC., New York, N. Y. Filed May 4, 1931.

Pennleigh

For Men's and Boys' Dress, Negligee, and Work Shirts, Blouses, Windbreakers, Underwear, Pajamas, Nightshirts, Overalls, Made of Cotton, Flannel, Wool, Linen, Silk, Rayon, and Other Textiles or Combination of Any.
Claims use since July 1, 1925.

Ser. No. 314,232. DEGNER SHOE MFG. COMPANY, Cudahy, Wis. Filed May 6, 1931.

Happy Juniors

For Boots and Shoes of Leather, Fabric, or Combinations Thereof.
Claims use since Apr. 15, 1931.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 314,265. JACK APPELBAUM, New York, N. Y. Filed May 7, 1931.

Sally's Studio

For Fur and Cloth Coats for Men and Women and Fur Neck Pieces.
Claims use since July 5, 1928.

Ser. No. 314,275. DAVID & BLUM INC., New York, N. Y. Filed May 7, 1931.

DOESUPRÊME
Finest French Doeskin

Applicant makes no claim to the right to the exclusive use of the expression "Finest French Doeskin" apart from the mark shown in the accompanying drawing.
For Leather Gloves.
Claims use since Dec. 1, 1930.

Ser. No. 314,281. THE FEDERAL KNITTING MILLS COMPANY, Cleveland, Ohio. Filed May 7, 1931.

ZEPHRAY

For Women's and Children's Knitted and Woven Apparel Comprising Bathing Suits, Sweaters, Jersey Shirts, Hats, Berets, Turbans, Dresses, and Hosiery.
Claims use since Mar. 1, 1929.

Ser. No. 314,308. BATES THOMPSON, INC., New York, N. Y. Filed May 7, 1931.

TOODLE DO

For Men's, Boys', and Women's Felt and Straw Hats.
Claims use since Feb. 1, 1931.

Ser. No. 314,578. PERLMAN BROTHERS, Savannah, Ga. Filed May 14, 1931.

YACHUM
YACHUM

For Shoes Made of Leather or Partly of Leather, Ladies' and Children's Dresses, and Men's and Boys' Suits.
Claims use since July 1, 1928.

Ser. No. 314,581. SEYMOUR TROY & COMPANY, INC., Brooklyn, N. Y. Filed May 14, 1931.

Sétry

For Ladies' Shoes Made from Leather, Rubber, or Fabric or Combinations of Those Materials.
Claims use since May 4, 1931.

Ser. No. 314,622. MAY HOSIERY MILLS, Nashville, Tenn. Filed May 15, 1931.

MAYRIB

For Hosiery.
Claims use since Apr. 28, 1931.

Ser. No. 314,629. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed May 15, 1931.

Duride

For Inner Soles of Rubber and Fibre.
Claims use since Mar. 24, 1931.

Ser. No. 314,640. DANIEL BROTHERS COMPANY, Atlanta, Ga. Filed May 16, 1931.

Bannington

For Men's and Boys' Clothing—Viz., Coats, Pants, Vests and Overcoats.
Claims use since Jan. 1, 1927.

Ser. No. 314,682. BROWN SHOE COMPANY, INC., St. Louis, Mo. Filed May 18, 1931.

THRIFTY THREE

For Shoes Made of Leather, Cloth, Canvas, or Combinations Thereof.
Claims use since Dec. 1, 1930.

Ser. No. 314,712. OLYMPIA KNITTING MILLS, INC., Olympia, Wash. Filed May 18, 1931.

MINNIE MOUSE

For Swimming Suits and Sweaters.
Claims use since May 27, 1930.

Ser. No. 314,718. RICHMOND GLOVE CORPORATION, Richmond, Ind. Filed May 18, 1931.

FREE WHEELING

For Fabric and Leather Gloves.
Claims use since Apr. 25, 1931.

Ser. No. 314,790. JOSEPH H. COHEN & SONS, VANITY CLOTHES, INC., New York, N. Y. Filed May 20, 1931.

ACE DEUCE

For Young Men's Suits Consisting of Trousers and Coat and Vest.
Claims use since Mar. 20, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 304,097. FOSTER-GRANT CO., INC., Leominster, Mass. Filed Aug. 1, 1930.

PYRALART

For Back Combs, Side Combs, Dressing Combs, Bobby Combs, Casque Combs, Spanish Combs, Waver Combs, Wavers, Hair Pins, Bob Hair Pins, Braid Pins, Barrettes; Toilet Sets, Consisting of Brush, Comb, and Mirror; and Infant Sets for Children, Consisting of Brush, Comb, and Mirror; all Goods Not Made of Precious Metal.
Claims use since January, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 313,377. LYONS SILK MFG. CO. INC., New York, N. Y. Filed Apr. 15, 1931.

Lyons
TEE MAR RAYON CREPE

Applicant disclaims the right to the exclusive use of the words "Rayon Crepe" separately and apart from the rest of the mark as shown in the drawing.
For Rayon Crepe in the Piece.
Claims use since Jan. 15, 1930.

Ser. No. 314,383. TERHUNE, YEABANCE & WOLFF, INC., New York, N. Y. Filed May 9, 1931.

Twistone

For Woolen Fabrics in the Piece.
Claims use since April, 1930.

Ser. No. 314,402. DUPLAN SILK CORPORATION, New York, N. Y. Filed May 11, 1931.

CREPE TEKNEEK

No rights are asserted to the exclusive use of the word "Crepe" apart from the mark as shown in the drawing.
For Textile Fabrics—Namely, Rayon Piece Goods.
Claims use since Apr. 7, 1931.

Ser. No. 314,665. UNITED ELASTIC CORPORATION, Easthampton, Mass. Filed May 16, 1931.

TWILLETTE

For Elastic Webbing.
Claims use since June 1, 1911.

Ser. No. 314,761. HOWLETT & HOCKMEYER CO., INC., New York, N. Y. Filed May 19, 1931.

ROI-DE-ROY

For Textile Fabrics—Namely, Corduroys and Velveteens, All in the Piece.
Claims use since May 4, 1931.

CLASS 43

Thread and Yarn

Ser. No. 314,220. PUTNAM SPINNERS INC., Putnam, R. I. Filed May 5, 1931.

RADIARN
SPUN RAYON

No claim is made to the words "Spun Rayon" apart from the mark as shown in the drawing.
For Rayon Yarn.
Claims use since Apr. 13, 1931.

Ser. No. 315,127. JOSEPH BENN CORPORATION, Greystone, R. I. Filed May 28, 1931.

Bengora

For Yarns.
Claims use since Apr. 11, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 309,018. THE B & P COMPANY, Cleveland, Ohio. Filed Dec. 13, 1930.



The rectangular border and the broken line or border beneath the two portraits are lined to indicate red in the drawing. The portraits appearing on the drawing are fanciful. No claim is made to the words "Wrinkle Eradicator" apart from the mark as shown on the drawing.
For Adhesive Sheet or Wafer to be Applied to the Wrinkled Portions of the Face.
Claims use since Aug. 1, 1899.

Ser. No. 311,531. THE MARVEL COMPANY, New Haven, Conn. Filed Feb. 27, 1931.

MARVEL WHIRLING FOUNTAIN

The words "Whirling Fountain" are disclaimed apart from the mark shown in the drawing.
For Fountain and Douche Syringes.
Claims use since July 25, 1930.

Ser. No. 313,772. DAVIS & GECK, INC., Brooklyn, N. Y. Filed Apr. 25, 1931.

KAL-DERMIC

The words "Dermic" is disclaimed apart from the other features of the mark as shown on the drawing.
For Surgical Skin Sutures for Human Use.
Claims use since Jan. 5, 1931.

Ser. No. 313,781. W. T. GRANT COMPANY, Lynn, Mass., and New York, N. Y. Filed Apr. 25, 1931.

QUALITY SIXES

For the purpose of this registration only exclusive use of the word "Quality" is claimed only in association with the other features of the mark as shown.
For Sanitary Napkins.
Claims use since Feb. 15, 1931.

Ser. No. 314,240. KEEN MANUFACTURING CORPORATION, New York, N. Y. Filed May 6, 1931.

Kera-Tonic

No claim is made to the word "Tonic."
For Pads for Use in Permanent Hair Waving.
Claims use since Feb. 18, 1931.

Ser. No. 314,882. THE WILSON RUBBER COMPANY, Canton, Ohio. Filed May 21, 1931.

WILTEX

For Rubber Gloves for the Use of Physicians, Surgeons, Dentists, Laboratory Technicians, Hospital Employees, and the Like.
Claims use since May 5, 1931.

Ser. No. 314,963. ROBERT J. PIERCE, INC., New York, N. Y. Filed May 23, 1931.

Optimus

For Prophylactic Rubber, Tissue, and Membranous Articles for the Prevention of Contagious Diseases.
Claims use since July 1, 1920.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 283,764. SODA LUNCH EQUIPMENT CO., INC., New York, N. Y. Filed May 9, 1929.

NO. 7

For Ginger Ale.
Claims use since Apr. 8, 1929.

Ser. No. 310,666. TAYLOR-LONG COMPANY, Winston-Salem, N. C. Filed Feb. 2, 1931.

GRAPE-JU

Applicant disclaims the exclusive right to the use of the word "Grape" except in association with the other features of the mark.

For Non-Alcoholic, Maltless, Carbonated Beverages and the Ingredients for Making the Same.

Claims use since Dec. 3, 1930.

Ser. No. 314,398. IRVING E. COX, Los Angeles, Calif. Filed May 11, 1931.

PASSION-O

For Nonalcoholic, Maltless Beverages Sold as a Soft Drink.

Claims use since Mar. 25, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 295,068. COLUMBIA RIVER PACKERS ASSOCIATION, INC., Astoria, Oreg. Filed Jan. 22, 1930.

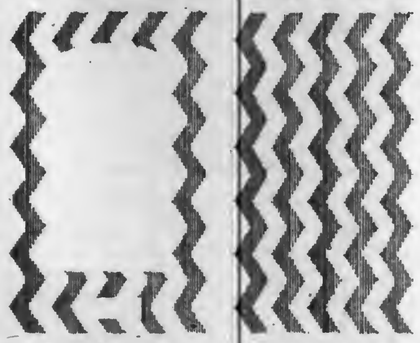


The drawing is lined for shading purposes only. No claim is made under the statute for the words "Brand", "Spring Catch", "Columbia River", and "Salmon" appearing on the drawing.

For Canned Salmon.

Claims use since 1896.

Ser. No. 297,189. GOLDEN EAGLE MILLING CO., Petaluma, Calif. Filed Mar. 12, 1930.



The lining shown on the drawing is for the color red, but no claim is made to any particular color.

For Dairy and Poultry Foods.

Claims use since May 15, 1923.

Ser. No. 300,072. MANNINGS, INC., doing business as Mannings, San Francisco, Calif. Filed May 7, 1930.

Kohi-stan

The trade-mark is a translation of a Hindu noun meaning a rolling, mountainous or hilly country.

For Tea.

Claims use since Apr. 8, 1930.

Ser. No. 301,066. HELEN SCHY-MAN-SKI & SONS, doing business as S-M-S Herb-Nu Remedies, Chicago, Ill. Filed May 22, 1930.

SMS "COF-E-NOT"

For Imitation Coffee.

Claims use since Feb. 20, 1905.

Ser. No. 309,169. S. JEROLLEMAN, New Orleans, La. Filed Dec. 19, 1930.



The picture of the girl shown on the drawing is fanciful.

For Self-Rising Flour.

Claims use since Jan. 1, 1915.

Ser. No. 311,724. WILLIAM B. FUNDIS, doing business as Sallie Sweets, Pittsburgh, Pa. Filed Mar. 4, 1931.



Applicant does not make claim for the exclusive use of the word "Sweets" except in the form and arrangement depicted in the drawing.

For Candy.

Claims use since Feb. 4, 1931.

Ser. No. 311,859. ATLANTA FLOUR & GRAIN COMPANY, INCORPORATED, doing business as Puritan Mills, Atlanta, Ga. Filed Mar. 5, 1931.



No claim is made to the representation of the bag. All the wording except "U-Like-It" and "Puritan Mills" is disclaimed apart from the mark as shown on the drawing.

For Plain and Self Rising Flour.

Claims use since Aug. 13, 1928.

Ser. No. 313,603. FRANCIS H. LEGGETT & COMPANY, New York, N. Y. Filed Apr. 21, 1931.

Premier

For Sandwich Spreads.

Claims use since Jan. 20, 1931.

Ser. No. 313,610. RILEY BROTHERS (HALIFAX) LIMITED, Halifax, England. Filed Apr. 21, 1931.



The lines shown on the drawing are for shading only and are not intended to indicate any particular color. The words "Rum & Butter Flavoured Toffee" are hereby disclaimed apart from the trade-mark as a whole.

For Rum and Butter Flavoured Toffee.

Claims use since Oct. 30, 1930.

Ser. No. 313,683. THE SPEAR FOLKS, Portland, Me. Filed Apr. 22, 1931.



No claim is made to the name "Jonesport" apart from the mark as shown. The portrait shown on the drawing is fanciful and is not that of any living person.

For Candy.

Claims use since Mar. 28, 1931.

Ser. No. 313,789. MCLAREN-CONSOLIDATED CONE CORPORATION, Dayton, Ohio. Filed Apr. 25, 1931.



The representation of an ice cream cone and the words "Cone" and "Cones" are disclaimed except as a part of the mark shown. The drawing is lined to indicate the colors brown and buff, but color is not claimed as a part of the mark.

For Bakery Products—Namely, Ice Cream Cones.

Claims use since Jan. 1, 1931.

Ser. No. 313,898. MRS. GERTRUDE S. FURRY, Valdosta, Ga., and Lakeland, Fla. Filed Apr. 27, 1931.



No claim is made for the words "Florida's Best" apart from the mark shown in the drawing. The trade-mark is a portrait of Mrs. Thos. A. Jones of Savannah, Ga.
For Fresh Oranges and Grapefruit.
Claims use since Nov. 1, 1930.

Ser. No. 313,985. ERVIN E. WAULTERS, doing business as Monument Nut Co., Ballston, Va. Filed Apr. 29, 1931.

BIG 5

For Shelled Nuts and Prepared Sandwiches.
Claims use since July 15, 1930.

Ser. No. 314,130. SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y. Filed May 2, 1931.

MOHAWK DUTCH

No claim is made to the word "Dutch" apart from the mark as shown.
For Malt Syrup.
Claims use since Apr. 27, 1931.

Ser. No. 314,259. WILKINSON, GADDIS & Co., Newark, N. J. Filed May 6, 1931.

GLENSIDE

For Vinegar, Salad Oil, Tomato Catsup, Cane and Maple Syrup, Prepared Mustard, Canned Pears, Corn Starch, Dill Pickles, Apple Butter, and Canned Vegetables.
Claims use since June 15, 1910.

Ser. No. 314,297. ROBERT LEE RIGGS, Daytona Beach, Fla. Filed May 7, 1931.

FLORIPURE

For Canned Juices of Grapefruits and Oranges for Food Purposes.
Claims use since Jan. 10, 1930.

Ser. No. 314,435. THEO. STIVERS MILLING COMPANY, Rome, Ga. Filed May 11, 1931.

AMOS 'N ANDY

For Wheat Flour.
Claims use since Apr. 7, 1931.

Ser. No. 314,493. DELBERT FERGUSON, Des Moines, Iowa. Filed May 13, 1931.

HALF MOON

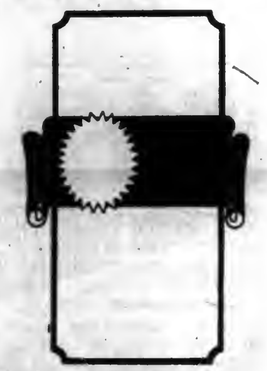
For Frozen Confections.
Claims use since Oct. 15, 1930.

Ser. No. 314,510. THE NUNNALLY COMPANY, Atlanta, Ga. Filed May 13, 1931.

Freshidor

For All Kinds of Candies.
Claims use since May 6, 1931.

Ser. No. 314,518. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed May 13, 1931.



For Coffee.
Claims use since 1902.

Ser. No. 314,662. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed May 16, 1931. Under 10-year proviso.

CHASE AND SANBORN'S

For Coffee and Tea.
Claims use since November, 1878.

Ser. No. 314,666. VITAMONT SALES COMPANY, Butte, Mont. Filed May 16, 1931.

VITAMONT



For Cat Food.
Claims use since Dec. 1, 1928.

Ser. No. 314,667. VITAMONT SALES COMPANY, Butte, Mont. Filed May 16, 1931.

VITAMONT



For Fox Food.
Claims use since Dec. 17, 1928.

Ser. No. 314,668. VITAMONT SALES COMPANY, Butte, Mont. Filed May 16, 1931.

Vitamont



For Fish Food.
Claims use since Mar. 13, 1931.

Ser. No. 314,711. ELSA G. MUELLER, doing business as The Mint-Julep Chewing Gum Company, Washington, D. C. Filed May 18, 1931.



The words "Candy Tablets" and "It's Green" are disclaimed except in association with the other features of the mark as shown.
For Candy Tablets.
Claims use since May 8, 1931.

Ser. No. 315,024. FEDERAL MILL, INC., Lockport, N. Y. Filed May 23, 1931.



The lining on the drawing indicating the colors gold, red and green.
For Wheat Flour.
Claims use since December, 1908.

Ser. No. 315,079. J. N. ADAM & CO., Buffalo, N. Y. Filed May 27, 1931. Under section 5b of the act of 1905 as amended in 1920.

J.N.ADAM & CO.

Applicant is owner of Certificates 254,646 (Class 42) and 255,761 (Class 39), both registered under the 10-year proviso.
For Candy.
Claims use since Nov. 28, 1929.

Ser. No. 315,147. JOHNSON EDUCATOR FOOD COMPANY, Cambridge, Mass. Filed May 28, 1931.

THINSIES

For Biscuits.
Claims use since Jan. 22, 1931.

Ser. No. 315,148. JOHNSON EDUCATOR FOOD COMPANY, Cambridge, Mass. Filed May 28, 1931.

SLENDERETTE

For Biscuits.
Claims use since May 13, 1931.

Ser. No. 315,224. SWIFT AND COMPANY, Chicago, Ill. Filed May 29, 1931.

Chubs

For Sausage.
Claims use since May 1, 1930.

Ser. No. 315,267. C. D. KENNY COMPANY, Baltimore, Md. Filed June 1, 1931.

CUP & SAUCER

For Coffee.
Claims use since July 20, 1927.

Ser. No. 315,283. SCHUTTER JOHNSON CANDY COMPANY INC., Chicago, Ill. Filed June 1, 1931.



For Candy.
Claims use since April, 1930.

CLASS 48

Malt Beverages and Liquors

Ser. No. 309,562. HAMPDEN BREWING COMPANY, Chicopee, Mass. Filed Jan. 2, 1931.



No claim is made to the words "Hampden" and "Stock Ale," except as associated with the other features of the mark. The drawing is lined for gold and red.
For Malt Beverages Containing Less Than ½ of 1 Per Cent Alcohol by Volume.
Claims use since 1918.

Ser. No. 314,500. THE GREATER NEW YORK BREWERY, INC., New York, N. Y. Filed May 18, 1931.





All wording appearing on the drawing are disclaimed with the exception of the name of applicant and the word "New Yorker."
For Malt Cereal Beverage, Containing Less Than ½ of 1 Per Cent Alcohol by Volume.
Claims use since Apr. 6, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 312,825. CROWN CAP MANUFACTURING COMPANY, INC., Dover, Del., and Brooklyn, N. Y. Filed Mar. 19, 1931.

Always Uniform



Always Dependable

Applicant disclaims the words "Always Uniform," "Always Dependable," and "Crowns" and the representation of the bottle cap, apart from the mark as shown.
For Bottles, Caps and Stoppers.
Claims use since Nov. 11, 1926.

Ser. No. 312,546. CLARK-CUTLER-MCDERMOTT COMPANY, Franklin, Mass. Filed Mar. 26, 1931.

THISTLE - DOWN

For Needled Felt.
Claims use since Mar. 12, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JULY 7, 1931

284,532. COAL-TAR DYESTUFFS AND INTERMEDIATES USED IN THE PREPARATION OF DYESTUFFS, ZINC CHLORIDE, ALUMINUM CHLORIDE, CREOSOTE CARBONATE, ZINC OXIDE, ANTIMONY SALT, CYCLOHEXANOL TETRAHYDRONAPHTHALENE, CYCLOHEXANOL ACETATE, METHYL CYCLOHEXANOL ACETATE, DECAHYDRONAPHTHALENE, CYCLOHEXANONE, ISOPROPYL ALCOHOL, METHYLCYCLOHEXANOL, AND SODIUM SILICATE. THE NEWPORT COMPANY, Carrollville, Wis.
Filed February 28, 1930. Serial No. 296,667. PUBLISHED APRIL 14, 1931. Class 6.

284,533. WASHING AND DRYING APPARATUS FOR FILMS AND PRINTS, SAFE-LIGHT LAMPS, SHUTTERS, ETC. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed March 13, 1930. Serial No. 297,247. PUBLISHED APRIL 28, 1931. Class 26.

284,534. FOOD PRODUCT MADE FROM COTTONSEED AFTER THE OIL HAS BEEN REMOVED, SUITABLE FOR USE AS A MEAT SUBSTITUTE. DAVID WESSON, Montclair, N. J., assignor to The Southern Cotton Oil Company, New York, N. Y., a Corporation of New Jersey.
Filed March 13, 1930. Serial No. 297,289. PUBLISHED APRIL 21, 1931. Class 46.

284,535. PIPE-WRAPPING MACHINES AND PARTS THEREFOR. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed March 22, 1930. Serial No. 297,762. PUBLISHED APRIL 28, 1931. Class 23.

284,536. PERFUMES AND COSMETICS. C. H. SELICK, INC., New York, N. Y.
Filed March 25, 1930. Serial No. 297,878. PUBLISHED JUNE 3, 1930. Class 6.

284,537. ELECTROTYPES, ELECTROPLATES, PRINTING PLATES, AND MATRICES. BOYCE AND RANKIN, Gastonia, N. C.
Filed March 28, 1930. Serial No. 298,008. PUBLISHED APRIL 21, 1931. Class 50.

284,538. NEWSPAPERS AND PERIODICALS. BOYCE AND RANKIN, Gastonia, N. C.
Filed March 28, 1930. Serial No. 298,009. PUBLISHED APRIL 21, 1931. Class 38.

284,539. PAINTS, VARNISHES, AND LACQUERS IN PASTE AND READY-MIXED FORM. RA-VAR CORPORATION, New York, N. Y.
Filed April 1, 1930. Serial No. 298,255. PUBLISHED OCTOBER 7, 1930. Class 16.

284,540. BLUING AND NEUTRALIZING COMPOUND. H. KOHNSTAMM & Co., INC., New York, N. Y.
Filed April 17, 1930. Serial No. 298,999. PUBLISHED JULY 22, 1930. Class 6.

284,541. GRADUATED GLASS CYLINDERS AND TEST TUBES, BURETTES, PIPETTES, ETC. WILLIAM GEYER, doing business as Scientific Glass Apparatus Co., Bloomfield, N. J.
Filed April 18, 1930. Serial No. 299,056. PUBLISHED APRIL 28, 1931. Class 26.

284,542. SAFETY GLASS IN BULK. RÖHM & HAAS AKTIENGESELLSCHAFT, Darmstadt, Germany.
Filed April 18, 1930. Serial No. 299,084. PUBLISHED APRIL 21, 1931. Class 33.

284,543. PIPE AND FITTINGS, SCREW MACHINE PRODUCTS. MUELLER BRASS CO., Port Huron, Mich.
Filed April 21, 1930. Serial No. 299,212. PUBLISHED APRIL 28, 1931. Class 18.

284,544. CANNED FRUITS, VEGETABLES, FISH, ETC. JOSEPH DOMKO, doing business as Joseph Domko & Co., Chicago, Ill.
Filed April 24, 1930. Serial No. 299,378. PUBLISHED AUGUST 5, 1930. Class 46.

284,545. CHOCOLATE COATINGS, CHOCOLATE CANDY, HOT CHOCOLATE POWDER, AND CHOCOLATE. AMBROSIA CHOCOLATE COMPANY, Milwaukee, Wis.
Filed April 26, 1930. Serial No. 299,481. PUBLISHED JULY 22, 1930. Class 46.

284,546. DISSOLVENTS, LACTIC-ACID LACTATES, ETC. BYK-GULDENWERKE CHEMISCHE FABRIK AKTIENGESELLSCHAFT, Berlin, Germany.
Filed April 26, 1930. Serial No. 299,485. PUBLISHED AUGUST 12, 1930. Class 6.

284,547. WOOLEN PIECE GOODS. CHARLES M. DE LAND, New York, N. Y.
Filed April 28, 1930. Serial No. 299,560. PUBLISHED NOVEMBER 4, 1930. Class 42.

284,548. MONTHLY PUBLICATION. AMERICAN MANAGEMENT ASSOCIATION, New York, N. Y.
Filed April 30, 1930. Serial No. 299,666. PUBLISHED APRIL 21, 1931. Class 38.

284,549. GENERAL TONIC. CYRIL F. GITTINOS, doing business as Cytola Co., Baltimore, Md.
Filed May 9, 1930. Serial No. 300,187. PUBLISHED APRIL 14, 1931. Class 6.

284,550. PREPARATION FOR TREATING RHEUMATISM. JOSEPH SZABO, Cleveland, Ohio.
Filed May 16, 1930. Serial No. 300,687. PUBLISHED APRIL 7, 1931. Class 6.

284,551. NONALCOHOLIC SYRUP—NAMELY, MALT SYRUP. RELIABLE DISTRIBUTING COMPANY INCORPORATED, Baltimore, Md.
Filed May 17, 1930. Serial No. 300,755. PUBLISHED SEPTEMBER 9, 1930. Class 46.

284,552. PERFUME, TOILET WATER, TALCUM POWDER, FACE POWDER, AND DUSTING POWDER. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,430. PUBLISHED APRIL 7, 1931. Class 6.

284,553. PERFUME. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,432. PUBLISHED APRIL 7, 1931. Class 6.

284,554. PERFUME. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,433. PUBLISHED APRIL 21, 1931. Class 6.

284,555. PERFUME, TOILET WATER, FACE POWDER, TALCUM POWDER, DUSTING POWDER, AND SACHET POWDER. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,434. PUBLISHED APRIL 7, 1931. Class 6.

284,556. PERFUME, TOILET WATER, FACE POWDER, TALCUM POWDER, SACHET POWDER, AND DUSTING POWDER. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,435. PUBLISHED APRIL 7, 1931. Class 6.

284,557. CAGE-CLAMPING BIRD-FOOD HOLDERS. H & B SALES COMPANY, Cleveland, Ohio.
Filed February 25, 1931. Serial No. 311,438. PUBLISHED APRIL 21, 1931. Class 13.

284,558. LIQUID PREPARATION INDICATED IN THE TREATMENT OF ACNE IN ALL ITS FORMS, BLOTCHES, PIMPLES, ECZEMA OF CERTAIN CHARACTER, AND SKIN IRRITATIONS. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y.
Filed February 25, 1931. Serial No. 311,424. PUBLISHED APRIL 7, 1931. Class 6.

284,559. PERFUME, TOILET WATER, TALCUM POWDER, FACE POWDER, AND DUSTING POWDER. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,427. PUBLISHED APRIL 21, 1931. Class 6.

284,560. PHARMACEUTICAL PREPARATION INDICATED IN THE TREATMENT OF GONORRHOEA. NORDMARK-WERKE AKTIENGESELLSCHAFT FÜR ANGEWANDTE CHEMIE, Hamburg, Germany.
Filed December 30, 1930. Serial No. 309,481. PUBLISHED APRIL 14, 1931. Class 6.

284,561. MACHINE FOR MAKING SOLIDIFIED CARBON DIOXIDE. STANDARD UTILITIES CORPORATION OF AMERICA, New York, N. Y.
Filed February 24, 1931. Serial No. 311,401. PUBLISHED APRIL 21, 1931. Class 23.

284,562. PUBLICATION ISSUED PERIODICALLY AT LEAST THREE TIMES A YEAR. AVIATION REGISTER, Chicago, Ill.
Filed February 25, 1931. Serial No. 311,417. PUBLISHED APRIL 21, 1931. Class 38.

284,563. MILK AND CHOCOLATE POWDER FOR MAKING A BEVERAGE. DAIRY BY-PRODUCTS, INC., Chicago, Ill.
Filed February 25, 1931. Serial No. 311,422. PUBLISHED APRIL 28, 1931. Class 46.

284,564. HYPODERMIC KITS. CONSOLIDATED PATENTEES, INC., New York, N. Y.
Filed December 26, 1930. Serial No. 309,334. PUBLISHED APRIL 21, 1931. Class 44.

284,565. GAS HEATERS FOR ROOMS, ETC., AUTOMATIC GAS-HEATED HOT-WATER SYSTEMS. F. O. SCHOEDINGER, Columbus, Ohio.
Filed December 26, 1930. Serial No. 309,358. PUBLISHED APRIL 28, 1931. Class 34.

284,566. OIL BURNERS. EDWARD L. TWINING, doing business as Heat-Engineering-Corp., Des Moines, Iowa.
Filed December 29, 1930. Serial No. 309,448. PUBLISHED APRIL 28, 1931. Class 34.

284,567. FRESH, DRIED, DESICCATED, AND/OR CANNED MUSHROOMS. MUSHROOM GROWERS CO-OPERATIVE ASSOCIATION, Kennett Square, Pa.
Filed December 27, 1930. Serial No. 309,452. PUBLISHED APRIL 28, 1931. Class 46.

284,568. CHEMICAL PREPARATION FOR SOFTENING AND IMPROVING LEATHER ARTICLES. JOSEPH SHORMAN, New York, N. Y.
Filed December 16, 1930. Serial No. 309,037. PUBLISHED APRIL 21, 1931. Class 4.

284,569. PHARMACEUTICAL PREPARATIONS AND MEDICINES. DEXTER LABORATORIES, New York, N. Y.
Filed December 16, 1930. Serial No. 309,048. PUBLISHED APRIL 7, 1931. Class 6.

284,570. GAS, OIL, COAL, AND WOOD BURNING FURNACES; SAWDUST, HOGGED FUEL, AND OIL BURNERS, STOKERS, AND THEIR PARTS; VENTILATING APPARATUS—NAMELY, FANS, AIR WASHERS, FILTERS, AND HUMIDIFIERS. MORRIS B. LEVIN, doing business as Levin Furnace Company, Portland, Oreg.
Filed December 18, 1930. Serial No. 309,136. PUBLISHED APRIL 28, 1931. Class 34.

284,571. RADIO TUBE TESTERS. KINNEY BROS. & SIPPRELL, Everett, Wash.
Filed December 22, 1930. Serial No. 309,245. PUBLISHED APRIL 28, 1931. Class 26.

284,572. FILTERING APPARATUS FOR PURIFYING LIQUIDS IN PARTICULAR WATER. N. V. STANDARD WATER MAATSCHAPPIJ, Amsterdam, Netherlands.
Filed March 4, 1931. Serial No. 311,747. PUBLISHED APRIL 21, 1931. Class 31.

284,573. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS USED IN MAKING THE SAME. ISLAND ROAD BOTTLING CO., Philadelphia, Pa.
Filed March 5, 1931. Serial No. 311,783. PUBLISHED APRIL 28, 1931. Class 45.

284,574. CHOCOLATES AND CANDIES. W. F. SCHRAFFT & SONS CORPORATION, Boston, Mass.
Filed March 5, 1931. Serial No. 311,791. PUBLISHED APRIL 21, 1931. Class 46.

284,575. HAND AND PORTABLE CONTAINERS, CANS, AND SIMILAR MEANS ADAPTED FOR DISTRIBUTING, USING, OR APPLYING INSECTICIDES. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed March 5, 1931. Serial No. 311,797. PUBLISHED APRIL 28, 1931. Class 23.

284,576. NONRUSTING CORROSIVE-RESISTING FREE-MACHINING STEELS IN THE FORM OF BILLETS, BARS, SHAPES, AND FORGINGS. BETHLEHEM STEEL COMPANY, Bethlehem, Pa.
Filed March 6, 1931. Serial No. 311,815. PUBLISHED APRIL 21, 1931. Class 14.

284,577. STEEL AND IRON WIRE. BRITISH ROPES LIMITED, London, England.
Filed March 6, 1931. Serial No. 311,818. PUBLISHED APRIL 21, 1931. Class 14.

284,578. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS FOR MAKING SAME. CHOCOLATE PRODUCTS COMPANY, Chicago, Ill.
Filed March 6, 1931. Serial No. 311,821. PUBLISHED APRIL 28, 1931. Class 45.

284,579. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 6, 1931. Serial No. 311,931. PUBLISHED APRIL 28, 1931. Class 42.

284,580. LETTER-OPENING DEVICES IN THE NATURE OF METAL KNIVES AND IN THE NATURE OF SMALL MACHINES AND OTHER TOOLS. REAL LETTER OPENER CORPORATION, Chicago, Ill.
Filed March 6, 1931. Serial No. 311,847. PUBLISHED APRIL 28, 1931. Class 23.

284,581. SMOKERS' PIPES, CIGAR AND CIGARETTE HOLDERS. REISS-PREMIER PIPE CO., West New York, N. J.
Filed March 6, 1931. Serial No. 311,848. PUBLISHED APRIL 28, 1931. Class 8.

284,582. VEHICLE LUGGAGE CARRIERS. KENNEDY MANUFACTURING COMPANY, Van Wert, Ohio.
Filed March 2, 1931. Serial No. 311,611. PUBLISHED APRIL 28, 1931. Class 19.

284,583. BLEACHING OR STRIPPING AGENT OR DYE REMOVER. PERRY E. NORRIS, doing business as Norris Products, Chicago, Ill.
Filed March 2, 1931. Serial No. 311,621. PUBLISHED APRIL 28, 1931. Class 6.

284,584. TOOTHBRUSHES. HARRY R. PRIEST, doing business as Krekt Way Specialty Co., Loudonville, Ohio.
Filed March 2, 1931. Serial No. 311,623. PUBLISHED APRIL 28, 1931. Class 29.

284,585. ARTIFICIAL AND SYNTHETICAL PERFUMES, ESSENTIAL OILS. SOCIÉTÉ ANONYME M. NAEF & CIE., Geneva, Switzerland.
Filed March 2, 1931. Serial No. 311,627. PUBLISHED APRIL 14, 1931. Class 6.

284,586. PREPARED MUSTARD. ATLANTIS SALES CORPORATION, Rochester, N. Y.
Filed March 3, 1931. Serial No. 311,642. PUBLISHED APRIL 28, 1931. Class 46.

284,587. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,658. PUBLISHED APRIL 28, 1931. Class 42.

284,588. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,659. PUBLISHED APRIL 28, 1931. Class 42.

284,589. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,660. PUBLISHED APRIL 28, 1931. Class 42.

284,590. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,661. PUBLISHED APRIL 28, 1931. Class 42.

284,591. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,662. PUBLISHED APRIL 28, 1931. Class 42.

284,592. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,663. PUBLISHED APRIL 28, 1931. Class 42.

284,593. OLIVE OIL. SOCIÉTÉ EN NOM COLLECTIF MAJANO, DEPO ET BARRAL, Nice, France.
Filed February 28, 1931. Serial No. 311,574. PUBLISHED APRIL 28, 1931. Class 46.

284,594. MALTLESS, NONALCOHOLIC BEVERAGE SOLD AS A SOFT DRINK. MARIO ALEMAGNA, Milan, Italy.
Filed February 27, 1931. Serial No. 311,506. PUBLISHED APRIL 21, 1931. Class 45.

284,595. GOLF BALLS. NATIONAL BELLAS HESS COMPANY, INC., New York, N. Y.
Filed February 25, 1931. Serial No. 311,441. PUBLISHED APRIL 28, 1931. Class 22.

284,596. SOAP, SOAP FLAKES, AND SAND SOAP. PRESERVENE PROPRIETARY LIMITED, Melbourne, Victoria, Australia.
Filed February 25, 1931. Serial No. 311,445. PUBLISHED APRIL 28, 1931. Class 4.

284,597. PILE FABRICS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed February 25, 1931. Serial No. 311,448. PUBLISHED APRIL 21, 1931. Class 42.

284,598. WOOLEN PIECE GOODS. WHITTENTON MANUFACTURING COMPANY, Boston, Mass.
Filed February 25, 1931. Serial No. 311,456. PUBLISHED APRIL 21, 1931. Class 42.

284,599. SIGNS MADE BY A PRINTER OR LITHOGRAPHER. PATTERSON DISPLAYS INC., Cleveland, Ohio.
Filed February 25, 1931. Serial No. 311,463. PUBLISHED APRIL 21, 1931. Class 38.

284,600. PAPER HOUSEHOLD APRONS. THE DIAPEX CORPORATION, New York, N. Y.
Filed February 26, 1931. Serial No. 311,473. PUBLISHED APRIL 21, 1931. Class 37.

284,601. SANITARY PROTECTIVE PAPER SHEETS AND SHEETING. THE DIAPEX CORPORATION, New York, N. Y.
Filed February 26, 1931. Serial No. 311,474. PUBLISHED APRIL 21, 1931. Class 37.

284,602. MACHINES FOR MENDING RUNS IN FABRICS SUCH AS HOSIERY AND THE LIKE. THE KNU-KNIT MANUFACTURING CORPORATION, Chicago, Ill.
Filed February 26, 1931. Serial No. 311,480. PUBLISHED APRIL 21, 1931. Class 23.

284,603. PREPARATION FOR USE IN THE TREATMENT OF LEG SORES, ULCERS, AND MILK LEG. STEVEN NOSIS, Massillon, Ohio.
Filed February 26, 1931. Serial No. 311,483. PUBLISHED APRIL 14, 1931. Class 6.

284,604. PAPER SHROUDS. ALEXANDER H. STRAUS, New York, N. Y.
Filed February 26, 1931. Serial No. 311,494. PUBLISHED APRIL 21, 1931. Class 37.

284,605. PHOTOGRAPHIC PRINTS. HARRY N. SHEPPARD, Seattle, Wash.
Filed February 26, 1931. Serial No. 311,501. PUBLISHED APRIL 21, 1931. Class 38.

284,606. HAND AGRICULTURAL IMPLEMENTS—NAMELY, CUTTERS, HARVESTERS, CHISELS, CLEANERS, CULTIVATORS, EDGERS, FORKS, HOES, MATTOCKS, HOOKS, SCRAPERS, SPADES, TROWELS, WEEDERS, DRAGS, SHOVELS, SCOOPS, AND RAKES. THE UNION FORK AND HOE COMPANY, Columbus, Ohio.
Filed February 26, 1931. Serial No. 311,495. PUBLISHED APRIL 28, 1931. Class 23.

284,607. COTTON SHEETS. UTICA STEAM & MOHAWK VALLEY COTTON MILLS, Utica, N. Y.
Filed February 26, 1931. Serial No. 311,498. PUBLISHED APRIL 21, 1931. Class 42.

284,608. SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed February 27, 1931. Serial No. 311,511. PUBLISHED APRIL 28, 1931. Class 4.

284,609. TOILET SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed February 27, 1931. Serial No. 311,514. PUBLISHED APRIL 21, 1931. Class 4.

284,610. LOCAL ANÆSTHETIC. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed February 28, 1931. Serial No. 311,575. PUBLISHED APRIL 14, 1931. Class 6.

284,611. BICYCLES AND TRICYCLES. GARFIELD A. ROBERDS, doing business as The Speedler Co., Olathe, Kans.
Filed February 28, 1931. Serial No. 311,581. PUBLISHED APRIL 21, 1931. Class 19.

284,612. GLARE SHIELDS FOR AUTOMOBILES, TRUCKS, AND THE LIKE. COUCH MANUFACTURING COMPANY, Shinnston, W. Va.
Filed February 27, 1931. Serial No. 311,517. PUBLISHED APRIL 28, 1931. Class 19.

284,613. GLAUBER SALT, SULPHUR AND SULPHUR COMPOUNDS, AMMONIA SULPHATE, AND BENZOL. BÁNSKÁ- A HUTNÍ SPOLEČNOST, Brunn, Czechoslovakia.
Filed January 7, 1931. Serial No. 309,709. PUBLISHED APRIL 7, 1931. Class 6.

284,614. BARBED WIRE AND WIRE TACKS. BÁNSKÁ-A HUTNÍ SPOLEČNOST, Brunn, Czechoslovakia.
Filed January 7, 1931. Serial No. 309,710. PUBLISHED APRIL 28, 1931. Class 13.

284,615. GLAUBER SALT, SULPHUR AND SULPHUR COMPOUNDS, AMMONIA SULPHATE, AND BENZOL. BÁNSKÁ- A HUTNÍ SPOLEČNOST, Brunn, Czechoslovakia.
Filed January 7, 1931. Serial No. 309,712. PUBLISHED APRIL 7, 1931. Class 6.

284,616. MEDICINE FOR RHEUMATISM AND GENERAL TONIC. CLAYOLA MEDICINE CO., INC., Manchester, Ky.
Filed January 8, 1931. Serial No. 309,724. PUBLISHED APRIL 7, 1931. Class 6.

284,617. OIL-WELL MACHINERY AND TOOLS—NAMELY, ROTARY BOOSTER BRAKES, CORING ASSEMBLIES, AND AUTOMATIC CATHEADS, AND STRUCTURAL PARTS THEREOF. CRUM-BRAINARD CO. LTD., Whittier, Calif.
Filed January 8, 1931. Serial No. 309,726. PUBLISHED APRIL 28, 1931. Class 23.

284,618. HEATING RADIATOR SHIELDS. TUTTLE & BAILEY MANUFACTURING COMPANY, New York, N. Y.
Filed January 8, 1931. Serial No. 309,753. PUBLISHED APRIL 21, 1931. Class 34.

284,619. FISH STEAKS, FROZEN FISH FILLETS, AND FRESH FISH FILLETS. ATLANTIC COAST FISHERIES CORPORATION OF NEW YORK, New York, N. Y.
Filed January 10, 1931. Serial No. 309,800. PUBLISHED APRIL 28, 1931. Class 46.

284,620. VAGINAL PESSARIES, AND CERTAIN NAMED SURGICAL RUBBER ARTICLES. THE AKMA SALES CO., Boston, Mass.
Filed January 12, 1931. Serial No. 309,839. PUBLISHED APRIL 28, 1931. Class 44.

284,621. VAGINAL PESSARIES. THE AKMA SALES CO., Boston, Mass.
Filed January 12, 1931. Serial No. 309,840. PUBLISHED APRIL 28, 1931. Class 44.

284,622. WEEKLY MAGAZINE. THE KIWANIS CLUB OF MARIETTA, OHIO, Marietta, Ohio.
Filed January 12, 1931. Serial No. 309,862. PUBLISHED APRIL 21, 1931. Class 38.

284,623. MEDICINAL PREPARATIONS HAVING ANÆSTHETIC PROPERTIES. SANDOZ CHEMICAL WORKS, INC., New York, N. Y.
Filed January 14, 1931. Serial No. 309,944. PUBLISHED APRIL 7, 1931. Class 6.

284,624. FRESH, CANDIED, AND SALTED PECANS. SOUTHERN PECAN SHELLING CO., San Antonio, Tex.
Filed January 15, 1931. Serial No. 309,996. PUBLISHED APRIL 21, 1931. Class 46.

284,625. MAPS AND ATLASES. NATIONAL MAP COMPANY, Indianapolis, Ind.
Filed January 17, 1931. Serial No. 310,061. PUBLISHED APRIL 21, 1931. Class 38.

284,626. ORGANIC CHEMICAL OF MEDICINAL VALUE—NAMELY, A MEDICINAL GERMICIDE OR DISINFECTANT FOR INTERNAL OR EXTERNAL USE. OSTEN CHEMICAL CORPORATION, New York, N. Y.
Filed January 17, 1931. Serial No. 310,063. PUBLISHED APRIL 14, 1931. Class 6.

284,627. PAINTERS' BRUSHES. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.
Filed January 6, 1931. Serial No. 309,660. PUBLISHED APRIL 21, 1931. Class 29.

284,628. MACHINES AND HAND TORCHES FOR AUTOGENOUS CUTTING, WELDING, AND SOLDERING OF METALS. "GRIESOGEN" GRIESHEIMER AUTOGEN VERKAUFS-GESELLSCHAFT M. B. H., Frankfork-on-the-Main-Griesheim, Germany.
Filed January 7, 1931. Serial No. 309,685. PUBLISHED APRIL 21, 1931. Class 34.

284,629. BARBED WIRES AND WIRE TACKS. BANSKÁ HUTNÍ SPOLEČNOST, Brunn, Czechoslovakia.
Filed January 7, 1931. Serial No. 309,708. PUBLISHED APRIL 28, 1931. Class 13.

284,630. RADIATOR CEMENT FOR MOTOR VEHICLES. FRED J. HAGERLING, St. Louis, Mo.
Filed January 2, 1931. Serial No. 309,561. PUBLISHED APRIL 7, 1931. Class 6.

284,631. TYPESETTING AND TYPE-CASTING APPARATUS AND MECHANICAL CONTROL UNITS, PERFORATORS, REPERFORATORS, PARTS AND TAPES FOR THE OPERATION THEREOF. TELETYPE CORPORATION, Chicago, Ill., assignor to Teletypesetter Corporation, Chicago, Ill.
Filed January 2, 1931. Serial No. 309,576. PUBLISHED APRIL 21, 1931. Class 23.

284,632. CANNED SEA FOODS—NAMELY, CANNED OYSTERS AND CANNED SHRIMP. L. P. MAGGIONI & CO., Savannah, Ga.
Filed January 6, 1931. Serial No. 309,646. PUBLISHED APRIL 28, 1931. Class 46.

284,633. WOODEN PACKING CASES USED IN THE TRANSPORTATION OF BREAKABLE VESSELS CONTAINING CORROSIVE CHEMICALS. THE GRASSELLI CHEMICAL COMPANY, Cleveland, Ohio.
Filed June 6, 1930. Serial No. 302,219. PUBLISHED APRIL 21, 1931. Class 2.

284,634. SNOWPLOWS. MAINE STEEL PRODUCTS CO., South Portland, Me.
Filed June 11, 1930. Serial No. 302,324. PUBLISHED APRIL 21, 1931. Class 23.

284,635. ALUMINUM ACETATE SUSPENSION FOR EXTERNAL TREATMENT TO REDUCE SWELLING AND INFLAMMATIONS. BENJAMIN EIDINGER, doing business as Germadol Laboratories, New York, N. Y.
Filed June 21, 1930. Serial No. 302,677. PUBLISHED APRIL 7, 1931. Class 6.

284,636. FAN BELTS AND TRANSMISSION BELTING. RABESTOS-MANHATTAN, INCORPORATED, Passaic, N. J., and Bridgeport, Conn.
Filed July 10, 1930. Serial No. 303,344. PUBLISHED SEPTEMBER 30, 1930. Class 35.

284,637. WHEAT FLOUR, TEA, AND COFFEE. SANDS, TAYLOR & WOOD COMPANY, Somerville, Mass.
Filed July 10, 1930. Serial No. 303,348. PUBLISHED OCTOBER 7, 1930. Class 46.

284,638. MEDICINAL PREPARATION. LOUIS I. WEINER, doing business as Tablax Company, New York, N. Y.
Filed July 28, 1930. Serial No. 303,988. PUBLISHED APRIL 28, 1931. Class 6.

284,639. FURNITURE CUSHIONS FOR SEATS, BACKS, ARMS, ETC. NACHMAN SPRING-FILLED COPPORATION, Chicago, Ill.
Filed August 4, 1930. Serial No. 304,209. PUBLISHED APRIL 28, 1931. Class 32.

284,640. ANIMAL MEDICINES. POLK MILLER PRODUCTS CORPORATION, Richmond, Va.
Filed November 17, 1926. Serial No. 240,214. PUBLISHED MARCH 15, 1927. Class 6.

284,641. FROZEN FOOD PRODUCTS—NAMELY, LAMB, PORK, VEAL, BEEF, AND SAUSAGE, FISH, SHELLFISH, VEGETABLES, AND FRUITS. FROSTED FOODS COMPANY, INC., New York, N. Y.
Filed May 22, 1930. Serial No. 301,023. PUBLISHED APRIL 21, 1931. Class 46.

284,642. PREPARATION IN TABLET FORM FOR RELIEVING PAIN, SUCH AS IN THE CASE OF HEADACHES AND COLDS. HERMAN B. LAYMON, doing business as World's Products Co., Spencer, Ind.
Filed May 24, 1930. Serial No. 301,179. PUBLISHED OCTOBER 14, 1930. Class 6.

284,643. WOOL AND COTTON PIECE GOODS. ROTH & NATHAN INC., New York, N. Y.
Filed May 27, 1930. Serial No. 301,364. PUBLISHED APRIL 28, 1931. Class 42.

284,644. FRESH CITRUS FRUITS. MCDERMONT AND WALL, INC., Riverside, Calif.
Filed May 31, 1930. Serial No. 301,977. PUBLISHED DECEMBER 2, 1930. Class 46.

284,645. RAZORS AND SHEARS. E. MORRIS MFG. CO., Detroit, Mich.
Filed May 31, 1930. Serial No. 301,991. PUBLISHED APRIL 21, 1931. Class 23.

284,646. FINISHING CREAMS AND VANISHING CREAMS HAVING ASTRINGENT CHARACTERISTICS. BEREZA PRODUCTS LTD., New York, N. Y.
Filed June 5, 1930. Serial No. 302,175. PUBLISHED APRIL 7, 1931. Class 6.

284,647. FLOUR, BUTTER, COFFEE, ETC. MCCLINTOCK-TRUNKEY COMPANY, doing business as Federated Stores, Spokane, Wash.
Filed September 29, 1930. Serial No. 306,192. PUBLISHED APRIL 28, 1931. Class 46.

284,648. FRESH CITRUS FRUITS. CROWN JEWEL GROVES, Redlands, Calif.
Filed June 13, 1928. Serial No. 267,937. PUBLISHED MAY 27, 1930. Class 46.

284,649. DISINFECTANT, STOCK DIP, INSECTICIDE, AND A LIQUID SOLUTION TO BE USED AS A GERMICIDE FOR SPRAYING TREES, PLANTS, AND THE LIKE. ALBERT WITTICH, doing business as Albert Wittich and Co., St. Louis, Mo.
Filed August 25, 1928. Serial No. 271,584. PUBLISHED APRIL 7, 1931. Class 6.

284,650. GUM FILMS IN BULK. RÖHM & HAAS AKTIENGESELLSCHAFT, Darmstadt, Germany.
Filed January 30, 1929. Serial No. 278,662. PUBLISHED APRIL 21, 1931. Class 50.

284,651. STATIONARY AND MARINE INTERNAL-COMBUSTION ENGINES. GRAY MARINE MOTOR COMPANY, Detroit, Mich.
Filed February 25, 1929. Serial No. 279,843. PUBLISHED APRIL 21, 1931. Class 23.

284,652. APPARATUS USED IN THE TREATMENT OF SINUSITIS, CATARRH, AND DEAFNESS. THOMAS A. POOLE, M. D., Washington, D. C.
Filed March 7, 1929. Serial No. 280,418. PUBLISHED APRIL 28, 1931. Class 44.

284,653. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. DORALDINA, INC., Hollywood, Calif.
Filed May 8, 1929. Serial No. 283,439. PUBLISHED APRIL 29, 1930. Class 6.

284,654. MEDICINAL PREPARATION FOR THE TREATMENT OF HEAD COLDS, NEURALGIA, ACHES, PAINS, HEADACHES, AND FOR USE AS A THROAT GARGLE. CLYDE E. PARK, doing business as Park Chemical Company, Ottumwa, Iowa.
Filed September 10, 1930. Serial No. 305,537. PUBLISHED DECEMBER 2, 1930. Class 6.

284,655. STEEL BOTTLES, PAILS, AND BUCKETS; WELDING, SOLDERING, STORAGE, AND SHIPPING TANKS, METAL CASKS, AND DRUMS. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Duesseldorf, Germany.
Filed September 10, 1930. Serial No. 305,550. PUBLISHED APRIL 28, 1931. Class 2.

284,656. PORTABLE PRESSURE LUBRICATING EQUIPMENT. THE ARO EQUIPMENT CORPORATION, Bryan, Ohio.
Filed September 12, 1930. Serial No. 305,600. PUBLISHED APRIL 28, 1931. Class 28.

284,657. SPECIFIC FOR AXILLARY ODOUR. KABUSHIKI-KAISHA TAKEDA CHOBEI SHOTEN, Osaka, Japan.
Filed September 12, 1930. Serial No. 305,616. PUBLISHED APRIL 28, 1931. Class 6.

284,658. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed February 17, 1931. Serial No. 311,140. PUBLISHED APRIL 21, 1931. Class 42.

284,659. PERFUMES. PARFUMERIE RIGAUD, INC., New York, N. Y.
Filed February 17, 1931. Serial No. 311,155. PUBLISHED APRIL 7, 1931. Class 6.

284,660. TALCUM POWDER, FACE POWDER, LIP ROUGE, BRILLIANTINE, FACE LOTION, PERFUME, TOILET WATER, FACE CREAMS, BATH SALTS, AND SACHETS. SOCIÉTÉ ANONYME JEAN PATOU, Paris, France.
Filed February 17, 1931. Serial No. 311,163. PUBLISHED APRIL 7, 1931. Class 6.

284,661. UNFINISHED LINERS OR LINER PLATES OF CAST METAL FOR BALL MILLS, GRINDERS, DISINTEGRATORS, PULVERIZERS, CRUSHERS, AND THE LIKE. UNION IRON WORKS, Spokane, Wash.
Filed February 17, 1931. Serial No. 311,164. PUBLISHED APRIL 28, 1931. Class 14.

284,662. CHEMICAL COMPOSITIONS SUITABLE FOR REMOVING ICE OR PREVENTING ITS FORMATION, SAID COMPOSITIONS CONSISTING PRINCIPALLY OF ANHYDROUS MAGNESIUM CHLORIDE. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed February 18, 1931. Serial No. 311,212. PUBLISHED APRIL 28, 1931. Class 6.

284,663. CHOCOLATE MALT FOOD DRINK. THE BURGER BROS. COMPANY, Cincinnati, Ohio.
Filed February 19, 1931. Serial No. 311,226. PUBLISHED APRIL 28, 1931. Class 46.

284,664. CERTAIN PAINT PRODUCTS. CALBAR PAINT & VARNISH CO., Philadelphia, Pa.
Filed February 19, 1931. Serial No. 311,228. PUBLISHED APRIL 21, 1931. Class 16.

284,665. COD-LIVER-EXTRACT PREPARATIONS. HENRY K. WAMPOLE AND COMPANY, INCORPORATED, Philadelphia, Pa.
Filed February 19, 1931. Serial No. 311,250. PUBLISHED APRIL 21, 1931. Class 6.

284,666. PREPARATIONS OF COD LIVER. HENRY K. WAMPOLE AND COMPANY, INCORPORATED, Philadelphia, Pa.
Filed February 19, 1931. Serial No. 311,251. PUBLISHED APRIL 21, 1931. Class 6.

284,667. ORGANIC CHEMICAL OF MEDICINAL VALUE—NAMELY, A MEDICINAL GERMICIDE OR DISINFECTANT FOR INTERNAL OR EXTERNAL USE. OSTEN CHEMICAL CORPORATION, New York, N. Y.
Filed January 17, 1931. Serial No. 310,064. PUBLISHED APRIL 7, 1931. Class 6.

284,668. ORGANIC CHEMICAL OF MEDICINAL VALUE—NAMELY, A MEDICINAL GERMICIDE OR DISINFECTANT FOR INTERNAL OR EXTERNAL USE. OSTEN CHEMICAL CORPORATION, New York, N. Y.
Filed January 17, 1931. Serial No. 310,065. PUBLISHED APRIL 7, 1931. Class 6.

284,669. SKIN LOTION, SKIN BLEACH, AND HAIR TONIC. P. W. BYRD, PH. C. RESEARCH LABORATORIES, San Jose, Calif.
Filed January 20, 1931. Serial No. 310,160. PUBLISHED APRIL 21, 1931. Class 6.

284,670. CHEMICAL PREPARATION FOR PRESERVING ROPE, CORD, TWINE, AND FISH NETS AND AS A WATERPROOFING MATERIAL FOR ARTICLES MADE OF CORD, FABRICS, AND FIBRE. THE H. A. MONTGOMERY CO. INC., Detroit, Mich.
Filed January 20, 1931. Serial No. 310,182. PUBLISHED APRIL 14, 1931. Class 6.

284,671. COMPOSITION FOR PROMOTING THE GROWTH OF THE HAIR. ELIZABETH PARR, Baltimore, Md.
Filed January 20, 1931. Serial No. 310,199. PUBLISHED APRIL 21, 1931. Class 6.

284,672. PETROLEUM JELLY. CHESEBROUGH MANUFACTURING COMPANY, CONSOLIDATED, New York, N. Y.
Filed January 21, 1931. Serial No. 310,210. PUBLISHED APRIL 7, 1931. Class 6.

284,673. PHOTOGRAPHIC PRINTS. PHILADELPHIA BLUE PRINT CO., Philadelphia, Pa.
Filed January 22, 1931. Serial No. 310,259. PUBLISHED APRIL 21, 1931. Class 38.

284,674. MEDICINAL COMPOUND IN CAPSULE FORM FOR USE IN THE TREATMENT OF CERTAIN TYPES OF NUTRITIONAL ANEMIA AND TO STIMULATE HEMOGLOBIN PRODUCTION. MYRON L. WALKER, doing business as Myron L. Walker & Co., New York, N. Y., assignor to Myron L. Walker Co. Inc., New Rochelle, N. Y., a Corporation of New York.
Filed January 22, 1931. Serial No. 310,271. PUBLISHED APRIL 28, 1931. Class 6.

284,675. MEDICINAL COMPOUND IN CAPSULE FORM FOR USE IN THE TREATMENT OF CERTAIN TYPES OF NUTRITIONAL ANEMIA AND TO STIMULATE HEMOGLOBIN PRODUCTION. MYRON L. WALKER, doing business as Myron L. Walker & Co., New York, N. Y., assignor to Myron L. Walker Co. Inc., New Rochelle, N. Y., a Corporation of New York.
Filed January 22, 1931. Serial No. 310,272. PUBLISHED APRIL 28, 1931. Class 6.

284,676. FIRE BUCKETS. LOUIS E. CARLOUGH, doing business as The Safety Fire Extinguisher Company, New York, N. Y.
Filed January 23, 1931. Serial No. 310,284. PUBLISHED APRIL 21, 1931. Class 2.

284,677. LIQUID FOR DESTROYING WEEDS. WEED DESTROYER CO., INC., Aberdeen, Wash.
Filed January 23, 1931. Serial No. 310,318. PUBLISHED APRIL 14, 1931. Class 6.

284,678. LIQUID USED FOR DESTROYING WEEDS. WEED DESTROYER CO., INC., Aberdeen, Wash.
Filed January 23, 1931. Serial No. 310,319. PUBLISHED APRIL 14, 1931. Class 6.

284,679. MALT CEREAL BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT OF ALCOHOL BY VOLUME. JOSEPH DI SANTO, doing business as Di Santo & Company, Duluth, Minn.
Filed March 10, 1931. Serial No. 311,955. PUBLISHED APRIL 28, 1931. Class 48.

284,680. CANNED FRUITS, CANNED VEGETABLES, CANNED SUCCOTASH, CANNED FRUITS FOR SALADS. THE FULLER CANNERIES COMPANY, doing business as Fuller's, Cleveland, Ohio.
Filed March 10, 1931. Serial No. 311,959. PUBLISHED APRIL 28, 1931. Class 46.

284,681. WRITING FLUID. HY-TON INK COMPANY, Tulsa, Okla.
Filed March 10, 1931. Serial No. 311,962. PUBLISHED APRIL 21, 1931. Class 11.

284,682. SAWS, KNIVES, ETC. TOLAND & SON, INC., Baltimore, Md.
Filed March 10, 1931. Serial No. 311,985. PUBLISHED APRIL 21, 1931. Class 23.

284,683. WIRE ROPE. THE UPSON-WALTON COMPANY, Cleveland, Ohio.
Filed March 7, 1931. Serial No. 311,896. PUBLISHED APRIL 28, 1931. Class 7.

284,684. PLASTIC PAINT. HAMLIN CEMENT PRODUCTS, INC., Garden City, N. Y.
Filed March 9, 1931. Serial No. 311,916. PUBLISHED APRIL 21, 1931. Class 16.

284,685. COFFEE. ROHRMOSER, ESQUIVEL & CO., San Jose, Costa Rica.
Filed March 7, 1931. Serial No. 311,888. PUBLISHED APRIL 21, 1931. Class 46.

284,686. STEEL. SIMONDS SAW & STEEL COMPANY, Boston, Mass.
Filed March 7, 1931. Serial No. 311,891. PUBLISHED APRIL 21, 1931. Class 14.

284,687. AXES, CANT DOGS, PICKAROONS, BARK SPUDS, SOCKET PICKS, WEDGES, PULP HOOKS, CANT HOOKS. SNOW & NEALLEY COMPANY, Bangor, Me.
Filed March 7, 1931. Serial No. 311,892. PUBLISHED APRIL 28, 1931. Class 23.

284,688. OIL BURNERS FOR STOVES AND RANGES. TOWER MANUFACTURING CORPORATION, Boston, Mass.
Filed March 7, 1931. Serial No. 311,895. PUBLISHED APRIL 28, 1931. Class 34.

284,689. HYPODERMIC NEEDLES. NOVOCOL CHEMICAL MFG. CO. INC., Brooklyn, N. Y.
Filed March 7, 1931. Serial No. 311,884. PUBLISHED APRIL 21, 1931. Class 44.

284,690. LEDGER PAPER. MILLERS FALLS PAPER COMPANY, Millers Falls, Mass.
Filed March 7, 1931. Serial No. 311,881. PUBLISHED APRIL 21, 1931. Class 37.

284,691. CHAIN AND CHAIN LINK. MOLINE MALLEABLE IRON COMPANY, St. Charles, Ill.
Filed March 7, 1931. Serial No. 311,882. PUBLISHED APRIL 28, 1931. Class 18.

284,692. DYESTUFFS, LAKES, AND CHEMICAL PRODUCTS SUITABLE FOR DYEING PURPOSES. GEIGY COMPANY, INC., New York, N. Y.
Filed March 7, 1931. Serial No. 311,872. PUBLISHED APRIL 21, 1931. Class 6.

284,693. PLANOGRAPHIC PRINTING INK, AND AUTOGRAPHIC INK. AMERICAN MULTIGRAPH CO., Wilmington, Del. and Cleveland, Ohio.
Filed March 7, 1931. Serial No. 311,864. PUBLISHED APRIL 28, 1931. Class 11.

284,694. FABRICS OF WOOL, COTTON, SILK, RAYON, OR MIXTURES. BOTANY WORSTED MILLS, Passaic, N. J.
Filed March 7, 1931. Serial No. 311,865. PUBLISHED APRIL 28, 1931. Class 42.

284,695. ASH TRAYS, ASH RECEIVERS, CIGAR AND CIGARETTE RESTS, CIGAR AND CIGARETTE EXTINGUISHERS, CIGAR AND CIGARETTE HOLDERS. UNITED STATES CUTLERY CO., Belleville, N. J.
Filed March 10, 1931. Serial No. 311,986. PUBLISHED APRIL 28, 1931. Class 8.

284,696. WOVEN, KNITTED, NETTED, TEXTILE, AND PILE FABRICS IN THE PIECE IN WHOLE OR PART OF SILK. CHENEY BROTHERS, South Manchester, Conn.
Filed March 11, 1931. Serial No. 311,995. PUBLISHED APRIL 28, 1931. Class 42.

284,697. GAUZE AND ADHESIVE PLASTER AND/OR A COMBINATION OF BOTH. THE KENDALL COMPANY, Boston, Mass.
Filed March 9, 1931. Serial No. 311,918. PUBLISHED APRIL 21, 1931. Class 44.

284,698. CIGARS. HIRAM F. MARTIN, York, Pa.
Filed March 9, 1931. Serial No. 311,921. PUBLISHED APRIL 21, 1931. Class 17.

284,699. SHEET MUSIC. MILLER MUSIC, INCORPORATED, New York, N. Y.
Filed February 27, 1931. Serial No. 311,532. PUBLISHED APRIL 21, 1931. Class 38.

284,700. CANDIES. CUNNINGHAM-LEBARON COMPANY, Minneapolis, Minn.
Filed February 27, 1931. Serial No. 311,519. PUBLISHED APRIL 28, 1931. Class 46.

284,701. CHEMICAL PRODUCTS FOR THE FILLING, BLEACHING, AND CONDITIONING OF LEATHER. CATARACT CHEMICAL COMPANY, INC., Buffalo, N. Y.
Filed February 28, 1931. Serial No. 311,558. PUBLISHED APRIL 21, 1931. Class 6.

284,702. PRECIOUS-METAL SALTS AND PRECIOUS-METAL ELECTROPLATING PREPARATIONS CONTAINING PALLADIUM AND RHODIUM. BAKER & COMPANY, INC., Newark, N. J.
Filed February 28, 1931. Serial No. 311,555. PUBLISHED APRIL 14, 1931. Class 6.

284,703. PRECIOUS-METAL SALTS AND PRECIOUS-METAL ELECTROPLATING PREPARATIONS CONTAINING RHODIUM. BAKER & COMPANY, INC., Newark, N. J.
Filed February 28, 1931. Serial No. 311,554. PUBLISHED APRIL 14, 1931. Class 6.

284,704. PERFUME. GABILLA, INCORPORATED, New York, N. Y.
Filed February 27, 1931. Serial No. 311,524. PUBLISHED APRIL 14, 1931. Class 6.

284,705. PERFUME. GABILLA, INCORPORATED, New York, N. Y.
Filed February 27, 1931. Serial No. 311,528. PUBLISHED APRIL 14, 1931. Class 6.

284,706. YARN. GREEN & HOPSON, Springfield, Mass.
Filed February 27, 1931. Serial No. 311,526. PUBLISHED APRIL 28, 1931. Class 43.

284,707. PERFUMES. THE QUEEN PERFUMERY CO., San Juan, Porto Rico.
Filed February 10, 1931. Serial No. 310,921. PUBLISHED APRIL 28, 1931. Class 6.

284,708. PERFUMES, TOILET WATER, FACE AND SKIN LOTIONS, FACE POWDER, TALCUM POWDER, SACHETS, FACE CREAMS, LIP ROUGE, BATH SALTS, BRILLIANTINE. SOCIÉTÉ ANONYME JEAN PATOU, Paris, France.
Filed February 11, 1931. Serial No. 310,950. PUBLISHED APRIL 14, 1931. Class 6.

284,709. PERFUME, TOILET WATER, FACE AND SKIN LOTIONS, FACE POWDER, TALCUM POWDER, SACHETS, FACE CREAMS, LIP ROUGE, BATH SALTS, BRILLIANTINE. SOCIÉTÉ ANONYME JEAN PATOU, Paris, France.
Filed February 11, 1931. Serial No. 310,951. PUBLISHED APRIL 14, 1931. Class 6.

284,710. PERFUME, TOILET WATER, FACE AND SKIN LOTIONS, FACE POWDER, TALCUM POWDER, SACHETS, FACE CREAMS, LIP ROUGE, BATH SALTS, AND BRILLIANTINE. SOCIÉTÉ ANONYME JEAN PATOU, Paris, France.
Filed February 11, 1931. Serial No. 310,952. PUBLISHED APRIL 14, 1931. Class 6.

284,711. PERFUMES, TOILET WATER, FACE AND SKIN LOTIONS, FACE POWDER, TALCUM POWDER, SACHETS, FACE CREAMS, LIP ROUGE, BATH SALTS, AND BRILLIANTINE. SOCIÉTÉ ANONYME JEAN PATOU, Paris, France.
Filed February 11, 1931. Serial No. 310,953. PUBLISHED APRIL 14, 1931. Class 6.

284,712. PERFUME, TOILET WATER, FACE AND SKIN LOTIONS, FACE POWDER, TALCUM POWDER, SACHETS, FACE CREAMS, LIP ROUGE, BATH SALTS, BRILLIANTINE. SOCIÉTÉ ANONYME JEAN PATOU, Paris, France.
Filed February 11, 1931. Serial No. 310,954. PUBLISHED APRIL 14, 1931. Class 6.

284,713. PERFUME, TOILET WATER, FACE AND SKIN LOTIONS, FACE POWDER, TALCUM POWDER, SACHETS, FACE CREAMS, LIP ROUGE, BATH SALTS, AND BRILLIANTINE. SOCIÉTÉ ANONYME JEAN PATOU, Paris, France.
Filed February 11, 1931. Serial No. 310,955. PUBLISHED APRIL 14, 1931. Class 6.

284,714. PILE OINTMENT. EDITH C. WERTZ, Long Beach, Calif.
Filed February 11, 1931. Serial No. 310,960. PUBLISHED APRIL 7, 1931. Class 6.

284,715. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed February 12, 1931. Serial No. 310,989. PUBLISHED APRIL 21, 1931. Class 42.

284,716. LIQUID SOAP. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed February 12, 1931. Serial No. 310,999. PUBLISHED APRIL 7, 1931. Class 4.

284,717. GRAFTING WAX AND A DIPPING AND COATING SOLUTION FOR NURSERY STOCK WHEN MELTED. WALTER E. CLARK & SON, Milford, Conn.
Filed February 13, 1931. Serial No. 311,025. PUBLISHED APRIL 28, 1931. Class 6.

284,718. METAL WORKING AND CUTTING TOOLS. FANSTEEL PRODUCTS COMPANY, INC., North Chicago, Ill., assignor to Ramet Corporation of America, North Chicago, Ill., a Corporation of Illinois.
Filed February 13, 1931. Serial No. 311,028. PUBLISHED APRIL 28, 1931. Class 23.

284,719. MOPS. MIDWAY CHEMICAL COMPANY, Chicago, Ill.
Filed February 13, 1931. Serial No. 311,040. PUBLISHED APRIL 28, 1931. Class 29.

284,720. CIGAR HOLDERS, CIGARETTE HOLDERS, AND PIPES. KAUFMANN BROS. & BONDY, INC., West New York, N. J.
Filed February 14, 1931. Serial No. 311,062. PUBLISHED APRIL 7, 1931. Class 8.

284,721. CIGAR HOLDERS, CIGARETTE HOLDERS, AND PIPES. REISS-PREMIER PIPE CO., West New York, N. J.
Filed February 14, 1931. Serial No. 311,071. PUBLISHED APRIL 7, 1931. Class 8.

284,722. SHOE CREAM, SHOE DRESSINGS, AND LEATHER DRESSINGS. 2 IN 1-SHINOLA-BIXBY CORPORATION, New York, N. Y.
Filed February 14, 1931. Serial No. 311,076. PUBLISHED APRIL 21, 1931. Class 4.

284,723. PILE FABRICS. BENNETT MILLS, INCORPORATED, Philadelphia, Pa.
Filed February 16, 1931. Serial No. 311,079. PUBLISHED APRIL 21, 1931. Class 42.

284,724. KNITTED PILE FABRICS. DAVID PELTON MOORE, New York, N. Y.
Filed February 16, 1931. Serial No. 311,100. PUBLISHED APRIL 28, 1931. Class 42.

284,725. GOLF CLUBS. ROYAL MANUFACTURING COMPANY, Toledo, Ohio.
Filed February 16, 1931. Serial No. 311,108. PUBLISHED APRIL 21, 1931. Class 22.

284,726. GOLF CLUBS. ROYAL MANUFACTURING COMPANY, Toledo, Ohio.
Filed February 16, 1931. Serial No. 311,109. PUBLISHED APRIL 21, 1931. Class 22.

284,727. GOLF CLUBS. ROYAL MANUFACTURING COMPANY, Toledo, Ohio.
Filed February 16, 1931. Serial No. 311,110. PUBLISHED APRIL 21, 1931. Class 22.

284,728. GOLF CLUBS, BALLS, AND BAGS. ROYAL MANUFACTURING COMPANY, Toledo, Ohio.
Filed February 16, 1931. Serial No. 311,111. PUBLISHED APRIL 21, 1931. Class 22.

284,729. MANURE, BASIC SLAG COMMONLY KNOWN TO THE TRADE AS "THOMAS SLAG" AND OBTAINED AS A BYPRODUCT IN THE MANUFACTURE OF THOMAS STEEL AND USED AS A FERTILIZER, MEAL FOR FERTILIZER, AND LIME FOR FERTILIZER. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed February 17, 1930. Serial No. 296,156. PUBLISHED APRIL 28, 1931. Class 10.

284,730. METAL HOSE PIPES, CAST-IRON PIPES AND CONDUITS, ETC. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed February 17, 1930. Serial No. 296,158. PUBLISHED APRIL 28, 1931. Class 13.

284,731. RAILWAY ROLLING STOCK. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed February 17, 1930. Serial No. 296,159. PUBLISHED APRIL 28, 1931. Class 19.

284,732. MACHINERY AND PARTS OF MACHINERY. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed February 17, 1930. Serial No. 296,161. PUBLISHED APRIL 28, 1931. Class 23.

284,733. JUTE-BOARD BOXES AND CARTONS AND BLANKS FOR MAKING THE SAME. NATIONAL METAL EDGE BOX COMPANY, Philadelphia, Pa.
Filed February 24, 1930. Serial No. 296,431. PUBLISHED APRIL 28, 1931. Class 2.

284,734. JUTE BOARD AND PAPER BOX BOARDS. NATIONAL METAL EDGE BOX COMPANY, Philadelphia, Pa.
Filed February 24, 1930. Serial No. 296,482. PUBLISHED APRIL 28, 1931. Class 37.

284,735. FOR PREPARATION FOR THE TREATMENT OF RHEUMATISM, LUMBAGO, STIFF JOINTS AND MUSCLES. JOHN A. SMITH COMPANY, Milwaukee, Wis.
Filed June 10, 1929. Serial No. 285,388. PUBLISHED DECEMBER 10, 1929. Class 6.

284,736. FRESH-DECIDUOUS FRUITS. COLUMBIA-OKANOGAN ORCHARDS, INC., doing business as C-O Orchards, Inc., Brewster, Wash.
Filed July 24, 1929. Serial No. 287,635. PUBLISHED JUNE 3, 1930. Class 46.

284,737. CHEWING GUM. AMERICAN CHICLE COMPANY, Long Island City, N. Y.
Filed October 7, 1929. Serial No. 290,735. PUBLISHED APRIL 21, 1931. Class 46.

284,738. RUBBERLIKE SUBSTANCES OF ORGANIC POLYMERIDES HAVING A HIGH MOLECULAR WEIGHT. RÖHM & HAAS AKTIENGESELLSCHAFT, Darmstadt, Germany.
Filed November 7, 1929. Serial No. 292,124. PUBLISHED APRIL 28, 1931. Class 50.

284,739. FRESH CITRUS FRUITS. GREGG MAXCY, Sebring, Fla.
Filed November 9, 1929. Serial No. 292,220. PUBLISHED APRIL 21, 1931. Class 46.

284,740. BOATS—NAMELY, MOTOR BOATS, CANOES, ROWBOATS, OUTBOARD-MOTOR BOATS, RUNABOUTS, AND CRUISERS. JOHNSON MOTOR COMPANY, Waukegan, Ill.
Filed December 16, 1929. Serial No. 293,732. PUBLISHED APRIL 28, 1931. Class 19.

284,741. ADHESIVE TAPE, PERFORATED GUMMED PAPER, AND BANDAGES. STERNBERG, HABERLAND, LIEBERT & CO., Berlin, Germany.
Filed December 17, 1929. Serial No. 293,796. PUBLISHED APRIL 21, 1931. Class 44.

284,742. PREPARATIONS USED FOR AIDING HUMAN AND ANIMAL METABOLISM. THE CROOKES LABORATORIES, INCORPORATED, New York, N. Y.
Filed February 17, 1930. Serial No. 296,106. PUBLISHED APRIL 7, 1931. Class 6.

284,743. CIGARETTES AND CIGARETTE TOBACCO. NEIL MANUFACTURING CO., LTD., Dunedin, New Zealand.
Filed October 6, 1930. Serial No. 306,454. PUBLISHED APRIL 21, 1931. Class 17.

284,744. HEALING OINTMENT FOR TREATING ATHLETES FOOT, GOLFER'S ITCH, ITCHING AND RINGWORM OF THE FEET, AND EXTERNAL WOUNDS. WINFIELD S. BRAINERD, doing business as Magnolia Co. (Not Incorporated.), Chicago, Ill.
Filed October 15, 1930. Serial No. 306,797. PUBLISHED APRIL 7, 1931. Class 6.

284,745. COD-LIVER OIL (PLAIN). SCOTT & BOWNE, Bloomfield, N. J.
Filed October 16, 1930. Serial No. 306,838. PUBLISHED APRIL 28, 1931. Class 6.

284,746. INFLATED RUBBER CUSHIONS. JEM RUBBER COMPANY LIMITED, Toronto, Ontario, Canada.
Filed October 18, 1930. Serial No. 306,892. PUBLISHED APRIL 28, 1931. Class 22.

284,747. ANTISEPTIC SOLUTIONS. THE MAY DEPARTMENT STORES COMPANY, St. Louis, Mo.
Filed October 29, 1930. Serial No. 307,323. PUBLISHED APRIL 14, 1931. Class 6.

284,748. UNMOUNTED LENS FOR SPECTACLES AND GOGGLES. XETAL SAFETY GLASS, LIMITED, Stapleford, England.
Filed October 31, 1930. Serial No. 307,437. PUBLISHED APRIL 28, 1931. Class 26.

284,749. ALUMINUM TABLES, CHAIRS FOR HOUSEHOLD AND OFFICE USE AND COAT TREES. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,877. PUBLISHED APRIL 28, 1931. Class 32.

284,750. ALUMINUM TABLES, CHAIRS FOR HOUSEHOLD AND OFFICE USE AND COAT TREES. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,878. PUBLISHED APRIL 28, 1931. Class 32.

284,751. WATER SOFTENER. THE CUDAHY PACKING CO., Chicago, Ill.
Filed November 15, 1930. Serial No. 307,927. PUBLISHED APRIL 7, 1931. Class 6.

284,752. COVERED CANS FOR NURSERY, BATH, AND LAVATORY USE, FOR LAUNDRY AND WASHING PURPOSES, AND FOR WASTE MATERIALS GENERALLY. MASTER METAL PRODUCTS INC., Buffalo, N. Y.
Filed November 20, 1930. Serial No. 308,119. PUBLISHED APRIL 28, 1931. Class 2.

284,753. DRIED CONCENTRATED AVOCADO FOOD. JOHANNA IRSEN, doing business as Handypack Drug Co., San Diego, Calif.
Filed November 26, 1930. Serial No. 308,335. PUBLISHED APRIL 28, 1931. Class 46.

284,754. EARTH-BORING MACHINERY, PARTICULARLY OF THE HORIZONTAL TYPE. HYDRAUGER CORPORATION, LTD., San Francisco, Calif.
Filed November 28, 1930. Serial No. 308,370. PUBLISHED APRIL 21, 1931. Class 23.

284,755. GRANULATED LAUNDRY SOAP. GORDON-ALLEN LTD., Oakland, Calif.
Filed November 29, 1930. Serial No. 308,438. PUBLISHED APRIL 21, 1931. Class 4.

284,756. GAS WATER HEATERS, GAS-BURNER WATER HEATERS, AND GAS STORAGE-WATER HEATERS. FRANK W. GURNEY, Boston, Mass., assignor to Gas Equipment Corporation, Boston, Mass., a Corporation of Massachusetts.
Filed November 29, 1930. Serial No. 308,439. PUBLISHED APRIL 21, 1931. Class 34.

284,757. TOILET PAPER. WHEELER PAPER CORPORATION, Albany, N. Y.
Filed December 2, 1930. Serial No. 308,525. PUBLISHED APRIL 21, 1931. Class 37.

284,758. AUTOMATIC COAL STOKERS, ALSO KNOWN AS AUTOMATIC COAL BURNERS. CLARICE HENDRICKSON, Chicago, Ill.
Filed December 5, 1930. Serial No. 308,628. PUBLISHED APRIL 28, 1931. Class 34.

284,759. MOTOR-DRIVEN VEHICLES—NAMELY, MOTOR-DRIVEN CYCLES HAVING TWO, THREE, OR FOUR WHEELS, AND ATTACHMENTS FOR SUCH MOTOR-DRIVEN CYCLES, COMPRISING AUXILIARY WHEELS WITH MEANS FOR ATTACHING THE SAME TO MOTOR CYCLES AND/OR TOW BARS FOR SUCH CYCLES. CYCLETOW CORPORATION, LTD., Los Angeles, Calif.
Filed December 9, 1930. Serial No. 308,774. PUBLISHED APRIL 21, 1931. Class 19.

284,760. CERTAIN NAMED BED FABRICS, BATH FABRICS, ETC. WEST POINT MANUFACTURING COMPANY, Langdale, Ala.
Filed December 9, 1930. Serial No. 308,801. PUBLISHED APRIL 21, 1931. Class 42.

284,761. ASH TRAYS. PRECISION METAL WORKERS, Chicago, Ill.
Filed December 11, 1930. Serial No. 308,867. PUBLISHED APRIL 21, 1931. Class 8.

284,762. PERFUME AND FACE POWDER. CHANEL, INC., New York, N. Y.
Filed December 13, 1930. Serial No. 308,964. PUBLISHED APRIL 14, 1931. Class 6.

284,763. MACHINES FOR DRILLING, REAMING, GRINDING, ETC. GUIBERT STEEL COMPANY, Pittsburgh, Pa.
Filed August 13, 1930. Serial No. 304,557. PUBLISHED APRIL 21, 1931. Class 28.

284,764. LIVE POULTRY, DRESSED POULTRY, BOXED EGGS, CANNED FRUITS AND VEGETABLES, AND BOTTLED FRUITS AND VEGETABLES. JOSEPH SCHWARTZ, doing business under "Flo-Ruth Farm," Benton Harbor, Mich.
Filed August 13, 1930. Serial No. 304,584. PUBLISHED APRIL 28, 1931. Class 46.

284,765. RIBBONS MADE OF COTTON FABRIC IN THE PIECE. WM. E. WRIGHT & SONS CO., Orange, N. J.
Filed August 16, 1930. Serial No. 304,705. PUBLISHED OCTOBER 14, 1930. Class 42.

284,766. CERTAIN NAMED PIECE GOODS FABRICS. BIANCHINI, FERIES, Lyon, France.
Filed August 18, 1930. Serial No. 304,714. PUBLISHED APRIL 21, 1931. Class 42.

284,767. VEHICLE TIRES OF RUBBER OR RUBBER COMPOSITION OR RUBBER AND FABRIC AND INNER TUBES THEREFOR. THE FALLS RUBBER COMPANY, Cuyahoga Falls, Ohio.
Filed August 18, 1930. Serial No. 304,718. PUBLISHED APRIL 21, 1931. Class 35.

284,768. COMPOUND FOR STOPPING LEAKS IN BOILERS. ROSS MANUFACTURING COMPANY, Kansas City, Mo.
Filed August 18, 1930. Serial No. 304,737. PUBLISHED APRIL 7, 1931. Class 6.

284,769. SILENT AND SOUND MOTION-PICTURE FILMS. WILLIAM ALEXANDER HALL, New York, N. Y.
Filed August 30, 1930. Serial No. 305,184. PUBLISHED APRIL 28, 1931. Class 26.

284,770. MEDICATED GAS USED IN THE TREATMENT OF HAY FEVER, ASTHMA, COLDS, AND RESUSCITATION. WALL CHEMICALS INCORPORATED, Detroit, Mich.
Filed August 30, 1930. Serial No. 305,201. PUBLISHED APRIL 28, 1931. Class 6.

284,771. WHOLE-TOMATO CATSUP, TOMATO SOUP, TOMATO PURÉE, VEGETABLE SOUP, CANNED SPAGHETTI, AND CANNED PORK AND BEANS. ELLENDALE CANNING COMPANY, Philadelphia, Pa.
Filed September 3, 1930. Serial No. 305,269. PUBLISHED APRIL 28, 1931. Class 46.

284,772. MEDICINAL PREPARATIONS FOR THE TREATMENT OF BOWEL, LIVER, AND STOMACH DISORDERS AND DISEASES AND FOR KINDRED COMPLAINTS AND AILMENTS. SOLOMON S. SEIGLE, doing business as Ess Ess Laboratories, Washington, D. C.
Filed September 3, 1930. Serial No. 305,288. PUBLISHED APRIL 7, 1931. Class 6.

284,773. LIQUID FOR DESTROYING WEEDS. WEED DESTROYER CO., INC., Aberdeen, Wash.
Filed January 24, 1931. Serial No. 310,358. PUBLISHED APRIL 14, 1931. Class 6.

284,774. MAGAZINE. FIRESIDE PUBLICATIONS, INC., Chicago, Ill.
Filed January 23, 1931. Serial No. 310,363. PUBLISHED APRIL 28, 1931. Class 38.

284,775. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France.
Filed January 26, 1931. Serial No. 310,384. PUBLISHED APRIL 21, 1931. Class 45.

284,776. NONALCOHOLIC, MALTLESS BEVERAGE SOLD AS A SOFT DRINK AND SYRUP THEREFOR. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France.
Filed January 26, 1931. Serial No. 310,385. PUBLISHED APRIL 21, 1931. Class 45.

284,777. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND CONCENTRATES THEREFOR. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France.
Filed January 26, 1931. Serial No. 310,386. PUBLISHED APRIL 21, 1931. Class 45.

284,778. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France.
Filed January 26, 1931. Serial No. 310,387. PUBLISHED APRIL 21, 1931. Class 45.

284,779. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France.
Filed January 26, 1931. Serial No. 310,388. PUBLISHED APRIL 21, 1931. Class 45.

284,780. NONALCOHOLIC, MALTLESS SYRUP USED IN THE PREPARATION OF SOFT DRINKS. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France.
Filed January 26, 1931. Serial No. 310,389. PUBLISHED APRIL 21, 1931. Class 45.

284,781. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France.
Filed January 26, 1931. Serial No. 310,390. PUBLISHED APRIL 21, 1931. Class 45.

284,782. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France.
Filed January 26, 1931. Serial No. 310,391. PUBLISHED APRIL 21, 1931. Class 45.

284,783. FACE POWDERS, SACHETS, BATH SALTS, LIP STICKS, TOILET WATERS, ROUGES, AND POWDER COMPACTS. LENTHERIC INCORPORATED, New York, N. Y.
Filed January 27, 1931. Serial No. 310,448. PUBLISHED APRIL 14, 1931. Class 6.

284,784. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,665. PUBLISHED APRIL 28, 1931. Class 42.

284,785. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,666. PUBLISHED APRIL 28, 1931. Class 42.

284,786. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,667. PUBLISHED APRIL 28, 1931. Class 42.

284,787. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,668. PUBLISHED APRIL 28, 1931. Class 42.

284,788. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,669. PUBLISHED APRIL 28, 1931. Class 42.

284,789. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,670. PUBLISHED APRIL 28, 1931. Class 42.

284,790. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,671. PUBLISHED APRIL 28, 1931. Class 42.

284,791. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,672. PUBLISHED APRIL 28, 1931. Class 42.

284,792. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,673. PUBLISHED APRIL 28, 1931. Class 42.

284,793. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,674. PUBLISHED APRIL 28, 1931. Class 42.

284,794. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,675. PUBLISHED APRIL 28, 1931. Class 42.

284,795. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,676. PUBLISHED APRIL 28, 1931. Class 42.

284,796. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed March 3, 1931. Serial No. 311,677. PUBLISHED APRIL 28, 1931. Class 42.

284,797. COTTON AND RUBBER LINED HOSE, LINEN HOSE, RUBBER HOSE, RUBBER AND FABRIC HOSE, RUBBER TUBING; RUBBER, COTTON, AND LEATHER BELTING; RUBBER GASKETS, RUBBER VALVES, AND MACHINERY PACKING IN SHEET, SPIRAL, AND RING FORM COMPOSED OF RUBBER, RUBBER AND METAL, RUBBER AND ASBESTOS, RUBBER AND CLOTH, RUBBER AND FIBER, AND RUBBER AND FLAX. FREDERICK A. LACHANCE, doing business as Imperial Rubber Co., New York, N. Y.
Filed March 3, 1931. Serial No. 311,687. PUBLISHED APRIL 28, 1931. Class 35.

284,798. COFFEE. THOMAS J. LIPTON, INC., Dover, Del.; Hoboken, N. J.; Chicago, Ill.; San Francisco, Calif.
Filed March 3, 1931. Serial No. 311,688. PUBLISHED APRIL 28, 1931. Class 46.

284,799. MALT SYRUP. PHILADELPHIA MALT EXTRACT Co., Philadelphia, Pa.
Filed March 3, 1931. Serial No. 311,692. PUBLISHED APRIL 28, 1931. Class 46.

284,800. MAYONNAISE, SALAD DRESSING, AND SPREAD FOR BREAD. SCHREIBER PRODUCTS CORPORATION, Buffalo, N. Y.
Filed March 3, 1931. Serial No. 311,700. PUBLISHED APRIL 28, 1931. Class 46.

284,801. COFFEE. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed March 3, 1931. Serial No. 311,703. PUBLISHED APRIL 21, 1931. Class 46.

284,802. PERIODICAL. VETERINARY MAGAZINE CORPORATION, Chicago, Ill.
Filed March 3, 1931. Serial No. 311,710. PUBLISHED APRIL 21, 1931. Class 38.

284,803. CANNED TOMATOES. GAETANO FIORE, New York, N. Y.
Filed March 4, 1931. Serial No. 311,723. PUBLISHED APRIL 28, 1931. Class 46.

284,804. WRITING AND PRINTING PAPER. HURLBUT PAPER COMPANY, South Lee, Mass.
Filed March 4, 1931. Serial No. 311,734. PUBLISHED APRIL 21, 1931. Class 37.

284,805. BISMUTH SODIUM GLUCONATE COLLOIDAL PREPARATION USED INTRAMUSCULARLY AS AN ANTISYPHILITIC. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y.
Filed January 30, 1931. Serial No. 310,557. PUBLISHED APRIL 21, 1931. Class 6.

284,806. GAME APPARATUS—NAMELY, A TABLE OR BOARD, DEVICES TO BE MOVED OVER THE TABLE OR BOARD, AND CUES FOR PROPELLING SAID DEVICES. WILLIAM J. SCHLOSSER, San Antonio, Tex.
Filed January 30, 1931. Serial No. 310,578. PUBLISHED APRIL 21, 1931. Class 22.

284,807. ABRASIVE SHOT AND GRIT FOR BLASTING APPARATUS. STEELBLAST ABRASIVES COMPANY, Cleveland, Ohio.
Filed January 30, 1931. Serial No. 310,579. PUBLISHED APRIL 21, 1931. Class 4.

284,808. VALVES FOR PNEUMATIC TIRES. THE TIRE AND RIM ASSOCIATION, INCORPORATED, Cleveland, Ohio.
Filed January 30, 1931. Serial No. 310,581. PUBLISHED APRIL 21, 1931. Class 13.

284,809. CHECK-PROTECTING MACHINES AND CHECK-SIGNING MACHINES. THE TODD COMPANY, INC., Rochester, N. Y.
Filed January 30, 1931. Serial No. 310,583. PUBLISHED APRIL 21, 1931. Class 23.

284,810. TANK TRAPS USED IN CONNECTION WITH SYSTEMS FOR STORING, HANDLING, AND DISPENSING GASOLINE, OILS, AND SIMILAR PRODUCTS. AQUA SYSTEMS, INCORPORATED, New York, N. Y.
Filed February 2, 1931. Serial No. 310,630. PUBLISHED APRIL 21, 1931. Class 13.

284,811. DEODORANT. AURALITE MANUFACTURING COMPANY, Chicago, Ill.
Filed February 2, 1931. Serial No. 310,631. PUBLISHED APRIL 14, 1931. Class 6.

284,812. OUTBOARD-MOTOR BOATS. BLUE STREAK LTD., Los Angeles, Calif.
Filed February 3, 1931. Serial No. 310,672. PUBLISHED APRIL 21, 1931. Class 19.

284,813. PERIODICAL PUBLICATION. BENJAMIN F. FORSYTH, doing business as Ben Forsyth Publishing Company, Minneapolis, Minn.
Filed February 3, 1931. Serial No. 310,678. PUBLISHED APRIL 21, 1931. Class 38.

284,814. NONPOISONOUS INDUSTRIAL FUMIGANTS. KAY-FRIES CHEMICALS, INC., West Haverstraw, N. Y.
Filed February 3, 1931. Serial No. 310,680. PUBLISHED APRIL 21, 1931. Class 6.

284,815. GOLF CLUBS. A. J. REACH, WRIGHT & DITSON INCORPORATED, New York, N. Y.
Filed February 3, 1931. Serial No. 310,699. PUBLISHED APRIL 21, 1931. Class 22.

284,816. MONTHLY MAGAZINE. NATIONAL RECREATION ASSOCIATION, INCORPORATED, New York, N. Y.
Filed February 4, 1931. Serial No. 310,733. PUBLISHED APRIL 21, 1931. Class 38.

284,817. STATIONERY—NAMELY, LETTER PAPER, LEAVES FOR LOOSE-LEAF FILES, PRINTED BLANKS, AND FORMS. THE MCBEE BINDER COMPANY, Athens, Ohio.
Filed February 3, 1931. Serial No. 310,688. PUBLISHED APRIL 21, 1931. Class 37.

284,818. CANNED FRUITS. JOSEPH E. RAHAL, doing business as The Rahal Packing Co. Inc., Cleveland, Ohio.
Filed February 4, 1931. Serial No. 310,736. PUBLISHED APRIL 21, 1931. Class 46.

284,819. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 5, 1931. Serial No. 310,770. PUBLISHED APRIL 7, 1931. Class 6.

284,820. LIP STICKS. PAIR-O'-LIPSTIK INCORPORATED, New York, N. Y.
Filed February 5, 1931. Serial No. 310,774. PUBLISHED APRIL 7, 1931. Class 6.

284,821. OINTMENT FOR USE IN TREATING CHRONIC ULCERS, RECTAL IRRITATIONS, CARBUNCLES, BOILS, CUTS, BRUISES, AND WOUNDS. SEA ORO LABORATORY, West Palm Beach, Fla.
Filed February 5, 1931. Serial No. 310,777. PUBLISHED APRIL 7, 1931. Class 6.

284,822. METAL HAMPER FOR LAUNDRY. WEINSTOCK & SONS, New York, N. Y.
Filed February 5, 1931. Serial No. 310,784. PUBLISHED APRIL 21, 1931. Class 2.

284,823. HEATING MATERIALS—NAMELY, BOILERS, RADIATORS, AND WATER HEATERS USING EITHER SOLIDS, LIQUIDS, OR VAPORS AS THE HEATING MEDIUM OR FUEL. CRANE CO., Chicago, Ill.
Filed February 6, 1931. Serial No. 310,797. PUBLISHED APRIL 28, 1931. Class 34.

284,824. HEALING SALVE FOR BOILS, CARBUNCLES, AND INFECTED SORES. WIGHTMAN T. REID, Covington, Ky.
Filed February 6, 1931. Serial No. 310,811. PUBLISHED APRIL 7, 1931. Class 6.

284,825. CERTAIN NAMED PAINT PRODUCTS. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed February 7, 1931. Serial No. 310,846. PUBLISHED APRIL 21, 1931. Class 16.

284,826. GRANITE MONUMENTS AND MEMORIALS. ROCK OF AGES CORPORATION, Burlington, Vt.
Filed February 7, 1931. Serial No. 310,849. PUBLISHED APRIL 28, 1931. Class 50.

284,827. CALCULATING MACHINES. EUROPA SCHREIBMASCHINEN A. G., Erfurt, Germany.
Filed February 9, 1931. Serial No. 310,862. PUBLISHED APRIL 28, 1931. Class 26.

284,828. SKIN LOTION. HO-RO-CO MANUFACTURING COMPANY, St. Louis, Mo.
Filed February 9, 1931. Serial No. 310,867. PUBLISHED APRIL 7, 1931. Class 6.

284,829. KITS FOR CONVERTING A HOT-WATER HEATER TO A HEAT-STORAGE SYSTEM, GAS BURNERS, AND SAFETY PILOTS. SPENCER THERMOSTAT COMPANY, Cambridge, Mass.
Filed February 9, 1931. Serial No. 310,889. PUBLISHED APRIL 28, 1931. Class 34.

284,830. FRESH FRUITS—TANGERINE ORANGES, PINEAPPLE ORANGES, LATE VALENCIA ORANGES, PARSON BROWN ORANGES, GRAPEFRUIT, PINEAPPLES, AND AVOCADOS. M. C. THRELKELD, San Francisco, Calif., and Stuart, Fla.
Filed February 9, 1931. Serial No. 310,891. PUBLISHED APRIL 21, 1931. Class 46.

284,831. OINTMENT FOR USE ON THE MUCOUS MEMBRANE OF THE NOSE AND THROAT. THE UPJOHN COMPANY, Kalamazoo, Mich.
Filed February 9, 1931. Serial No. 310,892. PUBLISHED APRIL 21, 1931. Class 6.

284,832. TOILET GOODS—NAMELY, A PREPARATION FOR USE IN WAVING THE HAIR. PETROLEUM DERIVATIVES COMPANY, Montclair, N. J.
Filed January 27, 1931. Serial No. 310,461. PUBLISHED APRIL 7, 1931. Class 6.

284,833. FIRST-AID KITS. LAWRENCE E. GOELLER, doing business as Kippy Kit Co., Circleville, Ohio.
Filed January 28, 1931. Serial No. 310,477. PUBLISHED APRIL 28, 1931. Class 44.

284,834. MAGAZINES. BOSTON UNIVERSITY, Boston, Mass.
Filed January 29, 1931. Serial No. 310,543. PUBLISHED APRIL 28, 1931. Class 38.

284,835. MONTHLY PERIODICALS. AMERICAN SOCIETY FOR STEEL TREATING, Cleveland, Ohio.
Filed January 30, 1931. Serial No. 310,548. PUBLISHED APRIL 28, 1931. Class 38.

284,836. SMOKERS' PIPES. SASIENI LONDON, LTD., New York, N. Y.
Filed September 30, 1930. Serial No. 306,244. PUBLISHED APRIL 28, 1931. Class 8.

284,837. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. HARRY E. MOYSES, doing business as Vytex Laboratories, New York, N. Y.
Filed October 4, 1930. Serial No. 306,411. PUBLISHED APRIL 21, 1931. Class 44.

284,838. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. HARRY E. MOYSES, doing business as Vytex Laboratories, New York, N. Y.
Filed October 4, 1930. Serial No. 306,412. PUBLISHED APRIL 21, 1931. Class 44.

284,839. PRINTED MATTER—NAMELY, BUILDING PLANS AND SPECIFICATIONS AND REPRODUCTIONS ON LIGHT-SENSITIVE MATERIAL. ADRIAN J. WILLIAMS, Chicago, Ill.
Filed October 4, 1930. Serial No. 306,428. PUBLISHED APRIL 21, 1931. Class 38.

284,840. PERIODICAL. PEANUT JOURNAL PUBLISHING Co., Suffolk, Va.
Filed March 13, 1931. Serial No. 312,117. PUBLISHED APRIL 21, 1931. Class 38.

284,841. ALL MANNER AND KINDS OF RAZORS, SHEARS, SCISSORS, KNIVES OF BASE METAL, AND HAIR CLIPPERS. BRESDUCK, INC., New York, N. Y.
Filed March 12, 1931. Serial No. 312,123. PUBLISHED APRIL 28, 1931. Class 23.

284,842. COTTON PIECE GOODS. BURGESS LEDWARD & COMPANY LIMITED, Manchester, England.
Filed March 14, 1931. Serial No. 312,137. PUBLISHED APRIL 28, 1931. Class 42.

284,843. PRODUCT OF A PROCESS OF PRINTING—VIZ, BOOKS OR BOOKLETS. THE FORBES LITHOGRAPH MANUFACTURING COMPANY, Chelsea, Mass.
Filed March 14, 1931. Serial No. 312,147. PUBLISHED APRIL 21, 1931. Class 38.

284,844. PIPE-CUTTER WHEELS. TRIMONT MANUFACTURING COMPANY, Boston, Mass.
Filed March 14, 1931. Serial No. 312,167. PUBLISHED APRIL 21, 1931. Class 23.

284,845. TOOL HANDLES. TRINITY MANUFACTURING COMPANY, Trinity, Tex.
Filed March 14, 1931. Serial No. 312,168. PUBLISHED APRIL 21, 1931. Class 23.

284,846. WOVEN SACKS. BEMIS BRO. BAG COMPANY, St. Louis, Mo.
Filed March 16, 1931. Serial No. 312,171. PUBLISHED APRIL 28, 1931. Class 2.

284,847. JEWELERS' CRUCIBLES. BINNEY & SMITH COMPANY, New York, N. Y.
Filed March 16, 1931. Serial No. 312,172. PUBLISHED APRIL 21, 1931. Class 26.

284,848. PERIODICALS ISSUED MONTHLY. THE MELLIAND, INC., New York, N. Y.
Filed March 16, 1931. Serial No. 312,193. PUBLISHED APRIL 21, 1931. Class 38.

284,849. EMBOSSED GLASSINE PAPER. WESTFIELD RIVER PAPER COMPANY, INC., Russell, Mass.
Filed March 16, 1931. Serial No. 312,210. PUBLISHED APRIL 21, 1931. Class 37.

284,850. COMIC GOLF CARTOON FOR NEWSPAPER PUBLICATION. PRESS PUBLISHING COMPANY, New York, N. Y.
Filed March 16, 1931. Serial No. 312,222. PUBLISHED APRIL 21, 1931. Class 38.

284,851. NONALCOHOLIC, MALTLESS BEVERAGES AND EXTRACTS AND FLAVORS FOR MAKING THE SAME. THEALL & PILE, INC., New York, N. Y.
Filed March 16, 1931. Serial No. 312,225. PUBLISHED APRIL 21, 1931. Class 45.

284,852. PILE FABRICS. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed March 18, 1931. Serial No. 312,267. PUBLISHED APRIL 28, 1931. Class 42.

284,853. BALE TIES, AND PARTICULARLY SINGLE-LOOP BALE TIES. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J.
Filed March 19, 1931. Serial No. 312,287. PUBLISHED APRIL 28, 1931. Class 13.

284,854. RAYON FABRIC IN THE PIECE. PROGRESSIVE KNITTED RAYON FABRIC MILLS, INC., Brooklyn, N. Y.
Filed March 19, 1931. Serial No. 312,312. PUBLISHED APRIL 28, 1931. Class 42.

284,855. CIGARS AND CIGARETTES. CHILDS COMPANY, New York, N. Y.
Filed March 17, 1931. Serial No. 312,321. PUBLISHED APRIL 28, 1931. Class 17.

284,856. COFFEE. SOUTHLAND COFFEE COMPANY, Macon, Ga.
Filed March 21, 1931. Serial No. 312,392. PUBLISHED APRIL 28, 1931. Class 46.

284,857. APPARATUS FOR THE RECORDING AND APPARATUS FOR THE REPRODUCTION OF TALKING PICTURES AND THE PARTS THEREOF. GENERAL TALKING PICTURES CORPORATION, New York, N. Y.
Filed March 23, 1931. Serial No. 312,425. PUBLISHED APRIL 23, 1931. Class 26.

284,858. PICKLES. GLASER, CRANDELL CO., Chicago, Ill.
Filed March 23, 1931. Serial No. 312,426. PUBLISHED APRIL 28, 1931. Class 46.

284,859. MEAT-BLOCK SCRAPERS. HENRY A. LINDENSCHMITT, Grand Junction, Colo.
Filed March 23, 1931. Serial No. 312,439. PUBLISHED APRIL 28, 1931. Class 23.

284,860. BROODERS. GLOBE AMERICAN CORPORATION, Kokomo, Ind.
Filed March 11, 1931. Serial No. 312,002. PUBLISHED APRIL 21, 1931. Class 50.

284,861. CANDY. M. J. HOLLOWAY & COMPANY, Chicago, Ill.
Filed March 11, 1931. Serial No. 312,005. PUBLISHED APRIL 21, 1931. Class 46.

284,862. BAKED-ENAMEL REMOVERS. THE LONG PAINT & CHEMICAL CO., Oakland, Calif.
Filed March 11, 1931. Serial No. 312,011. PUBLISHED APRIL 28, 1931. Class 16.

284,863. MONTHLY PUBLICATION. THE STOCKMAN FARMER COMPANY, Cheyenne, Wyo.
Filed March 11, 1931. Serial No. 312,018. PUBLISHED APRIL 28, 1931. Class 38.

284,864. SEMIMONTHLY MAGAZINE. PROGRESSIVE FARMER-RURALIST COMPANY, Birmingham, Ala.
Filed March 11, 1931. Serial No. 312,029. PUBLISHED APRIL 21, 1931. Class 38.

284,865. PRESERVED PICKLES. ANNA MYERS PURE FOOD, INC., Newark, N. J.
Filed March 12, 1931. Serial No. 312,058. PUBLISHED APRIL 28, 1931. Class 46.

284,866. WATCHES, WATCHCASES, AND WATCH MOVEMENTS. ADOLPHE SCHWOB, INC., New York, N. Y.
Filed March 12, 1931. Serial No. 312,066. PUBLISHED APRIL 28, 1931. Class 27.

284,867. CLOTHESLINES. SEWARD WIRE COMPANY, INC., Parkersburg, W. Va.
Filed March 12, 1931. Serial No. 312,067. PUBLISHED APRIL 21, 1931. Class 7.

284,868. CANDY. ALESSANDRO E. SPRIANO, doing business as Italian Fruit Caramel Co., Boston, Mass.
Filed March 12, 1931. Serial No. 312,070. PUBLISHED APRIL 21, 1931. Class 46.

284,869. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed March 13, 1931. Serial No. 312,086. PUBLISHED APRIL 28, 1931. Class 42.

284,870. WOOLEN PIECE GOODS. BOTANY WORSTED MILLS, Passaic, N. J.
Filed March 13, 1931. Serial No. 312,087. PUBLISHED APRIL 28, 1931. Class 42.

284,871. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 13, 1931. Serial No. 312,088. PUBLISHED APRIL 28, 1931. Class 42.

284,872. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 13, 1931. Serial No. 312,089. PUBLISHED APRIL 28, 1931. Class 42.

284,873. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 13, 1931. Serial No. 312,090. PUBLISHED APRIL 28, 1931. Class 42.

284,874. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 13, 1931. Serial No. 312,091. PUBLISHED APRIL 28, 1931. Class 42.

284,875. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 13, 1931. Serial No. 312,092. PUBLISHED APRIL 28, 1931. Class 42.

284,876. GIN. P. HOPPE, Amsterdam, Netherlands.
Filed March 13, 1931. Serial No. 312,100. PUBLISHED APRIL 21, 1931. Class 49.

284,877. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed February 20, 1931. Serial No. 311,257. PUBLISHED APRIL 21, 1931. Class 42.

284,878. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed February 20, 1931. Serial No. 311,258. PUBLISHED APRIL 21, 1931. Class 42.

284,879. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed February 20, 1931. Serial No. 311,259. PUBLISHED APRIL 21, 1931. Class 42.

284,880. GOLF BALLS. DAVEGA, INC., New York, N. Y.
Filed February 20, 1931. Serial No. 311,260. PUBLISHED APRIL 21, 1931. Class 22.

284,881. PARLOR FOOTBALL GAME. LIBERTY SHOW PRINTING COMPANY, Pittsburgh, Pa.
Filed February 20, 1931. Serial No. 311,275. PUBLISHED APRIL 21, 1931. Class 22.

284,882. HEMORRHOIDAL SUPPOSITORIES. THE SARGON LABORATORIES, INC., Dayton, Ohio.
Filed February 20, 1931. Serial No. 311,285. PUBLISHED APRIL 7, 1931. Class 6.

284,883. INSECTICIDES. ROBERT C. WHITE COMPANY, Philadelphia, Pa.
Filed February 20, 1931. Serial No. 311,296. PUBLISHED APRIL 28, 1931. Class 6.

284,884. PREPARATION TO BE USED AS AN AID IN SOAKING RAW SILK OR RAYON FOR THROWING PURPOSES, ASSISTING IN A COMPLETE TAKE-UP OF OIL, SOAP, ETC. BACHMEIER & COMPANY, INC., New York, N. Y.
Filed February 21, 1931. Serial No. 311,317. PUBLISHED APRIL 7, 1931. Class 6.

284,885. FRESH DECIDUOUS FRUITS, FRESH CITRUS FRUITS, FRESH VEGETABLES, FRESH MELONS—NAMELY, CANTALOUPES AND HONEYDEWS. CORN & WARE, Calipatria, Calif.
Filed February 21, 1931. Serial No. 311,323. PUBLISHED APRIL 28, 1931. Class 46.

284,886. FRESH GRAPES. ITALIAN VINEYARD CO., Los Angeles and Guasti, Calif.
Filed February 21, 1931. Serial No. 311,336. PUBLISHED APRIL 21, 1931. Class 46.

284,887. TOY BOATS. SHOE FORM CO., INC., Auburn, N. Y.
Filed February 21, 1931. Serial No. 311,345. PUBLISHED APRIL 21, 1931. Class 22.

284,888. TRADING STAMPS. TRADING STAMP RELIEF CLUB, Oklahoma City, Okla.
Filed February 21, 1931. Serial No. 311,348. PUBLISHED APRIL 21, 1931. Class 38.

284,889. FACE POWDER. THE ARMAND COMPANY, Des Moines, Iowa.
Filed February 24, 1931. Serial No. 311,356. PUBLISHED APRIL 7, 1931. Class 6.

284,890. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed February 24, 1931. Serial No. 311,357. PUBLISHED APRIL 21, 1931. Class 42.

284,891. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed February 24, 1931. Serial No. 311,358. PUBLISHED APRIL 21, 1931. Class 42.

284,892. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed February 24, 1931. Serial No. 311,359. PUBLISHED APRIL 21, 1931. Class 42.

284,893. LAXATIVE EMBODIED IN ARTICLE OF FOOD. C. & C. COMPANY, Oakland, Calif.
Filed February 24, 1931. Serial No. 311,363. PUBLISHED APRIL 7, 1931. Class 6.

284,894. INCANDESCENT MANTLES. THE COLEMAN LAMP AND STOVE COMPANY, Wichita, Kans.
Filed February 24, 1931. Serial No. 311,365. PUBLISHED APRIL 21, 1931. Class 34.

284,895. ROTARY DRIERS AND PARTS THEREOF FOR INDUSTRIAL USES IN DRYING SUCH MATERIALS AS SAND, GRAVEL, CLAY, AND THE LIKE. HARMOR & CO. INC., Buffalo, N. Y.
Filed February 24, 1931. Serial No. 311,377. PUBLISHED APRIL 28, 1931. Class 23.

284,896. LAPEL BUTTONS, EMBLEMS, BADGES, IDENTIFICATION BUTTONS, SHIELDS, PLACARDS, AND NONELECTRIC SIGNS, AND ELECTROTYPES. KIWANIS INTERNATIONAL, Chicago, Ill.
Filed February 24, 1931. Serial No. 311,382. PUBLISHED APRIL 28, 1931. Class 50.

284,897. DRAINPIPE SOLVENT. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed February 24, 1931. Serial No. 311,378. PUBLISHED APRIL 21, 1931. Class 6.

284,898. INSECTICIDE. MOONSHINE CHEMICAL CO., Pittsburgh, Pa.
Filed February 24, 1931. Serial No. 311,393. PUBLISHED APRIL 28, 1931. Class 6.

284,899. COMPOSITION USED IN THE MANUFACTURE OF ARTIFICIAL DENTURES. DAVID PERRY, Minneapolis, Minn.
Filed February 24, 1931. Serial No. 311,394. PUBLISHED APRIL 28, 1931. Class 44.

284,900. FRESH LIMES. GEORGE PRATT SMITH, Vista, Calif.
Filed February 24, 1931. Serial No. 311,397. PUBLISHED APRIL 28, 1931. Class 46.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

284,901. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) I. SIKORSKY, College Point, N. Y. Filed June 4, 1929. Serial No. 285,041.

SIKORSKY

For Toy Airplanes and Toy-Airplane Parts—Namely, Wings, Bodies, Tails, Floats, Control Surfaces, Landing Gear, Interconnecting Members, and Propellers and Parts of Said Parts.
Claims use since June 14, 1927.

284,902. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) IGOR SIKORSKY, College Point, N. Y. Filed June 4, 1929. Serial No. 285,045.

SIKORSKY AMPHIBION

For Toy Airplanes and Toy-Airplane Parts—Namely, Wings, Bodies' Tails, Floats, Control Surfaces, Landing Gear, Interconnecting Members, and Propellers and Parts of Said Parts.
Claims use since June 14, 1927.

284,903. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) HAYES MANUFACTURING CO., Paterson, N. J. Filed Apr. 10, 1930. Serial No. 298,630.

HAYES

For Boilers.
Claims use since Apr. 4, 1930.

284,904. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BENNETT MILLS, INCORPORATED, Philadelphia, Pa. Filed June 4, 1930. Serial No. 302,157.

Cromwell

For Pile Fabrics.
Claims use since May 29, 1930.

284,905. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) F. ROMEO & COMPANY, INC., doing business as Marietta Packing Co., New York, N. Y. Filed July 24, 1930. Serial No. 303,788.

MARIETTA

The applicant is the owner of registration 170,979 under the act of 1920.

For Food Products—Namely, Olive Oil, Filets of Anchovies, Tuna Fish, Coffee, and Tomato Paste.

Claims use since 1920.

284,906. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EUREKA TEA CO., Chicago, Ill. Filed Nov. 17, 1930. Serial No. 307,969.

SEROY

For Coffee.

Claims use since July 15, 1928.

284,907. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930. Serial No. 308,415.

The Haig

For Wood and Metal Golf Clubs.

Claims use since May 21, 1929.

284,908. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) SHAPLEIGH HARDWARE COMPANY, St. Louis, Mo. Filed Mar. 4, 1931. Serial No. 311,752.

SHAPLEIGH'S

For Footballs, Football Head Harness, Shin Guards, Basket Balls, Boxing Gloves, Striking Bags, Fishing Rods, Fishing Reels, Fishing Lines, Fishing Floats, Fishing Hooks, Artificial Baits, Sinkers, Baseball Mitts, Baseball Gloves, Baseball Masks, Baseball-Shoe Plates, Trot Lines, Seines and Fishing Nets, Minnow Buckets, Baseballs, and Baseball Bats.

Claims use since 1921.

284,909. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ANDERSON BROS. CANNING COMPANY, Oskaloosa, Iowa. Filed May 16, 1931. Serial No. 314,635.

Andersons

For Canned Vegetables—Namely, Corn, Tomatoes, Beans, and Pumpkin; and Catsup.

Claims use since 1904.

TRADE-MARK REGISTRATIONS RENEWED

35 501. CATTLE FOOD. Registered November 27, 1900. AMERICAN MILLING COMPANY, Philadelphia, Pa. Renewed November 27, 1930, to Allied Mills, Inc., Chicago, Ill., a Corporation of Indiana, successor.

36,412. SALAD DRESSING. Registered May 14, 1901. SPRAGUE, WARNER & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed May 14, 1931.

36,490. LIME. Registered May 28, 1901. JAMES B. ADAMS, Longview, Ala. Renewed May 28, 1931.

36,792. MISSES' AND CHILDREN'S SHOES. Registered July 23, 1901. THOMAS G. PLANT CO. Renewed July 23, 1931, to Thomas G. Plant Corporation, Boston, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

36,845. TOOTH POWDER. Registered July 30, 1901. FREDERICK B. HORTON, South Manchester, Conn. Renewed July 30, 1931, to Lambert Pharmacal Company, Wilmington, Del., a Corporation of Delaware, assignee by mesne assignments.

36,920. RESOLVENT. Registered August 20, 1901. POTTER DRUG & CHEMICAL CORPORATION, Boston, Mass. Renewed August 20, 1931, to Potter Drug and Chemical Corporation, Malden, Mass., a Corporation of Maine, assignee.

36,921. OINTMENT. Registered August 20, 1901. POTTER DRUG & CHEMICAL CORPORATION, Boston, Mass. Renewed August 20, 1931, to Potter Drug and Chemical Corporation, Malden, Mass., a Corporation of Maine, assignee.

37,299. CERTAIN NAMED BAKERY PRODUCTS AND CONFECTIONERY. Registered November 12, 1901. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and Chicago, Ill. Renewed November 12, 1931, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

76,764. A STOCK AND POULTRY FOOD. Registered February 15, 1910. M. C. PETERS MILL CO., Omaha, Nebr. Renewed February 15, 1930, to Allied Mills, Inc., Chicago, Ill., a Corporation of Indiana, successor.

78,822. A STOCK AND POULTRY FOOD COMPOSED OF CORN, OATS, ALFALFA-MEAL, AND MOLASSES. Registered July 12, 1910. M. C. PETERS MILL CO., Omaha, Nebr. Renewed July 12, 1930, to Allied Mills, Inc., Chicago, Ill., a Corporation of Indiana, successor.

81,296. HAND SEWING-NEEDLES AND PINS. Registered March 21, 1911. GEORG PRINTZ & CO., Aachen, Germany, and New York, N. Y., a firm. Renewed March 21, 1931.

81,856. CHAINS OF IRON. Registered May 16, 1911. THE COLUMBUS CHAIN COMPANY, Columbus, Ohio. Renewed May 16, 1931, to Columbus McKinnon Chain Corporation, Tonawanda, N. Y., a Corporation of New York, successor.

81,908. HAND SEWING-NEEDLES AND TOILET-PINS. Registered May 16, 1911. GEORG PRINTZ & CO., Aachen, Germany, and New York, N. Y., a firm. Renewed May 16, 1931.

82 076. MATCHES. Registered May 30, 1911. GRANTORPETS TÄNDSTICKSFABRIKS AKTIEBOLAG, Westervik, Sweden. Renewed May 30, 1931, to Jonkopings och Vulcans Tandsticksfabriksaktiebolag, Jonkoping, Sweden, a Corporation of Sweden, assignee by mesne assignments.

82,147. MOUTH-WASH. Registered June 6, 1911. GRUMME & SON. Registered June 6, 1931, to Aktiebolaget Grumme & Son, Stockholm, Sweden, a Corporation of Sweden, successor.

82,261. SOAP USED FOR SCOURING AND WASHING DISHES. Registered June 13, 1911. I. ROKEACH & SONS, New York, N. Y. Renewed June 13, 1931, to I. Rokeach & Sons, Inc., Brooklyn, N. Y., a Corporation of New York, successor.

82,506. WOVEN LINEN-FABRIC HOSE. Registered July 4, 1911. EUREKA FIRE HOSE MANUFACTURING COMPANY, Jersey City, N. J., a Corporation of New Jersey. Renewed July 4, 1931.

82,706. SEAL-PRESSES. Registered July 18, 1911. MEYER & WENTHE, Chicago, Ill. Renewed July 18, 1931.

82,789. TOOTH-CREAM. Registered July 25, 1911. GRUMME & SON. Renewed July 25, 1931, to Aktiebolaget Grumme & Son, Stockholm, Sweden, a Corporation of Sweden, successor.

82,919. OUTER SKIRTS. Registered August 1, 1911. SILVERSTEIN BROS. Renewed August 1, 1931, to Star Skirt Co. Inc., New York, N. Y., a Corporation of New York, assignee.

82,971. STORAGE BATTERIES, PARTS THEREOF, AND SETS OF SUCH BATTERIES. Registered August 8, 1911. EDISON STORAGE BATTERY COMPANY, West Orange, N. J., a Corporation of New Jersey. Renewed August 8, 1931.

83,008. CERTAIN CLOTHING. Registered August 15, 1911. WILLIAM HOLLINS AND COMPANY, LIMITED, Nottingham and London, England, a Corporation of Great Britain. Renewed August 15, 1931.

83,084. TIN-PLATE, SHEET-IRON, AND METALS. Registered August 15, 1911. C. H. NELSON METAL CO. INC. Renewed August 15, 1931, to Nelson Metal Company, Inc., Baltimore, Md., a Corporation of Maryland, by change of name.

83,256. WATCHCASES AND WATCH-MOVEMENTS. Registered August 29, 1911. ILLINOIS WATCH CASE COMPANY, Elgin, Ill., a Corporation of Illinois. Renewed August 29, 1931.

83,408. BASE-BALL BATS. Registered September 12, 1911. J. F. HILLERICH & SON. Renewed September 12, 1931, to Hillerich & Bradsby Co., Louisville, Ky., a Corporation of Kentucky, assignee by mesne assignments.

83,409. BASE-BALL BATS. Registered September 12, 1911. J. F. HILLERICH & SON. Renewed September 12, 1931, to Hillerich & Bradsby Co., Louisville, Ky., a Corporation of Kentucky, assignee by mesne assignments.

83,410. BASE-BALL BATS. Registered September 12, 1911. J. F. HILLERICH & SON. Renewed September 12, 1931, to Hillerich & Bradsby Co., Louisville, Ky., a Corporation of Kentucky, assignee by mesne assignments.

83,411. BASE-BALL BATS. Registered September 12, 1911. J. F. HILLERICH & SON. Renewed September 12, 1931, to Hillerich & Bradsby Co., Louisville, Ky., a Corporation of Kentucky, assignee by mesne assignments.

83,646. SOAP. Registered October 3, 1911. HASKINS BROS. & COMPANY, Sioux City, Iowa, and Omaha, Nebr., a Corporation of Iowa. Renewed October 3, 1931.

83,653. FURNITURE-POLISH. Registered October 3, 1911. KEEP BROTHERS. Renewed October 3, 1931, to Florence Keep, Philadelphia, Pa., assignee by mesne assignments.

83,848. WHEAT-FLOUR. Registered October 17, 1911. MOSELEY & MOTLEY MILLING CO., Rochester, N. Y., a Corporation of New York. Renewed October 17, 1931.

83,910. SHEETS, PILLOW-CASES, RUGS, BLANKETS, AND SHAWLS. Registered October 24, 1911. WILLIAM HOLLINS AND COMPANY, LIMITED, London and Nottingham, England, a Corporation of Great Britain. Renewed October 24, 1931.

83,937. GERMICIDES AND INSECTICIDES. Registered October 24, 1911. NEWTON, CHAMBERS & CO. LIMITED, Thorncliffe, near Sheffield, England, a Corporation of Great Britain. Renewed October 24, 1931.

83,944. VACUUM CLEANING-MACHINES. Registered October 24, 1911. THE REGINA COMPANY. Renewed October 24, 1931, to The Regina Corporation, Rahway, N. J., a Corporation of New Jersey, assignee.

83,971. INSULATED ELECTRIC CONDUCTORS AND CABLES. Registered October 24, 1911. FRANK M. FERRIN, Boston, Mass. Renewed October 24, 1931.

84,022. WHEAT-FLOUR. Registered October 31, 1911. MOSELEY & MOTLEY MILLING CO., Rochester, N. Y., a Corporation of New York. Renewed October 31, 1931.

84,061. LUBRICATING-OILS. Registered October 31, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed October 31, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,074. SHOE-POLISH. Registered November 7, 1911. S. M. BIXBY & Co., Brooklyn, N. Y. Renewed November 7, 1931, to 2 in 1-Shinola-Bixby Corporation, New York, N. Y., a Corporation of New Jersey, successor.

84,178. VANILLA, LEMON, AND ALMOND FLAVORING EXTRACTS AND ESSENCES. Registered November 14, 1911. GOWAN-PEYTON-TWOHY CO. Renewed November 14, 1931, to Gowan-Lenning-Brown Company, Duluth, Minn., a Corporation of Minnesota, successor.

84,189. COMPOUND FOR MAKING A PRINTED IMPRESSION. Registered November 14, 1911. FRED A. PUTNAM, Boston, Mass. Renewed November 14, 1931, to Fred A. Putnam, Keene, N. H.

84,196. WATCHCASES. Registered November 14, 1911. STAR WATCH CASE CO., Ludington, Mich., a Corporation of Michigan. Renewed November 14, 1931.

84,224. METALLIC BELT-FASTENERS. Registered November 21, 1911. FLEXIBLE STEEL LACING COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed November 21, 1931.

84,225. STEEL BELT-LACING. Registered November 21, 1911. FLEXIBLE STEEL LACING COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed November 21, 1931.

84,232. STOMACH-BITTERS. Registered November 21, 1911. THE HOSTETTER COMPANY, Pittsburgh, Pa., a Corporation of Pennsylvania. Renewed November 21, 1931.

84,262. AN IRON COMPOUND IN PLASTIC FORM. Registered November 21, 1911. SMOOTH-ON MANUFACTURING COMPANY, Jersey City, N. J., a Corporation of New Jersey. Renewed November 21, 1931.

LABELS

REGISTERED JULY 7, 1931

39,397.—*Title:* THE MEGA-COUSTIC PROGRAM REPRODUCER. For Apparatus for Audibly Reproducing Programs. AMPLIFIERS, LIMITED, San Francisco, Calif. Published February 5, 1931.

39,398.—*Title:* DR. BURCHFIELD'S BLACK PILLS. For Pills for the Liver, Blood, Indigestion, and Constipation. JOHN PATTON BURCHFIELD, Clearfield, Pa. Published April 20, 1931.

39,399.—*Title:* WHITLOCK'S SPECIAL. For a Stomachic Astringent and Laxative Tonic. CHEROKEE REMEDY COMPANY, Chicago, Ill. Published April 23, 1931.

39,400.—*Title:* HAWAII. For Vinegar. SAM'L J. DAVID. Philadelphia, Pa. Published April 25, 1931.

39,401.—*Title:* BOND BREAD SLICED. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published May 9, 1931.

39,402.—*Title:* BOND BREAD. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published May 9, 1931.

39,403.—*Title:* OLD GOLD COFFEE. For Coffee. GILDEHAUS, WULFING & COMPANY, St. Louis, Mo. Published May 1, 1931.

39,404.—*Title:* LA-BO-JEL. For Vaginal Antiseptic and Prophylactic Jelly. LA-BO-JEL LABORATORIES, Minneapolis, Minn. Published March 21, 1931.

39,405.—*Title:* HAPPINESS. For Malt Syrup. LEO LUBAN, doing business as Happiness G. J. Co., Brooklyn, N. Y. Published March 1, 1931.

39,406.—*Title:* JOAN OF ARC. For Lingerie. I. SCHNEIERSON & SONS, INC., New York, N. Y. Published July 10, 1929.

39,407.—*Title:* SHUR-OIL. For Oil. SHUR-GLOSS MFG. CO., Chicago, Ill. Published May 1, 1931.

39,408.—*Title:* ROYAL. For Baking Powder. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 1, 1931.

39,409.—*Title:* FURNITINT. For Enamel Manufactured Especially for Furniture Finishing. STEELCOTE MANUFACTURING COMPANY, St. Louis, Mo. Published December 31, 1930.

39,410.—*Title:* COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published April 14, 1931.

39,411.—*Title:* THE GLORIOUS FOURTH. For Taffy Bars. VOGAN CANDY CORPORATION, Portland, Oreg. Published March 2, 1931.

39,412.—*Title:* MODERNE. For Rings. J. R. WOOD & SONS, INC., doing business as Wood, Brooklyn, N. Y. Published July 1, 1930.

39,413.—*Title:* MODERNISTE. For Rings. J. R. WOOD & SONS, INC., doing business as Wood, Brooklyn, N. Y. Published July 1, 1930.

39,414.—*Title:* VOGUISTE. For Rings. J. R. WOOD & SONS, INC., doing business as Wood, Brooklyn, N. Y. Published July 1, 1930.

39,415.—*Title:* STYLISTE. For Rings. J. R. WOOD & SONS, INC., doing business as Wood, Brooklyn, N. Y. Published July 1, 1930.

PRINTS

REGISTERED JULY 7, 1931

13,288.—*Title:* ATLANTIC & PACIFIC COAL. For Anthracite Coal. WARREN BETTERLY, Waterbury, Conn. Published January 1, 1931.

13,289.—*Title:* WE RECOMMEND THESE NEW BRADLEYS . . . FOR VERY SPECIAL PLACES IN THE SUN. For Clothing. BRADLEY KNITTING COMPANY, Delavan, Wis. Published January 1, 1931.

13,290.—*Title:* A TIMELY LINE TO THE SNOWBOUND . . . ABOUT SOME SMART NEW BRADLEYS. For Clothing. BRADLEY KNITTING COMPANY, Delavan, Conn. Published February 1, 1931.

13,291.—*Title:* NEW SPRING BRADLEYS . . . FOR YOUR FIRST 'FRIDAY-TO-MONDAY' IN THE COUNTRY. For Clothing. BRADLEY KNITTING COMPANY, Delavan, Conn. Published March 1, 1931.

13,292.—*Title:* THE CHALLENGER. For Stoves. THE FAVORITE STOVE & RANGE COMPANY, Piqua, Ohio. Published March 1, 1931.

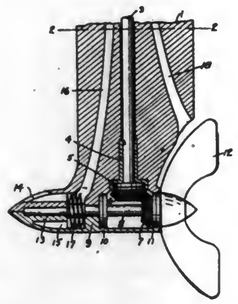
13,293.—*Title:* CONSISTENTLY SUPERIOR. For Sausages and Meats. FRANK AND COMPANY, Milwaukee, Wis. Published April 28, 1931.

13,294.—*Title:* JUMBO. For Peanut Butter. THE FRANK TEA & SPICE CO., Cincinnati, Ohio. Published March 20, 1931.

REISSUES

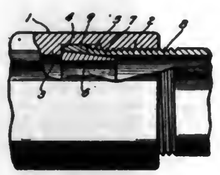
JULY 7, 1931

18,118. MARINE PROPULSION DEVICE. JAMES H. PIERCE, Bay City, Mich., assignor to Johnson Brothers Engineering Corporation, Waukegan, Ill., a Corporation of Indiana. Original No. 1,579,834, dated Apr. 6, 1926, Serial No. 742,814, filed Oct. 10, 1924. Application for reissue filed Apr. 3, 1928. Serial No. 267,076. 19 Claims. (Cl. 155—18.)



1. In a marine propulsion device provided with a vertically disposed knife edged wedge shaped power shaft housing, a propeller shaft housing, a power shaft in said power shaft housing, water intake and outlet passages adjacent the power shaft, and an intake port in the propeller shaft housing and communicating with said intake passage.

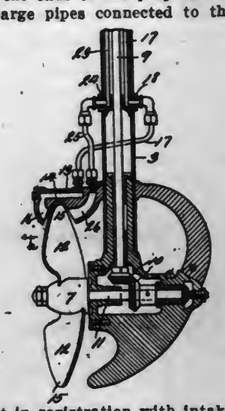
18,119. PIPE COUPLING. CHARLES E. SMITH, Three Rivers, Tex., assignor to Hinderliter Tool Company, a Corporation of Oklahoma. Original No. 1,682,635, dated Aug. 28, 1928, Serial No. 178,385, filed Mar. 25, 1927. Application for reissue filed June 9, 1930. Serial No. 460,070. 13 Claims. (Cl. 285—157.)



1. In a pipe coupling, a connecting member having an interior annular shoulder, a compressible packing ring seated on said shoulder and a relatively rigid keeper ring seated on the shoulder within the packing ring for restraining lateral expansion of the packing ring responsive to end thrust of a pipe section, threaded into the connecting member and projected between the opposed walls of the keeper ring and connecting member.

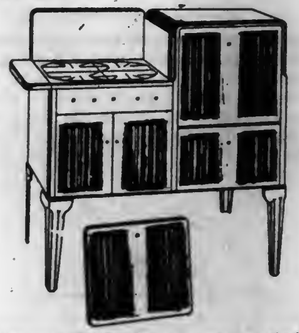
18,120. WATER-COOLING SYSTEM FOR OUTBOARD MOTORS. LOUIS J. JOHNSON, South Bend, Ind., assignor to Johnson Bros. Engineering Corporation, South Bend, Ind. Original No. 1,567,512, dated Dec. 29, 1925, Serial No. 691,601, filed Feb. 9, 1924. Application for reissue filed Sept. 7, 1927. Serial No. 218,091. 28 Claims. (Cl. 115—18.)

1. The combination with an outboard motor having a water jacket, a drive shaft casing, a bladed propeller, a bracket carried by said casing and provided with a recess through which the ends of the propeller blades move, intake and discharge pipes connected to the water jacket



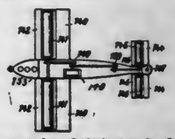
and the bracket in registration with intake and discharge ports located respectively rearwardly and forwardly of the ends of the propeller blades.

18,121. RANGE OR SIMILAR ARTICLE. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Original No. 82,528, dated Nov. 11, 1930, Serial No. 36,762, filed Aug. 25, 1930. Application for reissue filed Feb. 3, 1931. Serial No. 38,534. Term of patent 14 years. (Cl. 81—4.)



The ornamental design for a range or similar article, as shown and described.

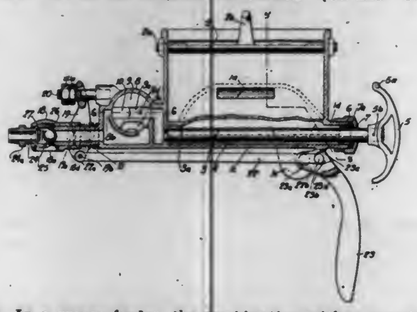
18,122. ARRANGEMENT FOR EXCHANGING ENERGY BETWEEN A CURRENT AND A BODY THEREIN. ANTON FLETTNER, Berlin, Germany, assignor to N. V. Instituut voor Aero en Hydro-Dynamiek, Amsterdam, Netherlands, a Dutch Corporation. Original No. 1,074,169, dated June 19, 1928, Serial No. 726,825, filed July 18, 1924, and in Germany July 28, 1923. Application for reissue filed Dec. 30, 1929. Serial No. 417,540. 55 Claims. (Cl. 170—159.)



1. In an arrangement for driving a body by means of the energy of a flowing medium in combination an object for

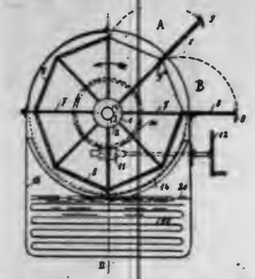
utilizing the energy of flow, an element having a shape suitable to produce the Magnus effect carried by said object, means for moving at least the border surface of said element within its shape on that side of the element adjacent to the medium and in the direction of flow, on which side, due to the Magnus effect, a vacuum is to be produced for pulling said element substantially transverse to the medium flow.

18,123. GREASE FEEDER. WILLIAM L. MORRIS, Wilmette, Ill., assignor to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Aug. 7, 1916, Serial No. 113,653. Renewed Feb. 11, 1929. Original No. 1,749,830, dated Mar. 11, 1930. Application for reissue filed Mar. 10, 1931. Serial No. 521,524. 61 Claims. (Cl. 221—47.3.)



1. In a grease feeder, the combination with a receptacle therefor, of means for sucking the grease from said receptacle, a loose cover plate over the grease all the edges of which in all of its operating positions are sufficiently spaced from the suction to prevent air from piercing the grease, the cover plate being moved by the withdrawal of grease.

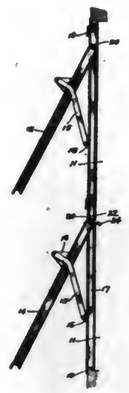
18,124. APPARATUS FOR AND PROCESS OF CONGELATION. JOHANNES EMMERICK WOLFF REEH, La Rochelle, France, assignor to Societe Anonyme de Conservation Industrielle du Poisson, Paris, France. Original No. 1,747,080, dated Feb. 11, 1930, Serial No. 317,673, filed Nov. 6, 1928, and in France Nov. 8, 1927. Application for reissue filed Oct. 4, 1930. Serial No. 486,450. 23 Claims. (Cl. 62—104.)



13. The process of preserving fish and the like which comprises first subjecting them immediately as caught and for a substantial period of time to a preliminary chilling atmosphere and then subjecting them to a liquid refrigerant.

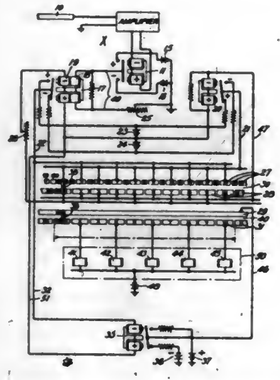
18,125. AWNING TYPE WINDOW. JOHN J. DONOVAN, Oakland, and ESMOND F. WILEY, San Francisco, Calif. Original No. 1,776,620, dated Sept. 23, 1930, Serial No. 296,676, filed Aug. 1, 1928. Application for reissue filed Jan. 19, 1931. Serial No. 509,813. 11 Claims. (Cl. 189—67.)

8. The combination with a window frame, of a plurality of sashes mounted in said frame to swing, an actuating bar mounted to reciprocate in the window frame, a connection between one of the sashes and the bar that causes the swinging of the sash on the reciprocation of the bar,



and a bolt movably mounted on the other sash and detachably engaging with the bar to effect its movement with the latter sash and to permit the independent movement of said latter sash.

18,126. SIGNALING SYSTEM. MARK B. I ERA, Rosebank, Staten Island, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Original No. 1,680,550, dated Aug. 14, 1928, Serial No. 117,047, filed June 19, 1926. Application for reissue filed Nov. 17, 1928. Serial No. 320,102. 17 Claims. (Cl. 178—88.)

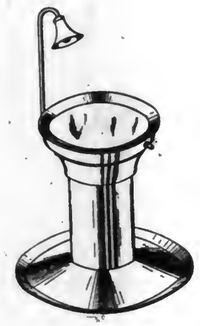


1. In a signaling system, the combination of two unbiased polar relays, each having a local energizing winding, an armature, and current supply contacts cooperating with the armature, a continually rotating distributor, an energizing circuit for the local winding of each relay extending through the distributor, the current supply contacts and the armature of the other relay, said circuits being alternately completed by the rotation of the distributor whereby the armatures are caused to vibrate under the control of the distributor, a line winding on one of said relays arranged to prevent the vibration of said armatures, and an energizing circuit for said line winding independent of said distributor.

DESIGNS

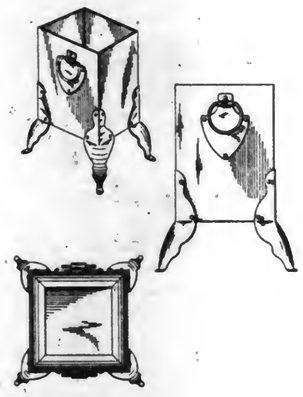
JULY 7, 1931

84,560. SERVING TRAY. ALFRED A. ANGELUS, Milwaukee, Wis. Filed Mar. 14, 1931. Serial No. 39,097. Term of patent 14 years.



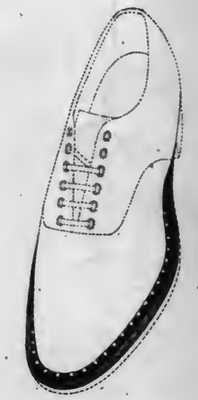
The ornamental design for a serving tray substantially as shown.

84,561. FIREPLACE SCUTTLE. DELAVAN M. BALDWIN, New York, N. Y. Filed Apr. 13, 1931. Serial No. 39,461. Term of patent 3½ years.



The ornamental design for a fireplace scuttle, as shown.

84,562. SHOE OR ARTICLE OF ANALOGOUS NATURE. WALTER G. BARBOUR, Quincy, Mass., assignor to Perley E. Barbour, trading as Barbour Welting Company, Brockton, Mass. Filed Apr. 23, 1931. Serial No. 39,605. Term of patent 7 years.



The ornamental design for a shoe or article of analogous nature substantially as shown and described.

84,563. LAMP BASE. CAROLINE A. BURKE, Chicago, Ill. Filed Apr. 7, 1930. Serial No. 35,183. Term of patent 3½ years.



The ornamental design for a lamp base substantially as shown.

84,564. LAMP BASE. CAROLINE A. BURKE, Chicago, Ill. Filed Apr. 7, 1930. Serial No. 35,184. Term of patent 3½ years.



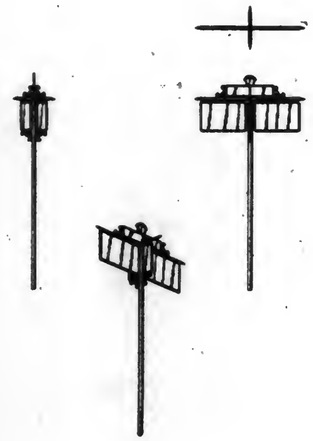
The ornamental design for a lamp base substantially as shown.

84,565. LAMP BASE. CAROLINE A. BURKE, Chicago, Ill. Filed Apr. 7, 1930. Serial No. 35,186. Term of patent 3½ years.



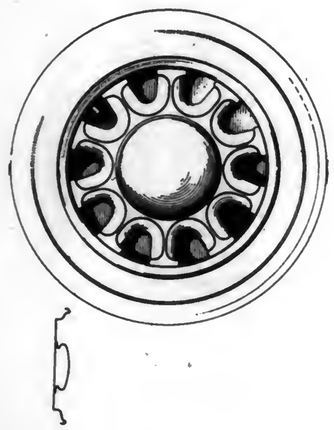
The ornamental design for a lamp base substantially as shown.

84,566. ROAD SIGN. WILLIAM H. CARSON, New Rockford, N. Dak. Filed Apr. 2, 1930. Serial No. 35,110. Term of patent 7 years.



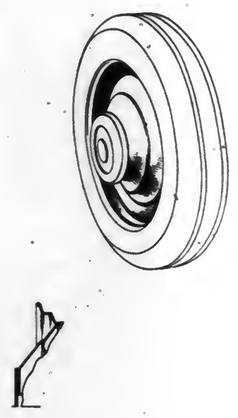
The ornamental design for a road sign substantially as shown.

84,567. WHEEL. TALMON A. DAVENPORT, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 30, 1930. Serial No. 35,442. Term of patent 14 years.



The ornamental design for a wheel as shown.

84,568. WHEEL. TALMON A. DAVENPORT, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 6, 1930. Serial No. 35,510. Term of patent 14 years.



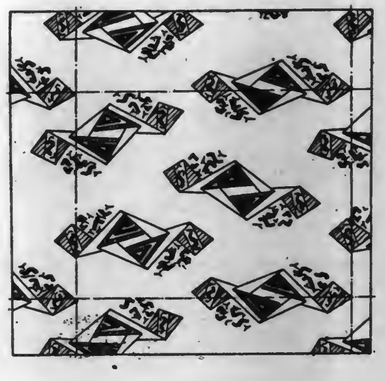
The ornamental design for a wheel as shown.

84,569. HAT HANGER. JOE DE GEORGE, Ashtabula, Ohio. Filed Apr. 23, 1931. Serial No. 39,607. Term of patent 14 years.



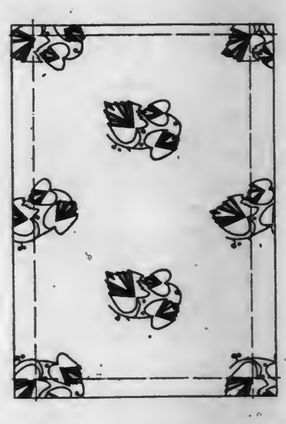
The ornamental design for a hat hanger, as shown.

84,570. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEF DORNBUSCH, Krefeld, Germany, assignor to Lambert & Loomis, Inc., a Corporation of New York. Filed Jan. 27, 1931. Serial No. 38,457. Term of patent 3½ years.



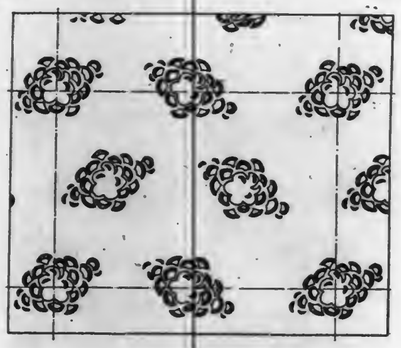
The ornamental design for textile fabric or similar article as shown and described.

84,571. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEF DORNBUSCH, Krefeld, Germany, assignor to Lambert & Loomis, Inc., a Corporation of New York. Filed Jan. 27, 1931. Serial No. 38,458. Term of patent 3½ years.



The ornamental design for textile fabric or similar article as shown and described.

84,572. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEF DORNBUSCH, Krefeld, Germany, assignor to Lambert & Loomis, Inc., a Corporation of New York. Filed Jan. 27, 1931. Serial No. 38,459. Term of patent 3½ years.



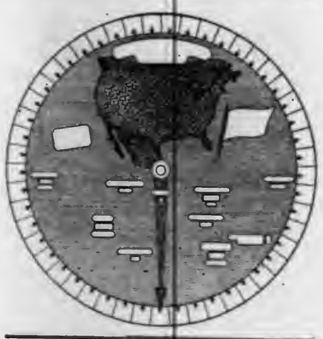
The ornamental design for textile fabric or similar article as shown and described.

84,573. MAT OR SIMILAR ARTICLE. JOHN DRENTHE, Chicago, Ill. Filed Apr. 24, 1931. Serial No. 39,612. Term of patent 14 years.



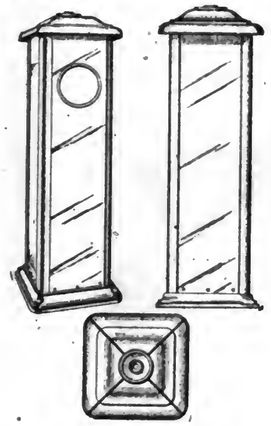
The ornamental design for a mat or similar article, as shown.

84,574. STATISTICAL CHART. MORRIS ENGL and GERHARD MIRUS, New York, N. Y. Filed Mar. 3, 1931. Serial No. 38,918. Term of patent 3½ years.



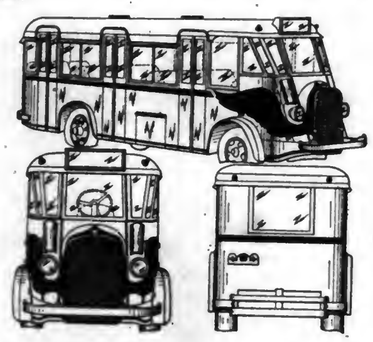
The ornamental design for a statistical chart as shown.

84,575. CASING FOR DISPENSING APPARATUS. CHARLES D. FAGAN, Sharon, Pa., assignor to Sharpsville Boiler Works Company, Sharpsville, Pa., a Corporation of Pennsylvania. Filed Dec. 10, 1929. Serial No. 33,736. Term of patent 14 years.



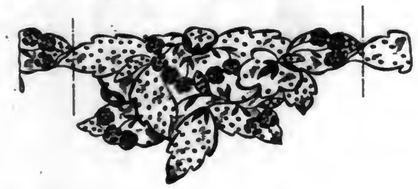
The ornamental design for a casing for dispensing apparatus as shown.

84,576. MOTOR VEHICLE. FRANK R. FAGEOL and WILLIAM B. FAGEOL, Kent, Ohio, assignors to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed May 7, 1931. Serial No. 39,755. Term of patent 14 years.



The ornamental design for a motor vehicle substantially as shown.

84,577. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed May 25, 1931. Serial No. 39,957. Term of patent 3½ years.



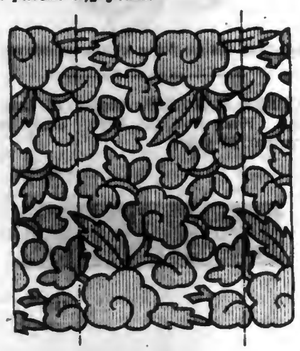
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,578. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed May 25, 1931. Serial No. 39,958. Term of patent 3½ years.



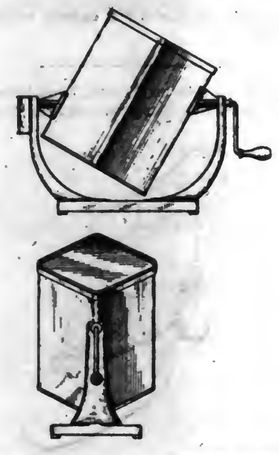
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,579. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed May 25, 1931. Serial No. 39,959. Term of patent 3½ years.



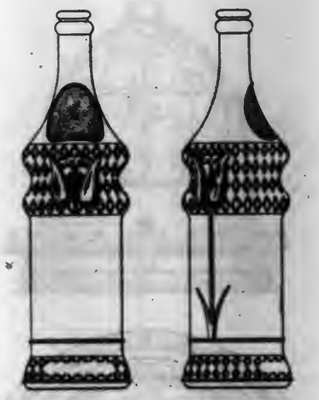
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,580. COMBINED WASHING MACHINE CASING AND SUPPORT THEREFOR. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 2, 1931. Serial No. 39,688. Term of patent 7 years.



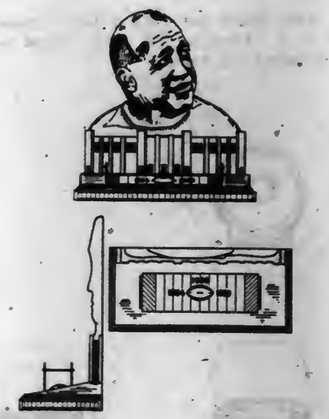
The ornamental design for a combined washing machine casing and support therefor, substantially as shown.

84,581. BOTTLE OR SIMILAR ARTICLE OF MANUFACTURE. JACOB GOLDHABER, Johnstown, Pa. Filed Apr. 2, 1931. Serial No. 39,350. Term of patent 3½ years.



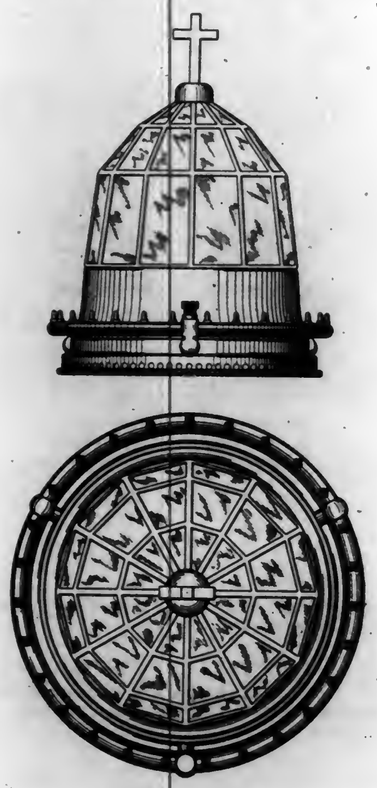
The ornamental design for a bottle or similar article of manufacture, as shown and described.

84,582. BOOK END. HOMER J. HAMILTON and AUBRY E. STONE, South Bend, Ind. Filed Apr. 10, 1931. Serial No. 39,434. Term of patent 3½ years.



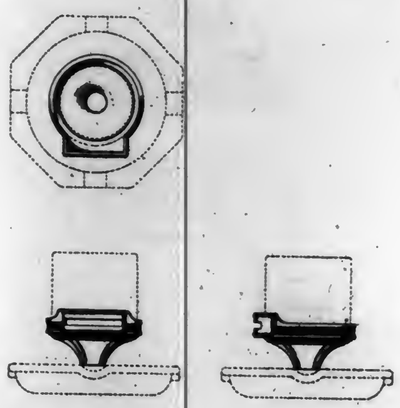
The ornamental design for a book end, as shown.

84,583. HOLY WATER FONT. MARY CATHERINE HURLEY, Dorchester, Mass. Filed Mar. 23, 1931. Serial No. 39,199. Term of patent 14 years.



The ornamental design for a holy water font as shown.

84,584. ASH TRAY OR THE LIKE. ALBERT KLEIN, Bronx, N. Y. Filed Mar. 3, 1931. Serial No. 38,914. Term of patent 3½ years.



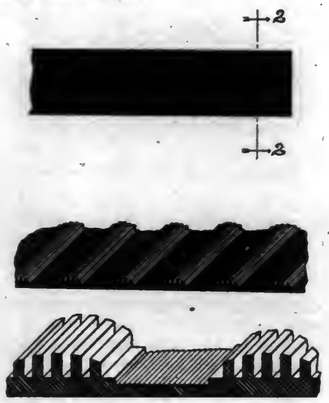
The ornamental design for an ash tray or the like, substantially as shown.

84,585. CHAIR. CHRISTOPHER LEDDER and OLIN SNOW, Hardin, Ill. Filed Apr. 20, 1931. Serial No. 39,578. Term of patent 3½ years.



The ornamental design for a chair, as shown.

84,586. RUBBER MATTING. ROGER K. LEE, Highland Park, Mich. Filed Nov. 22, 1930. Serial No. 37,756. Term of patent 14 years.



The ornamental design for a rubber matting substantially as shown.

84,587. SHOE. CHARLES MILLER, Long Island City, N. Y. Filed Mar. 26, 1931. Serial No. 39,243. Term of patent 3½ years.



The ornamental design for a shoe, as shown and described.

84,588. COMBINED BOOKCASE, CLOCK CASE AND RADIOCABINET. JAY M. MULLIN, Elmhurst, N. Y. Filed Feb. 24 1931. Serial No. 38,798. Term of patent 7 years.



The ornamental design for a combined bookcase, clock case and radiocabinet, as shown and described.

84,589. LIGHTING FIXTURE. ALBERT J. D. OHM, Oak Park, Ill., assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 17, 1931. Serial No. 39,519. Term of patent 3½ years.



The ornamental design for a lighting fixture as shown and described.

84,590. LIGHTING FIXTURE. ALBERT J. D. OHM, Oak Park, Ill., assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 17, 1931. Serial No. 39,520. Term of patent 3½ years.



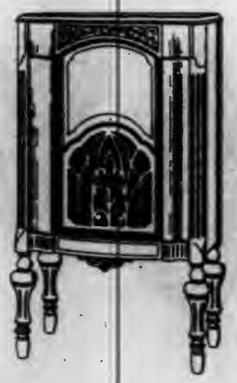
The ornamental design for a lighting fixture as shown and described.

84,591. SOLE FOR A WOMAN'S SHOE. JAMES C. PAPE, New York, N. Y. Filed Apr. 25, 1931. Serial No. 39,627. Term of patent 14 years.



The ornamental design for a sole for a woman's shoe substantially as shown.

84,592. RADIOCABINET OR SIMILAR ARTICLE. GEORGE J. PIKE, Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 8, 1931. Serial No. 39,764. Term of patent 3½ years.



The ornamental design for a radio cabinet or similar article as shown.

84,593. JAR OR SIMILAR ARTICLE. THEODORE J. PIAZZOLI, Connellsville, Pa., assignor to Capstan Glass Company, Connellsville, Pa., a Corporation of Delaware. Filed Apr. 30, 1931. Serial No. 39,665. Term of patent 14 years.



The ornamental design for a jar or similar article as shown.

84,594. RADIOCABINET OR SIMILAR ARTICLE. GEORGE J. PIKE, Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 8, 1931. Serial No. 39,766. Term of patent 3½ years.



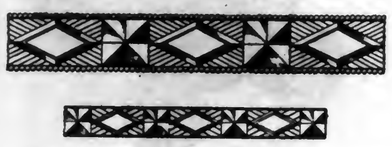
The ornamental design for a radio cabinet or similar article as shown.

84,595. CLOCK CASE. HARRY C. RICHARDSON, North Salem, N. Y., assignor to Warren Telechron Company, a Corporation of Maine. Filed Oct. 10, 1930. Serial No. 37,210. Term of patent 14 years.



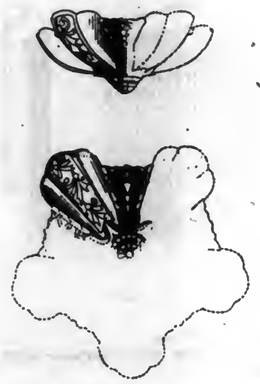
The ornamental design for a clock case as shown.

84,596. WIRE OR SIMILAR ARTICLE. WILLIAM A. ROHMAN, Attleboro, Mass., assignor to D. E. Makepeace Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Feb. 20, 1931. Serial No. 38,742. Term of patent 3½ years.



The ornamental design for wire or similar article substantially as shown.

84,597. LIGHTING FIXTURE MEMBER OR ARTICLE OF SIMILAR NATURE. ISIDOR ROSENBLATT, New York, N. Y. Filed May 7, 1931. Serial No. 39,745. Term of patent 3½ years.



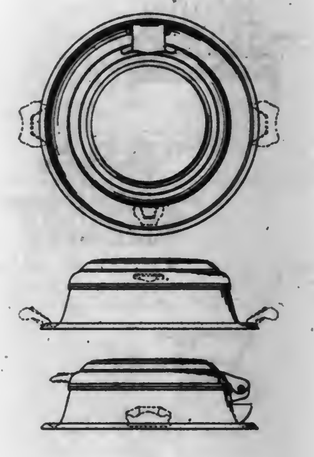
The ornamental design for a lighting fixture member or article of similar nature, as shown and described.

84,598. COMBINED SMOKER'S STAND LAMP. JAMES JOSEPH ROWBOTTOM, Chicago, Ill. Filed Apr. 13, 1931. Serial No. 39,468. Term of patent 3½ years.



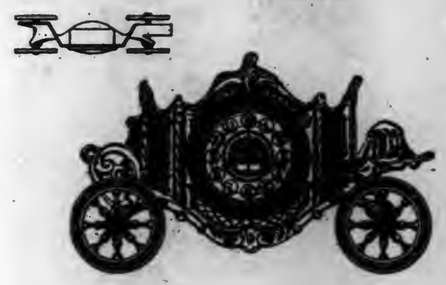
The ornamental design for a combined smoker's stand lamp, as shown.

84,599. ELECTRIC WAFFLE IRON. ABE O. SAMUELS, Rochester, N. Y., assignor to Samson-United Corporation, Rochester, N. Y. Filed Feb. 6, 1931. Serial No. 38,566. Term of patent 7 years.



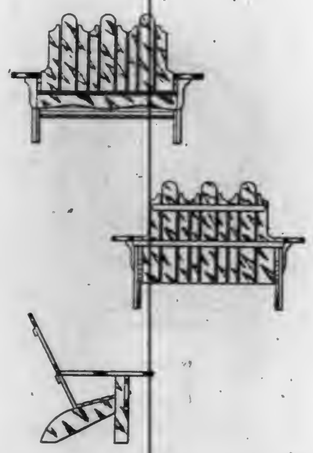
The ornamental design for an electric waffle iron, as shown.

84,600. CLOCK CASE. BENJAMIN A. SCHIFF, Chicago, Ill. Filed Feb. 3, 1931. Serial No. 38,535. Term of patent 3½ years.



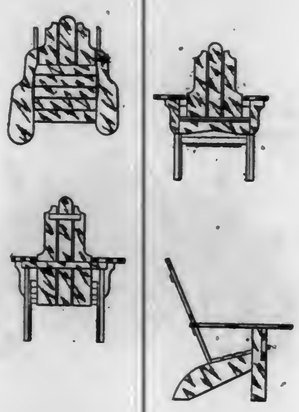
The ornamental design for a clock case, as shown.

84,601. CHAIR SETTEE. JULIUS A. SEIDEL, St. Louis, Mo., assignor to Julius Seidel Lumber Company, St. Louis, Mo., a Corporation of Missouri. Filed May 11, 1931. Serial No. 39,812. Term of patent 14 years.



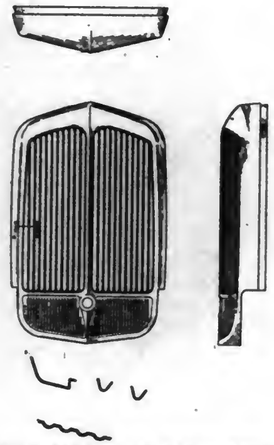
The ornamental design for a chair settee, as shown.

84,602. CHAIR. JULIUS A. SEIDEL, St. Louis, Mo., assignor to Julius Seidel Lumber Company, St. Louis, Mo., a Corporation of Missouri. Filed May 11, 1931. Serial No. 39,813. Term of patent 14 years.



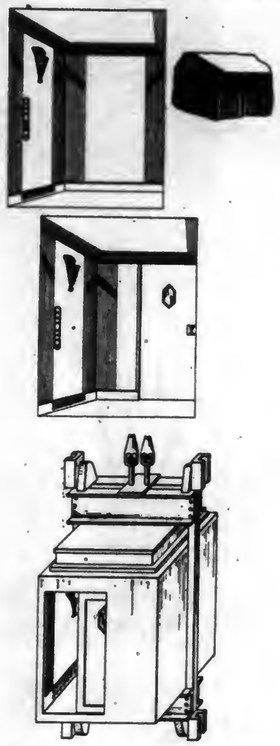
The ornamental design for a chair, as shown.

84,603. RADIATOR SHELL FOR AUTOMOBILES. HARRY A. SHAW, East Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed May 4, 1931. Serial No. 39,707. Term of patent 7 years.



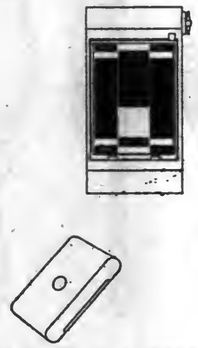
The ornamental design for a radiator shell for automobiles, as shown.

84,604. ELEVATOR CAB. ALBERT J. STEGEMAN, Quincy, Ill., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 17, 1931. Serial No. 38,346. Term of patent 14 years.



The ornamental design for an elevator cab substantially as shown.

84,605. CAMERA CASING. WALTER D. TEAGUE, New York, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 21, 1931. Serial No. 39,586. Term of patent 14 years.



The ornamental design for a camera casing as shown and described.

84,606. STAND FOR SMOKER'S AND SIMILAR ARTICLES. ARTHUR VON FRANKENBERG, New York, N. Y. Filed May 9, 1931. Serial No. 39,792. Term of patent 3½ years.



The ornamental design for a stand for smoker's and similar articles, as shown.

84,607. STAND FOR SMOKER'S AND SIMILAR ARTICLES. ARTHUR VON FRANKENBERG, New York, N. Y. Filed May 9, 1931. Serial No. 39,793. Term of patent 3½ years.



The ornamental design for a stand for smoker's and similar articles, as shown.

84,608. STAND FOR SMOKER'S AND SIMILAR ARTICLES. ARTHUR VON FRANKENBERG, New York, N. Y. Filed May 9, 1931. Serial No. 39,794. Term of patent 3½ years.



The ornamental design for a stand for smoker's and similar articles, as shown.

84,609. STAND FOR SMOKER'S AND SIMILAR ARTICLES. ARTHUR VON FRANKENBERG, New York, N. Y. Filed May 9, 1931. Serial No. 39,795. Term of patent 7 years.



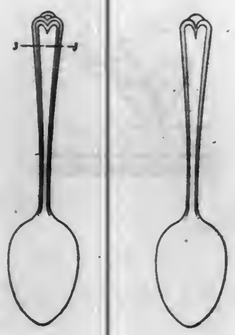
The ornamental design for a stand for smoker's and similar articles, as shown.

84,610. STAND FOR SMOKER'S AND SIMILAR ARTICLES. ARTHUR VON FRANKENBERG, New York, N. Y. Filed May 9, 1931. Serial No. 39,797. Term of patent 3½ years.



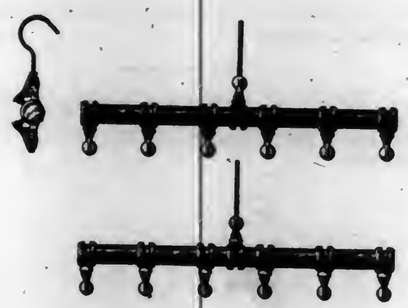
The ornamental design for a stand for smoker's and similar articles, as shown.

84,611. SPOON OR SIMILAR ARTICLE. WILLIAM S. WARREN, Meriden, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a Corporation. Filed Apr. 24, 1931. Serial No. 39,617. Term of patent 7 years.



The ornamental design for a spoon or similar article as shown.

84,612. GARMENT HANGER. SILVESTER F. WILSON, Oakland, Calif. Filed May 1, 1931. Serial No. 39,670. Term of patent 14 years.



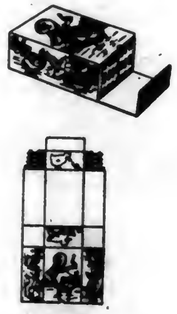
The ornamental design for a garment hanger substantially as shown.

84,613. HAIR BRUSH. JOSEPH ZAPPULLA, Bay Shore, N. Y. Filed Apr. 16, 1931. Serial No. 39,498. Term of patent 3½ years.



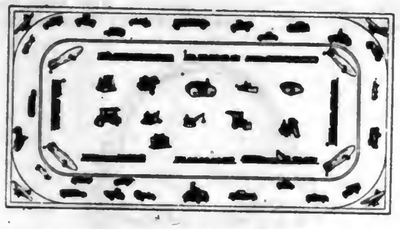
The ornamental design for a hair brush as shown.

84,614. BOX FOR BABY'S SHOES. BENNO SCHUBART, Nuremberg, Germany, assignor to the Firm Vereinigte Schuhfabriken Berneis-Wessels A. G., Augsburg-Oberhausen, Germany, a German Firm. Filed Jan. 5, 1931. Serial No. 38,202. Term of patent 3½ years.



The ornamental design for a box for baby's shoes, as shown and described.

84,615. RUG. JOHN C. SMILEY, Uniontown, Pa. Filed May 16, 1931. Serial No. 39,875. Term of patent 14 years.

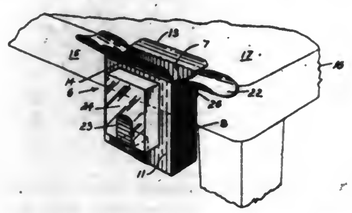


The ornamental design for a rug, as shown.

PATENTS

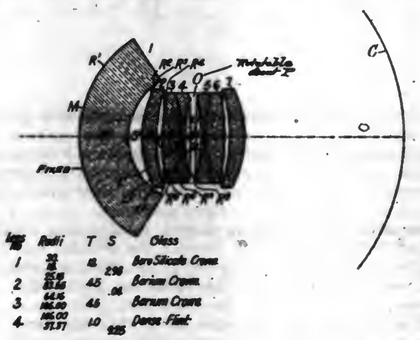
GRANTED JULY 7, 1931

1,812,850. SMOKER'S DEVICE. FRED H. AXELL, Oakland, Calif. Filed Aug. 27, 1928. Serial No. 302,213. 3 Claims. (Cl. 131—51.)



1. In a device of the character described, means providing an ash receptacle having pairs of opposed sides, and a unitary member formed of a strip of resilient material and having an intermediate portion thereof generally U-shaped and arranged to be resiliently engaged with and between a pair of opposite sides of the receptacle to provide a false bottom therefor, said member having end portions providing cigar rests arranged to overlie and extend outwardly from the top edges of said receptacle sides.

1,812,851. PHOTOGRAPHIC OPTICAL SYSTEM. FRED E. ALTMAN, Rochester, N. Y., assignor, by mesne assignments, to Felms Revo Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1929. Serial No. 347,756. 10 Claims. (Cl. 88—57.)



1. A photographic optical system comprising a symmetrical objective of finite, positive focal length and uncorrected for coma and a negative meniscus lens, concave to the doublet, both surfaces of the meniscus lens being concentric with one of the Gauss points of the objective.

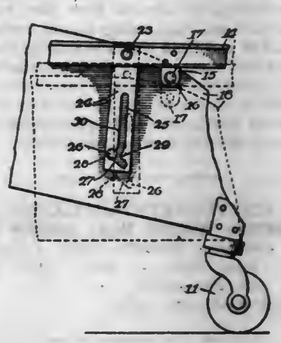
1,812,852. SEWING MACHINE SHUTTLE. FRED ASHWORTH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Sept. 24, 1929, Serial No. 394,770. Divided and this application filed May 1, 1930. Serial No. 448,910. 6 Claims. (Cl. 112—238.)

1. A sewing machine shuttle comprising a discoidal shuttle casing having an open end, a removable thread holder forming a closure for the open end of the shuttle casing, provided with a stud projecting inwardly into the shuttle casing and forming a central support for the shuttle thread mass, a thread engaging plunger mounted in said stud, means for removably locking the thread holder to the shuttle casing, comprising a locking slide



mounted in the end of the thread holder casing to move diametrically into engagement with the shuttle casing, and a spring arranged to press said plunger outwardly towards a surface formed on the slide between which surface and the plunger the thread passes on its way from the shuttle to the work.

1,812,853. SAFETY LOCK FOR ROLLER BEDS. GEORGE W. BARNES, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed May 9, 1927. Serial No. 189,818. 6 Claims. (Cl. 5—167.)

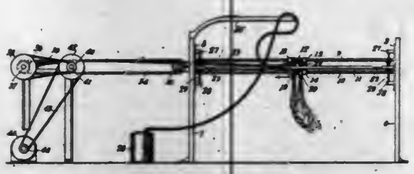


1. In a roller bed, the combination of a movable wheeled carriage having a relatively short wheel base, a relatively long bed frame pivoted on the carriage and adapted to swing thereon from vertical folded position to extended horizontal or unfolded position, a link pivotally connected to said frame and freely suspended from its pivot, and a stop on said carriage, said link and stop being normally out of operative engagement so as not to interfere with normal folding or unfolding of said bed frame, but adapted to automatically cooperate to limit accidental tipping of the upper part of said carriage inwardly over the bed frame when the latter is in unfolded position.

1,812,854. PAINT SPRAYING APPARATUS. WILLARD C. BEACH, East Orange, N. J. Filed July 3, 1929. Serial No. 375,808. 1 Claim. (Cl. 91—45.)

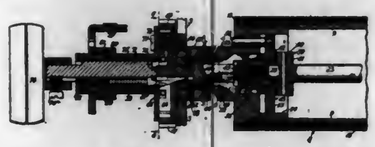
In a paint spraying apparatus, a slidably mounted carriage, a paint spray gun mounted on the carriage, a track positioned adjacent the carriage, a roller attached to the trigger of the gun and bearing on the track to cause the gun to operate, said track having depressions at each end into which the roller falls to enable the trigger to discon-

tinue the operation of the gun, said track having an aperture at each end, threaded rods passing through the aper-



tures, and nuts in threaded engagement with said rods, the track being supported in adjusted positions by said nuts.

1,812,855. TYPEWRITING MACHINE. RUSSELL E. BENNER, Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Apr. 29, 1929. Serial No. 359,106. 22 Claims. (Cl. 197—145.)



16. The combination of a carriage, a cylindrical platen, and means for detachably mounting the platen in the carriage comprising a rotative part that remains fixed against removal from the carriage and to which the platen may be attached and from which it may be detached without removing said rotative part from the machine, a chuck carried by the platen, and means for closing said chuck on said rotative part when the platen is in place and for disengaging the chuck from said rotative part preliminary to a removal of the platen from the carriage.

1,812,856. ACETYL-3-PHENYL-SALICYLIC ACID. EDGAR C. BRITTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 19, 1929. Serial No. 393,846. 1 Claim. (Cl. 260—107.)

Acetyl-3-phenyl-salicylic acid.

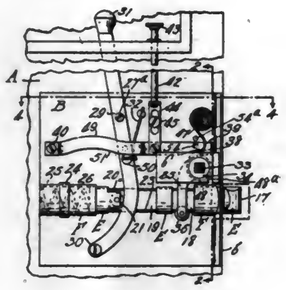
1,812,857. CURTAIN ROD. MATTHEW J. BRUNNER, Buffalo, N. Y. Filed Jan. 13, 1930. Serial No. 420,333. 6 Claims. (Cl. 156—22.)



1. In a curtain fixture having a rod-engaging portion and a yieldable latching element applied to the bracket to interlock with said rod said element having a portion extending beyond the attaching end of the rod and constituting a finger-piece for releasing the latching element.

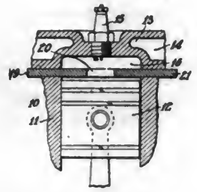
1,812,858. FASTENER FOR DOORS AND THE LIKE. JOHN S. BURDICK, Hamburg, N. Y. Filed Dec. 17, 1927. Serial No. 240,914. 11 Claims. (Cl. 292—164.)

1. A fastener including a bolt adapted to co-operate with a keeper, said keeper being provided with a face extending transversely of the direction of movement of said bolt into its locking position and said bolt being provided with a face adapted to cooperate with a face of said keeper, said



face of said bolt being rotatable about the longitudinal axis of the bolt during the fastening operation of said bolt to permit the face of said bolt to aline itself with the face of said keeper along a straight line.

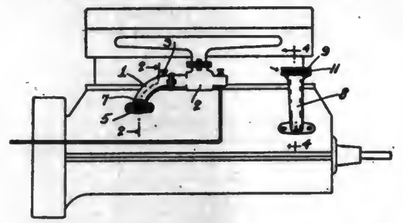
1,812,859. INTERNAL COMBUSTION ENGINE. JAMES P. BURKE, Newark, N. J., assignor of one-half to Eugene M. Cahalan, Newark, N. J. Filed Feb. 21, 1928. Serial No. 255,893. 2 Claims. (Cl. 123—191.)



1. An internal combustion engine comprising a cylinder, a combustion head for the cylinder, the cylinder and head having plane inner connecting surfaces, a single separable comparatively thin solid plate engaged between said surfaces, said plate having its opposite sides substantially uniformly plane and parallel, said plate having a substantially central opening therein, said opening affording restricted communication between the cylinder and head, a piston in the cylinder, the end of the piston being parallel to the adjacent side of the plate and approaching into close proximity thereto, the combustion head representing all of the effective combustion space when the piston is in the position of greatest compression, the opening in the plate causing a turbulence in the gases driven into the combustion head by the piston, the said plate being rigid and substantially free of vibrational effects incident to the stresses created in the compression, combustion and expansion of the gases, said plate being substantially highly heated by the combustion in the combustion head, combustible gas inlet and burnt gas outlet passages for said combustion space, said combustion space being otherwise closed, valves for said passages, and spark ignition means for the combustion space.

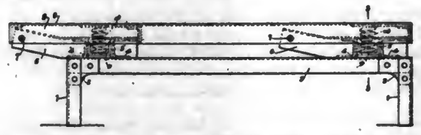
1,812,860. INTERNAL COMBUSTION ENGINE. WALTER M. BURNS, Absecon, N. J. Filed June 17, 1929. Serial No. 371,611. 1 Claim. (Cl. 123—119.)

In an internal combustion engine, a pipe for connecting the air intake of the carbureter thereof with the upper part of the crank case, said pipe having an air inlet port therein, an adjustable valve for controlling said port, a



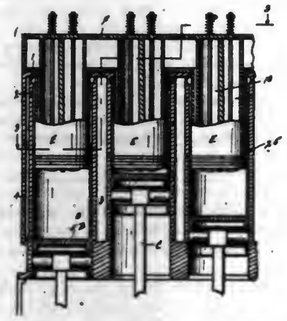
valve for regulating the flow of vapors through the pipe, a valve in the cap of the breather tube for preventing the escape of crank case vapors through the breather tube.

1,812,861. SPRING SUPPORTED PLATFORM FOR VEHICLES. SHERWOOD M. CHASE, Columbus, Ohio, assignor to The Chase Foundry & Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 17, 1927. Serial No. 176,077. 5 Claims. (Cl. 248—41.)



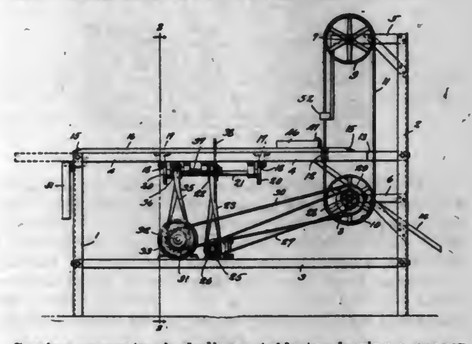
1. In combination, a detachable supporting platform, standards to support said platform on the ground, a load supporting platform, arms to pivotally connect said platforms to one another, means to support the free end of said arms with respect to the first mentioned platform, and yielding means interposed between the free end of said arms and the load supporting platform whereby the load supporting platform may move substantially vertically and yieldingly with respect to the platform which is supported directly on the ground.

1,812,862. INTERNAL COMBUSTION ENGINE. DOUGLAS F. CLARKE, Salt Lake City, Utah, assignor to American Miracle Motors, Ltd., a Corporation of California. Filed Sept. 17, 1929. Serial No. 393,150. 5 Claims. (Cl. 123—173.)



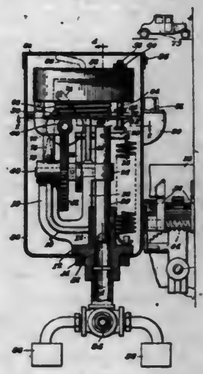
1. In a motor of the class described the combination of a cylinder having an annular well formed near the top end thereof; a bleeder formed spirally down the side wall thereof a detachable cylinder head having an extension thereon adapted to fit down within and spaced from the inner wall of said cylinder; a piston operable within said cylinder having the top end formed into a cup, said cup to operate within the space between the inner walls of the cylinder and the outer walls of the cylinder head; a water jacket formed within the extension on the head around the side walls thereof; a partition between the inner walls of said head extending from top to bottom; valves operable one on each side of said wall, and in valve seats formed on the end of said extension; intake and exhaust pipes adjacent each other to carry fuel to the motor and the exhaust gases therefrom with the exhaust gases to preheat the intake fuel by the close proximity thereto; and a well formed within the extension and through the head in which the spark plug is placed for firing the gases within the cup and below the extension of the head.

1,812,863. SAWING APPARATUS. ALMON E. COMBS and GEORGE D. FISK, Fort Dodge, Kans. Filed Dec. 6, 1928. Serial No. 324,256. 1 Claim. (Cl. 143—1.)



Sawing apparatus including a table top having a corner portion cut away and a slot adjacent to said corner portion, of a band saw working within the slot and corner portion, a delivery chute extending under said corner portion for receiving objects gravitating through said corner portion, a slide mounted for reciprocation on the table top, a motor, disks mounted for rotation close to but beneath the table top, pitman connections between the disks and the slide, and means under the control of an operator for coupling the disks to or uncoupling them from the motor, said slide constituting means for feeding stock to the saw, said cut-away corner portion of the table top and the delivery chute being positioned to receive the end of the stock when severed.

1,812,864. LIQUID HANDLING MEANS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 9, 1925. Serial No. 74,421. 12 Claims. (Cl. 184—30.)



1. Handling means for material of a substantially liquid nature, comprising a unitary support, an inertia operated

power mechanism at the top of said support, a portion of said power mechanism requiring freedom of oscillation, a pump near the bottom of said support, a transmission between said power mechanism and said pump, a receptacle fastened on said support and enclosing said pump, transmission and power mechanism, and a filling inlet for said receptacle determining the maximum level of material in said receptacle, said level being below that of the portion of said power mechanism requiring freedom of oscillation but above said transmission and pump to submerge them.

1,812,865. VALVE FOR MAGAZINES FOR PICTURE FILMS. AUGUSTO DINA, Jersey City, N. J., assignor to The Precision Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 5, 1925. Serial No. 54,620. 3 Claims. (Cl. 88—17.)



1. In a device of the character described, in combination with the magazine of a motion picture machine, a film valve comprising a plurality of rollers, two heat conducting distance blocks recessed to receive the rollers and to form a film chute, a back plate detachably secured to the distance blocks, two front plates similarly secured to the distance blocks and spaced apart so as to form a narrow slit registering with the chute formed by the distance blocks.

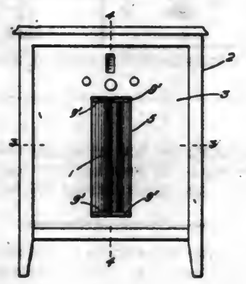
1,812,866. RAILROAD GATE. JOSEPH ARTHUR DROUIN, Willimantic, Conn. Filed Mar. 31, 1928. Serial No. 266,348. 1 Claim. (Cl. 39—7.)



A gate construction comprising a well adapted to be embedded in the ground, a hollow casting supported by the well above the ground and secured thereto, said casting including a top wall having a centrally located bearing, a shaft rotatably supported within the well and having at its upper end journaled in and projecting above said bearing, a circular track rising from the top wall of the casting, a post arranged above the casting and having a centrally located bearing to receive the adjacent end of said shaft, a gate supported by the post, means for rotating the shaft in reverse direction to open or close the gate, the lower portion of the post being relatively wide and formed with inner and outer depending annular flanges, and rollers journaled between said flanges and movable over the circular track of the casting.

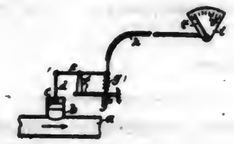
1,812,867. RADIO LOUD SPEAKER. CHARLES HUGH DUFFY, Miami, Fla. Filed Apr. 25, 1930. Serial No. 447,390. 20 Claims. (Cl. 181—31.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A diaphragm for radio speakers and the like comprising two sheets of celluloid flexed into two substantially quarter circle formations so that the plane of the side edges of the sheets lies at substantially right angles to the plane of the meeting edges of the sheets, means for clamping the said side edges of the sheets of the diaphragm, strips of soft pliable material applied to the top and bot-



tom edges of the diaphragm, means adjacent the said edges to receive said strips to prevent the vibratory waves from passing from front to back of the diaphragm at the top and bottom edges thereof and means for fastening the said soft pliable strips to the said means adjacent the said edges.

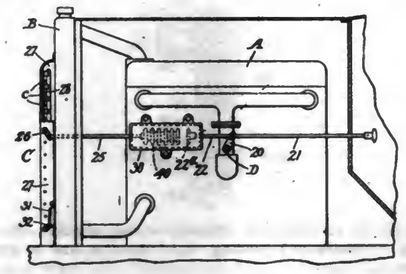
1,812,868. INDICATING DEVICE FOR THE POWER CONSUMPTION IN MOTOR CARS AND THE LIKE. HERMANN ALWIN DUTSCHKE, Cassel, Germany. Filed Aug. 2, 1929, Serial No. 383,187, and in Germany June 12, 1929. 1 Claim. (Cl. 116—114.)



An indicating device for power consumers in motor cars and other land, air and water vehicles driven by motors, comprising in combination two shafts, a yielding clutch adapted to couple said two shafts, a clutch half shiftable on one of said shafts, a lever-like feeler adapted to be guided by said shiftable clutch half, a scale on the dash board of the vehicle, a hand movable on said scale, and a Bowden cable adapted to transmit the movement of said feeler to said hand, to indicate the $H_e P$. transmitted by said clutch.

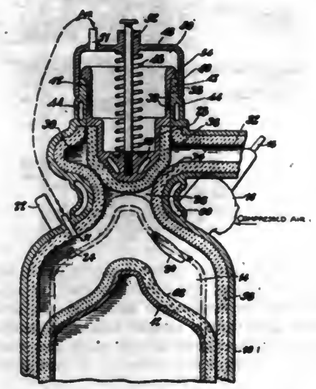
1,812,869. RADIATOR SHUTTER THROTTLE CONTROL. WILLIAM A. EDWARDS, Chicago, Ill. Filed May 19, 1928. Serial No. 279,184. 7 Claims. (Cl. 123—174.)

1. In an engine driven vehicle in combination with the engine having a radiator for controlling the temperature of the engine and radiator shielding means adjustable as to degree of opening and closing for controlling access of cooling air to the radiator, and operating connections for adjusting said shielding means, a member connected with the engine throttle for movement in the adjustment of the throttle, and means connected for movement in the opening and closing movement of the radiator shielding means, said last mentioned means and the throttle-connected means being positioned for movements respectively in the directions for encountering each other in the movement of the radiator shielding means for increasing air access to the radiator and for the throttle-connected means for opening the throttle, with a lost motion interval between them at the normal closed position of the radiator shield-



ing means and the closed position of the throttle, said interval being substantially equal to the total throttle operating movement; the radiator shield operating means comprising a heat-responsive element positioned for experiencing the engine heat adapted to be expanded thereby in the direction for reducing said last mentioned interval.

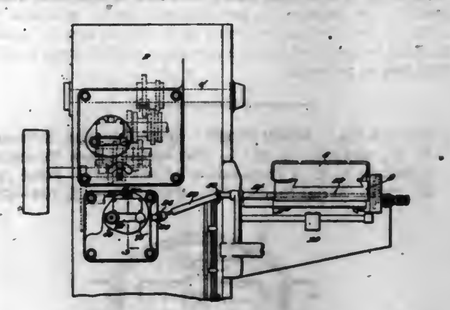
1,812,870. VALVE TO CONTROL HIGH TEMPERATURE HIGH PRESSURE FLUIDS. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1928, Serial No. 269,975. Renewed Nov. 14, 1930. 17 Claims. (Cl. 123—191.)



1. The combination in an internal combustion engine of a power cylinder having an exhaust port, and a valve controlling said port, said cylinder and valve having refractory coverings on surfaces exposed to hot gases, said coverings presenting only flat and rounded surfaces to the gases whereby differences in temperature between different portions of the said coverings are minimized.

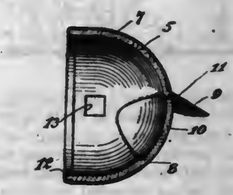
1,812,871. VARIABLE SPEED CONTROLLER MECHANISM. BENJAMIN P. GRAVES, Cranston, R. I., assignor to Brown and Sharpe Manufacturing Company, a Corporation of Rhode Island. Filed Jan. 20, 1928. Serial No. 248,137. 16 Claims. (Cl. 74—39.)

15. In a machine tool the combination with a variable speed mechanism of a plurality of variable speed controller mechanisms located at different points on the machine, each comprising a shaft rotatable through one revolution for each succeeding adjustment in a cycle of adjustments of the variable speed mechanism, means for indicating the present adjustment of the variable speed mechanism, a manually operable rotary controller loosely mounted on each shaft, means for connecting the rotary controller to rotate



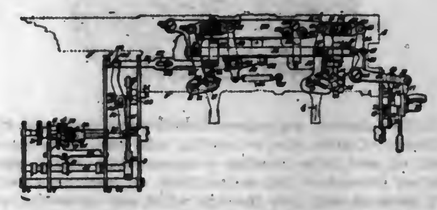
the shaft, and means for holding the rotary controller when out of operation in the same predetermined angular position on the machine.

1,812,872. ARTIFICIAL EYE FOR DOLLS, MANIKINS, AND OTHER FIGURE TOYS. LEO J. GRUBMAN, Belle Harbor, Long Island, N. Y., assignor to Margon Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 24, 1927. Serial No. 170,446. 4 Claims. (Cl. 46—40.)



1. An artificial eye structure comprising an outer sheet metal shell having an eye shaped opening in its wall, an inner shell of thermo-plastic material having a section of its wall projected through and substantially closing said opening, the outer surfaces of the outer shell and projected section of the wall of the inner shell being positioned in the same circumferential arc, and eyelash strands having one of their ends embedded in the structure of the inner shell wall and supported by the projected section of said wall in definite angularly projecting relation to the surface of the outer shell at one edge of the opening therein.

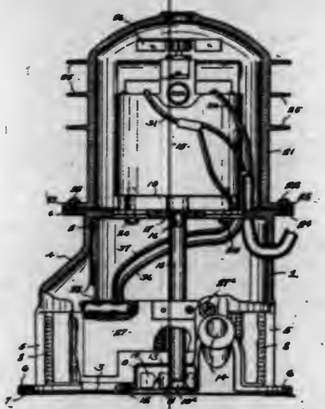
1,812,873. COMPUTING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Dec. 31, 1926. Serial No. 158,266. 4 Claims. (Cl. 235—59.)



4. In the gear-shift mechanism of a computing machine, the combination of a rod to be shifted lengthwise, a lever

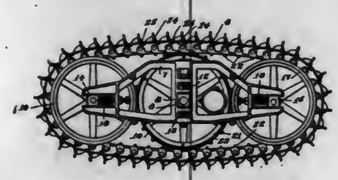
83 having a slotted end engaging a pivot in the slotted end of said rod, said lever pivoted on a stud, a link engaging the opposite end of said lever by pin-and-open-slot connection, a device by which said link is operated, and a second stud engaging a longitudinal slot in said link to guide it, the construction being such that by merely removing said second stud the link and lever will be freed so that they can be removed.

1,812,874. SUMP PUMP. MEAD HEDGLON, Syracuse, N. Y., assignor to M. L. Oberdorfer Brass Company, Syracuse, N. Y., a Corporation of New York. Filed Jan. 29, 1929. Serial No. 335,847. 5 Claims. (Cl. 103—26.)



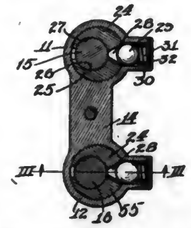
1. A sump pump comprising a body having top and bottom walls and side walls closed at their upper portion adjacent the top wall and open at their lower portions whereby the upper portion acts as a diving bell, the lower open portion of the body above the bottom forming an inlet for water, a pump casing mounted on the upper side of the bottom wall, a pump rotor therein, an electric motor mounted on the top wall and having its shaft extending vertically through the body and connected to the rotor, a casing mounted on the top wall and enclosing the motor and a float operated electric switch located in the lower portion of the body for controlling the flow of current to the motor.

1,812,875. TRACTOR. CLARENCE A. HENNEUSE, Sacramento, Calif., assignor to Hadfield-Penfield Steel Company, Bucyrus, Ohio, a Corporation of Ohio. Refile of abandoned application Serial No. 348,009, filed Dec. 29, 1919. This application filed June 20, 1925. Serial No. 38,549. 2 Claims. (Cl. 305—8.)



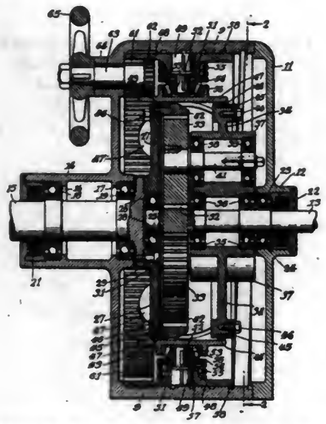
2. In a tractor, an endless flexible track composed of a plurality of links, pins connecting said links, elements on each of said links forming a substantially closed outer surface throughout the entire track, an inwardly extending tooth on each link through which the connecting pin passes, each of said teeth being spaced from the ground engaging portion of said links, and a driving sprocket provided with teeth engaging said track teeth.

1,812,876. ECCENTRICALLY ADJUSTED SPRING SHACKLE. GEORGE H. HUFFERD, Detroit, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 12, 1929. Serial No. 254,471. 6 Claims. (Cl. 308—62.)



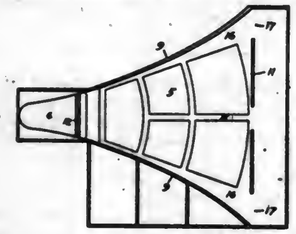
1. In an eccentrically adjusted spring shackle, shackle bolts, wedge-shaped bearing seats therefor and a spring urged ball therefor tending to maintain said seats in wedging engagement with said bolts.

1,812,877. VARIABLE SPEED DEVICE. CLIFFORD E. IVES, Wilmette, Ill. Filed Apr. 12, 1930. Serial No. 443,680. 12 Claims. (Cl. 74—34.)



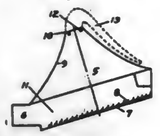
1. A variable speed device comprising a sun gear, an orbit gear, a planet gear interconnecting said gears, a rotatable member concentric with the sun gear carrying said planet gear, and a second rotatable member contacting with and interconnecting the orbit gear and the rotatable member to effect an exchange of forces therebetween.

1,812,878. ACOUSTIC CHAMBER. JAMES C. KARNES, Buffalo, N. Y. Filed Nov. 21, 1929. Serial No. 408,840. 15 Claims. (Cl. 181—30.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



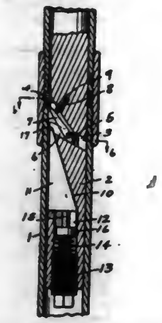
1. In a building structure, an auditorium, having a floor, side walls and a ceiling co-operating to form a horn with an exponential variation of cross section with the length, a stage in prolongation of the auditorium, and a sound reproducer horn in prolongation of the stage.

1,812,879. ACOUSTIC CHAMBER. JAMES C. KARNES, Buffalo, N. Y. Filed Nov. 21, 1929. Serial No. 408,841. 8 Claims. (Cl. 181—30.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



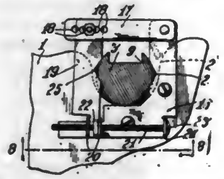
1. In an acoustic chamber, a ceiling formed in the shape of a horn having an exponential variation of cross section with the length and a floor in projection of the mouth of the horn, the axis of the horn being perpendicular to the floor.

1,812,880. WHIPSTOCK. FRANK KINZBACH, Houston, and HARVE M. WHEELER, Humble, Tex. Filed Feb. 13, 1928. Serial No. 253,886. 21 Claims. (Cl. 255—1.)



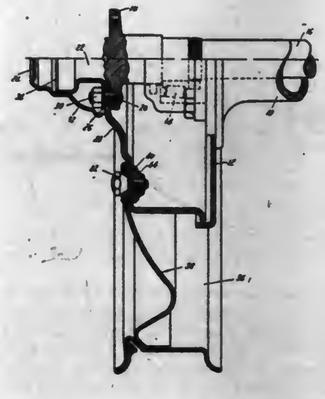
18. The combination with a jointed pipe, of a whip stock having a locking means associated therewith and means associated with the whip stock and adapted to engage in a joint of the pipe to cause said locking means to lock said whip stock in said pipe.

1,812,881. CURTAIN POLE AND BRACKET THEREFOR. CHARLES W. KIRSCH, Sturgis, Mich., assignor, by mesne assignments, to Kirsch Company, Sturgis, Mich., a Corporation of Michigan. Filed Jan. 24, 1927. Serial No. 162,991. 1 Claim. (Cl. 156—22.)



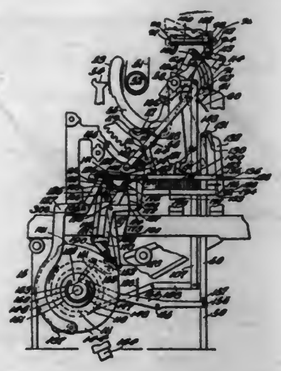
A curtain pole supporting bracket provided with a recess to receive an end portion of a curtain pole and in which the latter is normally rotatable, means mounted on a side face of the bracket and bordering the said recess therein, said means comprising a pair of opposed members projecting toward each other inwardly of the opposed walls of said recess and adapted to engage the pole surface to prevent rotation thereof relatively to said bracket, said members being separable to release said pole.

1,812,882. WHEEL. LUDGER E. LA BRIE, South Bend, Ind., assignor to Motor Industries, Inc., Chicago, Ill., a Corporation of Illinois. Filed Dec. 7, 1925. Serial No. 73,633. 1 Claim. (Cl. 301—6.)



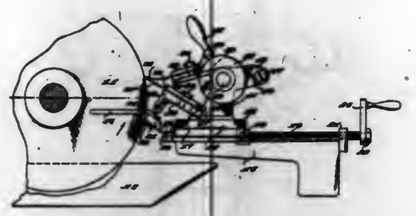
A wheel comprising, in combination, an inner part having openings spaced angularly about its outer edge, an outer part contacting with the inner part along two circular lines, the annular portion between said circular lines forming an annular recess in said outer part, conical flanges formed within said annular recess opposite each of said openings, bushings in said openings having parts formed with conical recesses extending into said annular recess for cooperation with said conical flanges and fastening means having conical portions seated in said flanges and forcing the two parts of the wheel together.

1,812,883. TABULATING MACHINE. JAMES LAST, Kingston, Pa., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 14, 1925, Serial No. 75,843, and in Great Britain Dec. 17, 1924. 37 Claims. (Cl. 235—58.)



1. In a machine of the character stated, the combination of an accounting mechanism including a movable sector set for card group designation control a total taking mechanism, a card controlled analyzing mechanism for controlling said accounting mechanism, and means operated by said sector in response to a change of group designation sensed by said analyzing mechanism for causing said total taking mechanism to function.

1,812,884. COMBINED INK ELIMINATOR AND DOCTOR BLADE. RUSS B. LEECH, Chicago, Ill., assignor to Standard Process Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 4, 1929. Serial No. 390,355. 15 Claims. (Cl. 101—157.)

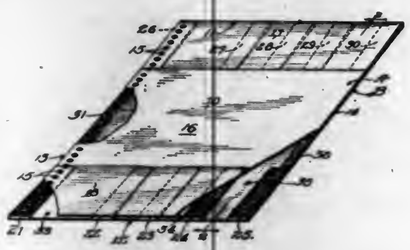


1. In combination, a support for the doctor blade of a printing press, a yielding doctor blade mounted on said support and an ink eliminating member mounted on said support in slightly spaced relation to said form in position to remove some of the surplus ink on a printing form in advance of the operation of the doctor blade and without wear on said form.

1,812,885. PROCESS OF TREATING NACREOUS SUBSTANCES AND ARTICLES FORMED THEREFROM. GEORGE A. LIPPINCOTT, Philadelphia, Pa. Filed Sept. 21, 1927. Serial No. 221,130. 4 Claims. (Cl. 252—1.)

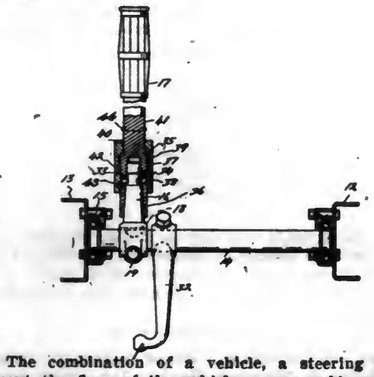
1. The process of treating nacreous materials having the form of crystalline layers united by a natural binder, which consists in immersing the material in water and subjecting it in a closed chamber to a temperature above 100° C. and a pressure above that of the atmosphere to dissolve the natural binder, and recovering the separated layers.

1,812,886. PARTITION SHEET. ALFRED M. MARTIN, Chicago, Ill. Filed Nov. 12, 1929. Serial No. 406,589. 5 Claims. (Cl. 129—1.)



1. For a loose-leaf binder of the character described, a partition sheet having an inner side edge, an outer side edge, and top and bottom edges, said edges defining a substantially rectangular shape and the sheet having upper and lower portions adjacent to said top and bottom edges respectively, with means adjacent to the inner edge of the sheet for holding it in the binder, said sheet comprising a sheet proper, a plurality of thickening pads spaced apart and positioned in one of said portions, a second sheet proper substantially coextensive with the first-mentioned sheet proper, facing the first-mentioned sheet proper, and covering said pads and the areas between the adjacent pads, with the pads secured to at least one of the sheets proper.

1,812,887. STEERING MECHANISM FOR DELIVERY VEHICLES. EDWIN R. MAURER, Detroit, and DONALD M. FERGUSON, Highland Park, Mich., assignors to Divco-Detroit Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 1, 1929. Serial No. 382,815. 9 Claims. (Cl. 180—77.)



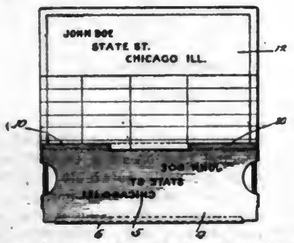
1. The combination of a vehicle, a steering element adjacent the floor of the vehicle, a removable operating handle engageable with said element at the floor of the vehicle, and means for automatically locking said handle to said steering element releasable by a manual operation.

1,812,888. TEMPERATURE AND VACUUM RELIEF DEVICE. JOSEPH A. MAYNARD, Boston, Mass. Filed May 14, 1929. Serial No. 362,929. 4 Claims. (Cl. 137—161.)



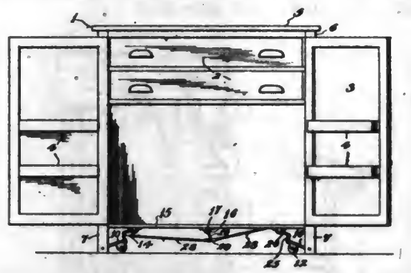
2. A relief device for hot water systems, such as a hot water boiler, comprising a casing member having an inlet passage and an outlet passage at substantially right angles to each other, a partition wall separating said passages and having an opening therethrough forming a valve seat, a tube having an exterior vacuum valve resting on said seat and extending freely through the opening, and a fusible plug exposed in said inlet passage and closing a passage through the tube.

1,812,889. PRINTING DEVICE. BENJAMIN Z. MCCAIN, Oak Park, and HERBERT L. THOMPSON, Elgin, Ill., assignors to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 6, 1928. Serial No. 252,148. 12 Claims. (Cl. 101—369.)



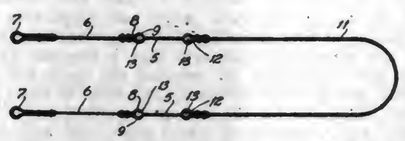
1. The combination of a printing plate having retainer means at the side edges thereof, a frame having flexible arms adapted to be detachably engaged with said retainer means, and a card carried by said frame.

1,812,890. COMBINED TOOL CABINET AND WORK-BENCH. ALLIE B. MCWHORTER, Taft, Tex. Filed Sept. 13, 1928. Serial No. 305,859. 4 Claims. (Cl. 280—44.)



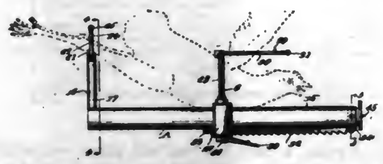
1. The combination with a cabinet, of elevating and lowering means therefor comprising a pivoted member provided with a supporting roller, a pivoted arm, a clevis pivoted to said arm, a pivotal and sliding connection between the clevis and the beforementioned pivoted member, and an operating member connected with the said pivoted arm.

1,812,891. EXERCISING BELT FOR MASSAGING MACHINES. FRANCIS X. MEEHAN, St. Louis, Mo., assignor of one-half to Alfred D. Luehrmann, St. Louis, Mo. Filed July 19, 1928. Serial No. 293,803. 1 Claim. (Cl. 128—63.)



An exercising belt for massaging machines having a main section provided at each of its ends with a retaining device, end sections each of which has at its outer end a unitary engaging member and at its inner end a retaining device, and rubber belt sections having their opposite ends secured, respectively, in the corresponding retaining devices of said main and end sections.

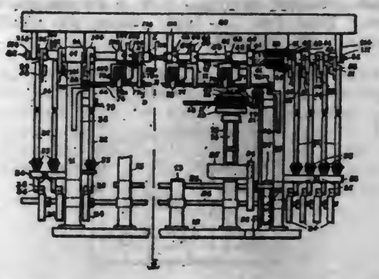
1,812,892. CAPONIZING STRETCHER. MAXWELL C. MERRIFIELD, Seattle, Wash. Filed Jan. 27, 1930. Serial No. 423,856. 4 Claims. (Cl. 128—306.)



1. In a caponizing stretcher a wing holder comprising a supporting post and a pair of resilient wire members secured at their inner ends to the post and flaring outwardly therefrom.

1,812,893. POTTERY FORMING MACHINE. WILLIAM J. MILLER, Swissvale, Pa. Filed Feb. 5, 1927. Serial No. 166,181. Renewed Jan. 27, 1928. 14 Claims. (Cl. 25—24.)

1. In a pottery forming machine a pivotally mounted arm, a trimmer thereon, another pivotally mounted arm, a profile thereon, a means for intermittently depressing said trimmer arm, a means for intermittently depressing



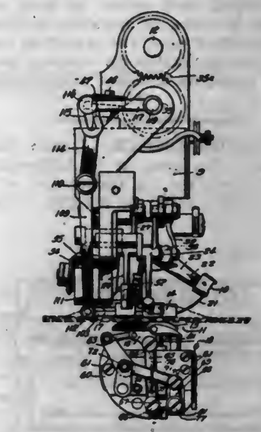
said profile arm, a jigger and rotary cams on said jigger, for actuating each of said depressing means independently of the other.

1,812,894. PRINTING DEVICE. VALENTINE J. MOHLER, River Forest, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 5, 1929. Serial No. 383,604. 3 Claims. (Cl. 101—369.)



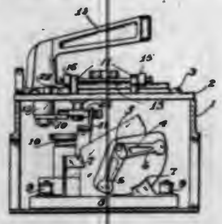
1. A printing device of the class described, comprising a frame, an integral retaining tongue stamped from the frame, and an uninterrupted spacing flange on the frame at the end thereof, the free end of the tongue being stepped and overlapping the underlying portion of the flange.

1,812,895. FEEDING MECHANISM FOR SEWING MACHINES. CHARLES W. MUSELLER, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed Apr. 26, 1927. Serial No. 186,673. 13 Claims. (Cl. 112—203.)



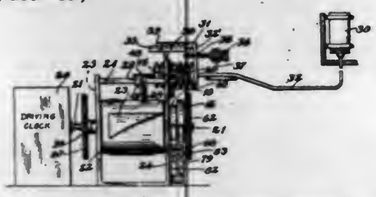
1. In a feeding mechanism for sewing machines, the combination with two work feeding devices operating in planes at right angles to each other to feed the work in the same direction, yieldable means for normally holding said feeding devices in operative engagement with the work, and manually controlled means for moving said feeding devices out of operative working positions.

1,812,896. SWITCH OPERATING MECHANISM. RAYMOND H. OLLEY, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Dec. 24, 1927. Serial No. 242,357. 4 Claims. (Cl. 200—50.)



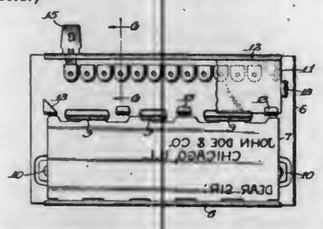
1. The combination of a switch and fuse box having a cover, of a door hinged to the cover, a switch operating lever carried by the cover and pivoted thereto on an axis extending at an angle to the cover and located at one end of the hinge of the door, the lever having means for interlocking with the door near the axis thereof to hold the door closed when the lever is in its position assumed when the switch is "on" and the door having means for locking the lever in its position assumed when the switch is "off" and the door is open, said lever having an angularly extending handle movable into a position to overhang the door when the switch is on.

1,812,897. HEAT CONTROLLING SYSTEM. PERCY R. OWENS, Mount Kisco, N. Y., assignor of twenty-five per cent to Page S. Haselton, Bayside, Long Island, N. Y. Filed Jan. 15, 1926. Serial No. 81,465. 17 Claims. (Cl. 236—46.)



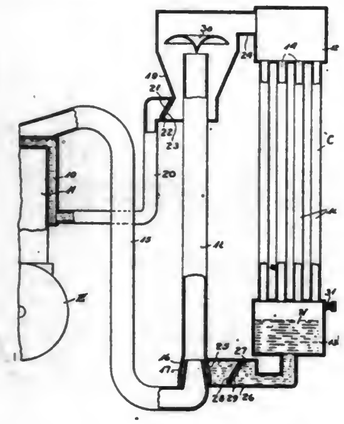
1. In combination, a source of heat, means for intermittently controlling said source of heat, said means being adjustable to cause its operation at time intervals of a length dependent upon the prevailing temperature, and clock operated mechanism for reducing the frequency of intervals of operation during a predetermined portion of the day.

1,812,898. PRINTING DEVICE. JAQUES CAMILLE PASCHALI, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 2, 1928. Serial No. 316,659. 6 Claims. (Cl. 129—16.8.)



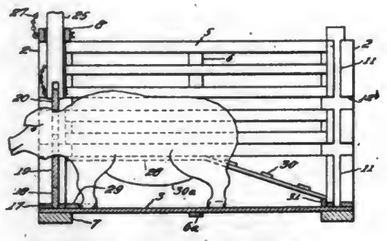
1. The combination of a printing device of the class described comprising a body, a detachable index tab, and tab-retaining devices struck up on the body and adapted to receive and hold the tab in fixed position, said retaining devices including a pocket depressed from the back of the body and receiving the end portion of the tab.

1,812,899. STEAM COOLING SYSTEM. ARTHUR W. POPE, Jr., Waukesha, Wis., assignors to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Oct. 9, 1926, Serial No. 140,439. Renewed July 9, 1928. 18 Claims. (Cl. 123—174.)



1. In a steam cooling system, the combination with the water jacket of an internal combustion engine, of a condenser having a condensate chamber below the level of said water jacket, an elevating tube communication at its lower end with said chamber, a steam pipe extending from the top of said water jacket and discharging into the bottom of said elevating tube to receive the condensate and carry it through said tube, a reservoir at the upper end of said tube for receiving the steam and condensate, said reservoir communicating with the upper part of said condenser for the flow of the steam to the condenser, and a condensate return path from said reservoir to the lower part of said water jacket.

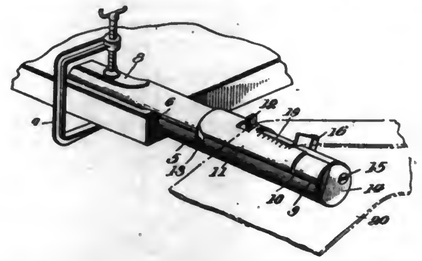
1,812,900. CRATE. FRANK RITZMAN and DONALD RITZMAN, Chicago, Ill. Filed Aug. 18, 1928. Serial No. 300,463. 3 Claims. (Cl. 119—99.)



1. In a crate, a body portion, end gates removably carried thereby, and a breeding bed removably carried by said body portion, said breeding bed comprising spaced connected platforms slidably engaging with the sides of the body portion, said platforms having one inclined stepped end each.

1,812,901. RAG RIPPER. PHILIP B. ROHNER, Carroll, Iowa. Filed Mar. 14, 1929. Serial No. 346,997. 13 Claims. (Cl. 164—36.)

1. In a device for ripping rags, the combination of a body member and a cutting member, said body member having a detachable portion effective to engage said cutting member and clamp same in the body member, and a guide movable on said body member relative to said cutting member, effective to guide a rag strip as it is ripped,



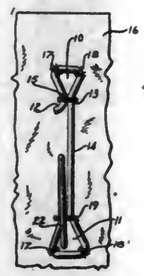
said guide having a rounded surface adapted to project under the strip to facilitate movement of the strip, and gauging means on said projection.

1,812,902. TOY GUN. FREDERICK T. RUSSELL, Utica, N. Y., assignor, by mesne assignments, to Fox Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 11, 1930. Serial No. 443,279. 4 Claims. (Cl. 124—12.)



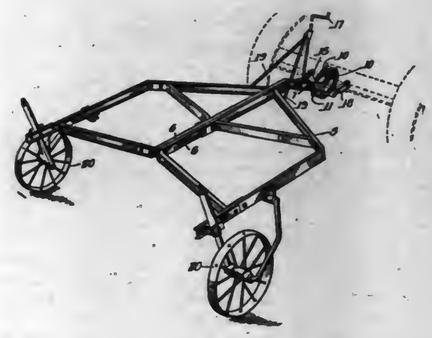
1. In a toy gun, the combination of a frame and a barrel integral with each other and of sheet metal, said barrel being provided with a circumferential annular inwardly indented groove intermediate the ends of said barrel to form a rigid shoulder within the bore of said barrel, a spring-impelled, trigger-controlled impact plunger reciprocable within said barrel to the rear of said shoulder, an impact block fitting said bore in the rear of and seated against said shoulder, a longitudinally reciprocable strike-pin mounted in said impact member, and a light spring also mounted in said impact member and normally yieldingly holding said strike-pin in its rearmost position with the rear end of said strike-pin projecting into the path on the forward movement of said plunger, and a ball retainer fitting said bore of said barrel and fixedly positioned substantially against the forward shoulder provided by said circumferential groove, said ball retainer being provided with means for holding a ball in alinement with the forward end of said strike-pin when strike-pin is in its rearmost position.

1,812,903. DRAPERY SUPPORTING DEVICE. DICKRAN M. SARKISIAN, Forest Hills, N. Y. Filed Oct. 26, 1929. Serial No. 402,573. 7 Claims. (Cl. 156—21.)



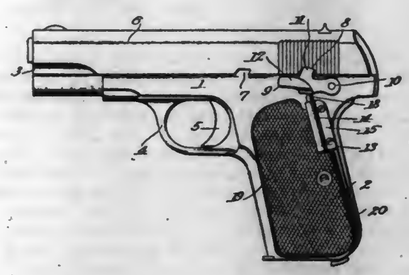
1. A one-piece hook for suspending fabrics, comprising a wire with shank portion and formed at one end with an eye and the wire terminating thereat in a lateral projection adjacent a portion of the shank to afford a neck therewith about which the hook may be sewed to the fabric.

1,812,904. WHEELED HARROW FRAME ADJUSTMENT. EDWARD M. SMITH, Peoria, Ill., assignor to Brown Lynch Scott Co., Monmouth, Ill., a Corporation of Illinois. Original application filed Jan. 19, 1928, Serial No. 247,805, Patent No. 1,740,841, dated Dec. 24, 1929. Divided and this application filed Nov. 22, 1929. Serial No. 409,044. 5 Claims. (Cl. 97—103.)



1. The combination of a harrow frame, a forwardly extending lever pivotally mounted between its ends at the front of said frame, means at the front end of said lever for attaching the harrow to a tractor, and a gear and a segment for swinging said lever with the tractor connection as a fulcrum to raise and lower the frame.

1,812,905. SAFETY DEVICE FOR FIREARMS. LEWIS RUTHERFURD STUYVESANT, Allamuchy, N. J. Filed Apr. 27, 1929. Serial No. 358,601. 20 Claims. (Cl. 42—70.)



1. In a firearm, the combination of a frame, a barrel, a movable breech-slide, a safety device to hold said slide in a predetermined position, and means tending always to hold said device positively in engagement with said slide.

1,812,906. ARTIFICIAL BAIT. HERMAN G. SWEARINGEN, California, Mo., assignor of one-fourth to H. R. Popejoy and one-fourth to J. R. Popejoy, California, Mo. Filed May 1, 1930. Serial No. 448,968. 1 Claim. (Cl. 43—35.)

In an artificial bait of the class described, a body constructed to resemble in its external appearance a minnow,

said body being fashioned at one end with a pair of spaced parallel furcations constituting the tail portion of the minnow and defining an intervening sheath, a transverse cross pin carried by said furcations and spanning the space constituting said sheath, said pin being located intermediate the ends of the furcations, a bodily slidable bait hook unit formed from a single length of wire bent upon itself to provide an intermediate spring coil and a pair of companion arms, the end portions of said arms being disposed in intersecting relationship and the terminal portions being fashioned to define a pair of complemental



overlapping bait receiving hooks, said hooks extending beyond the tail when in overlapping position, the intermediate portions of said arms being provided with inwardly projecting keeper hooks detachably engageable with said cross pin, said intermediate portions being further provided with outwardly extending finger grips, said body being provided with a longitudinal guide bore communicating with the sheath, a fishing line slidably mounted in said bore and connected at its inner end to the spring coil, whereby to bodily slide said unit with respect to the body at the desired time to release the keeper hook from said retaining pin and to allow the bait hooks to expand.

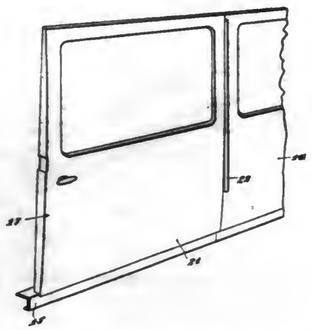
1,812,907. DEVICE FOR TAPPING PIPES. WILLIAM J. TELL, Detroit, Mich. Filed Jan. 13, 1930. Serial No. 420,344. 3 Claims. (Cl. 77—37.)



3. The combination of a yoke clamp adapted to embrace a pipe, an exteriorly threaded shank on said clamp, said clamp and shank having a bore extending therethrough, a set screw threaded in said clamp at the side thereof diametrically opposite to said bore, a tubular drill rotatable and axially slidable in said bore, a circumferentially extending annular shoulder on said drill, a sleeve threaded on said shank, an inturned annular flange on said sleeve swivelly engaging said drill shoulder for moving said drill axially, the outer surface adjacent the outer end of said drill being of graduated diameter for sealing the hole made by said drill when plugged thereinto.

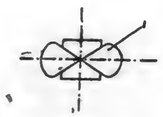
1,812,908. HINGE. MILLARD H. TONCRAY and JAMES W. GREIG, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 19, 1927. Serial No. 220,422. 9 Claims. (Cl. 16—128.)

1. A hinge for automobile doors and the like, said hinge comprising two members connected by a pintle pin, one of said members having a curved portion extending the length of said member and forming a cover and a plurality of projections extending from the free edge of said cover and inwardly offset therefrom in line with said free edge by an amount substantially equal to the thickness of the material and thence rolled toward the cover with their ends substantially meeting the offset to form a plurality of spaced pintle pin bearings within said



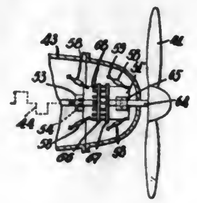
cover, and the other of said members having a series of pintle pin bearings fitting between said first named pintle pin bearings within the cover.

1,812,909. APPARATUS FOR BURNISHING SILVER PLATE. LOUIS TRINQUET, Pavillon S/Bois, and RENÉ MARCEL HAMEL, St. Ouen, France. Filed July 5, 1928, Serial No. 290,677, and in France July 12, 1927. 8 Claims. (Cl. 29—90.)



1. A machine for mechanically burnishing and polishing objects chiefly covers comprises a rotary tool, oblique working ribs provided thereon, means for yieldingly pressing the tool to bear tangentially through its working ribs against the object to be treated, means for shifting the angular position of the said means with reference to the axis of rotation of the tool and means for making the object advance in a direction perpendicular to the axis of rotation of the tool.

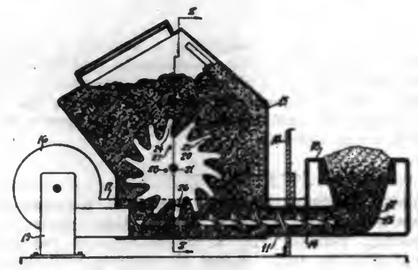
1,812,910. PROPELLER MOUNTING FOR AEROPLANES AND THE LIKE. SPIROS S. VARKAS, New York, N. Y. Filed Oct. 28, 1929. Serial No. 402,886. 3 Claims. (Cl. 244—25.)



1. A propeller mounting for aeroplanes, comprising a shaft for carrying a propeller and separate from the crank shaft of a motor for driving the propeller, a motor for driving said propeller and having a casing and a crank shaft, means for rotatively supporting the propeller shaft and arranged for communicating all pulling and other stresses to the said casing, means for connecting the propeller shaft and the crank shaft for the transmission

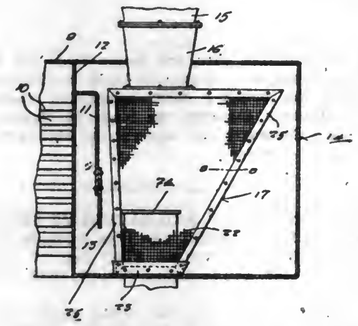
of rotations only, and means for adjusting the longitudinal position of the propeller shaft, comprising a base slidably mounted on the crank casing and carrying standards supporting the propeller shaft, means for adjusting the position of the base, turn buckles pivotally connected with the base and with eye members slidably arranged in slots on said crank case.

1,812,911. AGITATOR FOR STOKERS. JOSEPH H. WALTER, Portland, Oreg., assignor to Iroh Fireman Manufacturing Company, Portland, Oreg. Filed Feb. 7, 1929. Serial No. 338,253. 6 Claims. (Cl. 259—39.)



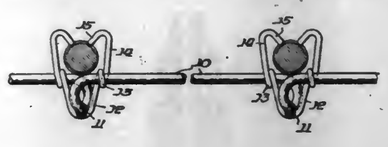
1. In a fuel feeding mechanism the combination of an elongated trough shaped hopper, a feed worm mounted in the bottom thereof, and a toothed wheel whose tooth length approximates the worm diameter, said wheel having its axis mounted transversely across said hopper above said feed worm.

1,812,912. LOCOMOTIVE SMOKE BOX CONSTRUCTION. JOSEPH R. WHEARY and GEORGE J. LUCAS, Crewe, Va. Filed Feb. 7, 1930. Serial No. 426,740. 1 Claim. (Cl. 230—97.)



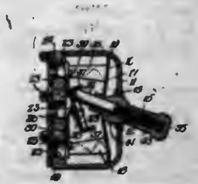
In a spark arrester for locomotives, in combination, a boiler including an end head, flue tubes connected with said head and arranged in said boiler, a smoke box extending outwardly from and surrounding said head, an exhaust nozzle projecting upwardly into said smoke box, a smokestack extending upwardly and outwardly from the smoke box and in vertical alinement with said nozzle, a multiple wall cage arranged in said smokebox in spaced relation to the end head and having its lower end portion embracing the projecting end of the nozzle and its upper end portion connected with the smokestack, said cage including screen walls of substantially flat form converging inwardly and downwardly around the discharge end of said nozzle, and a baffle plate including a horizontal portion attached to said head and a depending vertical portion spaced from the head and the discharge ends of said tubes and spaced from the rear wall of the cage.

1,812,913. BAR CLIP. WILLIAM E. WHITE, Chicago, Ill. Filed Dec. 10, 1927. Serial No. 239,077. 3 Claims. (Cl. 78—122.)



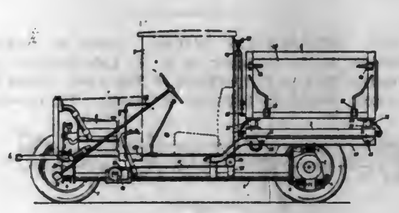
1. The combination with a spacer, of a bar holder applied thereto, said holder comprising a pair of independent, upwardly projecting, resilient arms, the free ends of the arms being in the form of inwardly projecting hooks, the ends of the hooks being adapted to lie immediately above the bar at such angle that the bar cannot escape without distorting the hooks.

1,812,914. THREE POSITION TOGGLE SWITCH. CLARENCE WILLIAMS and ERNST G. APPLETON, Chicago, Ill., assignors to Roach-Appleton Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 10, 1928. Serial No. 260,720. 4 Claims. (Cl. 200—6.)



1. In a switch, in combination, a cup-shaped member having an aperture in the bottom wall thereof, a member of sheet material fitting within said cup-shaped member and having an aperture in substantial alignment with said first-mentioned aperture, an operating member disposed within said apertures and having a protuberance rotatably seated between said member of sheet material and the bottom of said cup-shaped member in bearing relationship with said member of sheet material and said bottom.

1,812,915. DUMP TRUCK. JAMES A. WRIGHT, Montreal, Quebec, Canada. Filed Dec. 7, 1927. Serial No. 238,403. 1 Claim. (Cl. 298—18.)



In a dump truck, a central frame adapted to centrally support a dumping body in its operating positions, the dumping body comprising a table supported on pivots on the central frame, pivotal rest blocks at the corners of the table, upwardly projecting conical seats on the rest blocks, and a load box having pivotal rest blocks and conically bored seats adapted to fit over the conical seats.

1,812,916. RESISTANCE UNIT. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 24, 1929. Serial No. 334,680. 7 Claims. (Cl. 184—7.)



1. In lubricating apparatus of the class described, a resistance unit comprising a body having a bore therein, a plug located in said bore and co-operating therewith to define a passageway of relatively high resistance to flow of lubricant therethrough, said plug having an axial inlet and a conduit connecting said inlet with said passageway, a well in the end of the plug in communication with the axial inlet, and a strainer located at said inlet and said well.

1,812,917. RAIL FASTENING DEVICE. BORIS PAWLOWITSCH ANDREIANOW, Moscow, Union of Socialist Soviet Republics. Filed Mar. 6, 1930, Serial No. 433,624, and in the Union of Socialist Soviet Republics May 17, 1929. 8 Claims. (Cl. 238—304.)



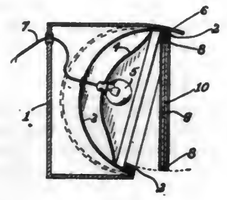
1. In combination, a rail having the usual foot flange, a railway chair plate having a recess on the upper surface on which said rail is mounted, a dog bolt mounted movable vertically in said recess, pressed on the one hand against a vertical surface of said recess and on the otner hand against the under side of the foot flange of said rail, a clamping plate fastened by said dog bolt and seizing over one side of said rail flange, and suitable means for securing the opposite side of said rail flange against movement transversely.

1,812,918. WINDSHIELD WIPER. JOHN M. AUFIERO, Brooklyn, N. Y., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 12, 1929. Serial No. 339,366. 8 Claims. (Cl. 15—253.)



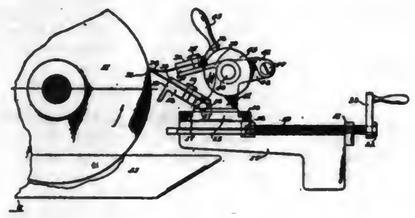
2. A wiper operating mechanism including a casing formed with slots in its upper edge, wiper operating units extending within said casing and through said slots, a rack bar having teeth in its upper edge and adjacent its ends to actuate said units and having teeth in its lower edge, and an operating pinion in engagement with said latter teeth and maintaining the upper edge of said bar in engagement with said casing.

1,812,919. ELECTRIC SIGN. MILTON C. BALDER, Yonkers, N. Y. Filed May 16, 1930. Serial No. 452,845. 7 Claims. (Cl. 40—132.)



1. An electric sign, comprising a housing, a lighting system mounted for angular movement in said housing, a translucent sign-bearing member disposed in fixed relation to said lighting system, and means for varying the angular position of said member and lighting system with relation to the housing.

1,812,920. DOCTOR BLADE. ERNEST S. BALLARD, San Francisco, Calif., assignor to Standard Process Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 24, 1930. Serial No. 455,373. 12 Claims. (Cl. 101—157.)



1. In combination with the doctor blade for a printing press, of means to cause said blade to yieldingly contact with the printing form comprising independent yielding elements engaging the blade at closely spaced points along the length and adjacent the edge thereof that contacts with said form.

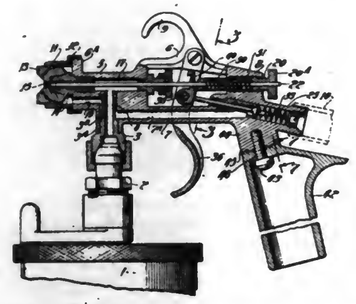
1,812,921. UNHAIRING AND BATING OF SKINS. ALBERT RENÉ BOIDIN, Seclin, and IVAN AUGUSTE EFFRONT, Marcq en Baroeul, France. Filed Oct. 17, 1929, Serial No. 400,441, and in France Oct. 29, 1928. 8 Claims. (Cl. 149—3.)

1. Process for unhairing and bating skins, which consists in completely soaking the skins in water, and in steeping the said skins, at a temperature not exceeding 18° C., during about 24 hours, in a bath containing an alkaline salt of low alkalinity and an unhairing enzyme.

1,812,922. TOUCH-UP SPRAY GUN. SVEND BRAMSEN and WILLIAM HERSLEB, Chicago, Ill., assignors to Binks Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 9, 1929. Serial No. 405,979. 6 Claims. (Cl. 91—45.)

1. In a spraying appliance, a body member, a liquid-controlling needle valve and an air valve stem both slidably supported by the body member and both extending forwardly of the body member, an actuating lever straddling the body member and presenting two arms at opposite sides of the body member and of the needle valve, means for pivoting the similar ends of both lever arms

to the body member on a common axis, a radial enlargement fast on the needle valve, a second detachable pivoting means extending through the two lever arms, a thrust member pivoted on the second pivoting means and disposed in front of both the air valve stem and the said

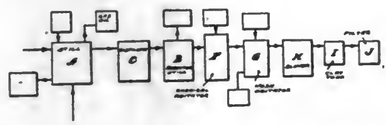


enlargement, a stop fast on one lever arm and disposed in front of the thrust member at a distance from the axis of the second pivoting means, and spring means continually pressing the air valve stem forward against the thrust member to hold the thrust member against the said stop.

1,812,923. PROCESS OF REFINING OILS. WILLIAM T. BRYANT, Houston, Tex., assignor to W. A. Williams, Houston, Tex. Filed Aug. 30, 1927. Serial No. 216,496. 1 Claim. (Cl. 196—147.)

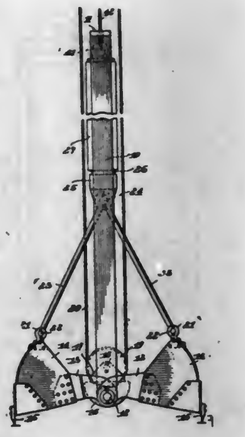
The process of treating oil which comprises subjecting the oil to acid treatment and removing the sludge, heating the oil above 212° F. and below its flash point, delivering the oil so heated to a clay treating chamber and maintaining it at elevated temperature, adding the clay to the oil while at said temperature to cause substantially instantaneous reaction of the oil and clay, agitating the mixture, immediately conducting the oil from the chamber through a continuous filtering means, and subjecting the filtered oil while in heated condition to the action of a vacuum, removing the moisture by volatilization, the temperature of the oil being sufficiently high to cause vaporisation of any water contained in the oil at the particular pressure utilized.

1,812,924. PROCESS OF MAKING LUBRICATING OIL. WILLIAM T. BRYANT, Houston, Tex., assignor to W. A. Williams, Houston, Tex. Filed Aug. 30, 1927. Serial No. 216,497. 2 Claims. (Cl. 196—35.)



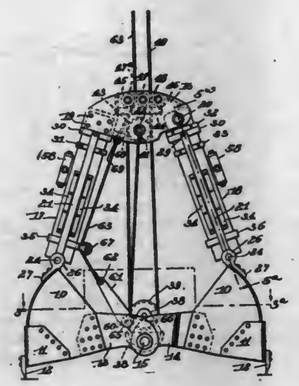
1. The process of refining oil which comprises introducing the oil into a still, adding a small quantity of dilute, caustic, alkali solution thereto, distilling off the lighter fractions, continuing distillation of the remaining charge of caustic and oil until substantially five percent of bottoms remain, reducing said last mentioned distillate by heating to remove lighter fractions only, subjecting the reduced distillate to a chemical treatment with acid of less than ninety-eight percent concentration, removing the sludge, treating with absorbent clay to decolorize the oil, filtering the oil, and subjecting the oil to a brightening treatment.

1,812,925. EXCAVATING MACHINE. FRANK A. BUCKLAND, Rochester, N. Y. Filed Jan. 9, 1929. Serial No. 331,376. 20 Claims. (Cl. 37—184.)



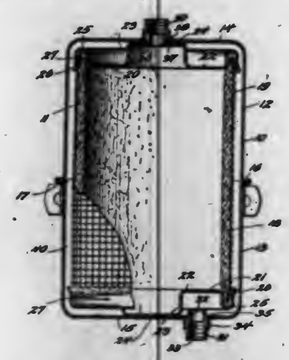
1. In apparatus of the class described, the combination of a frame, a plurality of digging implements connected with the frame for movement one relative to another thereon, an anvil connected with the digging implements, lifting means for the anvil movable relative thereto including a cylinder from which the anvil depends movable upon and a fluid pressure operated piston within the cylinder guided by the lifting means and arranged to deliver a succession of blows to the anvil.

1,812,926. EXCAVATING MACHINE. FRANK A. BUCKLAND, Rochester, N. Y. Filed Nov. 5, 1929. Serial No. 405,037. 22 Claims. (Cl. 37—184.)



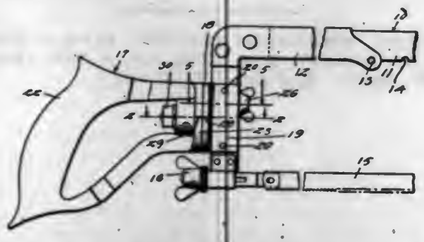
1. In apparatus of the class described, the combination of a plurality of digging implements, a supporting frame upon which the implements are mounted to swing, an anvil mounted directly on each implement, individual power operated hammers on the supporting frame each arranged to deliver a succession of blows to one of the anvils and means for swinging the implements upon said supporting frame.

1,812,927. FILTER. ARTHUR A. BULL and TORLEIF I. LARSEN, Detroit, Mich., assignors to Handy Cleaner Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 12, 1929. Serial No. 385,143. 7 Claims. (Cl. 210—183.)



1. In a filter, in combination, a perforated support member, a filter fabric against substantially the whole area of one side of said member, one edge of said fabric extending beyond and being turned over an edge of said member, a metal plate having a deep groove receiving said member edge and the two thicknesses of said fabric, the walls of said groove being spaced less than the normal thickness of the two layers of fabric to engage and compress said fabric against said support member.

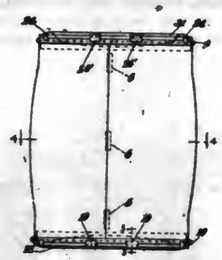
1,812,928. HACK SAW. FRED H. BUNDY, Manhattan, Kans. Filed June 10, 1930. Serial No. 460,270. 1 Claim. (Cl. 145—108.)



An attachment for connecting an adjustable handle with a hack saw U-frame comprising a plate member having forwardly projecting spaced arms engaging one of the arms of the U-frame above the saw end engaging means, means for securing said arms to said hack saw frame arm, a threaded bolt secured to said plate and extending rearwardly therefrom, a handle loosely mounted on said bolt and having a face with recesses therein, means engaging said bolt for yieldably holding said handle against longitudinal movement, and a thumb bolt threadably mounted in said plate and adapted to engage in a selected recess of said handle whereby to hold said handle upon said bolt against circumferential movement.

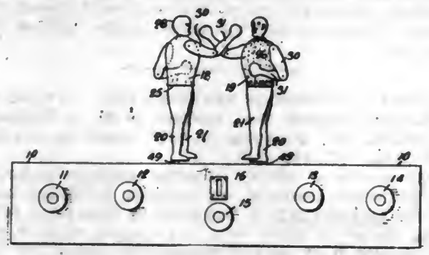
1,812,929. METAL DRUM, BARREL, OR CONTAINER. JOHN J. CAIN, Bayonne, N. J. Filed Oct. 28, 1927. Serial No. 229,310. 23 Claims. (Cl. 220—5.)

22. A device of the character described including, in combination, a body part formed of two members, said body part being formed with a plurality of slots near one end, a lid or cover member having a plurality of lugs adapted to pass through said slots in said body part and to be bent around the upper edge of said body part, said lid or cover member being composed of two parts, said lugs being formed on one part which constitutes a holding



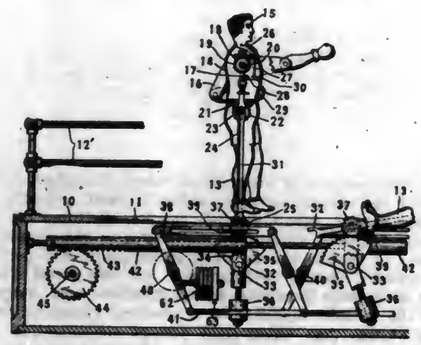
member and the other part constituting a lid or cover adapted to fit over the holding member and to be held in position by said bent over lugs.

1,812,930. GAME. FRANK R. CHESTER, New York, N. Y., assignor to Chesterfield Control Company, Dover, Del., a Corporation of Delaware. Filed May 7, 1927. Serial No. 189,511. 9 Claims. (Cl. 46—40.)



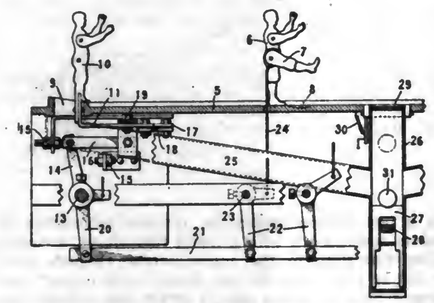
1. A game, including a base, figures mounted upon said base, means for shifting said figures toward and away from each other, movable portions forming a part of said figures, means for moving such portions including a crank, a parallel link movement mounted by said base, one of the links thereof being formed with a slot accommodating the end of said crank, said slot extending in the direction of shifting of said figure, and means for rocking said parallel link movement to actuate the movable portions of said figure.

1,812,931. FIGHT GAME. FRANK R. CHESTER, New York, N. Y., assignor to Chesterfield Control Company, Dover, Del., a Corporation of Delaware. Filed Mar. 5, 1928. Serial No. 259,165. 15 Claims. (Cl. 46—40.)



1. A game including a figure, movable limb portions forming a part thereof, a pair of operating means connected to said figure, one for shifting the same back and forth and the other for actuating said limb portions and resilient connections interposed in both said operating means.

1,812,932. FOOTBALL GAME. FRANK R. CHESTER, New York, N. Y., assignor to Chesterfield Control Company, Dover, Del., a Corporation of Delaware. Original application filed Nov. 17, 1926, Serial No. 148,792. Divided and this application filed May 9, 1928. Serial No. 276,275. 2 Claims. (Cl. 273—94.)



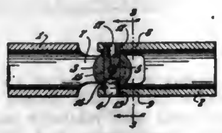
1. A game including a deck formed with an opening providing a missile goal, a figure extending within said opening and adjacent the forward edge of the same and means for shifting said figure from one side to the other side of said opening.

1,812,933. FASTENER FOR DISPLAY CHARACTERS. JAMES COOKE, Omaha, Nebr. Filed May 5, 1930. Serial No. 449,964. 4 Claims. (Cl. 40—143.)



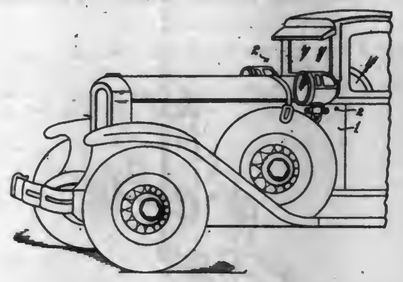
1. The combination with a display character having a back, of a prong projecting from the back, said prong being of triangular outline in side elevation, and a flange projecting from and angularly disposed relative to the high end of the prong.

1,812,934. UNIVERSAL JOINT. GEORGE V. CURTIS, West Springfield, Mass. Filed Aug. 11, 1930. Serial No. 474,343. 3 Claims. (Cl. 64—102.)



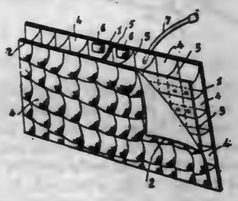
1. A universal joint comprising a spherical pivot member, pins through the member and arranged relatively at right angles to each other with one pin passing through the other, said pins extending through and beyond the outer surface of said spherical pivot member, and tubular forked coupling heads pivoted on the projecting ends of said pins, the curvature of the inner surfaces of the projecting ends corresponding with the curvature of the spherical pivot member.

1,812,935. MOTOR VEHICLE HEAD LAMP. JOSEPH G. DAVIS, Arlington, Tex. Filed Apr. 24, 1930. Serial No. 447,048. 7 Claims. (Cl. 240—61.4.)



1. A revoluble head lamp for motor vehicles comprising a housing carrying a reflector and a lens, a base plate on the housing having an opening, a post traversing the opening; a bracket for supporting the lamp from the sides of a vehicle, said bracket having a housing with spaced parts, said post providing a pivotal connection between the base plate and the bracket housing, a gear carried on the post, a chain associated with the gear for imparting rotation to the post to revolve the lamp, said post being channeled for an electric wire; means connected with the chain and associated with the steering mechanism of the vehicle, whereby when the vehicle is steered from a straight course said lamp will be rotated to move in the arc of a circle in the direction toward which the vehicle is traveling.

1,812,936. CELLULAR MATERIAL FOR SAFETY GARMENTS. SERAFINO DE FAVERI, Milan, Italy. Filed Aug. 15, 1929. Serial No. 386,122, and in Italy June 4, 1929. 5 Claims. (Cl. 9—20.)

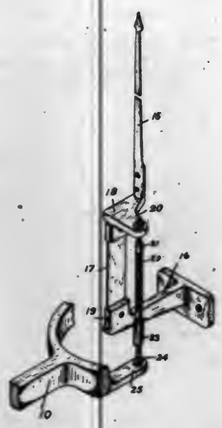


1. A material for use in the production of garments for protection and safety, including the combination, with a plurality of layers of flexible material and partitions connected to said layers so as to form a plurality of cells, of imperforate means dividing said cells between the layers of said flexible material into distinct and independent groups, and means providing compensatory inter-communication between the individual cells within each group thereof.

1,812,937. SCALE. CHARLES DOLLACK, Brooklyn, N. Y., assignor to The Jacobs Bros. Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 21, 1929. Serial No. 348,827. 14 Claims. (Cl. 265—59.)

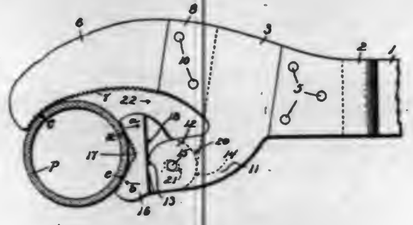
1. A scale including, in combination, a rockingly mounted beam, a flexion strip, a bracket connected to the upper end of said flexion strip, means for mounting the lower end of said flexion strip, registering means secured to said

bracket, and connecting means extending between said bracket and said beam, the upper end of said connecting



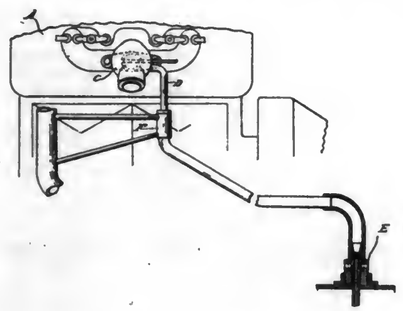
means being fixed with respect to said bracket, and means providing a movable coupling between said beam and the lower end of said connecting means.

1,812,938. WRENCH. CHARLES L. DUNHAM, Wellsburg, W. Va. Filed July 24, 1930. Serial No. 470,462. 1 Claim. (Cl. 81—94.)



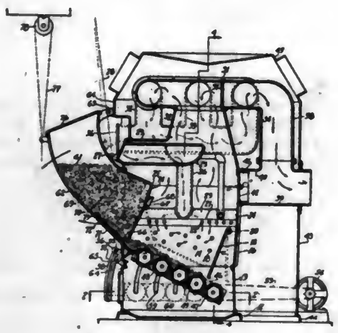
A wrench of the type described, comprising an arm having a hand at one end, said hand comprising a body portion, a fixed curved finger projecting forwardly therefrom in the general direction of the arm and a fixed thumb projecting laterally from said body portion and forwardly, said finger and thumb being separated to leave a crotch which extends in the general longitudinal direction of the arm, a pivoted jaw, and a stud pivoting said jaw to the end of said thumb to swing into and out of the crotch, said jaw having a working face and said finger having a working face cooperating therewith, said thumb having the inner corner part of its ends curved to constitute a pressure receiving seat and said jaw having a shoulder cooperating with said seat, the pivotal connection between said jaw and said thumb being loose, said thumb having its end bifurcated and said jaw having an ear to fit said bifurcation, said ear having its end face curved on a radius having the pivot stud as a center, and said thumb having a seat to be engaged by said curved end face, whereby the thrusts will be received by said seats to take the wear off the pivot stud, said body portion and said finger being separate elements having a tongue and groove engagement, and means securing the same together, and said body portion and said arm being separate elements having a tongue and groove engagement and means securing the same together, said thumb being integral with said body portion.

1,812,939. FUEL INTAKE CONTROLLING DEVICE FOR INTERNAL COMBUSTION ENGINES. WILLIAM A. EDWARDS, Chicago, Ill. Filed Dec. 7, 1923. Serial No. 679,276. 1 Claim. (Cl. 123—124.)



In a fuel feeding system for internal combustion engines, in combination with a liquid fuel source, a conduit leading therefrom to the engine intake through which the fuel is moved toward the engine, said conduit comprising a pipe of limited size; a larger pipe leading from the atmosphere and having a constriction through which at the constriction thereof, the first mentioned pipe discharges, said larger pipe constituting the sole conduit to the engine for the air and fuel entering through both said pipes; a normally closed inwardly opening valve controlling air access to the said larger pipe; a piston member connected with said valve, and a chamber in which said piston reciprocates closed at the outer end, whereby it constitutes a dash pot for retarding the closing movement of the valve, the piston chamber having an air relief or vent and means for regulating the same at will.

1,812,940. SMOKELESS FUEL ECONOMIZING FURNACE. JOHN B. EHRLICH, Portland, Oreg. Filed Jan. 30, 1928. Serial No. 250,518. 4 Claims. (Cl. 110—35.)

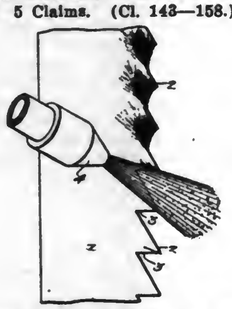


1. A furnace having in combination an inclined grate surface comprising a pair of side frames, a plurality of hollow hexagonal grate bars rotatably mounted in said frames extending therebetween and having openings formed in the sides thereof, and having encircling flanges along the length of each bar, the flanges on each bar lying intermediate to the flanges on adjacent bars, means for varying the degree of inclination of said grate surface, and an agitator having one end resting on a hexagonal grate bar.

1,812,941. MANUFACTURE OF STAINLESS IRON. ALEXANDER L. FEILD, Canton, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Dec. 18, 1926, Serial No. 155,767. Renewed Jan. 14, 1931. 2 Claims. (Cl. 75—45.)

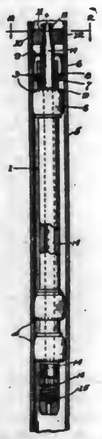
1. A process for making stainless iron which comprises the steps of forming a highly heated bath of a ferrous base metal, charging iron oxide, removing carbon from the metal by oxidation at relatively high temperature, charging high carbon ferro-chrome, maintaining the bath at or above said high temperature to oxidize carbon from the bath, charging a silicon reducing agent and lime, and maintaining the bath at high temperature until the slag is substantially free from iron and chromium.

1,812,942. PROCESS OF CLEANING POWER MEAT SAWS. EUGENE F. GAINES, Philadelphia, Pa., assignor to Atlas Manufacturing Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 9, 1929. Serial No. 338,848. 5 Claims. (Cl. 143—158.)



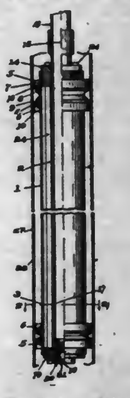
1. The method hereindescribed of removing adhering material from the gullets of meat saws, said method consisting in causing the saw after it has cut the meat to pass two concentrated blasts of air projected toward the toothed edge thereof at an angle to the face of the saw and at the back of the line of teeth and at an incline thereto in the direction of travel of the teeth, so that the adhering material will be forced from the gullets between the teeth and the side of the saw near the cutting edge will be cleaned by the air blasts.

1,812,943. MEANS FOR LOCATING LEAKS IN WELL TUBING. PAUL H. GRANGER, Los Angeles, Calif. Filed Sept. 26, 1928. Serial No. 308,495. 3 Claims. (Cl. 187—77.)



1. An instrument adapted to fall by gravity in a well tube for locating leaks in the well tube, comprising a body member provided with upper cup shaped packing means adapted to expand under pressure from above and lower cup shaped packing means adapted to expand under pressure from below, so as to act as closure means for the well tube, and slip devices movably mounted on said member adapted to engage the walls of the tubing to automatically move said slip device to position to grip the tubing and prevent upward movement of the instrument in the tubing, said body member having a longitudinally passage and an upwardly movable valve therein.

1,812,944. MEANS FOR INDICATING AND CEMENTING OFF LEAKS IN WELL CASINGS. PAUL H. GRANGER, Los Angeles, Calif. Filed May 27, 1929. Serial No. 366,250. 5 Claims. (Cl. 166—21.)



1. A device for indicating and/or cementing leaks in well casings, for the purposes set forth, comprising a tubular body having packing means at its upper and lower portions, and a tubular supporting means for the said tubular body communicating with the interior of said tubular body, said tubular body having perforation means between said packing means, for establishing communication between the interior of said tubular body and the space between the upper and lower packing means, said perforation means being provided only in the lower portion of said tubular body and adjacent the lower packing means.

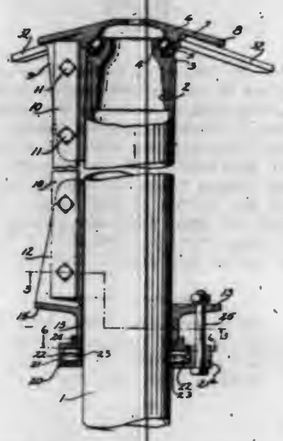
1,812,945. MEANS FOR LOCATING AND CEMENTING OFF LEAKS IN WELL CASINGS. PAUL H. GRANGER, Los Angeles, Calif. Filed Oct. 12, 1929. Serial No. 399,176. 2 Claims. (Cl. 166—1.)



1. An instrument for the purposes set forth comprising a tubular body provided with upper and lower packing

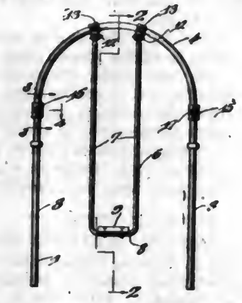
means, each packing means comprising an inner member adapted to tighten under pressure existing between the packing means and an outer member adapted to tighten under pressure from the outside, said tubular body being provided with opening means establishing communication between the interior thereof and the space around said tubular body between said upper and lower packing means a suspending pipe on which said tubular body is supported, and adapted for supply of fluid material to the interior of said tubular body through said suspending pipe, valve means comprising a sleeve rotatably mounted on the tubular body above the upper packing means and provided with a valve aperture, valve means comprising a sleeve rotatably mounted on the tubular body below the lower packing means and provided with a valve aperture, each of said valve means being provided with means for frictionally engaging with the casing to prevent rotation of said valve means, said tubular body being provided with apertures cooperating respectively with the apertures in the aforesaid valve means on partial rotation of the tubular body within the first-named valve means to open or close communication between the interior of the tubular body and the spaces below and above the packing means on the tubular body and within the casing and means for limiting the relative rotative movement of the tubular body within the aforesaid valve means.

1,812,946. ROUNDABOUT. HERBERT H. GRUBB, Baraboo, Wis., assignor to Humane Stanchion Works, Baraboo, Wis., a Corporation of Wisconsin. Filed Jan. 26, 1929. Serial No. 335,209. 1 Claim. (Cl. 272—33.)



An apparatus of the character described comprising a central post, a combined radial and thrust bearing carried by the upper end of the post, a supporting cap having a recessed flange engaging the combined radial and thrust bearing and also having a peripheral flange and webs connecting the flanges, hanger bars secured to the webs and extending close to and down along the post in parallel relation to the axis of the post, an annular connecting member having webs secured to the lower ends of the hanger bars, a thrust bearing between the annular connecting member and the post, a plurality of seat supporting bars having their inner ends secured to the connecting member, an inclined brace for each seat supporting bar, each inclined brace being disposed in the plane of its bar and having one end connected to the peripheral flange of the cap and having its other end fastened to the seat supporting bar adjacent the outer end thereof and elongated seats arranged in end to end relation and angularly with respect to each other and secured to and supported upon the outer ends of the seat supporting bars.

1,812,947. SWING. HERBERT H. GRUBB, Baraboo, Wis., assignor to Humane Stanchion Works, Baraboo, Wis., a Corporation of Wisconsin. Filed Jan. 27, 1930. Serial No. 423,610. 2 Claims. (Cl. 155—58.)



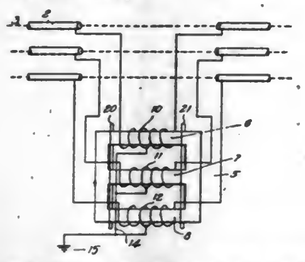
1. A swing of the character described comprising spaced supports, each including transversely spaced legs and an arched connecting portion integral with and extending between the legs, longitudinal connecting elements extending in the plane of and secured to the legs of the supports, a swing board extending longitudinally between and centrally of the supports and U-shaped hangers having their lower ends pivotally connected to the swing board and having their upper ends pivotally connected to the arched portions of the support.

1,812,948. CARPET OR RUG. CARL HERMANN HACKLÄNDER, Wermelskirchen, Germany. Filed Sept. 17, 1928, Serial No. 306,529, and in Germany Sept. 17, 1927. 1 Claim. (Cl. 154—49.)



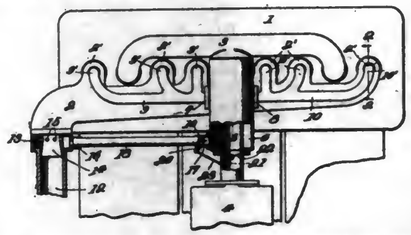
A composite floor mat or rug comprising a facing and a backing interconnected at the edges, and a filling composed of fabric and attached by spaced impressions with said backing.

1,812,949. TRANSFORMER. HERMAN HALPERIN and KENNETH W. MILLER, Chicago, Ill. Original application filed Nov. 30, 1927, Serial No. 236,634. Divided and this application filed May 29, 1930. Serial No. 456,888. 8 Claims. (Cl. 175—356.)



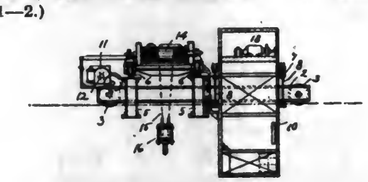
1. As an article of manufacture, a sheath bonding transformer having a core provided with a plurality of legs, a phase winding on each core leg and comprising a primary of the transformer, and a common secondary winding around all of the core legs, said secondary winding comprising a copper ring of a single turn.

1,812,950. HEATING MEANS CONTROL FOR INTAKE MANIFOLDS OF INTERNAL COMBUSTION ENGINES. WALTER G. HEGINBOTTOM and JACOB RICHARD FRANCIS, Flint, Mich.; The Union Industrial Trust Company and Anna Heginbottom executors of said Walter G. Heginbottom, deceased. Filed May 1, 1923. Serial No. 635,859. 1 Claim. (Cl. 123—122.)



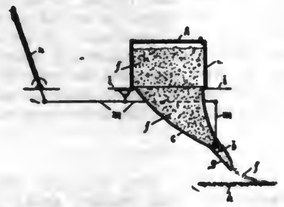
The combination with an internal combustion engine having an intake manifold, exhaust manifold and exhaust pipe connected thereto, of a heating chamber arranged to heat the intake manifold provided with spaced inlets, separate pipes connected to said inlets provided with branches extending to the respective exhaust ports of the engine, a connection from said heater to said exhaust pipe, a venturi disposed in said exhaust pipe having openings in communication with said connection for causing a flow of exhaust gases through said heating chamber.

1,812,951. CRANE. WALTER C. HEINLE, Willoughby, Ohio, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio, a Corporation of Ohio. Filed June 2, 1927. Serial No. 196,127. 5 Claims. (Cl. 191—2.)



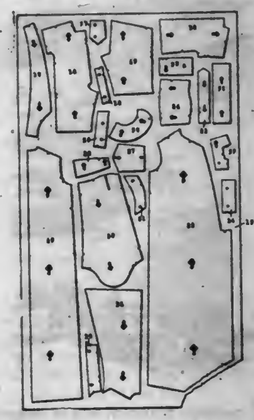
1. In a bridge crane, two tracks extending from one end of the bridge to the other, a current conductor arranged intermediate said tracks, a trolley on one of the tracks and having a current collector extending therefrom to a position intermediate the tracks and adapted to cooperate with said current conductor, and an operator's cage on the other of said tracks and likewise having a current collector extending therefrom to a position intermediate the tracks.

1,812,952. SAND SPRAYING DEVICE FOR MOTOR VEHICLES. WILHELM HERDLING, Wehen, Germany. Filed Apr. 7, 1930, Serial No. 442,386, and in Germany Feb. 18, 1930. 2 Claims. (Cl. 291—32.)



1. A sand spraying device for motor vehicles adapted to be operated from the driver's seat, comprising in combination an upper box, a discharge funnel tapering gradually to a slot opening, forming the bottom of said box, and mouthpiece made of flexible material, such as rubber.

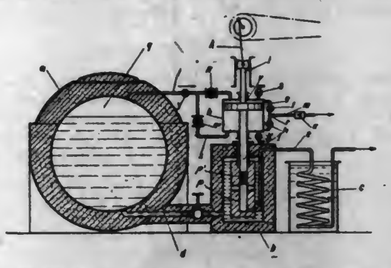
1,812,953. FINISHED PATTERN AND METHOD OF MAKING SAME. MAX HERZBERG, New York, N. Y., assignor to Pictorial Review Company, New York, N. Y., a Corporation of New York. Filed June 23, 1924. Serial No. 721,652. 4 Claims. (Cl. 33—12.)



1. In combination, a blanket sheet and a master pattern, a keymark upon said blanket sheet and a keymark in the form of an opening incorporated in said master pattern, said master pattern to be applied to said blanket sheet, the keymark upon the latter appearing within the keymark opening upon the former when the parts are properly correlated.

2. A method of manufacturing patterns of similar outline but different sizes, which includes preparing a plurality of blanket sheets to have indicia thereon disposed within the area of the smallest pattern to be cut therefrom, subsequently arranging said blanket sheets in different piles, placing a master pattern upon the upper sheet of each pile and covering the indicia upon said sheet in predetermined relationship thereto, the master patterns being of similar outline but each differing in size from the others and thereupon cutting the sheets of each pile along the lines indicated by the master pattern to provide a series of pattern sections.

1,812,954. METHOD AND DEVICE FOR PRODUCING COMPRESSED GAS FROM LIQUEFIED GAS. CHRISTIAN WILHELM PAUL HEYLANDT, Berlin-Britz, Germany. Filed Jan. 3, 1930, Serial No. 418,345, and in Germany Jan. 5, 1929. 2 Claims. (Cl. 62—1.)



1. The method of producing pressure gas from liquefied gas of low boiling point, which consists in transferring the gas in liquefied state from a closed storage vessel to a low-pressure chamber, mechanically transferring the liquefied gas from said low pressure chamber to a high pressure chamber, utilizing the working pressure of the gas in the storage vessel to assist in driving the mechanical device which transfers the liquefied gas to the high pressure chamber, and vaporizing said gas and converting it into gas of predetermined high pressure.

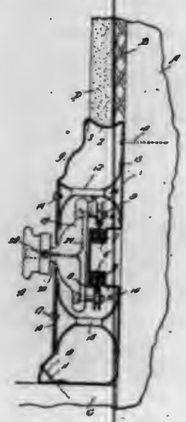
1,812,955. AERIAL PACKAGE CARRIER AND SIGNAL. PAUL P. HORNI, Newark, N. J. Filed Dec. 24, 1928. Serial No. 328,177. 10 Claims. (Cl. 244—2.)



2. An aerial package transfer means comprising balloon suspension means, cables connecting the balloons to ground apparatus, ground apparatus for elevating and lowering the balloons by means of the cables, a frame rigidly holding the balloons apart, and a guiding vane mounted on the frame so as to keep said frame normal to the wind.

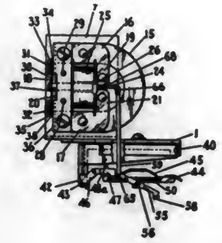
10. In a device of the character described, the combination with a substantially horizontal rigid support, of balloons connected to and spaced one from the other along said rigid support, anchoring cables connected to said balloons, a guiding vane mounted on and normally arranged with respect to said rigid support, and a package-carrier mounted on said rigid support.

1,812,956. ADJUSTABLE ELECTRIC RECEPTACLE. SYLVESTER F. HOWK, San Antonio, Tex. Filed July 25, 1928. Serial No. 295,312. 3 Claims. (Cl. 247—3.)



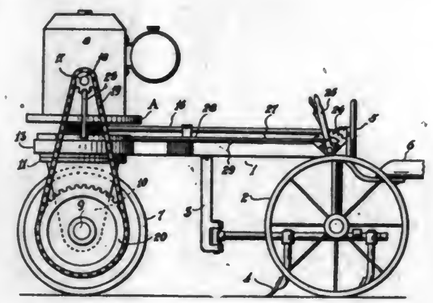
1. An electrical outlet comprising an elongated housing, said elongated housing including a front and rear section, said front section being provided with a slot means for detachably connecting the front section to said rear section, said rear section being deformed to provide a longitudinal trough, an insulated body disposed within the trough, and a longitudinally extending conductor track mounted upon the body, and a current collector movable in the slot on the front section to ride on the said conductor.

1,812,957. ELECTRICALLY OPERATING SOUND RECORDER AND REPRODUCER. CHARLES HUENLICH, Bloomfield, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Nov. 8, 1928. Serial No. 316,896. 14 Claims. (Cl. 179—100.41.)



1. An electrical sound recorder comprising, in combination, a frame, a floating support pivotally mounted on said frame, a lever arm pivotally mounted for oscillation on said floating support, a stylus mounted on one end of said arm, a link pivotally secured to the other end of said arm, a magnetic driving motor mounted on said frame and comprising a vibratile armature biased to neutral position, and electromagnetic means for positively actuating said armature in either direction, and a pivot connection between said armature and said link.

1,812,958. TRACTOR. BEN G. JENNINGS, Dallas, Tex. Filed Apr. 18, 1929. Serial No. 356,248. 2 Claims. (Cl. 180—26.)

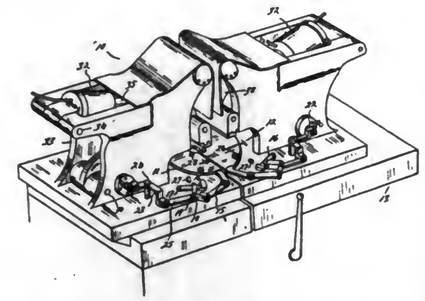


1. A tractor comprising a framework having a forwardly extending portion of circular shape; a circular plate having spaced elements and supporting said forwardly projecting portion of the framework; roller bearings interposed between said framework and plate; a king post on the plate; an upper plate carried by the king post, an engine mounted on the upper plate, the crank shaft of the engine having a drive gear and a clutch member engageable therewith; means establishing operable connection between the drive gear and the axle to rotate the front wheel; and including means mounted upon said forwardly-extending portion of the framework for operating the clutch.

1,812,959. APPARATUS FOR MAKING WHEEL SPIDERS. IRVING H. JUDD, Detroit, Mich., assignor to Whitehead and Kales Company, River Rouge, Mich., a Corporation of Michigan. Filed July 23, 1928. Serial No. 294,714. 5 Claims. (Cl. 78—82.)

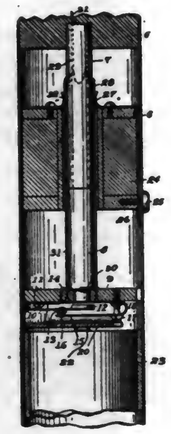
1. In a welding machine for wheel spiders, a work holding fixture having means for positioning the spider

units to be united, holding levers adapted to engage said unit at points substantially opposed to said positioning



means, clamping means for clamping the unit in position, and means for simultaneously operating said levers and for subsequently operating said clamping means.

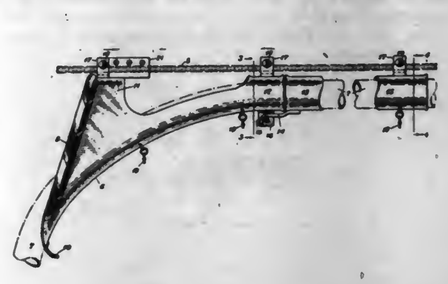
1,812,960. ELECTRIC MASSAGE MACHINE VIBRATOR. CHARLES W. KENT, Peoria, Ill. Filed Jan. 21, 1929. Serial No. 333,767. 1 Claim. (Cl. 128—41.)



In a massage machine vibrator the combination of a handle portion, a primary coil mounted therein, an insulating disc adjacent one end of the coil, vibrator parts comprising a spring mounted vibrator carried by the disc, a spring mounted contact member carried by the disc and cooperating with the spring mounting for the vibrator, means for adjusting the contact member, a guard carried by the disc and substantially inclosing the vibrator parts and in electrical connection with one thereof, and a battery within the handle and in electrical contact with the guard.

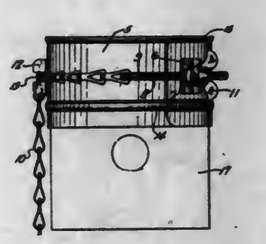
1,812,961. CABLE GUIDE. ROBERT J. KENT, Jamaica, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 30, 1929. Serial No. 359,305. 1 Claim. (Cl. 175—376.)

An aerial guide for cables adapted to be mounted on a messenger wire, a curved member of substantially U-shaped cross-section for initially receiving the cable, a nose member at one end of the channel member for preventing interference to the entrance of the end of a cable into the channel member, a tubular portion connected to the



channel member, a straightener hinged to the tubular member and cooperating therewith in guiding the cable in a direction parallel to the messenger wire while the cable is being installed thereon, and means for supporting the guide on the messenger wire.

1,812,962. PISTON RING COMPRESSOR. CHARLES G. KING, Milwaukee, Wis. Filed July 9, 1928. Serial No. 291,319. 6 Claims. (Cl. 29—86.4.)



1. A piston ring compressor, comprising a sheet metal member in convolute form and having a natural expansibility, said member having means formed directly therein for preventing lateral displacement of the convolutions with respect to each other, flexible means for releasably holding said member in an adjusted compressed position, and other means for further compressing said member.

1,812,963. CHANNELED STRIP MATERIAL. EDWARD J. KVET, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 3, 1929. Serial No. 360,096. 3 Claims. (Cl. 296—44.5.)



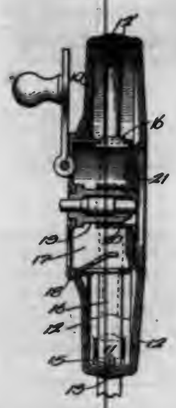
1. Channeled strip material comprising rubber sidewalls, a fibrous cover for said sidewalls adhesively attached thereto, and a rubber tube enclosed in the margin of each sidewall of the strip and vulcanized thereto.

1,812,964. CALLING DIAL. JAMES M. LABAUGH, Paterson, N. J., and VICTOR F. MILLER, Queens Village, N. Y.; said Labaugh assignor to American Telephone and Telegraph Company, a Corporation of New York, and said Miller assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 27, 1929. Serial No. 366,446. 4 Claims. (Cl. 40—10.5.)



1. A combination card holder comprising a main frame and a second frame each adapted to hold a card, and a transparent protecting member for the card mounted in the main frame, means for holding the card and member in said main frame, said member serving as a backing support for the card mounted on the second frame.

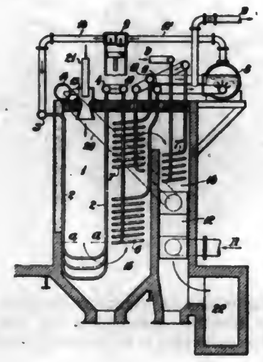
1,812,965. MEASURING TAPE. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Co., Chicago, Ill., a Corporation of Delaware. Filed Nov. 7, 1927. Serial No. 231,442. 12 Claims. (Cl. 220—1.)



1. A measuring tape having a case with center openings therein, a winding drum and support bushing rotatably mounted in said openings, and a cover on said case, one side of said cover being held to the casing in part by the drum and the other side being held by the bushing, said drum and bushing overlying and riding upon the cover.

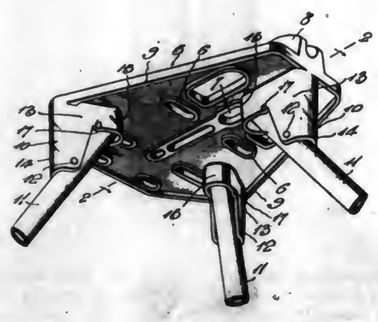
1,812,966. COAL DUST FURNACE FOR HIGH PRESSURE BOILERS. STEPHAN LÖFFLER, Charlottenburg, near Berlin, Germany; Jenny Elfriede Löffler sole heir and widow of said Stephan Löffler, deceased. Filed Sept. 20, 1928, Serial No. 307,289, and in Germany Sept. 26, 1927. 3 Claims. (Cl. 122—460.)

1. A dust coal furnace of the Löffler type, comprising, in combination with the furnace parts forming the combustion space, and with the means for introducing the dust coal into said space, downwardly extending U-shaped superheating pipes arranged in said space and forming with one half of their legs a bounding wall between the



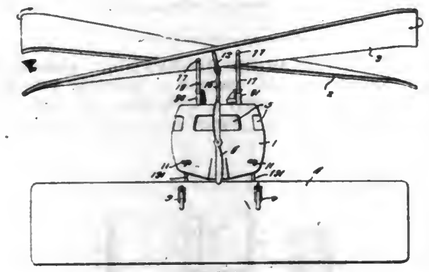
said space and a neighboring space in said furnace, the transverse pipe parts connecting said wall-forming legs with the opposite other legs being arranged in different heights so as to form passages between them, substantially and for the purpose set forth.

1,812,967. VISE STAND. JAMES A. LONG, Reading, Pa., assignor to Penn Engineering Company, Reading, Pa., a Partnership composed of James A. Long, Cleve E. Long, J. Edwin Tothero and Harry A. Kissinger. Filed Nov. 27, 1929. Serial No. 410,130. 3 Claims. (Cl. 248—43.)



1. A stand comprising a top plate having pairs of downwardly projecting parallel walls, legs whose upper ends are pivoted between said walls in position to at all times clear said top plate, means for limiting the outward swinging of said legs to their operative positions, and humps integral with said side walls and projecting inwardly therefrom in opposed relation with each other, said humps being positioned to abut opposite side portions of said legs and hold the latter in their operative positions, portions of said stand having sufficient inherent resiliency to allow said legs to snap past said humps when swinging said legs to and from operative positions.

1,812,968. HELICOPLANE. RUDOLPH LUZARDO, New York, N. Y. Filed Apr. 26, 1928. Serial No. 272,051. 19 Claims. (Cl. 244—15.)

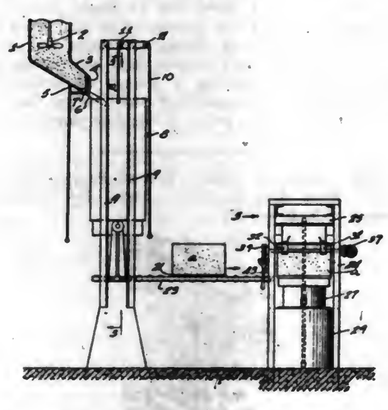


1. In a helicoplane, a rectangular supporting plane comprising a plurality of substantially triangular sections susceptible of adjustment at varying angles to each other to form a vertical propeller.

1,812,969. PROCESS OF MAKING INTEGRAL INSULATING BOARD WITH HARD WELDED SURFACES. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Original application filed Mar. 1, 1926, Serial No. 91,447. Divided and this application filed Mar. 16, 1928. Serial No. 262,336. 2 Claims. (Cl. 92—54.)

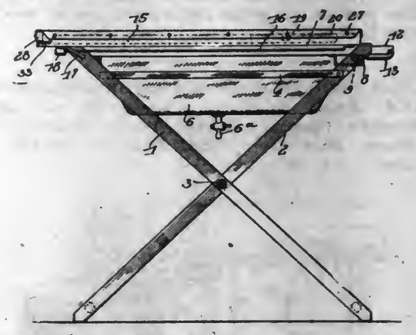
1. Process of forming integral fiber products comprising adjacent portions which are respectively of high density and of high porosity, which comprises applying heat and pressure to a body of moist ligno-cellulose fiber until welding or coalescing of the fibers into permanent relation has extended therein to a material extent but not therethrough, cutting off the application of heat while still maintaining the pressure, and finally releasing the pressure.

1,812,970. PROCESS OF MANUFACTURING INSULATING BOARD. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Filed Jan. 23, 1929. Serial No. 334,387. 7 Claims. (Cl. 92—61.)



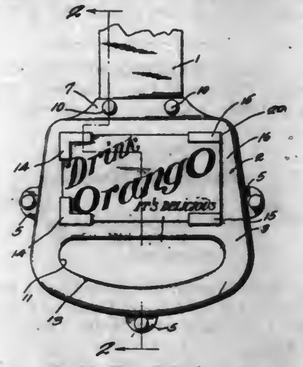
1. A process of the character described, comprising flowing a fibre and water mixture into a vertically disposed form, draining water from the bottom of the mixture to form a sheet causing relative movement of form and sheet to separate the same, inverting said sheet, inserting same into a press, and expressing water therefrom.

1,812,971. INFANT'S COMBINATION BATHTUB AND DRESSING TABLE. HARRY E. MCCANDLESS, Rochester, N. Y. Filed Dec. 24, 1927. Serial No. 242,304. 8 Claims. (Cl. 4—177.)



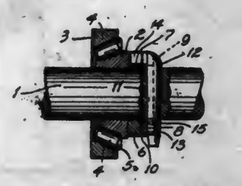
4. The combination with a foldable stand including pivotally connected supports, of a tub frame connected with the stand and positionable either horizontally thereon or parallel to one of the supports to permit folding the stand, guide members pivotally mounted on one of the supports, and a table member having sides with guide slots engaging said guide members, said sides being cut away adjacent one end of each of the slots to permit engagement or disengagement of the table member with the guide members.

1,812,972. HANDLE FOR STREET CAR STRAPS. EDWARD MILLER, Chicago, Ill. Filed May 29, 1930. Serial No. 457,421. 3 Claims. (Cl. 105—354.)



1. A handle of the class described having a hand grip opening at its lower portion and a pocket formed on its outer face for the reception of advertising matter.

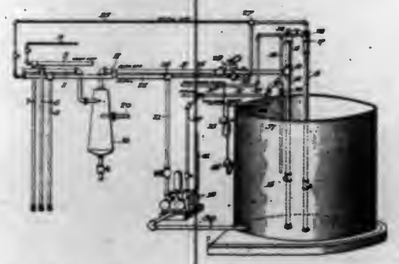
1,812,973. BEARING ADJUSTING AND LOCKING DEVICE. ERWIN E. MILLER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed July 27, 1929. Serial No. 381,585. 3 Claims. (Cl. 287—52.)



1. A device for adjusting and locking anti-friction bearings including a race member, comprising a washer

for abutting against said race member, an outer washer spaced slightly therefrom, shims interposed between said washers, a locking device engaging said outer washer to hold the parts in position, said locking device having a portion holding said shims and washers against rotation relative to each other.

1,812,974. BOILER BLOW-OFF AND REFILLING SYSTEM. FRANK W. MILLER, Chicago, Ill., assignor to Franclare Company, Chicago, Ill., a Corporation of Illinois. Filed May 5, 1923. Serial No. 636,835. 17 Claims. (Cl. 122—396.)



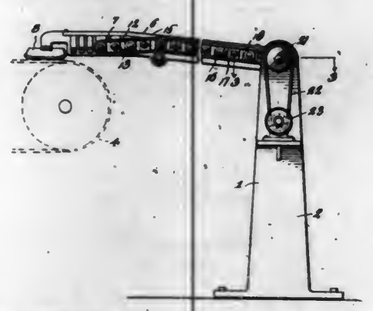
1. In a boiler blow-off and refilling system, the combination of a refill water tank, a blow-off steam line, adapted to deliver into said tank, a condenser interposed in said line, a refill line connected to said tank, a circulating line connected at one end with the refill line and at its other end with said condenser, a branch line leading from the refill line to the condenser, a valve in said branch line, means adapted to be actuated by the steam in the blow-off line for controlling said valve for regulating the flow of refill water through said branch line to the condenser.

1,812,975. GLASS MELTING APPARATUS. WILLIAM A. MORTON, Pittsburgh, Pa. Filed Sept. 15, 1928. Serial No. 306,269. 3 Claims. (Cl. 49—54.)



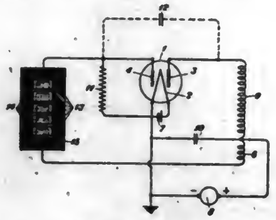
1. Glass melting apparatus comprising a hearth shaped to accelerate the glass flow, and burners arranged to produce a flame stream flowing in the reverse direction to the glass flow.

1,812,976. CONVEYING APPARATUS. FRANK P. NISTLE, West Lawn, Pa. Filed Oct. 19, 1927. Serial No. 227,312. 4 Claims. (Cl. 198—127.)



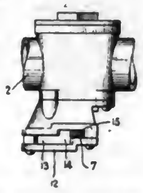
4. A conveying apparatus comprising a supporting structure, a drive shaft carried thereby, drive means directly mounted on the supporting structure and having connection with said shaft, a conveying frame having one end mounted to swing about said shaft as an axis and shoes mounted upon the other end of the frame adapted to have direct movable contact with a conveyer.

1,812,977. OSCILLATION GENERATOR. RUSSELL S. OHL, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 25, 1925. Serial No. 71,473. 23 Claims. (Cl. 250—36.)



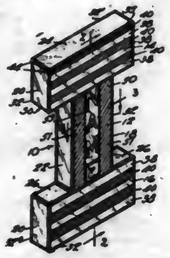
22. Means for producing a constant frequency, comprising a space discharge oscillator having two crystals connected in its input circuit, one of said crystals being cut to vibrate in resonance at a frequency approximately the same as that of the other.

1,812,978. FIRE APPARATUS. ALBERT W. ORTON, Utica, N. Y., assignor to American La France and Foamite Corporation, Utica, N. Y., a Corporation of New York. Filed Jan. 24, 1928. Serial No. 249,004. 5 Claims. (Cl. 169—15.)



1. In fire apparatus, the combination with a pipe conducting liquid under pressure, a valve member therein having a handle rotatable through less than a complete revolution to move it from open to closed position, and means for controlling the movement of said handle permitting a free and quick closing movement thereof to a point of nearly complete closure, said controlling means having provisions requiring a change of movement of said handle and a corresponding dwell before the handle can be continued to the point of complete closure.

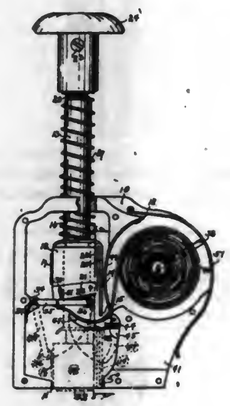
1,812,979. DISPLAY SIGN. JEROME PASINI, New York, N. Y. Filed May 9, 1930. Serial No. 450,936. 3 Claims. (Cl. 40—132.)



1. A display sign of the character described comprising a housing having two vertical display walls composed

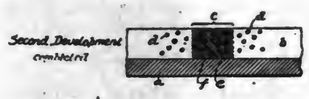
of interchangeable glass plates having certain configurations thereon which are supported in guide strips, end walls composed of glass panels, a top transparent glass panel to admit solar light, the entire assembly of which is bound by binding strips joined to said guide strips, reflecting inner surfaces on said interchangeable glass plates, and a source of light within said housing whereby said configurations are made visible by the reflected light.

1,812,980. MANUALLY OPERATED STAMP CUTTING, AFFIXING, INKING, AND CANCELING MACHINE. CLARENCE R. PENNEY, Des Moines, Iowa. Filed May 31, 1930. Serial No. 458,864. 7 Claims. (Cl. 216—2.)



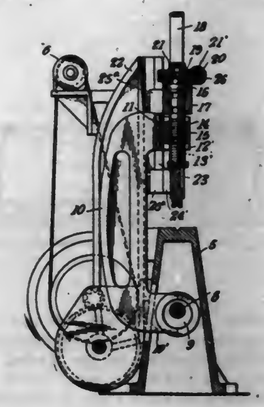
1. In a device of the class described, a housing designed to contain a roll of flexible material; said material being gummed on one of its sides, a delivery port in the bottom of said housing, absorbent material designed to be moistened and capable of engaging the gummed side of said flexible material as it is unwound, a rod slidably mounted in said housing, a spade member in said housing and secured to said rod capable of cutting off a portion of said flexible material each time said rod is reciprocated, a member operatively secured to said rod capable of engaging the cut-off portion of said flexible material and delivering it through said port, and a flexible canceling pad secured to said member operatively secured to said rod capable of engaging the upper side of said piece of flexible material when the same is delivered through said port.

1,812,981. PROCESS FOR TRANSFERRING GELATINE SILVER BROMIDE PICTURES. MICHEL PROCOUDINE-GORSKY, Paris, France, assignor to Societe de Photochimie "Elka," Nice, France. Filed Jan. 31, 1927, Serial No. 165,033, and in France Feb. 8, 1926. 5 Claims. (Cl. 95—5.6.)



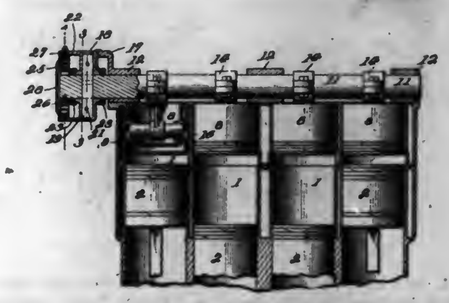
1. In a process for transferring gelatine silver-bromide pictures, the steps which comprise first partly developing the picture with a tanning developer and then continuing the development with an ordinary non-tanning developer.

1,812,982. MACHINE FOR BENDING SHEET METAL SHAPES. ALBERT RAFTER, Belleville, N. J., assignor to Rafter Machine Company, Belleville, N. J., a partnership composed of Albert Rafter and John C. Rafter, jr. Filed Dec. 13, 1929. Serial No. 413,770. 6 Claims. (Cl. 153—21.)



1. In a bending machine, a bed, a hammer, a connecting rod having an arm adjustably connected with the hammer, said arm being directed at an angle to the line of travel of the connecting rod and eccentric means mounted on the bed for reciprocating the connecting rod.

1,812,983. CONSTANT COMPRESSION DEVICE FOR INTERNAL COMBUSTION ENGINES. ALBERT G. REDMOND, Indianapolis, Ind., assignor to Jacob Richard Francis, Flint, Mich. Filed Oct. 1, 1921, Serial No. 504,615. Renewed Apr. 19, 1928. 18 Claims. (Cl. 123—78.)

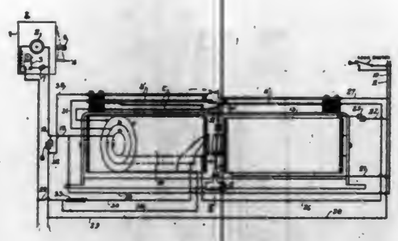


1. An internal combustion engine having a plurality of combustion chambers provided with auxiliary pistons slidably mounted therein, a shaft having a connection with each of said pistons for moving said auxiliary piston within said combustion chamber for adjusting the cubic contents thereof, means for retarding the oscillation of said shaft and yieldable means connected to said shaft for moving said pistons to adjust the cubic contents of said combustion chamber according to the position of the throttle.

1,812,984. LOCKOUT FOR OUTGOING CALLS FOR TELEPHONE SYSTEMS. CHARLES V. RICHEY, Jamaica, N. Y. Filed May 22, 1930. Serial No. 454,753. 5 Claims. (Cl. 179—81.)

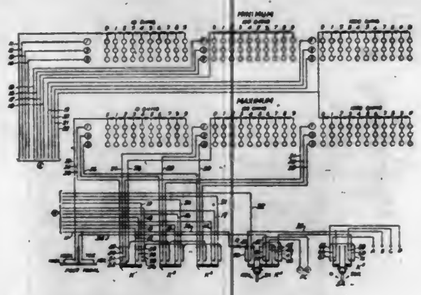
1. Lock out for telephone systems comprising means for producing a gap in the line circuit in series with the gap produced at the hook switch in the telephone instrument,

and an armature actuated by the ringing circuit for closing a shunt circuit around first mentioned gap, a magnet for returning said armature, said shunt circuit including branches reversely wound upon said magnet so as to be energized in bucking relation during the period of incoming



speech, preventing return of said armature, said hook switch being in one of said branches whereby when the transmitter circuit is opened by the placing of the telephone receiver upon the hook, one of said branch circuits is opened permitting the other to energize said magnet for returning said armature.

1,812,985. TESTING APPARATUS. HAROLD C. ROBINSON and ANDERS M. MALMBERG, Chicago, Ill., assignors to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed May 2, 1929. Serial No. 359,784. 5 Claims. (Cl. 175—183.)



1. In a relay testing device for testing a relay for operation between required limits, a common circuit including the coil of a relay and a source of current, a pair of branch circuits each including a variable resistance set to one of the limits of the coil, a tilting switch for switching from one limit to the other by including the respective branch in the common circuit, another pair of branch circuits each including a variable resistance set to other limits, and a key for causing said latter two branches to be included in the common circuit by the tilting switch in place of the first two branches.

1,812,986. OIL WELL REGULATION APPARATUS. JOSEPH F. RYAN, Chicago, Ill. Filed Dec. 28, 1929. Serial No. 417,151. 7 Claims. (Cl. 166—1.)

1. A liner for maintaining a column of oil adjacent an oil producing stratum of an oil well and adapted to be loosely supported on a packing within a well boring, said unit comprising concentric cylindrical members spaced from and secured to one another for removal as a unit independently of the packing, means affording communication between the well boring and the space between said



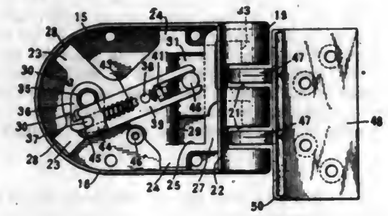
cylindrical members, whereby said liner member is freely removable as a unit from its support within the well boring.

1,812,987. THIMBLE CAP FOR METAL BAR EYES. HERMAN R. SAXON, Toledo, Ohio. Filed July 17, 1930. Serial No. 468,573. 4 Claims. (Cl. 293—55.)



4. In combination with a bumper having a supporting bar, the supporting bar having an eye, a plated metal cap adapted to be sprung about said eye.

1,812,988. LOCK. SAMUEL SEGAL, New York, N. Y. Filed Mar. 29, 1928. Serial No. 265,530. 5 Claims. (Cl. 70—14.)

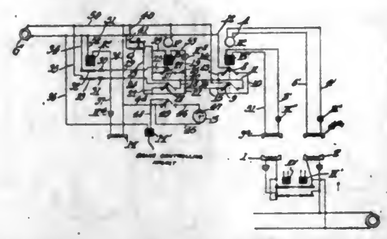


1. A lock including a casing, a frame disposed within said casing and comprising a sheet of substantially constant gauge metal formed with an opening providing a trackway for a bolt, a bolt mounted upon said trackway, means for moving said bolt, and outstruck portions forming a part of said sheet and constituting stop means, and limiting the movement of said bolt actuating means.

1,812,989. AUTOMATIC TRAIN CONTROL SYSTEM, INTERMITTENT TYPE WITH ROADSIDE ENERGY. ARCHIBALD G. SHAVER, Chicago, Ill., assignor to The Regan Safety Devices Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 7, 1922. Serial No. 527,566. 25 Claims. (Cl. 246—63.)

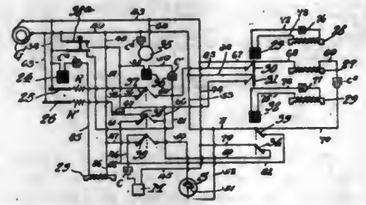
1. In an inductive train control system, in combination, a plurality of roadside inductoriums, a roadside

source of energy connected to one of said inductoriums, means for connecting the source of energy to the other of said inductoriums comprising provisions for breaking circuit connections therebetween and provisions for reversing



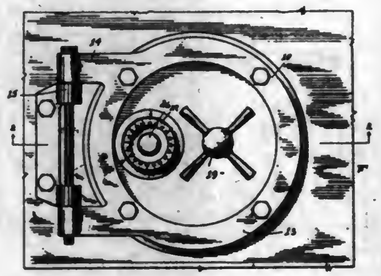
circuit connections therebetween, a home relay controlling the operation of said first mentioned provisions, and a distant relay controlling the operation of said second mentioned provisions.

1,812,990. AUTOMATIC TRAIN CONTROL SYSTEM INTERMITTENT TYPE WITH VEHICLE ENERGY. ARCHIBALD G. SHAVER, Chicago, Ill., assignor to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 7, 1922. Serial No. 527,567. 37 Claims. (Cl. 246—63.)



1. In combination, vehicle carried mechanism, means including roadside mechanism for influencing the vehicle carried mechanism in the movement of the vehicle over a roadway, and means for determining the operation of the said mechanism so influenced including a plurality of independent vehicle energy receiving inductor coils and a plurality of roadside energy transmitting inductor coils selectively operable for selectively affecting the vehicle energy receiving inductor coils.

1,812,991. SAFE CONSTRUCTION. ADON L. SMITH, Rocky River, Ohio, assignor to The Guardian Safe and Manufacturing Company, Alliance, Ohio, a Corporation of Ohio. Filed Aug. 29, 1928. Serial No. 302,700. 6 Claims. (Cl. 109—3.)



1. A burglar-proof safe including a door having an inner socket and locking bolts movable lengthwise for engaging the safe wall when the door is closed, each bolt having an annular groove about it intermediate its ends, a rotatable actuating disc within said socket and a crank shaft piercing said door and bearing said disc thereon in fixed relation, there being elongated members movable in said door adjacent the said grooves and normally pressed into locking engagement with said grooves, detachable means for covering the said socket and pressing said members out of engagement with said grooves, and detachable means for connecting the bolts with the disc.

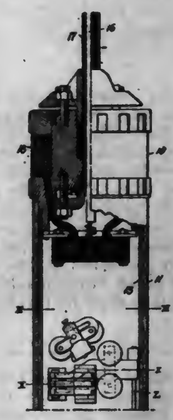
1,812,992. METHOD OF CASTING METALS AND ALLOYS THEREFOR. WALTER C. SMITH, Moylan, Pa., assignor to Allied Process Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 12, 1927. Serial No. 225,845. 1 Claim. (Cl. 75—62.)

In the method of making sound castings of "copper" the step which consists in adding lithium to the molten metal at the customary copper refining temperature of from about 1100° C. to about 1250° C. in amount from 0.00018% to 0.04% of the weight of the metal.

1,812,993. PROCESS OF REFINING METALS. WALTER C. SMITH, Moylan, Pa., assignor to Allied Process Corporation, New York, N. Y., a Corporation of New York. Filed June 21, 1929. Serial No. 372,797. 2 Claims. (Cl. 75—62.)

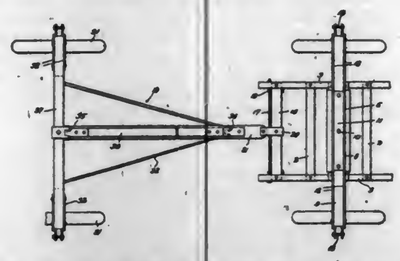
1. In the process of producing sound castings of "copper" the steps which consist in first at least partially degasifying and deoxidizing the molten metal by the addition thereto of an agent other than lithium and thereafter adding to the molten metal lithium in quantity of from about 0.0001% to about 0.05% at the customary copper-refining temperature of from about 1100° C. to about 1250° C.

1,812,994. BOREHOLE INCLINATION RECORDER. ELMER A. SPERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 17, 1925. Serial No. 75,931. 23 Claims. (Cl. 234—1.)



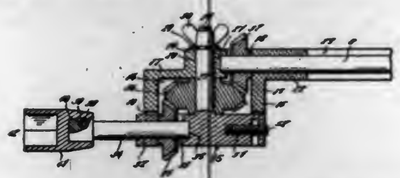
1. A bore-hole inclination recorder including means responsive to inclination, means actuated by said first means for recording said inclination, and a self-contained electric power plant within said recorder for operating the same.

1,812,995. TRUCK AND TRAILER. FRANK J. STOCKBURGER, Toston, Mont. Filed July 28, 1930. Serial No. 471,284. 2 Claims. (Cl. 280—33.4.)



1. In combination with the side members of the chassis of a motor vehicle, a number of spaced cross bars supported on the rear portion of said side members, a pair of longitudinally extending members resting on the ends of said cross bars, a cross beam having its ends resting on an intermediate portion of the longitudinally extending members, bolts passing through the ends of the cross beams, portions of the longitudinally extending members, a cross bar and the said side members of the chassis, an inverted channel shaped plate straddling the central portion of the cross beam, a bolster, a channel shaped plate straddling the central portion of the lower part of said bolster, a pivot bolt passing through the central part of the bolster, the two channel plates and the cross beam, a second bolster, a cross beam to which the second bolster is attached, an axle supporting the said beam, wheels carried by the ends of the axle, a tongue connected with the supporting beam of the second bolster, and means for pivotally connecting the front end of the tongue to one of the cross bars which are connected with the side members of the chassis.

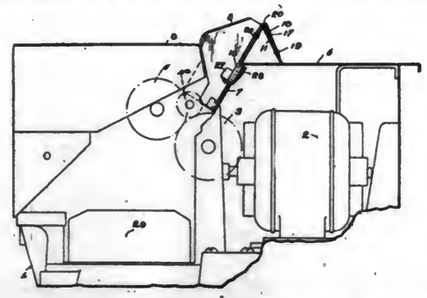
1,812,996. ATTACHMENT FOR BRACES. PHILIP J. STOCKER, Jordan, Minn. Filed Jan. 3, 1930. Serial No. 418,378. 1 Claim. (Cl. 145—69.)



An attachment for a brace comprising in combination, a casing including an inner wall, outstanding side walls and an open outer face, said casing further formed with a projecting sleeve, for rotatably receiving the shank of a brace, a cover plate disposed over said open face of the casing and provided with an inwardly directed pin, the edge of said side walls provided with notches for selectively seating the pin, a spindle formed on the inner face of the cover plate and detachably secured to the inner wall of the casing, a stub shaft journalled in the cover plate, and means on the brace shank interconnected with means on the spindle and said stub shaft for turning the latter when the brace is turned.

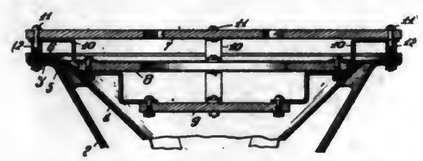
1,812,997. CHECK MARKING DEVICE. HJALMAR SWANSON, Chicago, Ill., assignor to Cummins Perforator Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1929. Serial No. 413,817. 7 Claims. (Cl. 101—232.)

1. A check guide device for check endorsing machines comprising a metallic plate adapted to be removably secured to the cover of the machine, a pair of guide members having upstanding check-aligning flanges slidably mounted on said plate and adjustable towards and away from each other to accommodate checks of varying sizes and to position said checks in predetermined alignment with respect to the printing roller of the machine, and a



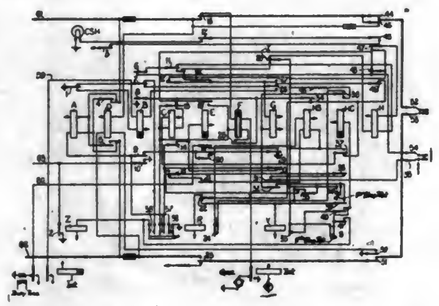
pivoted latch member mounted on said plate and movable into engagement with said cover to removably secure the check guide device in position on the machine.

1,812,998. RESONANCE ATTACHMENT FOR SOUND REPRODUCING DEVICES. ARNO E. TAUSCHER and BENNO E. SCHULTZE, Chicago, Ill. Filed Mar. 20, 1930. Serial No. 437,456. 2 Claims. (Cl. 181—31.)



1. An attachment of the type specified including a circular plate disposed over and spaced from the mouth of the sound-wave responsive member of the receiving instrument, a plate disposed substantially within the mouth of said member, and a circular plate disposed inwardly of and spaced from said second plate, there being annular spaces between the circumferential edges of said two last-mentioned plates and the wall of said member, and means rigidly associating said plates with each other and said first-named plate.

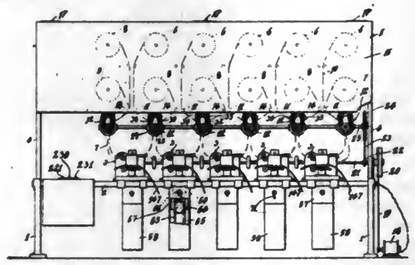
1,812,999. TELEPHONE SYSTEM. REGINALD TAYLOR, Liverpool, and LANCELOT MARTIN SIMPSON, Thorner, near Leeds, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed July 24, 1929, Serial No. 380,718, and in Great Britain July 26, 1928. 15 Claims. (Cl. 179—18.)



1. In a two-directional multi-level switch, wipers, means for positioning said wipers on a particular level,

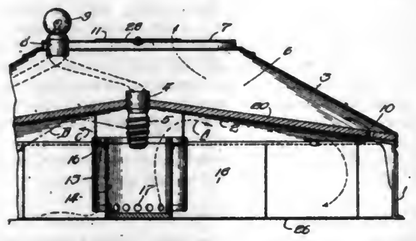
means for automatically moving said wipers over the level in search of an idle set of contacts, contacts operated mechanically responsive to the movement of the wipers past the last set of contacts in the level, a relay for causing the wipers to be automatically positioned on another level, and a circuit including said contacts for operating said relay.

1,813,000. PHOTOGRAPHIC FILM PRINTER. FREDERICK B. THOMPSON, Hollywood, Calif., assignor, by mesne assignments, to Cinema Patents Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 28, 1926. Serial No. 103,066. 11 Claims. (Cl. 95—75.)



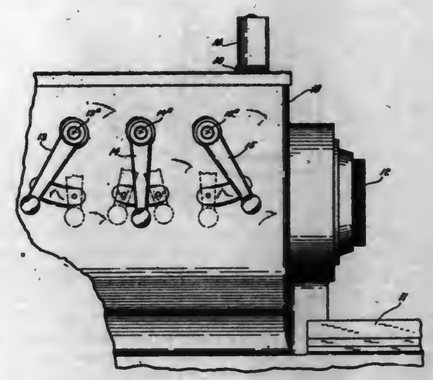
1. In a film printer unit, the combination of a contact plate, means for drawing a negative film and sensitized film over the contact plate, a pressure plate supported in position above the contact plate means carried by the pressure plate for first contacting the said films at their centers, and yieldably urged toward the contact plate, means for holding the pressure plate away from the contact plate, and means for intermittently releasing the said holding means so as to permit the pressure plate to move toward the contact plate to contact the negative film and the sensitized film at the point of exposure of the said unit.

1,813,001. ELECTRICALLY HEATED BROODER. DONALD B. TOLLEY, Macomb, Ill., assignor to American Steel Products Co., Macomb, Ill., a Corporation of Illinois. Filed Nov. 26, 1928. Serial No. 322,054. 4 Claims. (Cl. 119—33.)



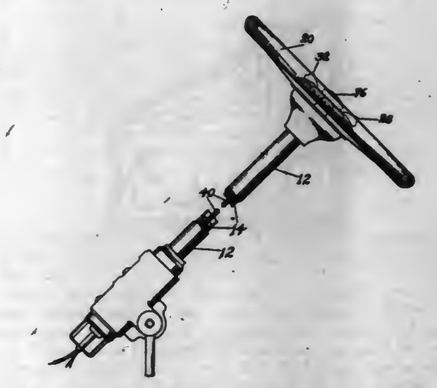
1. In a brooder, a heat deflector, means for supporting the deflector at an elevation above a floor, a heater supported below and near the center of the deflector; and a drum unit suspended from the deflector above the floor and in axial alinement with the deflector; the drum unit comprising as a rigid assembly two concentric and freely spaced upright drums each open at its upper end, spacer elements radially spacing the two drums, means for suspending the drums from the deflector, and a closure of heat-insulating material for the lower end of the inner drum; the outer drum being freely open at its lower end and having its lower end freely spaced from the floor and curtaining depending from the outer edge of the deflector, the space between the curtaining and the outer drum below the deflector being unobstructed.

1,813,002. INDICATOR. JOHN J. N. VAN HAMERSVELD, Cleveland Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 7, 1930. Serial No. 419,096. 12 Claims. (Cl. 116—116.)



1. An indicator adapted to be applied to a machine tool having either a rotating work piece or a rotating tool and control members therefor, said indicator adapted to be associated with the control members and having means for indicating substantially the cutting speed of the tool at different diameters of the work.

1,813,003. SPEEDOMETER. BERT H. VON KLEIN, New York, N. Y. Filed Nov. 21, 1930. Serial No. 497,262. 3 Claims. (Cl. 180—78.)

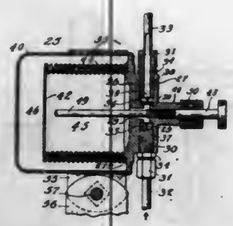


1. In an automobile, steering mechanism, a movable indicator housing associated therewith, an indicator within said housing, said housing having a viewing opening therein, a transparent cover for said opening, a contact member carried by said indicator housing, and a circuit including said contact member having a conduit carried by said steering mechanism.

1,813,004. DEODORANT POWDER. FREDERICK C. WEBER, Eastchester, N. Y. Filed Mar. 3, 1927. Serial No. 172,564. 9 Claims. (Cl. 167—92.)

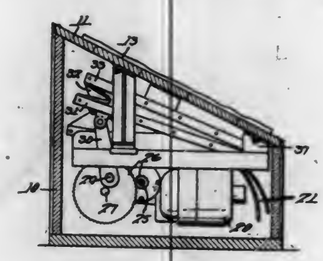
9. A deodorant powder for application to the skin, comprising dry powdered emollient material, a solid aldehydic compound capable of giving off small quantities of formaldehyde at body temperature, and a solid ammonium salt capable of stabilizing formaldehyde.

1,813,005. AUTOMATIC LUBRICANT DISTRIBUTING MEANS. BRENNAN B. WEST, Cleveland Heights, Ohio. Filed Apr. 8, 1925. Serial No. 21,517. 11 Claims. (Cl. 184—7.)



6. In a lubricant distributing system for use on vehicles propelled by power plants in the normal operation of which heat is generated, the combination of a lubricant container, conduits through which the lubricant is delivered to various parts of the vehicle, a pump for transferring the lubricant from the container to the conduits, and a diaphragm chamber containing a thermosensitive medium subjected to the heat generated by the power plant for operating the pump.

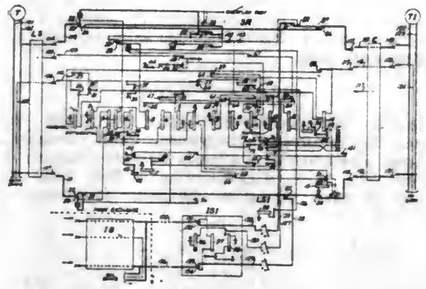
1,813,006. FOOT EXERCISER. WILLIAM D. WHITE, Worcester, and CLIFFORD J. GLEASON, Leicester, Mass., assignors, by mesne assignments, to Marcus A. Coolidge, Fitchburg, Mass. Filed Feb. 5, 1930. Serial No. 426,115. 5 Claims. (Cl. 128—64.)



3. In a device of the character described, the combination with a supporting plate and a sheet metal plate spaced therefrom and supported thereby, said sheet metal plate having an opening therethrough, a heel rest and a toe strap carried by the sheet metal plate for holding the human foot in position over said opening, a flexible diaphragm carried by the supporting plate under said opening, means for inflating and deflating the diaphragm and means for yieldingly supporting the heel rest and foot strap at both sides thereof, comprising latches, the sheet metal plate having slits provided with upwardly extending edges around which the lower end of the latches engage.

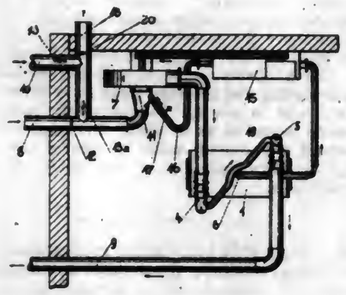
1,813,007. AUTOMATIC TELEPHONE SYSTEM. JOHN WICKS, Oak Park, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 23, 1930. Serial No. 477,214. 25 Claims. (Cl. 179—18.)

1. A two-coordinate switching selector repeater for use in branch exchanges, said selector repeater comprising means for switching a call originating in the branch exchange in which it is being used from the main exchange to said branch exchange when sufficient digits have been called to determine the destination of the call, and compris-



ing a wiper positioned solely by the first coordinate movement of the selector repeater for controlling said switching means.

1,813,008. FURNACE FOR SMOKING GOODS SUCH AS FISH, MEAT, SAUSAGE, AND THE LIKE. KARL WINKELMÜLLER, Leipzig, Germany. Filed Mar. 15, 1928, Serial No. 261,859, and in Germany Mar. 14, 1927. 1 Claim. (Cl. 99—2.)

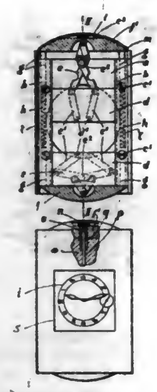


In combination with a unitary smoking and drying chamber, smoking and drying apparatus comprising a smoke producing furnace, a jacket surrounding said furnace for heating air delivered thereto, a blower, an air inlet duct for the blower, pipe connections whereby air from said blower may be forced through the jacket space and the air thus heated delivered to said chamber, other pipe connections leading from said furnace to said air inlet duct whereby smoke may be delivered by said blower to said chamber through said first named pipe connections, and dampers in said air inlet duct and second-named connections for controlling the circulation of drying and smoking gases.

1,813,009. WATCHCASE. CORNELIUS WINTERHALTER, Le Locle, Switzerland. Filed Mar. 9, 1929, Serial No. 345,666, and in Switzerland Feb. 16, 1929. 1 Claim. (Cl. 58—88.)

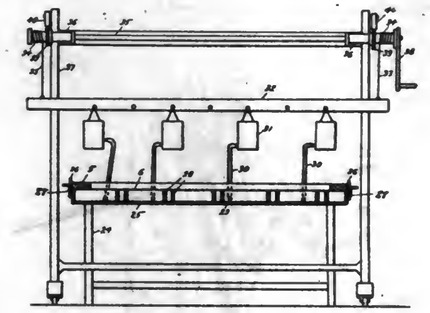
In a watch having a movement provided with a dial and a winding stem, a case comprising in combination; an oblong frame formed of two head plates and two side rails so arranged as to define a movement-receiving opening, said side rails each having a longitudinally coextension bore and one of the push plates having a bore for the winding stem of the movement; a push plate at each end of the frame having pins fixed thereto and fitted slidingly within said bores and helical springs inserted into said bores between the pins of the two push plates, grooved guide bars fixed to said rails and shutters fitted slidingly into said bars and adapted to mark the movement-receiving opening, a lazy

tongs pivotally held on each of said head plates and attached with one end to a shutter and with the other end to the respective push plate, a sleeve carrying the winding knob and fitted rotatably into the respective push plate and



slidably over the winding stem, and a coupling between sleeve and winding stem of the movement, said coupling formed of a pin fixed to the stem and engaged into a slot of the sleeve.

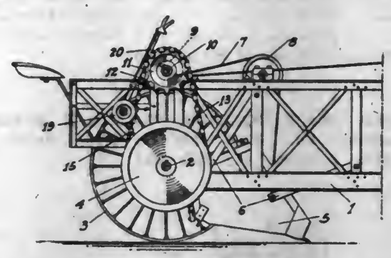
1,813,010. PRINTING MACHINE FOR SILK AND OTHER MATERIALS. PETER M. ZLYDIN, New York, N. Y. Filed Nov. 6, 1928. Serial No. 317,580. 4 Claims. (Cl. 101—114.)



1. In a machine for printing on silk and other materials, the combination with a tray, a frame removably supported on said tray, said silk being stretched on the bottom surface of said frame, partitions on said tray forming closed patterns, spaces in said closed patterns being adapted to be filled with liquid solutions of dyes, and means to raise the level of said solutions to the edges of said partitions and in a contact with said silk on said frame.

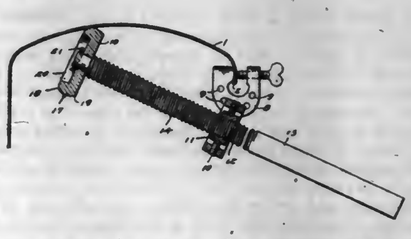
1,813,011. CHAIN DRIVE CONTROL FOR SCRAPER BOWLS. WILLIAM J. ADAMS, Santa Cruz, Calif., assignor to Ball Wagon Grader Company, Stockton, Calif., a Corporation. Filed Sept. 28, 1928. Serial No. 308,995. 4 Claims. (Cl. 74—31.)

1. In combination, a sheave, a sprocket wheel, an endless chain about the sprocket and sheave, the teeth of the wheel engaging only alternate links of the chain, and cross plates on the intermediate links to engage the face of the



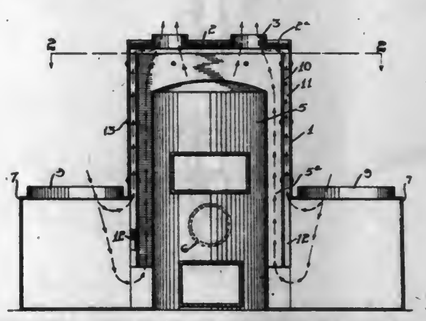
sheave throughout their area and projecting from the sheave engaging sides of the links to maintain said alternate links clear of the sheave.

1,813,012. TOOL FOR REMOVING DENTS FROM METALLIC BODIES. ALLEN P. ASHER, Sandpoint, Idaho. Filed Oct. 29, 1929. Serial No. 403,248. 8 Claims. (Cl. 81—15.)



1. A tool for removing dents from metallic bodies comprising an elongated frame, clamp elements designated to pivotally connect with the ends of said frame, a pair of pivot elements carried by the frame, a block member oscillatably mounted between the pivots, a bar extending through said block, a mandrel roller rotatably carried upon one end of said bar, and a screw thread connection between said bar and said block permitting adjustment of the bar transversely of the block.

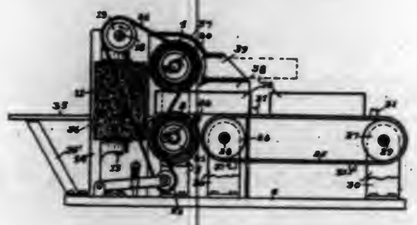
1,813,013. HOT AIR FURNACE CASING. ROBERT M. BAKER, Toledo, Ohio. Filed June 17, 1930. Serial No. 461,794. 1 Claim. (Cl. 126—99.)



A furnace casing including opposite side walls, and a top wall having a warm air outlet, a pair of vertical and oppositely disposed cold air inlet boxes each having a cold air inlet at its top, said boxes having open inner sides of a width equalling the width of and connected to the respective opposite adjacent side walls of the casing, and a par-

tition spaced from the side walls of the casing and having its top spaced from the top wall of the casing and its bottom projecting for a distance below the cool air inlets of the boxes whereby the inlet to the space between the outer side of the partition is located at a distance above the inlet to the inner side of the partition.

1,813,014. BRICK CLEANER. WILLIAM R. BANKSON, Pittsburgh, Pa. Filed July 17, 1929. Serial No. 378,968. 1 Claim. (Cl. 125—26.)



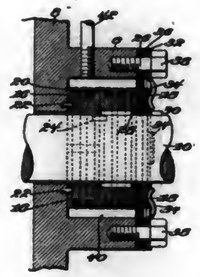
In combination, a brick cleaner of the character described comprising a pair of spaced, cylindrical, horizontally disposed brushes, a pair of spaced, cylindrical vertically disposed brushes, means for rotating each pair of associated brushes in opposite directions with respect to each other; a conveyer element operable for conveying the brick between each of said pairs of brushes to be acted upon by the latter; a shield member partially enclosing one pair of said brushes, said shield member being formed to provide a pair of passages for the brick; one of said passages communicating with one of said brushes and the other of said passages communicating with the clearance between one pair of said brushes.

1,813,015. JAR. THOMAS W. BELL, Parkersburg, W. Va. Filed June 29, 1929. Serial No. 374,844. 3 Claims. (Cl. 255—27.)



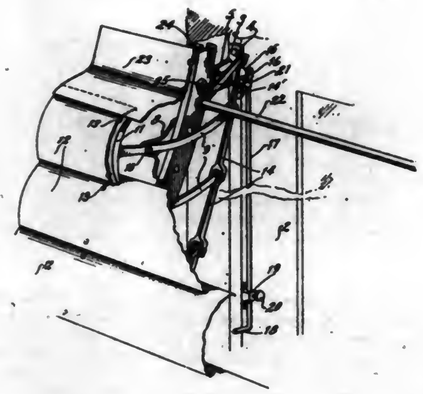
1. A drill jar comprising an upper and a lower headed element, a sleeve connecting the elements and enclosing the heads thereof, the three parts being coupled for free rotation, one head being mounted on an elongated neck to permit reciprocation between said elements and the sleeve, the other element having no reciprocatory movement relative thereto.

1,813,016. PACKING. OLIVER D. H. BENTLEY, Norfolk, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed May 31, 1923. Serial No. 642,380. 5 Claims. (Cl. 286—24.)



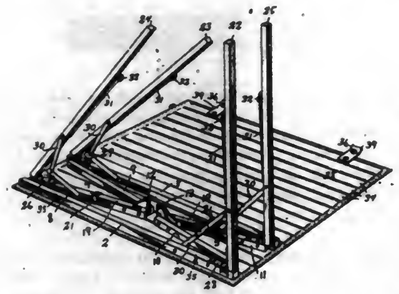
1. A packing comprising a stuffing box, a pair of packing rings each consisting of a pair of segmental shaft-engaging portions and a pair of segmental cap portions covering the shaft-engaging portions, the rings being held from rotational movement and being disposed relatively to one another to break joints, a sealing ring adjacent the outer packing ring, a flexible ring secured at its outer annular portion to the outer end of the stuffing box, and a spring member for forcing the inner annular portion of the flexible ring and the sealing ring inwardly to provide a tight joint at the outer end of the stuffing box, the spring member comprising an annular portion fixedly supported on the end of the stuffing box and a plurality of inwardly extending spring fingers.

1,813,017. METAL WINDOW AWNING. SHERMAN G. BOND, Wichita, Kans. Filed Nov. 11, 1929. Serial No. 406,254. 5 Claims. (Cl. 156—17.)



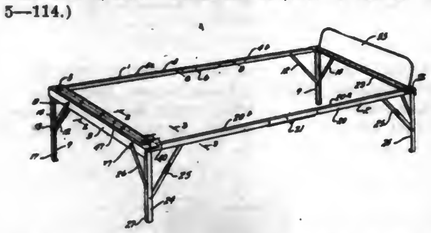
1. An awning comprising transversely alining brackets, end frame bars pivoted to the brackets, means for rigidly fastening the bars to a support, a set of levers pivotally carried by each of the bars, two sets of links, one set connected to each set of levers, slats connecting alining levers on the respective bars, means for actuating one set of links, a rock shaft pivotally mounted in the respective end frame bars and crank arms on the rock shaft connected to the two sets of links.

1,813,018. COLLAPSIBLE TABLE. NEWTON N. BROWN, Racine, Wis., assignor to Gold Medal Camp Furniture Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed July 28, 1924, Serial No. 728,546. Renewed June 28, 1929. 7 Claims. (Cl. 45—11.)



1. A collapsible table comprising side and end frame members hinged together, two of said members comprising hinged sections whereby the same may be folded inwardly between said other frame members and the latter moved together against the former, a leg hingedly associated with each side frame member in such wise as to be foldable flatly down against the underface of the same, a leg hingedly associated with each end member in such wise as to be folded flatly down against the underface of the same, and a flexible member adapted to form a top for said table when in use and an inclosing cover therefor when collapsed.

1,813,019. FOLDABLE BED. NEWTON N. BROWN, Racine, Wis., assignor to Gold Medal Camp Furniture Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 4, 1927. Serial No. 165,779. 2 Claims. (Cl. 5—114.)



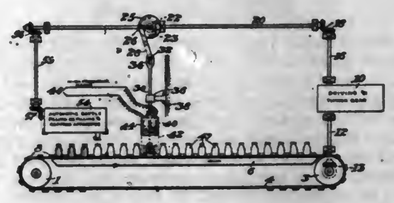
1. A foldable bed comprising a frame made up of a pair of separable sections, each section including an end rail constituted of an angle iron and a side rail consisting of a pair of hingedly connected parts, a pivotal connection between one end of each side rail and the end rail of its section, the pivotal connection of the side rail and end rail of one section being located adjacent the vertical flange of its end rail, the pivotal connection of the side rail and end rail of the other section being located at a point spaced at a relatively great distance from the vertical flange of its end rail, releasable connections between the free ends of each side rail and the end rail of the other section, said sections when detached and folded up being interfitted to dispose the horizontal flanges of the end rails in substantial parallelism and in protective relation to the folded side rails on three sides thereof.

1,813,020. FASTENING MEANS FOR FLEXIBLE SEATS. NEWTON N. BROWN, Racine, Wis., assignor to Gold Medal Camp Furniture Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 4, 1927. Serial No. 165,780. 1 Claim. (Cl. 155—187.)

A chair having rectangular side rails, a flexible seat having its ends coiled completely around the side rails, channels fitted over the side rails and embracing the portions of the flexible seat wrapped around the side rails, the seat also having portions wound in the same direction around the outsides of the channels and urging and compressing the same into clamping engagement with the portions of the seat interposed between said channels and rails and engaging opposite faces of the rails and also preventing accidental displacement of the channels.

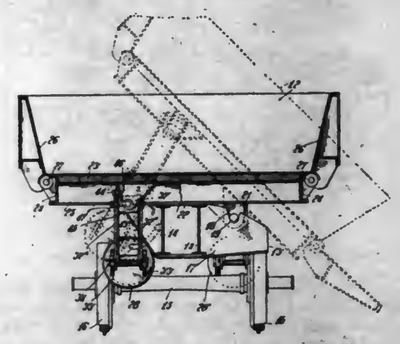


1,813,021. STERILIZING SYSTEM. THOMAS H. BROWN, Chatham, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 11, 1926. Serial No. 154,161. 1 Claim. (Cl. 167—3.)



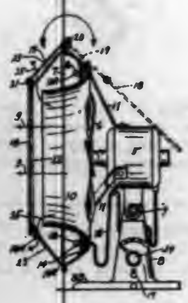
In a bottle sterilizing apparatus, an induction type mercury vapor lamp and a high frequency coil therefor, said lamp being of a size suitable for insertion into a bottle and said coil of a size suitable for movement to a position about a bottle, and means for conveying a succession of bottles to and away from said lamp and coil and for moving said lamp and coil into operable relation respectively in and about each bottle successively as it is presented thereto and for moving the lamp and coil from such operative relation therewith, before it is moved away.

1,813,022. DUMP CAR. WILLIAM L. BUENER, Columbus, Ohio, assignor to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed July 9, 1927. Serial No. 204,506. 38 Claims. (Cl. 105—273.)



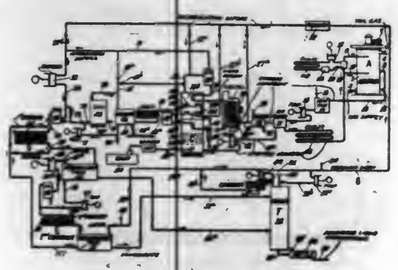
1. A dump car comprising an under body, a tilting bed mounted thereon for tilting about laterally spaced fulcrums, and power transmission mechanism comprising a longitudinally disposed cylinder movable to tilt the bed.

1,813,023. ELECTRIC HEATER. FRANK J. CHESLOCK and CLEMENT A. YAREN, St. Paul, Minn. Filed Aug. 11, 1928, Serial No. 298,888. Renewed June 9, 1930. 3 Claims. (Cl. 219—39.)



1. In a portable electric air circulating device having an electric motor and a rotary fan operated thereby, and variable speed control means for said fan; a single circular trough shaped ring fixed concentric of and about said fan to provide an opening for free circulation of air current from said fan therethrough, an electric heat generating element fixed in the said trough, and pivotally suspended deflector means adapted to be removably placed forward of said opening of the ring and forward of the fan and concentric thereof to deflect air currents from the fan and radially spread the air heated by said heater element and in a direction at right angles to the initial movement of the said air currents created by the fan.

1,813,024. PRODUCTION OR RECOVERY OF LIGHTER HYDROCARBONS. ALEXANDER CLARKE, Eastland, Tex., and HORACE BUTLER, West Chester, Pa., assignors to United Hydro Carbons Company, West Chester, Pa., a Corporation of West Virginia. Filed Aug. 7, 1926. Serial No. 127,718. 39 Claims. (Cl. 196—8.)



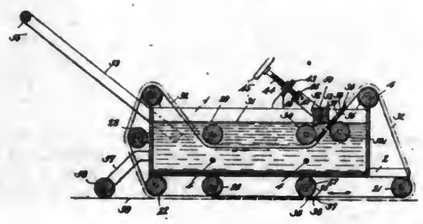
1. In the production of gasoline from natural gas by a method wherein hydrocarbons are absorbed from natural gas by an absorption medium, the steps comprising subjecting the medium charged with absorbed hydrocarbon vapors to dry distillation and then separately to steam distillation, separately withdrawing evolved hydrocarbon vapors from said distilling operations, admixing the hydrocarbon vapors so withdrawn, and subjecting the admixed vapors to compression and cooling.

1,813,025. BINDER STRIP FOR FLOOR COVERINGS. ROBERT G. COLLINS, Philadelphia, Pa. Filed Sept. 7, 1929. Serial No. 390,877. 7 Claims. (Cl. 154—49.)



1. In a device of the character stated, an outer U-shaped sleeve having its inner edges folded inwardly to form inner ways, an inner sleeve having its edges positioned within said ways, there being a chamber formed between the closed ends of said sleeves, and a longitudinally slidable locking rod positioned in said chamber.

1,813,026. FLOOR WASHING MACHINE. JOHN L. COOLE, Boston, Mass. Filed May 18, 1929. Serial No. 364,120. 4 Claims. (Cl. 15—51.)



1. A device of the character described comprising a belt; a plurality of cleaning sets extending across, and having portions extending beyond, said belt; laced members connecting said portions to each other; means to connect said members to said belt; and means to drive said belt.

1,813,027. ART OF PACKING INNER TUBES FOR PNEUMATIC TIRES. JOHN COOPER, Inchinnan, Scotland. Filed Jan. 4, 1930, Serial No. 418,544, and in Great Britain Jan. 17, 1929. 4 Claims. (Cl. 206—46.)



1. As an article of manufacture, a package comprising a ring-shaped pneumatic tire tube coiled into a conical roll, and a hollow container of truncated conical formation snugly housing said roll and being of the same conicity as said roll, so that the surfaces of said roll and said container which are in frictional engagement are confined to the outer peripheral surface of said roll and the inner peripheral surface of said container.

1,813,028. PROCESS OF CASE HARDENING. ROYSEL J. COWAN and PHILIP W. MCCOY, Toledo, Ohio, assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Mar. 8, 1930. Serial No. 434,445. 5 Claims. (Cl. 148—16.)

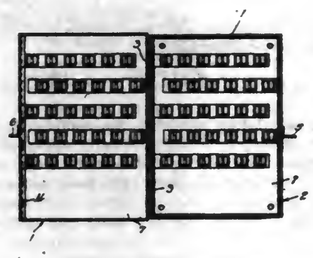
1. A process of case hardening objects by ammonia gas comprising simultaneously passing said objects and said gas in unidirectional flow through a heating chamber.

1,813,029. MACHINE FOR INDICATING WEIGHT AND FUNCTIONS OF WEIGHT. ROBERT CRAIG, Dayton, Ohio, assignor to International Business Machines Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1923. Serial No. 614,798. 25 Claims. (Cl. 265—37.)



1. An automatic scale comprising in combination, a load support, a chart having a plurality of sets of indications, a telescope, manually operable means for selectively controlling the visibility of said sets of indications through said telescope, and means controlled by said load support for distinctively disclosing through said telescope a portion of any selected set of said indications in accordance with the weight of a commodity.

1,813,030. KEY CABINET AND RETAINER. ARTHUR C. DAVENPORT, Chicago, Ill. Filed Oct. 8, 1930. Serial No. 487,237. 9 Claims. (Cl. 40—19.5.)



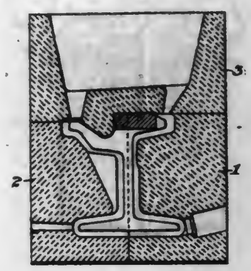
1. In a device of the character described, a plate having hook members projecting laterally therefrom and disposed in alignment transversely of the plate, and a strip secured to the plate and provided with transverse depressions forming with the plate pockets for reception of identification cards, said depressions being provided with openings for rendering the cards therein visible and the hook members extending across the pockets and through the openings thereof.

1,813,031. AWNING HOOK. WILL DE GROFFT, Woodstown, N. J. Filed May 29, 1928. Serial No. 281,428. 3 Claims. (Cl. 248—22.)



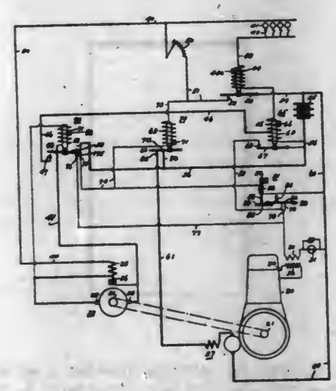
1. A hook adapted to receive an eyelet of a predetermined inside diameter, means for securing the eyelet in the hook including a spring member extending in reverse direction from the point of the hook and having its free end spaced from the hook a distance greater than the inside diameter of the eyelet.

1,813,032. MOLD FOR ALUMINO-THERMIC WELDING OF RAILS. JOHN H. DEPPELER, Weehawken, N. J. Filed Aug. 23, 1929. Serial No. 387,833. 2 Claims. (Cl. 22—116.)



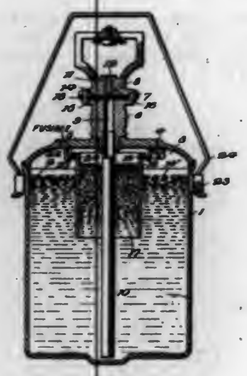
1. A mold for welding rails by superheated molten metal, comprising lower mold sections enclosing the rail ends to substantially the level of the tread surface of the rails, and an upper section fitted to and constituting a completing supplement to the lower sections, said upper section being separately removable to permit passage of traffic.

1,813,033. ELECTRIC SYSTEM. ERNEST DICKEY, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 30, 1926. Serial No. 84,840. 3 Claims. (Cl. 290—30.)



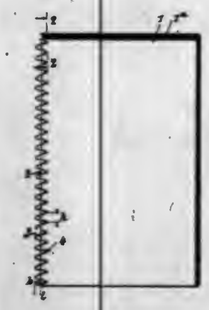
1. An electrical generating system, comprising in combination, a work circuit, a prime mover, a source of current, electrical apparatus associated with the prime mover and source of current, said apparatus being adapted to receive current from said source for starting the prime mover and adapted to supply current to said work circuit and said source, means for controlling the connections between said source and apparatus, and means for interrupting the flow of current from the apparatus to said source when the demand in the work circuit exceeds a certain amount.

1,813,034. FIRE EXTINGUISHER. HOWARD WATERS DOUGHTY, Amherst, Mass. Filed Dec. 31, 1929. Serial No. 417,693. 10 Claims. (Cl. 169—27.)



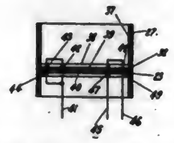
1. A fire extinguisher comprising a container having a discharge opening, a fire extinguishing liquid in said container, gas-producing reactive substances floating on said fire extinguishing liquid, a partition for normally maintaining said reactive substances out of contact with each other, and fusible means for supporting said partition in normal position.

1,813,035. STITCHING MACHINE FOR SETS OF SHEETS. ROBERT DRAEGER, Montrouge, France, assignor to Draeger Freres, Montrouge, France. Filed Dec. 7, 1929, Serial No. 412,385, and in France Nov. 19, 1929. 9 Claims. (Cl. 140—93.)



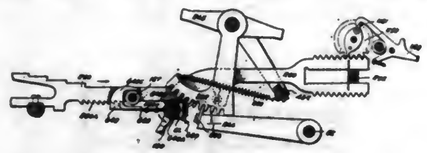
1. In a machine for stitching together a set of sheets pierced along one edge with equidistant holes by means of a wire wound in a helix, in combination: lateral guiding means parallel with the faces of the set of sheets for holding the sheets against each other, a guiding rod having a cross section lesser than the cross section of the free internal space of the helically wound wire when inserted in the holes of the set of sheets and provided with a curved longitudinal face adapted to bear on the edge of the set of sheets adjacent to the holes, and guiding means obliquely inclined with relation to the faces of the set of sheets and adapted to bear on one of the edges of the set of sheets adjacent to the edge bearing on said rod, whereby said channels are given a substantially helical form.

1,813,036. SYSTEM OF NEUTRALIZATION. HAROLD F. ELLIOTT, Palo Alto, Calif., assignor, by direct and mesne assignments, to Victor Talking Machine Company, Camden, N. J., a Corporation of New Jersey. Filed Mar. 11, 1927. Serial No. 174,475. 9 Claims. (Cl 175—350.)



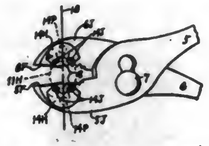
1. In combination, an insulation tube, a coil wound on the tube, a disc-like member fixed in the tube, said member having a peripheral slot therein that is closed by the tube, and a coil in said slot.

1,813,037. RACK CONTROLLING MEANS FOR CALCULATING MACHINES. EMIL JOHN ENS, Newark, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Filed June 22, 1928. Serial No. 287,480. 6 Claims. (Cl. 235—60.)



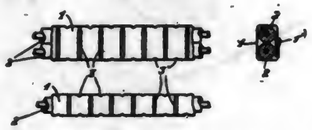
1. In a calculating machine, the combination with accumulator actuators, of automatically operated pawl and ratchet means for holding the actuators against further advance movement after they have been initially set, operating means, and a friction clutch interposed between said operating means and the pawl and ratchet means aforesaid.

1,813,038. PLIERS. JOHN A. ERNE, Spokane, Wash. Filed Sept. 23, 1929. Serial No. 394,522. 3 Claims. (Cl. 81—31.)



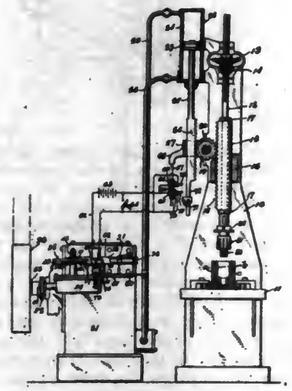
1. In a tool of the class described comprising in part a pair of gripping jaws with parallel outside faces, pivot means rearward of said jaws and handle means extending from said pivot, an auxiliary jaw member rotatably mounted on each jaw, fingers on each said jaw extending radially inwardly and formed integral with each auxiliary jaw.

1,813,039. PROTECTING SHEATH FOR ELECTRIC WIRES. JULES ESCOL, Chatelet, Belgium. Filed Mar. 27, 1930, Serial No. 439,509, and in Belgium Mar. 27, 1929. 4 Claims. (Cl. 247—39.)



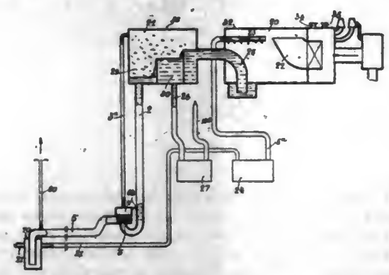
1. In combination with an insulated electric conductor, a continuous protecting sheath enclosing said conductor throughout its length, said sheath being made of a rigid metal having a polygonal cross-section with an even number of sides, said sides having transverse notches therein, the notches in diametrically opposite sides facing each other.

1,813,040. CONTROL GEAR. WALTER FERRIS, Milwaukee, Wis., assignor to Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 11, 1923. Serial No. 644,712. 12 Claims. (Cl. 77—32.)



1. In a machine tool or the like having a driven element, a variable displacement pump, means actuated by fluid delivered by said pump for driving said element through successive stages of an operating cycle, mechanism for regulating pump displacement, a cam for controlling said mechanism, means operable independently of said element for driving said cam during each stage, and means controlled by said element for interrupting the action of said cam at the end of each stage of the cycle.

1,813,041. FEED WATER HEATER. SEBASTIEN OTTO ALFRED FIEDLER, Paris, France, assignor to l'Auxiliare des Chemins de fer et de l'Industrie, Paris, France. Filed Aug. 2, 1929, Serial No. 383,080, and in France Apr. 12, 1929. 3 Claims. (Cl. 261—1.)



1. A hot water feeding arrangement for boilers comprising a source of cold water, a feed water heater, means for supplying said heater with heating steam, cold water supply means for supplying said heater with water from said source of cold water, boiler feeding means, means for connecting the intake of said feeding means, with the outlet of said heater, an overflow compartment in said heater, water discharge means for connecting said overflow compartment with the intake of said cold water supplying means, steam trap means in said water discharge means, and a vent pipe of suitable height opening into said water discharge means past said steam trap means.

1,813,042. PROCESS FOR THE TREATMENT OF ZINCIFEROUS AND COMPOSITE ORES, BY THE VOLATILIZATION OF METALLIC ELEMENTS. ALEXANDRE FOLLIET and NICOLAS SAINDERICHIN, Paris, France. Filed May 27, 1929, Serial No. 366,522, and in France May 30, 1928. 2 Claims. (Cl. 75—28.)

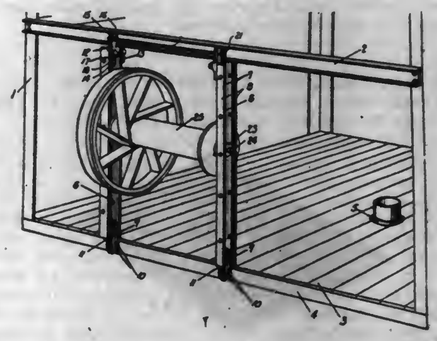
1. The herein described process for the volatilization of zinc-bearing or composite ores which consists in adding to a mixture of ores, a combustible substance which serves solely as a reducing body and which moves forward gradually, in a thin layer, in a suitable refractory channel in which it is subjected only at the vicinity of the discharge end of said channel, to the energetic action of jets of air under pressure which is raised to a constant temperature of 650° to 800° C., whereby the residues may be discharged before their scorification commences.

1,813,043. SWIMMING GARMENT. EDWIN H. FOREMAN, New York, N. Y. Filed July 12, 1929. Serial No. 377,635. 3 Claims. (Cl. 2—67.)



1. A knitted form-fitting swimming garment having arm openings extending substantially below the armpits of the wearer, the forward portion adjacent the arm openings below the breast portion being made shorter than the more central portions of the garment so as to provide tension at the said forward portion, causing the garment adjacent the arm openings to lie close to the body.

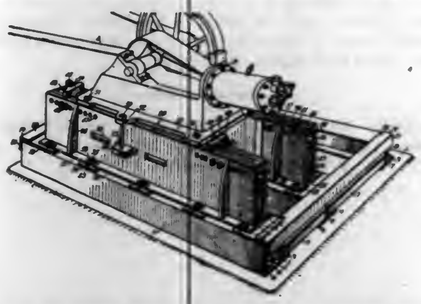
1,813,044. MOUNTING FOR CALF WHEELS OR THE LIKE. HARRY H. FRANKS, Tulsa, Okla., assignor of three-fourths to Tidal Oil Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Dec. 13, 1929. Serial No. 413,813. 7 Claims. (Cl. 189—16.)



7. In combination with a derrick including a floor and cross girder, spaced posts supported on and attached to

the floor, a pair of clamp members on the upper end of each post, one having fixed and the other adjustable mounting on the post, an adjusting bolt connecting the clamp members, and tie rods respectively connecting the fixed clamp members and the movable clamp members on respective posts for retaining the posts in spaced relation.

1,813,045. ENGINE FRAME. HARRY H. FRANKS, Tulsa, Okla., assignor of three-fourths to Tidal Oil Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Jan. 20, 1930. Serial No. 422,009. 5 Claims. (Cl. 248—15.)



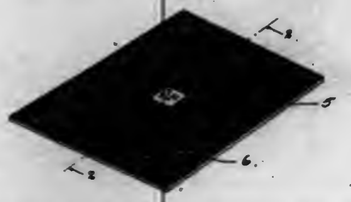
1. In an engine supporting frame, a sub-frame, engine mounting members adjustably supported on the sub-frame and having aligning slots, a bar extending through the slots, and means for connecting the bar to an engine base.

1,813,046. BEACH COT. MAX FRIEDLANDER and WILLIAM T. BAKER, San Francisco, Calif. Filed Aug. 9, 1930. Serial No. 474,210. 10 Claims. (Cl. 5—113.)



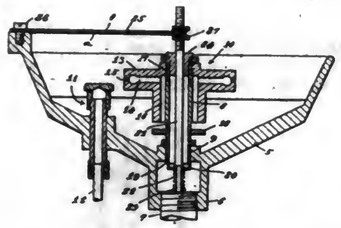
1. A beach cot comprising a foldable frame; a fabric cover mounted upon the frame; an extension formed upon one end of the cover and extendible to form a canopy over one end of the cot; side extensions formed along the sides of the cover; loops formed in the cover at the ends of the frame; and members insertible through the loops to detachably engage the ends of the cot frame and provided with foldable arms to engage and hold the cover extensions in raised operative positions.

1,813,047. BARBER'S LATHERING DEVICE. ALEXANDER GIBSON, Oakland, Calif. Filed Apr. 13, 1929. Serial No. 354,793. 6 Claims. (Cl. 87—23.)



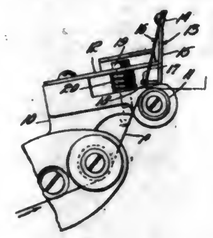
1. A fabric pad having a pile, a cake of soap embedded therein and affixed to the fabric.

1,813,048. SAFETY BURNER. JOHN H. GRAYSON, Lynwood, Calif., assignor to Grayson Heat Control, Inc., Lynwood, Calif., a Corporation of California. Filed July 20, 1929. Serial No. 379,680. 6 Claims. (Cl. 158—117.1.)



1. The combination with a gas burner having a gas supply pipe leading thereto, of a tubular manifold forming a part of the burner itself and having its one end normally communicating with the gas supply pipe, said manifold having gas jet orifices in a predetermined relation to the ports of the burner, a valve seat at the first mentioned end of said manifold remote from the orifices, a disc type valve for cooperation with the seat, a stem disposed substantially concentrically in said manifold having the valve mounted on one end thereof, a guide for said stem at the other end of the manifold through which the stem projects out of the manifold, a pilot burner adjacent the gas burner for lighting the same, and an elongated flexible thermostat suitably supported at one end and disposed in transverse relation to the projecting end of the valve stem and having the free end thereof connected with the latter to communicate movement thereto in the flexing thereof, said thermostat having a portion thereof intermediate its ends in proximity with the pilot burner so as to be heated thereby.

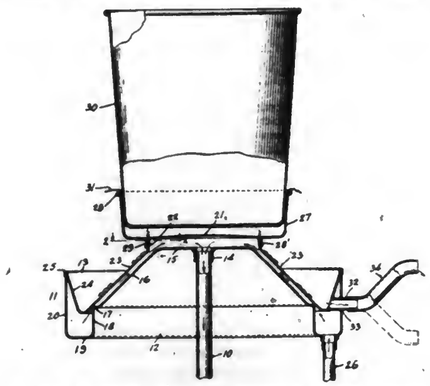
1,813,049. SLUB CATCHER. LOUIS B. HASBROUCK, Elmira, N. Y., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y., a Corporation of New York. Filed Sept. 14, 1929. Serial No. 392,619. 6 Claims. (Cl. 28—64.)



1. A slub catcher, comprising a bed across which a traveling yarn is drawn, and a bent resilient blade having a body portion inclined towards the direction from which the yarn is traveling and an end portion substantially perpendicular to the line of travel of the yarn and terminating in an edge slightly spaced from said bed.

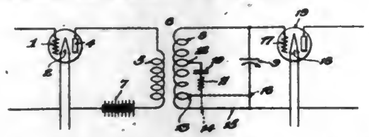
1,813,050. MILK COOLER. EDWIN HAUK, Milwaukee, Wis. Filed Mar. 28, 1928. Serial No. 265,410. 4 Claims. (Cl. 257—179.)

2. A milk or cream cooler, comprising a base section including a conical portion and a lower circular channel about the same, and a closing top section also including a conical portion spaced from the first conical portion and over the outer side of which milk or cream to be cooled is adapted to flow, with a circular trough at the lower edge of the top section for collecting the milk or cream, the said trough resting in the said channel, and



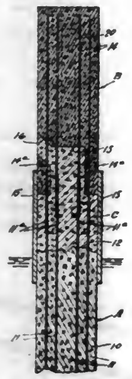
the said sections together forming a closed compartment for the circulation of cooling water at the sides of the trough, with an inlet and an outlet therefor.

1,813,051. AMPLIFIER CIRCUITS. HERMAN HOLLERITH, Jr., Riverton, and ALMON N. FENTON, Audubon, N. J., assignors to Victor Talking Machine Company, a Corporation of New Jersey. Filed May 14, 1925. Serial No. 30,281. 21 Claims. (Cl. 179—171.)



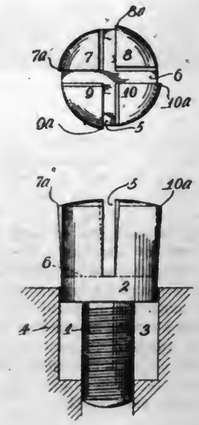
1. In combination with a plurality of vacuum tubes comprising grid, filament and plate electrodes, means including closely coupled primary and secondary windings for connecting said tubes in cascade, and means in shunt to a portion only of said secondary winding for preventing oscillation of one or more of said tubes due to the coupling between said windings.

1,813,052. PROTECTED CONCRETE PILE. FRANK S. HONBERGER, Los Angeles, Calif. Filed Aug. 28, 1926. Serial No. 132,074. 2 Claims. (Cl. 61—56.)



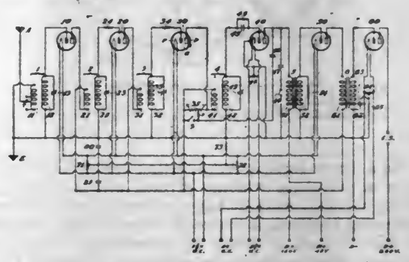
1. A concrete pile or the like, comprising two precast and joined sections, the upper section being impregnated with asphalt on all surfaces including the joined surfaces so as to be impervious to fluid entry.

1,813,053. SELF-LOCKING FILLISTER HEADSET SCREW. RICHARD T. HOSKING, Wilmette, Ill., assignor, by mesne assignments, to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 409,149. 2 Claims. (Cl. 151—31.)



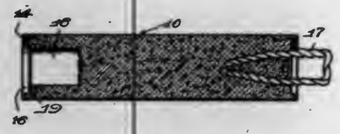
1. A fillister bolt having its cylindrical head elongated and made of spring material shaped to be received in a complemental hole in a piece of work and formed with two slots in intersecting planes extending from the top of the head toward its base, said slots defining between them a plurality of spring tongues each integral at one end with the base of said head and bent in a way to present one of its longitudinal edges as a spring tooth projecting farthest beyond the cylindrical periphery of the head at the top thereof and least at the base thereof, said tooth positioned in progressively increased biting-in relation to the wall of said hole from the base to the top for locking the bolt against tendency to unscrew.

1,813,054. WIRELESS RECEIVING SYSTEM. CHARLES T. JACOBS, East Orange, N. J., assignor to Splitdorf Radio Corporation, Newark, N. J. Filed Apr. 12, 1928. Serial No. 269,337. 9 Claims. (Cl. 250—27.)



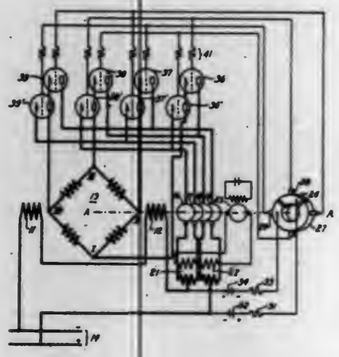
1. In a receiving system for wireless waves which includes; at least one stage of radio frequency amplification including its associated vacuum tube and at least one stage of audio frequency amplification including its associated vacuum tube and a detector tube operatively connected on its input side with the radio frequency amplification stage and on its output side with said audio stage; means for utilizing and controlling regeneration in the detector tube including a potentiometer having its extremities connected in parallel with some part of the radio frequency stage connected to the input of the detector tube and a condenser connected between the plate of the detector tube and the movable contact member of the potentiometer.

1,813,055. DIVIDING STONE FOR GARDENS OR LAWNS. GEORGE P. KANNEN, Berwyn, Ill. Filed Feb. 23, 1928. Serial No. 256,158. 4 Claims. (Cl. 47—33.)



1. A molded dividing stone having a base provided with an integral upwardly extending ornamental portion, the ends of said base being disposed in vertical planes, each end being provided with a recess spaced from the edges thereof, a bendable metal alining member embedded in the base and projecting through one of said recesses beyond the corresponding end of the base, the opposite end of the base having a longitudinal molded socket extending inwardly from said recess and adapted to receive a similar alining member of another stone said socket having walls cooperating with said aligning member to align said stones, said recesses being adapted to receive plastic adhesive material for uniting contiguous stones and sealing said sockets against moisture when a plurality of said stones are arranged in end to end relation.

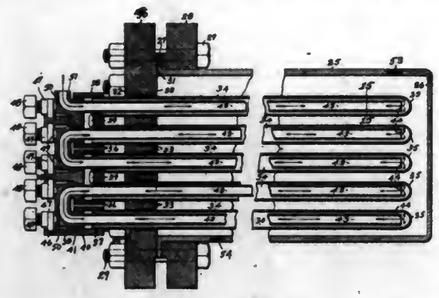
1,813,056. COMMUTATION OF CONTINUOUS CURRENT. ERWIN KERN, Wettingen, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Filed Oct. 15, 1928, Serial No. 312,649, and in Germany Oct. 15, 1927. 5 Claims. (Cl. 171—228.)



1. In a direct current commutating device for polyphase motors, a polyphase winding divided into a plurality of winding portions, metallic vapor valves connected between the winding portions, a source of direct current connected with said valves, a source of alternating current, and means for superimposing the alternating current on the direct current.

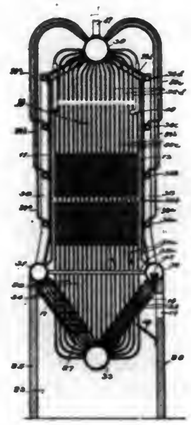
1,813,057. APPARATUS FOR HEAT EXCHANGING. FREDERICK E. KEY, East St. Louis, Ill., assignor to Key Boiler Equipment Co., East St. Louis, Ill., a Corporation of Missouri. Filed Oct. 31, 1927. Serial No. 229,882. 4 Claims. (Cl. 257—238.)

1. A heat exchanger comprising a casing closed at one end, a removable head for closing the opposite end of said casing, a plurality of tubes projecting through said head into said casing, the ends of the tubes within the casing being closed, means outside the casing for permitting communication between pairs of the tubes, tubes concentric with and within the first-mentioned tubes, removable means for permitting communication between pairs of said last-mentioned tubes, whereby all the tubes are united to



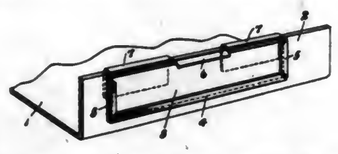
form a single sinuous passage, means for introducing a fluid into said tubes, and means through which a heating medium can enter and pass from said casing.

1,813,058. BOILER. GEORGE LASKER, Chicago, Ill. Filed Aug. 29, 1929. Serial No. 389,190. 14 Claims. (Cl. 122—235.)



1. The combination with a down draft furnace of a boiler construction comprising a plurality of vertical stand-pipes, a system of horizontal pipes and drums connected with the stand-pipes, said stand-pipes and horizontal pipes being positioned outside of the furnace, and a system of vertical tubes positioned about the interior walls of said furnace, said tubes having their ends projecting through the furnace walls and connecting with said horizontal pipes.

1,813,059. LABEL HOLDER. JAMES EDGAR LEE, Grand Haven, Mich., assignor to Challenge Machinery Company, Grand Haven, Mich., a Corporation of Michigan. Filed June 11, 1928. Serial No. 284,310. 1 Claim. (Cl. 40—17.)



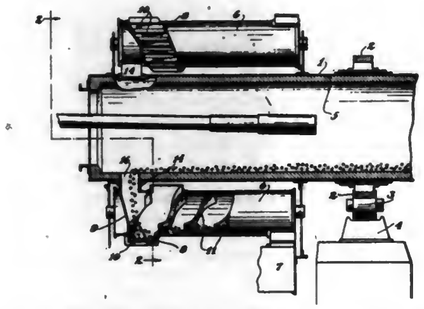
A label holder comprising, a vertical back of sheet metal, a lip bent forwardly and downwardly at an angle to the horizontal between the ends of said back, hook members at each side of the lip bent to the rear and then downwardly, and means at the ends and at the bottom of said back for receiving and holding the end and bottom edge portions of a label.

1,813,060. NONDETACHABLE IDENTIFICATION TAG. JOHN A. LETHERT, St. Paul, Minn. Filed July 12, 1929. Serial No. 377,906. 2 Claims. (Cl. 40—21.)



1. An identification device comprising a tag and a bendable element adapted to embrace an object to secure the tag thereto, the tag comprising a front wall and a rear wall secured to the front wall and having a pair of outwardly bulged portions providing pocket members, each pocket member having an entrance to the space therein through one of the side walls, and the bendable element being provided at its opposite extremities with ends passing through the respective entrances into said pockets and resilient tongues on said ends, each tongue interlocking with a wall of the respective entrance and being normally spaced at its extremity from the body of said end to such degree as to require compression of the tongue during insertion of the end into the pocket.

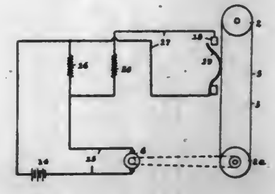
1,813,061. ROTARY KILN AND COOLER. POUL T. LINDHARD, Brooklyn, N. Y., assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Dec. 18, 1928. Serial No. 326,749. 2 Claims. (Cl. 222—5.)



1. The combination of a rotary kiln for use in the manufacture of cement, having in its end portion a circumferential series of openings through which the clinker is discharged, and a circumferential series of cooling drums supported by the kiln about itself and communicating respectively with the kiln about said openings, each of said drums being provided at its end portion with a spiral enlargement of greater diameter than the body of the drum to receive the clinker as it is discharged from the kiln and urged onward into the drum.

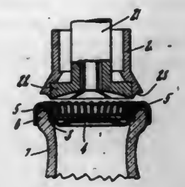
1,813,062. SIGN APPARATUS. GEORGE LISS, Paterson, N. J. Filed Feb. 14, 1931. Serial No. 515,724. 3 Claims. (Cl. 40—53.)

1. In combination, driven means including a travelling support having the subjects to be displayed arranged thereon in a series extending lengthwise of the travel of the support, electro-motive means to drive the driven means including an electric circuit and a motor therein having a driving connection with the driven means, and a shunt



having a break therein, said support having means, arranged in succession lengthwise of its travel and one for each subject displayed thereon, to cause alternate closing and opening of the break.

1,813,063. BOTTLE CAP AND METHOD OF APPLYING THE SAME. HAROLD W. MARTIN, Natick, Mass., assignor, by mesne assignments, to American Seal-Kap Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Dec. 28, 1927. Serial No. 248,157. 6 Claims. (Cl. 215—38.)

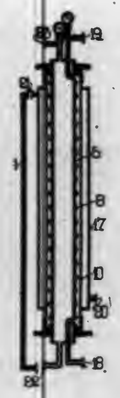


1. A milk bottle cap shaped prior to attachment to the bottle and comprising a waxed paper disk formed up with a marginal pouring lip housing, the outer wall of said housing having certain of its material gathered into folds presenting outwardly projecting ribs, the material of said housing including said ribs being compacted together into a dense horn-like structure highly resistant to moisture, said outer wall being stretchable by the opening up of said folds without substantial effect on said dense structure.

2. A bottle cap for application to a bottle having an internal annular ledge and a pouring lip above said ledge, said bottle cap having a bore covering portion for engagement with said ledge, and a pouring lip housing above its bore covering portion, said housing being initially higher than said pouring lip above said ledge and having a resilient outer margin to permit said housing portion to be rolled down toward the top of said pouring lip and its margin to pass down and inwardly under said lip.

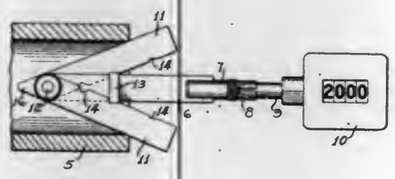
3. A bottle cap for application to a bottle having an internal ledge and a pouring lip above said ledge, said bottle cap comprising a waxed paper disk initially molded to present a bore covering portion for engagement with said ledge, and a pouring lip housing higher than said pouring lip, the material of said disk being gathered together over said lip and compressed into a dense horn-like structure having outwardly projecting folds forming ribs extending to the outer edge of said housing, the material of said housing being yieldable by a partial opening of said folds without injury to said horn-like structure to permit said pouring lip housing to be depressed against the top of said pouring lip and the margin of said pouring lip housing to spring under and contact with the lower part of said pouring lip.

1,813,064. PRESERVING EGGS. WINCENTY MATZKA, London, England. Filed June 10, 1927, Serial No. 197,863, and in Great Britain Aug. 6, 1926. 7 Claims. (Cl. 204—24.)



1. The process for sterilizing egg which process consists in subjecting egg simultaneously to heat at a temperature not in excess of 60° C. and to the action which occurs between two metallic surfaces arranged with a narrow space between them, one surface having a higher electro-potential than hydrogen, the other having a lower electro-potential than hydrogen, and both being chemically inert to the egg.

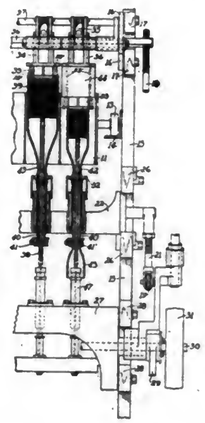
1,813,065. ADJUSTABLE CENTER FOR ROTARY SPEED INDICATORS AND THE LIKE. BENJAMIN L. METZGER, Toledo, Ohio. Filed Apr. 6, 1929. Serial No. 353,050. 5 Claims. (Cl. 235—103.)



1. In a device of the character described, the combination with a shank, of oppositely disposed wings pivoted thereto and having opposed notches in their inner edges, and a stop selectively engageable with the notches to limit the inward movement of said wings.

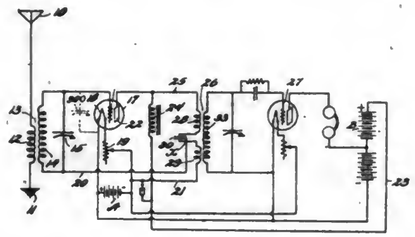
1,813,066. WASHER FOR BOTTLES OF DIFFERENT SIZES. GEORGE L. N. MEYER, Jackson Heights, N. Y., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a Corporation of Wisconsin. Filed Dec. 12, 1928. Serial No. 325,449. 3 Claims. (Cl. 15—60.)

1. In a bottle washing machine of the type in which rows of bottles in a series of stations are clamped between upper and lower clamping members and in which brush spindles carrying brushes are admitted to the bottles through brush tubes of the lower clamping members, means for adapting a bottle station to clean smaller bottles comprising an extension secured to the upper clamping member, a shorter brush spindle and smaller brush for said



station, and an extension for the brush tube at said station secured to the lower end of the tube to prevent the brush bristles bending backwardly.

1,813,067. THERMIONIC AMPLIFIER SYSTEM. BYRON B. MINNIUM, Chicago, Ill., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill., a Corporation of Delaware. Filed Mar. 18, 1926. Serial No. 95,721. 1 Claim. (Cl. 179—171.)

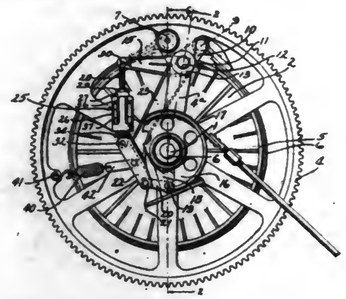


Radio frequency receiving apparatus comprising in combination, a vacuum tube having a filament, a grid and a plate, an input inductance, an output inductance, and a source of plate supply, said elements being arranged in the form of a balanced Wheatstone bridge, the grid-to-plate capacity of the tube being in one arm of the bridge, the filament-to-grid capacity being in another arm, said output inductance being divided into two portions by a stopping condenser, each portion being in its allotted one of the two remaining arms of said bridge, with said stopping condenser in one inductive arm, and a secondary circuit coil inductively coupled to both parts of said output inductance.

1,813,068. POWER CLUTCH. HOLGER L. MITCHELL and ROLF LJUNGKULL, Milwaukee, Wis., assignors to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 4, 1929. Serial No. 337,185. 13 Claims. (Cl. 192—36.)

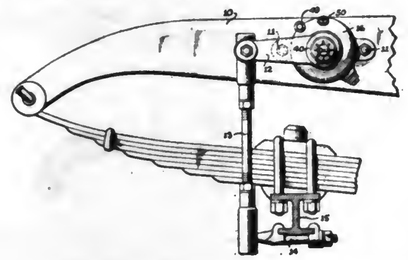
12. A power clutch including a driving element, a main clutch band carried thereby, an auxiliary control drum, a manually operable brake therefor, means carried by the driving element and connected to the main clutch band for expanding and contracting the same, linkage connecting

said auxiliary control drum and said means, and a yieldable shock absorbing connection incorporated in said linkage



and acting to absorb shocks and preclude overloading of the main clutch band when the same is contracted under the influence of the auxiliary control drum.

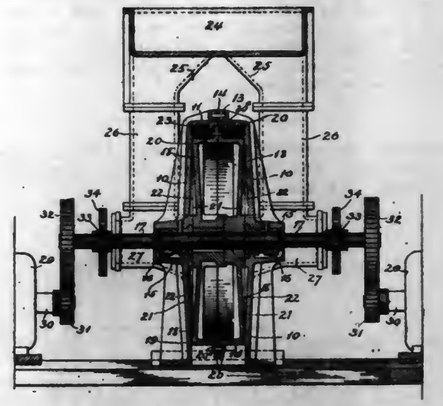
1,813,069. SHOCK ABSORBER. PORTER S. MORGAN, New York, N. Y., assignor to Morgan, Blodgett, Morgan, Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1924, Serial No. 712,526. Renewed Oct. 5, 1925. 29 Claims. (Cl. 188—88.)



1. A hydraulic shock absorber for spring-supported vehicles comprising in combination means for attaching the body of the absorber to one of two relatively movable parts of the vehicle, an oscillatory arm, having a normal intermediate position, operatively connecting the absorber to the other of said parts of the vehicle, a piston operated by said arm and provided with cam surfaces, a supplementary cam member integral with said piston, a double cam having opposed cam surfaces positioned between and in contact with the cam surfaces of said piston and said supplementary cam member in such manner that rotation of said piston results in longitudinal movement thereof in accordance with the direction and extent of rotation, a cylinder wherein said piston is adapted to operate to compress fluid within said cylinder when said arm moves toward its said normal intermediate position in either direction, means adjustable to permit and restrict the flow of fluid when so compressed, and auxiliary means to relieve compression when extraordinary forces are transmitted to the absorber.

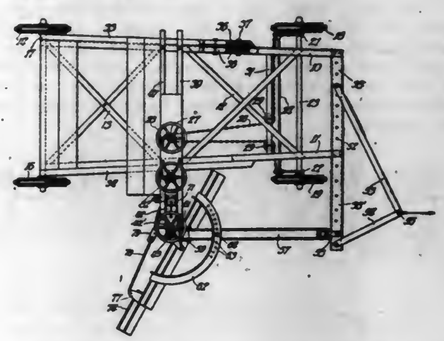
1,813,070. APPARATUS FOR DISINTEGRATING SUGAR CANE. WILLIAM HENRY MORGAN, Alliance, Ohio, assignor, by mesne assignments, to The Morgan Hurrycane Company, New York, N. Y., a Corporation of Florida. Filed Feb. 28, 1925, Serial No. 12,410. Renewed Dec. 26, 1930. 13 Claims. (Cl. 146—106.)

10. A machine for disintegrating cane stalks comprising a housing having two vertically arranged spaced side walls, rotary means located between and spaced from said side walls, and arranged to rotate on a substantially horizontal axis, said side walls having feed openings adjacent said axis, cooperating cane splitting devices carried respectively by said side walls and said rotary means, a hopper and



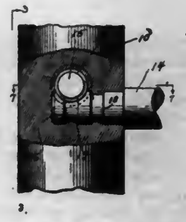
connections for delivering said cane stalks from said hopper simultaneously through said openings to the spaces between said side walls and said rotary means.

1,813,071. ROAD SCRAPER. CHARLES J. MORITZ, Effingham, Ill. Filed June 7, 1929. Serial No. 369,086. 11 Claims. (Cl. 37—155.)



2. In a road scraper a wheeled frame adapted to ride on a finished roadway, a bracket having a pivotal connection to the frame at the side thereof, a mold board suspended from said bracket and means for tilting the bracket with respect to the frame to impart an angular adjustment to the mold board.

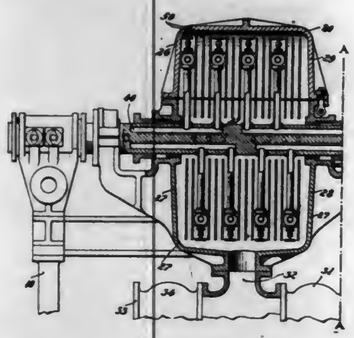
1,813,072. INTERLOCKING STRETCHER JOINT IN FURNITURE. HENRY J. MURDOCK, Statesville, N. C. Filed June 22, 1929. Serial No. 372,958. 4 Claims. (Cl. 144—309.)



1. That process of making wood joints which comprises boring a hole in a wooden member, forming a second

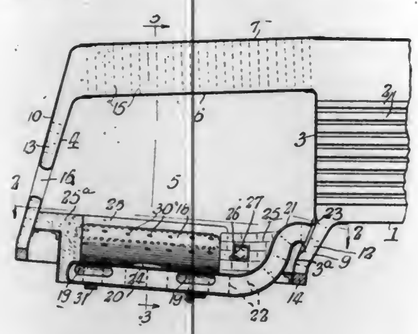
wooden member with peripheral grooves therein, forcing the second wooden member into the said hole, boring another hole in the first wooden member transversely to the direction of the first hole, and cutting while boring the said hole an arc-shaped cavity out of the edge of the second wooden member and forcing into the said second hole a third wooden member similar in construction to the second wooden member.

1,813,073. FILTERING MEANS. JOHN J. NAUGLE, Greenwich, Conn. Filed May 25, 1928. Serial No. 280,638. 3 Claims. (Cl. 210—200.)



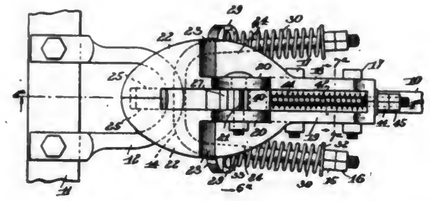
1. Filtering means comprising a hollow filtering element slotted inwardly from the periphery thereof to a point located adjacent the center thereof, and means located within said slot and communicating with the interior of said filtering element at two points thereof on either side of said slot, for withdrawing filtrate from said filtering element.

1,813,074. LOCOMOTIVE BOILER. ARTHUR WM. NELSON, Park Ridge, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed June 18, 1928. Serial No. 286,441. 3 Claims. (Cl. 122—58.)



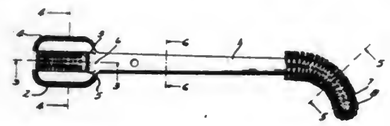
1. A locomotive boiler construction embodying therein a firebox having side sheets and a throat sheet, a pair of relatively flat hollow water circulating and steaming elements, each being affixed at the top end to and opening through an associated side sheet and extending downwardly and inwardly therefrom and a header connected at one end to said throat sheet and positioned at its other end between said elements and connected to each element at longitudinally spaced points thereof and providing air inlet openings for the firebox between said points of connection, said elements and header coacting to substantially close the bottom of the firebox.

1,813,075. COUPLING DEVICE. HENRY J. NEUFANG, Atlanta, and WILLIAM S. WALDO, Batavia, N. Y., assignors, by mesne assignments, to Boggs Plow Company, Inc., Atlanta, N. Y., a Corporation of New York. Filed Dec. 12, 1930. Serial No. 501,908. 10 Claims. (Cl. 280—33.16.)



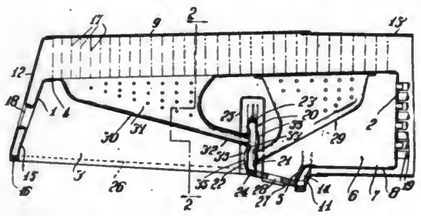
1. In a coupling device for tractors and the like, a frame, a coupling lever movable upon the frame, means yieldably resisting movement of the lever, a guard for the lever, the lever being movable upon the guard to a predetermined release position under an abnormal load, a part on the frame for limiting the movement of the lever subsequent to release thereof and yieldable means operating after release of the lever to hold the guard in position to urge the lever in engagement with said part.

1,813,076. BRUSH. GEORGE W. NEWELL, Burlington, Wis. Filed Apr. 15, 1929. Serial No. 355,113. 1 Claim. (Cl. 15—167.)



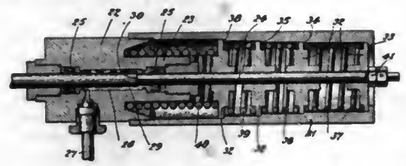
A brush adapted for use in cleaning a dental plate comprising a handle, a brush head projecting entirely beyond one end of the handle and having a U-shaped formation in cross section, the outer wall of the U-shaped brush head being offset with respect to the handle, and a set of bristles projecting outwardly from the outer wall of the U-shaped head, the inner wall of the U-shaped head also being adapted to carrying a set of inwardly directed bristles.

1,813,077. LOCOMOTIVE BOILER. ERNEST J. NOEL, Ironton, Ohio, assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 392,979. 2 Claims. (Cl. 122—68.)



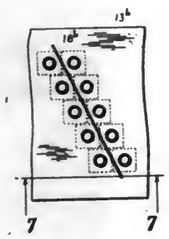
1. A locomotive boiler embodying therein a firebox having a fire chamber and a combustion chamber, an upright transversely disposed water wall spaced rearwardly from the front throat of the boiler and communicating at its ends with the side water legs only of the boiler and a siphon in each of said chambers and opening at one end through the crown sheet and opening at its other end into said water wall.

1,813,078. AUTOMATIC PUMP CONTROL MEANS. MICHAEL NYROP, Mount Vernon, N. Y. Filed Dec. 7, 1928. Serial No. 324,555. 2 Claims. (Cl. 103—38.)



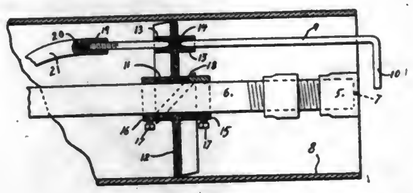
1. In automatic control means for pumps, a cylinder having a detachable head at one end provided with a chamber for connection to the pressure side of the pump, a piston reciprocating in said cylindar adapted for connection with a part of the pump operating means, and said piston having a part in said chamber acted upon by the pump pressure to move the piston in one direction, and a plurality of springs in said cylinder progressively increasing in strength and independently acting to resist movement of said piston in response to cumulative pressure within said chamber.

1,813,079. RADIATOR. CHARLES OPPE, New Haven, Conn., assignor to The G & O Manufacturing Company, New Haven, Conn. Filed July 8, 1927. Serial No. 204,306. 5 Claims. (Cl. 257—125.)



1. A header for a radiator comprising a relatively long thin metal plate, and rod-like stiffening means secured to said plate, said stiffening means extending substantially at right angles to the length of said plate.

1,813,080. AIR-DIRECTING AND IGNITION-ELECTRODE SUPPORT FOR OIL-BURNERS. CHARLES W. PARKER, Omaha, Nebr. Filed Nov. 12, 1928. Serial No. 318,891. 2 Claims. (Cl. 158—1.5.)



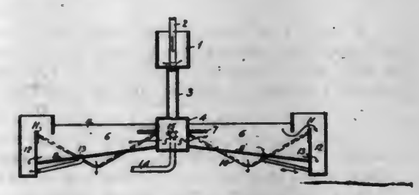
1. In a liquid fuel burner of the class described, the combination with a fuel-nozzle, and a fuel-pipe extending to and supporting said nozzle; of an air-directing member and electrode-support formed integrally of insulating material and comprising an annular central portion fitting about said fuel-pipe, and a plurality of helicoidal blades extending outwardly from said annular central portion; electrodes extending substantially parallel with the fuel-pipe through the intermediate portions of some of said blades and supported solely thereby; and means for securing said air-directing member and electrodes in adjusted relations to the nozzle, said means comprising collars secured upon the fuel-pipe, one of said collars having parts interengaged with the annular central portion of said member to prevent turning thereof about the fuel-pipe.

1,813,081. WATERPROOF CONSTRUCTION MATERIAL. JOHN HOMER PLUNKETT, Beverly Hills, Calif., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 12, 1929. Serial No. 385,098. 9 Claims. (Cl. 72—124.)



1. A building material suitable as a backing for plaster, stucco and the like, comprising lengths of felted fibrous material saturated with a water-proofing substance and coated on its surfaces with a layer of bituminous material, one of said coated surfaces having affixed thereto throughout its entire extent, a sheet of water-absorptive, smooth, and relatively tough paper.

1,813,082. FLOTATION ORE CONCENTRATING MACHINE. HERBERT WATMOUGH PUDAN, Carmel, Calif. Filed Feb. 23, 1924, Serial No. 694,782. Renewed Feb. 10, 1931. 4 Claims. (Cl. 209—170.)



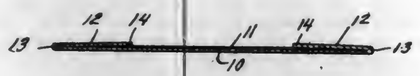
1. A flotation concentrating machine comprising a pressure feed box, a standpipe opening from and extending above said feed box, an air lift extending below said box and adapted to deliver pulp at its top under pressure into said feed box, a froth separating cell communicating with and adapted to receive aerated pulp from the feed box.

1,813,083. OIL BURNER. SERGE M. PYANKOW, Moscow, Union of Socialist Soviet Republics. Filed Nov. 18, 1929, Serial No. 407,996, and in the Union of Socialist Soviet Republics Mar. 14, 1928. 4 Claims. (Cl. 299—115.)



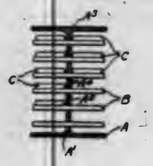
2. In an oil burner, the combination with an outer tubular member, the main portion of said member being of a cylindrical cross-section, a flattened nozzle on said member, an inner member slidably fitted in the cylindrical portion of said outer member, a flattened tip on said inner member conforming to said flattened nozzle, said inner member being provided with a channel inside for air and with spiral grooves on the outside for fuel, said tip being provided with straight grooves extending in a direction of the flattened aperture in said nozzle and forming a continuation of said spiral grooves.

1,813,084. METAL-CLAD FLASHING MATERIAL. THOMAS ROBINSON, New York, N. Y., assignor to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 22, 1929. Serial No. 349,072. 3 Claims. (Cl. 154—51.)



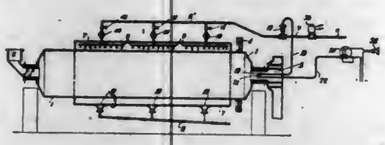
1. A material for roofing and similar purposes which comprises a web of flexible water-resistant material, and a strip of thin flexible metal extending lengthwise of the base spaced inwardly from the edges thereof, the portions of the base projecting beyond the edges of the metal strip being turned back upon themselves to give the web a double thickness at each side of the area covered by the metal.

1,813,085. WARE SUPPORT. ROGER W. ROWLAND, New Castle, Pa., assignor to New Castle Refractories Company, New Castle, Pa., a Corporation of Delaware. Filed Feb. 21, 1930. Serial No. 430,178. 6 Claims. (Cl. 25—153.)



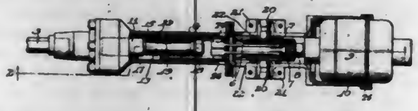
1. A support for ceramic ware comprising an elongated main supporting member having a base flange and a vertical web, and a plurality of horizontally extending ware supporting members extending laterally from said web.

1,813,086. GRINDING MILL. VIGGO SAHMEL, Forest Hills, N. Y., assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Nov. 14, 1929. Serial No. 407,063. 6 Claims. (Cl. 83—9.)



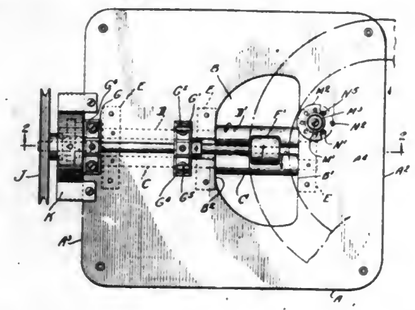
1. The combination with a grinding mill and means to supply a cooling medium for the purpose of preventing an undesirable increase of temperature in the mill, of means to control the flow of the cooling medium, and thermostatically controlled devices to regulate the operation of said means and subject to the temperature of the material acted upon.

1,813,087. IMPACT TOOL. JACOB R. SANDAGE, Chicago, Ill. Filed Jan. 28, 1926. Serial No. 84,425. 8 Claims. (Cl. 125—33.)



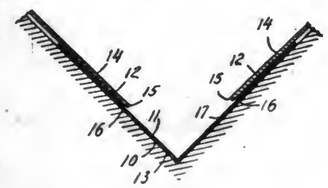
1. In an impact tool apparatus, the combination of means for holding the tool loosely in position at the front end of the apparatus, and power instrumentalities including a hammer to deliver the impacts to said tool, whereby the hammer reciprocates relatively to said tool, a hollow reciprocating and externally supported and guided member open at its rear end and formed at its front end with a bearing for said hammer, in which bearing the hammer reciprocates endwise, spring means engaging said hammer and said bearing to cause the hammer to reciprocate and have a longer stroke than said member, causing the hammer to continue moving forward by momentum alone after said member reaches the end of its forward stroke, operative to return the hammer to normal position on said member after the impact, said open end permitting access to one end of said spring means and to the rear end of said hammer in assembling the parts, said bearing precluding such insertion and access through the front end of said member, and means for actuating said member and forming a transverse pivot in said open end thereof, said spring means being disposed entirely in front of said pivot.

1,813,088. MANUFACTURE OF HATS. RUDOLPH G. SEGSCHNEIDER, Yonkers, N. Y. Filed Jan. 31, 1930. Serial No. 424,776. 13 Claims. (Cl. 223—27.)



1. A hat brim mellowing machine comprising a plurality of mellowing rolls arranged to form a roll pass unobstructed at one end and separate means arranged adjacent to the unobstructed end of said roll pass for guiding successive portions of a hat brim through said roll pass.

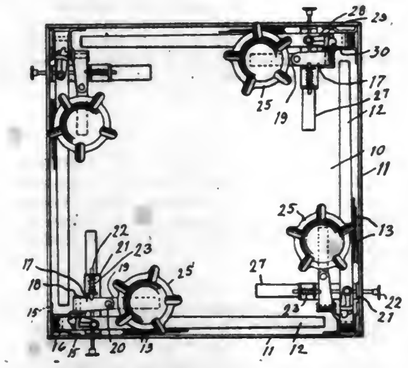
1,813,089. FLASHING MATERIAL. WILLIAM M. SHAKESPEARE, South Orange, N. J., assignor to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 1, 1929. Serial No. 343,743. 11 Claims. (Cl. 154—51.)



8. A method for producing a material for roofing and similar purposes which comprises placing a web of base material in motion endwise, moving a strip of metal of indefinite length in the same direction and at the same rate in spaced relation to the web, applying an adhesive coating to the under surface of the metal, placing the coated metal strip and the web in contact and applying yielding pressure thereto, moving a pair of strips of base material narrower than the web in the same direction as the metal-clad web and in spaced relation thereto, applying adhesive to the inner surface of both strips, placing the strips in contact with the metal-clad base along the edges of the latter and subjecting the base and strips to yielding pressure to cause the strips to be united to the web along the edges thereof.

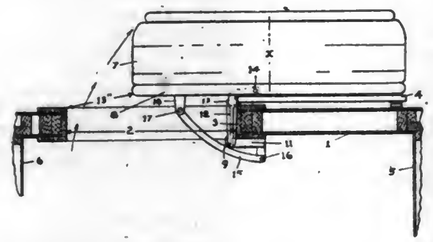
9. A material for roofing and other purposes which comprises a web of flexible fibrous material treated to be water-resistant, the web having a lengthwise portion two plies thick along one margin thereof, and a strip of flexible metal affixed to the web and covering the portion of single thickness.

1,813,090. COMBINED FOLDING TABLE, ASH AND BUFFET TRAY. MORRIS SIEGEL, Los Angeles, Calif. Filed Aug. 7, 1929. Serial No. 384,034. 7 Claims. (Cl. 45—11.)



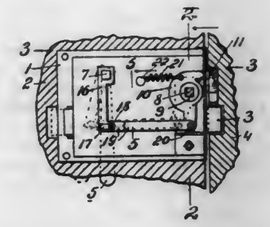
1. In a collapsible table, a table top including depending flanges, supporting members disposed beneath the top, a table leg operatively connected to each of the supporting members, foldable arms pivotally connected, one to each supporting member, and adapted to swing to an operative position adjacent to a corresponding table leg, latch members mounted on the table legs and adapted to engage with the foldable arms in the operative position thereof, and trays carried by said arms.

1,813,091. NARROW DOOR WALL BED. NEIL SINCLAIR, Oakland, Calif., assignor to Rip Van Winkle Wall Bed Company, Inc., Oakland, Calif., a Corporation of California. Filed June 27, 1929. Serial No. 374,041. 4 Claims. (Cl. 5—172.)



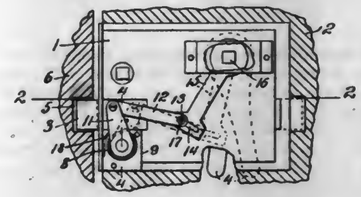
1. In a wall bed adapted to swing through a doorway from a position substantially parallel with and at one side of a wall to a position at the other side of the wall substantially parallel therewith, a bed frame, a pair of vertically aligned arms, means vertically pivoting the arms at one end respectively to the upper and lower portions of the bed frame, means vertically pivoting the opposite ends of the arms to rigid supports adjacent the jamb of the doorway at one side of the wall, said arms being substantially L-shaped and arranged to have the long and short runs respectively extending along opposite sides of the wall when the bed is swung from one extreme position to the other, and a controlling lever pivoted at one end to the bed frame and at the other end to a fixed point at said one side of the wall spaced away from said doorway beyond the vertical pivoting of said arms.

1,813,092. DOORLOCK. ROBERT N. SMITH, Kansas City, Mo., assignor of one-half to James L. Hogin, Kansas City, Kans. Filed Nov. 4, 1929. Serial No. 404,635. 4 Claims. (Cl. 292—138.)



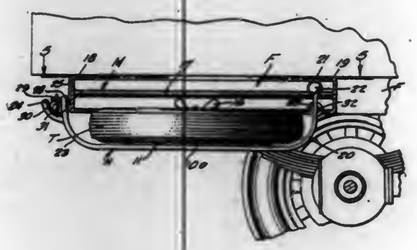
1. In a door lock, the combination with a jamb having a strike surface and a door having a lock provided with a handle and a bolt adapted to engage said jamb and retractible therefrom by said handle, the latter having an oscillative shaft, of a crank on said handle shaft, a push member movable into travelling engagement with said surface, when said door is closed, and a link pivoted to said crank and to said push member arranged, when said handle retracts said bolt, to slide said push member on said surface in a direction such that the door will be forced toward the open position, said link being adapted to move said push member in the opposite direction to the release position of the latter.

1,813,093. AUTOMOBILE DOORLOCK. ROBERT N. SMITH, Kansas City, Mo., assignor of one-half to James L. Hogin, Kansas City, Kans. Filed Feb. 17, 1930. Serial No. 428,980. 1 Claim. (Cl. 292—139.)



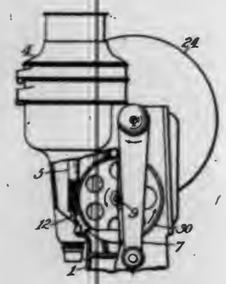
In a car door lock, the combination with a lock casing, a bolt in said casing, and a handle for retracting said bolt movable from a bolt retracted position to a bolt locking position, of a push member rotative and axially slidable in and having threaded engagement with said casing such that, when turned in one direction, it will be adapted to push against a jamb so as to open a closed door associated with said jamb and carrying said casing, said push member having a crank arm, a crank on and oscillative with said handle and having a slot, a link pivoted to said crank arm, means slidable in said slot connecting said crank with said crank arm for turning said push member in said direction and providing a lost motion connection between said crank and said link, and yielding means for so retracting said push member.

1,813,094. TIRE CARRIER. JOSEPH J. APPEL, Osdick, Calif. Filed Sept. 10, 1928. Serial No. 304,987. 8 Claims. (Cl. 224—29.)



8. A tire carrier comprising a tire holder on which a tire is adapted to be mounted, means for mounting the holder for pivotal and sliding movements on a vehicle underneath the body thereof to render the holder capable of occupying an elevated retracted position and a lowered projected position, and means for positively maintaining the holder connected to the mounting means when the holder is moved to its projected position.

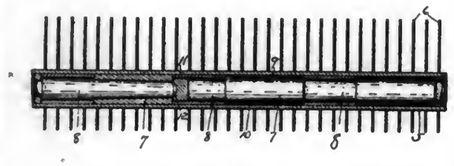
1,813,095. SEPARATOR DRIVING MECHANISM. WILLIAM C. STARKEY and DALMAR T. BROWNLEE, Indianapolis, Ind., assignors to L. G. S. Devices Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed May 31, 1928. Serial No. 281,758. 6 Claims. (Cl. 74—7.)



1. A separator driving mechanism including two identical coil spring friction clutches spaced apart in tandem arrangement, a horizontal gear shaft loosely arranged in the clutches and rotatably supported, two collars rigidly secured to the shaft at corresponding ends of the clutches respectively and connected thereto, a rotary crank shaft, and a toothed gear wheel rigidly secured thereto, a toothed pinion rotatively supported on the shaft gear in mesh with the gear wheel and provided with a hub portion having a bore receiving the major portion of one of the clutches to frictionally engage the clutch upon rotation in one direction, and a pulley rotatably supported also on the shaft and provided with a hub portion having a bore receiving the major portion of the remaining one of the clutches to frictionally engage the clutch upon rotation in one direction.

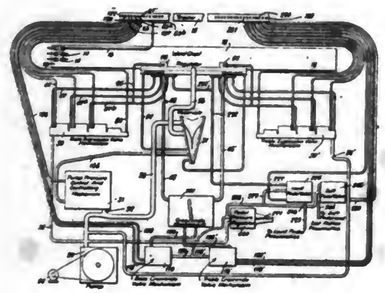
1,813,096. TUBE EXPANDER AND METHOD OF EXPANDING TUBES. KARL A. STENNER, Farmington, Conn. Filed Aug. 14, 1929. Serial No. 388,918. 8 Claims. (Cl. 153—80.5.)

1. A tube expander including a tapered mandrel, a plurality of bushings outwardly shaped to fit a tube and inwardly shaped to fit a mandrel, and a spacer located between said bushings.



8. The process of expanding a tube into tight contact with surrounding fins, that consists in placing within said tube a number of expansible bushings outwardly shaped to fit said tube, placing a spacer between each two adjacent bushings, placing a number of tapered mandrels fitted to holes within said bushings, applying force to the larger end of the outer mandrel, loosening the mandrels, moving the mandrels and bushings endwise within the tube to new positions, and again applying force to the larger end of the outer mandrel.

1,813,097. AUTOMATIC MUSICAL INSTRUMENT. CHARLES F. STODDARD, New York, N. Y., assignor, by mesne assignments, to American Piano Corporation, East Rochester, N. Y., a Corporation of Delaware. Filed June 18, 1926. Serial No. 116,787. 30 Claims. (Cl. 84—39.)

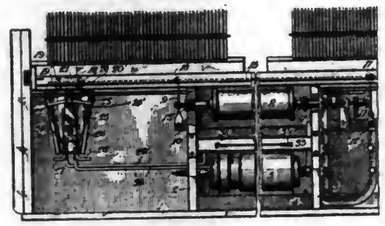


1. In an automatic musical instrument, in combination, hammer actions, and a plurality of striker pneumatics connected thereto, said pneumatics being adjusted to cause each respective note throughout the entire range of the instrument to sound with substantially the same audible intensity when actuated by substantially equal degrees of exhaust, and means for maintaining a substantially constant degree of exhaust for actuating said pneumatics comprising a regulator having a controlling valve consisting of a flexible movable member of very little inertia, said regulator being provided with chambers in which are maintained different degrees of exhaust acting directly on said valve to control the same, and means for varying the exhaust in one of said chambers to thereby vary the exhaust in another chamber whereby playing intensities are varied.

1,813,098. AUTOMATIC MUSICAL INSTRUMENT. CHARLES F. STODDARD, New York, and CLARENCE N. HICKMAN, Jackson Heights, N. Y., assignors, by mesne assignments, to American Piano Corporation, East Rochester, N. Y., a Corporation of Delaware. Filed July 12, 1928. Serial No. 292,214. 10 Claims. (Cl. 84—138.)

1. In a tracking apparatus for automatic musical instruments, in combination, a pair of movable members

mounted to engage the edges of a note sheet, a pair of pneumatics, each said pneumatic having a connection to



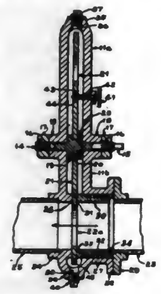
a source of exhaust and a vent to atmosphere, and unitary means having resilient connection with said movable members for controlling said vents to atmosphere.

1,813,099. EDIBLE CONTAINER. ELLIOTT M. STORY, Worcester, Mass. Filed July 9, 1929. Serial No. 377,017. 2 Claims. (Cl. 99—10.)



1. An edible container composed of two sections having annular recessed internal faces forming an annular charge-holding cavity, abutment faces at opposite sides of the recessed faces, and external faces conforming to the recessed faces and constituting annular inner and outer rests for digits of a holding hand grasping the container, the arrangement being such that said digits may press the abutment faces together, and prevent relative edgewise displacement of the sections and exudation of charge material between said abutment faces.

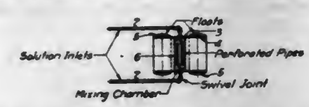
1,813,100. ORIFICE FITTING. JOHN A. SWINDLE, Maywood, Calif. Filed Feb. 4, 1929. Serial No. 337,325. 4 Claims. (Cl. 187—75.)



1. In an orifice fitting provided with a tubular channel and containing a plate interposed across said channel and provided with an orifice: an arcuate slot formed in said plate and positioned to register with the lower portion of said channel and to provide a means of communication between the two sides of said fitting when said orifice is out of register with said channel.

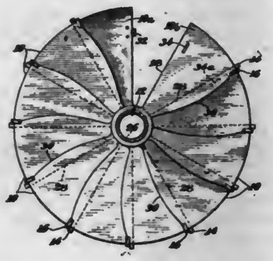
1,813,101. MIXING CHAMBER FOR FOAM FORMING SOLUTIONS. JACK FRANCIS MAHON TAYLOR, Wilmington, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Oct. 9, 1928. Serial No. 311,390. 4 Claims. (Cl. 169—4.)

1. In an apparatus for preventing fires in oil tanks, substantially as described; a mixing vessel, supported by floats, close to the surface of the oil, connected by swing pipes and swivel joints, with the inlets for the foam



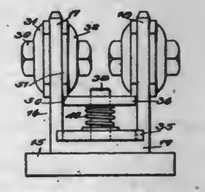
forming solutions in the lower part of the tank containing the oil, its outlet consisting of a sloping spillway for the foam, ending near the oil level.

1,813,102. FOLDABLE AND ADJUSTABLE REFLECTOR. WILLIAM VOGEL, New York, N. Y. Filed Jan. 24, 1931. Serial No. 510,949. 8 Claims. (Cl. 240—103.)



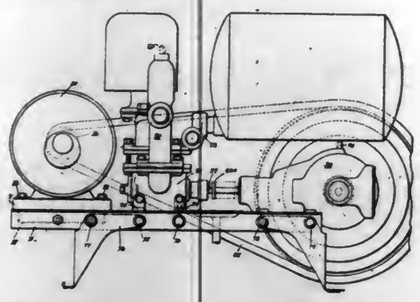
1. A foldable reflector comprising a plurality of flexible radial segments loosely mounted successively one above the other upon a center axis and adapted to slide one above the other compactly together, or to spread out successively flatly fan-wise, connective means mounted approximately upon the circumferential edge of said segments adapted to restrict their spreading sliding movement so that one edge of each segment slightly overlaps the adjacent edge of the segment next in succession when all are spread out, said segments when substantially flatly spread out adapted to form a complete circle except for a substantial space between the first and last segment of the succession, and attachment means adapted to join the first and last segment of the succession when they are closed together by flexing all the segments under tension, to form a dish-shaped basin of substantially parabolic shape.

1,813,103. DISCONNECT SWITCH. KENNETH S. WAGONER, Oak Park, Ill., assignor to Electrical Engineers Equipment Co., Melrose Park, Ill., a Corporation of Illinois. Filed Aug. 17, 1929. Serial No. 386,093. 3 Claims. (Cl. 200—169.)



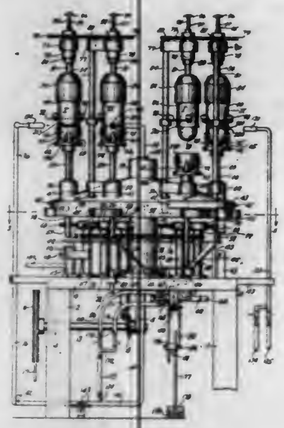
1. In combination, a pair of spaced parallel switch clips, switch blade members pivoted on the clips, a base plate resting between the clips and movable with respect thereto, a stop plate between the base plate and the switch blades, a guiding stud mounted on the base plate and extending through an opening in the stop plate, and spring means between the two plates for pressing the stop plate against the blade to act as a friction stop for the blade, said base plate and said stop plate being free of mechanical fastenings to the switch and both plates being slidable along the switch clip, both of said plates being free of portions encircling the clips.

1,813,104. PUMP. CLARENCE WARNER and HARRY G. FISHER, Dayton, Ohio, assignors to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 25, 1926. Serial No. 143,822. 9 Claims. (Cl. 103—218.)



1. In a pumping apparatus, the combination with a driving member and a driven member, of a support for said members including spaced parallel portions, means carried by one of said members for holding same in operating alignment with the other member but which permits said member to be slid longitudinally on said spaced parallel portions, and tie means connecting said spaced portions for adjustably clamping said first named means between said spaced parallel portions.

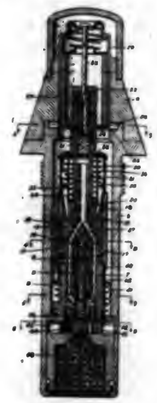
1,813,105. BOTTLE-SEALING METHOD AND APPARATUS. MINER P. WETMORE, Norwich, Conn., assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed July 5, 1928. Serial No. 290,468. 4 Claims. (Cl. 49—1.)



1. In the manufacture of double-walled vacuum bottles of glass, the process which comprises blowing an outer and an inner cylinder with a rounded bottom, cutting the rounded bottom off the outer cylinder to permit insertion of the inner cylinder, sealing the nested cylinders at the neck, and sealing the severed bottom on the outer cylinder while holding the parts in substantially vertical alignment and moving them toward and from each other to produce a kneading effect on the plastic glass at the sealed joint.

3. In a machine for completing the fillers of double-walled vacuum bottles of glass, means for rotatably supporting a bottle unit consisting of an inner cylinder sealed at the neck to an outer cylinder open at the bottom, means for rotatably supporting a cup of blown glass in axial alignment with said unit and spaced therefrom, said cup being adapted to form the rounded bottom of the outer cylinder, burners for heating the adjacent rims of said outer cylinder and said cup to make them plastic for sealing, means for bringing the plastic rims together to form a sealed joint, and means for producing a kneading effect on the plastic glass at the joint to form a seal of requisite strength and substantially uniform thickness.

1,813,106. FUSE FOR PROJECTILES. HERMANN H. ZORNIG, U. S. Army, Newhall, Iowa. Filed Aug. 1, 1928. Serial No. 296,783. 7 Claims. (Cl. 102—39.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



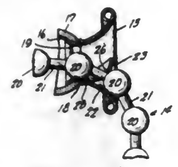
1. In a fuse, an explosive train carrier, a plunger mounted on the carrier, a cage embracing the plunger and engageable therewith, a creep spring confined between the cage and plunger, an arming spring confined between the cage and the carrier, a sleeve separating the springs and secured to the cage, spaced blades secured to the cage and terminating in latch heads, a retaining ring fixed on the carrier and formed with recesses for receiving the latch heads, a ring embracing the carrier, a spring holding the ring in contact with the ends of the latch heads, a depending finger on the ring and a movable detonator carrier held in unarmed position by the finger.

1,813,107. METHOD OF AND MEANS FOR INCREASING THE USEFUL LOW FLOW CAPACITY OF A HYDROELECTRIC PLANT. FREDERICK A. ALLNER, Baltimore, Md. Filed Nov. 30, 1929. Serial No. 410,818. 12 Claims. (Cl. 290—4.)



1. The method of increasing the useful low flow capacity value of two or more hydro-electric plants having an interconnected power system and provided with pondage, located serially in the same stream, in such a manner that the headwater level of each lower plant forms the tailwater level of the next upper plant, which method consists in discharging at times of low river flow water in excess of the stream flow through the upper plant or plants during the heavy load hours, retaining such excess discharge in the pond or ponds of the lower plant or plants and operating during the hours of light load demand of the interconnected power system, when the water power plants are not generating power, a portion or all of the installed generating units at the upper plants as motor driven pumps for lifting such excess discharge from the lower level or levels to the higher level or levels.

1,813,108. ELECTRIC PULL SOCKET. CHARLES E. AVERY, Bridgeport, Conn., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 25, 1929. Serial No. 409,587. 8 Claims. (Cl. 173—354.)

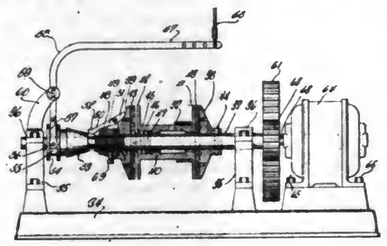


7. In an electric pull socket, a bell guide for a pull chain, a pull chain in said guide comprising a series of balls and connecting links, a stop for said chain comprising a dished slit washer having a diameter larger than the minimum diameter of the bell opening in the guide, said washer having an opening whose diameter is larger than the diameter of the chain links to permit it to rock sideways on the link and smaller than the diameter of the chain balls.

1,813,109. ANTISEPTIC COMPOSITION AND METHOD OF MAKING THE SAME. HENRY W. BANKS, 3d, Norton, Conn. Filed Dec. 15, 1925. Serial No. 75,623. 7 Claims. (Cl. 167—58.)

1. An antiseptic composition comprising a water-absorptive, jell-forming bentonite clay and a halogenated antiseptic substance.

1,813,110. EXCAVATOR. EDWARD BAUER, Milwaukee, Wis., assignor, by mesne assignments, to Bucyrus-Erie Company, Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 24, 1926. Serial No. 97,009. 12 Claims. (Cl. 214—146.)



1. In an excavator having a dipper provided with a discharge door, a locking bolt for securing the door closed and a trip cable connected with the locking bolt whereby a pull on the cable greater than a certain amount permits the opening of the dipper door, a drive shaft, means for continuously rotating the drive shaft, a drum rotatably mounted on the drive shaft and about which the trip cable is adapted to be wound, a friction member fixed to the drive shaft, means providing a slipping frictional contact between the friction member and drum, whereby the drum normally tends to wind the trip cable thereon to maintain a tension on the cable sufficient to take up all slack therein but insufficient to actuate the locking bolt, and means for increasing the frictional contact between the friction member and the drum to increase the tension on the trip cable to a point sufficient to actuate the locking bolt.

1,813,111. MUSIC HOLDER. ALFRED BEYER, Anaconda, Mont. Filed Mar. 11, 1929. Serial No. 346,195. 4 Claims. (Cl. 129—19.)

1. In combination, centrally folded and stitched gummed strips designed to be adhesively secured to sheets of music and rods passing between the stitching and the folds of the strips and projecting therebeyond, a book cover comprising a back and sides, an outwardly arched

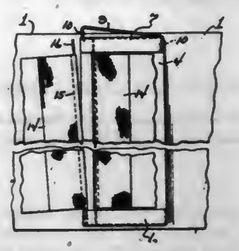
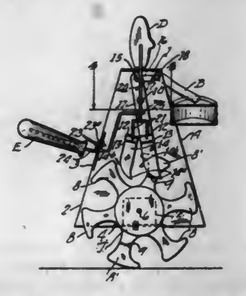


plate having its side edges fixed to the back and having its ends bent to provide hangers for the reception of the projecting ends of the rods.

1,813,112. WALKING FIGURE WHEELED TOY. ALBERT BRESCH, St. Louis, Mo. Filed Nov. 11, 1927. Serial No. 232,654. 7 Claims. (Cl. 46—40.)



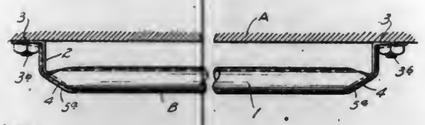
1. In a toy, in combination with a body, a pair of arms disposed in relation to the body, a disk mounted for rotation on the body, and means for alternately swinging said arms on rotation of the disk, said means comprising strips pivoted intermediate their ends upon the body, links pivotally connected at one end to the upper end of said strips, reversely disposed C-shaped members having engagement at one end with said links and supporting engagement at their other end with the arms, and offset portions on the disk adapted for engagement with said strips at their opposite end.

1,813,113. PROPELLER OF A VESSEL. HANS BUHREN, Brooklyn, N. Y., assignor of one-third to George Feddersen and one-third to J. W. Stamp, Brooklyn, N. Y. Filed Oct. 25, 1929. Serial No. 402,396. 4 Claims. (Cl. 170—156.)



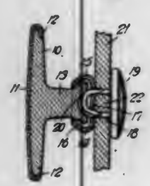
1. A propeller of the character described, comprising a continuous blade element integral with a concentric hub, and the said blade so formed that, from its forward end it follows the line of a true helix up to that portion substantially positioned at two thirds of its circumference and from this point is flared sharply in a rearward direction.

1,813,114. GRAB IRON OR LADDER RUNG. GEORGE S. CHILES, St. Louis, Mo., assignor to Scullin Steel Company, St. Louis, Mo., a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,472. 2 Claims. (Cl. 228—49.)



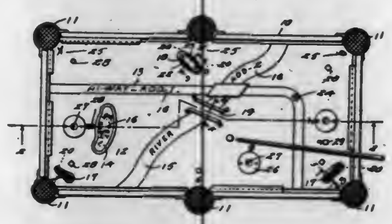
1. A grab iron or ladder rung for freight cars, consisting of a pressed metal member having a substantially tubular, bar-like portion whose ends are closed by inclined end walls that merge into spacing devices which are disposed at substantially right angles to said bar-like portion, and laterally-projecting flanges on said spacing devices.

1,813,115. BUTTON. JOHN M. CLARK, Detroit, Mich., assignor to Universal Button Fastening & Button Co., Detroit, Mich., a Corporation of Michigan. Filed July 23, 1929. Serial No. 380,290. 7 Claims. (Cl. 24—95.)



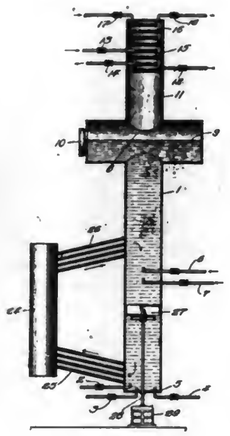
1. A flexible button comprising in combination a button head, a solid button shank integral with said head, and a cup shaped fastener receiving member loosely embracing the lower end of said shank to provide a flexible connection for said button head, said fastener receiving member being provided with means for receiving a button fastener.

1,813,116. GAME APPARATUS. PETER CLAUSEN, Mission, S. Dak. Filed Apr. 30, 1929. Serial No. 359,257. 4 Claims. (Cl. 273—87.)



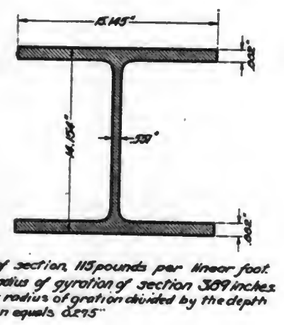
4. Apparatus for playing a game simulating golf upon pool tables, comprising in combination with a pool table including the usual bed and pockets a spherical member, a sheet superimposed upon said bed and covering the same having adjacent each pocket of the table an indicium identifying the pocket as one of successive holes of a golf course, the sheet being further provided with suitably designated areas associated with each hole and from which a ball must be played to the next hole, and obstacles projecting upwardly from the face of the sheet preventing or rendering difficult direct play of a ball from an area to the associated hole, said obstacles being detachably secured to the sheet.

1,813,117. APPARATUS FOR TREATING, DISTILLING AND DECOMPOSING HYDROCARBON OILS. HOMER T. DARLINGTON, West Chester, Pa., assignor to Martin B. Schuster, Joliet, Ill., trustee. Continuation of application Serial No. 186,466, filed Apr. 25, 1927. This application filed June 24, 1929. Serial No. 373,394. 20 Claims. (Cl. 196—98.)



1. A new and improved apparatus for the treatment of hydrocarbon oils comprising a vertically disposed main chamber of cylindrical formation and a heating unit for heating said oils comprising a header in the form of a vertically disposed cylindrical chamber standing in substantially parallel and spaced relation to the main chamber a group of heating and circulating tubes extending from one end of said header and communicating with a corresponding portion of the main chamber, and a second group of heating and circulating tubes extending from the other end of said header and communicating with a corresponding portion of the main chamber, and means for heating said tubes.

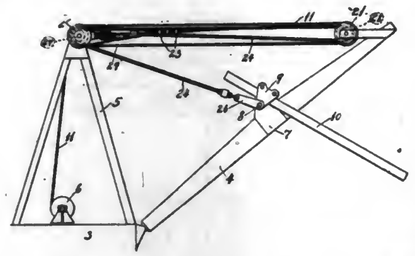
1,813,118. ROLLED H SECTION. JAMES H. EDWARDS, Passaic, N. J., and ROBERT A. MARBLE, Ben Avon, Pa., assignors to United States Steel Corporation, New York, N. Y., a Corporation of New Jersey. Filed May 15, 1925. Serial No. 30,493. 3 Claims. (Cl. 189—37.)



Weight of section 115 pounds per linear foot.
Least radius of gyration of section 3.09 inches.
The least radius of gyration divided by the depth of section equals 0.215"

1. A rolled steel section of substantially or approximately H-shape in cross-section weighing 115 pounds per linear foot and having the following dimensions, depth 14,154 inches, width 15,145 inches, web .551 inch thick each of the flanges having a slight slope and a mean thickness of .882 inch.

1,813,119. BOOM SUSPENSION. WERNER LEHMAN, South Milwaukee, and TREVOR DAVIDSON, Milwaukee, Wis., assignors to Bucyrus-Erie Company, South Milwaukee, Wis., a Corporation of Delaware. Filed July 28, 1928. Serial No. 296,028. 15 Claims. (Cl. 214—135.)



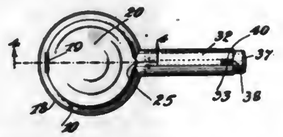
1. In a power-shovel, having an A-frame, a boom, and a shipper shaft mounted a at point intermediate the ends of the boom: a boom-suspension, consisting in two ropes, passing from points of attachment at the ends of the shipper shaft, thence over widely spaced sheaves at the apex of the A-frame, thence over narrowly spaced sheaves at the outer end of the boom, and thence back to widely spaced anchorages at the apex of the A-frame.

15. In a power shovel, having an A-frame and a boom, the combination of: a boom-hoist cable, cooperating with the A-frame; and boom-suspension cables, extending from the A-frame to points adjacent the outer end of the boom and points adjacent the middle of the boom.

1,813,120. PROCESS FOR PREPARING AND PRESERVING THE BEVERAGE, TEA. RAYMOND T. METZGER and PAUL D. POTTER, Winnetka, Ill., assignors to Sprague, Werner & Company, Chicago, Ill., a Corporation. Filed Jan. 11, 1930. Serial No. 420,291. 2 Claims. (Cl. 99—11.)

2. In process of preparing and preserving the beverage, tea, the step of: subjecting the aqueous extract of tea while under adequate pressure to a temperature above that of boiling water for a time interval sufficient to bring about rapid coagulation, flocculation and precipitation of the substances which give rise to cloudiness and sediment.

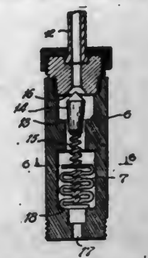
1,813,121. COSMETIC CONTAINER. ALEXANDER MOODIE, East Orange, N. J., assignor to Pendennis Toiletries, Incorporated, New York, N. Y., a Corporation of New York. Filed July 22, 1929. Serial No. 380,222. 5 Claims. (Cl. 132—83.)



4. A cup-shaped shell member open at the top and bottom, a second cup-shaped shell member closed at the bottom and open at the top, the two shell members being affixed to each other with their openings outwardly positioned, a cover for each shell opening, and a rigid handle projecting radially from said shell members.

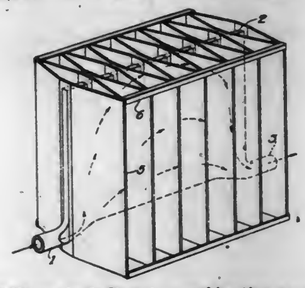
1,813,122. LUBRICATING SYSTEM. GEORGE L. MOORE, Chicago, Ill., assignor to Auto Research Corporation, a Corporation of Delaware. Filed May 28, 1926, Serial No. 112,189. Renewed Apr. 29, 1929. 25 Claims. (Cl. 184—7.)

1. In a pressure lubricating system of the type in which a plurality of bearings is supplied with lubricant under pressure from a central source and in which the bearings are located at varying heights and varying distances from the source and which systems are exposed to varying temperatures; a plurality of identically constructed and interchangeable flow control devices, one at each bearing



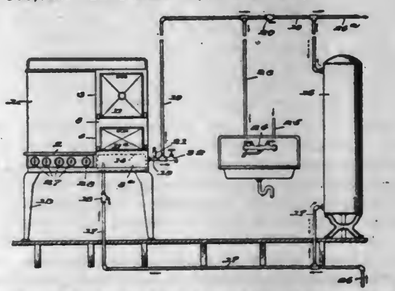
and pressure and temperature responsive means in said flow control devices whereby the amount of oil discharged at each bearing is substantially equal to the amount discharged at every other bearing, regardless of varying pressure and temperature conditions at the bearings.

1,813,123. RADIATOR. THOMAS E. MURRAY, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Murray Radiator Corporation, a Corporation of New York. Filed May 5, 1927. Serial No. 188,890. 11 Claims. (Cl. 257—139.)



1. A radiator including in combination a chamber for the heating medium and a sheet metal radiating structure engaging said chamber and comprising a series of plates extending horizontally on both sides of the chamber said plates being in pairs, the two plates of each pair being separated from each other at the center and united to each other at their outer edges, so as to form vertical flues for heating the air and inducing a draft and circulation of the heated air.

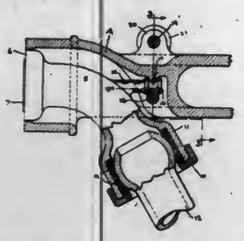
1,813,124. WATER HEATER FOR ELECTRIC RANGES. WILLIAM RICHARDSON and GEORGE STEINGRUBER, Atlanta, Ga., said Richardson assignor, by mesne assignments, to said Steingruber. Filed Apr. 9, 1929. Serial No. 353,719. 11 Claims. (Cl. 219—38.)



2. The combination with a cooking range having the usual oven, of a warming closet below the oven, a re-

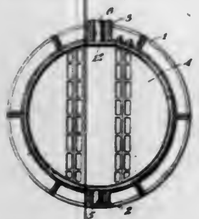
movable water-box having a flat top forming the floor or bottom of said closet, a stand boiler, circulation pipes connecting said stand boiler with said water-box, and means for heating said water-box.

1,813,125. AUTOMATIC TRAIN PIPE CONNECTER. JOSEPH ROBINSON, New York, N. Y. Filed Mar. 29, 1924, Serial No. 702,832. Renewed July 11, 1928. 13 Claims. (Cl. 285—58.)



1. In an automatic train pipe connecter, the combination of a coupling head and a suitable support therefor, of means for yieldingly connecting a flexible hose pipe to said connecter, said means comprising a member extending rearwardly from said coupling head and having a hollow portion, a conduit projecting into said portion, and means for rotatably securing said conduit in place.

1,813,126. VALVE. HOWARD M. SHEPPARD, Philadelphia, Pa., assignor to I. P. Morris Corporation, a Corporation of Delaware. Filed Oct. 4, 1926. Serial No. 139,414. 18 Claims. (Cl. 251—11.)

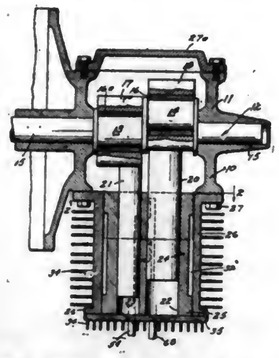


1. The combination in a hydraulic valve mechanism interposed between up and down-stream pipes at least one of which is filled with liquid under pressure throughout all normal operations of the valve, comprising a casing and a pivotal valve member adapted to be rotated into and out of juxtaposition to the inner wall of said casing, thereby to substantially prevent or to allow fluid flow through said valve, a tubular sealing member disposed between the adjacent surfaces of said casing and valve member when the valve is in closed position and said tubular member being adapted to have an unsealing position when the valve is closed, and means for expanding said tubular member by fluid pressure for effecting a sealing action and for releasing the sealing pressure to effect contraction of the tubular member and thereby allow the valve to open substantially freely.

1,813,127. PROCESS OF TREATING FRESH FRUIT FOR RETARDING DECAY FROM BLUE AND GREEN MOLD. HENRY B. SLATER, Riverside, Calif., assignor, by mesne assignments, to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed July 28, 1925. Serial No. 46,655. 4 Claims. (Cl. 99—1.)

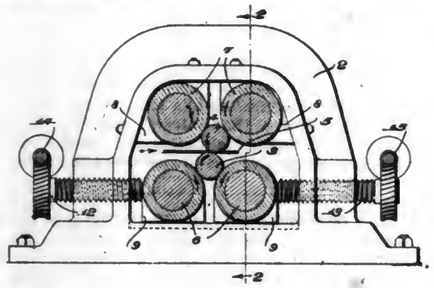
1. A process of treating fresh fruit for the market which comprises subjecting the fruit to the action of a sterilizing solution containing a hypochlorite of an alkali-forming metal and an acid carbonate.

1,813,128. COMPRESSOR. LUDWIG STOESLING, San Fernando, and WILLIAM D. PEARSALL, Hollywood, Calif. Filed Apr. 9, 1928. Serial No. 268,558. 21 Claims. (Cl. 230—222.)



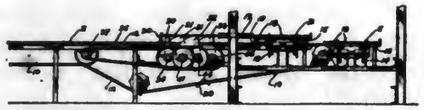
1. In a device of the class described, the combination of: walls forming primary and secondary cylinders; a primary piston reciprocable in said primary cylinder; and a secondary piston reciprocable in said secondary cylinder, said primary piston and said walls of said primary cylinder providing co-acting means forming an intake and exhaust means for said secondary cylinder, and said secondary piston and said walls of said secondary cylinder providing co-acting means forming an intake and exhaust means for said primary cylinder.

1,813,129. ROLLING MILL. CLARK WHITE, Ashland, Ky. Filed Feb. 25, 1928. Serial No. 257,081. 18 Claims. (Cl. 80—381.)



1. A rolling mill comprising a pair of working rolls in substantially perpendicular alinement, sets of supporting rolls with which the working rolls are in rolling contact for support, bearing blocks for the sets of supporting rolls, and means to effect rectilinear adjustments of the bearing blocks of one set of supporting rolls at right angles to the said working rolls either in diverse or similar directions to separate or bring the bearing blocks closer and thereby elevate or lower the respective working roll in respect to the complementary working roll along the line of said substantial perpendicularity.

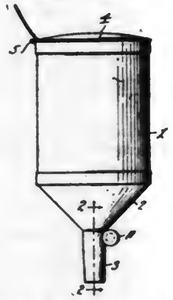
1,813,130. CONVEYER SYSTEM. YRJÖ A. AHNGER, Crockett, Calif. Filed Sept. 12, 1928. Serial No. 305,353. 13 Claims. (Cl. 198—20.)



1. A conveyer system, comprising a pair of intermittently moving conveyers arranged side by side at different

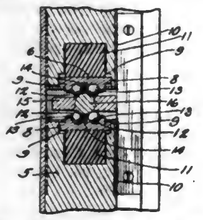
levels, an additional conveyer extending horizontally and at right angles to said pair of conveyers, said latter conveyer having followers for spacing the articles carried thereupon, an automatic elevating mechanism operating in timed relation with the followers upon said latter conveyer for elevating alternate articles carried thereby, and a guide for directing the elevated articles on to the upper one of said pair of conveyers, whereby the articles conveyed will be transferred uniformly to said pair of conveyers.

1,813,131. DISPENSING RECEPTACLE. JOSEPH ANDRASSY, Cleveland, Ohio. Filed Jan. 7, 1929. Serial No. 330,759. 1 Claim. (Cl. 221—62.)



A dispensing device of the character described comprising a metal receptacle having a conical bottom terminating in a discharge spout having a slotted opening in one side thereof, a tubular metal guide member rigidly secured on said spout adjacent said slotted opening, a valve stem slidably mounted in said guide member and having one end bent back upon itself and shaped to provide a valve which is adapted to enter said slotted opening and close said spout, a coil spring arranged within said guide member and surrounding said valve stem and normally urging said valve to closed position, said valve and valve stem being formed of a single piece of material and a push button secured to the outer end of said valve stem.

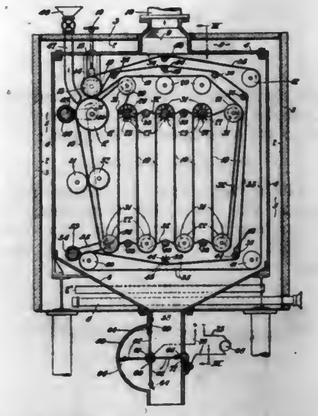
1,813,132. ANTIRATTLE DEVICE. ISAAC ANDREWS, Spartanburg, S. C. Filed Nov. 3, 1930. Serial No. 493,130. 4 Claims. (Cl. 16—86.)



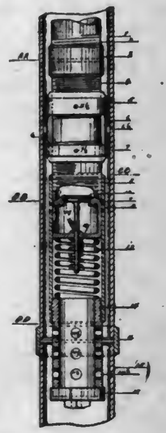
1. An anti-rattling device for motor vehicle doors, comprising a housing fitted on the door jamb, said door jamb having recesses, movable blocks supported within the recesses, pairs of balls positioned in the blocks, means for cushioning the movements of the blocks, a tongue carried by the door, a roller supported within the tongue and extending beyond the upper and lower surfaces of the tongue, and said roller adapted to engage between the balls to cushion the movements of the door.

1,813,133. DRYING APPARATUS. HENRY ANHALTZER, Pittsburgh, Pa. Filed Mar. 13, 1928. Serial No. 261,280. 3 Claims. (Cl. 159—7.)

1. In a drying apparatus for drying viscous matter, a pair of spreading and flattening rollers journaled in said apparatus, a plurality of guide-rollers journaled in spaced relation in said apparatus, and an endless belt for carrying the material to be dried trained over one of said spreading and flattening rollers and over and under alternate ones of said guide-rollers, all of said guide-rollers contacting with the material carrying face of said endless belt being of spider-like construction and composed of a hub and a plurality of radial blades adapted to have an edge contact with said belt.



1,813,134. WELL BAILING DEVICE. BOYD K. APPLEMAN, Beaumont, Tex. Filed Mar. 26, 1929. Serial No. 350,013. 1 Claim. (Cl. 74—109.)



A deep well bailing device for operating in a casing, comprising a cylindrical element having collars disposed in spaced relation thereon, a packing ring surrounding said element and confined between said collars, the said ring being provided with a series of apertures and having its upper and lower sides beveled toward said element, whereby said ring may pass over open joints in said casing and will be substantially balanced against excessive hydraulic pressure.

1,813,135. RECEPTACLE. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 26, 1929. Serial No. 402,649. 2 Claims. (Cl. 40—20.)

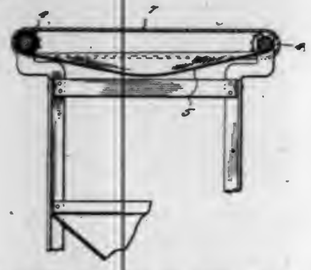
1. A receptacle having a base portion, an interior lining therein and an external covering thereover and having two sets of separated openings arranged at an angle to each other through the base portion, a button member

on the inside of the base portion having prongs extending through one set of the openings and clamped down over the outside of the base portion, the lining extending over



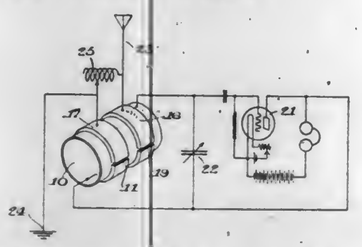
the button on the inside of the receptacle and the covering extending over the clamped prongs and over the other set of openings on the outside of the receptacle.

1,813,136. STRAINER. JOHN A. BATHEN and WILLIAM F. INGRAHAM, Jr., Sioux City, Iowa, assignors of one-third to Abraham D. Bland, Sioux City, Iowa. Filed June 7, 1928. Serial No. 283,559. 1 Claim. (Cl. 210—149.)



A device of the class described comprising a support, a pair of rollers revolubly mounted upon the support, sprocket wheels connected with the rollers, an endless sprocket chain trained around the sprocket wheels for simultaneously rotating the rollers, a sheet of screening material windable upon actuation of the chain from one roller to the other in a plan below the longitudinal axes of the rollers, and means for discharging liquid upon the sheet, one stretch of the chain serving to prevent rotation of the rollers when the sheet is subjected to the weight of fluid, whereby abnormal sagging of the sheet is prevented.

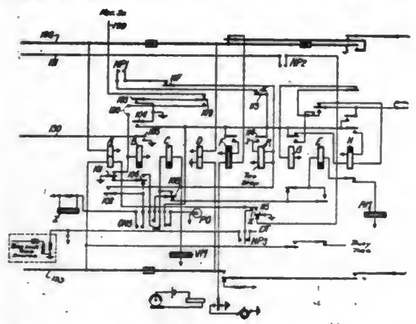
1,813,137. RADIO FREQUENCY COIL. ALFRED E. BAUMANN, Milwaukee, Wis. Filed Nov. 25, 1925. Serial No. 71,379. 5 Claims. (Cl. 250—27.)



1. The combination with a solenoidal radio-frequency coil and a tubular supporting form therefor, of a discontinuous annular metallic shielding band surrounding said coil and having inturned flanges at opposite edges beyond the ends of the coil resting on said tubular supporting form.

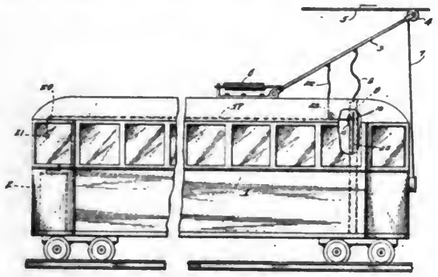
1,813,138. TELEPHONE SYSTEM. CHARLES EDMUND BEALE, London, England, assignor to Associated Telephone and Telegraph Company, Kansas City, Mo., a Corporation of Delaware. Filed Oct. 1, 1928, Serial No. 309,649, and in Great Britain Nov. 23, 1927. 11 Claims. (Cl. 179—18.)

1. In a telephone system, an automatic switch, an operator's position, means for operating said switch responsive to digit impulses, means responsive to a predetermined first digit for signalling said operator's position, and means responsive to a different predetermined first



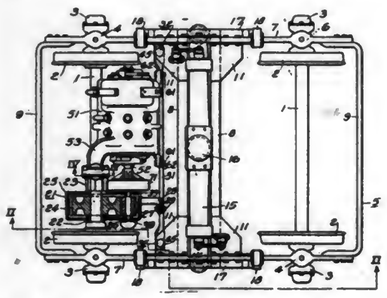
digit for automatically releasing said switch and rendering said signalling means ineffective in case the said first predetermined digit is then called.

1,813,139. SAFETY DEVICE FOR STREET CARS. FINIS BELLAMY, Redford, Mich. Filed Apr. 21, 1928. Serial No. 271,848. 7 Claims. (Cl. 191—94.)



1. In a device of the character described, a street-car, a trolley-wire, a trolley-pole for conveying a current of electricity to the car to drive the car, a trolley-pole actuating member positioned in one end of the car, means for connecting said member to the trolley pole, and means operable from either end of the car to release said actuating member to disconnect the trolley pole from the trolley wire.

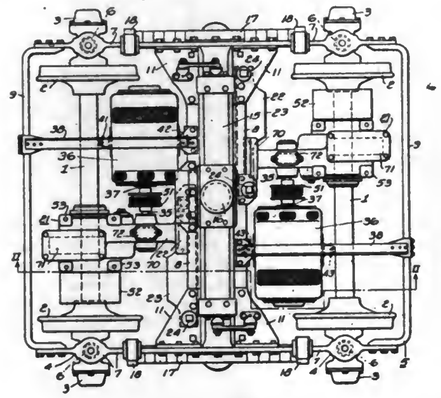
1,813,140. RAILWAY MOTOR SUSPENSION. CLAUDE BETHEL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 25, 1928. Serial No. 249,262. 9 Claims. (Cl. 105—139.)



9. In a railway-vehicle truck, in combination, a truck frame, a wheel axle for supporting the truck frame, a motor resiliently mounted on the truck frame and the wheel axle, and a transmission mechanism journalled on the wheel axle and resiliently supported from the frame for transmitting power from the motor to the wheel axle.

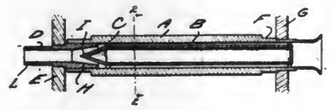
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1,813,141. RAILWAY MOTOR MOUNTING. CLAUDE BETHEL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 25, 1928. Serial No. 249,264. 5 Claims. (Cl. 105—113.)



1. In a railway-vehicle truck, in combination, a unitary gear-reduction driving mechanism, said driving mechanism being suspended at one side on the truck axle and at the other side on the truck transom, a system of suspension links, a motor for driving the truck, said motor being suspended from the truck frame by means of the suspension links, and flexible means for transmitting power from the motor to the gear mechanism.

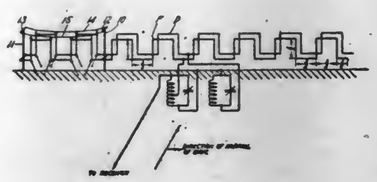
1,813,142. GLASS FORMING ROLL. LOUIS BOUDIN, St. Gobain, France, assignor to Societe Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Filed June 25, 1928, Serial No. 288,118, and in France June 30, 1927. 3 Claims. (Cl. 257—95.)



2. The combination with a roll having trunnions upon the ends thereof and having an interior cavity of substantially uniform diameter from the outer end of one trunnion to adjacent the opposite end of the roll, an induction member having a conical end in the last named end of the roll, and a cylindrical core within the roll having a conical head adjacent to the induction member and spacing members adapted to center the core within the roll.

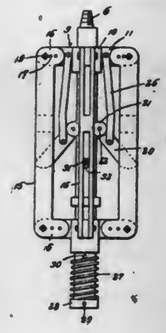
1,813,143. AERIAL SYSTEM. EDMOND BRUCE, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 25, 1927. Serial No. 235,464. 5 Claims. (Cl. 250—11.)

1. A uni-directional broadside aerial system comprising an antenna and a reflector, identical in form, mounted in parallel planes separated by an odd multiple of a quarter wave length, said antenna and said reflector comprising a series of active elements having corresponding termi-



nals of adjacent elements alternately connected by non-active elements, the sum of the length of each active element and the spacing between adjacent active elements being an odd multiple of half a wave length.

1,813,144. PERFORATING MACHINE FOR WELL CASINGS. ARTHUR E. CARTER and CLARENCE A. JOHNSON, San Bernardino, Calif. Filed Aug. 31, 1929. Serial No. 389,840. 6 Claims. (Cl. 81—188.)

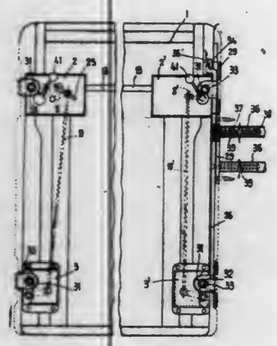


1. In a device of the class described, a mandrel adapted for disposition in a well casing, a spider slidably supported on the mandrel adjacent one end of the mandrel, a second spider slidably supported on the mandrel adjacent the opposite end of the mandrel, means operatively connected to the spiders for maintaining said spiders in a predetermined spaced relation on said mandrel, cutting knives pivoted to the mandrel at the sides of the mandrel intermediate said spiders, trip bars pivoted to the knives and to one of said spiders, a compressible spring convoluted about said mandrel adjacent the lower end thereof, a shearable pin extending transversely through the mandrel and engaging said spring for normally retaining the latter in a compressed condition, and said spring adapted upon expansion thereof to bear against said second spider for urging said spider upwardly longitudinally of the mandrel, whereby said cutting knives are swung vertically about their pivots to a substantially horizontal position for cutting engagement with the wall of a well casing.

1,813,145. VEHICLE DOOR. GIOACCHINO CAVICCHIOLI and EUGENIO CESCHI, Turin, Italy. Filed Nov. 8, 1929, Serial No. 405,755, and in Italy May 1, 1929. 10 Claims. (Cl. 16—147.)

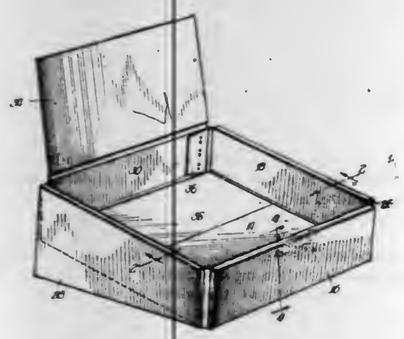
1. A door structure for a vehicle body comprising posts in said body, hinges each comprising a stationary member fastened on one of said posts and a movable member piv-

oted on said stationary member, a door, engaging means on each movable hinge member and cooperating engaging means on the registering edge of said door, each of said movable hinge members having a bolt socket, bolts located



on opposite side edges of the door, each bolt adapted to engage one of the said bolt sockets, means for bolt actuation on each door edge, and means for locking a bolt on either door edge when a bolt of the other door edge is actuated for release.

1,813,146. DISPLAY AND SHIPPING CONTAINER. JAMES H. CLARK, Chicago, Ill., assignor of one-half to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 6, 1929. Serial No. 412,003. 4 Claims. (Cl. 206—44.)



1. In a combined shipping and display container, in combination a bottom, side walls extending upwardly from the bottom, a front and rear wall also extending from the bottom, flaps secured to said walls respectively, said side flaps being provided with extensions having tabs, and the front flap being provided with an extension having slots, said flaps being further adapted to overlie the walls, the extensions underlying the bottom, whereby the container is supported in an elevated position.

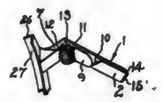
1,813,147. VANITY CASE. CHARLES N. CORYELL, Larchmont, N. Y. Filed June 24, 1930. Serial No. 463,457. 5 Claims. (Cl. 132—83.)

5. A vanity case, including a body, a lid hinged thereto and a lipstick holder, said holder being formed with means interlocking with the pintle of the hinge connecting the body and lid, and an integral projection extending toward



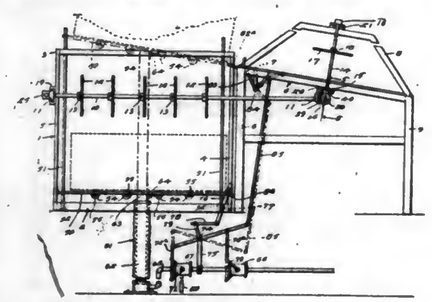
the outer end of the lid, and a mirror carried by the lid overlapping said extension, whereby the holder is held against independent movement.

1,813,148. OPHTHALMIC MOUNTING. CHARLES O. COZZENS, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Feb. 8, 1928. Serial No. 252,780. 4 Claims. (Cl. 88—53.)



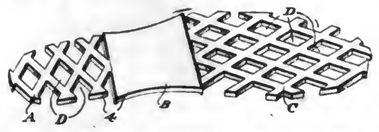
1. A temple connection for an ophthalmic mounting comprising a temple member having a substantially V-shaped dished cross section, a hinge member having a V-shaped body portion to fit into the recess of the V-shaped dished temple cross section and a bevelled end portion opposite the hinge connection end to taper off the joint with the temple, and having a projecting hinge connection for pivotally supporting a temple.

1,813,149. ICE SCORING MACHINE. JOHN Q. DAUGHERTY, Electra, Tex. Filed Sept. 9, 1930. Serial No. 480,752. 11 Claims. (Cl. 125—13.)



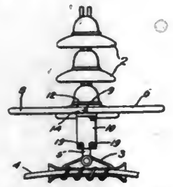
1. A machine of the character set forth, comprising a chute, a platform located rearwardly of the chute and adapted to receive a block of ice, means mounting the platform for movement from a horizontal plane located below the rear end of the chute to an inclined plane substantially coincident with the bottom of the chute, the platform being adapted to receive the block of ice when in said first position and adapted to discharge the block therefrom onto the chute when in said second position, means for raising the platform from said first to said second position and adapted to support it horizontally during the first phase of the raising movement thereof, means adapted to move the platform into its inclined position during the second phase of the raising movement thereof, and means adapted to score the block of ice during the first phase of the raising movement of the platform.

1,813,150. MOLDING DIE. ERNEST W. DUNBAR, Hudson, Mass., assignor to Cambridge Rubber Co., Cambridge, Mass., a Corporation of Massachusetts. Original application filed Mar. 17, 1926, Serial No. 95,264. Divided and this application filed Mar. 12, 1928. Serial No. 260,881. 3 Claims. (Cl. 18—34.)



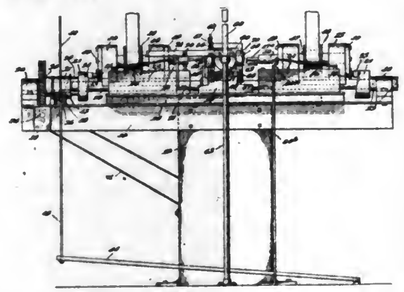
2. A die for molding outsoles from rubber and the like comprising a plate-like body of approximately sole-shaped outline having faces on opposite sides thereof for molding right and left soles, respectively, and having holes extending through said body from one face thereof to the other and also having slots extending into said body from the edge thereof, said slots and holes being adapted to produce prominent features of the desired design in the same relationship to the outlines of both right and left soles.

1,813,151. TRANSMISSION LINE DEVICE. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 29, 1927. Serial No. 187,617. 4 Claims. (Cl. 173—318.)



1. A transmission-line device comprising a one-piece ring portion having displaceable ends permitting the ring to be placed around, and removed from, an insulator, while the insulator is connected to its support and to a conductor, and a supporting element to which one of said ends is permanently, and the other end separably, secured.

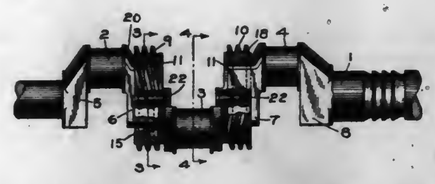
1,813,152. MACHINE FOR FORMING OPENINGS IN PIPING. WINFORD L. ENGHAUSER, Cincinnati, Ohio. Filed Feb. 20, 1929. Serial No. 341,467. 10 Claims. (Cl. 29—33.)



1. A machine of the class described, comprising, a pair of reciprocable spindles, means for rotating said spindles, means for simultaneously reciprocating said spindles, a drill and a spinning tool mounted in the respective opposing ends of the spindles, a work support mounted for sliding movement between and transverse to said tools and axially supported for rotative movement, and means for securing the work in the respectively opposite sides of said support for simultaneous drilling and spinning operations on the oppositely disposed pieces of work.

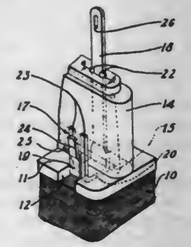
6. In a device of the class described, a pair of spindles mounted for reciprocation toward each other, means for rotating said spindles, tools mounted in the opposing ends of said spindles, means for simultaneously reciprocating said spindles, a slide block mounted transverse to and between said opposing spindles, a support rod extending from one end of said slide block, a work support axially mounted on said rod and alignable with said slide block, a latch between said work support and said slide block, said latch unlatched by disengagement of said work support from said slide block for permitting rotation of the work support, and means for mounting respective pieces of work in the opposing sides of said work support, said latch having a latching connection with said slide block for aligning said work support therewith.

1,813,153. CRANK SHAFT. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 27, 1929. Serial No. 416,871. 2 Claims. (Cl. 74—38.)



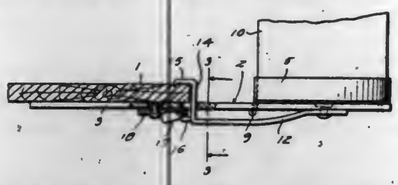
1. A crank shaft having a crank arm, a section of which has a contour including parallel sides, a gear mounted on said section having an opening, the contour of which corresponds with the contour of said section, a flange formed at one side of said section against which the gear bears, and means for securing said gear in position on said section.

1,813,154. TERMINAL FOR ELECTRICAL DEVICES. ERWIN E. FRANZ, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1930. Serial No. 423,358. 12 Claims. (Cl. 175—21.)



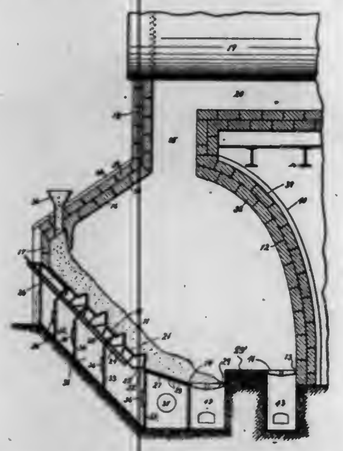
1. In an electrical device, a terminal mounting having spaced cooperating slots, and a terminal member having correspondingly spaced portions engaging the slots and impinging therebetween the portion of the mounting intermediate the slots, one of the terminal portions having a projection formed at its point of exit from the associated slot of the mounting for preventing displacement of the terminal member therefrom.

1,813,155. SHELF ATTACHED ARTICLE SUPPORTING BRACKET. FRANCIS W. FURSTENBERGER and CLYDE C. DEEDS, Terre Haute, Ind. Filed Mar. 22, 1930. Serial No. 438,212. 6 Claims. (Cl. 248—20.)



1. A shelf attached article support comprising a supporting body adapted to have a portion thereof disposed against the under face of a shelf, a gripping element resiliently secured to the under face of the body and adapted to engage the top face of the shelf to maintain the body in position thereagainst, and a holding means carried by the body for maintaining an article in position thereon.

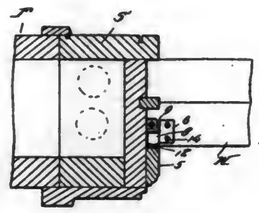
1,813,156. FURNACE. WILLIAM A. GILCHRIST, Chicago, Ill. Continuation of application Serial No. 375,020, filed Apr. 19, 1920. This application filed Oct. 20, 1927. Serial No. 227,603. 12 Claims. (Cl. 110—7.)



1. In a furnace for burning bagasse and other fuels having a large moisture content, a fuel support, a floor extending rearwardly from substantially the level of the rear of the support, said floor forming with other flame confining surfaces an enlarged combustion chamber having ample space rearward of the fuel for retaining a large body of vaporized fuel combustibles during a substantial portion of their combustion, said chamber including a rear refractory wall arising from the floor and extending forwardly, and a refractory arch extending rearwardly and upwardly above the fuel support, the arch and rear wall being adapted to detain under their upper portions the hottest of the burning gases and to reflect and radiate the heat received therefrom back into said hottest gases and also onto the entire rearwardly exposed surface of the fuel and a flue in said chamber adapted to exhaust the burned gases between the rear edge of said arch and the front edge of said rear wall.

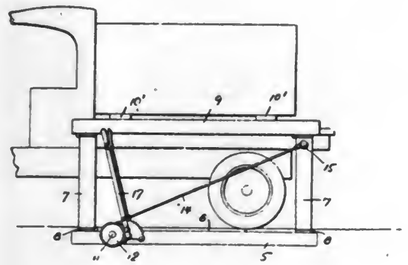
1,813,157. ANTIRATTLER FOR WINDOW SASHES. ALFRED THOMPSON GRANGER, Hanover, N. H. Filed Apr. 15, 1930. Serial No. 444,511. 1 Claim. (Cl. 292—73.)

In an anti-rattling device for sliding window sashes, an apertured flange adapted to be secured to a rail of the window sash, an arm extending laterally from said flange and rolled upon itself to provide a cylindrical housing, a disk like projection extending at right angles to said arm for closing one end of said housing, said arm at the open end of said housing being provided with a plu-



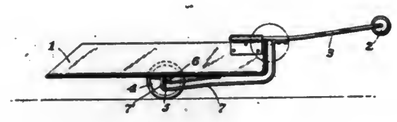
rality of fingers arranged in an annular series and bent inwardly toward one another, a ball partially projecting from said housing engaging said fingers and adapted to bear against a window stop, and means for yieldably projecting the ball.

1,813,158. LOADING MECHANISM FOR TRUCKS AND OTHER CARRIERS. GEORGE GRIMM, Menlo, Wash. Filed Jan. 16, 1929. Serial No. 333,007. 1 Claim. (Cl. 254—91.)



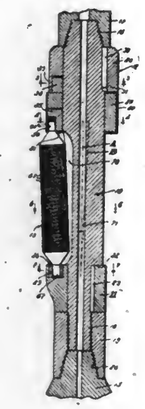
A loading mechanism for trucks and other carriers comprising a pair of spaced parallel, horizontal, coextensive base beams, leaf hinges disposed on the upper sides of the base beams adjacent the ends of said base beams, one of the leaves of each hinge being anchored to the base beams, the other of the leaves of each hinge being free for swinging movement in a vertical plane and adapted for abutting engagement with the first named leaves for limiting the swinging movement of said other leaves in one direction, standards fixed on the swingable leaves for movement therewith, said standards disposed in vertical position when the leaves of the hinges are in opposed, abutting engagement with each other, the hinges constituting means for pivotally connecting the standards to the base beams for swinging movement in one direction only from a vertical position, leaf hinges mounted on the upper ends of the standards and reversely disposed with respect to the first named hinges, one of the leaves of each of the second named hinges being secured to the standards, the other leaves of each of the second named hinges being swingable in a vertical plane and adapted for opposed, abutting engagement with the secured leaves for limiting the movement of said swingable leaves and a pair of spaced, parallel, coextensive beams anchored to the swingable leaves of the second named hinges adjacent their ends and disposed substantially in parallelism with the base beams.

1,813,159. PORTABLE SCOOP. GEORGE GUNDERSON, St. Ansgar, Iowa. Filed Jan. 2, 1931. Serial No. 506,232. 4 Claims. (Cl. 37—130.)



1. A scoop, an axle carrying wheels, and means for holding the said axle to the scoop, said axle being shiftable along said holding means from operative position under the scoop to a position at the rear of said scoop, substantially as described.

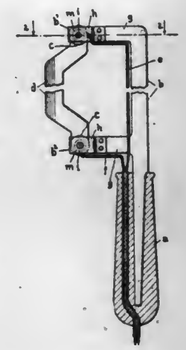
1,813,160. WELL REAMING TOOL. LELAND S. HAMER, Long Beach, Calif., assignor, by direct and mesne assignments, to John Grant, Los Angeles, Calif. Filed Feb. 8, 1927. Serial No. 166,642. 28 Claims. (Cl. 255—76.)



9. A tool of the character described including a body, a cutter having one end carried by the body, a block carrying the other end of the cutter, and a member rotatable on the body and having a guideway slidably carrying the block, the guideway extending tangentially relative to the body, the body having a recess to receive the block in an in position and having a part to engage behind the block to hold it in the out position, the recess and said part being movable into and out of operative position by relative rotation between the body and said member.

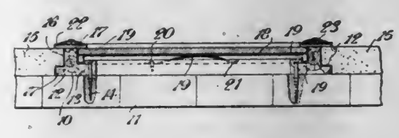
1,813,161. ELECTRICALLY HEATED SOLDERING IRON. CARL HELLE, Brunswick, Germany, assignor to Elektrische Löt- und Schweiss-Gesellschaft mit beschrankter Haftung, Brunswick, Germany. Filed Oct. 3, 1929, Serial No. 397,044, and in Germany Mar. 19, 1929. 1 Claim. (Cl. 219—26.)

The hereindescribed soldering apparatus, comprising a supporting member having a pair of spaced laterally directed shanks for supporting a soldering block, a soldering block of chromium nickel steel supported by and insulated from said shanks, said soldering block being of substantial cross-section and length and having its central portion off-set beyond the ends of said supporting shanks



and substantially parallel with said supporting member, and means whereby electric current may be supplied to said block.

1,813,162. MIRROR SETTING. JOSEPH A. HOEGGER, Jersey City, N. J. Filed Feb. 16, 1929. Serial No. 340,358. 2 Claims. (Cl. 20—15.)

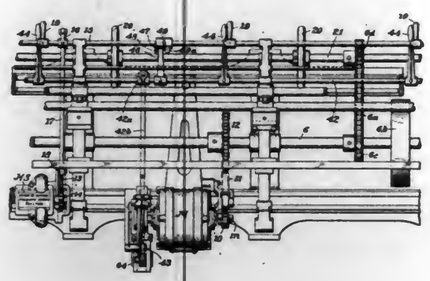


1. The herein described means for supporting a panel in a stationary position in a wall recess with the face of the panel substantially flush with the finish face of the wall comprising a back frame fitting in the aforesaid recess and shaped to receive and support the panel, said frame having an internal shoulder functioning to support the panel and to receive fastening elements to secure the frame to the wall back, a panel fitting within the said back frame opposite the aforesaid shoulder, spring shoes riding on the shoulder and affording a backing for the panel, and a finish frame lying upon and having means for attachment to the said back frame, said finish frame being of a width to overlap both the panel and the adjacent finish face of the wall.

1,813,163. FULL FASHIONED KNITTING MACHINE. KENNETH HOWIE, Norristown, Pa., assignor to Wildman Mfg. Co., Norristown, Pa., a Corporation of Pennsylvania. Filed Nov. 9, 1929. Serial No. 405,967. 19 Claims. (Cl. 66—82.)

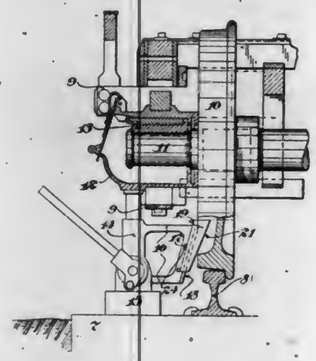
1. In combination in a full fashioned knitting machine, power means for driving the machine at normal speed, manually operable control means accessible to the attendant for operation at various points along the machine front for throwing the power on or off, brake means for automatically arresting the machine when the power is thrown off and for releasing the machine when the power is thrown on, a hand drive for the machine oper-

able from various points along the machine front and means for releasing the brake when the hand drive is to be



operated, said brake releasing means being manually operable from various points along the machine front, substantially as described.

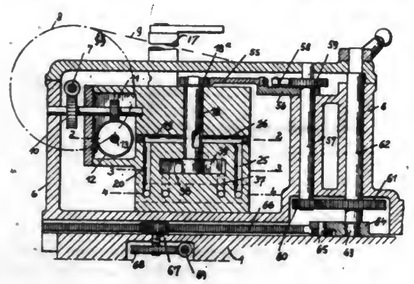
1,813,164. JACK WITH AUTOMATIC WHEEL RETAINER. SIGURD W. L. JOHNSON and CLEMENT ZAREMBINSKY, Minneapolis, Minn., assignors of one-third to Henry M. Robertson, St. Paul, Minn. Filed Sept. 4, 1928. Serial No. 303,645. 7 Claims. (Cl. 254—33.)



1. A lifting jack having a laterally offset member with a relatively long straight oblique surface arranged, when the jack is positioned to lift a journal box, to incline inwardly over the rim of a wheel and extend above and below the same, said member being held in position by the lifting action of the jack.

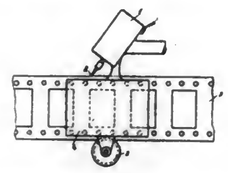
1,813,165. ADJUSTMENT DEVICE, PARTICULARLY FOR THE CROSS-SLIDES OF GRINDING MACHINES. KARL JUNG, Berlin, Germany. Filed Mar. 8, 1928, Serial No. 260,043, and in Germany Mar. 5, 1927. 4 Claims. (Cl. 51—165.)

1. An adjustment device particularly for the cross-slides of grinding machines comprising in combination with the cross-slide of the machine, a hydraulic piston for feeding the cross-slide, a pump serving for producing a medium under pressure moving said piston, a second hydraulic piston for controlling said first-mentioned piston by leading the medium under pressure to the one or the other side of the piston, a cylinder in which said second piston works, a second pump serving for producing a medium under pressure for moving said second piston, a pipe line leading the driving medium to said cylinder, and a hand-controlled



valve inserted into said hydraulic means and adapted to adjust same in accordance with the time allowed for working.

1,813,166. TALKING MACHINE RECORDER. THEODOR KAHN, Berlin-Charlottenburg, Germany. Filed Nov. 30, 1929, Serial No. 410,893, and in Germany Nov. 27, 1928. 1 Claim. (Cl. 274—11.)



A talking-machine recorder adapted to be fitted to a talking machine and comprising a holder adapted to be fitted to a talking machine, a sound box on said holder, means on said sound box adapted to engage a film at its edge, and means on said holder adapted to engage the opposite edge of said film.

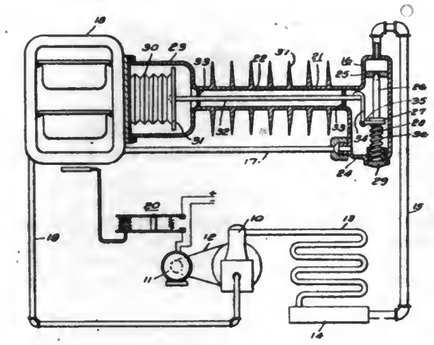
1,813,167. PLUG. WILLIAM KAISLING, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 16, 1923. Serial No. 657,678. 9 Claims. (Cl. 173—361.)



1. A connecting plug of the class described having a sleeve contact extension, a tip contact, a conducting bolt, spring terminals for said tip and sleeve contacts provided with rearwardly extending bifurcated members, a block having a plurality of grooves in its faces and secured to said conducting bolt for separating said spring terminals, said conducting bolt securing said tip contact in association with said sleeve contact and securing said spring terminals in conductive relation with their respective contacts to form engaging means for multiple connections.

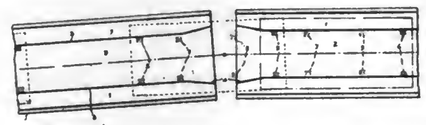
1,813,168. REFRIGERATING APPARATUS. MILTON KALISCHER, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 14, 1929. Serial No. 385,880. 2 Claims. (Cl. 62—8.)

1. In a refrigerating apparatus, an evaporator, an expansion valve for controlling the flow of refrigerant medium through said evaporator, said valve comprising a sealed casing having enlarged end portions and an intermediate tubular portion, one of the enlarged end portions being adjacent the evaporator and in thermal contact



therewith, a gas-filled expansible member in said adjacent portion, a valve and valve seat in the opposite end portion, and operative connections between said expansible member and said valve, said connections passing through the tubular portion.

1,813,169. GOODS CONTAINER TRANSPORTATION MEANS. WILLIAM PLATTS KELLETT, New York, N. Y. Filed July 17, 1930. Serial No. 468,723. 3 Claims. (Cl. 105—366.)



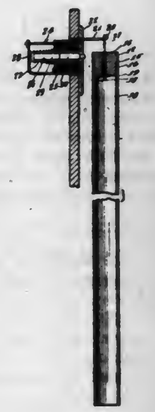
3. Goods container transport means comprising railway car decks having depressed parallel sided longitudinal runways formed with flaring ends, goods containers having wheel supports arranged in pairs adjacent to the ends, said wheel supports being of a gauge to bring the flanges of the wheels into engagement with the flanges of the runways whereby said goods containers will be supported against lateral displacement, and sets of wheels spaced between the end wheels and of a narrower gauge than said end wheels to permit the containers to be swung at an angle to the runway in passing from the car.

1,813,170. MEANS FOR DRAWING CURTAINS AND THE LIKE. WALTER EDWARD KIMBER, London, England. Filed Aug. 16, 1928, Serial No. 300,091, and in Great Britain Aug. 16, 1927. 13 Claims. (Cl. 156—20.)



1. Apparatus for the drawing of curtains comprising a curtain rod, curtain suspensory devices mounted on said rod, a carrier slidably guided along said rod, a hump formation on the upper surface of said carrier and a connection for the leading suspensory device of the curtain provided on the leading end of said carrier.

1,813,171. CHIME. JOSEPH W. KLEIN, Los Angeles, Calif., assignor to The Electric Signal Company, Limited, Los Angeles, Calif., a Corporation of California. Filed Apr. 1, 1930. Serial No. 440,720. 5 Claims. (Cl. 116—169.)



1. In a device as described, a sounding tube having a nonmetallic plug at the top thereof, means to suspend the tube by the said plug, and a striking device to strike the said plug.

1,813,172. INSULATOR. HOBART M. KRANER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 29, 1927. Serial No. 216,137. 5 Claims. (Cl. 173—318.)



1. A tension insulator comprising oppositely spaced terminal structures, a plurality of insulating elements connected therebetween to subdivide the tension load and yieldable means between the insulating material of each element and the next adjacent part of one of the terminal structures to balance the load divisions relative to each other.

1,813,173. CORNER MOLDING. LOUIS KUEHN, Milwaukee, Wis., assignor, by mesne assignments, to Milcor Steel Company, Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 4, 1927. Serial No. 230,963. 4 Claims. (Cl. 72—121.)

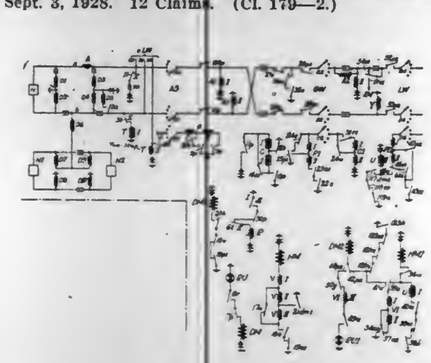


2. A section of sheet metal corner molding including a transversely curved body plate, longitudinal marginal ridges on the body plate, wings of expanded metal extending from the ridges, the body plate and ridges having an inwardly depressed extension at one end, said wings terminating short of said inwardly depressed tension.

1,813,174. PROCESS OF MAKING ACTIVATED SORBENT MATERIAL. ARTHUR B. LAMB, Cambridge, Mass. Filed Sept. 22, 1925, Serial No. 57,945. Renewed Dec. 22, 1928. 9 Claims. (Cl. 252—2.5.)

1. In a process of activating sorbent material, treating the sorbent with ammonia and then subjecting to heat and vacuum the material charged with ammonia.

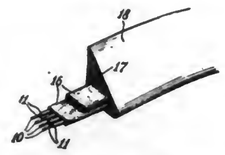
1,813,175. AUTOMATIC TELEPHONE SYSTEM, MAX LANGER, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Aug. 5, 1929, Serial No. 383,522, and in Germany Sept. 3, 1928. 12 Claims. (Cl. 179—2.)



1. In a telephone system wherein a portion of one conductor of a line extending to a subscriber's station is used for special purposes, means at said station for transmitting signals over the other conductor of said line, and means for repeating said signals over a part of the first conductor not being used for special purposes.

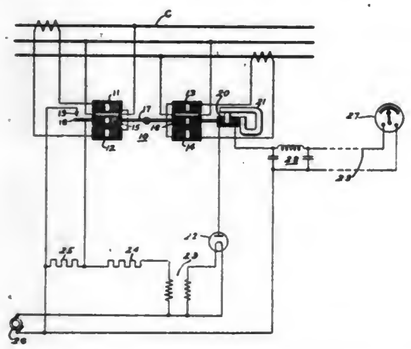
1,813,176. TIRE BEAD CONSTRUCTION AND METHOD OF MAKING SAME. CHARLES W. LEGUILLON, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Feb. 28, 1927. Serial No. 171,395. 1 Claim. (Cl. 154—14.)

The method of making an inextensible tire bead which comprises coating the surface of a steel wire, while in a relatively clean condition, with a film of a tacky heat plastic rubber isomer, forming the wire into a multistrand bead core, surrounding said core with a vulcanizable rubber composition, and thereafter subjecting the bead to a vulcanizing temperature, whereby the outer rubber portion of



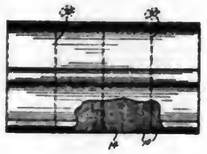
the bead is bonded to the wire core through the intermediary of the rubber isomer coating with a durable and permanent bond.

1,813,177. REMOTE-METERING SYSTEM. BERNARD E. LENEHAN, Bloomfield, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 18, 1929. Serial No. 333,471. 9 Claims. (Cl. 171—95.)



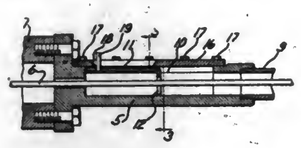
1. A metering system including a meter, a control device responsive to the quantity or characteristic to be measured, a thermionic device having a considerable time lag, a contact member actuated intermittently into engagement with a fixed contact member by said control device in such manner that the interval of engagement of said contact member is a function of the magnitude of said quantity or characteristic, for controlling the energization of said thermionic device, said meter being responsive to the magnitude of the current passing through said thermionic device.

1,813,178. PACKAGE OF STACKED GASKETS. HENRY A. LINDSLEY, Cleveland, Ohio. Filed Dec. 30, 1929. Serial No. 417,433. 4 Claims. (Cl. 206—46.)



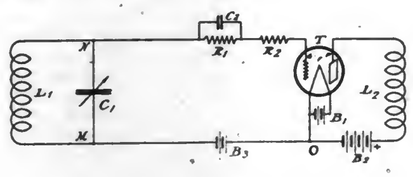
2. As a new article of manufacture, a stack of gaskets made of non-metallic material which varies in cross dimension in accordance with climatic conditions, the gaskets of said stack being of the same shape and the same cross dimensions and being maintained in stacked alignment by a moisture proof coating secured to the side surfaces of said stack, said coating not only maintaining said gaskets in such aligned, stacked relation, but also protecting said gaskets from size variation in response to climatic changes.

1,813,179. DEVICE FOR CLOSING OPENINGS. JOSEPH EVERETT LODGE, Maywood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 2, 1929. Serial No. 337,037. 7 Claims. (Cl. 18—6.)



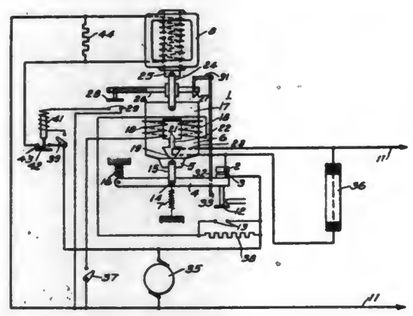
5. In a fluid containing chamber having an inlet aperture, a gate slidable across the aperture for closing it, the gate having a blade depending therefrom into the chamber and responsive to the pressure of fluid in the chamber to maintain the gate closed.

1,813,180. RADIO RECEIVING APPARATUS. PERCIVAL D. LOWELL, Jamaica, N. Y., assignor to A. H. Grebe & Co., Inc., Richmond Hill, N. Y., a Corporation of New York. Filed July 16, 1927. Serial No. 206,168. 6 Claims. (Cl. 179—171.)



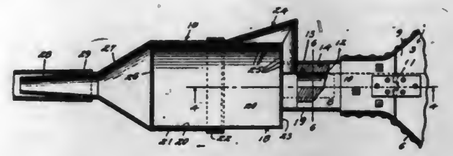
1. In a radio frequency amplifier using a triode vacuum tube, the combination of a tuned input circuit, an inductively reactive plate circuit, two resistances in series between the grid and tuned input circuit, and means for paralleling part of such resistance by a capacity path.

1,813,181. HIGH-SPEED CIRCUIT INTERRUPTER. JOHN B. MACNEILL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 7, 1926, Serial No. 114,045. Renewed Nov. 8, 1930. 14 Claims. (Cl. 200—99.)



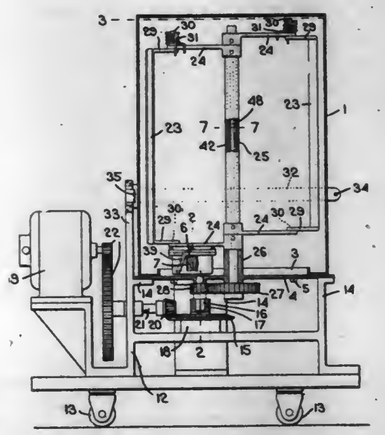
1. In a high-speed circuit interrupter, a pair of relatively movable contact members, actuating means for the contact members biased to its circuit-opening position, and magnetic holding means for the actuating means adapted to be moved to the circuit-opening position of, and engage, the actuating means and then be moved so as to move the actuating means to its circuit-closing position.

1,813,182. POWDER BLOWER. LAWRENCE MANNE, Rockford, Ill. Filed Jan. 10, 1931. Serial No. 507,952. 8 Claims. (Cl. 43—147.)



1. A powder blower of the character described, comprising a receptacle, a discharge nozzle leading from said receptacle at one end thereof, an air receiving sleeve carried by the receptacle adjacent the other end, means for injecting air into said sleeve, and means for introducing the injected air into the receptacle from the sleeve through the end of the receptacle adjacent the sleeve and through the side wall of the receptacle.

1,813,183. GREASE DISPENSER. WILFRED B. MATHEWSON, Weymouth, Mass., assignor to Roy Manufacturing Company, Quincy, Mass., a Corporation of Massachusetts. Filed Dec. 23, 1927. Serial No. 242,249. 18 Claims. (Cl. 221—47.1.)

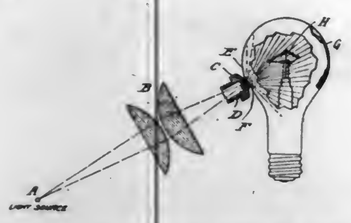


1. In a grease dispenser, the combination with a container, of a pump in the bottom of the container for pumping grease therefrom, rotary means to cut the grease from the side walls of the container, driving means, and means to operate both the pump and the cutting means therefrom, said cutting means having a rotary movement only while in operation.

1,813,184. METHOD FOR TREATING BAGASSE AND SIMILAR FIBROUS PRODUCTS FOR THE PRODUCTION OF PULP AND THE EXTRACTION OF CELLULOSE. RAYMOND CHARLES MCQUISTON, Newton, and HARRY VON LOESECKE, Arlington, Mass., assignors to United Fruit Company, Boston, Mass., a Corporation of New Jersey. Filed Apr. 30, 1930. Serial No. 448,780. 8 Claims. (Cl. 92—14.)

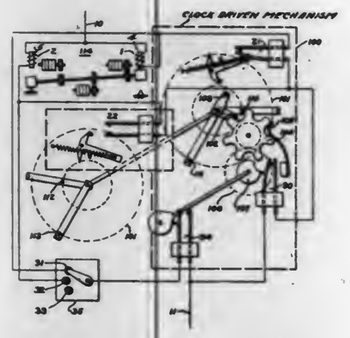
1. The method of extracting cellulose from bagasse which consists in treating the same with a solution of sodium hydroxide in sea water.

1,813,185. OPTICAL ILLUMINATING SYSTEM. PRESTON S. MILLAR, Brooklyn, and HAROLD H. MILLAR, New York, N. Y., assignors to Electrical Testing Laboratories, New York, N. Y., a Corporation of New York. Filed Apr. 14, 1927. Serial No. 183,667. 8 Claims. (Cl. 88—14.)



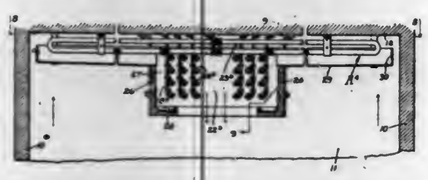
1. The method of inspecting elements within the interior of hollow articles having a translucent wall provided with a surface of comparatively high translucency which comprises producing upon the translucent surface of the wall, a concentrated secondary light source of minute area and of high intensity.

1,813,186. MULTIRATE METER. GEORG MOHR, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 13, 1929, Serial No. 406,873, and in Germany Nov. 17, 1928. 5 Claims. (Cl. 171—268.)



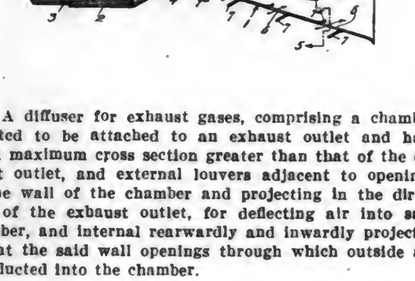
1. In a multi-rate meter, the combination with a plurality of controls, and means for selectively operating said controls during a predetermined period of time, of means for rendering said means non-effective during a predetermined fractional portion of said period of time, and means for operating said controls separately while said first means is non-effective.

1,813,187. MEANS FOR REFRIGERATING AND CONTROLLING THE CIRCULATION OF AIR IN COLD STORAGE ROOMS. CHARLES A. MOORE, Edina, Minn. Filed Jan. 23, 1929. Serial No. 334,511. 14 Claims. (Cl. 62—99.)



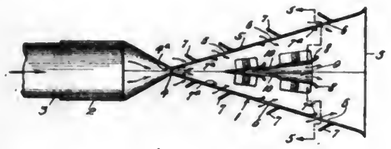
1. The combination with a room of a refrigerating and air circulating element forming a baffle spaced from the side walls at and depending from the ceiling of the room, another similar element extending from said first element in a direction toward one of said side walls, and a conduit open at its upper side along its length beneath said latter element and leading toward said first element.

1,813,188. AIR CONDITIONING AND CIRCULATING APPARATUS FOR COLD STORAGE CHAMBERS. CHARLES A. MOORE, Edina, Minn. Filed June 3, 1929. Serial No. 368,150. 8 Claims. (Cl. 257—18.)



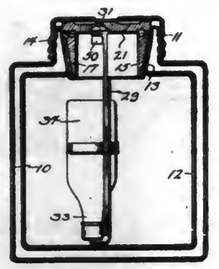
1. In combination, a structure providing a chamber, an overhead bank of refrigerating coils disposed longitudinally of the chamber, centrally thereof, near the ceiling, the coils being relatively arranged to provide upper and lower channel-like passageways extending longitudinally of the bank, the former opening upward and the latter opening downward, an appliance at one end of the bank of coils including two upright conduits and means for reducing the temperature of the air therein, one conduit communicating at its upper end with the outer atmosphere and the second conduit communicating at its lower end with the lower portion of said first conduit, the upper portion of the second conduit terminating in two branches, one communicating with the upper channel-like passageway in the bank of coils and the other communicating with the lower channel-like passageway therein, and a fan arranged to draw air into said second branch both from said first branch and from said second conduit and mix it and blow it into said lower passageway.

1,813,189. DIFFUSER FOR EXHAUST GASES. WILLIAM J. MOORE, Brooklyn, N. Y., assignor to Nomac Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 10, 1928. Serial No. 260,568. 4 Claims. (Cl. 137—160.)



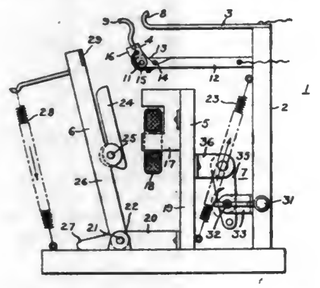
1. A diffuser for exhaust gases, comprising a chamber adapted to be attached to an exhaust outlet and having a maximum cross section greater than that of the exhaust outlet, and external louvers adjacent to openings in the wall of the chamber and projecting in the direction of the exhaust outlet, for deflecting air into said chamber, and internal rearwardly and inwardly projected lips at the said wall openings through which outside air is inducted into the chamber.

1,813,190. BEVERAGE BOTTLE CARRYING RECEPTACLE. EMERY F. MORIN, Sioux City, Iowa. Filed Sept. 8, 1930. Serial No. 480,377. 11 Claims. (Cl. 220—14.)



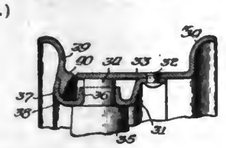
4. In combination with a jug shaped, heat insulated receptacle having a neck, means supported in said neck for individually supporting a plurality of beverage bottles and for moving them individually through the neck into the central space below the neck within the receptacle compartment and thence from said central space into the region surrounding said central space within the receptacle compartment and vice versa.

1,813,191. HIGH SPEED CIRCUIT BREAKER. AUGUST J. MOTTLAU, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 30, 1926. Serial No. 105,721. 7 Claims. (Cl. 200—87.)



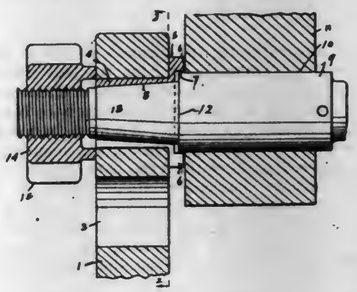
1. In a switch structure, a pivotally mounted holding electromagnet, a coaxially pivoted armature therefor, a pair of relatively movable contact members controlled by the armature member, means for biasing the armature member into position to permit the contact members to open and means for turning the holding electromagnet to the contact-opening position of the armature member and for turning the holding electromagnet and the armature member into position to close the contact members against the biasing means.

1,813,192. FELLY AND RIM CONSTRUCTION. EMIL A. NELSON, Detroit, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Sept. 28, 1927. Serial No. 222,434. 2 Claims. (Cl. 301—67.)



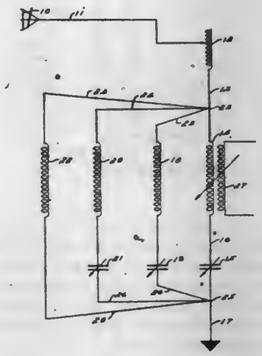
1. A tire-carrying rim comprising a cylindrical tire-seating rim base having an upwardly extending permanent tire-retaining flange at the rear and terminating forwardly short of the location of a front tire-retaining member, a felly secured to the underside of the cylindrical rim base and upturned at its front to provide a gutter beneath and in advance of the front edge of the cylindrical rim base, a removable tire-retaining ring seated within the gutter and having a tire-seating portion disposed substantially flush with and forming in effect a forward continuation of the cylindrical rim base.

1,813,193. WRIST PIN. JEDDY D. NIXON, Houston, Tex. Filed Mar. 26, 1929. Serial No. 349,966. 6 Claims. (Cl. 287—53.)



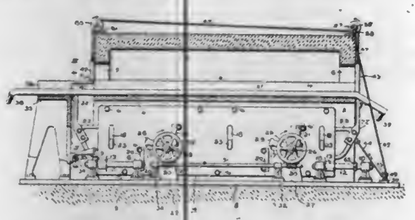
1. The combination with a crank arm wrist pin having a shank which is tapered and whose free end is externally threaded, of an expansible bushing adapted to fit through the crank arm, and having a tapered bearing therethrough to receive said shank snugly, an outward extension on one end of said bushing and a clamp nut on the threaded end of said shank, said nut and flange being spaced apart to clamp the crank arm between them.

1,813,194. RADIO APPARATUS. JOHN N. NORDLUND, Detroit, Mich. Filed May 4, 1925. Serial No. 27,992. 4 Claims. (Cl. 250—20.)



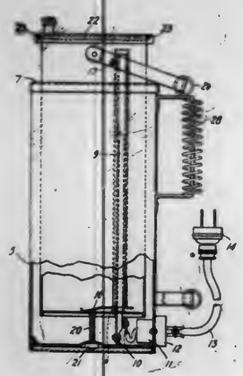
1. In combination, a tuning unit consisting of a variable inductance connected in series with a fixed inductance and a variable capacity interposed between the antenna and ground connections of a radio circuit, low resistance by-pass units for eliminating interfering frequencies, each of said by-pass units comprising an inductance and a variable capacity in series connected in parallel relation with said fixed inductance and variable capacity and a low inductance also connected in parallel relation with said fixed inductance and variable capacity for by-passing low frequency currents.

1,813,195. BILLET CONVEYING APPARATUS FOR HEATING FURNACES. MAXIMILIAN K. NYE, Ellwood City, Pa. Filed Feb. 12, 1930. Serial No. 427,981. 8 Claims. (Cl. 263—6.)



3. In an apparatus for the purpose set forth, the combination with a furnace having longitudinal channels in the bottom thereof of a reciprocable member slidably mounted upon supporting means beneath the furnace bottom for horizontal movement, an elevator arranged therein for vertical movements the upper portion thereof comprising horizontally disposed parallel conveyor bars, extending along within the furnace channels rotatable means for imparting vertical movements to the elevator, rotatable means for imparting horizontal movements to said member and elevator, and means for preventing the elevator from being displaced horizontally when the same is about to ascend.

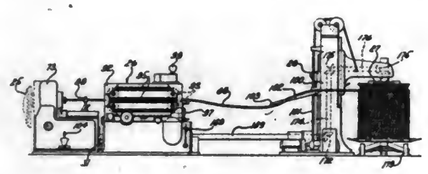
1,813,196. MELTING POT. JOSEPH H. PETTUS, Port Washington, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 9, 1928. Serial No. 276,239. 8 Claims. (Cl. 219—44.)



3. A device for melting wax and other materials comprising a container within which the wax is placed, a heating element, a metallic tube surrounding said heater and extending above the normal level of the wax to a point near the top of said container, and a second tube surrounding but spaced from said first tube, said second tube being open at the top and bottom.

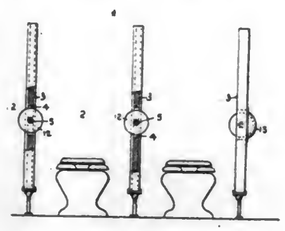
1,813,197. CABLE FORMING APPARATUS. LESTER O. REICHELT, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,386. 12 Claims. (Cl. 117—48.)

1. In a cable forming apparatus, a normally stationary strand supply carrier having a longitudinal passage for the strands, a plurality of strand supplies mounted upon the carrier with their axes of rotation parallel to and spaced laterally from said passage, a rotatable flyer for carrying the strands bodily around the strand supplies, means for rotating the flyer, means for rotating the strand



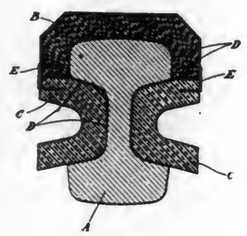
supply carrier, and common means for rendering effective the means for rotating the flyer and simultaneously rendering ineffective the means for rotating the carrier.

1,813,198. TOILET ROOM EQUIPMENT. RALPH E. RHOADS, Ridley Park, and PHILIP D. PARSONS, Swarthmore, Pa., assignors to Scott Paper Company, a Corporation of Pennsylvania. Filed Mar. 1, 1930. Serial No. 432,573. 2 Claims. (Cl. 72—16.)



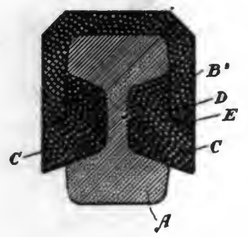
2. The combination of a plurality of compartments separated by a partition having an aperture formed therein and providing oppositely directed outlet portions opening into the adjacent compartments, and means intermediate of the oppositely directed open portions of the aperture for supporting materials to be dispensed through the aperture into either compartment.

1,813,199. SYSTEM OF THIRD RAIL INSTALLATION. HOMER L. ROGERS, Cincinnati, Ohio, assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed June 27, 1928. Serial No. 288,720. 13 Claims. (Cl. 191—30.)



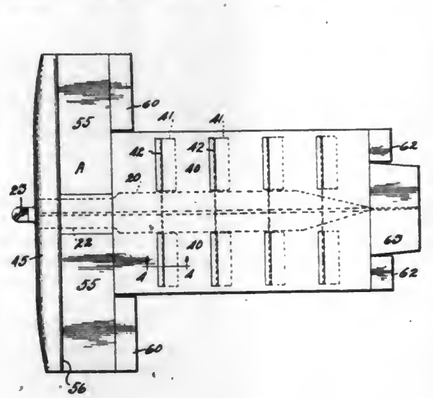
1. A third rail system comprising a third rail, a cover for same, composed of a body of material containing bitumen, preformed to conform to the contour of the rail and means attaching said cover adhesively to the rail.

1,813,200. COVER FOR THIRD RAIL AND OTHER ELECTRIC CONDUCTORS. HOMER L. ROGERS, Cincinnati, Ohio, assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed June 27, 1928. Serial No. 288,721. 17 Claims. (Cl. 191—30.)



1. A cover for third rail electric conductors consisting of a plurality of plastic form-retaining members each containing bitumen preformed to conform to the contour of a conductor, one of said members having a portion integral therewith adapted to hold another member in position on a rail.

1,813,201. AEROPLANE. ARTHUR A. ROOT, Detroit, Mich. Filed Oct. 22, 1927. Serial No. 227,896. 9 Claims. (Cl. 244—29.)

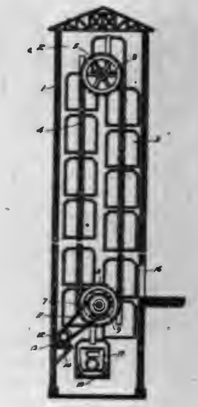


1. In an aeroplane a body or fuselage, a forwardly located laterally extended cambered aerofoil or plane above said body, and a longitudinally arranged flat plane also above said body and in approximate alignment with the forward plane, said forward plane being of greater lateral dimensions than said longitudinal plane and the latter being of greater width than said body and having spaced intermediate its length a plurality of controlled transverse air passages, and control planes hinged to the free rearward edges of said planes.

1,813,202. CIRCUIT BREAKER. REINHOLD RUDENBERG, Berlin-Grunewald, Germany, assignor to Westinghouse Electric & Manufacturing Company, New York, N. Y., a Corporation of America. Filed Sept. 8, 1927, Serial No. 218,372, and in Germany Sept. 10, 1926. 6 Claims. (Cl. 200—150.)

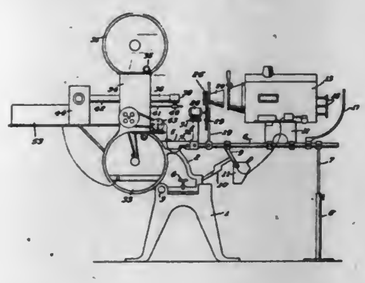
3. In combination, a circuit breaker and an element of the halogen series in the free state mixed with the medium surrounding the contacts of said breaker.

1,813,203. GARAGE ELEVATOR. WALTER S. RUGG, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,241. 30 Claims. (Cl. 214—16.1.)



1. A conveyor comprising a plurality of containers, means for moving the containers in synchronized relation to one another and independent means, including means operably responsive to the movement of said containers for changing their relative positions while they are moving.

1,813,204. RADIO PHOTOGRAPHY TRANSMITTER. VIRGIL ADOLF SCHOENBERG, Niles Center, Chicago, Ill. Filed Aug. 1, 1929. Serial No. 382,750. 6 Claims. (Cl. 178—6.)

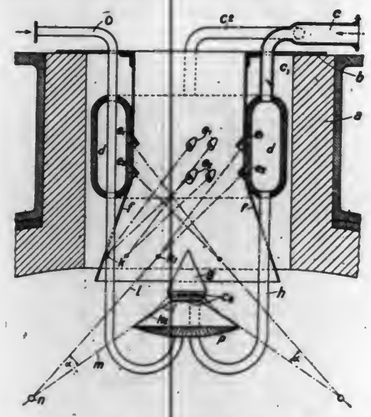


1. In radio photography transmitters, a framework, a film head arranged thereupon and carrying the film mounting, a door for said film head, a photo-electric cell mounted to said door, a potentiometer mounted in said door and in circuit with said photo-electric cell, said electric circuit being made and broken by the closing and opening of said door, and light transmission and focusing means mounted to said framework and associated with said film mounting and cell.

1,813,205. DEVICE FOR CHARGING VESSELS. WERNER SCHOLZ, Oberleschen, and ARNO FROHBERG, Cunnersdorf, Germany. Filed Sept. 24, 1930, Serial No. 484,220, and in Germany May 30, 1928. 4 Claims. (Cl. 92—7.)

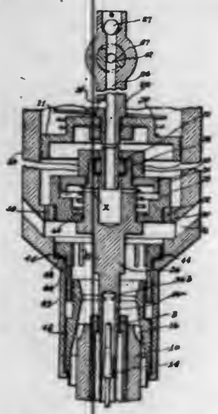
1. A device for charging vessels with material of bulky character by means of jets of a pressure medium com-

prising two groups of nozzles adapted to largely convert the pressure energy of the currents of the pressure me-



dium into speed, the one group of nozzles encircling the charging orifice and the second group of nozzles being arranged at the central part thereof.

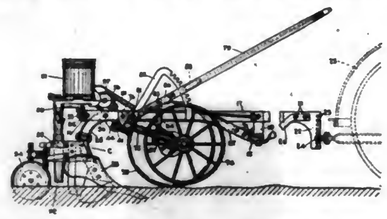
1,813,206. CARBURETOR. RALPH SHIPMAN, Sunbury, Pa. Filed July 1, 1927. Serial No. 202,947. 10 Claims. (Cl. 261—45.)



1. In a carburetor the combination of a mixing chamber, a fuel nozzle therein, a throttle near the exit end of the mixing chamber, an air choke sleeve adjacent to the nozzle and an air valve whose position is determined by the differences of pressure on opposite sides of the throttle and which controls the area of the air choke and also the area of an air passage in the mixing chamber but remote from the nozzle.

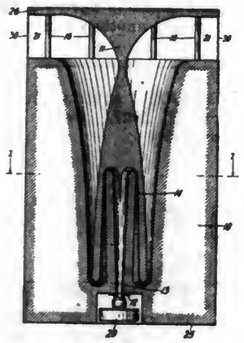
1,813,207. LISTER. WALTER H. SILVER, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 15, 1928. Serial No. 261,719. 12 Claims. (Cl. 97—103.)

1. In a lister, the combination of a frame, a plurality of plows carried by said frame, a supporting wheel disposed between the sides of said frame for normally supporting the frame between the sides thereof, power lift mechanism cooperating with said wheel for raising said frame, depth adjusting means connected with and operative through said wheel for establishing the depth adjustment of the implement, said wheel having frame supporting contact with the ground and bracing the frame between the sides against downward stresses resulting from the action of the plows in the different depth ad-



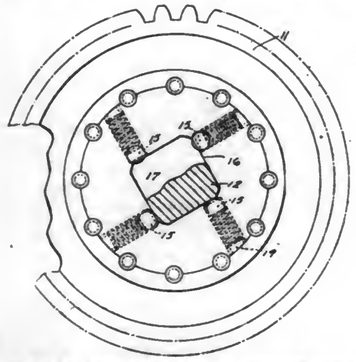
justments, and a pair of gauge wheels at the sides of said frame for leveling the plows and maintaining the same at the proper balance.

1,813,208. ACOUSTIC DEVICE. EDWIN H. SMYTHE, Evanston, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 26, 1926. Serial No. 150,830. 10 Claims. (Cl. 181—27.)



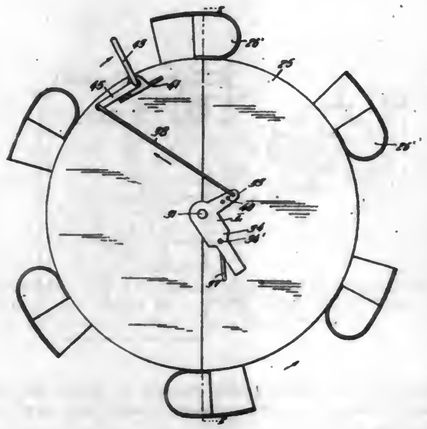
1. A sound radiator comprising a continuous exponentially tapered sound passage, said sound radiator being formed by a plurality of telescoping sections and having an annular mouth.

1,813,209. ANTIRATTLE SLIDING GEAR ASSEMBLY. CHARLES BEERS SPASE, Syracuse, N. Y. Filed Feb. 11, 1930. Serial No. 427,472. 2 Claims. (Cl. 74—58.)



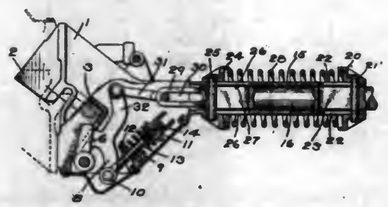
1. In a sliding gear assembly, in combination, a shaft, a gear mounted to freely slide on the shaft, poppets within the gear in constant forced contact with the shaft whereby said poppets being located off the center line of the shaft the line of force of the poppets does not pass through the center line of the shaft.

1,813,210. MERRY-GO-ROUND. FELIX SUCHER and SOPHIA H. SUCHER, St. Louis, Mo. Filed May 19, 1930. Serial No. 453,687. 1 Claim. (Cl. 272—33.)



In an apparatus of the class described, a vertical standard, means for supporting the standard, a sleeve rotatable about the standard, arms radiating outwardly from the standard, seats on the ends of the arms, and means for causing the rotation of the sleeve about the standard, said means for rotating the sleeve comprising a toothed wheel fixed to the standard, a bell crank lever rockable on the standard, a pawl on the lever engageable with the toothed wheel and means for oscillating the lever, said pawl having a bifurcated engaging end, and spring means holding one or the other of the furcations in engagement with the toothed wheel as desired.

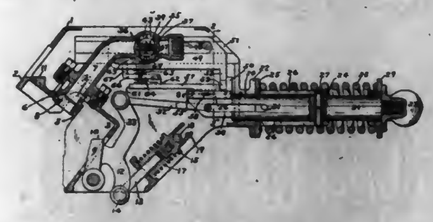
1,813,211. AUTOMATIC COUPLING. THOMAS H. THOMAS, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 28, 1928. Serial No. 250,226. 4 Claims. (Cl. 285—58.)



1. The combination with a train pipe coupling having a tubular extended portion and a locking lever for locking the coupling in its coupled position, of a member slidably mounted in said extended portion and provided with a slot, and a link connected to said lever and engaging in said slot and movable in said slot relatively to said member.

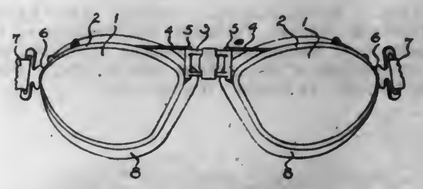
1,813,212. AUTOMATIC COUPLING. THOMAS H. THOMAS, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 3, 1928. Serial No. 323,290. 2 Claims. (Cl. 284—12.)

1. The combination with a train pipe coupling having a fixed portion and a head having a train pipe passage movably mounted thereon, a valve mounted in the head for controlling the flow of fluid through the passage, said valve having a crank arm provided with a roller, and



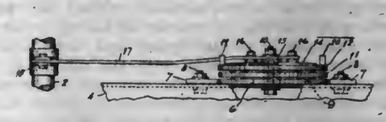
means for actuating the valve including a bar detachably connected to the fixed portion and having a cam groove for receiving the roller.

1,813,213. EYE PROTECTOR. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 21, 1930. Serial No. 422,298. 8 Claims. (Cl. 2—14.)



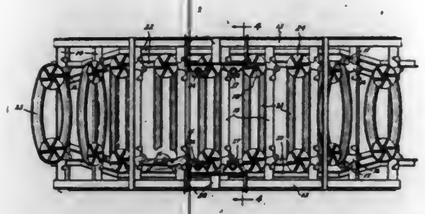
1. In a device of the character described, an eyecup having an air channel in its wall extending from one external opening to another and intersected intermediate its external openings by a vent connecting the interior of the eyecup with the air channel and deflecting means over the external openings adapted to deflect air coming from either direction into the channel and create suction in the vent to draw air from the interior of the cup.

1,813,214. RESILIENT CONNECTION. SEYMOUR PAUL WARD, Oakland, Calif., assignor to Cairew Incorporated, San Francisco, Calif., a Corporation of Nevada. Filed Apr. 9, 1928. Serial No. 268,545. 7 Claims. (Cl. 267—21.)



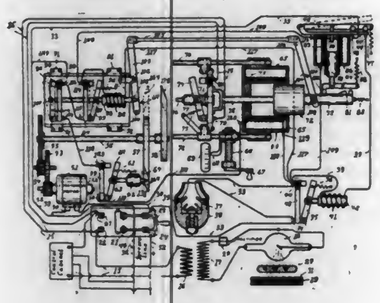
1. A resilient connection between two relatively movable members attached to the frame and axle respectively of an automotive vehicle, said connection comprising a pair of coaxially arranged metallic disks facing each other and being provided with a series of opposed shallow, circular pockets forming housings, means connecting said disks with the respective movable members which are attached to the frame and axle such that a relative movement of said members produces a pivotal movement between the said disks, and a series of flat, circular pads of rubber-like material snugly fitted within the opposed pockets in said disks and adapted to be placed under a shearing stress due to the pivotal movement between the disks.

1,813,215. TUBE TESTING APPARATUS. HAROLD E. WARNER, West Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Apr. 13, 1929. Serial No. 354,729. 7 Claims. (Cl. 73—51.)



1. In a device of the character described a pair of spaced rolls adapted to carry a tube between them, plates on the said rolls presenting projecting portions, and pins in the line of travel of the said rolls adapted to engage with the projecting portions on the rolls and rotate the rolls as they are drawn past the pins.

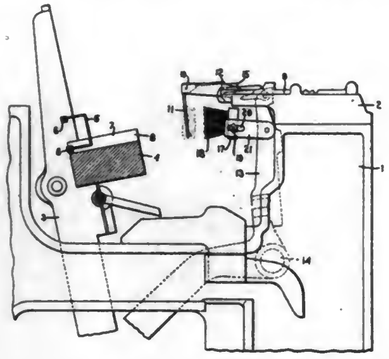
1,813,216. RADIOGRAPHIC TIMING APPARATUS. WILBUR S. WERNER, Covington, Ky., assignor to The Kelley-Koett Manufacturing Company, Covington, Ky., a Corporation of Ohio. Filed July 12, 1927. Serial No. 205,269. 10 Claims. (Cl. 250—34.)



1. In combination with a normally open main alternating electrical circuit to be successively closed and opened, an auxiliary alternating current circuit having a plurality of circuit branches, a circuit closing and circuit opening member driven in synchronism with the current in said main circuit and adapted to close and open in successive order a first gap in said auxiliary circuit, a gap in said main circuit, and a second gap in said auxiliary circuit, and means to independently close a third gap in said auxiliary circuit to initiate a cycle of circuit closing and circuit opening movements.

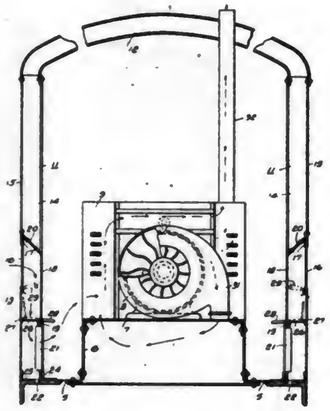
1,813,217. FILLING FORK AND GRID CLEANER. JACK FAYETTE WEST, Canton, Ga., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Dec. 1, 1930. Serial No. 499,202. 4 Claims. (Cl. 139—379.)

1. In a loom having a filling fork pivoted on a fork slide carried by the breast beam and a grid carried by the lay and cooperating with the fork, the combination of a brush and means for supporting the brush in front of the fork with the bristles facing the tines and for moving the brush into engagement with the fork tines when the lay



beats up on a detecting pick, thereby to steady the fork, prevent filling from being thrown around the fork tines and clear the tines.

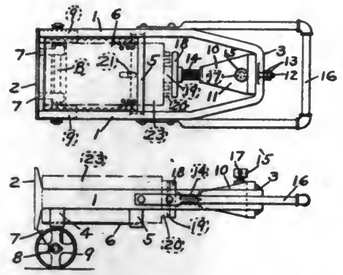
1,813,218. VENTILATING MEANS FOR ELECTRIC RAILWAY LOCOMOTIVES. CHARLES C. WHITTAKER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 29, 1928. Serial No. 289,316. 2 Claims. (Cl. 98—3.)



1. In combination with a locomotive cab, an air-intake disposed in the wall thereof and comprising a screen, a baffle plate for directing the air entering said screen, the lower end thereof being turned up to provide a trough, a damper plate, a longitudinally-extending horizontal rod for pivotally supporting said damper plate, the edge of the damper plate engaging the edge of said trough when the damper plate is closed, and an operating handle for said damper plate.

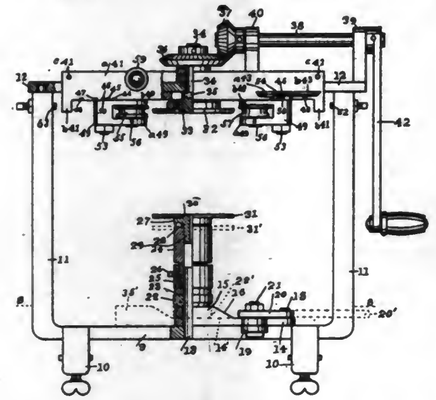
1,813,219. PORTABLE PRESS. HARRY F. WOERNLEY, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 19, 1929. Serial No. 333,667. 3 Claims. (Cl. 29—85.)

1. In a portable press, the combination with a frame adapted to receive a draft gear, said frame having an end piece adapted to support the press in a vertical position and forming a seat for one end of said gear, of means carried by said frame adapted to be operated into



engagement with the other end of said gear to compress the gear, and wheels upon which said press is transported when the press is moved from a vertical position.

1,813,220. HAND CAN-TOP SEALER. CHARLES M. YOUNG, Ten Mile Township, Whatcom County, Wash. Filed July 22, 1929. Serial No. 380,030. 3 Claims. (Cl. 113—22.)



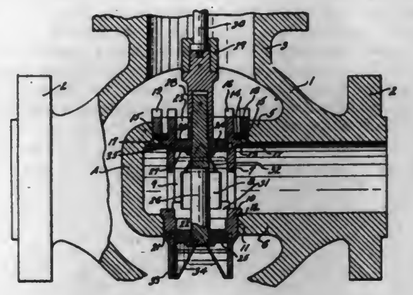
1. A can-top sealer consisting of a frame attachable to a bench having a bottom frame bar a top frame bar and two side frame uprights connecting said bottom and top bars rigidly together, a head bar mounted for reciprocation on said top frame bar, a vertical spindle mounted for revolution in central bearings on said top frame bar, a chuck disc adapted to engage a can top fastened to the lower end of said spindle concentric therewith and revoluble thereby, a grooved first-sealing roll mounted for revolution on a vertical shaft fastened to said head bar adjacent said chuck disc having said groove thereof in the plane of said chuck disc, a grooved second-sealing roll mounted for revolution on a vertical shaft fastened to said head bar adjacent said chuck disc opposite said first-sealing roll having the plane of said groove thereof in the plane of said chuck disc, a vertical stud on the bottom frame bar projected upward in the axis of the vertical spindle, elevator means mounted on the stud to bear on the bottom frame bar, a nut around the stud supported on the elevator means, an externally threaded sleeve engaged threadwise in the nut mounted on the stud, a can base disc adapted to mount a can thereon having a hub engaged with the upper end of the sleeve mounted thereon for revolution in the axis of the vertical spindle, means to operate said elevator means beneath the nut to raise, retain and lower the can base disc, and means to revolve the spindle and reciprocate the head bar.

1,813,221. RADIATOR SIDE PLATE. FRED M. YOUNG, Racine, Wis. Filed Nov. 9, 1928. Serial No. 318,108. 8 Claims. (Cl. 257—125.)



1. In a radiator construction, a radiator core comprising spaced rows of water tubes and superimposed fins, and side plates on the core having sunken intermediate portions and protruding longitudinal edge portions, the intermediate portions being soldered to the edges of the fins.

1,813,222. BALANCED VALVE. JOSEPH M. BARRETT, Cleveland Heights, Ohio, assignor to Bailey Meter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Oct. 17, 1928. Serial No. 313,055. 7 Claims. (Cl. 251—82.)

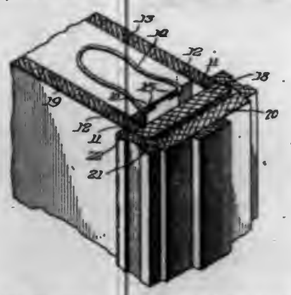


7. A valve of the class described, comprising a valve body having a valve stem opening at one side and a cross wall provided with two parallel portions lying in planes transverse to the length of the valve stem, said wall portions being provided with openings of different sizes, the larger opening being nearer to the valve stem opening of the body, and a cage member provided with valve seats of like diameter, said cage member being larger at one end than at the other and adapted for attachment to the cross wall by inserting its small end through the larger opening for attachment at the smaller opening and at its larger end being provided with an annular washer-like flange, and means for rigidly clamping the periphery of said flange to the cross wall at the larger opening.

1,813,223. METAL AND WOOD FRAME. ISAAC A. BAUM, Chicago, Ill. Filed Jan. 20, 1928. Serial No. 248,157. 4 Claims. (Cl. 72—98.)

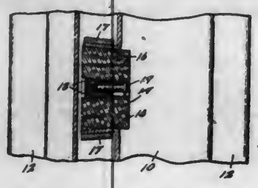
1. In framing for wall openings the combination of a metal channel, the flanges of which project into the opening, ears struck out of the web of the channel and projecting rearwardly in line with said flanges and serving as means for positioning the channel relative to a wall, a

wood block fixed in the channel, a sub-buck secured to the block and serving as a plaster ground, a casing element



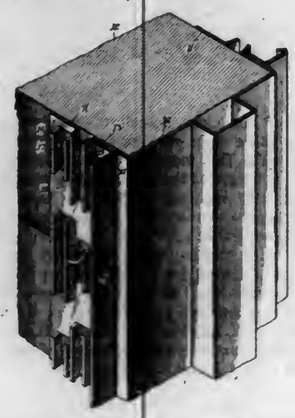
secured to the sub-buck, and molding overlying the edges of the casing element and the sub-buck and secured thereto.

1,813,224. DOOR SILENCER. ISAAC A. BAUM, Chicago, Ill. Filed Dec. 3, 1928. Serial No. 323,363. 2 Claims. (Cl. 189—46.)



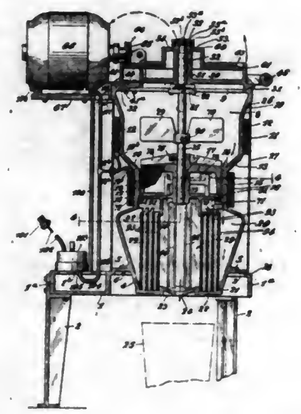
1. In metal door frame construction, the combination of a metal jamb and door stop formed on the face thereof, means integral with said stop forming a pocket in the door-contacting face of said stop, a resilient block disposed within said pocket, a portion of which projects beyond the face of said stop, means for effecting the expansion of said block in said pocket for anchoring said block within said pocket.

1,813,225. PLASTER ANCHOR. ISAAC A. BAUM, Chicago, Ill. Filed Sept. 6, 1929. Serial No. 390,760. 3 Claims. (Cl. 72—98.)



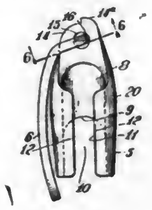
1. In a frame for wall openings, the combination of a metal member having portions adapted to lie alongside of the wall and to receive plaster thereon, and flat strips struck out of the metal portions and projecting in a line other than perpendicular to the plane of the portions, the space formed by striking out the strips being directly open to the plaster space to permit plaster to enter and to contact with the wall.

1,813,226. METHOD OF AND APPARATUS FOR RENDERING FATS. WILFRED T. BIRDSALL, Montclair, N. J., assignor to B. B. Machine Corporation, a Corporation of New York. Filed Nov. 20, 1924. Serial No. 751,002. 14 Claims. (Cl. 87—13.)



12. Apparatus of the class described, including a hollow upright member formed with an upper portion constituting a hopper and with a lower discharge portion into which the hopper discharges, an intermediate constricted portion between the hopper portion and the discharge portion containing a downward annular passage for a thin layer of material, means for heating the walls of said annular passage, and means for forcing material through said annular passage in abrasive slip contact with said heated walls.

1,813,227. SLIDER. GEORGE W. BLAIR, Mishawaka, Ind., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed Apr. 3, 1926. Serial No. 99,446. 13 Claims. (Cl. 24—205.)

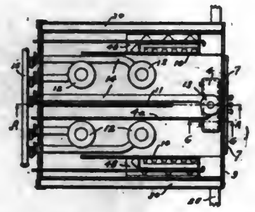


1. An operating member for a fastening device of the class described, said member comprising a substantially wedge shaped spreader with flanges extending outwardly therefrom to form divergent channels merging into a single channel, said flanges being gradually increased in thickness from the edges to the spreader for reinforcing said flanges against separating strain.

1,813,228. HEAT EQUIPMENT. OLIVER S. BOWMAN, Colorado Springs, Colo. Filed Dec. 19, 1929. Serial No. 415,254. 13 Claims. (Cl. 126—36.)

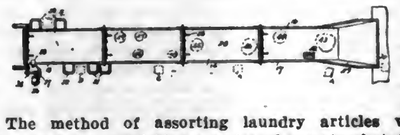
1. In a heat equipment, the combination of a combustion chamber partially enclosed by a vertically corrugated shell, and provided with fire doors and a draft door; a horizontally disposed smoke chamber, provided with baffles, disposed above said combustion chamber; gas burners disposed within said smoke chamber and provided with supply pipes; a pair of vertically disposed, damper

controlled, smoke channels communicating with said smoke chamber; a vertically disposed central smoke channel in open communication with said smoke chamber, disposed between said pair of smoke channels; a horizontally



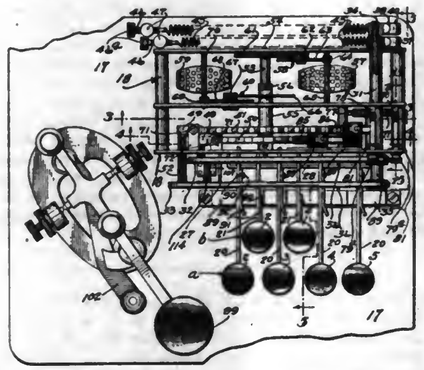
disposed smoke channel in open communication with said pair of smoke channels and with said central smoke channel, and provided with an outlet; and a damper controlled by-pass providing communication between said combustion chamber and said central smoke channel.

1,813,229. METHOD OF ASSORTING AND CLASSIFYING LAUNDRY ARTICLES. CHARLES E. CONSTABLE, Cincinnati, Ohio, assignor to The National Marking Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed June 28, 1928, Serial No. 288,979. Divided and this application filed June 4, 1929. Serial No. 368,333. 4 Claims. (Cl. 209—122.)



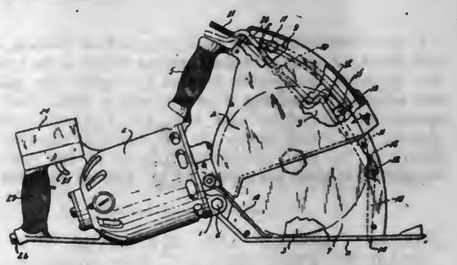
1. The method of assorting laundry articles which consists in first establishing a series of operators' stations, then advancing past said stations a series of compartments designed to contain laundry articles, and stopping each compartment temporarily adjacent to each station, and then during the time that each compartment is standing adjacent to each station performing by the operator an assorting portion of the complete assorting operation so that each operator may perform the same portion of the assorting operation upon each set of laundry articles in each compartment.

1,813,230. TELEGRAPHIC TRANSMITTING INSTRUMENT. WILLIAM D. COOPER, St. Paul, Minn. Filed May 20, 1929. Serial No. 364,452. 16 Claims. (Cl. 178—83.)



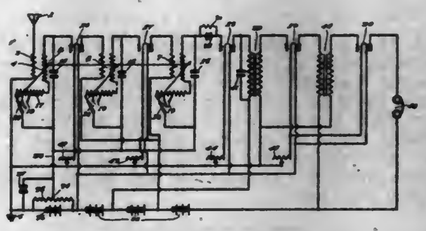
1. In a telegraph transmitting instrument, a means for opening and closing a telegraphic circuit including a rotary member and a non-rotary member, means for intermittently driving said rotary member including a member mounted for oscillatory or rocking movements, a series of keys, means for operatively connecting each key in the series of keys to turn the said oscillatory or rocking member a predetermined different distance away from its neutral position, means for returning said oscillatory or rocking member back to its neutral position, and an operative connection between said oscillatory or rocking member and said rotary member, whereby said rotary member will be driven from said oscillatory or rocking member on its return movement to a neutral position.

1,813,231. MOTOR DRIVEN HAND TOOL. JOHN M. CROWE, Covington, Ky., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 24, 1930. Serial No. 438,474. 6 Claims. (Cl. 143—159.)



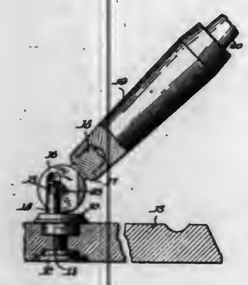
1. In a portable power driven hand tool adapted to be applied bodily to the work and moved along the same by the operator, a frame, a cutting blade operatively mounted thereon, a motor for operating said blade, guarding means movably mounted on said frame to advance or recede to guard or expose a cutting portion of said blade, and comprising a base having a surface adapted to engage and travel along the work, automatic means effective in all tool positions and tending to advance said guarding means, means also effective in all tool positions for automatically securing said guarding means against recession, a handle arranged adjacent said blade, and means associated with said handle for operator-operated release of said guarding means while the handle is grasped.

1,813,232. RECEIVING CIRCUIT. HIRAM D. CURRIER, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1925. Serial No. 26,835. 17 Claims. (Cl. 179—171.)



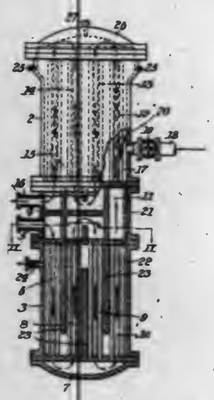
1. A cascade receiving circuit of the character described including a plurality of audion tubes, a plurality of transformers associated with said tubes and having primary windings and adjustable secondary windings, condensers bridged across said secondary windings, and means for adjusting said secondaries by steps and by rotating portions of said secondary windings relative to other portions thereof to tune the said secondary windings to desired frequencies.

1,813,233. ADJUSTABLE PEN SUPPORT. FRANK C. DELL, Chicago, Ill., assignor to Autopoint Company, Chicago, Ill., a Corporation of Illinois. Filed June 23, 1930. Serial No. 463,052. 14 Claims. (Cl. 120—108.)



1. In combination, a support, a post fixed therein, said post having a circumferential groove between its ends, a disc having a side recess adapted to receive the post, a pen support comprising a socket and a wing that are operatively related to said disc, and rotatable relative thereto, and means carried by the disc and entering the groove in the post preventing removal of the disc and permitting angular movement of the disc on the post.

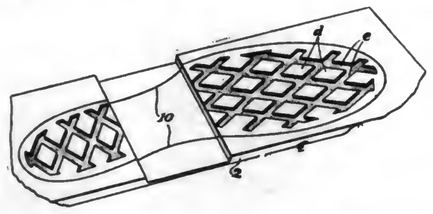
1,813,234. METHOD AND APPARATUS FOR EXCHANGING HEAT. GERALD D. DODD, Greensburg, Pa. Filed Mar. 24, 1928. Serial No. 264,342. 11 Claims. (Cl. 257—223.)



1. In a heat exchange apparatus, a plurality of heat exchange units of the two-surface type, connections for passing comparatively cool water serially through said units, means for introducing comparatively high temperature water into one of said units and flashing the same therein, means for collecting condensate formed in said last mentioned unit and passing it to the other unit, and means providing a tortuous flow path for the condensate in said other unit.

1,813,235. PROCESS OF MANUFACTURING RUBBER ARTICLES. ERNEST W. DUNBAR, Hudson, Mass., assignor to Cambridge Rubber Co., Cambridge, Mass., a Corporation of Massachusetts. Filed July 31, 1926. Serial No. 126,139. 6 Claims. (Cl. 18—53.)

1. That improvement in the method of making molded rubber articles which consists in providing an unvulcanized rubber compound of suitable composition, relatively pressing a portion of said compound and a die together while they are at substantially normal atmospheric temperatures to mold the compound, utilizing said molding operation to produce a bold design in the article so molded,

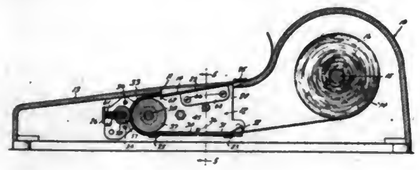


separating said die and the body molded thereby, subsequently allowing the body so molded to rest for a substantial period of time, and then vulcanizing said molded body in an unconfined condition.

1,813,236. ADHESIVE COMPOSITION AND METHOD OF MAKING THE SAME. LOUIS K. FACKLER, Ridgewood, N. J., and HERBERT F. GARDNER, Brooklyn, N. Y., assignors to Stein, Hall & Company, Inc., a Corporation of New York. Filed Dec. 9, 1927. Serial No. 238,992. 11 Claims. (Cl. 87—17.)

1. Process of making adhesives which comprises suspending in water a mixture of a starchy carbohydrate and an aromatic compound containing one or more of the groups consisting of carboxyl, sulphonic acid and acid anhydride, and subjecting the aqueous suspension to heat for such time and at such a temperature as to cause rupture of the starch cellulose envelopes of the starch granules and to produce an adhesive adapted for gluing wood and the like and having free-flowing properties when cold.

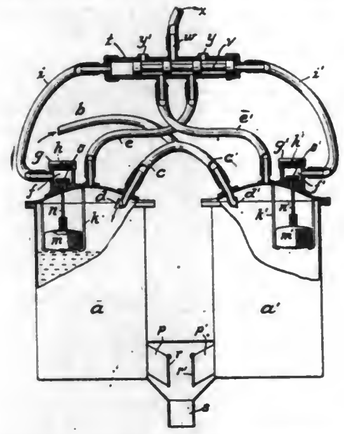
1,813,237. HANDWRITING MACHINE. ROBERT A. FLUM, Cleveland Heights, Ohio. Filed Apr. 5, 1929. Serial No. 352,627. 5 Claims. (Cl. 281—11.)



1. In a handwriting machine, a separable paper advancing unit, a frame including side members, a bottom member having inturned side portions constituting a guide for the paper, and a semi-cylindrical end member secured between said side members, a feed roller positioned in said semi-cylindrical end member and journaled in the side member, the semi-cylindrical member having openings, spring pressed rollers secured to the end of said side members extending through said semi-cylindrical member for holding the paper against said feed roll, a platen secured at the top of said members extending from said feed roller, and means pivoted to said frame for engaging said feed roller for rotating the same.

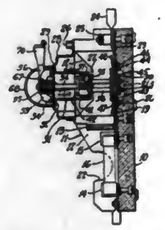
1,813,238. CONTINUOUS MILK DELIVERY SYSTEM. CYRUS HOWARD HAPGOOD, Nutley, N. J., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 18, 1929. Serial No. 415,098. 10 Claims. (Cl. 31—58.)

8. A continuous milk delivery system comprising a pair of tanks, a milk inlet to both tanks, air pipes one opening into each tank, a source of suction, a main pressure operated control valve adapted in one position to connect one air pipe with suction and the other air pipe with a source of higher pressure, and adapted in another position to reverse said connections, air passages connected with opposing pressure faces of the main valve and with the respective tanks, valves between the tanks and the respective air passages and operable by unbalanced pneumatic pressure whereby when one tank is under suction the corresponding valve is held closed, a float in each



tank movable independently of the corresponding valve but adapted, when lifted to a predetermined level by accumulating milk in a tank, to lift the corresponding valve and connect the corresponding air passage with suction and thereby effect movement of the valve from one operative position toward the other, the valve controlling the other air passage being opened by unbalanced pressure to maintain air pressure in the corresponding air passage to insure the completion of the shift of the main valve.

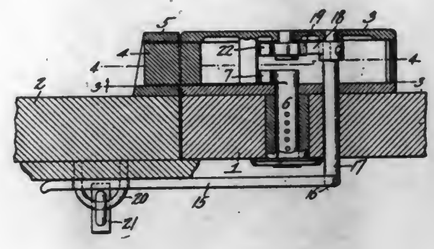
1,813,239. BRUSH CONTACT SWITCH. HENRY F. HOLKENBRINK, Portland, Oreg. Filed Aug. 13, 1928. Serial No. 299,302. 4 Claims. (Cl. 200—16.)



1. A molded base for brush contact switches consisting of a rectangular base plate having three parallel walls formed thereon forming a pair of adjacent channels, each of said channels having fuse terminals at one end and brush contact bars at the opposite end thereof, and having a transverse partition connecting the outer and inner partition between said fuse terminals and said brush contact bars.

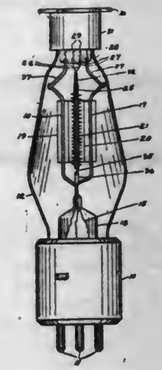
1,813,240. LOCK. THEODORE H. JOSEPH, New York, N. Y. Filed Jan. 14, 1928. Serial No 246,790. 6 Claims. (Cl. 70—5.)

1. In combination, a bolt, means for throwing the bolt in either direction, means independent of said first mentioned means for throwing the bolt in one direction only, an auxiliary locking device, and a key operated member, one of said bolt throwing means being responsive to said



key operated member and the other bolt throwing means being responsive to operation of said auxiliary locking device.

1,813,241. THERMIONIC TUBE. EARL L. KOCH, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 9, 1926. Serial No. 100,897. 3 Claims. (Cl. 250—27.5.)

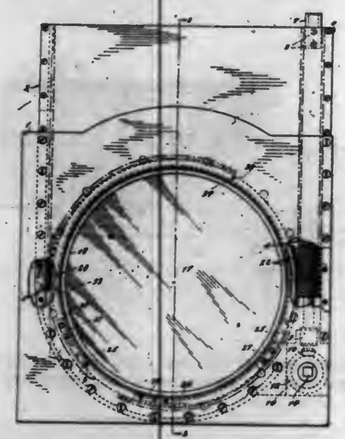


2. In a vacuum tube, a stem, spaced wires extending from said stem, a plate fixed to said wires, a grid, wires extending from said stem for supporting said grid from said stem in fixed relation to said plate said wires being offset so as to lie in a plane at substantially right angles to the plane of said spaced wires, a cathode associated with said grid and attached to said stem and having a conductor extending through said stem, a heating element for said cathode, a secondary stem, leads for said heating element extending through said secondary stem, and means joining said secondary stem to said wires whereby said cathode is maintained in fixed relation to said plate.

1,813,242. AIRPORT CLOSURE DEVICE. WALDO L. KRAEMER, Brooklyn, N. Y., and JOSEPH E. GARABRANT, Montclair, N. J., assignors to Kearfott Engineering Company, Inc., a Corporation of New York. Filed Mar. 13, 1929. Serial No. 346,557. 11 Claims. (Cl. 114—177.)

1. In an airport construction, a casing, a rack rigidly secured to a wall of said casing, a closure member having

a circular frame, gear teeth on said frame and adapted to engage said rack, means for rotating said frame about its



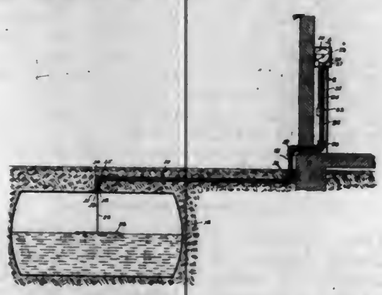
center as an axis to roll the closure member along said rack, and means for firmly securing the closure member in the closed position.

1,813,243. HAIR WAVER. ANTON KRETSCHAN, Chicago, Ill. Filed Nov. 21, 1929. Serial No. 408,697. 5 Claims. (Cl. 132—38.)



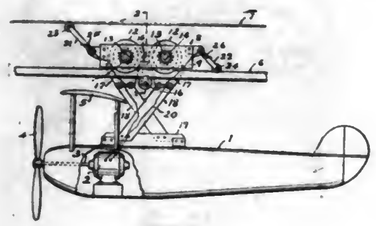
3. A hair device comprising a U-shaped frame member, tooth members V-shaped in cross section on the legs of said frame, a track member hinged to the base of said U-shaped member and having lateral extensions providing means for engaging the legs of said frame member, said track having a slotted section, and a flexible base having bristles seated in said track and having a handle portion projecting through said slot to provide means for adjusting said base along said track.

1,813,244. OIL GAUGE. WALTER R. LAWSON, Clarinda, Iowa. Filed July 10, 1928. Serial No. 291,612. 2 Claims. (Cl. 73—82.)



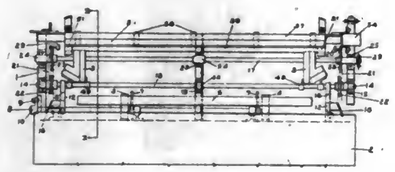
1. A liquid gauge comprising a casing, a horizontal shaft rotatively mounted therein, a drum supported on said shaft, a graduated tape wound spirally on the periphery of said drum with its free end projecting downwardly into a tank, a float connected to the lower end of said tape, a second drum on said shaft provided with a frusto-conical shaped working surface, a cable wound on said second drum in the opposite direction from which the tape is wound on the first drum, said cable being wound on the second drum to approach its smaller diameter as the first drum is unwound, and vice versa, and a weight on the free end of said cable.

1,813,245. TROLLEY PLANE. FREDERICK H. MANSFELD, Houston, Tex. Filed Aug. 27, 1928. Serial No. 302,184. 1 Claim. (Cl. 104—23.)



The combination with an aeroplane having a fuselage, a plane, and a propeller, of an electric motor carried by the fuselage and operatively connected with the propeller, an overhead trolley wire and track, a carriage having carrier wheels movable along said track, a hanger connecting the fuselage rigidly to the carriage, a current conductor into which the motor is connected leading from the trolley wire and grounded on the track, yieldably mounted trolley poles pivotally connected to the carriage and supporting said conductor and having trolley wheels, one of which moves in contact with the trolley arm and the other of which moves in contact with said track.

1,813,246. DEVICE FOR CUTTING RUBBER TUBES. GEORGE J. MEAD, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1925. Serial No. 69,125. 18 Claims. (Cl. 164—38.)

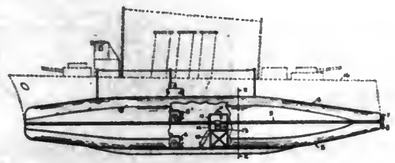


1. A device for cutting tubes to length while supported on a mandrel which comprises, a relatively stationary cutting element and means to roll the tube and mandrel bodily over said element.

1,813,247. DETERGENT. MENAHEM MERLUB-SOBEL, New York, N. Y. Filed July 6, 1925. Serial No. 41,877. 1 Claim. (Cl. 87—5.)

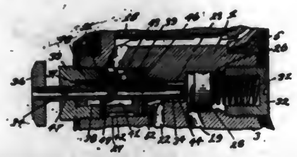
A detergent preparation consisting of a pulverized mixture containing approximately: Soap 10% (anhydrous content), colloidal clay 2½% (anhydrous content), soda ash 45% (anhydrous content), water 42½%.

1,813,248. MARINE VESSEL. WILLIAM R. MESTICE, Newark, N. J. Filed Oct. 9, 1928. Serial No. 311,359½. 5 Claims. (Cl. 114—16.)



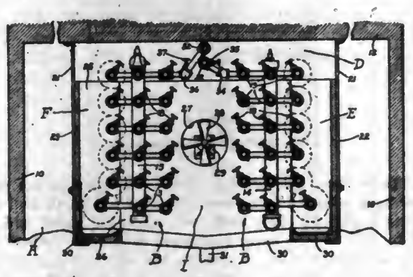
1. In combination, surface and sub-surface marine vessels, said sub-surface vessel secured below and extending the entire length of the keel of said surface vessel, and means for releasing and separately operating said vessels.

1,813,249. TIRE GAUGE. MALCOLM E. MITCHELL and ARTHUR F. SWAN, Oakland, Calif. Filed Jan. 27, 1930. Serial No. 423,804. 2 Claims. (Cl. 152—11.5.)



1. A valve mechanism for tire gauges comprising a valve mounted in connection with a supply passage for delivering air from a source of compressed air to a tire; means normally moving the valve to closed position; and an actuating member slidably mounted in axial alinement with the valve and movable to engage and move the valve to open position, said member having a gauge supply passage formed therein and having an inlet opening at the end adjacent the valve to deliver air from the delivery side of the valve to a pressure actuated gauge member, said opening being closed by engagement with the valve when the valve is moved to open position; and a vent passage formed in the actuating member and opening to the atmosphere to release the pressure from the gauge when the actuating member is moved to valve opening position, said vent passage being closed when the actuating member is moved to normal valve closing position.

1,813,250. MEANS FOR CONDITIONING AND CIRCULATING THE AIR IN COLD STORAGE ROOMS. CHARLES A. MOORE, Edina, Minn. Filed Feb. 7, 1929. Serial No. 338,181. 16 Claims. (Cl. 62—103.)



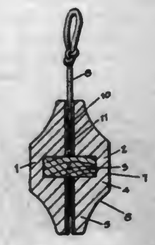
13. In combination, a structure forming a chamber, a bank of refrigerant conductors extending along the chamber near the ceiling, and formed to provide a vertical central port extending along the same, and a ~~fan~~ arranged to blow air into said port longitudinally thereof from one end of the bank of conductors.

1,813,251. WRITING DEVICE. HOWARD I. MORRIS, Lakewood, Ohio, assignor to The Yoder Pencil Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Dec. 29, 1921, Serial No. 525,585. Divided and this application filed Nov. 17, 1924. Serial No. 750,276. 20 Claims. (Cl. 120—17.)



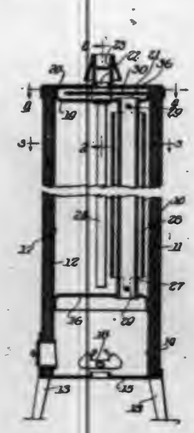
1. In a pencil, the combination of a body adapted to have a lead project from one end thereof, a tubular element mounted to reciprocate in said body and slidably supporting the lead, feeding means movably mounted in said element and comprising a lower member engaging said lead and an upper member, means for locking the upper member of said feeding means against rearward movement, a spring tending to move said element outwardly and arranged to be put under tension when said element is moved inwardly, and a device carried by said element and arranged to engage with the upper member of said feeding means and operate the latter during its outward movement.

1,813,252. TOY. HUBERT A. MYERS, Toledo, Ohio. Filed Nov. 5, 1929. Serial No. 405,021. 1 Claim. (Cl. 46—14.)



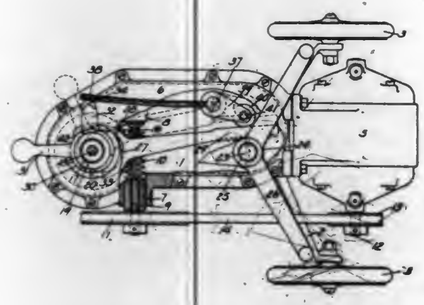
In a toy, a pair of members formed of fragile palatable material, the members having lateral surfaces located in proximity to each other and in opposed relation to each other, the lateral surfaces having relative tough discs of thin sheet material located thereon, an axle member having its ends embedded within the said members, and a cord attached to the axle whereby the cord may be wound on the axle between the discs of relative tough material to cause the inertia of the members to raise the toy and wind up the string when in rotation and the fragile palatable material is protected from the rubbing of the cord and the cord is protected from impregnation by the fragile material.

1,813,253. WATER HEATER. JESSE H. NEWPORT, Kenilworth, Ill. Filed Oct. 5, 1928. Serial No. 310,504. 3 Claims. (Cl. 122—17.)



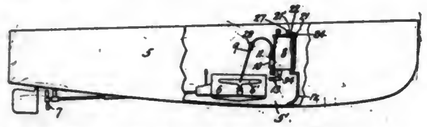
1. In a heater of the character described, the combination with a heat source and a receptacle having a cup-shaped member adjacent its top; of enclosing means cooperating with said cup-shaped member to provide a chamber having a vent; a pipe extending through said chamber into said receptacle; means providing a flue communicating with said heat source and said chamber; and a baffle member located within said chamber and having an aperture for the reception of said pipe, said aperture being defined by flanges providing an air space about said pipe, said flanges serving to support said baffle member in position intermediate the outlet of said flue and said vent.

1,813,254. STARTING AND STOPPING MECHANISM. JULIAN L. PERKINS, West Springfield, and HIRAM D. CROFT, Springfield, Mass., assignors to Perkins Machine and Gear Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 20, 1928. Serial No. 307,260. 9 Claims. (Cl. 74—14.)



1. In mechanism of the class described, a rotatable member, an eccentric, an oscillatory member driven by said eccentric, and adapted to be swung thereon into and out of engagement with said rotatable member, and means to actuate said oscillatory member into such engagement, and permit it to become disengaged, said eccentric rotating in a direction tending to actuate said oscillatory member out of engagement with said rotatable member.

1,813,255. MEANS FOR REMOVING WATER FROM MOTOR BOATS. JOHN F. PETRE, Farmingdale, N. Y. Filed May 2, 1930. Serial No. 449,180. 14 Claims. (Cl. 114—183.)



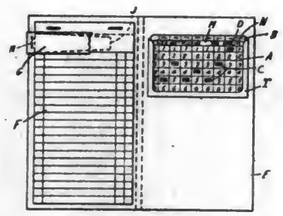
1. In a motor boat, a chamber having an intake connection with the bilge of the boat and an outlet connection to the exterior of the boat, an internal combustion engine including a suction manifold, and means comprising a connection from said chamber to said manifold for causing the removal of water from said boat.

1,813,256. BOX. LAURENT V. RADKUS, Chicago, Ill., assignor to Hindu Incense Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed May 1, 1929. Serial No. 359,508. 1 Claim. (Cl. 206—65.)



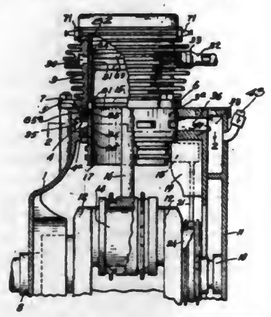
A rectangular shallow box having a lengthwise extending flat false bottom therein lying parallel with the bottom of the box and formed with a centrally located upstanding rib dividing said box into two parallel compartments for receiving a layer of flat fragile pieces of incense, a cover hinged to said box and telescoping thereon, and a bowed piece of resilient cardboard of greater width than the width of the cover and of less length than the length of the cover contained in the cover and held therein by its inherent flexibility, said resilient card being adapted to enter the box when the cover is closed and apply a light pressure over a substantial portion of the fragile pieces, whereby they are held in a flat condition upon the flat false bottom of the box.

1,813,257. CREDIT SYSTEM. JAMES H. RAND, Jr., Tonawanda, N. Y., assignor, by mesne assignments, to Remington Rand, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 13, 1925. Serial No. 8,909. 8 Claims. (Cl. 283—7.)



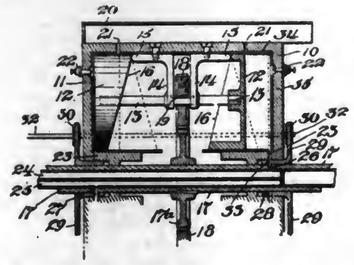
1. In a fraud preventing device the combination of an order book adapted to be retained by a salesman and comprising a pair of cover members, an order blank pad carried by one of said cover members, each page thereof having a section provided to receive the name of a purchaser, a card holder carried by the other of said cover members, a plurality of identification characteristics associated with said holder, a card adapted to be retained by a customer and having a plurality of openings provided therein for registry with certain of the characteristics associated with said holder when said card is properly positioned in said holder and indicative of the ownership of said card, and an impression forming member permanently mounted on said card for registry with the name section on said pad and adapted to impress through a suitable impression transferring medium the name of the customer in said section when said card is properly positioned in said holder and the identity of the purchaser is disclosed by the characteristics visible through the openings therein, by closing the covers of said book and applying pressure thereto.

1,813,258. INTERNAL COMBUSTION ENGINE. GEORGE RILEY, Los Angeles, Calif. Filed Aug. 28, 1928. Serial No. 302,481. 5 Claims. (Cl. 123—44.)



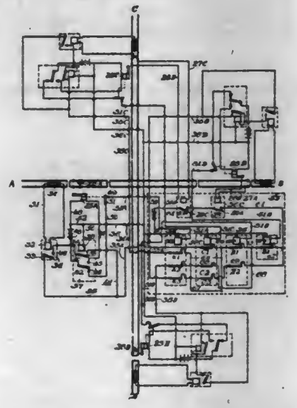
2. A two cycle internal combustion engine including a cylinder having an intake and an exhaust, a single sleeve valve controlling the intake and the exhaust, a reciprocating piston, and an operating connection causing axial reciprocation of the sleeve valve in advance of reciprocation of the piston, the sleeve valve having an outlet at its upper end and an inlet medially of its length, and the parts being so arranged that when the piston is at upper dead center the sleeve valve closes both the exhaust and intake of the cylinder; and during down stroke of the piston the valve inlet alines with the cylinder intake, with the piston closing said alined inlet and intake, and the valve outlet alines with the cylinder exhaust after the piston has completed at least one-half of its down stroke; and during the remainder of the down stroke of the piston the said inlet and intake and the said outlet and exhaust remain in alinement with the piston uncovering said alined inlet and intake appreciably in advance of completion of its down stroke; and at the start of the up stroke of the piston the said outlet is moved out of alinement with the exhaust, while the said inlet and intake remain in alinement and uncovered by the piston, and when the piston has completed a part of its up stroke the said inlet is moved out of alinement with the intake.

1,813,259. ENGINE. JACOB SCHICK, Sound Beach, Conn., assignor to Schick Dry Shaver, Inc., a Corporation of Delaware. Filed Feb. 25, 1929, Serial No. 342,369. 7 Claims. (Cl. 123—45.)



6. An engine comprising a pair of opposed cylinders, pistons in the cylinders, a shaft secured to the pistons, abutments in the cylinders, the pistons having cam surfaces to engage the abutments whereby the pistons and the shaft are caused to revolve when they reciprocate, the cylinders having ports opened and closed by the pistons, a main shaft driven from the shaft connecting the piston, the shaft having an exhaust passage and a fuel passage therein with opening to register with the ports in the cylinders and a control member interposed between the cylinder and the main shaft with an opening ot be placed in selected positions to control the duration of opening of the cylinder port.

1,813,260. RAILROAD CROSSING TRAFFIC SYSTEM. ARCHIBALD G. SHAVER, Chicago, Ill. Filed June 14, 1927. Serial No. 198,825. 37 Claims. (Cl. 246—63.)

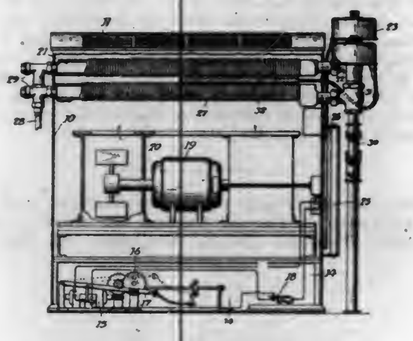


1. In a railroad crossing protection system of the character described including an interlocking means for coordinating electrical circuits, a track system comprising means along the track adapted to receive an impulse from a passing train, a home signal located between said means and the rail junction normally indicating "stop" and adapted to be changed to indicate "clear", a local electric circuit adapted upon closure to change the signal to "clear", said circuit comprising an electrical source, a relay operated switch, and said signal; a relay coil for said switch, a current providing means adapted to energize said coil upon the receipt of said impulse from the train, a second relay switch associated with said coil, normally live terminals connected into the interlocking means, a loop of a circuit connected to said terminals comprising said second relay switch, and said relay coil, whereby when said terminals are alive the signal may be held "clear", and when said terminals are dead the signal indicates "stop", and a loop of a circuit normally completed in the interlocking means, said loop comprising in series, a switch adapted to be closed when the signal indicates "stop", and the electrical source.

1,813,261. HEATING AND VENTILATING UNIT. MORTON O. SNEDIKER, Chicago, Ill. Filed May 5, 1930. Serial No. 449,947. 5 Claims. (Cl. 236—38.)

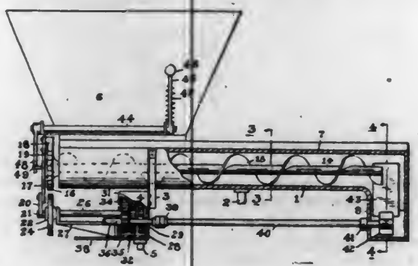
1. In combination, a casing having an upper air-outlet opening and two air-inlet openings, one of the latter being connected to the space the temperature of which is to be controlled and the other connected to a space outside of said temperature-controlled space, a pair of independent heat exchange elements in said casing, a thermostat for controlling the admission of air to said casing either from the inside or outside spaces, a second thermostat for controlling the admission of heat to the lower of said heat exchange elements according to the temperature of the space between the superposed heat exchange elements,

and a third thermostat mounted in the space the temperature of which is to be finally controlled, and control-



ling the admission of heat to said upper heat exchange element according to the temperature of the air in said temperature controlled space.

1,813,262. MECHANICAL STOKER. TRUMAN R. SNYDER, Meadville, Pa., assignor to Frederick C. Hinkel, Ross Township, Allegheny County, Pa. Filed Jan. 17, 1929. Serial No. 333,087. 6 Claims. (Cl. 198—128.)



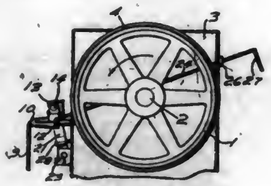
1. In a mechanical stoker, the combination of a horizontally disposed conveyer trough, a feed hopper at one end of said trough, a shaft extending through said trough, a bearing for said shaft at the feed end of the trough, the other end of said shaft being free for movement transversely to the axis of the trough, a conveyer worm carried by said shaft, an ejector box at the other end of the trough and into which the fuel is delivered by the conveyer worm, said box being provided with a doorway, and an ejector in said box to discharge the fuel through said doorway.

1,813,263. FLOATING AIRPORT. JAMES H. TODD, Brooklyn, N. Y., and GEORGE F. WHEELER, Riverside, Conn. Filed Aug. 1, 1929. Serial No. 382,697. 3 Claims. (Cl. 114—0.5.)



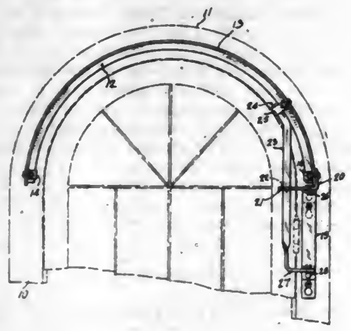
1. The combination with a float having a ramp at one end thereof and mooring means at its other end, of mooring standards positioned concentrically about said mooring means, and means carried by said float to co-act with said mooring standards for swinging said float into an adjusted position.

1,813,264. TIRE BUILDING MACHINE. GEORGE F. WIKLE, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Sept. 21, 1927. Serial No. 220,921. 1 Claim. (Cl. 164—36.)



A device of the character described comprising, a support extending transversely of the surface of the drum of a tire building machine, mounted for pivotal movement toward and from the drum about an axis parallel to the axis of the drum and normally held out of operative position by its own weight and that of the parts carried by it, a knife carrier suspended from the support, a knife adjustably secured in the carrier, means to swing the support toward the drum to bring the knife into contact with the tire on the drum and a spring connection between the carrier and the support to provide a yielding pressure controlled by the support moving means.

1,813,265. SWINGING DRAPERY SUPPORT FOR CIRCLE-HEAD WINDOWS. JOHN WITTEMANN, Los Angeles, Calif. Filed July 26, 1930. Serial No. 470,843. 2 Claims. (Cl. 156—19.)

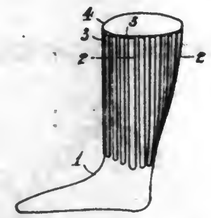


1. A swinging drapery support for a circle-head window, comprising a flat metal strip curved edgewise to conform to the contour of the window, a bent wooden strip overlapping the outer curve of the said metal strip, and clamps engaging the metal strip and secured to the flat wooden strip to maintain the angular cross-sectional arrangement of the associated metal and wooden strips.

1,813,266. SELF-SUPPORTING HOSE. LEONARD WOODS, St. Louis, Mo. Filed June 19, 1929. Serial No. 371,978. 2 Claims. (Cl. 139—388.)

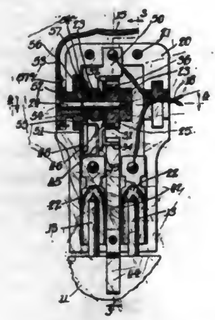
1. A self-supporting hose comprising a woven stocking portion having a substantially cylindical leg portion formed of longitudinally disposed straight stiffening warp portions and circumferential weft integrally interlaced

with and frictionally engaging intermediate portions of the stiffening warp portions extending from the ankle



portion to the open end to support all parts of the leg of the stocking when adjusted on the leg of the wearer and avoid its slipping downward toward the ankle.

1,813,267. CONTROL DEVICE FOR ELECTRIC IRONS AND THE LIKE. CHARLOTTE ARNESEN, Chicago, Ill. Filed June 22, 1925, Serial No. 38,690. Renewed Nov. 26, 1930. 9 Claims. (Cl. 200—138.)

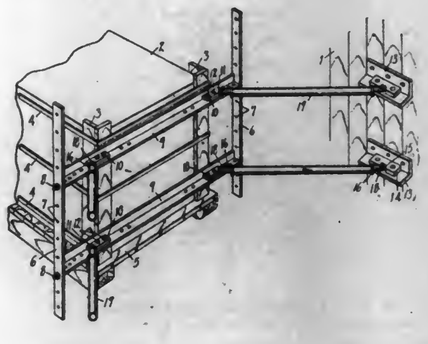


1. A control device for electrically heated implements having an electrical heating circuit, two switches in parallel in said circuit, means to close one switch when the implement is held for use, said means and said switch being arranged to open automatically when not held in use, manual means to close the other switch, and thermostatic means to open the other switch automatically at a predetermined maximum temperature of the implement.

1,813,268. PROCESS OF MAKING LEGUMINOUS FLAKES. FREDERICK R. BACHLER, Oxnard, Calif. Filed Aug. 1, 1927. Serial No. 209,970. 4 Claims. (Cl. 99—11.)

1. A process of making leguminous flakes which consists in extracting unpleasant-tasting compounds and bodies from legumes by leaching, in a stream of continuously changing cold or lukewarm water expelling odoriferous volatile matter from the leached legumes by steaming, cooking, and disintegrating the legumes by subjecting them to a pressure-cooking operation, circulating steam into and out of the vessel containing the disintegrated and cooked mass so as to discharge odoriferous and volatile matter therefrom, converting the cooked mass into one of a creamy consistency by homogenizing, seasoning the creamed mass by treating a portion thereof so as to convert a portion of its starch content into glucose and to produce sodium chloride therein, mixing the treated portion with the remainder of the mass, causing the mass to adhere as a film upon a heated surface, without exerting a pressure upon the mass, scraping off the film from the heated surface and thereby producing flakes of a light texture, and finally baking the flakes.

1,813,269. LOAD BLOCKING DEVICE FOR FREIGHT CARS AND THE LIKE. RAY W. BARRETT, Kalamazoo, Mich. Filed Sept. 12, 1929. Serial No. 392,042. 6 Claims. (Cl. 105—369.)



1. In a blocking apparatus, the combination of a load engaging abutment comprising uprights, angle iron thrust bars mounted for independent vertical adjustment on said uprights with their angles facing upwardly, their horizontal arms being provided with adjustable thrust blocks having curved seats, thrust plates adapted to be secured to the side walls of a freight car and provided with thrust blocks having curved seats, shouldered coupling members pivotally mounted on said thrust bars and thrust plates and having rounded ends coacting with said seats in said thrust blocks, and tubular struts engaging said shouldered coupling members.

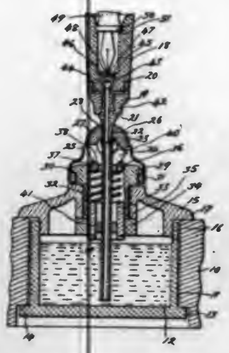
2. In a blocking apparatus, the combination of a load engaging abutment comprising uprights, thrust bars mounted on said uprights and provided with thrust blocks having curved seats, thrust plates adapted to be secured to the side walls of a freight car and provided with thrust blocks having curved seats, shouldered coupling members pivotally mounted on said trust bars and thrust plates and having rounded ends coacting with said seats in said thrust blocks, and tubular struts engaging said shouldered coupling members.

1,813,270. ELECTRICAL HEATER. CHARLES D. BENEDICT, Sturgis, Ky. Filed Jan. 20, 1930. Serial No. 422,101. 2 Claims. (Cl. 219—41.)



1. An electrical heater of the class described comprising a handle having a socket in its inner end, and an opening formed in the handle with a bore connecting the opening with the socket, a perforated cylinder, a tubular shank connected with one end of the cylinder having its other end embedded in the socket, a smaller cylinder located in and spaced from the first cylinder, a shank connected with one end of the small cylinder, and passing through the tubular shank and through the bore in the handle into the opening in the handle, non-conductor material located between the two shanks and insulating them one from the other, a conductor connected to the tubular shank and a conductor connected to the end of the central shank which extends into the opening in the handle.

1,813,271. FOUNTAIN PEN DESK SET. ANDREAS BIENENSTEIN, Toledo, Ohio, assignor to Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 26, 1929. Serial No. 388,589. 8 Claims. (Cl. 120—4.)

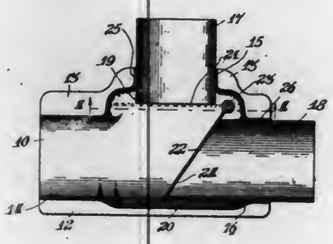


1. A fountain pen desk set comprising a pen supporting receptacle, a base, means connecting said receptacle to said base comprising a semiball-shaped member on said receptacle having an opening extending therethrough, a second member on which said semiball-shaped member is rotatably journalled, said second member also having an opening extending therethrough and means for rotatably mounting said second member on said base.

1,813,272. DEHYDRATION. WILHELM BILTZ, Hanover, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 3, 1929, Serial No. 330,132, and in Germany May 14, 1927. 4 Claims. (Cl. 23—110.)

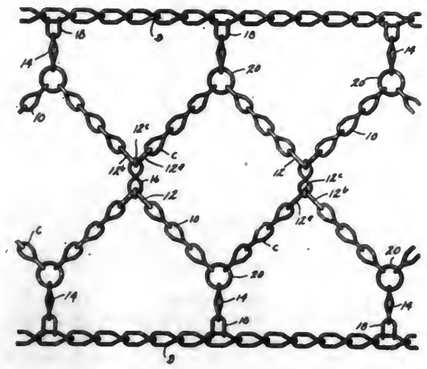
2. A process for the dehydration of a hydrogel of silicic acid, which comprises treating the said hydrogel with liquid ammonia.

1,813,273. VALVE CONSTRUCTION AND METHOD FOR MAKING THE SAME. SIDNEY J. V. BOVEY, Chicago, Ill., assignor, by mesne assignments, to Metalcraft Heater Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed June 27, 1927. Serial No. 201,675. 4 Claims. (Cl. 251—156.)



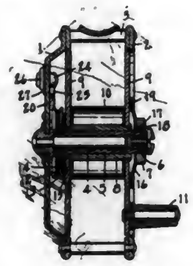
1. The herein described method of making a valve from sheet metal consisting of first stamping two valve casing members having corresponding semi-circular flanges and complementary laterally extending flanges thereon, then pivotally mounting a flap between said casing members at a point along said laterally extending flanges, then inserting tubular members in said semi-circular flanges and adjusting them so that the flap properly seats on the inner edges thereof, then welding the semi-circular flanges to said tubular members.

1,813,274. TIRE CHAIN. WILLIAM J. BROOKS, Des Moines, Iowa. Filed Mar. 11, 1929. Serial No. 346,178. 5 Claims. (Cl. 152—14.)



1. In a tire chain, a pair of side chains, angularly arranged cross chains and a closed link connection included in said cross chains, said closed link connection being V-shaped by bending the link whereby two V-shaped legs are formed, one of said legs being in contact with a tire to which the tire chain is applied and the other one being spaced therefrom.

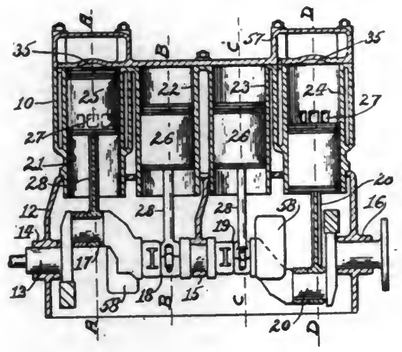
1,813,275. FISHING REEL. FRANK BURDICK, Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Mar. 24, 1930. Serial No. 438,309. 9 Claims. (Cl. 242—84.5.)



8. In a fishing reel, the combination of a frame, a spool, a brake drum having frictional driving connection to said spool, a brake shoe pivotally mounted to coact with the periphery of said brake drum and so that rotation of the drum in one direction tends to engage said brake, and means for holding said brake shoe in inoperative position.

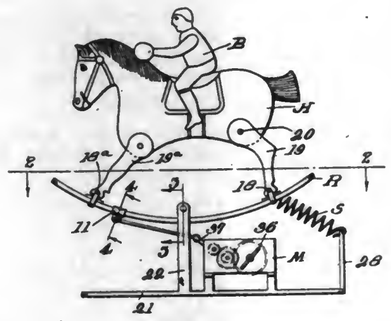
1,813,276. INTERNAL COMBUSTION ENGINE. EVERETT R. BURTNETT, Los Angeles, Calif., assignor, by direct and mesne assignments, to The Automotive Valves Corporation, Reno, Nev., a Corporation of Nevada. Filed Mar. 17, 1927. Serial No. 176,057. 1 Claim. (Cl. 123—60.)

In a two stroke cycle internal combustion engine, eight main cylinders, arranged in two rows, four cylinders in a row, the planes occupied by the axes of the two rows of cylinders being disposed 90° apart, eight auxiliary cylinders disposed in two rows of four cylinders each, one auxiliary cylinder being disposed immediately above each main cylinder, thereby forming four units, each comprising four cylinders that are arranged in pairs, each pair comprising a main cylinder and an auxiliary cylinder, the two pairs of cylinders at each end of the structure functioning as combustion units, the intermediate pairs of cylinders functioning as charge pumping units, pistons arranged for operation within all of the cylinders, a crank shaft having four throws arranged ninety degrees apart, connections from two pistons within the main cylinders, one in each row of main cylinders to each crank throw, gaseous fuel inlet ports formed in the walls of the auxiliary cylinders, the pistons in the auxiliary cylinders functioning as valves for opening and closing said ports for con-



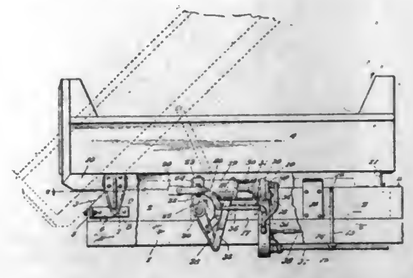
trolling the passage of charge volumes to the pumping cylinders and to the combustion cylinders, a cam shaft, connections from said cam shaft to the crank shaft, whereby said cam shaft operates synchronously with said crank shaft, connections from said cam shaft to said pistou valves, the main cylinders of the combustion units being provided intermediate their ends with exhaust ports that are open when the pistons within said cylinders are at the crankward limit of their respective cylinders, and counterbalancing weights mounted on the crank arms between each pair of crank throws and which counterweights are disposed 120° from the crank pins of the adjacent crank throws.

1,813,277. ROCKING FIGURE TOY. GEORGE PAN CHURUS, New York, N. Y. Filed Aug. 21, 1930. Serial No. 476,903. 3 Claims. (Cl. 46—40.)



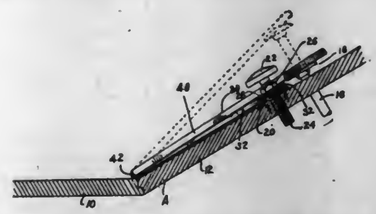
1. A rocking toy comprising a base, a pair of rockers pivotally supported by the base, a vertical arm secured to one end of the base, a motor operatively associated with the rockers, and a spring connected to the rockers and to the vertical arm.

1,813,278. DUMPING UNIT FOR TRUCKS. THOMAS HERBERT CLARK, Marion, Ohio, assignor to The Marion Steel Body Company, Marion, Ohio, a Corporation of Ohio. Filed Jan. 29, 1930. Serial No. 424,371. 2 Claims. (Cl. 298—22.)



1. A dumping unit for vehicles comprising a pair of beams, a dumping body mounted upon the beams for rocking movement about the rear ends of the same in a vertical plane, a cross bar connected with and disposed between the beams in advance of the rear ends thereof, a cylinder secured at its front end upon said cross bar, a transverse rod mounted fixedly in the beams at the rear of said cross bar and below the cylinder, a sleeve engaged about said rod and supporting the rear end of the cylinder, a piston mounted in the cylinder, means for operating the piston by fluid pressure, cranks mounted upon the fixed transverse rod to turn thereon at the sides of the cylinder, links connecting the respective cranks with the dumping body, a crosshead connected with the piston at the rear of the cylinder and above said rod, segments mounted on the fixed transverse rod at the sides of and connected with the cranks, and flexible connections between the crosshead and the cranks, said connections passing forwardly from the crosshead over and being supported by the segments.

1,813,279. ACCELERATOR PUSH ROD CONTROL. HARRY J. COCKS, Des Moines, Iowa, assignor to Metal Products Company, Des Moines, Iowa. Filed July 29, 1929. Serial No. 381,952. 2 Claims. (Cl. 74—81.)

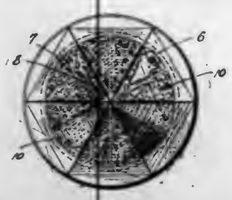


1. For use with an accelerator push rod having a foot rest mounting at the side thereof, an accelerator pedal and a bracket therefor, said bracket having one end secured to said foot rest mounting and its other end substantially spaced rearward and sideward from said first end and located rearward of said accelerator pedal, one end of said accelerator pedal being hinged to the second-mentioned end of the bracket and its other end engaging said push rod whereby said pedal is in substantial alignment with the foot of a driver when using said pedal.

1,813,280. PAPER WEIGHT. CHARLES ERIN COLE, Cripple Creek, Colo. Filed Dec. 3, 1929. Serial No. 411,333. 1 Claim. (Cl. 35—12.)

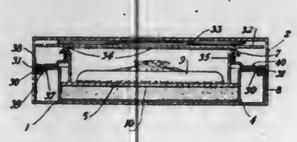
A paper weight including a magnifying glass constituting a body having separate non-communication recesses

extending upwardly thereinto from the bottom for holding specimens to be displayed and magnified, and a closure seated in the base of the magnifying glass for closing all



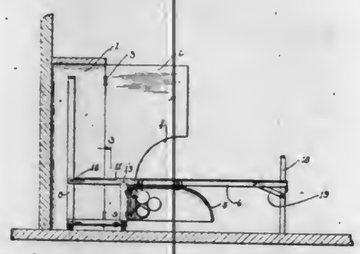
of the recesses and retaining specimens therein, the several recesses increasing in depth but diminishing in width toward the center of the device thereby to constitute segmental containers.

1,813,281. FACE POWDER BOX. CHARLES DAVIS, Neuilly-sur-Seine, France. Filed Mar. 28, 1930, Serial No. 439,742, and in France Apr. 9, 1929. 6 Claims. (Cl. 132—83.)



6. A face-powder box comprising a casing composed of two parts hinged together, a container for powder situated in one part of said casing, a frame adapted to slide in and out of said part of the casing, a rotary compressor carried by said frame for compressing powder in said container into a soft but firm compact, and a pressing plate and a spring situated in the other part of said casing for pressing said compressor into firm contact with the powder compact in said container when the frame and compressor are in the operative position and said two parts of said casing are closed together.

1,813,282. COMBINATION FOLDING BED AND IMITATION FIREPLACE. MORRIS DEMLINGER, Chicago, Ill. Filed May 27, 1929. Serial No. 366,452. 1 Claim. (Cl. 5—159.)



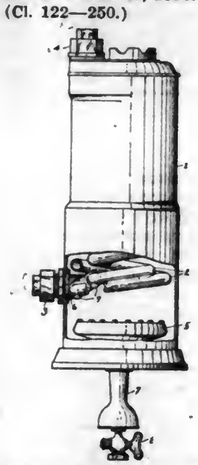
A device of the type described comprising a housing, a bed, means whereby said bed may be folded so as to be disposed in said housing, a fireplace unit carried by said bed, and a door for said housing having a cutaway portion arranged to conform to said fireplace unit when said door is in closed position.

1,813,283. LINGERIE FASTENER. RUTH FREEDMAN, New York, N. Y. Filed July 6, 1929. Serial No. 376,416. 3 Claims. (Cl. 24—73.)



1. A lingerie fastener including a safety pin adapted to be secured to the shoulder portion of an outer garment, a clasp adapted to be detachably connected to the shoulder strap of an undergarment, and means including a flexible element and hook for detachably connecting the pin and clasp.

1,813,284. COUPLING FOR CIRCULATING COILS. ARTHUR FRIEDMAN, Cleveland, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 29, 1928. Serial No. 257,917. 3 Claims. (Cl. 122—250.)



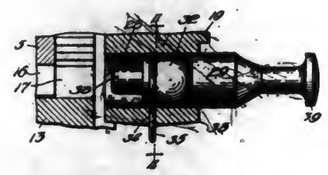
1. A gas fired water heater comprising a heater casing, a circulating coil housed in said casing, a lower coupling member receiving said coil, means to apply heat to said coil, and means integrally formed on said lower coupling member comprising an extending portion of decreasing thickness as its outer edge is approached and adapted for contact with said coil to direct the flow of the condensed products of combustion deposited on said coil from the joint between said coupling member and said coil.

1,813,285. SODA STRAW ATTACHMENT. WALTER GALETSCHKY, Pittsfield, Mass. Filed Feb. 14, 1930. Serial No. 428,406. 3 Claims. (Cl. 299—17.)



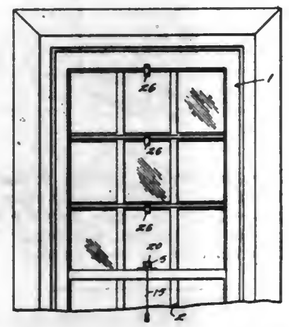
1. An attachment for soda straws of the character described comprising a metallic tapered valve casing, an integral inlet neck on one end of the valve casing, said neck being of less diameter than said casing and having one end formed to provide a valve seat, a ball check valve loosely disposed for movement in the casing and engageable on the seat in a manner to control the passage through the inlet neck, and an integral flared sleeve on the other end of the casing for the reception of the soda straw for detachably mounting the valve casing thereon.

1,813,286. CLUTCH. WILLIAM C. GEWALT, Racine, Wis., assignor to Twin Disc Clutch Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 9, 1928. Serial No. 318,133. 1 Claim. (Cl. 74—39.)



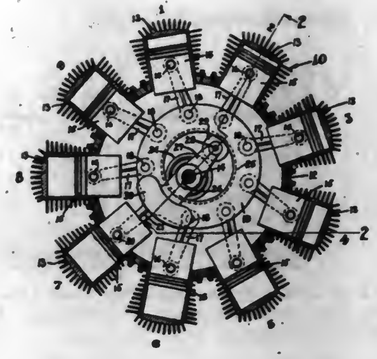
In a device of the class described a pair of members angularly adjustable with respect to each other, one of said members having an annular concentric series of recesses and the other of said members a bore adapted to be brought into registry with any one of said recesses as said members are relatively rotated, the last mentioned member being also slitted on a plane substantially perpendicular to said bore, a locking pin in said bore adapted to slide therein into an inner position in which it engages one of said recesses and into an outer position in which it is out of engagement with the first-mentioned member, said pin being formed with circumferential spaced grooves and an intermediate enlargement tapered toward the respective grooves, and a bifurcated spring member anchored against movement longitudinally of the pin in the slit in the last-mentioned member and engaging the pin on opposite sides thereof and adapted to yieldingly hold the pin either in the locking or in the unlocked position.

1,813,287. AUTOMATIC WINDOW LATCH. HOWARD W. GILBERT, Nazareth, Pa. Filed Jan. 4, 1930. Serial No. 418,590. 3 Claims. (Cl. 292—171.)



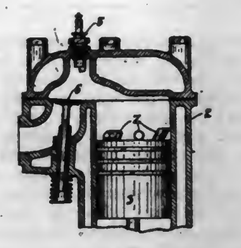
1. In combination, a window latch having a reciprocable bolt and adapted to be mounted upon the top bar of a lower window sash, and a bolt guide and shifting element adapted to be mounted upon a mullion of an adjacent sash to shift said bolt when the first mentioned sash is lifted to permit the bolt to pass the mullion.

1,813,288. RADIAL POWER DEVICE. JACOB B. GROH, Los Angeles, Calif. Filed Oct. 15, 1929. Serial No. 399,792. 7 Claims. (Cl. 74—17.)



1. In a rotary mechanism having a drive shaft, a ring member positioned around said shaft, a member on said shaft, a portion of said shaft engaging said last-mentioned member, an arm secured to said shaft, a rotatable member supported on said arm adjacent one end thereof, said rotatable member engaging said ring member opposite said shaft member and means to move said ring member about an axis eccentric to said shaft.

1,813,289. CARBON CUTTER. DOUGLAS H. HASTINGS, West Sand Lake, N. Y. Filed Apr. 7, 1928. Serial No. 268,311. 4 Claims. (Cl. 15—104.01.)



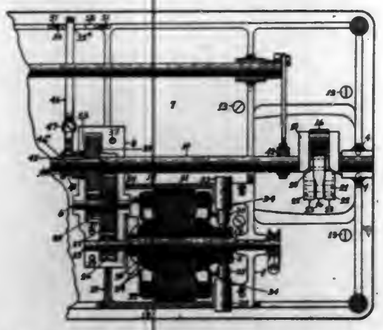
1. A carbon cutter comprising a length of tubing made from a copper-zinc composition having a thickness of from .008 to .018 inches, the length of said tubing being about equal to the diameter thereof, both length and diameter being too great to permit same to pass, without distortion beneath the exhaust valve of an internal combustion engine in which the cutter is designed to be used.

3. The method of cleaning the interior surface of an internal combustion engine cylinder which comprises placing a device in the cylinder, and impacting said device against the interior surfaces of said cylinder directly by a flow of gases into and out of said cylinder.

1,813,290. ELECTRICALLY-DRIVEN SEWING MACHINE. CHARLES W. H'DOUBLER, Racine, Wis. Filed Oct. 8, 1924. Serial No. 742,488. 3 Claims. (Cl. 112—220.)

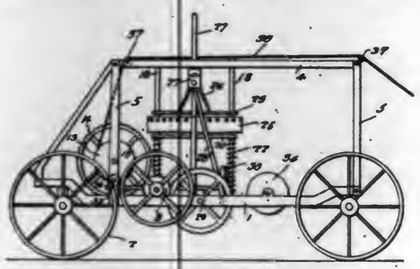
1. In a sewing machine, in combination, a bed-plate supporting a horizontally disposed hook shaft, a motor

having the shaft of the armature portion thereof journaled in the bed-plate adjacent and substantially parallel



to the hook shaft, a driving connection between the motor and the hook shaft and means for connecting and disconnecting said driving connection.

1,813,291. AUTOMATIC WOOD-SAWING MACHINE. HENRY HERMAN HERBOLD, Thayer, Mo. Filed Apr. 5, 1927. Serial No. 181,154. 2 Claims. (Cl. 143—17.)



1. In a wood sawing machine comprising a subframe, a superframe, means for supporting the superframe about the subframe, a power shaft on the subframe, a drum rotatably mounted on the subframe, and being in driven connection with the power shaft, a flexible connection between the work and the drum, a vertical guide bar supported within said frame, a slidable member adapted to be engaged by the work, and a connection between the said member and a saw whereby the saw may be brought to bear against the work when the work has urged the slidable member a predetermined distance, and said vertical guide bar being adapted to guide the saw down upon the work.

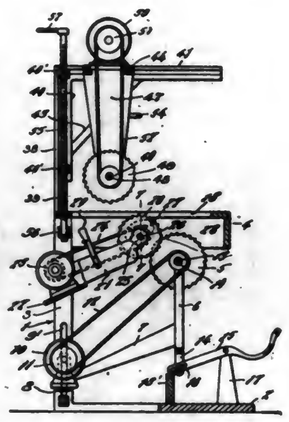
1,813,292. TOBACCO STICK. WINN ESTILLE HORD, Maysville, Ky. Filed Aug. 6, 1929. Serial No. 383,822. 2 Claims. (Cl. 131—22.)



1. A tobacco stick comprising an elongated hollow member, said member being formed to provide longitudinally extending ribs.

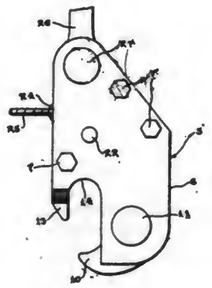
1,813,293. COMBINATION WOOD SAWING MACHINE. JOSEPH HRNCSJAR, Homewood, Ill. Filed Sept. 9, 1929. Serial No. 391,240. 6 Claims. (Cl. 144—3.)

1. A wood sawing machine of the character described comprising a work supporting table having an intermediate slot and a pair of outer slots disposed parallel with said intermediate slot on the opposite sides thereof, a pair of spaced, rotary dado cutters mounted for movement in a horizontal plane above the table for operable engagement with the work thereon, a pair of spaced rotary



dado cutters shiftably mounted beneath the table and operable through the outer slots for engagement with the work, a rotary cut-off saw mounted for vertical movement beneath the table and operable through the intermediate slot for engagement with the work.

1,813,294. CRANE HOOK. CHARLES HUNT, Washington, D. C. Filed May 7, 1929, Serial No. 361,017. Renewed Nov. 20, 1930. 12 Claims. (Cl. 24—241.)

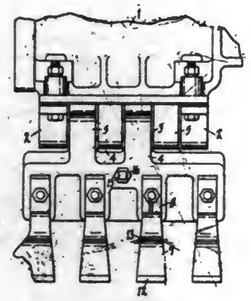


1. A hook device including a frame formed of a plurality of plates, a hook member movably supported by the frame, and means including toggle links for holding the hook member in latched position, said toggle links having a pivotal connection with the hook member.

1,813,295. TAMPING OR BALLASTING MACHINE. CORWILL JACKSON, Chicago, Ill. Filed Aug. 22, 1930. Serial No. 476,992. 10 Claims. (Cl. 104—12.)

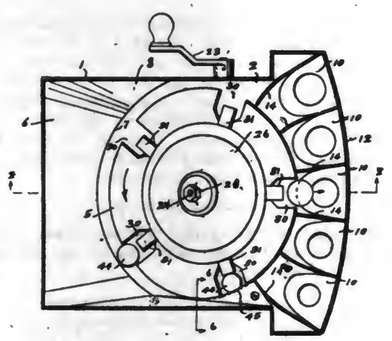
1. In a track working machine, the combination with a drop hammer having depending pivot ears, a pivot carried thereby, tool head members arranged in opposed pairs and having alternately disposed knuckle members engaged with said pivot, said tool head members having spaced tool seats in their outer faces, said seats being

undercut at their upper ends, tools having shank portions arranged in said seats and recesses in their inner sides engaging the lower edges of the head members, bolts for



clamping said tools in said seats, and an adjustable stop carried by one head member to coact with the other for limiting the inward swing of the head members.

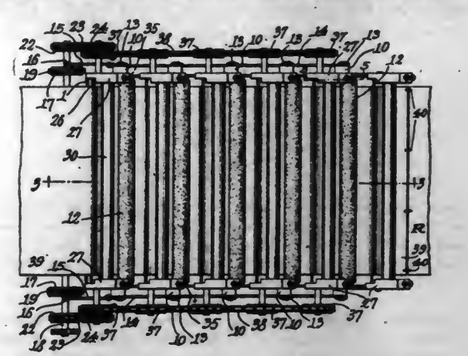
1,813,296. COIN SEPARATOR. ARTHUR C. KIDWELL, Houston, Tex. Filed Mar. 14, 1927. Serial No. 175,148. 13 Claims. (Cl. 133—8.)



1. An apparatus for assorting coins, and the like, of different denominations, including a coin receptacle having a plurality of coin discharge passageways, and means associated with said receptacle and adapted to select coins of different denominations and align them with different passageways, coin ejectors associated with the selector, means acting through the coin for successively retracting the ejectors, means for temporarily retaining the retracted ejectors in retracted position and means for actuating the retracted ejectors when released by said retaining means to permit them to eject the coins into the corresponding passageways.

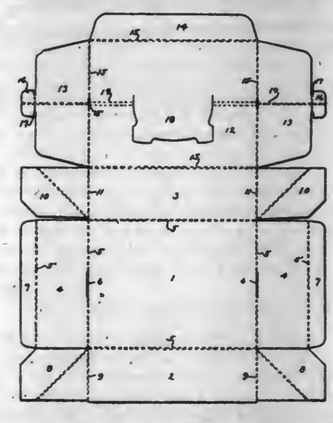
1,813,297. MACHINE FOR WASHING RUGS AND THE LIKE. HERMANN KLEIN, Milwaukee, Wis., assignor to Klein, Weiner & Bell, Milwaukee, Wis., a Firm. Filed Aug. 3, 1928. Serial No. 297,260. 2 Claims. (Cl. 15—40.)

1. The combinaton with a tank having separate compartments for holding a cleaning fluid, of means adjacent to the tops of the compartments for feeding and compressing a length of fabric and supporting it with depending loops in the respective compartments, cylindrical brushes within the respective compartments adapted to



extend through and be rotated by the respective loops, each brush constituting means for holding the lower portion of a loop submerged in the cleaning fluid.

1,813,298. PROVISION BOX. JOHN R. KLIN, Dayton, Ohio, assignor to The Rike Folding Box Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 19, 1928. Serial No. 307,016. 2 Claims. (Cl. 206—44.)



1. In a box having along each end thereof adjacent the bottom a slit, a lid integral with said box, said lid having on each end thereof and separated therefrom by score lines an end flap and a tab having a notch adjacent the flap, said tab being adapted to engage said slits to hold the box and the lid in engagement with each other, said lid also having formed therein and integral therewith a central flap, double score lines extending from said central flap to the ends of said lid and across the end flaps and the tabs as a single score line so that the end flaps and the tabs may be bent over on the inside of the lid and the upper part of the lid, then bent down over the back part of the lid so that the front part of the lid will engage the upper part of the box and form with the central flap a display card.

1,813,299. VENDING MACHINE. WILLIAM C. LAUGHLIN, Cleveland, Ohio, assignor of one-third to John P. Fife, Cleveland, Ohio, and one-third to William T. Fife, Atlanta, Ga. Filed Nov. 9, 1927. Serial No. 232,076. 9 Claims. (Cl. 312—51.)

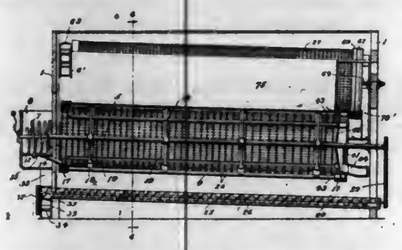
1. A vending machine comprising a storage chamber adapted to support articles to be vended in a substantially

vertical position, a display compartment adapted to contain one of said articles, a wall separating said compartment from said chamber, means for lifting a single article



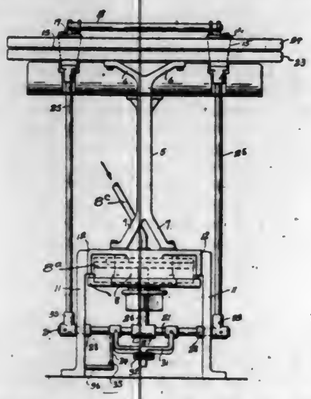
from said chamber over said wall and allowing said article to fall into said compartment, a gate closing the lower end of said compartment, and common means for opening and closing said gate and for actuating said lifting means.

1,813,300. SEED GRADER. GROVER C. LEACH, Brownwood, Tex., assignor to Thomas Richard Leach, Brownwood, Tex. Filed Oct. 27, 1929. Serial No. 401,522. 8 Claims. (Cl. 209—292.)



1. A seed-cleaning and grading machine comprising upper and lower drums inclined downwardly toward their rear ends, means for rotating said drums, a hopper at the front end of the lower drum to receive seed and deliver it into the lower drum, a conveyer below the lower drum receiving trash therefrom and carrying it to a point of discharge, means for transferring cleaned seed from the lower drum to the upper drum, a conveyer below the upper drum receiving graded seed therefrom and means whereby said seed will be discharged from said conveyer according to grade.

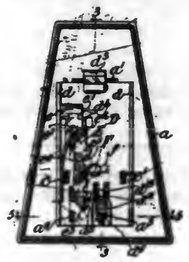
1,813,301. PRESS AND FRAME. JAMES C. LEDBETTER, Brooklyn, N. Y., assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed July 2, 1924, Serial No. 723,741. Renewed Mar. 20, 1930. 20 Claims. (Cl. 68—9.)



3. A pressing machine comprising a frame including a bolting bracket, a press jaw mounted thereon, a press head superimposed above the jaw, vertical swing links pivoted on the lower end of the frame, and adapter brackets anchored to the swing links and reaching around the jaw and anchored to the head.

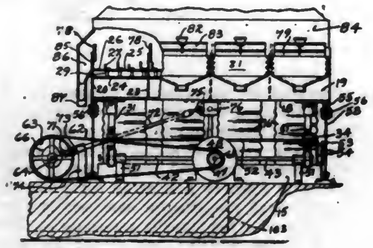
20. A pressing machine comprising a frame, a pressure chamber carried by the frame, a buck mounted on the pressure chamber, a head movable toward and from the buck, a pressure member movable in said chamber, motion transmitting connections between the pressure member and the head comprising a floating link pivoted at its lower end to the pressure member and carrying the head at its upper end, and means for supplying a fluid pressure to the upper portion of the pressure chamber above the pressure member.

1,813,302. LOCK. MITCHELL LEVENTHAL, Brooklyn, N. Y., assignor to Sosy, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 3, 1929. Serial No. 397,002. 3 Claims. (Cl. 70—115.)



1. A lock comprising a cover plate, a key operable elongated tumbler slidable against the back of the cover plate, and a spring pressed draw-bolt movable over the back of the cover plate enclosing the tumbler, said draw-bolt having longitudinal flanges, the edges of which engage the back of the cover plate and struck up lips which project toward the cover plate spaced from one of the flanges, said struck-up lips and flange serving to guide the tumbler in its movements when operated by a key.

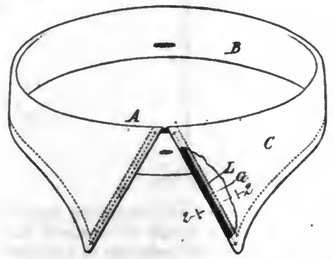
1,813,303. DRY SEPARATOR. MARTIN J. LIDE, Birmingham, Ala. Filed Dec. 16, 1926. Serial No. 155,259. 1 Claim. (Cl. 209—467.)



In a dry separator, partitions dividing the separator into a succession of deep compartments, means providing an upward flow of air through the several compartments to stratify the material, means to feed material into one of the end compartments of the separator, means to impart horizontal reciprocatory motion to the separator normal to the partitions to cause the lighter components of the material to overflow said partitions successively, concomitant means to impart reciprocatory motion to the separator in a direction parallel to the partitions to effect movement of the heavier components of the material transversely to the lighter material, concomitant means to vertically vibrate the table to aid in stratification of the material,

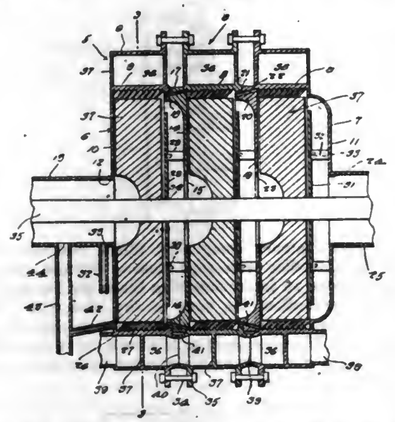
adjustable gates to remove the heavier components of the materials at the side of the separator in each compartment, and riffles provided in the compartments parallel with the partition walls.

1,813,304. COLLAR. EDWARD LIND, Brooklyn, and DAVID FEIGENBAUM, Jamaica, N. Y. Filed Sept. 5, 1929. Serial No. 390,456. 3 Claims. (Cl. 2—132.)



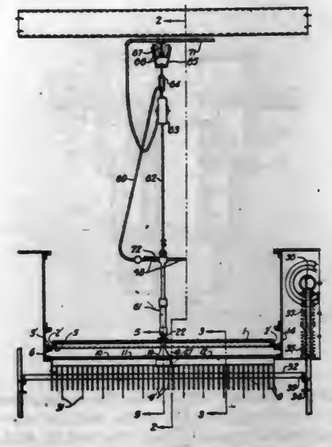
1. A soft collar comprising a plurality of plies of fabric, an additional fabric strip within each front edge of the collar, a pliable, settable stiffening wire carried by said fabric strip, and said fabric strip together with its stiffening wire being attached to the collar by the same seams which unite the plurality of plies of fabric of the collar.

1,813,305. REGENERATIVE ATOMIZING AND VAPORIZING DEVICE. NORVIN G. MALONEY, Jr., Key West, Fla. Filed July 13, 1929, Serial No. 378,162. Renewed Jan. 30, 1931. 6 Claims. (Cl. 261—12.)



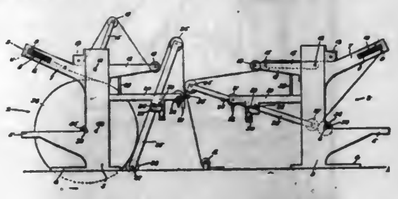
1. In an atomizing and vaporizing device of the class described, a casing having oppositely disposed inlet and outlet ports, said casing comprising end sections and intermediate sections, means for forcing heated air into said casing, a shaft rotatably supported in said casing, a plurality of fans secured to said shaft for rotation therewith, there being one fan within each of said sections, each of said sections being of substantially circular formation, each of said sections having inner and outer spaced peripheral walls, means for passing heated gases between said walls, means for forcing liquid into said casing, said sections having liquid receiving passages formed therein on the inner faces of the inner walls of the respective sections, said passages extending spirally about said sections in a direction corresponding to the direction of rotation of said fans, and liquid conduits between the respective sections and communicating with said liquid passages as and for the purpose specified.

1,813,306. ELECTRICAL PRECIPITATION APPARATUS. KENNETH I. MARSHALL, Los Angeles, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed July 29, 1929. Serial No. 382,043. 12 Claims. (Cl. 183—7.)



1. In combination with the electrode means of an electrical precipitator, a plurality of impact members mounted in position to transmit vibrations to different parts of said electrode means, track means, a carrier means mounted to travel on said track means, and a single rapping device mounted on said carrier means and movable therewith so as to bring the rapping device into position of operative engagement with any one of said impact members.

1,813,307. PAPER ROLL HOLDER FOR PRINTING PRESSES. CHRISTOPHER J. MCGARRY, Paterson, N. J. Filed Jan. 30, 1930. Serial No. 424,635. 5 Claims. (Cl. 242—58.)

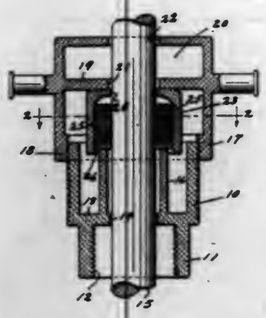


1. A paper roll holder for printing presses of the character described comprising a pair of co-acting units upon each of which is rotatably mounted a roll of paper to be fed to the press, each unit comprising a pair of standards, guide rollers rotatably mounted on the standards about which the paper from the respective roll is trained, a stationary pasting roller on each unit over which the paper is trained, a traveling pasting roller mounted for swinging movement on each unit over which the paper is trained, said traveling pasting roller adapted to be shifted in a manner to press the paper trained thereover into engagement with the paper trained over the stationary pasting roller of the other unit.

1,813,308. STUFFING BOX. WILLIAM H. MCKISSICK, Tulsa, Okla. Filed Jan. 25, 1929. Serial No. 334,923. 2 Claims. (Cl. 286—16.)

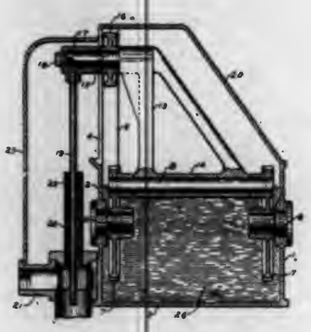
1. In a stuffing box for polish rods, a body, a cap adjustably mounted upon said body and having a partition, a polish rod passing through the body and cap and movable laterally thereof, a follower sleeve rigidly mounted

in the body spaced from the polish rod and having its upper edge rounded, an inverted packing cup surrounding the polish rod and contacting with the cap at its upper end, the upper end of the sleeve telescoping into the cup,



and a packing element within the cup compressed by the sleeve and snugly engaging the polish rod, the cup and packing being movable laterally with the rod in contact with said partition and supported by the rounded edge of said sleeve.

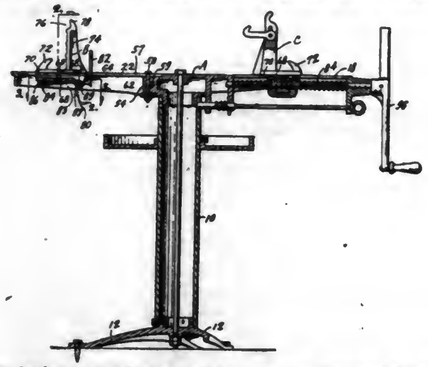
1,813,309. POWER HEAD FOR PUMPS. PHILIP A. MYERS, Ashland, Ohio, assignor to The F. E. Myers and Bro. Company, Ashland, Ohio, a Corporation of Ohio. Filed July 24, 1929. Serial No. 380,548. 12 Claims. (Cl. 74—14.)



1. In a power head for pumps, a casing having a guide, a gear rotatably mounted in said casing, a shaft eccentrically mounted on said gear, a link having a relatively long bearing at one end engaging said shaft, a spindle on the other end of said link, a roller on said spindle guided by said guide, and a pump rod attached to said spindle.

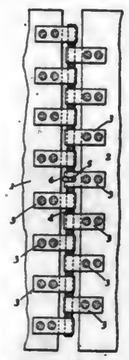
1,813,310. TIRE CHANGER JAW HOLDING MEANS. CHARLES G. NATHE, Jr., Minneapolis, Minn., assignor to Marquette Manufacturing Company, St. Paul, Minn. Filed Sept. 21, 1927. Serial No. 220,904. 2 Claims. (Cl. 157—1.)

1. In a tire changer, an upright standard, an arm projecting therefrom, a tire engaging device slidable on said arm and means to lock the device at different positions on said arm, said means comprising a slidable pin selectively engageable with a row of spaced openings in said arm, an opening in said pin, a rod having one end pivoted to



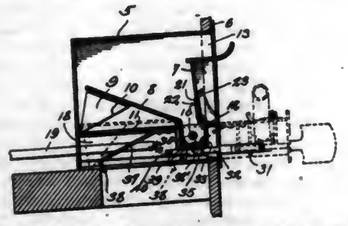
said device and its other end projecting loosely through said opening and spring means to constrain said pin toward engagement with said openings in said arm.

1,813,311. CONVEYER BELT. TAGE GEORG NYBORG, Worcester, England, assignor of one-half to Mark Frederick Higgins, Worcester, England. Filed Jan. 7, 1930, Serial No. 419,129, and in Great Britain Jan. 11, 1929. 3 Claims. (Cl. 24—33.)



2. A belt fastener comprising hinge members at the belt ends, a flexible wire rope passing through the members to provide an interconnecting hinge for the belt ends, means to strengthen the ends of the wire rope forming the hinge pin, and means passing through the wire rope at one of the hinge members to interlock the rope and hinge member, said means being maintained flush with the surface of the hinge member.

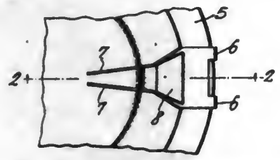
1,813,312. CIGARETTE LIGHTER. LAWRENCE HENRY OFFUT, Raspeburg, Md., assignor to D. R. S. Company Inc., Baltimore, Md. Filed Apr. 8, 1929. Serial No. 353,535. 2 Claims. (Cl. 312—86.)



1. In a cigarette holder and lighter, a body portion, a drawer slidable in the body portion, said drawer having

a groove near the front end thereof, said groove being of a size to receive a cigarette, a tube at one end of the groove, said tube being in communication with the groove, a pipe connected with the tube and having connection with a suction producing means, to draw air through the cigarette, a heating element at one end of the groove, and a pivoted member on the drawer operating above the groove to engage one end of a cigarette held in the groove to press the cigarette into the groove and close the upper surface of one end of the groove.

1,813,313. DEVICE FOR EXTINGUISHING FIRE ON CIGARETTES. LAWRENCE H. OFFUTT, Raspeburg, Md., assignor to The D. R. S. Company, Inc., Baltimore, Md. Filed Apr. 20, 1929. Serial No. 356,731. 1 Claim. (Cl. 131—51.)



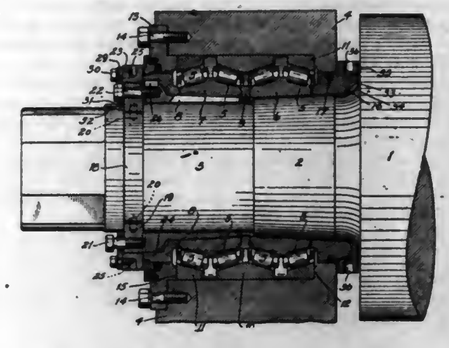
A cigarette fire extinguisher comprising a body portion formed of a length of sheet metal having a downwardly extended portion to overlie the edge of an ash tray, gripping fingers formed on the body portion and adapted to grip the edge of the tray on which the device is positioned, yieldable fingers forming a part of the body portion, the yieldable fingers being disposed in spaced relation with each other, and the outer edges of the yieldable fingers being free and exposed to permit a cigarette to be drawn between the fingers throughout the lengths of the fingers.

1,813,314. CAMERA ATTACHMENT. THOMAS PALLESON, Scotia, Calif. Filed Oct. 3, 1929. Serial No. 397,026. 1 Claim. (Cl. 235—91.)



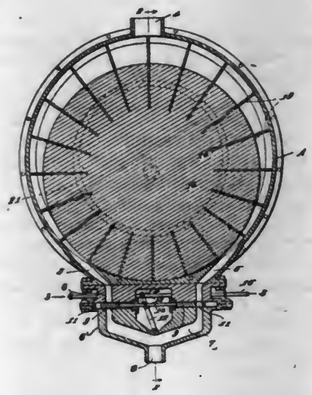
An indicating attachment of the character described for cameras, a circular casing adapted to be mounted on the camera adjacent the shutter operating lever thereof and having an observation window in one side and a peripheral slot, a ratchet wheel mounted for rotation in the casing having indicating numerals on one side thereof for successive registry with the window upon actuation of the ratchet wheel, a shoe slidably mounted for reciprocating movement on the inner periphery of the casing and having an integral rib thereon disposed for longitudinal sliding movement in the slot, means for operatively connecting the shoe to the shutter lever for actuation thereby in one direction, a resilient pawl mounted on the shoe for movement therewith and having its free end operatively engaged with the periphery of the ratchet wheel in a manner to actuate said wheel in a step by step manner upon reciprocatory movement of the shoe to successively bring the indicating numerals before the window, a hook formed integrally on the shoe and extending inwardly therefrom, and a spring disposed in the casing and having one end secured thereto and its free end terminating in a hook operatively engaged with the first named hook in a manner to return the shoe to inoperative position.

1,813,315. ROLLER BEARING CONSTRUCTION. ALBERT J. PETERMAN, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Sept. 9, 1929. Serial No. 391,225. 1 Claim. (Cl. 308—207.)



A roller bearing rolling mill construction comprising a frame having an opening therein, a roll having a reduced tapering neck portion extending into said opening and forming a shoulder on said roll adjacent to said opening, a roller bearing interposed between said roll neck and said frame with its inner raceway member tight on said tapering roll neck, a closure ring for said frame opening, said ring being in abutting relation to said inner raceway member and projecting beyond said frame towards said shoulder, said projecting portion being externally threaded and a nut on said threaded portion for reacting against said shoulder to loosen said inner raceway member from said roll neck.

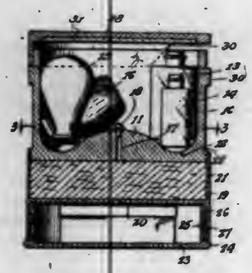
1,813,316. ROTARY STEAM ENGINE. CLAIR W. PHILLIPS, Lynch, Ky. Filed Apr. 6, 1928. Serial No. 267,928. 1 Claim. (Cl. 121—85.)



An engine of the class described, comprising a circular casing, a rotor eccentrically arranged therein and supported for rotation, radially arranged blades slidably carried by the rotor, the periphery of the rotor and the circumferential wall of the casing defining a crescent shaped chamber, the casing having an outlet port located between the ends of said chamber, a valve casing mounted upon the under side of the casing and having inlet passages communicating with the ends of said chamber, whereby a motive fluid may enter the chamber at either end thereof to vary the direction of rotation of the rotor, the valve casing comprising separable connected sections and formed in

the meeting faces of the two sections with matching horizontal recesses providing valve chambers, flat valve plates slidably mounted in said chambers and each provided near its outer end with an opening for registration with the respective one of the intake passages of the valve casing, a rod extending between and connecting the relatively adjacent ends of said plates, rack arms pivotally mounted at their lower ends within the valve casing and having longitudinal slots therein, below their upper ends, pins extending from opposite sides of the said rod and engaging in the slots, whereby, when the arm is rocked about its pivot, shifting adjustment of the valves will be effected to open one of the inlet passages and close the other inlet passage, a frame disposed exteriorly of the valve casing and including side members and connecting end members, means connecting the upper ends of the said arms pivotally with the side members of said frame, and a handle member upon one end of the frame.

1,813,317. SHAVING OUTFIT. HARRY R. PRIEST, Loudonville, Ohio. Filed July 12, 1930. Serial No. 467,605. 6 Claims. (Cl. 132—81.)



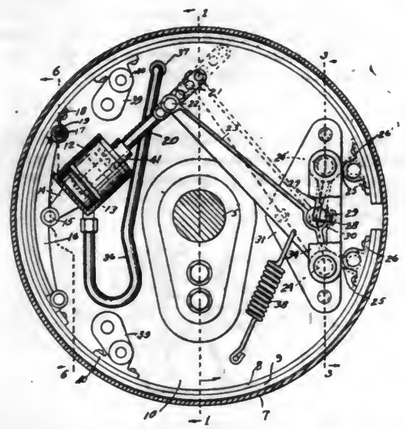
1. A shaving outfit comprising a mug having an axial duct in the bottom, a cover for the mug, and a base for the mug comprising an upper and lower compartment separated by a transverse partition, the inner face of the base being threaded above and below the partition, the upper threads screwing onto the base of the mug, said upper compartment comprising a magazine for shaving cream, and a container for shaving tools having a marginal flange threaded to engage the threads of the base disposed below said partition.

1,813,318. STOCK WATERER. ALFRED I. RALSTON, Omaha, Nebr. Filed Apr. 27, 1926. Serial No. 105,002. 1 Claim. (Cl. 126—344.)



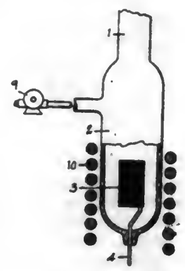
In a watering trough for out door use, a body portion including an outer member formed with downwardly extended portions defining the sides of the body portion and having a central depressed portion extending throughout the width and length of the body portion defining a trough, inner walls spaced from the downwardly extended portions of the body portion, the upper edges of the inner walls engaging the depressed portion providing a space between the walls and depressed portion, means for closing the space at the base thereof to provide a dead air space, said inner walls defining an inner heating chamber under the depressed portion, and burners in the heating chamber.

1,813,319. FLUID BRAKE MECHANISM. CHARLES A. SAWTELLE, Detroit, Mich., assignor of one-half to Armin A. Darmstaetter, Detroit, Mich. Filed July 18, 1927. Serial No. 206,446. 5 Claims. (Cl. 188—152.)



5. A brake mechanism comprising a brake drum, a brake element interiorly engageable with said drum, a fluid pressure motor within the drum pivotally connected to said brake element, a lever actuable by said motor, and further transmitting the effort of said motor to said brake element, and a pivot member for said lever fixed with respect to said brake element, whereby said lever is adapted to restrain the brake element from rotation.

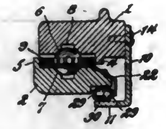
1,813,320. GASEOUS CONDUCTION LAMP ELECTRODE. FRANK SCHAEFER, Kalamazoo, and ORA S. DUFFENDACK, Ann Arbor, Mich.; said Duffendack assignor to American Signs Corporation, Kalamazoo, Mich. Filed Nov. 24, 1928. Serial No. 321,606. 4 Claims. (Cl. 176—126.)



1. The method of making electrodes for gaseous conduction lamps consisting of applying barium carbonate to a nickel base element, and heating in an oxidizing atmosphere by subjecting to an impinging flame until a substantial portion of the barium carbonate is converted to barium oxide and fused with a portion of the base element into a homogeneous substance.

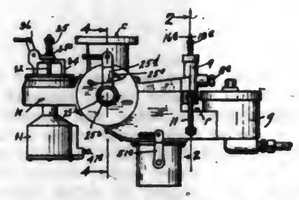
1,813,321. TYPEWRITING MACHINE. GILBERT M. SCHEAER, New York, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 8, 1928. Serial No. 318,027. 10 Claims. (Cl. 197—69.)

9. In a carriage mechanism for typewriting machines or the like, a pair of rails movably mounted one on the other for relative longitudinal movements, the under face of the lower rail being flat, the opposed faces of the rails being provided with complemental raceways, an antifriction ball disposed in said raceways, a clamp fixed to the upper rail and having a portion extending under the



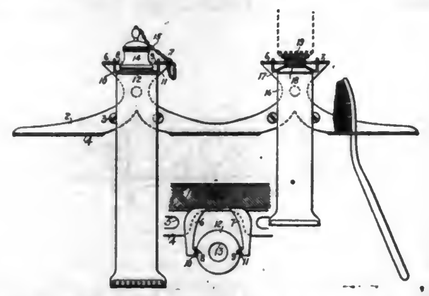
lower rail, a roller interposed between the flat under surface of the lower rail and the extending-under portion of the clamp, and means connecting the antifriction ball and the roller for bodily movements as a unit longitudinally of said lower rail.

1,813,322. CARBURETOR. OLIVER SEIFFERLE, Portland, Oreg., assignor to J. C. Dennis Co. Filed June 24, 1929. Serial No. 373,809. 12 Claims. (Cl. 261—41.)



1. A carburetor comprising a housing, a main fuel reservoir and a control valve therefor, a manually operated throttle valve, a series of fuel wells, air inlets therefor, ducts connecting said wells with said reservoir, an air inlet in said housing arranged between said reservoir and the chamber of said throttle valve, a series of Venturi tubes located in said air inlet, a series of accelerator passageways connecting the said Venturi-tubes, respectively with the throttle valve chamber, ducts leading from the said wells and opening into the said Venturi-tubes respectively, and said manually operated throttle valve adapted to open one or more of the ports of said accelerator passageways successively.

1,813,323. TOOTH PASTE TUBE HOLDER. ABRAHAM J. SHEKTER, Jamaica, N. Y. Filed July 18, 1927. Serial No. 206,731. 1 Claim. (Cl. 248—20.)

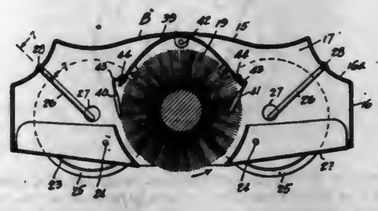


In a collapsible tube holder, the combination with a support, of a plate pivotally carried by the support, the said plate having an opening adapted to removably engage the threaded nipple of the tube whereby the cap of the tube may be applied and removed above the plate and whereby the tube and plate may be turned upwardly towards the support into an inverted position.

1,813,324. LEAD ALLOY. ROBERT JAY SHOEMAKER, Chicago, Ill., assignor to S. & T. Metal Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 28, 1928. Serial No. 322,573. 10 Claims. (Cl. 75—1.)

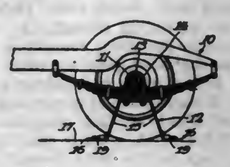
1. A tough, slightly hardened, non-corrosible lead alloy consisting principally of lead and containing the following substances in quantities by weight substantially as follows: calcium 0.1 per cent to 0.4 per cent and tin 0.5 per cent to 2.0 per cent.

1,813,325. CARPET SWEEPER. EARLE R. SMITH, Los Angeles, Calif., assignor to Gillette Sweeper Corporation Ltd., a Corporation of Nevada. Filed Feb. 23, 1927. Serial No. 170,213. 4 Claims. (Cl. 15—48.)



1. A carpet sweeper comprising a body, a brush rotatable in the body, a hood secured within the body and disposed directly above the brush, and combs having angular extensions hingedly mounted on the hood so that the combs are on opposite sides of the brush and are virtually level with the axis of the brush, when the carpet sweeper is in its operative position, and that thereby the combs are free to respond to the action of gravity.

1,813,326. SHIPPING DEVICE. CLIFFORD L. SNYDER, Detroit, Mich., assignor to Evans Products Company, Detroit, Mich., a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 440,242. 5 Claims. (Cl. 188—32.)

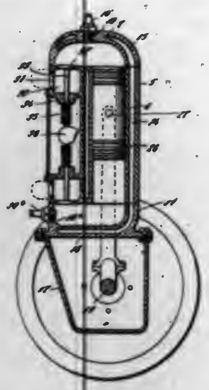


1. A device for anchoring an automobile during shipment, comprising a comparatively narrow strip of sheet metal bent to form a loop at its intermediate portion for engaging a portion of a vehicle, the ends of said strip forming legs and being bent to form attaching feet, a foot plate for each attaching foot, said plates extending across said attaching feet, said plate having an upwardly extending loop, said foot having a return bent portion extending through said loop.

1,813,327. TREATMENT OF PETROLATUM STOCKS. BENJAMIN L. SOUTHER, Pittsburgh, and WILLIAM A. GRUSH, Wilkinsburg, Pa., assignors to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed June 5, 1928. Serial No. 283,122. 8 Claims. (Cl. 196—20.)

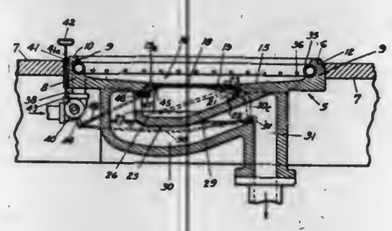
1. The process of recovering heavy mineral oil from petrolatum stock which comprises adding a butyl alcohol to petrolatum stock at a temperature sufficient to effect solution, cooling the solution to produce a separation of asphaltic, resinous and waxy material, removing the so separated material, distilling off butyl alcohol and recovering the heavy mineral oil residue.

1,813,328. INTERNAL COMBUSTION ENGINE. LAWRENCE STORK, Walsh, Ill. Filed Mar. 14, 1929. Serial No. 346,998. 1 Claim. (Cl. 123—63.)



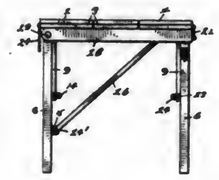
An engine of the class described comprising a casing, a plurality of spaced parallel cylinders formed in the casing, a unitary head structure on one end of the casing having head elements formed therein with firing chambers registering with the cylinders, head elements at the other ends of the cylinders with firing chambers formed therein, upper and lower valve chambers formed integrally on one side of the casing communicating with the firing chambers adjacent one side thereof, a cam shaft mounted for rotation between the chambers, a closure plate secured to the outer sides of the valve chambers in a manner to enclose the cam shaft, spring controlled valves controlling communication between the valve chambers and the firing chambers and operatively engaged with the cam shaft for actuation thereby, hangers depending from the last mentioned element and terminating in bearings, a crank shaft journaled in said bearing and having cranks one to each side of said bearings, said cylinders having oppositely disposed slots, double ended pistons in the cylinders, wrist pins extending through the centers of the pistons and through the slots, connecting rods engaged with the ends of the wrist pins and with the cranks of the crank shaft so that there is a pair of connecting rods one to each side of each cylinder, intake and exhaust valve means associated with the said elements, and ignition means associated therewith, a crank case below the casing and having bearings at the ends thereof in which said crank shaft is journaled, and means operatively connecting the crank shaft to the cam shaft.

1,813,329. ANIMAL TOILET. ANNA C. SUPPLEE, Los Angeles, Calif. Filed Mar. 7, 1930. Serial No. 434,015. 3 Claims. (Cl. 119—15.)



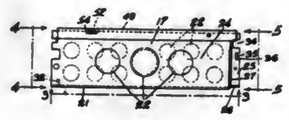
1. An animal toilet comprising a bowl, a transversely extending closure plate mounted within said bowl, an edge portion of said plate being hingedly connected with said bowl, a spring normally sustaining the free edge of said plate, said plate being adapted to be depressed against the opposition of said spring to an inclined position to facilitate flushing thereof, flushing means adapted to direct water downwardly upon said plate, and manually operable means to simultaneously operate said flushing means and depress said plate against the opposition of its spring.

1,813,330. FOLDING TABLE. EMIL VIDAL, San Francisco, Calif. Filed Dec. 3, 1927. Serial No. 237,475. 2 Claims. (Cl. 45—106.)



1. A folding table comprising a rectangular top formed from a plurality of foldable panels hingedly connected along adjacent longitudinal edges; legs hingedly connected to the top; a pair of longitudinal braces mounted upon each side of the top, and pivotally connected at one end of each brace upon the under side of the top adjacent the center thereof and arranged to incline outwardly and downwardly into detachable engagement with the legs, the braces of each pair being connected upon opposite sides of the transverse centerline of the table top and being foldable into inoperative folded positions extending across the centerline to the end of the table top remote from the pivot mounting and overlapping the pivoted end of the adjacent brace; and transverse braces pivotally mounted upon the under side of the top adjacent the ends thereof and arranged to be extended into detachable engagement with the legs, said longitudinal and transverse braces and legs being foldable into substantially parallel relation extending longitudinally against the under side of the top and between the panels when folded.

1,813,331. WIRING CHANNEL STRUCTURE. DAVID T. WADSWORTH, Cold Springs, Ky., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Filed Sept. 14, 1926. Serial No. 135,457. 7 Claims. (Cl. 247—2.)



1. A sheet metal wiring channel element for wall mounting comprising a U-shaped member open at its top and ends, one of said ends having inwardly offset flanges provided with notches and having lugs extending therefrom at certain of said notches, the opposite end of said channel being provided with complementary notches and lugs whereby a plurality of said channel elements may be telescoped one upon the other at the ends thereof.

1,813,332. DISPLAY APPARATUS. DAVID HENRY WARD, Seattle, Wash. Filed Aug. 25, 1930. Serial No. 477,718. 7 Claims. (Cl. 40—97.)



1. In exhibitors of the character described, a case having a window, an endless chain sheet-conveyor mounted in the upper portion of the case and comprising an operating shaft with sprockets, an upper master roller, an intermediate roller, said rollers having chain-receiving portions, endless chains taking around said master roller and said sprockets, and a set of transversely folded sheets hingedly connected at the folded edge to said chains, means combined with said rollers for ironing out said sheets.

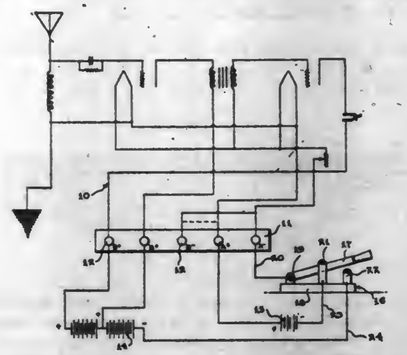
1,813,333. MOLDED COMMUTATOR ASSEMBLY. GARDINER CUSHING WILSON, Lockport, N. Y. Filed Apr. 28, 1928. Serial No. 273,761. 6 Claims. (Cl. 171—321.)



1. The method of making a commutator which comprises forming a cylindrical member with recesses on its inner surface, placing said cylindrical member in a die, placing mica and other insulation material in said die and within said cylindrical member with the mica projecting into the recesses on the inner surface of said member, subjecting said insulation material to heat and pressure to solidify the same, and cutting said cylindrical member so as to separate it into segments at the points where it is recessed.

1,813,334. AUDION CIRCUIT BATTERY CONTROL. FRANKLYN J. WOLFF, Trenton, N. J. Filed June 26, 1926. Serial No. 118,767. 2 Claims. (Cl. 250—27.)

1. In an audion circuit in which a switch is interposed in the common leg of the plate and filament circuits, the method of maintaining the activated condition of the filaments which comprises operating the switch to first close



the filament circuit, and after an appreciable time further operating the switch to close the plate circuit without opening the filament circuit.

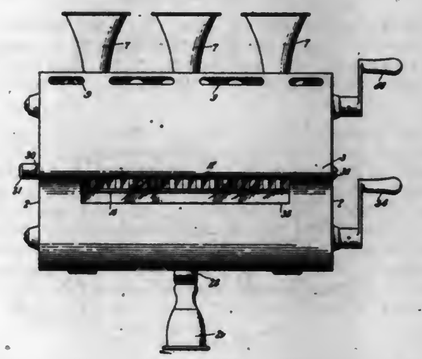
1,813,335. REFRIGERANT. LEONARD KAY WRIGHT, Jackson Heights, N. Y. Filed Oct. 7, 1927. Serial No. 224,766. 5 Claims. (Cl. 62—179.)

1. A refrigerating process comprising adsorbing allylene, driving off the allylene from the adsorption agent, condensing the allylene, and evaporating the condensed allylene to produce refrigeration.

1,813,336. REFRIGERANT. LEONARD KAY WRIGHT, Jackson Heights, N. Y. Filed Nov. 8, 1927. Serial No. 231,994. 2 Claims. (Cl. 62—178.)

1. A refrigerating process comprising adsorbing betabutylene alone, heating the adsorbent to drive off the refrigerant, condensing the refrigerant so driven off, and reducing the pressure of the condensed refrigerant to cause evaporation.

1,813,337. MUSICAL INSTRUMENT. MARTIN D. ZIMMERMAN, Washington, D. C., and HARRY PULLEN, Preston, Md., assignors to International Patents Corporation, Rehoboth Beach, Del., a Corporation of Delaware. Filed Mar. 22, 1930. Serial No. 438,125. 16 Claims. (Cl. 84—93.)



11. A unit for a player type of musical instrument comprising a hollow member sealed at its ends and provided with an elongated slot, a harmonica within the member and having its mouth fitted tightly within said slot, bifurcated passageways for feeding air to the opposite

ends of the hollow member, and means located near the opposite ends for baffling the air before passing to the harmonica.

1,813,338. REENFORCING TRUSS. CHARLES BOTEL and LEON R. PAUL, New York, N. Y. Filed Aug. 4, 1930. Serial No. 472,955. 3 Claims. (Cl. 189—37.)



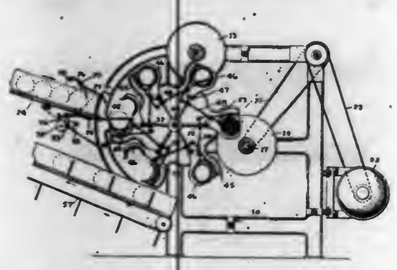
1. A form truss including a beam, links detachably and adjustably connected to the end portions thereof, coupling members below the beam, draw rods connecting said members to the links, screw-threaded adjustable connections between the coupling members, means for attachment to the beam between its ends ,and thrust transmitting standards interposed between and adjustably connected to the coupling members and said means.

1,813,339. BUTTON. JOHN M. CLARK, Detroit, Mich., assignor to Universal Button Fastening & Button Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 12, 1930. Serial No. 435,084. 3 Claims. (Cl. 24—94.)



1. The method of forming a cheap button which is characterized by upsetting at one end a short section of soft steel rod of a diameter corresponding to the diameter of the button shank, to form a button head; indenting the other end of the rod to form a concave upsetting die; and then enlarging the rim surrounding the concavity to form a laterally extending bead, the intermediate portion of the rod being left unchanged to form the shank of the button.

1,813,340. APPARATUS FOR CUTTING DRINKING TUBES. EUGENE CONTI, Cliffside Park, N. J., assignor to Alexander Herz, New Rochelle, N. Y. Filed Sept. 22, 1922. Serial No. 589,771. 18 Claims. (Cl. 164—61.)



1. In a machine of the class described, the combination with means for dividing a bundle of tubing into shorter bundles of approximately drinking tube lengths, of means for subsequently trimming the ends of the shorter bundles to form straws of exact drinking tube length and conveying means for presenting the bundle to said dividing and trimming means.

1,813,341. TREATMENT OF PITCHES AND TARS. ORIN D. CUNNINGHAM, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed Apr. 30, 1925. Serial No. 27,064. 29 Claims. (Cl. 252—3.)

2. A process which comprises emulsifying tarry-pitchy material with a fused non-volatile alkali compound and heating sufficiently to convert the said tarry-pitchy material into a semi-coked product.

1,813,342. FROTH FLOTATION PROCESS. ORIN D. CUNNINGHAM, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed Sept. 10, 1928, Serial No. 305,143. Renewed Feb. 19, 1931. 4 Claims. (Cl. 209—166.)

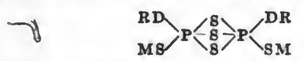
1. A process which comprises froth flotation of ores in the presence of a xanthogenate of a hydrogenated hydroxy-aromatic derivative.

1,813,343. PROCESS OF FROTH FLOTATION. ORIN D. CUNNINGHAM, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed Nov. 7, 1929, Serial No. 405,547. Renewed Feb. 19, 1931. 5 Claims. (Cl. 209—166.)

1. In the froth flotation of metalliferous material, the herein described process which comprises subjecting the said material to flotation in the presence of a compound having the general formula $P(OR)_3$ in which R represents an alkyl, aryl, aralkyl or alkaryl group.

1,813,344. FROTH FLOTATION OF ORES. IRA H. DERBY and ORIN D. CUNNINGHAM, Indianapolis, Ind., assignors to Peter C. Reilly, Indianapolis, Ind. Filed Nov. 17, 1928. Serial No. 320,207. Renewed Feb. 19, 1931. 8 Claims. (Cl. 209—166.)

1. In the art of concentrating ores and minerals by froth flotation, the step of subjecting the ore, in the form of a pulp, to a froth flotation operation in the presence of an organic compound having the structural formula



in which D represents a diad element, oxygen or sulphur, R represents an aryl, alkyl, hydrogenated aryl or acyl radical, and M represents an alkali-forming metal.

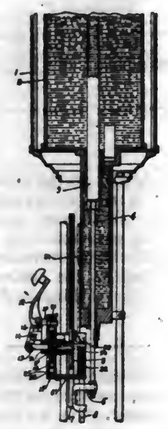
1,813,345. PROCESS OF ORE FLOTATION. IRA H. DERBY and ORIN D. CUNNINGHAM, Indianapolis, Ind., assignors to Peter C. Reilly, Indianapolis, Ind. Filed Sept. 17, 1930. Serial No. 482,643. 10 Claims. (Cl. 209—166.)

1. In the art of froth flotation the step of floating material to be concentrated in the presence of the herein described flotation agent which comprises a reaction product of a phosphorous sulfur compound with a coal tar pyridine base extract.

1,813,346. PROCESS OF ORE FLOTATION AND FLOTATION AGENT. IRA H. DERBY and ORIN D. CUNNINGHAM, Indianapolis, Ind., assignors to Peter C. Reilly, Indianapolis, Ind. Filed Dec. 16, 1930. Serial No. 502,858. 5 Claims. (Cl. 209—166.)

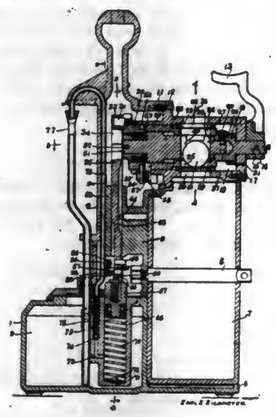
1. In the art of froth flotation the step of floating material to be concentrated in the presence of the herein described flotation agent which comprises a reaction product of a phosphorus sulfur compound with an organic nitrile.

1,813,347. SETTING MECHANISM FOR PUMPS. EARL E. EICKMEYER, Dayton, Ohio, assignor to The Dayton Pump and Mfg. Co., Dayton, Ohio, a Corporation of Ohio. Original application filed Oct. 31, 1928, Serial No. 316,246. Divided and this application filed Feb. 8, 1929. Serial No. 338,364. 14 Claims. (Cl. 221—100.)



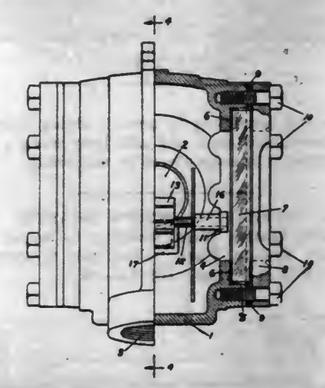
1. In a gasoline dispensing pump in combination with a bowl and a measuring tube, an operating handle pivotally supported for adjusting said tube, means for positioning said handle in its adjustment of said tube, said means including a plurality of adjustable jaws, and a plurality of centering plates.

1,813,348. COIN COLLECTING LIQUID DISPENSING APPARATUS. EARL E. EICKMEYER, Dayton, Ohio, assignor to The Dayton Pump & Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed June 20, 1929. Serial No. 372,246. 21 Claims. (Cl. 194—92.)



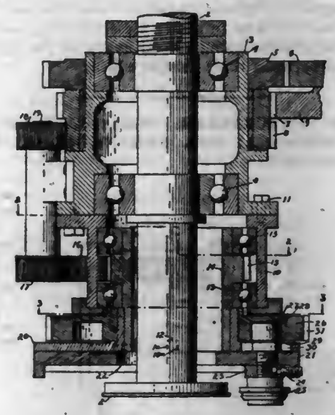
1. In combination in a liquid dispensing apparatus, operated means, an operating means, means comprising a stationary sleeve and a pawl adapted to connect the operating means to the dispensing means when a coin is inserted into said operating means and means to release said coin but not to release the connection between operating means and the liquid dispensing means until the dispensing operation is completed.

1,813,349. VISIBLE FLOW DEVICE. EARL E. EICKMEYER, Dayton, Ohio, assignor to The Dayton Pump and Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 3, 1930. Serial No. 441,270. 19 Claims. (Cl. 116—117.)



1. A visible flow device consisting of a fluid passageway having oppositely disposed windows, and revolving vanes at one edge of said passageway adapted to revolve between the windows as fluid flows in the passageway.

1,813,350. CAN SEAMING MACHINE. EDWIN FORSBERG, San Jose, Calif. Filed Mar. 19, 1930. Serial No. 437,129. 4 Claims. (Cl. 113—24.)



1. An oval seamer head comprising a spindle having an oval chuck mounted thereon, a head member mounted to rotate in one direction about the spindle and in concentric relation thereto, and actuating means therefor, a second member mounted to rotate as a unit with the head member and mounted for independent rotation about said spindle in eccentric relation thereto, means for rotating said second member at the same speed but in the opposite direction to the head member, a seaming roller mounted on the second member in operative relation to the chuck.

1,813,351. HYDRAULIC FRICTION DEVICE FOR KNITTING MACHINES. JOHN GIFT, South Temple, Pa. Filed Dec. 4, 1930. Serial No. 500,107. 22 Claims. (Cl. 66—82.)

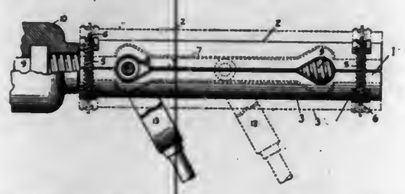
1. In a hydraulic friction device, a body, means to effect a stroke of constant length of said body, a shaft slid-

ably carried by said body, and hydraulic means operatively coupling said body and said shaft together, said



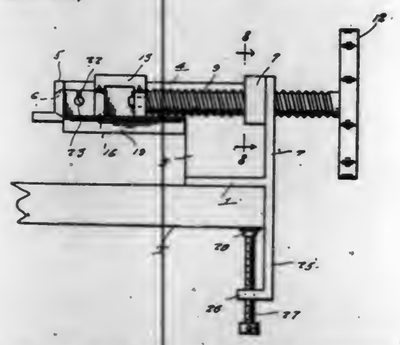
means having provisions to permit sliding movement to occur between said shaft and said body when a predetermined resistance is encountered by said shaft.

1,813,352. COVER FOR SCREW SHAFTS. JOHN F. HABERLIN, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed July 7, 1930. Serial No. 466,157. 4 Claims. (Cl. 74—40.)



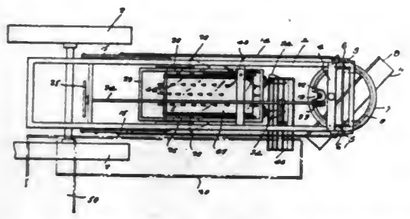
1. A device of the class described consisting of an expansible sleeve adapted to embrace a screw-shaft and to permit passage of a traveler along said shaft, said sleeve being longitudinally divided into two halves, each of said halves being yieldingly held together and having their abutting edges flanged and recessed, the recessed portions being adapted to receive extensions formed on said traveler at their end of travel in either direction along said shaft, both of said halves being spread apart as the said extensions pass between their flanged edges.

1,813,353. NUTCRACKER. HARRY W. HUBBY, Waco, Tex. Filed Apr. 11, 1930. Serial No. 443,416. 2 Claims. (Cl. 146—12.)



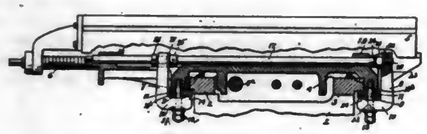
1. A nut cracker of the class described comprising an elongated member, a head on the member projecting laterally therefrom, a movable head having an arm slidably mounted on the member to move toward and away from the first mentioned head, a block on the elongated member provided with an opening partially provided with internal threads, a threaded shaft threaded through the opening in the block, said shaft provided with a longitudinally extending groove within which to seat the threaded portion of the block to allow longitudinal sliding movement of the shaft, and means for freely securing said second mentioned head to one end of said shaft whereby when said shaft is rotated said second mentioned head will be moved toward or away from the first mentioned head.

1,813,354. BEET HARVESTER. CASSIUS ERNST IMEL and RAY EDGAR BARKER, Erie, Colo. Filed June 3, 1930. Serial No. 459,036. 4 Claims. (Cl. 55—9.)



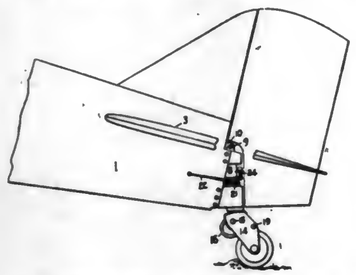
1. A beet harvester of the character described comprising a wheeled supporting frame, an annulus mounted for vertical adjustment on the forward end portion of the supporting frame, a ring gear rotatably mounted on the annulus, a topping knife rigidly suspended from the ring gear, and means mounted on the supporting frame and disposed rearwardly of the topping knife for lifting the beets out of the ground.

1,813,355. METAL WORKING MACHINE. HENRY M. LUCAS, Cleveland, Ohio, assignor to The Lucas Machine Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 14, 1928. Serial No. 246,687. 4 Claims. (Cl. 90—37.)



1. In a metal working machine, a bed having front and rear ways, a slide movable along said ways, a pair of studs rigidly connected to the slide, mechanism for clamping the slide to the ways comprising two clamping members pivotally mounted on said studs and having integral angularly disposed arms including arms which extend beneath the ways and arms which extend along and closely adjacent the outer sides of the bed and above the ways, and a common means engaging said last mentioned arms to rock said members so as to cause the first mentioned arms to exert clamping pressure on the ways with an equalized action, said studs having on their lower ends rockers constituting fulcrums and the clamping members having seat portions engaging said rockers.

1,813,356. TAIL WHEEL SUPPORT. ROBERT J. MINSHALL, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed May 28, 1930. Serial No. 456,413. 9 Claims. (Cl. 244—2.)



1. A tail wheel support of the class described consisting of a pair of aligned bearings having their centerline

arranged at an angle with respect to the tail post of an airplane, said bearings rotatably supporting a shock absorbing unit having a wheel and wheel fork swingably depending therefrom, a resilient means independent of the shock absorbing unit arranged within the fork and adapted to resist the rearward movement thereof.

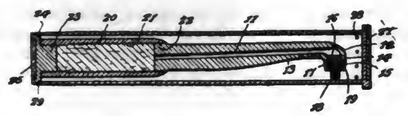
1,813,357. ART OF TREATING FRUITS. HUGH T. O'NEILL and ARTHUR J. HARRIMAN, Washington, D. C. Filed May 13, 1930. Serial No. 452,128. 8 Claims. (Cl. 99—1.)

5. The process of treating citrus fruit to determine its susceptibility to mycological infection and thereby determine its keeping qualities, which comprises treating such fruit with ferric chloride adapted to react wth subcutaneous tannin bearing portions of the fruit exposed by abrasion, whereby to form readily discernible reaction compounds and thereafter culling the colored fruit from the uncolored fruit.

1,813,358. ART OF TREATING FRUITS. HUGH T. O'NEILL and ARTHUR J. HARRIMAN, Washington, D. C. Filed May, 27, 1930. Serial No. 456,283. 9 Claims. (Cl. 99—1.)

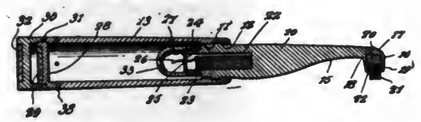
2. The process of treating fruit to determine its susceptibility to mycological infection, comprising the steps of subjecting the fruit to the action of a reagent adapted to be sorbed into surface abrasions, said reagent being in the leuco form, and then exposing the so-treated fruit to the action of a reagent adapted to transform the leuco form of the first said reagent to the chromophoric form thereof.

1,813,359. TOOTH CLEANER AND POLISHER. HARRY R. PRIEST, Loudonville, Ohio. Filed July 12, 1930. Serial No. 467,607. 4 Claims. (Cl. 132—84.)



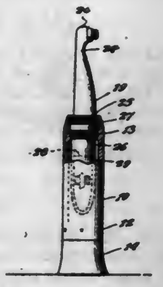
1. A tooth cleaning and polishing tool comprising a shank having a duct therethrough, a magazine carried by the shank for supplying tooth paste through said duct, said shank terminating in a substantially annular hollow head extending laterally from the shank, said head being relatively short in length and being interiorly threaded, a socket screwed into said head and having an axial duct communicating with the duct of the shank, and a single tuft of relatively short stiff bristles rigidly secured in said socket and extending at substantially a right angle to the axis of said shank.

1,813,360. TOOTH CLEANING AND POLISHING TOOL. HARRY R. PRIEST, Londonville, Ohio. Filed July 15, 1930. Serial No. 468,131. 5 Claims. (Cl. 132—84.)



1. A tooth cleaning and polishing tool comprising a shank terminating at one end in a goose neck, a hollow head offset from the goose neck to extend at substantially a right angle to the axis of the shank and of sufficient length to extend approximately to said axis, a cleaning and polishing element detachably secured in said head, a dental floss magazine in the shank opposite said head, and a reversible cap adapted to form either a grip to extend in prolongation of said shank and house said magazine or a housing to house said cleaning and polishing element.

1,813,361. TOOTH CLEANER AND POLISHER. HARRY R. PRIEST, Loudonville, Ohio. Filed Aug. 25, 1930. Serial No. 477,689. 4 Claims. (Cl. 15—184.)

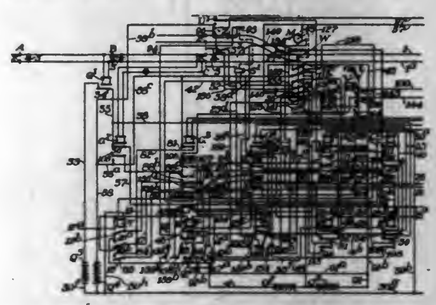


1. A tooth cleaning and polishing device comprising a shank, a nipple on one end of the shank, a removable cap on the nipple constituting a magazine for spare polishing and cleaning elements, the shank terminating opposite the nipple in a hollow threaded head, a single unitary tuft cleaning and polishing element threaded into said head, and a tubular grip housing the shank and removably engaging the shank near the nipple to permit of the nipple and magazine being exposed beyond the grip for access thereto without disturbing the shank.

1,813,362. MANUFACTURE OF PAPER. HAROLD ROBERT RAFTON, Andover, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Mar. 17, 1930. Serial No. 436,651. 21 Claims. (Cl. 92—21.)

1. The steps in the method of manufacturing paper filled with alkaline filler comprising adding flotation agent bearing material to a fibrous mix under conditions favoring the minimizing of the time of contact of said material with the constituents of the mix, and thereafter making paper therefrom.

1,813,363. RAILWAY TRAFFIC CONTROLLING APPARATUS. LESTER E. SPRAY, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,311. 12 Claims. (Cl. 246—21.)



1. In combination, a stretch of railway track containing a switch, trackway means for controlling the operation of said switch when a vehicle approaches said switch, means for preventing such operation of said switch when a second vehicle moves toward said switch but not when said second vehicle moves away from said switch, and means for controlling said trackway means from said first vehicle.

1,813,364. CONDENSATION PRODUCT OF THE DIETHYL ESTER OF METHELENE-DISALICYLIC ACID-DI (P-AMINO BENZYL ETHER) WITH PYRUVIC ACID. SAMUEL LEWIS SUMMERS, Fort Washington, Pa. Filed Oct. 30, 1924. Serial No. 746,868. 3 Claims. (Cl. 260—64.)

1. The hereindescribed condensation product of the diethyl ester of methelene-disalicylic acid-di (p-amino benzyl ether) with pyruvic acid, insoluble in water, but slightly soluble in chloroform and freely soluble in ethyl alcohol.

1,813,365. ACETYLATED DISAZO COMPOUND. SAMUEL LEWIS SUMMERS, Fort Washington, Pa. Filed Feb. 27, 1929. Serial No. 343,242. 2 Claims. (Cl. 260—77.)

1. A diacetyl derivative of the product obtained by coupling diszotized methylene-di(p-)phenetidine with methylene-disalicylamide, wherein the phenolic groups are the ones acetylated.

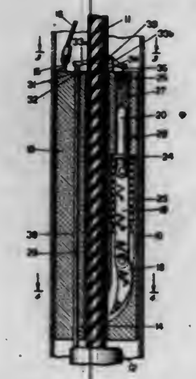
1,813,366. METHOD OF REMOVING THE BITTER TASTE FROM ORANGE PEELS. HEINRICH TEUSCH, Essen, Germany. Filed Oct. 3, 1927, Serial No. 223,843, and in Germany Oct. 11, 1926. 3 Claims. (Cl. 99—11.)

1. The herein described process of treating orange peels preparatory to using the same in the manufacture of food, confectionery, jam, extracts for refreshing beverages and the like, which consists in removing the bitter taste from orange peels by treating the same with water, and causing fermentation of the peels contained within the water.

1,813,367. FIRE EXTINGUISHER. CLAUDE S. THOMPSON, Seattle, Wash., assignor to Thompson Manufacturing Co., Seattle, Wash., a Corporation of Washington. Filed Nov. 24, 1925. Serial No. 71,204. 10 Claims. (Cl. 23—9.)

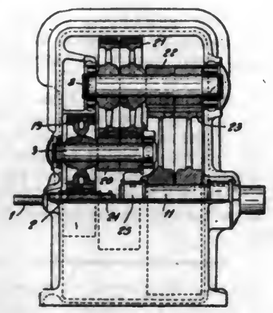
5. The method of extinguishing fire, which comprises providing by the combustion heat a volatilized oxidation-inhibitor in the form of an oxide of an element of the bismuth group of higher atomic weight than phosphorus, and subduing the combustion by exposure thereto.

1,813,368. CABLE KNIFE. MELVIN F. TOLES, Myton, Utah. Filed Dec. 19, 1928. Serial No. 327,059. 6 Claims. (Cl. 255—34.)



6. A cable cutting device comprising a body formed with a longitudinal bore for the cable, a keen-edge cutting member mounted in said body, explosive means for propelling said cutting member to cut said cable, and impact-controlled means for actuating said explosive means.

1,813,369. POWER TRANSMISSION GEARING. WILHELM ROBERT UGGLA, Morby, Stocksund, Sweden, assignor to Luth & Rosens Elektriska Aktiebolag, Stockholm, Sweden, a Corporation of Sweden. Filed Oct. 23, 1926, Serial No. 143,657, and in Sweden Oct. 28, 1925. 2 Claims. (Cl. 74—7.)



1. Power transmitting gearing comprising a drive shaft, a plurality of power receiving shafts including a driven shaft in axial alignment with the drive shaft and two series of intermediate shafts, each of said series comprising a plurality of shafts and said series being located at opposite sides of the drive and driven shafts, a casing enclosing the gearing and providing bearings for all of said shafts, there being a bearing at each end of each of the power receiving shafts and gears on said shafts for transmitting power from the drive shaft to the driven shaft, all of the gears on the power receiving shafts being located between bearings and one of the gears on an intermediate shaft in each series being peripherally resilient.

1,813,370. HUNTER'S DUCK DECOY. JOSEPH E. VILLATORE, Jersey City, N. J., and RUDOLPH ANELLO, Brooklyn, N. Y., assignors to George Sciacca, New York, N. Y. Filed Sept. 24, 1929. Serial No. 394,905. 6 Claims. (Cl. 43—3.)

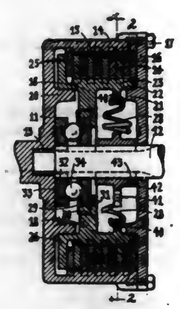


6. A decoy duck comprising a body portion, a vertical journal bushing passing through said body, a stem within the bushing, a freely rotatable head on the upper end of the stem, a slotted post carried by the lower end of the stem, a flat vane having its front end passing through and horizontally adjustably fastened to the post, a rudder formed with the rear portion of the vane, weights replaceably attached to the rudder portion on each side thereof, said post being counterbalanced by said weights to maintain the vane is a horizontal position and prevent tilting of the body.

1,813,371. COMPOSITE LAKE PIGMENT. WILLIAM HENRY WHATMOUGH, London, England, assignor to Standard Products Corporation, a Corporation of New York. Original application filed Jan. 30, 1926, Serial No. 85,025, and in Great Britain Dec. 7, 1925. Divided and this application filed Aug. 25, 1926. Serial No. 131,550. 4 Claims. (Cl. 134—58.5.)

1. The process of preparing a composite pigment which comprises dispersing a finely divided substrate in an aqueous dispersion of oleaginous material and striking a dye on said substrate to form a lake pigment whereby the pigment particles are precipitated and carry down with them the oleaginous material.

1,813,372. GRIPPING DEVICE. ERNEST WILDHABER, Brooklyn, N. Y. Filed Feb. 28, 1928. Serial No. 265,283. 9 Claims. (Cl. 192—56.)



1. In a friction clutch, two members angularly movable relatively to each other about the axis of the clutch, an operating member movable axially relatively to both said members, spring means for operatively connecting said two members, helical guides disposed on one member, other guides disposed in the second of said members, either guides engaging with said operating member, rolling members disposed in said guides for exerting pressure between either of said two members and the operating member with a minimum of friction.

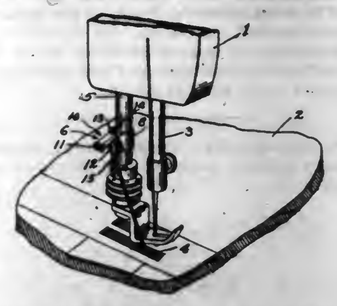
1,813,373. LATTICE BEAM. CHARLES L. WOOLDRIDGE, Pittsburgh, Pa., assignor to Charles L. Wooldridge, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1929. Serial No. 334,248. 1 Claim. (Cl. 189—37.)



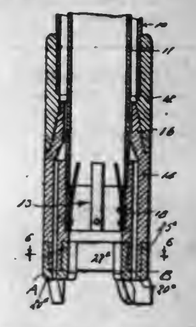
A lattice beam comprising a tension chord of T-shape in cross section and having a single central vertical web portion formed with serrations at the ends, a compression chord having a single central vertical web portion formed at the ends with serrations complementary to those of said tension chord, said chords being associated with their said web portions abutting edgewise at the ends, each set of serrations engaging in the other set, a pair of plates at each end of the beam, said plates enclosing the web portions of said tension and compression chords between them, thereby to maintain said chords in vertical alignment, means for drawing said plates together to clamp said web portions, and struts connected between said chords, said struts consisting of tubes having the ends thereof formed with flat portions for attachment to the vertical webs of said chords.

1,813,374. THREAD CUTTER FOR SEWING MACHINES. NAOMI H. WOOLSEY, Los Angeles, Calif. Filed Aug. 21, 1928. Serial No. 301,150. 4 Claims. (Cl. 112—252.)

1. A thread cutter for sewing machines, comprising a bar, said bar having a reverse bend with two flat parallel portions, the said bar having a resiliency to press said portion tightly together forming a clamp, one end of the bar having means for attachment to the presser bar of a sewing machine, the other end forming a guide for inserting thread in the clamp and at least one of the portions having a sharpened edge adapted to sever thread clamped between the portions of the bar.

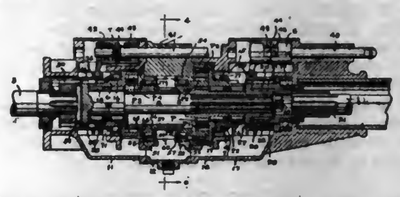


1,813,375. CORE DRILL. JESSE C. WRIGHT, Huntington Park, and LYNN F. BONNEY, Los Angeles, Calif., assignors to Wieman, Kammerer, Wright Co., Inc., a Corporation of California. Filed Nov. 15, 1927. Serial No. 233,351. 4 Claims. (Cl. 255—72.)



1. A core drill including an annular shank having a flange projecting downwardly from its lower end, a cutter having downwardly projecting teeth and upwardly projecting flanges overlapping the inner and outer sides of the flange on the shank, and cooperating lugs and openings at the flanges whereby the cutter is rotated by the shank.

1,813,376. TRANSMISSION GEARING. CHARLES E. F. AHLM, Cleveland, Ohio, assignor to Automotive Patent Holding Company, Cleveland, Ohio, a Corporation of Delaware. Filed Apr. 4, 1925. Serial No. 20,837. 27 Claims. (Cl. 74—59.)

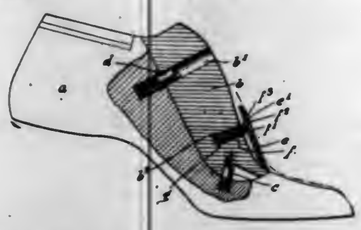


8. In a gearing a shaft, a hollow gear in surrounding and concentric relation to the shaft, a compound gear in surrounding and eccentric relation to the shaft and having teeth meshing with the first mentioned gear, another gear in concentric relation to the shaft and having teeth meshing with teeth of the compound gear, a driving member and a driven member in fixed longitudinal relation to each other and means to establish a driving connection therebetween through the shaft only, or through the gears.

1,813,377. PROCESS OF MAKING A WATER RESISTANT ADHESIVE AND THE PRODUCT THEREOF. HARRY P. BANKS, Seattle, Wash. Filed Jan. 26, 1929. Serial No. 335,397. 12 Claims. (Cl. 87—17.)

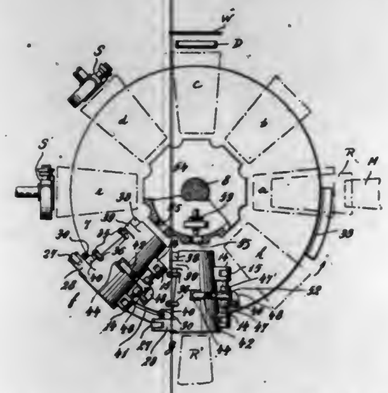
1. The method of making adhesives which comprises adding furfural to oleaginous seed flour containing material dispersed in an alkaline medium.

1,813,378. SHOE-LAST. ANDREW BARNA, Astoria, N. Y. Filed May 2, 1930. Serial No. 449,183. 2 Claims. (Cl. 12—137.)



1. The combination with a shoe-last of a threaded tube set into the last, a shouldered and headed screw engaged with the tube, and a plate shaped to conform substantially to the surface of the last and engaged freely between the head and shoulder of the screw.

1,813,379. APPARATUS FOR MAKING RECEPTACLES. HART O. BERG, New York, N. Y., assignor, by mesne assignments, to Seal-Cones, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 19, 1929. Serial No. 400,944. 21 Claims. (Cl. 93—44.)

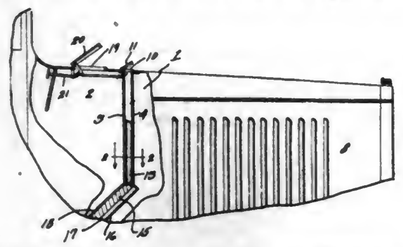


1. In apparatus for forming receptacles, a carrier, and a series of receptacle holders mounted on the carrier to have adjustment longitudinally of the axis of the holders and horizontally and vertically of the longitudinal axis of the holders.

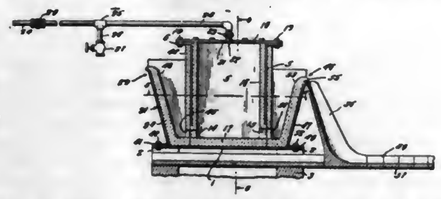
8. In apparatus for forming receptacles, a rotatable disk, tubular receptacle holders comprising semi-circular sections pivotally connected, and means to mount one of the sections in fixed position on the disk.

1,813,380. AUTOMOBILE BODY CONSTRUCTION. JOHN M. BONBRIGHT, Detroit, Mich. Filed Nov. 2, 1929. Serial No. 404,486. 6 Claims. (Cl. 180—90.)

1. In an automobile having a forward engine compartment and a rear passenger compartment, a dash separating the compartments extending transversely of the vehicle from one side to the other, said dash being of hollow form and closed at its lower edge, a footboard engaging the lower edge of the dash and extending longitudinally thereof, a deflector plate forwardly of the footboard in spaced relation therewith, said hollow dash having a practically centrally disposed opening for egress or ingress of air at the top and openings to atmosphere at opposite sides at the bottom.

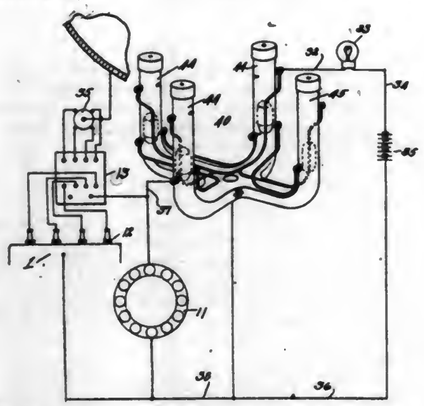


1,813,381. CASTING LADLE. FRANK G. CARRINGTON, Anniston, Ala., assignor to Ferric Engineering Company, Anniston, Ala., a Corporation of Delaware. Filed June 8, 1928. Serial No. 283,863. 14 Claims. (Cl. 22—79.)



1. A casting ladle comprising a chamber for molten metal, a discharge spout in communication with said chamber and terminating above the initial level of the molten metal in the ladle, a charging spout in communication with said chamber and terminating above the discharge spout and means for introducing a gas under pressure into said chamber to force the molten metal from the discharge spout.

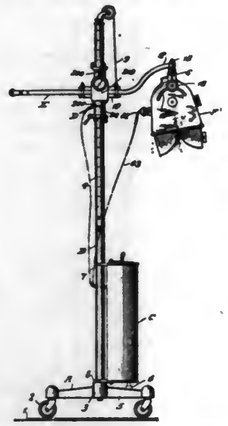
1,813,382. OIL LEVEL INDICATING APPARATUS. JAMES F. CHAPPELL, Windsor, Ontario, Canada. Filed Apr. 26, 1926. Serial No. 104,580. 3 Claims. (Cl. 177—311.)



3. The combination with an oil containing casing of an internal combustion engine having an oil outlet in its lowermost portion, of an oil level indicating device comprising a multi-arm container including a series of four hollow vertical portions and integral horizontal connecting portions together united at a common center opening to the said oil outlet of the casing and spaced practically

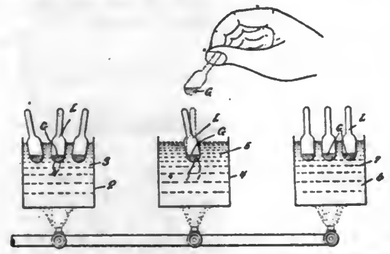
equal angular distances apart about an axis parallel to the said tubular portions, the said vertical portions being disposed in pairs on opposite sides of a longitudinal and transverse line of the casing, an electric circuit having terminals extending into the said vertical portions of the container and a second circuit also having terminals in the said vertical portions at a higher level than the first named terminals, a float in each of the said vertical portions of the container of a character to contact the terminals and close either of the circuits when the floats are at a level to contact the terminals of the respective circuits.

1,813,383. THERAPEUTIC LAMP APPARATUS. JACQUES W. D. CHESNEY, Chicago, and HECTOR P. MACLAGAN, Oak Park, Ill., assignors to McIntosh Electrical Corporation, a Corporation of Delaware. Filed Jan. 30, 1928. Serial No. 250,528. 10 Claims. (Cl. 174—177.)



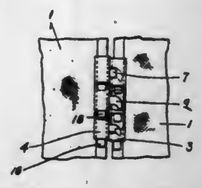
1. In therapeutic lamp assembly, in combination a mercury arc bulb; adjustable means for supporting and moving and guiding said bulb bodily up and down in a vertical line, and with a revolving motion about a vertical axis, in any direction in the same horizontal plane and in and out in a horizontal straight line, in a swiveling motion about a vertical axis substantially passing through said bulb, and in any combination of said movements while maintaining it always in a normal operating position relatively to the horizontal; a hood enclosing said bulb, bodily movable therewith and partaking of all its aforesaid movements; and separate means for swiveling said bulb independently of said enclosing hood.

1,813,384. METHOD OF MANUFACTURING HYDROMETER FLOATS. HOWARD E. CHRISTIE and KIBBEY W. COUSE, Bronx, N. Y. Filed June 7, 1927. Serial No. 197,191. 4 Claims. (Cl. 265—45.)



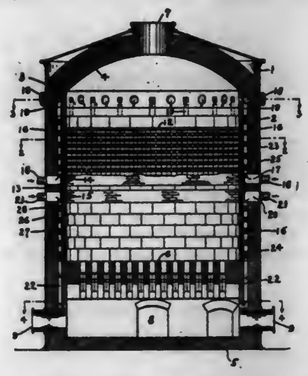
4. The herein described method of manufacturing hydrometer floats, which method consists in providing a hydrometer float having a weighty fusible material within the lower end portion thereof, reducing said fusible material to a mobile condition and shifting its position within the float while floating in a medium which is of relatively greater specific gravity than the medium within which the float is intended for use so as to secure a perpendicular floating condition of said float, and then allowing the weighty material to again solidify in its shifted position.

1,813,385. FASTENING DEVICE. DANIEL F. DALTON, Waterbury, Conn., assignor to The Shoe Hardware Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 14, 1925. Serial No. 62,348. 11 Claims. (Cl. 24—205.)



6. A separable fastener comprising a pair of stringers, two series of unlike elements, secured respectively to the adjacent edges of the two stringers, and having interengageable portions located and contacting in a plane to one side of and parallel to the plane of the stringers, the interengaging portions being so constructed as to be engageable by the convergent edgewise movement of the stringers.

1,813,386. WATER GAS CARBURETOR. GEORGE W. DAVEY and FRANK H. WAITE, Long Island City, N. Y. Filed Feb. 2, 1926. Serial No. 85,454. 3 Claims. (Cl. 48—79.)



1. A water gas carburetor, having in combination, a refractory-lined carbureting chamber having passages in said lining, steam admission means to certain of said passages, air admission means to other of said passages, steam and air inlets from their respective passages into the chamber, a water gas inlet in said chamber, and a grate and a checker-work body of refractories, spaced from each other, positioned in the chamber between the steam inlets and the air inlets.

1,813,387. PROCESS OF MAKING A WATER RESISTANT DOUBLE DECOMPOSITION ADHESIVE AND TO THE PRODUCT THEREOF. GLENN DAVIDSON and IRVING F. LAUCKS, Seattle, Wash. Filed Jan. 25, 1929. Serial No. 335,143. 20 Claims. (Cl. 87—17.)

1. A method of making double decomposition adhesives embodying oleaginous seed flours and sulphur derivatives of carbonic acid which comprises adding thereto sodium fluoride as an alkaline salt which together with calcium hydrate provides the alkalinity required in the presence of water.

1,813,388. HOSIERY FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co. Inc., Auburn, N. Y., a Corporation of New York. Filed Mar. 16, 1929. Serial No. 347,691. 2 Claims. (Cl. 223—18.3.)



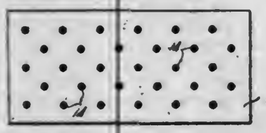
1. A hosiery form comprising a foot and leg portion of stiffly resilient sheet material and a base upon which the portion is supported, with the foot end free to move relative to the base, whereby the portion may be flexed to demonstrate the appearance of a piece of hosiery slipped thereon under varying conditions.

1,813,389. APPAREL GARMENT. EWEN C. DUFF, New York, N. Y., assignor to Kops Bros. Inc., New York, N. Y., a Corporation of New York. Filed May 16, 1928. Serial No. 278,114. 3 Claims. (Cl. 2—42.)



2. In an apparel garment, an elastic strip lying adjacent an edge portion of the garment material, and a binder member straddling the outer edge of the elastic strip, the said elastic strip being connected in a stretched condition to both the said binder member and the adjacent portion of the garment material by a line of stitching, said line of stitching passing through both sides of the binder.

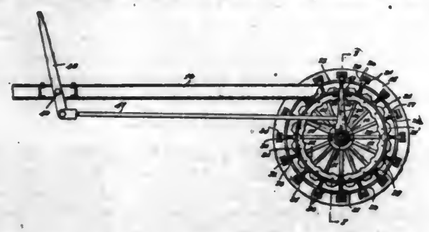
1,813,390. MEANS OF DECORATING LEATHER. MICHEAL J. DWYER, East Weymouth, Mass. Filed May 22, 1930. Serial No. 454,811. 6 Claims. (Cl. 41—24.)



1. That method of producing colored figures upon a leather sheet which comprises first stretching the sheet locally at predetermined portions thereof, and then coloring said stretched portions.

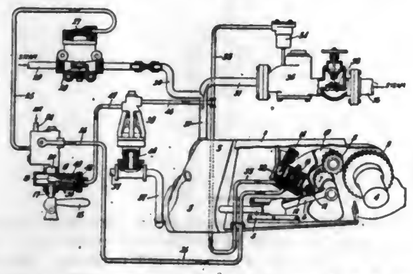
1,813,391. ANTISKID DEVICE. HENRY H. ELLSWORTH, Cohasset, Mass. Filed Mar. 29, 1930. Serial No. 439,948. 4 Claims. (Cl. 301—47.)

3. In an anti-skid device for automobiles, having as elements a plurality of tractive elements rotatable with the wheel, and adapted to be operated radially therewith to engage the surface of the road, and a member rotatable with the wheel and relatively rotatable thereto, and provided with a plurality of cams in engagement with, and adapted to move the respective anti-skid elements radially to project beyond the line of the periphery of the wheel; in combination therewith a friction element, adapted to be engaged with the cam member for the purpose of retarding the rotation of the ring relative to the rotation of the



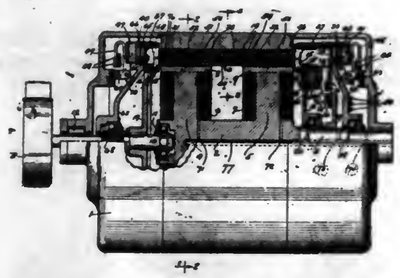
wheel, from an initial position and within predetermined limits in either direction depending on the direction of rotation of the wheel; and means operative on the friction element, for controlling its engagement with the cam elements.

1,813,392. LOCOMOTIVE BOOSTER APPARATUS. MAJOR T. FORKER, Loomis, N. Y., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1927. Serial No. 232,873. 27 Claims. (Cl. 105—48.)



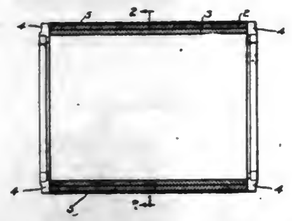
1. Locomotive booster apparatus comprising a booster motor and automatic disabling means therefor under the influence of the booster exhaust, including means for preventing automatic resumption of booster operation.

1,813,393. ELECTRIC MACHINE. ETHELBERT M. FRASER, Yonkers, N. Y. Filed Nov. 16, 1925. Serial No. 69,236. 15 Claims. (Cl. 171—123.)



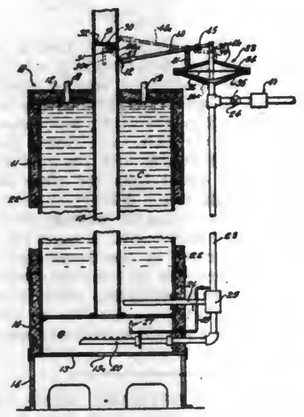
1. An electric machine comprising two field structures, a rotary converter winding, a generator inductor winding secured to but insulated from said converter winding, and a motor inductor winding, the converter winding and the motor inductor winding being adapted to cut the flux produced by one of said field structures, and the generator inductor winding and the motor inductor winding being adapted to cut the flux produced by said other field structure.

1,813,394. INDUCTOR WINDING AND METHOD OF MAKING SAME. ETHELBERT M. FRASER, Yonkers, N. Y. Original application filed Nov. 16, 1925, Serial No. 69,236. Divided and this application filed Feb. 15, 1928, Serial No. 254,349. Renewed Apr. 2, 1931. 3 Claims. (Cl. 171—206.)



1. An inductor winding comprising a hollow cylindrical structure made up of conductors held together in the form of a unitary structure and insulated from each other by heat-hardened insulating material, and wire wrapped about said winding to strengthen the same.

1,813,395. DAMPER CONTROL SYSTEM. KENNETH FRASER, Pasadena, Calif. Filed Feb. 13, 1929. Serial No. 339,540. 7 Claims. (Cl. 236—20.)



1. In heating apparatus of the character described, the combination embodying a main burner, a feed line for delivering fuel to said burner, a burner adjustment valve in said line, a thermostat controlled valve, said thermostat controlled valve regulating the gas supply to said main burner, between the burner and said adjustment valve, a control member associated with the heater, and pressure actuated means independent of said valves, communicating with the feed line between said valves and operatively connected to said control member, whereby said member is actuated by virtue of pressure changes in the feed line.

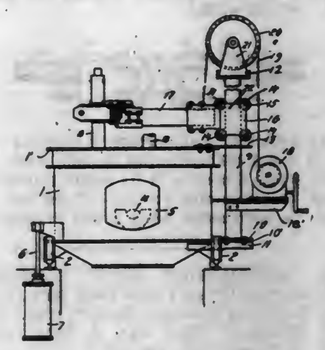
1,813,396. PEN AND PENCIL CLIP. WILLIAM GORDON, Union, N. J. Filed Feb. 7, 1929. Serial No. 338,057. 2 Claims. (Cl. 24—11.)

1. A clip for pens, pencils and the like, embodying, in combination, a clip body having means for attachment to a pen, a spur member mounted on said clip body to have limited upward and downward movements longitudinally of the clip and substantially parallel with the axis of the pen, a casing open at its upper end within which said spur is adapted to move, a relatively heavy spring mounted within said casing for automatically forcing said spur longitudinally upwardly to the open end of the casing, a relatively light spring for automatically and flexibly forcing said spur transversely toward the pen, manually-actuated releasing means for moving said spur downwardly into



said casing against the action of said longitudinal-pressing spring to cause a transverse movement of the spur in the opposite direction and a sheathing thereof by the casing.

1,813,397. ELECTRIC ARC FURNACE AND CRANE STRUCTURE. ALBERT E. GREENE, Medina, Wash. Filed June 18, 1930. Serial No. 461,947. 8 Claims. (Cl. 13—1.)



1. In an electric arc furnace comprising a shell enclosing a heating chamber and mounted for tilting movement, an electrode extending through the top of the shell into the heating chamber, and an arm arranged to support the electrode in an upright position above the shell, means for permitting vertical movement of the arm, said means consisting of a mast rigidly connected at one side of the shell and a carriage for the arm having rollers arranged to engage opposite faces of the mast, said mast being composed of two spaced track members and two spacing elements each rigidly connected to the track members adjacent the edges of the track members.

1,813,398. LIGHTER FILLING STATION. JOHN CLARENCE GRIESEMER, Reading, Pa. Filed Nov. 4, 1930. Serial No. 493,348. 1 Claim. (Cl. 221—100.)

A device for dispensing liquids in small quantities consisting of a base, an elongated post carrying at its upper end a receptacle, said receptacle having a base member secured to the post, a glass cylinder resting on the base member, a cap member resting on the top of the glass cyl-

inder, a central clamping rod screw threaded at its opposite ends being threaded into the base member and extending through the top member, a nut threaded on the



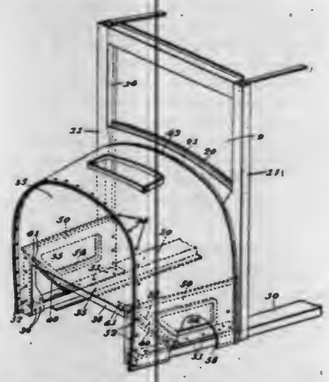
upper end of said rod adapted to clamp said cap member tightly on said cylinder, and a faucet secured in said bottom or base member communicating with the interior of said receptacle.

1,813,399. CORD COUPLING. HAROLD D. GRINNELL, Pittsfield, Mass., assignor to The G. C. A. Manufacturing Company, Pittsfield, Mass., a Corporation of Massachusetts. Filed Feb. 3, 1931. Serial No. 513,155. 6 Claims. (Cl. 24—123.)



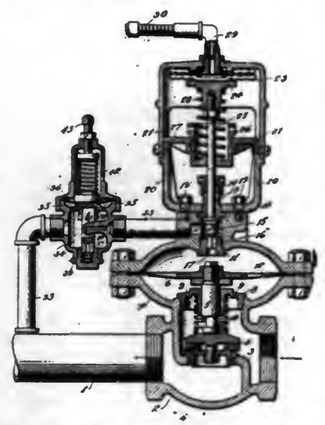
3. As an article of manufacture, a coupling formed of a length of metal tubing having its side walls cut away at opposite points a portion of its length intermediate the extremities, the remaining portions of the side walls intermediate the extremities being bowed inwardly.

1,813,400. AUTOMOBILE BODY CONSTRUCTION. OTTO J. GROEHN, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 2, 1928. Serial No. 258,615. 4 Claims. (Cl. 296—28.)



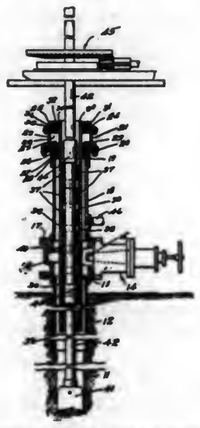
1. In an automobile body, in combination, a body sill structure, uprights secured to and supported by said sill structure, a reinforcing bracket connecting said uprights and secured at its lower edge to said sill structure and a panel secured to and supported by said uprights and having its lower edge free from said sill structure.

1,813,401. TEMPERATURE REGULATOR. JOHN G. HELMSTAEDTER and FREDERICK J. SCHILLING, Newark, N. J. Filed May 16, 1928. Serial No. 278,149. 4 Claims. (Cl. 236—32.)



1. In a device of the character described, a conduit for supplying steam to a hot water tank, a normally closed main valve in said conduit, a steam-pressure-movable member connected to said valve and having a leak-port from one side of itself to the other, a chamber for said member at the top of the main valve casing communicating on one side of said member with the inlet side of said valve and having an outlet from the other side of the member to said conduit at the delivery side of the valve, an auxiliary valve controlling the passage of steam from said chamber through said outlet, a cage, an expansion unit in said cage operated by the temperature of water in the tank and connected to said auxiliary valve to close the same, and a pressure regulating valve in said outlet adapted to be closed by excess pressure on the delivery side of the main valve and thus operate the main valve to close the same.

1,813,402. PRESSURE DRILLING HEAD. EVERT N. HEWITT, Los Angeles, Calif. Filed June 1, 1927. Serial No. 195,696. 10 Claims. (Cl. 255—1.)

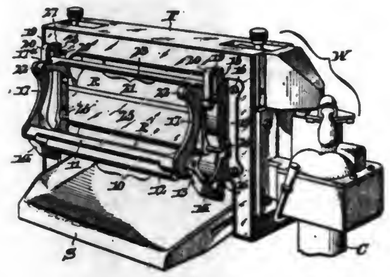


1. In the art described the combination of a well casing, a valve mounted thereon, a false casing mounted

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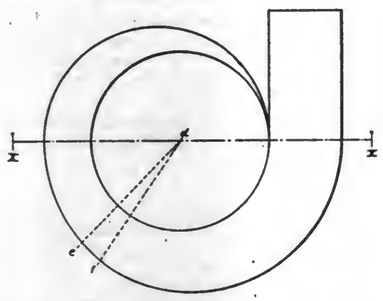
on the valve, said casing having a head with a packing, a cap mounted on the head, having antifriction bearings, a rotatable sleeve mounted on said bearings and passing through the packing into the false casing and through the valve into the casing, resilient packing rings in the sleeve, and a drill pipe passing through the sleeve and forming a seal with the resilient packing rings.

1,813,403. SAFETY FEED FOR WRINGERS. EMIL A. HIRNER, Allentown, Pa. Filed Mar. 22, 1929. Serial No. 349,113. 11 Claims. (Cl. 68—32.)



1. A safety feed for wringers having squeeze rolls comprising a horizontally-pivoted gravity-influenced feed member with an associated freely-rotatable roller for presenting material to be wrung at the bight of the squeeze rolls, a finger guard for shielding the rolls, and means operatively co-ordinating said guard with the feed member for induced movement to clear the material concurrent with its presentation to the wringer squeeze rolls.

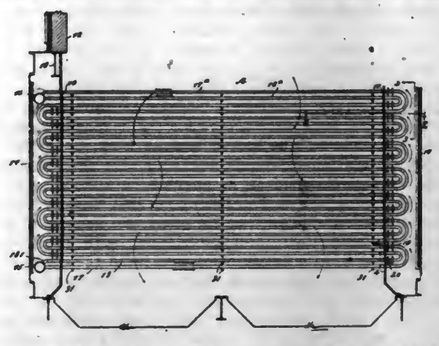
1,813,404. TURBINE CASE. ALEXANDER V. KARPOV, Pittsburgh, Pa. Filed Aug. 15, 1928. Serial No. 299,711. 1 Claim. (Cl. 253—120.)



A turbine case of scroll form, composed of unitarily-connected segmental portions each of which constitutes approximately a fundamental ring section, based on the average radial dimension of that particular section.

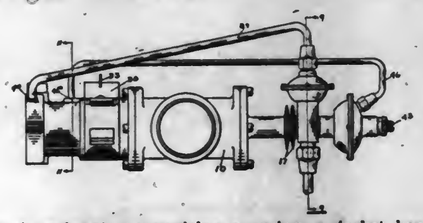
1,813,405. FLUID HEATER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 11, 1928. Serial No. 245,972. 9 Claims. (Cl. 257—230.)

1. In combination, a flue, a fluid heater comprising tubes extending transversely of the flue, and a baffle wall extending across the tubes, said baffle wall comprising baffle plates extending across the flue and overlapping one another with the lower portion of each of certain of the



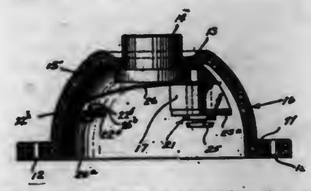
baffle plates overlapping the upper outer edge of the next lower baffle plate, the edges of said plates being provided with recesses adapted partially to surround said tubes.

1,813,406. CARBURETOR. FRANK A. KIRSTATTER, Akron, Ohio. Filed May 13, 1926. Serial No. 108,782. 8 Claims. (Cl. 123—133.)



1. A carburetor comprising a casing, a jacket having a duct therethrough for vaporizing liquid fuel, said jacket being provided with heat absorbing fins, means for conducting exhaust gases through the casing about the jacket, means for supplying a liquid fuel within the jacket and causing it to impinge against the wall of said duct so as to be gasified, a mixing chamber arranged to receive the gasified fuel, said chamber having an air inlet therein so directed as to impart a whirling motion to the gases in the chamber, said duct in said jacket being small as compared with the throttle opening, a throttle controlling delivery of the combustible mixture from the chamber, a diaphragm valve for controlling supply of liquid fuel to the carburetor, means normally closing the valve, means connecting one side of the diaphragm of said valve directly to the engine suction for opening said valve, a second diaphragm valve for controlling the flow of liquid fuel through the carburetor, means normally holding the valve in an engine-idling position, and means connecting one side of the diaphragm of said second valve to the throttle-controlled suction in the carburetor.

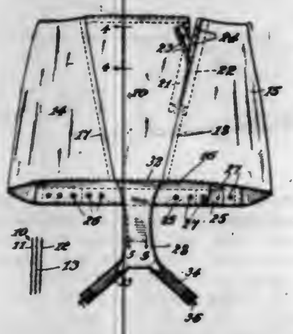
1,813,407. PUSH BUTTON SWITCH CONSTRUCTION. KNUD KNUDSEN, Danbury, Conn. Filed May 29, 1928, Serial No. 281,422. Renewed Nov. 21, 1930. 16 Claims. (Cl. 200—159.)



1. In push button switch construction, in combination, a dome-like housing made of a moldable insulating mate-

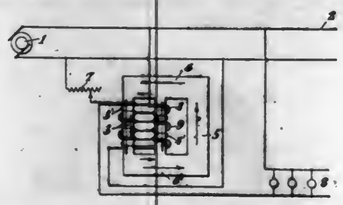
rial and having on the interior thereof two substantially opposed projecting portions, a metallic sleeve member threaded interiorly and molded into each of said projecting portions, each sleeve member projecting therefrom, a metal contact member supported by one of said projecting portions and secured in place by said sleeve member, the latter being bent over said contact member to hold it in place, a metallic member supported by the other of said projecting portions of said housing and secured in place by the sleeve molded into the latter, a projecting portion of the sleeve being bent over said metallic member to hold it in position, a spring bridging member having one end overhanging said first-mentioned contact member and having its other end bent back substantially upon itself and interlocked with said other contact member, the latter being apertured to receive said end portion of said spring member and having a slot through which said end portion may be passed into said aperture, a push button extending through the upper portion of said housing and engaging said spring member for operating the latter, and a pair of connecting screws, each threaded into one of said metallic sleeve members.

1,813,408. APPAREL GARMENT. WALDEMAR KOPS, New York, N. Y., assignor to Kops Bros. Inc., New York, N. Y., a Corporation of New York. Filed Aug. 19, 1929. Serial No. 386,828. 4 Claims. (Cl. 2—43.)



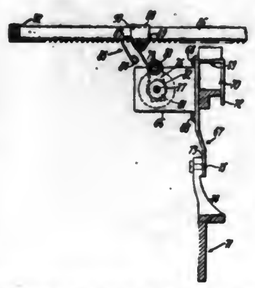
1. In a garment of the type described, a girdle adapted to extend around the abdominal portion of the body of a wearer, a crotch member extending from the lower front edge of the girdle, and means for connecting the crotch member in any one of a plurality of positions along the lower edge portion of the back of the girdle to cause the crotch member and the lower edge portions of the girdle to engage the upper parts of the limbs of the wearer to maintain the girdle in position on the body.

1,813,409. ALTERNATING CURRENT CONTROLLING APPARATUS. HAROUTION K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Nov. 21, 1928. Serial No. 320,908. 13 Claims. (Cl. 171—242.)



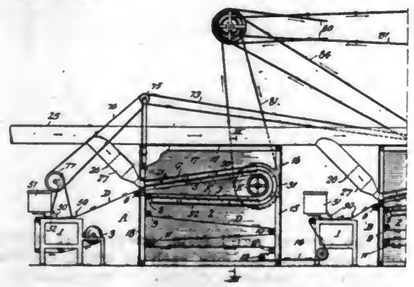
1. Controlling apparatus adapted to be supplied from a source of alternating current energy comprising a core having alternating current windings thereon, means for varying the alternating current in one of said windings, and another of said winding being in series with the load and supplied with alternating current energy from said source, the path of the flux of said last-named winding through said core including a portion of said core additional to that followed by the flux created by said first-named winding.

1,813,410. TYPEWRITING MACHINE. ADOLPH G. KUPETZ, New York, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed Sept. 25, 1924, Serial No. 739,807. Divided and this application filed Dec. 20, 1926. Serial No. 156,046. 6 Claims. (Cl. 235—102.)



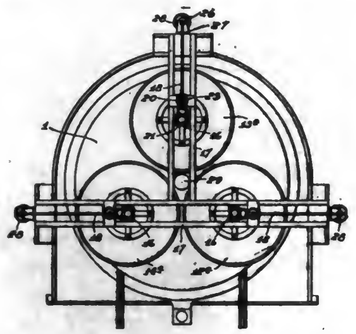
5. In a typewriting machine having a frame, a reciprocating carriage, and an arm on the carriage with a rack-bar fixed on it, the combination of a counting register, including a swingable crank-arm, a bracket detachably mounted on the frame and carrying the register, a resilient extension on the crank-arm, and a yoke straddling said rack-bar and fixable in an adjustable position along this bar, the respective positions of the rack-holding arm and of the yoke with reference to the crank-arm extension being such that in the reciprocating movement of the carriage said arm and said yoke form the two end abutments or stops for said extension with the crank-arm, to throw them into one or the other of their two end positions.

1,813,411. TANDEM COATING MACHINE. JULIUS D. LIPPMANN, East Orange, N. J., assignor to Textileather Corporation, Newark, N. J., a Corporation of New Jersey. Filed May 19, 1928. Serial No. 278,957. 2 Claims. (Cl. 91—55.)



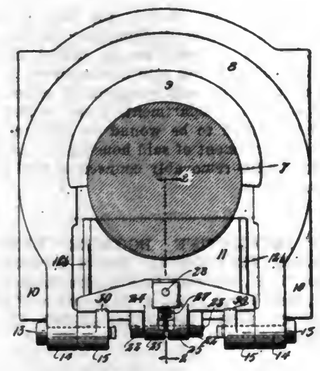
1. Tandem apparatus for fabricating coated fabric comprising several longitudinally spaced dope appliers; a drying hood spaced after each dope applier; means for drawing a strip of textile fabric in tandem through said dope appliers and drying hoods comprising a propulsion roll associated with each drying hood; and means for simultaneously driving said propulsion rolls at various individual propulsion speeds whereby said fabric as an entirety is propelled throughout its length instead of being dragged solely at its far end, and whereby compensation for stretch in said fabric is provided.

1,813,412. GLASS SURFACING MACHINE. WILLIAM H. MARR, South Oil City, Pa. Filed Sept. 8, 1928. Serial No. 304,774. 2 Claims. (Cl. 51—131.)



1. A sheet glass surfacing machine, comprising a horizontally disposed circular work table rotatable on its vertical axis and provided at its center with an elevated portion extending over a central inactive zone, said raised portion being adapted to aid in anchoring glass to the table and in avoiding the collection of abrasive material in the center of the table, the remainder of the surface of the table forming a support for glass, a plurality of rotatable circular runners of equal diameter positioned above the table and each extending from its periphery to said inactive zone, and means for rotating the table, and said runners being rotated by frictional contact with the glass mounted upon said rotating table.

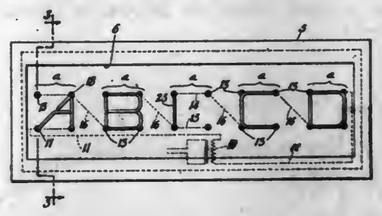
1,813,413. LUBRICATOR CONSTRUCTION. FREDERICK W. MARTIN, Bronxville, N. Y., assignor to Franklin Railway Supply Company, a Corporation of Delaware. Filed Nov. 11, 1925. Serial No. 68,260. 16 Claims. (Cl. 308—83.)



1. Lubricator equipment adaptable to axle boxes of various sizes, comprising a spreader having marginal extensions of maximum size adapted to be reduced for narrower boxes, a cellar of minimum size, and centering means for the cellar.

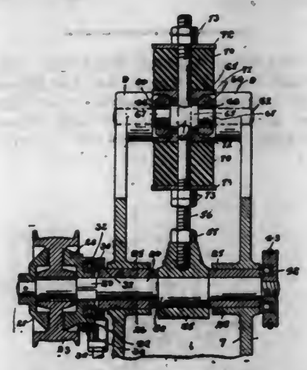
1,813,414. ELECTRIC SIGN. LOUIS I. MATTHEWS, Merion, Pa. Filed June 5, 1929. Serial No. 368,525. 3 Claims. (Cl. 40—130.)

1. In a sign, the combination of a panel, a plurality of groups of permanently arranged terminals, a pair of terminals in each group being adapted to be connected in series by a character in the display, a permanent series connection between groups, and a plurality of luminous



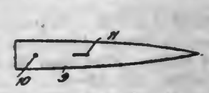
characters adapted to be interchangeably coupled into any group as aforesaid to make up a display having all the characters in series relation.

1,813,415. RIVETING MACHINE. JOHN G. MCCLEAN, Chicago, Ill., assignor to The Grant Manufacturing and Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 24, 1929. Serial No. 394,758. 2 Claims. (Cl. 78—40.)



1. In a riveting machine, the combination of a pedestal including an arm having a shouldered hole therethrough smaller through one portion than the other, and a transverse hole intersecting the larger diameter, a cylindrical bearing within the smaller diameter and having an annular flange seated upon the shoulder in the first mentioned hole, a similar cylindrical bearing having an annular flange positioned in the larger diameter of the hole, a flanged cylindrical bushing surrounding the last mentioned bearing and seated against its flange, means for securing the flange of the larger bushing to the arm and the smaller bushings in position, a reciprocatory and rotatable hammer spindle journaled in the bearings, a worm gear positioned between the flanged ends of said bearings within the larger diameter of the hole and upon the hammer spindle to which it is splined for reciprocatory movement of the spindle, means for reciprocating the hammer spindle in its bearings and gear, and means for rotating the worm gear and spindle.

1,813,416. FISH BAIT. WILLIAM C. MILES, White Plains, N. Y. Filed Apr. 9, 1930. Serial No. 442,782. 2 Claims. (Cl. 43—42.)



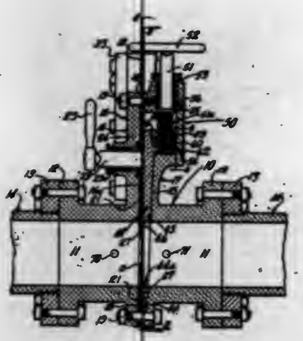
2. An imitation pork rind fish bait of No. 189 imitation chamois.

1,813,417. GROUND CONNECTER. EDWARD J. NOBLE, New London, Conn., assignor, by direct and mesne assignments, to Gillette-Vibber Company, Incorporated, New London, Conn., a Corporation of Connecticut. Filed June 23, 1928. Serial No. 287,856. 7 Claims. (Cl. 247—1.)



1. In a ground connecter the combination of a corrugated flexible shield member mounted over the wire to be grounded having an internally threaded coupling into which the end of the shield is swaged, a clamp member having a bracket longitudinally adjustably mounted over the other end of said corrugated shield member and adapted to bind the end of said wire in a fixed grounded position on a suitable ground pipe.

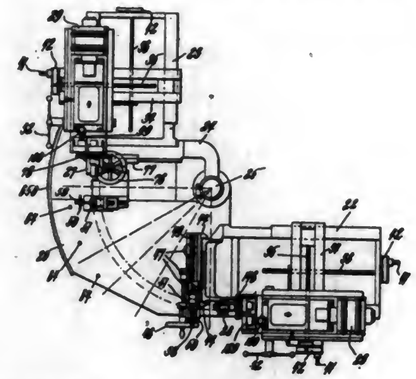
1,813,418. ORIFICE METER FITTING. CHARLES M. O'LEARY and JOHN F. HILTSCHER, Los Angeles, Calif.; Lucille U. Hiltscher, administratrix of said John F. Hiltscher, deceased, assignor to said O'Leary. Filed Dec. 24, 1928. Serial No. 328,098. 5 Claims. (Cl. 137—75.)



1. In a device of the character described, a body having a fluid conduit, a housing having an interior chamber extending completely around the conduit and defined by two substantially parallel transverse wall surfaces, a carrier plate movable transversely in the chamber between the two parallel wall surfaces, the carrier having a disk receiving opening of a size greater than the cross sectional size of the conduit, and an orifice disk in the disk opening, the looseness of fit between the two parallel wall surfaces being less than the thickness dimension of either plate or disk.

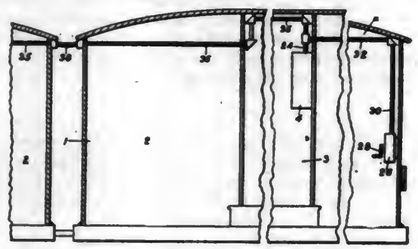
1,813,419. ELBOW LATHE. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 12, 1929. Serial No. 346,478. 5 Claims. (Cl. 82—2.)

1. Apparatus of the class described comprising a pair of cutter heads for trimming the ends of a pipe elbow, means for revolving each cutter head around an axis, means for supporting the cutter heads with their axes intersecting, means for clamping a pipe elbow from



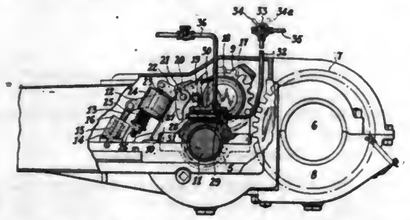
above and below at points adjacent to the ends thereof, each clamp being vertically adjustable relatively to its respective cutter head.

1,813,420. INDICATOR. JAMES I. PARRISH, Indianapolis, Ind. Filed Jan. 18, 1930. Serial No. 421,842. 4 Claims. (Cl. 40—95.)



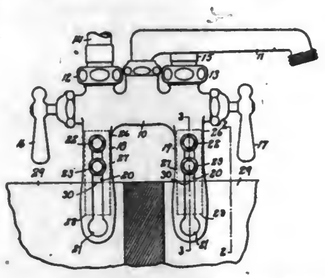
1. In an indicator for cars or the like, a housing, a partition in said housing dividing the interior thereof into compartments, a frame snugly fitting one of said compartments and entering said compartment at one end only, a closure means for said compartment adapted to lock said frame in said compartment, reels carried by said frame, a belt adapted to be wound on said reels, means in the other compartment of said housing for rotating said reels, and means for removably connecting said reels with said rotating means.

1,813,421. LOCOMOTIVE BOOSTER ENTRAINING AND IDLING MECHANISM. FRANK RICHARD PETERS, New York, N. Y., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 28, 1930. Serial No. 424,092. 12 Claims. (Cl. 105—48.)



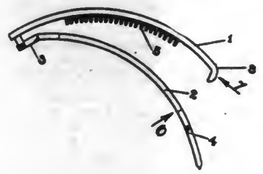
12. The combination of a normally disentrained booster, an idler gear shiftably mounted so as to be moved to entrain the booster, a brake normally effective to restrain rotation of the idler gear, means adapted to release said brake when the idler gear is shifted to entrain the booster and means for releasing said brake to permit idling of the booster prior to entrainment.

1,813,422. LAUNDRY TRAY FAUCET. ELTON A. POPE, Oakville, Conn., assignor to The Chase Companies, Inc., Waterbury, Conn., a Corporation. Filed Sept. 20, 1930. Serial No. 483,292. 7 Claims. (Cl. 4—193.)



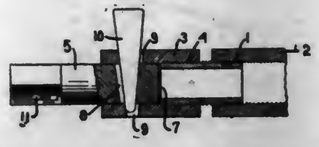
1. In a faucet fixture, the combination with a mounting member therefor; of a clamp member complementing the said mounting member to grip a tray-wall therebetween; an adjustable draft member adjustably connecting the said clamp member from a point between its ends to the said mounting member for pulling the former toward the latter; and an adjustable compression member for adjustably resisting the pull of the said draft member and located at a point, with respect to the latter, opposite the point at which the said mounting and clamp members grip the tray-wall.

1,813,428. BARRETTE. JOHN B. RICHARD, Leominster, Mass., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 24,1930. Serial No. 423,047. 4 Claims. (Cl. 132—48.)



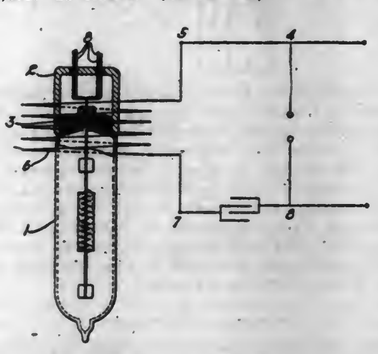
4. In a barrette, a body carrying comb teeth thereabong, a tongue for cooperation with the body, and provided with a slot for the reception of the comb teeth, a hinge structure connecting the tongue with the body at one end, and a fastening means for the tongue member and body at the other end, such fastening means comprising an upturned end portion of said body to thereby present a spaced-standard structure on the body for the reception of the tongue, the immediately cooperating parts presenting a shank-and-socket structure, and such hinge structure comprising a member on the body for the reception and hinging of the tongue and upstanding from the body, thereby placing such end at a substantial distance above the body to give suitable clearance to the hinged end of the tongue, said tongue, closely adjacent said end, being downset toward the body, out of the tongue's general shape over all, thereby to overcome the spacing effect of said upstanding hinge member along the major portion of the length of the tongue to thereby bring the tongue into intimately close holding relation to said body, despite the said hinging clearance.

1,813,424. HOLDER FOR SCREW-THREADED ARTICLES. MICHAEL J. ROCHE, Watertown, Mass., assignor of one-half to Gustave A. Gabulson, Jamaica Plain, Mass. Filed Nov. 9, 1929. Serial No. 405,943. 2 Claims. (Cl. 81—53.)



1. A holder or clamp for exteriorly screw-threaded articles comprising a sleeve member having interior screw threads at one end and adapted to be screw threaded to said article, a clamping member entering the sleeve member axially from the other end and adapted to bear against the end of said article, and means co-operating with the clamping member and the sleeve to force the end of the clamping member against the end of the screw-threaded article and to cause the screw-threads of the sleeve to have a binding engagement with the screw threads of said article, the clamping member projecting beyond the sleeve member and the projecting portion having flat sides to receive a wrench.

1,813,425. METHOD OF HEATING AN ELECTRICAL AND THERMAL NONCONDUCTOR. ESME EUGENE ROSAIRE, Houston, Tex., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 22, 1926. Serial No. 110,891. 13 Claims. (Cl. 18—59.)



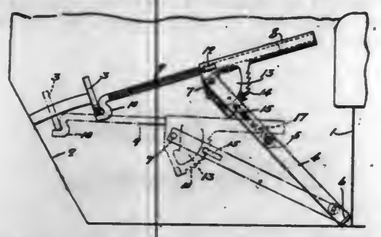
1. The method of heating an electrical and thermal non-conducting body, which consists in incorporating particles of conducting material in the non-conducting body and then subjecting the body to the influence of an alternating magnetic field.

13. The method of affixing to a glass bulb a base composed of material of poor heat conductivity which consists in interposing between the bulb and the base a layer of cement adjoining metal and developing in said metal sufficient heat to bake said cement.

1,813,426. PEDAL JACK. LINUS E. RUSSELL, Jr., and GEORGE E. PETERS, Springfield, Ohio. Filed Jan. 21, 1929. Serial No. 334,062. 18 Claims. (Cl. 254—118.)

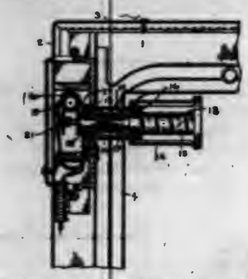
1. In a spacer jack of the character described, a pair of arms interpivoted for unison oscillation and forming a toggle joint, one of said arms comprising two telescopically adjustable sections, a series of ratchet teeth carried by one section of said arm and a detent pawl carried by the other section of the arm and engaging with the ratchet teeth to normally resist retraction of the telescopic arm but permitting free extension thereof,

and a series of ratchet teeth carried by one of said interpivoted arms and a detent pawl carried by the other



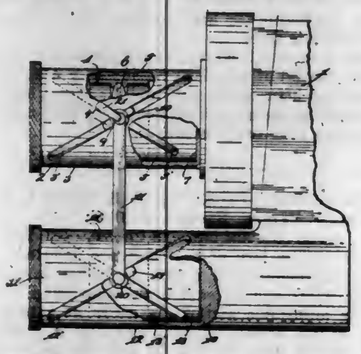
arm and engaging with the ratchet teeth permitting free adjustment of the arms toward aligned position, but normally resisting relative adjustment in reverse direction.

1,813,427. THERMOSTATIC DEVICE. EDWIN A. RUTENBER, Milwaukee, Wis., assignor to A. J. Lindemann & Hoverson Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 18, 1926. Serial No. 136,234. 4 Claims. (Cl. 219—35.)



1. In combination with a heating chamber having inner and outer walls spaced apart, a thermostatic device for controlling the generation of heat in said chamber having a temperature responsive element therein and switch and control mechanism mounted between said walls, the outer of said walls having an opening to permit the insertion and removal of said switch mechanism and element, a removable cover for said opening, a rigid housing supporting said switch, element and control positioned between said walls and forming therewith an enclosure for said switch and control.

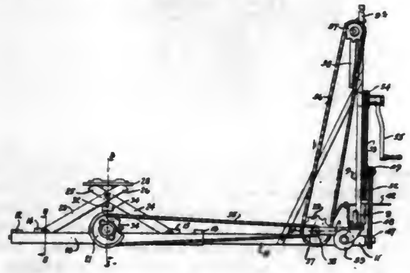
1,813,428. METHOD AND MEANS FOR MAKING DISSOLVES AND EFFECTS IN MOTION PICTURES. JOHN F. SEITZ, Los Angeles, Calif. Filed Dec. 20, 1926. Serial No. 155,915. 22 Claims. (Cl. 88—16.)



1. A method of making dissolves in motion pictures which comprises moving the lens of a motion picture apparatus quickly out of focus while making a series of exposures of a scene so that the scene becomes blurred to any desired degree, then bringing a second scene into focus from a blur.

4. A motion picture device comprising a stationary outer casing having a helical slot, an inner rotatable and slidable lens casing, a lens mounted therein, a rotatable casing having a helical slot arranged transversely to the first mentioned slot, said rotatable casing being intermediate the outer and inner lens casing, a finder lens casing mounted for longitudinal and rotational movement, a finder lens therein, an operating link having universal joint connections with both the said inner lens casing and said finder lens casing and manually operated means for operating said link.

1,813,429. TRAVELING LIFTING JACK. GEORGE A. SEXTON, Brookline, Mass. Filed Sept. 22, 1926. Serial No. 137,015. 1 Claim. (Cl. 254—9.)



A lifting jack comprising a carriage body, a trough-like member having one of its end portions connected to said body, an upright member positioned at the other end of said trough-like member, a non-traveling screw rotatively positioned in said last-named member, means borne by said upright member to rotate said screw, a pair of spaced blocks threadedly engaging said screw and adapted to be reciprocated and guided by said trough-like member, a table positioned above said carriage body and a pair of arms pivoted together adjacent said table forming a toggle, the upper ends of said arms supporting said table while the lower ends are connected with said blocks and operable therewith.

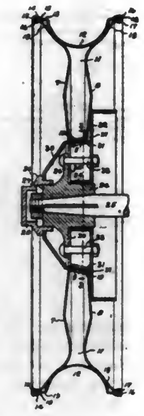
1,813,430. AIRCRAFT CONSTRUCTION. JOSEPH B. SHAINLINE, Norristown, Pa., assignor of one-half to Harold Slemmer, Norristown, Pa. Filed Sept. 21, 1929. Serial No. 394,186. 5 Claims. (Cl. 244—12.)



1. A skeleton for an aircraft wing consisting of ribs and spars, the ribs having a rigid lower member fixed to the front and rear spars and an upper member turnably fixed to the front spar and slidably secured to another member positioned at the rear of the wing and connected to the rear spar, and means positioned between intermediate spars for expanding the wing.

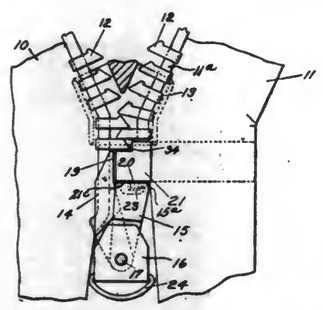
1,813,431. DEMOUNTABLE WHEEL AND HUB. ALVIN H. SHOEMAKER, Seattle, Wash. Filed July 3, 1928. Serial No. 290,064. 2 Claims. (Cl. 301—9.)

1. A wheel and hub structure embodying a hub member secured to an axle and having a flange thereon, a plate seating against said flange, the margin of said plate being bent inwardly to form a polygonal hub block which tapers convergently toward the outside of said wheel, a brake drum disposed with its rear side against the inner side of said hub block, spacing means between said plate and said



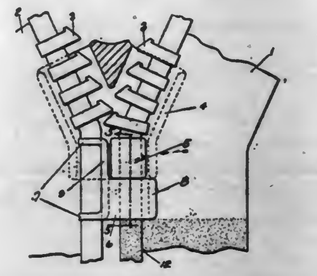
brake drum adjacent said hub member, bolts securing said plate and said brake drum together, a wheel having a tapered polygonal hub opening adapted to fit tightly onto said tapered hub block, a thrust cone engaging the wheel around the hub opening and means for forcing the thrust cone against the wheel.

1,813,432. SEPARABLE FASTENER. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Mar. 16, 1927, Serial No. 175,664. Renewed May 17, 1930. 15 Claims. (Cl. 24—205.)



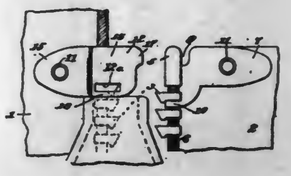
12. A separable fastener comprising a pair of fastener stringers having opposed series of interlocking members, a slider movable along said stringers and having diverging channels to engage and disengage said members, and a combined slider stop and end connection for said stringers including stop means for limiting movement of the slider, an arm attached to one stringer, one end of said arm protruding through the rear end of said slider when the slider is against said stop means, a hook-like member on the other stringer for detachable connection to the protruding end of said arm, said hook member and arm having cooperating means to prevent substantial relative pivotal movement between said member and arm when the fastener is closed.

1,813,433. SEPARABLE FASTENER. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Original application filed Mar. 16, 1927, Serial No. 175,664. Divided and this application filed Jan. 16, 1928. Serial No. 247,044. 15 Claims. (Cl. 24—205.)



1. A separable fastener comprising a pair of stringers having opposed series of interlocking members, a slider movable along said stringers to engage and disengage said members, and a separable bottom connection including a member on one stringer having a socket for receiving the edge of the second stringer and a member on said second stringer adapted to engage the end of said socket nearest the interlocking members to limit the movement of the second stringer in one direction.

1,813,434. SEPARABLE FASTENER. JOHN PUGH BENNETT, Witton, Birmingham, England. Filed Apr. 22, 1930, Serial No. 446,256, and in Great Britain May 3, 1929. 10 Claims. (Cl. 24—205.)

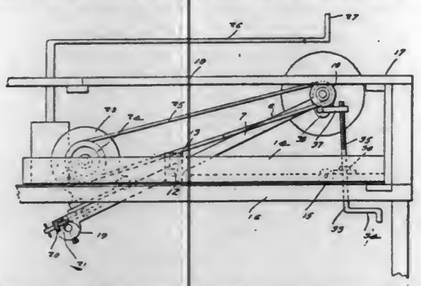


1. In a fastener of the class described, a pair of stringers, opposed series of fastener members carried by said stringers, a slider for engaging and disengaging said members and a separable end connection for said stringers comprising a socket forming member, said member having side wings with parallel integral extensions straddling the stringer and an integral connection for said side wings spaced laterally from the stringer, said side wings being spaced apart to provide a longitudinally extending socket laterally of the stringer, and means carried by the other stringer adapted to be inserted in the socket between said wings and held against lateral separation therefrom by said integral connection.

1,813,435. ROTARY SAW. EDWIN C. BENTZ Glendale, Calif. Filed June 17, 1929. Serial No. 371,533. 1 Claim. (Cl. 143—33.)

In a structure of the class described, in combination, a work bench, a pair of spaced, parallel rails disposed below the bench and spaced therefrom, a wheel equipped carriage slidably mounted for longitudinal movement on the rails, an operating handle for said carriage, said carriage including a frame having centrally disposed substantially U-shaped bearings mounted thereon, a portable saw unit removably mounted on the carriage and comprising a beam

having an integral transverse shaft removably mounted for oscillation in the bearing, a rotary saw mounted for operation on one end portion of the beam, an electric motor adjustably mounted for longitudinal movement on the opposite end portion of the beam, means for operatively connecting the rotary saw to the electric motor for actuation thereby, an adjusting screw mounted for operation in one



end portion of the beam and operatively connected to the electric motor for shifting the same longitudinally and maintaining said motor in adjusted position on the beam, and an adjusting screw mounted for operation on the carriage and operatively connected to the beam in a manner to rock said beam on the carriage and maintain the same in adjusted position.

1,813,436. METHOD OF PRODUCING MULTIPOSE PICTURES. CHARLES WILLIAM BHOSYS, New York, N. Y. Filed Aug. 16, 1928. Serial No. 300,127. 12 Claims. (Cl. 95—5.)

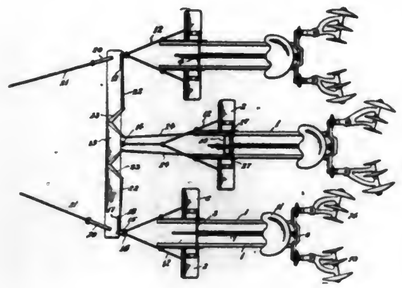


1. The method of producing a multipose picture of a given subject on a single negative, which consists in first photographing the subject against a portion of the background, using a non-actinic surface at least for the remainder of the background within the range of the objective but without the scope of the exposure, then photographing the subject against another portion of the background, using a non-actinic surface for the portion of the background previously used, parts of said subject being made to appear as overlapping other parts thereof in the finished picture, by being given a higher actinic value in relation to the sensitized surface of the negative used.

1,813,437. PROCESS OF MAKING IRON AND STEEL AND PRODUCT. JAMES A. CARSON, Salt Lake City, Utah, assignor to Utah Metals Flux Company, Salt Lake City, Utah, a Corporation of Utah. Filed Mar. 4, 1930. Serial No. 433,188. 3 Claims. (Cl. 75—14.)

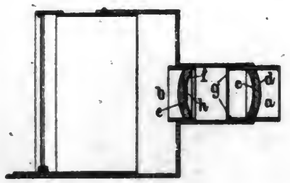
1. Process which comprises heating a mixture of iron ore and shale substantially identical with that found in the northern central portion of Emery County, Utah, south of Price River and Desert Lake, to a temperature of about from 2900 to 3200° F. and casting the resulting metal.

1,813,438. AGRICULTURAL IMPLEMENT. SAMUEL W. COKER, Lubbock, Tex. Filed Mar. 6, 1930. Serial No. 433,699. 1 Claim. (Cl. 97—148.)



In an agricultural implement, the combination of a draft beam, a tilling instrumentality having a fixed connection with the draft beam, a second tilling instrumentality, draft links extending forwardly from the last-mentioned tilling instrumentality, a clevis connected with the front ends of said links and having a sliding connection with the draft beam, an angle lever fulcrumed upon the draft beam and having one end operatively connected with said clevis, a hand lever upon the first-mentioned tilling instrumentality, and operative connections between said hand lever and the angle lever.

1,813,439. LENS OF PHOTOGRAPHIC CAMERAS, PICTURE PROJECTING APPARATUS, AND OTHER LIKE OPTICAL DEVICES. CLYDE JAY COLEMAN, London, England. Filed Mar. 18, 1925. Serial No. 16,503. 5 Claims. (Cl. 95—64.)

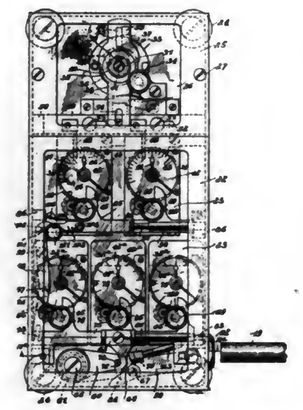


1. Apparatus for projecting the image of objects to a surface situated in the focal plane of a lens, comprising a lens, a marginal stop formed with an aperture, and a supplementary stop of smaller diameter than said aperture located near the surface of the lens remote from the source of light and in a plane between the marginal stop and the focal plane and near the optical axis of the lens and being adjustable toward or from said marginal stop.

1,813,440. RUBBER COATED ARTICLE AND METHOD OF MAKING SAME. BENTON DALES, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Aug. 12, 1927. Serial No. 212,610. 5 Claims. (Cl. 91—68.)

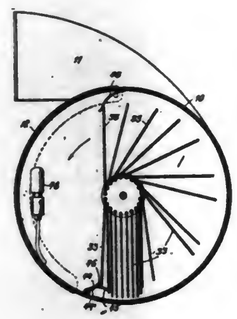
2. The method of providing an article with a protective coating of rubber which comprises depositing on the article a layer of a rubber isomer from a liquid dispersion thereof, then depositing thereon a layer of rubber from an aqueous dispersion thereof and drying the deposited layers.

1,813,441. LOCKING MECHANISM. WILLIAM F. DIESEL, Rochester, N. Y., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y., a Corporation of New York. Filed Jan. 7, 1928. Serial No. 245,215. 30 Claims. (Cl. 70—26.)



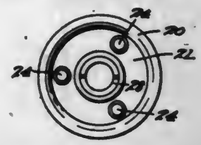
1. In a locking mechanism for the closures of safes and the like having releasable securing means, the combination with releasable guard means for the securing means, of primary and secondary timing mechanisms one of which is normally inactive and selective control devices whereby either of said timing mechanisms may be made to effect release of said guard means, said control means including a part operable from the exterior of the safe when closed to effect release of said normally inactive timing mechanism.

1,813,442. ADVERTISING DEVICE. EMMANUEL DOBROWSKY, New York, N. Y., assignor to Motor Car Advertising Device Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 5, 1930. Serial No. 433,360. 9 Claims. (Cl. 40—72.)



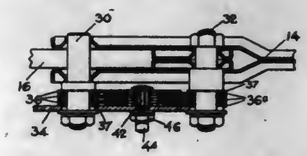
1. In an advertising device, two discs spaced apart, a plurality of sign bearing members extending substantially from one disc to the other and having terminals pivoted to the discs, a spring positioned for engaging the sign bearing members to hold the sign bearing members momentarily in position and against the rotation of the discs, and a catch spaced from the spring, the catch having two arms positioned to permit each sign bearing member as it leaves the spring to pass over one of the arms and ride on the second arm a predetermined distance.

1,813,443. PACKING NUT FOR DOORCHECKS AND THE LIKE. THOMAS CRABTREE, Worcester, Mass., assignor to Independent Lock Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed July 1, 1930. Serial No. 465,157. 6 Claims. (Cl. 286—35.)



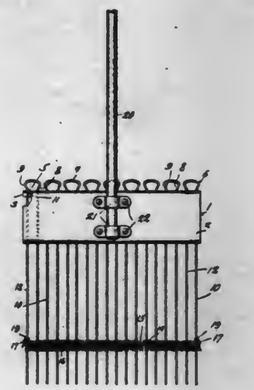
1. As an article of manufacture, a packing nut comprising two pieces of pressed metal, each having an annular portion, means for securing them together in registration with each other, a washer located between the two annular portions and compressed between them by the application of the rivets, one of said sheet metal parts having a packing box therein, and a shaft passing through the packing nut and packing box and rotatably mounted therein.

1,813,444. BRAKE MECHANISM. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1927. Serial No. 231,452. 15 Claims. (Cl. 188—79.5.)



1. Brake mechanism including a drum, brake shoes arranged within the drum having overlapping ends supported upon anchor pins, an adjustable connection between the pins operable to positively move them relatively toward or away from each other.

1,813,445. WIRE BROOM OR RAKE. ELMER W. DOWD, Chicago, Ill. Filed May 28, 1930. Serial No. 456,714. 3 Claims. (Cl. 55—10.)



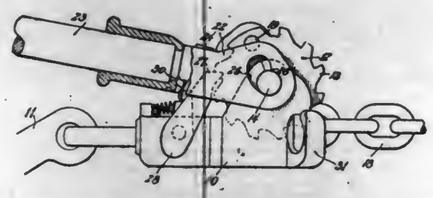
1. An implement of the class described, comprising tines, a coiled spring through which the tines pass, the spring being disposed transversely of the tines, and a tie extended through the spring longitudinally thereof, the spring being connected at spaced points to certain of the tines.

1,813,446. AUTOMATIC BOOKMARK. HERBERT M. FULLER, Bradenton, Fla. Filed Aug. 2, 1930. Serial No. 472,677. 10 Claims. (Cl. 116—119.)



1. A book mark comprising a leaf engaging element, a page indicating element, and a crimped elastic element connecting the page indicating element to the leaf engaging element, the supporting element normally occupying a collapsed condition and adapted to be placed under tension when extended.

1,813,447. PULLING IMPLEMENT. LEO HAUBERT, Tulsa, Okla. Filed Aug. 10, 1928. Serial No. 298,780. 5 Claims. (Cl. 74—54.)



1. A pulling implement of the class described comprising, in combination, an open frame; a chain winding sheave rotatably mounted in said frame; a shaft for said sheave; a pair of ratchet wheels on the sheave; holding pawls pivoted on the frame and cooperating with the ratchet wheels; a forked ratchet lever member having its ends pivotally mounted on the shaft of said sheave; and operating pawls on the lever member, said forks having curved slots cooperating with the sheave shaft to permit the operating pawls to be disengaged from the ratchet wheels.

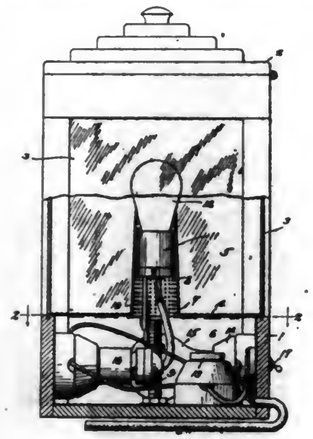
1,813,448. GROUND WIRE CONNECTION. BRYSON D. HORTON, Detroit, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed May 14, 1925. Serial No. 30,162. 11 Claims. (Cl. 173—259.)



2. Means for securing a conductor to a metallic surface of unlimited size, comprising a sheet-metal member to a surface of which a conductor is to be secured, said member including an integral portion formed into a substantially annular raised boss having at least one transverse depression therein, and said member having an internally screw-threaded hole therethrough within said annular boss portion and substantially centrally disposed with respect thereto for the reception of a conductor-securing screw or the like.

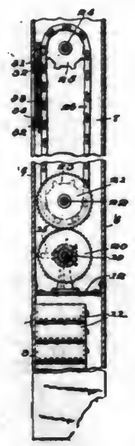
1,813,449. HEATER. JOHN L. HOWARD, Columbus, Ohio. Filed Mar. 15, 1930. Serial No. 436,205. 2 Claims. (Cl. 219—43.)

1. The combination with a casing having a storage compartment, a heating compartment, and a foraminous partition between the compartments, of a foraminous flue extending from the partition into the storage compartment, a heating unit in the heating compartment, and a



lamp in series with the heating unit for regulating the action of the unit and for illuminating the contents of the storage compartment through the partition.

1,813,450. CHANGEABLE INDICATOR. JOB HUTCHINSON, Great Neck, N. Y. Filed May 25, 1927. Serial No. 194,129. 8 Claims. (Cl. 40—96.)



1. A changeable indicator comprising a housing, a pair of shafts journalled in spaced vertical relation in said housing, each of said shafts having a pair of sprockets arranged in spaced relation thereon, chains spaced horizontally and engaged about said sprockets, said chains each having a series of blocks interconnected by links, horizontally disposed bars fastened to said blocks and interconnecting said chains, certain of said bars having forwardly projecting ribs with enlarged heads defining upper and lower grooves, the upper groove of one bar and the lower groove of another bar being adapted to receive a display plate therein, and the distance between the bottoms of said grooves being greater than the width of said display plate to permit ready insertion and removal of said display plate.

1,813,451. CONVERTIBLE BASKET-TABLE. ORIN A. JOHNSTON, Purcell, and CLARENCE F. JOHNSTON, Oklahoma City, Okla. Filed Dec. 28, 1928. Serial No. 328,996. 7 Claims. (Cl. 190—12.)



1. A device of the character set forth, comprising a central member, other members connected to the central member for arrangement into basket or table top forming position with respect thereto, means carried by certain of said other members and engaging the remaining of said other members to hold said remaining members in basket forming position, a handle secured to the central member, releasable means carried by said handle and engaging said certain members intermediate their ends to hold them in basket forming position, and means for supporting the members when in table top formation.

1,813,452. GYPSUM CONCRETE. GEORGE D. KING, Chicago, Ill., and FRED J. GOUGH, Fort Dodge, Iowa, assignors to United States Gypsum Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 23, 1927. Serial No. 221,610. 2 Claims. (Cl. 106—34.)

1. A dry mixed gypsum product adapted to be rendered plastic and to harden with water, comprising a mixture of powdered calcined gypsum with a coarser raw gypsum rock aggregate the surface of which is calcined to plaster of Paris.

1,813,453. HOSE SUPPORTER. WILLIAM E. KINSER, Quincy, Ill. Filed Aug. 12, 1930. Serial No. 474,803. 2 Claims. (Cl. 241—6.)

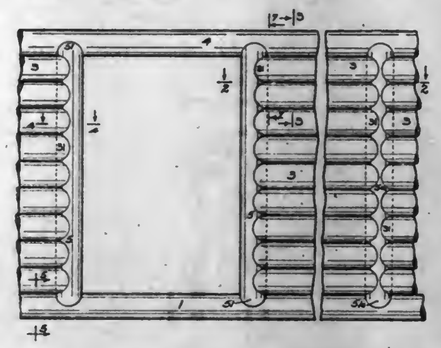


1. In a hose supporter, a length of material adapted to embrace one side of the leg of a wearer, a length of material adapted to embrace the opposite side of the leg, one of said lengths of material having slots through which the other length of material is slidable, and means on the ends of each length of material for connecting the same to a hose.

1,813,454. SAPONIFICATION. VAMAN R. KOKATNUR, Brooklyn, N. Y. Filed Apr. 23, 1925. Serial No. 25,459. 4 Claims. (Cl. 87—4.)

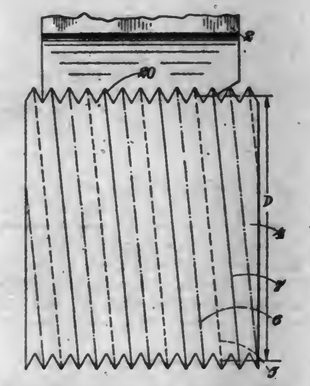
1. The process of saponifying organic esters which comprises treating the organic ester with substantially anhydrous alkali in the presence of an inert organic diluent in which the alcoholic component of the ester is substantially insoluble, and simultaneously removing the alcoholic component in a concentrated form by partial pressure distillation of the diluent and the alcoholic component.

1,813,455. LOG STRUCTURE. HOWARD B. LAWTON, Detroit, Mich. Filed Aug. 31, 1929. Serial No. 389,627. 1 Claim. (Cl. 20—4.)



In a log structure, a wall arrangement comprising substantially circular logs arranged vertically at intervals to form uprights, other substantially circular logs placed horizontally one upon the other and extending between adjacent pairs of vertical logs, the ends of the horizontal logs being concave transversely across their extremities so that the distance between the two concave ends of each horizontal log at its sides is greater than the distance between the pair of vertical logs between which it extends, the concavities conforming substantially to the curvature of the vertical logs and partly encircling the latter so that the horizontal logs are held by their concave extremities against lateral movement relative to said vertical logs, the latter being slotted longitudinally, key pieces lying in the slots and projecting therefrom, the concave ends of the horizontal logs being slotted substantially centrally of their concavities to receive the projecting portions of said key pieces, the horizontal logs being also slotted longitudinally on opposite sides, and other key pieces engaging the adjacent slots formed in adjacent pairs of horizontal logs.

1,813,456. SCREW-THREAD CUTTING DIE. ARTHUR HAROLD LLOYD, Coventry, England. Filed Oct. 18, 1929, Serial No. 400,614, and in Great Britain July 9, 1929. 4 Claims. (Cl. 51—278.)



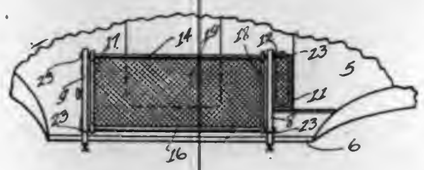
1. A method of rectifying, by the use of a lapping hob, a die segment for cutting a screw of effective diameter d with m threads per unit length, which involves the use of a lapping hob of an effective diameter of $n \times d$ where n is an integar greater than 1, and with m/n threads per unit length, substantially as described.

1,813,457. TOOTH PASTE TUBE HOLDER. JAMES H. LODGE, Camden, N. J. Filed July 25, 1929. Serial No. 380,942. 1 Claim. (Cl. 221—60.)



A holder for collapsible tube containers consisting of a strip of sheet metal bent into substantially U shape having the legs bent outwardly into a plane spaced from and parallel with the part connecting the legs and the end of one leg bent back parallel with but spaced from the main part of said leg and its end bent up to lie substantially in the plane of the part of the strip connecting the legs, said part connecting the legs, having a longitudinal slot cut therefrom, said leg whose end is bent backwardly having a slot detent cut therefrom, and said upturned part of that leg, having a slot detent cut in from its end edge and a slotted key member slidable in the slot in the part connecting the legs as specified.

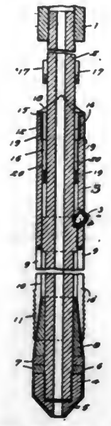
1,813,458. DOG CARRIER. AUGUST MEURER, San Bruno, Calif. Filed Oct. 4, 1929. Serial No. 397,423. 1 Claim. (Cl. 224—29.)



A retaining device for attachment to the frame of a vehicle consisting of a pair of end brackets having a fabric stretched thereon, one of said brackets having a head hole formed therein, a supplemental bracket forming a closure between one of said brackets and the body of the vehicle hinged thereto, rods extending between said end brackets, a fabric stretched thereon, and supplemental braces extending between said rods for the purpose specified.

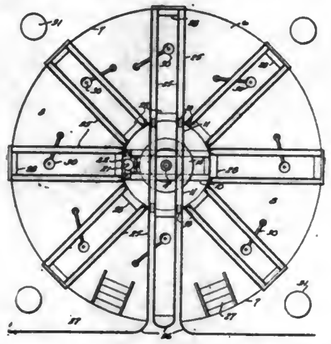
1,813,459. ROTATING SPEAR. WILLIAM J. MILLER, Sulphur, La. Filed June 27, 1929. Serial No. 374,181. 8 Claims. (Cl. 294—96.)

1. A spear comprising an elongated shank having a surrounding head intermediate its ends, a tapered mandrel carried by and surrounding the lower portion of the shank, a slip sleeve surrounding the shank and having its lower end portion provided with gripping arms, said slip sleeve having direct free movement lengthwise of



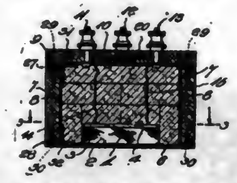
the shank, the tapered mandrel engaging said gripping arms from within, the intermediate head of the shank fitting substantially snug within the sleeve.

1,813,460. MULTIPLE AUTOMOBILE PIT. HERMAN A. MUGLER, Lynbrook, N. Y. Filed May 11, 1928. Serial No. 277,012. 5 Claims. (Cl. 104—44.)



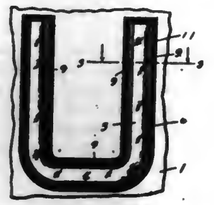
1. A multiple automobile servicing pit comprising a common chamber below the ground level, permitting ready access to the under-mechanisms of a plurality of vehicles at the same time, a rotary trackway and a plurality of radial trackways overlying said chamber, and extending from the rotary trackway to and ending at the edge of said common chamber.

1,813,461. PIEZO ELECTRIC CRYSTAL APPARATUS. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Dec. 20, 1926. Serial No. 156,032. 3 Claims. (Cl. 171—327.)



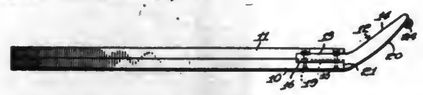
1. Piezo electric crystal apparatus comprising a casing, an electrostatic shield within said casing, a piezo electric crystal element, terminals carried by said casing, a connection between one face of said piezo electric crystal element and said electrostatic shield and a connection between another face of said piezo electric crystal element with the terminals carried by said casing.

1,813,462. SIGN. HERBERT W. PENROSE, Yerington, Nev., assignor of one-fourth to Matthew R. Penrose and one-fourth to Clark J. Guild, Yerington, Nev. Filed Mar. 24, 1931. Serial No. 524,911. 8 Claims. (Cl. 40—125.)



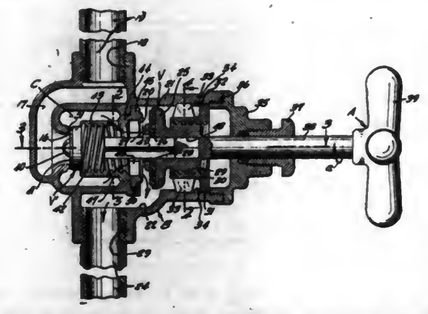
1. In a sign structure, a sign board, a letter of glass, said sign board having a recess in the face thereof designed to receive, and shaped to conform to the configuration of, the letter, and means for detachably securing the letter in the recess.

1,813,463. MUDBOAT. EDWARD W. PHILLIPS, Hudson, Mich. Filed July 16, 1929. Serial No. 378,694. 1 Claim. (Cl. 280—19.)



A runner end for mudboats and the like comprising an integral body having a horizontal rear portion provided with a longitudinal channel in its lower face in which the upper face of the forward end of the runner is adapted to be secured, the walls of the channel defining flanges adapted to overhang the edge portions of the runner, said body being further provided with a forward portion the rear extremity of which is formed with a depending shoulder adapted to lie against the forward end of the runner, said shoulder being equal in height to and slightly wider than the runner, the lower face of said forward portion being curved upwardly from the lower end of said shoulder to the forward extremity of said body.

1,813,464. VALVE. EMIL PRICE and WILLIAM A. PFISTER, Los Angeles, Calif. Filed Aug. 18, 1928. Serial No. 300,530. 11 Claims. (Cl. 277—13.)

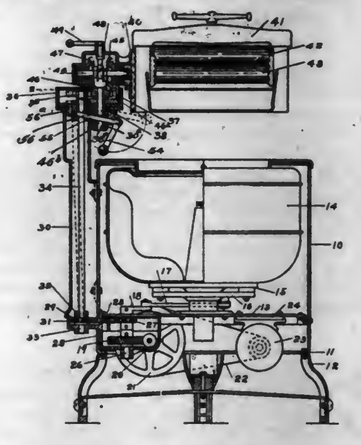


1. A diverting valve comprising a body having a chamber provided with an inlet and a pair of outlets, valves controlling the outlets, the valves being reversely threaded in the body for rotation about a common axis, means for operatively connecting the valves for rotation as a unit, yet allowing movement of the valves towards and away from each other to cause one valve to open its respective outlet and the other valve to close its respective outlet or vice versa according as the valves are rotated in one direction or the other.

1,813,465. CHEMICAL PROCESSING OF CELLULOSE PULPS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 15, 1929. Serial No. 355,428. 9 Claims. (Cl. 92—11.)

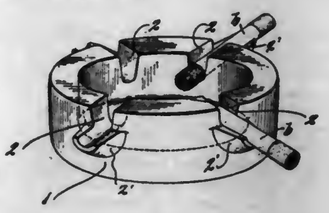
1. A process which comprises digesting cellulose pulp in an acid-sulphite liquor containing more free than combined SO_2, and then digesting the pulp in an alkaline liquor to remove the products of hydrolysis resulting from said first-mentioned digestion.

1,813,466. SUPPORTING AND DRIVING MECHANISM FOR WRINGERS. SIMON E. SCHROEDER, Newton, Iowa. Filed Dec. 12, 1925. Serial No. 75,007. 13 Claims. (Cl. 68—32.)



1. In a machine of the class described, the combination of wringer rolls and driving mechanism therefor including a horizontally disposed shaft, a stub drive shaft, gear connection between the stub shaft and horizontal shaft, a main drive shaft, gear connections between the main and stub drive shafts, means movable with said main drive shaft to lock said wringer against swinging movement only when said main and stud drive shafts are engaged and lever mechanism for causing engagement and disengagement of the main and stub drive shafts.

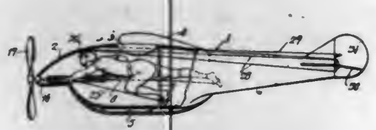
1,813,467. ASH TRAY. WILLIAM DE FORD SMITH, Steubenville, Ohio. Filed May 4, 1927. Serial No. 188,772. 1 Claim. (Cl. 131—51.)



As a new article of manufacture, an ash receptacle having one or more transverse open grooves in the wall

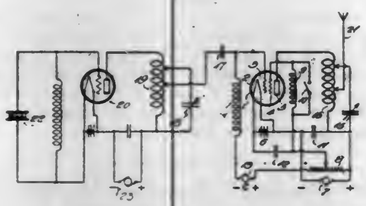
thereof, said receptacle wall being thickened at the points of the grooves so as to constitute continuations of the grooves so as to constitute continuations of the grooves to provide a substantially horizontal seat materially extending beyond the side of the receptacle wall, the walls of each of the said grooves slanting inwardly toward each other to accommodate cigarettes of differing diameters, the grooves being of such width as to snugly engage the cigarettes therein at the sides thereof while permitting ready displacement of the cigarettes, and said grooves constituting extinguishing means preventing burning of the cigarettes beyond the points corresponding with the ends of the grooves and being capable of holding the cigarettes in a substantially horizontal position.

1,813,468. AIRCRAFT. MARTIN C. SNYER, Paterson, N. J. Filed May 12, 1930. Serial No. 451,671. 5 Claims. (Cl. 244—14.)



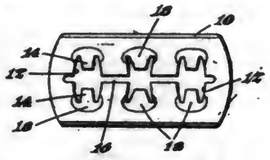
1. An aircraft of the character described including a fuselage, a horizontally disposed platform mounted in the fuselage adapted to support an operator, a pair of segmental plates mounted for oscillatory swinging movement in a horizontal plane forwardly of the platform in vertically spaced relation to each other, rack bars on the forward marginal portion of the segmental plates and on the opposite sides thereof, a propeller operatively connected to the rack bars in a manner to be driven continuously in one direction when the segmental plates are oscillated and means for oscillating said plates manually.

1,813,469. FREQUENCY MULTIPLICATION SYSTEM. ALBERT H. TAYLOR, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,936. 6 Claims. (Cl. 250—36.)



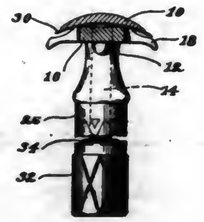
1. In combination a thermionic electron discharge device operative as a frequency multiplier or a power amplifier having a cathode, a plurality of grid electrodes and an anode, an output circuit connected to said anode, a source of supply for said anode, one of said grid electrodes being connected to said source of supply, and a choke coil having a switch connected thereto, said choke coil and switch being included in the circuit of said last mentioned grid electrode, said switch being movable to open position for rendering said choke coil effective for utilizing the frequency multiplification properties of said device and being movable to closed position for effecting the operation of said device as a power amplifier.

1,813,470. SAFETY RAZOR BLADE. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Feb. 11, 1930. Serial No. 427,496. 4 Claims. (Cl. 30—12.)



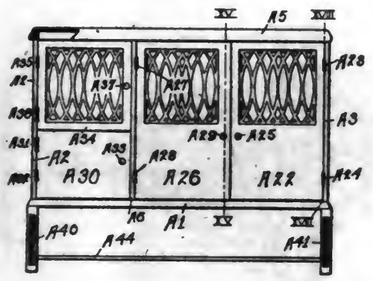
1. A flexible double-edged blade for safety razors, having spaced stud-receiving apertures which in outline define oppositely disposed tongues having stud-engaging ends, each tongue being bounded at its sides by outwardly extending recesses and the material of the blade including separate softened areas spaced longitudinally from each other and embracing in their area the entire contour of said tongues and recesses.

1,813,471. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,003. 1 Claim. (Cl. 30—12.)



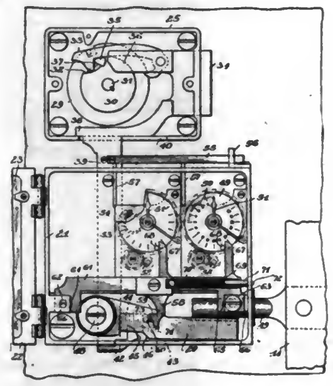
A safety razor comprising a guard member having spaced parallel fulcrum shoulders bounding a flat intermediate surface flush with such shoulders, a cap having a concave blade-shaping surface extending over said shoulders, a flexible blade clamped between the two and having a portion of its concave face exposed by slots formed in the guard which extend through the shoulders and terminate in said flat intermediate surface of the guard member.

1,813,472. AUTOMATIC PHONOGRAPH. FERDINAND J. TILLMAN, St. Louis, Mo. Filed Dec. 22, 1919. Serial No. 346,645. 36 Claims. (Cl. 274—10.)



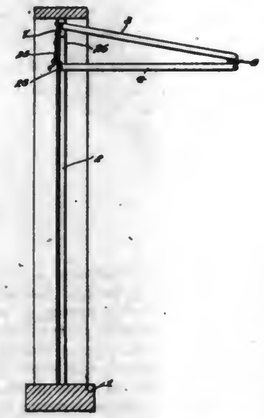
1. A phonograph having a magazine adapted to contain a number of records of small or large diameters, a power mechanism, means for playing the records in a set order, a tone arm operable on the records for playing them, means operated through the power mechanism to place each record in a position to be played, means operated through the power mechanism to remove each record from playing position after it has been played and to control the distance of travel of said tone arm relative to it engaging a small or large diameter record, and a series of guide-ways each being for the reception of respective records.

1,813,473. LOCKING MECHANISM. HERBERT F. WALKER, Rochester, N. Y., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y., a Corporation of New York. Filed July 17, 1925, Serial No. 44,373. Renewed Apr. 19, 1926. 27 Claims. (Cl. 70—26.)



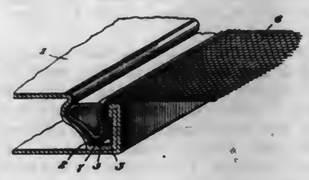
1. In combination, a safe or vault including a closure and securing mechanism therefor, a lock, timing-mechanism, means movable to and from obstructing position with relation to said securing mechanism and devices controlled by said lock and timing-mechanism, one of which is effective to move said means to obstructing position and the other to release the same after operation of the timing-mechanism for a predetermined period.

1,813,474. CLOSURE FOR WINDOWS. LAWRENCE THOMAS WARD, Kane, Pa., assignor to Kane Manufacturing Company, Kane, Pa., a Corporation of Pennsylvania. Filed Jan. 3, 1931. Serial No. 506,438. 15 Claims. (Cl. 156—14.)



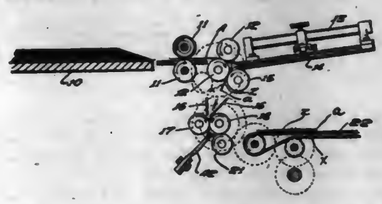
10. In combination, a closure for a frame, said closure comprising pivotally connected sections, a locking bolt slidably mounted on one of said sections adjacent the pivotal connection between said sections, the means connecting said sections comprising a link pivoted at one end to one section, the other end of said link provided with an opening, said locking bolt passing through said opening to provide a pivot for said other end of said link.

1,813,475. SCREEN AND LIKE DEVICE. LAWRENCE THOMAS WARD, Kane, Pa., assignor to Kane Manufacturing Company, Kane, Pa., a Corporation of Pennsylvania. Filed Feb. 24, 1931. Serial No. 517,047. 6 Claims. (Cl. 156—14.)



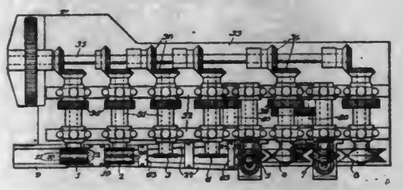
4. In a screen, a frame member formed from a metal containing aluminum, a screen fabric formed from a metal containing copper, means for connecting said fabric and frame in overlapping relation, the overlapping adjacent faces of the fabric and frame being electrically separated by a coating of asphalt paint whereby to prevent electrolytic corrosion of said fabric when exposed to the weather.

1,813,476. SHEET OVERTURNING MEANS FOR PAPER FOLDING MACHINES. ROBERT J. WATERWORTH, Sidney, Ohio, assignor to Lafayette M. Studevant, Sidney, Ohio. Filed Apr. 30, 1929. Serial No. 359,390. 12 Claims. (Cl. 270—68.)



1. In a paper folding machine, in combination, paper folding means, means adapted to forward the paper to the folding means with one of its faces uppermost, and means, adjustable to overturn the paper prior to its passage to the folding means to thus present the paper thereto with its other face uppermost.

1,813,477. MANUFACTURE OF CORNER BEADS. GEORGE W. BAKER, Chicago, Ill., assignor, by mesne assignments, to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1927. Serial No. 200,083. 10 Claims. (Cl. 164—6.6.)



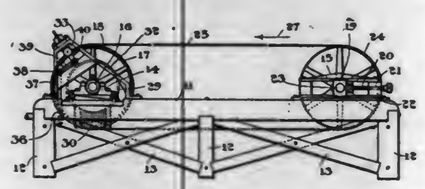
1. The method of forming corner bead which comprises slitting sections of a metal strip between unslitted mar-

ginal, intermediate and mid-sections, deflecting the intermediate unslitted sections from the plane of the strip to expand the slitted sections, deflecting the unslitted marginal sections in two directions from the mid-section to flatten the portions of the strip on opposite sides of the mid-section and bring the same into two divergent planes and forming the unslitted mid-section into a nosing.

1,813,478. PRODUCTION OF CATALYSTS. LEONID ANDRUSSOW, Livonia, and FELIX DURER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 20, 1929, Serial No. 372,527, and in Germany July 21, 1928. 3 Claims. (Cl. 23—234.)

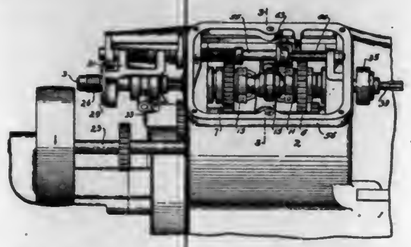
1. A process for the production of catalysts, which comprises adding to a solution of at least one metal salt selected from the class consisting of the soluble salts of the metals forming difficultly reducible oxides and the metals of the iron group, which is acidified to prevent hydrolysis, a solution of a salt of an acid selected from the group consisting of phosphoric acid and boric acid, to which latter solution caustic alkali has been added in such a quantity that a slight excess of alkali remains in the solution after precipitation, and drying the precipitate.

1,813,479. SKINNING MACHINE. JAMES J. BARRY, Halifax, Nova Scotia, Canada, assignor to Maritime Fish Corporation Limited, Montreal, Canada. Filed May 22, 1929, Serial No. 365,108, and in Canada Jan. 22, 1929. 3 Claims. (Cl. 17—4.)



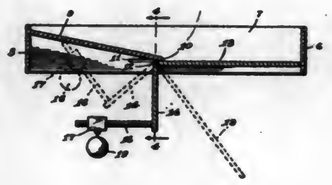
1. In a fish skinning machine, an endless conveyor belt, pulleys for supporting said belt, means for tensioning the belt, said belt having slots formed therein adapted to hold the tail of the fish against one of the pulleys and prevent relative movement of the fish during the skinning of same and a knife positioned above the pulleys at one end of the machine and adapted to cut the flesh clear of the skin during the movement of the belt.

1,813,480. THREADING DEVICE. ROBERT S. BROWN, New Britain, Conn., assignor, by mesne assignments, to The New Britain-Gridley Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 22, 1926. Serial No. 137,065. 34 Claims. (Cl. 10—129.)



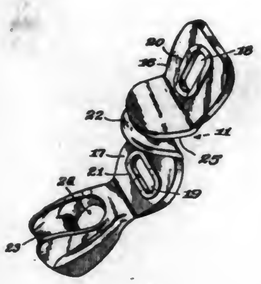
1. In a threading device, a threading spindle, means for rotating the same in forward and reverse directions, clutch mechanism for controlling the direction of rotation of said spindle, a leader screw on said spindle, a frame carrying a leader nut for receiving said leader screw, means for advancing said leader screw and leader nut to each other while said threading spindle is rotating in one direction, resilient means for permitting said leader screw and leader nut to move together until they are properly engaged, stop means for limiting the feed of said threading spindle by said leader members, said means including said frame for automatically tripping said clutch mechanism after said stop means has stopped the feed of said spindle.

1,813,481. AUTOMATIC ASH CHUTE. THOMAS BURLEY, Seattle, Wash. Filed Apr. 24, 1929. Serial No. 357,844. 2 Claims. (Cl. 126—242.)



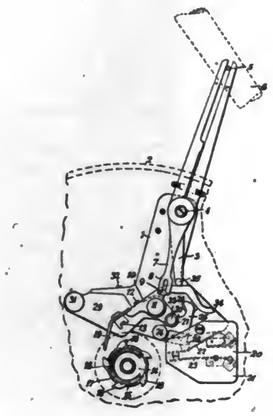
1. An automatic ash chute comprising a frame, an inclined shelf, a trap-door, pivot pins for the trap-door disposed in the lowered ends of elongated slots, a counter weight for the trap-door, adjustable means for the counterweight, pivotal suspension means for the counterweight, and stop means for retaining the trap-door in a normally closed horizontal position.

1,813,482. POLE GUY FIXTURE. ALBERT B. CHANCE, Centralia, Mo. Filed July 11, 1930. Serial No. 467,246. 14 Claims. (Cl. 24—115.)



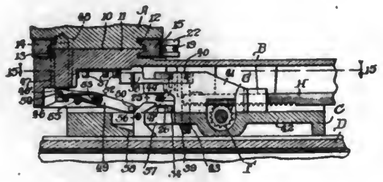
1. A pole guy fixture comprising a supporting body adapted to be attached to a pole or the like, and an integral extension of said body having a cable engaging surface which is curved laterally to conform substantially to the size and shape of said cable whereby the lateral walls of said extension support said cable laterally thereof to prevent flattening of the cable at the fixture, said body being provided with walls forming an opening tapering in width toward said cable engaging surface to facilitate the location of a cable on said surface under lateral pressure.

1,813,483. AUTOMATIC BRAKE FOR TALKING MACHINES. GEORGE FREDERICK CLARK, West Drayton, England, assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed May 10, 1930, Serial No. 451,429, and in Great Britain June 24, 1929. 2 Claims. (Cl. 192—119.)



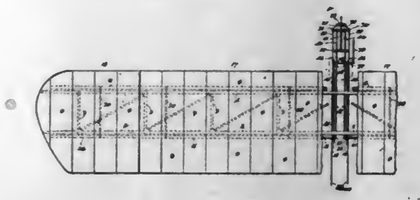
1. Stopping mechanism for an electrically driven talking machine comprising a member adapted to bring the rotating parts to a standstill by friction and mechanism operable through said frictional member and by the momentum of the rotating parts to open a switch in the electric circuit of the driving motor.

1,813,484. TURRET CLAMPING DEVICE. GEORGE M. CLASS, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a Corporation of Wisconsin. Filed Dec. 16, 1929. Serial No. 414,262. 5 Claims. (Cl. 29—50.)



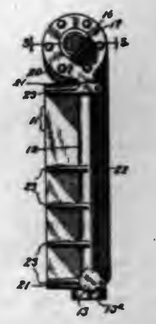
1. The combination of a saddle, a turret slide mounted on said saddle having a turret seat formed with a tapered flange, a turret rotatable on said seat and formed with an oppositely tapered flange registering with the flange of said seat, a split clamping ring embracing said flanges, apertured links pivotally connected to the opposed ends of said ring, a shaft having opposed eccentrics on its upper end engaged with the apertures of said links and a crank arm on its lower end, a fixed cam on said saddle cooperating with said crank arm to turn said shaft in a direction to expand said clamping ring during back traverse of said slide and to turn said shaft in a direction to tighten said ring during forward traverse of said slide, said eccentrics being so positioned on said shaft as to pass the dead center position in the fully locked position of said clamping ring, and a stop on said saddle cooperating with said arm to arrest further turning movement of said shaft after said eccentrics have passed the dead center position.

1,813,485. CONTROLLING MEANS FOR AEROPLANES. JOHN F. COOK, Jr., Detroit, Mich. Filed Apr. 19, 1926. Serial No. 102,925. 15 Claims. (Cl. 244—29.)



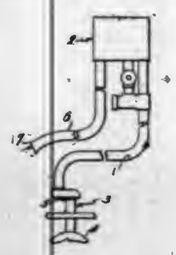
1. A control mechanism for air craft including a control instrumentality operable to effect movements of similar magnitude of the trailing edge portions of an aerofoil adjacent the two wing ends, and a second control member operable at will to cause the movement of the instrumentality to effect relative trailing edge movements differing as to magnitude in the several edge portions, the direction of major magnitude movement of a trailing edge to and from a normal position being selectively above or below such normal position, the movement of the instrumentality being similar in characteristic under both conditions.

1,813,486. REFRIGERATING UNIT. LEWIS W. EGGLESTON, Detroit, Mich., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 8, 1928. Serial No. 317,948. 1 Claim. (Cl. 62—95.)



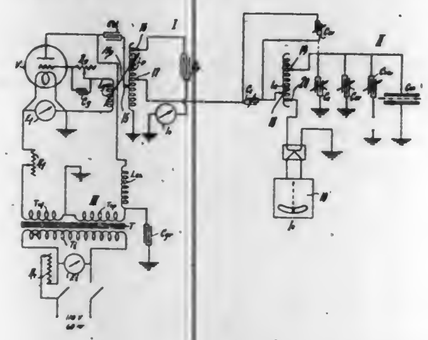
A refrigerating unit formed as an integral casting comprising a body portion including a series of flat tubular portions arranged side by side in spaced relation, a header at one end of said body portion common to the lower ends of said tubular portions, a float-chamber at the opposite end of said body portion having openings therein communicating severally with said tubular portions, and a series of transverse ribs arranged in spaced relation and extending laterally from one side wall of said body portion intermediate said float-chamber and said header, and vertical ribs arranged in spaced relation and extending from the opposite side wall of said body portion, substantially as specified.

1,813,487. METHOD OF AND APPARATUS FOR CONTROLLING AIR FLOW IN PNEUMATIC SYSTEMS. MERTON L. EMERSON, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Oct. 18, 1928. Serial No. 313,249. 14 Claims. (Cl. 243—12.)



1. Power control apparatus for use with a pneumatic tube line extending between two stations, said apparatus comprising a substantially air-tight box having a normally closed door, and connections secured to the box adapting it to form a receiving terminal alternatively for upwardly or downwardly extending pneumatic tubes.

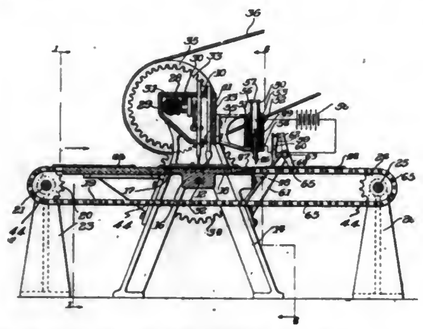
1,813,488. OSCILLATORY CIRCUITS AND METHOD OF COMPENSATING FOR VOLTAGE CHANGES IMPRESSED THEREON. ROBERT F. FIELD, Watertown, Mass., assignor to Atlantic Precision Instrument Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 21, 1927. Serial No. 227,694. 14 Claims. (Cl. 250—36.)



1. The method of neutralizing the effects on secondary current of changes of voltage impressed on the primary of coupled primary and secondary oscillatory circuits, which comprises balancing the effects on secondary current of changes in primary current flow due to changes in impressed voltage against the effects on secondary current of a compensating change in relative tuning between said circuits due to the same changes in impressed voltage.

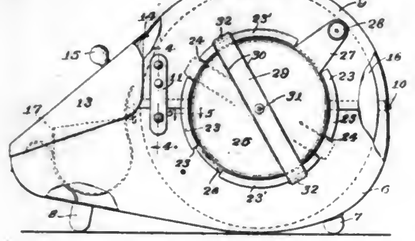
1,813,489. GANG SEWING APPARATUS. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 12, 1925, Serial No. 49,684. Renewed June 19, 1929. 8 Claims. (Cl. 112—3.)

1. In a gang stitching machine of the character described, the combination of a row of vertically operating stitching heads and means for supporting and driving the same, a work table beneath said stitcher heads formed with transverse grooves in its upper surface substantially midway between said stitcher heads, a platform at the work receiving end of the machine registering at its inner edge with one edge of said work table and slightly higher than the latter, said platform formed with transverse grooves in its upper surface registering with the grooves of said work table, a group of conveyor chains disposed with their upper



laps traveling through said grooves, pins on said conveyor chains operative to impale and advance the work over said platform and work table, and means for driving said conveyor chains and stitching heads in a fixed speed ratio to each other.

1,813,490. ICE CREAM FREEZER. JOHN H. GARDNER, Chicago, Ill. Filed July 14, 1928. Serial No. 292,695. 2 Claims. (Cl. 257—98.)



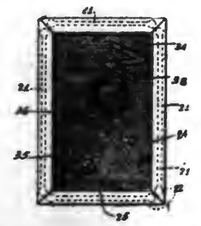
1. The combination of a rotatable container provided with a filling mouth surrounded by a neck having an annular gasket recess at its outer end; a gasket in said recess; an outwardly extending flange at the outer edge of said gasket recess, there being notches in said flange; a closure fitting into said recess onto said gasket and having a rigid projection engaging one of said notches; a clamping member pivoted to said closure and provided at its ends with engaging lips fitting through notches of said flange and engaging under the latter to lock said closure in place; a crank arm on said closure and projecting through a notch of said flange; and a crank handle at the outer end of said crank arm.

1,813,491. LUMINOUS ADVERTISEMENT. FRANCIS WALTER GILLARD, West Norwood, London, England, assignor, by mesne assignments, to Vividad Holdings Limited, London, England, a British Company. Filed Aug. 31, 1927, Serial No. 217,024, and in Great Britain Sept. 17, 1926. 8 Claims. (Cl. 40—134.)

1. In displaying by means of fluorescence excited by invisible ultra-violet rays, a display surface treated with fluorescent paints consisting of fluorescent preparations carried in a fluorescent vehicle.

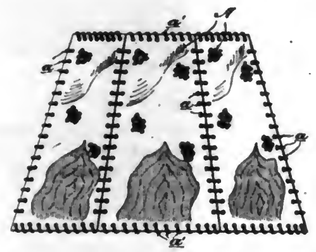
6. The combination with means for projecting invisible

ultra violet light thereon, of a sign bearing a design visible by ordinary light, certain parts of said design being blue violet in colour, other parts being brilliant green in colour, other parts being orange yellow in colour and



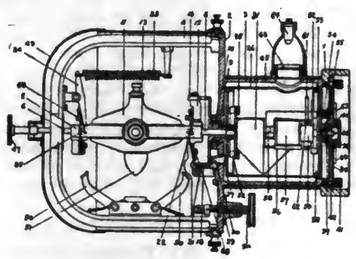
other parts being red in colour, said coloured parts of said design being separately covered throughout with pigments fluorescing with respective colours under the action of said invisible ultra violet light, all said pigment being incorporated in a fluorescent carrier.

1,813,492. TRANSLUCENT PANEL FOR LAMP SHADES AND OTHER PURPOSES. ALFRED MINOR GOODLOE, Roanoke, Va., assignor to Exchange Lumber Company, Roanoke, Va., a Corporation of Virginia. Filed Oct. 19, 1929. Serial No. 400,923. 1 Claim. (Cl. 240—108.)



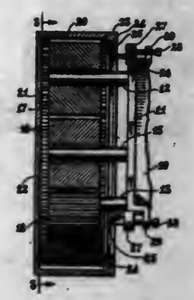
A lamp shade panel consisting of a single-ply thin translucent sheet of burl wood strengthened and rendered self-sustaining and shape-retaining under usual variations of moisture and temperature by impregnation and coating with suitable substance which does not impair translucence and without other layer of wood or other material superimposed thereon.

1,813,493. APPARATUS FOR INTEGRATING ACCELERATIONS. JAMES BLACKLOCK HENDERSON, Blackheath, England. Filed Feb. 9, 1927, Serial No. 167,043, and in Great Britain Feb. 12, 1926. 20 Claims. (Cl. 264—1.)



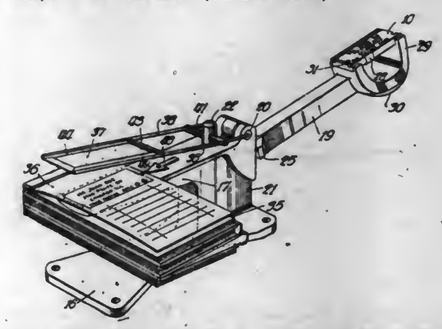
1. Mechanism for determining the change of velocity of a body in a horizontal plane, comprising a horizontal support mounted for translation with the body, a level pivoted on said support on an axis at right angles to the direction of motion of the body, a fluid contained within said level and adapted to flow at a rate proportional to the acceleration of the body, and means constraining the movement of the level about said axis so that the level is in neutral equilibrium as regards displacement of fluid in the level.

1,813,494. REAR WHEEL FOR TRACTORS. TOMÁS HERNÁNDEZ, Buenos Aires, Argentina. Filed July 29, 1929. Serial No. 381,991. 2 Claims. (Cl. 180—75.)



1. A tractor wheel, comprising a plate adapted for engagement upon the body of a tractor, a driver shaft extending therethru, a driver gear fixed on the shaft, several gears positioned about the driver gear and meshing therewith, and supported for rotation from shafts rotatively mounted in the plate, and a rim with internal teeth arranged for rotation on the said driven gears and a means for rotatively and laterally holding the rim relative with the driven gears, comprising a flange formed on the rim and formed with an internal groove, slides mounted on the plate and body, and means attached to said slides for holding the same in adjusted positions on said plate and body.

1,813,495. DEVICE FOR RECORDING SALES TRANSACTIONS. JOHN E. JOHNSON, Chicago, Ill., assignor to Speedaumat Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 6, 1927. Serial No. 159,347. 27 Claims. (Cl. 101—301.)

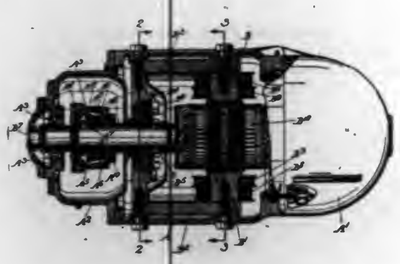


1. In a device for printing upon sales records or the like, the combination comprising a sheet having a printing medium thereon, a frame for holding said sheet, said frame having grooved sides for removably holding said sheet whereby said frame may be supplied with a fresh sheet when necessary, and means on said device for removably holding said frame.

1,813,496. FIELD CONTROL FOR ELECTRIC MACHINES. JOHN J. KENNEDY and CHARLES W. DAKE, Chicago, Ill., assignors to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Dec. 5, 1928. Serial No. 323,849. 8 Claims. (Cl. 171—227.)

1. In an electric machine, a magnetic field circuit, including field poles, a rotor between said poles, air gap

poles in series with the field poles and an adjustable closure for the air gap movable in consonance with the speed

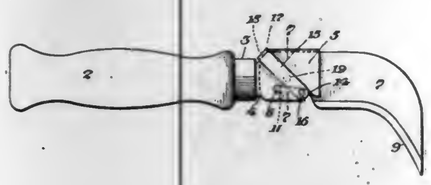


of rotation to vary the flow of magnetic lines of flux in the circuit, the air gap poles being in that part of the magnetic circuit furthest removed from the rotor.

1,813,497. PRODUCTION OF PURE SULPHUR. PAUL KOPPE, Goehlitz, and GUENTHER ROBBEL, Neuroessen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 13, 1930, Serial No. 435,645, and in Germany Mar. 26, 1929. 3 Claims. (Cl. 23—224.)

1. In the production of sulphur by decomposition of ammonium polysulphide solutions at temperatures above the melting point of sulphur, the step of effecting the decomposition in the presence of an adsorbent substance.

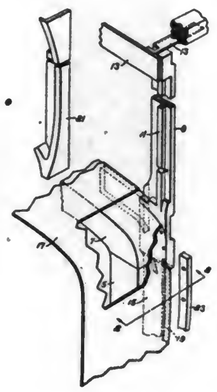
1,813,498. CUTTING TOOL. ARVID K. KOSUNEN, Jamaica, N. Y. Filed June 27, 1929. Serial No. 374,046. 17 Claims. (Cl. 30—[illegible])



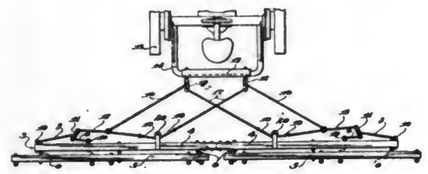
1. A cutting tool comprising a handle and a detachable blade, said handle and blade having means for interlocking them by the insertion of the blade transversely to the handle and swinging it into alinement with the handle and also having registering recesses at the edges of the handle and blade and a shiftable member for engaging both of said registered recesses for clamping the blade against movement.

1,813,499. AUTOMOBILE BODY. FREDERICK J. KUBLER, New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed Sept. 22, 1928. Serial No. 307,690. 4 Claims. (Cl. 296—28.)

1. A vehicle body having a wooden framing member at the cowl, a metallic top-supporting pillar comprising a web-like portion attached to the rear side of said framing inwardly of the outer side thereof and projecting above the same to the roof, a cowl panel having its edges shaped about said framing and separable pieces cooperating with said web-like portion respectively to provide a jamb face below the belt and to complete the contour of the upper portion of the pillar and overlying the edges of said panel adjacent said member.



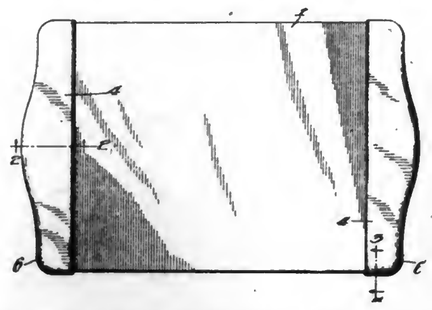
1,813,500. TRACTOR HITCH. ALFRED A. LENHART and ROY F. LENHART, Minneapolis, Minn. Filed Feb. 20, 1930. Serial No. 429,894. 11 Claims. (Cl. 55—84.)



1. A tractor hitch comprising a drag beam, a pair of forwardly projecting slack-compensating levers, an outer link and an inner link attached to each end portion of the drag beam in opposing relation and connected the former to the intermediate portion of one of said levers and the latter to the inner end thereof, and an equalizing linkage connecting the levers to a tractor, said linkage comprising for each lever an inner member and an outer member connected at their inner ends to the outer end of the lever, means for attaching the outer ends of said members to a tractor at transversely offset points, and a guide for holding the inner end portion of one of said members laterally offset from the other thereof.

1,813,501. DESK PAD AND POCKET PIECE THEREFOR. MELVIN S. LOWER, Barberton, Ohio, assignor to The Sun Rubber Company, a Corporation of Ohio. Filed Jan. 2, 1930. Serial No. 417,970. 6 Claims. (Cl. 120—24.)

1. A desk pad comprising a panel having a smooth hard surface and soft rubber members fitting over edge portions of the panel and extending underneath and across the top of the panel, the portions of said members underlying the panel being secured thereto, and the top portions of said members being loose to form pockets between the same and the panel.

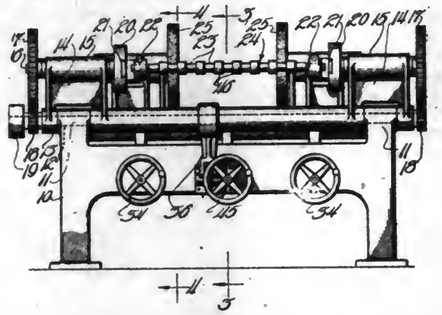


1,813,502. MEANS OF TRANSMITTING POWER. CHARLES P. MADSEN, New York, N. Y., assignor, by mesne assignments, to William W. Varney, Baltimore, Md. Filed Feb. 2, 1925. Serial No. 6,414. 1 Claim. (Cl. 74—26.)



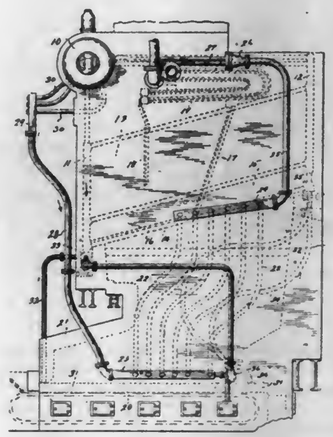
An air suction driving element having an attenuated external operative surface superimposed over a compressed interior supporting body, said surface being provided with air suction driving elements integral therewith, and means for laterally maintaining said interior supporting body in compression.

1,813,503. GRINDING MACHINERY. GEORGE E. MERRYWEATHER, Cleveland Heights, Ohio; Laura E. Merryweather, executrix of said George E. Merryweather, deceased, assignor to The Motch & Merryweather Machinery Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 3, 1927. Serial No. 223,568. 11 Claims. (Cl. 51—97.)



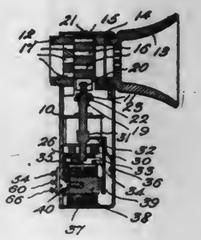
1. A grinding machine of the character described, including a bed or support, a plurality of grinding wheel carriages longitudinally movable thereon, means for individually imparting in and out of adjustment to said grinding wheel carriages, a work holder mounted on the support adjacent the grinding wheel carriages, and cam means for imparting an in and out movement to the work holder as respects the grinding wheels.

1,813,504. STEAM BOILER. WILLIAM S. MONROE, Chicago, Ill., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed May 4, 1925. Serial No. 27,704. 8 Claims. (Cl. 122—235.)



6. In combination, a furnace chamber, means causing gases passing through said chamber to follow a curved path, and water tubes adjacent the side walls of said chamber, and disposed generally parallel to said path substantially throughout their lengths.

1,813,505. TELEPHONE ATTACHMENT. FREDERICK THOMAS PEAK, New York, N. Y. Filed Mar. 26, 1929. Serial No. 350,083. 13 Claims. (Cl. 179—188.)

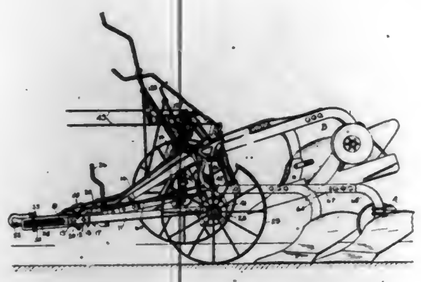


3. A telephone apparatus, including a shutter for the transmitter, and electromagnetic means for controlling said shutter, said means including a shaft associated with said shutter, a cross arm mounted upon said shaft, electromagnets operable upon energization to move said cross arm, resilient means associated with said cross arm for normally urging the same in shutter-closing position, and means for holding said shutter in opened position.

1,813,506. PLOW. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 23, 1929. Serial No. 349,330. 35 Claims. (Cl. 97—72.)

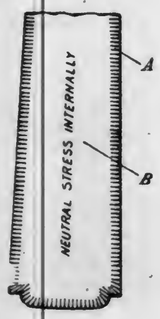
2. A two-way plow comprising a frame, dirigible ground wheels supporting said frame at the sides thereof, opposite-

ly acting gangs connected with said frame for alternate movement into or out of operative position, separately operable lifting devices for said gangs, respectively, each comprising cooperating members operable to lift the gang



connected therewith to approximately the same height regardless of the plowing depth thereof, and movable relatively to each other to vary the depth of plowing, and means adapted to be actuated by the ground wheels to operate said lifting devices.

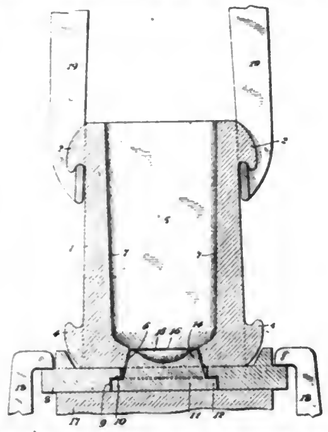
1,813,507. STEEL INGOT. WILLIAM HAIG RAMAGE, Girard, Ohio, assignor to Valley Mould & Iron Corporation, Sharpsville, Pa., a Corporation of New York. Original application filed Jan. 28, 1926, Serial No. 84,307. Divided and this application filed Jan. 24, 1927. Serial No. 162,974. 6 Claims. (Cl. 22—218.)



1. An article of manufacture comprising an ingot of steel having substantially a uniform chill on all rolling surfaces thereof.

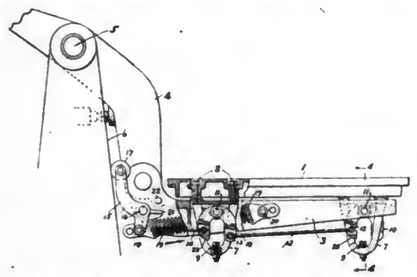
1,813,508. INGOT MOLD. WILLIAM HAIG RAMAGE, Trumbull County, and EDMUND J. KAUFFMAN, Girard, Ohio, assignors to Valley Mould and Iron Corporation, Hubbard, Ohio, a Corporation of New York. Filed Mar. 22, 1930. Serial No. 438,031. 10 Claims. (Cl. 22—139.)

10. An ingot mold set-up comprising a body member having a vertical matrix therein with an opening leading to the bottom of said matrix, the side walls of said opening being inclined downwardly and outwardly, a closure member adapted to telescope relatively to said mold body and to close said opening, the side walls of said closure member being inclined upwardly and inwardly at slightly less inclination than the inclination of the side walls of the open-



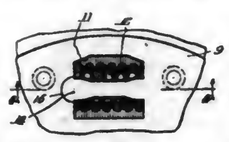
ing whereby a tight closed joint is formed between said body and said closure member adjacent the matrix of the body of the mold.

1,813,509. AUTOMATIC LOCK FOR JARRING ROLL-OVER MOLDING MACHINES. JOHN T. RAMSDEN, Philadelphia, Pa., assignor to The Tabor Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 15, 1930. Serial No. 444,446. 3 Claims. (Cl. 22—33.)



1. In combination, a stationary housing, a rollover plate, a rollover arm, a crank arm pivotally mounted on said rollover arm, a roller mounted in said crank arm and adapted to roll on said stationary housing, a spring attached to said crank arm and to said rollover arm stressing said roller against said stationary housing, a locking member adapted to engage said rollover plate to lock it to said rollover arm, and means connected to said crank arm and to said locking member whereby said crank arm actuates said locking member.

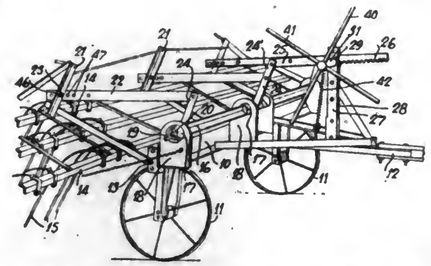
1,813,510. CLUTCH PLATE. HAROLD V. REED, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1929. Serial No. 345,144. 10 Claims. (Cl. 192—68.)



1. A driven plate for friction clutches comprising two overlapping members having registering openings therein,

springs seated in said openings, and fixed tongues in the openings of one of said members and extending through said springs.

1,813,511. ADJUSTING MEANS FOR AGRICULTURAL IMPLEMENTS. ARTHUR W. REYNOLDS, Leonardsville, N. Y., assignor to The Babcock Manufacturing Company, Leonardsville, N. Y., a Corporation of New York. Filed Apr. 23, 1929. Serial No. 357,450. 14 Claims. (Cl. 55—19.)

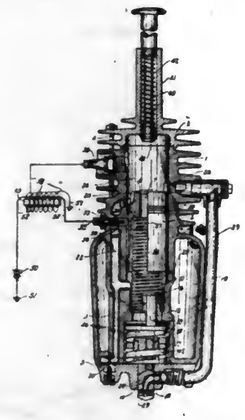


1. In an agricultural implement or the like, the combination of a support, a frame adjustably mounted on said support, ground-working implements carried by said frame, a rack connected to said frame, a member carried by said support and mounted for rotation on an axis transverse to said rack, a pair of pins carried by said rotatable element and adapted to extend between the teeth of said rack, and a spring secured to said support and tending to pull said rack against said pins.

1,813,512. PROCESS OF MAKING SOAP. JOHN E. RUTZLER, Jr., Arlington, N. J. Filed Sept. 28, 1928. Serial No. 309,126. 12 Claims. (Cl. 87—16.)

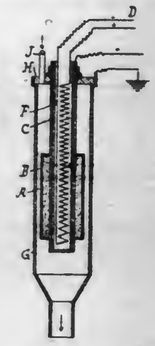
6. A process of making soap which comprises treating a soap stock with hydrogen peroxide and a concentrated solution of sodium hydroxide, the quantity of said sodium hydroxide solution being in excess of that required to neutralize the acid of said soap stock.

1,813,513. INTERNAL COMBUSTION HAMMER. SAMUEL R. SAUNDERS, Green Bay, Wis. Filed Feb. 25, 1927. Serial No. 170,872. 3 Claims. (Cl. 123—7.)



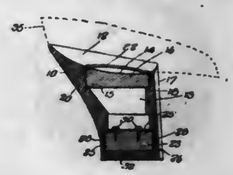
1. In a device of the character described, the combination with a cylinder having a port and a floating piston reciprocable therein and provided with a bevelled portion adapted to register with said port in one position, of said piston, means for securing said piston against rotation during its reciprocation in said cylinder, whereby to maintain said bevelled portion in a position for registry with said port, said means comprising a timer control member in splined engagement with said piston.

1,813,514. PRODUCTION OF CARBON BLACK AND APPARATUS THEREFOR. OTTO SCHMIDT and OTTO GROSSKINSKY, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 4, 1929, Serial No. 390,367, and in Germany Oct. 10, 1928. 3 Claims. (Cl. 204—31.)



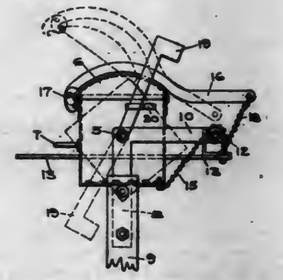
1. In the production of carbon black by decomposition, by heat treatment in the presence of catalysts, of carbon compounds in the gaseous phase, the step of carrying out the said decomposition while maintaining the reaction zone under the action of an electric field in the presence of water vapour.

1,813,515. HEEL. ISIDORE SIMON, Chicago, Ill. Filed Nov. 28, 1928. Serial No. 322,396. 8 Claims. (Cl. 36—34.)



1. In a device of the class described, a hard molded body formed of plastic material, means molded into said body for protecting an edge thereof from a tool or the like, and a penetrable member secured by said protecting means.

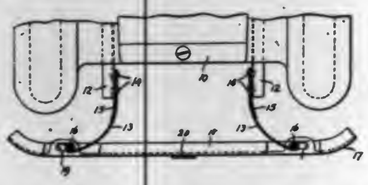
1,813,516. MAIL BOX. DANIEL H. TEMPLETON, Mead, Nebr. Filed June 8, 1928. Serial No. 369,397. 3 Claims. (Cl. 232—40.)



1. A mail box provided at its ends with trunnions and having a hinged lid, a pair of stationary angular sup-

porting brackets each having a part extending rearwardly of the box, a spool connecting the adjacent ends of said brackets, a bell-crank pivotally mounted on one of said brackets, an operating-lever mounted on the lid, a chain connecting the operating lever with the bell-crank, and a chain engaging the spool and connected with the bell-crank and bottom of the box, said bell-crank being movable for coincidentally causing a swinging movement of the box and a swinging movement of the lid to open position.

1,813,517. AUTOMOBILE BUMPER. ADOLPH A. THOMAS, New York, N. Y. Filed May 28, 1930. Serial No. 456,368. 9 Claims. (Cl. 293—55.)



1. A bumper structure for automobiles comprising a pair of leaf springs secured at their inner ends to the chassis of the car and diverging outwardly in substantially continuous curves, a bumper bar, and means whereby the free ends of said springs are forced apart when said bar strikes an obstruction, said means including automatically adjustable connections between the bumper bar and said springs.

1,813,518. POWDER PUFF AND METHOD OF MAKING THE SAME. JOSEPH E. VALENTINE, Plainfield, N. J., and IRVING ENGLANDER, Brooklyn, N. Y., assignors to Oxzyn Company, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1927. Serial No. 176,380. 8 Claims. (Cl. 132—73.5.)



1. The method of making a powder puff which includes providing a pair of discs of pile fabric material, forming crossed slits in one of said discs, placing said discs with their pile surfaces in contact and sewing said discs completely around their edges, turning said sewed article inside out through the opening provided by the slits and affixing a closure element over said slits.

1,813,519. GRAIN FEEDING DEVICE. JOHN J. WARUSKY, Minneapolis, Minn., assignor to Hart-Carter Company, Peoria, Ill., a Corporation of Delaware. Filed Apr. 10, 1929. Serial No. 353,989. 3 Claims. (Cl. 83—44.)



1. A feed receptacle having an elongated discharge passage in its lower portion, a spiral conveyor arranged over said discharge passage for the spreading and feeding of grain from the point of delivery to the remote portion of said discharge passage, a power-actuated drive for said spiral conveyor including a normally engaged clutch, a spiral rotary clutch-tripping device driven from said power-actuated drive and connected to one of the clutch members, said spiral rotary clutch-tripping device being relatively short as compared with said spiral conveyor, and located in said receptacle above that portion of said discharge passage that is remote from the point of delivery of said grain thereto and being arranged for endwise clutch-opening movement by resistance produced by an over-accumulation of grain above said discharge passage.

1,813,520. BUILDING MATERIAL AND METHOD OF AND MEANS FOR MAKING SAME. HALBERT E. WHITE, Tampa, Fla. Filed Nov. 19, 1928. Serial No. 320,392. 9 Claims. (Cl. 153—76.)

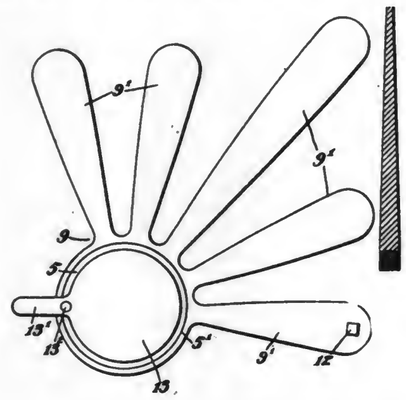


1. Sheathing having substantially trapezoidal integrally formed projections, one edge of each projection extending farther from the sheet than the other edge.

6. Means for forming a substantially dove-tailed projection in metal sheets, comprising a die having a longitudinal channel of approximately the width of the projection and having substantially parallel sides with the bottom arranged at an angle thereto and a second die coacting with the first named die with a longitudinal projection having one face substantially parallel to one side of said channel and adapted to project into the angle at the lower portion of the channel, the last named die being cut away adjacent to the opposite side of the channel to provide a space for one side of the dove-tailed projection when the other side is being formed.

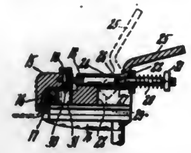
9. The method of making a metallic sheathing having grooves of substantially dove-tail shape cross section with the sides of the grooves projecting beyond the opposite side of the sheet at the points where they join the sheet, which consists in forming one side of each of a series of said grooves with the adjacent projection on the opposite side of the sheet and then forming the opposite sides of each of said grooves with the corresponding projections on the opposite side of the sheet.

1,813,521. THERMAL FILTER. WALTER G. WOLFE, Greenwood, Mass., assignor to Wilmot R. Evans, trustee, Boston, Mass. Filed Feb. 15, 1929. Serial No. 340,210. 14 Claims. (Cl. 88—24.)



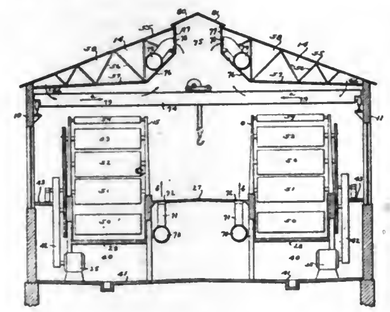
1. In a thermal filter, a transparent vitreous plate disposed in the path of a beam, and a metallic radiating plate conductively attached to said transparent plate beyond the beam intercept by a cementitious film including a metallic conductor dispersed therein.

1,813,522. NECK-BAND CLAMP MECHANISM. THOMAS J. YATES, Salem, Mass., assignor to Yates Machine Company, Salem, Mass., a Corporation of Massachusetts. Filed Oct. 16, 1929. Serial No. 399,087. 4 Claims. (Cl. 68—9.)



1. Mechanism of the class described comprising a neck-band appliance, a neck-band clamp having a portion engageable with the front face of said appliance, a stem secured to said clamp extending rearwardly through said appliance and projecting therefrom, a spring and an abutment on the projecting portion of said stem, the abutment being engaged by the rearward end of the spring, and cam means between said spring and said appliance movable to press said spring rearwardly, whereby said clamp is pressed resiliently against the face of said appliance.

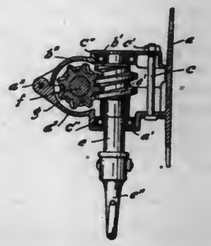
1,813,523. BUILDING. WALTER J. ZIMMERMAN, Dayton, Ohio, assignor to The Management Engineering and Development Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 6, 1927. Serial No. 181,387. 14 Claims. (Cl. 34—48.)



1. In a building of the class described, a roof portion having spaced upper and lower surfaces providing an air chamber therebetween, an outlet for the air in a lower wall of said air chamber, means for supplying heated air under pressure to said chamber so as to force the air out of said opening, and an air duct within said chamber for conveying moisture-laden hot air from the space below said chamber.

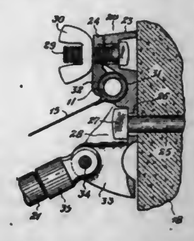
1,813,524. BALL-BEARING WORM-GEAR FOR ROLLER AWNINGS. WALTER C. ASTRUP, Cleveland, Ohio, assignor to The Astrup Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 12, 1929. Serial No. 354,546. 1 Claim. (Cl. 74—36.)

A separable actuating support for roller awnings, comprising a casing, the casing being composed of separable half sections, a mounting plate for one of the half sections, each section having an annular recess and two half annular recesses in the walls thereof, friction-reducing bearings mounted in the recesses, a shaft journaled in the annular recess bearings, a second shaft journaled in the half annular recess bearings, the axes of the shafts being at right angles with each other and in different planes, a worm gear on said first mentioned shaft, a worm wheel on said second shaft meshing with the worm gear, and means securing



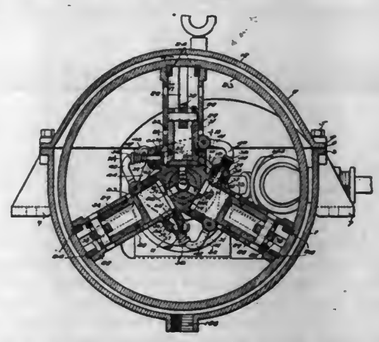
the half sections together, whereby access can be had to said bearings, shafts and gears upon separation of the half sections without disturbing a roller awning supported by said second shaft.

1,813,525. AWNING BRACKET. WALTER C. ASTRUP, Cleveland, Ohio, assignor to The Astrup Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct 4, 1930. Serial No. 486,413. 3 Claims. (Cl. 156—42.)



2. An awning bracket including a base member adapted to be attached to a structure wall, a movable member associated with the base member, the base member and movable member being provided with cooperating concaved portions for receiving and clamping an awning head rod, means for effecting a clamping action between said cooperating concaved portions, and means adapted for detachably supporting an end of an awning rafter bar including ears on the base member and a bolt removably carried by the ears.

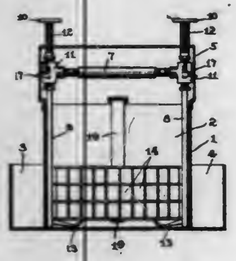
1,813,526. FLUID PRESSURE MOTOR. PAUL H. BENEDIX, Chicago, Ill. Filed Jan. 14, 1927. Serial No. 161,125. 7 Claims. (Cl. 121—60.)



1. In a fluid pressure motor, a hollow shaft, an assemblage of cylinders upon the shaft and having ports

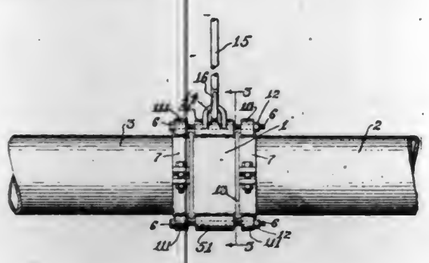
communicating therewith, pistons in the cylinders, said cylinders having exhaust ports adjacent the outer and inner ends, spring pressed valves normally closing the innermost ports, power transmitting means having connection with the pistons and eccentrically mounted relative the axis of the shaft to effect rotation of the shaft upon the admission of fluid pressure to said cylinders successively in the rotation of said shaft, means whereby to open and close said outer and inner ports successively for clearing the cylinders before receiving a new charge of fluid, a sleeve valve controlling the admission of fluid to said cylinders, and means for simultaneously adjusting said sleeve valve and said port controlling means whereby to reverse said motor.

1,813,527. EGG PACKING MECHANISM. WARREN W. CECIL, Dixon, Calif. Filed Oct. 10, 1928. Serial No. 311,456. 3 Claims. (Cl. 294—27.)



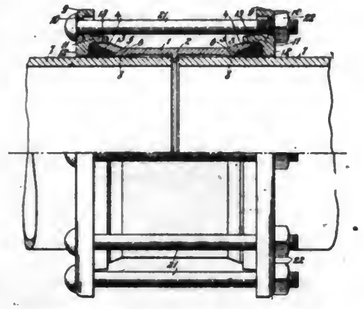
1. An egg packing mechanism comprising a supporting structure consisting of vertically disposed members, a frame connecting said members arranged to form the housing for a series of compartmented fillers carrying a quantity of packed eggs, means disposed in said members for holding said packed compartmented fillers in said housing, and means for releasing said holding means to dispose said packed eggs within a packing case.

1,813,528. PIPE COUPLING AND SUPPORT. ERNEST CLARK, Abington, Mass., assignor to Abington Textile Machinery Works, Boston, Mass., a Trust of Massachusetts. Filed Mar. 5, 1925. Serial No. 13,053. 3 Claims. (Cl. 285—132.)



1. The combination with a pipe-fitting having external lugs and pipes each having an end-portion thereof inserted within said pipe-fitting, of a ring separately clamped upon the exterior of each pipe, packing between each ring and the pipe-fitting, bolts engaging with said rings for drawing the pipes endwise toward each other and also compressing the packing between the rings and the fitting, and means carried by said pipe-fitting to be engaged by a supporting member to support the same and thereby the pipes at the joint, said lugs engaging with said bolts to utilize the latter and the rings in supporting the pipes adjacent the meeting ends thereof.

1,813,529. PIPE COUPLING FOR PLAIN END PIPES. JAMES CLARK, Bradford, Pa., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Jan. 18, 1930. Serial No. 421,701. 2 Claims. (Cl. 285—132.)



1. In a pipe coupling for plain end pipes, the combination with a middle ring, provided at each end with a packing recess, having at its inner end an annular shoulder substantially perpendicular to the axis of the ring and an outwardly flaring wall extending from the outer edge of said shoulder toward the end of the ring, clamping rings having packing recesses, resilient packing gaskets each having a tapered portion for engaging the packing recess of the middle ring, terminating in an annular face substantially perpendicular to the axis of the gasket to have abutting engagement with said shoulder of the middle ring, and means for causing said clamping rings to compress said gaskets axially against said shoulders.

1,813,530. CREPE FABRIC AND METHOD OF MAKING THE SAME. CAMILLE DREYFUS, New York, N. Y. Filed Apr. 12, 1929. Serial No. 354,710. 4 Claims. (Cl. 139—428.)

1. The method of forming crepe fabric comprising weaving together yarns of organic derivatives of cellulose and highly twisted degummed undyed natural silk yarn and then subjecting the fabric to a creping bath.

1,813,531. PROCESS FOR OBTAINING A PRODUCT RICH IN CELLULOSE AND USEFUL BY-PRODUCTS FROM STRAW. HENRI DU BOISTESSELIN, Rouen, France, assignor of one-half to Maurice Hurel, Aunay S/Crecy, Eure & Loir, France. Filed Sept. 13, 1929, Serial No. 392,497, and in France Sept. 18, 1928. 9 Claims. (Cl. 92—9.)

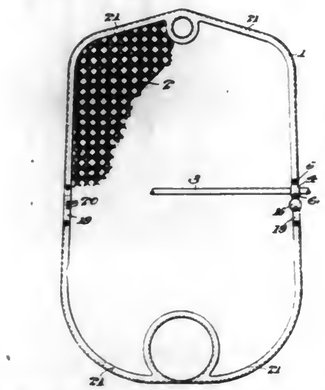
1. A process for preparing a product rich in cellulose from straw which comprises treating the straw at a temperature greater than 80° C. with substantially normal nitric acid in quantities such that the content does not fall below half normal value and subsequently draining, washing and drying the straw.

1,813,532. ADJUSTABLE SHOCK ABSORBER. ARMAND DUFAUX, Levallois, France. Filed Feb. 14, 1929, Serial No. 339,901, and in France Feb. 22, 1928. 6 Claims. (Cl. 188—130.)



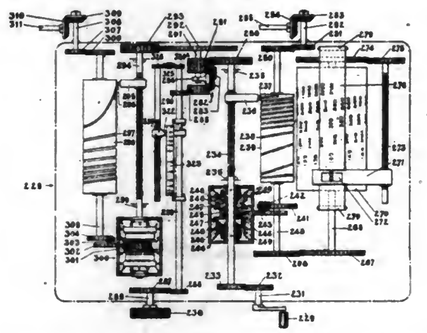
1. In a shock-absorber for automobiles of the type set forth, the combination of a pair of operating arms, friction washers interposed between said arms, a longitudinally displaceable stud shaft extending through said washers and said arms, spring means adapted to oppose the movement of said shaft, a second shaft disposed at right angles to said first shaft, means for rotating said second shaft, and means interconnecting said shafts adapted to cause displacement of said first shaft when said second shaft is rotated, for the purposes set forth.

1,813,533. RADIATOR SCREEN BRACKET. MAX M. FISCHER, Brooklyn, N. Y. Filed Nov. 22, 1930. Serial No. 497,452. 13 Claims. (Cl. 293—54.)



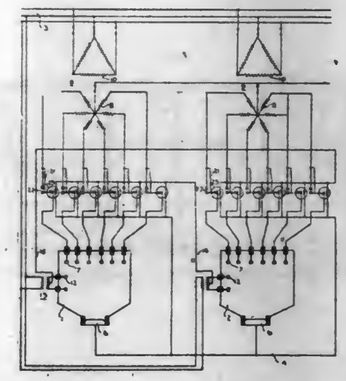
1. A device of the character described comprising, a clamping element, and a screen-engaging screw carried by the clamping element.

1,813,534. FIRE CONTROL SYSTEM. HANNIBAL C. FORD, Jamaica, N. Y., assignor to Ford Instrument Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Oct. 16, 1924. Serial No. 744,051. 19 Claims. (Cl. 235—61.5.)



9. In apparatus for controlling guns from a director station, means for receiving gun elevation directions from the director station, means for receiving gun train directions from the director station and including means for adjustment to compensate for parallax effects arising from the displacement of the gun relative to the director station, two operating members, means actuable by one of said members for calculating a range function and running the same into the gun-train-direction receiver to combine with said adjustment means to effect a parallax correction for the required range, and means actuable by both of said operating members for calculating a second range function and an erosion function and combining them to operate the gun-elevation receiver so as to correct the reading of the gun elevation receiver.

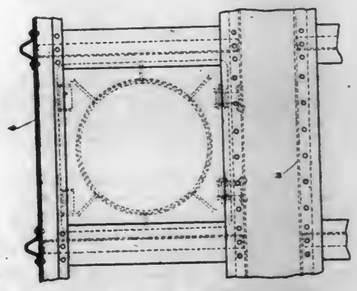
1,813,535. PROTECTION OF RECTIFIER SYSTEMS. ARTHUR GAUDENZI, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Apr. 9, 1928, Serial No. 268,573, and in Germany Aug. 8, 1927. 10 Claims. (Cl. 175—363.)



2. The combination of a rectifier of the vapor type including a cathode and a plurality of anodes cooperating with said cathode, a transformer having a plurality of leads connected to said anodes, relay means associated with said anode leads and responsive to abnormal current flow therein for stabilizing the operation of said rectifier, actuation of said relay means requiring maintaining the same in energized condition, and a source of supply independent of said rectifier for energizing said relay means.

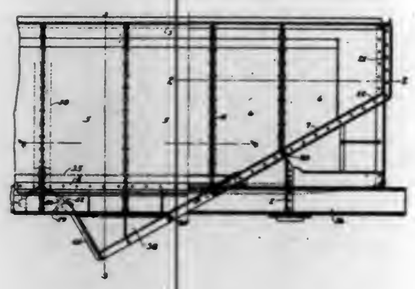
9. The combination of a pair of parallel operated direct-current generating apparatus, one of said apparatus being a rectifier having a cathode, a plurality of anodes, and a transformer having leads connected to said anodes for supplying the same, relay means in each of said leads, resistors associated with each of said leads, said relays being arranged to cut out the resistor from the associated leads under normal current flow conditions and cut in said resistor under abnormal current flow conditions, each relay having a pair of cooperating windings, one of said windings being energized by the current flowing in the associated anode lead, the other of said windings being energized with direct current from the direct-current generating apparatus operating in parallel with said rectifier.

1,813,536. DROP DOOR FOR RAILWAY CARS. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 26, 1929. Serial No. 358,305. 3 Claims. (Cl. 105—280.)



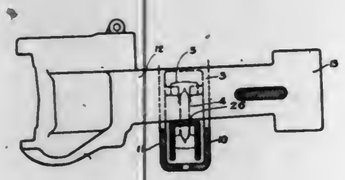
1. A hinged door for a railway car comprising a substantially rectangular body, a circular rib, said body extending beyond said rib on all sides thereof, and brackets springing from the rib and merging into the body.

1,813,537. CAR CONSTRUCTION. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed May 16, 1929. Serial No. 363,550. 8 Claims. (Cl. 105—249.)



1. In a railway car of the hopper type, a side wall comprising a top chord, a bottom chord, and a plurality of cast metal panels secured to said chords, said panels provided with flanges, said flanges being secured to corresponding flanges on adjacent panels to perform the functions of the usual side stakes.

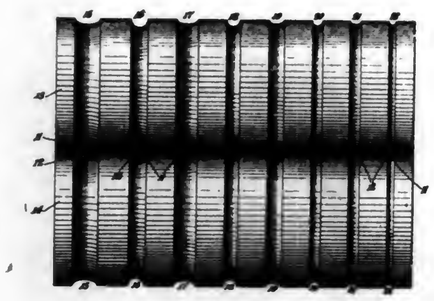
1,813,538. COUPLER POSITIONING DEVICE. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 5, 1929. Serial No. 411,820. 6 Claims. (Cl. 213—21.)



1. In a railway car, the combination of a coupler carrier swingably suspended from the car to swing laterally thereof and provided with a coupler engaging surface obliquely positioned relative to the plane of the swinging movement of the carrier.

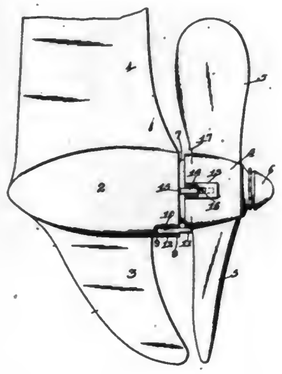
4. In a railway car, the combination of a coupler carrier swingably suspended from the car to swing in a substantially vertical plane and provided with a coupler engaging surface, a car part positioned adjacent one side of said carrier, and a car coupler having a carrier engaging surface positioned in an oblique plane when assembled in the car, said coupler engaging surface of the carrier being substantially parallel to the carrier engaging surface of the coupler when in normal position whereby the carrier is held out of contact with said car part during the swinging movements of the carrier.

1,813,539. METHOD OF ROLLING COMPOSITE WIRE. ROY T. HURLEY, Dobbs Ferry, N. Y., assignor to The B. G. Corporation, a Corporation of New York. Filed Mar. 12, 1927. Serial No. 174,896. 1 Claim. (Cl. 80—63.)



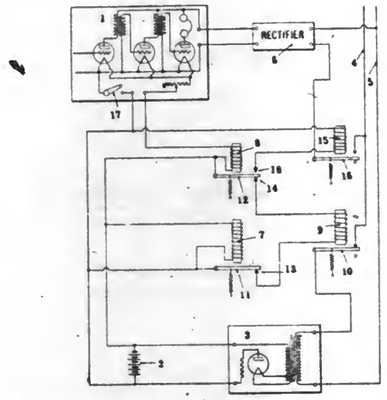
The method of rolling composite wire which comprises passing a composite ingot having a core of metal softer than that of the outer sheath through a series of rolls shaped to alternately vary said ingot between oval and round shape and to progressively decrease the cross sectional area thereof.

1,813,540. WEED CUTTER. JACOB LASKA, Milwaukee, Wis. Filed June 20, 1930. Serial No. 462,664. 2 Claims. (Cl. 115—40.)



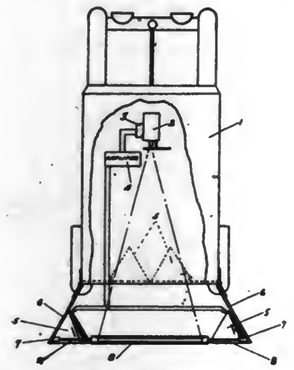
2. In a device of the character described, a housing, a shaft carried thereby, a propeller or hub mounted on the shaft adjacent the housing, said hub and housing having inwardly extending bores, cutting blades having shanks removably positioned within said bores and said cutting blades being relatively positioned for overlapping cooperation with one another for severing weeds engaging between the housing and the propeller hub.

1,813,541. CIRCUIT CONTROL SYSTEM FOR RADIO APPARATUS. CHARLES C. LAURITSEN, St. Louis, Mo., assignor, by direct and mesne assignments, to Colin B. Kennedy Incorporated, St. Louis, Mo., a Corporation of Missouri. Filed May 7, 1925. Serial No. 28,557. 6 Claims. (Cl. 250—27.)



6. The combination of a wireless set having vacuum tubes, rectifying apparatus for supplying power to the tubes, and means adapted to automatically control the connection of the rectifying device to a source of alternating current, said means being responsive to the operative condition of the tubes.

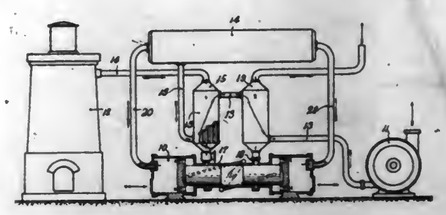
1,813,542. TALKING PICTURE VEHICLE. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 1, 1929. Serial No. 351,745. 4 Claims. (Cl. 88—16.2.)



1. A portable talking picture apparatus, comprising a vehicle having swinging doors, a projector and sound-reproducing device mounted in said vehicle, a plurality of loud speakers mounted on said doors in postition to face outward when the doors are open, and removable means for supporting a screen between said open doors and effective to retain said doors in open position.

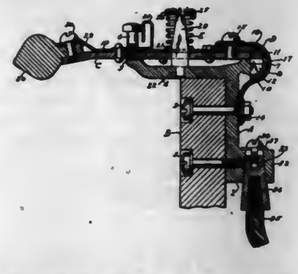
1,813,543. WASTE HEAT APPARATUS. RAUL PATERAS PESCARA, Paris, France. Filed June 29, 1927, Serial No. 202,444, and in France July 7, 1926. 3 Claims. (Cl. 60—11.)

1. In an apparatus of the type described an internal combustion air compressor of the direct driven direct acting type having a main driving cylinder and a plurality of compressing cylinders, an air turbine connected to said compressing cylinders, means for supplying said driving cylinder with a combustible fluid at a temperature greater



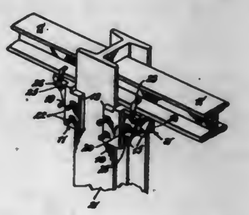
than that of the air compressed by said compressor and means for imparting a portion of the heat in said combustible fluid to the air furnished to said turbine for the purpose specified.

1,813,544. ELECTRICAL CONTROLLER. CHRISTIAN A. RASMUSSEN, Cleveland, Ohio, assignor to The Euclid Electric & Manufacturing Company, Euclid, Ohio, a Corporation of Ohio. Filed June 5, 1929. Serial No. 368,725. 5 Claims. (Cl. 200—166.)



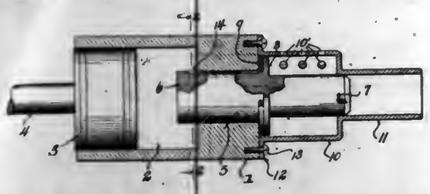
1. A contact device for electric controllers, comprising a stationary part, a contact finger hinged to said part having a slot therein, a tapered post fixed to said part and extending through said slot having a locking head, a coiled spring sleeved over said post, and a rotatable cap having a slot and depressions therein to permit detachable interlocking with said head under the tension of said spring.

1,813,545. DEVICE FOR SUPPORTING BEAMS FROM COLUMNS IN THE CONSTRUCTION OF WELDED BUILDINGS. WILLIAM REINHOLD, Buffalo, N. Y. Filed Apr. 3, 1929. Serial No. 352,078. 3 Claims. (Cl. 113—99.)



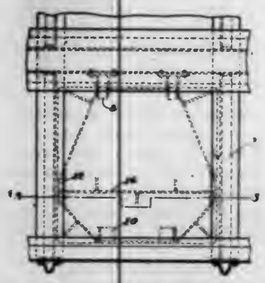
1. A device of the character described, comprising a pair of supporting members each formed with a jaw adapted to engage a structural member, and the screw connecting said supporting members, said screw being reversely threaded at its opposite ends whereby upon turning said screw said supporting members are moved toward and from each other to clamp the structural member therebetween, one of said members being formed to support the end of a beam.

1,813,546. AIR HAMMER. EMANUEL SCHINDLER, Chicago, Ill. Filed Feb. 6, 1928. Serial No. 252,390. 1 Claim. (Cl. 60—62.5.)



An air hammer comprising a body portion having a main cylinder and an auxiliary cylinder opening thereinto, said main cylinder being relatively larger than the auxiliary cylinder, a main piston mounted within said main cylinder and adapted to be reciprocated to alternately compress and rarify the air in said main cylinder, an auxiliary piston consisting of an elongated cylindrical member mounted within said auxiliary cylinder, a hammer rigid with said auxiliary piston, a collar rigid with said hammer and auxiliary piston, yielding means carried by said body portion and against which said collar is adapted to strike at the extreme rearward limit of motion of the auxiliary piston, said auxiliary piston having passageways cut in its periphery and terminating short of its rear end, and guiding means for said hammer carried by said body portion.

1,813,547. DROP DOOR FOR RAILWAY CARS. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 358,009. 9 Claims. (Cl. 105—280.)



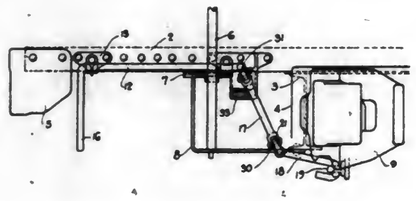
1. A door for a railway dump car comprising hinge elements adjacent one end thereof, support elements adjacent the other end thereof, bumpers adjacent the opposite sides thereof, and a rib on each side of the door, each of said ribs extending from a hinge element to a support element and deflected so as to pass through a bumper.

1,813,548. RAILWAY CAR HOPPER DOOR. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 10, 1929. Serial No. 398,624. 18 Claims. (Cl. 105—280.)



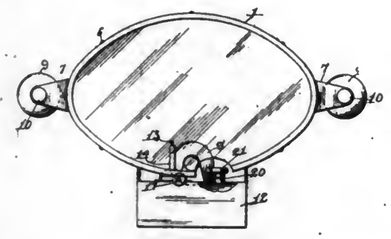
1. A hingeable cast metal door forming part of the load retaining means of a railway car, comprising a main portion formed into a bulge having its greatest depth adjacent the lower margin of the door with the surface of said bulge between the place of greatest depth and said lower margin inclined downwardly.

1,813,549. DEVICE FOR OPERATING CAR COUPLERS. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 18, 1929. Serial No. 414,887. 3 Claims. (Cl. 213—169.)



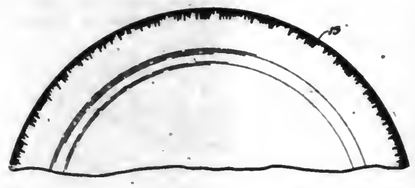
1. In a railway car, the combination of a coupler mounted upon the car so as to move longitudinally and laterally thereof in service, said coupler comprising a rotor arranged to operate said coupler upon rotation thereof, an operating rod rotatively mounted upon the car so as to prevent any substantial movement of the rod laterally of the car, said rod having a handle at its outer end, a rotor rod having its inner end rotatively connected to said rotor, and a connecting rod having its opposite ends connected by universal joints to the inner end of the operating rod and to the outer end of the rotor rod, respectively, whereby the raising of the handle rotates the rotor in any position the coupler may assume in service.

1,813,550. WINDSHIELD HEATER. EDWARD A. SMALL, Franksville, Wis., assignor to Eeja Auto Accessories Company, Franksville, Wis., a Corporation of Wisconsin. Filed May 13, 1929. Serial No. 362,842. 1 Claim. (Cl. 20—40.5.)



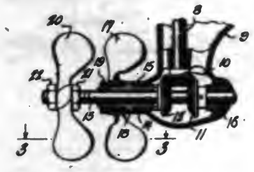
A windshield heater comprising a substantially oval-shaped metallic frame of material width, an annular inturned flange at each side of said frame, a transverse panel at one side of said frame resting against the flange, an angular plate secured to the frame and having one flange thereof arranged in opposed relation to the flange on the frame, and engaging the panel to retain the same in position, angular brackets at the ends of the frame, suction cups carried by said brackets with their open mouth portions projecting beyond the open side of the frame, a fuel tank at the lower side of the frame intermediate the ends thereof, a heating element carried by the fuel tank and a suction cup carried by the fuel tank between the first mentioned suction cups with its open mouth portion projecting beyond the open side of the frame in alignment with the cups.

1,813,551. PROCESS OF EDGE DECORATION. CHARLES O. SMITH, Sebring, Ohio, assignor of one-half to The Sebring Pottery Company, Sebring, Ohio, a Corporation of Ohio, and one-half to The Limoges China Company, Sebring, Ohio, a Corporation of Ohio. Filed Nov. 26, 1930. Serial No. 498,354. 4 Claims. (Cl. 41—26.)



1. The under glaze process of edge decorating table earthenware which consists in applying a ripple or feather edge water color decoration to the edge portion of a piece of unglazed earthenware, then dipping the decorated earthenware before firing, to glaze the same, and then firing the glazed earthenware.

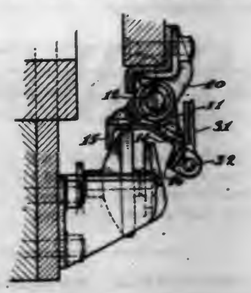
1,813,552. PROPELLING MECHANISM. JOHN STECHAUNER, Milwaukee, Wis., assignor of one-sixth to John Haas and one-sixth to Gabriel Goetz, Milwaukee, Wis. Filed Apr. 2, 1930. Serial No. 441,006. 1 Claim. (Cl. 115—18.)



In a propelling mechanism, the combination with an underwater housing, of a power transmission shaft journalled in said housing and extending lengthwise thereof and provided with a bevel gear, a sleeve shaft extending at right angles to said first named shaft and journalled in one end of said housing and provided with a bevel gear meshing with said first named gear and having a shoulder exterior of said housing, a propeller mounted on said second sleeve shaft and abutting said shoulder, a third shaft extending at right angles to said first shaft and journalled in said housing and extending through said sleeve shaft and provided with a bevel gear meshing with said first named bevel gear, and a propeller mounted on the outer end of said third shaft, said propellers being of substantially similar pitch ratio and size but of opposite pitch and mounted adjacent each other, said second and third named bevel gears being disposed on opposite sides of said first named bevel gear and being of the same pitch diameter.

1,813,553. SIDE DOOR FOR RAILWAY CARS. WILLIAM E. VAN DORN, Pasadena, Calif., assignor to Railway Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 29, 1929. Serial No. 358,972. 12 Claims. (Cl. 20—23.)

1. In a railway car, the combination of a plurality of rollers mounted upon the car, a door arranged to move laterally toward or away from the car, and a track pivoted to said door provided with angularly disposed treads arranged to support the door upon said rollers, one of said



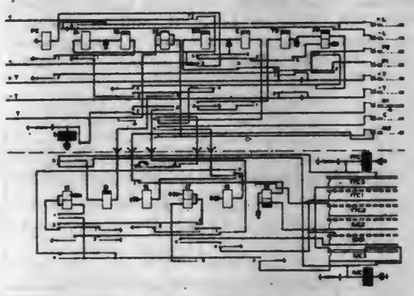
treads supporting the door when it is positioned away from the car and the other of said treads supporting the door when it is positioned near the car.

1,813,554. THEFT PREVENTER FOR TANKS. DAVID P. WICKLINE, Lynchburg, Va. Filed May 23, 1929. Serial No. 365,432. 5 Claims. (Cl. 220—86.)



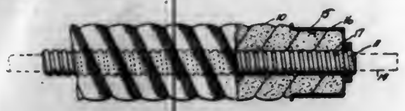
2. The combination with a liquid tank having an inlet opening and an inlet tube extending therethrough, of a pan-like body shielding the inlet end of said tube and held in spaced relation thereto, and means about the rim of said pan for preventing the end of a hose being slipped thereover.

1,813,555. AUTOMATIC OR SEMIAUTOMATIC TELEPHONE EXCHANGE SYSTEM. ESMOND PHILIP GOODWIN WRIGHT, Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Filed Jan. 23, 1930, Serial No. 422,803, and in Great Britain Feb. 7, 1929. 13 Claims. (Cl. 179—175.)



1. A telephone system comprising a test final switch, a plurality of test distributor switches, one of which is adapted to respond to transmitted impulses to select said final switch without performing any hunting operation and wherein the circuit of said test distributor switch comprises an individual portion and a portion common to all of said distributor switches.

1,813,556. DRAPERY FIXTURE. MAURICE M. YOUNG, Chicago, Ill. Filed Feb. 16, 1931. Serial No. 515,958. 7 Claims. (Cl. 156—16.)



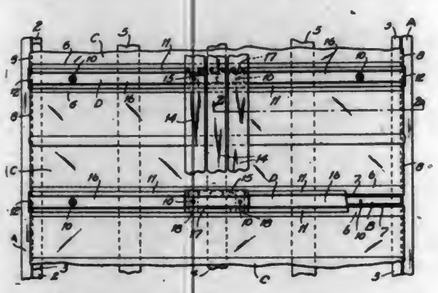
4. As an article of manufacture, a flexible tubing having a spiral thread, a cord covering said tubing, and a cap encasing the end of said cord and having a central opening through which said tubing protrudes.

1,813,557. SIGN HOLDER. MILTON ZADEK, Chicago, Ill., assignor to Reflector Hardware Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1930. Serial No. 477,285. 4 Claims. (Cl. 40—64.)



1. In a sign holder, the combination of a card holding frame having spaced upright connected and slotted tubular side members adapted to receive a plurality of cards, one above the other, and a parting strip formed with side walls and a cross wall providing upper and lower grooves for receiving adjacent edges of the cards and having resilient tongues upon the ends of the side walls adapted to enter the slots of the side member and thereby frictionally hold the parting strip in any position of adjustment.

1,813,558. CAR ROOF. CHARLES DAVID BONSALL, Pittsburg, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Nov. 21, 1930. Serial No. 497,099. 6 Claims. (Cl. 108—5.)



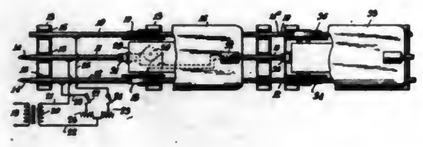
1. A seam cap for a car roof, said cap comprising end and intermediate sections provided with outstanding base flanges, the adjacent ends of the base flanges of said end sections being provided with notches, the base flanges of said intermediate cap section being provided with depressed portions adapted to seat within the notches in the base flanges of said end cap sections.

1,813,559. THREE DIMENSIONAL PROJECTION. WILLIAM F. C. BOUCHSPIES, San Francisco, Calif. Filed Sept. 21, 1926. Serial No. 136,822. 7 Claims. (Cl. 88—24.)



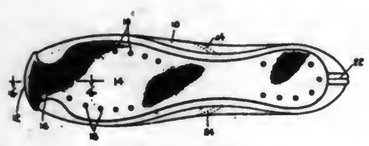
1. A system of optical projection of images which comprises, taking a plurality of pictures of a given object from various angles about said object and projecting said pictures of said object by means of visible light rays at respectively similar angles, toward a common center, a fluid light reflecting medium located substantially at said common center adapted to reflect the compound image resulting therefrom.

1,813,560. TOY ELECTRIC RAILWAY SYSTEM. WILLIAM A. BROWNE and ROBERT KISSEL, New York, N. Y. Filed Dec. 8, 1930. Serial No. 500,702. 8 Claims. (Cl. 104—149.)



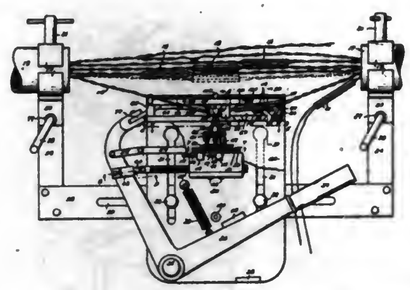
1. In a toy railway system, a track having a plurality of current-carrying rails, a vehicle capable of traveling on said track and having a driving motor adapted to draw current from one pair of said rails, a second vehicle capable of traveling on said track and having a driving motor adapted to draw current from another pair of said rails, a source of current adapted to be connected to said rails to actuate the driving motors of said vehicles, and controlling means, associated with said source of current and said rails, for connecting the source of current with either or both of said pairs of rails at will.

1,813,561. BALLET SLIPPER. SALVATORE CAPEZIO, East Paterson, N. J. Filed Mar. 1, 1929. Serial No. 343,671. 9 Claims. (Cl. 36—1.)



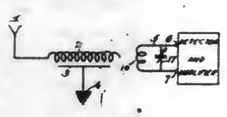
1. A protective device for ballet dancers' toe slippers comprising a molded rubber guard having a toe portion convexly formed to fit the toe of the slipper, a sole portion, and an interconnecting portion therebetween, said interconnecting portion being contracted in dimension in order to promote flexibility between the toe and sole portions.

1,813,562. CABLE-SPLICING MACHINE. JAMES W. CHANNELL, Southgate, Calif. Filed Mar. 30, 1929. Serial No. 351,212. 18 Claims. (Cl. 140—119.)



1. A splicing machine comprising; a rapidly rotatable member adapted to loosely engage and twist together a pair of approximately parallel wire-ends brought adjacent thereto, and to form thereof a twisted-off pigtail splice.

1,813,563. RADIO SIGNALLING. LOUIS COHEN, Washington, D. C. Filed July 18, 1928. Serial No. 293,608. 18 Claims. (Cl. 250—20.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a system for the reception of radio signals comprising an antenna, a wave conductor connected in series therewith, the said wave conductor being adjustable to a quarter wave length of the signals to be received, an oscillatory circuit placed in inductive relation to the said wave conductor, and means associated with said oscillatory circuit for detecting and amplifying said radio signals.

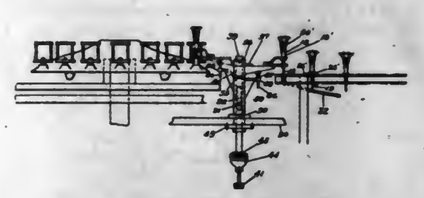
1,813,564. DOUBLE ACTING DOOR REVERSING TRACK. ROSCOE D. CONKLIN, Rahway N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Nov. 19, 1930. Serial No. 496,609. 12 Claims. (Cl. 268—1.)



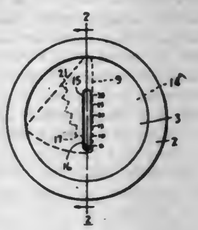
1. A folding door guide track of the type described, comprising two pivotally supported bars between which the guide roller of the door operates, means for interconnecting the free ends of the bars, means for resiliently holding them in normal parallel relation, and a control means operated thereby when the door strikes an obstruction for controlling the door.

1,813,565. ELECTRIC INCANDESCENT LAMP MAKING MACHINE. ROBERT W. CONN, Vaux Hall, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 30, 1927. Serial No. 223,058. 6 Claims. (Cl. 176—3.)

1. A lamp making machine comprising means for supporting a lamp mount, jaws for gripping the exhaust tube of said mount, means for moving said jaws to position said exhaust tube over a holder, means for moving said jaws to insert said exhaust tube into said holder and secondary means for engaging said mount to insure a downward movement thereof to insert the exhaust tube into said holder.

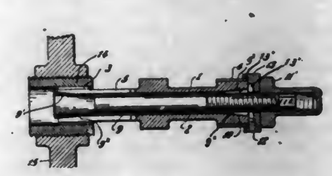


1,813,566. GAUGE. LORIN A. COREY, La Crosse, Wis., assignor, by mesne assignments, to General Instrument Company, La Crosse, Wis., a Corporation of Wisconsin. Filed July 10, 1930. Serial No. 467,036. 6 Claims. (Cl. 116—114.)



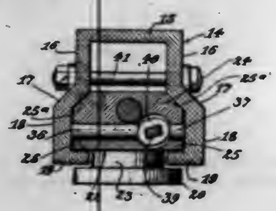
1. In an indicating instrument, a member having a vertical slot, a pivoted indicator, and means adapted to respond to varying conditions for swinging said indicator about its pivot in line with the slot to varying degrees in the length of the slot, the effective indicating portion of said indicator being an edge thereof which extends across the slot in a direction not departing appreciably from a line perpendicular to the length of the slot.

1,813,567. NIPPLE EXTRACTOR. ALFRED DELORME, Springfield, Mass. Filed May 1, 1930. Serial No. 448,905. 4 Claims. (Cl. 81—72.)



1. A nipple extractor comprising a member formed with an opening therethrough with a cone-shaped surface at one end, said end of the member being slitted for a portion of its length, the extreme outer end surface of the member having teeth which extend in a left-hand direction, a tapered member designed to be inserted in the opening of the member for expanding the slitted end, means for tightening the tapered member in the opening for embedding the teeth into a nipple, or the like, to be extracted, said member having a portion of its intermediate surface formed with parallel surfaces to receive an operating tool, for rotating the member, when a nipple is being extracted.

1,813,568. ADJUSTABLE MACHINE HEAD. RAYMOND E. DE WALT, Leola, Pa., assignor to De Walt Products Corporation, Leola, Pa., a Corporation of Pennsylvania. Original application filed May 13, 1927, Serial No. 191,117. Divided and this application filed Dec. 17, 1929. Serial No. 414,805. 2 Claims. (Cl. 143—52.)



1. An adjustable machine head structure comprising an arm having spaced side walls with divergent guide-faces and supporting and guiding flanges projecting inwardly below said faces, and a head mounted for longitudinal adjustment within the arm and including outwardly projecting flanges located between said arm guide-faces and flanges, and having angular guide faces cooperating with said arm guide-faces and pairs of locking bolts mounted for reciprocation in the head at right angles to the length thereof, the respective pairs being located near opposite ends of the head and the bolts of each pair being arranged for contact of their outer ends with faces of the arm at opposite sides of the head, a cam device for simultaneously and directly operating the two bolts of each pair, and a revoluble shaft longitudinally mounted in the head and connected to simultaneously and directly operate the cam devices.

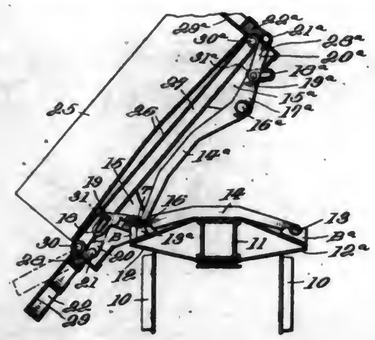
1,813,569. WASHING AND SCRUBBING BRUSH. RALPH W. EMERSON, East Orange, N. J., assignor to Gyro Brush Co., East Orange, N. J., a Corporation of New Jersey. Filed Apr. 17, 1928. Serial No. 270,598. 2 Claims. (Cl. 15—29.)



1. A device of the class described comprising a tubular handle, a chambered brush-head connected thereto and comprising a top portion and a continuous peripheral side wall, there being a water supply channel leading from the tubular handle through the top wall of the head, a water deflecting member extending laterally inward from the peripheral wall of the head adjacent the discharge end of the channel, a border brush attached to the peripheral wall and surrounding the brush-head, and a rotary brush revolvably mounted within the chambered head.

1,813,570. DUMP VEHICLE WITH ACTUATED DOORS. HENRY FORT FLOWERS, Findlay, Ohio. Filed July 10, 1926. Serial No. 121,689. 25 Claims. (Cl. 105—276.)

1. In a dump vehicle, a frame, a dump body tiltable for dumping to either side about fulcrums at the sides of said frame, said dump body being supported in stable equilibrium upon said fulcrums during normal transport, side doors for said dump body pivoted thereto, and independent, automatic and selective door controlling devices for said doors located beneath said body and extending across said frame, said devices including members having a slot-and-bolt connection to assure a permissive opening of the associated door during the tilting

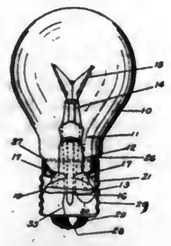


of said body about the adjacent fulcrum, and a positive closing of said door during the return of said body from tilted position.

1,813,571. PROCESS FOR GETTERING COILS. DANIEL SNYDER GUSTIN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 11, 1928. Serial No. 277,106. 7 Claims. (Cl. 176—16.)

1. The method of gettering a coiled filament comprising mechanically compacting finely divided dry getter material within the coils of the said coil filament.

1,813,572. LAMP BASE. DANIEL S. GUSTIN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 31, 1927. Serial No. 229,825. 3 Claims. (Cl. 176—32.)

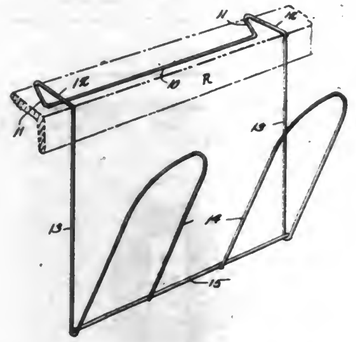


2. An incandescent electric lamp comprising a bulb having a neck portion of polygonal configuration in transverse cross section to provide a plurality of substantially plane surfaces, a base surrounding said neck portion and a collar having internally projecting edges to engage said plane surfaces and an exterior flange to engage with said base.

1,813,573. SHOE HANGER. HELEN C. HUESTIS, Washington, D. C. Filed May 17, 1930. Serial No. 453,370. 2 Claims. (Cl. 211—35.)

1. A slipper hanger including a length of wire having a straight central portion bent at its ends to provide a pair of bed rail engaging hooks, each end of the wire being further continued from the end of a respective hook portion downwardly to form a hanger portion, the ends of the wire being bent upwardly at acute angles to the hanger portions to form outer arch sides, each hook portion, its hanger portion and its outer arch sides having their axes

in a common plane at right angles to the central portion, said ends being further bent inwardly from the tops of



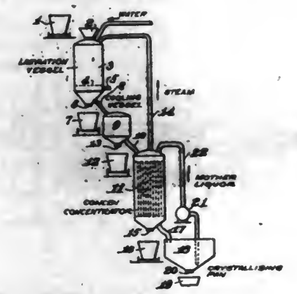
the outer arch sides and then downwardly to form inner arch sides, said arch sides all having their axes in a common plane.

1,813,574. FOOD PRODUCT AND METHOD OF MANUFACTURE THEREOF. WILLIAM HORLICK, Jr., Racine, Wis. Filed Jan. 27, 1928. Serial No. 250,095. 7 Claims. (Cl. 99—11.)

1. The process of manufacturing a food compound which comprises forming a cereal wort, adding milk and a fruit material containing a proteolytic ferment or ferments, effecting a partial digestion of the proteins of the milk and cereal and then, without destroying the digestive power of the ferment or ferments, reducing the same to highly concentrated form, substantially as described.

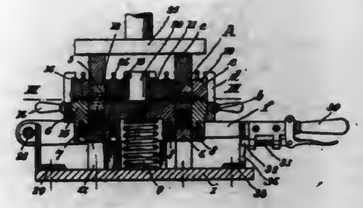
5. A powdered, soluble food compound formed of cereal product, milk and fruit material, and in which the proteins of the milk and cereal are partially digested by aid of a proteolytic ferment or ferments originally present in the fruit, substantially as described.

1,813,575. TREATMENT OF CRUDE MINERAL SALTS. ERNST JÄNECKE, Heidelberg, HERMANN KLIPPEL, Ludwigshafen-on-the-Rhine, and EMIL HEGELMANN, Mannheim, Germany, assignors to I. G. Ferbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 20, 1927, Serial No. 241,347, and in Germany Dec. 14, 1926. 10 Claims. (Cl. 23—268.)



1. The process of recovering valuable salts from a crude mineral salt, which comprises passing through said mineral salt steam and water.

1,813,576. MANUFACTURE OF FRICTION BODIES FOR BRAKE AND CLUTCH PURPOSES. HANS KATTWINKEL, Coswig, Germany. Filed Apr. 16, 1929, Serial No. 355,594, and in Germany Apr. 24, 1928. 18 Claims. (Cl. 18—16.)



2. In an apparatus for applying frictional material to perforated annular discs of sheet-metal, a swage comprising two parts adapted to securely grip between them an annular disc of sheet-metal provided with denture-like recesses, an annular pressure space provided oppositely to said disc in each of said swage-parts, an annular pressure member within each of said pressure spaces, and means for moving said pressure-members relatively to each other and to said swage-parts so as to exert substantially the same pressures on both sides of said disc, when put intermediate said swage-parts.

1,813,577. VACUUM DEVICE. WATSON KINTNER, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 21, 1928. Serial No. 287,280. 2 Claims. (Cl. 176—7.)

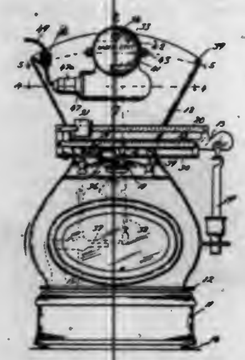


1. The method of producing a stem for a vacuum device which consists in disposing a glass exhaust tube within a glass flare tube, positioning an annulus of glass within the flare tube and around the exhaust tube and applying heat to fuse said annulus and portions of said tubes into a common mass.

1,813,578. COMPOUNDING SCALE. MODESTE J. LACHANCE, Louisville, Ky., assignor to Walter F. Stimpson, Detroit, Mich. Filed Jan. 13, 1930. Serial No. 420,440. 13 Claims. (Cl. 265—58.)

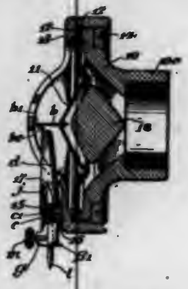
1. In a scale, the combination of a chart having index graduations extending to the top thereof, an indicator hand movable behind the chart and having a portion bent for-

wardly and then downwardly into close proximity to said chart, the downwardly extending portion being arranged



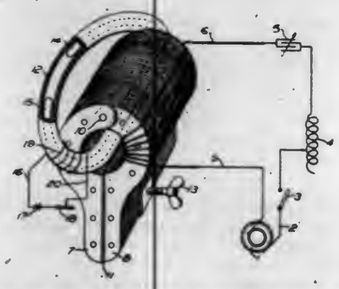
in the same vertical plane as the chart and bearing an index mark adapted to closely align with the graduations on the chart.

1,813,579. MEMBER OR STRUCTURE VIBRATED BY ENERGY IMPULSES. RUDOLPH F. MALLINA, Atlantic City, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Oct. 10, 1928. Serial No. 311,487. 8 Claims. (Cl. 274—37.)



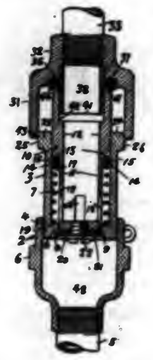
1. A vibratable member comprising a structure shaped from sheet material and terminating at one end in a web section, and spaced wing flanges disposed substantially at right angles to said web section and connected thereto.

1,813,580. MERCURY VAPOR LAMP. MONTFORD MORRISON, Chicago, Ill., assignor, by mesne assignments, to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 11, 1929. Serial No. 339,006. 4 Claims. (Cl. 176—13.)



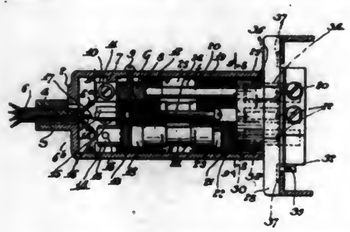
1. In a luminous discharge device, a core of magnetic material comprising an integrally separable leg, a primary winding upon said core and electrically associated with a source of alternating potential, a hollow translucent hermetically sealed envelope containing a medium conductive to electric current, luminescent under excitation and surrounding one leg of said core, whereby the said tube may be removed from said one leg by integrally separating one leg from said core.

1,813,581. VALVE. GEORGE RODRIGUES, Castroville, Calif. Filed May 21, 1929. Serial No. 364,764. 2 Claims. (Cl. 251—115.)



1. A plunger type valve including a shell, a pipe union to which the shell is threaded, a hollow cylindrical plunger having a closed bottom movable in the shell and adapted to be projected into the said union, said shell having a valve seat through which said plunger operates, a valve member carried by the lower end of said plunger, and a spring coiled around said plunger adapted to hold the valve normally closed, said cylindrical plunger having a series of openings adjacent its lower end and means whereby said lower end may be projected below said valve seat, and into said union, said means including a cap for said valve member, spirals on the outer side of said shell, lugs within said cap for engagement by said spirals, and a sprinkler head carried by said cap, said plunger having an enlarged upper end normally projecting beyond said shell, said cap having a cylinder adapted to seat within said projecting end.

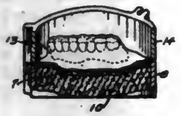
1,813,582. ATTACHMENT PLUG AND RECEPTACLE. CHARLES E. MASON, Upper Darby Township, Delaware County, Pa., assignor to Novelty Electric Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 14, 1928. Serial No. 319,198. 2 Claims. (Cl. 200—115.5.)



2. A plug comprising a shell member containing an insulating block member, one of said members containing a slot receiving a feather on the other, said block containing a ground post and live wire posts, means connecting said shell and ground post, each of said posts having on one end wire clamping means and the other ends of said

posts containing sockets, fuses housed in sockets aforesaid, a second insulating block spaced from said first block and containing conductors, one of said last-named conductors being engaged in a socket aforesaid, and the other of the conductors in the second named block containing sockets receiving said fuses, means connecting said blocks in spaced relation and pins projecting from conductors in said second named block and housed within said shell.

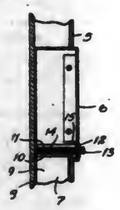
1,813,583. METHOD FOR THE PRODUCTION OF DENTURES. WILLIAM S. RICE, Washington, D. C. Filed May 28, 1928. Serial No. 281,278. 11 Claims. (Cl. 32—4.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



1. A process for producing artificial restorations of the oral cavity, consisting in producing a metal surfaced cast, developing a model upon said cast, metallizing the exterior surface of the model, embedding the model and cast in a cementitious substance, evacuating the modelling material to provide a cavity whose internal dimensions conform to the dimensional requirements of the desired restoration and perfecting the latter within said cavity.

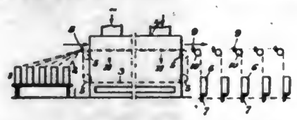
10. The method of producing an artificial denture involving the production of a metal wall which method comprises forming a trial denture with teeth in place, forming a rigid metallic shell conforming to the lingual side of the trial denture and teeth, forming a mold including the shell as a wall thereof, removing the trial denture leaving the teeth and shell in place, filling the mold with suitable denture material, and hardening the material to form the finished denture.

1,813,584. FLUE AIR STRAINER. GILBERT E. SANDERS, St. Louis, Mo. Filed Dec. 16, 1929. Serial No. 414,394. 2 Claims. (Cl. 183—74.)



1. In combination with a flue, a register grating, a strainer, said strainer in sliding engagement in a slot formed in said register grating.

1,813,585. APPARATUS FOR DRYING TEXTILE BANDS, YARNS, SLIVERS, TOPS, AND THE LIKE. RICHARD SCHILDE, Hersfeld, Germany. Filed June 2, 1925, Serial No. 34,442, and in Germany Feb. 21, 1925. 9 Claims. (Cl. 34—48.)

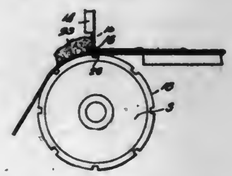


1. In combination, supply means for feeding a thread; take-up means for drawing and storing said thread after it is fed; air-permeable supporting means movable with the thread and engaging and supporting the threads between the supply and take-up; and means for directing a draft of air substantially at right angles through the threads and against the supporting means; said draft, supporting means and take-up means cooperating to hold the threads substantially free of tension between the supporting means and take-up means.

1,813,586. FIRE-EXTINGUISHING PROCESS. CHRISTIAN SCHNEIDER, Neuroessen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 7, 1929, Serial No. 345,223, and in Germany Mar. 14, 1928. 6 Claims. (Cl. 23—9.)

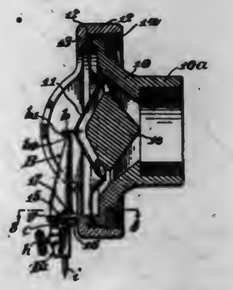
1. A process for extinguishing fire which comprises bringing a dilute aqueous solution of a highly effective wetting agent containing an acid group into contact with the burning material.

1,813,587. METHOD OF APPLYING DESIGNS TO FLEXIBLE SHEET MATERIALS. JAY J. SINDLER, Framingham, Mass., assignor to Hodgman Rubber Company, Framingham, Mass., a Corporation of Massachusetts. Filed Mar. 5, 1929. Serial No. 344,152. 11 Claims. (Cl. 41—24.)



1. A method of producing predetermined patterns or designs upon sheet materials comprising the steps of applying a suitable plastic coating material to the surface of the sheet, supporting the sheet upon a stencil bearing the desired pattern thereon, in relief, and forcing the stencil, sheet and plastic material through a constricting aperture or slit, thereby to force the plastic material upon and into the portions of said sheet overlying the depressed areas of said stencil.

1,813,588. MEMBER OR STRUCTURE VIBRATED BY ENERGY IMPULSES. FLORICEL A. STAPLER, Philadelphia, Pa., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Oct. 10, 1928. Serial No. 311,554. 12 Claims. (Cl. 274—37.)



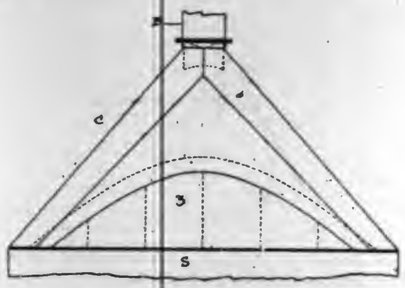
1. A vibratable member for transmitting energy impulses from one region to another, said member comprising a body portion formed from a plurality of shaped structures of sheet material having different thicknesses.

1,813,589. MEMBER OR STRUCTURE VIBRATED BY ENERGY IMPULSES. FLORICEL A. STAPLER, Philadelphia, Pa., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Oct. 10, 1928, Serial No. 312,911. Renewed Jan. 6, 1931. 9 Claims. (Cl. 274—37.)



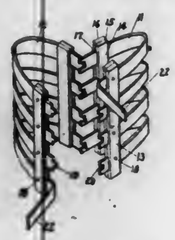
1. A vibratable member for transmitting energy impulses from one region to another, said member comprising a single member or element including a web section, spaced wing hinges angularly related to said web section and connected thereto, and a neck portion connecting said wing hinges and angularly related to said web section.

1,813,590. FEED CHUTE FOR STOKERS AND THE LIKE. ARTHUR J. BROCK, Jr., Lakewood, Ohio. Filed Feb. 23, 1926. Serial No. 89,880. 11 Claims. (Cl. 193—2.)



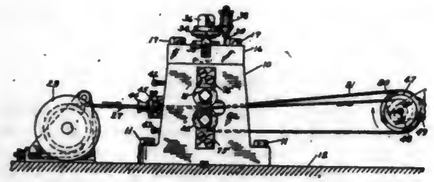
1. A non-segregating feed device providing a downwardly sloping flow surface in substantially the form of a mathematical surface of revolution, said surface broadening divergently and having a lower discharge edge forming a substantially transversely straight line drop-off, and a confining surface adapted to restrict the flow of material.

1,813,591. ELECTRIC COIL. CLAYTON TRIDLE ULREY, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 1, 1928. Serial No. 274,191. 3 Claims. (Cl. 219—47.)



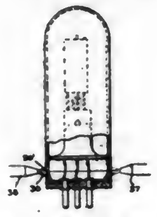
1. An electrical coil comprising a plurality of sets of electrically conducting sections, each set forming a portion of a complete coil, means for supporting the sections of each set in spaced, substantially parallel relation, means for pivotally connecting certain of said sets of sections together, at least at one end, and means detachably connecting together the other ends of said sections to form a continuous multi-turn coil.

1,813,592. MACHINE FOR FLATTENING FILAMENTARY WIRE. STEN WADSTEN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 8, 1929. Serial No. 376,587. 5 Claims. (Cl. 80—55.)



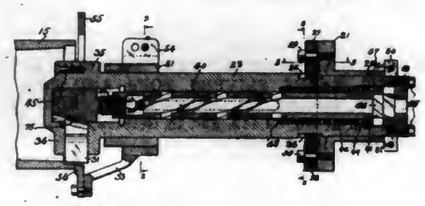
1. A machine for flattening a filamentary wire comprising pressure rollers, dressed surfaces on said rollers, bearings partly surrounding said rollers, the total bearing surfaces of said bearings engaging said dressed surfaces of said rollers and means for changing the diameter of said bearings to vary the degree of contact with said dressed surfaces.

1,813,593. ELECTRICAL DEVICE. FRANK WILLETT WALTON, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 6, 1927. Serial No. 159,269. 4 Claims. (Cl. 250—27.5.)



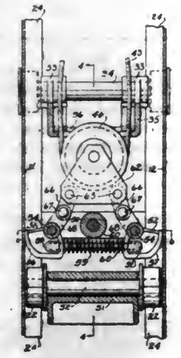
1. The method of manufacturing an electrical device which comprises positioning a mount having a vitreous flared portion within a bulb and in spaced relation to the perimeter of the mouth thereof, fusing the flared portion to the bulb, applying a base having a ridge of vitreous material to the perimeter of the mouth of the bulb so that the ridge is disposed in contact with the said mouth and in applying heat to fuse the base and bulb together.

1,813,594. RECEDING AND COLLAPSING TAP FOR THREADING PIPE COUPLINGS. CHARLES P. WETMORE, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Mar. 5, 1925. Serial No. 13,076. 28 Claims. (Cl. 10—145.)



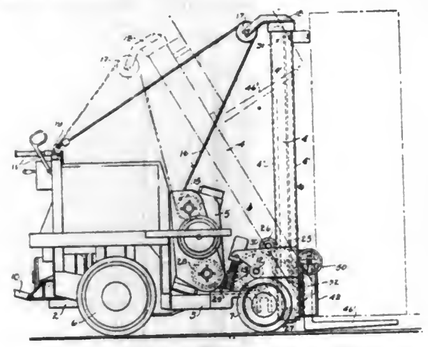
1. In a collapsible tap, a barrel adapted to be supported at one end and having a head on the other end thereof, the said head being provided with a plurality of radially extending slots, thread chasers arranged for movement in the said slots, a movable cam in the said head for supporting the chasers in operative position, a spindle provided with helical slots and mounted for rotation in the said barrel, a connection between the cam and spindle, and a pin passing through the helical slots, whereby upon movement to advance the tap the spindle is rotated to move the cam and permit recession of the chasers.

1,813,595. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 19, 1927. Serial No. 220,486. 5 Claims. (Cl. 187—11.)



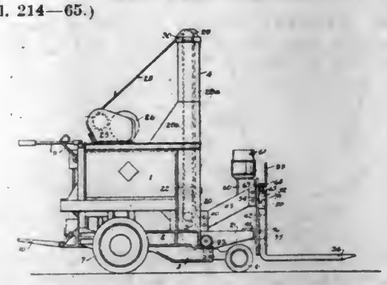
1. In a device of the class described, a carriage adapted to sustain a load, a trackway for the carriage, a pair of members pivoted to the carriage and adapted to engage and disengage respective sides of the trackway, resilient means physically interposed between and acting in opposite directions on the pivoted members and tending to force the members into engagement with the trackway, and means to raise and lower the carriage, the last-named means being connected to the carriage through the pivoted members, and the connection being arranged to oppose the action of the resilient means to normally hold the pivoted members in inactive position.

1,813,596. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell Parker Electric Co., Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 27, 1928. Serial No. 302,203. 10 Claims. (Cl. 214—65.)



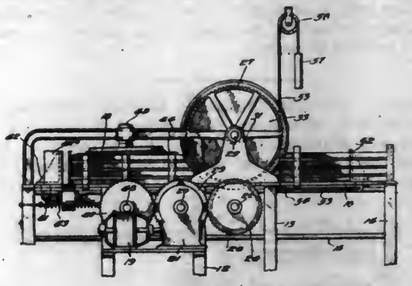
1. In an industrial truck, a plurality of individually movable load carrying members arranged to be raised and lowered to pick up and deposit a load, and means to progressively move said members unitarily, that is without relative movement between the members, transversely of the direction of movement of the truck.

1,813,597. LOAD HANDLING METHOD AND APPARATUS. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Aug. 27, 1928, Serial No. 302,203. Divided and this application filed June 3, 1929. Serial No. 367,880. 8 Claims. (Cl. 214—65.)



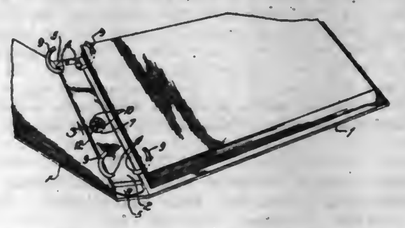
2. In an industrial power driven truck, substantially upright guiding means mounted on the truck, a frame mounted to traverse the guiding means, horizontal guiding means on the frame, a plurality of constantly spaced load engaging and lifting members guidingly supported by the horizontal guiding means, power mechanism supported by and movable with the frame, and a driving connection therefrom to said load engaging members arranged to position the same laterally of the path of movement of the truck.

1,813,598. BOOK TRIMMING MACHINE. RAYMOND E. ACKLEY, Chicago, Ill., assignor to R. R. Donnelley & Sons Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 17, 1927. Serial No. 176,092. 8 Claims. (Cl. 164—62.)



1. In a book trimming machine, a support, means for forcing books along said support, rotary cutters arranged along the sides of said support, said cutters being set at a slight angle to the sides of said support so that the books are relieved of pressure as they advance past the cutting edges, and means for rotating said cutters.

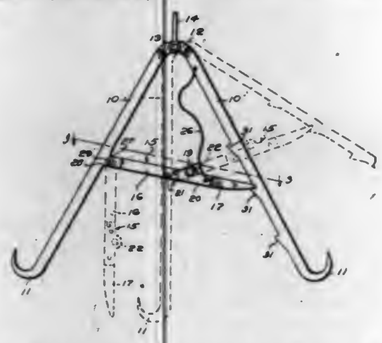
1,813,599. LOOSE LEAF RING BOOK. HENRY T. ADAMS, Chicago, Ill. Filed May 22, 1929. Serial No. 365,066. 8 Claims. (Cl. 129—24.)



2. In a device of the character set forth, a metal back strip provided with inturned edges, ring members engaging

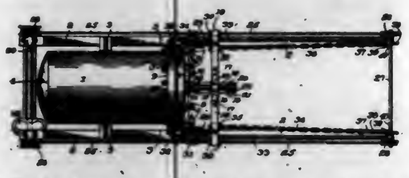
said wedges, and lateral projections from said ring members formed integrally therewith, said lateral projections being pivotally connected at their inner ends, and said back strip being provided on its closed side with an opening through which said lateral projections may swing.

1,813,600. GAMBREL. JULIUS A. AUBOL, Minot, N. Dak. Filed May 27, 1930. Serial No. 456,166. 1 Claim. (Cl. 17—44.)



A gambrel comprising a pair of hook carrying arms pivotally connected near their upper ends, one hook carrying arm being provided with spaced shoulders, a brace arm arranged between the hook carrying arms and embodying sections, a downwardly breaking knee joint connecting the inner adjacent ends of said sections, means to lock the knee joint against opening movement, means for permanently pivotally connecting the outer end of one brace arm section with the adjacent hook carrying arm, the other brace arm section being provided at its free end with a notch to receive the adjacent hook carrying arm, the wall of the notch being adapted to engage over a selected shoulder.

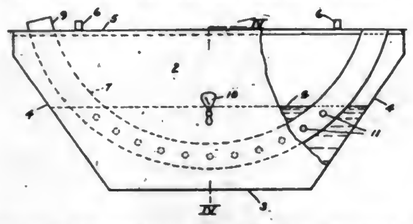
1,813,601. FILTER OPENING MEANS. WILLIAM H. BACHELDOR, Woodriver, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 29, 1929. Serial No. 381,845. 6 Claims. (Cl. 220—47.



6. In a pressure type filter, the combination of a closed tank adapted to contain filter elements, a removable head for the front end of said tank, means for locking said head to said tank, means for supporting said head while it is removed from said tank, means for actuating said locking means and for exerting a predetermined force on said head to move the head on said support in a direction away from said tank, and means for exerting a force on said head to cause the same to be initially moved from said tank, comprising a flexible elongated member having one end connected to said head and the other end connected at a point substantially spaced in front of said head, and a jack-screw adapted to cooperate with said flexible member and exert a tension thereon.

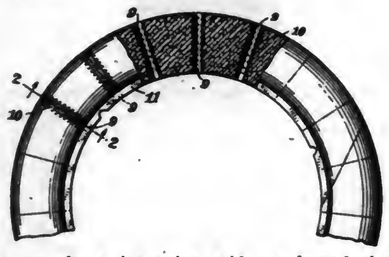
1,813,602. MILK BOTTLE STERILIZER. JAMES B. BAKER, Scenery Hill, Pa. Filed Aug. 12, 1930. Serial No. 474,855. 2 Claims. (Cl. 141—7.)

1. In a sterilizing tank for bottles, the combination of a main vessel adapted to contain water and having a supporting bottom, outwardly and upwardly extending end walls having vertically extending upper edges, parallel sides connecting the bottom and end walls and terminating on the horizontal plane of the end wall edges, a flat removable cover having interfitting flange connection with the side and end wall edges, a tubular bottle



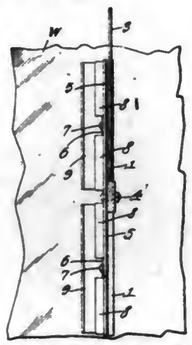
containing and guiding conduit fixedly connected with and extending inwardly and downwardly from opposite end portions of the cover and rounded in the form of a depending arc with its middle adjacent the vessel bottom, the lower portion of said conduit having a plurality of transverse openings.

1,813,603. CUSHION TIRE FOR VEHICLES. ROSARIO BELLO, New York, N. Y. Filed Apr. 29, 1930. Serial No. 448,313. 3 Claims. (Cl. 152—5.)



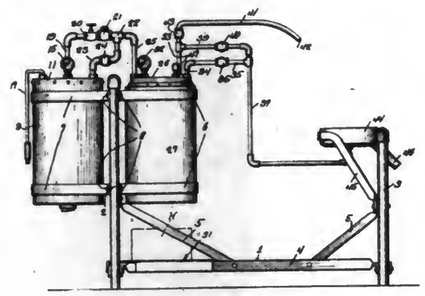
1. A core for a tire casing, said core formed of sponge rubber and provided with a series of radial openings extending therethrough, an inner peripheral integral rib, said openings extending through said rib, and coil springs embedded within the tire core and terminating short of the opposite ends of their respective openings and the axis of the springs registering co-axial with the bore of the openings.

1,813,604. WINDSHIELD SCRAPER. NICOLAI J. BERGE, Deerfield, Wis. Filed July 7, 1930. Serial No. 466,265. 1 Claim. (Cl. 15—251.)



A scraper including an equalizing strip for pivotal attachment at its center to a windshield wiper, clips pivotally connected to said strip at equal distances from its pivotal point, and scraping blades detachably mounted in the clips.

1,813,605. CAN WASHER. CARL J. BETTGER, Herreid, S. Dak. Filed Dec. 31, 1927. Serial No. 243,922. 2 Claims. (Cl. 299—95.)



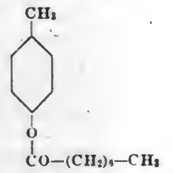
1. A hot water and steam generator comprising a supporting frame, a pair of tanks mounted on said frame, one of said tanks to contain water under air pressure, the other tank to contain hot water under steam pressure, means for discharging water or compressed air from the first mentioned tank to the hot-water tank, and heating means for the last mentioned tank.

1,813,606. PROCESS OF OBTAINING OXYGENATED COMPOUNDS FROM ALKYL BENZENES. JOSEPH BINAPFL, Krefeld, and WILLI KREY, Uerdingen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main Germany, a Corporation of Germany. Filed Dec. 23, 1927, Serial No. 242,284, and in Germany Dec. 23, 1926. 6 Claims. (Cl. 260—131.)

1. A process of obtaining oxygenated compounds from alkyl benzenes with two or more carbon atoms in the side chain which comprises reacting upon an alkyl benzene in liquid phase with a gas containing oxygen at a temperature above 50° C. in the presence of an inorganic oxygen carrier comprising a compound of a heavy metal.

1,813,607. 1-METHYL-4-HYDROXYBENZENE CAPRYLATE. MARTIN BOLLMANN, Berlin, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 19, 1929, Serial No. 348,366, and in Germany Mar. 30, 1928. 1 Claim. (Cl. 260—107.)

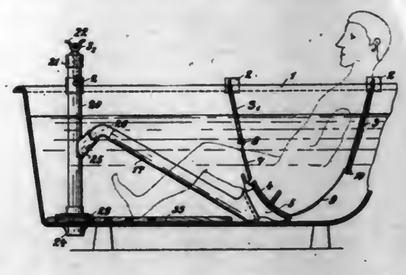
1. As a new product 1-methyl-4-hydroxybenzene caprylate corresponding to the formula:



being a colorless liquid with a boiling point of 170 to 172° C. at 6 mm. pressure and a density $D_{18°\ C.}=0.965$ and being miscible with other odoriferous substances for the manufacture of perfumes.

1,813,608. APPARATUS FOR SUBMERGED INTESTINAL LAVAGE. ANTON BROSCH, Vienna, Austria. Filed Dec. 18, 1928. Serial No. 326,752, and in Germany Dec. 24, 1927. 14 Claims. (Cl. 128—227.)

1. An appliance for intestinal lavage under water that can be fitted to an ordinary bath comprising three elastic cords adapted to be fixed in a suitable manner on the edges of the bath and stretched thereacross, said cords being sheathed in flexible metal tubes, and one of them being adapted to be placed near the foot of the bath to

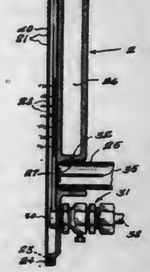


hold down a drain pipe fitting loosely into the waste of the bath, and the other two cords adapted to support the laving bowl and hold it watertight against the seat of the patient due to the tension created by his weight as he sinks into the bath.

1,813,609. DETERIORATION INHIBITOR FOR RUBBER. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 29, 1930. Serial No. 457,495. 12 Claims. (Cl. 18—50.)

1. A method of treating rubber which comprises incorporating therein a naphthyl substituted benzidine.

1,813,610. PRESSING MACHINE ELEMENT. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed April 25, 1929. Serial No. 358,140. 7 Claims. (Cl. 68—9.)

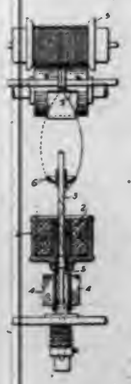


1. A pressing machine element comprising a body formed with an internal chamber for a fluid and with perforations opening from said chamber through its pressing face and a conduit for a fluid under pressure having jet openings in said chamber in line with the perforations and spaced from the inner ends of the perforations.

1,813,611. MANUFACTURE OF YARNS OR THREADS AND APPARATUS THEREFOR. WILLIAM ALEXANDER DICKIE and ROBERT MARTIN, Spondon, Near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 11, 1927, Serial No. 225,537, and in Great Britain Oct. 22, 1926. 11 Claims. (Cl. 118—50.)

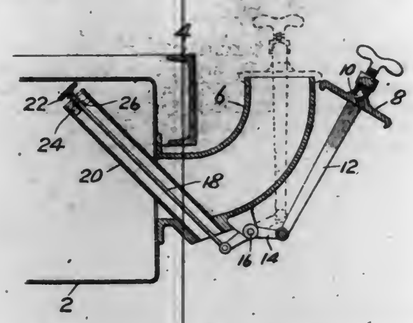
1. Process for the production of twisted yarns, said process comprising drawing the yarn from a rotating yarn

package, and leading the yarn to a point above and substantially in alinement with the axis of the package, causing said yarn to coil round a rotating member co-



axial with and extending through the package and to pass in a balloon-shaped path from the said member to the said point.

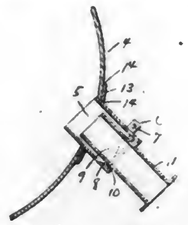
1,813,612. FILLER CONNECTION FOR TANKS. ELEUTHERE PAUL DU PONT, Montchanin, Del. Filed Mar. 14, 1930. Serial No. 435,715. 7 Claims. (Cl. 220—86.)



5. In combination, a tank for holding a supply of liquid, a filler conduit communicating at one end with the tank and opening at its free end outside the tank above the normal level of liquid in the tank but extending below said level, an air vent passage opening at its inner end within the tank above the normal level of liquid therein and at its outer end outside the tank and the filler conduit, a removable cap for closing the free end of said filler conduit, a lever, link means connecting the cap to the lever, a valve, and connections between the valve and lever whereby the valve is located to close the passage when the cap is located to close the filler conduit, and is opened when the filler conduit is uncovered.

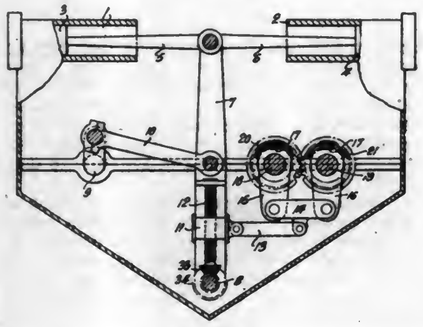
1,813,613. STEAM PIPE CONNECTION. JEROME OWEN ESLAVA, Mobile, Ala., assignor of one-half to John B. Robertson, jr., Mobile, Ala. Filed May 28, 1928. Serial No. 281,305. Renewed Nov. 4, 1930. 1 Claim. (Cl. 285—30.)

A steam pipe connector of the class described comprising a tubular section longitudinally slit, and provided adjacent its outer end, and on its exterior with a pair of brackets, a clamping bolt connecting said brackets, retaining elements disposed on the interior of said section, and located adjacent the outer end thereof, a packing ring arranged between said retaining elements, and a steam pipe connecting tube arranged telescopically within said outer section, and cooperable with said packing,



said tube being provided at its outer end with an apertured attaching flange for connection with the steam pipe.

1,813,614. TRANSMISSION GEAR FOR USE WITH INTERNAL COMBUSTION ENGINES. ERNEST ARTHUR FRANKS, Whitchurch, Wales. Filed Aug. 8, 1930, Serial No. 473,999, and in Great Britain June 13, 1929. 6 Claims. (Cl. 74—54.)



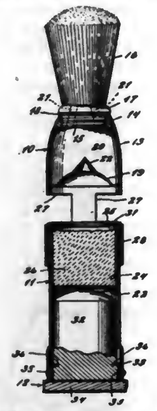
1. The combination of a power actuated rocker arm, a shaft, a uni-directional drive device for the shaft, a link coupled to the drive device and to the rocker arm, and means for varying the point at which the link is coupled to the arm, comprising a block which is mounted on the arm and to which the link is pivotally connected, a screwed rod rotatably carried by the arm and adapted, when rotated to displace the block, a spindle on which the rocker arm is pivotally mounted, gearing connecting the spindle and the screwed rod, pawl and ratchet members carried respectively by the rocker arm and the spindle, and manually operable means for controlling engagement between the pawl and ratchet members.

2. The combination of horizontally opposed cylinders, pistons therein, a rocker arm, two shafts, a connecting rod pistons to the rocker arm, two shafts, a connecting rod and crank connection coupling the arm to one shaft, and means for converting oscillatory movement of the arm into variable uni-directional rotation of the other shaft, a transmission shaft, and means for selectively coupling the shafts to the transmission shaft.

1,813,615. SHAVING BRUSH. WILLIAM G. FRAZIER, Philadelphia, Pa. Filed Feb. 25, 1929. Serial No. 342,590. 7 Claims. (Cl. 132—80.)

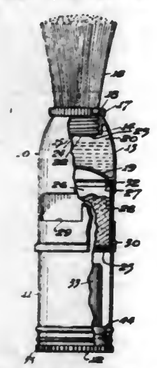
7. A shaving accessory comprising a member having a transverse partition therein defining a reservoir, a fountain brush mounted on said member and receiving water from said reservoir, said member serving as a handle, said member having air admission openings spaced from said

partition and in non-communicating relation to the reservoir, a second member movably connected with said first named member and movable to cover or uncover said openings, a fuel holder mounted within the second named



member and occupying a portion of its interior, a closure cap detachably connected with the second named member, and means detachably mounted in said cap for carrying a cake of soap accommodated within the remaining portion of the second named member.

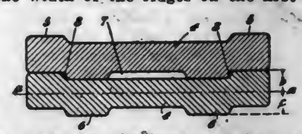
1,813,616. SHAVING OUTFIT. WILLIAM G. FRAZIER, Philadelphia, Pa. Filed Aug. 12, 1930. Serial No. 474,827. 6 Claims. (Cl. 132—80.)



1. In a kit of the character described, the combination of a handle member formed with a water reservoir, a fountain brush carried by one end of the handle member and having valved communication with the reservoir, heating means within the handle member, the handle member being formed of relatively movable sections movable to give access to the heating means and to admit air thereto for supporting combustion, and a closure member for the other end of the handle member formed as soap-holding means.

1,813,617. LAMINATED SPRING. JOEL SAMUEL FRIES, Helenelund, Sweden, assignor to Aktiebolaget Svenska Spiralfabriken, Stockholm, Sweden, a Manufacturing Company of Sweden. Filed June 30, 1928, Serial No. 289,529, and in Sweden July 7, 1927. 5 Claims. (Cl. 267—47.)

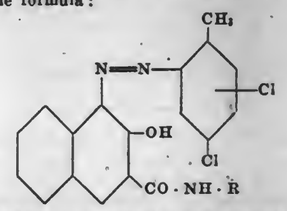
1. In a laminated spring, the combination of at least two spring plates bearing against each other and each having a substantially rectangular cross section, each spring plate having longitudinal ridges on both sides projecting outside the rectangular cross section of the plate, said ridges on one side of each plate running along the edges of the plate, and said ridges on the other side of each plate running at a distance from the edges of the plate equal to the width of the ridges on the first named side



of the plate, said ridges having such height and such size that the maximum stresses become substantially equal on both sides of the spring plate.

1,813,618. AZODYES DERIVED FROM 2.3-HYDROXYNAPHTHOIC ACID ARYLAMIDES. EUGEN GLIETENBERG, Leverkusen-on-the-Rhine, JOSEF HALLER, Wiesdorf-on-the-Rhine, and MAX BALTES, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 7, 1928, Serial No. 291,134, and in Germany Aug. 11, 1927. 2 Claims. (Cl. 260—95.)

1. As new products, the water insoluble azodyestuffs of the probable formula:

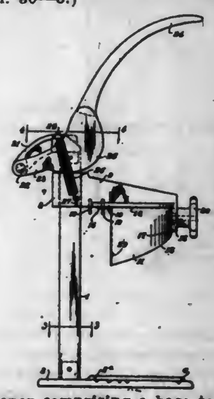


wherein R stands for a residue of the benzene or naphthalene series, giving when produced on the fibre very clear shades similar to alizarine red with remarkable fastness properties in particular to light and being when produced in substance clear red powders, dissolving in concentrated sulfuric acid with a fuchsin red coloration and which upon reduction with hydrochloric acid and zinc yield a dichloro-2-toluidine and an arylamide of 1-amino-2-hydroxy-3-naphthoic acid.

1,813,619. CYANOGEN HALIDE DERIVATIVES OF CELLULOSE AND PROCESS OF MAKING. JOSEF HALLER, Wiesdorf, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 11, 1928, Serial No. 299,116, and in Germany Aug. 17, 1927. 3 Claims. (Cl. 260—100.)

1. Process which comprises reacting upon alkali cellulose with a cyanogen halide.

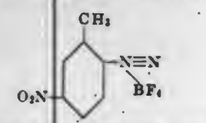
1,813,620. CAN OPENER. CASHLY A. HENRY, Dayton, Ohio. Filed Aug. 8, 1930. Serial No. 473,910. 4 Claims. (Cl. 30—3.)



3. A can opener comprising a base to support a can to be opened, a standard on said base, a head slidable upon

said standard and projecting over the base, handle means for depressing the head, a pin projecting downwardly from said head near the standard, a cupped blade, an apertured lip on the inner part of said blade to fit said pin, a radial screw projecting outwardly from said blade, a depending ear on said head formed with a horizontal U slot to receive the radial screw, and a threaded hand wheel on the outer end of the screw for the purpose specified.

1,813,621. STABLE DIAZO COMPOUND OF 5-NITRO-2-AMINO-1-METHYLBENZENE. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, and ERNST TIETZE, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 25, 1928, Serial No. 288,285, and in Germany July 18, 1927. 1 Claim. (Cl. 260—69.)
The compound of the probable formula:



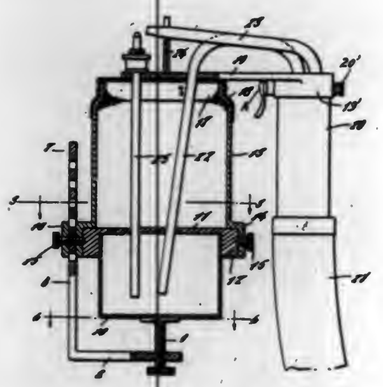
being a stable colorless powder, easily soluble in water.

1,813,622. HAIRPIN HOLDER. JERRY HORNICEK, Coraopolis, Pa. Filed May 22, 1930. Serial No. 454,530. 7 Claims. (Cl. 132—1.)



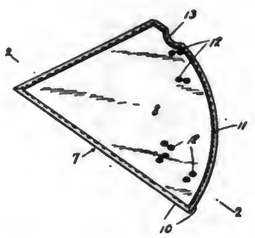
1. A hairpin holder having a holding socket and a dividing device for separating the hairpin prongs.

1,813,623. SPRAY DEVICE. OTTO L. JANSKY, Pittsburgh, Pa., Filed Mar. 6, 1929. Serial No. 344,842. 3 Claims. (Cl. 91—45.)



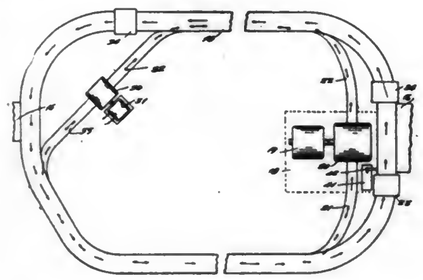
1. Means for operatively mounting a fluid containing receptacle on a pneumatic spraying unit of the type having a cap and a fluid outlet pipe extending downwardly through the cap and an air eduction tube operatively associated with the fluid outlet pipe for elevating the fluid from the receptacle, comprising a substantially cylindrical member detachably connected to the cap, said member being open at its end, a cover plate detachably secured to the lower end portion of the member having an opening therein for the passage of the fluid outlet pipe, a marginal flange depending from the cover plate for the reception of the receptacle, and means mounted on the member and engageable with the receptacle for removably clamping said receptacle against the cover plate.

1,813,624. SPLASHER PLATE FOR VEHICLE BUMPERS. MAX Z. KATZ and SAMUEL KATZ, Hartford, Conn. Filed Aug. 27, 1929, Serial No. 388,744. Renewed May 22, 1931. 1 Claim. (Cl. 280—152.)



A splashing shield for automobile bumpers, comprising a plate, a cover receiving and completely encasing said plate and having spaced layers, a cushioning element between one face of the plate and one layer of the cover substantially throughout the area thereof, and eyelets extending through the plate, cover and cushioning element and joining said parts.

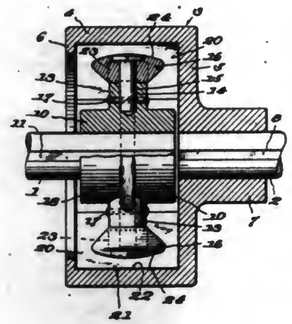
1,813,625. TRANSPORTATION SYSTEM. HOWARD L. KNOX, Lynden, Ontario, Canada. Filed June 12, 1930. Serial No. 460,776. 8 Claims. (Cl. 105—155.)



1. In a pneumatic tube system, a continuous main tube having a station section, a casing fitting said tube, a fan having its intake connected to the tube at one side of the station section and its outlet connected to the tube at the opposite side of the station, and valves interposed between the fan connections and the station section and opening toward the connection of the fan outlet.

1,813,626. FRICTION CLUTCH. EUGENE E. LANDAHL, Fairmont, W. Va. Filed Aug. 14, 1929. Serial No. 385,816. 7 Claims. (Cl. 192—105.)

7. A friction clutch comprising a rotary driving member, a rotary driven member, a friction element arranged between said members and movable by centrifugal force into frictional engagement with said driven member, and



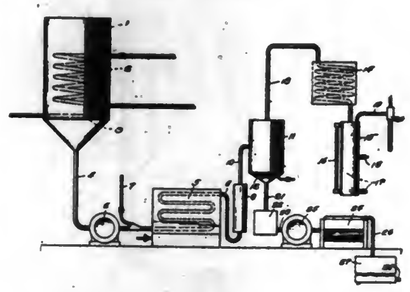
means rotatable on an axis extending radially of said driving member to transmit the rotation of said driving member to said element.

1,813,627. AEROPLANE. EDWARD H. LANIER, Covington, Ky. Filed Nov. 19, 1930. Serial No. 496,725. 13 Claims. (Cl. 244—12.)



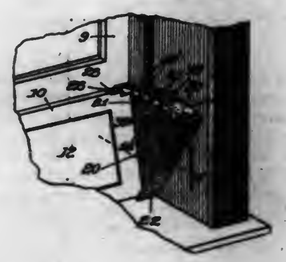
1. In aeroplanes, a body having a tail end provided with steering rudders and elevators, to open top chamber located above said body, the walls of said chamber being arranged to deflect the air currents so as to produce an area of low pressure over said chamber, the side walls of said chamber being flared and extended laterally and beyond the body to serve in lieu of wings.

1,813,628. ART OF DECOLORIZING HYDROCARBON OILS. HUGH LOWERY and ROBERT S. LANE, Wood River, Ill., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Jan. 27, 1927. Serial No. 163,949. 18 Claims. (Cl. 196—147.)



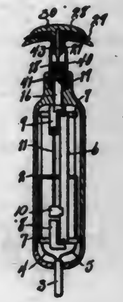
7. The method of decolorizing lubricating stocks, which consists in diluting said stocks with furnace oil, treating the solution with acid, mixing finely divided decolorizing clay with sour oil, heating the mixture in a confined stream to between 550 and 900° F., passing the heated mixture into an enlarged chamber, supplying steam thereto, withdrawing vapors and steam therefrom under reduced pressure, withdrawing unvaporized oil from said chamber, reducing its temperature to between 250 and 400° F., filtering from the admixed clay and cooling the filtered oil.

1,813,629. WINDOW VENTILATOR. FREDERICK G. LUMLEY, Chicago, Ill. Filed Apr. 10, 1929. Serial No. 354,047. 11 Claims. (Cl. 98—99.)



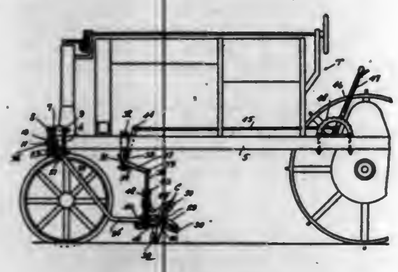
1. In a window-construction, the combination of its vertically movable sash, a deflector pivotally supported at its lower portion, and stop means for preventing said deflector from being swung into the path of movement of said sash upon lowering said sash from a position in which it is raised above said deflector and positioned to permit said deflector to close the window opening below said sash when the latter is raised part way.

1,813,630. ELECTROMAGNETIC OSCILLATOR. MADISON P. MCCARTY, Dallas, Tex., assignor of fifty-one per cent to Warner Clark, B. L. Laird, Graham B. Moody, Leonard W. Orynski, and Earl R. Wall, Dallas, Tex. Filed July 23, 1929. Serial No. 380,452. 5 Claims. (Cl. 175—338.)



1. A device for electrically imparting oscillatory movement in the operation of instruments including an electromagnetic coil, an axially disposed element arranged to operatively receive said instruments and capable of movement relative to said coil, an armature arranged in parallel relationship with the axis of said coil, pole pieces affixed to said element having their greatest area in parallel relationship with and exposed to said armature and arranged to be movable relative to said armature to operate said axially disposed element through the magnetic effect produced by said coil on said armature.

1,813,631. STALK CUTTER ATTACHMENT FOR TRACTORS. OSCAR THOMAS MINOR, Mayfield, Okla. Filed Aug. 16, 1930. Serial No. 475,807. 4 Claims. (Cl. 97—47.)



1. A stalk cutter attachment for tractors comprising a pair of forwardly disposed brackets mounted on the tractor, a sleeve supported between said brackets, a shaft rotatably mounted in said sleeve, and having its ends extending beyond the corresponding ends of said sleeve, a collar on each end of said sleeve, and including a relatively large cylindrical portion embracing the sleeve, and a relatively smaller cylindrical portion embracing the shaft, arms mounted on the shaft for rocking movement therewith, said arms extending downwardly and rearwardly, a second shaft rotatably supported between said arms and connecting the free ends of said arms, a cutter mounted on said shaft for rotation therewith, a rock shaft, means for supporting said rock shaft on the tractor rearwardly of said sleeve, yieldable means connecting said rock shaft with the free ends of said arms for transmitting movement of said rock shaft to said arms, and manual means for rocking said rock shaft, said last mentioned means including means for securing the rock shaft at the desired fixed adjustment.

1,813,632. PRESERVATION OF FIBERS. TREADWAY B. MUNROE and ELBERT C. LATHROP, Chicago, Ill.; said Lathrop assignor to said Munroe. Filed May 28, 1927. Serial No. 195,144. 15 Claims. (Cl. 92—1.)

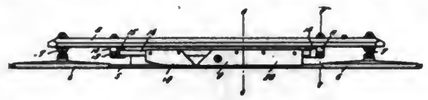
12. The method of storage of bagasse and analogous fiber producing materials for their preservation, comprising baling of the materials, the formation of the bales into a stack, and the application of a fungicide between outwardly exposed contacting edges of adjacent bales.

1,813,633. THREAD CLEANER. WILLARD T. MUNSON, Scranton, Pa., assignor to Collins Supply & Equipment Company, a Partnership consisting of Henry E. Collins and Albert B. Collins. Filed Nov. 14, 1930. Serial No. 495,730. 5 Claims. (Cl. 28—70.)



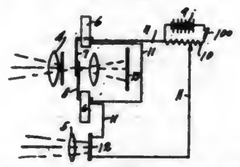
1. A thread cleaner, comprising a support, a pair of blades mounted in the support and having opposed thread engaging edges, a combined spacing and gauge bar insertable between the blades for spacing said thread engaging edges apart, said bar being non-circular in cross section and adapted to be inserted between the blades in different angular positions for changing the spacing apart of said thread engaging edges of the blades, and means for clamping the blades and bar in the support.

1,813,634. SIGNAL SWITCH FOR TROLLEY LINES. PATRICK JAMES MURPHY, Scranton, Pa. Filed Jan. 7, 1931. Serial No. 507,267. 4 Claims. (Cl. 246—252.)



3. A switch of the character described comprising in combination a trolley line, a swingable body supported thereon, contacts on the body, and spring means engaging the body for normally maintaining the contacts disengaged from the trolley line.

1,813,635. AUTOMATIC IRIS FOR CAMERAS. JOSEPH W. MYERS and ROLAND J. WILKINSON, Jackson, Mich. Filed Mar. 27, 1930. Serial No. 439,478. 9 Claims. (Cl. 95—64.)

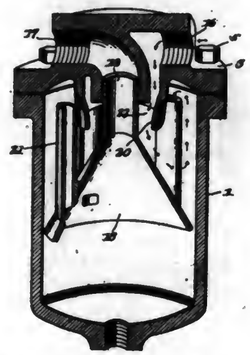


1. The combination of an apparatus adapted to vary the area of the light aperture, an electrically actuated means for operating said apparatus and a light sensitive means adapted to vary the current in said electrically actuated means for the purpose described.

1,813,636. PROCESS OF SEPARATING FORMIC ACID FROM ACETIC ACID. IRNFRIED PETERSEN, Wolfen, near Bitterfeld, and CURT ENGELBRECHT, Dessau, in Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 1, 1929, Serial No. 336,910, and in Germany Feb. 7, 1928. 4 Claims. (Cl. 260—122.)

1. In the process of separating formic acid from acetic acid, the steps which comprise adding to the mixture of said acids an organic liquid being a solvent for acetic acid, but a non-solvent for formic acid being capable of forming an azeotropic mixture with formic acid, and distilling the formic acid together with the organic liquid.

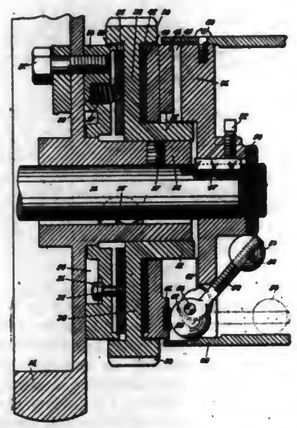
1,813,637. SEPARATOR. WILLIAM T. POWERS, Syracuse, N. Y., assgnor to The Direct Separator Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 20, 1927. Serial No. 220,668. 3 Claims. (Cl. 183—106.)



1. A separator of the class described comprising a chamber having an inlet passage and an outlet passage,

a funnel shaped element mounted within the chamber and having its tubular end connected to the outlet passage and so arranged relative to the inlet passage that gas entering through the same strikes the outer inclined side of said element, said element having passages in its inclined side near the base thereof and tubular members extending from said passages toward the inlet passage and parallel with the axis of said funnel shaped element.

1,813,638. ACCELERATING CLUTCH. LOUIS W. RAWSON, Worcester, Mass., assignor to Worcester Polytechnic Institute, Worcester, Mass., a Corporation of Massachusetts. Filed May 7, 1928. Serial No. 275,856. 27 Claims. (Cl. 192—105.)



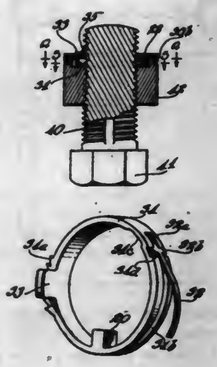
1. An accelerating clutch comprising driving and driven members, spring means effective to provide an initial driving tension between said members, and means acting in opposition to said first means to increase said driving tension as the speed of rotation of said driving member increases, said last named means being mounted upon the driven member.

1,813,639. BICYCLE. ANDREW H. RICHARDS, Grand Junction, Colo. Filed Oct. 11, 1930. Serial No. 488,119. 1 Claim. (Cl. 208—113.)



A bicycle comprising a frame, said frame including a main bar, front and rear forks connected with the frame, said main bar having a horizontal section, said horizontal section having a slot, a seat, a seat post secured to the seat and extending through the slot, a sleeve mounted on the horizontal section, said sleeve having an opening to receive the seat post, and means for securing the sleeve in various positions of adjustment.

1,813,640. NUT LOCK. GEORGE ROSSETTI, Chicago, Ill. Filed May 29, 1929. Serial No. 367,100. 6 Claims. (Cl. 151—13.)



6. The combination with a longitudinally-grooved bolt shank; of a nut lock comprising a nut with an interrupted annular surface, a ring within the nut and having a toothed portion adapted for engagement with said surface whereby to prevent relative rotation between the nut and the bolt, said ring also having a circumferential slot, means cooperating with the bolt shank groove to lock the ring against rotation relative to the bolt, and a leaf spring lodged between the ring and the nut and urging the ring into said engagement, said spring linking with one end portion in one end of the slot, and adapted to be received in the latter when the ring is backed out of the engagement mentioned.

1,813,641. FAST PRINTS ON VEGETABLE FIBERS. ALWIN SCHNEEVOIGT, Ludwigshafen-on-the-Rhine, and KARL ANACKER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 20, 1928, Serial No. 320,748, and in Germany Nov. 28, 1927. 5 Claims. (Cl. 8—5.)

1. A process of producing fast prints of chromium compounds of azo dyestuffs on vegetable fibres which comprises employing strongly acid printing pastes containing a free organic acid and a cotton mordant.

3. As new articles of manufacture, pastes for printing vegetable fibres comprising a chromium compound of an azo dyestuff, a free organic acid and a cotton mordant.

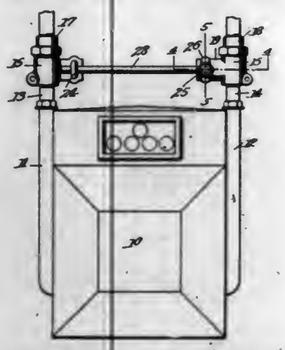
1,813,642. PROCESS OF PURIFYING PETROLEUM PRODUCTS. HERSCHEL G. SMITH, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed June 16, 1926. Serial No. 116,461. 4 Claims. (Cl. 196—44.)

1. In the final purification of petroleum products to remove taste and odor, the process which comprises repeatedly warming such a product with a plurality of portions of fresh and active aluminum chlorid with intermediate separation of sludge, heating the treated material with dilute solution of sulfuric acid, washing with water and drying.

1,813,643. METER CONNECTION AND SUPPORT. JAMES T. SUTLIFF, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed May 10, 1928. Serial No. 276,686. 4 Claims. (Cl. 48—30.)

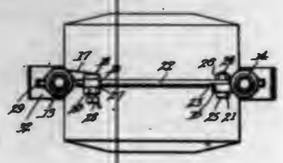
4. In a device of the class described, thimbles for attachment to a meter and to the inlet and outlet supply pipes, said thimbles having extensions thereon, a one-piece

rod for connecting said thimbles, and means pivotally mounted on said extensions for slidably receiving an end



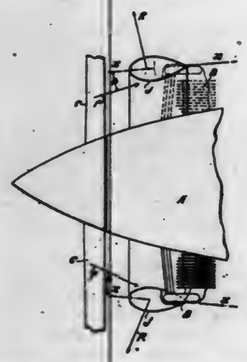
of the rod, whereby said rod is slidably mounted with respect to said extensions and pivotally movable about an axis at right angles to the axis of the rod.

1,813,644. METER CONNECTION AND SUPPORT. JAMES T. SUTLIFF, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed May 10, 1928. Serial No. 278,687. 3 Claims. (Cl. 248—30.)



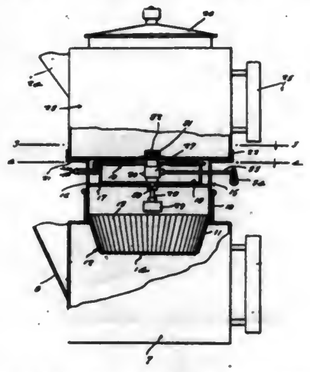
3. In a device of the class described, thimbles adapted for attachment to a meter and the inlet and outlet supply pipes, integral opposed inward extensions on said thimbles, a single rigid bar connected at its ends to said extensions, one of said thimbles being longitudinally slidable and rotatable upon said bar, and the other thimble being pivotally adjustable on said bar.

1,813,645. MEANS FOR REDUCING EDDY FORMATION IN THE AIRFLOW PASSING AIRCRAFT BODIES. HUBERT CHARLES HENRY TOWNEND, Teddington, England, assignor to Boulton & Paul Limited, Riverside Works, Norwich, Norfolk, England. Filed July 2, 1929, Serial No. 375,371, and in Great Britain July 10, 1928. 3 Claims. (Cl. 244—31.)



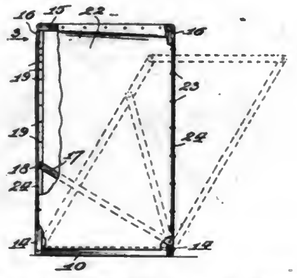
1. In combination, an aircraft body having radial engine cylinders projecting from the leading end of the body, and an annular aerofoil located around the radial cylinders and having its chord at each section at a positive angle of incidence giving a high lift co-efficient whereby the wash from the annular aerofoil is directed inwards to flow along the aircraft body.

1,813,646. COMBINATION COOKING UTENSIL. WILLIAM J. TURKENTON, Lancaster, Ohio. Filed Jan. 7, 1931. Serial No. 507,245. 1 Claim. (Cl. 53—3.)



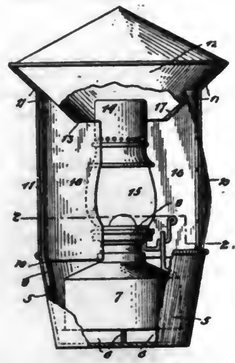
In a structural assembly of the class described, a housing comprising an annulus formed with a central horizontal partition defining upper and lower compartments, the upper portion of said annulus being provided with an outstanding circular flange and an upstanding companion flange, said flanges constituting a seat, a water boiler arranged in said seat and having its bottom portion spanning the upper portion of said annulus, electrical heating means contained in the upper compartment of said housing, a casing in said upper compartment for supporting the electrical means, a conduit connected to and having communication with the central portion of the bottom of said boiler, a valve in said conduit, and operating means for said conduit, said conduit also including a reduced delivery pipe extending down through an opening in said partition, and through the bottom of the casing, a nut on the delivery pipe contacting the lower face of the partition with a part of the valve contacting the bottom of the casing and said casing resting on the attached partition and a distributing nozzle on the lower end of said pipe.

1,813,647. SUN BATH CABINET. GEORGE DONALD UHL, Los Angeles, Calif. Filed May 8, 1929. Serial No. 361,295. 3 Claims. (Cl. 174—177.)



1. In a sun bath cabinet, a base, a skeleton frame pivotally mounted on said base and capable of being moved into different inclined positions, said frame including corner posts, fabric side and end walls arranged on said frame and the vertical edges of the end walls having slidable connection with said corner posts.

1,813,648. INSECT EXTERMINATOR. RALPH WATSON, Villa Ridge, Ill. Filed Sept. 9, 1930. Serial No. 480,739. 5 Claims. (Cl. 43—113.)

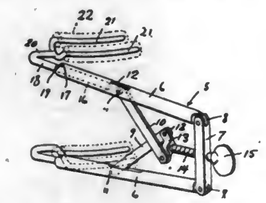


5. An insect exterminator comprising a lantern having a fuel pot and a globe, an open-top liquid-containing pan receiving said fuel pot and of greater diameter than the same to allow insects to descend into said pan, a drum over the upper end of the lantern having an opening in its bottom of greater diameter than said upper end of the lantern to allow insects to enter and fall from said drum, supporting legs for said drum having detachable connections with said pan, plates extending vertically from said pan to said drum, said plates being secured to said legs and drum and disposed in planes extending outwardly from the lantern globe, and additional vertical plates projecting from the outer edges of the first named plates and disposed at an angle thereto, said additional plates being secured to the first named plates and to said drum, all of said plates being adapted to guide the insects into either the drum or the pan.

1,813,649. DEHYDRATION AND DECOMPOSITION OF IRON SULPHATES. PAUL WEISE, Wiesdorf-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 5, 1929, Serial No. 330,621, and in Germany Jan. 9, 1928. 8 Claims. (Cl. 23—200.)

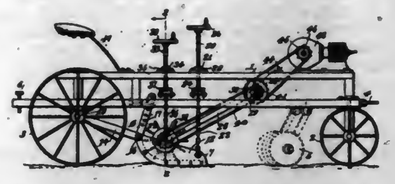
1. In the process for the dehydration and decomposition of iron sulphates the step which comprises heating a mixture of iron sulphate and 10–30% of a solid, iron-containing decomposition product of iron sulphate, to a temperature of between about 100–200° C.

1,813,650. DENTAL APPLIANCE. LUTHER C. WHITLOCK, Lake City, S. C. Filed July 16, 1929. Serial No. 378,795. 2 Claims. (Cl. 32—16.)



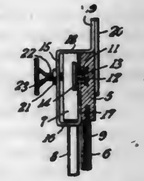
1. A dental appliance comprising a pair of straight elongated frame bar members, the forward ends of said members terminating in sockets, a rear frame bar pivotally connected at its terminals to the rear ends of the frame bar members, shanks detachably received in said sockets, and absorbent roll holding forks carried by said shanks.

1,813,651. SOIL PULVERIZING MACHINE. PORUS J. YOUNG, Charleston, W. Va. Filed Mar. 14, 1929. Serial No. 347,123. 3 Claims. (Cl. 97—10.)



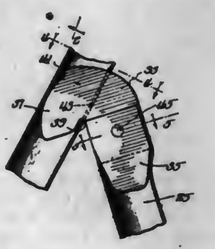
8. A soil pulverizing machine comprising a wheel supported frame, a gatherer, means for adjustably and pivotally suspending the rear end of the gatherer from the frame, means for adjustably suspending the front end of the gatherer from the frame, a drum provided with peripheral teeth, means for adjustably suspending the drum from the frame directly above the gatherer, and means for rotating the drum in its adjusted positions.

1,813,652. LOCK FOR WINDOW SCREENS AND THE LIKE. IRVING ABRAMS and IRVING SAGER, Brooklyn, N. Y., assignors to Louis Raphael, New York, N. Y. Filed Jan. 22, 1930. Serial No. 422,572. 3 Claims. (Cl. 156—38.)



2. The combination with a window screen having a pair of slidably connected frames adapted to fill the space below a window sash and its sill, of a clamp composed of a flat metallic strip having a face disposed transversely over the inner frame, parallel, outwardly extending elements reaching from said face, the lower of said elements bent upwardly to enter between the adjacent frame members, and the upper of said elements extended across the tops of both frame members, an upright at the end of the upper member, a plate fixed on said upright to extend downward in contact with the outer surface of the outer frame, and means for tensioning said face against the plate.

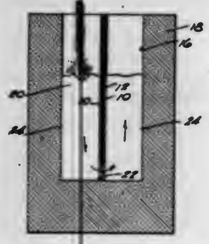
1,813,653. FOLDING CHAIR. JOHN B. ADLER and JOHN B. O'CONNOR, Aurora, and WALTER N. VANCE, Chicago Heights, Ill., assignors to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation. Filed Aug. 24, 1928. Serial No. 301,726. 19 Claims. (Cl. 155—142.)



17. An article of furniture having relatively foldable parts, each part having cooperatively associating means providing pivotal engagement of said parts so that said parts may be swung to predetermined angular positions and

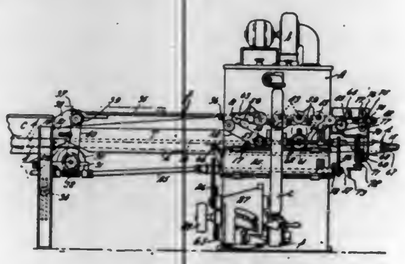
be freely disassociated by direct separational movement thereof when said parts are in one of said predetermined relative angular positions, said parts having additional means operative whenever said parts are swung to the other of said predetermined relatively angular positions for preventing disassociation and disassembly of said parts, and other means applied to at least one of said parts to limit the swinging movement of said parts within the limits of said predetermined angular positions.

1,813,654. PROCESS OF MAKING FERROUS PRODUCTS FACED WITH STABLE SURFACE ALLOYS. PERCY A. E. ARMSTRONG, New York, N. Y. Filed Mar. 30, 1929. Serial No. 351,314. 2 Claims. (Cl. 29—189.)



2. Process of making sheets of ferrous metal faced on opposite surfaces with welded surface portions of stable surface alloy, which comprises arranging relatively thin sections of solid stable surface material back to back in an ingot mold, casting ferrous metal between the insert and the mold walls, separating the resulting ingot parts, each comprising a ferrous metal part and a stable surface alloy part welded thereto in casting, and reversing same to bring the ferrous surfaces into contact and the stable surface alloy facing outwardly on opposite sides, and subjecting to hot mechanical work, as by hot rolling, whereby the ferrous metal part is welded into a homogeneous interior portion and same is faced on its opposite sides with welded thin surface portions of stable surface alloy material.

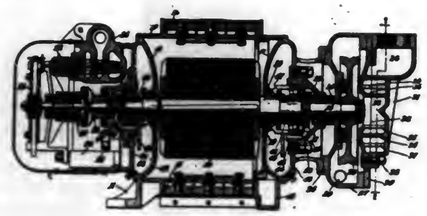
1,813,655. CONFECTION COATING AND DECORATING MACHINE. ALONZO LINTON BAUSMAN, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 15, 1928. Serial No. 262,010. 13 Claims. (Cl. 91—3.)



1. In a machine for coating and decorating confections, a heated casing, a conveyer on the upper stretch of which confections are carried through said casing, means in said casing for coating said confections, said confections clinging to the conveyer while it passes from its upper to its lower stretch, a delivery conveyer underlying the first conveyer to receive the coated confections as they drop from said lower stretch, said second conveyer extending through said casing and having its upper stretch moving in the same direction and at substantially the same speed as the lower stretch of the first conveyer, and insulating means for protecting the finished confections on the second conveyer during their travel through said casing from the effects of the temperature existing therein.

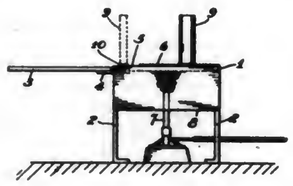
12. The method of controlling the decorations, formed in the coatings of confections by strings drawn out from the plastic coatings as the confections fall from the under side of a conveyer, to which they have been clinging by their plastic coatings, consisting in varying the slope of the conveyer at that portion of its travel where the confections fall therefrom.

1,813,656. TURBO-GENERATOR. ELI J. BLAKE and WILLIAM FOREST BOUCHÉ, Buffalo, N. Y., assignors, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1925. Serial No. 68,644. 11 Claims. (Cl. 171—209.)



6. The combination of a generator having an armature and its shaft, a permanently magnetized field and a frame member therefor, end cover plates secured to said frame member and preventing inadvertent removal of the armature but being formed with apertures for passage therethrough of the armature shaft, and a ball bearing assembly adjacent said end plate, fitted by force upon the armature shaft but removable therefrom by means of a bearing puller while the end plate and armature remain in position.

1,813,657. METHOD OF AND APPARATUS FOR SOLDERING. DALE M. BOOTHMAN, Oakmont, and JAMES A. CULLERTON, New Kensington, Pa., assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 12, 1928. Serial No. 305,593. 4 Claims. (Cl. 113—59.)



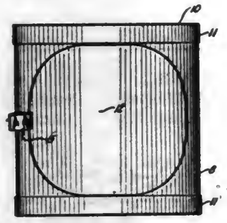
1. An apparatus for making a soldered joint between two metallic parts, one of which comprises aluminum foil in pack form, comprising a metallic hot plate having a plane-surfaced portion for preheating one of the parts, and a solder-applying scored-surface portion for abrading and simultaneously wetting the aluminum foil part with solder.

4. The method of soldering a metallic terminal to the end of a condenser formed from aluminum foil interleaved with paraffined paper, comprising tinning and preheating the terminal to soldering temperature, tinning the condenser end to which the terminal is to be attached by rapid rubbing on a heated solder-carrying scored surface to abrade and simultaneously wet said end with solder without materially melting said paraffin, applying the tinned surfaces to one another, and without materially disturbing the contact between said surfaces chilling the joint by contact with a cold surface.

1,813,658. PROCESS OF MANUFACTURE OF PULP AND PAPER. LEVIS MILLER BOOTH, Plainfield, N. J. Filed Oct. 5, 1928. Serial No. 310,674. 3 Claims. (Cl. 92—21.)

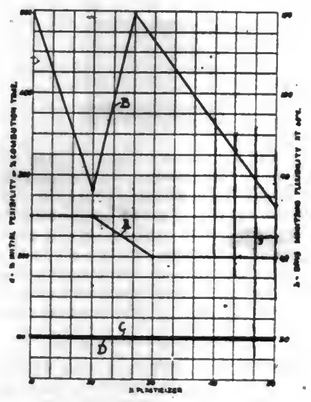
1. The process of making pulp or paper from unwashed or partially washed pulp which has been digested by an alkaline process which consists of adding chlorine to such pulp to stabilize or fix organic compounds contained therein.

1,813,659. RECEPTACLE. WALTER C. CARLSON, Milwaukee, Wis., assignor to The Milwaukee Paper Box Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 17, 1928. Serial No. 306,485. 4 Claims. (Cl. 206—8.)



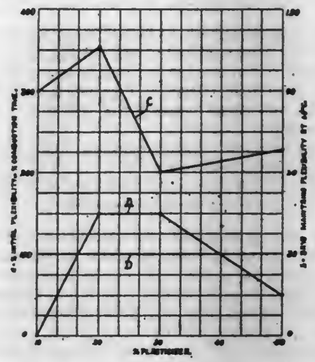
1. A cardboard receptacle comprising a body portion having a cylindrical side wall and closed ends, said side wall being provided with an opening, and a slidable complete cylindrical side wall adjacent said wall also having an opening therein adapted to be moved into or out of registration with the opening in the side wall of the body portion.

1,813,660. CELLULOSIC COMPOSITION OF MATTER CONTAINING ACETOXIME. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,448. 4 Claims. (Cl. 134—79.)



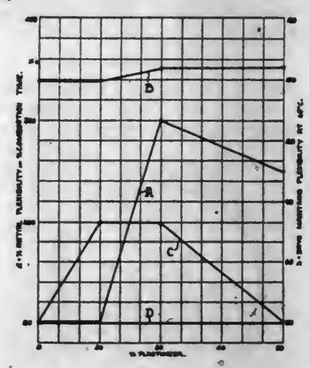
1. A composition of matter comprising a cellulose derivative and acetoxime.

1,813,661. CELLULOSIC COMPOSITION OF MATTER CONTAINING ISO-PROPYL-BROMIDE. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,458. 4 Claims. (Cl. 134—79.)



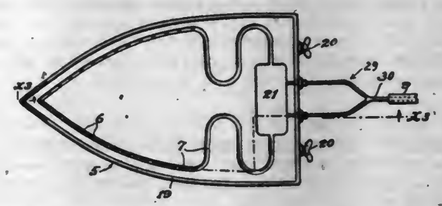
1. A composition of matter comprising a cellulose derivative and iso-propyl-bromide.

1,813,662. CELLULOSIC COMPOSITION OF MATTER CONTAINING IODO-BENZENE. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 23, 1929. Serial No. 394,646. 4 Claims. (Cl. 106—40.)



1. A composition of matter comprising a cellulose ester and iodo-benzene.

1,813,663. COMBINED ELECTRIC AND STEAM GARMENT AND CLOTH PRESSING APPARATUS. WILLIAM J. DANENHOWER, Los Angeles, Calif., assignor to Lora Jayne Woltzen, Los Angeles, Calif. Filed Mar. 6, 1928. Serial No. 259,395. 1 Claim. (Cl. 68—26.)



A smoothing iron having a steam chamber and a tortuous channel; said channel being connected at its ends

to the ends of the chamber and open to perforations extending through the bottom of the iron; a tube connected to a source of steam supply and a forked tubular connection connected to the tube and connected to the chamber near the opposite ends thereof so that the steam wih be distributed equally to the ends of the tortuous passage.

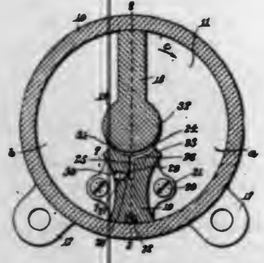
1,813,664. TREATMENT AND PACKAGING OF ETHER. WALTER G. CHRISTIANSEN, Bloomfield, and RAYMOND VAN WINKLE, Passaic, N. J., assignors to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,855. 16 Claims. (Cl. 23—250.)

10. The process that comprises percolating ether through a cuprous compound.

1,813,665. PROCESS OF MAKING CELLULOSE ETHERS. PAUL C. SEEL, WILLIAM R. WEBB, and JOHN M. DONOHUE, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 11, 1921. Serial No. 468,756. 1 Claim. (Cl. 260—152.)

The herein described process of making cellulose ethers which comprises first preparing alkali cellulose by adding to a given weight of cellulose, only that amount of water which is to remain in the alkali cellulose, which amount of water is substantially less than the amount of the cellulose, and separately therefrom adding only the amount of caustic alkali which is to remain in the alkali cellulose, which amount of caustic alkali is substantially greater than the amount of cellulose, and thereafter mechanically working the mixture into a uniform mass, the said addition of water and alkali being in any order, and thereafter subjecting such alkali cellulose to action of an etherifying agent, at a temperature between about 90 and 170° C.

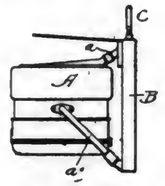
1,813,666. SHOCK ABSORBER. FREDERICK T. ELLIOTT, Somerville, Mass. Filed Aug. 10, 1929. Serial No. 384,963. 10 Claims. (Cl. 188—89.)



1. The combination of a casing having an inner chamber with a cylindrical wall; a centrally disposed oscillating shaft in said chamber having a single crescent shaped groove in the periphery thereof and provided with an imperforate radial blade substantially opposite said groove and abutting the walls of said chamber; and a single radial partition in said chamber extending from the wall of said chamber to said shaft and coacting with said blade to divide said chamber into two compartments, said partition having a valved passage therethrough always communicating at one end with said groove.

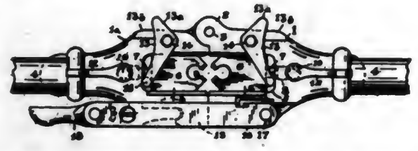
1,813,667. APPARATUS FOR COOLING INTERNAL COMBUSTION ENGINES. HERMAN L. HARTENSTEIN, Chicago, Ill. Filed Oct. 18, 1926. Serial No. 142,193. 3 Claims. (Cl. 257—23.)

1. In cooling apparatus for internal combustion engines embodying a radiator having a fill opening and a vapor space with which the condenser communicates in the upper end of the radiator, a condenser comprising a base portion adapted to be removably secured in the said fill opening and forming a closure therefor, and a coil secured in said base with its attached end in communication with said vapor space, the pitch of said coil being



such that condensation will drain therefrom into said radiator, said coil comprising an open ended return section which communicates with the end of the coil proper remote from the base portion of the condenser, said return section being reversely bent and extending through an opening in said base portion in register with the overflow pipe of the radiator.

1,813,668. DIESTOCK. GIDEON GARFIELD HASSLER, Stowe Township, Allegheny County, Pa. Filed June 4, 1928. Serial No. 282,520. 4 Claims. (Cl. 10—125.)



1. In a partible die-stock, the combination of the stock-parts in hinged relation, cutting dies mounted on said stock-parts, lever-mechanism arranged to project the dies from the stock-parts when the latter are opened, and means whereby said lever-mechanism is actuated as the stock-parts approach their fully opened positions.

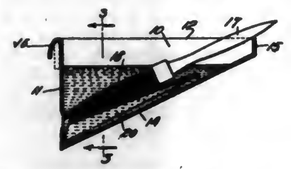
1,813,669. METHOD OF MAKING COLOR PHOTOGRAPHIC FILM EMBOSSING TOOLS. HENRY E. HASTINGS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 2, 1928. Serial No. 316,647. 3 Claims. (Cl. 76—107.)



1. The method of preparing an embossing tool for photographic film having minute lenticular areas thereon comprising preparing an extra hard drawn phosphor bronze member with a smooth accurately dimensioned periphery, polishing said periphery, cutting a plurality of closely spaced serrations in the order of .0018 of an inch in size into the polished periphery, the cutting operation also polishing the serrations, and electro-depositing on the polished serrations a thin layer of chromium.

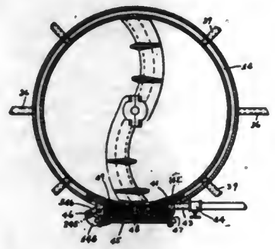
1,813,670. PAN FOR KEEPING PAINT BRUSHES SOFT AND READY FOR USE. JUSTUS KESSLER, Hackensack, N. J. Filed Mar. 1, 1929. Serial No. 343,773. 5 Claims. (Cl. 91—63.)

1. In a device of the class described, the combination of a pan having a bottom upwardly inclined from the horizontal, means at the front of the pan for supporting the handle of a paint brush, and an inclined strainer resting on the bottom for flatly supporting the bristles of the



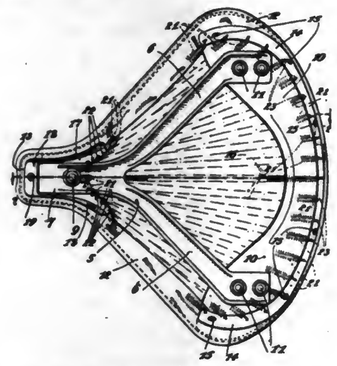
brush at an angle substantially less than forty-five degrees and cooperating with the front supporting means for supporting the entire brush in substantial contact with the strainer and the front supporting means.

1,813,671. RENDERING TANK DOOR. ERVIN W. MCCULLOUGH, Indianapolis, Ind. Filed Nov. 8, 1926. Serial No. 147,096. 2 Claims. (Cl. 87—13.)



1. In a garbage extraction tank having a curved side wall and a discharge opening therein and a frame work therefor, a closure for said opening movably mounted on said frame work, a one-piece apertured plate consisting of three sides and a bottom portion being mounted on said closure and so spaced therefrom as to be flush with the side walls of said tank, the middle one of the side walls of said plate being shaped to conform to the interior surface of the tank side wall, the said plate, closure and framework together forming a chamber adapted to contain a filtering medium.

1,813,672. SADDLE. FREDERICK MESINGER, Mount Vernon, N. Y. Filed Aug. 13, 1929. Serial No. 385,651. 3 Claims. (Cl. 208—15.)



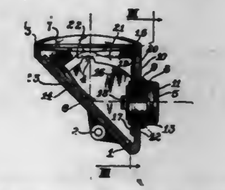
2. A cycle saddle including a rigid frame, a flexible saddle top, means supporting the rear end of the saddle top at its marginal edge upon said frame, a pommel plate pivotally mounted on the frame and supporting the forward end of the saddle top with respect thereto, and a plurality of resiliently yieldable elements of substantially equal length extending longitudinally beneath the saddle top in contact therewith and all connected at their forward ends with said pommel plate to yieldably resist movement of the saddle top and the pommel plate and retain the same in a normal position with relation to the frame.

1,813,673. STEREOSCOPIC TELEMETER. JOSEPH MIHALYI, Rochester, N. Y. Filed Mar. 12, 1928. Serial No. 260,830. 7 Claims. (Cl. 88—2.7.)



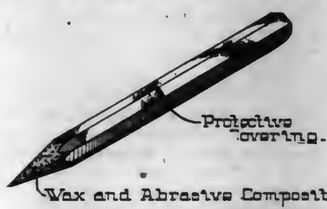
1. A stereoscopic telemeter comprising two objectives, two oculars, means dividing the entire bundle received from each objective into two bundles of rays, each of which transmits only a portion of the image received from an objective, and means for directing the entire two bundles of rays from each image to both of the oculars.

1,813,674. CAMERA VIEW FINDER CONSTRUCTION. JOSEPH MIHALYI, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 28, 1930. Serial No. 439,695. 10 Claims. (Cl. 88—1.5.)



1. In a view finder, the combination with a casing, of an objective, a viewing element, and a mirror adapted to bend light rays passing through the objective to the viewing element, means for supporting the objective in the casing including a mount, and a spring clip adapted to support said lens and said viewing element in position relative to the finder casing.

1,813,675. PHOTOGRAPHIC ABRASIVE PENCIL. WILLIAM L. MOORE, Dayton, Ohio. Filed Nov. 2, 1929. Serial No. 404,356. 3 Claims. (Cl. 51—280.)

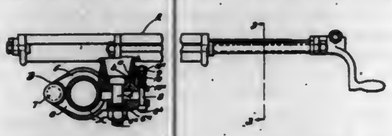


2. An abrasive pencil for photographic and allied arts comprising cerasin wax, bees wax and powdered pumice.

1,813,676. MOUNTING FOR ROCK DRILLS. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 12, 1929. Serial No. 354,513. 7 Claims. (Cl. 255—51.)

7. A saddle device for supporting a shell mounting on a column arm or the like comprising clamping jaws hav-

ing curved sockets shaped to fit the column arm, said jaws being pivoted together at one end, means for adjustably securing a guide shell to said device, and means independent of said first named means and disposed at the free ends of said jaws for applying a constant yielding clamping pressure to the latter.



1,813,677. HOT METAL WORKING TOOL. PAUL BURTON PIERSOL, Beaver Falls, Pa., assignor to The Babcock & Wilcox Tube Company, West Mayfield, Pa., a Corporation of Pennsylvania. Filed Nov. 10, 1928. Serial No. 318,600. 20 Claims. (Cl. 80—51.)

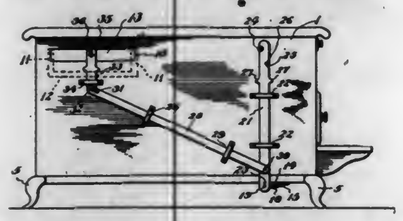
10. A tool for working hot metal required to have high resistance to heat and shock and to wear resulting from rubbing contact with the hot metal under high pressure, made of stable austenitic iron-chromium-nickel alloy, having hard carbide particles distributed in the austenite grains, and which is tough and highly resistant to shock and deformation, highly wear-resistant at high temperatures, retains its hardness at high temperatures, is substantially non-oxidizable at high temperatures, and the temperature of re-crystallization of which is below 500° F.

1,813,678. HOOD PAD. HOWARD D. RANDALL, Cincinnati, Ohio, assignor to The Randall Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 10, 1929. Serial No. 333,669. 3 Claims. (Cl. 180—69.)



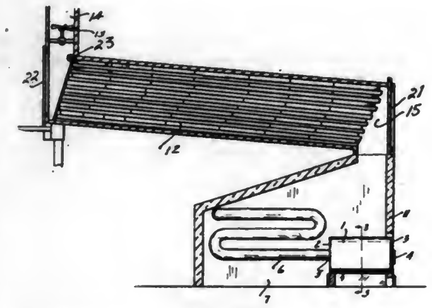
2. The method of securing cushioning pads between two metal members by first positioning one layer of fabric upon one of the metal members, a socket shaped metal member with prongs thereon being inserted through said fabric, the prongs extending through an opening in the metal support, then positioning a second layer of fabric to cover and conceal said socket member and finally driving a second attaching member having a notched shank through said upper layer and into said socket shaped member until the head of said driven member is depressed into the upper layer of fabric and the prongs engage said notched shank while the outer ends of said prongs are clinched against the metal support.

1,813,679. AIR HEATING ATTACHMENT FOR STOVES. THOMAS A. RICHARDS, North Troy, N. Y. Filed Dec. 30, 1929. Serial No. 417,517. 3 Claims. (Cl. 126—4.)



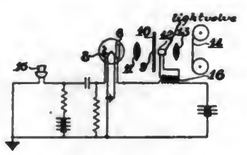
1. The combination with a stove, of an air heating flue extending through said stove and having open lower and upper ends whereby air near the floor of a room may enter the flue through the lower end thereof and be returned to the room in a heated condition from the upper end of the flue, a closure for the lower end of said flue, a closure for the upper end of said flue, a drawbar slidably carried by said stove and having one end connected with a closure to adjust the closure when the drawbar is moved, and a bar slidably carried by the stove and having its ends connected with the drawbar and the other closure to cause the second closure to be adjusted when the drawbar is moved.

1,813,680. DRIER. FRANK D. ROBBINS, Newberg, Oreg. Filed Sept. 25, 1929. Serial No. 395,036. 1 Claim. (Cl. 34—39.)



In a device of the class described, in combination with a fruit drying chamber, a breeching vertically secured to the end of the chamber, said breeching divided into a plurality of compartments, an induction fan disposed within each of said compartments, and a roller rotatably disposed between the chamber and the breeching at their meeting edges, said roller having a fabric with a plurality of holes disposed therein.

1,813,681. METHOD AND APPARATUS FOR SOUND REPRODUCTION. OTTO SANDVIK, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 21, 1930. Serial No. 437,859. 4 Claims. (Cl. 179—100.3.)

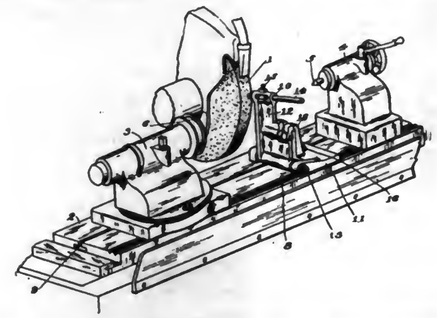


3. In combination with a photographic sound record device employing a source of light, an amplifier including an electron discharge device having an anode, a control electrode and a substantially incandescent cathode, said cathode serving as the light source for use in said photographic sound record device.

1,813,682. WHEEL DRESSER. EDWARD AUGUSTUS SHRIVER, Cincinnati, Ohio, assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 3, 1924. Serial No. 684,126. 4 Claims. (Cl. 125—11.)

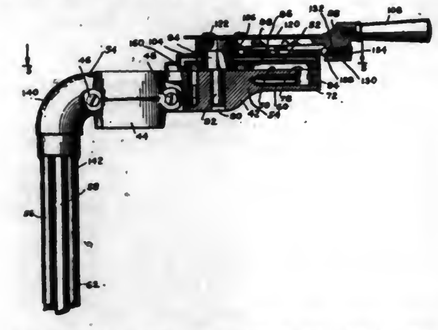
2. Grinding apparatus, comprising a work-support, a grinding wheel, a wheel-dresser organized therewith, and comprising a base member secured upon said work-support, a tool-holder pivoted to said base member beneath the

work and transverse to the axis thereof, an abutment provided by said base member and provided with a forked



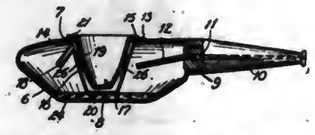
end, and a locking element carried by said tool-holder and adapted to releasably engage said forked end to maintain the tool-holder in its operative position.

1,813,683. PNEUMATIC GEAR SHIFT. HARRY E. SPENCER, New Haven, Conn., assignor to Universal Gear Shift Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1929. Serial No. 342,685. 2 Claims. (Cl. 74—58.)



1. A pneumatic gear shift controlling valve, comprising a flat base plate of sector shape, widely spaced fluid pressure distributing ports in said base plate, and adjacent the periphery thereof, a fluid pressure feeding port in said base plate, a valve element slidably mounted upon said base plate in air-tight relation therewith, said valve element comprising a circular portion and a finger extending therefrom, a groove on one face extending around said circle and out into said finger, the circular portion of said groove being in constant registry with said fluid pressure feeding means, and manually operable means for moving said valve element that the groove in the finger thereof may selectively register with one of said fluid distributing ports.

1,813,684. SMOKE PIPE. EMIL M. SPAICH, St. Louis, Mo. Filed July 8, 1929. Serial No. 376,621. 4 Claims. (Cl. 131—12.)

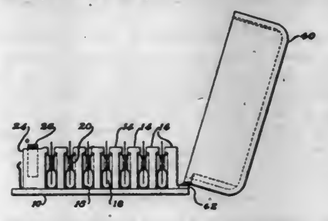


1. A smoke pipe comprising a hollow outer member, an intermediate member carried by and extending into said outer member to form a water-receiving compartment therebetween, said intermediate member having an opening in its side wall, a tubular member surrounding said opening and extending into the interior of the outer member, a bowl carried by said intermediate member and communicating near its bottom with the interior thereof, and a hollow stem removably carried by said hollow member, the smoke remaining above said water on its passage through the pipe.

1,813,685. PROCESS FOR CHANGING THE SOLUBILITY OF CELLULOSE ACETATE. CYRIL J. STAUD and CHARLES S. WEBBER, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 26, 1929. Serial No. 395,452. 6 Claims. (Cl. 260—102.)

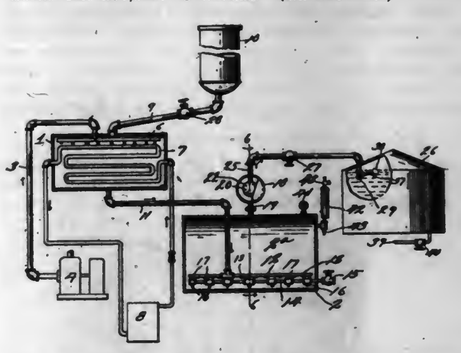
1. In the process for the preparation of organic esters of cellulose, the step which comprises hydrolyzing the cellulose ester in a bath containing an oxide of nitrogen.

1,813,686. BLADE HOLDER. LEON W. STETSON, West Newton, Mass. Filed Aug. 21, 1930. Serial No. 476,813. 2 Claims. (Cl. 206—16.)



1. A blade-holding container comprising a base portion, a series of partitions mounted on the base portion to form separated, vertical compartments, means for maintaining a blade suspended vertically in each compartment with the edge removed from the wall of the compartment, means for cleaning the surface of a blade, and a removable cover for normally closing the container.

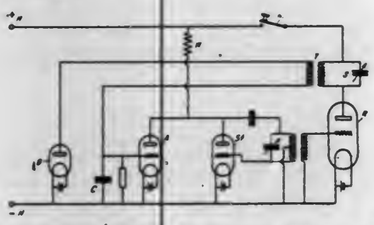
1,813,687. LIQUID PURIFYING DEVICE. JOHN H. STOCKHOLDER, New Orleans, La., assignor to Mary Stockholder, New Orleans, La. Filed July 8, 1930. Serial No. 466,519. 5 Claims. (Cl. 210—15.)



1. A water cleaning and purifying apparatus comprising a cracking tank, a separating tank, a storage tank, a heating element in the cracking tank, a spraying device in the cracking tank above the heating element, means for forcing liquid through said spraying element onto the heating element, means for discharging odor from the cracking tank, a spraying device in the bottom of the chamber of the separating tank, means for discharging

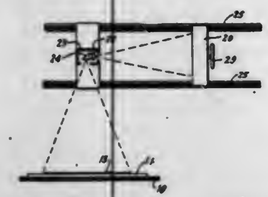
liquid from the cracking tank into the separating tank through the spraying device, means for discharging liquid from the upper end of the separating tank into the storage tank and strainer means interposed between the separating tank and storage tank and through which liquid passing to the storage tank passes.

1,813,688. TRANSMITTER PLATE POTENTIAL EQUALIZING CIRCUIT. RUDOLF UATEL, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 28, 1929, Serial No. 335,507, and in Germany Mar. 26, 1928. 6 Claims. (Cl. 250—19.)



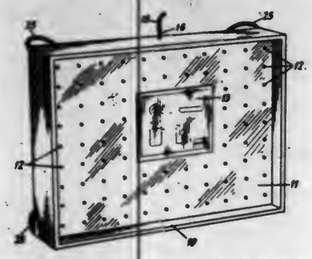
4. The method of operating a space discharge oscillator and a space discharge repeater each having an input and a space current circuit, which consists in impressing waves from the oscillator upon the input of the repeater, rectifying a portion of the amplified waves of the repeater, and utilizing the direct current component of the rectified waves to maintain a constant average potential on the output circuit of the oscillator.

1,813,689. PHOTOSTATIC PRINTING APPARATUS. ELLIS WEISKER, New York, N. Y. Filed Aug. 17, 1926. Serial No. 129,684. 16 Claims. (Cl. 88—24.)



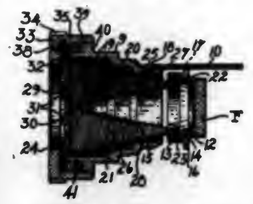
1. In photographic apparatus: a combined focussing and sensitized material retaining member, comprising a transparent plate, a ground glass plate, intermediate sealing means separating the two plates and affording a sealed air chamber therebetween, said glass plate having openings therethru, and a vacuum connection to said chamber.

1,813,690. PHOTOGRAPHIC APPARATUS. ELLIS WEISKER, New York, N. Y. Filed Oct. 6, 1927. Serial No. 224,289. 8 Claims. (Cl. 88—24.)



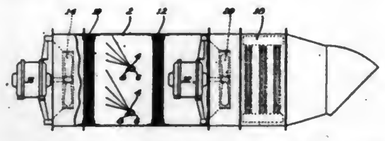
1. A focusing member, comprising a perforated translucent portion, and vacuum means associated therewith operating substantially in the focal plane of the said translucent portion to cause sensitized photographic material to be held thereto, and embodying individual vacuum elements entering from one face a said perforation and terminating substantially flush with the surface of the opposite face.

1,813,691. DIAPHRAGMING FILTER ATTACHMENT FOR CAMERAS. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 24, 1929. Serial No. 402,130. 9 Claims. (Cl. 95—81.5.)



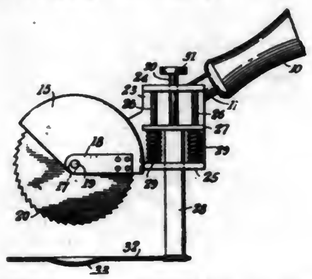
1. In a light reducing device for photography, the combination with an attachment for objectives having a light opening therein, a pair of elongated hinged plates curved in cross section having one end near the light opening, and the other end hinged to the attachment and having edges projecting therefrom, a member movably mounted on the attachment engaging the edge projecting from the plate to move the plates for altering the aperture.

1,813,692. AIR CONDITIONING APPARATUS. SAMUEL M. ANDERSON, Hyde Park, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed June 11, 1929. Serial No. 370,069. 3 Claims. (Cl. 183—9.)



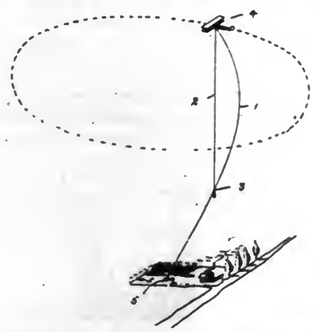
1. Air conditioning apparatus comprising a plurality of air conditioning units including a humidifier unit, a propeller fan for each unit, the humidifier unit being disposed between successive fans, and means located between the fans for damping the spin velocity introduced into the air stream of the first fan.

1,813,693. SURGICAL INSTRUMENT. AMELIA C. BALINSKI, Tarrytown, and EDWARD MAHONEY, New Rochelle, N. Y. Filed June 21, 1929. Serial No. 372,708. 2 Claims. (Cl. 128—317.)



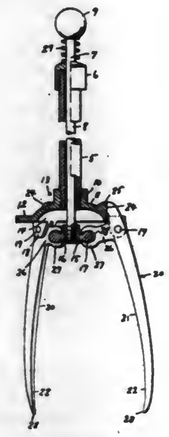
1. A hand controlled circular saw for plaster casts, having a handle to maneuver said saw, a hood in which the saw is mounted, a power drive extending through said handle to the saw, a frame carried by said handle, a guard, a bar on said guard slidable in said frame, said bar being of lesser width than the saw, springs tending to raise said guard relative to the saw, and means for manually depressing said guard.

1,813,694. AERIAL NAVIGATION. FREDERICK C. BOWMAN, Duluth, Minn. Filed June 14, 1929. Serial No. 370,937. 6 Claims. (Cl. 244—1.)



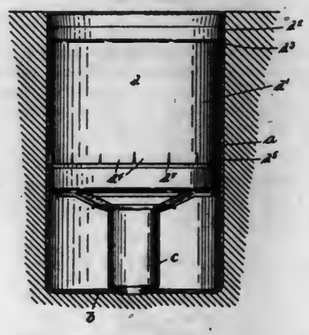
6. The herein described method of establishing and maintaining communication between an aircraft in flight and the earth, comprising dropping a tethered object from the aircraft to establish said communication, assuming a circular course by said aircraft until said communication is established and concluded, when a withdrawel course is assumed by the aircraft.

1,813,695. TONGS. FREDERICK PHILIP BROCKSCHMIDT, Quincy, Ill. Filed Aug. 15, 1930. Serial No. 475,523. 1 Claim. (Cl. 294—115.)



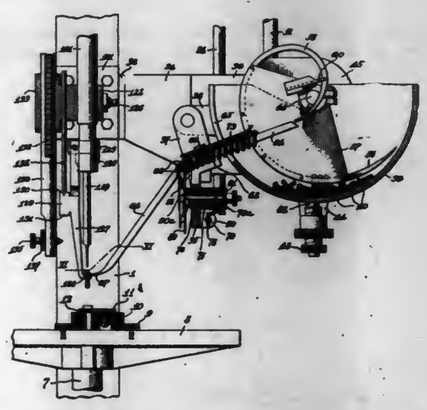
A tongs of the type described comprising a tubular casing threaded at both ends, a cap screw-threaded on the upper end of the casing and provided with a central aperture, a rod for reciprocation within the casing, and through the said aperture, a ball handle on the upper end of the rod, and a claw operating disc screw-threaded on the lower end of the rod, and a collar screw-threaded on the lower end of the casing, a downwardly and outwardly flared flange at the lower end of said collar, and a laterally directed flange on the outer lower end of said first named flange, and a plurality of pairs of depending lugs on the lower surface of the last mentioned flange, and stop members formed adjacent to and above said lugs on the upper surface of the last mentioned flange, a pivot through said pairs of depending lugs, and claws pivoted near their upper ends between each of the lugs of said pairs, a projection on the upper end of said claws above said pivotal point, adapted to engage against said stop members, and inwardly and laterally directed arms projecting from said claws adjacent the pivotal points and the inner end portions of the arms adapted to be engaged with the said disc, said disc comprising a collar, a circular flange on the lower end of the collar, and the outer end portions of the flange expanded to have a circular cross section.

1,813,696. GOLF HOLE CUP. RALPH C. CROCKER, Toledo, Ohio, assignor of one-half to S. Chilton Crocker, Boston, Mass. Filed Feb. 13, 1930. Serial No. 428,091. 12 Claims. (Cl. 273—34.)



1. In combination with a cylindrical metal golf hole cup, a lining therefor and for the top portion of the hole in which the cup is placed, composed of a cylindrically formed sheet of fibrous material of suitable stiffness having one end portion thereof fitted within the top portion of the cup, and the opposite end portion thereof protruding beyond the top edge of the cup, to line a portion of the hole directly thereabove.

1,813,697. SCREW FEEDING MECHANISM. FRANK H. DELLAREE, Detroit, Mich., assignor of one-half to Roy W. BAILEY, Detroit, Mich. Filed Jan. 9, 1926. Serial No. 80,184. 5 Claims. (Cl. 10—169.)



1. In a screw driving machine wherein a feed chute is adapted to place screws in position to enter a piece of

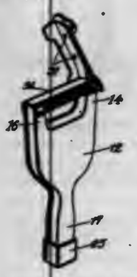
work, an escapement mechanism associated with said feed chute and adapted to intermittently release screws, said escapement mechanism comprising a set of detachable disks adapted to be oscillated, said disks having a configuration to receive the screw when turned in one direction and release the screw when turned in the opposite direction.

1,813,698. ENDLESS V-SHAPED BELT. CHARLES C. GATES, Denver, Colo., assignor to The Gates Rubber Company, Denver, Colo., a Corporation of Colorado. Filed July 23, 1928. Serial No. 294,773. 7 Claims. (Cl. 74—62.)



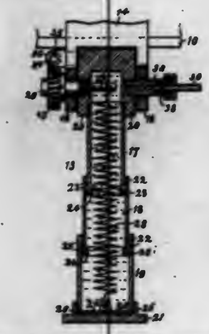
7. An endless vulcanized side-driving belt whose opposite walls are transversely and uniformly concave to conform to a curve of suitable radius so that when the belt is flexed around pulleys there will be a tendency to fill the concavities for the purpose set forth.

1,813,699. SAFETY RAZOR. OTTO GOETZKE, Jersey City, N. J. Filed Oct. 13, 1930. Serial No. 488,323. 16 Claims. (Cl. 30—12.)



1. A safety razor comprising a magazine for a coiled razor strip and having a guide outlet for said strip, reciprocable means movable towards and from said outlet, and gripping means on said reciprocable means to grip said strip on movement towards said outlet and to release it on the return movement.

1,813,700. HYDRAULIC JACK. BARNEY GOLDMAN, New York, N. Y. Filed Sept. 14, 1928. Serial No. 305,885. 6 Claims. (Cl. 254—93.)

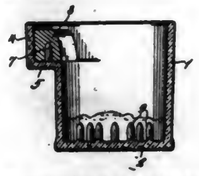


1. In a hydraulic jack the combination with a head suitable for fastening to an axle, of a series of telescopic cylinders carried by the head, trunnions to swingingly connect one of the cylinders to the head, a fluid inlet leading into one of the trunnions for expanding the cylinders to elevate the axle, and a shaft having manually controlled means connected to the other trunnion for swinging the cylinders into action.

1,813,701. DETERGENT. WILLIAM C. HOWE, Chicago, Ill., assignor to The Alden Speare's Sons Co., Boston, Mass., a Corporation of Massachusetts. Filed Oct. 20, 1927. Serial No. 227,626. 3 Claims. (Cl. 87—5.)

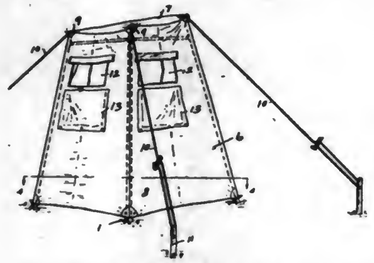
3. A non-caking detergent powder readily soluble in water, comprising granulated sodium metasilicate with about one-third its weight of neutral soap and twice its weight of soda ash.

1,813,702. SHAVING MUG. THEODORE D. JONES, Los Angeles, Calif. Filed June 1, 1929. Serial No. 367,777. 2 Claims. (Cl. 45—136.)



1. A shaving mug comprising a receptacle member having projections extending from the bottom thereof for cooperation with the bristles of a shaving brush in producing a lather, said mug having a cake soap receiving compartment adjacent to the top thereof, and means in said compartment for positively gripping a soap cake and retaining it therein.

1,813,703. TENT. ROBERT F. KATTMANN, Houston, Tex. Filed Mar. 7, 1930. Serial No. 434,106. 4 Claims. (Cl. 135—15.)



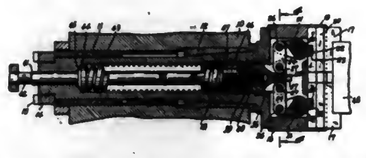
1. A tent comprising side walls and a cover, of flexible material, secured together, inside vertical pockets at the corners of the tent, tent poles fitted through said pockets and retained permanently therein, the cover having reinforced portions opposite and resting against the upper ends of said poles.

1,813,704. CATHODE. ERNEST ANTON LEDERER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 26, 1928. Serial No. 288,348. 5 Claims. (Cl. 250—27.5.)



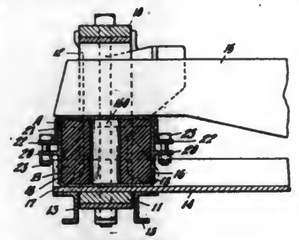
1. A cathode for an electron emission device comprising a core having a wire wound thereon to provide grooves and an electron emission material encasing said wound wire and substantially filling said grooves.

1,813,705. CHUCK. ARTHUR J. LEWIS, Stratford, Conn., assignor to The Baird Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 2, 1928. Serial No. 316,662. 4 Claims. (Cl. 279—118.)



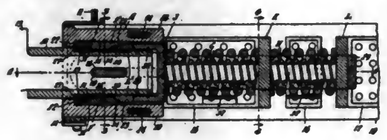
1. In a chuck, a circular head having radial guideways in the face thereof and a chamber communicating with said guideways, jaws mounted to slide in said guideways, levers pivotally mounted in the chamber and enclosed by the walls thereof, means for connecting the levers to the jaws, a hollow rotatable spindle carrying the head, a block mounted to slide longitudinally in the spindle, links pivoted to the block and the levers to form a toggle therewith, a longitudinal rod in the spindle connected to the block for shifting it, and a spring in the spindle tending to shift the rod to close the jaws.

1,813,706. RESILIENT UNIT FOR CAR TRUCKS. GOODRICH Q. LEWIS, Wheaton, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 23, 1926. Serial No. 143,560. 3 Claims. (Cl. 267—63.)



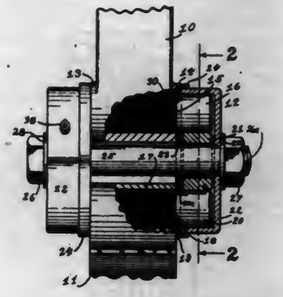
1. In a railway car including a truck provided with a bolster relatively movable with respect to the truck proper and supporting the car body, the combination with a supporting element fixed with respect to the truck proper; of a cushioning means interposed between the supporting element and bolster, said cushioning means including a mass of live rubber and a telescopic receptacle enclosing said mass, the walls of said receptacle closely fitting the mass of rubber and said mass being provided with an opening to permit flow of the rubber mass during compression; and means connecting the sections of said telescopic receptacle limiting separation of the parts thereof to an extent to constantly hold said rubber mass in partially contracted condition and maintain the same under a predetermined initial compression.

1,813,707. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,562. 12 Claims. (Cl. 213—22.)



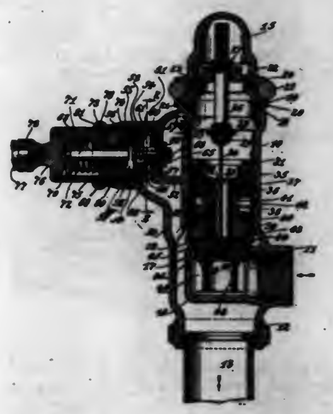
1. In a railway draft rigging, the combination with friction means fixed to the car underframe structure and extending lengthwise of the rigging; of a coupler actuated in buff and draft; friction means movable lengthwise of the rigging in unison with the coupler; wedge friction means interposed between said fixed and movable means, said wedge friction means including a plurality of wedge blocks having wedging engagement with each other and frictional engagement with the fixed and movable friction means; and spring resistance means opposing movement of said wedge friction means.

1,813,708. SPRING SHACKLE BEARING. JAMES H. OLCOTT, Waterbury, Conn. Filed Mar. 12, 1930. Serial No. 435,130. 16 Claims. (Cl. 267—54.)



1. In a shackle, a pair of oppositely disposed cup-shaped oval shells, a connecting bolt passing through the centers of said shells, a pair of roller bearings surrounding the ends of said bolt and located within said shells, and a pair of bearing pins engaging both of said roller bearings at opposite sides of said bolt, one of said bearing pins being rigidly connected to the frame of a vehicle and the other bearing pin being rigidly connected to the extremity of a spring of said vehicle.

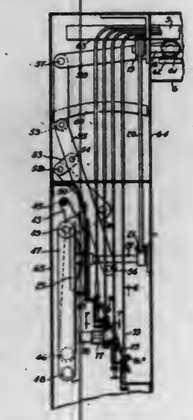
1,813,709. FLUSH VALVE. ABRAM N. PASMAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 7, 1929. Serial No. 390,884. 6 Claims. (Cl. 137—93.)



1. In a flush valve, a casing enclosing a pressure chamber and having an inlet connection and an outlet connection, a valve adapted to seat against the pressure in the inlet connection for controlling communication between the inlet connection and the outlet connection, a boss ex-

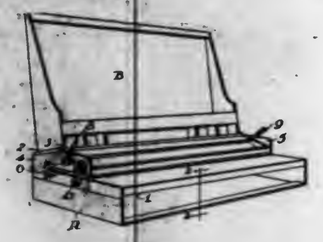
tending from the casing, a plug member located in the said boss, a release valve in the pressure chamber, a triangular valve stem mounted in the said plug and carrying the said release valve, a cap member, a plunger plug mounted in the cap member, a plunger operable in the plunger plug, the cap member being adapted to be connected to the said boss with the plunger plug abutting against the release valve plug in such a position that one end of the plunger lies adjacent the end of the valve stem, and means for moving the plunger to shift the valve stem and thereby unseat the said release valve.

1,813,710. DOOR OPERATING AND LOCKING MECHANISM. ABRAHAM PERLMAN, New York, N. Y. Filed Apr. 30, 1930. Serial No. 448,596. 9 Claims. (Cl. 189—8.)



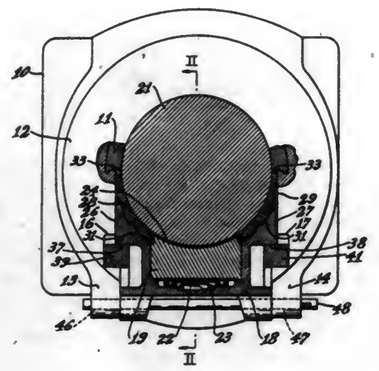
7. In a door operating and locking mechanism, the combination with mechanism for opening and closing the doors connected thereto, of individual locking means for each door and operating means operatively associated therewith, means comprising individual flexible cables each connected to one of said operating means, individual handles connected to said cables, individual indicators carried by said handles, and means operated by said opening and closing mechanism for controlling said indicators.

1,813,711. STENCILING DEVICE. ADOLPH F. J. POKORNY, St. Paul, Minn. Filed Feb. 10, 1930. Serial No. 427,180. 6 Claims. (Cl. 101—126.)



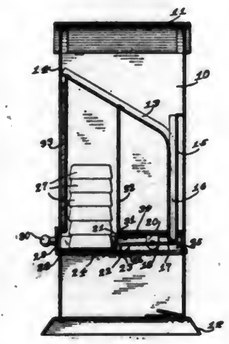
1. A stencil mechanism having a bed, card clamping means mounted above said bed and having an aperture therein, a feed roller mounted in the base to have the upper surface thereof substantially tangent with the surface of the bed, a shaft rotatably mounted in the aperture in said card clamping means above said feed roller, a pair of rollers mounted on said rod, and means acting on said shaft to resiliently urge it downward toward said feed roller.

1,813,712. LOCOMOTIVE DRIVING BOX CELLAR. CHARLES J. SCUDDER, Scranton, Pa. Filed Apr. 15, 1929. Serial No. 355,353. 5 Claims. (Cl. 308—43.)



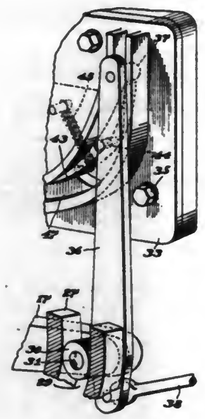
3. In a locomotive driving box, a driving box cellar comprising a body portion of non-bearing metal, upwardly extending side portions and an end portion of non-bearing metal, a bearing metal hub face cast integrally on the end portion, and journal underbearings cast integrally on the side portions.

1,813,713. TOY BANK AND VENDING MACHINE. WILLIAM SELBY and RENÉ PAUL MAGNENAT, Waterbury, Conn., assignors to Waterbury Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 20, 1929. Serial No. 356,852. 4 Claims. (Cl. 194—39.)



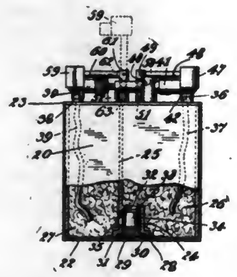
1. In a toy vending bank, a casing, a coin-conveying chute, a slidable pull drawer for containing a vendible article, a lever pivotally mounted on said drawer, said lever having a depending latch on its forward end, said casing having a slot located below said latch when said drawer is closed for normally preventing the withdrawal thereof, the rear end of said lever having a locking latch for engaging said casing to prevent complete withdrawal of said drawer, said rear end being normally situated beneath and in alinement with the bottom discharge end of said coin chute, whereby the falling of a coin will cause the latch to be disengaged from said catch permitting the manual withdrawal of said pull drawer for removal of the article therefrom.

1,813,714. TUFT PILE FABRIC LOOM. EDWIN W. STONE, Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Oct. 1, 1930. Serial No. 485,613. 13 Claims. (Cl. 139—8.)



1. In a tuft pile fabric loom, the combination of shed arms for carrying a tube frame to the weaving point and adapted to support the frame for tilting movement relative to the arms, and mechanism for tilting the tube frame while supported by the arms including a curved guide-way and means cooperating therewith and connected to the tube frame.

1,813,715. CIGAR AND CIGARETTE LIGHTER. SAMUEL SUMMER, Albany, N. Y., assignor of one-half to Samuel Summer and one-half to Frank S. Summer, New York, N. Y. Filed May 1, 1929. Serial No. 359,496. 3 Claims. (Cl. 67—7.1.)



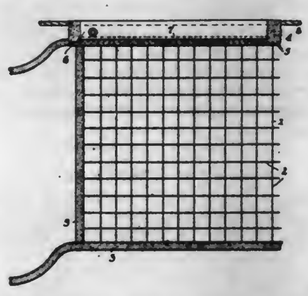
1. In a cigar and cigarette lighter, a casing, a plurality of individually operable lighting devices thereon, a partition dividing said casing into a plurality of compartments, each of which is associated with one of said lighting devices, a wick tube associated with each compartment, a wick lying within each compartment and extending from the wick tube associated therewith, a fuel inlet cup associated with said casing and communicating with each compartment therein, and a plug member for said inlet cup for controlling communication between the compartments.

1,813,716. INSULATING AND SUPPORTING WASHERS FOR ELECTRICAL BINDING POSTS. CHESTER H. THORDARSON, Chicago, Ill., assignor to Thordarson Electric Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 24, 1930. Serial No. 430,844. 3 Claims. (Cl. 173—311.)



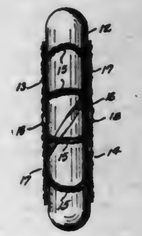
3. The combination with a perforated metallic member, of insulating and binding post supporting gang washers fitted to the opposite sides of said member and having longitudinally spaced openings and provided therearound at adjacent sides of the washers with bosses that abut at the member perforations, each washer consisting of a flat stiff mechanically strong strip, headed binding posts extending through the bosses and the perforations of said member, and clamping nuts threaded on said posts.

1,813,717. MANUFACTURE OF TENNIS NETS. ROBERT C. WEBSTER, Baltimore, Md., assignor to W. & J. Knox Net and Twine Company, Baltimore, Md., a Corporation of New Jersey. Filed Aug. 21, 1930. Serial No. 476,889. 10 Claims. (Cl. 273—29.)



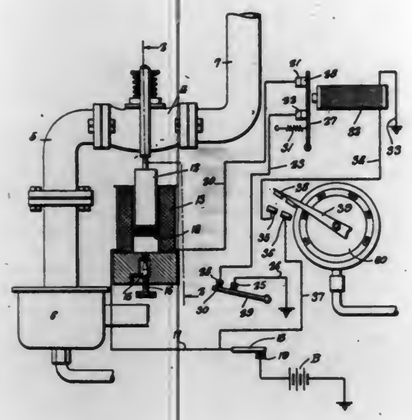
1. The hereindescribed method consisting in stitching to the margin of a netted fabric a selvage-forming band of close-mesh fabric, treating the thus selvaged netted fabric with a viscous substance, and stitching to said band clear of the strands of the thus treated netted fabric another and reinforcing band of close mesh fabric.

1,813,718. ANTISKID TIRE CHAIN. HARRY D. WEED, Southport, Conn. Filed Feb. 20, 1931. Serial No. 517,151. 21 Claims. (Cl. 152—14.)



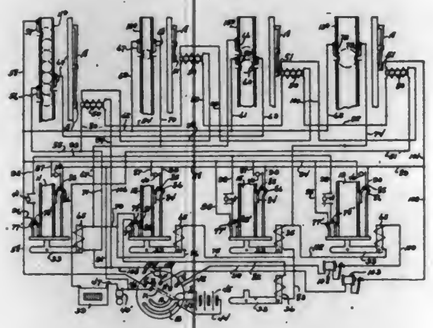
1. An anti-slipping device for wheels, comprising attaching elements at opposite sides of the wheel, an anti-slipping medium secured to the attaching elements and extending across the periphery of the wheel, and means to shift the medium to an oblique position for tightening the device on the wheel.

1,813,719. ELECTRICALLY OPERATED FUEL CONTROL. WILFRED JONES WHITE, Tampa, Fla. Filed Mar. 3, 1930. Serial No. 432,826. 2 Claims. (Cl. 123—124.)



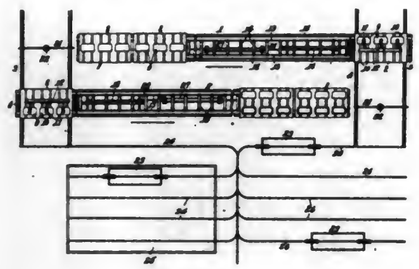
1. In combination with a motor, electrically operated means for cutting off the flow of mixture to the cylinders when the accelerator or throttle is moved to closing position and means for automatically rendering such means inactive when the engine reaches idling speed.

1,813,720. AUTOMATIC CHANGE MACHINE. ROLLIN V. WILSON, Memphis, Tenn., assignor of one-half to Sam L. Franklin, Knoxville, Tenn. Filed Apr. 19, 1929. Serial No. 356,439. 4 Claims. (Cl. 194—7.)



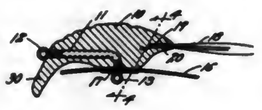
1. In a machine of the character described, a housing, separate coin receptacles therein, each receptacle being adapted to receive coins of a given value, individual coin chutes for said receptacles, means normally closing the chutes to prevent the passage of coins from said chutes into the receptacles, electrically controlled means to operate the chute closing means to permit of the passage of coins into the receptacles, electrically operated means controlled by the coins within the chutes to discharge coins from the receptacles, and electrically controlled means including the means for normally closing the chutes to intermittently open the chutes to fill the receptacles.

1,813,721. METHOD AND APPARATUS FOR MANUFACTURING CASTINGS. JOHN E. WAIGHT, Wheeling, W. Va. Filed Mar. 14, 1928. Serial No. 261,508. 7 Claims. (Cl. 25—2.)



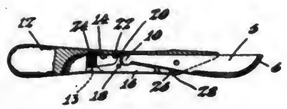
2. In a material handling apparatus, a pair of conveyor tables arranged in side by side relation, opposite substantially parallel runways adjacent the ends of the tables and at substantially right angles to the latter, carriages movable along said runways, mold supporting platforms removably mounted on the carriages, mold charging means associated with each runway and located adjacent to the receiving end of each table, and power hoists for the work over the opposite runways and located adjacent to the delivery ends of said tables.

1,813,722. FISH LURE AND PROCESS OF MAKING THE SAME. STANLEY M. WAIGHT and ANDREW D. McGILL, Denver, Colo. Filed Dec. 14, 1928. Serial No. 326,022. 6 Claims. (Cl. 43—42.)



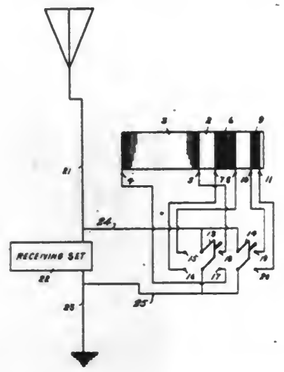
1. A fishing lure comprising: a metallic tension member; a body molded about said tension member; a sheet of flexible material having an outline simulating legs or the like; a plate of rigid material; and a screw eye adapted to thread to said tension member and cause said plate to clamp said sheet against said body.

1,813,723. KNIFE. RUDOLPH BEAVER, Watertown, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Sept. 20, 1927. Serial No. 220,756. 3 Claims. (Cl. 30—9.)



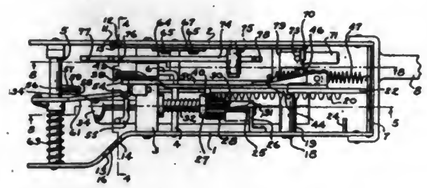
1. In a knife of the character described, the combination of a blade having a taper shank terminating in a circular projection, with a holder having a stop of circular contour for limiting the insertion of the taper shank by wedging engagement, and a blade locking member having a circular recess and being movable into yielding interlocking engagement with the end of the shank.

1,813,724. RADIO RECEIVING SET. AUGUST A. BESTE, Virginia, Minn. Filed May 6, 1927. Serial No. 189,208. 3 Claims. (Cl. 250—20.)



1. An auxiliary tuning device for radio receiving apparatus comprising a closed receptacle having a hinged cover, a plurality of separate differentiating coils disposed within said receptacle, a double pole, double throw switch mounted on said cover and connected to certain of said coils, a double pole, single throw switch also mounted on said cover and connected to the other of said coils, said switches being arranged in end to end abutting relation, whereby the blades of the last-named of said switches will be engageable with the adjacent of the contacts of the first-named of said switches, and conductors commonly connected to said switches and leading therefrom for connection with the primary circuit of a receiving apparatus.

1,813,725. KNOTTER. ERSKINE E. BOYCE, Coronado, Calif. Filed May 2, 1928. Serial No. 274,536. 20 Claims. (Cl. 289—3.)

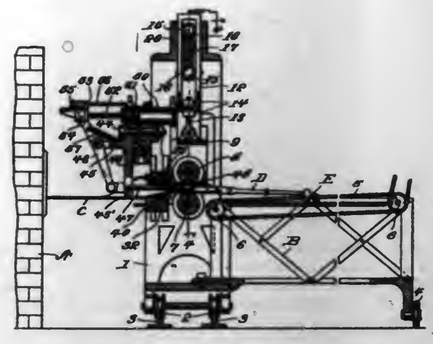


14. In a knotter, in combination, a rotary tying bill, means for holding two threads across said bill on the same side thereof with one portion of one thread releasably held below the adjacent portion of the second thread, means for moving a portion of said first thread from one side of said releasably held portion and transversely beneath said second thread, and means for moving a portion of said first thread from the other side of said releasably held portion over and transversely across said second thread.

1,813,726. ETHYLATION OF CELLULOSE. DONALD B. BRADNER, Hamilton, Ohio, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 10, 1927. Serial No. 212,137. 6 Claims. (Cl. 260—152.)

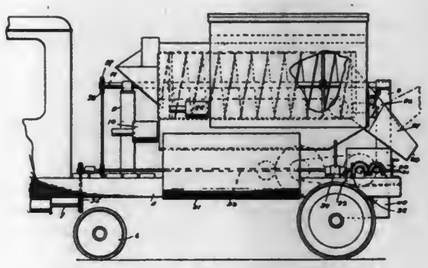
1. The process of producing cellulose ethers which comprises agitating and heating a mixture of cellulose, alkali, water, ethyl chloride, and a potassium salt.

1,813,727. LAP WELDING MACHINE. EVERETT BRYAN, Chicago, Ill., assignor of one-half to Carroll E. Judd, Chicago, Ill. Filed Nov. 26, 1928. Serial No. 322,023. 1 Claim. (Cl. 78—88.)



In a lap welding machine, a die member, a mandrel normally aligned with one end of said die member, an arm supporting said mandrel, a pivotally mounted lever connected to said arm, yieldable means acting on said lever for supporting said mandrel in said named position, and pressure operating means for keeping said mandrel into and relative to said die member.

1,813,728. MATERIAL TREATING APPARATUS. CURTIS D. CHASE, Alston, Mass., assignor to Chase Holding Corporation, a Corporation of Pennsylvania. Filed Oct. 19, 1927. Serial No. 227,339. 16 Claims. (Cl. 94—43.)

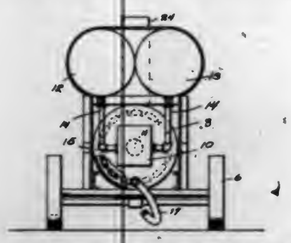


1. In an apparatus of the character described, in combination, a supporting frame, a combustion chamber mounted thereon, a material feeding drum mounted in said chamber, a source of heat in said chamber for heating the drum and from which the exhaust products of combustion are adapted to return through the drum, and openings at one end of said drum, thru one of which the material to be heated is adapted to be fed and thru the other of which the products of combustion are adapted to exhaust from the drum.

1,813,729. SNOW MELTING FLUSHER. CURTIS D. CHASE, Alston, Mass., assignor to Chase Holding Corporation, a Corporation of Pennsylvania. Filed Oct. 19, 1927. Serial No. 227,341. 1 Claim. (Cl. 299—47.)

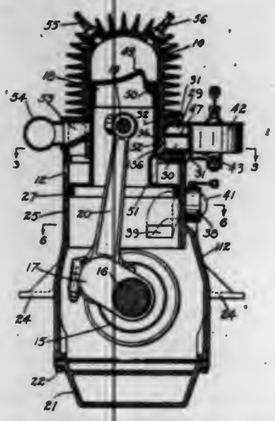
In an apparatus of the character described, a portable support, a horizontally disposed cylindrical heating chamber mounted thereon having a centrally and axially disposed oil burner for heating the same, fuel and compressed air reservoirs carried by said frame with their axes extending parallel to the longitudinal axis of the heating

chamber, coil sections each of substantially semi-cylindrical formation and mounted in said chamber about the interior periphery thereof and comprising tubes connected by reverse bends thru which water under pressure is adapted to be passed, inlets to and outlets from said coil



sections, a coupling common to said inlets, a flexible line from an unlimited source of water under pressure to said coupling, and a coupling common to said outlets and connected to an outlet nozzle whereby the water heated in said coil sections may be discharged.

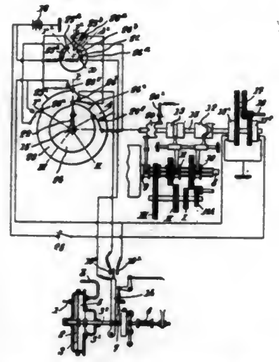
1,813,730. INTERNAL COMBUSTION ENGINE. JULIAN P. FARNAM and EDWARD R. STONE, Minneapolis, Minn. Filed Mar. 5, 1929. Serial No. 344,134. 11 Claims. (Cl. 123—67.)



2. An internal combustion engine comprising a cylinder, a piston movable therein, an exhaust port on one side of said cylinder, a fuel mixture intake port on the opposite side of said cylinder positioned below said exhaust port, an air intake port positioned below said fuel mixture port and at another portion of said cylinder distinct from said exhaust and fuel mixture ports, said exhaust port being adapted to be first uncovered by the piston upon the approach of said piston toward the end of its impulse stroke, a passageway in said piston for thereafter and while the exhaust port is uncovered bringing said compressed air port into communication with said cylinder, to scavenge the burned gases within said cylinder, said air port being adapted to be covered and said fuel mixture port uncovered during the final movement of said piston in its impulse stroke to charge said cylinder with fuel mixture, means for carbureting the air passing through said fuel mixture port, and means for forcing air through said compressed air port.

1,813,731. AUTOMATIC GEAR SHIFT. GASTON FLEISCHEL, Bieneau, France. Filed Mar. 4, 1931, Serial No. 520,089, and in Italy Mar. 28, 1930. 9 Claims. (Cl. 74—97.)

1. In combination, a motor including a driving shaft, a driven shaft, means for coupling said driving and driven shafts in various speed ratios, means including a lever operative by changes in the load on the motor and by variations in speed of one of said shafts to actuate said last named means, a movable control adapted to occupy any one of three positions corresponding to operation of the



motor in reverse, neutral, and advance, and means operative by the displacement of said movable control to react on both of the aforementioned means so that the vehicle may operate in reverse, neutral, and in any one of a plurality of advancing speeds.

1,813,732. FURNACE CONTROL. EDWARD E. FREEMAN, Danville, Ill. Filed Jan. 16, 1931. Serial No. 509,049. 10 Claims. (Cl. 236—11.)

1. In a furnace control, the combination of apparatus for controlling the rate of combustion and the rate of supply of a heat-conducting medium, thermostatic apparatus responsive to furnace temperature, and connections between said control apparatus and said thermostatic apparatus by means of which said control apparatus operates to check combustion while supplying said medium when furnace temperature exceeds a predetermined degree

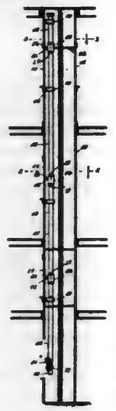
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1,813,733. HOSE NOZZLE. JAMES J. FREEMAN, Bradford, Pa. Filed July 30, 1928. Serial No. 296,210. 1 Claim. (Cl. 299—153.)

A nozzle tip comprising a body circular in transverse section, said body being hollow and open at its receiving end and having a wall disposed across its discharge end, the inner surface of said wall having centrally converging concaved areas, and the outer surface of said wall lying

in a plane at a right angle to the axis of the tip, said wall having thickness at its center whereby said inner and outer wall surfaces are spaced from each other, said wall having an elongated passageway passing through its center, said passageway having converging concaved side wall areas, the tip having in its outer plane surface a transversely concaved groove disposed at a right angle to the length of the passageway, the surfaces of the groove meeting the surfaces of the passageway at acute angled edges, said edges being bowed downwardly and longitudinally along the groove to produce a fan like form of fine spray.

1,813,734. LATCHING MEANS FOR DUMB-WAITER DOORS. ISIDORE FRIED, New York, N. Y. Filed June 20, 1929. Serial No. 372,481. 10 Claims. (Cl. 187—61.)

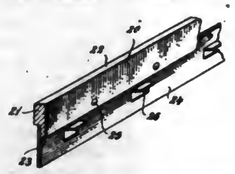


1. In combination with a dumb-waiter shaft having doors at different levels, latch means for each of the doors, and actuating means located at the bottom of said shaft for each latch means and operatively connected therewith to actuate the same to latch and unlatch the related door.

1,813,735. LACQUERING COMPOSITION AND METHOD OF EMPLOYING SAME. CHARLES L. GABRIEL, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed July 30, 1924. Serial No. 729,163. 5 Claims. (Cl. 134—26.)

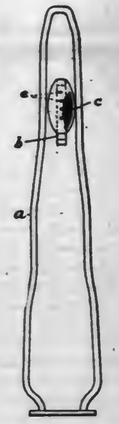
1. A cellulose lacquer undercoat composition comprising two to four pounds of gum shellac and two to ten ounces of dibutyl phthalate dissolved in one gallon of a volatile solvent.

1,813,736. BIMETALLIC FLOOR STRIP. PASQUALE GALASSI, New York, N. Y. Filed July 1, 1929. Serial No. 375,053. 13 Claims. (Cl. 94—17.)



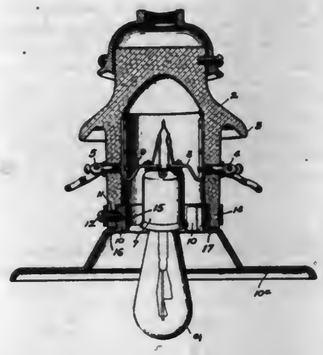
1. A floor strip of the character described, comprising an upper section and a lower section, said upper section having a longitudinally extending top portion with an uninterrupted upper edge, and a plurality of spaced lugs depending therefrom, said lugs being provided with through openings, and means passing through said openings, connecting said sections to each other.

1,813,737. HOSIERY DRYING FORM. PAUL GUGGENHEIM, Philadelphia, Pa., assignor to Philadelphia Metal Drying Form Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,302. 4 Claims. (Cl. 223—17.)



1. A hosiery drying apparatus comprising a form body member and a heel member slidable thereon, one of said members being provided with a series of spaced apart recesses, and a spring-pressed device carried by the other member and automatically engageable with any recess opposite to which it is brought in the sliding movement of the heel member.

1,813,738. ELECTRIC LAMP FIXTURE. CROMWELL A. B. HALVORSON, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 20, 1929. Serial No. 394,099. 4 Claims. (Cl. 240—128.)



1. In a lamp fixture, the combination of a casing having an open end and perforations adjacent to said open end, a reflector having a portion which projects into said open end, said portion having recesses provided with sloping walls, a ring which surrounds said end and is provided with threaded perforations, a packing between the reflector and the casing, a screw in said threaded perforations which passes loosely through said first-named perforations and engages said sloping walls, whereby when the screws are tightened to fasten the reflector in position, the reflector is drawn upwards to clamp it against the packing.

1,813,739. TRANSMISSION MECHANISM. ROY E. HAPTONSTALL, Chula Vista, Calif. Filed July 25, 1928. Serial No. 295,300. 3 Claims. (Cl. 24—7.)



1. A five-gear transmission, in which all gears are of the same size, a case to house said transmission, a drive shaft extending through said case adapted to carry an object to be driven, a right angle gear fixed to said drive shaft within said case, a tubular shaft encircling said drive shaft and extending through one end of said case, and adapted to carry an object to be driven, a second right angle gear fixed to said tubular shaft within said case, ball bearings mounted between said drive shaft and said tubular shaft, a tube encircling said drive shaft and spaced between the right angular gear on said drive shaft and the right angular gear on the tubular shaft within said case, three right angle compensating gears mounted in ball bearings in the side wall of said case, and spaced apart at intervals in triangular form within said case meshing with the driving gears fixed to said shaft and said tubular shaft within the case.

1,813,740. SUPPORT. CASEY E. HARPER, Hampton, Fla. Filed Apr. 30, 1927. Serial No. 188,017. 1 Claim. (Cl. 248—20.)



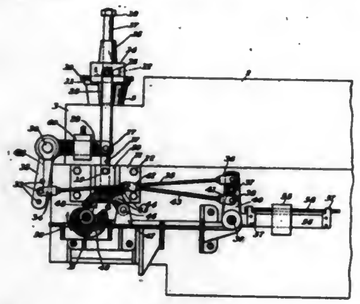
As a new and improved article of manufacture, a sap cup support formed of wire and including a shank adapted to be partly driven into a tree in a horizontal position, a relatively large elongated flat head formed on one end of the shank and between which and said tree the cup is adapted to be clamped, cross arms projecting from opposite sides of the shank in horizontal alignment and in the same plane therewith, and a relatively flat surface formed at the point of juncture of the shank and said arms and cooperating with the latter to support the bottom of the cup thereon.

1,813,741. SEAT BURR. WILLIAM E. HARPER, Chicago, Ill. Filed Dec. 21, 1929. Serial No. 415,763. 7 Claims. (Cl. 32—31.)



1. A dental burr of substantially cylindrical shape having a cutting surface on its sides and on one end and a curved edge cutting surface connecting said sides and end.

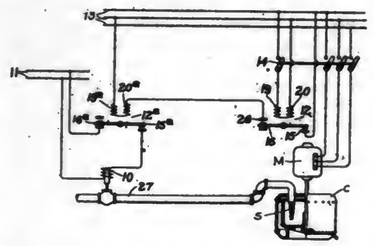
1,813,742. METHOD AND APPARATUS FOR FEEDING MOLTEN GLASS. GEORGE E. HOWARD, Butler, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 11, 1922. Serial No. 560,111. 39 Claims. (Cl. 4—55.)



33. The method of utilizing a vertically reciprocating plunger to control the delivery of molten glass through a downwardly opening outlet, that comprises causing said plunger to fall freely by gravity toward said outlet and regulably controlling the speed of the gravity descent of the plunger toward said outlet independently of any change in the condition of the glass in contact with the plunger.

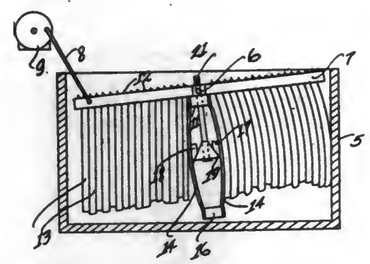
37. Glass feeding apparatus comprising a receptacle for molten glass having a discharge opening in its bottom, a vertical plunger mounted for vertical reciprocation above said opening, means for lifting said plunger and then permitting the plunger to fall toward said opening independently of said lifting means, and means independent of the glass and of said lifting means for varying the speed at which said plunger will fall toward said opening.

1,813,743. TIME ELEMENT CONTROL SYSTEM AND APPARATUS. CLARENCE S. HULL, Oakland, Calif., assignor to General Electric Company, a Corporation of New York. Filed Oct. 9, 1924. Serial No. 742,729. 7 Claims. (Cl. 175—375.)



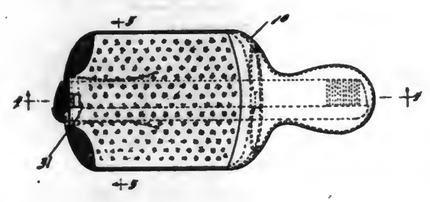
5. The combination of a circuit, a plurality of separately operable circuit controlling members connected in said circuit for independently controlling the same, a master controller, time element means including a motor operated switch having its energizing circuit controlled by said master controller and an electromagnet having its energizing circuit controlled by said motor operated switch for operating one of said members a predetermined time interval after the operation of said controller, said motor operated switch having adjustable means for varying said time interval at will, and independently operable time element means including an operating motor having its energizing circuit controlled by said motor operated switch for operating another of said members a predetermined time interval after the operation of said one member, said operating motor having adjustable means for varying said time interval at will.

1,813,744. TANNING APPARATUS. ADRIAN S. JONES, Redwood City, Calif. Filed Jan. 20, 1930. Serial No. 422,183. 3 Claims. (Cl. 149—8.)



2. In a tanning apparatus, a tank adapted to hold a tanning liquor, a frame mounted within said tank, means for reciprocating said frame, an expansion member suspended from said frame, said expansion member comprising a plurality of slats, and means for expanding said slats away from each other for the purpose specified.

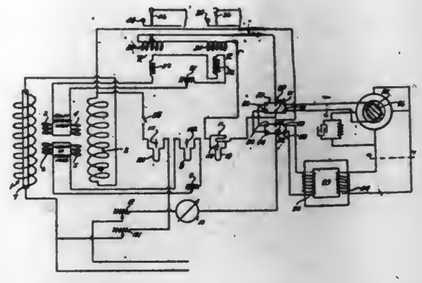
1,813,745. HAIRBRUSH. AXEL KILSTROM, Cranston, R. I., assignor to Henry Lederer & Bro. Inc., a Corporation of Rhode Island. Filed Jan. 20, 1931. Serial No. 509,935. 16 Claims. (Cl. 132—87.)



16. In a hair brush, a shell having a back wall, an edge flange extending therefrom with an opening at one end, lips adjacent one end of the shell extending inwardly from said flange, a portion of a front wall spaced from said lips, a partition in said shell engaging said edge flange spaced from said back wall and located between said opening and lips, a finger on said partition at one end thereof extending into said opening, a resilient finger on the other end thereof engaging said front wall portion, and provided with resilient arms extending therefrom, a block having bristles therein, its edge extending beneath said lips and front wall portion and held under said lips by said resilient arms and removable against said spring pressure, a comb on the opposite side of said partition insertable thru said opening, and spring fingers on said partition engaging the opposite edges of said comb to hold the same in place.

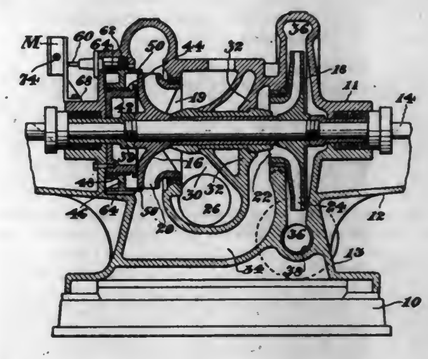
1,813,746. METHOD OF AND APPARATUS FOR MAGNETIC TESTING. CARL KINSLEY, Scarsdale, N. Y., assignor, by mesne assignments, to Magnetic Analysis Corporation, Long Island City, N. Y., a Corporation of New York. Filed Feb. 23, 1927. Serial No. 170,195. 13 Claims. (Cl. 175—183.)

2. The method of testing a magnetizable body which includes simultaneously establishing a magnetic flux in a standard of known magnetism affecting properties and in said body respectively by means of a magnetic force and producing for inspection a representation of the instantaneous value variations of a cycle unit of the current pro-



duced by a difference in said magnetic fluxes due to a difference in a magnetism affecting property of said standard and said body.

1,813,747. CENTRIFUGAL PUMP. JOHN KIRGAN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 20, 1928. Serial No. 327,394. 3 Claims. (Cl. 103—97.)

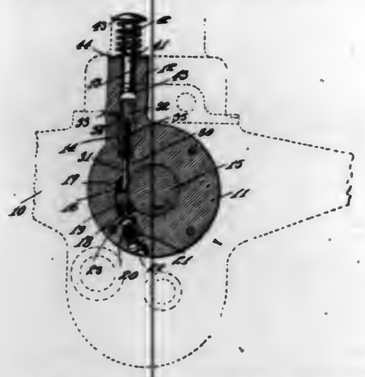


1. A multiple stage pumping system including a first stage impeller and a second stage impeller, a common shaft for said impellers, each impeller being adapted to receive fluid from a fluid inlet and to discharge the same with increased head through a fluid outlet, a rotatable valve adapted to be moved longitudinally with respect to the shaft across the opening at the outlet of the first stage impeller, a motor to actuate the valve, and means responsive to the fluctuation in quantity of fluid supplied to the pumping system for controlling said motor.

1,813,748. DEVICE FOR PREVENTING RETROGRADE MOVEMENT OF VEHICLES. MARTIN J. A. KOCHEVAR, Pueblo, Colo. Filed May 24, 1930. Serial No. 455,400. 3 Claims. (Cl. 192—4.)

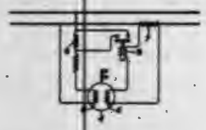
1. A device for preventing retrograde movement of vehicles comprising a transmission housing, a disc secured to an end of the housing and having a passage, a drive shaft of the vehicle received within the passage, said disc being provided with a chamber in lateral communication with the passage, a roller in the chamber, said chamber having a restricted section to receive the roller and lock the shaft against rotation in one direction, said chamber having an expanded section to receive the roller in an inoperative position to permit rotation of the shaft in either direction, a movable pin in the disc having a

free end projecting into the chamber for forcing the roller into the expanded section of the chamber, a reverse gear



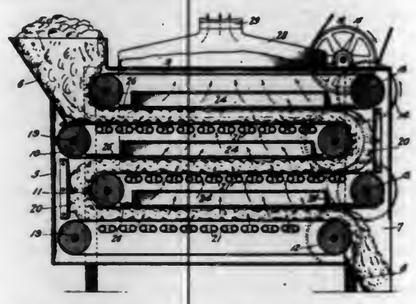
shifter rod having a cam portion for actuating the pin to force the roller in the expanded section of the chamber.

1,813,749. PROTECTIVE ARRANGEMENT. FRANCIS JOHN LANE, Harlsden, London, and ROBERT D. PARRY, Northway, Neasden, England, assignors to General Electric Company, a Corporation of New York. Filed July 8, 1929, Serial No. 376,764, and in Great Britain July 11, 1928. 5 Claims. (Cl. 175—294.)



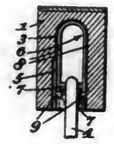
1. In a protective arrangement for an electric circuit, a relay having opposing current and voltage elements connected to be energized from the circuit, said current element preponderating over said voltage element when the current and voltage at the relay location correspond to an impedance characteristic less than that of a section of the circuit, means for limiting the voltage applied to the voltage element of the relay when the section of the circuit with which the relay is associated is sound and means for eliminating the effect of the voltage limiting means on the occurrence of abnormal circuit conditions.

1,813,750. DRIER. ALEXANDER S. MACKENZIE, Houston, Tex., assignor to Clayton Gin Compress Company, Houston, Tex., a Corporation of Texas. Filed Oct. 27, 1928. Serial No. 315,603. 3 Claims. (Cl. 34—12.)



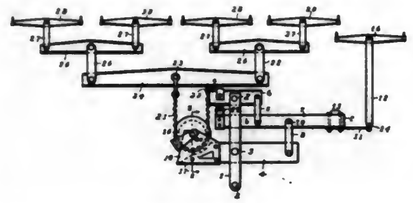
1. In a drier, the combination with a plurality of endless aprons arranged to convey material through the drier and discharge it from one to the other, of an air exhausting chamber arranged between the runs of one of said aprons with its inlet opening substantially coextensive with a run of said apron and arranged in close proximity thereto, said chamber having its ends in the plane of said opening and arranged in contact with the run of said apron.

1,813,751. MUSICAL INSTRUMENT KEY BUSHER. THOMAS J. MALCOLM, Natchez, Miss. Filed Jan. 24, 1930. Serial No. 423,143. 10 Claims. (Cl. 84—436.)



1. The combination of a musical instrument key, guide means by which the key is guided in its movements, and a compressible busher applied to the key and retained there by its expansion, being slidable against the guiding means during said movements.

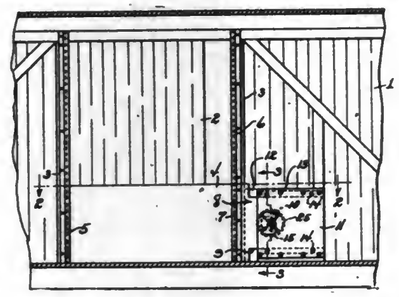
1,813,752. DRAFT EQUALIZER. JOHN E. MCCUSKER, Ogalalla, Nebr. Filed Apr. 28, 1930. Serial No. 447,955. 1 Claim. (Cl. 278—6.)



The combination with a five horse evener, means to which four horses may be attached, a draft bar, a transverse bar pivoted to said draft bar, a sheave carried by one end of the transverse bar, to one side of the draft bar, a flexible member attached to the four horse draft means and extending rearwardly over the sheave and forwardly, a forward transverse bar carried by the draft bar, and to one end of which the flexible member is attached, an intermediate bar, a link connection between the intermediate bar and the forward transverse bar adjacent the draft bar, a link connection between the rear transverse bar and the intermediate bar to the outside of the first mentioned link connection, means for attaching a single draft animal to the outer ends of the intermediate bar and an antifrictional roller engagement between one end of the intermediate bar and the forward transverse bar.

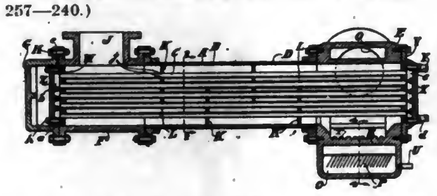
1,813,753. MOVABLE GRAIN DOOR JAMB. GEORGE HOWARD MCNOLTY, Saskatoon, Saskatchewan, Canada, assignor of one-half to Arthur F. Thomas, Saskatoon, Canada. Filed Jan. 11, 1930. Serial No. 420,220. 1 Claim. (Cl. 20—30.)

Jambs for the grain doors of cars, comprising members which have their inner faces grooved to receive the grain doors therein, one of said jambs comprising an upper removably fixed section and a lower movable section, said lower section having a tongue extension, a casing in which the said tongue is received, anti-friction bearings in the casing to engage with the edges of the tongue, said tongue having a rectangular opening therethrough, a roller received in the opening and contacting with the side walls thereof, a spindle journaled through the casing passing eccentrically through the roller and removably fixed to said roller, said spindle having a squared portion extending through the side of the car, an operating wheel having its hub fixed on the said portion of the spindle, an escutcheon plate on the outer side of the car, provided with a



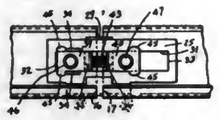
bearing opening for the rounded portion of the spindle, a latch pivotally secured to the plate and having a central notched portion shaped to correspond with and to engage with the squared portion of the spindle, a finger extension on the free end of the latch, a keeper lug on the plate through which the finger passes and a removable locking element for the finger.

1,813,754. HEAT EXCHANGER. CHESTER W. METZGAR, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 22, 1928. Serial No. 321,151. 6 Claims. (Cl. 257—240.)



1. A heat exchanger, comprising a casing, tubes in the casing for conveying cooling liquid, baffles in the casing arranged in staggered relation with respect to each other to direct fluid flowing through the casing into intimate contact with the tubes, and a separator integral with the casing for removing moisture entrained by the fluid intended to be cooled.

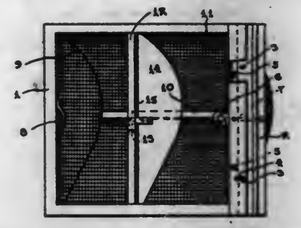
1,813,755. HEADLAMP LOCATING AND CLAMPING BAND CONSTRUCTION. FREDERICK W. C. NEUNER, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind., a Corporation. Filed May 10, 1930. Serial No. 451,272. 9 Claims. (Cl. 240—41.5.)



1. A lamp structure including a casing open at one end, a lens closure for said opening, a split door rim surrounding the periphery of said lens and adapted to clamp the same in closing relation to said opening, a lug attached to each end of said rim adjacent the split, one of said lugs having a portion projecting within said rim, means for drawing said lugs together, and a member adapted to engage the internally projecting lug and fastened to the other end of said rim for limiting the movement of the said ends when in non-clamping position.

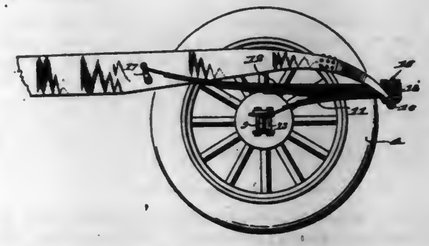
1,813,756. COMBINED WINDOW SCREEN, WIND DEFLECTOR AND VENTILATOR. RICHARD NOPPENZ, Ozone Park, N. Y. Filed July 29, 1929. Serial No. 381,870. 3 Claims. (Cl. 98—44.)

1. In a window screen, the combination of a frame, bowed side members extending outwardly from said frame



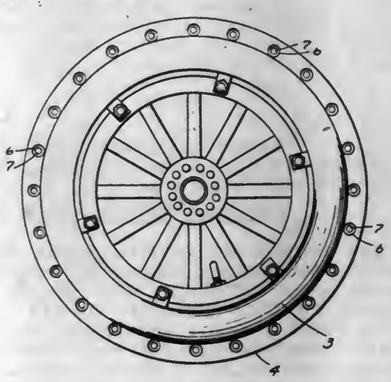
beyond the vertical plane thereof, a wind deflector supported by said frame and extending outwardly between said side members, screening secured to said frame and enclosing said side members and wind deflector, and resilient means for holding the frame within a window frame.

1,813,757. VEHICLE SPRING SUSPENSION. JOSEPH RICHARD OGDEN, Jr., Atlantic City, N. J. Filed Sept. 30, 1927. Serial No. 223,104. 8 Claims. (Cl. 280—106.5.)



1. A vehicle spring suspension comprising two leaf springs rigidly attached together at one end and arranged side by side in parallel planes, one of said leaves being longer than the other and connected at its free end with the vehicle chassis, the free end of the shorter spring being pivotally connected with the vehicle axle.

1,813,758. PNEUMATIC TIRE. CHARLES PARIDY, Belleville, Ill. Filed July 3, 1929. Serial No. 375,637. 2 Claims. (Cl. 152—10.)



1. A tire comprising a pneumatic casing portion and an integral tread portion of relatively greater diameter and

relatively narrow width, said tread portion having relatively thin circumferentially spaced diaphragms at the medial portion of the tread formed by alined frusto-conical shaped recesses extending inwardly from the opposite sides of the tread, said recesses being substantially tangential to the casing portion thereat.

1,813,759. LUMINOUS TUBE. THOMAS K. PETERS, Los Angeles, Calif., assignor to Color-Ray Holding Corporation, Denver, Colo., a Corporation of Colorado. Filed July 14, 1928. Serial No. 292,671. 2 Claims. (Cl. 40—130.)



1. A luminous grid of the class described, comprising a plurality of non-communicating luminous tubes having electrodes, certain of said tubes having main portions connected by bridge portions, other of said tubes having portions interspaced between said main portions, means in said tubes for emitting luminous rays of different colors or tints, and means for causing illumination of the tubes separately for producing different color effects.

1,813,760. PROCESS FOR THE MANUFACTURE OF CYANOGEN FORMARYLIDES. JOHANNES PFLEGER, Frankfort-on-the-Main, Germany, assignor to Deutsche Gold & Silber Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation. Filed Feb. 14, 1929, Serial No. 340,018, and in Germany Nov. 20, 1928. 3 Claims. (Cl. 260—108.)

1. A process for the manufacture of nitrogen substituted cyanogen formarylides of the general formula:

$$Ar—\underset{\displaystyle R}{N}—COCN,$$

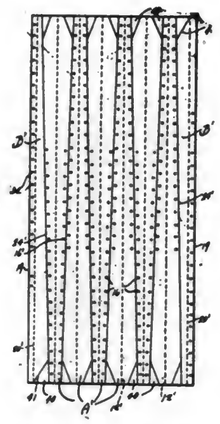
wherein Ar is any substituted or unsubstituted aromatic residue and R is any substituted or unsubstituted aromatic or aliphatic residue, which consists in reacting the corresponding acid chlorides of the general formula:

$$Ar—\underset{\displaystyle R}{N}—COCl$$

with hydrocyanic acid in pyridine in the absence of any diluting agents other than pyridine.

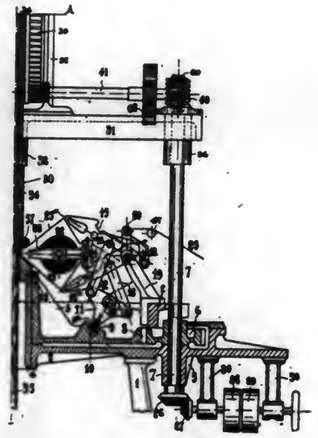
1,813,761. METHOD OF CUTTING METAL FENCE POSTS FROM SHEET MATERIAL. WINGATE P. PICKETT, Union Springs, Ala. Filed May 18, 1929. Serial No. 364,272. 3 Claims. (Cl. 164—17.)

1. The method of striking tapered metal post blanks having converging edges from a single sheet of metal which consists in cutting line posts at the side longitudinal portions of the sheet of metal in relative end to end inverted relation, by severing them from the sheet of metal along parallel cutting lines which are biased as to the length of the sheet of metal, and subdividing the remaining portion of the sheet of metal into corner posts which are



adjacently inverted end to end in the blank by relatively severing them along cutting lines extending in alternately inclined relation along the length of the sheet of metal.

1,813,762. MACHINE FOR TUBULAR WEAVING. ALEXANDRE PONCET, Paris, France. Filed July 7, 1927, Serial No. 204,057, and in France Aug. 20, 1926. 16 Claims. (Cl. 139—15.)

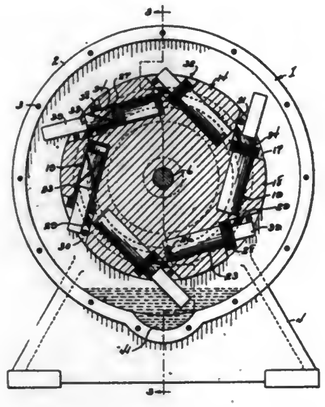


1 In a machine for weaving tubular fabric, shuttles for carrying and feeding the weft threads, each shuttle having a wedge shaped end, a circular series of pivotally mounted levers, each adapted to feed a warp thread, means for oscillating said levers so that some move in one direction while others move in the opposite direction and in such relation that a shed is opened and closed for each shuttle progressively along said series, said levers providing a track on which said shuttles may move and being adapted to press on said wedge shaped ends to propel the shuttles along said track through said sheds.

1,813,763. ROTARY ENGINE. STERLING M. PRICE, Montgomery, Ala. Filed Feb. 19, 1930. Serial No. 429,683. 3 Claims. (Cl. 121—58.)

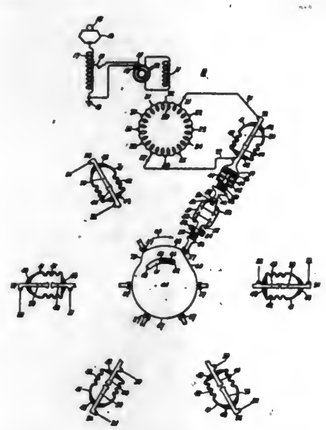
1. In a rotary engine of the class described, a cylindrical casing, a rotor mounted for rotation therein, cylinders

mounted tangentially in the rotor for rotary movement about their own axis, means for continuously rotating the cylinders in consonance with the rotation of the rotor, each cylinder having a port in its inner end, the rotor



having ports opening transversely therethrough and with which the ports of respective cylinders are adapted to successively communicate in the rotary motion of the cylinders, the casing being provided with inlet and exhaust passages in communication with the ports in the rotor.

1,813,764. DYNAMO ELECTRIC MACHINE. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 29, 1930. Serial No. 471,507. 6 Claims. (Cl. 171—228.)



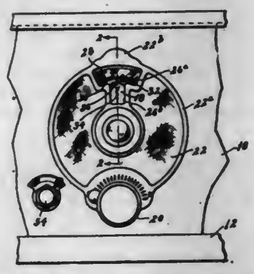
1. A dynamo electric machine comprising a rotatable winding, a stationary winding consisting of a plurality of distributed coils inductively related to said rotatable winding, and means for producing a rotating magnetic axis of said stationary winding, the said means comprising a plurality of mechanically operated switches each having a pair of relatively movable contacts electrically connected to said stationary winding, means for bringing the contacts of one switch after another into engagement at a rate substantially in proportion to the speed of said rotatable winding, and means for separating the contacts of each switch only after the contacts of another switch are in engagement.

1,813,765. FERTILIZER. CECIL F. RAYFIELD, Waldemar, Ontario, Canada. Filed Feb. 5, 1930. Serial No. 426,119. 1 Claims. (Cl. 111—8.)



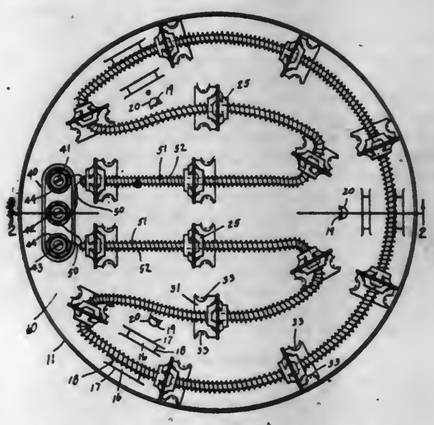
An improved farm implement comprising a frame, a supporting roller, a rotatable axle therefor, a cam keyed thereto, a rocker arm engaging said cam and adapted to be teetered thereby, a hopper, a feed chute therefrom, a sliding shutter in the opening between said hopper and chute, an extension joined to said shutter and adjustable longitudinally thereof, a spring acting on said extension to hold said shutter in normally closed position and an operative connection between said rocker arm and said shutter extension to cause reciprocation of the latter.

1,813,766. DIAL APPARATUS. WILLIAM A. READY, Brookline, Mass. Filed Aug. 11, 1926. Serial No. 128,621. 7 Claims. (Cl. 116—124.4.)



1. Dial apparatus comprising, in combination, a rotatable dial plate, a shell covering said plate having a window through which access may be had to a section of the plate for making record thereon of the dial setting; said window having a portion open and a portion closed by a pane having a notch therein over the open portion for locating a reference mark.

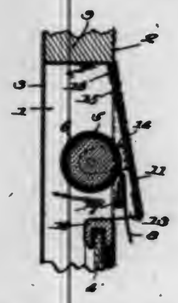
1,813,767. ELECTRIC HEATER CONSTRUCTION. JAMES H. REICHART, Muncie, Ind. Filed Mar. 30, 1929. Serial No. 351,185. 2 Claims. (Cl. 219—37.)



1. An electric heater construction including a supporting plate, a plurality of apertured insulation supports sup-

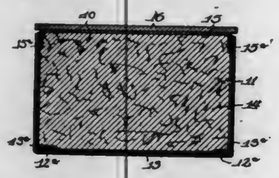
ported in spaced relation by said plate, and a heating element supported by said insulation member and comprising an elongated heating coil, a flexible tubular insulation therefor and inclosing said coil, and a second elongated heating coil surrounding said first mentioned coil and the tube supported by the latter.

1,813,768. WINDOW SHADE MOUNTING. CHARLES WESLEY RICE, Union City, Ind. Filed Jan. 17, 1930. Serial No. 421,482. 7 Claims. (Cl. 156—10.)



3. The combination claimed in claim 1, in which the shield plate is provided with a line of perforations inwardly of each wall engaging end and the covering material is made to conform to the contour of the shield plate by stitching passing through the perforations.

1,813,769. MEAT PACKAGE AND PROCESS OF FORMING SAME. HENRY J. RIHA, Chicago, Ill., assignor to Swift & Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 11, 1924. Serial No. 731,245. 5 Claims. (Cl. 99—11.)

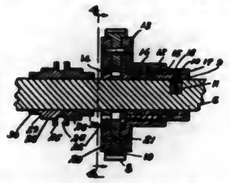


1. The process of forming a meat package which consists in lining a container of the desired contour with strips of pig-skin overlapping each other and having the fat side thereof directed inwardly, the overlapping portions of said pigskin being parallel to the surface of the body of meat located inwardly therefrom and having their edges spaced apart, placing within said lining a body of meat closely filling the same, placing a cover of pig-skin over said meat body with the fat side thereof directed toward said meat body, applying pressure to said cover, cooking said meat body while confined in said covering of pig-skin under pressure, and subsequently cooling said meat body while it is so confined.

2. A meat package comprising a body of meat and an outer stiffening cover formed of a plurality of overlapping pieces of hide adhering to said body of meat and to each other due to cementing action due to cooking but being otherwise un-united, the overlapping portions of said pieces of hide being parallel to the surface of the body of meat located inwardly therefrom with the edges of said portions spaced apart.

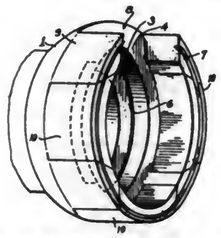
1,813,770. CLUTCH MECHANISM. JAMES ROBERTSON, Peace River, Alberta, Canada. Filed May 12, 1930. Serial No. 451,729. 1 Claim. (Cl. 192—67.)

A clutch mechanism comprising a splined shaft, an inner race fitted thereon, a stud lodged in an opening in the shaft and having a reduced end projecting into an opening in the inner race, a spring retaining said reduced end in its opening, an outer race, anti-friction members interposed between said races, flanges preventing the outer race from shifting axially, a gear fixed to said outer race, a plate fixed to said gear, recesses provided in said plate and said



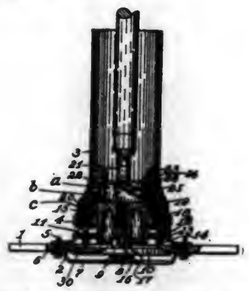
gear, guiding elements interposed between said recesses, a clutch element slidably mounted on said shaft and held against independent rotation by flutes, locking lugs borne thereby, and guiding elements forwardly projecting therefrom for engagement with the aforesaid guiding elements to align the locking lugs with the aforesaid recesses.

1,813,771. CONSTRUCTION OF SECTIONAL CONDUITS. HARRY A. SCHNAR, Wabash, Ind. Filed Dec. 10, 1929. Serial No. 413,048. 2 Claims. (Cl. 285—118.)



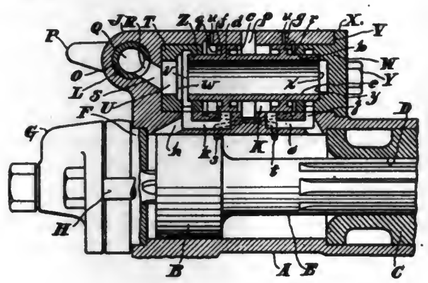
1. In combination adjacent sections of sewer pipe, one section having a bell provided with an inner shoulder, the other section having an end portion fitting into the first section beyond said inner shoulder and having a flange abutting the end of said bell, said shoulder and said flange defining between said sections an annular channel for receiving cement slush, said bell being provided peripherally with weakened portions, in the zone of said channel, one of which may be broken out to give access to said channel.

1,813,772. MACHINE FOR CONSTRUCTING CONCRETE PIPE. ALFRED W. SCHULTZ, Waterloo, Iowa, assignor to Zeidler Concrete Products Machinery Company, St. Joseph, Mo. Filed Mar. 24, 1930. Serial No. 438,487. 4 Claims. (Cl. 25—36.)



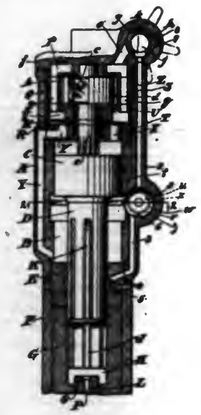
1. The combination, in a machine for constructing concrete pipe, of an outer mold-casting with a separable bottom platen, a longitudinally reciprocatory and rotatable former-head therein, and troweling wings mounted upon said former-head, each having a convex rubbing face crossed by an oblique trough from its upper edge toward its advancing edge.

1,813,773. VALVE FOR ROCK DRILLS. WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 14, 1928. Serial No. 299,492. 1 Claim. (Cl. 121—28.)



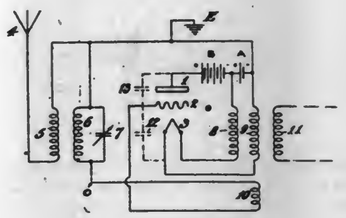
In a fluid actuated rock drill, the combination of a cylinder and piston, a valve chest having a valve chamber comprising an enlarged intermediate portion and reduced end portions, an exhaust port leading from the intermediate portion to the atmosphere, inlet passages leading from the reduced end portions to the ends of the cylinder, exhaust passages leading from the inlet passages at the ends of the cylinder to the enlarged intermediate portion of the valve chamber, a hollow valve in the valve chamber constantly exposed interiorly to live pressure fluid and extending slidably with its ends into the reduced portions of the valve chamber, a pair of flanges on the valve slidable in the enlarged portion to control the outlet openings of the exhaust passages, actuating surfaces on the outer ends of the flanges, crossed kicker passages leading from the intermediate portion of the cylinder to the ends of the enlarged portion for conveying pressure fluid to act against the actuating surfaces for actuating the valve, vent ports in the valve chest spaced from the ends of the enlarged portion and adapted to be controlled by the flanges, and holding surfaces on the ends of the valve exposed to pressure fluid flowing to the cylinder for holding the valve in thrown position.

1,813,774. BLOWING DEVICE FOR ROCK DRILLS. WILLIAM A. SMITH, Jr., and GEORGE H. FUEHRER, Phillipsburg, N. J., assignors to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 5, 1929. Serial No. 411,812. 6 Claims. (Cl. 121—6.)



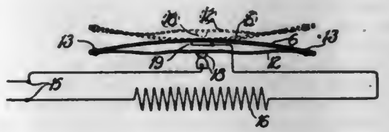
1. In a fluid actuated rock drill, the combination of a cylinder having an exhaust port, a piston in the cylinder normally controlling the exhaust port, a chuck having a cavity, a hollow working implement guided by the chuck and extending into the cavity, a valve chamber in the cylinder, a valve in the valve chamber movable to form a closure for the exhaust port, said valve having a pressure surface exposed to exhaust fluid for moving the valve to open position, means including passages for supplying pressure fluid to the valve chamber to close the valve and to supply pressure fluid to the cavity, and means for controlling the admission of pressure fluid to the passages.

1,813,775. MEANS FOR PREVENTING RETROACTIVE EFFECTS IN AUDION AMPLIFIER CIRCUITS. GEORGE A. SOMERSALO, New York, N. Y. Filed Jan. 27, 1927. Serial No. 164,009. 8 Claims. (Cl. 179—171.)



1. The method of controlling or eliminating the effect of a disturbing electro-motive force in the plate filament circuit of a three-element thermionic device upon the input element associated with the grid and plate of said thermionic device, which comprises establishing a point which due to said disturbing electro-motive force assumes the potential of the plate, and impressing the input energy through said input element between said point and the plate.

1,813,776. THERMOSTAT. JOHN A. SPENCER, Revere, Mass., assignor to Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Original application filed June 1, 1922, Serial No. 565,244. Divided and this application filed Aug. 1, 1925. Serial No. 47,486. 14 Claims. (Cl. 297—15.)

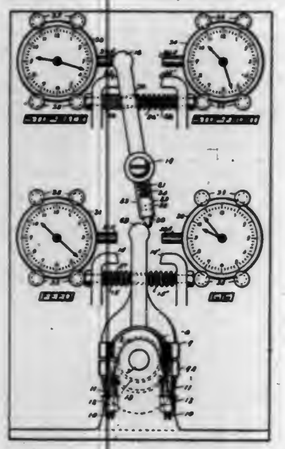


2. A thermostatic control comprising a thermostatic frame, a resilient metallic strip connected to the frame at opposite ends, the frame being maintained in a flexed condition such that predetermined distortion of the frame causes the strip to snap across an axis of pressure.

1,813,777. OPERATION METER. EMMET G. STACK, Marshfield, Oreg. Filed Mar. 6, 1928. Serial No. 259,511. 10 Claims. (Cl. 161—15.)

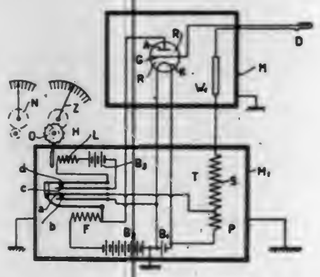
1. In an operation meter, in combination, movement-indicating means; a drive for the meter from the machine

being metered; a mechanism for disabling the drive during the stops of the machine; a spring clutch operated by the drive to bring the movement-indicating means into



operation during the movements of the machine; means operable to bring the spring clutch to an off position when the machine stops.

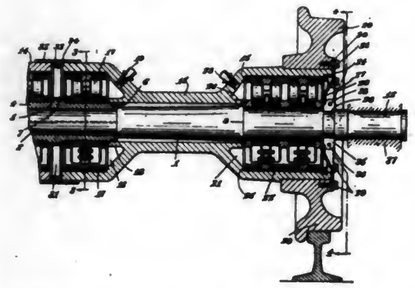
1,813,778. DEVICE FOR MEASURING HIGH RESISTANCES. SIEGMUND STRAUSS, Vienna, Austria. Filed Oct. 14, 1926, Serial No. 141,622, and in Austria Jan. 22, 1926. 9 Claims. (Cl. 175—183.)



1. An electrical measuring apparatus of the kind specified, comprising a thermionic valve with a plurality of electrodes, one electrode being a heated cathode and another an anode, both being included in an outer circuit, a further electrode being a grid controlling the flow of current through said thermionic valve, means dependent upon the flow of current in the outer circuit to impress a negative charge upon the grid capable of suppressing the flow of current through the thermionic valve, said means comprising a transformer having a primary and a secondary winding, a circuit for carrying away the negative charge of the grid, so as to restore the flow of current through the grid, said circuit containing the object to be measured and the secondary of the transformer, a further circuit connected with the heated cathode and containing the primary of the transformer, both circuits being connected, whereby a connection of the discharge circuit of the grid with the cathode is established.

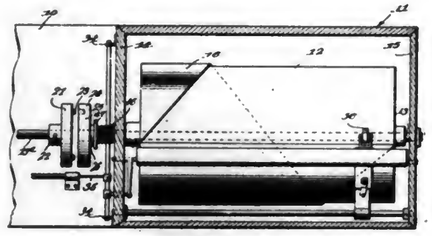
9. In an electrical measuring apparatus of the kind specified, a thermionic valve comprising a heated cathode, an anode, and a grid electrode controlling the flow of current through said valve, means for impressing a negative charge on said grid electrode to interrupt the flow of current between said cathode and anode, said means comprising an inductance capable of generating an induction current, and a connection with said grid practicable for induction currents but impracticable for leakage currents, a measuring circuit to contain the object to be measured and connected with said grid and said cathode and adapted to allow discharge of the grid charge over the object to be measured and restore the conductivity of the thermionic valve, and an annunciator circuit between said cathode and anode separate and distinct in all its elements from the measuring circuit and the charging circuit of the grid and containing the means for maintaining a flow of currents through said thermionic valve, means for controlling the generation of inductive charges to be applied to the grid and means annunciating the number of complete grid discharges.

1,813,779. AXLE. GEORGE W. TAYLOR, Wellesley, Mass., assignor, by mesne assignments, to Harold J. Clark, Watertown, Mass. Filed Dec. 17, 1926. Serial No. 155,391. 48 Claims. (Cl. 295—36.)



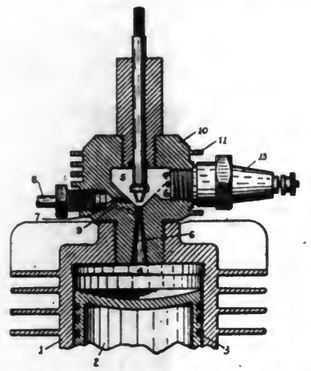
1. Axle construction of the kind described, comprising a rotatable shaft, housings, wheels mounted on said housings, said housings, being rotatably mounted on said shaft and disconnected from each other whereby differential rotation of the wheels is permitted, and a roller bearing housed in the inner end of each of said housings.

1,813,780. TIMING DEVICE. RALPH V. TUTTLE, Lewiston, Idaho. Filed July 15, 1927. Serial No. 206,013. 1 Claim. (Cl. 200—33.)



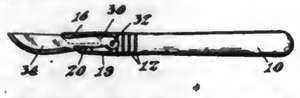
In a timing device for printing photographs, a cylinder, means for rotating the cylinder, a contact strip of progressively increasing width on the cylinder, a shaft rockably mounted adjacent the cylinder, a lever slidably mounted on the shaft but rockable with the shaft, a resilient arm secured to the lever and having a contact member at the free end adapted to engage the contact strip and the cylinder, a switch element on the lever, a second switch element on the resilient arm adapted to be moved into engagement with the switch element on the lever when the contact member is in engagement with the contact strip, the second switch element being out of engagement with the first element when the contact member is in operative relation with the cylinder.

1,813,781. INTERNAL COMBUSTION ENGINE. EUGEN THOMAS and ROBERT STUHR, Dusseldorf, Germany. Filed Oct. 12, 1928, Serial No. 312,018, and in Germany June 25, 1928. 6 Claims. (Cl. 123—32.)



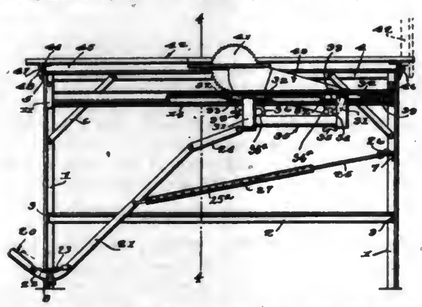
1. An internal combustion engine comprising a cylinder having a compression space at its outer end, a piston reciprocal within said cylinder, a housing provided with an explosion chamber in communication through a bore with said compression space, said housing having a fuel supply passage opening into said explosion chamber outwardly of the outer end of said bore, and manually operable means for reducing the effective cross sectional area of said bore to facilitate starting of the engine.

1,813,782. SURGICAL KNIFE. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 5, 1927. Serial No. 231,329. 6 Claims. (Cl. 30—9.)



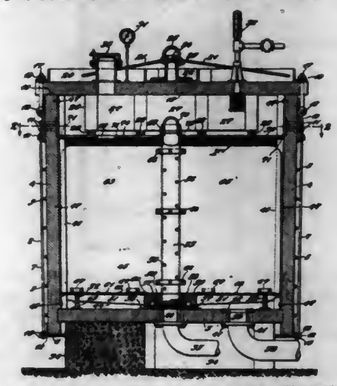
1. A surgical knife comprising an integral handle having a socket in the body thereof adjacent to one end, a replaceable blade having a shank formed with an enlargement to fit the socket, thereby anchoring the blade longitudinally and constituting a defined fulcrum point for the blade in the handle, a rigid jaw supporting the blade for more than half its entire length, and a spring jaw substantially shorter than the rigid jaw for maintaining the blade in engagement with the rigid jaw.

1,813,783. SAW TABLE. WILLIAM A. TOMLINSON and HOWELL B. BEARDEN, Phoenix, Ariz. Filed Dec. 5, 1928 Serial No. 323,978. 1 Claim. (Cl. 143—47.)



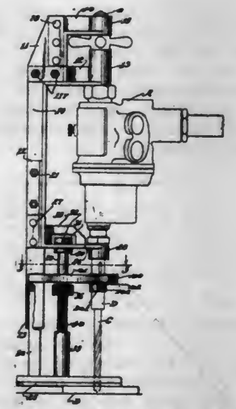
In a saw table, a supporting structure having a top with a slot therein, laterally spaced longitudinally extending tubular tracks mounted on said structure below said top, said tracks being slotted longitudinally on their lower faces, a saw carriage having upstanding roller carried hangers mounted in said tracks with the shanks of the hangers operating in said slots, a lever and link mechanism directly connected with said carriage, a foot pedal connected to actuate said mechanism to move the carriage in one direction, and a coiled spring connected with said mechanism and with the structure to move the carriage in the opposite direction when the pedal is released.

1,813,784. DYEING MACHINE. WILLIAM A. TRAVER, Providence, and JOHN M. WOOD, Pawtucket, R. I., assignors to Franklin Process Company, Providence, R. I., a Corporation of Rhode Island. Filed July 27, 1929. Serial No. 381,505. 12 Claims. (Cl. 8—18.)



1. In an apparatus for dyeing and otherwise treating fibrous materials, the combination of a closed vessel having an intake-opening in its bottom for admitting fluid under pressure, a removable carrier for holding the material within the vessel comprising a vertical standpipe open at its upper end and arranged with its lower end in communication with the intake-opening in the vessel, means for supporting the material packed around the standpipe, and a connection between the lower end of the standpipe and the intake-opening adapted to be sealed by the hydraulic pressure of the fluid flowing through the standpipe and acting against the top of the mass of material held on the carrier.

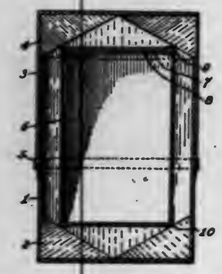
1,813,785. ATTACHMENT FOR DRILLING MACHINES OR DRILLS. CHARLES WEBER, Pearson, Wash. Filed June 30, 1928. Serial No. 289,335. 2 Claims. (Cl. 77—7.)



1. A drilling machine attachment, including a base, an adjustable drill support rising from said base and

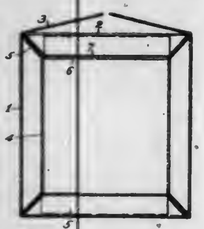
movable with respect thereto, said support including at its upper extremity, a pair of vertically adjustable sleeves adapted to receive the feed screw of a drill therethrough and to receive the feed wheel of the screw therebetween to support the drill, said base including a post adapted to receive the lower end of the support thereover in telescopic relation, and means associated with said base for automatically lowering said support and drill in response to rotation of the drill chuck.

1,813,786. INSULATED CASE. MELVIN L. WEBSTER, Independence, Iowa. Filed Aug. 5, 1929. Serial No. 383,505. 3 Claims. (Cl. 229—14.)



1. An insulated shipping case, comprising in combination, rectangularly cupped telescoping members having inner sloping corner truncating spacers, and an inner rectangular container removably engaged at each end corner only with said spacers to provide an open interspace about the container except at single corner points only of contact with the spacers.

1,813,787. HEAT INSULATING CASE. MELVIN L. WEBSTER, Independence, Iowa. Filed Sept. 30, 1929. Serial No. 396,198. 4 Claims. (Cl. 229—14.)

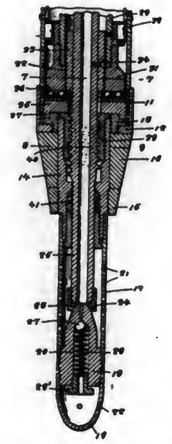


1. A heat insulated receptacle, comprising in combination, an outer case having an open upper end and a closure therefor, and an inner case having an open end and a closure therefor, the inner case having wall projections releasably engaging the inner walls of the outer case to provide an uninterrupted dead air space all around the side parts of the inner case, and separated dead air spaces at the end parts of the case.

1,813,788. LIVER EXTRACT FOR SECONDARY ANEMIA AND PROCESS OF MAKING IT. GEORGE B. WALDEN, Southport, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 10, 1930. Serial No. 487,907. 8 Claims. (Cl. 167—74.)

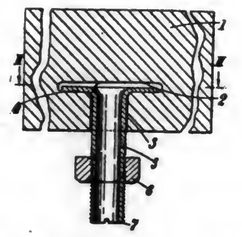
1. The method of producing from glands of the class which comprises the liver and the kidney a concentrated substance capable of producing beneficial effects in the treatment of certain secondary anemias, which consists in extracting the gland with hot slightly acid water of between pH 5 and pH 6, removing the extract from the residue and concentrating it, mixing alcohol with the concentrated extract to produce an alcohol concentration of between 50% and 75% and thus obtaining a precipitate, and separating and preserving the precipitate thus obtained.

1,813,789. TESTING ATTACHMENT FOR DRILLS. THOMAS J. WHITE, Fordyce, Ark. Filed Apr. 5, 1929. Serial No. 352,829. 6 Claims. (Cl. 166—1.)



1. In a well testing device, a tubular member adapted to have one of its ends connected with the lower end of a drill stem, a hollow rotatable valve stem extending through said member and having an opening at its lower end surrounded by a valve seat, a relatively stationary valve member positioned for engagement by said seat, and means to move the seat with respect to the valve member when the stem is rotated.

1,813,790. FURNACE LINING. HENRY WILLIAM WILDISH, Gosport, England. Filed Apr. 26, 1928, Serial No. 273,028, and in Great Britain July 2, 1927. 7 Claims. (Cl. 72—101.)

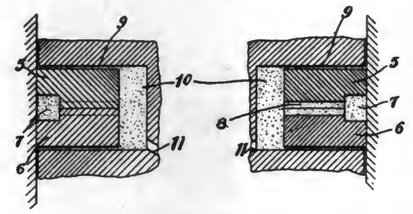


1. In a furnace, a furnace casing, a substantially rectangular lining brick formed with an undercut cavity, communicating with the face of the brick, adjacent said casing by a passage of reduced cross-section, but internally closed to the remaining faces of said brick, and a bolt passing through said casing and said passage and anchored within said cavity to clamp said brick to said casing whereby said bolt is insulated from the heat of the furnace.

1,813,791. PISTON RING. WILLIAM WUERFEL, Philadelphia, Pa., assignor to Wilkening Manufacturing Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 28, 1930. Serial No. 456,350. 6 Claims. (Cl. 74—109.)

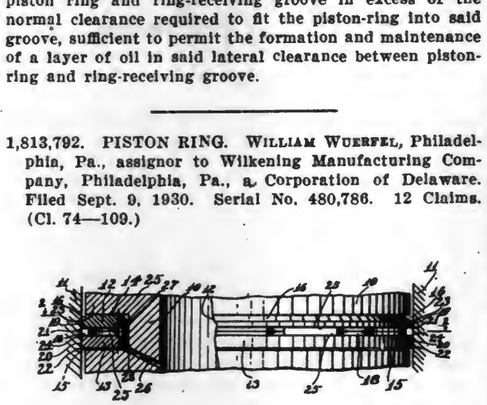
1. The combination with a cylinder and a piston adapted to travel therein, the latter having an annular ring-

receiving groove therein, the defining walls of which are integral with each other, of an axially divided multi-piece, split, annular cast iron piston-ring having an outer annular oil-collector groove in the outer cylindrical surface thereof, divided between the several annular ring members comprising said piston-ring, a plurality of generally radial oil passageways, distributed over the periphery of the ring, extending from said outer annular oil-collector groove through the piston-ring, into an oil chamber formed between the inner peripheral surface



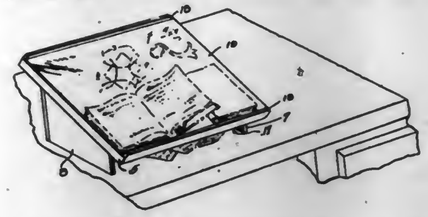
of the piston-ring and the inner wall of the ring-receiving groove; the dimensions of said radial passageways in a direction parallel to the periphery of the ring being greater than their dimensions in a direction parallel to the axis of the ring, and lateral or axial clearance between piston ring and ring-receiving groove in excess of the normal clearance required to fit the piston-ring into said groove, sufficient to permit the formation and maintenance of a layer of oil in said lateral clearance between piston-ring and ring-receiving groove.

1,813,792. PISTON RING. WILLIAM WUERFEL, Philadelphia, Pa., assignor to Wilkening Manufacturing Company, Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 9, 1930. Serial No. 480,786. 12 Claims. (Cl. 74—109.)



1. The combination with a cylinder, of a piston adapted to travel therein, having an annular ring-receiving groove, the defining walls of which are integral with each other, and of an axially divided multi-piece, split, annular metallic piston-ring having an outer annular oil-collector groove in the outer cylindrical surface thereof, a plurality of peripherally distributed generally radial oil passageways, extending from said outer annular oil-collector groove through the piston-ring, into an oil chamber formed between the inner peripheral surface of the piston-ring and the inner wall of the ring-receiving groove; the dimensions of said radial passageways in a direction generally parallel to the periphery of the ring being greater than their dimensions in a direction generally parallel to the axis of the ring, and lateral or axial clearance between piston ring and ring-receiving groove in excess of the normal clearance required to fit the piston-ring into said groove, sufficient to permit the formation and maintenance of a layer of oil in said lateral clearance between piston-ring and ring-receiving groove;—each of said ring members having an outer side-seating surface for side-seating engagement with the respective side-walls of the ring-receiving groove, and the effective area of one of said two side-seating surfaces being substantially less than the effective area of the other of said side-seating surfaces.

1,813,793. PULPIT DESK. CARL C. BULLOCK, Aliquippa, Pa. Filed May 3, 1930. Serial No. 449,570. 3 Claims. (Cl. 45—57.)



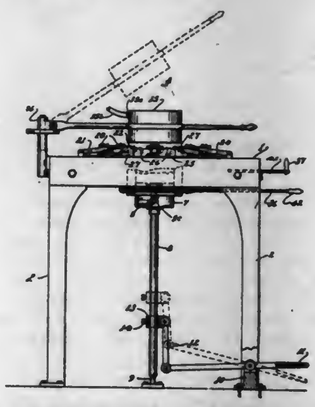
1. A pulpit or the like comprising a top inclined surface having side and rear walls thereby to provide a concealed chamber in which notes may be placed, said side and end walls being foldable one above the other and in a position parallel to the top surface, and securing means for holding said side and end walls either closed or erected as desired.

1,813,794. CONVEYER SYSTEM. JOHN PERCIVAL BUNCH, London, England, assignor to Baker Perkins Co. Inc., Saginaw, Mich., a Corporation of New York. Filed Aug. 18, 1927, Serial No. 213,911, and in Great Britain Sept. 8, 1926. 15 Claims. (Cl. 198—155.)



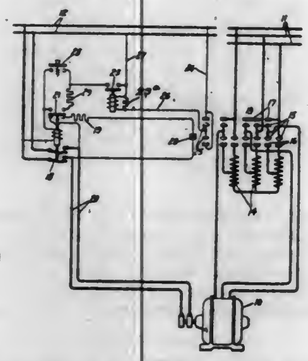
1. A conveyer system comprising in combination an endless connected series of receiving devices each containing a plurality of superposed receiving compartments, means for connecting said series adapted to permit of independent movements of the several receiving devices, said movements having a component perpendicular to the general line of travel of said connected series, and means for giving travel movement to the series; together with a casing having a plurality of receiving and discharging openings parallel to the direction of travel movement, and a track in said chamber adapted to position the compartments of said receiving devices severally with respect to said openings.

1,813,795. HAT BLOCKING MACHINE. PETER DE SIMONE, Brooklyn, N. Y. Filed Aug. 9, 1929. Serial No. 384,535. 11 Claims. (Cl. 223—31.)



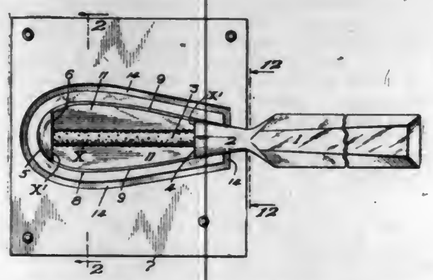
1. In a hat blocking machine, in combination, a hat-block, brim stretching means, and a sectional flexible expanding device for centering the hat carried by said brim stretching means.

1,813,796. CONTROL SYSTEM. ALFRED C. FINNEY, Upper Darby, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 30, 1928. Serial No. 322,627. 5 Claims. (Cl. 172—280.)



2. The combination with a synchronous motor having armature and field windings, of means for connecting said field windings in a local circuit, means for establishing starting connections to said armature windings of said motor and means for opening said local circuit in response to the establishment of said starting connections.

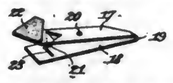
1,813,797. METHOD OF MAKING RUBBER-HANDLED TOOLS. WILLIAM VINCENT FOLEY, New Haven, Conn., assignor of one-half to Edward S. Beach, Ridgefield, Conn. Filed Apr. 27, 1928. Serial No. 273,212. 3 Claims. (Cl. 18—59.)



1. The herein described method of making rubber handled tools, consisting in inserting veneers of a curable relatively hard rubber compound into the cavity of each of a plurality of complementary molds in which the cavity has a butt-end portion and an opening at the other end; placing within each veneer lining a complementary core-forming member of curable rubber compound softer than the veneer compound, bringing the charged complementary molds together with a metal bar between them having a shank fitting the said openings of said molds, said bar being located between the complementary core-forming members; compressing the charged molds together so that the material of the core-forming members is displaced by said bar and the members are caused to surround said bar and to be brought into contact with one another, while displacing and then compressing the material of the core members solidly onto and around said bar; and curing the rubber under compression in the molds.

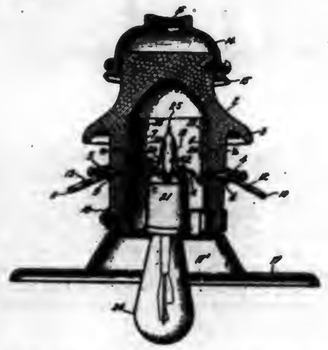
1,813,798. RETAINER FOR SHINGLES. ANTHONY GEROSA, New York, N. Y. Filed Jan. 25, 1930. Serial No. 423,384. 3 Claims. (Cl. 108—33.)

1. A shingle retainer comprising a pair of substantially flat members suitably united at one end and adapted to overlie the opposite sides of a shingle, said members having provision at their free ends for impaling the shingle



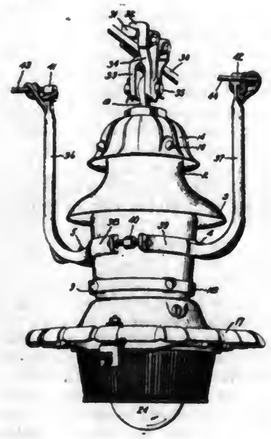
and also for engaging each other to secure the retainer in place on the shingle, and one of said members having a shingle engaging hook on one end.

1,813,799. FIXTURE FOR ELECTRIC LAMPS. CROMWELL A. B. HALVORSON, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 17, 1928. Serial No. 320,141. 5 Claims. (Cl. 173—328.)



1. In a lighting fixture, the combination of a casing, terminals in the casing each comprising an arm which extends along the inner wall of the casing and an arm which projects at an angle thereto toward the center of the casing, said first-named arms being adjustable along the wall of the casing, spring contacts carried by the ends of said angularly projecting arms, and binding posts which extend through the casing and engage said first-named arms to hold the terminals in adjusted position and to make electrical contact therewith.

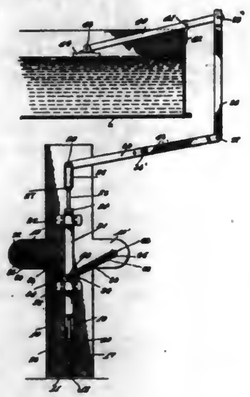
1,813,800. HIGHWAY LIGHTING FIXTURE. CROMWELL A. B. HALVORSON, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 29, 1929. Serial No. 366,981. 3 Claims. (Cl. 240—63.)



1. The combination with an electric light unit which is hingedly hung from a support, said unit having a body

formed of insulating material of means for supporting the line conductors therefor, said means comprising L-shaped holders adapted to be mounted, one at each side of said housing, co-acting clamping means carried by the horizontal portions of said holders, adapted to engage the body of said housing at its center, and clamp it between them, the vertical portions of said holders having their free ends spaced apart and in alignment with the horizontal axis of said hinged support.

1,813,801. ELECTRIC SWITCH. RICHARD H. HAYNES, Sealy, Tex. Filed Mar. 30, 1928. Serial No. 266,006. 1 Claim. (Cl. 74—14.)



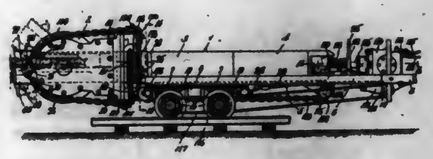
A snap mechanism comprising a base, spaced guides mounted on said base, an elongated member mounted for endwise movement in said guides, laterally extending rods disposed at opposite sides of said elongated member and having adjacent ends thereof apertured and overlapped, a single pivot engaged in the said apertures and connecting the overlapped ends of said rods to said elongated member, said pivot being carried by said elongated member at a point thereon substantially midway between said guides, pins rising from said base at opposite sides of said elongated member, bifurcations formed in the outer ends of said rods and engaged with said pins, and coiled springs carried on said rods between said pivot and said pins.

1,813,802. ANNEALING MAGNETIC PUNCHINGS. LEE E. HILDEBRAND, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 21, 1929. Serial No. 408,891. 6 Claims. (Cl. 148—13.)



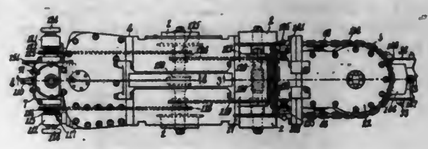
1. The method of fabricating a dynamo electric machine from magnetic laminæ having a yoke portion and teeth extending therefrom which comprises assembling said laminæ in superimposed relation and locally heating the end portions of said teeth which comprise the air gap surface of said dynamo electric machine to annealing temperature without substantially heating the yoke portion of said laminæ.

1,813,803. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 8, 1926, Serial No. 140,865. Renewed May 23, 1930. 111 Claims. (Cl. 262—28.)



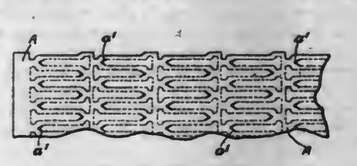
1. In a mining machine, the combination of a body, a cutter carrying head rotatably mounted on said body and having a kerf cutting cutter bar mounted thereon, a motor in said body, and means driven by said motor for rotating said head to change the plane of operation of said bar comprising a rotatable member and a flexible transmission element cooperating therewith and operatvely connected to said head.

1,813,804. MINING APPARATUS. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Jan. 11, 1929. Serial No. 331,839. 77 Claims. (Cl. 262—28.)



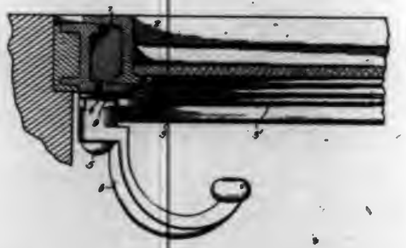
1. In a mining apparatus, the combination of a body, a cutter carrying head rotatably mounted on said body and having a pivoted cutter bar mounted thereon, a motor in said body, and mechanism driven by said motor for swinging said bar about its pivot relative to said head in any adjusted position of the latter about its axis comprising a power transmitting member rotatable relative to said head and surrounding the head axis, said member having an annular bearing portion and said head having a circular external peripheral portion which said annular bearing portion surrounds, and operative connections between said rotatable member and said cutting bar for transmitting a swinging force from the former to the latter.

1,813,805. MANUFACTURE FROM SHEET METAL OF POINTED FASTENING DEVICES. FRANK HUMPHRIS, Parkstone, England. Filed Dec. 20, 1928, Serial No. 327,412, and in Great Britain Dec. 21, 1927. 3 Claims. (Cl. 10—33.)



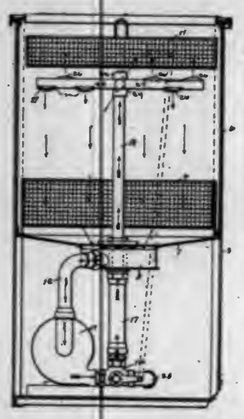
1. Sheet material prepared for use in the manufacture of pointed fastening devices by means of a press and having a number of slits formed therein in rows extending both longitudinally and transversely of the sheet, the said slits being respectively limited in shape and position to the point parts only of fastening devices to be formed from the sheet.

1,813,806. CASEMENT WINDOW. KARL F. JOSS, Washington, D. C., assignor to Crittall Casement Window Company, Detroit, Mich., a Corporation of Michigan. Filed May 3, 1930. Serial No. 449,615. 2 Claims. (Cl. 189—69.)



1. In a combined casement window and channel frame screen fixed to the casement frame, a latch pivoted to the casement frame, and a keeper fixed to the sash frame and projecting into the screen frame, said screen frame having a slot therein through which the dog of the latch operates, said dog having a form to substantially close the slot in all positions of the latch.

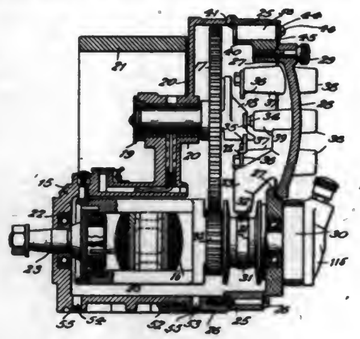
1,813,807. WASHING MACHINE. WARD E. KETTERING and ALEXANDER B. HILL, Jr., San Francisco, Calif. Filed July 12, 1929. Serial No. 377,864. 1 Claim. (Cl. 299—69.)



In a spraying device for washing machines, a hollow head constructed to be mounted for rotation, conduit arms formed with said head and being in communication therewith, said arms being formed with nozzles extending at a lateral inclination therefrom and arranged upon opposite sides thereof, said nozzles being disposed on the upper and lower surfaces of the arms, and the upwardly disposed nozzles discharge liquid in a rearward direction while the downwardly directed nozzles discharge liquid in a forward direction with respect to the direction of rotation of the arms.

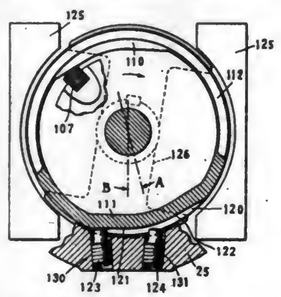
1,813,808. MAGNETO VENTILATION. GEORGE F. KUEHN, Jackson Heights, N. Y., assignor to Eisemann Magneto Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1929. Serial No. 415,283. 13 Claims. (Cl. 123—149.)

1. A magneto having an inclosing casing forming a distributor chamber and a coil chamber below but in communication therewith, openings located to form inlet and outlet means between said distributor chamber and the



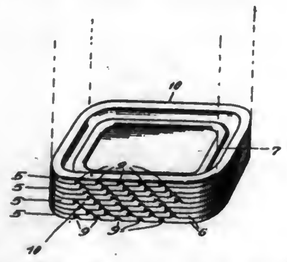
outside, air filtering means for said inlet openings, and outlet openings through said casing from said coil chamber.

1,813,809. MAGNETO BREAKER ADJUSTMENT. GEORGE F. KUEHN, Jackson Heights, N. Y., assignor to Eisemann Magneto Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1929. Serial No. 415,284. 14 Claims. (Cl. 123—149.)



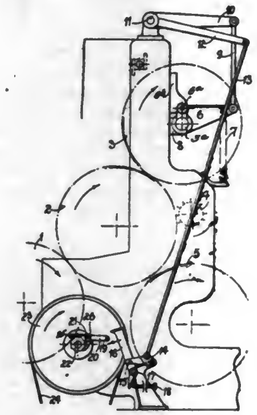
1. In a magneto, a casing, a rotatable breaker mechanism and a member mounted on said casing to form a ring housing for said mechanism, said member having a cam on its inner surface for actuating said breaker mechanism and having a movement between limits to vary the point of actuation of the breaker mechanism and means adjustable to change the limits of the movement of said member.

1,813,810. CAN END. CHARLES D. MCDONALD and BERT A. DEISCH, Chicago, Ill., assignors to McDonald Machine Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 24, 1928. Serial No. 321,539. 1 Claim. (Cl. 220—97.)



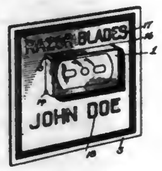
A metal can end having a central depression with a horizontal flange and a depending lip at the outer edge thereof forming therebetween a channel for sealing material, said lip being of uniform depth throughout its peripheral edge and having a series of spaced inwardly bent portions adjacent its edge forming a support for the can ends when nested one on the other.

1,813,811. SAFETY STOP FOR CIGARETTE MACHINES. WALTER EVERETT MOLINS, London, England. Filed Jan. 29, 1929, Serial No. 335,817, and in Great Britain Feb. 3, 1928. 7 Claims. (Cl. 192—125.)



1. In a tobacco feeding apparatus for use on a cigarette making machine, the combination with a combing roller, of a cooperating brushing roller, and supporting means for said brushing roller yieldably urging the latter into close proximity to the combing roller, whereby a foreign body in the tobacco passing between the combing roller and the brushing roller will cause the latter to move away from the combing roller against the action of said means to prevent damage to the rollers.

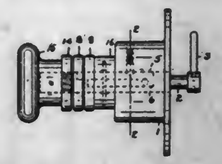
1,813,812. DISPLAY CARD. HENRY H. MOLKENTHIN, Glen Ridge, N. J., assignor to International Safety Razor Corp., Bloomfield, N. J., a Corporation of New Jersey. Filed Dec. 21, 1929. Serial No. 415,679. 1 Claim. (Cl. 206—79.)



A card for supporting a box having folded end flanges formed with pressed-out tongues, one of said tongues being shaped to have a substantially vertical part thereof folded across the end of said box, and a substantially horizontal part forced into the box between the flange and the top of the box, the last-mentioned part of the tongue having a transverse bend for frictionally engaging the top of the box and preventing displacement of the tongue.

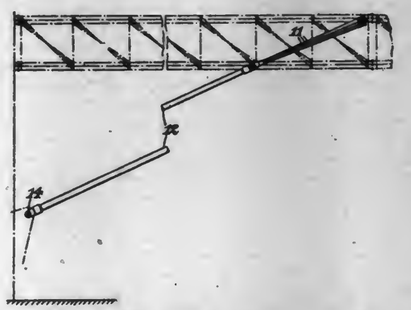
1,813,813. COMBINATION KNOB LOCK. HENRY L. MUNSON, Fort Wayne, Ind. Filed Jan. 18, 1930. Serial No. 421,614. 3 Claims. (Cl. 70—53.)

1. A device of the class described comprising a base adapted to be fixed, a revoluble bolt extending through the base, a knob on one end of the bolt, a locking member connected to the opposite end of the bolt and means to lock the bolt to the base including a plurality of tumblers



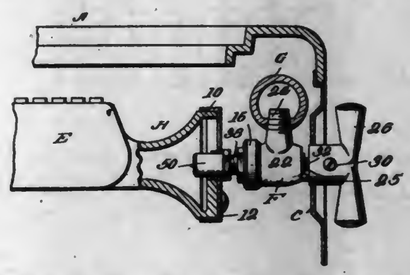
in the base, movable members mounted in the bolt and adapted to engage the tumblers and revoluble members on the bolt engaging the movable members and adapted to be selectively operated to move the movable members.

1,813,814. AIRCRAFT STRUCTURE. HAROLD JOHN POLLARD, Bristol, England, assignor to The Bristol Aeroplane Company Limited, Bristol, England, a British Company. Filed Feb. 19, 1930, Serial No. 429,716, and in Great Britain Feb. 21, 1929. 3 Claims. (Cl. 244—31.)



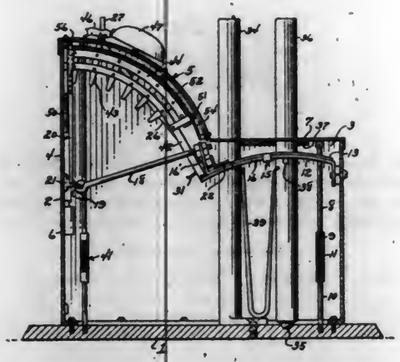
1. A strut for supporting an aircraft structure from without comprising an external part, and a plurality of internal parts all engaging the external part within the structure and connected to the interior of the structure at distributed points.

1,813,815. GAS COCK FOR RANGES. MINARD A. POSSONS, Cleveland, Ohio, assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Original application filed Nov. 13, 1928, Serial No. 319,108. Divided and this application filed Oct. 30, 1929. Serial No. 403,544. 3 Claims. (Cl. 251—112.)



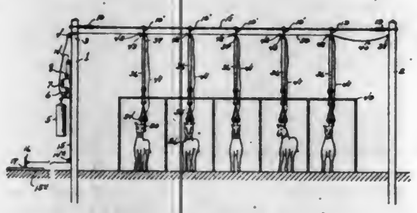
1. A valve of the oscillating type, comprising a housing, a valve plug in said housing, an inlet at the side of the housing and at the side of the plug, a longitudinal opening in the plug for the passage outward of gas therethrough, a cap comprising a nipple closing the outlet end of the housing and means to oscillate said plug for opening and closing the valve.

1,813,816. GRIP TESTING MACHINE. GEORGE MONROE RAMSEY, Amarillo, Tex. Filed Dec. 26, 1928. Serial No. 328,404. 1 Claim. (Cl. 265—22.)



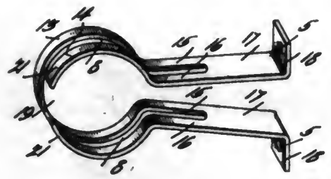
In a grip testing machine, a casing having a fixed handle and a movable handle which is spring influenced away from the fixed handle, a plate carried by the movable handle, a substantially U-shaped bail journaled in the casing for rotation and having a cranked portion, adjustable means connecting the plate with the said cranked portion, a pivotally supported spring influenced detent on one of the arms of the bail, a fixed plate in the casing, fingers pivoted to said fixed plate in the path of contact with the detent, one of said fingers being longer than the remaining fingers and carrying a contact element, a bell on the casing engageable with said element, a movable spring influenced plate to which the fingers are pivoted, said casing carrying a scale, and a finger carried by the second arm of the bail and movable over the scale as the bail is rotated when the movable handle is swung toward the stationary handle to impart a sliding movement to the plate on said movable handle.

1,813,817. MACHINE FOR THE PURPOSE OF HOLDING AND RELEASING ANIMALS IN VARIOUS CONTESTS OF SPEED. CHARLES HENRY REDFERN, St. Louis, Mo. Filed Sept. 12, 1927. Serial No. 219,050. 4 Claims. (Cl. 119—15.5.)



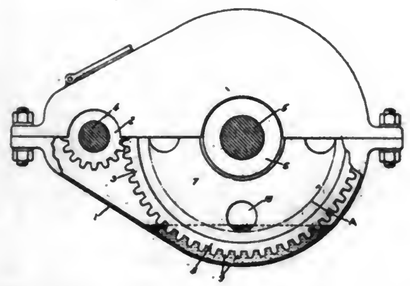
1. In combination, spaced posts, a suspension rod between the same and spaced above the ground, pendent rings spaced apart on said rod, a cable connected with one post and movable relative to the other post and also movable through said rings, gravitational means connected to said cable and adapted when released and permitted to gravitate to suddenly pull the cable through the rings, means for holding and releasing said gravitational means, latches connected with and pendent from said rings and having straps connected at one end to the latches and also having spring-influenced bolts for detachably holding the opposite ends of the straps, and cables connected to the first-named cable and to said bolts and movable through said rings.

1,813,818. SELF ADJUSTABLE TOWEL BAR BRACKET. EDWIN REYNOLDS, Vineland, N. J. Filed Oct. 21, 1930. Serial No. 490,216. 13 Claims. (Cl. 248—20.)



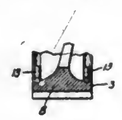
4. In a sheet metal towel bar bracket having two towel bar holding heads, spaced horizontally apart by longitudinal slots and side by side, each head having a separate pair of parallel arms for supporting same, said pairs of arms being spaced apart and side by side, and each pair of arms being integral with a relative pair of wider fastening plate arms, and the said fastening plate arms having apertured supporting plates for mounting same.

1,813,819. GEAR WHEEL. AUBREY A. ROSS, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 27, 1927. Serial No. 187,070. 2 Claims. (Cl. 74—28.)



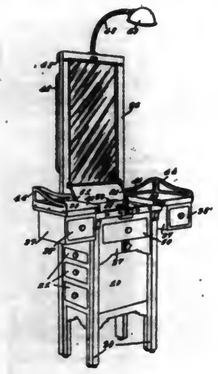
1. The combination of a casing, a gear wheel which runs therein, said gear wheel being provided with walls which form an open, inwardly-facing pocket, and lubricant in the casing which fills the casing normally to a point above the level of the pocket whereby when the gear wheel is running, the pocket becomes filled with lubricant so as to render the gear wheel non-resonant.

1,813,820. GEAR WHEEL AND THE LIKE. AUBREY A. ROSS, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 5, 1930. Serial No. 433,453. 7 Claims. (Cl. 74—28.)



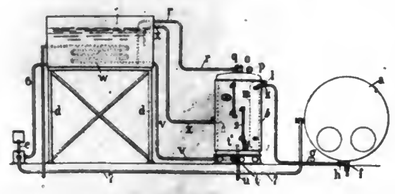
1. The combination with a resonant metallic body having a groove, of a metallic member having a period of vibration different from that of said body inserted in said groove and held therein without being rigidly and integrally attached to said body whereby it may function to absorb vibration in said body by impact.

1,813,821. COMBINATION DRESSER AND MANICURE TABLE. HARRY RUEBSAHM, San Antonio, Tex. Filed Aug. 11, 1930. Serial No. 474,481. 3 Claims. (Cl. 45—5.)



1. A convertible article of furniture comprising a cabinet, a top hingedly mounted thereon having a mirror upon one side thereof, a support having lazy tong connections with the top in order to sustain the latter in horizontal working position, side tables hingedly mounted upon the cabinet, a latch connection established between each table and the support and means for releasing the latch upon extending the support.

1,813,822. SLUDGE REMOVER. VADIM VLADIMIROVITCH SAKS, London, England, assignor of one-half to Filtrators, Limited, London, England. Filed May 24, 1928, Serial No. 280,350, and in Great Britain June 22, 1927. 4 Claims. (Cl. 122—397.)

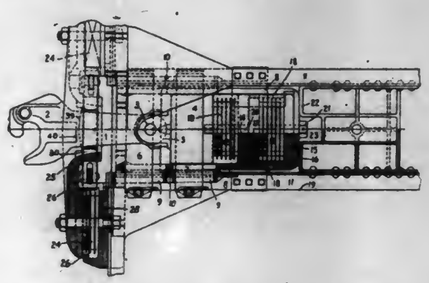


1. An apparatus for the automatic control of the density of boiler water and for its clarification, during the use of a steam generator comprising in combination, a completely closed and heat insulated vessel in continuous communication with a steam generator, the steam generator, a pipe by which the communication is maintained between them, the said pipe being at one end connected to the steam generator at a position at which the boiler water sludge is accessible, and at its opposite end to the said vessel at a position other than at the lower part thereof, a sludge and water outlet pipe at the lower part of the said vessel, means for controlling the outlet therethrough, a relief valve at the upper part of the said vessel, the said relief valve being adapted to release steam from within the said vessel and to maintain a determined maximum pressure of steam within the said vessel, a feed water tank for the said steam generator, a pipe communicating between the said relief valve and the said feed water tank, and adapted to convey steam from the said vessel to the said feed water tank, and a water outlet pipe communicating from a position above the bottom of the said vessel and between the said vessel and the said feed water tank, substantially as hereinbefore described.

1,813,823. PROCESS FOR FINISHING APPLIED LACQUER. JULIUS SNUKISKIS, Philadelphia, Pa. Filed May 31, 1930. Serial No. 458,933. 1 Claim. (Cl. 91—68.)

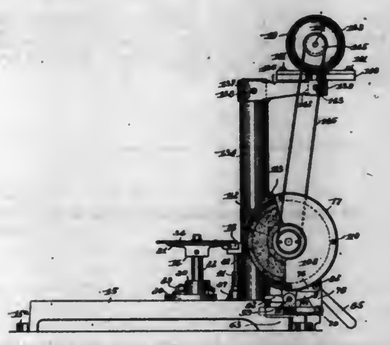
A process for rubbing a lacquer coat consisting in rubbing the lacquer with sand paper attached to a rubbing woolen block, first dipping it in oil and pumice stone and rubbing the surface until the orange peel is removed, then detaching the sand paper and rubbing the surface with the woolen block dipped in oil and pumice stone until the sand paper scratches are removed, rubbing with burlap dipped in oil and pumice stone, procuring a glass-like smoothness known as a dull finish, then rubbing the dull finish with rotten stone and cheese cloth until very smooth and finally polishing until a mirror-like very high lustre is obtained.

1,813,824. CENTRAL BUFFING AND DRAW-GEAR. ALEXANDER SPENCER and RICHARD THOMSON GLASCODINE, London, England. Filed Oct. 22, 1929. Serial No. 401,517, and in Great Britain Sept. 12, 1929. 4 Claims. (Cl. 213—21.)



1. In central buffing and draw gear, a coupler head having a shank, india-rubber buffing springs located in front of the vehicle headstock, a movable member for compressing said front buffer springs upon inward movement of said coupler head, and means, carried by said movable member, for centralizing said buffer head.

1,813,825. MACHINE FOR GRINDING SAWS. EMANUEL STAUDER, Rochester, N. Y., assignor to Huther Brothers Saw Mfg. Co., Rochester, N. Y., a Corporation of New York. Filed Oct. 12, 1927. Serial No. 225,831. 24 Claims. (Cl. 76—40.)

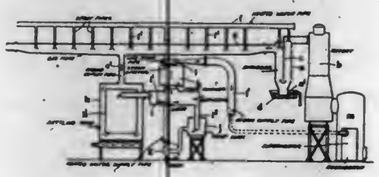


1. In a saw grinding device, a saw support, a frame adjacent said support, said frame being mounted to swing about a vertical and a horizontal axis, a grinding wheel,

a member on which the wheel is fixed, said member being rotatably and slidably mounted on said frame, and means including a manually operable member for controlling the swinging movement of said frame about said axes so as to present said wheel in proper relation to a saw on said support.

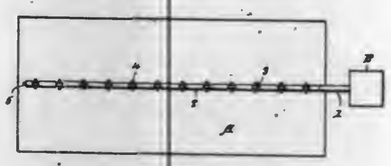
5. In a device of the class described, a saw support adapted to carry a circular saw for rotary adjustment thereon, an indexing mechanism adjacent said saw support for cooperation with a saw thereon, said mechanism comprising a head adapted to support the saw, a detent comprising yieldable arm adapted to engage a tooth of said saw slidably mounted on said head, the detent being displaced by one tooth for automatic engagement with another, means for controlling the movement of said detent on said head and an upstanding shaft on the base adjustable vertically thereon, said head being adjustable about the axis of the shaft.

1,813,826. APPARATUS FOR THE DISTILLATION OF SOLID CARBONACEOUS SUBSTANCES. EDGAR ROUSE SUTCLIFFE, Leigh, England. Filed Sept. 23, 1926, Serial No. 137,316, and in Great Britain Sept. 28, 1925. 1 Claim. (Cl. 202—99.)



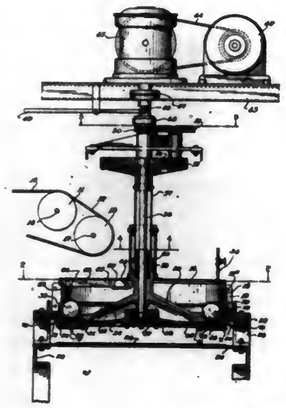
Apparatus for the distillation of a solid carbonizable substance comprising in combination a retort, a scrubber, a gas main, the said gas main being adapted for use as a scrubber, an evaporator separate from the said scrubber, a superheater, and means for their connection in series, the said means being adapted for the admission into the retort of superheated steam from the superheater, for the admission into the scrubber of a mixture of gas, vapour and steam from the retort for admission into the main of gas from the scrubber, for the admission into the evaporator of hot water from the main, and for the re-circulation of part of the hot water back from the evaporator to the main, and for the admission into the superheater of the steam from the evaporator, substantially as hereinbefore described.

1,813,827. METHOD OF TREATING BATHING POOLS WITH CHLORINE. CLAIR V. SWEARINGEN, Chattanooga, Tenn. Filed Oct. 24, 1930. Serial No. 491,004. 4 Claims. (Cl. 210—11.)



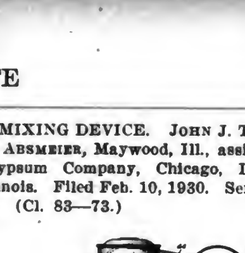
1. Means for treating the water in a pool or basin with a purifying medium, comprising a hose placed in the pool or basin and consisting of a plurality of sections, nipples connecting the sections together and a transversely extending nozzle connected with each nipple.

1,813,828. MIXING DEVICE. JOHN J. TURNER, Chicago, and CARL ABSMEIER, Maywood, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 10, 1930. Serial No. 427,100. 7 Claims. (Cl. 83—73.)



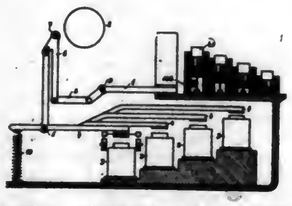
1. In a mixing device, a mixing container, a rotary mixing element having mixing surfaces, scraping means closely adjacent to said rotor and adapted to move relative to said rotary element, and balls arranged around the periphery of said mixing element to aid in the mixing of material in said container.

1,813,829. STORAGE BATTERY TERMINAL CONNECTER. MICHAEL VACCARO, Port Chester, N. Y. Filed Aug. 21, 1929. Serial No. 387,502. 2 Claims. (Cl. 173—259.)



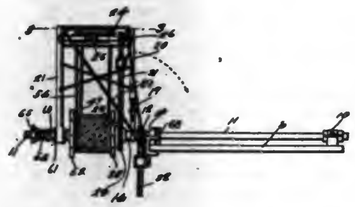
1. As a new product of manufacture, a connecter including a longitudinally bowed channel-shaped member having its flanges formed with curvate edge portions cooperable with a battery post, and a socket at one end of said channel-shaped member adapted for anchorage of a conductor.

1,813,830. CALCULATING MACHINE. BERNHARD WEINER, Prague-Dejvice, Czechoslovakia. Filed Nov. 7, 1924, Serial No. 748,439, and in Germany Nov. 7, 1923. 18 Claims. (Cl. 235—60.)



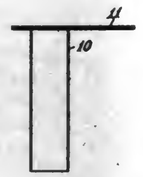
3. An electrical calculating and typewriting machine, comprising a plurality of writing mechanisms, a keyboard, a number of groups of relays and a number of auxiliary relays, wherein in the keyboard, a calculation key is provided for each kind of calculation which closes circuits through the windings of said auxiliary relays to transfer numbers between the groups of main relays.

1,813,831. WIRE REELING APPARATUS. ALBERT HERMAN WILLIAM WESSLER, Arenzville, Ill. Filed June 7, 1929. Serial No. 369,188. 2 Claims. (Cl. 242—91.)



1. A wire winding apparatus comprising a shaft, a removable reel slidably and rotatably mounted on the shaft, an eccentrically mounted disc provided with a grooved periphery, drive means for the disc, a rockable arm, spring means for normally maintaining one end of the arm disposed within the groove of the disc, the opposite end of the arm being disposed angularly and provided at its free end with means for guiding wire onto the reel, a frame slidable on said shaft and composed of relatively fixed and movable section, the said movable section carrying the said disk and rockable arm and being adapted when engaged with the shaft to bridge tue said reel and being movable, when released from the shaft, to clear the reel to permit removal of same from the shaft.

1,813,832. MUSICAL ELEMENT. HERMAN E. WINTERHOFF, Indianapolis, Ind., assignor to Leedy Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Dec. 4, 1929. Serial No. 411,535. 12 Claims. (Cl. 84—410.)

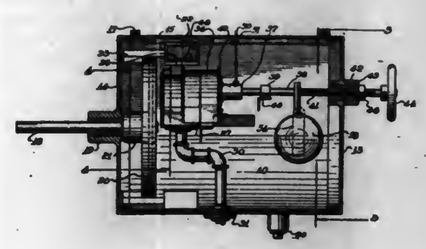


1. A musical instrument of the percussion type composed of a tube and a bar each of resonant material and rigidly directly connected so as to vibrate as a unit under percussion, said bar being so proportioned as to its percussion pitch, relative to the resonator pitch and percussion pitch of the tube, that the percussion pitch of the unit will be the same as the resonator pitch of the tube.

1,813,833. PROCESS OF TREATING TOBACCO. CLARENCE W. ANDREWS, Burlington, N. C. Filed Apr. 5, 1930. Serial No. 442,040. 5 Claims. (Cl. 131—55.)

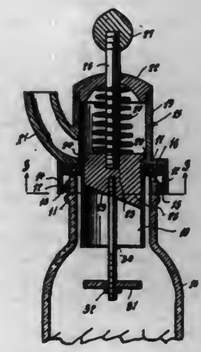
1. A process of treating tobacco comprising subjecting tobacco leaves to the action of water vapor, extracting liquid from said tobacco leaves, boiling the extracted liquid and permitting said liquid to separate into layers, and thereafter retreating tobacco leaves with an intermediate layer of the extracted liquid.

1,813,834. LIQUID MEASURING APPARATUS. BERNARD T. BALLARD and FRED J. GOUGH, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 30, 1930. Serial No. 424,626. 1 Claim. (Cl. 221—95.)



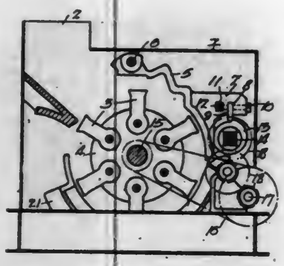
In a liquid measuring apparatus, a container for liquid to be measured, a series of dippers adapted to rotate and dip liquid from said container, and then discharge the liquid from said dippers, a tray for receiving a portion of the discharge of liquid from said dippers, a shield slidably mounted above said tray, a knife edge associated with said shield, the knife edge being adapted to split the stream flowing from said dippers and thus cause a portion of said liquid to be discharged into said tray and the other portion of said liquid to be returned to the container, and means for accurately adjusting the position of said shield relative to said dippers, so as to vary the amount of liquid flowing from said container.

1,813,835. POWDER DISPENSER. DON M. BATES and HARRY W. COBURN, Huntington, W. Va. Filed Aug. 16, 1929. Serial No. 386,269. 1 Claim. (Cl. 221—61.)



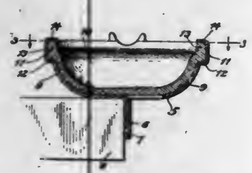
A dispenser attachment of the class described, comprising a body, said body including an annular horizontally disposed wall provided with means to attach it to a bottle or the like, cylinders on opposite sides of said wall and of different dimensions providing a shoulder, one of said cylinders provided with a discharge opening, the other cylinder being adapted to receive material, a valve operable in the cylinders and having an annular flange adapted to seat on said shoulder, a cut-off valve carried by the first mentioned valve and movable into one of the cylinders, a stem extending from the first mentioned valve, and a spring surrounding said stem and urging the first mentioned valve into engagement with the shoulder.

1,813,836. HAMMER CRUSHER. WILLIAM A. BATTEY, Haverford, and JAMES E. STINE, Aldan, Pa., and GEORGE W. BORTON, New Lisbon, N. J., assignors to Pennsylvania Crusher Company, New York, N. Y., a Corporation of New York. Filed Oct. 15, 1927. Serial No. 226,439. 5 Claims. (Cl. 83—11.)



1. In a hammer mill, the combination with a rotary hammer, of a plurality of pivotally mounted elements adapted to form a crushing surface against which a material is impelled by said hammer, a fixed stop limiting the forward movement of each of said elements, resilient means tending to retain said elements against the stops, and means for alternately moving said elements against the pressure of the springs away from the stops and releasing them so that the springs are permitted to sharply return said elements to the normal stop-engaging position.

1,813,837. ASH RECEIVER. CHARLES R. BOLAND, Baltimore, Md. Filed Apr. 16, 1930. Serial No. 444,797. 3 Claims. (Cl. 248—20.)



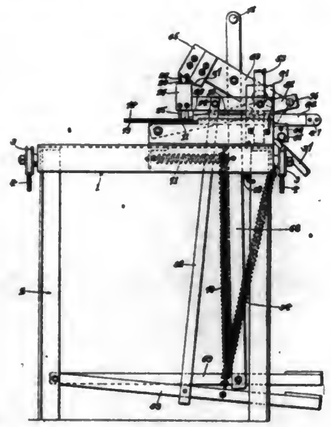
1. A holding clip for an ash tray, comprising a single resilient relatively thin and wide strip of sheet metal having a horizontal intermediate portion provided with means at its center for mounting it upon a support, the end portions of said strip being curved upwardly and alone providing thin wide longitudinally curved arms adapted to frictionally grip a tray, said arms being also curved transversely of their lengths to resist sliding of the tray from the clip and having their terminals bent inwardly to lie upon the upper edge of the tray.

1,813,838. RESIN. HERMAN ALEXANDER BRUSON, Germantown, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa. Filed July 8, 1930. Serial No. 466,591. 14 Claims. (Cl. 260—8.)

6. A composition of matter comprising the reaction product of a polyhydric alcohol and a benzophenone dicarboxylic acid.

1,813,839. STAPLING MACHINE. CARL F. CAPELL, Santa Monica, Calif., assignor, by direct and mesne assignments, to Orna-Metal Awning Corporation, Las Vegas, Nev., a Corporation of Nevada. Filed May 29, 1930. Serial No. 457,198. 7 Claims. (Cl. 1—2.)

1. In a stapling machine for hingedly connecting a perforated panel with an imperforate panel, the combination of a frame adapted to be moved with respect to the panels, a punching mechanism carried by the frame for forming openings through the imperforate panel, and a stable affixing mechanism including a staple forming means and

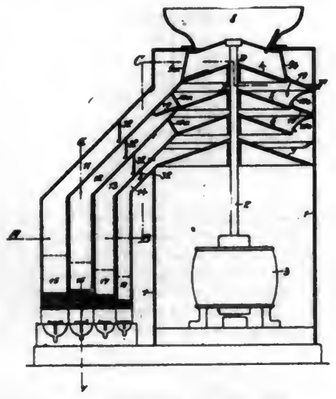


acting to extend one side of the formed staple through said panels, the other side of the staple through one of said panels, and to secure to the latter panel the ends of the staple.

1,813,840. TREATMENT OF METAL. FRED J. CROLIUS and RUDOLPH W. STULER, Pittsburgh, Pa., assignors to Stainless Steel Corporation, a Corporation of Delaware. Filed Nov. 12, 1930. Serial No. 495,282. 7 Claims. (Cl. 75—22.5.)

1. The process of preparing metal in high frequency electric furnaces which comprises subjecting a molten bath of the metal to a sudden shock by suddenly turning into the furnace the full force of the alternating current.

1,813,841. DEVICE FOR SORTING COINS. FRIEDRICH FAST, Berlin, Germany. Filed Nov. 20, 1928, Serial No. 320,685, and in Germany Dec. 5, 1927. 7 Claims. (Cl. 133—3.)

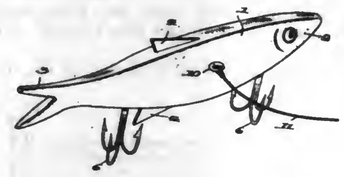


1. A device for sorting coins including in combination a plurality of rotary sorting disks one beneath the other, a wall surrounding said sorting disks and having annular clearances with said disks, the width of said clearances to be decreased from disk to disk in downward sequence according to the size of coin to be separated by each disk, circular ledges provided at the inside of said wall, each ledge being associated to a disk and surrounding the same, each disk directing the coin of its denomination to lie across the clearance between the disk and the associated wall-ledge, while simultaneously rolling the coin upon said ledge to a point of discharge in said wall, however allowing smaller coin to drop upon the following disk, and means for rotating said disks.

1,813,842. PROCESS OF PRODUCING PROTECTIVE METAL COATINGS. COLIN G. FINK, New York, N. Y., and CHARLES H. ELDRIDGE, Metuchen, N. J., assignors, by mesne assignments, to United Chromium, Incorporated, New York, N. Y., a Corporation of Delaware. Filed July 23, 1925. Serial No. 45,693. 3 Claims. (Cl. 204—1.)

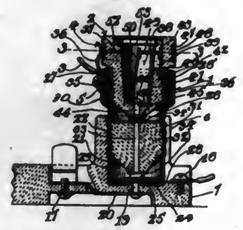
1. A process of producing protective coatings comprising electrodepositing a plate of one of the herein-described resistant metals, mechanically treating to heal or eliminate pin-holes, and coating with a second coat of metal.

1,813,843. FISH BAIT. FRED L. B. FLOOD, Frostproof, Fla. Filed Sept. 22, 1928. Serial No. 307,615. 4 Claims. (Cl. 43—46.)



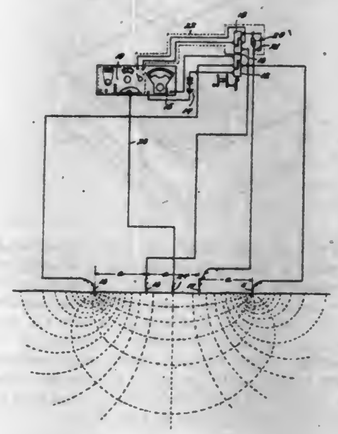
2. A fish bait simulating a minnow and having means at a side thereof for attachment of a line, said means being disposed intermediate the ends of the bait and intermediate the top and bottom edges thereof and permitting the line to extend laterally from the bait approximately at right angles to the axis of the bait while holding the bait in an upright position, to cause the bait to glide in an arc of a circle.

1,813,844. CIRCUIT CLOSING DEVICE. TYSON H. GILBERT, Abilene, Tex. Filed Apr. 26, 1929. Serial No. 358,394. 3 Claims. (Cl. 200—117.)



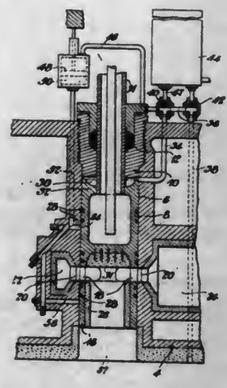
1. circuit closing device for the purpose set forth, a plug structure including a pocket, electrical conducting means secured to the periphery of the plug structure, a contact carried by the plug structure, electrically engaging with said means and projecting into said pocket, said plug structure further including a recess opening into said pocket, a sleeve mounted on the periphery of the plug structure and having an extension projecting into said recess, a conductor member extended from one end of said structure, a resilient circuit closing member having one end secured to the plug structure by said conductor member at its other end normally free of and adapted to abut said contact to close the circuit, said circuit closing member arranged in said pocket, and a fusible member fixedly secured at one end to the upper end of said circuit closing member and at its other end to said extension for normally maintaining said circuit closing member free of said contact.

1,813,845. APPARATUS FOR THE STUDY OF THE EARTH'S CRUST. OLIVER H. GISH, Somerset, Chevy Chase, Md., assignor to Carnegie Institution of Washington, Washington, D. C., a Corporation. Filed Apr. 19, 1929. Serial No. 356,333. 7 Claims. (Cl. 175—182.)



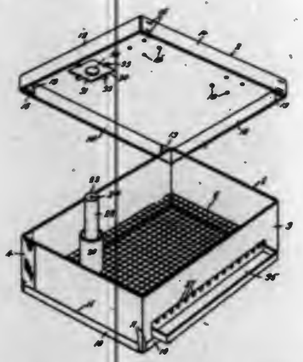
1. An apparatus for studying the earth's crust consisting of a source of current, an instrument for measuring the value thereof, a potentiometer, a double rotor commutator, leads from each rotor of said commutator to the earth, leads from one of said rotors to the current measuring instrument and the source of current, and leads from the other rotor of said commutator to the potentiometer.

1,813,846. PISTON VALVE. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed July 5, 1929. Serial No. 376,015. 8 Claims. (Cl. 123—188.)



1. A piston valve for controlling the flow of fluid to or from an engine, means to supply lubricating oil to the surface of said piston under pressures equalized to counteract the fluid pressures opposing the flow of said lubricating oil.

1,813,847. SHIPPING BOX AND BROODER FOR BABY CHICKS. ROBERT A. GORSUCH, Gambier, Ohio, assignor to The Congor Mfg. Company, Gambier, Ohio, a Corporation of Ohio. Filed Jan. 25, 1927. Serial No. 163,362. 2 Claims. (Cl. 119—19.)



1. A device of the class set forth comprising a peripheral wall, a bottom wall having a downturned edge disposed adjacent the lower edge of the peripheral wall, a channel member embracing and connecting together said edges of the peripheral and bottom walls, the peripheral wall having an opening extending along one of its sides, and a feeding trough having a perforated wall arranged across said opening and provided with parts engaged between the peripheral wall below said opening and the adjacent downturned edge of the bottom wall.

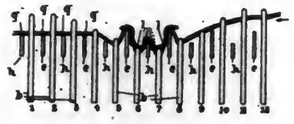
1,813,848. STOCKING FORM. CHARLES T. GRIFFITH, Philadelphia, Pa., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 17, 1927. Serial No. 240,847. 1 Claim. (Cl. 223—17.)



A stocking form having flat parallel sides and a single flat face along one of its edges, said single flat face extending from one to the other of said flat parallel sides at an acute angle with respect to one of the said parallel sides of the form.

1,813,849. METHOD AND APPARATUS FOR FORMING KNITTED LOOPS IN HOSIERY MACHINES. ROBERT GUILLEMOT, St. Maur les Fosses, France, assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Oct. 1, 1926, Serial No. 138,892, and in France Oct. 1, 1925. 6 Claims. (Cl. 66—107.)

1. A method of forming loops of yarn in knitting machines, adapted to produce a tighter and finer stitch whilst simultaneously securing a regular knocking over of same, the method comprising the steps of forming the loops over edges of different height some of which edges are not high enough by themselves to knock over the stitch so as to form longer stitches upon some edges than upon others, and subsequently equalizing the long and short stitches thus produced.



2. The method of forming stitches which consists in forming, at the knocking-over operation, adjacent loops of unequal size, the smaller loop being smaller than, and the larger loop being at least as large as, the smallest loop that can be knocked over when adjacent loops are formed of equal size.

1,813,850. ALUMINUM ALLOY. HORACE CAMPBELL HALL, Littleover, Derby, and TENNYSON FRASER BRADBURY, Derby, England, assignors to Rolls Royce Limited, Derby, England. Filed Sept. 30, 1930, Serial No. 485,548, and in Great Britain Oct. 1, 1929. 3 Claims. (Cl. 75—1.)

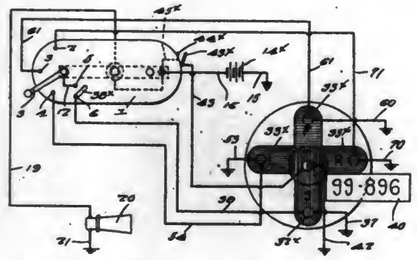
1. As a process in making a casting of the following metals, to wit:

	Per cent of the whole
Copper	0.5 to 5.0
Magnesium	0.1 to 1.7
Nickel	0.2 to 1.5
Iron	0.6 to 1.5
Silicon exceeding	0.55 to 2.8
Titanium	up to 0.3
Manganese	up to 0.3
Aluminium	the remainder

Only traces of other elements.

before pouring the molten alloy into the mould, plunging into it a small quantity of metallic sodium not exceeding 0.01 per cent of the alloy to be treated.

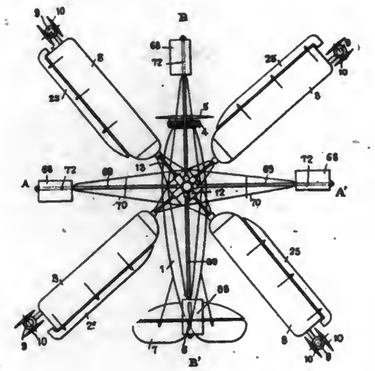
1,813,851. AUTOMOBILE SIGNAL. ELMER N. HOCKETT, Unionville, Mo. Filed Dec. 22, 1925. Serial No. 77,017. 2 Claims. (Cl. 177—339.)



1. In an automobile signal a plurality of signal lamps and a source of current, a horn, circuits and selective switching means for including any of said lamps in circuit with the source of current, said means also including switching means having a circuit closing member biased to a closed circuit position for opening the selected circuit and for thereafter closing the horn circuit.

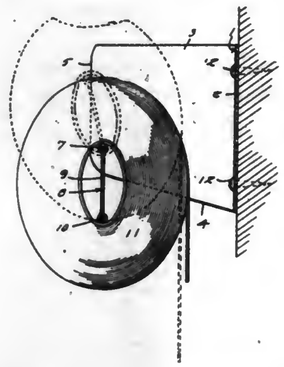
1,813,852. FLYING MACHINE. VITTORIO ISACCO, Paris, France. Filed May 23, 1929, Serial No. 365,472, and in Great Britain Apr. 30, 1929. 11 Claims. (Cl. 244—19.)

6. In a flying machine of the helicopter type, a sustaining propeller comprising a hub rotatable about a vertical axis, and propeller blades universally jointed to said hub, engines mounted on said blades, air screws driven by said engines, small additional surfaces disposed between and



rotatable with said blades, and means controlled by the pilot for effecting periodic variation of the incidence of said surfaces during rotation of said propeller and whereby to control the stability of the machine.

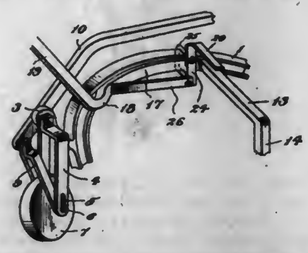
1,813,853. ROLL PAPER SUPPORT. JAMES M. JACKSON, St. Louis, Mo. Filed July 20, 1929. Serial No. 379,757. 1 Claim. (Cl. 242—552.)



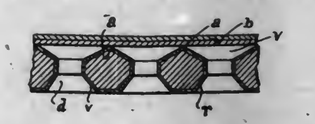
A holder for paper rolls having a tubular core comprising a pair of plates designed to be mounted in spaced parallel relation to project forwardly from a supporting surface and each having a substantially vertical forward edge and further having an aperture formed therethrough adjacent the lower part of the forward edge, and a roll supporting body comprising an elongated plate adapted to position between the side plates and having a bar extending longitudinally of eac hside edge and projecting beyond the ends thereof, one of said bars being designed to have its ends extended through said apertures, the other of the bars limiting rotary movement of the holder and roll through contact with the forward edges of the side plates.

1,813,854. PLOW ATTACHMENT. RICHARD C. JEFFRESS, Skipwith, Va. Filed Oct. 21, 1929. Serial No. 401,228. 3 Claims. (Cl. 97—130.)

1. An attachment for plows comprising an arch, a wheel carried by one side of the arch, an arm projecting rearwardly from the opposite side of the arch and conforming to a plow beam, a transverse supporting arm having a downturned end bearing against the side of the plow beam and said rearwardly projecting arm adjacent the point of contact of the transverse portion of the arch with the beam, means engaged with said downturned end of the supporting arm to clamp the same and the rearwardly projecting arm of the arch to the beam, a seat mounted upon the free end of said supporting arm, a brace connecting the wheel-carrying side of the arch with the forward portion of the plow beam, and a spring secured to the free end of said arm and extending forwardly and downwardly therefrom to rest upon the top of the arch, the lower front end of said spring being connected with said brace.

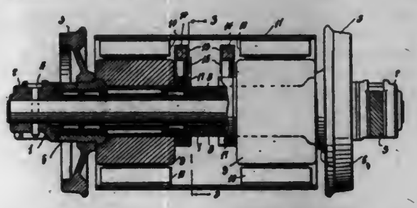


1,813,855. ELECTROSTATICAL VIBRATION STRUCTURE. ERNST KLAS, Berlin, Germany, assignor, by mesne assignments, to United Reproducers Patents Corporation, a Corporation of Nevada. Filed May 21, 1927, Serial No. 193,217, and in Germany May 21, 1926. Renewed Nov. 14, 1930. 10 Claims. (Cl. 179—111.)



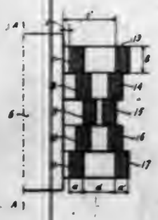
2. An acoustic device comprising a supporting plate having a plurality of concave depressions therein forming cross ribs and terminating into apertures, a dielectric coating on said plate and a conducting membrane disposed on said cross ribs, said concave depressions exposing limited areas of said conducting membrane to permit unrestrained vibrations thereof.

1,813,856. DIRECT DRIVE FOR ANTIFRICTION ROLLER BEARING FREE WHEELS. WILLIAM C. KLEIN, Allentown, Pa. Filed Dec. 11, 1930. Serial No. 501,726. 3 Claims. (Cl. 105—57.)



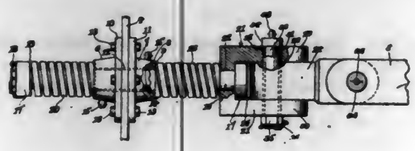
1. In combination with a car truck frame, an axle secured to and supporting the frame, sleeves mounted for rotation on said axle, a wheel secured to and rotatable with each sleeve, a housing secured to said frame and surrounding the sleeves, electric motors for driving said sleeves, an element of each motor secured to each sleeve, and another element of each motor secured to the housing and arranged to cooperate with each of the first mentioned elements.

1,813,857. TRANSFORMER. JOHANNES KUBLER, Baden, Switzerland. Filed Aug. 19, 1930, Serial No. 476,295, and in Germany Aug. 9, 1929. 6 Claims. (Cl. 175—359.)



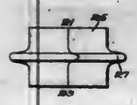
1. An electric transformer comprising a core, a primary winding, and a secondary winding, said windings being divided into parallel connected winding sections, said sections being so spaced relative to said core and so proportioned as to obtain substantially equal inductances at all points throughout parallel connected sections.

1,813,858. TRAILER HITCH. JOHN LAMBRECHT, Oneonta, N. Y. Filed July 2, 1930. Serial No. 465,410. 7 Claims. (Cl. 280—33.9.)



1. In a trailer hitch, a rolling joint structure for connection to and extension through the rear of a truck frame and including a bushing, a headed pull bar extending through the bushing and resilient cushioning elements abutting the ends of the bushing and confined on the pull bar, a pitching joint structure including a clevis revolubly attached to the pull bar and a coupling member including a head pivoted to the clevis, the pivot for said head being disposed at right angles to the longitudinal axes of the bolt, said clevis abutting one of said resilient elements, and a turning joint structure including means pivotally connected to the coupling member and adapted to be secured to a trailer tongue, the pivot for the pitching joint being disposed at right angles to the pivot of the turning joint and at right angles to the longitudinal axis of the bolt.

1,813,859. CORRUGATED SHELL AND METHOD OF MAKING THE SAME. ALMON R. LAWRENCE, Arlington, Mass., assignor to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed July 13, 1929. Serial No. 378,013. 8 Claims. (Cl. 113—35.)



1. The method of forming a corrugated shell which consists in constructing a seam-welded tube from a sheet metal blank, and corrugating the tube, the blank having been cut at such a predetermined angle to the longitudinal axis of the blank as to position that part of the seam in the area to be corrugated in a substantially neutral position with respect to elongation and contraction.

1,813,860. COMPOSITE FABRIC AND METHOD OF MAKING THE SAME. FRANK H. LEE, Danbury, Conn. Filed Mar. 12, 1931. Serial No. 522,125. 32 Claims. 19—147.)



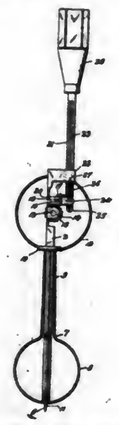
1. The herein described art which consists in forming a layer of feltable fibers, relating thereto a material made of threads having interstices therebetween, working certain of the feltable fibers through said interstices, felting the fibers of said layer together, and looping the fibers passing through said interstices over the threads of said material and felting the otherwise free ends thereof into the layer of felt.

1,813,861. HAT CONSTRUCTION AND ART OF MAKING THE SAME. FRANK H. LEE, Danbury, Conn. Filed Mar. 13, 1931. Serial No. 522,338. 44 Claims. (Cl. 28—5.)



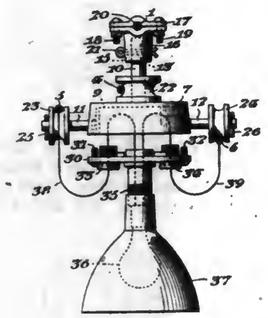
1. The herein described art of hat manufacture which consists in forming a cone-shaped layer of feltable fibers, relating thereto a cone-shaped material made of threads having interstices therebetween, felting the fibers of said layer together, looping certain of said fibers through said interstices and over the threads of said material and felting the otherwise free ends thereof into the layer of felt, and blocking the resultant hat body into the shape of a hat.

1,813,862. CONTINUOUS ROTARY BEATER. THOMAS J. MADIGAN, New York, N. Y. Filed Oct. 23, 1929. Serial No. 401,841. 6 Claims. (Cl. 259—128.)



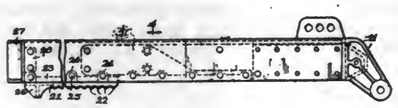
1. A beater of the class described, including a rotary agitator member and gearing for imparting a continous forward rotary movement to the agitator member, including upper and lower intermeshing gears, one of the gears being shiftable into and out of mesh with the other gear, and a reciprocating rack bar meshing with the shiftable gear and arranged to hold the said gears in mesh for actuating the agitator member during one movement of the rack bar and capable of moving the shiftable gear out of mesh during the movement of the rack bar in the opposite direction.

1,813,863. HANGER FOR SUSPENSION LIGHTING FIXTURES. FRANCIS BYRON NIGHTINGALE, Pasadena, Calif., assignor to Edgar Little Nightingale, Los Angeles, Calif. Filed May 27, 1930. Serial No. 456,041. 7 Claims. (Cl. 240—52.)



1. A suspension lighting fixture comprising a hanger having a housing opening downwardly and provided with a supporting stem and line wire supporting means, means connecting said stem with a messenger wire or suspended cable, a closure plate for said opening provided with apertures, and a lamp depending from said closure having connecting wires leading into said housing, through said apertures and arranged to be respectively connected with the line wires carried by said supporting means.

1,813,864. DIPPER HANDLE. JOHN D. RAUCH and WILLIAM L. REID, Lima, Ohio, assignors to The Ohio Power Shovel Company, Lima, Ohio, a Corporation of Ohio. Filed Nov. 5, 1928. Serial No. 317,193. 4 Claims. (Cl. 214—145.)



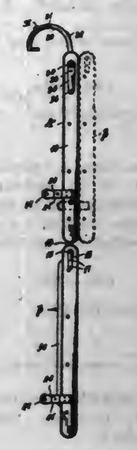
1. In a dipper handle, a beam made up of a single pressed steel plate formed in U-shape, and a rack member bridging the open margins of said plate and secured directly thereto.

1,813,865. FIRE ESCAPE LADDER. JOHN REESE, Goodhue, Minn. Filed May 22, 1930. Serial No. 454,725. 10 Claims. (Cl. 228—38.)

1. In a ladder of the class described, a plurality of ladder sections having stiles, said stiles having slots opening outwardly of their edges, and link means pivotally and slidably connecting said ladder sections and extending through said slots.

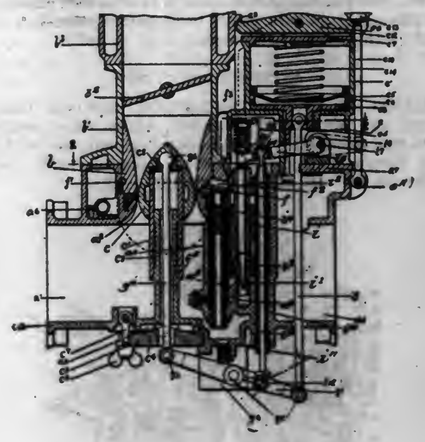
9. A device of the class described comprising a plurality of slidably connected ladder sections, a suspending hook for the device pivoted to one of said sections, said hook being movable downwardly between both ladder sections whereby it will in that position engage the topmost rung of the other section and prevent relative sliding movement thereof.

10. A device of the class described comprising a ladder, a suspending hook therefor pivoted thereto, said hook being provided with a shank engageable with a rung on the



ladder in its extended position, and the ladder having abutments adjacent the rungs also engageable by the shank.

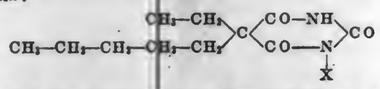
1,813,866. CARBURETOR. FREDERICK HENRY ROYCE, Elmstead, West Wittering, Chichester, England, assignor to Rolls Royce Limited, Derby, England. Filed Jan. 16, 1929, Serial No. 332,969, and in Great Britain Jan. 24, 1928. 11 Claims. (Cl. 261—44.)



1. A carburetor for an internal combustion engine comprising a throat consisting of an annular fixed member and a movable member of circular cross section adapted to move co-axially towards or away from such annular member, a mixing chamber, a variable metering jet, an air bleed suction device arranged and adapted to vaporize the liquid fuel between the metering and mixing chambers and means independent of the pressure of air on the movable member for automatically adjusting the members of the throat relatively and the variable metering jet both consistently with the vacuum in the mixing chamber.

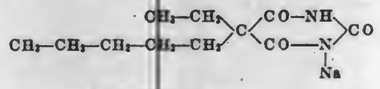
1,813,867. N-AMYL ETHYL BARBITURIC ACID AND ITS INTERMEDIATES. HORACE A. SHONLE, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Filed July 20, 1928. Serial No. 294,318. 7 Claims. (Cl. 260—33.)

1. The new substances, which may be represented by the formula:



wherein X represents either a hydrogen atom, an atom of a monovalent metal, or an equivalent of a polyvalent metal, or the ammonium ion, or an organic base.

7. The new substance, sodium n-amyl ethyl barbiturate, which may be represented by the formula:

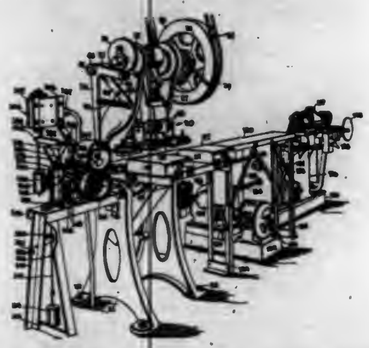


1,813,868. KNIFE GUARD. ANTONIO SMIROLDO, Akron, Ohio. Filed July 17, 1930. Serial No. 468,693. 2 Claims. (Cl. 30—20.)



1. A knife blade guard comprising a knife blade having an end cutting portion, a split handle mounted on said blade, and said handle having a longitudinal recess therein forming longitudinal spaces at each side of said blade, a channel guard member co-operating with the lower longitudinal edge of said knife and slidable thereon, and means in the recess of the handle adapted to slide said guard, and to adjustably fix said guard to cooperate effectively with said cutting edge of the blade.

1,813,869. FLAP CUTTING DEVICE. EDWIN G. TEMPLETON and WILLIAM K. GLENNON, Akron, Ohio, assignors to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 10, 1925. Serial No. 36,145. 33 Claims. (Cl. 101—287.)

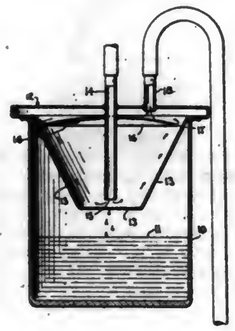


1. A power driven machine comprising means for conveying a strip of flexible material therethrough, means for simultaneously punching and stamping the strip at regular predetermined intervals as it passes through the machine and means actuated in response to the movement of the strip for severing the strip adjacent the punched portions.

1,813,870. METHOD OF REDUCING EVAPORATION LOSSES IN TANKS. JULES VERNER, Linden, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 2, 1929. Serial No. 404,516. Renewed May 21, 1931. 4 Claims. (Cl. 62—170.)

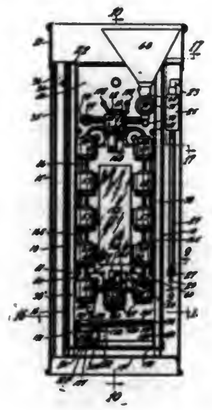
1. The method of minimizing the evaporation loss of liquids during storage in tanks, which comprises covering at least part of the outside surface of the tank with a porous material and spraying said material with water often enough to keep it wet, so that evaporation of water can take plate continuously, whereby the daily temperature variations inside the tank are reduced.

1,813,871. CONDENSER. KREIGH B. AYERS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 10, 1930. Serial No. 419,878. 6 Claims. (Cl. 257—34.)



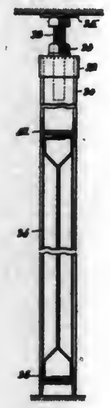
1. In combination, a receptacle having a cover adapted to condense vapors issuing from the contents of the receptacle, said cover including a hollow portion extending into the receptacle, and a plate positioned within the hollow portion for facilitating distribution of the cooling agent therein.

1,813,872. COFFEE MAKING MACHINE. ALONZO LINTON BAUSMAN, Springfield, Mass. Filed Apr. 18, 1929. Serial No. 356,141. 82 Claims. (Cl. 53—8.)



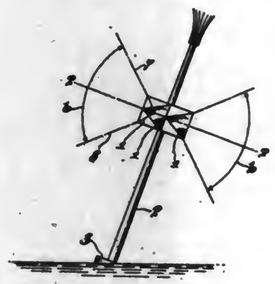
1. In a coffee making apparatus or the like, mechanism to make coffee comprising a conveyer, a series of porous cups spaced on the conveyer and hung to normally remain upright, means to stir the contents of said cups, means to feed ground coffee bean to the cups, means to turn the cups for emptying the coffee grounds, means to drop hot water through one cup to another, and means to operate said stirring means to loosen the coffee bean in the cups.

1,813,873. METALLIC PARTITIONING. JOAH BROGDEN, Melrose Park, Pa., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 28, 1926. Serial No. 157,445. 10 Claims. (Cl. 189—34.)



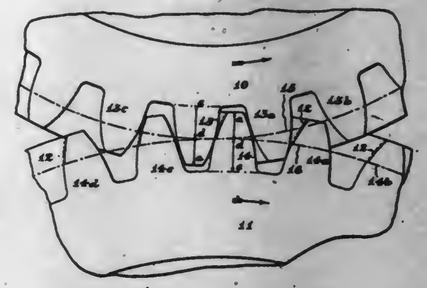
1. Metallic partitioning comprising interchangeable partitioning units; and a skeleton supporting structure embodying main floor to ceiling uprights of I-bar sections, basal horizontals of like section resting on the floor between the feet of such main uprights, additional horizontals of the same section between said main uprights at different elevations, and supplemental verticals of corresponding section extending between the horizontals in the spaces intervening the main uprights, said uprights and the horizontals jointly affording continuous channels for perimetrically engaging and retaining a multiplicity of the partitioning units and filler sections in superposed rows.

1,813,874. MARINE LIGHT SIGNAL REFLECTOR. SVEN AUGUST ESKILSON, Stockholm, Sweden, assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 21, 1928, Serial No. 327,514, and in Sweden Dec. 30, 1927. 6 Claims. (Cl. 88—1.)



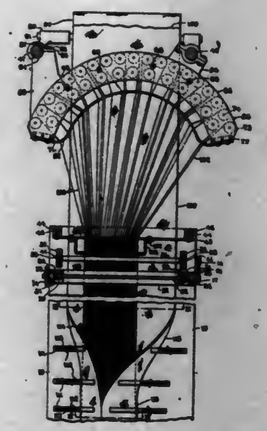
1. A light reflecting device of the character described comprising a plurality of solid reflectors of tetrahedral shape, an upright support, means for mounting the said reflectors in a circle around said support in contiguous relation to each other, the front faces of said reflectors being of triangular shape and each front face having an acute angle in adjoining relation to the middle point of a side of the front face of an adjoining reflector.

1,813,875. GEAR. ROY B. FEHR, Detroit, Mich., assignor to Gear Processing, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 19, 1931. Serial No. 523,747. 20 Claims. (Cl. 74—41.)



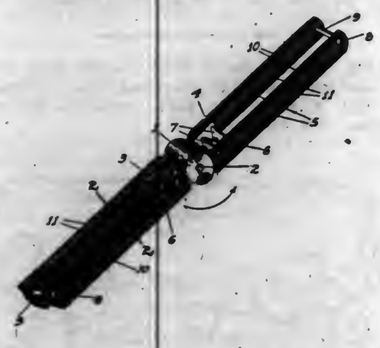
1. A pair of intermeshing gears, each tooth of the driven gear having its driven side gradually relieved on the addendum face from a maximum at its tip to a minimum at its pitch line to provide a gradual substantially non-impacting engagement with the mating tooth of the driving gear, the driving faces of the teeth of the driving gear being substantially unrelieved, whereby quiet operation of said gears is obtained.

1,813,876. CORD BELT BUILDING APPARATUS. WILLIAM H. GERSTENSLAGER, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 26, 1928. Serial No. 321,886. 3 Claims. (Cl. 154—3.)



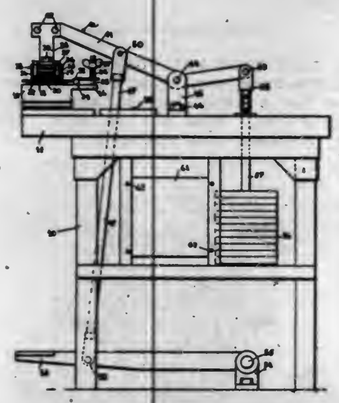
1. A belt building apparatus comprising a table for supporting an elongate strip of belt covering material, means for positioning a plurality of tension elements in parallel relation upon the strip, and means operating simultaneously with respect to the aforesaid means for folding edge portions of the latter upon the tension elements.

1,813,877. AIRPLANE PROPELLER. CHARLES H. GUNN, San Francisco, Calif., assignor to Aircraft Specialties Company, San Mateo, Calif., a Corporation. Filed Aug. 16, 1927. Serial No. 213,280. 3 Claims. (Cl. 170—165.)



1. An airplane propeller including a hub, pairs of rigid parallel-edged arms projecting radially from opposite sides of the hub, and straight edged thin blades abutted against and secured to the arms, the major area of the blades being straight in cross section and the width of the arms being equal to the width of such major area of the blades..

1,813,878. FLAP BRANDING MACHINE. RAY M. JOHNSON, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 1, 1929. Serial No. 396,451. 7 Claims. (Cl. 101—27.)

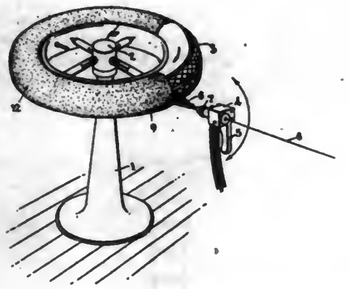


1. A branding machine comprising a yieldable support for engaging a material to be branded, a stamp movable to press the material against the support, means for heating the stamp and means for protecting the material.

1,813,879. DYESTUFFS CONTAINING CHROMIUM AND PROCESS OF MAKING. HANS KÄMMERER, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 27, 1926, Serial No. 151,255, and in Germany Dec. 1, 1925. 9 Claims. (Cl. 260—12.)

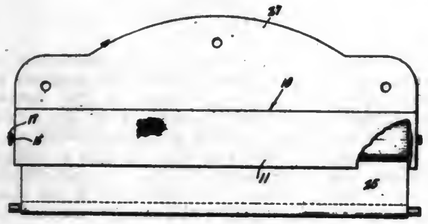
1. The process of producing dyestuffs containing chromium which comprises heating a chromable dyestuff with a salt of trivalent chromium in the presence of a water soluble salt of a strong mineral acid and a metal other than those which form metal compounds with the dyestuffs.

1,813,880. METHOD OF MAKING MOLDS. HERMAN T. KRAFT, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 6, 1927. Serial No. 217,580. 3 Claims. (Cl. 22—1.)



1. The method of making a tire mold which consists in inflating a tire, spraying molten metal upon said tire to form a matrix shell, deflating the tire and removing the matrix shell.

1,813,881. ANTIGLARE SHIELD. ALBERT G. PETERS, Geraldine, Mont. Filed May 29, 1929. Serial No. 367,065. 1 Claim. (Cl. 296—97.)



An anti-glare shield comprising a casing, a curtain supporting roller located in said casing, a spring re-winding means for said roller and rotatably supporting one end of the roller to the casing, a pin secured to the other end of the roller and extending through the casing to rotatably support said roller to the casing and having a headed end disposed exteriorly of the casing, and a frictional element between the casing and the roller and mounted on the pin.

1,813,882. PROCESS OF TREATING MINERAL OIL MATERIAL. HOMER BEHM, Chicago, Ill. Filed July 14, 1922, Serial No. 575,040. Renewed June 3, 1931. 9 Claims. (Cl. 196—1.)

1. A process which comprises forming a mixture by adding to a petroleum oil material, slaked lime, rosin, formaldehyde, and ammonia, allowing to stand, and adding turpentine, thereafter adding such mixture to a much larger volume of petroleum oil material, adding alcohol and water, and allowing protracted contact of the mixture with air, such operations being performed at about atmospheric temperature.

1,813,883. TREATMENT OF PETROLEUM OILS. HOMER BEHM, Tulsa, Okla. Filed May 9, 1923. Serial No. 637,889. 2 Claims. (Cl. 196—23.)

1. In the treatment of mineral oil material by aeration, the improvement which comprises adding to a mixture containing water, alcohol and a mineral oil material, an aqueous solution containing a nitrate and containing the reaction products of ammonia and iodine.

1,813,884. TREATMENT OF MINERAL OIL MATERIAL. HOMER BEHM, Belmar, N. J. Filed May 27, 1925, Serial No. 33,284. Renewed Oct. 20, 1928. 12 Claims. (Cl. 196—23.)

1. A process of treating mineral oil material which comprises mixing a mineral oil material consisting largely of fractions less readily volatile than gasoline, with a small proportion of a "starter," adding aqueous material and alcohol in amount equal to a few percent of the volume of the oil, adding an aqueous emulsion containing material of a gelatinous nature having the properties of the gelatinous material formed by aerating a mineral oil material, water, alcohol and a small amount of said "starter", aerating the mixture for a period of at least several hours, and adding successively during such aeration period small percentages of aluminum compounds and a phosphate and peroxide mixture, thereafter rendering the material acid in reaction, heating to above the normal temperature of the living human body, making somewhat alkaline, aerating and finally treating with steam under pressure, the "starter" above mentioned containing the reaction products of lime, rosin, ammonia, and formaldehyde, and a large amount of mineral oil material.

1,813,885. PROCESS OF TREATING OILS AND PRODUCT THEREOF. HOMER BEHM, Belmar, N. J. Filed Jan. 17, 1928. Serial No. 247,456. 3 Claims. (Cl. 196—1.)

1. In the treatment of mineral oil material the herein described process which comprises providing in the oil, the reaction products of lime, rosin, formaldehyde, ammonia and chlorinated lime, the mixture thereof with the oil having sufficient reaction to change the color of litmus, and the oil containing some water, and then over-neutralising the reaction of the mixture, to thereby form a gelatinous precipitate, and separating such gelatinous precipitate from the oil.

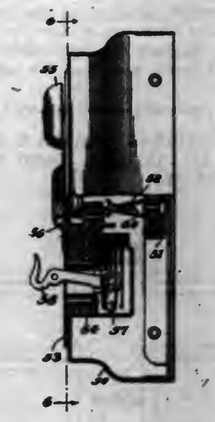
3. A gelatinous product produced by the process of claim 1, having a consistency resembling soft "vaseline" soluble in gasoline, such product, when applied to a leather belt, having an adhesive property, whereby slipping of the belt is decreased, which product when dissolved in gasoline has detergent properties.

1,813,886. PROCESS OF PRODUCING OIL-SOLUBLE MATERIAL AND PRODUCT THEREOF. HOMER BEHM, Belmar, N. J. Filed Jan. 16, 1928. Serial No. 247,266. 8 Claims. (Cl. 196—1.)

6. A process which comprises adding to a petroleum distillate not heavier than kerosene, lime and granulated rosin, mixing, adding strong ammonia water and formaldehyde solution, at below 60° F., letting stand for several hours, drawing off some of the water settled out, adding chlorinated lime, cooling, letting stand for several hours, adding turpentine and letting stand for several hours, adding acetone, letting stand for several hours, adding acetic acid, separating insoluble material, adding acetic acid and acetone to acid reaction, letting stand for several hours and separating insoluble material.

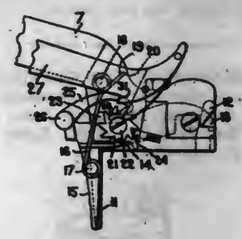
1,813,887. TELEPHONE. JOSEPH O. CADIEUX, Meriden, Conn., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn., a Corporation of Delaware. Filed June 7, 1930. Serial No. 459,807. 8 Claims. (Cl. 179—100.)

1. In a telephone instrument, a box adapted to be secured to a wall, an insulating support carried thereby, circuit terminals on said support, a front plate detachably connected to the box, an insulating block carried by the plate and projecting rearwardly therefrom, a hook switch carried by said insulating block, a transmitter and a receiver connected to the hook switch, and automatically



engaging contacts carried by said insulating support and said block and connected to said transmitter, receiver and hook switch.

1,813,888. INTERMITTENT THREAD CUTTING LOOM TEMPLE. CLARE H. DRAPER, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 17, 1929. Serial No. 393,181. 4 Claims. (Cl. 139—266.)



1. A loom temple provided with a filling parter, means to actuate said parter, means operatively to position the parter, a detent engageable with said positioning means to maintain the parter inoperative and unengageable by the actuating means, means to disengage the detent from said positioning means and governed by a plurality of successive operations of the parter and a following bodily movement of the template to effect re-engagement of the positioning means and the detent.

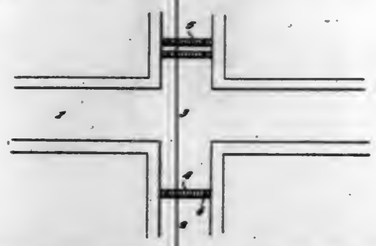
1,813,889. COMBINED SWITCH AND BRUSH HOLDER. FRANK C. DE REAMER, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York, Filed Sept. 18, 1930. Serial No. 482,796. 3 Claims. (Cl. 171—324.)



1. The combination of a brush-holder block provided on the rear side with metallic means for supporting a pair

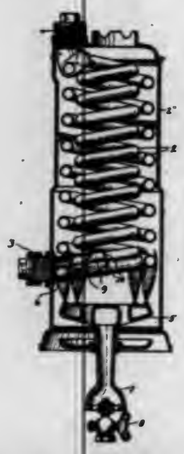
of brushes, means for attachment of a circuit wire to one of said brush-supporting means, a binding post mounted on the rear side of said block for connection with a second circuit wire, a switch mounted on the front side of said block and provided with two stationary contacts respectively connected through the brush-holder block to said binding post and to the second of the pair of brush supports.

1,813,890. ROAD SIGNAL. CHARLES H. FOWLER, Eugene, Oreg. Filed Apr. 16, 1930. Serial No. 444,787. 1 Claim. (Cl. 238—3.)



A road signal including a bar applied to the surface of a thoroughfare some distance from a point of danger and having its upper surface formed with rounded side portions merging into side faces of the bar, the upper face being provided with ribs to prevent a vehicle from skidding extending the full width of the bar and having their ends extending downwardly and merging into the side faces of the bar, and fastening means passing through the bar between certain of the ribs and into the bed of the thoroughfare to secure the bar thereto.

1,813,891. REENFORCED CIRCULATING COIL. ARTHUR FRIEDMAN, Cleveland, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 27, 1928. Serial No. 257,222. 4 Claims. (Cl. 122—250.)



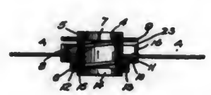
1. In a water heater, a vertically arranged tubular circulating coil, a coupling member for the lower end of said coil, heating means located below said coil, and coil re-enforcing means comprising a relatively short section of tubing providing a protective sheath that encompasses the lower end portion of said coil to protect said coil at the point where it enters said coupling from the corrosive action of condensate deposited on said coil and collected at this point.

1,813,892. RIVET. WALTER I. JONES, Arlington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1929. Serial No. 347,637. 5 Claims. (Cl. 85—40.)



1. A one-piece tubular rivet having a shank, a head integral with one end of said shank, axially movable means integral with said head and located within the rivet and means formed as a part of said shank thereby to provide for expansion of a portion of the shank when the axially movable means is moved relative to the shank.

1,813,893. FLYER CONSTRUCTION. MICHAEL J. McHALE, Scranton, Pa. Filed May 31, 1930. Serial No. 458,210. 15 Claims. (Cl. 117—23.)



1. A flyer for the spindles of spinning machines, including an apertured bottom member having an internally threaded extension formed with a shoulder, a threaded apertured top member having a shoulder, and a spring member disposed in said apertures and retained by said shoulders.

1,813,894. FLYER CONSTRUCTION. MICHAEL J. McHALE, Scranton, Pa. Filed May 31, 1930. Serial No. 458,211. 10 Claims. (Cl. 117—23.)



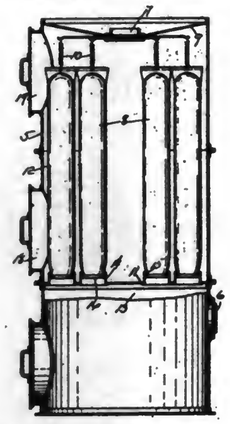
1. A flyer including a body having a centrally apertured hub portion and an outer sheath adapted for threaded engagement with said hub, said sheath having a serrated bearing edge.

1,813,895. FLYER CONSTRUCTION. MICHAEL J. McHALE, Scranton, Pa. Filed May 31, 1930. Serial No. 458,212. 11 Claims. (Cl. 117—23.)



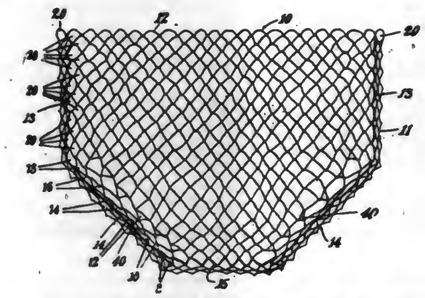
1. A flyer including an apertured body having an offset flange at the bottom, a head portion having an annular peripheral groove, a flyer wire disposed in the groove, and a separable cap fitted over said head.

1,813,896. FILTER FOR DUST COLLECTORS. WILBUR V. PAINE, East Hartford, Conn., assignor to The Spencer Turbine Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 19, 1928. Serial No. 327,067. 5 Claims. (Cl. 183—51.)



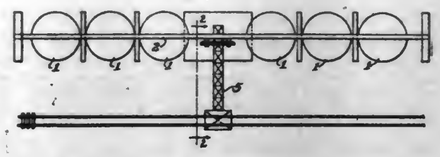
1. A dust collector including a support, a collar, a holder comprising a ring mounted within the collar, a filter tube suspended from said support and open at its lower end and adapted to project through said ring, and a retainer attached to the lower end of said tube and constructed to be passed through said ring and thereafter to engage the latter to retain the lower end of said tube in place.

1,813,897. HAIR NET. NAT L. SOLOMON, Brooklyn, N. Y. Filed Sept. 30, 1930. Serial No. 485,341. 8 Claims. (Cl. 132—49.)



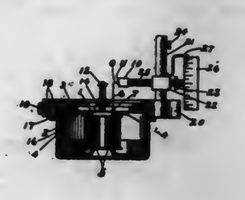
1. A hair net comprising a body portion of relatively large meshes of uniform size and a perimetral band of smaller meshes extending partly around the perimeter of the body portion, said band comprising one or more rows, the unbanded portion of the perimeter presenting the large body meshes only, thereby making this portion of the net of great invisibility and relieving the strain of the banding.

1,813,898. TROLLEY DEVICE. FERDINAND F. WAECHTER, Philadelphia, Pa., assignor to Link-Belt Company, a Corporation of Illinois. Filed Dec. 22, 1930. Serial No. 504,027. 8 Claims. (Cl. 104—93.)



1. In a material handling system, the combination of a trolley beam positioned in a fixed plane, a trolley follower adapted to travel longitudinally on said beam, loading means located at a point laterally offset with respect to the plane of the trolley beam, a hoist bucket adapted to be loaded at said point and to be moved along an inclined path from said point to a position directly beneath said trolley beam, means connecting said bucket and trolley follower for so moving said bucket, and means for preventing the imposition of torsional strain on said trolley beam due to the angularity of the load acting on said trolley follower.

1,813,899. RESONANT ELECTRICAL RELAY. CARLOS B. MIRICK, Washington, D. C. Filed Sept. 1, 1923. Serial No. 660,597. 10 Claims. (Cl. 200—91.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A resonant relay including in combination an electromagnetic means adapted to be supplied with periodic electrical currents, a reed having two components of vibration and resonant to said periodic currents adapted to be vibrated by said electromagnetic means, a vibrator mounted upon said reed and substantially normal to one of said components of vibration thereof and resonant thereto, a contact member carried at the extremity of said vibrator, and an adjustable contact adjacent the contact on said vibrator.

Patents Nos. 1,813,900 to 1,815,028

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Prints	3	No. 13,295 to No.	13,297, inclusive.
Reissues	3	No. 18,127 to No.	18,129, inclusive.
Designs	53	No. 84,616 to No.	84,668, inclusive.
Patents	1,129	No. 1,813,900 to No.	1,815,028, inclusive.
Total	1,528		

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,634,367, L. E. La Brie, Brake, decided June 23, 1931, claim 13.

Pat. 1,650,482, Fred Barden, Fuel control attachment for carburetors, decided June 26, 1931, claims 1, 2, and 5.

Pat. 1,706,842, G. E. Cooper, Welding machine, decided June 22, 1931, claims 3 and 25.

Pat. 1,748,723, A. G. McKee, Method and apparatus for treating gases, decided June 23, 1931, claims 4, 5, 6, 7, 9, 10, 16, 17, 18, 19, 20, 23, 24, 25, and 26.

Pat. 1,764,266, L. M. Karnasch, Torque transmitter, decided June 25, 1931, claims 1, 2, 3, 4, and 5.

Adjudicated Patents

(C. C. A. Ill.) Hult patent, No. 1,166,523, for outboard motor, *Held* invalid. *Johnson Bros. Engineering Corporation* v. *Masters*, 49 F.(2d) 187.

(C. C. A. Okla.) Fardon patent, No. 1,184,673, for storage-tank, claim 1 *Held* valid and infringed. *Johns-Manville Corporation* v. *National Tank Seal Co.*, 49 F.(2d) 142.

(C. C. A. Ill.) Hult patent, No. 1,207,761, for outboard motor, *Held* invalid. *Johnson Bros. Engineering Corporation* v. *Masters*, 49 F.(2d) 187.

(C. C. A. Ill.) Johnson patent, No. 1,467,641, for outboard motor for small craft, claims 2 and 9 *Held* not infringed. *Id.*

(C. C. A. Del.) Bassett patent, No. 1,666,589, for elevator signal system, *Held* valid and infringed. *Graham & Norton Co.* v. *Elevator Supplies Co.*, 49 F.(2d) 268.

(D. C. Ill.) Edelman patent, No. 1,680,370, for radio power-supply unit, claims 1 to 3 *Held* valid and infringed. *Banning* v. *Hartman Furniture & Carpet Co.*, 49 F.(2d) 331.

(D. C. Ill.) Edelman patent, No. 1,682,492, for radio battery eliminator, claims 3 and 4 *Held* valid and infringed. *Id.*

(D. C. Ill.) Edelman patent, No. 1,682,778, for radio chassis, *Held* invalid. *Id.*

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Condition of Applications Under Examination at Close of Business June 27, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 92,553; Trade-Mark Division, 1,190. Oldest new case, Oct. 27, 1930; oldest amended, Oct. 27, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action: New	Oldest new application awaiting office action: Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	†Feb. 9	Feb. 16	774
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	†Jan. 2	†Jan. 2	1,452
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Feb. 2	†Mar. 30	846
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Jan. 21	†Jan. 27	813
108°	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	†Jan. 3	†Jan. 12	780
318	6. LEWERS, A. M., Carbon Chemistry	Dec. 4	Dec. 3	2,033
106	7. JARBOE, C. G., Optics; Photography	Nov. 28	Dec. 1	2,081
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 1	Dec. 3	1,618
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 2	†Jan. 5	1,415
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	†Feb. 4	†Feb. 20	1,001
148°	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Feb. 4	†Feb. 11	758
380	12. HENRY, O. C., Machine Elements	Oct. 28	Dec. 29	1,302
154°	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 8	†Jan. 13	1,138
102°	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Jan. 8	†Jan. 17	1,202
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 6	Dec. 5	2,541
242°	16. SPENCER, C. J., Telegraphy; Telephony	†Mar. 17	†Mar. 21	806
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Nov. 22	Nov. 26	1,481
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 29	Dec. 31	1,114
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Nov. 4	Nov. 5	1,980
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	†Jan. 5	†Jan. 15	932
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	†Jan. 6	†Feb. 24	979
244°	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Feb. 3	†Feb. 11	800
317	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Nov. 4	Oct. 31	1,056
147°	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 26	†Jan. 6	933
202°	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Dec. 29	†Jan. 2	1,514
228°	26. HODGES, J. S., Electricity, Generation; Motive Power	†Jan. 9	†Jan. 16	965
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	†Jan. 5	†Jan. 5	1,143
225	28. BENSON, A. R., Internal-Combustion Engines	Dec. 23	Dec. 29	1,728
160°	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	†Jan. 31	†Feb. 28	553
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Feb. 2	†Apr. 4	889
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Oct. 27	Oct. 27	2,596
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 28	†Jan. 29	1,339
152	33. WYMAN, W. L., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 31	Dec. 27	2,458
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Feb. 28	†Mar. 3	796
116°	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Apr. 8	†Apr. 3	959
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Nov. 7	Nov. 6	2,283
224°	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Dec. 15	Dec. 20	1,514
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Mar. 31	†Mar. 23	539
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	†Jan. 3	†Jan. 8	1,612
262°	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Nov. 26	†Jan. 2	2,935
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	†Jan. 31	†Jan. 30	723
223°	42. CUTTING, H. O., Electric Signaling	†Jan. 2	Dec. 22	1,405
124°	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 31	†Jan. 9	1,644
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 29	Nov. 1	2,252
179	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Nov. 24	Nov. 25	2,147
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	†Jan. 7	†Jan. 18	1,146
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	†Jan. 2	†Jan. 2	2,139
212°	48. ROEFKE, O. B., Electricity, General Applications	Dec. 18	Dec. 10	1,151
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Feb. 2	†Feb. 9	1,307
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Nov. 20	Nov. 20	2,502
240°	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Nov. 10	Nov. 10	2,184
144	52. KNOTTS, M. E., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 29	†Jan. 28	1,525
201°	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 28	†Feb. 27	846
241°	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Nov. 5	Nov. 5	2,769
102	55. BOWEN, S. T., Bread, Pastry, and Confection Making; Cutlery	†May 18	†May 11	183
	Designs	†June 4	†June 18	227
209	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 1	Nov. 28	1,753
257°	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	†Jan. 2	†Feb. 3	774
270°	58. DOWELL, E. F., Abrading; Typewriting	Nov. 28	Nov. 28	1,491
315	59. RICHARD, V. I., Chemistry, Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	†Jan. 16	†Jan. 21	1,702
213°	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Nov. 7	Nov. 17	1,991
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 29	Nov. 5	2,102
245°	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers.	Nov. 7	Nov. 8	2,537
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Nov. 12	Nov. 12	2,352
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.. Trade-Marks	†June 1	†June 16	1,030
	Labels and Prints	†June 1	†June 15	160

° Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

Supreme Court of the United States

DE FOREST RADIO COMPANY *v.* GENERAL ELECTRIC COMPANY

No. 630. Decided May 25, 1931

1. PATENTS—INVENTION—QUESTION INVOLVED.
In determining the validity of the Langmuir patent for a discharge tube, "the question is not, as respondent argues, whether Lilienfeld or others made a practical high vacuum tube, but whether they showed how it could be made and demonstrated and disclosed the relationship of the discharge to reduced pressure, and how to reduce it."

2. WHAT IS PATENTABLE.
"It is method and device which may be patented and not the scientific explanation of their operation."

3. SAME—PATENTABILITY.
Langmuir Patent No. 1,558,436, for electrical discharge apparatus and process of preparing and using the same *Held* invalid as not involving invention over the prior art.

ON WRIT of certiorari to the United States Circuit Court of Appeals for the Third Circuit.

Mr. Samuel E. Darby, jr., and *Mr. Thomas G. Haight* (*Mr. Carl A. Richmond* and *Mr. William R. Ballard* on the brief) for De Forest Radio Company.

Mr. Ralph B. Evans (*Mr. Hubert Howson, Mr. Paxson Deeter, Mr. Albert G. Davis*, and *Messrs. Howson and Howson* on the brief) for General Electric Company.

Mr. Justice STONE delivered the opinion of the Court.

Certiorari was granted, 282 U. S. 836, to review a judgment of the Court of Appeals for the Third Circuit, holding the Langmuir Patent, #1,558,436, granted October 20, 1925, for "electrical discharge apparatus and process of preparing and using the same", valid, and infringed by petitioners. The District Court for Delaware, in which respondent, the assignee of the patent, brought suit for infringement, held the patent invalid for want of invention, and because of prior use and prior invention, and gave judgment dismissing the complaint, 23 F.(2d) 698, which the appellate court at first affirmed, and then, on reargument, reversed. 44 F.(2d) 931.

Infringement is conceded if the claims of the patent are valid. It is known as a high vacuum tube patent, and the alleged invention is exemplified in high vacuum tubes of similar use as detectors or amplifiers in the art of radio communication and telephony. Correct appreciation of the contentions made requires, at the outset, an understanding and some exposition of the scientific principles which it is agreed are brought into play in the high vacuum tube or which at least are accepted as working hypotheses accounting for its operation.

A radio tube of the audion or three electrode type consists of a bulb, within which a vacuum has been created, enclosing a filament, which is a negative electrode, or cathode; a plate, which is a positive electrode, or anode; and a third electrode, known as a grid, located between the filament and the plate. The grid is connected with an input circuit, over which electrical radio activity, actuated at the sending station, is gathered from the ether and passes to the grid. When the tube is used as an amplifier, the plate is connected in circuit with a telephone receiver or loud speaker. In operation, the filament is heated to incandescence by passing an electric current through it. In its incandescent state, electrons, or negative charges of electricity, are developed at the filament and pass to the plate, attracted to it by its positive potential, and cause a flow of electricity through the plate-loud-speaker circuit. The sounds given out by the loud speaker are produced by variations in the current passing to it. Radio amplification depends on producing in the more powerful current of the loud speaker circuit, variations exactly corresponding to the variations in the weaker input or voice current which are actuated by the sending station.

In the vacuum tube of the three electrode type, this is accomplished by passing the input or voice current over the grid. Variations in that current produce variations in potential of the grid which, by reason of its location between the filament and plate, effects like variations in the effective potential of the plate with corresponding variations in the loud speaker circuit. The number of electrons emitted by the filament is determined by its temperature. But the current passing through the plate loud speaker circuit depends on the number of electrons drawn from the filament to the plate, and this in turn depends on the voltage of the current passing to the filament. When it is high enough to force all the electrons emitted by the filament to pass from filament to plate, increase in the voltage at the filament will not produce an increase in current in the loud speaker circuit and the tube is then said to be "saturated". As successful operation of the tube depends on the response of the loud speaker current to changes in voltage effected by the voice or input current, the tube is most efficiently operated at a voltage of a range below saturation, and a current within this range is known as the "space current".

Of critical importance in the present controversy is the effect of the presence of gas within the tube. As in the practical art of bulb manufacture no scientifically perfect vacuum can be attained, air or other gas is always present within the vacuum tube. This consists of a small amount of residual gas, after the vacuum is created by pumping out the tube in the process of manufacture. There is also gas in the walls of the bulb and the electrodes, described as "occluded," which, if not expelled from them and removed in the course of manufacture, is later freed in varying amounts when the tube is in use, by the action of the heat of the filament and the electrons generated there.

The passage of electrons from filament to plate at certain voltages produces changes in the gas, known as "ionization." Ionization is the manifestation of a rearrangement of the constituent electrons of the gas atoms which occurs, in low vacuum tubes, if other factors of causation remain constant, at known voltages within a range of from 20 to 30, but varying somewhat with different gases. The atom, according to present day scientific theory, is composed of an electrically positive nucleus, around which revolve at high speeds electrically negative electrons. In its normal state, the atom, whose nucleus and electrons are in electrical balance, exhibits no electrical effects; but within a thermionic tube, the impact upon the gas atoms of the electrons, passing from cathode to anode at velocities induced by ionization voltages, forces off negative electrons from the atoms. The atoms from which the electrons have thus been detached are then electrically positive and are known as ions. Ionization, which begins at the ionization voltage, is increased with increasing voltages as the tube approaches saturation, when extreme ionization takes place; and, for reasons which need not be elaborated here, the tube then ceases to function as a radio tube, a condition visibly manifested by a blue glow within it.

Gas ionization in the vacuum tube is of great practical importance because of its effect on the current passing from filament to plate. Ionization, when it occurs, may operate within the range of the space current to increase "conductivity" of the tube, that is, the discharge from filament to plate, above what it would be at the same voltage in the absence of ionization, through the development of the positive ions, which pass to the cathode, and of the negative electrons, which pass to the anode. The ions facilitate the flow of electrons from cathode to anode and increase their number by impact on the former, which raises its temperature. The result is that, in low vacuum tubes, saturation with the blue glow effect is reached, other factors remaining constant, at lower voltages than in high vacuum tubes. Hence, in the range of voltage above ionization and below saturation, within which the tube is commonly operated, a low vacuum tube, because of the increase of current due to ionization, is more responsive to slight changes in voltage produced by the operation of the grid or input current. In consequence, the low vacuum tube is more sensitive both as a detector and as an amplifier than a tube of high vacuum.

But this advantage is accompanied by a serious disadvantage, especially when the tube is used for amplification, in that ionization produces variations in the electronic discharge from filament to plate, which correspondingly affect the current passing through the loud speaker circuit. Ionization is affected by the amount of gas in the tube, and hence by the degree of vacuum and the amount of occluded gas freed in operation by heat and bombardment. Since the discharge varies with the amount of ionization, the effective current in the loud speaker circuit varies with different tubes and with the same tube at different times; and critical adjustments of the current flowing to the filament are necessary to improve operation.

From what has been said, it is apparent that the problem of securing evenness or regularity of discharge from filament to plate and hence of current flowing through the loud speaker circuit is dependent upon the reduction of ionization in the tube, and this in turn is dependent, within certain ranges of limits, upon a number of variables, the more important of which are (1) the geometry of the tube, that is, its size and shape and the location of electrodes, (2) heat of the filament, (3) voltage of the filament, and (4) of vital importance here, amount of gas, that is, pressure within the tube. With the other variables controlled so as to remain approximately constant, as is practicable, reduction of pressure reduces ionization and increases steadiness of current and in turn raises the saturation point of the tube, permitting its use with higher than ionization voltages.

As in the low vacuum tube regularity or evenness of the loud speaker current was more or less imperfectly secured by varying the voltage at the filament with different tubes and at different times with the same tube, the desired result may also be attained, and far more effectively, by reducing the pressure in the tube and keeping other factors constant. When a vacuum is produced of as low a pressure as a few hundredths of a micron (a micron is equal to 1/1000 of a millimeter of mercury in terms of barometric pressure), the discharge is independent of the degree of vacuum, when the tube is used with appropriate space charge. The discharge then passing from cathode at constant temperature to anode, varies directly with the 3/2 power (square root of the cube) of the voltage imposed on the cathode. This is equivalent to saying that steadiness of current through the loud speaker circuit is obtained, with an increase in power, until saturation, in known relationship to the increase of the imposed voltage. While the effectiveness of the low vacuum tube begins to diminish, in the upper range of ionization voltages, with high vacuum tubes, currents of much higher voltages may be used without loss of effectiveness.

The desired reduction of pressure in the tube involves the use of methods for producing a high vacuum and reducing to a minimum the effects of occluded gas. By evacuating the tube by pump or other suitable means, and at the same time freeing it of occluded gas by heating tube and electrodes, and also, as may be done, by passing a current through the filament, causing "bombardment" of the electrodes by electrons, a high vacuum tube is produced. By such procedure, the disturbing influence of ionization may be removed with consequent stability of discharge. The result is of great importance, since by adaptation of the procedure to manufacturing methods, tubes giving uniform stability of current may be commercially produced, suitable for use in the complex modern radio receiving sets employing multiple tubes, without necessity for the critical adjustments of the filament circuit necessary with low vacuum tubes.

It is the high vacuum tube of this type which respondent says embodies the Langmuir invention. As a product or structure it differs from the low vacuum tube, of which the Fleming valve and De Forest audion are well known types, only in that the pressure has been reduced to such a point that there is no appreciable ionization, with the resulting constancy of current in the amplifier circuit.

In the light of the explanation given of the operation of the vacuum tube, we now examine the claims of the patent. The application, filed October 16, 1913, was pending for 12 years before it was issued October 20, 1925, a period which witnessed the most important beginnings and many of the chief developments of the radio art. The original application was for a process or method patent only. It contained five claims covering methods of obtaining a high vacuum in vacuum tubes and expelling occluded gas from them. These claims were all ultimately cancelled. Other process claims, substituted by amendment, of which four only survived in the patent as issued, were amplifications of the original method and process claims. Late in 1913 Langmuir first made claim to invention of the tube as a structure or device, in four claims, all of which were amended one or more times. All but the third, which was amended four times, were cancelled in 1925, the year the patent issued. There are 28 claims for the structure or device in the patent as issued. Of these one was filed by amendment in 1913, 1 in 1917, 9 in 1919, 3 in 1921, and 14 in 1925. During the 12 years the patent was pending, there were 67 amendments of specifications, of which 45 were in 1925. Amended claims filed, and additions and cancellations of them made, number 100 in all, of which 42 were in 1925.

The process claims cover methods of creating the high vacuum tube in the manner already described, that is, freeing the tube of occluded gas by heating tubes and electrodes and by electronic bombardment, at the same time evacuating the tube of air or gas by approved methods, such as the use of the Gaede molecular pump or chemical means. The court below did not rest its holding of validity of the patent on these claims, and respondent does not seriously urge their validity here. It suffices to say that an examination of the prior art discloses that long before the earliest date claimed for Langmuir, the necessity for removing occluded gas from tubes or other electrical discharge devices in order to procure a high vacuum, and the methods of doing it by heating and electronic bombardment were well known, as was the procedure for constructing the high vacuum tube by expelling occluded gas while evacuating the tube. An article by Duncan, American Electrician, May, 1896; one by Doane, Electrical World and Engineer, of May 21, 1904; the Dwyer patent, No. 496,694, January 4, 1898, for a process for producing high vacuum in incandescent lamps or similar receptacles during their manufacture; the Soddy patent, No. 859,021, July 2, 1907, for the employment of certain reagents in the process of producing high vacuum; the Thatcher patent, No. 1,028,636, June 4, 1912; application filed March 30, 1910, for method of exhausting vessels; and an article by Lilienfeld in 1910, to be mentioned later, disclosed before Langmuir the essentials for producing a high vacuum, described in the present process claims. They were in use in laboratory practice by Millikan and others before 1911.

It was upon the claims for the high vacuum tube structure or device that the court below based its decision, and they are urged upon us here as the grounds for sustaining the patent. They put forward, in a great variety of forms, claims for an electrical discharge device consisting of a tube with cathode and anode within it, with relation of parts and degree of evacuation (vacuum) such that the device is capable of operation with higher than ionization voltages in a range below saturation, substantially unaffected by ionization. Claim 2, which respondent selects as typical, reads:

> 2. A discharge tube having a cathode adapted to emit electrons and an anode adapted to receive said emitted electrons, the tube walls being fashioned or shaped to permit the direct passage of a useful proportion of said electrons from cathode to anode, the gas content or residue of said tube and the relation of the parts of the tube being such that the tube is capable of being so operated in a range below saturation and materially above ionization voltages that the space current is governed or limited by the electric field of said electrons substantially unaffected by positive ionization.

But this claim, as well as all others of the Langmuir patent, must be read in the light of the fact, fully accepted by the parties to this litigation, that electrical discharge devices such as the Fleming valve and the De Forest audion, patents on the latter of which expired in 1925, which were well known before Langmuir, comprise all the elements of the combination claimed except the presence within it of a high vacuum. It is conceded that if the requisite high vacuum be created in a De Forest audion, it becomes the high vacuum tube of the patent and is an infringing device if the patent is valid. The degree of the vacuum within the tube is therefore the crucial feature of the invention claimed. Langmuir, in describing in his patent the method of producing the device, says:

> The evacuation of the device should be preferably carried to a pressure as low as a few hundredths of a micron, or even lower, but no definite limits can be assigned.

In at least 13 of the claims, the device claimed is one in which the gas within the tube, or the pressure, is sufficiently reduced, or the vacuum raised high enough, (all of which are synonymous), to produce the desired result, that is, a discharge unaffected by ionization when the tube is operated by the appropriate space current, which may be of higher voltage than that for the low vacuum tube.

The characteristics of the discharge named by the inventor in the specifications "in order to distinguish electron discharge devices made in accordance with my invention from the prior art" are the following: (1) gas ionization absent or negligible; (2) cathode not heated by the discharge; (3) no blue glow or visible evidence of discharge; (4) 3/2 power relation of current to voltage; (5) discharge independent of degree of vacuum within intended limit for particu-

lar tube; (6) regularity and reproducibility. But all these characteristics may be summed up in the simple statement that in the tube of the patent, there must be an absence of harmful ionization; and since, as already indicated, harmful ionization disappears when the requisite vacuum is attained, the device or structure of the patent is one in which such a vacuum has been produced.

That the high vacuum tube was an improvement over the low vacuum tube of great importance, is not open to doubt. Even though the improvement was accomplished by so simple a change in structure as could be brought about by reducing the pressure in the well known low vacuum tube by a few microns, still it may be invention. Whether it is or not depends upon a question of fact, whether the relationship of the degree of vacuum within the tube, to ionization, and hence to the stability and effectiveness of discharge passing from cathode to anode, was known to the art when Langmuir began his experiments. If that relationship was then known, it required no inventive genius to avoid ionization and secure the desired result by creating the vacuum in a De Forest tube or other form of low vacuum discharge device.

That this relationship was known was the fact found by the district court and not challenged by the opinion of the court of appeals. In 1910 Lilienfeld, in a paper published in Annalen der Physik, vol. 32, on "The conduction of electricity", made a complete and explicit disclosure of the essentials of all the structures and methods of the Langmuir patent. The paper described methods of obtaining the "extreme vacuum" desired by freeing electrical discharge devices of occluded gas in the manner already described and at the same time evacuating the tube. He described the space charge effect, not mentioned in Langmuir's original specification, but later recited in the claims of the patent, in the following language:

> One can formulate more generally the conditions for high voltage and large current density as follows: The production of a state in which the volume density of the electrons carrying the current is as large as possible compared with the density of gas molecules in which there exists therefore a tendency for the formation of the maximum possible space charge in the path of the current.

To one skilled in the art, this could only mean that increased effectiveness of an electrical discharge device, to which a suitable current is applied, could be obtained by raising the vacuum in the manner which the writer had described. He also stated that—

> from a definite maximum density of the gas downwards, the discharge phenomena are independent of the gas density in the region investigated.

a statement equivalent to the fifth characteristic of the discharge in the Langmuir specification, namely, that it is independent of degree of vacuum within the intended limit for the particular tube.

Lilienfeld also deduced from meter readings and stated, the 3/2 power relation of current to voltage, as Langmuir later stated it in his patent. From this the conclusion is inescapable that Lilienfeld knew and stated, in terms which could be understood by those skilled in the art, that in a high vacuum the current produced is under control, stable, and reproducible; and, as he employed high voltages, that high power levels of the discharge may be obtained by the employment of a high voltage in a high vacuum tube. Space charge effect was also described by Lilienfeld in Physikalische Zeitschrift, in 1908, in which he pointed out that by raising the vacuum there is an increase in the number (volume density) of the negative electrons, and said:

> The higher the vacuum, the greater the current density, the more pronounced this new kind of discharge becomes.

The very fact that Lilienfeld knew and described the methods of the patent for obtaining high vacuum carries with it as a necessary corollary that the device itself, apart from its functioning and use, is lacking in patentable novelty. Hence, invention, if any there be, is embraced in the discovery of the principle that discharges above ionization voltages can be produced without substantial ionization if the vacuum be sufficiently high, and the disclosure that the device of the claims constitutes suitable means for putting the principle into practice. But Lilienfeld, in his paper of 1910, disclosed that he obtained discharges free from the effects of ionization, as Langmuir testified in interference proceedings in the Patent Office, and that he accomplished this through the attainment of high vacua by the very methods later described in the Langmuir patent.

Fleming, the inventor of the Fleming valve, in a paper read before the Royal Society on the conversion of electric oscillations into continuous current by means of a vacuum valve, February 9, 1905, pointed out the possibility of creating "an ideal and perfect rectifier for electric oscillations" by enclosing within a tube a hot carbon filament and a cold metal anode "in a very perfect vacuum"; and he described a method of procuring the vacuum by exhausing the bulb while freeing it of occluded air. In his patent, No. 803,634, November 7, 1905, he describes the method of securing a high vacuum within the bulb by freeing it of occluded gas by heating the bulb and filaments to incandescence and at the same time evacuating it. He defined a high vacuum as one reduced to "one hundred millionth of an atmosphere", which is less than the 1/100 of a micron, the pressure in the tube of the patent; and in an article in "The Scientific American Supplement" for January 20, 1906, on "Electric conductivity of a vacuum", he disclosed not only that electrons are emitted by hot cathodes in a high vacuum, but also—

> that a high vacuum may be a very good conductor, provided the negative electrode is rendered incandescent.

Thus Fleming knew, and stated, the advantages of the high vacuum, its definition, and the method of procuring it. The state of the art and the progress of scientific knowledge in this field was accurately summed up in the statement of the Law Examiner in the Patent Office who passed on the Langmuir claims:

> It is apparent after a review of the record that there is no single element which is broadly novel in the assemblage of elements making up an electron discharge device of the character defined in the issue. An evacuated tube having therein an incandescent electron emitting cathode and an anode was old prior to the filing of Langmuir's application, and methods of attaining high vacua, sufficient to give a relatively pure electron discharge in a properly designed tube were also well known and available to persons skilled in the art.

[1] The narrow question is thus presented whether, with the knowledge disclosed in these publications, invention was involved in the production of the tube, that is to say, whether the production of the tube of the patent, with the aid of the available scientific knowledge that the effect of ionization could be removed by reducing the vacuum in an electric discharge device, involved the inventive faculty or was but the expected skill of the art. The question is not, as respondent argues, whether Lilienfeld or others made a practical high vacuum tube, but whether they showed how it could be made and demonstrated and disclosed the relationship of the discharge to reduced pressure, and how to reduce it. See *Corona Co.* v. *Dovan Corporation*, 276 U. S. 358, 384. That the production of the high vacuum tube was no more than the application of the skill of the art to the problem in hand is apparent when it is realized that the invention involved only the application of this knowledge to the common forms of low vacuum discharge devices such as the Fleming and De Forest tubes. Once known that gas ionization in the tube caused irregularity of current which did not occur in a high vacuum, it did not need the genius of the inventor to recognize and act upon the truth that a better tube for amplifying could be made by taking out the gas. Arnold, who was skilled in the art, and who had made studies of electrical discharges in high vacua, when shown a De Forest audion for the first time on November 14, 1912, immediately recognized and said that by increasing the vacuum the discharge would be sufficiently stable and have adequate power levels to enable the tube to be employed as a relay device in transcontinental telephony. The very fact that all of significance in the Langmuir improvement was obvious to one skilled in the art as soon as he saw the unimproved tube, as the district court said, "lies athwart a finding of invention."

Respondent recognizes the force of this objection to patentability, but seeks to avoid it by insisting that the invention claimed is not as we have described it, but that—

> Langmuir's invention consisted in taking out [of the tube] the gaseous conductor upon which the prior art relied, and putting nothing [a vacuum] in its place.

It adopts also the statement in the opinion of the court below, upon which its decision turned,

> a vacuum, or, indeed, change of vacuum, isolated and standing by itself, is not the Langmuir invention, but it is a working tube in which all the elements, cathode, plate, vacuum, so coordinate and interwork that the current flow is not affected by gas,

a statement which, as we have already pointed out, takes no account of the scientific knowledge, available before Langmuir, that increase of vacuum in well known devices was all that was necessary to produce the desired result. Respondent elaborates, by saying that—

> in the practical prior art devices [that is to say, low vacuum tubes] the condition of current depended upon gas ionization; the art, moreover, believed that unless there was enough gas to act as a conductor no current could flow and the tube would not work.

It says that the high vacuum tube of the patent works on a different principle, that of the "pure electron discharge" and it was the recognition of this scientific truth and the adaptation of the device to it in which the invention consists.

But if Langmuir's invention is so to be defined, it is not the invention claimed by the patent. Respondent puts forth as sustaining this definition, statements in the specifications of the patent, to the effect that in the device of the patent, in which gas ionization is absent, the discharge is "distinct in its characteristics" from the described discharge taking place in an ionized gas, and again that it is "characterized by regularity and reproducibility with given conditions." But, while these and many other statements in the patent indicate that high vacuum was an effective means of producing in the old tubes of the art the stable current which could not be produced in the presence of ionization, they do not suggest any discovery of a scientific truth that essentially different principles control the discharge in low vacuum tubes from those which operate in high, other than that ionization, present when gas is present, has certain effects, notably on stability of current in a low vacuum, which is absent in the high, when ionization is absent, as Lilienfeld and others had disclosed.

If it were necessary to a decision we could not find that any such scientific truth is established by this record. Respondent, to support the contention, does not rely on evidence, but on a collection of more or less casual statements by various writers, made before 1915, to the effect that the gas or ionized gas of the low vacuum tube is a conductor. Before the development of the electron theory, "conductivity" of substances was a convenient expression for explaining the flow of electric currents. Fleming, in a statement in 1906, already quoted, referred to the high vacuum as a good "conductor" if a hot cathode was used. The present tendency is to ascribe the flow of current from a hot cathode through both high and low vacua to the flow or discharge of electrons. Millikan the eminent physicist testified that this theory was generally accepted before 1912. Langmuir himself so explained the flow of current in a gaseous tube in his specifications. The known truth is that current flows through both low and high vacua and is unfavorably affected by ionization in the former; but that the flow is due to conductivity of the ionized gas in one and, to something different, pure electron discharge, in the other, is not established by the evidence before us. There is some testimony to the contrary. Nor is our attention directed to anything which suggests that Langmuir thought there was such a difference, or relied upon it to remove ionization effects, rather than upon the simple expedient of removing the gas known to be responsible for them.

Even if the asserted difference were established, it is no more than the scientific explanation of what Lilienfeld and others knew, before Langmuir, of the effect of the high vacuum on the discharge, and the methods and devices for procuring the vacuum. It is method and device which may be patented and not

the scientific explanation of their operation. See *Le Roy* v. *Tatham*, 14 How. 156, 174–6.

Only when invention is in doubt may advance made in the art be thrown in the scale to support it. If we were to assume that invention here was doubtful, we can find little to suggest that the high vacuum tube when produced satisfied a long felt want or that its present utility is indicative of anything more than the natural development of an art which has passed from infancy to its present maturity since Langmuir filed his application. There was little or no practical use for a high vacuum tube in 1913. The De Forest audion was not in general use and Langmuir did not see one until that year. The many amendments of Langmuir's application during its long pendency, disclosing his uncertainty as to what he had invented, and the exhibits in this case, constitute a history of the development of the art, which indicate unmistakably that the resort to the high vacuum tube for discharges above ionization voltages was but the adaptation to the natural development of the art, by those skilled in it, of the scientific knowledge which had been accumulated by investigation and experimentation. When the need became apparent, De Forest and Arnold, as well as Langmuir, found ready at hand the knowledge which would enable one skilled in the art to satisfy it.

The court below, contenting itself with finding invention, said nothing of the finding of prior use by the district court. We hold that this finding of the district court was supported by the evidence and should have been given effect. As we have concluded that the Langmuir patent did not involve invention, we refer only briefly to the facts which establish prior use. In 1911 and until September of 1912, De Forest was in the employ of the Federal Telegraph Co. of California, then engaged in the commercial transmission and reception of radio messages, in which audion detectors as well as audion amplifiers were used. In July, 1912, De Forest sought and obtained a high vacuum in the audions used as amplifiers, and observed that when the vacuum was too low the blue glow effect occurred at from 15 to 20 volts. In order to secure higher voltages from the audions used as amplifiers and to procure the requisite high vacuum, he had some of the bulbs re-exhausted while super-heated. Before August, 1912, the Telegraph Company used De Forest amplifying audions at 54 and 67½ volts, which was possible only because he had exhauseed the tubes of gas, which would otherwise have ionized at from 20 to 30 volts. The vacuum was lower than that obtained by later and improved methods; but the effect of high vacuum upon voltages above the point of ionization was then known, and the knowledge was thus availed of in practice. Whether De Forest knew the scientific explanation of it is unimportant, since he did know and use the device and employ the methods, which produced the desired results, and which are the device and methods of the patent.

Reversed.

Mr. Justice MCREYNOLDS concurs in the result.

U. S. Court of Customs and Patent Appeals

IN RE WHITAKER

No. 2,624. Decided February 25, 1931

1. PATENTABILITY—INVENTION.

"A combination of old elements, in order to be patentable, must involve invention. It must produce not only some useful but some new result which goes beyond what may be achieved by mere mechanical skill in operating the elements disclosed by prior art."

2. SAME—FILLER FOR SEALING PIPE JOINTS.

Claims for a filler for sealing pipe joints *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Steward & McKay, Mr. Clarence O. McKay, and *Mr. Melvin W. Sandmeyer* for Whitaker.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.:*

Appellant seeks patent for alleged new and useful improvements in fillers for pipe joints, and has appealed to this court from the decision of the Board of Appeals of the Patent Office affirming the action of the Examiner denying same.

The claims, three in number, read as follows:

5. A filler for sealing pipe and similar joints adapted to be placed as a preformed element in the pipe or similar joint, said element comprising a body of plastic, non-metallic adhesive material provided with a non-adhesive impervious coating capable of being readily broken down upon distortion of the plastic body when placed in the joint.

6. A filler for sealing pipe and similar joints adapted to be placed as a preformed element in the pipe or similar joint, said element comprising an elongated rope-like body of homogeneous plastic adhesive water-proof material and fibrous material, said body being capable of being readily distorted to conform to joint spaces wherein used, said body being provided with a thin film-like impervious surface coating of a non-adhesive non-elastic material capable of being readily broken down upon distortion of the plastic body when placed in the joint.

7. A filler for sealing pipe and similar joints adapted to be placed as a preformed element in the pipe or similar joint, said element comprising a body of plastic non-metallic adhesive material provided with a thin-film-like coating of a material having the characteristics of collodion.

The references cited in the rejection are: Dailey, No. 1,056,010, March 18, 1913; Ferguson, No. 1,608,470, November 23, 1926.

There is in the record also, and referred to by the Board, patent to Collins, 853,003, May 7, 1907.

The filler which appellant discloses is a ropelike composition of adhesive waterproof material which contains fibrous matter as a part thereof. This is coated with an impervious film or covering made of nonadhesive material which is capable of being readily broken down when the body is placed in the joints of sewer pipes, and the like, and distorted.

The patent to Dailey discloses a plastic packing "for piston rods, throttle rods, valve stems, pump rods and the like," the object of it being "to provide a resilient, steam resisting packing which will have a 'flow', as it were, and can be fed under pressure to and around the rod, and which will be easy to make and handle." After being prepared the product is packed "under pressure" in casings "of paper, tin foil or other soft, flexible and frangible material which will work in with the packing and not interfere with its flow. * * *."

Ferguson's preferred form of filler for sewer pipes and the like, as stated in his specification, consists of a "gasket or core formed from a waterproof, plastic asphaltic compound" with an outer case or covering which will permit the core to deform in a way "to become packed tightly between the abutting ends of the pipe and between the bell and spigot" when the latter is forced into the former. His outer cover or casing is "formed from an inexpensive fabric, such as a porous cotton fabric", which "permits the plastic core to ooze through". He states, however, that it is immaterial what particular kind of asphaltic substance is used for the core, and what particular fabric for the casing.

As to the core or filler the patents to Ferguson and Dailey—Ferguson being in the same field as appellant—are obvious anticipations of the disclosures of the application. We think this is also true as to the coating, although the material of which the coating is made differs from the tin foil of Dailey and the cheesecloth of Ferguson. In both patents the coverings are designed to render the filler structure convenient to handle and to remain in the filler material after the latter is pressed into place in sealing the pipe joints. In the Dailey patent the cover is broken down and mixes with the filler. And, aside from these, Collins discloses a filmlike coating for his packing of metallic material, said coating being composed of "glue, glycerin, sugar and varnish". This coating is stated to be a "casing for the same in shipment".

Appellant insists, however, that since no one of the patents discloses all the elements of his claims, it is improper to combine references as was done by the Examiner and the Board, and cites *In re Champeau*, 17 C. C. P. A. (Patents) 568, 34 F.(2d) 1012, 388 O. G. 783.

[1] Suffice it to say that we there found that the applicant had evolved a combination of several elements, each disclosed in the prior art, which combination produced a new and useful result different from that which had been before produced, and patent was granted. In the case at bar we fail to see where appellant has produced any new result by his combination. The result may be better but it is not novel in the sense of the patent laws. A combination of old elements, in order to be patentable, must involve invention. It must produce not only some useful but some new result which goes beyond what may be achieved by mere mechanical skill in operating the elements disclosed by prior art. *In re Bayer*, 17 C. C. P. A. (Patents) 614, 35 F.(2d) 66, 390 O. G. 4.

[2] Each of appellant's claims calls for a filler as a "preformed element". That is to say, the filler is formed at the manufacturing plant and conveyed to the point of use ready for use, except for cutting to the required lengths and bending about the pipe joints. In the same sense the products of both Dailey and Ferguson are preformed.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FORREST

No. 2,619. Decided February 25, 1931

PATENTABILITY—METHOD OF PROCESSING DRIED FRUITS.

Certain claims for a method of processing dried fruits by treating them with an oil expressed from the seeds of like fruit *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Miller & Boyken and *Mr. Charles S. Grindle* for Forrest.

Mr. T. A. Hostetler for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals affirming the decision of the Primary Examiner denying claims 1 to 5, inclusive, 8, and 9 in appellant's application for an alleged invention relating to a method of processing dried fruits.

After the appeal had been taken, but prior to the oral arguments in this court, counsel for appellant withdrew appealed claims 4, 5, and 8. At the time of the oral arguments in this court, counsel for appellant in open court withdraw appealed claim 1. Accordingly, the appealed claims before the court for consideration are Nos. 2, 3, and 9. They read as follows:

2. The method of processing dried fruits which comprises treatment of the same with an oil expressed from the seeds of like fruit.

3. The method of processing dried fruits which comprises removal of the seeds therefrom, expressing the oil from the seeds and reapplying it to the fruit.

9. A new article of manufacture comprising dried fruit having the exterior surface coated with oil of the seeds of the fruit.

It appears from the record that the Primary Examiner allowed claims 6, 7, 11, and 12, which involved the method of processing seeded dried raisins with oil from the seeds of raisins.

The Board of Appeals allowed claim 10, which had been rejected by the Primary Examiner and which involved the disclosed process of treating unseeded raisins.

It appears from appellant's specification that, prior to the use of the alleged invention, dried raisins and possibly other dried fruits had been sprayed with mineral oil for the purpose of making the fruit nonadhesive; but that, due to the fact that the mineral oil so used gave the fruit an undesirable flavor, appellant conceived the idea of using the oil from the seeds of raisins, thereby making the dried fruit nonadhesive and at the same time imparting to it an improved flavor.

The involved claims were rejected by the Primary Examiner on the following references: Roeding, 1,245,031, October 30, 1917; Cassel, 106,465, August 16, 1870.

The Board of Appeals held that the patent to Roeding was not a proper reference because it disclosed the treatment of raisins with a solution consisting of olive oil and lye.

The patent to Cassel disclosed the use of oil obtained from grapes for the purpose of preserving meat and other articles of food such as eggs and butter.

It was pointed out in the decision of the Board of Appeals that raisin-seed oil is not a new product; that it was known and used long prior to the filing

of appellant's application; and that oil from the pits of peaches and apricots had also been well known for many years. The board then said:

As it is obvious that any oil will serve to make the fruit nonadhesive and it is known that oil may be obtained from the seeds of various fruits which are dried and that such oils have flavoring properties we are unable to find anything patentable in flavoring dried fruits or anything else with such oils.

Appellant concedes in his specification that it was old in the art to treat dried raisins with mineral oil in order to make them nonadhesive; and that it was well known that the use of such oil imparted an undesirable flavor to the fruit.

In view of the fact that the flavoring and nonadhesive qualities of raisin-seed oil and oils from the seeds of other fruits, were well known prior to the filing of appellant's application, we are of opinion that the application of such oils to dried raisins and other dried fruits for the purpose of making them nonadhesive, and for flavoring purposes, would not involve invention.

The patentability of the allowed claims is not before us for consideration. However, we are of the opinion that the Board of Appeals was right in holding that the claims at issue do not involve invention.

The decision is, therefore, affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

SUNDBACK *v.* BLAIR AND PERRAULT

No. 2,599. Decided February 25, 1931

1. PATENTS—APPEALS—SECTION 4911, REVISED STATUTES. "We repeat that the words 'the decision,' as used in section 4911, mean a decision of the Board of Appeals rendered by it in the performance of the duties expressly conferred upon it by statute, and they do not include any decision rendered by it pursuant to any rule of the Patent Office conferring upon it a jurisdiction not expressly authorized by the statutes."

2. SAME—SAME—THE COURT OF CUSTOMS AND PATENT APPEALS—JURISDICTION.

The Court of Customs and Patent Appeals has no jurisdiction to review a decision of the Board of Appeals affirming a decision of the Law Examiner dissolving an interference.

APPEAL from the Patent Office. Dismissed.

Mr. Julian S. Wooster for Sundback.

No appearance for Blair and Perrault.

LENROOT, *J.:*

This is an appeal by the appellant Sundback from a decision of the Board of Appeals of the United States Patent Office which affirmed a decision of the Law Examiner granting a motion by the appellee Blair to dissolve the interference as to all counts, in an interference proceeding which had been declared between the appellant Sundback and the appellees Blair and Perrault. The motion to dissolve was granted upon the ground of anticipation by the patent to Denner-Meier, No. 1,116,249, November 3, 1914, and it was upon this ground of nonpatentability that the Board of Appeals affirmed the decision of the Law Examiner.

The applications of the several parties were filed as follows: Sundback, appellant, filed on September 3, 1924; Blair, appellee, filed on July 2, 1927; Perrault, appellee, filed on July 2, 1925.

The appellee Perrault is a patentee, his patent being dated January 26, 1926, and the four counts of the issue are claims of said patent copied for purposes of an interference.

Various other proceedings have been had in the Patent Office with reference to the applications of the parties and the interference declared between them, which it is unnecessary to refer to here.

Appellant assigns a large number of errors, the principal one being that the Board of Appeals erred in holding that the counts in issue are not patentable over the prior art.

The question confronts us at the outset as to whether this court has jurisdiction of this appeal. If it has not, the appeal of course must be dismissed. This question must be determined by a construction of the statutory law relating to the subject.

By section 482 of the Revised Statutes, the Board of Appeals of the Patent Office is authorized—

to review and determine upon the validity of the adverse decisions of Examiners upon applications for patents and in interference cases.

By section 483, the Commissioner of Patents is empowered, subject to the approval of the Secretary of Commerce, to "establish regulations, not inconsistent with law, for the conduct of proceedings in the Patent Office."

Section 4904 provides that:

Whenever an application is made for a patent which, *in the opinion of the Commissioner*, would interfere with any pending application, or with any unexpired patent, he shall give notice thereof to the applicants, or applicant and patentee, as the case may be, and *shall direct the Primary Examiner to proceed to determine the question of priority of invention*. And the Commissioner may issue a patent to the party who is adjudged the prior inventor, unless the adverse party appeals from the decision of the Primary Examiner, within such time, not less than twenty days, as the Commissioner shall prescribe. (Italics ours.)

Section 4909 reads as follows:

Every applicant for a patent or for the reissue of a patent, any of the claims of which have been twice rejected, and every party to an interference, may appeal from the decision of the Primary Examiner, or of the Examiner in charge of interferences in such case, to the Board of Appeals; having once paid the fee for such appeal.

Section 4911 reads as follows:

If any applicant is dissatisfied with the decision of the Board of Appeals, he may appeal to the United States Court of Customs and Patent Appeals, in which case he waives his right to proceed under section 4915 of the Revised Statutes. If any party to an interference is dissatisfied with the decision of the Board of Appeals, he may appeal to the United States Court of Customs and Patent Appeals, provided that such appeal shall be dismissed if any adverse party to such interference shall within twenty days after the appellant shall have filed notice of appeal according to section 4912 of the Revised Statutes, file notice with the Commissioner of Patents that he elects to have all further proceedings conducted as provided in section 4915 of the Revised Statues. Thereupon the appellant shall have thirty days thereafter within which to file a bill in equity under said section 4915, in default of which the decisions appealed from shall govern the further proceedings in the case. If the appellant shall file such bill within said thirty days and shall file due proof thereof with the Commissioner of Patents, the issue of a patent to the party awarded priority by said Board of Appeals shall be withheld pending the final determination of said proceeding under said section 4915.

The inquiry arises as to the construction of the words "the decision" as used in said section 4911. Does it mean any decision that the Board of Appeals is authorized by the statute and the rules of the Patent Office to render, or only such decisions as the Board of Appeals is specifically authorized by the terms of the statute to render?

We are clear that appeals can be taken to this court only from decisions which the Board of Appeals is specifically authorized by the statutes to make in proceedings relating to patents, and that any decisions not so authorized, but which are made under authority of the Commissioner of Patents to aid him in the performance of his duties, are not appealable to this court.

In the case at bar, the decision of the Board of Appeals is based upon an appeal from a decision of a Law Examiner. Nowhere in the statutes relating to the Patent Office is any power conferred upon Law Examiners to act as tribunals, from whose decisions an appeal may be taken to the Board of Appeals. Nowhere in such statutes are Law Examiners mentioned except that there shall be such persons in the Patent Office and their salaries are fixed. The plain inference from this fact is that Law Examiners can exercise no powers of decision as tribunals of the Patent Office, but act in a purely advisory capacity to the statutory tribunals of the Patent Office, and in certain cases they may act for the Commissioner in the performance of the duties imposed upon him by law, in which latter case the decision of a Law Examiner is, in legal effect, the decision of the Commissioner.

The fact that rule 122 of the Patent Office provides that motions to dissolve an interference shall be heard and determined by the Law Examiner is immaterial to the question before us. In such case, the Law Examiner acts for the Commissioner. Under no other theory could the decisions of the Law Examiner have any force whatever. The same observations are true respecting rule 124, which provides for an appeal from the decision of the Law Examiner to the Board of Appeals. In such case the decision of the Board is not one which it is authorized to make in its statutory capacity, but is one in which it acts for the Commissioner, for the law imposes upon the Commissioner the duty of determining whether an interference shall be declared; and, once declared, only the Commissioner has the power to dissolve the same, which, under the rules, may be done by other parties in the Patent Office to whom the Commissioner has delegated the power to act for him. The statutes do not provide for any appeal to this court from a decision of the Commissioner in proceedings relating to patents.

Nowhere in the statutes is the Board of Appeals specifically given any jurisdiction except in a prescribed appellate capacity. If any jurisdiction is exercised by it in proceedings relating to patents, not expressly authorized by the statutes, but under rules of the Patent Office, any decision rendered thereunder is not a decision which is appealable to this court, because there is no statutory authority for such an appeal.

We repeat that the words "the decision," as used in section 4911, mean a decision of the Board of Appeals rendered by it in the performance of the duties expressly conferred upon it by statute, and they do not include any decision rendered by it pursuant to any rule of the Patent Office conferring upon it a jurisdiction not expressly authorized by the statutes.

Nothing herein should be construed as intimating that, if the decision of the Board of Appeals had been based upon an appeal to it from a decision of a Primary Examiner or Examiner of Interferences, dissolving an interference we would entertain jurisdiction. It is unnecessary for us to decide that question.

We may add that appellant, by following the appropriate procedure, may secure a review by this court of the patentability of his claims, should his application be finally rejected by the Primary Examiner and the Board of Appeals.

For the reasons stated, the appeal is dismissed for lack of jurisdiction of this court to entertain it.

Dismissed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

896,807, K. Dieterich, Agar-agar compound; 943,163, A. Schmidt, Agar-agar cascara product, D. C., S. D. N. Y., Doc. E 24/517, *Chemische Fabrik* v. *Remschild Chemical Corp. et al.* Dismissed May 14, 1931. Doc. E 24/159, *T. W. Miller* v. *Reinschild Chemical Co. et al.* Decree as above.

943,163. (See 896,807.)

1,050,894, Williams & Bernhard, Automatic refrigerating system, D. C. Del., Doc. E 714, *Refrigeration Development, Inc.*, v. *Frigidaire Corp. et al.* Consent decree dismissing bill May 13, 1931.

1,100,934, J. K. Williams, Vulcanizing press, D. C., N. D. Ohio, E. Div., Doc. E 8128, *National Erie Co.* v. *Southwark Foundry & Machine Co.* Consent decree holding patent valid and infringed (notice May 15, 1931.)

1,123,502, J. A. Dubbs, Process of treating oils; 1,281,884, M. J. Trumble, same; 1,392,629, 1,522,425, 1,525,281, 1,534,927, 1,549,352, 1,550,607, 1,686,654, 1,703,100, C. P. Dubbs, same; 1,546,634, same, Apparatus for treating petroleum; 1,488,325, same, Process and apparatus for treating oils; 1,550,568, 1,628,270, R. T. Pollock, same; 1,638,735, L. C. Huff, Method of hydro-carbon oil conversion, D. C. Del., Doc. E 783, *Universal Oil Products Co.* v. *Standard Oil Co.* Consent decree dismissing bill May 7, 1931.

1,227,364, W. E. Baker, Rail joint, filed May 8, 1931, D. C., N. D. Calif. (San Francisco), Doc. 2878–L, *W. R. Layne et al.* v. *Steel Weld Equipment Corp. et al.*

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit; 1,465,332, same, Vacuum tube amplifier, D. C., S. D. Calif. (Los Angeles), Doc. E K–50–M, *P. Artigue* v. *Famous Players Lasky Corp.* Dismissed without prejudice Sept. 12, 1930.

1,263,355, P. Artigue, Means for producing animated shadow-graphs, D. C., S. D. Calif. (Los Angeles), Doc. E K–50–M, *P. Artigue* v. *Famous Players Lasky Corp.* Dismissed without prejudice Sept. 12, 1930.

1,281,884. (See 1,123,502.)

1,301,561, M. Hirschthal, Method and apparatus for providing concrete structures, filed May 14, 1931, D. C., S. D. N. Y., Doc. E 59/380, *M. Hirschthal et al.* v. *Booth & Flinn Co.*

1,307,733, A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means, D. C., N. D. Calif. (San Francisco), Doc. E 2287–L, *Alemite Mfg. Corp.* v. *W. P. Jones (Jones Auto Supply Co.).* Patents held infringed May 8, 1931.

1,307,734. (See 1,307,733.) 1,336,640. (See 1,648,559.)

1,337,275, A. R. Sandt, Platform and mud guard, D. C. Minn. (St. Paul), Doc. 1031, *S. W. S. Co.* v. *Ford Motor Co.* Dismissed without prejudice Apr. 7, 1931.

1,350,097, F. B. Glover, Work holder; 1,505,557, same, Multiple engraving machines, D. C., S. D. N. Y., Doc. E 56/250, *F. B. Glover* v. *L. E. Waterman Co.* Consent order of discontinuance May 14, 1931.

1,354,968, H. E. Goodwin, Shears, filed May 15, 1931, D. C., W. D. Pa. (Pittsburgh), Doc. E 2522, *The Alliance Mfg. Co.* v. *Montgomery Ward & Co., Inc.*

1,389,319, G. E. Quigley, Irrigating device, D. C., S. D. Calif. (Los Angeles), Doc. E O–85–H, *H. R. Brown* v. *A. Kraemer.* Dismissed for want of prosecution Feb. 12, 1931.

1,392,629. (See 1,123,502.) 1,403,475. (See 1,231,764.)

1,419,137, J. A. Hewes, Men's neckwear, D. C., S. D. N. Y., Doc. E 49/389, *Hewes & Potter, Inc.*, v. *H. Forman.* Decree for plaintiff May 14, 1931.

1,423,956, Mitchell & White, Tipless incandescent lamp, filed May 6, 1931, D. C., N. D. Calif. (San Francisco), Doc. E 2876–S, *General Electric Co.* v. *B. C. Brown et al.* (*Associated Manufacturers Importing Co.*).

1,465,332. (See 1,231,764.) 1,488,325. (See 1,123,502.)

1,505,557. (See 1,350,097.) 1,522,425. (See 1,123,502.)

1,525,281. (See 1,123,502.)

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. N. Y., Doc. E 50/18, *A. B. Dick Co.* v. *Repeating Stamp & Duplicator Corp.* Consent decree for plaintiff May 12, 1931. Doc. E 50/138, *A. B. Dick Co.* v. *W. E. Bradley Co., Inc.* Decree as above.

1,534,927. (See 1,123,502.) 1,546,634. (See 1,123,502.)

1,549,352. (See 1,123,502.)

1,549,872, Hebeler & Schulenberg, Electric welding apparatus; 1,643,550, Frickey & Kalenborn, Engine controller for welding system; 1,749,133, 1,778,973, same, Arc welding system; 1,772,636, ReQua & Kalenborn, Rail grinding machine, filed May 7, 1931, D. C., N. D. Calif. (San Francisco), Doc. E 2877–K, *Welding Service, Inc.*, v. *Steel Weld Equipment Corp.*

1,550,568. (See 1,123,502.) 1,550,607. (See 1,123,502.)

1,566,761, Miles & Bauless, Siren and attaching means therefor, D. C., S. D. Calif. (Los Angeles), Doc. E O–55–M, *L. H. Miles* v. *C. P. Meusdorffer et al.* Claims 2, 7, 8 and 9 held invalid; bill dismissed Jan. 16, 1931.

1,613,163, C. D. Dunning, Method of producing composite photographs; 1,673,019, 1,686,987, R. J. Pomeroy, same; 1,776,269, same, Correction of color transparencies, filed April 28, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E T–110–C, *R. J. Pomeroy et al.* v. *First National Pictures, Inc., et al.*

1,628,270. (See 1,123,502.)

1,629,275, E. C. Kennedy, Latch needle, filed Mar. 4, 1931, D. C. Vt. (Burlington), Doc. E 122, *The Torrington Co.* v. *C. Cooper Co., Inc.*

1,638,735. (See 1,123,502.) 1,643,550. (See 1,549,872.)

1,648,559, G. A. Mitchell, Movement mechanism for cameras; 1,336,640, J. E. Leonard, Film magazine, D. C., S. D. Calif. (Los Angeles), Doc. R–120–C, *Mitchell Camera Corp.* v. *R. G. Fear et al.* (*Fearless Camera Co.*). Dismissed without prejudice Dec. 22, 1930.

1,648,820, F. E. Phillips, Reversing mechanism for machine tools, filed May 14, 1931, D. C., S. D. Ohio, W. Div., Doc. E 741, *F. E. Phillips* v. *Cisco Machine Tool Co.*

1,673,019. (See 1,613,163.)

1,673,727, L. V. Aronson, Cigar lighter; Des. 74,248, same, Lighter, D. C., S. D. N. Y., Doc. E 49/269, *Art Metal Works, Inc.* v. *H. Lederer & Bro., Inc., et al.* Consent decree for plaintiff May 13, 1931, Doc. E 51/77, *Art Metal Works, Inc.* v. *Smoker's Products Corp. et al.* Decree as above (notice May 12, 1931).

1,686,654. (See 1,123,502.) 1,686,987. (See 1,613,163.)

1,687,370, J. R. LaVigne, Suspender end loop, D. C., S. D. N. Y., Doc. E 52/23, *The Waterbury Buckle Co.* v. *A. Klaristenfeld* (*Metropolitan Suspender Co.*). Consent decree for plaintiff (notice May 11, 1931).

1,688,478, A. J. Weiss, Electrical condenser, D. C., S. D. N. Y., Doc. E 52/59, *Dubilier Condensing Corp.* v. *Polymet Mfg. Corp.* Dismissed on merits May 12, 1931.

1,702,608, Lawson & Lawson, Mechanism for producing knitted fabrics having lap stripes and yarn variations, filed May 16, 1931, D. C. Del., Doc. E 879, *Hemphill Co.* v. *Great American Knitting Mills, Inc.*

1,703,100. (See 1,123,502.)

1,713,159, E. A. Arndt, Automobile trunk platform; 1,753,077, W. W. Wilson, Trunk and luggage rack, D. C., N. D. Iowa (Dubuque), Doc. E 169, *Kari-Keen Mfg., Inc.*, v. *Peerless Machinery Co.* Injunction granted May 8, 1931.

1,742,830, Seaman & Braf, Piping and method of forming same; 1,756,036, same, Sewing machine, filed May 4, 1931, D. C., S. D. N. Y., Doc. E 59/392, *C. Seaman* v. *Mohawk Sales Corp.*

1,749,133. (See 1,549,872.)

1,753,077. (See 1,713,159.) 1,756,036. (See 1,742,830.)

1,764,555, A. S. Friedlander, Shield for garments, filed Nov. 28, 1930, D. C., N. D. Calif. (San Francisco), Doc. 2732–L, *M. M. Adams* v. *I. B. Kleinert Rubber Co.*

1,769,858, C. L. Roberts, Marine derrick footing, filed May 1, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E T–113–M, *C. L. Roberts* v. *Pacific Western Oil Co. et al.*

1,772,636. (See 1,549,872.)

1,774,367, H. Golber, Calculating machine, filed May 8, 1931, D. C. Del., Doc. E 874, *Complete Calculator Co.* v. *Monroe Calculating Machine Co.*

1,776,269. (See 1,613,163.) 1,778,973. (See 1,549,872.)

1,781,271, G. W. Cowdrey, Bathing suit, filed Apr. 8, 1931, D. C., S. D. Calif. (Los Angeles), Doc. T–94–C, *G. W. Cowdrey et al.* v. *Pacific Knitting Mills, Inc., et al.*

1,798,009, C. Arens, Power transmitting device, filed May 11, 1931, D. C., W. D. Mich., S. Div., Doc. E 2441, *C. Arens et al.* v. *The Shakespeare Products Co.*

Re. 16,157, J. C. Hinshaw, Trailer truck, C. C. A. 6th Cir., Doc. 5558, *The Ohio Galvanising & Mfg. Co.* v. *Mercury Mfg. Co.* Claims 2, 5, 7, 8 and 10 held invalid May 11, 1931.

Re. 17,328, R. D. Davies, Process of facing the cutting edges of drilling tools, filed Apr. 23, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E T–105–M, *P. L. & M. Co.* v. *J. C. Ballagh et al.* (*Armite Laboratories*). Doc. E S–21–J, *P. L. & M. Co.* v. *M. A. Griffith et al.* (*Spartan Steel Co.*). Dismissed Dec. 2, 1930.

Re. 17,885, J. H. Janowitch, Shirt collar stiffener, filed May 13, 1931, D. C., S. D. N. Y., Doc. E 59/377, *Lakewood's Patents Corp.* v. *S. Goodman et al.*

Des. 70,209, J. Berlinger, Wedding ring, D. C., S. D. N. Y., Doc. E 51/269, *J. Berlinger* v. *B. & E. J. Gross Co., Inc.* Dismissed without prejudice May 11, 1931.

Des. 73,995, T. W. Behan, Combined casing and frame for washing machine, D. C., N. D. Ohio, E. Div., Doc. E 3684, *Nineteen Hundred Corp.* v. *Apex Rotarex Corp.* Patent held invalid, dismissed (notice May 16, 1931).

Des. 74,248. (See 1,673,727.)

Des. 81,971, J. Forst, Reclining arm chair, filed May 14, 1931, D. C., S. D. N. Y., Doc. E 59/391, *Manhattan Wicker Co., Inc.*, v. *Mayhew Shop, Ltd.*

Des. 83,651, P. A. Stuart, Shoe; Des. 83,711, C. Wolfelt, same, filed May 14, 1931, D. C., S. D. N. Y., Doc. E 59/390, *A. Geller Shoe Mfg. Co., Inc.*, v. *M. J. L. Shoe Shop, Inc.*

Des. 83,711. (See Des. 83,651.)

T. M. 134,900, The Cellucotton Products Co., Sanitary napkin, appeal filed Mar. 5, 1931, C. C. A., 3d Cir., Doc. 4581, *Kotex Co.* v. *Kotabs, Inc., et al.*

CARNEGIE LIBRARY OF ATLANTA

TRADE-MARKS

OFFICIAL GAZETTE, JULY 14, 1931

[VOL. 408. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 314,993. MAX HERTZ LEATHER COMPANY, Newark, N. J. Filed May 25, 1931.



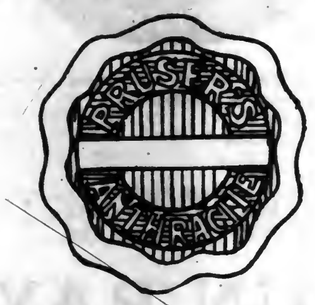
FAUN-SUEDE

Applicant hereby disclaims exclusive use of the word "Suede".

For Leather.

Claims use since May 1, 1931.

Ser. No. 315,417. HENRY B. PRUSER, INCORPORATED, Mount Vernon, N. Y. Filed June 4, 1931.



Exclusive use of the word "Anthracite" is disclaimed. The drawing is lined for red and blue.

For Coal.

Claims use since June 1, 1929.

Ser. No. 315,523. MILTON BRADLEY COMPANY, Springfield, Mass. Filed June 8, 1931.

MILCARBRA

For Carving or Sculpturing Material of Wax Composition.

Claims use since May 12, 1931.

CLASS 2

Receptacles

Ser. No. 313,145. NATIONAL ENAMELING & STAMPING CO., Milwaukee, Wis. Filed Apr. 9, 1931.

COLONIAL

For Kitchenette Sets, Including Flour, Sugar, Coffee, and Tea Canisters, Bread Boxes, Flour Bins, Cake Closets, Cookie Boxes, Pantry Boxes, Made of Japanned Ware.

Claims use since Mar. 24, 1931.

Ser. No. 313,146. NATIONAL ENAMELING & STAMPING CO., Milwaukee, Wis. Filed Apr. 9, 1931.

GARDEN GIRL

For Kitchenette Sets, Including Flour, Sugar, Coffee, and Tea Canisters, Bread Boxes, Flour Bins, Cake Closets, Cookie Boxes, Pantry Boxes, Made of Japanned Ware.

Claims use since Mar. 24, 1931.

Ser. No. 313,484. B. & B. SHOE COMPANY, Chicago, Ill. Filed Apr. 18, 1931.

Visibab

For Cardboard Boxes Used Particularly for Holding Infant Shoes.

Claims use since Jan. 8, 1931.

Ser. No. 313,600. HYGIENIC TUBE AND CONTAINER COMPANY, Newark, N. J. Filed Apr. 21, 1931.

HYCOLOID

For Cellulose Acetate, Cellulose Nitrate, and Cellulose Acetate Stearate Products—Namely, Containers in Tube-Like Formation, Cylindrical Cans with Frangible Seals, Collapsible Tubes, Vials, and Bottles for Cream, Salves, Ointments, Emulsions, and Other Compositions.
Claims use since Apr. 1, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 312,109. MARTINS-BIRMINGHAM LIMITED, Birmingham, England. Filed Mar. 13, 1931. Under 10-year proviso.

MARTIN

For Purses, Wallets, Note Cases, Dollar Bill Cases, Pocket-Books, Visiting Card Cases, Trunks, Portmanteaux, Suit Cases, Travel Bags, Attaché Cases, Week-End Cases, Kit Bags, Hand Bags, Hat Cases and Hat Boxes, Being in the Nature of Luggage, Knapsacks, Satchels, Dog Leads, Dog Collars, Straps, and Tool Bags.
Claims use since 1889.

Ser. No. 315,207. MICHEL, MAKSIK & FELDMAN, INC., New York, N. Y. Filed May 29, 1931.

PE-KAY

For Hand Bags, Purses, and Pocket-Books of Leather, Cloth, and Combinations of Leather and Cloth.
Claims use since May 20, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 301,127. MALCOLM E. ROCKHILL, doing business as Universal Glas-Spra Company, Tulsa, Okla. Filed May 23, 1930.

GlaSpra

The word "Spra" is hereby disclaimed apart from the mark shown on the drawing.
For Glass Cleaning Preparation.
Claims use since July 1, 1929.

Ser. No. 311,411. MCGREW AND NYE, Payne, Ohio. Filed Feb. 24, 1931.

Devil-Grip

For Belt Dressing.
Claims use since Jan. 24, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 291,835. LAU BROS., Berwyn, Ill. Filed Oct. 31, 1929.

L. L. L.

For Liniment for Treating Headaches, Toothaches, Coughs, Stomach Disorders, Neuralgia, and Hay Fever.
Claims use since Mar. 1, 1897.

Ser. No. 301,000. WIGG'S MEDICINE CO., INC., Mobile, Ala. Filed May 21, 1930.

WIGG'S BLACK DEATH SPRAY

No claim being made to the word "Spray" apart from the mark as shown on the drawing.
For Insecticide.
Claims use since Feb. 7, 1930.

Ser. No. 301,541. WESTERN STATES MANUFACTURING COMPANY, doing business as Mil-Use Chemical Company, Los Angeles, Calif. Filed May 28, 1930.

SUN RAY

For Bleaching Compound.
Claims use since July 1, 1928.

Ser. No. 301,785. P. BEIERSDORF & CO. INC., New York, N. Y. Filed May 31, 1930.

LEUKOPLAST

For Medicated Adhesive Plasters.
Claims use since Jan. 21, 1930.

Ser. No. 301,955. DR. H. C. LEMKE MEDICINE CO., Chicago, Ill. Filed May 31, 1930. Under 10-year proviso.

DR. LEMKE'S

For Mixtures of Herbs Designed to Produce a Laxative Effect; Compounds Designed for Treatment of Constipation, Bilious Disorders, and Catarrh-Jaundice; Preparations Designed for the Treatment of Cholera, Colic, and Cramps in the Stomach; Medicated Plasters Designed for the Treatment of Superficial Wounds, Sores, Cuts, Burns, Bruises, and Boils; Blood and Nerve Tonics; Preparations Designed for the Treatment of Costiveness, Dyspepsia, Dropsy, Sour Stomach, Colic and Cramps, and Similar Ailments; Medicinal Liniments Designed for the Treatment of Muscular Pains; Medicinal Ointments Designed for the Treatment of Skin Sores and Burns; Headache Tablets; Preparations Designed to be Used in Treatment of Coughs and Colds; Preparations Designed to Remove Corns, Warts, and Similar Growths; Preparations Designed for the Treatment of Toothache, Earache, and Similar Ailments; and for Medicinal Pills Designed for Use as a Laxative.
Claims use since 1871.

Ser. No. 308,757. THE SYRUP OF SICILIAN MANNA COMPANY, Dayton, Ohio. Filed Dec. 8, 1930.

SYRUP OF MANNA

Applicant disclaims exclusive use to the words "Syrup of Manna" except in combination with a representation substantially as shown.
For Syrup Laxative.
Claims use since Nov. 6, 1930.

Ser. No. 309,420. THE C. B. DOLGE COMPANY, Westport, Conn. Filed Dec. 29, 1930.

PURIFEX

For Concentrated Chlorine Disinfectant.
Claims use since August, 1930.

Ser. No. 310,019. HENRY NEWCOMB LIVEZEY, doing business as Clayton Tablet Company, Los Angeles, Calif. Filed Jan. 16, 1931.

CLAYTON'S TABLETS
Clayton's
Price 37.5
Distributed by CLAYTON TABLET CO. Los Angeles, Calif.

All the wording appearing on the drawing with the exception of "Clayton's," "Clayton Tablet Co.," and the letter "C" constitutes descriptive and geographical matter and is hereby disclaimed in the statement.
For Medicines for the Relief of Gastric Hyperacidity, Sour Stomach, Etc.
Claims use since Jan. 9, 1931.

Ser. No. 310,268. ANNA SPERL, doing business as The Anna Sperl Mfg. Co., New York, N. Y. Filed Jan. 22, 1931.

Anna Sperl

The signature appearing on the drawing is a facsimile of the signature of the applicant.
For Mange Ointment.
Claims use since July 1, 1930.

Ser. No. 310,932. BONICOT WARENVERTRIEBSGESELLSCHAFT M. B. H., Vienna, Austria. Filed Feb. 11, 1931.

BONICOT

For Disinfectants, Liquids, and Solutions and Preparations for Rendering Harmless Poisons and Nicotine.
Claims use since May 30, 1928.

Ser. No. 311,017. PAUL PETER MÜLHENS, doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" Gegenüber der Pferdepost von Ferd. Mülhens, Cologne, Germany. Filed Feb. 12, 1931.



The shading forming the background of the label in the drawing is intended to indicate blue. No claim is made to the representation of a label per se.

For Eau de Cologne-Water, Perfumery, Hair-Tonics, Shampoo, Pomade, Brilliantine, Cold-Cream, Vanishing-Cream, Rouge, Face-Powder, Baby-Powder, Shaving Lotion, Tooth-Paste, Mouth-Wash, Head-Tonics, Ethereal Oils.

Claims use since Aug. 1, 1930.

Ser. No. 311,048. WILLIAM A. WALLACE, doing business as Wallace Chemical Company, Savannah, Ga. Filed Feb. 13, 1931.

RIJOLO

For Ointment for Treating Skin Diseases.
Claims use since Jan. 27, 1930.

Ser. No. 311,246. REGAL PRODUCTS CO., San Francisco, Calif., and New York, N. Y., assignor to Galree Products Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 19, 1931.

REGAL

For Preparations for Destroying of Moth Larvæ and Eggs.
Claims use since Feb. 19, 1930.

Ser. No. 311,564. JOHN DELSON, doing business as The John Delson Drug Co., New York, N. Y. Filed Feb. 28, 1931.

Delora

For Toilet Articles—Namely, Face Creams, Beautifying Creams, Tissue Creams, Cleansing Creams, Cold Creams, Massage Creams, Vanishing Creams, Face Powders (in Powder or Compact Form), Toilet Powders, Toilet Creams, Foot Powders, Talcums, Face Packs, Face Pastes, Face Bleach Beauty Clays, Face Lotions, Hand Lotions, Lip Sticks, Rouges, Perfumes, Bath Salts, Preparations for Scenting the Breath, Preparations for Scenting the Bath, Body Salts, Smelling Salts, Incenses, Toilet Waters, Sachets, Bay Rum, Hair Tonics, Hair Shampoos, Scalp Massage Salves, Hair Oils, Pomades (in Sticks and Cakes), Cuticle Remover (in Liquid Form), Nail Pastes, Nail Polishes, Eyebrow Pencils, Tooth Powders, Tooth Pastes, Tooth Washes, and Deodorizing Creams, Liquids, and Pastes, Mouth, Nose, and Throat Washes, Astringents, Rubbing Alcohol, Hair Remover (Liquid or Paste Form), Hair Restoratives, and Cuticle Ice.

Claims use since Dec. 1, 1930.

Ser. No. 311,645. BUCKEYE MINERALIZED STOCK POWDERS COMPANY, Gettysburg, Ohio. Filed Mar. 3, 1931.

BUCKEYE

For Cattle Powders Used as an Aid to Digestion, Hog Powders to Eradicate Worms and to Prevent Hemorrhagic Septemia or Flu and Postler Paralysis, Poultry Powders Used to Eradicate Worms, and a Tonic Preparation Designed for Stimulating Growth and Promoting Health in Stock in General.

Claims use since Feb. 2, 1931.

Ser. No. 311,748. N. V. STANDARD WATER MAATSCHAPPIJ, Amsterdam, Netherlands. Filed Mar. 4, 1931.

ADM

For Preparations for Purifying Liquids in Particular Water.

Claims use since January, 1931.

Ser. No. 311,886. JAMES R. RICHARDSON, doing business as Malitone, Inc., Los Angeles, Calif. Filed Mar. 7, 1931.

MALITONE

For Alkaline Laxative and Antiseptic Solution.
Claims use since Jan. 30, 1931.

Ser. No. 312,568. NIP-IT COMPANY, Brunswick, Ga. Filed Mar. 26, 1931.

Nip-It

For Medicine in Liquid and Also in Tablet Form for Treatment of Gonorrhea.
Claims use since Nov. 20, 1930.

Ser. No. 313,001. PLOUGH, INC., doing business as The St. Joseph's Laboratories, Memphis, Tenn. Filed Apr. 6, 1931.

MOROLINE

For Medicinal Preparation—Namely, Petroleum Jelly.
Claims use since Jan. 20, 1931.

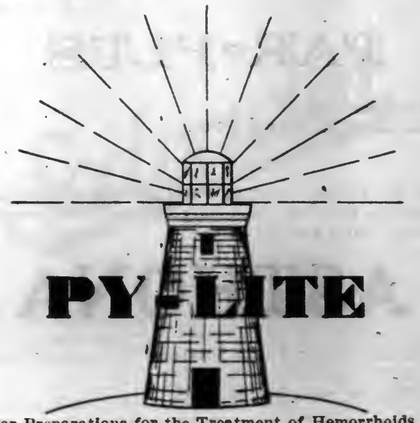
Ser. No. 313,439. JOSEPH E. LAYTON, doing business as Red-Hed Laboratories, Seattle, Wash. Filed Apr. 16, 1931.



G-C

The drawing is lined for red.
For Preparation for Treating Coccidiosis in Poultry.
Claims use since Jan. 1, 1930.

Ser. No. 313,506. CARL W. MEYER, Toledo, Ohio. Filed Apr. 18, 1931.



For Preparations for the Treatment of Hemorrhoids.
Claims use since Apr. 2, 1931.

Ser. No. 313,585. BERNARD E. DAVIS, doing business as Dav-O-Lin Company, New York, N. Y. Filed Apr. 20, 1931.

DAV-O-LIN
TRADE MARK
JUST RUB IT IN

The words "Trade Mark" and "Just Rub It In" are disclaimed apart from the mark as shown.

For Medicinal Preparation for Use in the Treatment of Neuritis, Rheumatism, Sciatica, Backache, Tired Feet, Swellings, Sprains, Bruises, Chest Colds, Sore Throat, Rubdown for Athletes and After Exposure, and in General to Alleviate Muscular Pains and Strains.

Claims use since Dec. 5, 1930.

Ser. No. 313,620. WORCESTER SALT COMPANY, New York, N. Y. Filed Apr. 21, 1931.

WHITEROCK

For Salt.
Claims use since June 15, 1929.

Ser. No. 313,719. THE MUTSU VAPOR BALM COMPANY, Memphis, Tenn. Filed Apr. 23, 1931.

MUTSU

For Ointments or Salves for the Relief of Colds, Chest Congestion, Lung Irritations, Hoarseness, and Sore Throat.
Claims use since Apr. 14, 1931.

Ser. No. 313,822. AKTIEBOLAGET PROBAT, Stockholm, Sweden. Filed Apr. 27, 1931.

TEMOIN

For Disinfectants and Means for Exterminating Vermin.
Claims use since Feb. 25, 1931.

Ser. No. 313,844. LOYOLA J. FAY, doing business as Par-Plus Laboratories, Spokane, Wash. Filed Apr. 27, 1931.

PAR-PLUS

For Anaesthetic.
Claims use since Aug. 1, 1930.

Ser. No. 313,933. SAMUEL ALEXANDER PAUL, doing business as The Paul Proprietary Co., Auckland, New Zealand. Filed Apr. 28, 1931.

ASTHONA

For Preparation for the Treatment of Consumption and Kindred Complaints.
Claims use since Jan. 31, 1929.

Ser. No. 313,979. THE SHELBY GUM COMPANY, Shelby, Ohio. Filed Apr. 29, 1931.



No claim is made to the words "Menthol Chewing Gum" apart from the mark as shown. The drawing is lined for yellow.
For Menthol Chewing Gum for the Relief of Colds, Coughs, Hoarseness, and Throat Tickle.
Claims use since Feb. 23, 1931.

Ser. No. 314,024. EDWARD A. WILLIAMS, Jr., Lima, Ohio. Filed Apr. 30, 1931.



The drawing is lined for the color red.
For Rust Removing Preparations.
Claims use since Mar. 1, 1931.

Ser. No. 314,051. HOPE CONSTRUCTION & REFINING COMPANY, Pittsburgh, Pa. Filed May 1, 1931.

HOPANE

For Hydrocarbon Gases for Heating and Cutting Purposes.
Claims use since Nov. 19, 1930.

Ser. No. 314,052. HOPE CONSTRUCTION & REFINING COMPANY, Pittsburgh, Pa. Filed May 1, 1931.

S-O-T-A-N-E

For Hydrocarbon Gases for Heating and Cutting Purposes.
Claims use since Nov. 26, 1930.

Ser. No. 314,065. MAXWELL & TENNYSON, Washington, D. C. Filed May 1, 1931.

NATRICINE

For Intestinal Bactericides.
Claims use since August, 1930.

Ser. No. 314,149. FREDERICK EDWARD COE, Twickenham, England. Filed May 4, 1931.

HERBARAS

For Chemical Substances Used for Constipation.
Claims use since Sept. 13, 1929.

Ser. No. 314,252. RICHARD F. SAVELLI, doing business as Ovacide Laboratories, Oakland, Calif. Filed May 6, 1931.

Ovacide

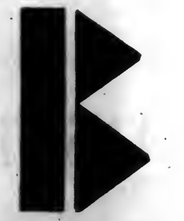
For Antiseptic Preparation in Powder Form, Medicated Antiseptic Suppositories and Medicated Antiseptic Jelly.
Claims use since December, 1927.

Ser. No. 314,303. SANOZYM, INCORPORATED, New York, N. Y. Filed May 7, 1931.

NAZOKIN

For Preparation Consisting of a Saline Aqueous Solution of Antiseptic Cleansing Properties and Designed as a Hygienic Lotion for Nose and Throat.
Claims use since Apr. 15, 1931.

Ser. No. 314,317. ABRAM JAMES BECKER, Lansing, Mich. Filed May 8, 1931.



BECKER'S
LIQUID
MASSAGE

The words "Becker's Liquid Massage" are hereby disclaimed apart from other features of the mark of which the distinctive display of the words "Becker's Liquid Massage" constitutes a part.
For Liquid Massage Preparation.
Claims use since July 18, 1930.

Ser. No. 314,321. BURROUGH BROTHERS MANUFACTURING COMPANY, doing business as Burrough Brothers Laboratories, Baltimore, Md., and Cleveland, Ohio. Filed May 8, 1931.

ERGOFORTIS

For Liquid Ergot.
Claims use since Apr. 30, 1931.

Ser. No. 314,336. PAUL P. MATTHEWS, doing business as Salvador Products Co., Cleveland, Ohio. Filed May 8, 1931.

Salvador

For Eczema Ointment.
Claims use since Feb. 1, 1927.

Ser. No. 314,434. HERMANN STEIN, doing business as Hair Research Laboratories, New York, N. Y. Filed May 11, 1931.



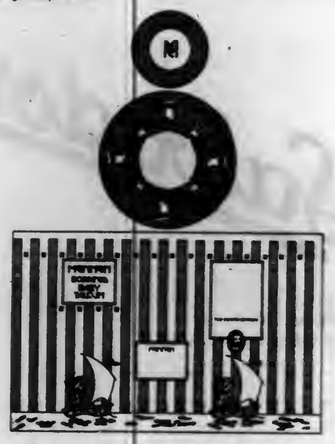
Applicant disclaims the words "11 W. 42nd St., New York."
For Preparations for Treating and Waving the Human Hair.
Claims use since July 1, 1930.

Ser. No. 314,439. JOSHUA HOLLAND, Chicago, Ill. Filed May 11, 1931.

HAP

For Anti-Pain Preparation.
Claims use since Sept. 20, 1929.

Ser. No. 314,455. THE MENNEN COMPANY, Newark, N. J. Filed May 12, 1931.



The drawing is lined to indicate the colors blue and yellow, which are claimed as features of the mark, no claim being made to the exclusive use of the words "Borated Baby Talcum" apart from the mark shown on the drawing. The portrait appearing in the mark is that of Gerhard Mennen, deceased, the founder of applicant's business.

For Borated Talcum Powder.

Claims use since December, 1929.

Ser. No. 314,467. SCHNEITEL BROS., INC., Newark, N. J. Filed May 12, 1931.

La Cross

For Cuticle Remover in the Form of a Liquid Applicable to the Nails Tending to Remove the Cuticle, Finger Nail Enamel, Finger Nail Polish, Nail Bleach, Nail White, and Nail Creams for Strengthening the Nails.

Claims use since 1922.

Ser. No. 314,474. EDWARD WALRATH, doing business as Sirocco Manufacturing Co., La Fargeville, N. Y. Filed May 12, 1931.

SIROCCO

For Preparation for Killing Flies and Insects.

Claims use since Jan. 23, 1928.

Ser. No. 314,582. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y. Filed May 14, 1931.

DOMINION

For Inorganic Chemicals, as Follows: Sodium Compounds, Alkali Carbonates, Causticized Soda Ash, Alkali Carbonate and Phosphate Mixtures, and Alkali Carbonate, Phosphate, and Silicate Mixtures.

Claims use since August, 1909, on sodium compounds, alkali carbonates, causticized soda ash, alkali carbonate and phosphate mixtures, and since July, 1918, on alkali carbonate, phosphate, and silicate mixtures.

Ser. No. 314,607. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

CADENCE

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, Vegetal, and Shaving Cream.

Claims use since Apr. 10, 1931.

Ser. No. 314,608. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

CONSECRATION

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Vegetal.

Claims use since Apr. 10, 1931.

Ser. No. 314,612. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

PROPHETIE

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Vegetal.

Claims use since Apr. 10, 1931.

Ser. No. 314,615. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

TRANSITION

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Vegetal.

Claims use since Apr. 10, 1931.

Ser. No. 314,644. JEANNE V. GOLDSMITH, doing business as Terri Cosmetics, New York, N. Y. Filed May 16, 1931.

"La Terri"

For Astringents—Namely, Astringent Cerates; Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Astringents, Black Head Remover Preparation, Skin Stimulant, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eyedrops, Hand Lotions, Skin Lotions, After-Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixir, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Water.

Claims use since Mar. 28, 1931.

Ser. No. 314,651. KERMIT LINDAHL, doing business as Dentalade Co., New York, N. Y. Filed May 16, 1931.

MILCMAG

For Tooth Powder.

Claims use since Feb. 2, 1931.

Ser. No. 314,742. ROSE WILKE, doing business as Vital Food Company of California and V. P. O. Company of America, Los Angeles, Calif. Filed May 18, 1931.

V-P-O

For Tooth Powder, Bath Powder, Enema Powder, Douche Powder, Face and Hand Lotions, Facial Packs, Foot Powder, Nail Polish, Hair Tonic.

Claims use since July 16, 1930.

Ser. No. 314,759. VIA B. HAGGARD, Blackwell, Okla. Filed May 19, 1931.

HS-2

For Medicinal Preparation for the Treatment of the Nose and Throat.

Claims use since May 16, 1931.

Ser. No. 314,765. THE K-O-KOL COMPANY, Glendale, Calif. Filed May 19, 1931.

K-O-KOL

For Medicinal Preparation for Use in Treating Acid and Other Abnormal Conditions of the Stomach and Digestive Tracts.

Claims use since Feb. 3, 1931.

Ser. No. 314,841. E. DALTROFF & CIE., doing business as Parfumerie Caron, Paris, France. Filed May 21, 1931.

AVION

For Perfumery—Namely, Extracts, Toilet Waters and Toilet Preparations for Scenting, Beautifying and Preserving the Skin and Hair.

Claims use since Oct. 1, 1930.

Ser. No. 314,866. SCHERING & GLATZ, INC., Bloomfield, N. J. Filed May 21, 1931.



For Analgesics, Anesthetics, Anodynes, Antiarthritic, Antiepileptics, Antifermentatives (Medical), Antigonorrheics, Antihemorrhoidals, Antineuralgics, Antiperiodics, Antiphlogistics, Antipyretics, Antirheumatics, Antiseptics, Antispasmodics, Cardiac Sedatives, Carminatives, Cholagogues, Deodorants, Diagnostics, Disinfectants, Diuretics, Escharotics, Expectorants, Hypnotics, Intestinal Antiseptics, Mydriatics, Nervines, Neurotonics, Sedatives, Soporifics, Urinary Antiseptics.

Claims use since 1915.

Ser. No. 314,867. SCHERING & GLATZ, INC., Bloomfield, N. J. Filed May 21, 1931.

PERALGA

For Medicinal Preparation Used as a Pain Alleviator.

Claims use since Mar. 1, 1922.

Ser. No. 314,978. OLGA BENOS, doing business as Onaida Turkish Beauty Preparations, New York, N. Y. Filed May 25, 1931.

ONAIDA

For Toilet Articles—Namely, Face Creams, Beautifying Creams, Tissue Creams, Cleansing Creams, Cold Creams, Massage Creams, Vanishing Creams, Face Powders (in Powder or Compact Form), Toilet Powders, Toilet Creams, Foot Powders, Talcums, Face Packs, Face Pastes, Face Bleach Beauty Clays, Face Lotions, Hand Lotions, Lip Sticks, Rouges, Perfumes, Bath Salts, Preparations for Scenting the Breath, Preparations for Scenting the Bath, Body Salts, Smelling Salts, Incenses, Toilet Waters, Sachets, Bay Rum, Hair Tonics, Hair Shampoos, Scalp Massage Salves, Hair Oils, Hair Dyes, Pomades (in Sticks and Cakes), Cuticle Remover (Liquid and Paste Forms), Nail Pastes, Nail Polishes, Eyebrow Pencils; Tooth Powders, Tooth Pastes, Tooth Washes; and Deodorizing Creams, Liquids, and Pastes; Mouth, Nose, and Throat Washes; Astringents, Rubbing Alcohol, Hair Remover (Liquid or Paste Form), Hair Restoratives, and Cuticle Ice.

Claims use since Jan. 2, 1930.

Ser. No. 314,982. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed May 25, 1931.



No claim is made to the representation of a carton appearing on the drawing or to the words "Creme Dentifrice." The vertical lining on the drawing on the five name panels denotes the color red; the vertical lining on the margins of these panels denotes the color salmon; the vertical lining on the illustration panel denotes the color salmon; the oblique lining on the drawing denotes the color green.

For Dental Cream.

Claims use since October, 1929.

Ser. No. 315,000. MIDLAND METAL MANUFACTURING COMPANY, Kansas City, Mo. Filed May 25, 1931.

Kleen-N-Flush

No claim is made to the words "Kleen" and "Flush" apart from the mark shown on the drawing.

For Radiator Cleaning Compound.

Claims use since Apr. 28, 1931.

Ser. No. 315,027. DR. J. L. BLISS BATES, Washington, D. C., and Revere, Mass. Filed May 26, 1931.



For Medicinal Preparations for the Treatment of the Feet.

Claims use since May 26, 1931.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 310,933. BONICOT WARENVERTRIEBSGESELLSCHAFT M. B. H., Vienna, Austria. Filed Feb. 11, 1931.

BONICOT

For Apparatus for the Introduction and Injection of Liquid into Tobacco or Tobacco Products, Devices for Rendering Harmless Poisons and Nicotine; Pipes, Cigarette-Holders, and Cigar Holders.

Claims use since May 30, 1928.

Ser. No. 314,696. THE HOUSE OF CRANE, Indianapolis, Ind. Filed May 18, 1931.

HONEY BRIAR

The word "Briar" is hereby disclaimed apart from the mark as shown.

For Smoking Pipes.

Claims use since Mar. 1, 1931.

CLASS 10

Fertilizers

Ser. No. 314,032. THE ROGERS & HUBBARD COMPANY, Portland, Conn. Filed Apr. 29, 1931.

GRO-FAST

For Plant Food.

Claims use since April, 1926.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 313,281. CALIFORNIA CORRUGATED CULVERT CO., Berkeley, Calif. Filed Apr. 13, 1931.

Spi-weld

No claim is made to the word "Weld" apart from the mark as shown.

For Helically Welded Metal Pipe and Tubing.

Claims use since Mar. 20, 1931.

Ser. No. 314,253. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Filed May 6, 1931.

HANDY ANDY

For Screws, Nuts, Bolts, Bolt Heads, Cotter Pins, Ball-Cock Cups, Seat Caps, and Collars for Pipe Fittings and Plumbing Supplies; Fuller Caps, Stems, Nuts, and Eccentrics; and Metallic Washers.

Claims use since December, 1923.

Ser. No. 314,361. THE CLEVELAND BRASS MANUFACTURING COMPANY, Cleveland, Ohio. Filed May 9, 1931.

FULFLO

For Oil Barrel Faucet Valves.

Claims use since July 18, 1924.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 311,785. KEMET LABORATORIES COMPANY, INC., New York, N. Y. Filed Mar. 5, 1931.



The drawing is lined for the colors blue, red, and gray.

For Metals and/or Alloys Commonly Known as "Getters," for Eliminating or Minimizing Residual Gases in Evacuated Electric Light Bulbs, Radio Tubes, and the Like.

Claims use since about Oct. 14, 1930.

CLASS 15

Oils and Greases

Ser. No. 299,893. BLUMENFELD ICE & COAL COMPANY, doing business as Blumenfeld Oil Company, Memphis, Tenn. Filed May 3, 1930.

BLUCO

For Motor Lubricating Oils and Gasoline.

Claims use since April, 1929.

Ser. No. 313,758. SUN OIL COMPANY, Philadelphia, Pa. Filed Apr. 24, 1931.

SUNFLUSH

For Oil for Use in Flushing Crank Cases of Internal Combustion Engines.

Claims use since June 27, 1930.

Ser. No. 314,015. RADHILL OIL COMPANY, Philadelphia, Pa. Filed Apr. 30, 1931.

Penn-Rad

For Motor Lubricating Oils.

Claims use since May 19, 1930.

Ser. No. 314,084. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed May 1, 1931.

SOBASO

For Lubricating Oil.

Claims use since Apr. 9, 1931.

Ser. No. 314,541. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed May 14, 1931.

ALCOA

For Anti-Seize Compound.

Claims use since May 9, 1930.

Ser. No. 314,542. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed May 14, 1931.



For Anti Seize Compound.

Claims use since Mar. 9, 1930.

Ser. No. 314,869. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill. Filed May 21, 1931.

Stanocyl

For Lubricating Oils and Greases.
Claims use since Mar. 28, 1931.

Ser. No. 314,947. JOEL B. CLARK, doing business as J. B. Clark Oil Company, Buffalo, N. Y. Filed May 23, 1931.

oLIXIR

For Lubricating Oils and Lubricating Oil Compositions.
Claims use since Apr. 20, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 314,203. INTERNATIONAL COMPOSITIONS COMPANY, INC., New York, N. Y. Filed May 5, 1931.

CORROLINE

For Ready Mixed Paints for Exteriors of Hulls of Ships of the Type Commonly Known as Topside Paints.
Claims use since May 1, 1931.

Ser. No. 314,669. JOSEPH WENLER, doing business as Atlas Paint and Varnish Co., New York, N. Y. Filed May 16, 1931.

Audrey

For Inside Paint Containing White Lead, Lithopone, Asbestine Zinc Oxide, Linseed Oil, China Wood Oil, Resins, Mineral Spirits, Drier.
Claims use since Jan. 1, 1922.

Ser. No. 314,791. CONGOLEUM-NAIRN INC., Kearny, N. J. Filed May 20, 1931.

SEALEX

For Floor Wax.
Claims use since May 11, 1931.

Ser. No. 314,853. THE MARTIN-SENOUR COMPANY, Cleveland, Ohio. Filed May 21, 1931.

SYNTHOL

For Paints (Ready-Mixed, Paste Form, and Dry), Paint Enamels, Japans, Varnishes, Stains, and Lacquers.
Claims use since Apr. 29, 1931.

Ser. No. 315,200. INDIANAPOLIS PAINT & COLOR CO., Indianapolis, Ind. Filed May 29, 1931.

NU-DA

For Ready-Mixed Paints for Interior and Exterior Use, Paint Enamels, Wood Stains, and Wood Fillers.
Claims use since Jan. 15, 1931.

Ser. No. 315,499. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed June 6, 1931.

CARHIDE

For Liquid and Paste Paints.
Claims use since Nov. 29, 1929.

Ser. No. 315,500. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed June 6, 1931.

CHROMAX

For Pyroxylin Lacquers.
Claims use since Jan. 11, 1929.

CLASS 17

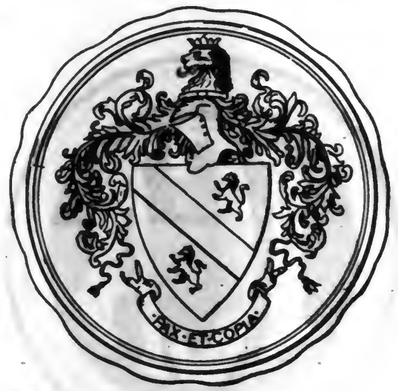
Tobacco Products

Ser. No. 313,914. ABRAHAM A. GREENWALD, doing business as Jacob Stahl Jr. & Co., New York, N. Y. Filed Apr. 28, 1931. Under 10-year proviso.

The Brunswick

For Cigars.
Claims use since Aug. 17, 1883.

Ser. No. 313,917. ABRAHAM A. GREENWALD, doing business as Jacob Stahl Jr. & Co., New York, N. Y. Filed Apr. 28, 1931.



For Cigars.
Claims use since Apr. 1, 1930.

Ser. No. 314,908. LOUIS B. GRABOSKY, Philadelphia, Pa. Filed May 22, 1931.



Applicant disclaims the shape of the cigar band as shown in the drawing.
For Cigars.
Claims use since Mar. 18, 1931.

Ser. No. 315,152. LARUS & BROTHER COMPANY, INCORPORATED, Richmond, Va. Filed May 28, 1931.

HARD CASH

For Tobacco Products—Namely, Smoking Tobacco and Cigarettes.
Claims use since 1891.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 306,365. PITTSBURGH SCREW AND BOLT CORPORATION, Pittsburgh, Pa. Filed Oct. 3, 1930.



The representation of the goods is disclaimed apart from the mark as shown.
For Aircraft Propellers.
Claims use since July 15, 1930.

Ser. No. 314,953. THE GLOBE MACHINE & STAMPING COMPANY, Cleveland, Ohio. Filed May 23, 1931.



For Automobile Radiator Grilles.
Claims use since July 1, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 303,613. GUY E. RIEGEL, Spokane, Wash. Filed July 18, 1930.



The lines on the drawing are shade lines.
For Radio Receiving Apparatus.
Claims use since June 1, 1930.

Ser. No. 307,112. OTTO PRESSLER THÜRINGER VACUUMRÖHRENFABRIK, Leipzig, Germany. Filed Oct. 23, 1930.



For Electron Tubes, Photoelectric Cells, Discharge Tubes, Rectifier Tubes, and Assembled Current Rectifying Units.
Claims use since Aug. 15, 1927.

Ser. No. 313,584. TRAFFIC STORAGE BATTERY CO., Los Angeles, Calif. Filed Apr. 18, 1931.

TRAFFIC

For Storage Batteries.
Claims use since Feb. 24, 1931.

Ser. No. 313,865. THE PERMANENT ELECTRIC COMPANY, Cleveland, Ohio. Filed Apr. 27, 1931.

Purette

For Electrically Operated Air Deodorizer, Filter, and Purifier.
Claims use since Apr. 24, 1931.

Ser. No. 314,271. CHICAGO PNEUMATIC TOOL COMPANY, New York, N. Y. Filed May 7, 1931.



For Electrical Apparatus and Machines, Particularly Portable Electric Tools for Boring, Buffing, Drilling, Grinding, Nut Running, Reaming, Screw Driving, Sanding, Stud Setting and Tapping; Also Circuit Breakers, Electric Hammer Drills, Electric Spike Drivers, Electric Hoists, Wood Boring Drills, Track Drills, Rail-bonding Drills, Staybolt Tappers, Electric Wood-Boring Machines, and Electric Wrenches and Parts Thereof.
Claims use since May 31, 1922, on circuit breakers; since Sept. 24, 1925, on electric hammer drills; and since Dec. 26, 1924, on remainder of tools.

Ser. No. 314,647. INSULINE CORP. OF AMERICA, New York, N. Y. Filed May 16, 1931.



For Line-Noise Eliminators for Radio Sets, Electrical Tone-Control Devices for Radio Receiving Sets and Electrically Amplified Phonographs, Automatic Voltage Controllers, and Voltage Regulaters for Radio Receiving Sets, Electric Outlets, Radio Receiving Sets and Parts Thereof Consisting of Panels, Insulators, Dials, Sockets, Condensers, Rheostats, Potentiometers, Vario-Couplers, Binding Posts, Ear Phones, Insulated Wire, Tubing and Variometers.
Claims use since September, 1927.

Ser. No. 314,922. THE MILLER COMPANY, Meriden, Conn. Filed May 22, 1931.

PALISADES

For Portable Floor and Table Lamps.
Claims use since May 9, 1930.

Ser. No. 314,923. THE MILLER COMPANY, Meriden, Conn. Filed May 22, 1931.

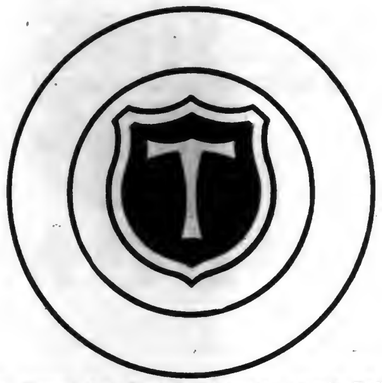
SILVO

For Portable Floor and Table Lamps.
Claims use since May 14, 1930.

CLASS 22

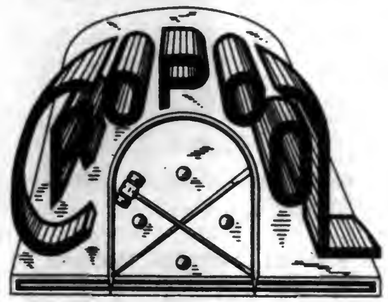
Games, Toys, and Sporting Goods

Ser. No. 313,454. ALEX TAYLOR & CO. INC., New York, N. Y. Filed Apr. 16, 1931.



For Tennis and Squash Racquets, Tennis Balls and Equipment, Canoe Paddles and Oars, Baseballs, Indoor and Outdoor, Baseball Gloves, Baseball Bats, Body Protectors; Archery Equipment—Namely, Bows and Arrows; Croquet Sets and Equipment; Horseshoes, Quoits, and Equipment Therefor; Golf Clubs, Golfbags, Golfballs, and Golf Equipment—Namely, Golf Practice Devices; Athletic Equipment—Namely, Hammers, Shots, Indoors and Outdoors, Discuses, Vaulting Poles, Jumping and Vaulting Stands, Running Corks, Relay Batons, Volley Balls, Volley Ball Nets, Hand Balls and Hand Ball Equipment, Medicine Balls, Punchballs, Basket Balls, La Crosse Sticks, Water Polo Balls, Surf Balls, Field and Ice Hockey Sticks, Ice Hockey Pucks, Field Hockey Balls, Footballs, Basket Ball Goals, Basket Ball Bladders, Basket Ball Carriers, Soccer Balls, and Fencing Foils, Skates, Ice and Roller, Skis, Ski Poles, Snowshoes; Toboggans, Sleds, Leg Harnesses, Racing Sacks, Boxing Gloves, Striking and Punching Bags, Striking and Punching Bag Platforms, Striking and Punching Bag Swivels, Striking and Punching Bag Bladders, Exercising Machines, Dumb-Bells; Gymnasium Apparatus, Including Parallel Bars, Climbing Ropes, Climbing Poles and Ladders, Flying Rings, Travelling Rings, Trapezes, Horizontal Bars, Indian Clubs, Barbells and Wands, Punch Balls, Punch Ball Bladders, Darts, Badmington, Shuttle Cocks.
Claims use since 1915.

Ser. No. 314,792. DAVID STANLEY CORWIN, Greenport, N. Y. Filed May 20, 1931.



No claim is made to the representation of the game except in the association shown.
For Combination Game of Croquet and Pool for Indoors or Outdoors.
Claims use since Jan. 2, 1931.

Ser. No. 314,925. NEWTON MANUFACTURING COMPANY, Newton, Iowa. Filed May 22, 1931.

Ding-Bat

For Bat and Ball Game Somewhat Resembling Shuttlecock.
Claims use since Feb. 17, 1931.

Ser. No. 315,405. JAMES HEDDON'S SONS, Dowagiac, Mich. Filed June 4, 1931.

DOUBLE-HEADER

For Fishing Lines.
Claims use since May 29, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 300,965. ALBERT PICK-BARTH COMPANY, INC., New York, N. Y., and Chicago, Ill. Filed May 21, 1930.

PICK-BARTH
Everything at ONE PLACE

No claim is made to the words "Everything at One Place" apart from the mark shown.
For Stainless Steel Steak Knives; Base Metal Knives, Forks, Spoons, and Corn Holders; Enameled Basting Spoons and Base Metal Tableware, Knife Sharpeners Other Than Abrasive Stones; Paper Cup Dispensers, Milk and Cream Pumps, Cork Pullers; Ice Picks, Scoops, and Shavers; Soda Fountains, Match Vending Machines, Carpet Sweepers, Peanut Venders, Presses for Squeezing Duck Carcasses and the Like, Can Openers, Egg Slicers, Paring Machines, Cheese Graters, Knife Cleaners, Double Blade Mincing Knife, Apple Cutters, Slaw Cutters, Ricers, Asparagus Knives, Wooden Spoons and Forks, Cleavers, Spatulas, Oyster Knives, Butcher Block Scrapers, and Manually Operable Potato Mashers, Bread, Meat, Fruit, and Vegetable Slicers, Potato Cutting and Dicing Machines, Meat Choppers, Butter Cutters, and Fruit Juice Extractors.
Claims use since October, 1929.

Ser. No. 308,226. THE STANLEY WORKS, New Britain, Conn. Filed Nov. 22, 1930.



No claim is made to the exclusive use of the representation of the screw driver. The trade-mark consists of a series of circular grooves on the tapered portion of the bolster of the screw driver having no functional use.

For Screw Drivers.

Claims use since Nov. 14, 1930.

Ser. No. 309,460. COLUMBUS HANDLE & TOOL CORPORATION, Columbus, Ohio. Filed Dec. 30, 1930.



No claim is made to the representaton of a portion of a handle shown in the drawing except in association with the other features of the mark. The drawing is lined to indicate the color red.

For Handles for Shovels, Forks, Rakes, and Hoes.

Claims use since Oct. 8, 1930.

Ser. No. 312,673. TYSON ROLLER BEARING CORPORATION, Massillon, Ohio. Filed Mar. 28, 1931.



No claim is made to the representation of a roller bearing or to the word "Cageless" apart from the mark as shown.

For Roller Bearings.

Claims use since Feb. 28, 1931.

Ser. No. 314,146. BÜSSING-NAG VEREINIGTE NUTZKRAFTWAGEN AKTIENGESELLSCHAFT, Brunswick, Germany. Filed May 4, 1931.



For Tractors and Internal Combustion Engines.

Claims use since January, 1931.

Ser. No. 314,176. THE SHARPLES SPECIALTY COMPANY, Philadelphia, Pa. Filed May 4, 1931.

VAPORSEAL

For Centrifugal Machines and Parts Thereof.

Claims use since Nov. 8, 1927.

Ser. No. 314,752. THE F. & N. LAWN MOWER COMPANY, Richmond, Ind. Filed May 19, 1931.

NOVO

For Lawn Mowers.

Claims use since May 8, 1928.

Ser. No. 314,901. EMPORIA MACHINE CO. INC., Emporia, Va. Filed May 22, 1931.

G.C. EMPORIA MACHINE CO.

The expression "Emporia Machine Co." is disclaimed apart from the other features of the mark shown in the drawing.

For Plows.

Claims use since Jan. 1, 1906.

Ser. No. 314,902. EMPORIA MACHINE CO. INC., Emporia, Va. Filed May 22, 1931.

NO. 8 & 11¼ C EMPORIA MACHINE CO.

The notation "No. 8 & 11¼" and the expression "Emporia Machine Co." are disclaimed apart from the other features of the mark shown in the drawing.

For Plows.

Claims use since Jan. 1, 1906.

Ser. No. 315,053. WILLIAM M. KEITH, Youngstown, Ohio. Filed May 26, 1931.

NU-I-DEA

For Bolt Clippers.

Claims use since May 7, 1931.

Ser. No. 315,556. PETROLEUM DERRICK COMPANY, LTD., Los Angeles, Calif. Filed June 8, 1931.

BIG MOGUL

For Oil-Well Derricks and Structural Parts Thereof.

Claims use since May 11, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 311,011. VULCAN MANUFACTURING CO., Kansas City, Mo. Filed Feb. 12, 1931.

PARAMOUNT

For Domestic Laundry Washing Machines.

Claims use since Aug. 5, 1930.

Ser. No. 314,057. MAUDE T. KELLEY, Mount Vernon, N. Y. Filed May 1, 1931.

UNDE' WASHER

The word "Washer" is disclaimed apart from the mark as shown.

For Washing Devices—Namely, Clothes Agitators or Pounders.

Claims use since Mar. 4, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 310,283. THE CARBORUNDUM COMPANY, Niagara Falls, N. Y. Filed Jan. 23, 1931.

SILFRAX

For Pyrometer Tubes, Muffles.

Claims use since Nov. 10, 1914.

Ser. No. 314,931. HERMAN SEGAL, doing business as Colora Products Company Inc., New York, N. Y. Filed May 22, 1931.

SPEED Press 2000 Colora Products Company NEW YORK

No claim is made to the exclusive use of the words "Speed", "Press", and "New York" apart from the mark as shown on the drawing.

For Photographic Dry Plates as Used in Newspaper Work.

Claims use since January, 1930.

Ser. No. 314,942. ACUTONE CORPORATION, New York, N. Y. Filed May 23, 1931.

ACUTONE

For Lenses.

Claims use since January, 1931.

Ser. No. 314,986. THE FAIR, Chicago, Ill. Filed May 25, 1931.

TONELITE

For Lenses.

Claims use since Feb. 19, 1931.

Ser. No. 315,244. JOHN D. BROCK, doing business as Specialty Optical Company, Kansas City, Mo. Filed June 1, 1931.

AERIAL

For Lenses and Frames for Eye Glasses.

Claims use since May, 1923.

Ser. No. 315,247. JOHN D. BROCK, doing business as Specialty Optical Company, Kansas City, Mo. Filed June 1, 1931.

VISOTEX

For Eye Glass Lenses.

Claims use since May, 1929.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 308,263. WILLIAM R. NEUMANN, doing business as W. R. Neumann & Co., Chicago, Ill. Filed Nov. 24, 1930.

STEEL-BLUE

For Diamond Rings.
Claims use since Nov. 12, 1930.

Ser. No. 314,293. H. W. PETERS CO., INC., Boston, Mass. Filed May 7, 1931.

OFFICIAL BRIDESMAID

For Finger Rings.
Claims use since Mar. 17, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 313,191. K. P. & B. Co., Decatur, Ill. Filed Apr. 10, 1931.



Appplicant makes no claim to the representation of the goods which appears as a part of the drawing. The portrait constituting a part of the mark is merely a fanciful picture.

For Cleaning Devices in the Nature of a Mop for General Household Purposes, Especially Adapted for Cleaning Painted and Papered Walls, for Cleaning Rugs, and Furniture Cushions.
Claims use since January, 1929.

CLASS 31

Filters and Refrigerators

Ser. No. 314,924. NEW STANDARD CORPORATION, Mount Joy, Pa. Filed May 22, 1931.

DANDY

For Ice-Cream Freezers.
Claims use since October, 1922.

CLASS 32

Furniture and Upholstery

Ser. No. 300,969. ALBERT PICK-BARTH COMPANY, INC., Chicago, Ill. Filed May 21, 1930.

PICK-BARTH
Everything at ONE PLACE

No claim is made to the words "Everything at One Place" apart from the mark as shown.

For Chairs and Tables for Household and Office Use, Davenports, Dressers, Beds, Grip Stands, Day Beds, Rockers, Settees, Benches, Telephone Stands, Consoles, Desks, Mirrors, Lunchroom Chairs, Table Tops, High Chairs, Cabinets, Stools, Coat and Hat Racks; Toilet Stands, Folding Screens, Mattresses, Pillows, Bed Springs, Display Cases, Bulletin Boards, Key and Letter Racks, Meat Blocks, Pastry Cases, Back Counters, Portable Soda Nooks, Lunch Counters, Urn Stands, Sauce Pan Racks, and Work Tables.
Claims use since October, 1929.

CLASS 33

Glassware

Ser. No. 309,113. AMERICAN PERFIT CRYSTAL CORP., New York, N. Y. Filed Dec. 18, 1930.



For Watch Crystals.
Claims use since Dec. 10, 1930.

Ser. No. 314,163. KUHNS & ALLEN, Kansas City, Mo. Filed May 4, 1931.



No claim is made to the words "Trade Mark" shown on the drawing.

For Sheet Glass and Sheet Glass Products—Namely, Window Glass, Bureau, Table, or Counter Glass Tops.
Claims use since May 1, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 300,842. WESTERN BLOWER COMPANY, Seattle, Wash. Filed May 19, 1930.

Blue Streak

For Blower and Radiator Heater Units.
Claims use since Jan. 3, 1930.

Ser. No. 313,784. ILG ELECTRIC VENTILATING COMPANY, Chicago, Ill. Filed Apr. 25, 1931.

ILG COLUMNAR

No claim being made to the word "Columnar" apart from the diamond field on which said words and design are shown.

For Heating Systems for Buildings and Dwellings.
Claims use since Feb. 10, 1931.

Ser. No. 313,949. EASTERN OUTFITTING CO. OF LOS ANGELES, CAL., Los Angeles, Belvedere, and Huntington Park, Calif. Filed Apr. 28, 1931.



For Gas Ranges.
Claims use since Jan. 1, 1931.

Ser. No. 315,123. RICHARD F. WORTHAM, doing business as Kell-Worth Company, Boston, Mass. Filed May 27, 1931.

KELL-WORTH

For Rotary Shutter Type Door Ventilators.
Claims use since Apr. 27, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Nonmetallic Tires

Ser. No. 314,827. VICTAULIC COMPANY OF AMERICA, Jersey City, N. J. Filed May 20, 1931.



The words "Gas and Oil Proof Laminated Gasket" being hereby disclaimed.

For Laminated Gaskets Composed Mainly of Rubber or Rubber Compositions.
Claims use since May 11, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 308,436. THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed Nov. 29, 1930.

Telediphone

For Phonographic Apparatus Designed to Produce Grooved Sound Records and to Reproduce Sound from Such Records.
Claims use since Aug. 8, 1930.

Ser. No. 314,312. THE WOODWIND COMPANY, New York, N. Y. Filed May 7, 1931.



For Reeds for Clarinets and Saxophones.
Claims use since Mar. 31, 1930.

CLASS 37

Paper and Stationery

Ser. No. 280,541. COLUMBIAN ART WORKS, INC., Milwaukee, Wis. Filed Mar. 11, 1929.

Success

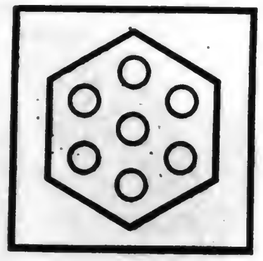
For Calendar Pads and Calendar Stands.
Claims use since Mar. 1, 1925.

Ser. No. 307,538. SHIRAISHI KOGYO KABUSHIKI KAISHA, Inben Gun, Miye Ken, Japan. Filed Nov. 4, 1930.

A
C
O

For Chalk Crayons, School Chalk, and Pencils.
Claims use since April, 1928.

Ser. No. 307,539. SHIRAISHI KOGYO KABUSHIKI KAISHA, Inben Gun, Miye Ken, Japan. Filed Nov. 4, 1930.



For Chalk Crayons and School Chalk.
Claims use since June, 1928.

Ser. No. 314,012. MAXIMILIAN I. PRIESTER, Brooklyn, N. Y. Filed Apr. 30, 1931.



No claim is made for the word "Check" appearing on the drawing separate from the mark shown.
For Checks.
Claims use since Apr. 15, 1931.

Ser. No. 314,241. JAMES M. KEPLAR, Elkhart, Ind. Filed May 6, 1931.



For Card Index.
Claims use since Apr. 27, 1931.

Ser. No. 314,520. THE O. & W. THUM COMPANY, Grand Rapids, Mich. Filed May 13, 1931.



For Gummed Cloth Tape and Gummed Paper Tape.
Claims use since Oct. 20, 1925, on gummed cloth tape, and since Oct. 24, 1925, on gummed paper tape.

Ser. No. 315,276. RELIANCE PENCIL CORPORATION, New York, N. Y. Filed June 1, 1931.

Templar

For Pencils.
Claims use since May, 1929.

Ser. No. 315,277. RELIANCE PENCIL CORPORATION, New York, N. Y. Filed June 1, 1931.



For Pencils.
Claims use since May, 1929.

Ser. No. 315,345. EAGLE PENCIL COMPANY, New York, N. Y. Filed June 3, 1931.

RECORDER

For Lead Pencils.
Claims use since 1880.

Ser. No. 315,419. SAMUEL RUBIN, New York, N. Y. Filed June 4, 1931.



For Order Books, Form Blanks, Desk Pads.
Claims use since May 29, 1931.

Ser. No. 315,580. THE STANDARD REGISTER COMPANY, Dayton, Ohio. Filed June 5, 1931.

"WRITE AWAY"

For Manifolding Assemblies of Record and Carbon Material in Packet or Roll Form.
Claims use since May 17, 1930.

CLASS 38

Prints and Publications

Ser. No. 313,471. PAUL R. GRUEN, Chicago, Ill. Filed Apr. 17, 1931.

LIFE'S ROMANCES

For Periodical Magazine.
Claims use since Mar. 17, 1931.

Ser. No. 314,071. PATTERSON PUBLISHING COMPANY, Chicago, Ill. Filed May 1, 1931.

Hotels & Resorts

For Magazine.
Claims use since Mar. 11, 1931.

CLASS 39

Clothing

Ser. No. 304,135. THE GLOBE OVERALL COMPANY, Cincinnati, Ohio. Filed Aug. 2, 1930.

MAGNET

For Work Clothing—Namely, Overalls, Jackets, Combined Jacket and Trouser Suits.
Claims use since July 10, 1930.

Ser. No. 308,765. SAKOWITZ BROTHERS, Houston, Tex. Filed Dec. 8, 1930.

Morton

For Men's and Boys' Wearing Apparel—Viz, Suits, Overcoats, Raincoats, Dress and Negligee Shirts, Union Suits, Undershirts and Drawers, Neckties, Sweaters, Bathing Suits, Pajamas, Lounging and Bath Robes, Straw and Felt Hats, and Caps.
Claims use since Feb. 1, 1930.

Ser. No. 312,021. STEPHAN BROS., Shelbyville, Ind. Filed Mar. 11, 1931.



Applicant claims no exclusive right to the pictorial representation of the goods or to the word "Noglu" apart from the complete mark shown, or to the words "Non-Slip Heel Pad Instantly Installed."
For Heel Upper Pads.
Claims use since Feb. 25, 1931.

Ser. No. 312,610. MARGUERITE FRANCES JANE LOWENFELD, London, England. Filed Mar. 27, 1931.

AFRIS

For Brassières, Corselets, Corsets, Suspender Belts, Suspenders, Girdles, and Garters for Women and Children.
Claims use since Nov. 11, 1930.

Ser. No. 312,872. WEINGARTEN BROS., New York, N. Y. Filed Apr. 2, 1931.

W.B.
"MISS TYPIST"

For Women's Undergarments—Viz., Brassières, Corset Brassières, Corsets, Girdles, and Corselets.
Claims use since Mar. 23, 1931.

Ser. No. 313,162. THE WASHINGTON MFG. CO., New York, N. Y. Filed Apr. 9, 1931.

Knick-ER-Breech

Applicant disclaims the word "Knicker" as shown on the drawing.
For Men's and Boys' Pants.
Claims use since Apr. 1, 1931.

Ser. No. 313,255. A. I. NAMM & SON, doing business as The Namm Store, Brooklyn, N. Y. Filed Apr. 11, 1931.



For Men's and Boys' Hats.
Claims use since Mar. 19, 1931.

Ser. No. 313,811. STEINBERGER BROS. GLOVE CORP., San Francisco, Calif., and New York, N. Y. Filed Apr. 25, 1931.

LAVARIS
WASHABLE

No claim being made to the exclusive use of the word "Washable" apart from the mark as shown in the drawing.
For Leather and Fabric Gloves.
Claims use since February, 1927.

Ser. No. 313,887. MONARCH SHOE CO., INC., Chicago, Ill. Filed Apr. 27, 1931.



The picture of the child is fanciful.
For Baby Shoes.
Claims use since Jan. 2, 1931.

Ser. No. 313,893. JOHN H. STARK, Miami, Fla. Filed Apr. 27, 1931.

Harbor of Lost Soles

Applicant disclaims the right to the exclusive use of the word "Soles" and to the pictorial representation of a shoe except in the particular arrangement and association in which it appears with the rest of the trade-mark as shown on the drawing.
For Heel Pads.
Claims use since Nov. 1, 1927.

Ser. No. 314,089. WINCHELL SHOE MANUFACTURING CO., Natick and Boston, Mass. Filed May 1, 1931.

THE FAITH FUL FOUR

For Shoes Made of Leather and Fabric, and Also Shoes Made of Both of These Materials with Rubber Soles and Others Having the Usual Leather Soles.
Claims use since Oct. 9, 1930.

Ser. No. 314,138. S. BEARMAN SHOE COMPANY, St. Louis, Mo. Filed May 4, 1931.



No claim is made to the word "Shoe."
For Leather Boots and Shoes for Men, Women, and Children.
Claims use since August, 1929.

Ser. No. 314,141. H. D. BOB COMPANY INC., New York, N. Y. Filed May 4, 1931.

LEONARD

For Men's and Boys' Dress, Negligee, and Work Shirts, Blouses, Windbreakers, Underwear, Pajamas, Night Shirts, Overalls, Made of Cotton, Flannel, Wool, Linen, Silk, Rayon, and Other Textiles or Combinations of Any.
Claims use since May 1, 1931.

Ser. No. 314,376. CALVIN C. MCGAUGH, Dallas, Tex. Filed May 9, 1931.

Airmaid Hosiery

No claim is made for the word "Hosiery" apart from the mark as shown.
For Hosiery.
Claims use since Dec. 27, 1930.

Ser. No. 314,428. SIMON SCHWOB, doing business as The Standard Tailoring Company and The Schwob Company, Columbus, Ga. Filed May 11, 1931.

SCHWOBILT
CLOTHES

Exclusive right to the use of the word "Clothes" is disclaimed.
For Men's Suits and Overcoats.
Claims use since Mar. 6, 1931.

Ser. No. 314,448. MAX GREENBERG & CO., New York, N. Y. Filed May 12, 1931.

SANISLIP

For Women's and Misses' Dresses.
Claims use since Apr. 10, 1931.

Ser. No. 314,481. THE AMERICAN LEGION OF RHODE ISLAND, Providence, R. I. Filed May 13, 1931.



For Military Dress Uniforms.
Claims use since Mar. 1, 1930.

Ser. No. 314,719. ROYAL DRESS CO., INC., New York, N. Y. Filed May 18, 1931.

Montmarte DRESSES

The descriptive word "Dresses" is disclaimed apart from the mark as shown on the drawing.
For Ladies', Misses', and Junior Dresses, Frocks, and Gowns.
Claims use since May 1, 1931.

Ser. No. 315,050. GOTHAM SILK HOSIERY COMPANY, INC., New York, N. Y. Filed May 26, 1931.

JUSTIBLES

For Hosiery.
Claims use since May 21, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 314,046. EVERLASTIK, INC., Chelsea, Mass. Filed May 1, 1931.

VITALIFE

it's insulated!

For Narrow Elastic Webbing.
Claims use since Apr. 10, 1931.

Ser. No. 314,823. HENRY STUART COMPANY, INCORPORATED, Milford, Conn. Filed May 20, 1931.

INVISO

For Boning for Wearing Apparel.
Claims use since Jan. 30, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 307,887. FOREMOST FABRICS CORPORATION, New York, N. Y. Filed Nov. 14, 1930.



For Textile Fabrics—Namely, Silk Piece Goods.
Claims use since Oct. 29, 1930.

Ser. No. 311,268. DUPLAN SILK CORPORATION, New York, N. Y. Filed Feb. 20, 1931.

DUPEX

For Piece Goods of Silk and Rayon and Mixtures Thereof.
Claims use since Feb. 11, 1931.

Ser. No. 312,868. THE STROUSE, ADLER COMPANY, New Haven, Conn. Filed Apr. 2, 1931.

Fablastic

For Elastic Fabric Material for Use in the Manufacture of Foundation Garments—Namely, Corsets, Bodicettes, Girdles, and Brassières.
Claims use since Mar. 21, 1931.

Ser. No. 313,115. T. GAINES AMERY, INC., New York, N. Y. Filed Apr. 9, 1931.

TGA
IMPRESSIVELY CORRECT
PRECISION
FABRICS
TRADE MARK

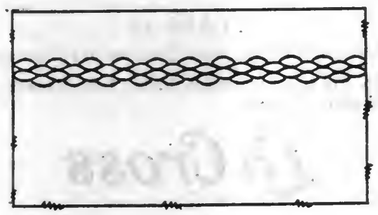
No claim is made to the exclusive use of the words "Trade Mark," "Impressively Correct," and "Fabrics" except in association with the mark as shown.
For Textile Fabrics Composed of Cotton, Wool, Linen, Rayon, Silk, or Ramie, or Composed of Mixtures of Cotton, Wool, Linen, Rayon, Silk and/or Ramie.
Claims use since July 15, 1929.

Ser. No. 313,609. THEODORE PEARL, doing business as Pearl Handkerchief Company, New York, N. Y. Filed Apr. 21, 1931.

Universal Kerchief

The word "Kerchief" is disclaimed apart from the mark as shown in the drawing.
For Handkerchiefs.
Claims use since Sept. 15, 1922.

Ser. No. 313,613. J. P. STEVENS & CO. INC., New York, N. Y. Filed Apr. 21, 1931.



The trade-mark consists of a self-colored satin line placed between the broadcloth proper and the selvage and running parallel to the selvage. No claim is made to the representation of a piece of broadcloth as shown on the drawing.
For Broadcloth in the Piece.
Claims use since July 1, 1930.

Ser. No. 314,078. CHARLES E. SIGLER, New York, N. Y. Filed May 1, 1931.

CHELSICO-PILE

No claim is made to the word "Pile" apart from the mark shown.
For Cotton, Rayon, Silk, and Woolen Piece Goods.
Claims use since Jan. 5, 1931.

Ser. No. 314,236. JOHN C. GALLAGHER, doing business as Detroit Waste Works, Detroit, Mich. Filed May 6, 1931.

GALLAGHER'S
TEE TOWL

Applicant makes no claim to the exclusive use of the word "Towl" except in the form and combination illustrated in the accompanying drawing.
For Golfer's Towel to be Used in Conjunction with Golfers' Kits.
Claims use since Mar. 1, 1931.

Ser. No. 314,365. THOS. G. HILL & CO. LIMITED, Manchester, England. Filed May 9, 1931.





For Cotton Piece Goods.
Claims use since Oct. 2, 1889.

Ser. No. 314,379. PATEX FIBRE CORPORATION, Montville, N. J. Filed May 9, 1931.

Thirsty Towel

The word "Towel" is disclaimed for purpose of this registration.
For Cotton Towels and Toweling.
Claims use since Sept. 1, 1929.

Ser. No. 314,464. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y. Filed May 12, 1931.

"A Maximilian Silk"

The word "Silk" is disclaimed apart from the mark as shown in the drawing.
For Silk Goods in the Piece.
Claims use since March, 1931.

Ser. No. 314,981. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed May 25, 1931.

CELAFAILLE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since May 21, 1931.

Ser. No. 315,030. BURTON BROTHERS & CO. INC., New York, N. Y. Filed May 26, 1931. Under 10-year proviso.

BURTON'S
Old English
BROADCLOTH
MADE IN U.S.A.

No claim being made to the exclusive use of the words "Broadcloth Made in U. S. A." apart from the mark as shown in the drawing.
For Cotton Piece Goods and Mixtures of Cotton and Silk Piece Goods.
Claims use since May, 1894.

Ser. No. 315,070. UTICA STEAM & MOHAWK VALLEY COTTON MILLS, Utica, N. Y. Filed May 26, 1931.

BEAUTICALE

For Sheets and Pillow Cases.
Claims use since May 16, 1931.

Ser. No. 315,188. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed May 29, 1931.

Similfur

For Pile Fabrics in the Piece.
Claims use since May, 1931.

Ser. No. 315,231. HILLSBORO WOOLEN MILL CO., INC., Hillsboro, N. H. Filed May 29, 1931.

CROFTER TWEED

The word "Tweed" is not sought to be exclusively appropriated except as used in the setting and relation in which it appears in the drawing and specimens and is hereby disclaimed in so far as not appropriated.
For Wool Fabrics in the Piece.
Claims use since Mar. 17, 1931.

CLASS 43
Thread and Yarn

Ser. No. 313,941. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed Apr. 28, 1931.

PREEMO

For Cotton Thread and Cotton Yarn.
Claims use since Apr. 7, 1931.

Ser. No. 314,664. TUBIZE CHATILLON CORPORATION, New York, N. Y. Filed May 16, 1931.

SANÇONIZE

For Artificial Silk (Rayon) Yarn.
Claims use since Mar. 23, 1931.

Ser. No. 315,392. GENERAL SILK CORPORATION, New York, N. Y. Filed June 4, 1931.

GENERA

For Thread Made of Silk, Cotton, Rayon, Artificial Silk, or any Combination of These Materials.
Claims use since May 20, 1930.

CLASS 44
Dental, Medical, and Surgical Appliances

Ser. No. 314,465. SCHNEPEL BROS., INC., Newark, N. J. Filed May 12, 1931.

La Cross

For Tweezers for Dental, Surgical, and Manicure Purposes; Manicure and Pedicure Nippers, Manicure and Pedicure Scissors, Finger Nail Clips, Cuticle Pushers, Cuticle Knives, Corn Knives, and Corn Razors; Manicure Emery Boards, Blackhead and Pimple Removers, Manicure Buffers, Manicure Sticks Including Orange-Wood Sticks, Levy or Manicure Knives for Scraping Finger Nails, and Manicure Sets.
Claims use since 1922.

Ser. No. 314,485. DEAN RUBBER MANUFACTURING COMPANY, North Kansas City, Mo. Filed May 18, 1931.

PROTEX

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since May 1, 1930.

Ser. No. 314,486. DEAN RUBBER MANUFACTURING COMPANY, North Kansas City, Mo. Filed May 18, 1931.

SAFE-WAY

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since May 1, 1930.

Ser. No. 314,487. DEAN RUBBER MANUFACTURING COMPANY, North Kansas City, Mo. Filed May 18, 1931.

SECURITY

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since May 1, 1930.

Ser. No. 315,281. THE SCHAAF & GOOD COMPANY, Fremont, Ohio. Filed June 1, 1931.

DOUBLE
XX

For Manicure Files.
Claims use since May 8, 1931.

Ser. No. 315,282. THE SCHAAF & GOOD COMPANY, Fremont, Ohio. Filed June 1, 1931.

TRIPLE
XXX

For Manicure Files.
Claims use since May 8, 1931.

Ser. No. 315,357. MILLARD B. HODGSON, doing business as George W. Brady & Company, Chicago, Ill. Filed June 3, 1931.

DENTETTE

For X-Ray Film Packets.
Claims use since May 27, 1931.

CLASS 45
Beverages, Nonalcoholic

Ser. No. 312,810. WALTER T. MARKILLIE, San Francisco, Calif. Filed Apr. 1, 1931.

ALTER BOQUET

Applicant disclaims the use of the word "Boquet" apart from the mark as shown.
For Non-Alcoholic Maltless Flavor Bases Used in the Preparation of Soft Drinks.
Claims use since Feb. 4, 1931.

Ser. No. 315,603. KATE E. PARKER, Santa Rosa, Calif. Filed June 9, 1931.

KEP

For Mineral Water.
Claims use since May 23, 1931.

Ser. No. 315,676. DE LISSER EXTRACT CO. INC., New York, N. Y. Filed June 11, 1931.

JIGGER

For Non-Alcoholic, Non-Cereal, Maltless Beverages, Sold as Soft Drinks and Sirups and Extracts for Making the Same.
Claims use since Mar. 15, 1931.

CLASS 46
Foods and Ingredients of Foods

Ser. No. 299,961. DOUGHERTY CAKE PRODUCTS, INCORPORATED, Muncie, Ind. Filed May 5, 1930.

BALANCED RECIPE

No claim is made to the exclusive use of the word "Recipe" apart from the mark as shown in the drawing.
For Cakes Including Fried Cakes, Devil's Food Cakes, and Angel Food Cakes.
Claims use since July 6, 1929.

Ser. No. 301,670. THE MARYLAND BAKING COMPANY, INC., Baltimore, Md. Filed May 29, 1930.

Happy Lad

For Ice Cream Cones.
Claims use since Mar. 3, 1930.

Ser. No. 301,672. THE MARYLAND BAKING COMPANY, INC., Baltimore, Md. Filed May 29, 1930.

LUCKY BOY

For Ice Cream Cones.
Claims use since Mar. 3, 1930.

Ser. No. 301,674. THE MARYLAND BAKING COMPANY, INC., Baltimore, Md. Filed May 29, 1930.

SUNFREEZE

For Ice Cream Cones.
Claims use since Mar. 3, 1930

Ser. No. 303,945. BRIGHT STAR PRODUCTS CO., Miami, Fla. Filed July 29, 1930.

DELANEY'S BRIGHT STAR MAYONNAISE NET WGT. 40 OZS. BRIGHT STAR PRODUCTS CO. MIAMI, FLA.

No claim being made herein for any of the wording except "Delaney's Bright Star" and the applicant's name apart from the mark shown.
For Mayonnaise.
Claims use since June 15, 1930.

Ser. No. 308,506. E. C. HALL COMPANY, doing business as Nation-Wide Service Grocers and Nation-Wide Stores Co., Brockton and Hyannis, Mass., and Augusta, Me. Filed Dec. 2, 1930.

NATION-WIDE

In the drawing the lining indicates shading and not color. No claim is made to the map of North America apart from the trade-mark shown.
For Group 1—Tea, Bread; Group 2—Coffee; Group 3—Gelatine Dessert; Group 4—Butter, Cane Sugar, Wheat Flour, Spices, Bacon, Macaroni, Spaghetti, Noodles, Eggs, Corn Syrup, Malt Syrup, Pancake Flour; Group 5—Canned Berries, Food Flavoring Extracts; Group 6—Olive Oil; Group 7—Olives; Group 8—Evaporated Milk, Mince Meat, Corn Flakes; Group 9—Nut Margarine, Oleomargarine, Canned Fish; Group 10—Marshmallow Creme; Group 11—Sandwich Spread, Mayonnaise, Canned Vegetables, Pure Maple Syrup, Cane and Maple Syrup, Tomato Catsup, Peanut Butter, Marmalade, Pickles, Cocoa, Berry Jams, Canned Fruits, Cranberry Sauce, Canned Baked Beans, Canned Pork and Beans.
The trade-mark has been continuously used and applied to said goods in applicant's business in claims use in group 1 since July, 1929; group 2, since September, 1929; group 3, since December, 1929; group 4, since January, 1930; group 5, since February, 1930; group 6, since March, 1930; group 7, since April, 1930; group 8, since May, 1930; group 9, since July, 1930; group 10, since September, 1930; group 11, since October, 1930.

Ser. No. 308,750. PACIFIC COMMERCIAL COMPANY, San Francisco, Calif. Filed Dec. 8, 1930.

EL RAYO

For Canned Fish.
Claims use since Mar. 21, 1930.

Ser. No. 311,049. M. WOLFF & SONS, Chicago, Ill. Filed Feb. 18, 1931.

BIG TEN

For Food Products—Namely, Queen Olives, Manzanilla Olives, Sweet Pickles, Peanut Butter, and Prepared Mustard.
Claims use since Oct. 1, 1930.

Ser. No. 311,889. ROBERT C. SHADDICK, doing business as Woods Mince Meat Co., Baltimore, Md. Filed Mar. 7, 1931.

WOOD'S MONUMENTAL

For Mince Meat.
Claims use since Apr. 2, 1930.

Ser. No. 312,878. COWGILL FLOUR MILLS, INC., Carthage, Mo. Filed Mar. 19, 1931.

PARADISE

For Wheat Flour and Wheat Stock Feed.
Claims use since March, 1907.

Ser. No. 313,579. LAND O'LAKES CREAMERIES, INC., Minneapolis, Minn. Filed Apr. 18, 1931.

KENWOOD BRAND CREAMERY BUTTER

No claim is made to the word "Kenwood" and the descriptive words "Brand" and "Creamery Butter" apart from the mark as shown on the drawing.
For Creamery Butter.
Claims use since Jan. 1, 1931.

Ser. No. 313,948. ALASKAN GLACIER SEA FOOD COMPANY, Seattle, Wash., and Petersburg, Alaska. Filed Apr. 28, 1931.



No claim is made to the representation of the shrimp, the outline of the label or to any of the wording except "Frigid Zone" and the name "Alaskan Glacier Sea Food Co."
For Canned Shrimp Meat.
Claims use since Nov. 26, 1930.

Ser. No. 314,134. CLARENCE I. TOGSTAD, doing business as The C. I. Togstad Company, Kokomo, Ind. Filed May 2, 1931.

TOGSTAD'S

"VANALO"

For Flavoring Extracts for Food Purposes.
Claims use since Jan. 1, 1931.

Ser. No. 314,364. THE GELFAND MANUFACTURING CO. OF CALIFORNIA, Los Angeles, Calif. Filed May 9, 1931.

U-DINE

For Chicken and Egg Noodles, Spaghetti Dinner with Chicken Croquettes, Chicken Ravioli, Canned and/or in Glass.
Claims use since Dec. 17, 1930.

Ser. No. 314,372. LAMBERT MARKETING COMPANY, Sacramento, Calif. Filed May 9, 1931.

LEAPS AHEAD

For Fresh Vegetables, Fresh Deciduous Fruits.
Claims use since Mar. 22, 1931 on fresh vegetables, and since Mar. 30, 1931 on fresh deciduous fruits.

Ser. No. 314,476. NATHAN WILLIAMS, Wilkes-Barre, Pa. Filed May 12, 1931.



The name "Marvin" is disclaimed apart from the other features of the mark shown in the drawing.
For Malt Syrup.
Claims use since 1923.

Ser. No. 314,554. THE CORTLAND BAKING COMPANY, Cortland, N. Y. Filed May 14, 1931.



The lining in the drawing is to represent the colors red, green, and yellow. No claim is made to the exclusive use of the word "Wheat" apart from the mark as shown.
For Bread.
Claims use since Sept. 24, 1930.

Ser. No. 314,701. LOS ANGELES BREWING CO., Los Angeles, Calif. Filed May 18, 1931.

IT WORKS WONDERS

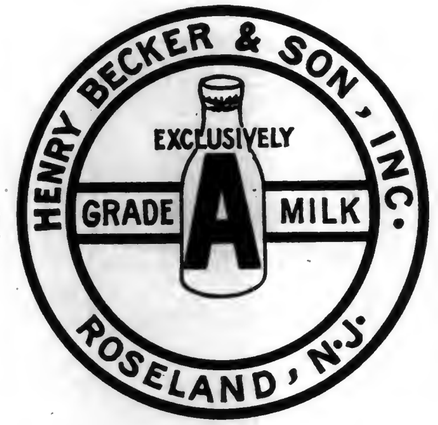
For Malt Syrup.
Claims use since Apr. 20, 1931.

Ser. No. 314,745. HENRY BECKER & SON, INC., Roseland, N. J. Filed May 19, 1931.



No claim is made to the words "Roseland, N. J." and the letter "A" apart from the mark shown in the drawing, but in making this disclaimer applicant does not relinquish any of its common law rights. The representation of the bottle and the bottle cap is also disclaimed.
For Milk and Cream.
Claims use since 1880.

Ser. No. 314,747. HENRY BECKER & SON, INC., Roseland, N. J. Filed May 19, 1931.



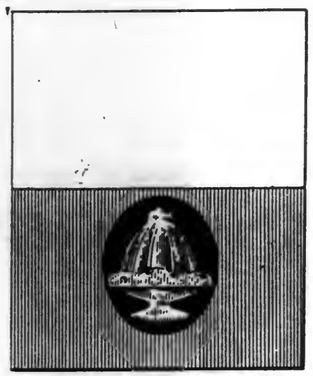
No claim is made to the words "Exclusively Grade A Milk" and "Roseland, N. J." apart from the mark shown in the drawing. The representation of the bottle and the bottle cap is disclaimed.
For Milk and Cream.
Claims use since 1929.

Ser. No. 314,932. JOS. M. SPRIGGS' SONS, INC., Washington, Pa. Filed May 22, 1931.

SUGAR HILL

For Canned Fruits and Vegetables.
Claims use since Apr. 29, 1931.

Ser. No. 315,015. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed May 25, 1931.



In the drawing the lining is intended to indicate the color red which is particularly claimed in its various shades inclusive of the shades commonly known as cherry, strawberry, and raspberry.
For Gelatin Desserts.
Claims use since Mar. 2, 1931.

Ser. No. 315,016. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed May 25, 1931.



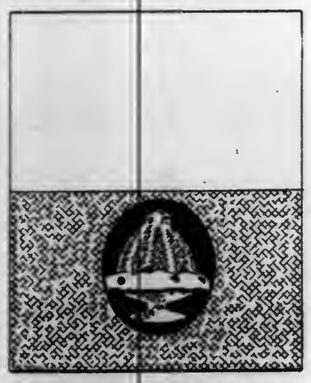
In the drawing the lining is intended to indicate the color yellow which is particularly claimed.
For Gelatin Desserts.
Claims use since Mar. 2, 1931.

Ser. No. 315,017. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed May 25, 1931.



In the drawing the lining is intended to indicate the color green which is particularly claimed.
For Gelatin Desserts.
Claims use since Mar. 2, 1931.

Ser. No. 315,018. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed May 25, 1931.



In the drawing the lining is intended to indicate the color orange which is particularly claimed.
For Gelatin Desserts.
Claims use since Mar. 2, 1931.

Ser. No. 315,115. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed May 27, 1931.



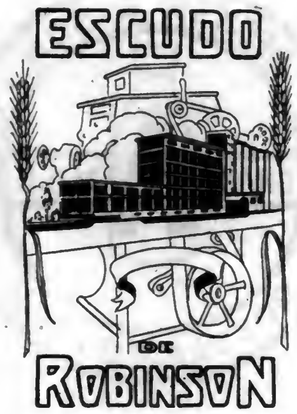
No claim is made to the word "Brand" except in connection with the mark as shown.
For Coffee and Tea.
Claims use since October, 1885.

Ser. No. 315,116. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed May 27, 1931.

SEAL
BRAND

No claim is made to the word "Brand" except in connection with the mark as shown.
For Coffee and Tea.
Claims use since October, 1885.

Ser. No. 315,279. THE ROBINSON MILLING COMPANY, Salina, Kans. Filed June 1, 1931.



For Wheat Flour.
Claims use since June 10, 1927.

Ser. No. 315,432. FRANK G. SHATTUCK COMPANY, doing business as Schrafft's Stores, New York, N. Y. Filed June 4, 1931.

CAMILLAS

For Candy.
Claims use since March, 1931.

Ser. No. 315,452. R. L. HEFLIN, INC., Sherman, Whitesboro, and Galveston, Tex. Filed June 5, 1931.



For Stock Feed.
Claims use since Dec. 22, 1930.

Ser. No. 315,453. R. L. HEFLIN, INC., Sherman, Whitesboro, and Galveston, Tex. Filed June 5, 1931.



TEXAS BULL

For Stock Feed.
Claims use since Dec. 22, 1930.

Ser. No. 315,471. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed June 5, 1931.



Applicant makes no claim to the price notation 10¢ except as it forms a part of the trade-mark as shown.
For Tea.
Claims use since Feb. 16, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 299,808. THE SPOOL COTTON COMPANY, New York, N. Y. Filed May 1, 1930.

The Selectacolor

For Display Devices for Spools of Thread.
Claims use since Apr. 3, 1930.

Ser. No. 315,094. JOSEPH HAAS, doing business as National Poultry Band Co., Newport, Ky. Filed May 27, 1931.

ZIP

For Identification Tags for Poultry and Animals.
Claims use since Nov. 1, 1930.

Ser. No. 315,222. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed May 29, 1931.



For Flag and Radio Masts of Steel or Iron.
Claims use since July 8, 1918.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JULY 14, 1931

284,910. CANDIES. ANNA MASKEY, doing business as Maskey's, San Francisco, Calif.
Filed January 19, 1931. Serial No. 310,134. PUBLISHED MAY 5, 1931. Class 46.

284,911. BATTERIES. BOND ELECTRIC CORPORATION, Jersey City, N. J.
Filed January 21, 1931. Serial No. 310,204. PUBLISHED APRIL 14 1931. Class 21.

284,912. CANNED FRUITS, CANNED VEGETABLES, CANNED BERRIES, ETC. THE CINCINNATI WHOLESALE GROCERY COMPANY, Cincinnati, Ohio.
Filed January 22, 1931. Serial No. 310,250. PUBLISHED MAY 5, 1931. Class 46.

284,913. FEEDS FOR CATTLE, HOGS, SHEEP, AND POULTRY. TARKIO MOLASSES FEED COMPANY, Kansas City, Mo.
Filed February 4, 1931. Serial No. 310,742. PUBLISHED MAY 5, 1931. Class 46.

284,914. GRAPHITE ELECTRODES, PLATES, AND ANODES. INTERNATIONAL GRAPHITE & ELECTRODE CORPORATION, Niagara Falls, N. Y.
Filed February 17, 1931. Serial No. 311,148. PUBLISHED APRIL 14, 1931. Class 21.

284,915. ELECTRIC-LIGHT BULBS, INCANDESCENT LAMPS, FUSES, PLUGS, ADAPTERS ACTING AS SOCKET REDUCERS, AND DECORATIVE LIGHTING OUTFITS. RAYLITE TRADING CO., INC., New York, N. Y.
Filed February 18, 1931. Serial No. 311,200. PUBLISHED APRIL 7, 1931. Class 21.

284,916. RADIO RECEIVING SETS AND PARTS THEREOF. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed February 20, 1931. Serial No. 311,297. PUBLISHED APRIL 14, 1931. Class 21.

284,917. RADIO RECEIVING SETS AND PARTS THEREOF. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed February 20, 1931. Serial No. 311,299. PUBLISHED APRIL 14, 1931. Class 21.

284,918. RADIO RECEIVING SETS AND PARTS THEREOF. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed February 20, 1931. Serial No. 311,300. PUBLISHED APRIL 14, 1931. Class 21.

284,919. CHEWING GUM. ORBIT LISTERATED GUM COMPANY, Chicago, Ill.
Filed March 19, 1931. Serial No. 312,308. PUBLISHED MAY 5, 1931. Class 46.

284,920. FRESH VEGETABLES. GITMAN BROTHERS, Cincinnati, Ohio.
Filed February 21, 1931. Serial No. 311,329. PUBLISHED MAY 5, 1931. Class 46.

284,921. FRESH MELONS—NAMELY, CANTALOUPES; FRESH VEGETABLES. W. E. WHITACRE, INC., El Centro, Calif.
Filed February 21, 1931. Serial No. 311,351. PUBLISHED MAY 5, 1931. Class 46.

284,922. SILVER-PLATED AND STERLING-SILVER ARTICLES OF FLATWARE, HOLLOW WARE, TOILET WARE, AND ECCLESIASTICAL WARE. INTERNATIONAL SILVER COMPANY, Meriden, Conn.
Filed February 24, 1931. Serial No. 311,379. PUBLISHED APRIL 21, 1931. Class 28.

284,923. RADIO RECEIVING SETS AND PARTS. SAMUEL ROTH, doing business as Acratest Products Co., New York, N. Y.
Filed February 5, 1931. Serial No. 310,776. PUBLISHED APRIL 21, 1931. Class 21.

284,924. ELECTRICAL CONDENSERS OF VARIOUS KINDS—NAMELY, ELECTROSTATIC PAPER DIELECTRIC CONDENSERS AND ELECTROLYTIC ELECTROSTATIC CONDENSERS. CONDENSER CORPORATION OF AMERICA, Jersey City, N. J.
Filed December 30, 1930. Serial No. 309,401. PUBLISHED MARCH 10, 1931. Class 21.

284,925. CANDIES. ANNA MASKEY, doing business as Maskey's, San Francisco, Calif.
Filed January 19, 1931. Serial No. 310,133. PUBLISHED MAY 5, 1931. Class 46.

284,926. A MEDICAL PREPARATION FOR THE TREATMENT OF CANCER, GOITER, AND SWELLINGS. GEORGE F. GREEN, doing business as Nu-Form-Le Laboratory, Culver City, Calif.
Filed December 22, 1930. Serial No. 309,239. PUBLISHED APRIL 21, 1931. Class 6.

284,927. VACCINE MADE FROM GONOCOCCI. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed December 22, 1930. Serial No. 309,255. PUBLISHED APRIL 21, 1931. Class 6.

284,928. MEDICINAL CREAM FOR USE AS AN ANTISEPTIC. CONSOLIDATED PATENTEES, INC., New York, N. Y.
Filed December 26, 1930. Serial No. 309,332. PUBLISHED APRIL 21, 1931. Class 6.

284,929. TOILET PREPARATIONS FOR SCENTING, BEAUTIFYING, AND PRESERVING THE SKIN, HAIR, AND NAILS, AND BUST DEVELOPER. AMERICAN TOILETRIES COMPANY, INC., Marion, Ohio.
Filed January 10, 1931. Serial No. 309,798. PUBLISHED APRIL 21, 1931. Class 6.

284,930. ANTISEPTIC OINTMENT AND RUB INHALANT. REX RESEARCH CORPORATION, Toledo, Ohio.
Filed January 15, 1931. Serial No. 309,989. PUBLISHED MARCH 3, 1931. Class 6.

284,931. NAIL POLISH. JEROME C. WISE, doing business as Denise et Cie., New York, N. Y.
Filed January 26, 1931. Serial No. 310,437. PUBLISHED APRIL 21, 1931. Class 6.

284,932. COSMETICS—NAMELY, LIP STICK, ROUGE, FACE POWDER, FACE LOTIONS, HAND LOTIONS, BATH SALTS, BATH TABLET, EYE-BATH LOTION; ASTRINGENTS, CREAM AND LIQUIDS; COLD CREAM, REFRESHING CREAMS, VANISHING CREAM, TALCUM AND BATH POWDER, HAIR LOTIONS, SHAMPOOS, SACHET, TOILET WATERS, EYE SHADOW, MASCARA, NAIL POLISH, NAIL CREAMS, NAIL POWDER, CUTICLE ICE, EYEBROW AND EYELASH GROWER CREAM, EYEBROW PENCIL, LIQUID POWDER, MUSCLE OIL, AND PERFUME. BEN BROCKER, doing business as Geté, New York, N. Y.
Filed January 30, 1931. Serial No. 310,551. PUBLISHED APRIL 21, 1931. Class 6.

284,933. MEDICINAL TREATMENT FOR HAIR, SCALP, AND TISSUES OF THE FACE AND BODY. BERNARD S. ARTZT, doing business as B. S. Artzt Laboratories, Philadelphia, Pa.
Filed February 2, 1931. Serial No. 310,705. PUBLISHED APRIL 21, 1931. Class 6.

284,934. GAUGE GLASSES, WATER COLUMNS, AND WATER GAUGES. DIAMOND POWER SPECIALTY CORPORATION, Detroit, Mich.
Filed February 6, 1931. Serial No. 310,818. PUBLISHED MAY 5, 1931. Class 26.

284,935. CHAIRS FOR HOUSEHOLD AND OFFICE USE. BILTWELL CHAIR AND FURNITURE COMPANY, doing business as Ko-Rect Posture Chair Company, Denton, N. C.
Filed February 21, 1931. Serial No. 311,319. PUBLISHED MAY 5, 1931. Class 32.

284,936. FERMENTING CULTURES. COTTON STATES DAIRY LABORATORIES, Nashville, Tenn.
Filed February 25, 1931. Serial No. 311,421. PUBLISHED APRIL 7, 1931. Class 6.

284,937. COLORING MATERIAL FOR BLEACHED AND GRAY HAIR, IN LIQUID FORM. YOUTH PRODUCTS CO., Detroit, Mich.
Filed March 9, 1931. Serial No. 311,944. PUBLISHED APRIL 28, 1931. Class 6.

284,938. NOSE AND THROAT SPRAY. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed March 4, 1931. Serial No. 311,760. PUBLISHED APRIL 28, 1931. Class 6.

284,939. NOSE AND THROAT SPRAY. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed March 4, 1931. Serial No. 311,758. PUBLISHED APRIL 28, 1931. Class 6.

284,940. PRESSURE GAUGES FOR PNEUMATIC TIRES. TIRE SAVERS CORPORATION, LTD., San Jose, Calif.
Filed March 9, 1931. Serial No. 311,940. PUBLISHED MAY 5, 1931. Class 26.

284,941. MEDICINAL PREPARATION FOR TREATING HEADACHE, NEURALGIA, LUMBAGO, TOOTHACHE, COLDS, RHEUMATIC PAINS, AND NEURITIS. LEO J. HOFFERD, doing business as White Cross Laboratories, Cedar Rapids, Iowa.
Filed March 10, 1931. Serial No. 311,960. PUBLISHED APRIL 28, 1931. Class 6.

284,942. MEDICINE FOR THE DISEASES OF THE NERVOUS SYSTEM. SMITH, KLINE & FRENCH LABORATORIES, Philadelphia, Pa.
Filed March 11, 1931. Serial No. 312,019. PUBLISHED APRIL 28, 1931. Class 6.

284,943. LAXATIVE MEDICINE. MARVELAX CORPORATION, Minneapolis, Minn.
Filed March 12, 1931. Serial No. 312,055. PUBLISHED APRIL 28, 1931. Class 6.

284,944. WETTING-OUT AGENTS, EMULSIFYING AGENTS, AND DYE ASSISTANTS. NATIONAL ANILINE & CHEMICAL COMPANY, INC., New York, N. Y.
Filed March 13, 1931. Serial No. 312,114. PUBLISHED APRIL 28, 1931. Class 6.

284,945. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. VIVINY PERFUMERS, INC., New Haven, Conn.
Filed March 13, 1931. Serial No. 312,119. PUBLISHED APRIL 28, 1931. Class 6.

284,946. MEDICAL COMPOUND FOR COUGHS AND COLDS. MARGARET GROSBIER, doing business as The Grosbier Company, Washington, D. C.
Filed March 18, 1931. Serial No. 312,322. PUBLISHED APRIL 28, 1931. Class 6.

284,947. PAPER-FOLDING MACHINES AND SEALING MACHINES FOR PLACING SEALS ON MAILING PIECES. ALLIED PRINTING AND BINDING MACHINERY, INC., Cleveland, Ohio.
Filed March 23, 1931. Serial No. 312,404. PUBLISHED MAY 5, 1931. Class 23.

284,948. PHOTOGRAPHIC FILM. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed March 26, 1931. Serial No. 312,555. PUBLISHED MAY 5, 1931. Class 26.

284,949. RAZOR BLADES. INTERNATIONAL SAFETY RAZOR CORP., Bloomfield, N. J.
Filed March 26, 1931. Serial No. 312,563. PUBLISHED MAY 5, 1931. Class 23.

284,950. AXES AND MACHETES. THE COLLINS COMPANY, Collinsville, Conn.
Filed March 25, 1931. Serial No. 312,511. PUBLISHED MAY 5, 1931. Class 23.

284,951. PERFUME, TOILET WATER, TALCUM POWDER, SACHET POWDER, AND DUSTING POWDER. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,436. PUBLISHED APRIL 21, 1931. Class 6.

284,952. LUMINOUS OR PLAIN NUMBER PLATES, NAME PLATES, SIGN PLATES, AND INDICATORS. UNITED STATES RADIUM CORPORATION, New York, N. Y.
Filed February 26, 1931. Serial No. 311,497. PUBLISHED MAY 5, 1931. Class 50.

284,953. HOSIERY. BRUMBACH & MILLER, INC., Temple, Pa.
Filed February 27, 1931. Serial No. 311,508. PUBLISHED APRIL 28, 1931. Class 39.

284,954. MEN'S SUITS, COATS, VESTS, PANTS, OVERCOATS, RAINCOATS, TOPCOATS, AND ULSTERS. FORD NAYLOR, New York, N. Y.
Filed March 2, 1931. Serial No. 311,622. PUBLISHED APRIL 21, 1931. Class 39.

284,955. MEN'S AND BOYS' FLANNEL AND WORK SHIRTS. NORTHERN JOBBING COMPANY, Chicago, Ill., New York, N. Y., and St. Paul, Minn.
Filed March 6, 1931. Serial No. 311,844. PUBLISHED APRIL 21, 1931. Class 39.

284,956. RAZORS AND BLADES THEREFOR. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y.
Filed March 13, 1931. Serial No. 312,082. PUBLISHED MAY 5, 1931. Class 23.

284,957. RUBBER TIRES AND TUBES FOR AUTOMOBILES, AUTOMOBILE TRUCKS, AND TRAILERS. MARSHALL FIELD & COMPANY, Chicago, Ill.
Filed March 14, 1931. Serial No. 312,144. PUBLISHED MAY 5, 1931. Class 35.

284,958. RUBBER TIRES AND TUBES FOR AUTOMOBILES, AUTOMOBILE TRUCKS, AND TRAILERS. MARSHALL FIELD & COMPANY, Chicago, Ill.
Filed March 14, 1931. Serial No. 312,146. PUBLISHED MAY 5, 1931. Class 35.

284,959. HOSIERY. GUS GRISSMANN CO., INC., New York, N. Y.
Filed March 14, 1931. Serial No. 312,149. PUBLISHED APRIL 28, 1931. Class 39.

284,960. CUSHIONING PADS FOR SUPPORTING TYPEWRITERS AND THE LIKE. SANO TYPEWRITER PAD COMPANY, Wilkes-Barre, Pa.
Filed March 23, 1931. Serial No. 312,455. PUBLISHED MAY 5, 1931. Class 50.

284,961. RAZORS AND RAZOR BLADES. INTERNATIONAL SAFETY RAZOR CORP., Bloomfield, N. J.
Filed March 26, 1931. Serial No. 312,564. PUBLISHED MAY 5, 1931. Class 23.

284,962. BRAKE LINING. THE RUSSELL MANUFACTURING COMPANY, Middletown, Conn.
Filed March 26, 1931. Serial No. 312,572. PUBLISHED MAY 5, 1931. Class 35.

284,963. PRINTING INKS, INKS FOR RAISED-LETTER PRINTING, AND THERMOGRAPHIC COMPOUNDS USED IN THE PRODUCTION OF RAISED-LETTER PRINTING. THERMOGRAPHIC CORPORATION, New York, N. Y.
Filed March 26, 1931. Serial No. 312,580. PUBLISHED MAY 5, 1931. Class 11.

284,964. CIGARS, CIGARILLOS, CIGARETTES, AND SMOKING TOBACCO, CHEWING TOBACCO, AND SNUFF TOBACCO. VEBELLEN LIMITED, Antwerp, Belgium.
Filed January 13, 1931. Serial No. 309,912. PUBLISHED MAY 5, 1931. Class 17.

284,965. PLUG TOBACCO. THE AMERICAN TOBACCO COMPANY, New York, N. Y.
Filed January 27, 1931. Serial No. 310,489. PUBLISHED MAY 5, 1931. Class 17.

284,966. TROUSERS. ROSALIND ELAINE KRESS, New York, N. Y.
Filed February 18, 1931. Serial No. 311,191. PUBLISHED APRIL 21, 1931. Class 39.

284,967. WOMEN'S DRESSES AND BLOUSES. STORYK BROS., New York, N. Y.
Filed February 20, 1931. Serial No. 311,291. PUBLISHED APRIL 21, 1931. Class 39.

284,968. NONFERROUS METALS AND ALLOYS CONTAINING COPPER AND SILICON AND FOR ROLLED AND DRAWN RODS, BARS, AND WIRES. THE OHIO BRASS COMPANY, Mansfield, Ohio.
Filed February 24, 1931. Serial No. 311,412. PUBLISHED MAY 5, 1931. Class 14.

284,969. ELECTRICAL CONNECTORS FOR WIRES, CABLES, TUBE, ROD, AND THE LIKE. BURNDY ENGINEERING COMPANY, INC., New York, N. Y.
Filed February 16, 1931. Serial No. 311,081. PUBLISHED APRIL 21, 1931. Class 21.

284,970. STORAGE BATTERIES. LINCOLN OIL REFINING COMPANY, Robinson, Ill.
Filed February 4, 1931. Serial No. 310,721. PUBLISHED APRIL 21, 1931. Class 21.

284,971. ELECTRICAL SIGNS. ADVERTISING PRODUCTS, INCORPORATED, Minneapolis, Minn.
Filed March 6, 1931. Serial No. 311,813. PUBLISHED APRIL 21, 1931. Class 21.

284,972. ELECTRICAL CONNECTION PLUGS AND CONNECTION-CORD SETS COMPRISING A CONNECTION CORD WITH CONNECTION PLUGS WITH OR WITHOUT A COILING DEVICE. GROVER B. HIGGINS, doing business as The Neverknot Co., Chicago, Ill.
Filed February 17, 1931. Serial No. 311,143. PUBLISHED APRIL 21, 1931. Class 21.

284,973. RADIO RECEIVING SETS AND PARTS THEREOF. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed February 20, 1931. Serial No. 311,298. PUBLISHED APRIL 14, 1931. Class 21.

284,974. CHEWING GUM. THE GOUDEY GUM CO., Allston, Mass.
Filed February 21, 1931. Serial No. 311,330. PUBLISHED MAY 5, 1931. Class 46.

284,975. ELECTRICALLY-OPERATED SOUND HEADS ADAPTED FOR USE IN COMBINATION WITH PROJECTION APPARATUS. WEBER MACHINE CORPORATION, Rochester, N. Y.
Filed February 24, 1931. Serial No. 311,405. PUBLISHED APRIL 21, 1931. Class 21.

284,976. RADIO RECEIVING SETS. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed February 26, 1931. Serial No. 311,500. PUBLISHED APRIL 14, 1931. Class 21.

284,977. ELECTRICALLY-DRIVEN FLOOR POLISHERS AND PARTS THEREOF. ELECTROLUX, INC., New York, N. Y.
Filed March 2, 1931. Serial No. 311,601. PUBLISHED APRIL 21, 1931. Class 21.

284,978. ELECTRICAL FIRE-ALARM SYSTEMS AND PARTS THEREOF — NAMELY, FIRE-ALARM BOXES, VARIABLE TIME TRANSFORMERS, SIRENS, CONTROL-PANEL UNITS, AND PARTS THEREOF. THE GAMEWELL COMPANY, Newton and Newton Upper Falls, Mass.
Filed March 3, 1931. Serial No. 311,680. PUBLISHED APRIL 21, 1931. Class 21.

284,979. LUBRICATING OILS. GASH-STULL COMPANY, Chester, Pa.
Filed March 6, 1931. Serial No. 311,833. PUBLISHED APRIL 21, 1931. Class 15.

284,980. COFFEE. SOUTHLAND COFFEE COMPANY, Macon, Ga.
Filed March 10, 1931. Serial No. 311,982. PUBLISHED MAY 5, 1931. Class 46.

284,981. COFFEE. SOUTHLAND COFFEE COMPANY, Macon, Ga.
Filed March 26, 1931. Serial No. 312,576. PUBLISHED MAY 5, 1931. Class 46.

284,982. CANDY BARS. F. A. MARTOCCIO COMPANY, doing business as Hollywood Candy Co., Minneapolis, Minn.
Filed March 27, 1931. Serial No. 312,611. PUBLISHED MAY 5, 1931. Class 46.

284,983. CANNED APPLE SAUCE. THE LYNDONVILLE CANNING COMPANY, INC., Lyndonville, N. Y.
Filed March 28, 1931. Serial No. 312,656. PUBLISHED MAY 5, 1931. Class 46.

284,984. RECEPTACLES SUCH AS WARDROBE TRUNKS, DRESS TRUNKS, SHOE TRUNKS, HAT TRUNKS, AND TAXI TRUNKS. THE INDESTRUCTO TRUNK COMPANY, Mishawaka, Ind.
Filed March 12, 1930. Serial No. 297,193. PUBLISHED SEPTEMBER 16, 1930. Class 3.

284,985. CANDY; CHOCOLATE, COCOA, AND CHOCOLATE COATINGS; HOT-CHOCOLATE POWDER. AMBROSIA CHOCOLATE COMPANY, Milwaukee, Wis.
Filed March 31, 1930. Serial No. 298,132. PUBLISHED AUGUST 5, 1930. Class 46.

284,986. RULES. THE STANLEY WORKS, New Britain, Conn.
Filed May 17, 1930. Serial No. 300,763. PUBLISHED JANUARY 27, 1931. Class 26.

284,987. AUTOMOBILE RADIATOR SEAL AND CLEANER, RADIATOR CLEANER AND SCALE PREVENTATIVE. ABE GORDON, doing business as Black-Magic Products Company, Detroit, Mich., assignor to Black Magic Products Co., Detroit, Mich., a Corporation of Michigan.
Filed May 31, 1930. Serial No. 301,906. PUBLISHED APRIL 21, 1931. Class 6.

284,988. GASOLINE CONTAINING A CHEMICAL PREPARATION. R. L. BUFFINGTON, doing business as Carbonless Fuel Company, Columbus, Ohio.
Filed June 6, 1930. Serial No. 302,210. PUBLISHED APRIL 21, 1931. Class 15.

284,989. FRESH APPLES. P. J. MCGUIRE, Wenatchee, Wash.
Filed August 26, 1930. Serial No. 305,048. PUBLISHED MAY 5, 1931. Class 46.

284,990. ANÆSTHETICS OF ALL KINDS. ETABLISSEMENTS ROQUES, Paris, France.
Filed August 28, 1930. Serial No. 305,112. PUBLISHED APRIL 21, 1931. Class 6.

284,991. CANNED SALMON. NEW ENGLAND FISH COMPANY, Seattle, Wash.
Filed September 5, 1930. Serial No. 305,365. PUBLISHED MAY 5, 1931. Class 46.

284,992. FRESH RHUBARB. CHAS. D. MOREHOUSE, El Monte, Calif.
Filed September 15, 1930. Serial No. 305,720. PUBLISHED MAY 5, 1931. Class 46.

284,993. CHEWING GUM COMPRISING A CORE OF CHEWING GUM AND A THICK COATING OR COVERING OF HARD CANDY. FRANK H. FLEER CORPORATION, Philadelphia, Pa.
Filed September 23, 1930. Serial No. 305,967. PUBLISHED MAY 5, 1931. Class 46.

284,994. PETROLEUM-REFINING EQUIPMENT—NAMELY, CONTACTORS, LEVEL CONTROLS, MECHANICAL VALVES, AND COMPLETE ACID-TREATING PLANTS FOR PETROLEUM PRODUCTS. CHARLES W. STRATFORD, doing business as Stratford Engineering Company, Kansas City, Mo.
Filed September 25, 1930. Serial No. 306,073. PUBLISHED MAY 5, 1931. Class 23.

CARNEGIE LIBRARY OF ATLANTA

284,995. ANTACID. SOCIETÀ ANONIMA DELLE TERME DI S. PELLEGRINO, S. Pellegrino, Bergamo, Italy.
Filed October 6, 1930. Serial No. 306,468. PUBLISHED APRIL 28, 1931. Class 6.

284,996. ALUMINUM CASTINGS, BILLETS, AND INGOTS, ETC. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,867. PUBLISHED MAY 5, 1931. Class 14.

284,997. ALUMINUM CASTINGS, BILLETS, AND INGOTS, ETC. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,868. PUBLISHED MAY 5, 1931. Class 14.

284,998. BLANK LITHOGRAPH PLATES. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,871. PUBLISHED MAY 5, 1931. Class 14.

284,999. BLANK LITHOGRAPH PLATES. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,872. PUBLISHED MAY 5, 1931. Class 14.

285,000. PREPARATION FOR THE TREATMENT OF ASTHMA. MAXMILLIAN FISCHER, New Orleans, La.
Filed November 14, 1930. Serial No. 307,911. PUBLISHED APRIL 21, 1931. Class 6.

285,001. POWER-TRANSMISSION MACHINERY COMPRISING DRIVEN AND DRIVER GROOVED SHEAVES AND ENDLESS V-SHAPED BELTS. PYOTT FOUNDRY & MACHINE CO., Chicago, Ill.
Filed November 15, 1930. Serial No. 307,953. PUBLISHED MAY 5, 1931. Class 23.

285,002. ELECTRIC FURNACES, CONDUCTORS, RHEOSTATS, ETC. PROCESS ENGINEERING AND EQUIPMENT CORPORATION, Attleboro, Mass.
Filed November 18, 1930. Serial No. 308,032. PUBLISHED APRIL 7, 1931. Class 21.

285,003. HYPNOTIC SEDATIVE ANESTHETIC COMPOUND. ABBOTT LABORATORIES, North Chicago, Ill.
Filed November 26, 1930. Serial No. 308,321. PUBLISHED APRIL 21, 1931. Class 6.

285,004. CONDENSATION PRODUCT OF FORMALDEHYDE AND ETHYLAMINE. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed December 23, 1930. Serial No. 309,276. PUBLISHED MAY 5, 1931. Class 1.

285,005. RICE, BARLEY, DRIED PEAS, DRIED BEANS, DRIED LENTILS, COFFEE AND SPICES, RICE FLAKES, AND RICE FLOUR. SOUTHERN RICE SALES COMPANY, INC., New York, N. Y.
Filed February 5, 1931. Serial No. 310,780. PUBLISHED MAY 5, 1931. Class 46.

285,006. FRESH CITRUS FRUITS. A. & L. FRUIT CO., Los Angeles, Calif.
Filed March 18, 1929. Serial No. 280,867. PUBLISHED MAY 5, 1931. Class 46.

285,007. ALTIMETERS, INSTRUMENTS FOR TAKING BEARINGS, INCLINOMETERS, ETC. HUGO JUNKERS, Dessau, Germany.
Filed February 26, 1929. Serial No. 279,929. PUBLISHED MAY 5, 1931. Class 26.

285,008. FRESH CRANBERRIES. NEW ENGLAND CRANBERRY SALES COMPANY, Middleboro, Mass.
Filed December 19, 1928. Serial No. 276,976. PUBLISHED JUNE 3, 1930. Class 46.

285,009. MACHINES FOR APPLYING LABELS TO THE BODY OF BOTTLES AND THE LIKE. NATIONAL LABELING MACHINE CO., INC., Long Island City, N. Y.
Filed December 18, 1928. Serial No. 276,896. PUBLISHED MAY 5, 1931. Class 23.

285,010. A MIXTURE OF HERBS FOR USE IN WASHING OR SHAMPOOING THE HAIR. JOSIE A. WANOUS SHAMPOO BAG COMPANY, Minneapolis, Minn.
Filed July 10, 1929. Serial No. 286,909. PUBLISHED APRIL 21, 1931. Class 6.

285,011. FACE POWDER. PINAUD INCORPORATED, New York, N. Y.
Filed July 10, 1929. Serial No. 286,897. PUBLISHED FEBRUARY 24, 1931. Class 6.

285,012. WARDROBE TRUNKS, STEAMER TRUNKS, ETC. ORENSTEIN TRUNK CO., INC., Newark, N. J.
Filed July 6, 1929. Serial No. 286,677. PUBLISHED JULY 15, 1930. Class 3.

285,013. TOOTH PASTE, TOOTH POWDER, AND MOUTH WASH. SAMUEL TINSKY, doing business as Magdent Laboratories, New York, N. Y.
Filed November 2, 1929. Serial No. 291,940. PUBLISHED APRIL 28, 1931. Class 6.

285,014. WARDROBE TRUNKS, STEAMER TRUNKS, ETC. ORENSTEIN TRUNK CO., INC., Newark, N. J.
Filed July 6, 1929. Serial No. 286,678. PUBLISHED JULY 15, 1930. Class 3.

285,015. NONFERROUS CASTINGS AND FORGINGS. BOHN ALUMINUM & BRASS CORPORATION, Detroit, Mich.
Filed February 24, 1930. Serial No. 296,391. PUBLISHED MAY 5, 1931. Class 14.

285,016. NONFERROUS CASTINGS AND FORGINGS. BOHN ALUMINUM & BRASS CORPORATION, Detroit, Mich.
Filed February 24, 1930. Serial No. 296,389. PUBLISHED MAY 5, 1931. Class 14.

285,017. SUITS FOR WOMEN, JUNIORS, AND MISSES FOR SPORT WEAR. THE JOSEPH ENGEL-COHEN CO., INC., New York, N. Y.
Filed February 12, 1930. Serial No. 295,940. PUBLISHED APRIL 28, 1931. Class 39.

285,018. COATS FOR SPORT WEAR FOR WOMEN, MISSES, AND JUNIORS. THE JOSEPH ENGEL-COHEN CO., INC., New York, N. Y.
Filed February 12, 1930. Serial No. 295,939. PUBLISHED APRIL 28, 1931. Class 39.

285,019. FACE AND TALCUM POWDERS, ROUGES, EYEBROW PENCILS, LIP STICKS, COLD CREAMS AND VANISHING CREAMS, AND TOILET WATERS; STARCH AND STARCH PREPARATIONS FOR LAUNDRY USE, DYES AND PIGMENTS FOR USE IN THE MANUFACTURE OF DYES. STERNBERG, HABERLAND, LIEBERT & CO., Berlin, Germany.
Filed December 17, 1929. Serial No. 293,797. PUBLISHED APRIL 21, 1931. Class 6.

285,020. SALVE FOR TREATMENT OF SKIN IRRITATIONS, BABY POWDER, AND BABY CREAM. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn.
Filed November 29, 1929. Serial No. 293,056. PUBLISHED APRIL 28, 1931. Class 6.

285,021. SHOES MADE OF LEATHER, FABRIC, RUBBER, OR COMBINATIONS THEREOF. CRESCENT SHOE CO., New York, N. Y.
Filed November 17, 1930. Serial No. 307,968. PUBLISHED APRIL 28, 1931. Class 39.

285,022. FANS, NONELECTRIC. VICTOR BEFFA, Philadelphia, Pa.
Filed November 22, 1930. Serial No. 308,185. PUBLISHED APRIL 21, 1931. Class 40.

285,023. LIQUID RUBBER USED TO PREVENT RUGS FROM SLIPPING. CHARLES B. BRINKWORTH, Boston, Mass.
Filed December 13, 1930. Serial No. 308,924. PUBLISHED APRIL 28, 1931. Class 5.

285,024. COAL-TAR DYESTUFFS. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed January 27, 1931. Serial No. 310,455. PUBLISHED APRIL 28, 1931. Class 6.

285,025. COLD CREAM AND CLEANSING CREAM. DAGGETT & RAMSDELL, New York, N. Y.
Filed February 10, 1931. Serial No. 310,902. PUBLISHED APRIL 28, 1931. Class 6.

285,026. VANISHING CREAM. DAGGETT & RAMSDELL, New York, N. Y.
Filed February 10, 1931. Serial No. 310,903. PUBLISHED APRIL 28, 1931. Class 6.

285,027. COLD CREAM AND CLEANSING CREAM. DAGGETT & RAMSDELL, New York, N. Y.
Filed February 10, 1931. Serial No. 310,904. PUBLISHED APRIL 28, 1931. Class 6.

285,028. VANISHING CREAM. DAGGETT & RAMSDELL, New York, N. Y.
Filed February 10, 1931. Serial No. 310,905. PUBLISHED APRIL 28, 1931. Class 6.

285,029. MOTH REPELLANT. CHARLES L. R. RUSSELL, Brooklyn, N. Y.
Filed February 16, 1931. Serial No. 311,112. PUBLISHED APRIL 21, 1931. Class 6.

285,030. TONIC FOR ANEMIC CONDITIONS, MARASMUS, DIETARY DEFICIENCIES, AND MALNUTRITION. THE BOVININE COMPANY, Chicago, Ill.
Filed February 21, 1931. Serial No. 311,320. PUBLISHED APRIL 28, 1931. Class 6.

285,031. PREPARATIONS FOR THE TREATMENT OF THE HAIR AND SCALP. JOHN H. BRECK, INC., Springfield, Mass.
Filed February 27, 1931. Serial No. 311,507. PUBLISHED APRIL 28, 1931. Class 6.

285,032. LIQUID PREPARATIONS FOR USE UPON THE FACE FOR THE PURPOSE OF STIMULATING CIRCULATION. ADELE MOREL INC., New York, N. Y.
Filed February 28, 1931. Serial No. 311,585. PUBLISHED APRIL 28, 1931. Class 6.

285,033. EGG PRESERVER CONSISTING OF A PASTE-LIKE COMPOSITION FOR THE TREATMENT OF THE SHELLS OF EGGS IN THEIR NATURAL STATE. E-Z-WAY EGG PRESERVER CO., Minneapolis, Minn.
Filed March 2, 1931. Serial No. 311,602. PUBLISHED APRIL 21, 1931. Class 6.

285,034. CHEMICAL COMPOSITIONS FOR TREATING PETROLEUM OILS. FRANK F. GORMAN, doing business as Separafine Manufacturing Company, Bristow, Okla.
Filed March 2, 1931. Serial No. 311,605. PUBLISHED APRIL 21, 1931. Class 6.

285,035. OINTMENT FOR THE EXTERNAL APPLICATION OF IODIN. MENLEY & JAMES, LIMITED, New York, N. Y.
Filed March 2, 1931. Serial No. 311,618. PUBLISHED APRIL 21, 1931. Class 6.

285,036. PREPARATION FOR HIGH BLOOD PRESSURE. HARVEY W. ELLIS, doing business as Sap Laboratory Company, Waskom, Tex.
Filed March 3, 1931. Serial No. 311,650. PUBLISHED APRIL 21, 1931. Class 6.

285,037. CHEMICAL PREPARATION FOR CLEANING SMOKING PIPES AND RESTORING SWEETNESS TO THE SAME AND FOR CLEANING EYE-GLASSES. WARREN F. BLEECKER, Boulder, Colo.
Filed March 4, 1931. Serial No. 311,717. PUBLISHED APRIL 21, 1931. Class 6.

285,038. DEODORANTS. K O SYSTEM OF SANITATION, Cleveland, Ohio.
Filed March 4, 1931. Serial No. 311,736. PUBLISHED APRIL 21, 1931. Class 6.

285,039. COAL. LE FLORE POTEAU COAL COMPANY, Tulsa, Okla.
Filed March 4, 1931. Serial No. 311,741. PUBLISHED APRIL 28, 1931. Class 1.

285,040. NOSE AND THROAT SPRAY. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed March 4, 1931. Serial No. 311,759. PUBLISHED APRIL 21, 1931. Class 6.

285,041. NOSE AND THROAT SPRAY. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed March 4, 1931. Serial No. 311,761. PUBLISHED APRIL 21, 1931. Class 6.

285,042. PREPARATION FOR EXTERNAL APPLICATION IN THE IMPROVEMENT AND TREATMENT OF THE SKIN, A CLEANSING AND SOFTENING THEREOF, AND AS A HAIRDRESSING, BEARD SOFTENING, HAIR-WAVE SET, AND AS A DRESSING FOR SUNBURN AND WINDBURN. ALEXANDER ALBERT, doing business as Associated Beauticians, Brooklyn, N. Y.
Filed March 2, 1931. Serial No. 311,764. PUBLISHED APRIL 21, 1931. Class 6.

285,043. SOLUTION USED ON WOOD, TEXTILES, AND PAPERS TO PRESERVE AND PROTECT SAME AGAINST WATER, FIRE, ACID, FUNGUS GROWTH, AND DECAY AND TO PROTECT METALS AGAINST RUST AND ACIDS. AQUA-SEAL CORPORATION, Chicago, Ill.
Filed March 5, 1931. Serial No. 311,770. PUBLISHED APRIL 21, 1931. Class 6.

285,044. ANTHRACITE COAL. MADEIRA, HILL & COMPANY, Philadelphia, Pa.
Filed March 5, 1931. Serial No. 311,786. PUBLISHED APRIL 28, 1931. Class 1.

285,045. COAL. GENERAL COAL COMPANY, Cincinnati, Ohio.
Filed March 7, 1931. Serial No. 311,874. PUBLISHED APRIL 28, 1931. Class 1.

285,046. SALVE FOR EXTERNAL USE FOR TREATING INFLUENZA, PNEUMONIA, CROUPS, COLDS, AND SORE THROAT. NOAH A. JOHNSON, Kyles Ford, Tenn.
Filed March 7, 1931. Serial No. 311,875. PUBLISHED APRIL 21, 1931. Class 6.

285,047. INSECTICIDES. LARVACIDE SERVICE INC., New York, N. Y.
Filed March 7, 1931. Serial No. 311,877. PUBLISHED APRIL 21, 1931. Class 6.

285,048. OINTMENT FOR ATHLETE'S FOOT. RAE CHEMICAL COMPANY, Cincinnati, Ohio.
Filed March 9, 1931. Serial No. 311,929. PUBLISHED APRIL 21, 1931. Class 6.

285,049. LAPEL AND OTHER IDENTIFICATION BUTTONS AND EMBLEMS MADE OF OR PLATED WITH PRECIOUS METAL. KIWANIS INTERNATIONAL, Chicago, Ill.
Filed April 22, 1930. Serial No. 299,267. PUBLISHED APRIL 7, 1931. Class 28.

285,050. CORSETS, BUST SUPPORTS, GARTERS, AND SUSPENDERS. PAULINE WERNER, NÉE FRESENIUS, Stuttgart, Germany.
Filed May 20, 1930. Serial No. 300,900. PUBLISHED APRIL 28, 1931. Class 39.

285,051. LADIES' FINISHED UNDERWEAR OF KNITTED FABRIC, MADE OF PURE SPUN SILK AND ANGORA RABBITS' HAIR. BEDER & BEDER, INC., New York, N. Y.
Filed June 25, 1930. Serial No. 302,807. PUBLISHED APRIL 21, 1931. Class 39.

285,052. DIGESTIVE BEVERAGE MATERIAL CONTAINING CHOCOLATE AND YEAST. E. O. FARLEY LIMITED, Camperdown, near Sydney, Australia.
Filed July 2, 1930. Serial No. 303,049. PUBLISHED MAY 5, 1931. Class 46.

285,053. FOOTWEAR—NAMELY, BOOTS AND SHOES OF RUBBER OR RUBBER AND FABRIC. WM. ISAAC & SON, New York, N. Y.
Filed August 2, 1930. Serial No. 304,146. PUBLISHED APRIL 14, 1931. Class 39.

285,054. MEN'S, WOMEN'S, AND BOYS' OUTER CLOTHING CONSISTING OF KNICKERBOCKERS. ELMER L. WARD, Boston, Mass.
Filed August 2, 1930. Serial No. 304,170. PUBLISHED APRIL 14, 1931. Class 39.

285,055. PURE UNCOLORED OLEOMARGARINE FOR TABLE USE. THE GLIDDEN COMPANY, doing business as Wisconsin Food Products Co., Cleveland, Ohio.
Filed August 20, 1930. Serial No. 304,813. PUBLISHED MAY 5, 1931. Class 46.

285,056. SHOES MADE OF LEATHER, AND A COMBINATION OF LEATHER AND FABRIC. SPENCER CHAIN STORES, INC., Boston, Mass.
Filed August 4, 1930. Serial No. 304,220. PUBLISHED APRIL 28, 1931. Class 39.

285,057. CERTAIN NAMED WEARING APPAREL. INTERNATIONALER MARATTI-MASCHINENVERKAUF - A. - G., BERLIN, Berlin, Germany.
Filed September 10, 1930. Serial No. 305,532. PUBLISHED APRIL 28, 1931. Class 39.

285,058. ARTIFICIAL CELLULOSIC MATERIAL ADAPTED TO BE USED IN THE MANUFACTURE OF THREADS AND YARNS. MICHEL DASSONVILLE, Paris, France.
Filed September 24, 1930. Serial No. 305,999. PUBLISHED APRIL 21, 1931. Class 1.

285,059. DAIRY PRODUCTS—NAMELY, MILK, CREAM, BUTTER, BUTTERMILK, AND COTTAGE CHEESE. W. J. KENNEDY DAIRY CO., Detroit, Mich.
Filed October 8, 1930. Serial No. 306,532. PUBLISHED MAY 5, 1931. Class 46.

285,060. CUT-OUT PARTS OF LEATHER FOR SHOES—NAMELY, TAPS, TOP PIECES, OUTSOLES, INSOLES, AND COUNTERS. M. BERKOWITZ & SONS, Brooklyn, N. Y.
Filed October 31, 1930. Serial No. 307,382. PUBLISHED APRIL 28, 1931. Class 39.

285,061. FRATERNITY BADGES, SHIELDS, FINGER RINGS, ETC. ALPHA CHI EPSILON, Chicago, Ill.
Filed February 5, 1930. Serial No. 295,595. PUBLISHED APRIL 7, 1931. Class 28.

285,062. COAL, COKE, BRIQUETTES, ETC. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed February 17, 1930. Serial No. 296,155. PUBLISHED APRIL 28, 1931. Class 1.

285,063. WHEAT FLOUR. ROANOKE CITY MILLS, INCORPORATED, Roanoke, Va.
Filed February 19, 1930. Serial No. 296,240. PUBLISHED APRIL 1, 1930. Class 46.

285,064. LEATHER. THE MICHIGAN CITY TANNING COMPANY, Michigan City, Ind.
Filed January 13, 1930. Serial No. 294,736. PUBLISHED APRIL 21, 1931. Class 1.

285,065. LEATHERS. THE GRIESS PFLEGER TANNING COMPANY, Cincinnati, Ohio.
Filed February 19, 1930. Serial No. 296,225. PUBLISHED APRIL 28, 1931. Class 1.

285,066. ROSIN. THE NEWPORT COMPANY, Carrollville, Wis.
Filed February 28, 1930. Serial No. 296,666. PUBLISHED APRIL 21, 1931. Class 1.

285,067. MODELING CLAY, CLAY FLOUR, MOIST CLAY, AND GESSO CLAY. AMERICAN ART CLAY COMPANY, Indianapolis, Ind.
Filed November 6, 1930. Serial No. 307,571. PUBLISHED JANUARY 13, 1931. Class 1.

285,068. ELECTRIC LAMPS FOR ILLUMINATING THE FRONT OF PIANOS. PLAY-O-LITE CO. INC., Buffalo, N. Y.
Filed February 17, 1917. Serial No. 101,458. PUBLISHED JUNE 12, 1917. Class 21.

285,069. LADIES' UNDERGARMENTS—NAMELY, SLIPS, PETTICOATS, AND PAJAMAS. MAYERS & SCHILLER, INC., New York, N. Y.
Filed May 17, 1930. Serial No. 300,732. PUBLISHED APRIL 14, 1931. Class 39.

285,070. SHINGLES. ST. PAUL & TACOMA LUMBER COMPANY, Tacoma, Wash.
Filed February 20, 1931. Serial No. 311,288. PUBLISHED APRIL 21, 1931. Class 12.

285,071. FIRE BRICK. NORTH AMERICAN REFRACTORIES CO., Cleveland, Ohio.
Filed February 27, 1931. Serial No. 311,533. PUBLISHED APRIL 21, 1931. Class 12.

285,072. REINFORCED CONCRETE SHINGLES. ALLEN J. SAVILLE, INC., Richmond, Va.
Filed February 27, 1931. Serial No. 311,538. PUBLISHED APRIL 21, 1931. Class 12.

285,073. CONCRETE REPRODUCTIONS OF SHINGLES. ALLEN J. SAVILLE, INC., Richmond, Va.
Filed February 27, 1931. Serial No. 311,540. PUBLISHED APRIL 21, 1931. Class 12.

285,074. HOSIERY. COMBINE HOSIERY CORPORATION, Wilmington, Del., and New York, N. Y.
Filed February 28, 1931. Serial No. 311,560. PUBLISHED APRIL 28, 1931. Class 39.

285,075. SAFETY STAIR TREADS, FLOOR PLATES, AND RAMP PLATES. WOOSTER PRODUCTS INC., Wooster, Ohio.
Filed February 28, 1931. Serial No. 311,588. PUBLISHED APRIL 28, 1931. Class 12.

285,076. TOY BOATS. SHOE FORM CO., INC., Auburn, N. Y.
Filed February 21, 1931. Serial No. 311,344. PUBLISHED MAY 5, 1931. Class 22.

285,077. WATER COOLERS. NORGE CORPORATION, Detroit, Mich.
Filed March 7, 1931. Serial No. 311,883. PUBLISHED MAY 5, 1931. Class 31.

285,078. HAND BAGS, BILL FOLDS, WALLETS, AND PURSES. PARAGON NOVELTY BAG CO., INC., New York, and Newburgh, N. Y.
Filed March 10, 1931. Serial No. 311,970. PUBLISHED MAY 5, 1931. Class 3.

285,079. SWEET CIDER. W. L. SMITH ORCHARDS, INC., Cheswold, Del.
Filed March 14, 1931. Serial No. 312,163. PUBLISHED MAY 5, 1931. Class 45.

285,080. BOARD GAME PLAYED ON CHARTS WITH MOVABLE PIECES. PARKER BROTHERS INC., Salem, Mass.
Filed March 17, 1931. Serial No. 312,248. PUBLISHED MAY 5, 1931. Class 22.

285,081. DOLLS. GEO. BOROFELDT & CO., New York, N. Y.
Filed March 19, 1931. Serial No. 312,288. PUBLISHED MAY 5, 1931. Class 22.

285,082. PAJAMAS. HENRY HADAD CO. INC., New York, N. Y.
Filed March 19, 1931. Serial No. 312,298. PUBLISHED APRIL 28, 1931. Class 39.

285,083. NON-ALCOHOLIC, MALTLESS BEVERAGES, CARBONATED OR UNCARBONATED, SOLD AS SOFT DRINKS, AND SYRUPS, COMPOUNDS, FLAVORS, AND CONCENTRATES FOR MAKING THE SAME. LASH'S PRODUCTS COMPANY, San Francisco, Calif.
Filed March 19, 1931. Serial No. 312,302. PUBLISHED MAY 5, 1931. Class 45.

285,084. NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS FOR MAKING THE SAME. ALLEGHENY SALES COMPANY, Pittsburgh, Pa.
Filed March 23, 1931. Serial No. 312,403. PUBLISHED MAY 5, 1931. Class 45.

285,085. NONALCOHOLIC, MALTLESS BEVERAGES, AND SIRUPS, EXTRACTS, AND EMULSIONS FOR MAKING THE SAME. CANADIAN CLUB CORPORATION, Philadelphia, Pa.
Filed March 24, 1931. Serial No. 312,476. PUBLISHED MAY 5, 1931. Class 45.

285,086. NONALCOHOLIC, MALTLESS BEVERAGES AND SIRUPS, EXTRACTS, AND EMULSIONS FOR MAKING THE SAME. CANADIAN CLUB CORPORATION, Philadelphia, Pa.
Filed March 24, 1931. Serial No. 312,477. PUBLISHED MAY 5, 1931. Class 45.

285,087. APPAREL FOR DOLLS. MEYER GOLDMAN, Philadelphia, Pa.
Filed March 25, 1931. Serial No. 312,518. PUBLISHED MAY 5, 1931. Class 22.

285,088. CHEESE. REYNOLDS & Co., New York, N. Y.
Filed March 25, 1931. Serial No. 312,532. PUBLISHED MAY 5, 1931. Class 46.

285,089. DOG FOOD. SPRATT'S PATENT (AMERICA) LIMITED, London, England.
Filed March 25, 1931. Serial No. 312,537. PUBLISHED MAY 5, 1931. Class 46.

285,090. RIFLES AND MACHINE GUNS. COLT'S PATENT FIRE ARMS MANUFACTURING Co., Hartford, Conn.
Filed March 26, 1931. Serial No. 312,548. PUBLISHED MAY 5, 1931. Class 9.

285,091. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS USED IN MAKING THE SAME. REBECCA LEFFERMAN, doing business as The Silver Bottling Works, Port Chester, N. Y.
Filed March 26, 1931. Serial No. 312,565. PUBLISHED MAY 5, 1931. Class 45.

285,092. CARD GAME. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed March 27, 1931. Serial No. 312,622. PUBLISHED MAY 5, 1931. Class 22.

285,093. HARD COAL, BITUMINOUS COAL AND COKE. THE M. A. HANNA COMPANY, Cleveland, Ohio.
Filed March 28, 1931. Serial No. 312,645. PUBLISHED MAY 5, 1931. Class 1.

285,094. HARD COAL, BITUMINOUS COAL AND COKE. THE M. A. HANNA COMPANY, Cleveland, Ohio.
Filed March 28, 1931. Serial No. 312,646. PUBLISHED MAY 5, 1931. Class 1.

285,095. REFRIGERATING CABINETS OF THE INDIRECT REFRIGERATION TYPE. REFRIGERATION CORPORATION OF MARYLAND, Baltimore, Md.
Filed March 31, 1931. Serial No. 312,774. PUBLISHED MAY 5, 1931. Class 31.

285,096. GOLF BALLS, GOLF CLUBS, GOLF IRONS, GOLF TEES, AND GOLF BAGS. JACK WHITE GOLF COMPANY LIMITED, London, England.
Filed September 26, 1930. Serial No. 306,114. PUBLISHED MAY 5, 1931. Class 22.

285,097. CLARET AND WHITE WINES. BARTON & GUESTIER, Bordeaux, France.
Filed September 30, 1930. Serial No. 306,230. PUBLISHED MAY 5, 1931. Class 47.

285,098. TOY SWINGS. AIR-O-SWING Co. INC., Seattle, Wash.
Filed October 10, 1930. Serial No. 306,589. PUBLISHED MAY 5, 1931. Class 22.

285,099. ASPHALT, BRICK, AND CONCRETE PAVING MATERIAL. JOHN W. SPRY, Dallas, Tex.
Filed December 19, 1930. Serial No. 309,179. PUBLISHED APRIL 21, 1931. Class 12.

285,100. UNDERWEAR FOR GIRLS, WOMEN, AND CHILDREN, MADE FROM FABRICS IN THE PIECE. VAN RAALTE COMPANY, New York, N. Y.
Filed December 27, 1930. Serial No. 309,405. PUBLISHED APRIL 21, 1931. Class 39.

285,101. WOMEN'S AND CHILDREN'S PRINCESS SLIPS, PAJAMAS, BLOOMERS, STEP-INS, PANTIES, CHEMISES, AND GOWNS. STRAUBER BROS., New York, N. Y.
Filed December 31, 1930. Serial No. 309,536. PUBLISHED MARCH 10, 1931. Class 39.

285,102. WINDOW SASHES. SAMUEL I. BAER, Youngstown, Ohio.
Filed January 3, 1931. Serial No. 309,598. PUBLISHED APRIL 21, 1931. Class 12.

285,103. MANUFACTURED LADIES' UNDERWEAR. GLUCK & COHEN, New York, N. Y.
Filed January 3, 1931. Serial No. 309,599. PUBLISHED APRIL 14, 1931. Class 39.

285,104. GOLF TEES. GREEN CADDIE CORPORATION, Detroit, Mich.
Filed January 5, 1931. Serial No. 309,611. PUBLISHED MAY 5, 1931. Class 22.

285,105. DRESSES FOR WOMEN, MISSES, AND CHILDREN. QUALITY FROCK COMPANY, Los Angeles, Calif.
Filed January 12, 1931. Serial No. 309,868. PUBLISHED APRIL 14, 1931. Class 39.

285,106. GOLF GAME BOARDS. CHARLES A. REAM, Lancaster, Pa.
Filed January 16, 1931. Serial No. 310,026. PUBLISHED MAY 5, 1931. Class 22.

285,107. COSTUMES FOR DRAMATIC PRODUCTIONS, PLAYS, AND PAGEANTS. UNIVERSAL PRODUCING COMPANY, Fairfield, Iowa.
Filed January 26, 1931. Serial No. 310,426. PUBLISHED APRIL 14, 1931. Class 39.

285,108. HOSE FOR INFANTS AND STOCKINGS FOR BOYS AND GIRLS. WAYNE KNITTING MILLS, Fort Wayne, Ind.
Filed January 26, 1931. Serial No. 310,427. PUBLISHED APRIL 28, 1931. Class 39.

285,109. WEARING APPAREL FOR WOMEN AND GIRLS—NAMELY, SPORT, STREET, AND HOUSE DRESSES, AND PAJAMAS. R. LOWENBAUM MFG. Co., St. Louis, Mo.
Filed January 29, 1931. Serial No. 310,521. PUBLISHED APRIL 14, 1931. Class 39.

285,110. WOMEN'S SLIPS, PETTICOATS, AND NIGHTGOWNS. M. C. SCHRANK COMPANY, Bridgeton, N. J.
Filed January 30, 1931. Serial No. 310,589. PUBLISHED APRIL 21, 1931. Class 39.

285,111. WOMEN'S SLIPS, PETTICOATS, AND NIGHTGOWNS. M. C. SCHRANK COMPANY, Bridgeton, N. J.
Filed January 30, 1931. Serial No. 310,588. PUBLISHED APRIL 21, 1931. Class 39.

285,112. FORMED THERMAL INSULATING MATERIAL. PROCESS HOLDINGS COMPANY, Portland, Oreg.
Filed February 2, 1931. Serial No. 310,657. PUBLISHED APRIL 21, 1931. Class 12.

285,113. INFANTS' WEAR—NAMELY, FLANNELET KIMONOS, NIGHTGOWNS, AND PETTICOATS. S & R INFANTS WEAR Co., New York, N. Y.
Filed February 3, 1931. Serial No. 310,700. PUBLISHED APRIL 21, 1931. Class 39.

285,114. IMITATION STRAW AND IMITATION HORSEHAIR MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed February 5, 1931. Serial No. 310,750. PUBLISHED MAY 5, 1931. Class 1.

285,115. LADIES' SPORTSWEAR—NAMELY, SUITS, DRESSES, SKIRTS, ENSEMBLES, AND COATS. CHERRY & ROTH, Los Angeles, Calif.
Filed January 24, 1931. Serial No. 310,431. PUBLISHED APRIL 14, 1931. Class 39.

285,116. HOSIERY. CHAS. CHIPMAN'S SONS Co., INC., New York, N. Y.
Filed February 5, 1931. Serial No. 310,757. PUBLISHED APRIL 14, 1931. Class 39.

285,117. DOG FEED. W. EARL SIMPSON, doing business as Kennel Gardens, Inc., Elkridge, Md.
Filed February 11, 1931. Serial No. 310,949. PUBLISHED MAY 5, 1931. Class 46.

285,118. COKE FOR FUEL USE. THE BRANDON COAL Co., Youngstown, Ohio.
Filed February 12, 1931. Serial No. 310,969. PUBLISHED APRIL 21, 1931. Class 1.

285,119. HOSIERY. EDWIN A. LEE, Philadelphia, Pa.
Filed February 12, 1931. Serial No. 311,001. PUBLISHED APRIL 14, 1931. Class 39.

285,120. BELTS FOR OUTSIDE WEAR. CLUETT, PEABODY & Co., INC., Troy, N. Y.
Filed March 1, 1927. Serial No. 245,049. PUBLISHED APRIL 28, 1931. Class 39.

285,121. LUBRICATING GREASES. MERCO NORDSTROM VALVE COMPANY, San Francisco, Calif.
Filed August 27, 1928. Serial No. 271,616. PUBLISHED APRIL 1, 1930. Class 15.

285,122. NONALCOHOLIC, MALTLESS, NONCEREAL BEVERAGES AND COMPOUNDS, CONCENTRATES AND SYRUPS FOR MAKING THE SAME. WM. H. RANKIN COMPANY, Chicago, Ill.
Filed November 14, 1928. Serial No. 275,296. PUBLISHED MAY 5, 1931. Class 45.

285,123. PLAYING CARDS. CHAS. A. STEVENS & BROS., Chicago, Ill.
Filed November 30, 1928. Serial No. 276,105. PUBLISHED MAY 5, 1931. Class 22.

285,124. BREAD. AKTIEBOLAGET NYA SPIS & KNÄCKEBRÖDSFABRIKEN, Oscarshamn, Sweden.
Filed March 11, 1929. Serial No. 280,534. PUBLISHED MAY 7, 1929. Class 46.

285,125. BREAD. CONTINENTAL BAKING COMPANY, Wilmington, Del., and New York, N. Y.
Filed May 2, 1929. Serial No. 283,387. PUBLISHED APRIL 21, 1931. Class 46.

285,126. STERLING AND SILVER-PLATED FLATWARE. INTERNATIONAL SILVER COMPANY, Meriden, Conn.
Filed October 21, 1929. Serial No. 291,338. PUBLISHED APRIL 7, 1931. Class 28.

285,127. WHEAT FLOUR, PASTRY FLOUR, PANCAKE FLOUR, CANNED FRUIT, ETC. JAMESON-BOYCE COMPANY, Binghamton, N. Y.
Filed November 22, 1929. Serial No. 292,731. PUBLISHED MAY 5, 1931. Class 46.

285,128. MEN'S AND BOYS' DRESS, NEGLIGEE, AND WORK SHIRTS. ALPERIN STRAUSS CO., INC., New York, N. Y.
Filed March 3, 1930. Serial No. 296,724. PUBLISHED APRIL 21, 1931. Class 39.

285,129. WIRE-BOUND WOODEN FENCES. ROBERT C. REEVES Co., New York, N. Y.
Filed March 3, 1930. Serial No. 296,793. PUBLISHED MAY 6, 1930. Class 12.

285,130. CEDAR CLOSET LINING. CHICKAMAUGA CEDAR COMPANY, Stevenson, Ala.
Filed May 1, 1930. Serial No. 299,760. PUBLISHED APRIL 21, 1931. Class 12.

285,131. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. MARION ORANGE CRUSH BOTTLING COMPANY, INC., doing business as Orange Crush Bottling Co., Inc., and also as Blue Ridge Ginger Ale Co., Marion, Va.
Filed July 31, 1930. Serial No. 304,056. PUBLISHED MAY 5, 1931. Class 45.

285,132. GASEOUS AND LIQUID FUELS. "GRIESOGEN" GRIESHEIMER AUTOGEN VERKAUFS-GESELLSCHAFT M. B. H., Frankfort-on-the-Main-Griesheim, Germany.
Filed January 7, 1931. Serial No. 309,684. PUBLISHED APRIL 28, 1931. Class 6.

285,133. SHOES, BOOTS, AND SLIPPERS OF LEATHER, RUBBER, OR CANVAS AND COMBINATIONS THEREOF. A. DE PINNA Co., INC., New York, N. Y.
Filed January 19, 1931. Serial No. 310,122. PUBLISHED APRIL 21, 1931. Class 39.

285,134. CHEESE IN GENERAL. PETER BÜRKI, doing business as Peter Bürki, Lucerne, Switzerland.
Filed January 22, 1931. Serial No. 310,248. PUBLISHEL APRIL 21, 1931. Class 46.

285,135. CHEESE IN GENERAL. PETER BÜRKI, doing business as Peter Bürki, Lucerne, Switzerland.
Filed January 22, 1931. Serial No. 310,249. PUBLISHED APRIL 21, 1931. Class 46.

285,136. FELT HATS AND CAPS FOR MEN. MALLOROY CAP Co., Minneapolis, Minn.
Filed January 30, 1931. Serial No. 310,564. PUBLISHED APRIL 21, 1931. Class 39.

285,137. CHAPS, VESTS, APPAREL BELTS, AND RIDING CUFFS. A. C. MORAND CORPORATION, San Francisco, Calif.
Filed February 9, 1931. Serial No. 310,874. PUBLISHED APRIL 21, 1931. Class 39.

285,138. BOOTS AND SHOES OF LEATHER, RUBBER, FABRIC, AND COMBINATIONS THEREOF. BANCROFT WALKER COMPANY, Boston, Mass.
Filed February 11, 1931. Serial No. 310,931. PUBLISHED APRIL 21, 1931. Class 39.

285,139. CERTAIN NAMED WEARING APPAREL. DUMARI TEXTILE Co., INC., New York, N. Y.
Filed February 11, 1931. Serial No. 310,937. PUBLISHED APRIL 28, 1931. Class 39.

285,140. LEATHER AND RUBBER SHOES. J. K. ORR SHOE COMPANY, Atlanta, Ga.
Filed February 11, 1931. Serial No. 310,945. PUBLISHED APRIL 28, 1931. Class 39.

285,141. TEA. COMMERCIAL IMPORTING CO. INC., Seattle, Wash.
Filed May 31, 1930. Serial No. 301,852. PUBLISHED MAY 5, 1931. Class 46.

285,142. JEWELRY CONSISTING OF FINGER RINGS. ED CAIN, Chicago, Ill.
Filed February 14, 1931. Serial No. 311,053. PUBLISHED APRIL 7, 1931. Class 28.

285,143. COAL. THE MOFFAT COAL COMPANY, Denver, Colo.
Filed February 17, 1931. Serial No. 311,152. PUBLISHED APRIL 21, 1931. Class 1.

285,144. BUCKLES MADE OF NONPRECIOUS METAL. THE RIKER COMPANY, Newark, N. J.
Filed February 20, 1931. Serial No. 311,284. PUBLISHED APRIL 21, 1931. Class 40.

285,145. BUTTER, COCOA, COFFEE, DRY LEGUMES; BREAKFAST AND HOUSEHOLD CEREALS SUCH AS BARLEY, RICE, CORN MEAL, AND PEARL BARLEY; JELLIES; TABLE RELISHES—NAMELY, CATSUP AND OLIVES; FRESH FRUIT PRESERVES, TAPIOCA, TEA, AND WHOLE OR GROUND SPICES. GEO. RASMUSSEN Co., Chicago, Ill.
Filed March 14, 1930. Serial No. 297,829. PUBLISHED MAY 5, 1931. Class 46.

285,146. TRANSFORMERS, CONVERTERS, PLUGS, CORD ADJUSTERS, CONNECTOR CLIPS, TERMINALS, TIME SWITCHES, AND CORD CONNECTORS. THERMIQUE, INCORPORATED, New York, N. Y.
Filed April 9, 1930. Serial No. 298,601. PUBLISHED APRIL 14, 1931. Class 21.

285,147. CANNED CORN. MINNESOTA CONSOLIDATED CANNERIES, INC., Minneapolis, Minn.
Filed May 28, 1930. Serial No. 301,490. PUBLISHED MAY 5, 1931. Class 46.

285,148. FROZEN FOOD PRODUCTS—NAMELY, LAMB, PORK, BEEF, VEAL, AND SAUSAGE, FISH, SHELLFISH, VEGETABLES, AND FRUITS. FROSTED FOODS COMPANY, INC., New York, N. Y.
Filed May 22, 1930. Serial No. 301,024. PUBLISHED MAY 5, 1931. Class 46.

285,149. SMOKED MEATS, BOILED HAMS, AND SAUSAGE. ALBERT LEA PACKING COMPANY, INCORPORATED, Albert Lea, Minn.
Filed June 20, 1930. Serial No. 303,412. PUBLISHED MAY 5, 1931. Class 46.

285,150. RESONATORS FOR LOUD-SPEAKERS APPLICABLE TO PHONOGRAPHS OR THE LIKE. THE KIEL FURNITURE CO., Milwaukee, Wis.
Filed July 28, 1930. Serial No. 303,908. PUBLISHED APRIL 7, 1931. Class 36.

285,151. RADIO RECEIVING SETS. THE CLAGO RADIO CORPORATION, Chicago, Ill.
Filed September 6, 1930. Serial No. 305,389. PUBLISHED APRIL 14, 1931. Class 21.

285,152. GASOLINE, KEROSENE, LUBRICATING OILS, AND GREASES. H. S. AASEN, doing business as Sioux Oil Co., Winger, Minn.
Filed January 16, 1931. Serial No. 310,035. PUBLISHED APRIL 14, 1931. Class 15.

285,153. LEATHER SHOES. WM. HAHN & COMPANY, Washington, D. C.
Filed February 13, 1931. Serial No. 311,032. PUBLISHED APRIL 21, 1931. Class 39.

285,154. LADIES', WOMEN'S, AND MISSES' UNDERGARMENTS—NAMELY, BRASSIÈRES, STEP-IN UNDERDRAWERS, GIRDLES, PANTIES, AND BANDEAUX. BEN DAVIS, doing business as Central De Luxe Manufacturing Co., New York, N. Y.
Filed February 16, 1931. Serial No. 311,086. PUBLISHED APRIL 28, 1931. Class 39.

285,155. RUBBER HEELS. FIRESTONE FOOTWEAR COMPANY, Hudson, Mass.
Filed February 17, 1931. Serial No. 311,135. PUBLISHED APRIL 21, 1931. Class 39.

285,156. FOX PELTS. CLOVER HILL SILVER FOX CO., Clover Hill, N. J.
Filed February 18, 1931. Serial No. 311,181. PUBLISHED APRIL 28, 1931. Class 1.

285,157. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed February 17, 1931. Serial No. 311,138. PUBLISHED APRIL 21, 1931. Class 42.

285,158. SUITCASES. AMERICAN HARDWARE COMPANY, Petersburg, Va.
Filed February 19, 1931. Serial No. 311,224. PUBLISHED APRIL 28, 1931. Class 3.

285,159. LEATHER SHOES. BRILLIANT BROTHERS CO., Boston, Mass.
Filed February 19, 1931. Serial No. 311,252. PUBLISHED APRIL 28, 1931. Class 39.

285,160. LUBRICATING OILS AND GREASES. DEUTSCHE CALYPSOL-GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Dusseldorf, Germany.
Filed February 21, 1931. Serial No. 311,326. PUBLISHED APRIL 7, 1931. Class 15.

285,161. CANVAS WORK GLOVES. INDIANAPOLIS GLOVE COMPANY, Indianapolis, Ind.
Filed February 24, 1931. Serial No. 311,408. PUBLISHED APRIL 21, 1931. Class 39.

285,162. NURSERY STOCK—NAMELY, PLANTS, TREES, SHRUBS, AND ROSEBUSHES. C. E. WILSON & COMPANY, INC., Manchester, Conn.
Filed February 25, 1931. Serial No. 311,454. PUBLISHED APRIL 28, 1931. Class 1.

285,163. BANDEAUX, BANDETTES, BRASSIÈRES, HOSE-SUPPORTER BELTS, FOUNDATION GARMENTS, CORSETS. AMERICAN NARROW FABRIC COMPANY, Worcester, Mass.
Filed February 26, 1931. Serial No. 311,464. PUBLISHED APRIL 21, 1931. Class 39.

285,164. COAL. CONSUMER'S COAL AND COKE COMPANY, Flint, Mich.
Filed March 3, 1931. Serial No. 311,649. PUBLISHED APRIL 28, 1931. Class 1.

285,165. COAL. AMHERST-LOGAN COUNTY COAL CORPORATION, doing business as the Amherst Coal Company, Charleston, W. Va.
Filed March 5, 1931. Serial No. 311,769. PUBLISHED MAY 5, 1931. Class 1.

285,166. LEATHER. DAVIS LEATHER COMPANY, LTD., Newmarket, Ontario, Canada.
Filed March 5, 1931. Serial No. 311,775. PUBLISHED APRIL 28, 1931. Class 1.

285,167. BRASSIÈRES OF KNITTED, NETTED, AND TEXTILE FABRICS AND COMBINATIONS THEREOF. SAKS & COMPANY, New York, N. Y.
Filed March 5, 1931. Serial No. 311,790. PUBLISHED APRIL 21, 1931. Class 39.

285,168. CAKES AND PIES. TASTY BAKING COMPANY, Philadelphia, Pa.
Filed March 4, 1931. Serial No. 311,856. PUBLISHED APRIL 28, 1931. Class 46.

285,169. CELLULOSE. ENSO-GUTZEIT OSAKEYHTIÖ, Kotka, Finland.
Filed March 13, 1931. Serial No. 312,097. PUBLISHED APRIL 21, 1931. Class 1.

285,170. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 16, 1931. Serial No. 312,181. PUBLISHED APRIL 28, 1931. Class 46.

285,171. WHITE, RIGID, UNIFORMLY POROUS, ACID-PROOF MINERAL SUBSTANCE COMPOSED ESSENTIALLY OF SILICA WHICH FOR PURPOSES OF MOST GENERAL DESCRIPTION MAY BE TERMED AN ARTIFICIAL STONE. FILTROS INCORPORATED, Rochester, N. Y.
Filed March 20, 1931. Serial No. 312,337. PUBLISHED APRIL 28, 1931. Class 1.

285,172. PILE FABRICS. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed March 18, 1931. Serial No. 312,268. PUBLISHED APRIL 28, 1931. Class 42.

285,173. GELATINIZED CORN FLOUR USED AS AN ADHESIVE WHICH BINDS THE SAND TO FORM MOLDS USED BY FOUNDRIES. CHAS. A. KRAUSE MILLING CO., Milwaukee, Wis.
Filed March 23, 1931. Serial No. 312,437. PUBLISHED APRIL 28, 1931. Class 5.

285,174. SPECIALLY PREPARED FOOD FOR DOGS. FRANCIS H. LEGGETT & COMPANY, New York, N. Y.
Filed March 24, 1931. Serial No. 312,505. PUBLISHED MAY 5, 1931. Class 46.

285,175. MODELING CLAY. ANNA C. DIETZ, doing business as Rex Modeling Clay Co., New York, N. Y.
Filed March 27, 1931. Serial No. 312,601. PUBLISHED MAY 5, 1931. Class 1.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

285,176. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE KINOX COMPANY, INC., Rutland, Vt. Filed Aug. 9, 1930. Serial No. 304,412.

CALLOUS-EASE

For Medicated Plasters for Use in the Treatment of Callouses, Bunions, and Corns.
Claims use since May 26, 1930.

285,177. (CLASS 21. ELECTRICAL APPARATUS, MACHINES AND SUPPLIES.) SHAPLEIGH HARDWARE COMPANY, St. Louis, Mo. Filed Mar. 4, 1931. Serial No. 311,753.

SHAPLEIGH'S

For Radio Receiving and Transmitting Sets and Parts Thereof, Storage Batteries, Flash Lights and Flash-Light Batteries, and Electrical Dry Cells.
Claims use since 1921.

285,178. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SUTTER COOPERATIVE GROWERS, San Francisco, Calif. Filed Mar. 5, 1931. Serial No. 311,800.

Sutter Pak

For Canned Fruits and Canned Vegetables.
Claims use since May 1, 1925.

285,179. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LAWRENCE Z. KRAMER, doing business as The Modern Products Company, Jackson, Mich. Filed Mar. 10, 1931. Serial No. 311,965.

KRAMER'S ORIGINAL
CHARCOAL

For Tooth Paste.
Claims use since Jan. 1, 1927.

285,180. (CLASS 6. CHEMICALS, MEDICINES AND PHARMACEUTICAL PREPARATIONS.) COMAR & Co., Paris, France. Filed Mar. 13, 1931. Serial No. 312,094.

AMINARSAN

For Solution Used Hypodermically in All Cases Where Arsenical Medication is Indicated, Particularly for Syphilis, Anemia, Perisys, Dysentery, Spirochætosis, Paludism, Trypanosomiasis.
Claims use since Oct. 9, 1928.

285,181. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ERNEST A. STIENEN, New York, N. Y. Filed Mar. 16, 1931. Serial No. 312,224.

Obermaier

For Dyeing Machinery, Driers, and Extractors.
Claims use since Apr. 1, 1928.

285,182. (CLASS 39. CLOTHING.) WASHINGTON MANUFACTURING CO., Nashville, Tenn. Filed Apr. 11, 1931. Serial No. 313,262.

HEAVY DUTY

For Work Shirts.
Claims use since March, 1926.

285,183. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DAVID WROBLEWSKI, doing business as D. Wroblewski, Brooklyn, N. Y. Filed Apr. 15, 1931. Serial No. 313,404.

STARO POLSKI
MIÓD LECZNICZNY

For Preparation for Catarrh of the Stomach, Chronic Constipation, Indigestion, Acting on the Bowels as a Laxative Tonic, It Aids the Liver and Kidneys, Enriches the Blood, Increases the Appetite, It Assists in Building Up the System.
Claims use since June 1, 1914.

285,184. (CLASS 27. HOROLOGICAL INSTRUMENTS.) ELECTRIC CLOCK CORPORATION OF AMERICA, Chicago, Ill. Filed Apr. 18, 1931. Serial No. 313,502.

Lincoln

For Time Indicating Apparatus—Namely, Clocks.
Claims use since Feb. 13, 1930.

285,185. (CLASS 37. PAPER AND STATIONERY.) RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931. Serial No. 313,633.

RICHARD BEST

For Lead Pencils.
Claims use since January, 1917.

285,186. (CLASS 37. PAPER AND STATIONERY.) HURLBUT PAPER COMPANY, South Lee, Mass. Filed Apr. 24, 1931. Serial No. 313,735.

HURLBUT
DRAWING PAPERS

For Writing and Printing Paper.
Claims use since Apr. 1, 1930.

285,187. (CLASS 37. PAPER AND STATIONERY.) HURLBUT PAPER COMPANY, South Lee, Mass. Filed Apr. 24, 1931. Serial No. 313,737.

HURLBUT
BANK BOND

For Writing and Printing Paper.
Claims use since November, 1894.

285,188. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE COLORADO FUEL AND IRON COMPANY, Denver, Colo. Filed May 4, 1931. Serial No. 314,151.

COLORADO

For Metal Wire and Metal Rails for Railway Tracks.
Claims use since Nov. 1, 1914, on wire and since Jan. 1, 1922, on rails.

285,189. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) CONSOLIDATED RENDERING CO., Boston, Mass. Filed Apr. 9, 1931. Serial No. 313,124.

PREMIUM

For Soap and Grease for Soap Making.
Claims use since January, 1901.

285,190. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) CONSOLIDATED RENDERING COMPANY, doing business as Atlantic Packing Company, Boston, Mass. Filed Apr. 14, 1931. Serial No. 313,331.

PEERLESS

For Soap and Grease for Soap Making.
Claims use since January, 1901.

285,191. (CLASS 17. TOBACCO PRODUCTS.) ABRAHAM A. GREENWALD, doing business as Jacob Stahl Jr. & Co., New York, N. Y. Filed Apr. 28, 1931. Serial No. 313,916.

Osborn

For Cigars.
Claims use since Apr. 1, 1930.

285,192. (CLASS 12. CONSTRUCTION MATERIALS.) THE KAWNEER COMPANY, Niles, Mich. Filed Jan. 4, 1929. Serial No. 277,585.

EASYSET

For Window Constructions, Metal Window Constructions, Store Fronts, Store-Front Window Constructions, Bulkheads, Doors, Windows, Transoms, Vestibules for Store-Front Constructions, Metal Vestibules for Store-Front Constructions, and Mouldings and Metal Constructural Parts for the Above Structures.
Claims use since Feb. 28, 1913.

285,193. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) BESTONE, INC., Omaha, Nebr. Filed Apr. 8, 1929. Serial No. 281,986.

BESTONE

For Motion-Picture Projecting and Electric Sound Reproducing and Amplifying Apparatus and Parts, Combined for Synchronized Operation.
Claims use since Apr. 3, 1929.

285,194. (CLASS 15. OILS AND GREASES.) THE STANDARD OIL COMPANY, Cleveland, Ohio. Filed June 14, 1929. Serial No. 285,597.

CASTALIA

For Lubricating Oils and Greases.
Claims use since Apr. 23, 1919.

285,195. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) SCOVILL MANUFACTURING COMPANY, Waterbury, Conn. Filed Nov. 12, 1929. Serial No. 292,337.

STOP SPOT

For Street and Floor Markers.
Claims use since Sept. 23, 1929.

285,196. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) GRETSCH & BRENNER, INC., New York, N. Y. Filed May 31, 1930. Serial No. 301,909.

DUBBL-WOUND

For Musical-Instrument Strings Such as Strings for Violins and Similar Musical Instruments.
Claims use since Mar. 1, 1930.

285,197. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) BUTLER MANUFACTURING COMPANY, Kansas City, Mo. Filed June 7, 1930. Serial No. 302,233.

BUTLER

For Fabricated Steel.
Claims use since May 1, 1930.

285,198. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PARIS AMERICAN PHARMACAL COMPANY, Des Moines, Iowa. Filed June 9, 1930. Serial No. 302,284.

ACID OFF

For Dental Cream.
Claims use since Feb. 25, 1930.

285,199. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE GILBERT SHOE CO., Thiensville, Wis. Filed June 28, 1930. Serial No. 302,943.

LIKELY

For Leather.
Claims use since May 24, 1930.

285,200. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) TURCO PRODUCTS INC., Los Angeles, Calif. Filed Aug. 12, 1930. Serial No. 304,524.

Yuma

For General Household Cleaner—Namely, a Mineral Powder for Use in Cleaning, Scrubbing, and Polishing.
Claims use since Jan. 1, 1920.

285,201. (CLASS 12. CONSTRUCTION MATERIALS.) ARTHUR F. ROWE, Lansing, Mich. Filed Aug. 4, 1930. Serial No. 304,214.

PLYABLE WOOD

For Plastic Composition Used for Replacing Decayed Wood, Filling Cracks in Automobiles, Boats, Floors, Tree Surgery, and for Replacing Any Materials but Rubber, the Composition Being Insoluble in Gasoline or Water, Capable of Holding Nails, Tacks, or Screws, and Adapted for the Manufacture of Dishes or Molded Articles of Any Description.
Claims use since Mar. 3, 1930.

285,202. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) DANIEL B. GISH, doing business as Reda Manufacturing Company, Worcester, Mass. Filed Aug. 20, 1930. Serial No. 304,809.

REDA

For Wrenches.
Claims use since August, 1929.

285,203. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NYAL COMPANY, Detroit, Mich. Filed Oct. 31, 1930. Serial No. 307,416.

Dalon

For Perfumes, Face Powder, Cleansing Cream, Foundation Cream, Nourishing Cream, Skin Tonic, and Facial Astringent.
Claims use since July 20, 1928.

285,204. (CLASS 15. OILS AND GREASES.) PANTHER OIL & GREASE MFG. CO., Fort Worth, Tex. Filed Nov. 26, 1930. Serial No. 308,338.

TIFFANY GREASE

"Fine as a silky film of gauze Tough as a Rhino Hide"

ADDS YEARS TO YOUR GEARS

For Lubricating Oils and Greases.
Claims use since Apr. 14, 1930.

285,205. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) LOUIS W. SHASTOCK, doing business as L. W. Shastock Company, Cleveland, Ohio. Filed Dec. 5, 1930. Serial No. 308,647.

SHASTOCK

For Mutes and Attachments for Wind Instruments to Modify and Change the Natural Tone of the Instruments, Megaphones, Batons, Metal Orchestra Stands, and Music Stands.
Claims use since January, 1923.

285,206. (CLASS 32. FURNITURE AND UPHOLSTERY.) MARY E. MURPHY, Dallas, Tex. Filed Dec. 9, 1930. Serial No. 308,790.

NON-PULOF

For Window Shades and Window-Shade Rollers.
Claims use since Nov. 1, 1928.

285,207. (CLASS 37. PAPER AND STATIONERY.) AMERICAN REENFORCED PAPER COMPANY, Attleboro, Mass. Filed Dec. 11, 1930. Serial No. 308,848.

SISALKRAFT

For Reinforced Paper Used as a Protecting Covering.
Claims use since April, 1928.

TRADE-MARK REGISTRATIONS RENEWED

36,846. LIQUID COMPOUND USED AS A SUBSTITUTE FOR COURT PLASTER. Registered July 30, 1901. MARTIN E. WALDSTEIN, New York, N. Y. Renewed July 30, 1931, to Newskin Company, Brooklyn, N. Y., a Corporation of New York, assignee by mesne assignments.

37,054. WALL PLASTER. Registered September 10, 1901. GRAND RAPIDS PLASTER CO., Grand Rapids, Mich., a Corporation of Michigan. Renewed September 10, 1931.

37,244. CERTAIN NAMED LEATHER AND LEATHER GOODS. Registered October 29, 1901. THE AMERICAN OAK LEATHER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 29, 1931.

81,021. STRINGS FOR MUSICAL INSTRUMENTS. Registered February 21, 1911. NATIONAL MUSICAL STRING CO., New Brunswick, N. J., a Corporation of New Jersey. Renewed February 21, 1931.

82,056. BLENDED WHISKY. Registered May 30, 1911. CRAIGELLACHIE-GLENLIVET DISTILLERY CO. LIMITED. Renewed May 30, 1931, to The Stirling Bonding Company, Limited, Glasgow, Scotland, a Corporation of Great Britain, assignee.

82,072. STEEL BOXES FOR HOLDING TOOLS AND BATTERIES. Registered May 30, 1911. THE GLOBE MACHINE & STAMPING CO., Cleveland, Ohio, a Corporation of Ohio. Renewed May 30, 1931.

82,499. BLENDED WHISKY. Registered July 4, 1911. CRAIGELLACHIE-GLENLIVET DISTILLERY CO. LIMITED. Renewed July 4, 1931, to The Stirling Bonding Company, Limited, Glasgow, Scotland, a Corporation of Great Britain, assignee.

82,876. LEATHER BOOTS AND SHOES. Registered August 1, 1911. W. L. DOUGLAS SHOE CO., Portland, Me.; Boston and Brockton, Mass.; New York and Buffalo, N. Y.; Denver, Colo.; and Philadelphia, Pa. Renewed August 1, 1931, to W. L. Douglas Shoe Company, Brockton, Mass., a Corporation of Massachusetts, assignee.

82,959. HANDKERCHIEFS. Registered August 8, 1911. BROWN DURRELL CO., Boston, Mass., a Corporation of Massachusetts. Renewed August 8, 1931.

83,525. A MATERIAL MADE FROM PETROLEUM AND SIMILAR TO TURPENTINE. Registered September 19, 1911. SUN OIL COMPANY. Renewed September 19, 1931, to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey, assignee.

83,609. WATCHCASES. Registered September 26, 1911. STAR WATCH CASE CO., Ludington, Mich., a Corporation of Michigan. Renewed September 26, 1931.

83,623. CLOCKS, WATCHES, CLOCKWORKS, AND PARTS THEREOF. Registered September 26, 1911. VEREINIGTEN UHRENFABRIKEN VON GEBRÜDER JUNGHANS & THOMAS HALLER A-G. Renewed September 26, 1931, to Gebruder Junghans A. G., Schramberg, Germany, a Corporation of Germany, by change of name.

83,764. CAR-WHEELS. Registered October 10, 1911. NATIONAL CAR WHEEL COMPANY, Rochester, N. Y., and Pittsburgh, Pa. Renewed October 10, 1931, to Southern Wheel Company, Atlanta, Ga., and New York, N. Y., a Corporation of Georgia, assignee.

83,829. BEER. Registered October 17, 1911. GEBRÜDER THOMASS BIERBRAUEREI ZUM THOMASBRÄU. Renewed October 17, 1931, to Aktiengesellschaft Paulanerbrau Salvatorbrauerei und Thomasbrau, Munich, Germany, a Corporation of Germany, assignee.

83,858. BISCUIT. Registered October 17, 1911. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 17, 1931, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

83,872. A REMEDY FOR ROUP, CHOLERA, AND BOWEL TROUBLE. Registered October 17, 1911. DAILY JEROME WALKER, Lamoni, Iowa. Renewed October 17, 1931, to Daily Jerome Walker, Waterloo, Iowa.

84,012. SODA-WATER. Registered October 31, 1911. JOHN B. LAMBERT, Woonsocket, R. I. Renewed October 31, 1931.

84,044. SMOKING-TOBACCO. Registered October 31, 1911. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C., a Corporation of New Jersey. Renewed October 31, 1931.

84,056. LUBRICATING-OILS. Registered October 31, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed October 31, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,057. LUBRICATING-OILS. Registered October 31, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed October 31, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,058. LUBRICATING-OILS. Registered October 31, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed October 31, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,064. SOAP. Registered October 31, 1911. WEST DISINFECTING COMPANY, New York, N. Y. Renewed October 31, 1931, to West Disinfecting Company, Long Island City, N. Y., a Corporation of New York.

84,106. A PECTORAL COMPOUND FOR PULMONARY AFFECTIONS, AND AN ANODYNE. Registered November 7, 1911. LANMAN & KEMP. Renewed November 7, 1931, to Lanman & Kemp, Inc., New York, N. Y., a Corporation of New York, assignee.

84,107. DOUBLE EXTRACT OF WITCH-HAZEL. Registered November 7, 1911. LANMAN & KEMP. Renewed November 7, 1931, to Lanman & Kemp, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

84,108. VEGETABLE PASTILS FOR EXPELLING WORMS FROM THE SYSTEM. Registered November 7, 1911. LANMAN & KEMP. Renewed November 7, 1931, to Lanman & Kemp, Inc., New York, N. Y., a Corporation of New York, assignee.

84,109. CATHARTIC PILLS. Registered November 7, 1911. LANMAN & KEMP. Renewed November 7, 1931, to Lanman & Kemp, Inc., New York, N. Y., a Corporation of New York, assignee.

84,110. EMOLLIENTS. Registered November 7, 1911. LANMAN & KEMP. Renewed November 7, 1931, to Lanman & Kemp, Inc., New York, N. Y., a Corporation of New York, assignee.

84,184. PLUG, TWIST, CUT-PLUG SMOKING-TOBACCO AND LEAF TOBACCO. Registered November 14, 1911. MACLIN-ZIMMER TOBACCO CO. INCORPORATED. Renewed November 14, 1931, to Maclin-Zimmer-McGill Tobacco Co., Incorporated, Petersburg, Va., a Corporation of Virginia, assignee.

84,333. WEEKLY PERIODICALS. Registered November 28, 1911. MUNN & CO., INC. Renewed November 28, 1931, to Scientific American Publishing Company, New York, N. Y., a Corporation of Delaware, assignee.

LABELS

REGISTERED JULY 14, 1931

39,416.—*Title:* BEECH-NUT BRAND CHEWING GUM, SPEARMINT. For Chewing Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published September 7, 1929.

39,417.—*Title:* SOCIETY BRAND. For Relish Spread. BEEKS PRODUCE CO. INC., San Antonio, Tex. Published March 28, 1931.

39,418.—*Title:* SOCIETY BRAND. For Tartare Sauce. BEEKS PRODUCE CO. INC., San Antonio, Tex. Published March 28, 1931.

39,419.—*Title:* DERMEX ROLLER FACIAL TISSUE. For Roller Facial Tissues. DERMAY PERFUMERS, INC., New York, N. Y. Published April 1, 1931.

39,420.—*Title:* FULLER FLOOR WAX. For Floor Wax. THE FULLER BRUSH COMPANY, Hartford, Conn. Published May 20, 1931.

39,421.—*Title:* HEDGE'S MAYONNAISE. For Mayonnaise Dressing. ROY HEDGE, doing business as Hedge's Wigwam, Pleasant Ridge, Mich. Published January 1, 1931.

39,422.—*Title:* HOUSPRAY. For Insecticide. THE HOUSPRAY MANUFACTURING COMPANY, Toledo, Ohio. Published May 28, 1931.

39,423.—*Title:* NATHAN HARBATKIN'S BAKERY. For Challahs and Cakes. HYMAN PRICE, Brooklyn, N. Y. Published April 22, 1931.

39,424.—*Title:* SPOT-EM. For Game. DANIEL M. SHIPMAN, doing business as Whipponong Novelty Co., Whippany, N. J. Published March 25, 1931.

39,425.—*Title:* CHASE & SANBORN'S SEAL BRAND TEA BALLS. For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published May 27, 1931.

39,426.—*Title:* CHASE & SANBORN'S SEAL BRAND TEA BALLS. For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published May 8, 1931.

39,427.—*Title:* MASTER GROCERS GUILD. For Canned Peaches. SUSSMAN, WORMSER & COMPANY, San Francisco, Calif. Published April 27, 1931.

39,428.—*Title:* FUNGI-REX. For Medicinal Preparation Consisting of an Ointment for Treating Athlete's Foot. UNITED DRUG COMPANY, Boston, Mass. Published May 22, 1931.

PRINTS

REGISTERED JULY 14, 1931

13,295.—*Title:* THE WHOLE WORLD RESTS. For Upholstered Furniture. DUPLEX SWING-SPRING SEAT CO., Reading, Pa. Published June 1, 1931.

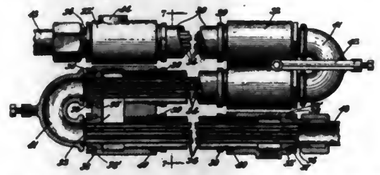
13,296.—*Title:* METALKLEEN. For Preparation for Removing Corrosion from Radiators. INLAND MOTOR PRODUCTS COMPANY, Des Moines, Iowa. Published April 1, 1931.

13,297.—*Title:* GINGHAM. For Preserves. PETER J. KASPER COMPANY, Chicago, Ill. Published June 2, 1931.

REISSUES

JULY 14, 1931

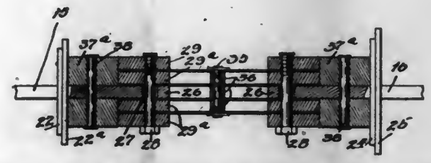
18,127. HEAT EXCHANGE DEVICE. FRITZ G. CORNELL, Jr., Cadwell, N. J., assignor to Jensen Creamery Machinery Co., Bloomfield, N. J., a Corporation of New York. Original No. 1,799,356, dated Apr. 7, 1931, Serial No. 353,838, filed Apr. 9, 1929. Application for reissue filed May 1, 1931. Serial No. 534,402. 20 Claims. Cl. 257—247.)



11. A device of the character described comprising a plurality of parallel pipes, headers slidably connected to the ends of said pipes, a cluster of tubes in each pipe, said tubes having their ends rigidly connected to said headers, and passageways connecting corresponding ends of tubes in adjacent pipes.

18,128. RENEWABLE FUSE ELEMENT. JOHN B. GLOWACKI, Chicago, Ill. Original No. 1,573,392, dated Feb. 16, 1926, Serial No. 656,316, filed Aug. 8, 1923. Application for reissue filed May 26, 1931. Serial No. 540,182. 7 Claims. (Cl. 200—135.)

4. A fuse element comprising a plurality of strips of fusible material and means for permanently securing said strips together in spaced relationship of such character that strip ends are provided extending free for individual attachment to parts within a cartridge fuse, said integral strips being composed of alternate small sections and large multi-layer sections so arranged that when under substantially normal load the larger sections will as a result of the multi-layer structure thereof materially



augment the radiating surface afforded the smaller sections to retard heating of said smaller sections and when subjected to an abnormal load such as a short circuit the melting of smaller sections will be substantially instantaneous.

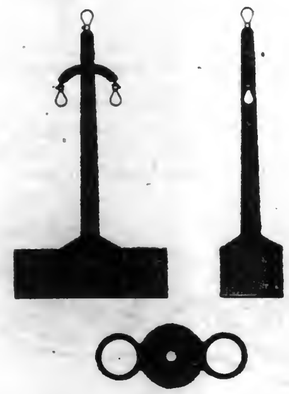
18,129. MANUFACTURE OF PHENOLIC COMPOUNDS. WILLIAM J. HALE and EDGAR C. BRITTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Original No. 1,607,618, dated Nov. 23, 1926, Serial No. 684,907, filed Jan. 7, 1924. Application for reissue filed Aug. 14, 1928. Serial No. 299,641. 16 Claims. (Cl. 260—154.)

11. A process for the manufacture of phenolic compounds, which comprises hydrolyzing a nuclear monohalogenated aromatic hydrocarbon of the benzene series and limiting diaryl oxide formation by adding the corresponding diaryl oxide.

DESIGNS

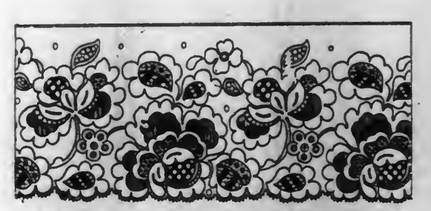
JULY 14, 1931

84,616. COMBINED LAMP STAND AND PLANT HOLDER. EMMETT BARKLEY, Chattanooga, Tenn. Filed May 7, 1931. Serial No. 39,754. Term of patent 3½ years.



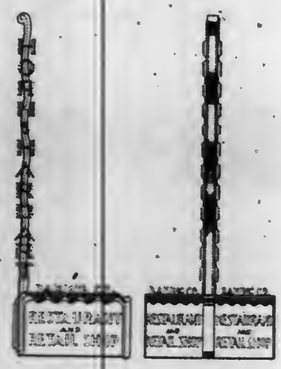
The ornamental design for a combined lamp stand and plant holder, as shown and described.

84,617. LACE. HENRI BEKKENS, Calais, France. Filed Apr. 22, 1931. Serial No. 39,588. Term of patent 3½ years.



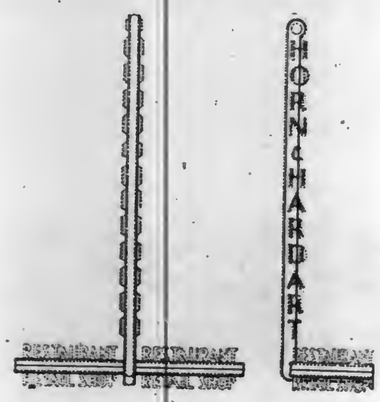
The ornamental design for lace, as shown.

84,618. ADVERTISING SIGN. RALPH B. BENCKER and BRUCE E. HOWDEN, Philadelphia, Pa., assignors to Horn & Hardart Baking Co., Philadelphia, Pa., a Corporation of New Jersey. Filed Mar. 19, 1931. Serial No. 39,168. Term of patent 14 years.



The ornamental design for an advertising sign, as shown and described.

84,619. ADVERTISING SIGN. RALPH B. BENCKER and BRUCE E. HOWDEN, Philadelphia, Pa., assignors to Horn & Hardart Baking Co., Philadelphia, Pa., a Corporation of New Jersey. Filed Mar. 19, 1931. Serial No. 39,169. Term of patent 14 years.



The ornamental design for an advertising sign, as shown and described.

84,620. SHOE HORN. HARRY L. BRADLEY, Milwaukee, Wis., assignor of one-half to Lynde Bradley, Milwaukee, Wis. Filed Mar. 5, 1931. Serial No. 38,940. Term of patent 14 years.



The ornamental design for a shoe horn, as shown.

84,621. RADIOCABINET. FRANK C. BURTON, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 12, 1930. Serial No. 35,241. Term of patent 7 years.



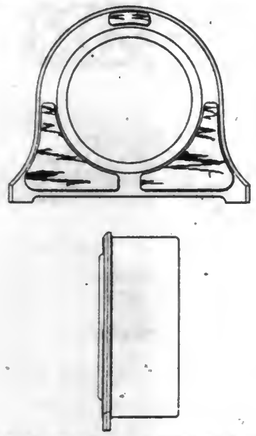
The ornamental design for a radio cabinet as shown.

84,622. HOSIERY DARNING FORM. BELLE STRUTHERS CAMERON, Wiarton, Ontario, Canada. Filed May 4, 1931. Serial No. 39,716. Term of patent 7 years.



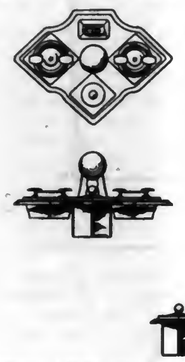
The ornamental design for a hosiery darning form as shown.

84,623. CLOCK CASE. ELOF L. CARLSON, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed May 8, 1931. Serial No. 39,777. Term of patent 14 years.



The ornamental design for a clock-case as shown.

84,624. TOP FOR SMOKING STANDS. ZIGMAN CHAPLICK, Chicago, Ill. Filed Mar. 21, 1931. Serial No. 39,197. Term of patent 7 years.



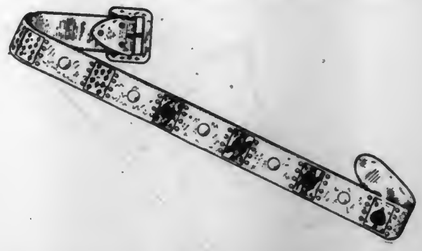
The ornamental design for a top for smoking stands as shown.

84,625. AUTOMOBILE RADIATOR. EBBETT L. CORD, Chicago, Ill., and HERBERT C. SNOW and DON C. HOLLISTER, Auburn, Ind., assignors, by mesne assignments, to Auburn Automobile Company, Auburn, Ind., a Corporation of Indiana. Filed Dec. 8, 1930. Serial No. 37,920. Term of patent 7 years.



The ornamental design for an automobile radiator substantially as shown.

84,626. BELT. JOHN R. CRAIGHEAD, Denver, Colo. Filed Apr. 27, 1931. Serial No. 39,632. Term of patent 3½ years.



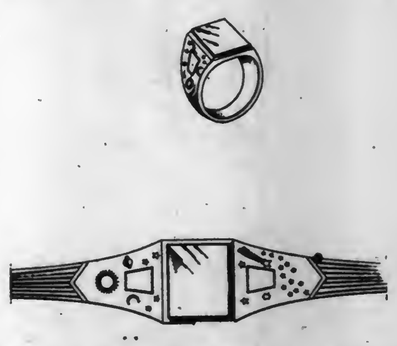
The ornamental design for a belt or similar article, substantially as shown.

84,627. SHOE. VINCENT DE LISO, Astoria, N. Y., assignor to Saks & Co., New York, N. Y., a Corporation of New York. Filed May 14, 1931. Serial No. 39,844. Term of patent 3½ years.



The ornamental design for a shoe as shown.

84,628. FINGER RING. FREDERICK DINGER, New York, N. Y. Filed Apr. 21, 1931. Serial No. 39,582. Term of patent 14 years.



The ornamental design for a finger ring, substantially as shown.

84,629. SHOE. FERDINAND W. ELLINGTON, Jamaica, N. Y., assignor to Delman, Inc., New York, N. Y., a Corporation of New York. Filed May 26, 1931. Serial No. 39,974. Term of patent 3½ years.



The ornamental design for a shoe as shown.

84,630. SHOE. FERDINAND W. ELLINGTON, Jamaica, N. Y., assignor to Delman, Inc., New York, N. Y., a Corporation of New York. Filed May 26, 1931. Serial No. 39,975. Term of patent 3½ years.



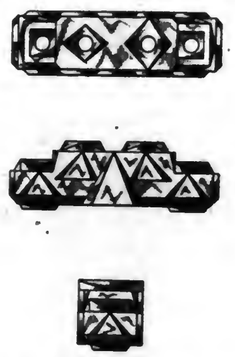
The ornamental design for a shoe as shown.

84,631. SHOE. FERDINAND W. ELLINGTON, Jamaica, N. Y., assignor to Delman, Inc., New York, N. Y., a Corporation of New York. Filed May 26, 1931. Serial No. 39,976. Term of patent 3½ years.



The ornamental design for a shoe as shown.

84,632. INSULATION BLOCK FOR ELECTRIC TERMINALS. EDWARD A. EVERETT, Long Island City, N. Y. Filed Jan. 22, 1931. Serial No. 38,411. Term of patent 14 years.



The ornamental design for an insulation block as shown.

84,633. TUMBLER. DAVID FISHER, Paden City, W. Va., assignor to Paden City Glass Manufacturing Company, Paden City, W. Va., a Corporation of West Virginia. Filed Oct. 31, 1930. Serial No. 37,477. Term of patent 7 years.



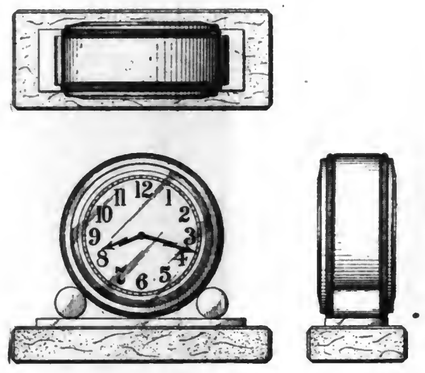
The ornamental design for a tumbler, as shown and described.

84,634. ATHLETIC TROPHY. ALFRED J. FLAUDER, Bridgeport, Conn., assignor to The Weidlich Bros. Mfg. Co., Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 19, 1931. Serial No. 39,156. Term of patent 7 years.



The ornamental design for an athletic trophy substantially as shown and described.

84,635. ELECTRIC CLOCK CASE. IRVING FLORMAN, New York, N. Y. Filed May 25, 1931. Serial No. 39,965. Term of patent 14 years.



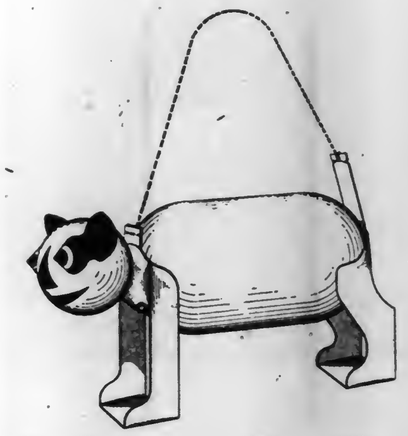
The ornamental design for an electric clock case, as shown.

84,636. THERAPEUTIC LAMP. NORRIS E. GOODRICH and JOSEPH CONNOR, Battle Creek, Mich., assignors to Sanitarium Equipment Company, Battle Creek, Mich. Filed Apr. 10, 1931. Serial No. 39,431. Term of patent 7 years.



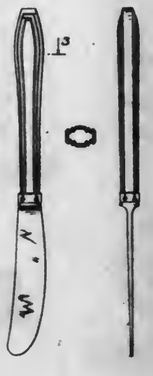
The ornamental design for a therapeutic lamp, as shown.

84,637. TOY. SAMUEL GORDON, Brooklyn, N. Y. Filed Nov. 18, 1930. Serial No. 37,698. Term of patent 7 years.



The ornamental design for a toy substantially as shown.

84,638. TABLE KNIFE. GEORGE P. ITTIG, Bridgeport, Conn., assignor to Blackstone Silver Company, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 14, 1929. Serial No. 33,789. Term of patent 14 years.



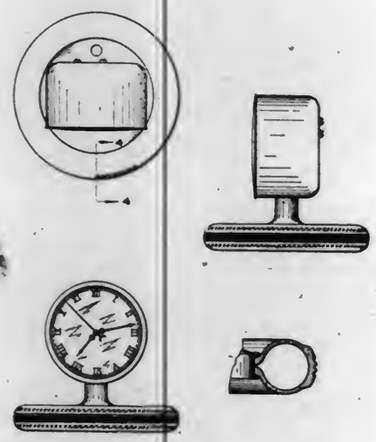
The ornamental design for a table knife substantially as shown and described.

84,639. RADIATOR ORNAMENT. WILLIAM H. JOHNSEN, Dallas, Tex. Filed Jan. 17, 1931. Serial No. 38,349. Term of patent 7 years.



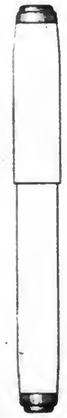
The ornamental design for a radiator ornament, as shown.

84,640. CLOCK CASING. IRVING H. JONES, Massillon, Ohio. Filed May 23, 1931. Serial No. 39,946. Term of patent 3½ years.



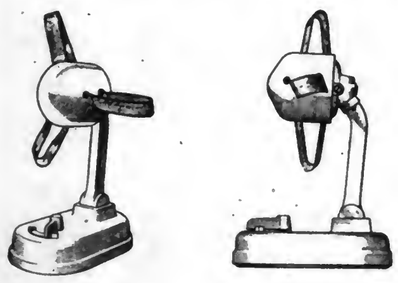
The ornamental design for a clock casing, substantially as shown and described.

84,641. FOUNTAIN PEN OR SIMILAR ARTICLE. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Feb. 16, 1931. Serial No. 38,684. Term of patent 14 years.



The ornamental design for a fountain pen or similar article substantially as shown and described.

84,642. ELECTRIC FAN. FREDRIK LJUNGSTROM, Lidingo, Sweden. Filed June 1, 1931, Serial No. 40,052, and in Sweden Mar. 3, 1931. Term of patent 14 years.



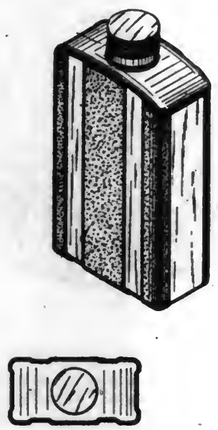
The ornamenal design for an electric fan, as shown.

84,643. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 9, 1931. Serial No. 38,261. Term of patent 3½ years.



The ornamental design for a dress substantially as shown and described.

84,644. BOTTLE OR SIMILAR ARTICLE. JOHN E. MARSDEN, Philadelphia, Pa. Filed Apr. 20, 1931. Serial No. 39,569. Term of patent 7 years.



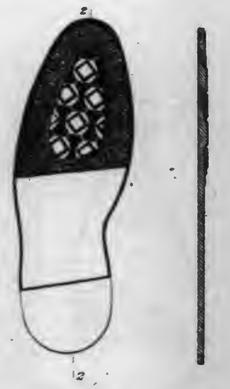
The ornamental design for a bottle or similar article substantially as shown.

84,645. SHOE. CHARLES MORALI, New York, N. Y., assignor to Delman, Inc., New York, N. Y., a Corporation of New York. Filed May 26, 1931. Serial No. 39,973. Term of patent 3½ years.



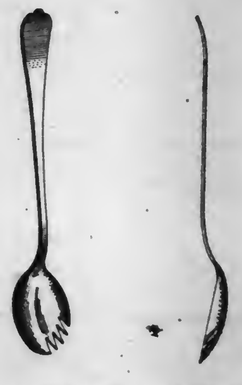
The ornamental design for a shoe as shown.

84,646. RUBBER SOLE FOR SHOES. ALBERT L. MURRAY, Auburn, Ind. Filed Mar. 16, 1931. Serial No. 39,106. Term of patent 7 years.



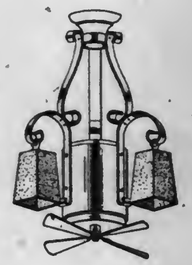
The ornamental design for a rubber sole for shoes, as shown.

84,647. COCKTAIL SPOON. ROBERT E. PELLOW, Waco, Tex. Filed May 23, 1931. Serial No. 39,940. Term of patent 14 years.



The ornamental design for a cocktail spoon as shown and described.

84,648. LIGHTING FIXTURE. JOSEPH E. PRIMAKOW, Milwaukee, Wis. Filed May 8, 1931. Serial No. 39,763. Term of patent 3½ years.



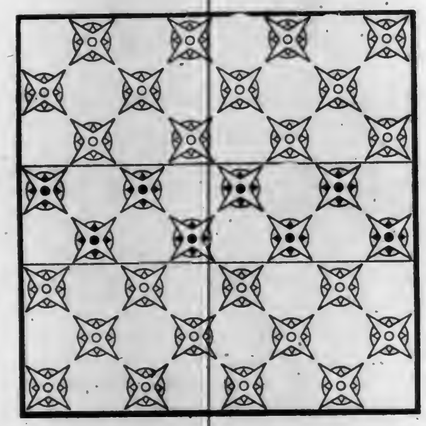
The ornamental design for a lighting fixture substantially as shown.

84,649. BOTTLE. MEYER RICH, New London, Conn. Filed Apr. 28, 1931. Serial No. 39,647. Term of patent 14 years.



The ornamental design for a bottle, as shown and described.

84,650. CHECKER BOARD. HAROLD A. RICHARDSON, Steelton, Pa. Filed May 12, 1931. Serial No. 39,818. Term of patent 14 years.



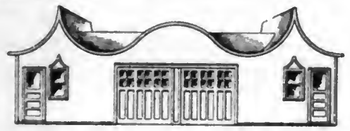
The ornamental design for a checker board, as shown and described.

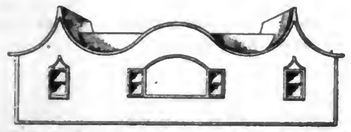
84,651. PLATE OR SIMILAR ARTICLE. ROBERT C. RICHARDSON, Jr., West Point, N. Y. Filed Mar. 5, 1931. Serial No. 38,943. Term of patent 14 years.



The ornamental design for a plate or similar article substantially as shown.

84,652. BUILDING. WILLIAM V. ROBINSON, Oskaloosa, Iowa. Filed May 12, 1931. Serial No. 39,817. Term of patent 7 years.





The ornamental design for building substantially as shown and described.

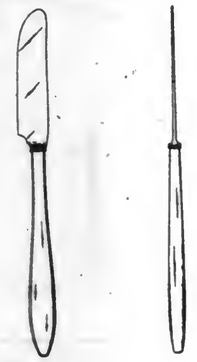
84,653. COMPOSITE CHARACTER SIGN. LOUIS L. RUSTAD, Minneapolis, Minn. Filed Apr. 29, 1931. Serial No. 39,652. Term of patent 14 years.





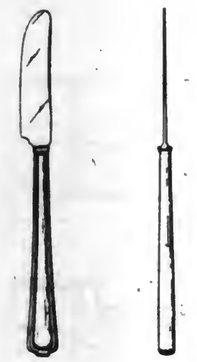
The ornamental design for a composite character sign as shown.

84,654. TABLE KNIFE OR SIMILAR ARTICLE. ELIEL SAARINEN, Birmingham, Mich., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Nov. 7, 1929. Serial No. 33,866. Term of patent 14 years.



The ornamental design for a table knife or similar article substantially as shown and described.

84,655. TABLE KNIFE. ELIEL SAARINEN, Bloomfield Hills, Mich., and ROBERT R. KINTZ, Meriden, Conn., assignors to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Feb. 21, 1931. Serial No. 38,788. Term of patent 14 years.



The ornamental design for a table knife substantially as shown and described.

84,656. PICTURE FRAME. LAWRENCE SAIN, St. Marys, Pa. Filed Apr. 1, 1931. Serial No. 39,326. Term of patent 7 years.



The ornamental design for picture frame as shown.

84,657. FINGER RING. JACOB H. SCHAEFFER, Brooklyn, N. Y. Filed June 11, 1930. Serial No. 36,016. Term of patent 7 years.



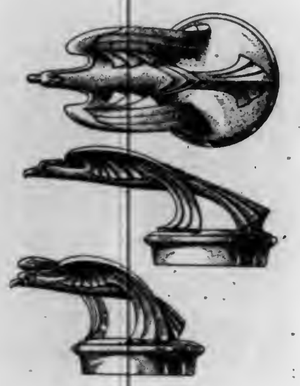
The ornamental design for a finger ring, as shown.

84,658. BOX. FRANK J. SCHLEICHER, University City, Mo. Filed Nov. 8, 1930. Serial No. 37,587. Term of patent 14 years.



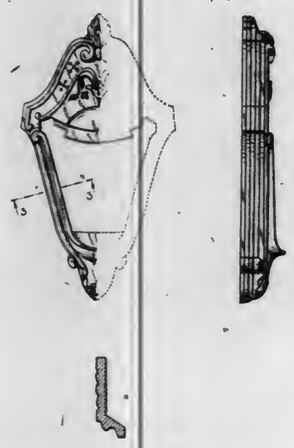
The ornamental design for a box, substantially as shown.

84,659. AUTOMOBILE RADIATOR ORNAMENT OR SIMILAR ARTICLE. WILLIAM SCHNELL and FREDERICK GIUNTINI, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed May 8, 1931. Serial No. 39,784. Term of patent 7 years.



The ornamental design for an automobile radiator ornament or similar article substantially as shown.

84,660. WALL BRACKET OR ARTICLE OF SIMILAR NATURE. CHARLES SHULMAN, New York, N. Y., assignor to Apt Novelty Company Inc., New York, N. Y. Filed May 20, 1931. Serial No. 39,916. Term of patent 3½ years.



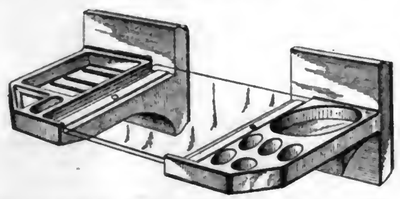
The ornamental design for a wall bracket or article of similar nature, as shown and described.

84,661. PANEL FOR CONCEALED RADIATOR CABINETS. WILFRED SHURTLEFF, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Dec. 9, 1929. Serial No. 33,714. Term of patent 14 years.



The ornamental design for a panel for concealed radiator cabinets, as shown.

84,662. COMBINATION SHELF, TUMBLER, SOAP, TOOTHBRUSH AND JEWEL CUP. JAMES R. SMITH, Sr., Trenton, N. N. J. Filed May 5, 1931. Serial No. 39,725. Term of patent 3½ years.



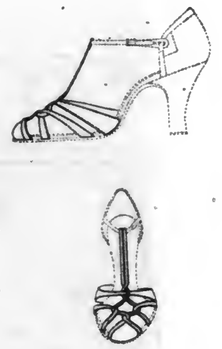
The ornamental design for a combination shelf, tumbler, soap, toothbrush and jewel cup, as shown.

84,663. RANGE. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Jan. 22, 1931. Serial No. 38,288. Term of patent 14 years.



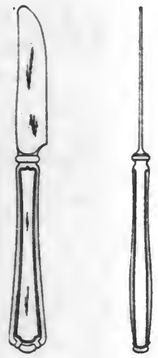
The ornamental design for a range, as shown and described.

84,664. WOMAN'S SHOE. SEYMOUR TROY, New York, N. Y. Filed Apr. 9, 1931. Serial No. 39,408. Term of patent 14 years.



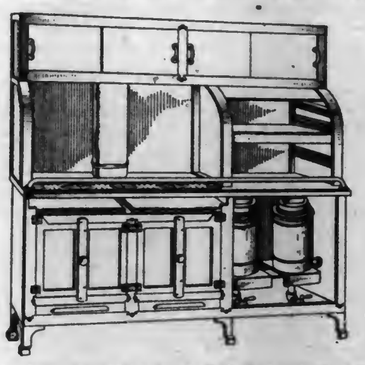
The ornamental design for a woman's shoe substantially as shown and described.

84,665. KNIFE. WILLIAM S. WARREN, Meriden, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a Corporation. Filed June 26, 1930. Serial No. 36,181. Term of patent 14 years.



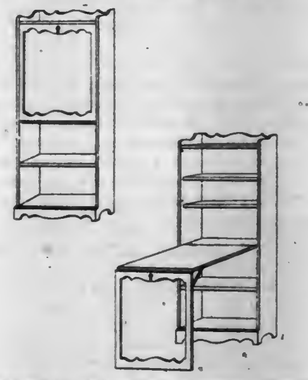
The ornamental design for a knife as shown.

84,666. DINING CAR RANGE. JOHN WIEDEMANN, Cleveland, Ohio, assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed May 5, 1931. Serial No. 39,720. Term of patent 14 years.



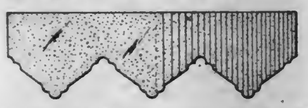
The ornamental design for a dining car range as shown.

84,667. COMBINATION TABLE AND CABINET. JOHN J. CONNERS, Tuckahoe, N. Y. Filed Mar. 23, 1931. Serial No. 39,201. Term of patent 3½ years.



The ornamental design for a combination table and cabinet substantially as shown.

84,668. COMPOSITION ROOFING OR SIDING STRIP. STUART H. RALPH, Belmont, Mass., assignor to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 2, 1931. Serial No. 39,335. Term of patent 14 years.

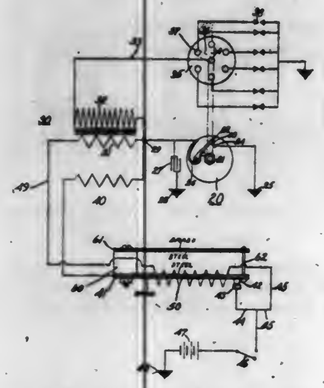


The ornamental design for a composition roofing or siding strip substantially as shown.

PATENTS

GRANTED JULY 14, 1931

1,813,900. IGNITION APPARATUS. JAMES L. ARTHUR, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 22, 1930. Serial No. 504,050. 3 Claims. (Cl. 123—148.)



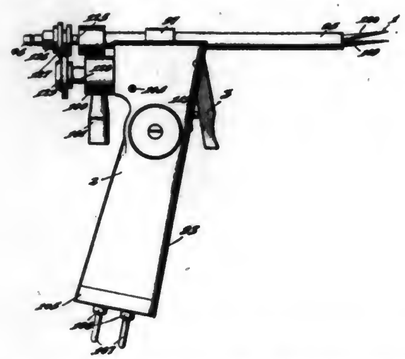
1. Ignition apparatus comprising in combination, an ignition coil including a primary winding, a current source, a circuit interrupter for controlling the passage of current from the source through the primary winding, a booster induction coil and a thermostat operated switch responsive to current flowing through the primary winding for controlling the connection of the booster coil with the primary winding.

1,813,901. MANUFACTURE OF COLORED PATTERNED GLASS AND OTHER TRANSPARENCIES OR TRANSLUCENCIES. BASIL RICHARD BAYNE, Gerrards Cross, England. Filed Oct. 5, 1929, Serial No. 397,668, and in Great Britain Nov. 9, 1928. 4 Claims. (Cl. 41—23.)



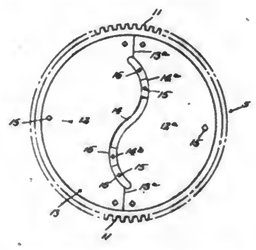
1. A method of manufacturing colored patterned glass wherein individual elements of glass are first caused to adhere to a glass base by means of an adhesive and flux to form the design, the whole being then fired at a suitable temperature to cause the elements to become fused through said flux to the glass base and then filling in the interstices between said elements so as to form a mosaic-like design on said base substantially as described.

1,813,902. ELECTROSURGICAL APPARATUS. WILLIAM T. BOVIE, Evanston, Ill., assignor to The Liebel-Flarsheim Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 18, 1928. Serial No. 247,719. 9 Claims. (Cl. 174—89.)



1. An electro-surgical apparatus, comprising, an operating electrode, means for supplying said electrode with high frequency operating current, a holder for said electrode, a switch associated with said holder, and a circuit insulated from the power supply circuit, said circuit including said switch and an electro-magnetic switch adapted to turn the operating current on and off by its motion.

1,813,903. POWER MULTIPLIER. WILLIAM H. BRAGAW and GEORGE W. BLEDSOE, Silver City, N. Mex. Filed Aug. 6, 1930. Serial No. 473,492. 2 Claims. (Cl. 74—1.)



1. A power multiplier wheel comprising a wheel having a mounting for a shaft projecting from one side thereof, and driving means at its periphery, and plates attached to the side of the wheel opposite the shaft mounting, said plates formed to define a diametrically disposed double curved slot for reception of a connecting rod pin, a connecting rod adapted to be driven by said slot and bearing at its outer end said pin, and blocks mounted in said slot to limit the outward movement of said connecting rod pin.

1,813,904. METHOD OF SOLDERING CHAINS, CHAIN-MESH OR THE LIKE. GEORG BRUNHÜBNER, Pforzheim, Germany, assignor to Ernst Gideon Bek, Pforzheim, Germany. Filed Mar. 13, 1928, Serial No. 261,695, and in Germany Mar. 17, 1927. 21 Claims. (Cl. 113—112.)

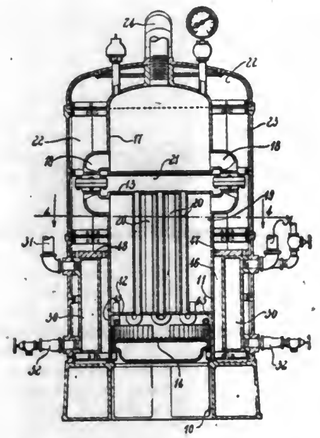
1. The method of soldering the ends of interconnected links or rings of chains or chainmesh fabric, which consists in dipping a plurality of interconnected links into a fluid solder material, whereby the links are covered with the solder material and particles of the solder material caused to flow into the link gaps, removing from the links all solder material except that contained in the link gaps, and then subjecting the links to the action of heat to fuse the solder material in the gaps.

1,813,905. LAMP. WILLARD LE ROY BURGESS, Kansas City, Mo. Filed May 3, 1930. Serial No. 449,478. 3 Claims. (Cl. 67—81.)



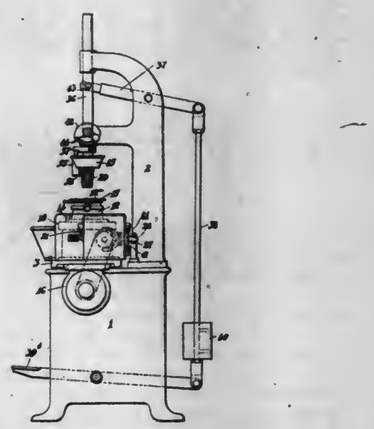
3. A lamp comprising a fuel resefvoir comprising a plurality of pipe sections, T-couplings connecting the sections, said pipe sections including end sections and an intermediate section, a cap closing the free end of one of said end pipe sections, a filling elbow connected with the free end of the other of said end pipe sections, a cap closing the free end of said elbow, said last mentioned cap being apertured, burner supporting members extending from said couplings, burners supported on the free end of said supporting members, said supporting members being hollow, and absorbing material in each of said burner supporting members.

1,813,906. BOILER. FRED M. CARON, Springfield, Mass., assignor to Richmond Lewis, Springfield, Mass. Filed June 25, 1928. Serial No. 288,255. 3 Claims. (Cl. 122—133.)



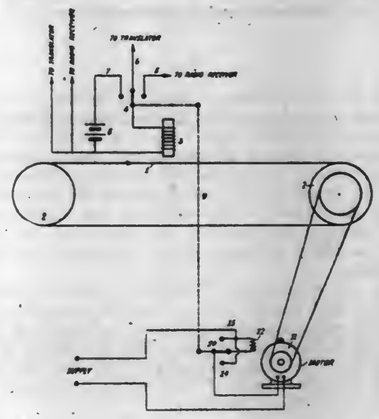
2. A boiler having a water-containing casing, a fire box beneath said casing, an outer casing surrounding both the water-containing casing and the fire box and connected to the fire box to receive hot gases therefrom, a water chamber connected to the water-containing casing and positioned between the two casings so as to be subjected on all sides to the gases from the fire box, said water chamber being formed in arc-shaped segments, a tube joining the two casings and passing between the segments of the water chamber, a fusible member at the inner end of the tube, and fuel controlling means extending through the tube adapted to shut off the supply of fuel in the event of fusion of the member.

1,813,907. MACHINE FOR MOLDING PIE CASINGS. EJNAR CHRISTIANSEN, Birmingham, England, assignor of one-half to Carl Oscar Ericsson, Birmingham, England. Filed May 17, 1928, Serial No. 278,550, and in Great Britain May 25, 1927. 10 Claims. (Cl. 107—15.)



2. A machine for molding pie casings comprising a rotary mounted table carrying the mould, means for rotating the table, a molding roller freely mounted to rotate about its own axis, means for moving the roller into the mould, and means for moving the table laterally in relation to the molding roller.

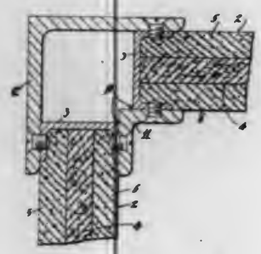
1,813,908. HIGH SPEED RADIOTELEGRAPHIC RECEIVING APPARATUS. JOSEPH BETHENOD, Paris, France. Filed July 1, 1927, Serial No. 202,826, and in France July 8, 1926. 10 Claims. (Cl. 178—17.5.)



1. The method of receiving high speed signals by means of a plurality of recording devices, such as, electromagnetic phonographs or telegraphones, which consist in momentarily and periodically recording by each device a portion of the received signals during one cycle, causing said recording devices to successively actuate printing appa-

ratus during another cycle, and then allowing the recording devices to become de-magnetized during a third cycle, the three cycles being repeated in a continuing sequence.

1,813,909. BUILDING CONSTRUCTION. CLARENCE H. BRAINARD, Glendale, REGINALD G. CARRINGTON, Santa Monica, and ALBERT F. COOKE, Los Angeles, Calif., assignors to Edwin H. Pierson, Los Angeles, Calif. Filed Apr. 10, 1926. Serial No. 101,063. 3 Claims. (Cl. 72—40.)



1. In means of the class described, a structural unit comprising a fibrous center sheet and having a body of hardened cementitious material, and channel irons on the outside of the body, with flanges projecting inwardly toward the central portion of the sheet, said cementitious material encasing the fibrous sheet and filling the space between the same and said flanges.

1,813,910. FIRE EXTINGUISHER. WILHELM B. BRONANDER, Montclair, N. J. Filed July 8, 1929. Serial No. 376,747. 13 Claims. (Cl. 169—35.)

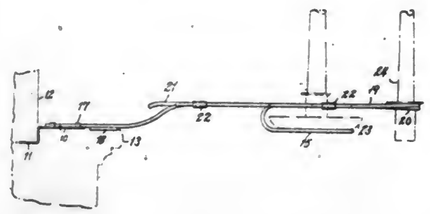


1. A fire extinguisher comprising a casing, a frangible container movably mounted therein, said container having fire extinguishing liquid therein, a spring for holding the container against movement, and means engageable by the container for breaking the container when the container is moved in the casing against the force of the spring, the weight of the container and liquid therein being sufficient to overcome the action of the spring when the bodily movement of the casing and contents is interrupted.

6. A fire extinguisher comprising a casing having a partition wall therein and a frangible container in the casing on each side of said wall, and a removable perforated cap at each end of the casing for closing the end thereof and confining the container therein and means at the perforated ends of said casing for breaking the containers by impact therewith.

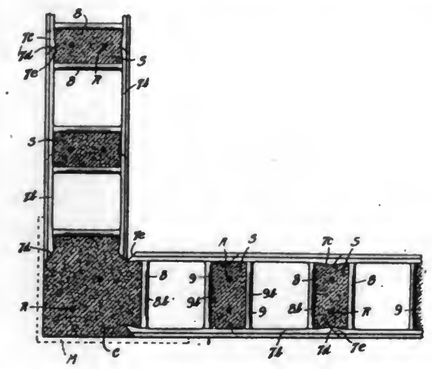
8. A fire extinguisher comprising a casing having a partition wall therein, a frangible container movably mounted in the casing on each side of said wall, the casing being closed at the ends, confining the container therein, resilient means engaging each container for holding the container in position in the casing, and means in the casing engageable by each container for breaking the container upon movement thereof against the action of the spring acting thereon.

1,813,911. LIGHT HOLDER FOR WINDOWS. EGISTO CINQUINI, Whitneyville, Conn. Filed Sept. 16, 1929. Serial No. 393,027. 2 Claims. (Cl. 248—20.)



1. A light holder for windows comprising a plate adapted to be engaged by a window sash a main frame formed from wire secured to said plate, said frame having parallel sides and an auxiliary frame formed from wire and adjustably mounted on the main frame, and provided at its inner end with a light-supporting socket.

1,813,912. CONCRETE BUILDING STRUCTURE. ARTHUR G. CLARK, St. Paul, Minn., assignor of one-third to Alexander C. Robarge and one-third to George E. Snell, St. Paul, Minn. Filed Oct. 27, 1927. Serial No. 229,109. 2 Claims. (Cl. 72—30.)

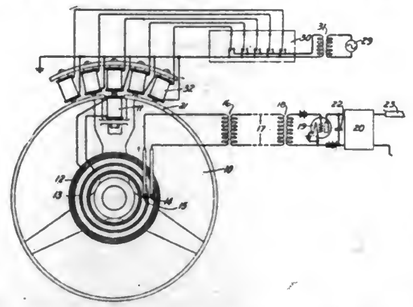


2. An integral building unit comprising a pair of vertical parallel sides, two pairs of transverse partitions connecting said sides and extending approximately the full height thereof, the end partitions of the pairs being inset from the ends of the sides a distance equal to one-half of the distance between the inner partition of the two pairs, means at the upper and lower edges of said sides for preventing lateral displacement of successive layers of units, said sides having dove-tail ends at their inward surfaces to interlock with a concrete column partially mounted thereby.

1,813,913. ROTARY DISTRIBUTOR. ALLISON A. CLOKEY, Rutherford, N. J., and WILLIAM A. KNOOP, Hempstead, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 7, 1928. Serial No. 324,436. 9 Claims. (Cl. 178—52.)

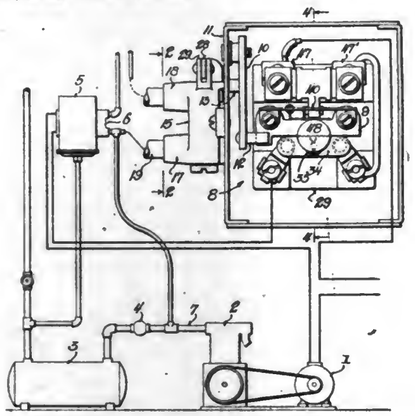
2. An electrical impulse distributing system comprising a rotary distributor carrying means for receiving and

means for translating current impulses and a plurality of means for impressing current impulses upon said cur-



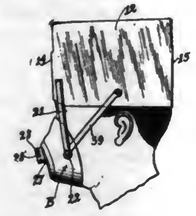
rent receiving means and separated therefrom by air gaps the amplitude and perodicity of the current impulses impressed upon the receiving means being invariable.

1,813,914. RELEASE MECHANISM. IVAN CORCORAN, Milwaukee, Wis., assignor to Square D Company, Detroit, Mich. Filed Sept. 26, 1930. Serial No. 484,694. 6 Claims. (Cl. 280—4.)



1. In a release mechanism, the combination of a circuit breaker biased towards open position and including means for closing said circuit breaker, means for holding said circuit breaker temporarily in closed position, means responsive to load conditions for releasing said circuit breaker, and a pressure relief valve opened by said circuit breaker when said circuit breaker moves towards open position.

1,813,915. RESPIRATOR. HARVEY S. COVER, South Bend, Ind. Filed July 9, 1928. Serial No. 291,189. 1 Claim. (Cl. 128—146.)

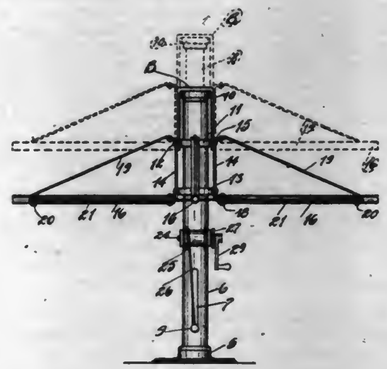


A respirator comprising a head box, a partition dividing said head box into an upper compartment and a lower compartment, said upper compartment being adapted to contain filtering material and being provided with an opening of large area for air intake directly from the atmosphere, said lower compartment arranged to fit upon the head of the user, a face piece, a pair of tube members connected to said face piece and extending in a substantially vertical direction to connect with the front portion of said upper compartment, whereby said tube members serve to maintain said face piece in proper spaced relation with respect to said head box for supporting said face piece in position, an exhalation valve mounted in said face piece and constructed and arranged to open upon exhalation and to close upon inhalation, and elastic members connected to said face piece and the sides of said head box and adapted to aid in maintaining said face piece in contact with the face of the user to permit readily disengaging said face piece from the face of the user without disconnecting the same from said head box.

1,813,916. PRODUCTION OF FINELY DIVIDED MATERIAL. ARTHUR B. CUMMINS, Lompoc, Calif., assignor to Celite Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 29, 1929. Serial No. 358,864. 13 Claims. (Cl. 252—2.)

1. The process of preparing a finely divided product from finely divided diatomaceous earth of indiscriminate particle sizes which comprises separating the indiscriminately sized particles into a product consisting of particles of the requisite sizes and a fraction containing excessively finely divided material, heating said fraction containing excessively finely divided material sufficiently to cause fritting of the particles comprised therein, and returning the material thus treated to further quantities of the finely divided diatomaceous earth of indiscriminate particle sizes prior to its subjection to the separating operation.

1,813,917. CLOTHES DRIER. MACK DURYEE, Bay City, Mich. Filed Oct. 6, 1930. Serial No. 486,649. 4 Claims. (Cl. 211—167.)

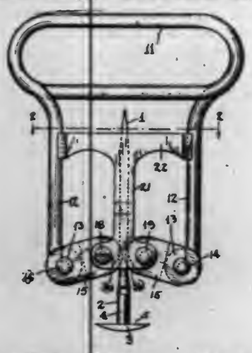


1. In a clothes drier, a standard having inner and outer telescoping sections, a collar slidably mounted on said standard, a U-shaped frame secured to said collar, and an antifriction bearing interposed between the top of said standard and the frame.

1,813,918. COMBINATION REPAIR APPARATUS. ALBERT H. FISHER, East Cleveland, Ohio, assignor to Harry G. Wedler and John F. Shuford. Filed Mar. 28, 1927. Serial No. 178,928. 3 Claims. (Cl. 152—27.)

1. A gripping tool having in combination, a handle having spring extensions, gripping jaws pivotally mount-

ed on said extensions, means holding the inner ends of said gripping jaws in uniform spaced relation to each other and tapered cam grooves formed in the adjacent end

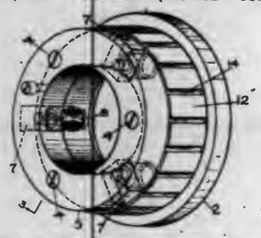


faces of said gripping jaws for engaging the tapered surface of an object at any one of a plurality of points along its length.

1,813,919. PROCESS FOR THE PRODUCTION OF BERYLLIUM ALLOYS, IN PARTICULAR THOSE WITH A HIGH BERYLLIUM CONTENT BY MEANS OF FUSED LIQUID ELECTROLYSIS. HELLMUT FISCHER, Berlin-Siemensstadt, Germany, assignor, by mesne assignments, to Metal & Thermit Corporation, New York, N. Y., a Corporation of New Jersey. Filed May 22, 1929, Serial No. 365,240, and in Germany Nov. 13, 1928. 8 Claims. (Cl. 204—19.)

1. The process of producing beryllium alloys which consists in introducing into a fused mass containing beryllium, a metal to be alloyed with beryllium, such metal being of a specific gravity greater than that of the fused mass, and subjecting the mass to electrolysis.

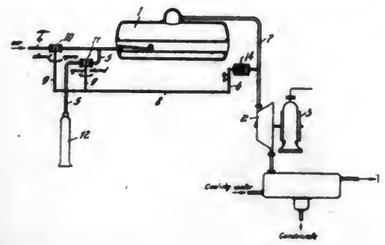
1,813,920. WINDER ROLL FOR PAPER MAKING MACHINES. JOHN M. GALLAGHER, Watertown, N. Y., assignor to The Bagley and Sewall Company, Watertown, N. Y., a Corporation of New York. Filed Sept. 29, 1927. Serial No. 222,703. 4 Claims. (Cl. 242—68.)



1. In a winding mechanism, the combination of a winding spindle, a guide collar on the spindle, a sleeve on the collar provided with openings, a holding plate secured outside the sleeve, locking devices having a bearing in the holding plate and held in the sleeve openings so as to engage the spindle, and a rotary eccentric member engaging the locking devices and acting to move the locking devices into locking relation with the spindle.

1,813,921. VAPOR POWER PLANT. WILHELM GUMZ, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Nov. 3, 1928, Serial No. 317,094, and in Germany Nov. 4, 1927. 2 Claims. (Cl. 110—54.)

2. In a power plant in combination, a vapor generator, a furnace for said generator, a receptacle for oxygen, a conduit between said receptacle and said furnace, means for controlling the flow of oxygen to said furnace in accordance with the load on the generator, means for supply-



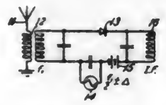
ing normal combustion air to said furnace, and means connected to the oxygen control means for regulating the combustion air flow to the furnace inversely to the oxygen flow.

1,813,922. DETECTION OF FREQUENCY MODULATED SIGNALS. CLARENCE W. HANSELL, Port Jefferson, Long Island, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 30, 1929. Serial No. 336,106. 14 Claims. (Cl. 250—20.)



1. The method of securing a response dependent upon the frequency of alternating electrical energy which includes so limiting the amplitude and energy per cycle of the energy that the energy per unit of time is proportional to the number of cycles per unit of time, rectifying the resulting energy, and utilizing the magnitude of the rectified energy as an indication of frequency.

1,813,923. RADIO RECEIVING SYSTEM. RAYMOND A. HEISING, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 6, 1929. Serial No. 337,785. 12 Claims. (Cl. 250—20.)

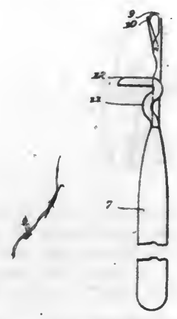


1. In a radio receiving system, a receiver for incoming waves, a source of oscillations having a frequency which differs by a small amount from one-half the frequency of the incoming waves, a space discharge device having a control electrode or grid in which said incoming waves and said oscillations are combined, and means for applying to the grid of said space discharge device a negative potential of such value that transmission of the combined wave therethrough is permitted only during portions of alternate half waves of said oscillations.

1,813,924. HAND OPERATED NEEDLE. EDWARD J. HOFFMAN, Boston, Mass., assignor to Eldeen Automatic Hosiery Mender Inc., Boston, Mass. Filed Apr. 2, 1928, Serial No. 266,718. Renewed May 18, 1929. 6 Claims. (Cl. 66—117.)

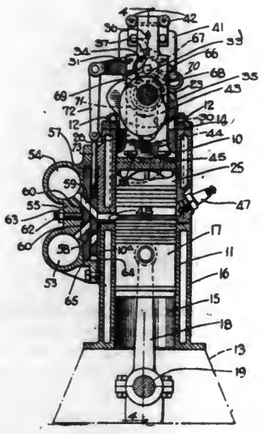
3. A needle for mending knitted fabric comprising a shank, a hook upon the shank, a latch having one end

pivotally mounted upon the shank and its free end coacting with the hook whereby a thread looped around the latch and the shank may pass over the point of the latch,



and a stop upon the shank located adjacent to the point of the latch when in the open position for engaging a straight thread of the fabric and holding the latter from passing over the point of the latch.

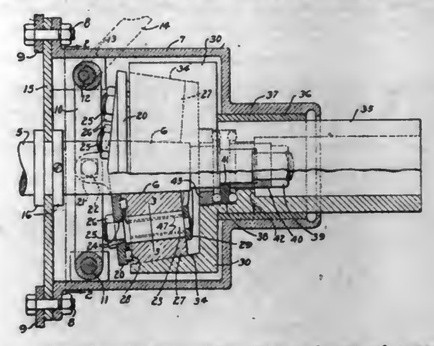
1,813,925. INTERNAL COMBUSTION ENGINE. ZACHARIAH S. HOFFMAN, Essex County, N. J. Filed May 21, 1929. Serial No. 364,751. 6 Claims. (Cl. 123—188.)



1. In an internal combustion engine, a cylinder, a piston reciprocable therein, the cylinder having a port therein, an intake conduit, an exhaust conduit, a slide valve normally closing the port, means driven by the piston for moving the slide valve in one direction to connect the port with the intake conduit on the intake stroke of the piston and in another direction to connect the port with the exhaust conduit on the exhaust stroke of the piston, and means for positively taking up wear of the slide valve.

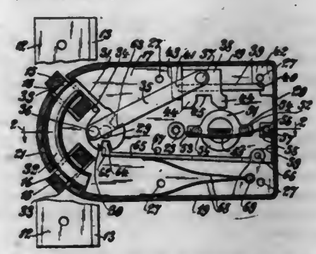
1,813,926. CLUTCH AND SPEED REDUCING MECHANISM. ROBERT HOFSTETTER, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1928. Serial No. 324,876. 5 Claims. (Cl. 74—26.)

1. In a clutch, a tapered driving shaft, a shaft driven thereby, a member provided with a conical surface connected to the driven shaft and surrounding the driving shaft, a plurality of tapered rollers with their axes inclined with respect to the axes of the shafts and adapted to be moved into and out of engagement with the tapered driving shaft and the conical surface, and means



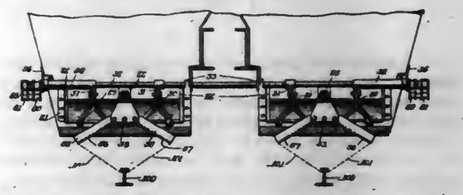
for moving the tapered rollers into and out of engagement with the tapered driving shaft and conical surface to actuate the driven shaft.

1,813,927. DOORLOCK. JOHN HOLTZMAN, New York, N. Y. Filed May 14, 1925. Serial No. 30,177. 15 Claims. (Cl. 70—46.)



1. A lock having a single curved bolt adapted to move in an arcuate path and mechanism to operate said bolt including the combination of a carriage adapted to move rectilinearly in opposite directions, key operated means to actuate said carriage, a link connecting said carriage to said bolt to transmit motion to said bolt, and a pawl adapted to engage said bolt to lock it in its operative and inoperative positions, said key means operating said pawl to release said bolt prior to the actuation of said carriage.

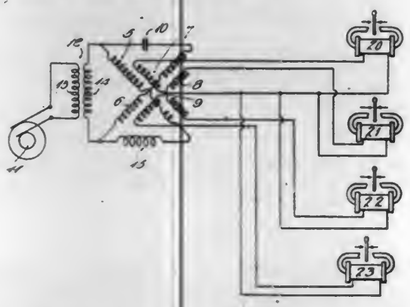
1,813,928. HOPPER CAR CONSTRUCTION. WILLIAM J. HOSCEIT, Chicago, Ill., assignor to Rodger Ballast Car Company, Chicago, Ill., a Corporation of Maine. Filed Aug. 2, 1930. Serial No. 472,650. 11 Claims. (Cl. 105—249.)



8. A hopper car of the character described comprising a sloping floor surface having portions extending below the center sill on opposite sides of said center sill each provided with a pair of discharge openings, and means beneath the inside openings for directing ballast therefrom between the track rails and means beneath the outside openings for directing ballast therefrom outside of the

track rails, said control means comprising a single device for operating said inside doors and separate devices for operating said outside doors, all constructed for operating said inside doors simultaneously with either outside door by a single operating movement.

1,813,929. ELECTRICAL SWITCHING SYSTEM. CLINTON W. HOUGH, Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Aug. 5, 1926. Serial No. 127,349. 4 Claims. (Cl. 171—97.)



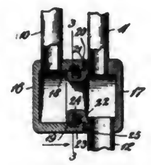
1. A switching system comprising a source of single phase alternating current, a plurality of control circuits and a circuit interposed between said control circuits and said source comprising a plurality of branches and independent transformers having primary and secondary windings with the secondary windings connected in star to said control circuits for deriving a lagging and leading current from said source and successively impressing said lagging and leading current upon said control circuits, and independent electromagnetic relays connected to each of said secondary windings for operation in successive and recurring order.

1,813,930. PISTON AND PISTON RING. THOMAS JAMES, Jr., Philadelphia, Pa. Filed Apr. 15, 1929. Serial No. 355,033. 2 Claims. (Cl. 74—108.)



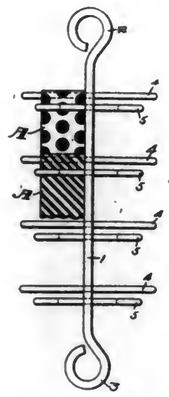
1. A cylindrical piston head, a cylindrical follower, a central boss upon one of said parts, means for detachably securing the follower upon the head whereby said boss will hold the outer portions of said head and said follower in spaced relation to each other forming an annular groove between said parts, a piston ring positioned between said head and said follower and movable radially between said head and said follower, said ring having an annular groove formed upon the inner face thereof, and a flexible member positioned between said head and said follower with its peripheral portion extending into said groove formed in the ring for overlapping the joint between the ends of the ring and the joints between the inner cylindrical face of the ring and the adjacent portions of said head and said follower.

1,813,931. HEARING TUBE. ARTHUR A. JOHNSON, Bridgeport, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Feb. 23, 1926. Serial No. 89,864. 25 Claims. (Cl. 181—24.)



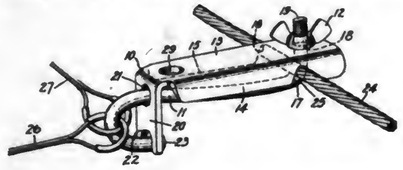
1. A hearing device comprising a pair of initially separate sound-discharging tubes, and means for permanently securing said tubes together in connected relation against becoming separated except by destruction, said means being relatively rotatable with respect to each of said tubes.

1,813,932. TIE HANGER. VICTOR P. KENNARD, Portsmouth, N. H. Filed Aug. 5, 1929. Serial No. 383,692. 2 Claims. (Cl. 211—119.)



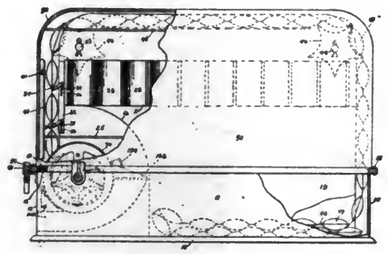
1. A tie holder comprising a back member, a tie supporting bar and a tie locking member thereon with an inturned end below the supporting bar, and adjacent the latter to lock the tie between the supporting bar and locking member vertically.

1,813,933. WIRE SUPPORT. CHARLES H. KLEIN, Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1930. Serial No. 423,506. 3 Claims. (Cl. 24—132.)



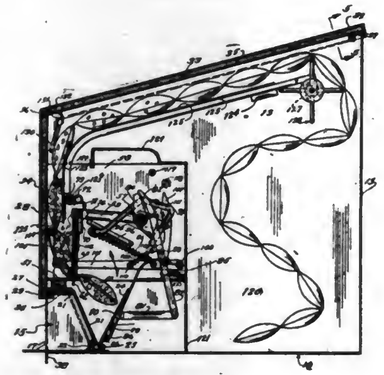
1. A wire support comprising a body member, a hook member, and a securing means, one end of said body member having an ear projecting therefrom, an aperture and a slot in said ear and an aperture in said body member, said hook extending through said apertures and positioned in said slot, said hook being rigidly held by said securing means.

1,813,934. VENDING MACHINE. AARON A. KNEE, Charlotte, N. C., assignor to The Lance Packing Company, Charlotte, N. C. Filed Sept. 28, 1928. Serial No. 309,103. 10 Claims. (Cl. 312—74.)



1. In a vending machine, a framework, a base portion, longitudinally and vertically disposed partitions on the framework, means on the exterior of the said partitions for holding objects, a glass cover for the framework and being adapted to rest on the base portion, means in the top of the framework for supporting a plurality of joined objects and allowing the same to be advanced with respect to the framework, vending mechanism mounted in the forward end of the base portion to which said joined objects are adapted to be led, said vending mechanism comprising means for advancing the joined objects thru the said mechanism and for separating one of the joined objects at a time from the others and delivering the same to the exterior of the machine.

1,813,935. VENDING MACHINE FOR BULK EDIBLES. AARON A. KNEE, Charlotte, N. C., assignor to The Lance Packing Company, Charlotte, N. C. Filed Feb. 18, 1929. Serial No. 340,718. 15 Claims. (Cl. 312—74.)

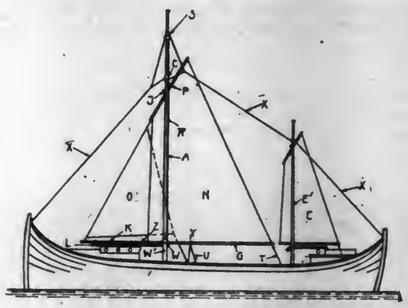


1. A vending machine adapted to vend merchandise, said merchandise being in the form of a ribbon of articles secured to each other, said vending machine comprising a casing, a compartment in said casing adapted to hold a ribbon of merchandise, a support for transversely supporting the merchandise, a vertically disposed guide-way through which the ribbon of merchandise is adapted to be propelled, a reciprocating pushing member adapted to push the merchandise into close proximity to a slot, a knife member slidably mounted with relation to the pusher member, said knife member being adapted to slide with relation to the pusher member after the pusher member has reached a point, to sever an article of merchandise from the said ribbon, and means for delivering the severed article of merchandise to the exterior of the machine.

1,813,936. MINERAL FOOD COMPOSITION AND PROCESS OF MAKING SAME. PHILIP ADOLPH KOBER, Evanston, Ill., assignor to G. D. Searle & Company, Chicago, Ill., a Corporation of Illinois. Filed May 19, 1927. Serial No. 192,800. 18 Claims. (Cl. 167—55.)

1. Process of making a mineral food which consists in adding a soluble alkali metal lactate to a mixture containing soluble alkaline earth and phosphate compounds to prevent the formation of insoluble compounds when the said mixture is dissolved in an aqueous medium.

1,813,937. SAIL, MAST AND RIG FOR SAILING BOATS AND SAILING VESSELS. DANIEL KRUSSAND, Oslo, Norway. Filed May 29, 1929, Serial No. 366,785, and in Norway May 24, 1928. 3 Claims. (Cl. 114—103.)



1. In a mast, rig and sail equipment for sailing boats and vessels, the combination of a mast formed by spaced twin pillars, an upper guide boom secured to and between said pillars near their upper ends, a lower guide boom, and a sail having its yard slidingly supported on said upper guide boom and its boom slidingly supported on said lower guide boom.

1,813,938. DISPLAY CONTAINER. WILLIAM B. LEAVENS, Jr., Maplewood, N. J., assignor to The Wilkata Folding Box Co., Kearny, N. J., a Corporation of New Jersey. Filed Oct. 16, 1929. Serial No. 399,922. 3 Claims. (Cl. 206—44.)

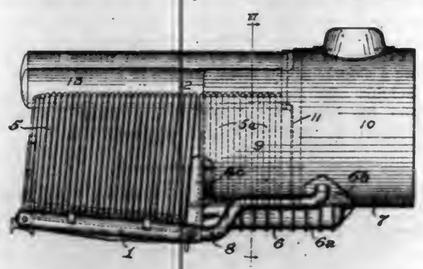


1. A display container comprising, a single folded cut-out having a bottom together with front, rear and end walls, an inner front wall connected at its upper edge to said front wall and at its lower edge to said bottom, an easel panel formed on said rear wall and a reenforcing member attached to said bottom and positioned in front and adjacent said easel panel for reenforcing the latter.

1,813,939. LOCOMOTIVE BOILER. CHARLES W. LESTER, Schenectady, N. Y. Filed June 26, 1928. Serial No. 288,413. 8 Claims. (Cl. 122—94.)

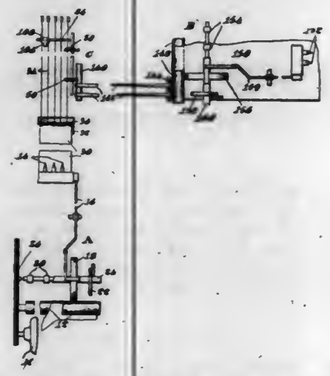
1. A structure for locomotive boilers, comprising a mud ring embodying a water circulation passageway; a

member extending forwardly of the mud ring and having a longitudinal groove communicating with the passage-



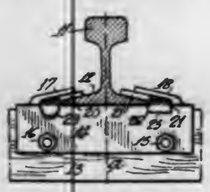
way in the mud ring; and a conduit disposed outside of the groove and connected at one end to the grooved member and at its other end to the mud ring.

1,813,940. RULING MACHINE. HARMON E. LINDBLADH, Brookline, Mass., assignor to The Lindbladh Corporation, a Corporation of Massachusetts. Filed Sept. 17, 1921. Serial No. 501,227. 81 Claims. (Cl. 33—39.)



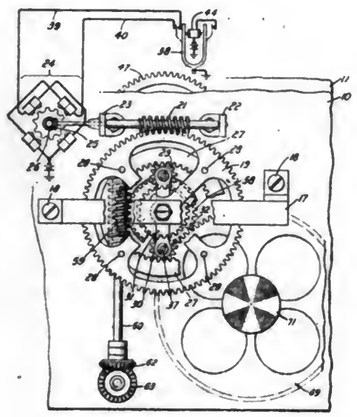
3. In a ruling machine, a plurality of ruling devices arranged to act successively upon the work, a plurality of work-controlling means one co-operating with each ruling device, means for actuating the controlling means in predetermined time-relation to one another, and means arranged to vary such time-relation.

1,813,941. RAILWAY TIE AND RAIL FASTENING. MATTHEW H. LOUGHRIDGE, Bogota, N. J. Filed May 31, 1930. Serial No. 458,735. 18 Claims. (Cl. 238—299.)



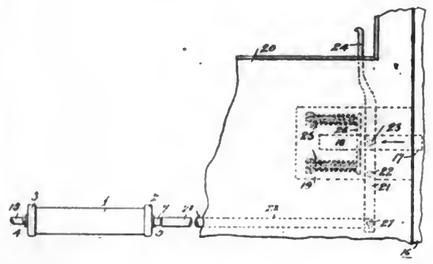
1. A railway tie and rail fastening comprising a tie with a fastening plate secured thereto, a pair of opposing lugs punched from said plate and forming a groove for the flange of the rail, a wedging plate engaging one of said lugs and the rail to position the rail and having both of its ends bent over to engage the sides of the tie and a second wedging plate engaging the opposing lug and the rail to fasten the rail to the tie.

1,813,942. FREQUENCY INDICATOR. RALPH E. MALLES, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 26, 1927. Serial No. 235,831. 3 Claims. (Cl. 58—34.)



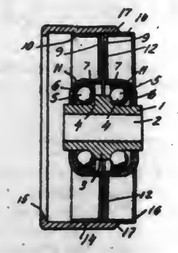
1. A clock driving mechanism comprising a synchronous motor, a clock reduction gearing and clock hands driven thereby, a gear reduction train including a yoke operated by said motor to drive the hands of the clock through said gearing, and manually operable means mounted on the clock for moving said yoke in either direction without disturbing the synchronism of the motor.

1,813,943. PNEUMATIC DOORLOCK CYLINDER. HARRY DOUGLAS MALLISON, Philadelphia, Pa., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Mar. 6, 1926. Serial No. 92,681. 1 Claim. (Cl. 292—254.)



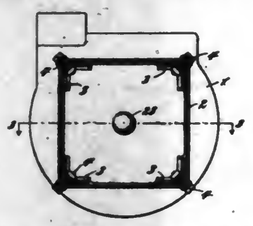
A fluid pressure operated latch comprising a slidable bolt, a first spring normally urging said bolt into a locking position, a lever pivotally attached to said bolt terminating at one end in a handle for enabling the latch to be opened solely against the force of said first spring and terminating at the other end in a pivotal connection with a pusher rod, a fluid pressure motor having a piston rod in alignment but normally out of contact with said pusher rod, and a second spring for normally maintaining such piston rod in disconnected relation with said pusher rod.

1,813,944. SKATE ROLL. JAMES E. MARSHALL, New Haven, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company, New Haven, Conn., a Corporation of Delaware. Filed Jan. 8, 1929. Serial No. 331,045. 4 Claims. (Cl. 208—181.)



1. A skate roll comprising a bearing cage and a web, the web being shaped to snugly receive the bearing cage, the web being formed of softer metal than the bearing cage, the exterior of the bearing cage being provided with extensions adapted to embed in the softer metal of the web.

1,813,945. FLOOR STAND. LOUIS H. MORIN, New York, N. Y., assignor, by mesne assignments, to Doehler Vending Machines, Inc., a Corporation of New York. Filed Aug. 7, 1926. Serial No. 127,834. 1 Claim. (Cl. 242—41.)



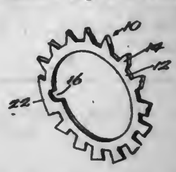
In a floor stand, the combination of a one-piece cast metal table top provided on its lower side in the same piece therewith with a deep depending rectangular flange having its salient corner angles flattened at the outside, leg-forming angle bars fitting into the angular inner corners of the said flange, a bolt for each leg passing through the flattened corner of the flange and detachably securing the leg to the flange, and flat braces detachably bolted at their ends within the angles of the angular legs.

1,813,946. PROCESS FOR EXTRACTING ACETYLENE OF HIGH VALUE FROM GASES POOR IN ACETYLENE. OTTO NICODEMUS, Frankfort-on-the-Main-Hochst, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 19, 1928, Serial No. 327,175, and in Germany Dec. 27, 1927. 6 Claims. (Cl. 260—170.)

1. The process of extracting acetylene from gases poor in acetylene which comprises washing said gases with acetonitrile at a low temperature.

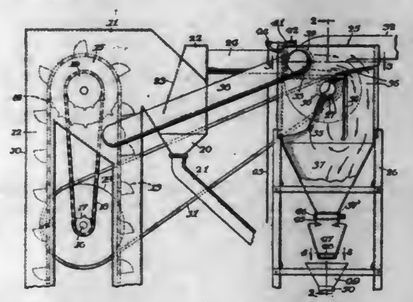
1,813,947. LOCK NUT. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 11, 1928. Serial No. 311,743. 2 Claims. (Cl. 151—35.)

1. A lock nut formed from flat spring stock including an annular body portion, a plurality of prongs extending radially from and spaced along the outer margin of said body portion, said prongs being warped out of the plane of said body portion to present work engaging teeth, said annular body portion being severed radially so as to permit the inner margin of said body portion to form a helix, which conforms with the thread helix of the element to which it may be applied, and a strengthening member formed along the outer margin of said body portion ad-



jacent the severed section thereof, the width of said member being substantially greater than the width of an individual prong, said member extending on opposite sides of the severed portion of the body and thereby rendering the portion of said body adjacent said severed area substantially as strong as the remaining portion thereof.

1,813,948. DOCKAGE COLLECTING AND SEPARATING DEVICE. CLYDE C. PALMER, Concordia, Kans. Filed Apr. 2, 1928. Serial No. 266,502. 3 Claims. (Cl. 209—137.)



1. In a dockage cleaner attachment for grain elevator legs, the combination of a casing, a dockage collecting and discharge hopper below said casing, the side walls of said hopper being formed as continuations of the side walls of said casing, a partition in said casing dividing the same into an exhaust chamber and a flow duct extending across the top and down one side of said exhaust chamber, said flow duct at its upper end being closed by a side wall of said casing and the lower ends of said flow duct and exhaust chamber both opening into the upper end of said hopper, a dockage suction pipe from an elevator leg communicating directly with the portion of said flow duct that extends across the top of said exhaust chamber, a fan communicating on its suction side with said exhaust chamber and discharging to atmosphere, and a discharge valve on the lower end of said hopper.

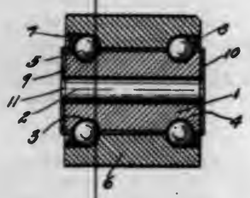
1,813,949. HERMETIC SEAL. ABRAHAM PODEL, New York, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed July 21, 1927. Serial No. 207,453. 9 Claims. (Cl. 215—40.)



1. A sealed package comprising a container having screw threads thereon for engagement with a closure and an inclined surface for engagement with a gasket, a closure

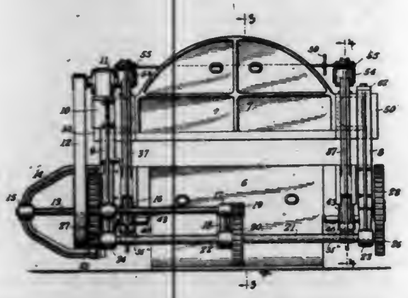
cap having a cover portion and a depending skirt, a gasket in the skirt of said cap adapted to engage the inclined surface on the container below the rim thereof to create a wedging action between the skirt of the cap and the inclined surface on the container, and means in said skirt for engaging the screw threads on said container to retain the closure in position and to force said gasket against the container.

1,813,950. GUIDE PULLEY. ALEXIS R. PRIBIL, Saginaw, Mich. Filed July 5, 1928. Serial No. 290,294. 4 Claims. (Cl. 308—193.)



1. A guide roller comprising a vertically disposed bored cone formed with spaced apart grooves, anti-friction balls mounted therein, a roller mounted thereon, the ends being counterbored to accommodate said balls, means for feeding said balls to said grooves, and stamped end plates pressed on and frictionally engaging the ends of the cone and forming a retainer and dust-proof closure for said balls.

1,813,951. MACHINE FOR BENDING SHEET METAL SHAPES. ALBERT RAFTER, Belleville, N. J., assignor, by mesne assignments, to said Albert Rafter and John C. Rafter, Jr., Belleville, N. J. Filed Dec. 8, 1928. Serial No. 324,706. 1 Claim. (Cl. 153—21.)



In a bending-machine, a bed, rear and front guides fixed to the bed, yokes at the ends of the bed, a hammer mounted on the yokes, said hammer being slidable in the guides, shafts mounted at each end of the bed, eccentric members fixed to said shafts, said eccentric members being connected to the yokes to reciprocate the latter when the shafts are rotated, and means supported by the rear guides to rotate the shafts.

1,813,952. RAILROAD PERMANENT WAY CONSTRUCTION. ADAM RAMBACHER, Munich, Germany. Filed Mar. 18, 1929, Serial No. 347,897, and in Germany Mar. 22, 1928. 4 Claims. (Cl. 238—115.)

4. In a railway track structure in which the rail is adjustably supported upon its tie plates, the combination therewith of separate pairs of concrete blocks arranged along said tracks, the blocks of each pair being spaced apart transversely of a rail, a wood tie piece spanning each pair of blocks, and a tie plate separably attached to each

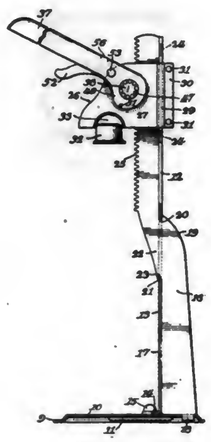


pair of blocks, the wood tie and to the rail to support the latter on the tie above the space between the blocks of a pair.

1,813,953. PRODUCTION OF KETONES. WALTER REPPE, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 27, 1928, Serial No. 328,857, and in Germany Jan. 21, 1928. 10 Claims. (Cl. 260—134.)

2. The process for the production of ketones, which comprises passing vapors of a glycol containing at least three carbon atoms, the hydroxyl-bearing carbon atoms of which are separated at the most by one methylene group, at about from 150° to 300° C. over a catalytic mass comprising a heavy metal of groups 1 and 8 of the periodic system.

1,813,954. BOTTLE CAPPER. HAROLD G. RICE, Chicago, Ill., assignor to Indestro Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 31, 1928. Serial No. 316,251. 8 Claims. (Cl. 226—84.)

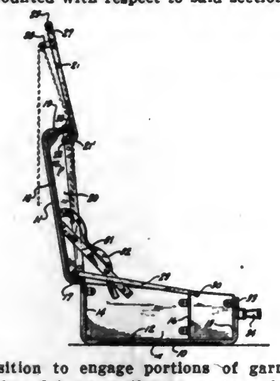


1. A bottle capper comprising a base, an upright on the base having a rack portion, a rider slidable on the upright, a capping head carried by the rider, a shaft journaled in the rider and having a pinion in mesh with the rack portion, said shaft extending from one side of the rider, and a handle rotatably mounted on the extended end of the shaft having a detent detachably locking said handle to said shaft.

1,813,955. WARDROBE CASE WITH FOLDABLE GARMENT SUPPORT. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 17, 1930. Serial No. 429,102. 7 Claims. (Cl. 190—41.)

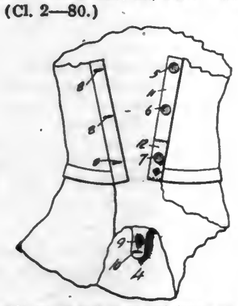
1. In a luggage case including a pair of hingedly connected sections, a clothes rack pivotally mounted within one of said sections and foldable therein lengthwise of the same and movable outwardly of the free end portion

of said section, and a garment folding and pressure member foldably mounted with respect to said section and adapted



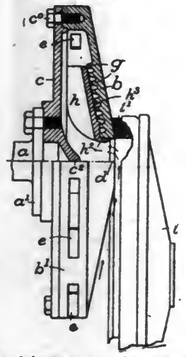
in one position to engage portions of garments on the clothes rack and to cause the garments to fold when said clothes rack is folded into the section.

1,813,956. CHILD'S GARMENT. ETHEL ROBERTS, Los Angeles, Calif. Filed Nov. 24, 1930. Serial No. 497,731. 2 Claims. (Cl. 2—80.)



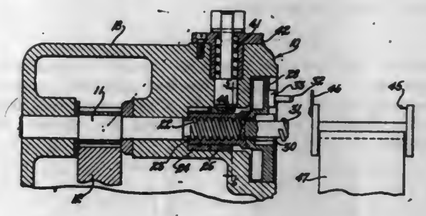
1. An infant's garment, comprising an open front vest, provided at the adjoining edges with fasteners for interengagement to close the vest, a flap for closing the lower portion of the garment, said flap being provided with a perforated tongue for engaging the bottom fastener, the said fastener being mounted on an elastic band, said band being fastened to one edge of the vest at the top and bottom, leaving the center portion carrying the fastener free to yield.

1,813,957. VARIABLE FRICTION GEARING. JOHN HOGG ROBERTSON, London, England. Filed Aug. 20, 1930, Serial No. 476,476, and in Great Britain Sept. 6, 1929. 4 Claims. (Cl. 74—26.)



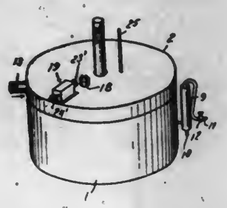
1. In a variable friction gearing, comprising two revoluble members adapted for direct-drive engagement in coaxial position and for indirect drive engagement in relatively eccentric position, one of said members having an air inlet opening adjacent to its axis, a plurality of air discharge openings adjacent to its periphery, and its interior open for passage of air from said inlet to said discharge openings, said inlet opening being freely accessible in the eccentric position of said members.

1,813,958. APPARATUS FOR ROTATING ARTICLES. GEORGE LYNDEN ROCK, Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 11, 1927. Serial No. 225,582. 6 Claims. (Cl. 74—54.)



2. In a device for rotating an article, a driving member for engaging an article, a threaded shaft having a projection, a threaded sleeve engaging the threaded shaft and connected to and supporting the driving member, a ratchet and pawl mechanism operatively connected to the sleeve for controlling the movements thereof, and means for rotating the shaft to effect a longitudinal movement of the sleeve to engage the projection on the shaft to rotate the article.

1,813,959. GAS CONDITIONING APPARATUS. ALEXIS LAWRENCE ROMANOFF, Ithaca, N. Y. Filed Nov. 17, 1928. Serial No. 320,051. 5 Claims. (Cl. 261—119.)

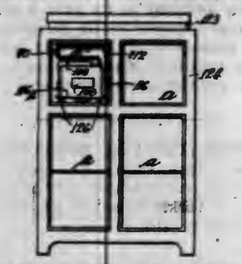


1. A gas conditioning apparatus comprising a liquid reservoir, means for conducting a gas into direct contact with the liquid in said reservoir and means for supplying heat to the liquid when the temperature thereof falls below a predetermined value and for cooling said liquid when the temperature thereof rises above a predetermined value.

1,813,960. REFRIGERATING APPARATUS. HERMAN SCHARNAGEL, Tompkinsville, N. Y., and MATTHEW H. LOUGHRIDGE, Bogota, N. J., assignors to Harry W. Dyer, New York, N. Y. Filed Sept. 29, 1926. Serial No. 138,444. 5 Claims. (Cl. 62—116.)

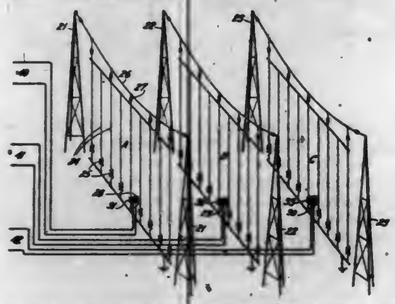
1. A refrigerating system as described comprising a cabinet with an evaporator therein, said evaporator mounted

on a slide for sliding into and out of said compartment, a condenser located outside said cabinet, and piping con-



necting said evaporator with said condenser, said piping arranged to expand like a lazy-jack to permit said evaporator to move on said slide.

1,813,961. SIGNALING SYSTEM. JOHN C. SCHELLENG, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 28, 1925. Serial No. 52,989. 15 Claims. (Cl. 250—11.)



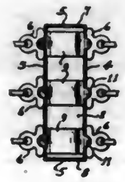
4. A directive polyphase transmitting antenna system comprising a plurality of multiple-tuned aerials in parallel planes, each of said aerials having a horizontal length substantially greater than the length of the wave to be radiated therefrom.

1,813,962. LIGHTING TORCH FOR ORCHARD HEATERS AND THE LIKE. WILLIAM C. SCHEU, Upland, Calif., assignor to Scheu Products Company, Ltd., Upland, Calif., a Corporation of California. Filed Nov. 13, 1929. Serial No. 406,875. 4 Claims. (Cl. 158—10.)



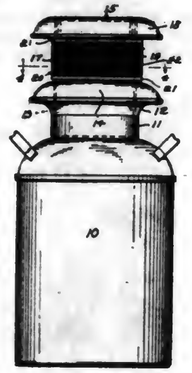
2. A lighting torch for orchard heaters and the like comprising a container for igniting fluid provided with a tubular spout, a wick extending within said spout, a supporting coil wrapped around said wick and also extending within said spout, and means on said spout and projecting inwardly and engaging between the turns of said coil so as to permit screw adjustment of said coil inwardly and outwardly with respect to the spout.

1,813,963. NECKLACE CLASP. HARRY C. SCHICK, Madison, N. J. Filed May 2, 1931. Serial No. 534,510. 5 Claims. (Cl. 24—230.)



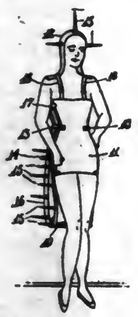
1. A necklace clasp comprising, a clasp body for connecting one or a plurality of necklace strands, said clasp body having a plurality of pairs of substantially oppositely disposed catch receiving apertures therein, and resilient catch members for attachment to the ends of necklace strands, said catch members being subject to interchangeable secured engagement in said pairs of catch receiving apertures.

1,813,964. VENTILATOR FOR MILK CANS. LAWRENCE J. SCHUBERT, Madison, Wis. Filed Oct. 8, 1929. Serial No. 398,216. 4 Claims. (Cl. 220—44.)



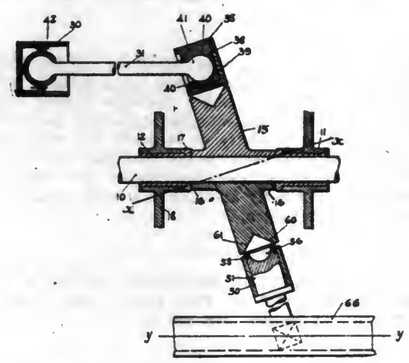
1. A ventilating device for a milk can, comprising a tubular body portion to be inserted within the neck of the milk can, said tubular body portion having ventilating openings formed in its side, and a separate circumferentially adjustable screen element removably mounted upon the exterior of said body portion to cover said openings.

1,813,965. LIFE SAVING SUIT. GIUSEPPE STERRAZZA, Thompsonville, Conn. Filed Feb. 19, 1931. Serial No. 517,015. 5 Claims. (Cl. 114—17.)



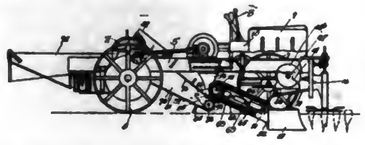
3. In an aquatic garment, a double walled garment having front and rear portions protecting the front and rear body portion of the wearer, the rear portion having a greater length than the front portion and being foldable upon itself.

1,813,966. CRANKLESS ENGINE. THOMAS LOUIS SHERMAN, Melbourne, Australia, assignor to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 12, 1929. Serial No. 332,145. 21 Claims. (Cl. 74—14.)



1. In combination, a swash plate, a ring surrounding the periphery of said plate, a reciprocable element pivotally connected to the ring, and slipper elements operatively connecting the ring and swash plate, the connection between the slipper elements and one of said parts consisting of substantially V-shaped bearing surfaces engaging a substantially V-shaped groove, and the slipper elements having a pivotal connection with the other part engaged thereby.

1,813,967. BEET HARVESTER. CASIMIR SIEMIANA, Bay City, Mich. Filed Mar. 14, 1927. Serial No. 175,052. 5 Claims. (Cl. 55—188.)



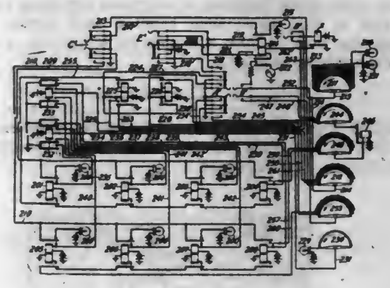
1. In a beet harvester, the combination of a frame, a beet lifting mechanism supported by the frame, a trough in the rear of said lifting mechanism and hingedly connected to the rear end thereof, and adapted to receive the beets, and a conveyor floating in said trough and adapted to deliver the beets to a second conveyor for elevating them to a hopper.

1,813,968. NUT DEVICE. ABRAHAM SIMONS, New York, N. Y. Filed Apr. 19, 1930. Serial No. 445,808. 3 Claims. (Cl. 85—32.)



3. A nut device having a base provided with a tapped opening, said base also having a collar, the internal wall of said collar being radially spaced from the wall of said opening, said collar having a portion whose inner and outer walls are flattened, said base having a substantially planar periphery, and the wall of said collar being yieldable so that said wall can be expanded in order to clamp an object against said periphery.

1,813,969. METHOD AND APPARATUS FOR MEASURING SMALL TIME INTERVALS. EDMUND B. SMITH, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1927. Serial No. 202,278. 15 Claims. (Cl. 175—183.)

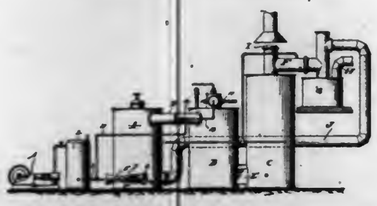


1. The method of measuring an interval of time consisting of oppositely and alternately polarizing a series of differential relays, connecting a source of alternating current successively to the idle windings of the relays, releasing a relay for each reversal of the current, and causing an indication of the number of relays so released, whereby such indication is a measure of the time interval.

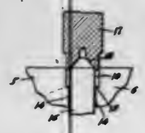
1,813,970. GAS GENERATING APPARATUS. FRANK W. STEERE, Detroit, Mich., assignor to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 21, 1924. Serial No. 700,744. 4 Claims. (Cl. 48—78.)

1. In a water gas generating apparatus, the combination with a generator and means for supplying steam to the generator during the gas making period, of means for supplying all of the air to the generator for the blow-

ing period, which means comprises a pressure device for supplying air under pressure, a storage tank into which air under pressure is delivered by said pressure device, an outlet nozzle through which air from said tank is discharged into said generator to supply air during the blowing period, and said generator having an opening provided with an open outer end in which said nozzle projects and through which atmospheric air is drawn by the action of the air discharged from the nozzle to provide the entire volume of air during the blowing period.

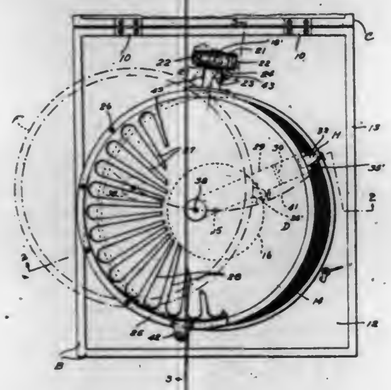


1,813,971. TUBING AND METHOD OF FORMING THE SAME. SAMUEL W. TAYLOR, Detroit, Mich., assignor to Copeland Products Inc., a Corporation of Michigan. Filed July 30, 1928. Serial No. 296,111. 5 Claims. (Cl. 153—79.)



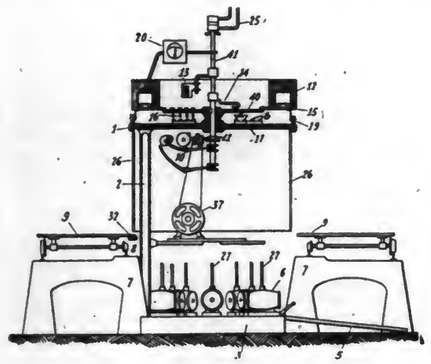
1. The method of forming an attaching end portion on an open ended tube which comprises inwardly tapering an end of said tube, then bending said inward taper within the tube to form a double thickness end, and outwardly tapering said end.

1,813,972. PHONOGRAPH. ADOLPH A. THOMAS, New York, N. Y. Filed June 11, 1926. Serial No. 115,150. 25 Claims. (Cl. 274—16.)



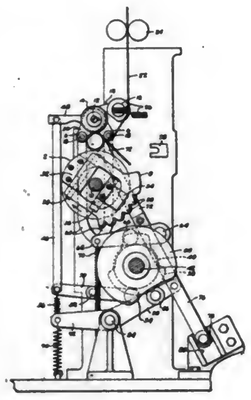
1. A hornless phonograph having a turntable, a substantially horizontal pivoted frame movable horizontally over the turntable, a substantially horizontal loudspeaking diaphragm secured at its edge in said frame and directly open to the free air, the pivot of said frame being so placed that the center of the diaphragm moves substantially over the center of the turntable during the horizontal swinging movements of the diaphragm, a stylus holder pivoted to said frame at the edge thereof so as to be readily accessible, and means mounted on said frame for transmitting the vibrations of said holder to said diaphragm.

1,813,973. DEVICE FOR EVACUATING VACUUM TUBES. GUY THÉODORE THURNEYSSEN, Paris, France. Filed Apr. 5, 1926, Serial No. 99,791, and in France Aug. 11, 1925. 13 Claims. (Cl. 176—2.)



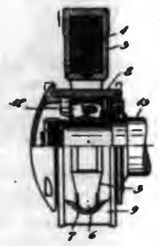
1. A device for evacuating containers and performing a succession of operations thereon comprising a vacuum pump, means for supporting a container in fixed relationship to the pump and means for connecting the container to the pump, a plurality of elements for performing a succession of operations on the container mounted on a common movable member, and means for moving said member intermittently and applying each element to the container in succession.

1,813,974. WRAPPING MACHINE. HARRY E. TOWNSEND, Brooklyn, N. Y. Filed May 3, 1928. Serial No. 274,710. 14 Claims. (Cl. 93—2.)



1. A machine for wrapping a cylindrical article of the class described having, in combination, wrapping rolls for winding a wrapper about the peripheral surface of the article, and devices carried by one of the rolls for tucking in the ends of the wrapper over the ends of the article and for yieldingly pressing the tucked in ends of the wrapper against the ends of the article.

1,813,975. BEARING FOR RAILWAY VEHICLES OR THE LIKE. ADOLF SIXTEN OLOF VON ZWEIGBERGK, Gottenborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Joint-Stock Company. Filed Aug. 22, 1928, Serial No. 301,252, and in Sweden Mar. 31, 1928. 2 Claims. (Cl. 105—224.)



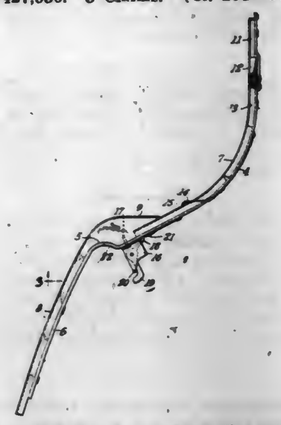
1. A bearing device for railway vehicles comprising a self-adjustable bearing, an axle box enclosing said bearing and adapted to swing about the centre of the bearing, a vertically movable yoke and a spring system connected thereto, said yoke being supported by the said axle box below the centre of the bearing.

1,813,976. TELEMOTOR OPERATED LIQUID DISCHARGE AND ADMISSION VALVE. JOHN WARDLE, Vickerstown, Barrow-in-Furness, England, assignor to Vickers-Armstrongs Limited, Westminster, England, a British Company. Filed Nov. 23, 1928, Serial No. 321,447, and in Great Britain Feb. 3, 1928. 9 Claims. (Cl. 114—125.)



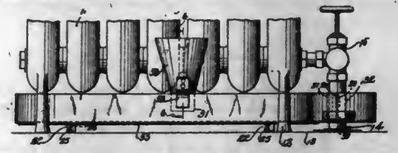
1. In a tank having a telemotor operated Kingston valve of the type having three functional conditions, namely, positively shut, positively open for flooding, and free to open for blowing when the internal air pressure exceeds the external water pressure, a vent-valve having a piston thereon, and means connected with the piston and with the control valve of the telemotor for applying pressure to one end of said piston to thereby open the valve when the control valve is in the "flood" position, and means connected with the piston and with the control valve for applying pressure to the other end of said piston to close the valve when the control member is in the shut or in the blow position.

1,813,977. COIN CHUTE FOR VENDING MACHINES. CHARLES WEBER, Newark, N. J. Filed Feb. 11, 1930. Serial No. 427,586. 3 Claims. (Cl. 194—97.)



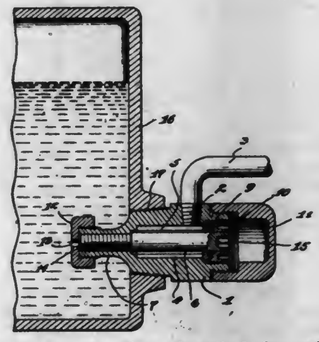
3. A coin chute having an upper portion and an offset lower portion, a hump at the entrance to the lower portion, said chute having an aperture in its base immediately preceding the hump, and a forked lever projecting up into the chute and pivotally mounted on the base thereon at a point preceding the aperture.

1,813,978. EVAPORATOR DRIP PAN FOR RADIATORS. IRVING WEISS, New York, N. Y. Filed May 31, 1930. Serial No. 457,939. 3 Claims. (Cl. 257—124.)



2. In combination with a radiator, and a supply connection therefor, a main drip pan under the radiator, an extension drip pan section co-operating with the main drip pan to take around said connection and collect drippings therefrom, and means to cause the main drip pan and the extension section to have liquid tight engagement with each other.

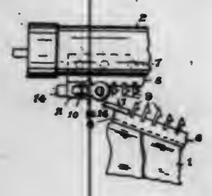
1,813,979. FLOW CONTROL FOR REFRIGERATING SYSTEMS. FRANK R. WEST, Detroit, Mich., assignor to Rice Products, Inc., Detroit, Mich., a Corporation of Michigan. Filed July 8, 1926. Serial No. 121,088. 13 Claims. (Cl. 62—126.)



1. A device of the class described for refrigerating systems, comprising relatively movable elements having

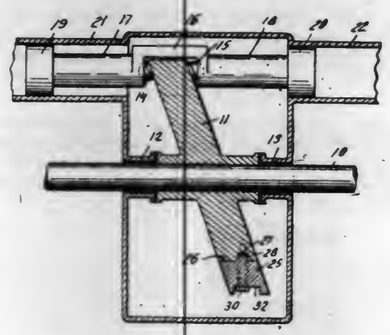
interfitting threaded portions cooperating to form a helical passageway for conducting the refrigerant to the cooling unit, and means for moving one of said elements to vary the length of and resistance to the flow of refrigerant through said passageway.

1,813,980. DETACHABLE WINDOW SHADE. ANNA WILLIAMS, Pittsburgh, Pa. Filed July 29, 1927. Serial No. 209,344. 2 Claims. (Cl. 156—25.)



1. In combination, a connecting device of the character described comprising a pair of supporting strips, a row of clasp hooks being permanently fixed to an edge margin of each of said pair of supporting strips, a slide element mounted on said rows of clasp hooks and shiftable on the latter in opposite directions for respectively interengaging and releasing the clasp hooks of said rows, and elongated connecting arms carried by the adjacent ends of said supporting strips and being longitudinally aligned with the respective rows of clasp hooks for receiving said slide element when the latter is disengaged from said rows of clasp hooks and further for reengaging said slide element with the latter, one of said connecting arms being detachable from said slide element for separating said pair of supporting strips.

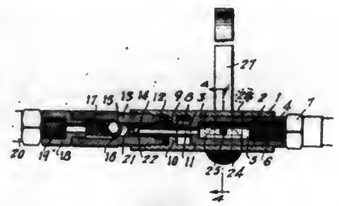
1,813,981. CRANKLESS MECHANISMS. VICTOR R. WILSON, Melbourne, Australia, assignor to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 3, 1929. Serial No. 396,975. 10 Claims. (Cl. 74—14.)



1. In mechanism of the character described, a swash plate having a transverse opening in the peripheral portion thereof and a segment removably secured thereto and closing said opening, said segment extending from one face to the other of said swash plate.

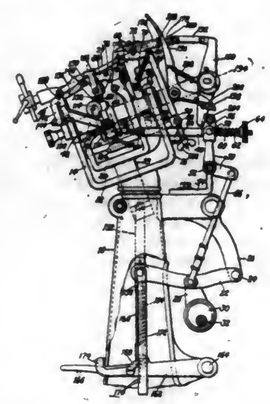
1,813,982. CUT OFF VALVE. JOSEPH W. WOODRUFF, Elizabeth, N. J. Filed Mar. 6, 1929. Serial No. 344,680. 9 Claims. (Cl. 251—8.)

2. A valve device comprising a casing having an inlet port controlled by an outwardly closing valve, a plunger reciprocable in said casing and having an outlet passage communicating at its inner end with said inlet port, said plunger engaging said valve to open the valve as the plunger moves inwardly of the casing and said valve closing as the plunger moves outwardly, said casing having



a recess, a cam engaging opposite side edges of said recess, means pivotally connecting said cam to said plunger, and means for rotating said cam, whereby upon rotation of said cam relative reciprocation of said casing and said plunger is produced to open and close said valve.

1,813,983. MACHINE FOR SHAPING UPPERS OVER LASTS. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 20, 1928, Serial No. 320,564, and in Great Britain Nov. 22, 1927. 71 Claims. (Cl. 12—2.)

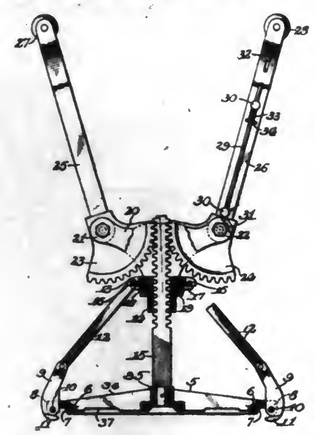


1. In a machine of the class described, grippers for gripping an upper respectively at the toe end and at the opposite sides of a last, means for imparting to said grippers upper-pulling movement heightwise of the last of variable extent depending upon the resistance of the upper to the force of the pull, and means for imparting to the last a lengthwise movement unrestricted by such limitation of the movement of the grippers to cause the grippers to subject the upper to a forward pull.

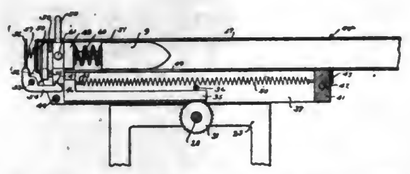
1,813,984. CAN CLOSING MACHINE. STEVENS A. BENNETT, Chicago, Ill. Filed Feb. 25, 1929. Serial No. 342,615. 4 Claims. (Cl. 113—18.)

1. A can closing machine comprising a base adapted to engage with a cam cover, a post mounted in the center of the base and having oppositely disposed racks thereon, a head-block slidably mounted on said post, a plurality of jaws pivoted around the base and adapted to coact therewith for crimping the can covers, links pivoted to the jaws and to the headblock, segmental gears mounted in

the headblock and engaging with the rack, levers secured to said gears, handles on said levers, and a catch coacting with one of said levers and adapted to engage with a stop on the headblock for holding the parts in adjusted position.



1,813,985. TOY. CHARLES C. BLACKMORE, Dayton, Ohio. Filed Oct. 11, 1928. Serial No. 311,735. 6 Claims. (Cl. 124—12.)



6. In a toy gun, a barrel, a plunger in the barrel, means to actuate the plunger to discharge a projectile from the barrel, and an inertia spring in front of the plunger to engage the projectile to be discharged.

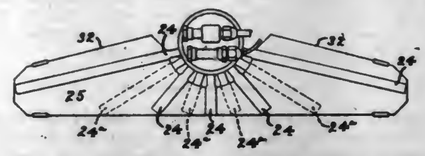
1,813,986. TAKE OFF AND LANDING APPARATUS FOR AIRPLANES. HERBERT J. BREEZE, Chatsworth, Calif. Filed Aug. 12, 1929. Serial No. 385,275. 6 Claims. (Cl. 244—2.)



1. A take-off and landing apparatus for airplanes including a support in the form of a building, an elevated runway pivotally mounted on said support, an inclined moving platform for transferring airplanes from the ground to said runway, and means for turning said runway in an arc so that the airplanes thereon can be faced in the direction from which the wind is blowing.

4. In a take-off and landing apparatus for airplanes, the combination with a building arranged to form a support and having compartments therein for the accommodation of manufacturing industries and persons associated with aerial navigation so as to centralize the industries and people connected therewith, of an elevated runway pivotally mounted above said building, circular endless tracks on said building, pairs of wheels on said tracks for supporting said runway, means for transferring airplanes and people to and from said runway, and means operable from said runway for moving it in an arc for the purpose specified.

1,813,987. REFRIGERATING APPARATUS. JAMES W. CARL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1928. Serial No. 281,610. 4 Claims. (Cl. 62—95.)

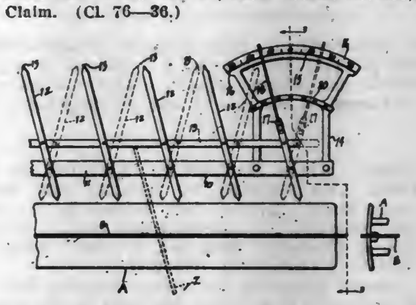


1. A refrigerating element for refrigerating apparatus comprising a header forming a reservoir for liquid refrigerant, transverse fins extending laterally beyond the header and a plurality of sets of conduits connected to the header in parallel circuit relation, the conduits being radially arranged with respect to the header, both sides of each fin being in intimate thermal association with a set of conduits.

1,813,988. PROCESS FOR THE MANUFACTURE OF GROUND WOOD PULP. ALLISON R. CHAMBERS, New Glasgow, Nova Scotia, Canada. Filed Jan. 31, 1929, Serial No. 336,660, and in Canada Jan. 16, 1929. 3 Claims. (Cl. 92—6.)

1. A process of grinding wood pulp which consists in introducing into the grinding magazine a solution of sodium chloride during the grinding operation.

1,813,989. SAW FILER'S GAUGE. ISAAC D. CANTRELL, Dallas, Tex. Filed Mar. 24, 1930. Serial No. 438,475. 1 Claim. (Cl. 76—36.)



In a saw filer's guide, a frame having a segment dial provided with indicia, a plurality of guide fingers pivotally mounted on said frame, an indicator means pivotally mounted on said frame and cooperating with said dial to indicate the angular position of the former, means connecting said indicator means to said fingers so that they move as a unit, said frame having means adapted to hold said indicator means and fingers in any desired position.

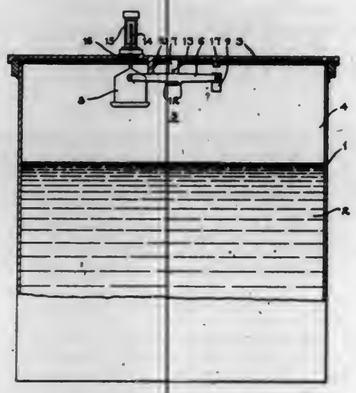
1,813,990. FILM SPOOL. HERMAN A. DE VRY, Chicago, Ill., assignor to Q. R. S.-De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 29, 1927. Serial No. 216,008. 2 Claims. (Cl. 242—70.)



1. A film spool comprising a hub and sides, each of the sides being provided with a shaft opening, one of the

sides having a series of comparatively small tongues projecting into its shaft opening to engage shafts of a predetermined size and center the spool, the marginal or edge portions of said one side between the tongues being concentrically curved to receive a cylindrical shaft having longitudinal grooves therein which interfit with the tongues, or to receive the corners of a polygonal shaft or a projecting key on a cylindrical shaft.

1,813,991. INDICATING DEVICE. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 3, 1922. Serial No. 598,775. 7 Claims. (Cl. 23—252.)



1. In combination, a tank containing an isolated atmosphere, an agent for absorbing a component of said atmosphere and weight-responsive means for indicating a predetermined condition of said absorbing agent.

1,813,992. SELF HARDENING BITUMINOUS CEMENT AND PROCESS OF MAKING THE SAME. DOZIER FINLEY, Berkeley, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Dec. 4, 1926. Serial No. 152,725. 1 Claim. (Cl. 106—31.)

A cement comprising the product resulting from the combination of the following substances in substantially the proportions stated:

660 pounds asphalt
60 pounds asbestos fiber
100 pounds pulverized soapstone
80 pounds infusorial earth
300 pounds sand

and with a softening agent comprising a mixture of (*a*) and (*b*)

(*a*)

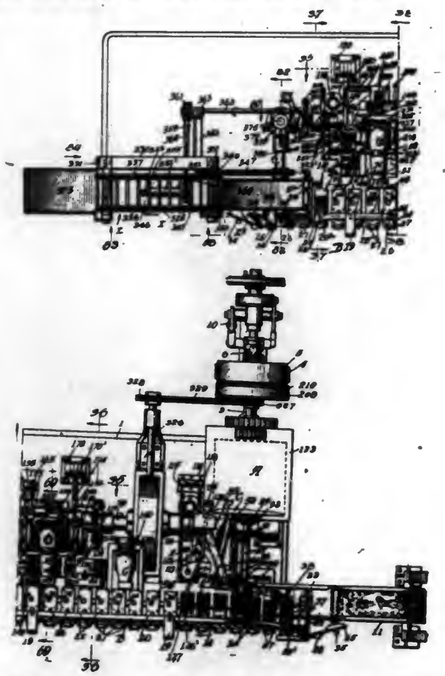
48.8 pounds asphalt
2.9 gallons turpentine substitute
10.7 gallons coal oil

(*b*)

73.1 pounds paraffine wax
3.6 pounds aluminum stearate
9.7 gallons coal oil

1,813,993. MACHINE FOR AND METHOD OF ASSEMBLING SPRINGS. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1926, Serial No. 90,892. Renewed Apr. 8, 1929. 72 Claims. (Cl. 226—18.)

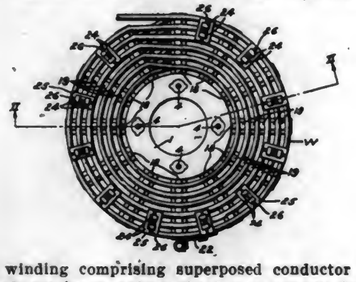
1. In the art of spring assembling, the combination of a support for a two-ply strip of fabric, mechanism for interposing a spring between the plies of said strip, and means for effecting relative movement of the strip and said interposing mechanism lengthwise of the strip.



16. The improvement in the art of manufacturing strips of connected flexible pockets containing individual springs which consists in first interposing the springs in spaced relation between the plies of a two-ply strip of flexible fabric and subsequently connecting together the plies between said springs.

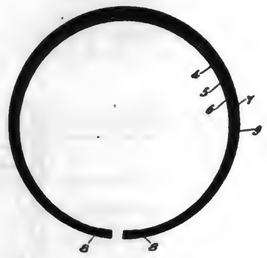
36. In a spring cushion assembling machine, the combination of means for moving endwise a folded fabric strip having an open edge, means for inserting coil springs in spaced relation through said open edge during the movement of said strip, and means for subsequently stitching said strip during the movement of the latter between said springs and along said open edge to form closed pockets wherein said springs are confined.

1,813,994. WINDING AND METHOD OF CONSTRUCTING THE SAME. ROBERT B. GEORGE, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1927. Serial No. 234,385. 6 Claims. (Cl. 175—359.)



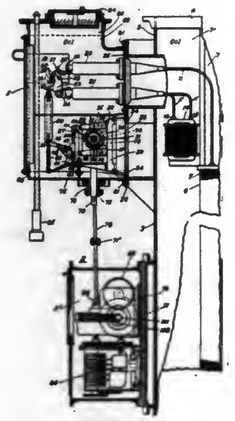
1. A winding comprising superposed conductor layers, apertured spacing members, having apertures in alignment disposed between said layers, and spacers extending through said apertured spacing members and between adjacent convolutions of said layers.

1,813,995. INSULATING JACKET FOR HOT WATER TANKS. LEWIS J. HENTSHAW, College Hill, Ohio, assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Feb. 27, 1924. Serial No. 695,562. 1 Claim. (Cl. 154—44.)



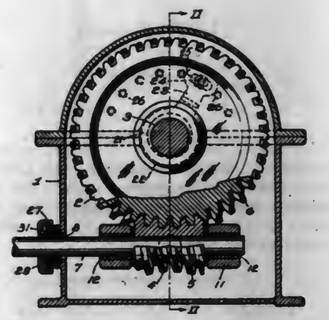
A cylindrical insulating jacket composed of a plurality of plies forming a unit cylinder, a longitudinal opening in said cylinder having continuous walls provided by the edges of said plies, stitching passing through the plies at a point adjacent to but not on the edges of said plies, a flexible waterproof fabric material extending across each of the walls of said opening and overlapping a portion of opposite faces of the jacket to a point beyond the stitching, all so arranged as to provide a reinforced continuous stiffened wall on opposite side of said opening.

1,813,996. EQUIPMENT FOR CHANGING TAPS OF ELECTRICAL APPARATUS. LELAND H. HILL, Collinswood, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 29, 1928. Serial No. 289,193. 6 Claims. (Cl. 175—361.)



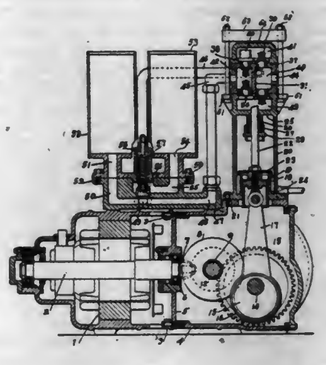
6. In combination, an electrical transformer winding having a plurality of taps, apparatus for electrically connecting and disconnecting said taps in predetermined sequence, said apparatus comprising switches, and means for opening and closing said switches, said means including cams for forcing said switches open in the event of any tendency in them to remain closed.

1,813,997. WORM-GEAR REDUCTION MECHANISMS. WALTER H. HIMES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 22, 1928. Serial No. 301,241. 3 Claims. (Cl. 74—36.)



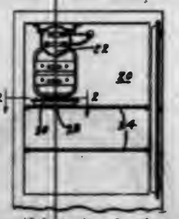
1. A transmission mechanism comprising a worm gear wheel, a worm disposed to mesh with the gear wheel, a bracket for supporting the worm, said bracket being mounted in such manner that it is free to move axially with respect to the gear-wheel and to turn in a plane at right angles to the axis of the gear wheel.

1,813,998. PUMP. EDWARD A. HOBART, Troy, Ohio, assignor to The Hobart Bros. Company, Troy, Ohio, a Corporation of Ohio. Filed Aug. 31, 1928. Serial No. 303,210. 19 Claims. (Cl. 103—42.)



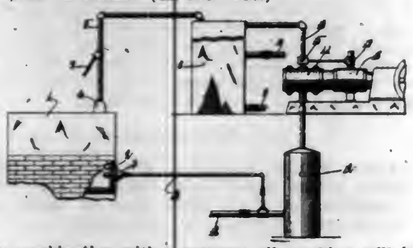
1. In a car washer, an integral structure consisting of a driving motor, a pump crank shaft driven directly therefrom, pump mechanism operated from said crank shaft, a high and low pressure distribution manifold connected to said pump and mounted upon said motor, low pressure and high pressure unitary air chambers mounted on said manifold, valve mechanism carried thereby for placing said low pressure air chamber in communication with the high pressure chamber, delivery means for conveying away the high pressure, and means for recirculating the pressure from the high pressure side through the low pressure side to the pump.

1,813,999. REFRIGERATING APPARATUS. GEORGE P. HOFFERBERTH, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 24, 1930. Serial No. 447,008. 4 Claims. (Cl. 62—1.)



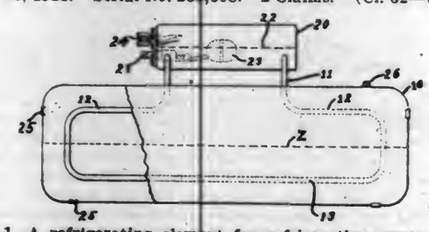
1. A mechanical refrigerator having a cooling device, a drip container having a slideway and adapted to be placed under said cooling device, a shelf for supporting said container, and a member carried by said shelf forming a guideway which cooperates with said slideway for guiding and locating said container.

1,814,000. SYSTEM AND APPARATUS FOR CONTROLLING EXCESS GAS. DAVID H. HUNTER, Dallas, Tex., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 25, 1924. Serial No. 694,919. 1 Claim. (Cl. 196—137.)



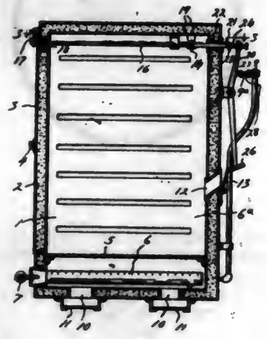
The combination with a pressure oil cracking still having means for permitting the escape therefrom of gases and vapors on development of excess pressures therein, of condensing means to which are delivered all of said gases and vapors on their escape from said still, separator means for receiving said gases and condensed vapors from said condensing means, and means for disposing of all the gases separated including a means for compressing said gases, a supply conduit, said compressing means having its inlet connected with said separator means and its outlet connected with said supply conduit, and a means for usefully employing all the gases supplied thereto connected with said supply conduit, said compressing means being provided with controlling means adapted to handle widely varying quantities of gas and to vary the operation of the compressing means in accordance with the supply of gas.

1,814,001. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1928. Serial No. 281,608. 2 Claims. (Cl. 62—95.)



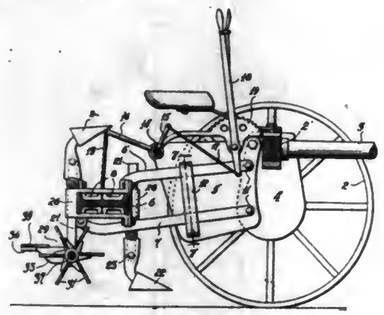
1. A refrigerating element for refrigerating apparatus comprising a header forming a reservoir for liquid refrigerant, a plurality of duct loops for circulating refrigerant depending from the header and connected thereto in parallel circuit relation, and a hollow fin surrounding each duct loop, said fins being adapted to contain liquid circulating medium in intimate thermal association with the ducts.

1,814,002. THERMOSTATIC OVEN CONTROL MECHANISM. AUGUST H. KOHLMEYER and FREDERICK A. KOHLMEYER, Detroit, Mich. Filed Jan. 23, 1928, Serial No. 248,588. Renewed Dec. 9, 1930. 4 Claims. (Cl. 236—15.)



1. In a thermostatic control mechanism, the combination with an oven having openings for the admission and discharge of air, of a burner for heating said oven, means for delivering fuel to said burner, a damper controlling one of said openings and a valve arranged exteriorly of the oven controlling said fuel delivery, a lever pivoted between its ends upon the oven exteriorly thereof, an actuating connection from said lever at one side of its pivot to said damper, an actuating connection from said lever at the other side of its pivot to said valve, a thermostat within the oven subjected to the heat thereof, and a pin slidable in a wall of the oven transmitting control from said thermostat to said lever.

1,814,003. GANG PLOW. HARRY O. LOWN, San Angelo, Tex. Filed Mar. 10, 1930. Serial No. 434,557. 2 Claims. (Cl. 55—61.)



1. A plow of the character described consisting of a wheeled framework having an I-beam suspended in transverse relation to the framework; means for pivoting said I beam to the framework to allow the I beam to oscillate on uneven ground, a plurality of plows mounted on the I beam, each plow having an individual slidable connection to the I beam horizontally and vertically of the beam; means for inverting the plows on the I beam and means for attaching a stalk cutter to the inverted plow shanks in units.

1,814,004. TROLLEY FROG. ROBERT H. MCCAFFERTY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,344. 7 Claims. (Cl. 191—38.)



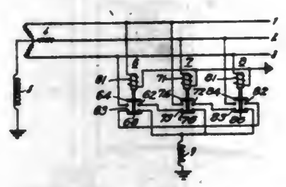
1. In a trolley frog, in combination, a trolley pan, an anchor plate for supporting the trolley pan, means for detachably securing a trolley wire on top of the anchor plate, and means for interlocking the anchor plate and trolley pan together to prevent relative movement thereof.

1,814,005. PROCESS FOR MANUFACTURING OLIVE OIL. EDGAR T. MEAKIN, Berkeley, Calif. Filed Dec. 14, 1925. Serial No. 75,435. 12 Claims. (Cl. 87—6.)

1. The process of extracting oils from olives which comprises the steps of reducing the constitutents of the meat of the olive to a colloidal suspension of finely divided solid constituents in an emulsion of the oil and water contained therein; and separating the suspended solid content from the emulsion, and the oil from the water.

3. The steps in the process of extracting oil from olives which comprises reducing the same to a mass of skin, pits, and crushed meat; separating the skins and pits from the crushed meat; and reducing the crushed meat to a colloidal suspension of the solid content thereof in the natural liquid content thereof.

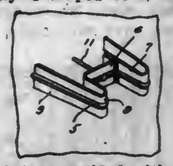
1,814,006. MEANS FOR SUPPRESSING GROUND CURRENTS. GERHART MEYER, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 28, 1929, Serial No. 374,349, and in Germany July 3, 1928. 8 Claims. (Cl. 175—294.)



1. In a high tension system, an inductance connected between the neutral point of said system and ground and so dimensioned that in case of accidental grounding of one line the ground capacities of the sound lines are undercompensated, a second inductance, and means adapted to connect said second inductance between a sound line and ground, said second inductance so dimensioned, that the ground capacity of the sound line to which said second inductance is connected is overcompensated to the same extent as the other sound line is undercompensated, the value of the undercompensation or overcompensation being so chosen that the current resulting from the capacitive and inductive ground currents is equal and opposite to the line charging residual ground current.

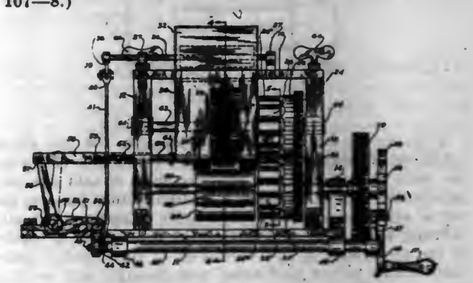
1,814,007. CHAIR FOR CONCRETE REENFORCEMENT STIRRUPS. ANDY L. NEELY and WILLIAM TOLLE, San Antonio, Tex. Filed Apr. 11, 1930. Serial No. 443,498. 1 Claim. (Cl. 72—122.)

A chair for supporting and spacing the vertical legs of a stirrup used in reinforced concrete beam construction comprising a strip of metal provided with a longitudinally extending strengthening rib, said metal being bent to provide a substantially U-shaped seat, and the rib at the



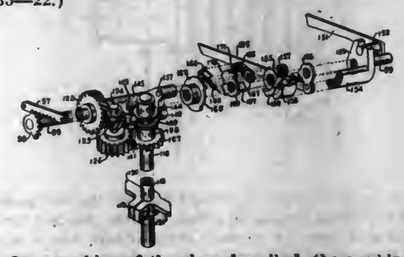
bight of said seat being provided with an opening for receiving a fastener for securing the chair in rigid position on a wall of the form.

1,814,008. CANDY MACHINE. FRED PARNELL, Medicine Hat, Alberta, Canada. Filed Dec. 12, 1929, Serial No. 413,589, and in Canada Aug. 6, 1929. 3 Claims. (Cl. 107—8.)



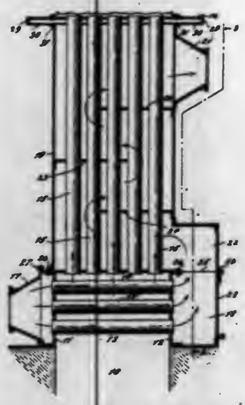
1. A candy machine including a supporting frame structure; a main rock shaft mounted in said supporting frame structure; a second rock shaft mounted in said supporting frame structure at right angles to the first mentioned rock shaft; a pair of drums having mould sections adapted to register for producing successive complete candy moulds; operating means for said drums; an automatic feed mechanism for feeding handles to position opposite said moulds; link connections between said rock shafts; means actuated by the drum operating means to rock said main rock shaft as each successive complete mould is produced by registration of the mould sections of said drums; and reciprocating means actuated by the second rock shaft to force a handle from said automatic feed mechanism into each complete mould as the latter is produced.

1,814,009. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Sept. 20, 1928. Serial No. 307,180. 7 Claims. (Cl. 335—22.)



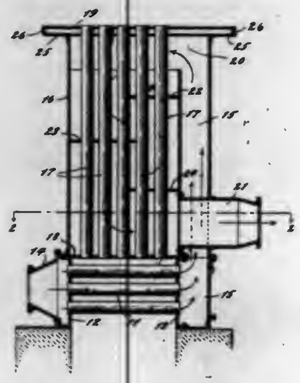
1. In a machine of the class described, the combination with a plurality of normally inaccessible drawers; means to select a drawer for operation; means to shift the selecting means to release the selected drawer; and a drive means for the shifting means; of a coupling interposed between the drive means and the shifting means; and means controlled by the selecting means to determine whether the coupling shall be effective or ineffective.

1,814,010. AIR HEATER. NORMAN L. SNOW, New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 27, 1925, Serial No. 12,107. Renewed Feb. 7, 1931. 21 Claims. (Cl 257—166.)



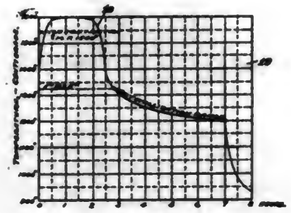
4. In an air heater, a vertical flue for the hot gases, a first set of tubes extending across the flue, tube plates for the ends of said tubes on opposite sides of said flue and outside the wall of said flue, a horizontal tube plate at the top of said flue, a second set of tubes extending vertically through and above said horizontal tube plate, a header at the upper ends of said second set of tubes and a casing surrounding all of said tubes and forming said vertical flue and also flues to conduct air from the interiors of the tubes of said first set to and over the exterior of the tubes of said second set.

1,814,011. AIR HEATER. NORMAN L. SNOW, Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 27, 1925, Serial No. 12,108. Renewed Oct. 9, 1930. 12 Claims. (Cl. 257—220.)



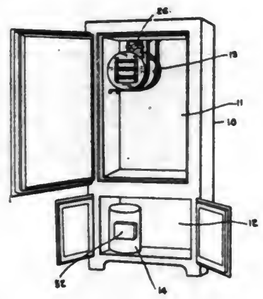
3. In an air heater, a vertical flue for the hot gases, a first set of tubes extending across the flue, headers for the ends of said tubes on opposite sides of said flue, a second set of tubes above said vertical flue and arranged vertically to receive and conduct hot gases from said vertical flue after the gases have passed over the exteriors of the tubes of said first set, headers for said second set of tubes, an air flue surrounding said second set of tubes, a duct to lead air from said first set of tubes to the upper portion of said air flue, and an air exit at the lower part of said air flue.

1,814,012. PROCESS OF MAKING ARTIFICIAL GRANITE. HOWARD B. TAFT, Wilkinsburg, Pa., assignor of one-half to Norris M. Wellman, Pittsburgh, Pa. Filed Oct. 31, 1929. Serial No. 403,661. 5 Claims. (Cl. 49—79.)



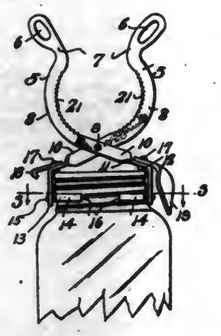
2. In a process of making artificial granite, first charging a quantity of pulverized natural granite into a crucible, and raising the temperature to a point above its melting point; pouring the molten mass into molds of desired form and cooling the granite to a point of solidification; placing the granite article formed in the mold within a lehr, and raising the temperature to a point within the crystallization temperature range of the granite; and then annealing the article for such a period of time, within said crystallization temperature range, as will thoroughly crystallize the structure of the granite article, and form a granite of substantially similar physical and visual characteristics to those of the natural mineral.

1,814,013. REFRIGERATOR CONTROL MECHANISM. MATSON C. TERRY, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 21, 1927. Serial No. 169,895. 4 Claims. (Cl. 62—4.)



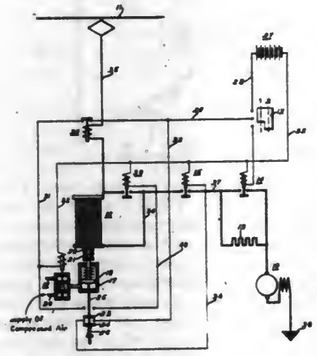
1. The combination with a refrigerating machine having a compressor, a motor for driving the compressor, a fluid tight casing enclosing the motor, a condenser, a fan for circulating air over the condenser, a motor for driving the fan, both the compressor motor and the fan motor being provided with starting and running windings connected in parallel with the source of electrical energy, and control means for automatically opening and closing the circuit between the motors and the source of electrical energy, of a switch disposed outside of the compressor motor casing for opening or closing the circuit through the starting windings of both the fan motor and the compressor motor, and an electromagnet for actuating said switch, said electromagnet being energized by the flow of current created upon the closing of the circuit between the source of electrical energy and the windings of both motors by the automatic control means.

1,814,014. GRIPPING TOOL FOR JARS. STEVEN VITALI, Plains, Pa. Filed Sept. 18, 1930. Serial No. 482,724. 1 Claim. (Cl. 7—1.)



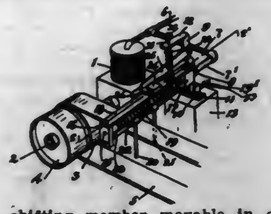
A tool for interchangeably grasping a jar by the end to lift it endwise or to clamp it transversely as for screwing or unscrewing a cap, comprising a pair of handle parts pivoted together intermediate their ends having hand-grip portions at one end, being thence outwardly curved from each other so as to enclose a jar transversely when the hand-grip portions are brought together, the handle parts being pivoted to each other beyond these curved portions, thence diverging sharply and having their free ends bent back substantially into parallelism and having transverse curved jaws to engage the end of the jar with the handles in line with the jar.

1,814,015. CONTROL SYSTEM. CHARLES C. WHITTAKER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 27, 1929. Serial No. 366,425. 4 Claims. (Cl. 172—179.)



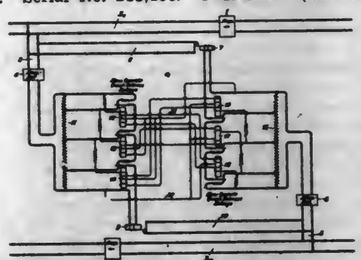
1. In a switching system for controlling the circuit connections between a translating device and a source of power, in combination, a switch disposed to connect the translating device to the source of power to establish a work circuit, a carbon-pile resistor connected in circuit relation with the translating device, means for applying pressure to the carbon pile to vary its resistance, means carried by the pressure-applying means and disposed to control the operation of the line switch in a definite time relation to the operation of the pressure-applying means, the means for controlling the application of pressure to the carbon pile to vary the resistance being disposed, relative to the line-switch actuating means, to provide for the introduction of resistance into the work circuit before the line switch is actuated to interrupt the circuit.

1,814,016. DRIVING BELT CONTROLLING DEVICE. AUGUST P. WINTER, Winnipeg, Manitoba, Canada. Filed Jan. 10, 1929. Serial No. 331,645. 6 Claims. (Cl. 64—4.)



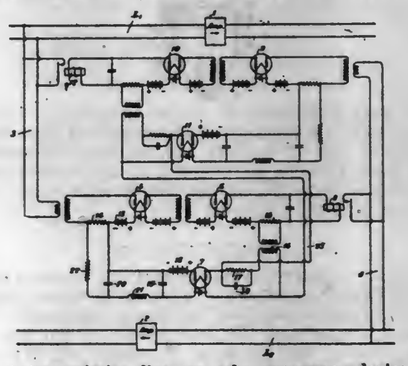
1. A belt shifting member movable in one direction against a mechanical pressure under a rising fluid pressure and movable in the reverse direction under the mechanical pressure upon the lowering of the fluid pressure and a yielding obstruction opposing the movement of the belt shifting member and controlling the variation of fluid pressure permitted.

1,814,017. MEANS FOR CONTROLLING SENSITIVITY OF VOICE OPERATED DEVICES. SUMNER B. WRIGHT, South Orange, N. J., and DOREN MITCHELL, New York, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed June 6, 1928. Serial No. 283,406. 5 Claims. (Cl. 178—44.)



1. In association with a transmission line, apparatus responsive to voice currents in said line, and means associated therewith and responsive to alternating currents of comparatively slow variations of amplitude in said line for controlling the sensitivity of said voice current responsive apparatus.

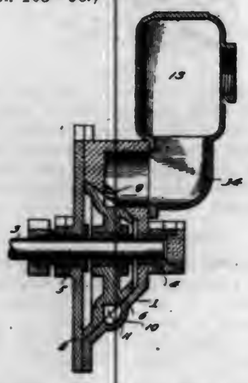
1,814,018. MEANS FOR CONTROLLING SENSITIVITY OF VOICE OPERATED DEVICES. SUMNER B. WRIGHT, South Orange, N. J., and DOREN MITCHELL, New York, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed June 6, 1928. Serial No. 283,407. 3 Claims. (Cl. 179—170.)



1. A transmission line, an echo suppressor device associated therewith, and a device in said line for control-

ling the operation of said echo suppressor device, said control device comprising a vacuum tube arrangement having the threshold of operation affected solely in proportion to the amount of input current applied thereto in a comparatively steady state.

1,814,019. TURBINE PUMP. EMANUEL YOSS, Richmond, Va. Filed July 28, 1928. Serial No. 295,989. 5 Claims. (Cl. 103—96.)



1. A pump of the class described comprising a casing having a frusto-conical chamber therein, an impeller of frusto-conical shape located in the chamber, said impeller having a concentric groove in its peripheral part, blades in the groove forming pockets, said groove being of substantially triangular shape in cross section with one wall parallel with the axis of the impeller and the other at rightangles to the axis, the internal wall of the casing having a concentrically arranged groove therein of substantially semi-elliptical shape in cross section opposite and in communication with the groove in the impeller, inlet and outlet chambers with which the ends of the groove in the casing are in communication, said chambers being arranged parallel with each other and with the axis of the device and of cylindrical formation, the intersection of the groove in the casing with the inlet and outlet chambers forming elliptical shaped ports which place said chambers in communication with the groove whereby the blades will enter the chambers and act on the fluid therein.

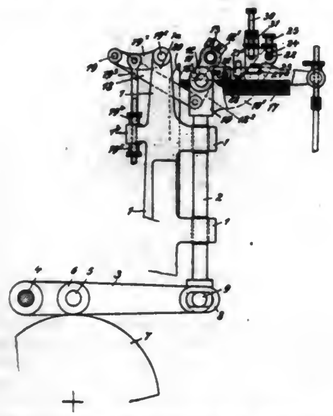
1,814,020. SPRAY ATTACHMENT FOR FAUCETS. LEONARD J. ARMSTRONG, Mariners Harbor, N. Y. Filed Nov. 8, 1929. Serial No. 405,708. 1 Claim. (Cl. 299—153.)



A spray attachment for faucets comprising a hollow body having a downwardly tapered lower end which forms the outlet end of the body and means for partitioning said tapered portion for forming a number of downwardly tapering passages of elongated form in cross section with narrow elongated outlet ends.

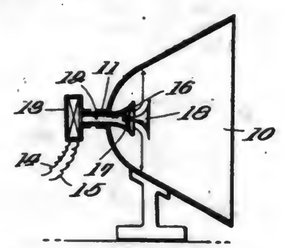
1,814,021. SHEET LAYING-ON DEVICE. ARTHUR BÜTTNER, Heidelberg, Germany, assignor to Schnellpressenfabrik Aktiengesellschaft Heidelberg, Heidelberg, Germany. Filed Sept. 10, 1929, Serial No. 391,639, and in Germany Aug. 28, 1929. 5 Claims. (Cl. 271—20.)

1. A sheet laying-on device, especially for use in connection with printing presses, comprising, in combination with the table supporting the pile of sheets, aligning abutments provided at said table, and vertically reciprocating means for conveying the uppermost sheet to the place of use, means for shifting this sheet towards and against said abutment members prior to the action of the convey-



ing means, these means comprising a vertically movable pusher so arranged as to be adapted to be moved in a plane standing obliquely with respect to the two middle axes of the uppermost sheet, and to contact with, and shift thereafter, said sheet.

1,814,022. SOUND AMPLIFYING DEVICE. ELMER F. CASSEL, Washington, D. C. Filed Mar. 7, 1925. Serial No. 13,803. 17 Claims. (Cl. 181—27.)

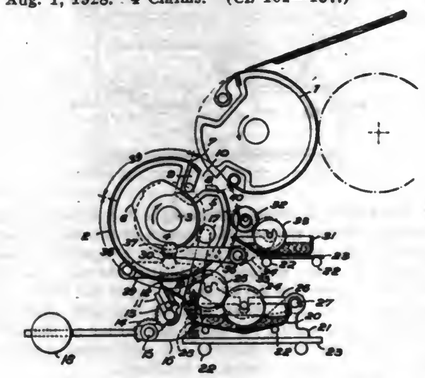


1. A sound producing device comprising a sound reflecting surface enclosing a space which is open to the atmosphere at one end, said surface having an approximate focal point located within said space, means in the other end of said space and concentrically supported therein for delivering sound waves into said space at a position corresponding to the said approximate focal point, and sound intercepting means also located within said space and separated from said sound reflecting surface, so that it will intercept sound waves introduced into said space by said sound wave delivering means, said reflecting surface being shaped to divert and distribute the intercepted sound waves in an outward direction toward said sound reflecting surface.

1,814,023. PROCESS FOR THE RECOVERY OF CADMIUM FROM COMPOUNDS OF CADMIUM AND OXYGEN BY DISTILLATION. CONWAY BARON VON GIERSWALD, Frankfort-on-the-Main, and HANS NEUMARK, Wetzlar, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 11, 1930, Serial No. 481,340, and in France Oct. 24, 1929. 11 Claims. (Cl. 75—17.)

1. A process for the recovery of cadmium, which comprises heating substances containing cadmium-oxygen compounds with reducing metals in vacuo, at temperatures not substantially exceeding the distillation temperature of cadmium and collecting the cadmium distilling over.

1,814,024. APPARATUS FOR REMOVING ANY INK REMAINS FROM THE PRINTING PLATE OF THE FORM CYLINDER OF ROTARY INTAGLIO PRINTING MACHINES. KARL DEBUS, Berlin-Waidmannslust, Germany, assignor to Berliner Maschinenbau-Actien-Gesellschaft vormals L. Schwartzkopff, Berlin, Germany. Filed May 20, 1930, Serial No. 454,065, and in Germany Aug. 1, 1928. 4 Claims. (Cl. 101—157.)

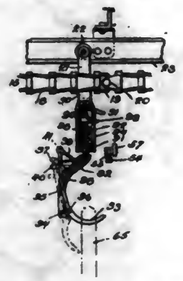


1. Apparatus for removing any ink remains from the printing plate of the form cylinder of a rotary intaglio printing machine, comprising a scraper knife to be applied on the printing plate in combination with means for moistening the printing plate in front of the part serving as the picture printing surface with an ink diluting medium for the purpose of enabling the scraper knife to be applied also on parts of the printing plate not inked.

1,814,025. PROCESS OF MAKING KETONES OF THE BENZOPHENONE TYPE. GREGG DOUGHERTY, Princeton, N. J., assignor to E. C. Klipstein & Sons Company, New York, N. Y., a Corporation of New Jersey. Filed June 28, 1927. Serial No. 202,161. 20 Claims. (Cl. 260—64.)

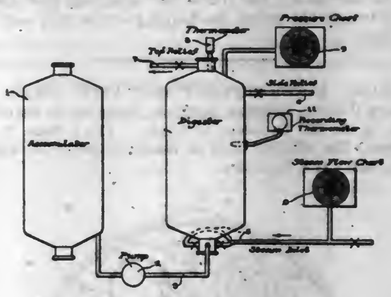
1. The process of producing ketones of the benzophenone type which comprises heating a benzoyl-benzoic acid to a temperature sufficiently high to cause liberation of carbon dioxide and formation of the desired ketone.

1,814,026. CONVEYER SYSTEM. LLOYD H. DRAEGER, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed May 27, 1927, Serial No. 194,750. Divided and this application filed July 28, 1928. Serial No. 295,953. 6 Claims. (Cl. 209—121.)



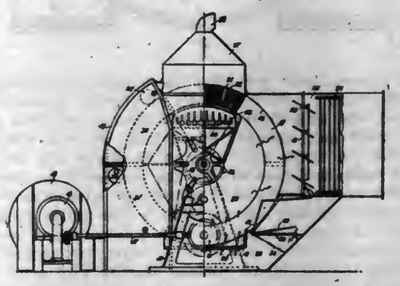
5. In a conveyer system, an endless conveyer of the suspended trolley type, including a flexible power transmitting element and trolleys arranged to travel along a stationary track; individual carriers for the articles being transported, the carrier being yieldingly suspended directly from said trolleys, whereby they occupy different positions according to the different weights of the loads they carry; trip means carried by the carriers and movable therewith as the carriers move due to the weights of the loads they carry; receiving stations for articles of different weights; and means at the receiving stations for causing release of the loads transported, arranged to act upon the trip devices of the carriers, the releasing means being located at different levels at the different stations, whereby only carriers with loads of determined weight will be tripped to discharge their loads at the desired stations.

1,814,027. SYSTEM FOR COOKING FIBROUS MATERIAL. THOMAS LEONIDAS DUNBAR, Watertown, N. Y. Filed Aug. 1, 1929. Serial No. 382,801. 16 Claims. (Cl. 92—11.)



1. In the digestion of fibrous material with acid liquor, initially subjecting the fibrous material in a digester to hot acid liquor under pressure, and afterwards intermittently admitting steam to the digester and thus causing the pressure therein to build up step by step.

1,814,028. SURFACE CONDITIONER. HULDREICH EGLI, Baltimore, Md. Filed Dec. 20, 1926. Serial No. 156,058. 17 Claims. (Cl. 183—4.)

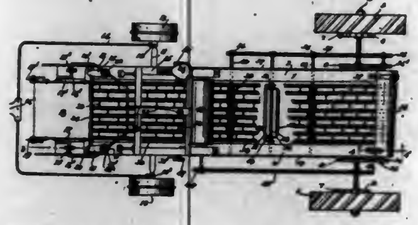


1. In a fluid medium conditioner the combination of a housing provided with an intake port, a by-pass port, a discharge port, means for controlling said ports, a movable carrier for a modifying medium, and means for positively and automatically bringing portions of said carrier into the path of the medium being modified.

1,814,029. COMBINED WEEDER AND CULTIVATOR. WILLIAM JOHN FREE, Neepawa, Manitoba, Canada. Filed Apr. 17, 1929. Serial No. 355,917. 7 Claims. (Cl. 97—10.)

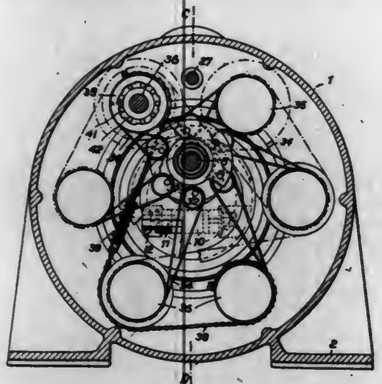
1. In a combined weeder and cultivator, a portable frame, an adjustable ground engaging shovel located at

the forward end of the frame, driven conveyors carried by the frame and adapted to receive the earth dug by the shovel and direct the same rearwardly, said conveyors being constructed to permit the earth to fall through and



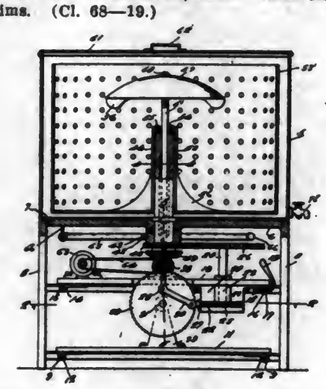
the weeds to be carried back thereby, means carried by the frame for crushing the earth as it moves backwardly and means carried by the frame for collecting and discharging laterally the weeds discharging at the rear end of the machine.

1,814,030. INTERMITTENT ACTUATING GEAR. HERBERT FÜSSEL, Dresden, Germany, assignor to Getriebebau G. m. b. H., Dresden, Germany. Filed June 7, 1930, Serial No. 459,725, and in Germany Sept. 25, 1928. 6 Claims. (Cl. 74—55.)



1. Intermittent actuating mechanism, comprising in combination, a driving shaft, rotational members connected with said shaft, eccentric discs carrying an eccentric shaft and mounted eccentrically in said rotational members, a worm gear adapted to rotate said eccentric discs inside said members for the purpose of setting up a relative radial displacement between the axes of said eccentric shaft and said driving shaft, a cone pinion connected with said worm and gearing with a crown wheel mounted concentrically with said driving shaft, but rotatable in relation thereto, planet pinions gearing with said crown wheel, a second ring of planet wheels rotating in common with the first mentioned planet pinions, a stationary crown wheel gearing with the second-mentioned planet wheels, a toothed crown connected with said driving shaft and also gearing with the second-mentioned planet wheels, a crown wheel adapted to be turned by means of a hand wheel and meshing with another crown wheel, gearing with the first-mentioned pinions, both of these two last mentioned crown wheels remaining stationary during the rotation of the eccentric, flexible traction members, means connecting said discs with said flexible traction members and exerting a tractive effort on said traction members, discs around which said flexible traction members are laid, intermittently rotated intermediate shafts adapted to be coupled with said second-mentioned discs and a driven shaft actuated through the agency of said intermediate shafts.

1,814,031. LAUNDRY MACHINE. RAYMOND C. GLEAVES, Orlando, Fla. Filed Oct. 21, 1929. Serial No. 401,197. 3 Claims. (Cl. 68—19.)



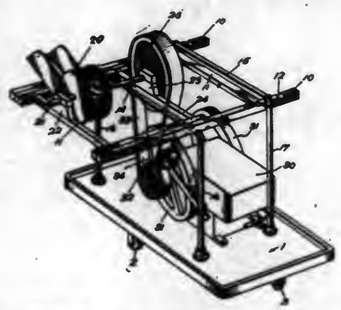
1. A washing machine comprising a tub, a barrel shaft rotatably disposed through the bottom of the tub, a basket secured to the said barrel shaft and adapted to rotate therewith, a shaft disposed vertically through the said barrel shaft, a suction device on the upper end of the said shaft, means at the lower end of the said shaft for vertically reciprocating the same, and means at the lower end of the barrel shaft whereby the said barrel shaft and basket may be either rotated or oscillated.

1,814,032. METALLIC BALL-HEAD HINGE FOR NON-METALLIC SPECTACLE-FRAMES. HEINRICH HAASE, Rathenow, Germany. Filed July 3, 1928, Serial No. 290,163, and in Germany Nov. 8, 1927. 1 Claim. (Cl. 88—53.)



A metallic hinge for non-metallic and recessed spectacle frames comprising a hinge member; and a dish-shaped elastic plate secured to the hinge member having radial projecting members adapted to be laterally forced into the recess of the frame of the spectacle whereby due to the elasticity of the plate the dish shape will become flat shaped to firmly secure the hinge by means of the projecting members in and to the frame.

1,814,033. APPARATUS FOR USE IN MILLING CURD. RALPH W. HARRIS, Canandea, N. Y. Filed Oct. 15, 1924. Serial No. 743,803. 2 Claims. (Cl. 31—48.)

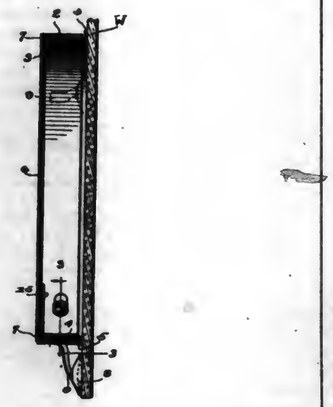


1. An apparatus for milling curd in the making of cheese, comprising a low hung wheeled truck, supporting

means carried by the truck, well above the floor of the truck, extending laterally from the truck in a direction substantially at right angles to the path of travel of the wheels, a curd mill supported at the outer end of said supporting means to overhang a curd sink, and a power operated mechanism, connected to drive the curd mill and placed on the floor of the truck so as to counterbalance the weight of the overhanging curd mill, whereby the curd mill may be moved freely along the curd sink as it mills the curd.

2. An apparatus for milling curd in the making of cheese, comprising a low hung wheeled truck, a pair of horizontally extending substantially parallel supporting members supported well above the floor of the truck and extending in the direction of travel of the wheels of the truck, a pair of horizontally extending arms for supporting a curd mill, engageable over and under said supporting members and extending laterally from the truck in a direction substantially at right angles to the direction of travel of the wheels, the arms being readily detachable from the supporting members by lifting on outer ends of the arms, a curd mill carried at the outer ends of the arms in an overhanging position at the side of the truck, and a power operated mechanism, connected to drive the curd mill and placed on the floor of the truck, to counterbalance the effect of the laterally overhanging curd mill.

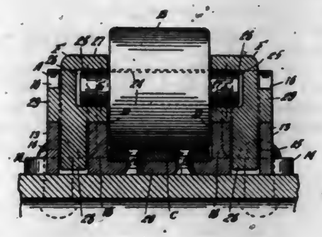
1,814,034. WINDSHIELD PROTECTOR. CLIVE E. HARTMAN, Alliance, Nebr. Filed Jan. 15, 1929. Serial No. 332,575. 1 Claim. (Cl. 20—40.5.)



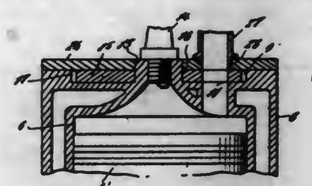
A windshield protector comprising a glazed casing consisting of a pair of bands having a liner clamped therebetween and protruding at one edge of the casing, a heating element situated in the bands and liner and a pair of terminals insulated from and transfixing the casing both to support said element and hold the bands and liner together.

1,814,035. ANTIFRICTION BEARING. STACY B. HASELTINE, Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., a Corporation of Delaware. Filed Nov. 19, 1924. Serial No. 750,757. 8 Claims. (Cl. 308—226.)

1. In an anti-friction bearing, the combination with a mounting adapted to be secured to the truck bolster of a vehicle; of an anti-friction element adapted to have limited bearing contact with respect to said mounting; means associated with said mounting providing independent bearing surfaces; supporting means movable with said element and adapted to have rolling engagement with said bearing surfaces and operating to support said anti-friction element for rotation about its axis beyond the limits of its said bearing contact; and centering means secured to said supporting means, in the form of counterweights which in normal balanced condition are disposed centrally with reference to said mounting, said counter-weights being unbalanced dependent upon rolling movement of said supporting means.



1,814,036. ROTARY VALVE FOR INTERNAL COMBUSTION ENGINES. CARL F. HAWK, Bellevue, Ohio. Filed July 10, 1929. Serial No. 377,130. 4 Claims. (Cl. 123—59.)

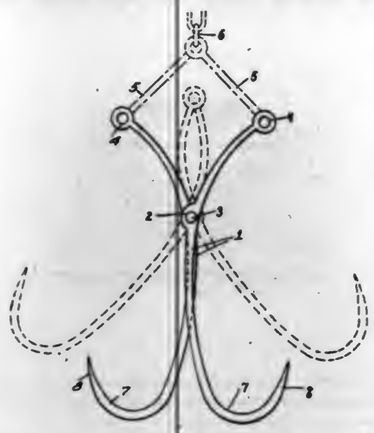


1. An internal combustion engine comprising in combination, a head including a plurality of recesses formed therein, said recesses being arranged in pairs, the recesses of the respective pairs intercommunicating, said recesses respectively provided with a tubular part adapted to support therein a spark plug for supporting the latter in operative position to the combustion chambers of the internal combustion engine, a rotary disc valve arranged in each of said recesses, said valve having an opening for accommodating said tubular spark plug supporting member, each of said recesses being provided with an intake and exhaust port, each of said valves provided with an intake and an exhaust port for registering with the first mentioned port, said valves having teeth formed on the peripheries thereof, the valves of the respective pairs adapted to mesh one with the other, a connecting gear with one valve of each pair for transmitting movement from one pair of valves to the other pair of valves, and gearing meshing with the other valve of said one pair of valves for rotating said valves.

1,814,037. EXPANDING GRAPPLE. EDSON H. HAZEN and GEORGE P. WELLINGTON, East Jaffrey, N. H. Filed Apr. 11, 1930. Serial No. 443,507. 1 Claim. (Cl. 43—58.)

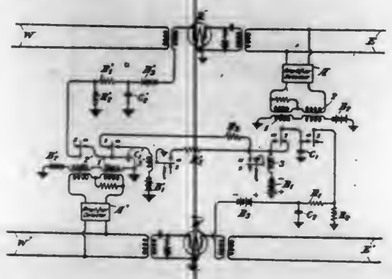
A grapple for the purpose set forth, comprising two similarly constructed oppositely arched bars having lapping portions pivotally connected and having one of their rounded ends merging into eyes, to be engaged by flexible

elements attached to the chain of a trap, the opposite ends of the bars being formed with outwardly extending



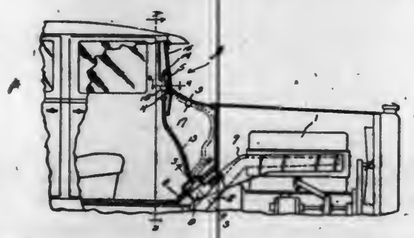
hooks having beak ends disposed at opposite curvatures with respect to the longitudinal planes of the bars and directed toward the eye ends of the bars.

1,814,038. ECHO SUPPRESSOR. JOSEPH HERMAN, Westfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 10, 1928. Serial No. 298,720. 6 Claims. (Cl. 178—44.)



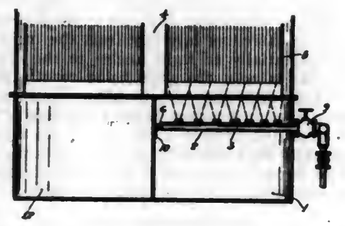
1. A transmission line, an echo suppressor device associated therewith, and means controlled by speech currents transmitted over said line for increasing the sensitivity of said device.

1,814,039. ATTACHMENT FOR MOTOR VEHICLES. CHARLES E. HEYDON, Jr., Naperville, Ill. Filed Mar. 10, 1930. Serial No. 434,623. 3 Claims. (Cl. 20—40.5.)



1. An attachment for an automobile having a radiator structure, means for supplying heated air thereto, a flexible hot air discharge extending from the radiator structure, a discharge nozzle carried by the free end of the conduit, clip means for removably supporting the nozzle adjacent the windshield of the automobile for directing a blast of heated air against the inner face of the windshield panel, and clip means for removably securing the nozzle in an inoperative position beneath the cowl of the automobile.

1,814,040. STEAM CLEANER FOR PREHEATERS. THURE GUSTAF HÖGLUND, Stockholm, Sweden, assignor to Aktiebolaget Superior, Stockholm, Sweden. Filed Nov. 15, 1927, Serial No. 233,456, and in Sweden Oct. 27, 1925. 1 Claim. (Cl. 257—6.)



Soot blowing apparatus of the class described, comprising a revoluble element having vertically arranged heat transmitting plates mounted thereon and carried thereby, and a fixed steam tube located below and disposed substantially radially with reference to said revoluble element, said tube having nozzles arranged to discharge jets of steam upwardly against and between the plates, said nozzles having such a shape as to emit a substantially fan shaped steam jet, and said nozzles being so spaced relatively to each other and so disposed relatively to the radial direction of said steam tube that the emitted steam jets are at an angle to said radial direction and overlap each other in said radial direction without touching each other.

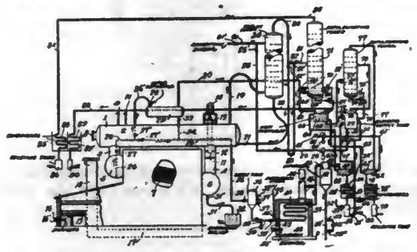
1,814,041. SOLDERING IRON. EDWARD JACOBSON, Winnipeg, Manitoba, Canada. Filed Apr. 8, 1930. Serial No. 442,671. 5 Claims. (Cl. 113—109.)



1. In a soldering iron, a handle having contained therein a magazine for receiving pellets of solder, a trough shaped member underlying the magazine and passing lengthwise within the handle, a pointed iron carried by the forward end of the handle, there being a pellet passage leading from the point of the iron and communicating with the forward end of the trough shaped member, manually actuated means permitting a predetermined number of pellets to escape from the magazine and enter the trough and manually actuated means for feeding the pellets one at a time through the passage to the pointed end of the iron.

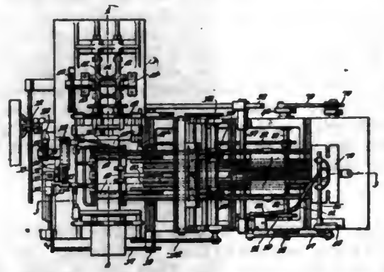
1,814,042. PROCESS FOR TRANSFORMATION OF PETROLEUM HYDROCARBONS INTO GASOLINE. ULYSSES S. JENKINS, Chicago, Ill., assignor to Jenkins Petroleum Process Company, Chicago, Ill., a Corporation of Wisconsin. Filed Nov. 16, 1928. Serial No. 319,923. 9 Claims. (Cl. 196—49.)

1. A process for producing a dry and frangible coal-like substance which includes the steps of withdrawing an intimate mixture of degraded liquid petroleum hydrocarbons with an adsorptive binder of ash-forming content from a body of hydrocarbon oils undergoing cracking; flashing and conducting off a portion of the volatile constituents of said mixture; heating the residue for a time inhibitive of substantial cracking under less pressure than the pressure on the body of hydrocarbon oils undergoing cracking



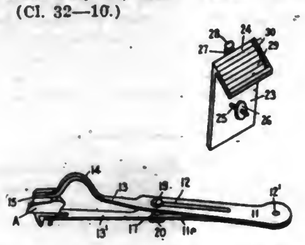
from which the degraded liquid petroleum hydrocarbons are withdrawn; and finally releasing the pressure on said residue to such an extent as to vaporize by its contained heat sufficient of the remaining volatile liquid constituents as to leave a fluid residual product which solidifies at atmospheric temperatures to form the aforesaid coal-like substance.

1,814,043. MACHINE FOR MAKING BOXES. FRANK M. JOSLIN, Amsterdam, N. Y., assignor to Inman Manufacturing Company, Inc., Amsterdam, N. Y., a Corporation of New York. Filed Apr. 11, 1929. Serial No. 354,353. 26 Claims. (Cl. 93—51.)



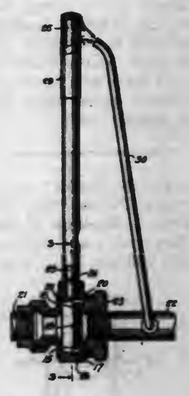
1. In a machine of the kind described, the combination of a die and a plunger cooperating therewith, said plunger comprising a body portion and a bottom portion, yieldable means for locking said portions together with said bottom portion in advance of or in proximity to said body portion, and means for simultaneously moving said portions respectively toward or away from the die when thus locked together.

1,814,044. INSTRUMENTALITIES FOR ANNEXING TIPS TO TOOTH FACINGS. PETER JOFFÉ, New York, N. Y. Filed July 14, 1928. Serial No. 292,801. 3 Claims. (Cl. 32—10.)



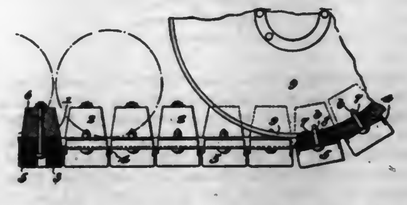
1. In a dental device for the purpose set forth, the combination of an adjustable clamping pliers for holding a tooth facing comprising two similarly shaped flat faced jaws secured in flat contact at one end, said jaws being resilient and capable of being flexed so as to be contracted, each of the free ends of the said jaws being provided with an elongated slit and a stud adapted to slide in the elongated channels positioned one in each of the said jaws substantially midway, to contract or open the free ends of the said jaws, with the heads of the stud overlying the channels; of a calibrated angled backing plate member provided with a medially positioned shank and tongue for engaging within the cooperative recess of the tooth facing adapted to be removably mounted upon one of the slit ends of the said plier jaws and a resilient clamping member for the tooth facing adapted to be removably mounted upon the other of the slit ends of the said plier jaws.

1,814,045. VALVE ACTUATING MECHANISM. OSCAR J. KAY, Los Angeles, Calif. Filed Nov. 9, 1929. Serial No. 406,020. 6 Claims. (Cl. 158—117.)



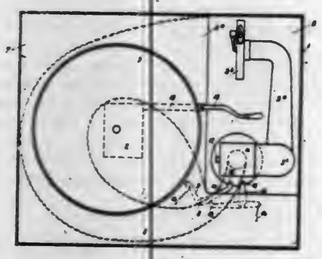
1. As an article of manufacture, a valve having a substantially concave side, a leaf spring tending to assume a curvature which is opposed to the concave side of the valve, and means securing the spring to the concave side of the valve so that the spring is flexed to a curvature corresponding to the curvature of said side.

1,814,046. ENDLESS TRACK BELT. ADOLPHE KÉGRESSE, Suresnes, France. Filed Feb. 3, 1928, Serial No. 251,644, and in France Feb. 9, 1927. 4 Claims. (Cl. 305—10.)



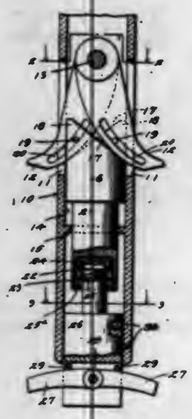
3. An endless track belt comprising an endless flexible band; a series of metal plates secured transversely to the outer surface of the band with their side edges in virtual abutting relation; a longitudinal series of guide blocks disposed on the inner surface of said band along its median line; a longitudinal series of elastic shoes disposed against the outer surface of the band directly opposite the guide blocks; and bolts passing through the band, guide blocks, shoes and plates for removably securing them together.

1,814,047. PORTABLE TALKING MACHINE. HEINRICH I. KÜCHENMEISTER, Berlin, Germany. Filed May 15, 1929, Serial No. 363,291, and in Germany Apr. 7, 1928. 6 Claims. (Cl. 274—2.)



4. A portable talking machine comprising a case having a compartment, a sound arm, a record plate, a bearing for said sound arm about which it may be rocked into said compartment into its inactive position, a brake lever adapted to engage said record plate, means for applying said lever to said plate, and a check on said sound arm adapted to move said brake arm into inactive position with respect to said record plate when said sound arm is moved into active position.

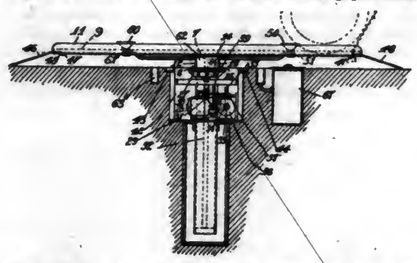
1,814,048. INSIDE CASING OR TOOL JOINT CUTTER. ROBERT A. LINCOLN, Pampa, Tex., assignor of one-half to American Iron & Machine Works, Inc., Oklahoma City, Okla., a Corporation of Oklahoma. Filed Mar. 22, 1928. Serial No. 263,879. 11 Claims. (Cl. 81—195.)



1. In a casing cutter, a body adapted to be extended into the casing to be cut, blades mounted in the body and extensible therefrom, a plunger mounted in the body and when shifted longitudinally operatively engaging the blades to extend the same and centrifugally projected stop members carried by the plunger and extending therefrom to engage the casing and provide a support for the plunger when the body is rotated.

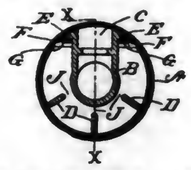
1,814,049. AUTOMOBILE SERVICING DEVICE. THOMAS A. MARTIN, Bridgeport, Conn. Filed Feb. 16, 1927. Serial No. 168,509. 8 Claims. (Cl. 184—1.5.)

1. In an auto lift, a track member comprising a pair of parallel track bars connected by a cross member and spaced apart to receive the wheels of an auto, means to elevate and depress the track member, a tank carried by the track member, a funnel carried by the track member arranged to receive fluid from the auto, a pipe from the



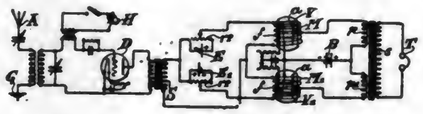
funnel to the tank, and means to automatically drain the tank when the track member is lowered from the elevated position.

1,814,050. SUCTION ROLL. ROBERT JOSEPH MARX, London, England. Filed Sept. 9, 1929, Serial No. 391,294, and in Great Britain Apr. 3, 1929. 10 Claims. (Cl. 92—53.)



1. In a suction roll comprising a perforated revolving shell and a stationary suction box, the open upper edges of the suction box in the direction of the longer axis of the shell being provided with outwardly extended rigid lips, the upper surface whereof in cross section conforms to the contour of the inner surface of the shell, which rigid lips extend circumferentially over a sufficient distance to cover several rows of perforations in the shell, the shell being so supported on its bearings as to bear on such lips with an easy running fit but without intentionally induced pressure.

1,814,051. METHOD OF AND APPARATUS FOR CONTROLLING ALTERNATING CURRENT. DAVID G. MCCAA, Philadelphia, Pa. Filed Dec. 8, 1925, Serial No. 74,087. Renewed Nov. 6, 1930. 9 Claims. (Cl. 250—20.)



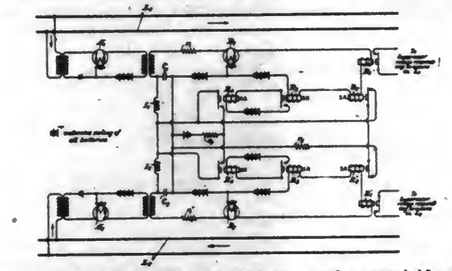
1. The method of differentiating between fluctuating or alternating currents of different amplitudes which comprises dividing said currents into components, causing said components of both currents to oppose each other in their effect upon a translating device, and opposing one of the components of the current of lesser amplitude by a constant uni-directional electro-motive-force of magnitude comparable with the magnitude of said component of said current of lesser amplitude to cause the other component of said current of lesser amplitude to affect said translating device.

1,814,052. ECHO SUPPRESSOR. DOREN MITCHELL, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Feb. 20, 1929. Serial No. 341,543. 5 Claims. (Cl. 179—170.)

1. In a system for suppressing echoes in a two-way circuit, a detector associated with each side of the circuit and

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responsive to waves therein, means controlled by each detector for blocking the opposite side of the circuit, and

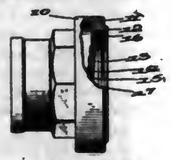


means associated with each detector and appreciably responsive only to sustained noise in the circuit for raising the threshold of operation of the detector.

1,814,053. PROCESS OF PREVENTING GAS ABSORPTION IN LIQUIDS AND FOR PREVENTING RUSTING OF SUBMERGED IRON. BERNHARD W. MUELLER, San Francisco, Calif., assignor to Firm: Paul Lechler, Stuttgart, Germany. Filed July 17, 1928, Serial No. 293,497, and in Germany Aug. 8, 1927. 2 Claims. (Cl. 91—68.)

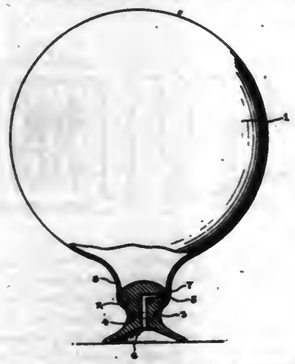
1. In the operation of water seal gasometers, the herein described improvements which comprises maintaining at all times a complete layer, at least $\frac{1}{8}$ of an inch in thickness, of a viscous mixture of a hydrocarbon oil and a bituminous material, which has a specific gravity less than unity, on the entire surface of the water, whereby oxygen and other gases are excluded from the water and corrosion is greatly retarded.

1,814,054. AUTOMOBILE HUB CAP. JOHN H. MUNSON, Hollywood, Calif. Filed Jan. 17, 1931. Serial No. 509,500. 2 Claims. (Cl. 88—1.)



1. A hub cap comprising a body portion having a laterally projecting flange and a concave reflector inset with respect to said flange to be protected thereby and retained in said body portion.

1,814,055. TOY AND SECURING MEANS THEREFOR. MELVIN J. NAPIER, Akron, Ohio. Filed Oct. 4, 1930. Serial No. 486,452. 7 Claims. (Cl. 46—53.)



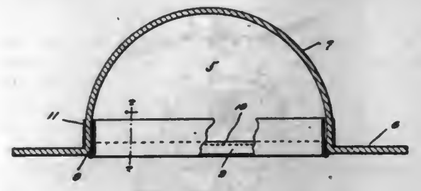
1. A support for an inflatable article comprising a portion formed for insertion within the article, and a vacuum cup attaching portion, wherein the support is formed with an air passage extending from the cup of the attaching portion to the exterior of the portion formed for insertion in the article.

1,814,056. PORTABLE ELECTRIC LAMP. SAMUEL H. NUCKOLLS, Stone Mountain, Ga., assignor to George Francis Willis, Atlanta, Ga. Filed Apr. 26, 1930. Serial No. 447,630. 4 Claims. (Cl. 240—10.64.)



1. An electric lamp including a casing having lateral openings in its fore portion, a socketed support and reflector in said casing adjacent said openings, a lens carrying cap in threaded engagement with the front end of the casing, a sleeve slidable on the casing to cover and uncover the lateral openings, a rear end cap, and foldable feet carried by said rear end cap to support the lamp.

1,814,057. SWEATBAND. STEPHEN J. PALINKOS, Norwalk, Conn. Filed May 20, 1930. Serial No. 454,056. 1 Claim. (Cl. 2—181.)



In a hat and in combination, a hat crown portion, a brim extending from the edge of said crown portion, a sweat band arranged within the hat crown portion adjacent to the joining of the brim thereto and including a portion spaced from the inner side of the hat crown portion and a portion interposed between the first named portion and the wall of the crown portion and alone stitched to the latter, and a bight joining said portions and having opposite the inner corner of the crown edge a comparatively thin portion whereby a cavity is formed between opposite portions of the sweat band, and rubber cement fully occupying said cavity and joining the opposed portions of the sweat band and adapted to assist in preventing the passage of perspiration from the head of a wearer to the said corner of the crown.

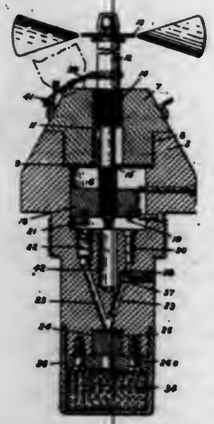
1,814,058. INTERNAL PIPE CUTTER. GEORGE V. POWERS, Oklahoma City, Okla., assignor to American Iron and Machine Works Company, Oklahoma City, Okla., a Corporation of Oklahoma. Filed Mar. 1, 1928. Serial No. 258,372. 7 Claims. (Cl. 81—195.)

1. An internal pipe cutter comprising a shank, a collar through which the shank passes and with which the shank has non-rotative engagement, a pipe section constituting a continuation of the collar and having laterally disposed slots, cutters pivoted within said pipe section, the upper ends of the cutters having blades projectible through said slots, a head carried by the shank and formed to wedge

the upper ends of the cutters apart and force the blades out through said slots when the head and shank are lowered, and means for arresting the descent of the lower end of the pipe section, said means permitting a rotation of the shank and said pipe section with the cutters.

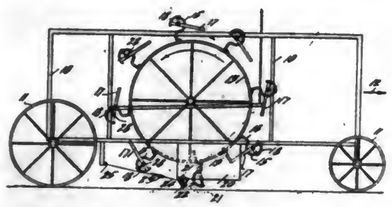


1,814,059. FUSE. GILBERT E. ROGERS, Rockaway, and JOHN M. KING, Dover, N. J. Filed Mar. 3, 1931. Serial No. 519,772. 7 Claims. (Cl. 102—39.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



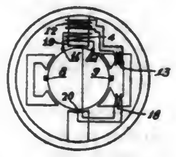
1. A fuse comprising a body formed with a cavity, a frangible diaphragm in the cavity, a head secured in the mouth of the cavity and confining the diaphragm, a plunger in the cavity, firing pins carried by the plunger, means for holding the plunger against rotation, powder trains in the body in line with the firing pins, converging flash passages leading from the powder trains, a carrier mounted transversely in the body, a detonator in the carrier, means for moving the carrier to armed position to align the detonator with the converging flash passages, a rod mounted in the body, a spring normally urging the rod against the plunger and out of the path of the carrier, and a striker having a shank threaded in the head and a reduced spindle passing through the diaphragm and threaded in the plunger to hold the plunger in and maintain the rod in the path of the carrier, the pitch of the threads on the spindle being greater than the pitch of the threads on the shank of the striker whereby to retract the plunger as the striker is threaded inwardly.

1,814,060. POTATO HARVESTER. EDWARD SANDERS, Moorhead, Minn. Filed Oct. 17, 1930. Serial No. 489,407. 4 Claims. (Cl. 55—59.)



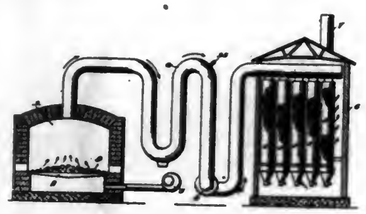
1. In a potato harvester, a rotating member, scoops carried thereby, guards pivotally mounted on the scoops for partially closing the mouths thereof, means for imparting motion to the guards for moving them into operative positions, and means for returning them to their inoperative positions during the rotation of the said member.

1,814,061. DIRECT CURRENT GENERATOR. ROBERT SARAZIN and MARCEL MONEYRON, Neuilly-sur-Seine, France. Filed Aug. 20, 1929, Serial No. 387,110, and in France Sept. 1, 1928. 3 Claims. (Cl. 171—223.)



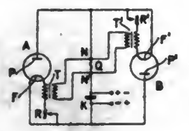
1. A constant-speed, direct current generator, comprising a main magnetic exciting circuit; electrical windings around said circuit supplied by a constant electromotive force; auxiliary magnetic circuits, having a demagnetizing action, independent of the main exciting circuit; and means for feeding the windings of said auxiliary circuits with an electromotive force which varies according to the current output of the machine; said means embodying two brushes adjustable in relation to the armature of the machine and arranged in a line parallel with the main exciting flux of the machine.

1,814,062. PROCESS FOR EXTRACTING A METAL FROM ITS ORE. ALFRED SCHWARZ, Montclair, N. J. Filed Sept. 19, 1928. Serial No. 306,906. 4 Claims. (Cl. 23—148.)



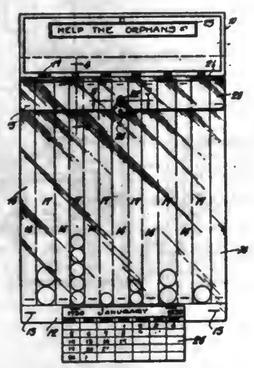
3. The process of producing zinc oxide from a sulphurous zinc ore, which consists in heating the ore and a reducing agent until the zinc and sulphur are vaporized, supplying steam and air thereby converting the zinc into a sulphate, dissolving the soluble salts produced, precipitating a zinc compound from the solution, and burning said zinc compound in the presence of air and a reducing agent to convert the same into zinc oxide.

1,814,063. CURRENT RECTIFIER. SIEGMUND STRAUSS, Vienna, Austria. Filed June 26, 1929, Serial No. 373,877, and in Austria May 19, 1927. 3 Claims. (Cl. 175—363.)



1. A current rectifier adapted to be connected with measuring apparatus for high resistances and ionic currents in which a condenser is employed repeatedly charged up to a constant voltage, said rectifier comprising a condenser charged by way of a rectifying valve from a supply of current, another thermionic valve connected as a discharge path by which part of the condenser charge is carried away in dependence of the actual voltage value of the supply, this dependance resulting from heating the filament of the thermionic valve from the supply.

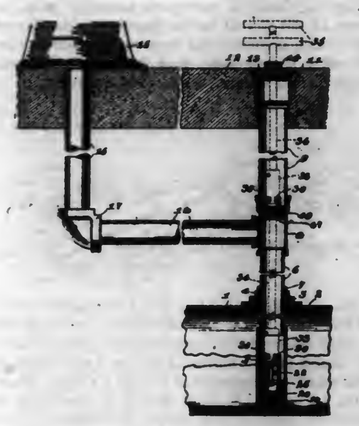
1,814,064. COIN HOLDER. ISIDORE TOLKOW, New York, N. Y. Filed May 20, 1930. Serial No. 454,049. 1 Claim. (Cl. 232—4.)



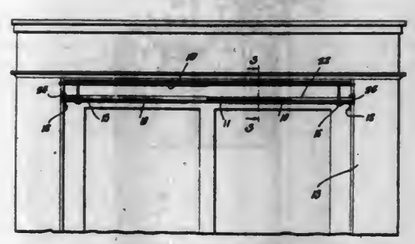
A coin holder comprising a supporting back plate, a plurality of spaced parallel strips secured to the front side of the back plate defining a plurality of coin receiving channels, a cross strip secured to the back plate and engaging the lower end of the first mentioned strip and closing the lower end of said channel, a front transparent panel secured to the front of said back wall overlying all of the strips and the channel, and a flexible transparent flap secured to the supporting back plate above the strip and the front panel and movable over the upper edge of said front panel and having a plurality of entrance slots therein communicating with the channel, and means for securing of the flaps to the front panel against unauthorized opening movement.

1,814,065. LIQUID MEASURING SYSTEM. ARTHUR THOMAS WAKEFIELD, Baltimore, Md., assignor to American Oil Company, Baltimore, Md. Filed Dec. 29, 1926. Serial No. 157,855. 1 Claim. (Cl. 220—86.)

In an underground tank adapted for the discharge of its contents by fluid pressure, a filler pipe extending substantially vertically from said tank to the ground level, a lateral discharge pipe communicating with said filling pipe at an intermediate part, fittings screwing into said pipe at depths inaccessible to hand operation, one below and one above said discharge pipe, the lower fitting having a check valve and the upper being an imperforate plug, a surface cap closing the upper end of said filling pipe, relative to which said plug is independent, said plug and check valve fitting having similar key engaging means by which they may be engaged and unscrewed successively by the same key.



1,814,066. SHADE AND CURTAIN HANGER. ADA B. WENDEL, Smithland, Iowa. Filed Apr. 3, 1930. Serial No. 441,388. 1 Claim. (Cl. 156—23.)

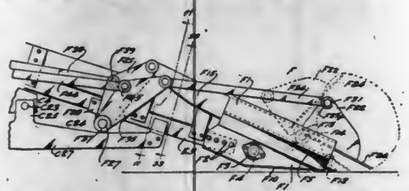


A shade and curtain hanger comprising a supporting member adapted to be clamped within a window frame, arms formed integrally with and extending horizontally outwardly from the end portions of said member and terminally formed with apertured portions, each of said horizontal arms, between the apertured portion and the supporting member being formed with an upwardly directed socket, a curtain supporting rod having its terminals seated in said sockets, and telescoped bars slidable through the apertures of said arms and having their outer ends formed for supporting a shade roller.

1,814,067. SHOVELING MACHINE. WILLIAM WHALEY, Knoxville, Tenn. Filed Nov. 30, 1929. Serial No. 410,811. 37 Claims. (Cl. 214—90.)

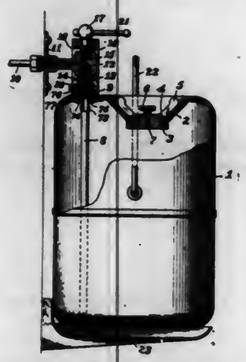
1. In a shoveling machine, the combination with a supporting structure, means forming guide-ways at each side

of the forward end of the supporting structure, conveyor means located below said guide-ways, a shovel having sides and a bottom, means supporting the rear lower part of the shovel to permit turning and bodily reciprocation of the shovel along the guide-ways, a plate-form cross member located between the shovel and the forward part of the conveyor means, a connecting member located adjacent each guide-way and in operative relation with the rear lower part of the shovel for reciprocating the shovel along the guide-ways, a connecting member coupled to the upper part of each shovel side, and power-driven means for reciprocating said several connecting members.



26. In a shoveling machine, the combination with a supporting structure and a shovel open at each end and comprising rigid sides and an approximately flat bottom adapted to go under lading material during approximately horizontal forward movement and forming a slide when tilted backward, of power-actuated means in operative relation with the rear part of the shovel on different transverse lines for bodily reciprocating the shovel relative to adjacent structure and turning the shovel during such reciprocation.

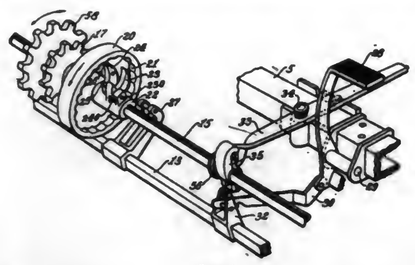
1,814,068. DETACHABLE TANK FOR PRESSURE BURNERS. FRED E. WHITE and ALFRED RUTTIMAN, Gardner, Mass., assignors to Florence Stove Company, Gardner, Mass., a Corporation of Massachusetts. Filed Sept. 10, 1927. Serial No. 218,663. 9 Claims. (Cl. 285—108.)



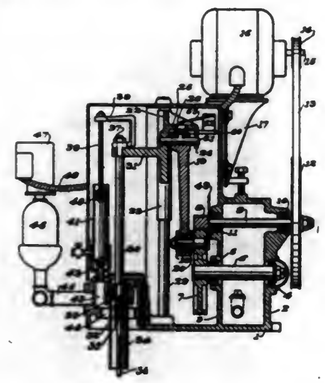
1. In combination, a feed line, a fixture secured thereto having a bore through which fuel is adapted to pass, a hollow nipple carried by the fixture, said nipple having a frusto conical terminal face, a fuel tank having a tube through which fuel is delivered to the feed line, a bored head extending above the tank top, said tube projecting within the head, means to maintain a fluid tight joint between the end of the tube and the nipple, a frusto conical recess in the top of the head, and means to press the frusto-conical face of the nipple against the frusto-conical face of the recessed head, whereby a fluid tight joint may be secured.

1,814,069. CORN PLANTER. EDWARD WITTE, Crescent City, Ill. Filed Nov. 6, 1926. Serial No. 146,628. 10 Claims. (Cl. 111—35.)

1. A corn planter having ground wheels, a seed plate driven from a ground wheel through a clutch, a seed dropper, check-rower mechanism operable by a check wire and connected to shift said clutch and said dropper, and actuating means operable by a ground wheel and connected to shift said dropper at definite intervals and render said clutch operative independently of the wire.



1,814,070. DEEP WELL PUMP. CLARENCE B. YOUNT, near Dayton, Ohio, assignor to Trupar Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed July 12, 1929. Serial No. 377,643. 6 Claims. (Cl. 184—4.)



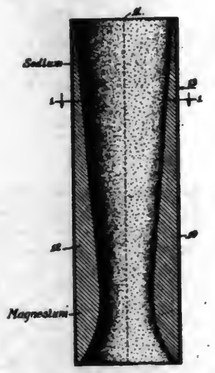
1. In a deep well pump, the combination with a casing adapted to contain a lubricant, a pair of vertical guide rods, a cross head having sleeves reciprocable on said guide rods, operating means for said cross head extending into the oil in the casing, a deflecting member carried by said sleeves, and means for whirling the lubricant from the bottom of the casing into contact with the deflecting member, for the purpose specified.

1,814,071. BOX LID. ALLAN A. ADAMSON, Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio, a Corporation of Delaware. Filed Mar. 18, 1929. Serial No. 347,865. 2 Claims. (Cl. 229—6.)



1. A lid or cover for boxes, formed of laminated paper board and having two sheets of tough paper covering the entire area of and adhesively secured to opposite faces of the lid, each sheet having adhesively secured portions turned about the front and side edges of the lid and extending onto the opposite face of the lid, the turned portions of one sheet being beneath the other sheet.

1,814,072. SEPARATING VOLATILE METALS BY SUBLIMATION. HERMAN E. BAKKEN, Niagara Falls, N. Y., assignor to American Magnesium Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Jan. 11, 1926. Serial No. 80,520. 7 Claims. (Cl. 75—17.)

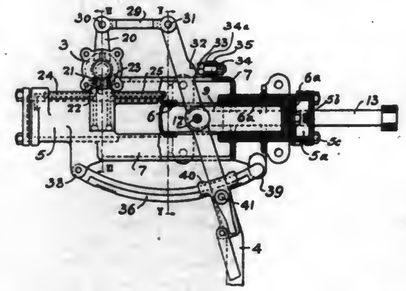


1. Process of treating alkali and alkaline earth metals and alloys thereof, comprising evaporating the metals from a metallic mixture containing the same, and condensing the resulting metallic vapors directly to the solid state upon a condensing surface by passing the vapors over such surface while controlling the temperature of said surface so as to cause substantial spatial separation of the metals condensed thereon.

1,814,073. PURIFICATION OF CALCIUM. HERMAN E. BAKKEN, Niagara Falls, N. Y., assignor to American Magnesium Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Mar. 10, 1926. Serial No. 93,780. 1 Claim. (Cl. 75—17.)

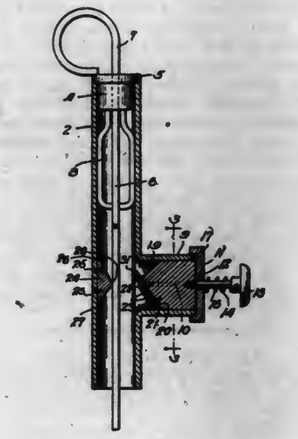
A process of purifying calcium, comprising evaporating impure calcium without fusion, and condensing the metallic vapor on a condensing surface while maintaining on the latter a substantially unvarying temperature gradient.

1,814,074. THROTTLE VALVE OPERATING MECHANISM. JAMES G. BLUNT and ROGER W. CLIFFORD, Schenectady, N. Y. Filed July 29, 1929. Serial No. 381,821. 14 Claims. (Cl. 137—139.)



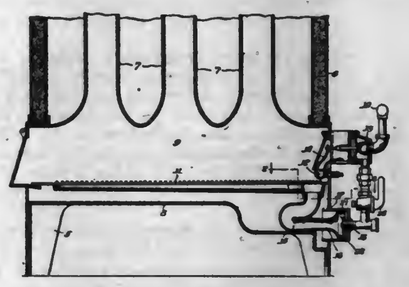
5. In a throttle valve operating mechanism, the combination of a fluid pressure motor embodying a piston element; an auxiliary valve movable from neutral position for controlling the application of fluid pressures to the piston element; a hand lever; and a quadrant movable relative to the piston element and in a direction substantially longitudinal of the lever, the said hand lever being operatively connected to the auxiliary valve and the piston element, and connected to the quadrant to permit the lever to fulcrum at its pivot of connection with said quadrant to return the auxiliary valve to neutral position.

1,814,075. OIL INDICATOR WIPER. WENDELL E. BURKHARDT, Crawfordsville, Ind. Filed June 16, 1930. Serial No. 461,469. 5 Claims. (Cl. 73—120.)



1. In a device of the class described, a tube, a gage removably mounted in the tube, and a wiper slidable in the tube into and out of engagement with the gage.

1,814,076. GAS BURNING DEVICE. GLEN C. CARNAHAN, Chicago, Ill., assignor to James B. Clow & Sons, Chicago, Ill., a Corporation of Illinois. Filed July 7, 1928. Serial No. 290,896. 5 Claims. (Cl. 158—7.)



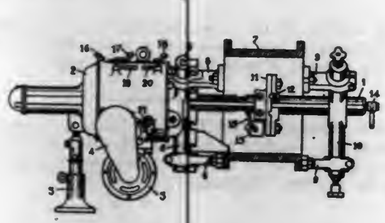
2. In a gas burning apparatus, the combination of a combustion chamber provided with an opening in one wall thereof, a burner within the chamber, an air and fuel mixing device communicating with the burner and projecting outwardly through said opening, means for supplying gas to the mixing device, and means for controlling the admission of air to said device, said last named means comprising a cup-shaped member surrounding the projecting end of said mixing device and projecting through said opening into the chamber whereby air from within the chamber and below atmospheric pressure is delivered to said mixing device in regulated quantities.

1,814,077. FASTENER. FRANK J. CAROLIN, Newark, N. J., assignor to Kohn & Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 24, 1930. Serial No. 447,003. 2 Claims. (Cl. 24—232.)



2. A fastener device of the character described comprising a sheath consisting of spaced side plates and a part connecting said plates intermediate of their ends and adjacent corresponding longitudinal edges thereof permitting relative yielding of the plates towards and from each other, said plates at one of their ends and in spaced relation to said connecting part converging inwardly towards each other, and a link member having a shank pivoted between the other ends of said side plates and provided at its free end with a returned hook bill, spaced parts of said shank and hook bill in the closed position of said member, lying between the relatively opposite edges of the sheath plates and resiliently gripped between the converging ends thereof, and the terminal of the hook bill engaging said connecting part to limit movement of the link member to its closed position.

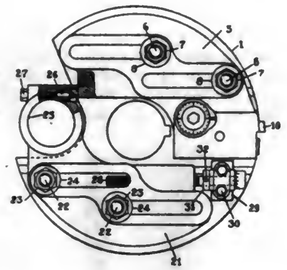
1,814,078. MACHINE FOR BORING CYLINDERS. CHARLES B. COLE and OTTO LEROY LEWIS, Chicago, Ill. Filed Feb. 3, 1930. Serial No. 425,385. 26 Claims. (Cl. 29—26.)



1. A machine for grinding cylinders including a bar capable of rotary and longitudinal motion, an enclosed transmission for imparting rotary and longitudinal motion to the bar, means for installing the transmission and bar in operating position, means for supporting the outboard end of the bar, a head mounted on the bar for supporting the grinder in operating position, and a grinder, driven by power transmitted through the bar from an outside source.

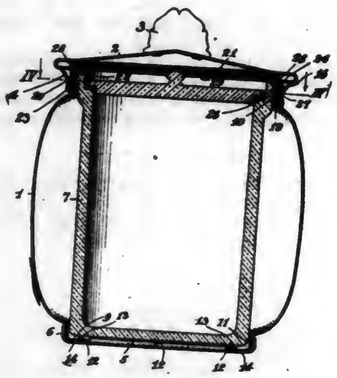
16. In a machine of the character described, a feed nut supported endwise and threaded upon a boring bar for the purpose of feeding said bar, a plurality of gears firmly secured to said nut, a gear mounted on a sleeve revolving in unison with the bar, a countershaft suitably supported and carrying in fixed relation a pinion meshing with the gear on the sleeve, a plurality of gears rotatably mounted on the counter shaft and meshing with corresponding gears on the nut, a plunger operated by rack and pinion, slidably mounted in a bore in the countershaft and having a collar for engaging selectively balls retained in holes in the countershaft with countersinks in the bore of the rotatable gears on the countershaft, thereby engaging selectively the gears with the countershaft and providing a differential rotary movement between sleeve and nut, the plunger being formed to act as a ball retainer for the idle gears.

1,814,079. TOOL CARRYING HEAD. CHARLES B. COLE and OTTO LEROY LEWIS, Chicago, Ill. Filed Feb. 8, 1930. Serial No. 425,386. 4 Claims. (Cl. 29—26.)



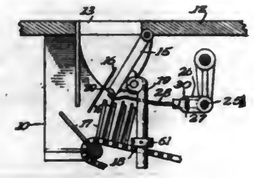
1. A boring and grinding head, including a face plate driving member, means for locking said member on a boring bar, a tool holder mounted on the face plate in guided slidable relation, means for firmly fastening said tool holder to said face plate, a boring tool, an indexed cam rotatably supported by the tool holder and arranged to adjust the position of the boring tool, an adjustable spacer interposed between the cam and the boring tool, a floating wedge-shaped member supported endwise, a cone headed screw arranged to bring pressure against the wedge-shaped member, thereby clamping the boring tool, and a nut engaging said screw, supported in the tool holder, and provided with interlocking means between itself and the cam member.

1,814,080. CONTAINER FOR COSMETICS. LÉON A. DANCO, Rockville Center, N. Y., assignor to McKesson & Robbins, Inc., Bridgeport, Conn. Filed July 3, 1928. Serial No. 290,218. 7 Claims. (Cl. 215—12.)



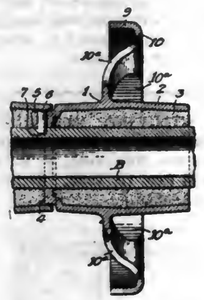
1. A toilet accessory comprising an inner container of porcelain, whose walls at the upper portion thereof are spaced apart a distance equal to or greater than that at any other part of said container, a fitted cap for said container, an outer metal casing, an inner thread provided on the upper portion of said metal casing, a thread provided on the periphery of the upper portion of the inner container adapted to engage directly with the inner thread on the casing for detachably connecting the upper portion of the casing to the inner container, a lid for the casing, an annular depending portion on said lid and means on said annular depending portion adapted to co-operate with means on said casing for connecting the lid to the casing.

1,814,081. STOP MECHANISM. WALTER ALLAN DUSENBURY, Chicago, Ill., assignor to Heco Envelope Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 4, 1928. Serial No. 303,883. 20 Claims. (Cl. 192—125.)



1. In a machine of the character described, means for causing the article being operated upon to assume a predetermined position in the cycle of operation of the machine, clutch mechanism for controlling the operation of the machine, means tending normally to render said clutch mechanism inactive, means embodying a locking device for rendering and maintaining the last said means inactive during the normal operation of the machine, the last recited means embodying an element to be engaged by the article, the said element operating in the absence of the article to cause the said locking device to become inactive, and means under the control of the operator for maintaining the said locking device active in the absence of an article in co-operation with said element.

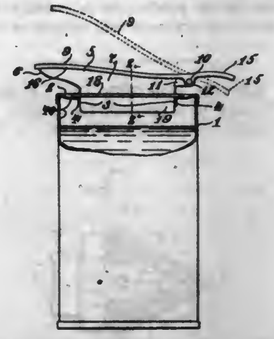
1,814,082. ROLLER TYPE CONVEYER FOR HEAT TREATMENT FURNACES. FRANK A. FAHRENWALD, Chicago, Ill. Filed Jan. 19, 1929. Serial No. 333,543. 5 Claims. (Cl. 263—6.)



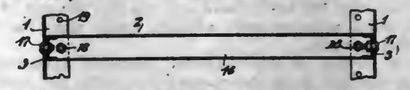
1. In a conveyer unit for heat treatment furnaces, a hub having means for supporting it upon a shaft at a material distance from the shaft, a rim, and a web uniting the rim and hub, having a radial section which extends indirectly between the hub and the rim.

1,814,083. POURING SPOUT. PORTER H. FLAUTT, Baltimore, Md., assignor of one-half to Francis C. Yingling, Baltimore, Md. Filed Aug. 30, 1928, Serial No. 302,901. Renewed May 25, 1931. 2 Claims. (Cl. 221—23.)

1. A pouring spout for friction top cans having a top thereon, a downwardly depending flange on said top, an annular body portion supporting said top, an opening in said body portion, a circumferential flange about said body portion, a downwardly disposed frictional engaging flange below said circumferential flange, the said two flanges forming an inverted L shaped can engaging and positioning means.

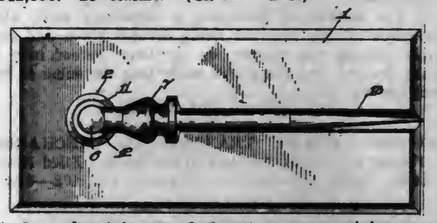


1,814,084. METAL SHELVING. SAMUEL GOLDBERG, New York, N. Y., assignor to Universal Fixture Corporation, New York, N. Y., a Corporation of New York. Filed June 6, 1930. Serial No. 459,533. 5 Claims. (Cl. 211—135.)



1. A sheet metal shelf including a reinforcing structure extending along one edge thereof, integrally formed therewith from a single blank of sheet metal and comprising a depending beam formed by a margin of the shelf blank bent downward and inward to form a channel, bent reversely and pressed into close face to face contact with the downwardly and inwardly bent portions, within said channel, and formed with a bend closely fitting within and reinforcing the downward bend along the latter.

1,814,085. DESK SET. WALTER GUYOT, Janesville, Wis., assignor, by mesne assignments, to Pen Desk Set Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 26, 1926, Serial No. 83,857. Divided and this application filed Feb. 25, 1929. Serial No. 342,558. 15 Claims. (Cl. 120—108.)



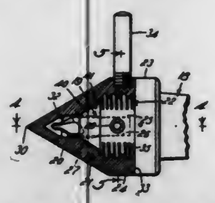
1. In a fountain pen desk set, a pen-receiving receptacle having its outer end flared, resilient means within said receptacle frictionally engaged by the pen inserted therein, and a cap mounted upon the outer end of said receptacle and having a central opening therein through which the pen is initially passed.

1,814,086. PLASTIC PAINT. JOSEPH F. HAGGERTY and DEAN D. CRANDALL, Buffalo, N. Y., assignors to National Gypsum Company, Buffalo, N. Y., a Corporation of Delaware. Filed Aug. 10, 1928. Serial No. 298,874. 3 Claims. (Cl. 134—46.)

1. A dry plastic paint base comprising a mixture of calcined gypsum and water absorbent fibre pulp in the pro-

portions of one to eight parts fibre pulp to one hundred parts calcined gypsum the mixture being adapted upon adding water to be applied as a coating and textured by the action of a stippling brush, sponge or the like.

1,814,087. DEVICE FOR USE ON LATHES OR THE LIKE. WILBUR E. HAYWARD, Los Nietos, Calif. Filed May 18, 1929. Serial No. 364,143. 2 Claims. (Cl. 82—33.)



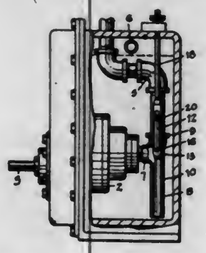
1. A device of the character described including, a shank adapted to fit the opening in a lathe tail stock, a radial flange on the shank to be disposed beyond the tail stock, a pin projecting outwardly from the flange, a tapered projection on the pin, a drill carried by the pin and extending from the projection, a center head having an opening to receive the pin and drill and having a tapered wall to seat on the projection, and a releasable connection between the center head and the pin, the end of the head being in engagement with the flange when the connection is made.

2. A device of the character described including, a shank adapted to fit the opening in a lathe tail stock, a radial flange on the shank to be disposed beyond the tail stock, a pin projecting outwardly from the flange, a tapered projection on the pin, a drill carried by the pin and extending from the projection, a center head having an opening to receive the pin and drill and having a tapered wall to seat on the projection, and an interrupted thread connection between the center head and the pin, the end of the head being in engagement with the flange when the connection is made.

1,814,088. REFRACTORY MATERIAL AND METHOD OF MAKING THE SAME. GEORGE SCOTT HOUSMAN, Norristown, Pa., assignor to E. J. Lavino and Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 31, 1929. Serial No. 417,816. 5 Claims. (Cl. 25—156.)

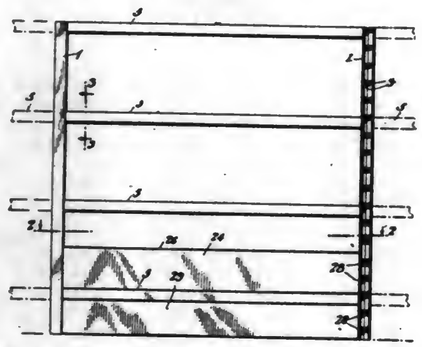
3. The method of producing a refractory body which comprises mixing together finely divided silica and chromite, forming the mixture or portions thereof into the shape desired, and thereafter subjecting the same to high temperature.

1,814,089. POWER TRANSMISSION MECHANISM. FRANCIS J. LAPOINTE, Ann Arbor, Mich. Filed Nov. 5, 1929. Serial No. 405,025. 2 Claims. (Cl. 103—41.)



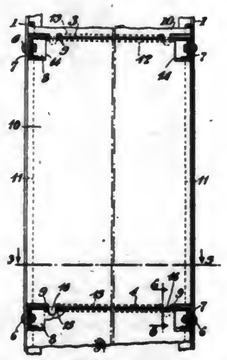
1. In a power transmission mechanism, a shell for containing an oil pump and oil, the pump having a rotatable member, the pump located within the shell at a point sufficiently below the upper end of the shell to locate the entire interior of the pump below the level of the oil in the shell, a member also located below the level of the oil and having a passageway communicating with the inlet port of the pump and with the lower end of the shell, and a movable member located in the passageway for progressively reducing the effective area thereof, the movable member having a restricted by-pass for maintaining the flow of oil from the lower end of the shell to the inlet port of the pump when the passageway is substantially closed by the member.

1,814,090. SHELVING STRUCTURE. EMANUEL MICALLY, Jackson Heights, N. Y., assignor to Universal Fixture Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 19, 1930. Serial No. 429,588. 11 Claims. (Cl. 211—136.)



11. A shelving structure comprising a shelf; four corner uprights each formed with walls therealong disposed at an angle to each other and forming a corner to receive a corner of the shelf; beams extending along the shelf ends and supporting them and extending straight fore-and-aft into said corners of the adjacent uprights, the corner walls of the latter directly opposed to the beam ends being formed with keeper apertures; and locking tongues carried by the beams and extending straight outward longitudinally from the ends thereof to enter and releasably interlock in said keeper apertures.

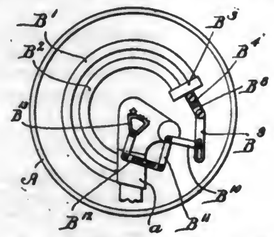
1,814,091. SHELVING STRUCTURE. EMANUEL MICALLY, Jackson Heights, N. Y., assignor to Universal Fixture Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 19, 1930. Serial No. 429,589. 2 Claims. (Cl. 211—135.)



1. In a shelving structure, a plurality of shelves supported in superposed, spaced relation and each having

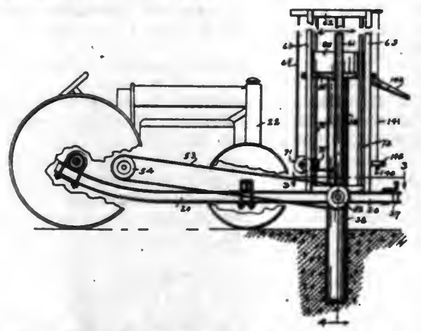
apertures spaced fore-and-aft; and a plurality of upright, fore-and-aft shelf space partitions for upper and lower shelf spaces, each partition comprising a metal sheet bent along its upper edge to form a flange having apertures spaced and registering with apertures of the shelf immediately above, and downwardly projecting tongues at its lower edge spaced therealong and inserted through apertures of a shelf immediately below and through registering flange apertures of a similar partition in a shelf space below, for mutually and removably supporting said partitions in position.

1,814,092. PRESSURE GAUGE. JOSEPH W. MOTHERWELL, Melrose, Mass., assignor to The Ashton Valve Company, Cambridge, Mass., a Corporation of Massachusetts. Original application filed May 23, 1924, Serial No. 715,399. Divided and this application filed Oct. 1, 1929. Serial No. 396,556. 8 Claims. (Cl. 73—109.)



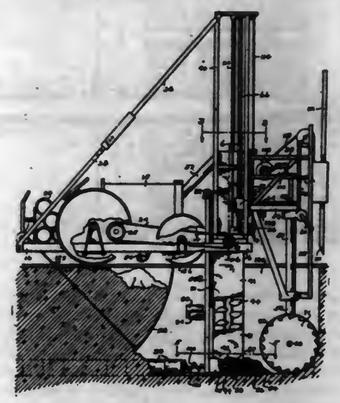
7. A device of the character described comprising a plurality of concentric arcuate spring tubes to be connected with the same source of pressure and each having a fixed end and a closed movable end, each movable end being closed also with relation to the other movable end or ends; a head rigidly connecting the movable ends of said plurality; a rocking element for operating an indicator; and means operatively connecting said head and said rocking element, said means including a plurality of elements movable with relation to each other, one of said plurality of elements being a link, the center line of which is substantially parallel to the tangent to the locus of the movable end deflection at a point midway between the points of no load and maximum load.

1,814,093. POWER DRIVEN HOLE DIGGER. WALTER RHODES, Terre Haute, Ind. Filed Nov. 14, 1927. Serial No. 233,151. 3 Claims. (Cl. 255—21.)



1. In a device for digging holes in the earth operated by a power unit, a supporting frame, a cylinder strengthened by a longitudinal central partition, a horizontal cylinder frame universally pivoted to the supporting frame, a ring supported by the frame, said cylinder being adapted to slide longitudinally through the ring, means associated with said frame and said ring to adjust and maintain the desired angle of the cylinder with the surface of the earth, a guide plate moving up and down with the cylinder, a ring gear on the cylinder carried by the said guide plate, said cylinder being free to slide through the ring gear, said ring gear being driven by said power unit, means permitting the ring gear to revolve said cylinder, a pair of earth elevating mechanisms within the cylinder one on each side of the partition, gear means carried at the top of the cylinder to simultaneously operate both of said elevating mechanisms, and shaft means for conveying power from said ring gear to said gear means.

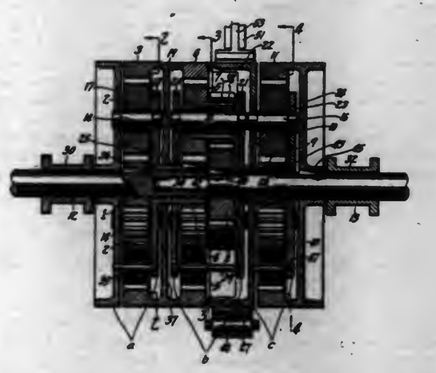
1,814,094. EARTH EXCAVATOR FOR TILE DITCHING. WALTER RHODES, Terre Haute, Ind. Filed Dec. 30, 1927. Serial No. 243,588. 14 Claims. (Cl. 37—80.)



1. In a ditch excavator, rotary cutting means comprising outer members and one or more inner members which inner members are variable in their planes to the outer embers, said means being adapted to be raised and lowered.

2. In a ditch excavator, an earth loosening means comprising a pair of outer cutting members and one or more cutters variable in position between the outer pair to cut the earth between the outer pair.

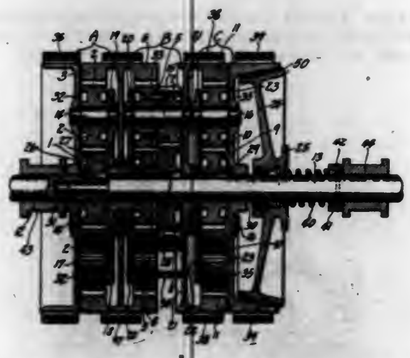
1,814,095. POWER SAVING DEVICE. TOSSY SAKI, Salt Lake City, Utah. Filed May 14, 1929. Serial No. 363,022. 14 Claims. (Cl. 74—34.)



1. In combination, a sun gear, planetary gears in mesh with said sun gear, an internal gear in mesh with said planetary gears, a second internal gear integral with the first internal gear, other planetary gears in mesh with said second internal gear, a second sun gear in mesh with said

other planetary gears, said second sun gear mounted to rotate in unison with the revolution of said planetary gears, auxiliary gears concentric and rigidly associated with said other planetary gears, and a driven sun gear in mesh with said auxiliary gears.

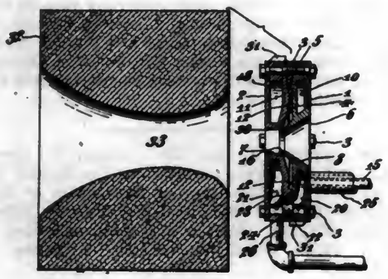
1,814,096. VARIABLE SPEED DRIVE MECHANISM. TOSSY SAKI, Salt Lake City, Utah. Filed June 16, 1930. Serial No. 461,580. 9 Claims. (Cl. 74—34.)



1. A variable speed drive mechanism, including in combination, a drive shaft, a driven shaft in substantial axial alignment therewith, a sun gear rigidly mounted on said drive shaft, planetary gears in mesh with said sun gear, an internal gear in mesh with said planetary gears, a carrier rotatable due to planetary motion of said planetary gears, a second sun gear, said second sun gear rigidly connected with said carrier; duplex planetary gears in mesh with said second sun gear, a second internal gear, said second internal gear in mesh with said duplex planetary gears and rigidly connected with the first internal gear, a third sun gear, said third sun gear in mesh with said duplex planetary gears, and rigidly mounted on said driven shaft; a second carrier, said second carrier rotatable due to planetary motion of said duplex planetary gears; a fourth sun gear, said fourth sun gear rigidly mounted on said driven shaft, secondary planetary gears in mesh with said fourth sun gear; a third internal gear, said third internal gear in mesh with said secondary planetary gears and rigidly connected with said second carrier; a third carrier, said third carrier rotatable due to the planetary motion of said last-mentioned planetary gears; a clutch operable to engage the said third carrier, said clutch mounted on said driven shaft, means for selectively preventing planetary motion of said first-mentioned planetary gears, means for selectively preventing the rotation of said first and second internal gears, means for selectively preventing planetary motion of said duplex planetary gears, means for selectively preventing planetary motion of the last-mentioned planetary gears, means for holding said clutch from engagement with said third carrier, and means for locking up said third carrier with said clutch.

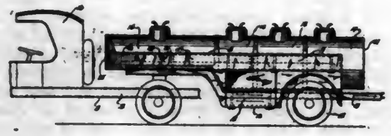
1,814,097. GAS BURNER. GILBERT E. SEIL, Conshohocken, Pa. Filed Feb. 15, 1929. Serial No. 340,037. 1 Claim. (Cl. 158—110.)

A device of the character described, comprising a gas burner comprising two sections and having means for securing said sections together, the said sections having annular hollowed out portions upon their inner sides which cooperate to form an annular chamber adapted to hold gas under pressure, each of the said sections having central openings which extend therethrough, one of the said openings being tapered and terminating in a projection which extends into the inner end of the opening of the other section and being spaced therefrom to provide an orifice through which gas is adapted to be discharged from the said annular chamber, and the said burner also comprising chambers therein which are adapted to receive and through which a cooling fluid is adapted to pass, a pipe



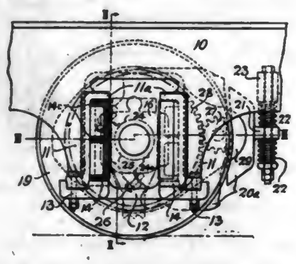
for supplying gas to the first named chamber, and a pipe for supplying a cooling fluid to the second named chambers, the said last mentioned pipe surrounding and being concentric with the pipe for supplying gas to the said first named chamber.

1,814,098. DROP FRAME TANK TRAILER. FREDERICK G. THWAITS, Wauwatosa, Wis., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 12, 1930. Serial No. 427,804. 3 Claims. (Cl. 280—5.)



3. In a tank trailer structure, the combination of a wheeled chassis, an under-structure corresponding in shape to the shape of the chassis and overlying the same, means detachably connecting the under-structure to the chassis, a tank carried by the under-structure, racks extending along opposite sides of the tank, said racks having outer side portions, the front of the tank being curved, and a plate secured to the front of the tank and correspondingly curved and having outwardly, rearwardly extending wings meeting said rack sides in the planes of the same.

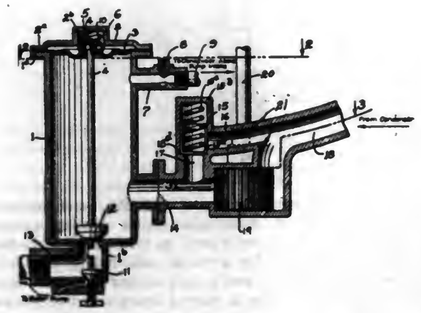
1,814,099. RAILROAD VEHICLE. CHARLES W. TODD, Schenectady, N. Y. Filed Dec. 13, 1929. Serial No. 413,701. 9 Claims. (Cl. 105—225.)



1. In a railroad vehicle, the combination of an axle; a pair of wheels supporting the axle; a journal box on

one end of the axle outside of the wheels; a side frame member disposed outside of the wheels and having a pair of pedestal jaws straddling the journal box; a motor disposed at one side of the axle; split bearing means connected to the motor, surrounding the axle, and supporting at least a portion of the weight of the motor thereon, the remaining portion being supported on the vehicle frame structure; driving means connecting the motor and the axle, at least one of said two means being disposed to obstruct purely vertical initial displacing movement of the axle from its normal position, a detachable pedestal shoe between each of the pedestal jaws and the journal box, the journal box, the pedestal shoes, and the gap between the pedestal jaws, being relatively proportioned to permit, without backing the axle away from the bearing means, the journal box to be slid longitudinally of the axle clear of the pedestal jaws, when the pedestal shoes are detached, and to permit the axle to be removed from the side frame member without dismounting the motor from the vehicle frame structure by moving the axle initially toward one of the pedestal jaws to avoid the obstruction, and then passing the same downwardly through the pedestal jaws, when the bearing has been separated and the pedestal shoes and journal box have been removed.

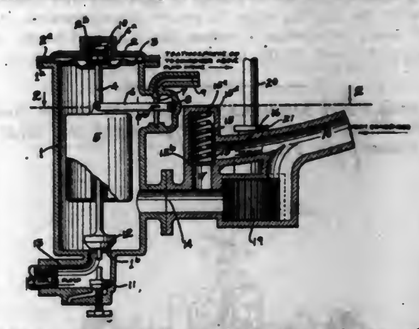
1,814,100. WATER SEAL FOR STEAM POWER PLANTS. RUSSELL R. WATERMAN, Long Beach, Calif., assignor to Farmers' National Bank of Greenville, Ohio, trustee, Greenville, Ohio, a Corporation of Ohio. Filed Apr. 22, 1926. Serial No. 103,809. 6 Claims. (Cl. 137—103.)



1. In a water seal apparatus for power plants, a vertical chamber member having a discharge opening at its lower end, a diaphragm extending over the upper end of the chamber member, a spring positioned above the diaphragm exerting force downwardly thereagainst, a valve stem extending downwardly from the diaphragm and having a valve at its lower end adapted to seat over the discharge opening, an inlet opening extending through the side of the chamber member near the lower end thereof, and a discharge conductor connected to the upper end of the chamber member below the diaphragm and above the inlet opening and of smaller diameter than the inlet opening.

1,814,101. WATER SEAL FOR STEAM POWER PLANTS. RUSSELL R. WATERMAN, Long Beach, Calif., assignor to Farmers' National Bank of Greenville, Ohio, trustee, Greenville, Ohio, a Corporation of Ohio. Filed Apr. 22, 1926. Serial No. 103,810. 8 Claims. (Cl. 137—103.)

1. In a water seal apparatus for steam power plants, a separating chamber connected to a water supply and provided with a diaphragm in its upper end, a valve supported by said diaphragm and seated in the lower end of said chamber, a float actuated valve communicating with said chamber near the upper side thereof, an outlet conductor communicating with said chamber through said



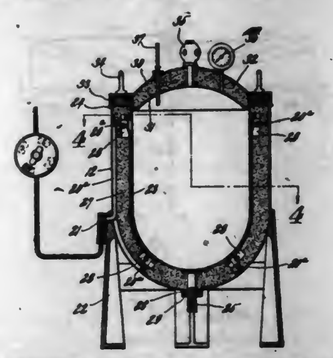
valve at the lower end of said chamber, and a second discharge conductor connected to the upper portion of said chamber and controlled by said float actuated valve.

1,814,102. HIGH TENSION ELECTRIC CABLE WITH PAPER INSULATION. MAX WEISET, Tempelhof, near Berlin, Germany. Filed Apr. 15, 1929, Serial No. 355,010, and in Germany June 16, 1928. 7 Claims. (Cl. 173—264.)



1. A high tension cable comprising a conductor, an impregnated paper insulation and an electrical conducting layer on the conductor, said layer lying immediately on the conductor and consisting of a porous electrical conducting material so that said layer is permeable by the impregnating substance and by the electrical current.

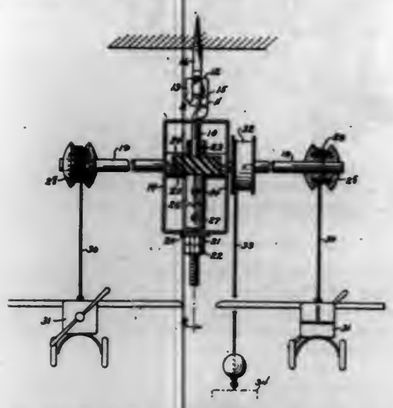
1,814,103. ELECTRICALLY HEATED COOKER. WILLIAM C. WHITE, Portland, Me., assignor to Industrial Development & Manufacturing Corporation, Portland, Me., a Corporation of Maine. Filed Oct. 3, 1927. Serial No. 223,576. 4 Claims. (219—35.)



2. An electrically heated cooker, comprising a bowl-shaped jacket, upper and lower supporting members fixed to the jacket and projecting inwardly from the inner surface thereof, heating units supported by and extending between said members and offset thereby from the inner surface of the jacket, said members and heating units forming a supporting cage within the jacket, said units being included in an electric heating circuit which in-

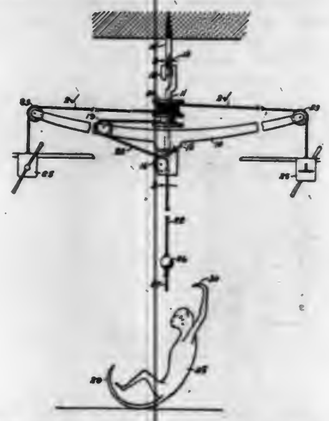
cludes leads extending through the wall of the jacket, and a bowl-shaped kettle seated on said cage and contacting with the heating units to receive heat therefrom, the kettle being removable to expose the cage and permit renewal and repair of the heating unit elements thereof.

1,814,104. TOY AEROPLANE. ANTON F. WOLFF, Genesee, Idaho. Filed Apr. 22, 1929. Serial No. 357,218. 3 Claims. (Cl. 272—31.)



3. In combination, a toy having a support, a shaft passed through the support and immovable with respect thereto, a cross arm for the support suspending cord connected toys therefrom, mechanically operated means rendered operable for reeling and unreeling action as the support turns about the shaft, a clutch connection between the mechanically operated means and shaft, and weight operated means cooperatively associated with the mechanically operated means automatically returning the toys to starting positions.

1,814,105. TOY AEROPLANE. ANTON F. WOLFF, Genesee, Idaho. Filed Feb. 26, 1930. Serial No. 431,529. 3 Claims. (Cl. 272—31.)

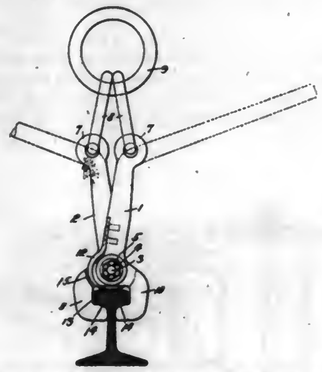


1. A toy comprising a support having upwardly inclined ends, a fixed shaft having the support journaled thereon, pulleys fixed upon said shaft one having cords wound thereon and trained over appropriate portions of the support, toys carried at the outer ends of the cords, a weight equipped cord inversely wound upon the remaining pulley, and a toy elevating element having automatic detachable engagement with the weight equipped cord.

1,814,106. MANUFACTURE OF CELLULOSE MATERIAL FROM MUSA FIBERS. EDWARD CHAUNCEY WORDEN, 1st, Millburn, N. J., assignor to Hanson & Orth, New York, N. Y., a Firm composed of Charles D. Orth, sr., Charles D. Orth, jr., Michael J. Smith, and William Knight, jr. Original application filed Mar. 16, 1929, Serial No. 347,728. Divided and this application filed Jan. 10, 1930. Serial No. 420,018. 6 Claims. (Cl. 92—14.)

1. A process for the treatment of Musa fibers to obtain highly purified cellulose therefrom, comprising disintegrating said fibers, boiling for several hours at atmospheric pressure with a solution of alkali metal hydroxide, alkali metal silicate and alkali metal saponified fatty acid until emulsifiable and saponifiable matter has been removed from the cellulosic portion, washing until a neutral reaction has been obtained, partially bleaching with liquid chlorine solution, and washing until neutral, substantially as herein set forth.

1,814,107. RAIL TONGS. FREDERICK F. ZAVATKAY, Winsted, Conn. Filed Dec. 3, 1929. Serial No. 411,240. 3 Claims. (Cl. 294—16.)



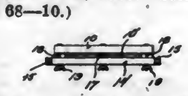
1. A gripping tong device of the character described comprising pivotally connected levers having gripping jaw portions at their lower end portions, said jaws being formed to jointly provide a pocket adapted to receive the head portion of a rail and a leaf spring attached to one of the levers and having a curved lower end portion positioned within the pocket for engagement with the upper surface of the rail head for retaining of the effective hold thereon.

1,814,108. ARM FOR LATERAL ARM AWNINGS. FREDERICK A. ANTON, Topeka, Kans. Filed Aug. 18, 1930. Serial No. 476,052. 5 Claims. (Cl. 156—44.)



4. An awning bracket having a pair of alined bolt-receiving openings and a pair of bar receiving recesses arranged with their corresponding axial planes bearing an inclined relation to the plane of said bolt openings.

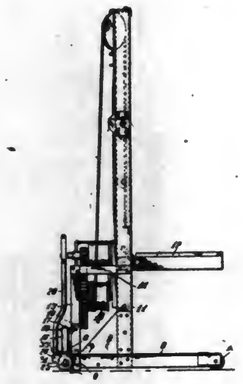
1,814,109. IRONING BOARD. KNUTE BAKKE, West Allis, Wis. Filed Nov. 2, 1929. Serial No. 404,261. 3 Claims. (Cl. 68—10.)



1. The combination of a cabinet having vertical ways in the sides thereof, an ironing board, a pair of transverse

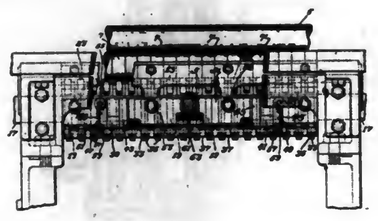
bars pivotally connected to one end of said board above and beneath the same, clamp screws coacting with said bars to releasably grip said board therebetween, one of said bars having end trunnions guided in said ways, a brace hingedly connected to said board, a brace support pivotally mounted in the base of said cabinet, and a hinge connection between said brace and brace support.

1,814,110. PORTABLE ELEVATOR. ARTHUR M. BARRETT, Winnetka, Ill., assignor to Barrett-Cravens Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 22, 1926. Serial No. 82,919. 27 Claims. (Cl. 280—46.)



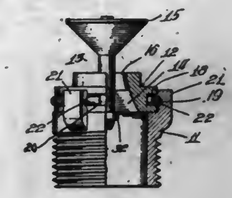
1. A portable elevator comprising a base, wheels supporting one end portion thereof, means carried by the base and adapted to bear on the floor to support the other end portion of said base, a steering axle, steering wheels mounted on said steering axle, a head on said steering axle, a cylinder connected with said head, a collar movable on said cylinder to engage said base, a cylinder on said base telescoping with said first cylinder, a piston operating in said first cylinder to check the descent of the base during the lowering operation, and means operable to move said collar vertically.

1,814,111. SPLITTING MACHINE. WILLIAM C. BAXTER, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 13, 1929. Serial No. 378,149. 13 Claims. (Cl. 69—13.)



12. A machine of the class described having, in combination, a knife, a rigid feed member, a cooperating yielding feed member, and resilient means adapted to be moved bodily into and out of operative relation to said yielding feed member.

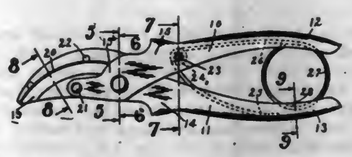
1,814,112. SPRINKLER HEAD OR NOZZLE FOR FILTER BEDS. HUBERT BEDDOES, Chicago, Ill., assignor to Pacific Flush Tank Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 24, 1928. Serial No. 264,338. 14 Claims. (Cl. 299—121.)



2. In a nozzle, the combination of a hollow body having recess means, a cap, and a spring member between the cap and the body cooperating with said recess means to lock the cap in a predetermined position on the body, a spray device removably mounted on the cap, said spring means being arranged for movement out of cooperative relation with said recess means by a separate tool to permit removal of the cap.

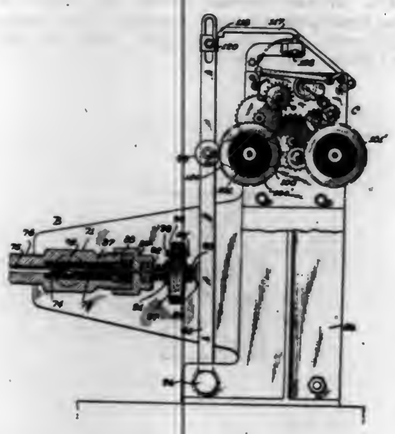
11. In a nozzle, the combination of a member having a central nozzle opening and narrow slots on opposite sides of the opening, a thin web adapted to fit in said slots so as to be removable therefrom, and a spray device carried by said web.

1,814,113. HAND TOOL. WILLIAM A. BERNARD, New Haven, Conn., assignor to The William Schollhorn Company, New Haven, Conn. Filed Jan. 13, 1926. Serial No. 81,022. 11 Claims. (Cl. 30—12.)



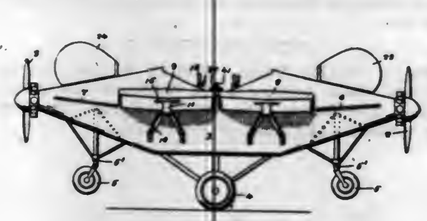
1. In a hand tool, a pair of members, each being formed from a strip of sheet metal and comprising a handle portion and a bifurcated portion, said members being crossed and pivoted together at their bifurcated portions, the arms of the bifurcated portion of one straddling an arm of the bifurcated portion of the other, and then being brought together into contact to form a jaw member, and a shear blade secured to the free arm of the other member and disposed between the free arm thereof and an adjacent arm of the other member and being in opposed shearing relation to said jaw member.

1,814,114. REFRIGERATION SYSTEM AND METHOD. WALTER LIGHT BODMAN, New York, N. Y., assignor to The Insulation Corporation, a Corporation of Delaware. Filed Nov. 21, 1925. Serial No. 70,506. 1 Claim. (Cl. 62—92.)



A refrigeration system comprising a source of pressure gas supply, a refrigeration box, a needle valve controlling the flow of gas from the source of supply to the box, means for periodically opening and closing the needle valve, and means for heating the stem of the valve.

1,814,115. AEROPLANE. WILLARD E. BLAIN, Van Buren, Ark. Filed Jan. 11, 1930. Serial No. 420,258. 2 Claims. (Cl. 244—12.)



1. In an aeroplane including the usual body tapered at each end, shafts mounted upright in the body adjacent the ends thereof with their upper ends protecting above the body, a rudder upon the said end of each shaft a cross arm upon each shaft, within the body, a shaft mounted upright in the body between the first mentioned shafts, a sleeve shaft rotatably mounted upon the last mentioned shaft, a hand lever upon the upper end of each of the last mentioned shafts operable to rotate the respective shaft, a cross bar at the lower end of each of the last mentioned shafts, and rods connected to the ends of the said cross bars of each shaft and each to corresponding ends of the cross bar at the lower end of the shaft of a respective one of the rudders.

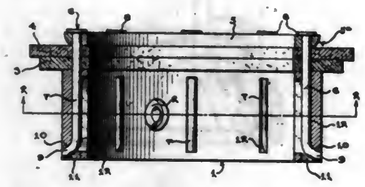
1,814,116. WINDING DEVICE FOR HAIR WAVERS. ARTHUR G. BORDEN, Washington, D. C., assignor to The Borden Method, Inc., Washington, D. C., a Corporation of Delaware. Filed May 29, 1930. Serial No. 457,140. 8 Claims. (Cl. 132—33.)

1. In a hair waving apparatus, a winding device comprising a tubular member adapted to slidably and rotatably engage a mandrel, said tubular device having a pair of oppositely directed jaws adapted to engage strands of hair



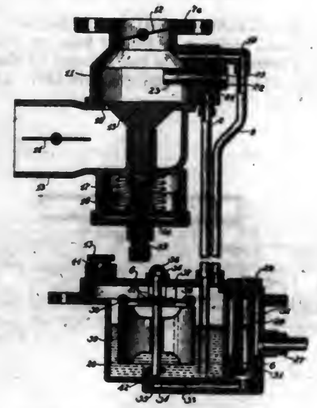
for wrapping the hair upon the mandrel when said tubular member is rotated in either a clockwise or a counter-clockwise direction.

1,814,117. PACKER. ALEXANDER BOYNTON, San Antonio, Tex. Filed Oct. 19, 1925. Serial No. 63,496. 4 Claims. (Cl. 166—18.)



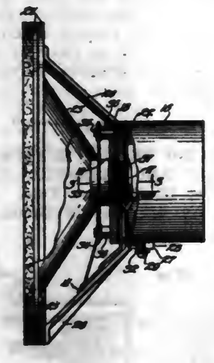
4. A packer comprising a tubular body, and a plurality of ring-washers applied to one end of the body and having openings constituting a continuation of the bore of the body to leave an unobstructed central passage, said washers being progressively larger in one direction to assume a progressively outstanding stepped relationship.

1,814,118. CARBURETOR FUEL SUPPLY SYSTEM. ROBERT F. BRACKS, Chicago, Ill., assignor to Curtis B. Camp, trustee, Chicago, Ill. Filed Oct. 14, 1926. Serial No. 141,489. 2 Claims. (Cl. 261—72.)



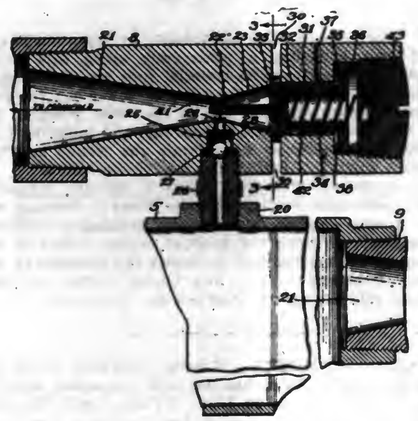
1. In a carburetion system, the combination of a carburetor having an automatic air admission valve, a fuel suction device and an induction passage, an auxiliary tank disposed separate from and below said carburetor, a suction pipe extending into said induction passage and communicating with said auxiliary tank to create a vacuum therein, that portion of said suction pipe disposed in the induction passage being provided with a plurality of apertures in registration with the head of said valve during the course of its travel, whereby certain of the apertures are shut off from the induction passage as the valve rises, a tube connecting said carburetor suction device with the lower portion of said auxiliary tank, and means for regulating the level of fuel in said auxiliary tank.

1,814,119. LOUD SPEAKING APPARATUS. CLIFFORD C. BRADBURY, Glencoe, Ill. Filed Sept. 3, 1929. Serial No. 389,903. 9 Claims. (Cl. 179—115.5.)



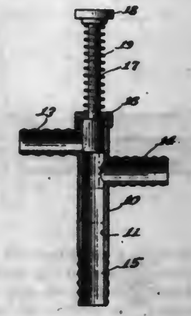
9. In a loud speaking apparatus, a magnetic circuit, means for supplying an energizing current therefor, means for eliminating the effect of variations of the energizing current comprising a neutralizing coil, and a generating coil differentially connected thereto, said generating coil being more subject to change of magnetic circuit than the neutralizing coil.

1,814,120. FUEL BOOSTER PUMP. CLIFFORD C. BRADBURY, Glencoe, Ill., assignor to Curtis B. Camp, trustee, Glencoe, Ill. Filed Sept. 3, 1929. Serial No. 389,904. 11 Claims. (Cl. 230—95.)



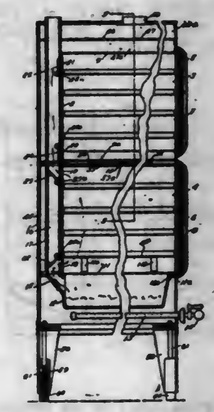
1. In an apparatus for producing a vacuum, a Venturi tube having a restricted throat, an intake in said throat, a valve controlling the admission of air to the end of said tube, and means for closing said valve when the suction in the tube falls to a predetermined value and opening said valve when the suction exceeds said value to govern the withdrawal of air to produce a low pressure in means associated with said tube.

1,814,121. MULTIPLE PORT VALVE. JOHN C. BROWN and HENRY W. BOHRMAN, Los Angeles, Calif. Filed Oct. 30, 1929. Serial No. 403,485. 1 Claim. (Cl. 251—76.)



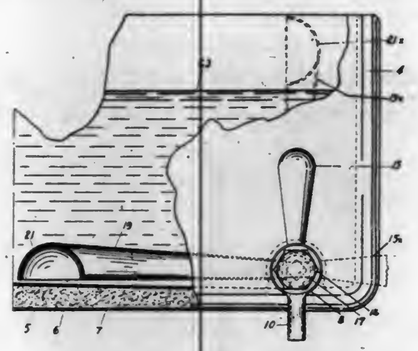
A multiple port valve comprising means providing a cylinder; first, second and third ports arranged at different localities along the length of the cylinder, a piston reciprocable in the cylinder, a cap for the end of the cylinder arranged near the first port, a stem on the piston extending through the cap, a handle on the stem, a spring compressed about the stem between the handle and cap urging the piston against the cap, the first port being so arranged near the cap that when the piston is in normal position it will close the first port placing the second and third ports in communication, said piston being movable into a position between the second and third ports to place the first and second ports in communication and close the third port.

1,814,122. COOKER. CHARLES G. BRYSON, Erie, Pa., assignor to Erie Restaurant Equipment Company, Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1929. Serial No. 337,683. 16 Claims. (Cl. 126—20.)



1. In a cooker, the combination of a case having a cooking compartment therein; a steam generator having outlets maintaining approximately atmospheric pressure; steam connections leading to and from the compartment, said connections having large capacities adapted to convey steam at approximately atmospheric pressure; and valves controlling the connections.

1,814,123. DISPENSER FOR HETEROGENEOUS LIQUIDS. CHARLES BURKART, Bronx, N. Y. Filed July 9, 1928. Serial No. 291,369. 5 Claims. (Cl. 225—21.)

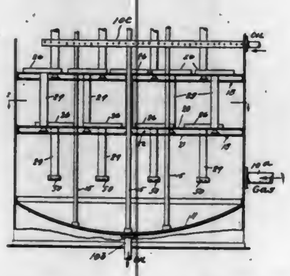


1. In combination with a container for a heterogeneous liquid, a duct partly submerged in said liquid, a connection from the submerged part of said duct to the outside of said container, an orifice on said duct above said liquid, and normally closed means submerging said duct by moving it in the direction in which said orifice opens from said duct when said means is being moved to open position.

1,814,124. SYNTHETIC RESIN AND PROCESS OF MAKING SAME. STEPHEN P. BURKE, New York, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Sept. 11, 1924. Serial N. 737,130. 16 Claims. (260—3.)

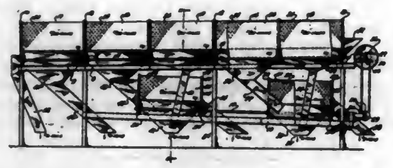
9. The process for the manufacture of synthetic moldable and heat-hardenable resins which comprises condensing with formaldehyde in the presence of a basic catalyst stronger than ammonia, the fractional distillate boiling between 200° and 300° C. of a primary coal tar, and separating the resultant resinous condensation product from the residual liquids.

1,814,125. ABSORBER. JULIAN A. CAMPBELL, Long Beach, Calif. Filed July 19, 1926. Serial No. 123,417. 10 Claims. (Cl. 261—113.)



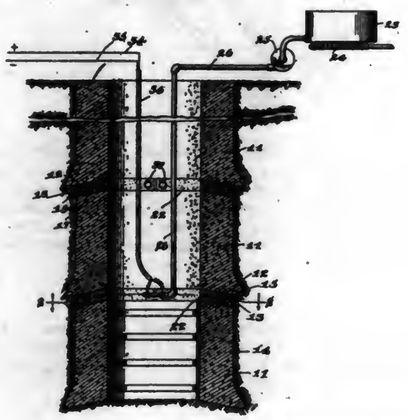
1. In an absorption tower or the like, a bubbling floor embodying two vertically spaced perforated plates enclosing between them a froth chamber, means for feeding liquid into said said plate enclosed chamber independently of the perforations in the upper plate, means for supplying gas under pressure under the lower plate, and means for removing froth from a point above the upper plate.

1,814,126. SYSTEM OF AND MACHINE FOR GRADING PEAS. FRANK D. CHAPMAN, Berlin, Wis. Filed June 3, 1927. Serial No. 196,821. 2 Claims. (Cl. 209—202.)



1. The system of grading granular food, which comprises, passing the mixed food granules over a screen having relatively small openings, subsequently passing the oversize from the first screen over a second screen having openings of larger size than those of the first screen, passing the granulars delivered through the openings of the second screen through a third screen having openings of the same size as those of the first screen, and directly mixing the granules delivered through the first and third screens.

1,814,127. PROCESS AND APPARATUS FOR SEALING CONSTRUCTION AND EXPANSION JOINTS. GEORGE W. CHRISTIANS, Chattanooga, Tenn. Filed Mar. 26, 1930. Serial No. 439,153. 20 Claims. (Cl. 61—41.)

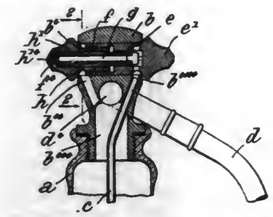


1. A method of sealing construction or expansion joints, comprising extending a passageway along said joint, forcing hot thermoplastic material into one end of said passageway and causing the same to flow along the passageway toward the other end of the latter, plugging the last mentioned end of the passageway, and radiating heat within the passageway to maintain the sealing material in fluid condition during the sealing operation.

15. A method of sealing joints in existing construc tions, comprising cutting conduits along a joint at angles to one another, and thereby forming a tortuous passageway, plugging the joint at certain points of entrance of the cutting tool to render the passageway unbroken from end to end, and forcing sealing material through said passageway from one end to the other.

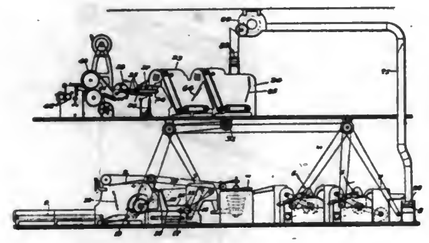
1,814,128. ATOMIZER. GASTON FRÉDÉRIC COURTOIS, Lyon, France. Filed Apr. 15, 1929, Serial No. 355,077, and in Belgium Apr. 26, 1928. 1 Claim. (Cl. 299—89.)

In combination, an atomizer head having a cylindrical bore therethrough, said atomizer head being provided with a pair of passages communicating with said bore and adapted to supply air and a liquid to the latter, and a pair of nozzle elements fitting into opposite ends of said bore and threadedly engaging with one another, one of said nozzle elements enclosing a portion of the other, each one of said nozzle elements having passages formed therein



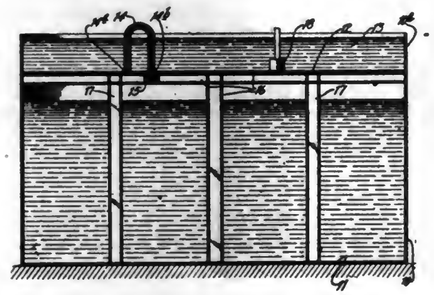
communicating with one of the passages in said atomizer, each of said nozzle elements having portions thereof abutting against one end of said bore when in assembled position.

1,814,129. COTTON OPENING AND PICKING SYSTEM. ROBERT S. CURLEY, Lowell, Mass., assignor to Saco-Lowell Shops, Boston, Mass., a Corporation of Massachusetts. Filed June 26, 1929. Serial No. 373,737. 12 Claims. (Cl. 19—65.)



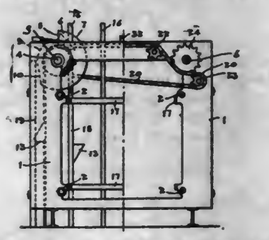
1. That improvement in methods of preparing ginned cotton for carding which consists in substantially completing the preparation of the cotton for the final lapping operation while maintaining the cotton in a loose condition and without producing a wound lap, distributing the cotton so prepared to finisher lappers, and feeding the cotton at a substantially uniform rate to each lapper.

1,814,130. CONTAINER FOR GASES AND VOLATILE LIQUIDS. CLAYTON L. DAY, New York, N. Y., and LEWIS MCDONALD, Chicago, Ill., assignors to Chicago Bridge & Iron Co., a Corporation of Illinois. Filed Dec. 27, 1927. Serial No. 242,826. 3 Claims. (Cl. 220—85.)



1. A container adapted to hold a gas or volatile liquid under pressure having a substantially flat roof; a liquid on the roof, the weight of said liquid operating to counterbalance the internal gas pressure against said roof; a cup depressed in said roof, said cup also being filled with said liquid on said roof; and automatic means for relieving the internal gas pressure when the same exceeds the counterbalancing effect of the liquid, said means including a vent pipe having one end in communication with the interior of the container, said vent pipe extending upwardly above the level of the liquid on the roof, and then bent downwardly with its other end immersed in the liquid in the cup in the roof.

1,814,131. LOWERING DEVICE. RUDOLF D. DELAMERE, Toronto, Ontario, Canada, assignor to Delamere and Williams, Toronto, Ontario, Canada. Filed July 16, 1928. Serial No. 293,100. 9 Claims. (Cl. 198—20.)



1. A lowering device, comprising a frame adapted to be placed upon a floor, a plurality of vertically arranged carrier belts supported from said frame and having carrier brackets thereon, means for temporarily supporting the article to be lowered above said belts and adapted when operated to lower the article onto the carrier brackets of said belts, and means for intermittently effecting an operative connection of said temporary supporting means and said conveyor belts to cause the same to operate in unison for limited times.

1,814,132. PROCESS FOR PREPARING ADHESIVE TAPE. RICHARD GURLEY DREW, St. Paul, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a Corporation of Delaware. Original application filed May 28, 1928, Serial No. 281,104, now Patent No. 1,760,820. Divided and this application filed May 24, 1930. Serial No. 455,440½. 11 Claims. (Cl. 91—68.)

10. The method of making a sheeted adhesive product which includes applying to a cellulosic backing comprising unsized paper, a unifying impregnating composition for the fibres of said paper, coating one face of the paper so treated with a primer comprising plasticized rubber, overlying a normally pressure sensitive adhesive over said priming coat, and coating the opposite face with a finishing coating.

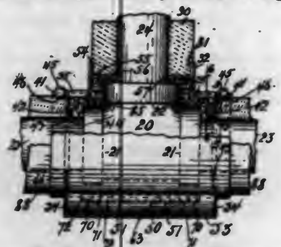
1,814,133. SHEET MATERIAL AND METHOD OF MAKING THE SAME. JOSEPH C. EDGAR, St. Joseph, Mo., assignor of one-half to Edward H. Wardwell, New York, N. Y. Filed Dec. 18, 1929. Serial No. 415,126. 12 Claims. (Cl. 41—17.)

9. The process of making imitation sheet metal for decorative purposes which comprises heating mollusk shells until they assume a metallic hue, dipping the shells in a binder, cutting the shells in regular shapes and then mounting them on a backing sheet.

1,814,134. INSULATION CASING FOR PIPE FITTINGS, VALVES AND THE LIKE. ABRAHAM EIGE, Jersey City, N. J. Filed Dec. 28, 1928. Serial No. 328,915. 5 Claims. (Cl. 154—44.)

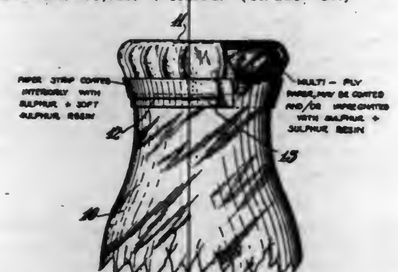
3. In an insulation casing the combination of a pair of semicylindrical portions, a hinge connecting the said portions at one end thereof, a clamping band extending from

the other end of one of said portions adapted to enter an opening extending through the other portion to clamp the portions together, said portions adapted to contain a heat insulating material to cover a pipe fitting, and end heads for the pair of semicylindrical portions having main open-



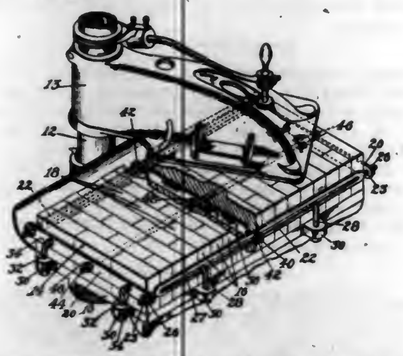
ings for pipes to extend therethrough and supplemental openings for the flow of a portion of the insulating material therethrough, said end heads forming pockets adapted to support pipe coverings and said coverings cementing with portions of the insulating material that extends through said supplemental openings.

1,814,135. COATED OR IMPREGNATED PRODUCT. CARLETON ELLIS, Montclair, N. J. Filed Jan. 5, 1927. Serial No. 159,245. 7 Claims. (Cl. 215—38.)



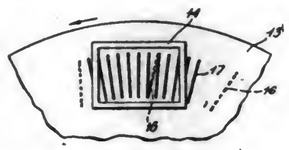
1. A hood cap for bottles comprising paper composed of two plies of dissimilar paper stock, impregnated with resinated sulphur.

1,814,136. CUTTING BLOCK. FRANK H. ELLIS, Braintree, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 20, 1929. Serial No. 387,188. 8 Claims. (Cl. 164—58.)



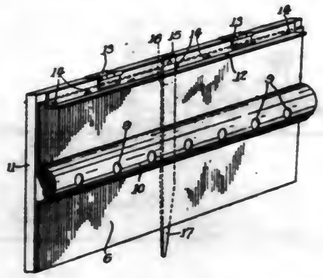
1. In a cutting block, metal reinforcing members extending through the block substantially at right angles to each other, one of said members passing through another.

1,814,137. TELEVISION. JUDAH B. FELSHIN, New York, N. Y., assignor of one-third to Morris Kirschstein and one-third to Louis Oskow, Brooklyn, N. Y. Filed Apr. 8, 1929. Serial No. 353,545. 11 Claims. (Cl. 178—6.)



1. In a scanning device, a rotatably mounted member, means for rotating said member, and means associated with said member for scanning a predetermined area a plurality of times during each revolution of said member said last mentioned means comprising a member having a plurality of narrow elongated openings.

1,814,138. INSTALLING DEVICE FOR PAVING JOINTS. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Jan. 24, 1927. Serial No. 163,054. 4 Claims. (Cl. 94—51.)



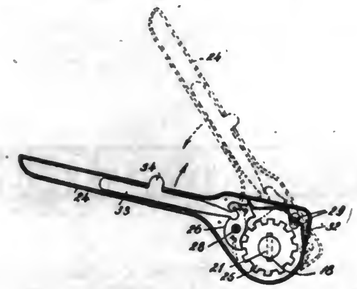
1. In an installing device for preformed paving joints, a backing member adapted to lie against one side of the joint, means including a member hinged to the backing member for holding the joint against the backing member, and staking means extending from the hinged member to project between the backing member and joint.

1,814,139. CONSTRUCTIONAL MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Dec. 22, 1927. Serial No. 241,972. 16 Claims. (Cl. 94—18.)



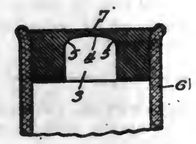
1. Constructional material comprising a preformed body consisting of a homogeneous mixture of a waterproofed binder, rubber material and cotton-seed hulls.

1,814,140. SEAT ADJUSTING MEANS FOR VEHICLES. GERHARD FLINTERMANN, West Orange, N. J. Filed May 8, 1929. Serial No. 361,403. 2 Claims. (Cl. 74—54.)



1. In a device of the class described, an operating lever comprising a hollow casing, a ratchet wheel mounted within and completely enclosed by said casing and movable relatively thereto, a ratchet pawl pivotally mounted between its ends within said casing and completely enclosed thereby, and means slidable within the casing for selectively moving the opposite ends of said pawl into engagement with said ratchet wheel.

1,814,141. CONTAINER STOPPER. ARTHUR O. FOX and JOHN A. KEENAN, Madison, Wis., assignors, by mesne assignments, to General Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed Dec. 17, 1928. Serial No. 326,595. 9 Claims. (Cl. 215—47.)



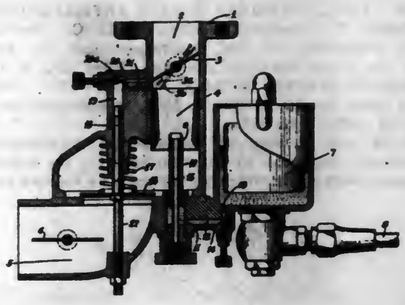
1. As an article of manufacture, a bottle or container stopper having a substantial taper to fit tightly in the mouth of the bottle or other container, formed with a cavity in the central portion thereof, which cavity is open to the contents of the bottle or other container, and formed with an elastic diaphragm providing an outer wall for said cavity, which wall is adapted to balloon out under internal pressure to prevent breakage of the bottle or other container, forming a bond between the sides of the cavity, the sides of said stopper being substantially thick to provide a body of such mass that distortion thereof by inflation of said diaphragm is prevented, permitting the diaphragm to balloon out under pressure without loosening the stopper in the mouth of the container.

1,814,142. TYPEWRITER ATTACHMENT. GROVER C. FRANTZ, Harrisburg, Pa., assignor to Modern Utilities Company, Harrisburg, Pa., a Corporation of Pennsylvania. Filed March 14, 1928. Serial No. 261,477. 5 Claims. (Cl. 197—133.)



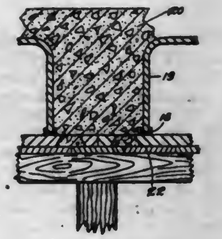
1. The combination with a typewriter embodying a bar having spaced throughout its length pairs of grooves alined upon opposite sides, a pair of arms having each an angularly disposed offset at one end with a cut out providing prongs appropriately spaced and proportioned to fit slidably into any one pair of grooves and trunnions carried at the ends of the arms opposite said prongs.

1,814,143. CARBURETOR. EDWARD F. GEIGER, Binghamton, N. Y. Filed June 25, 1928. Serial No. 287,908. 7 Claims. (Cl. 261—61.)



1. A carburetor with a throttle, a venturi, an air resisting valve disposed in the intake of the venturi, and provided with resilient means to resist opening movement thereof, in combination with means for modifying the action of said valve, said means comprising means brought into action by the depression of pressure which exists adjacent the throttle valve for effecting modification of the action of the air valve said means being shut off by the throttle when the latter moves to closed position.

1,814,144. CEILING SLAB. MAX S. GOLDSMITH, Cincinnati, Ohio. Filed June 30, 1927. Serial No. 202,565. 3 Claims. (Cl. 72—66.)



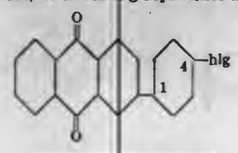
3. In a construction of the class described the combination with a temporary support, of a plurality of thin flat preformed slabs of fireproof material disposed on the support, each slab having extended parallel faces and thin edge faces at right angles thereto for complete abutment with the edge faces of adjacent slabs, said slabs having apertures with downwardly divergent walls disposed interiorly of each slab, and a mass of poured concrete disposed upon said slabs and entering the apertures for keying the slabs at a plurality of places to said concrete mass.

1,814,145. PROCESS OF PREPARING PARA-PHENYL-ORTHO-BENZOYL-BENZOIC ACID. PHILIP H. GROGGINS, Washington, D. C.; Dedicated, by assignment, to the Government and the People of the United States of America. Filed Aug. 8, 1929. Serial No. 384,505. 6 Claims. (Cl. 260—64.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A process of preparing the aluminum base of para-phenyl-ortho-benzoyl-benzoic acid which comprises condensing phthalic anhydride and diphenyl in the presence of anhydrous aluminum chloride at a temperature not exceeding 85° C.

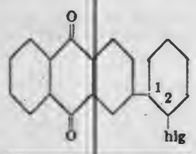
1,814,146. PROCESS FOR THE PREPARATION OF 4-HALOGEN-BETA-PHENYL-ANTHRAQUINONE. PHILIP H. GROGGINS, Washington, D. C.; Dedicated, by assignment, to the Government and the People of the United States of America. Filed Aug. 8, 1929. Serial No. 384,513. 6 Claims. (Cl. 260—57.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

5. As new articles of manufacture 4-halogen-beta-phenyl-anthraquinone having most probably the following chemical formula, in which hlg represents a halogen atom:



1,814,147. PROCESS FOR THE PREPARATION OF 2-HALOGEN-BETA-PHENYL-ANTHRAQUINONE. PHILIP H. GROGGINS, Washington, D. C.; Dedicated, by assignment, to the Government and the People of the United States of America. Filed Aug. 8, 1929. Serial No. 384,514. 11 Claims. (Cl. 260—57.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

10. As new articles of manufacture 2-halogen-beta-phenyl-anthraquinones having most probably the following chemical formula in which hlg represents a halogen atom.



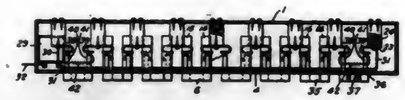
1,814,148. PROCESS FOR THE PREPARATION OF 4-AMINO-BETA-PHENYL ANTHRAQUINONE BY RING CLOSURE. PHILIP H. GROGGINS, Washington, D. C.; Dedicated, by assignment, to the Government and the People of the United States of America. Filed Aug. 8, 1929. Serial No. 384,515. 4 Claims. (Cl. 260—57.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. The process of preparing 4-amino-beta-phenyl-anthraquinone which comprises heating 4-amino-para-phenyl-ortho-benzoyl-benzoic acid at a temperature of about 125° C. with 95 per cent sulfuric acid as a dehydrating agent.

1,814,149. PROCESS FOR THE PREPARATION OF 2-AMINO-BETA-PHENYL-ANTHRAQUINONE BY RING CLOSURE. PHILIP H. GROGGINS, Washington, D. C.; Dedicated, by assignment, to the Government and the People of the United States of America. Filed Aug. 8, 1929. Serial No. 384,517. 3 Claims. (Cl. 260—57.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

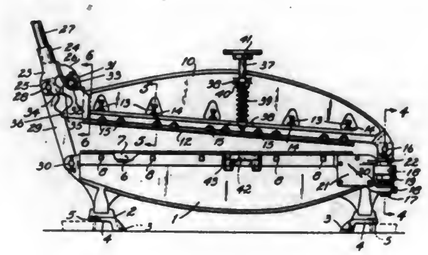
1. The process of preparing 2-amino-beta-phenyl-anthraquinone which comprises heating 2-amino-para-phenyl-ortho-benzoyl-benzoic acid at a temperature of about 125° C. with 95 per cent. sulfuric acid as a dehydrating agent in the presence of nitrobenzene.

1,814,150. ILLUMINATED SIGN. JOSEPH E. GROSS, Swissvale, Pa., assignor to Aurora Sign Company, a Corporation of Pennsylvania. Filed Apr. 20, 1929. Serial No. 356,719. 1 Claim. (Cl. 40—130.)



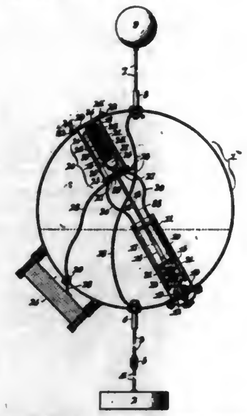
An illuminated sign comprising a casing having spaced openings in one side thereof, a plurality of posts of insulating material secured to a wall of said casing, said posts being in line, spaced substantially equal distances apart and extending towards said openings, a contact member secured to the outer end of each post, said contact members each having yieldable end portions extending towards adjacent posts, a plurality of plates disposed in said openings, means on said plates and casing for locking the plates in position in said casing openings, luminous tubes secured to some of said plates, two posts of insulating material secured in line to each plate, contact members on said posts, conductors connecting the terminals of the respective tubes to the contact members on the posts carried by the plates to which the tubes are secured, said plates when in position in the casing openings causing positive pressure engagement with adjacent ends of two contact members carried by the posts secured to said casing wall, said tubes when the plates are mounted in place, being connected in circuit relation by said contact members, and means for connecting said tubes to a source of alternating current.

1,814,151. SHINGLE CUTTER. SEVERIN N. GUNDLACH, Belleville, Ill. Filed May 2, 1929. Serial No. 359,739. 8 Claims. (Cl. 164—46.)



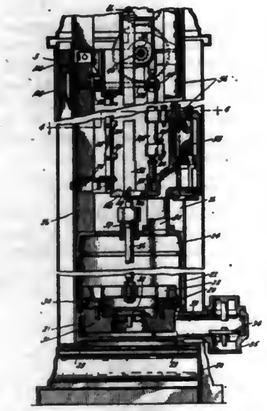
1. A cutting device comprising a body portion, a knife blade mounted therein, a knife carrier located above said body member and pivotally secured thereto, a knife blade mounted in said pivoted carrier for cooperation with the knife blade on said body member, means mounted on said body member and operatively engaging the free end of the pivoted knife carrier to actuate the latter, and means for varying the pivot point of said pivoted knife carrier, said means comprising a threaded stud slidably mounted on said body member and pivotally supporting said knife carrier, a spring for supporting said threaded stud, and a nut threaded on said stud and adapted to be held in abutting relation to said body member by the action of said stud supporting spring.

1,814,152. MARINE MINE AND FIRING METHOD THEREFOR. JOHN K. M. HARRISON, Ogontz, Pa. Filed Jan. 13, 1926, Serial No. 81,082. Renewed Sept. 30, 1930. 47 Claims. (Cl. 102—3.)



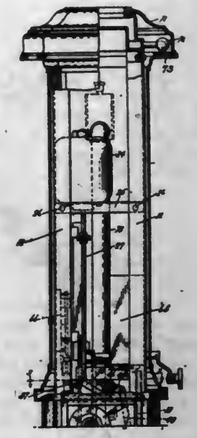
1. The method of firing a marine mine detonator directly with the energy of a sea battery, which comprises accumulating energy from the sea battery intermediate the same and the detonator for a period of time before passing such energy to the detonator.

1,814,153. MEASURING AND DISPENSING PUMP. LEE R. HARTLEY, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Oct. 2, 1926. Serial No. 139,071. 9 Claims. (Cl. 221—103.)



1. A dispensing pump comprising a base, a pump cylinder mounted on said base, a piston arranged to reciprocate in said pump cylinder, a connecting rod projecting upwardly from said piston through the end of said pump cylinder, upright bars carried by said base and extending upwardly above said pump cylinder, a rack connected to said piston rod, a shaft having a pinion thereon meshing with said rack, a bearing member mounted on said upright bars in which said shaft is journaled, a hand crank for rotating said shaft, a clutch member for releasably connecting said hand crank with said shaft, a bracket detachably supported by said upright bars, a motor cylinder carried by said bracket, a piston arranged to reciprocate in said motor cylinder, a piston rod connecting said piston with said rack, and means for introducing fluid under pressure into said motor cylinder for operating said pump piston.

1,814,154. MOTOR OPERATED DISPENSING PUMP. LEE R. HARTLEY, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Oct. 11, 1926. Serial No. 140,702. 7 Claims. (Cl. 103—23.)



4. The combination with a vertically reciprocating dispensing pump, of corner posts extending upwardly above said pump, a bracket carried by said corner posts above said pump, a horizontal shaft journaled in said bracket, rack and pinion mechanism for operating said pump from said shaft, a motor support mounted on said corner posts above said bracket, a motor rotatable about an upright axis and carried by said motor support, a vertical shaft extending downwardly from said motor, transmission mechanism mounted on said bracket and affording a driving connection between said vertical shaft and said horizontal shaft, said transmission mechanism including a frictional slip drive.

1,814,155. PROCESS OF TREATING VEGETABLE FIBERS. THEODORE P. HAUGHEY, Accomac, Va. Filed May 16, 1930. Serial No. 453,107. 12 Claims. (Cl. 92—10.)

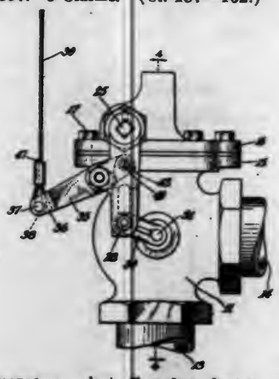
1. The process of treating vegetable fibers which includes digesting the fibers in a weak chemical solution under super-atmospheric pressure conditions to separate the gum and foreign matter from the fibers and thereafter treating the same under sub-atmospheric pressure conditions while forcing air therethrough to agitate the solution and to permit the removal of the gums and shive therefrom.

1,814,156. BATTERY TERMINAL CLAMP. JAMES E. HEDGES, Richmond, Va., assignor of one-half to Hildrey Ferguson, South Richmond, Va. Filed Feb. 14, 1929. Serial No. 339,843. 2 Claims. (Cl. 173—259.)



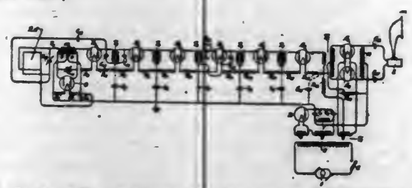
2. A battery connector comprising a collar member having a pair of rectilinear and parallel extensions, a link pivotally carried by one of said extensions, a slot adapted to receive said link in the other extension and means mounted on said link and cooperating with said second named extension for securing said extensions in locked engagement.

1,814,157. EMERGENCY VALVE. FRANK A. HEIMBOLD, Atlantic Highlands, N. J. Filed June 22, 1928. Serial No. 287,397. 8 Claims. (Cl. 137—162.)



6. An emergency shut-off valve device comprising a valve casing having a valve seat, a top plate for said casing, a sleeve centrally dependent from said plate, a valve stem slidable in said sleeve, a housing on said plate, one end of said stem being slotted and extending into said housing, a roller bearing in said slot, a cam shaft on said plate and projecting into said housing, a cam arm on said shaft projecting into said slot in engagement with said bearing, a valve on said stem, and a spring around said stem tending to move the valve toward its seat, and means connected to said cam shaft to hold the valve off its seat, and temperature responsive means to release said holding means when a predetermined temperature in the vicinity of the device has been achieved.

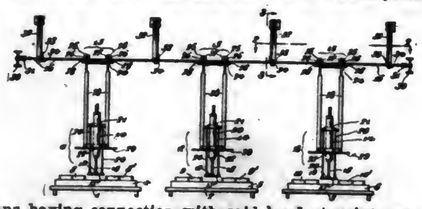
1,814,158. SIGNALING SYSTEM. WILLIAM H. T. HOLDEN, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 22, 1926. Serial No. 103,922. 5 Claims. (Cl. 250—27.)



5. In a radio receiving system, in combination, a plurality of three-electrode vacuum tubes and transformer coupling means interconnecting said vacuum tubes, a source of rectified alternating current, means comprising a plurality of resistances connected in series for supplying the proper potentials for operating said vacuum tubes from said source of rectified alternating current, two of said resistances being provided for at least one of the vacuum tubes, one of which resistances is connected to the input circuit of said vacuum tube and the other to the output circuit of said vacuum tube, the said two resistances associated wtih said one of the vacuum tubes being different from those associated with any of the other vacuum tubes.

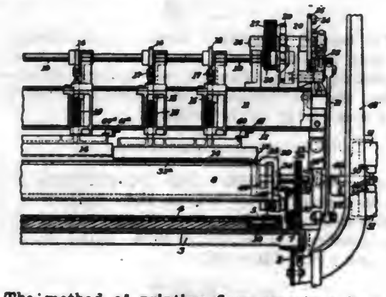
1,814,159. APPARATUS FOR MOLDING BRICKS. GEORGE SCOTT HOUSMAN, Norristown, Pa., assignor to E. J. Lavino and Company, Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 15, 1928. Serial No. 306,149. 2 Claims. (Cl. 25—41.)

1. In apparatus for molding bricks, the combination with a plurality of molds of a power driven hammer for tamping moldable material in the said molds, the said hammer having a tamping head pivotally connected thereto, means for supporting said hammer, said means and the said hammer being adapted to be positioned in operative relation to any one of the said molds, and elastic yielding



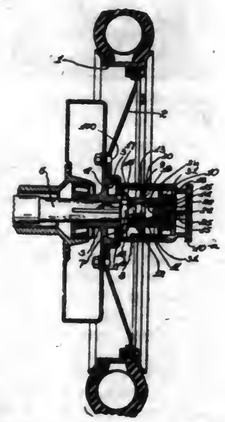
means having connection with said head at points on opposite sides of the axis of its pivotal movement, the said elastic yielding means exerting an upward pull upon said head.

1,814,160. BLOCK PRINTING MACHINE. CHARLES F. HUMPHREYS, Lancaster, Pa., assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 23, 1928. Serial No. 294,743. 34 Claims. (Cl. 101—199.)



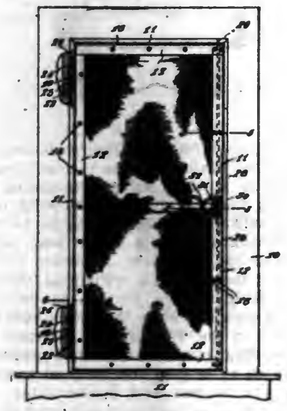
1. The method of printing floor coverings in a block printing machine having printing heads, which comprises the step of applying one character of coating material to one area of the printing block on a head and applying a coating material of another character to another area thereof in the same transverse portion of the block, the different coating materials being applied on different operations of the printing head.

1,814,161. DEMOUNTABLE WHEEL. ARTHUR C. HYNAN, Chicago, Ill., assignor to Robert N. Burton, Chicago, Ill. Filed Apr. 4, 1927. Serial No. 180,968. 5 Claims. (Cl. 301—9.)



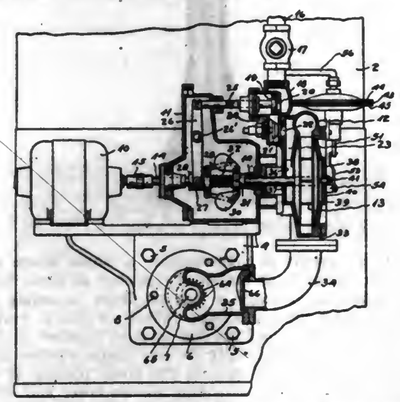
1. In combination with a wheel and its hub with which it is separably associated, an axle on which the hub is mounted, a part rigidly associated with said hub having a shoulder facing inwardly wtih reference to the end of the axle, the wheel having an outwardly facing shoulder, a locking member carried by the wheel and formed to fit between said shoulders for holding the wheel and hub together, and a retaining member axially movable in the wheel engageable with said locking member to hold it in locking position and disengageable therefrom for releasing the wheel from the hub.

1,814,162. DOOR AND WINDOW SCREEN. BENJAMIN L. INGRAM, Menard, and WILLIAM H. DE LONG, Champaign, Ill. Filed Apr. 26, 1929. Serial No. 358,399½. 1 Claim. (Cl. 292—40.)



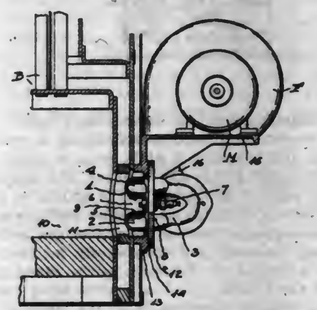
A lock for a hingedly mounted member comprising aligned longitudinally disposed locking rods adapted to be mounted for longitudinally sliding movement in said member and having their inner ends spaced apart and their outer ends adapted for engagement with keepers, a pair of pivotally connected cross arms having one of their ends operatively secured to the inner ends of the rods, with the inner ends of the rods extending through said arms, whereby the rods may be moved relatively outward, and a spring positioned between and having its opposite ends engaged over the ends of the rods to yieldingly force the latter outward.

1,814,163. COMBUSTION MIXTURE CONTROL. GEORGE H. IRWIN, Chicago, Ill. Filed Aug. 11, 1928. Serial No. 298,954. 1 Claim. (Cl. 158—119.)



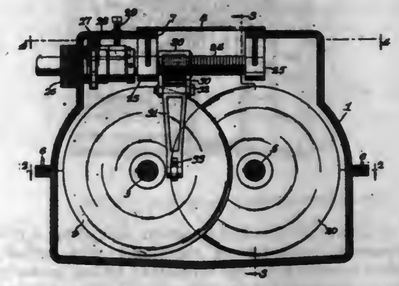
In a combustion system, the combination of a boiler, a blower for receiving and mixing air and natural or manufactured gas to produce a combustion mixture, a source of gas supply connected with the blower intake, and air inlet at the blower intake, a valve for said inlet, a diaphragm structure comprising a housing and a diaphragm therein, said gas supply source being connected with said housing at one side of said diaphragm whereby said diaphragm is subjected to the gas pressure, spring means resisting movement of the diaphragm by the gas pressure, said valve being connected with said diaphragm to be moved thereby to regulate the air inlet in accordance with the gas pressure variation whereby to maintain a fixed proportion of air and gas supply to the blower, a burner connected with the blower outlet to receive the combustion mixture, and a vent connection from the diaphragm housing to a combustion passage of said boiler for the escape of leakage gas in case the diaphragm should leak or become ruptured.

1,814,164. GAS BURNER STRUCTURE. GEORGE H. IRWIN, Chicago, Ill. Filed Aug. 11, 1928. Serial No. 298,955. 3 Claims. (Cl. 158—99.)



1. A gas burner structure comprising an annular body enclosing an annular passage, a combustion mixture inlet for said passage, combustion mixture main outlets through the inner wall of said body arranged in a row concentric with said body, a spark plug located axially within the outer end of the central space surrounded by said body, and radial gas outlets from said annular passage for directing pilot flames into said central space between the sparking end of the plug and said main outlets.

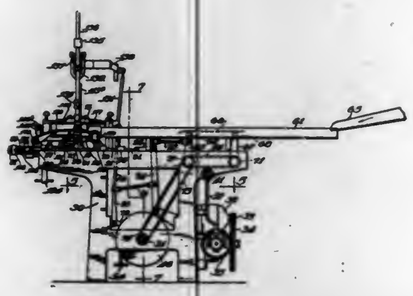
1,814,165. VARIABLE SPEED TRANSMISSION. RICHARD S. JACOBSEN, Wheaton, Ill., assignor to J. F. S. Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 12, 1929. Serial No. 385,129. 8 Claims. (Cl. 74—26.)



1. In a change-speed friction drive transmission, the combination of two parallel shafts, friction disks on said shafts, the disks of one shaft overlapping the disks of the other shaft, forming a plurality of friction disk couples between the two shafts, and a friction idler interposed between and engaging the opposing surfaces of each disk couple, together with means including parallel screws with an individual pivotal mounting thereon for each idler for

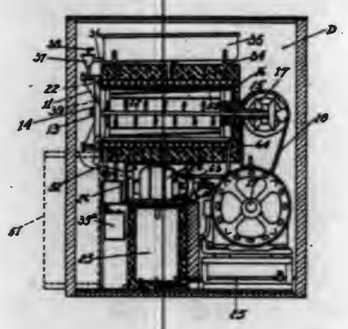
adjusting said idlers toward one shaft or the other, thereby to change or vary the ratio of rotation between the two shafts.

1,814,166. WRAPPING MACHINE. ALBERT S. KUX, Chicago, Ill. Filed Jan. 25, 1928. Serial No. 249,225. 11 Claims. (Cl. 93—2.)



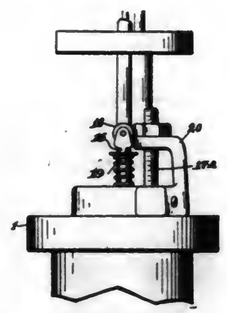
1. A wrapping machine embodying a unitary wrapping section proper, said section embodying a support along which the article is moved while being wrapped, means for thus moving the article and wrapper, and means arranged along the path of movement of the article on the support for successively engaging and folding portions of the wrapper against opposite faces of the article, the last said means embodying upwardly and downwardly inclined stationary surfaces arranged at different points along the line of travel of the article, all of said parts being bodily removable as a unitary structure from the machine and interchangeable with another unitary wrapping section.

1,814,167. ICE CREAM CABINET. JAMES M. LAIRD, Charleston, W. Va. Filed Nov. 28, 1927. Serial No. 236,145. 6 Claims. (Cl. 62—114.)



4. A cabinet for ices and ice cream comprising a freezer, an insulated compartment containing said freezer, an insulated compartment for solidifying frozen products, an insulated compartment for dispensing frozen products, refrigerating means, a circulatory brine system, and said freezer having a closed brine compartment surrounding same, said compartment provided with means for receiving the coldest brine from said circulating system, said freezer having a motor driven dasher, and automatic means for limiting the operation of said motor having manual means for controlling the operation of said dasher during the washing out operation.

1,814,168. FILLING HEAD FOR CAN FILLING MACHINES. JAMES LEONARD, Rochester, N. Y. Filed Jan. 14, 1928. Serial No. 246,829. 6 Claims. (Cl. 226—122.)



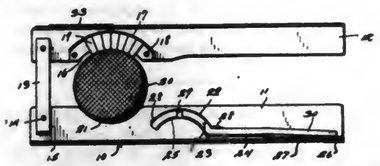
1. In a filling head for can filling machines, the combination of a casing having an open bottom, a solid center, a cushioning pad in said casing surrounding said solid center, a filling line leading thru said solid center, said filling line in said solid center having an enlarged short cylindrical extension with a valve seat between the filling line and the extension, a piston valve adapted to slide up and down in said cylindrical extension, said piston valve being adapted to seat or unseat on said valve seat and open and close the end of said filling line, a by-pass duct in the wall of said enlarged cylindrical extension extending from the end of said extension to said valve seat so as to by-pass the material extending thru said feeding line around said piston valve, said valve being solid and when seated being positioned with the lower end thereof substantially in line with the bottom of the solid center.

1,814,169. WHISK BROOM. OSCAR LEE, Waupun, Wis. Filed Mar. 14, 1930. Serial No. 435,926. 2 Claims. (Cl. 15—160.)



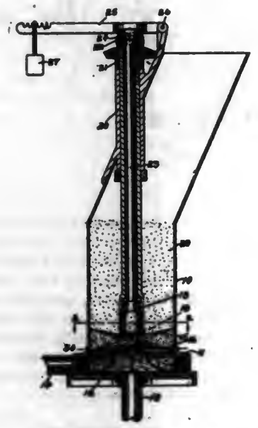
1. As an article of manufacture, a whisk broom comprising a plurality of individual bunches of fibers folded intermediate their ends, a loop of fibers extending outwardly beyond the top of said folded portion, a wrapped covering for the upper portion of said bunches to form the same into a substantially circular broom, another group of folded fibers placed around the lower portion of said wrapped covering and extending to the lower end of the broom, and another wrapped covering extending from the folded end portion of said second group of fibers to the lower portion of said first wrapped covering.

1,814,170. GOLF BALL MARKER. CLYDE R. LONG, Smethport, Pa. Filed Jan. 30, 1930. Serial No. 424,578. 8 Claims. (Cl. 101—35.)



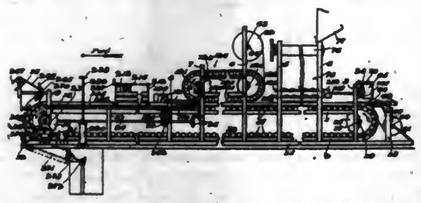
1. A marker of the character described comprising a pair of pivotal jaw members, link means for pivotally securing said jaw members to each other, and an indicia supporting member carried by one of said jaw members.

1,814,171. YIELDING PROPELLER. ESLI A. MARSH, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Mar. 11, 1929. Serial No. 345,927. 5 Claims. (Cl. 198—216.)



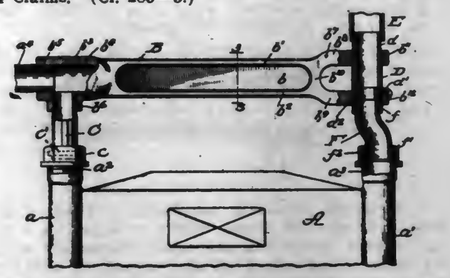
4. A propeller for propelling granular or powdery material comprising a propeller blade, means to drive the blade through material, a stem midway of said blade, and means constantly tending to move the rear edge of the blades towards the direction in which material is driven by the propeller.

1,814,172. BRICK MAKING MACHINE. EDWARD D. MARTINET, Los Angeles, Calif. Filed Mar. 14, 1927. Serial No. 175,317. 95 Claims. (Cl. 25—99.)



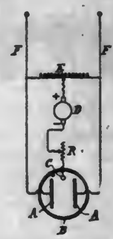
1. A machine of the character described comprising a carrier, means for discharging dry material upon the carrier and levelling the material at successively varying heights from the bottom of the carrier, means for moving the carrier in respect to the discharge means thereby spreading the material in successively superimposed layers, and means applying liquid to the successive layers in spray form to produce a plastic mass.

1,814,173. METER CONNECTION. GARNET W. MCKEE, Rockford, Ill. Filed Oct. 5, 1928. Serial No. 310,460. 4 Claims. (Cl. 285—3.)



3. In a meter connection, the combination of a rigid bar provided at one end thereof with means for connection to a pipe and a coupling nipple adapted to communicate with said pipe through the means, a fork at the other end of the bar, consisting of a pair of fork-members disposed one opposite the other and having coaxial holes formed therein, a sleeve fitting accurately and rotatable in the holes and provided at one end with means for connection to a second pipe, and a coupling nipple connected to the other end of the sleeve and adapted to communicate with said second pipe through the sleeve.

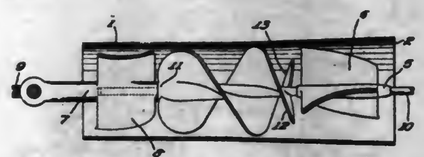
1,814,174. METHOD OF OPERATING ELECTROLYTIC APPARATUS. RALPH D. MERSHON, New York, N. Y. Filed Nov. 3, 1919. Serial No. 335,379. 15 Claims. (Cl. 175—315.)



1. In the art of operating electrolytic apparatus having filmed electrodes, the improvement which consists in operating with a film stress not materially lower than the critical forming voltage of the films.

10. The method of operating an electrolytic, film-forming condenser on an alternating-current circuit, which comprises applying a unidirectional-current excitation of such value that the impressed voltage on the film has the maximum value that will not permit an excessive leakage flow.

1,814,175. PROPELLER. WILLMAM I. MILLER, Chicago, Ill. Filed Nov. 28, 1928. Serial No. 322,443. 5 Claims. (Cl. 170—176.)



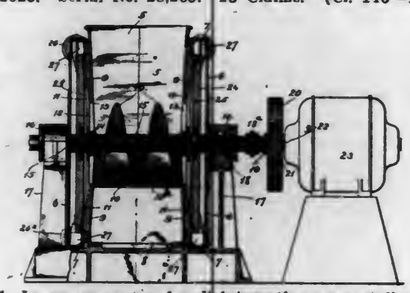
1. In a propeller, a rotary shaft, blades fast thereupon, a tubular tapered housing receiving said blades, a stationary support guide arranged in said housing in advance of said blades and receiving said shaft, and a stationary support guide at the rear of said blades arranged in said housing and receiving said shaft.

1,814,176. CENTRIFUGAL CASTING MACHINE. WILLIAM H. MILLSPAUGH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio, a Corporation of Ohio. Filed June 18, 1929. Serial No. 371,739. 12 Claims. (Cl. 22—65.)



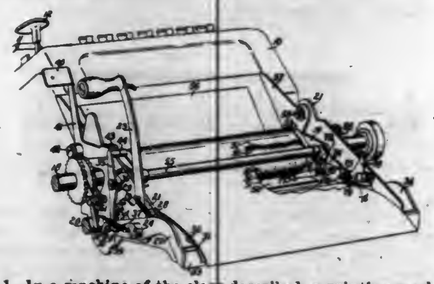
1. A casting apparatus comprising a rotor, a mold secured thereto and spaced therefrom to provide a cooling chamber surrounding the mold, an inwardly extending flange at one end of the rotor beyond the mold forming an inlet channel, and an inlet spout in said channel, said rotor being constructed with a plurality of angularly spaced orifices near the other end of the chamber with their combined area restricted to control the rate of circulation of the cooling liquid through said chamber.

1,814,177. CANE STALK DISINTEGRATOR. WILLIAM HENRY MORGAN, Alliance, Ohio, assignor, by mesne assignments, to the Morgan Hurrycane Company, New York, N. Y., a Corporation of Florida. Filed May 5, 1925. Serial No. 28,265. 13 Claims. (Cl. 146—107.)



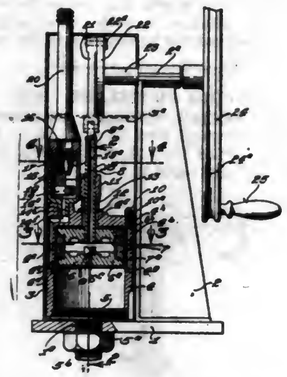
1. In an apparatus for disintegrating cane stalks, the combination of two stationary disks having shearing devices on their outer faces, and feed openings adjacent the centers of said disks, a hopper intermediate between said disks and communicating with said feed openings, a rotary shaft passing through the disks, disks secured to said rotary shaft and provided on their inner faces with shearing shredding knives which co-act with the knives on the stationary disks, and screw shaped feeding blades on the shaft within the hopper for positively feeding the stalks to the shearing knives.

1,814,178. PAPER CARRIAGE. ROBERT L. MULLER, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed June 24, 1929. Serial No. 373,170. 3 Claims. (Cl. 197—141.)



1. In a machine of the class described, a printing mechanism, a paper carriage having a platen for moving papers to a printing line to receive printing impressions from said printing mechanism, means for moving the platen to and from printing position, and a locking mechanism for locking said platen out of printing position, said locking mechanism being normally disabled by engagement with a sheet of paper that is about the platen but being released when the end of said paper passes said locking mechanism.

1,814,179. VACUUM PUMP. MARCELINO L. NESTAL, San Diego, Calif. Filed Aug. 1, 1928, Serial No. 296,773, and in Mexico Jan. 20, 1928. 8 Claims. (Cl. 230—203.)



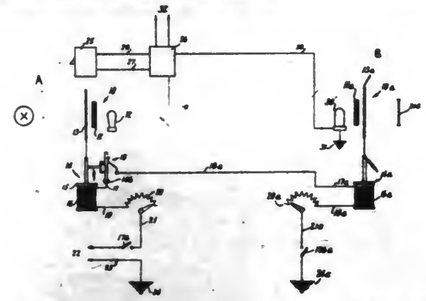
1. In a vacuum pump, in combination a casing with a fluid therein, a cylinder mounted in said casing in said fluid, a piston reciprocally mounted in said cylinder, a valve in connection with one side of said piston, and an outlet port in connection with the opposite side thereof, an auxiliary cylinder communicating with said cylinder, a conductor connecting with said auxiliary cylinder, a valve between said conductor and said auxiliary cylinder, a pressure actuated member for operating said valve and means for operating said piston.

1,814,180. COMPARTMENT CAN. HENRY M. NICHOLLS, Chicago, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 9, 1927. Serial No. 189,810. 1 Claim. (Cl. 220—20.)



A compartment can comprising separate containers, each container being closed independently of the other, said containers having mutually engaging portions which project a little outward from the bodies of the containers, and means detachably engaging above and below said outwardly projecting portions to removably secure the containers together, said means consisting of a band having an outwardly bent portion which embraces said portions of the containers and having upwardly and downwardly extending flanges which embrace respectively the walls of said containers, the ends of said band having detachable means for securely uniting said ends.

1,814,181. TELEVISION APPARATUS. LOUIS OSKOW, Brooklyn, N. Y., assignor of one-half to Morris Kirschstein, New York, N. Y. Filed Nov. 8, 1928. Serial No. 317,911. 15 Claims. (Cl. 178—6.)



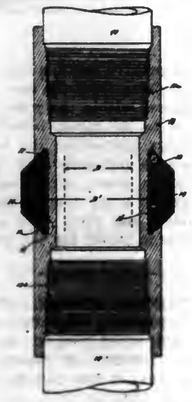
1. In television apparatus, a scanning device comprising a stationary screen having a plurality of openings and a reciprocating shutter having an opening adapted to overlap said screen openings, during movement of said shutter.

1,814,182. MANUFACTURE OF DETACHABLE BLADES. MORGAN PARKER, New York, N. Y. Original application filed Mar. 7, 1927, Serial No. 173,528. Divided and this application filed Feb. 20, 1928, Serial No. 255,722. Renewed Oct. 2, 1930. 2 Claims. (Cl. 76—104.)



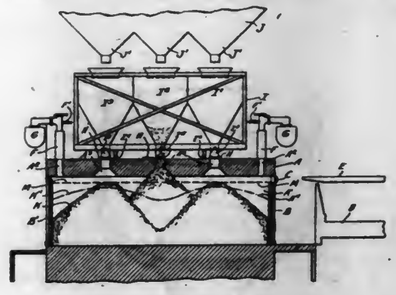
1. The method of making detachable blades for scissors which comprises passing a continuous strip of metal between rolls to form a continuous slotted recess extending longitudinally therethrough, drawing the shaped strip through hardening and planishing dies, tempering the strip, grinding a cutting edge thereon and then cutting the strip into unit lengths.

1,814,183. PIPE COUPLING AND TOOL JOINT. CLAUDE L. PATTERSON, Los Angeles, Calif., assignor to Patterson Ballagh Corporation, Los Angeles, Calif., a Corporation of California. Filed May 20, 1929. Serial No. 364,385. 4 Claims. (Cl. 303—4.)



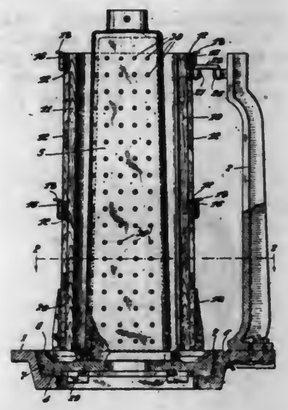
1. A pipe coupling embodying a single part, a pair of spaced annular and outwardly converging shoulders formed on said single coupling part, and a radially expanded and tensioned cushion ring carried on the coupling and axially compressed between said shoulders.

1,814,184. CHARGING HORIZONTAL COKE OVENS. WILLIAM H. PAVITT, Brooklyn, N. Y., assignor, by mesne assignments, to Wilputte Coke Oven Corporation, New York, N. Y., a Corporation of Maine. Filed June 2, 1927. Serial No. 195,907. 4 Claims. (Cl. 202—36.)



1. A method of charging a horizontal coke oven chamber which consists in passing coal into the chamber while the chamber is hot through a plurality of points distributed along the top of the chamber until the coal piling up beneath said points approaches, but does not reach the roof of the chamber, completing the charge by supplying the coal to the chamber at a single point and leveling the charge, and continuously withdrawing the gas from the chamber at opposite sides of the last mentioned point during the charging operation.

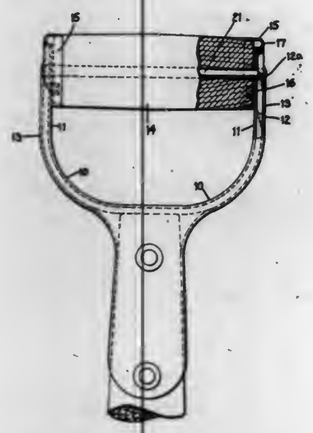
1,814,185. CORE BOX FOR INGOT MOLDS. JOHN EDMUND PERRY, Youngstown, Ohio, assignor to Valley Mould and Iron Corporation, Hubbard, Ohio, a Corporation of New York. Filed Mar. 23, 1928. Serial No. 263,996. 3 Claims. (Cl. 22—13.)



1. A core bar ramming box for ingot molds comprising a ramming base, a guide post rigidly secured to said ramming base, a sectional core box, a pair of flange supports on said core box for supporting the base of said core box, means for securing said flange supports to said ramming base to center the bottom of said core box relative to said

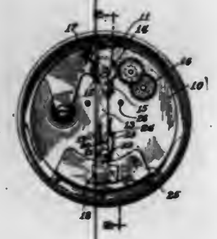
ramming base, and centering means cooperating with the upper end of said guide arm and the upper end of said core box to center the upper end of said core box relative to said ramming base, said centering means being outside said core box to leave a free space around the top of said core bar to facilitate sand ramming said core bar.

1,814,186. SHOVEL HANDLE. THOMAS G. PESTAK, Wyoming, Pa., assignor to The Wyoming Shovel Works, Wyoming, Pa., a Corporation of Pennsylvania. Filed July 12, 1930. Serial No. 467,437. 4 Claims. (Cl. 294—57.)



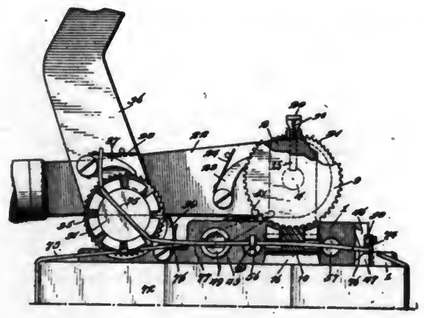
1. A shovel handle comprising the usual grip with ferrules upon its ends and with the ferrules provided with prong portions which engage into the wood of the grip, said handle having arm portions received by said ferrules and said arm portions being provided with prong portions to interengage the ferrules at the recess which is provided by the prong portions of the ferrules.

1,814,187. SELF-WINDING WATCH. MAX REINER, Bronx, N. Y., assignor, by mesne assignments, to Perpetual Self Winding Watch Company of America, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 8, 1929. Serial No. 338,395. 14 Claims. (Cl. 185—43.)



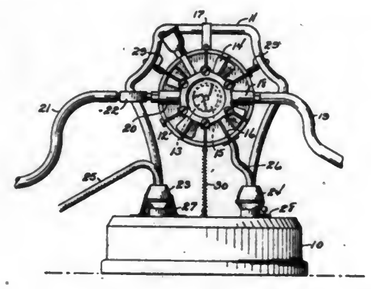
1. In a self-winding watch, a two-part jointed pendulum, a wheel, means to impart uni-directional rotation to said wheel from said pendulum, a winding train operated by said wheel, and yieldable means carried by one part and engaging the other part for normally preventing flexion of said pendulum.

1,814,188. WIRE-TYING MACHINE. JOHN A. RIETMANN, Roslyn, and ALEX RADICS, Farmingdale, N. Y., assignors to Amplex Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 27, 1923. Serial No. 671,241. 100 Claims. (Cl. 140—93.)



1. In a wire tying machine the combination of a base, tying means and tensioning means mounted thereon, oscillating levers for operating said tying means and said tensioning means, both levers extending from the machine in the same general direction and in lengthwise relation to the wire held in the machine, and pawl and ratchet means interposed between the levers and the tying means and the tensioning means to transmit the movements of the levers to said tying means and to said tensioning means.

1,814,189. EMBALMING PUMP. JOHN ROCCIOLA, Lodi, N. J. Filed Feb. 5, 1930. Serial No. 426,145. 1 Claim. (Cl. 230—58.)

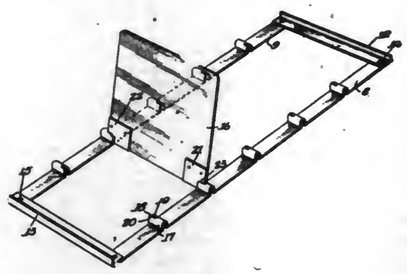


In an electrically operated pump, a base, a yoke-like support secured to and rising from the base, a motor including a housing positioned within the yoke above the base, a hanger loop secured to the motor housing and engaging over the yoke, springs connecting the housing and yoke and housing and base to yieldingly hold the motor housing in horizontal position, a motor driven fan included in said housing, a motor driven pump also included in said housing, means to connect the pump with a source of fluid supply, and a discharge outlet for the pump.

1,814,190. MULTILAYER FILTER. ROBERT L. SEBASTIAN and LEO FINKELSTEIN, Edgewood, Md., assignors to Harry A. Kuhn, Edgewood Arsenal, Md. Filed Oct. 28, 1926. Serial No. 145,695. 8 Claims. (Cl. 252—2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

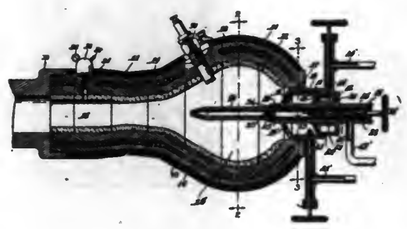
1. A process for building a filter comprising the steps of separately impregnating each of a plurality of layers of filtering material with finely divided solid particles adapted to fill up certain pores of said material and superimposing the layers of said material upon each other so as to obtain a critical pore diameter.

1,814,191. FILING DEVICE. JOSEPH C. SEYL, Evanston, Ill. Filed June 15, 1928. Serial No. 285,524. 9 Claims. (Cl. 129—16.)



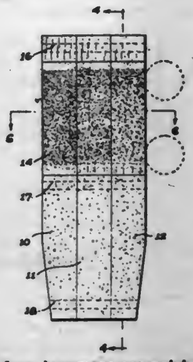
1. In a filing device of the character described, the combination of a partition for separating groups of papers, and means for pivotally retaining the partition comprising a pair of laterally spaced bars having upwardly extending loops thereon, and tongues rigid with the side margins of the partitions and extending laterally into the loops.

1,814,192. POWER GENERATOR. HENRY A. SLATTENGREN, Berwyn, Ill. Filed Aug. 18, 1927. Serial No. 213,749. 8 Claims. (Cl. 60—46.)



1. In a device of the kind described, a casing having a substantially spherical combustion and steam generating chamber communicating directly with a restricted steam conversion chamber, a plurality of concentric interfitted nozzles affording separate axially alined chambers operatively connected to and communicating with said combustion and steam generating chamber, one of said concentric nozzles extending substantially through said combustion and steam generating chamber to a point axially adjacent the entrance to said steam conversion chamber, an annular mixing chamber surrounding said nozzles and having an annular series of vents communicable with said combustion and steam generating chamber, and a fuel receiving and distributing chamber communicating with said mixing chamber, said nozzles and said mixing and receiving and distributing chambers being secured to and forming a part of an assembly removably attached to said casing.

1,814,193. DROP HAMMER. GRANT E. SMITH, Poughkeepsie, N. Y., assignor to Pouvailsmith Corporation, Poughkeepsie, N. Y., a Corporation of New York. Filed Mar. 13, 1925. Serial No. 15,398. 10 Claims. (Cl. 78—29.)



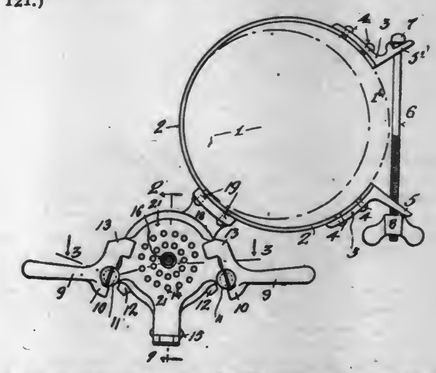
9. A board for drop hammers comprising a body portion of fibrous material and a facing of a different fibrous material, the whole being permanently deformed under heat and pressure.

1,814,194. SCORE SHEET HOLDER. CHARLES F. STONE, Upper Darby, Pa. Filed June 10, 1929. Serial No. 369,877. 2 Claims. (Cl. 281—6.)



1. In a playing card holder and score sheet, a holder and inner container having a recess in the back forming a compartment, open at the back, an outer container longer than the inner container, forming a closure for the back of the recess in the holder and recessed to provide side and end guides for score material and an opening for marking upon the score material when the score material has been partly withdrawn and a cover for the outer container applied to it from the opposite end to that from which the outer container is applied to the inner container.

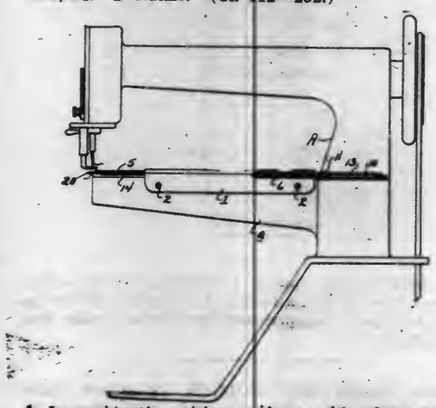
1,814,195. APPARATUS FOR MAKING CARBON DIOXIDE ICE. NORMAN MONTGOMERY THOMAS, Brooklyn, N. Y., assignor to The Solid Carbonic Company Ltd., New York, N. Y., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,081. 14 Claims. (Cl. 62—121.)



1. A refrigerating press fixedly mounted upon an adjustable metal band for securing said refrigerating press

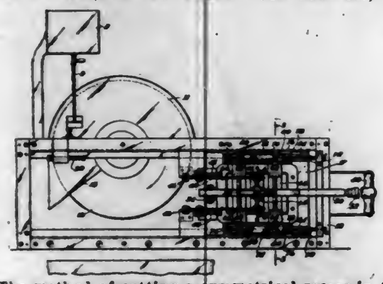
to a liquid carbon dioxide cylinder, said press comprising means for freezing liquid carbon dioxide into snow in wafer form and seal breaking means secured to said press for breaking any frozen condition that arises when the press is filled.

1,814,196. THREAD CUTTER. RAYMOND B. TRESNER, Mabton, Wash. Filed Nov. 27, 1929. Serial No. 410,138. 2 Claims. (Cl. 112—252.)



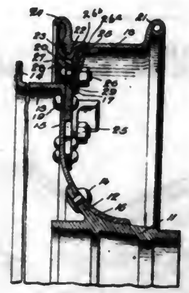
1. In combination with a sewing machine for repairing and making shoes, a thread cutter comprising a supporting member adapted to be connected with the arm of the sewing machine, a sliding member in the supporting member, a pair of pivoted cutters at the forward end of the sliding member, a bar carried by the sliding member, said sliding member having a pair of small slots therein, pins at the ends of the bar passing through the slots, links connecting the forward pin with the rear ends of the cutters, said supporting member having a slot therein into which the rear pin on the bar projects, said slot being so formed that the pin, engaging the rear wall thereof, will arrest the movement of the bar before the sliding member ceases its movement and the front end of the slot will arrest movement of the bar before the sliding member reaches its forward limit of movement, whereby the cutters are opened when the sliding member is retracted and closed at the forward limit of movement of the sliding member and manually operated means for operating the sliding member.

1,814,197. METHOD AND MEANS FOR CUTTING SPONGE RUBBER. WALDEMAR VERNET, New York, N. Y., assignor to Rubberset Products Inc., New York, N. Y., a Corporation of New York. Filed Dec. 21, 1928. Serial No. 327,648. 26 Claims. (Cl. 164—61.)



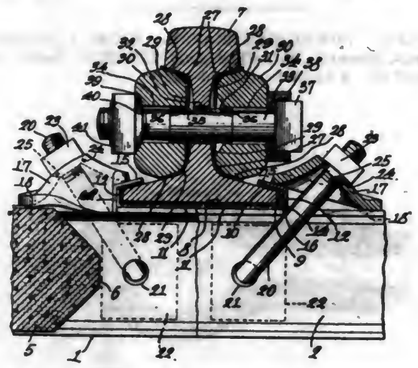
1. The method of cutting a symmetrical recess in tough porous resilient material comprising compressing the edges of a block of such material to cause a portion of the block within the compressed portion to project, cutting the projecting portion of the block while applying pressure to the face of the block opposite the projecting portion and supporting the projecting portion during the cutting operation.

1,814,198. VEHICLE WHEEL. JAMES H. WAGENHORST, Jackson, Mich. Filed Apr. 30, 1928. Serial No. 273,953. 4 Claims. (Cl. 301—6.)



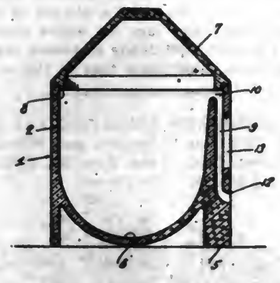
1. A wheel comprising the combination of a hub, a brake drum mounted thereon, a plurality of rim supporting members rigidly secured to the brakedrum, a demountable rim having an inwardly extending gutter at one edge thereof, said gutter being seated on said rim supporting members and rim securing members detachably fastened to said rim supporting members and engaging the front face of said gutter to hold it seated upon said rim supporting members.

1,814,199. TIE, JOINT AND RAIL FASTENING COMBINATION. WILLIS F. WALKER, Macungie, Pa. Filed Mar. 21, 1930. Serial No. 437,880. 2 Claims. (Cl. 238—57.)



1. In a device of the class described, a rail including a ball, a web and a flange, bridge bars on opposite sides of the web and having transverse openings, insulating plates disposed in upper and lower pairs, the upper pair having outwardly extending flanges disposed between the ball of the rail and the upper edge of the bridge bars, the lower pair having outwardly extended flanges disposed between the flange of the rail and the lower edge of the bridge bars, securing elements passing through the openings of the bridge bars and through the openings of the web of the rail, the securing elements having reduced intermediate portions defining shoulders located within the openings of the bridge bars and spaced from both the inner and the outer surfaces of the bridge bars, and split sleeves of insulating material around the securing elements and located between the shoulders, the sleeves extending through the rail and between the upper and lower pairs of insulating plates, the outer ends of the sleeves being located within the openings of the bridge bars in spaced relation to both the inner and outer surfaces of the bridge bars.

1,814,200. PAPER HOLDER. ROLAND E. WHEAT, Storm Lake, Iowa. Filed Feb. 25, 1930. Serial No. 431,159. 1 Claim. (Cl. 242—55.5.)



A paper holder of the character described comprising a container for the reception of a roll of paper, said container including a rear wall, side walls, an arcuate bottom wall and a comparatively thick front wall formed of a single integral piece of material, the front wall being provided with a transversely extending slot in its outer side spaced from the lower end of the container, the upper wall of the slot being formed to provide a cutting edge, said front wall being further provided with a vertical passage communicating at its lower end with the slot and communicating at its upper end with the interior of the container, said passage adapted to have the paper from the roll threaded therethrough, the front wall being further provided with a finger receiving opening communicating with the passage therein, said opening providing means for engaging the paper in the passage in a manner to feed the same therethrough, the container being open at its top and a closure detachably mounted thereon.

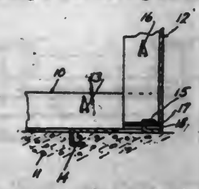
1,814,201. BROOM CONSTRUCTION. CHARLES LEO WINGARD, Portland, Oreg. Filed Mar. 13, 1929. Serial No. 346,616. 4 Claims. (Cl. 15—171.)



1. In a device of the class described, in combination with a broom head, a core disposed within the broom head, said core having an interlocking L shaped thread disposed upon its inner surface, and a handle having an interlocking L shaped thread disposed about its lower end, said thread being in direct threaded alignment with the interlocking thread within the core, and being adapted for preventing transverse and longitudinal strain on the connecting parts when the broom is used.

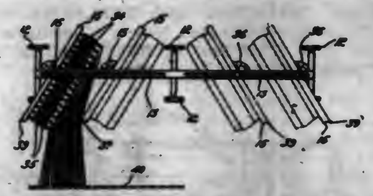
1,814,202. WALL CONSTRUCTION. ADRIAN WINGET, Wapakoneta, Ohio. Filed Mar. 29, 1929. Serial No. 350,892. 2 Claims. (Cl. 72—46.)

1. A wall supporting structure of the character described comprising a horizontally disposed base including a web and integral upturned side flanges, an integral hook struck up from one end portion of the web, a vertical strut mounted on said end portion of the base between the flanges and including a web having an inturned lower end



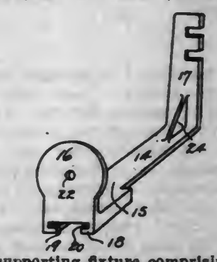
portion and integral side flanges having inturned lower end portions extending under the inturned portion of the strut web and adapted for rest on the base, said inturned web and flange portions having registering slots for the reception of the hook.

1,814,203. CREELING MECHANISM. HENRY HARRISON YATES, Cremorne, near Sydney, New South Wales, Australia. Filed May 15, 1929, Serial No. 363,265, and in Australia May 28, 1928. 9 Claims. (Cl. 242—131.)



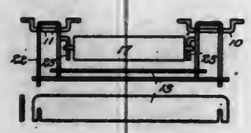
1. A creeling mechanism consisting of a main frame, a number of gates pivotally mounted on the main frame, a plurality of vertically disposed creel or bobbin supporting bars adapted to slide longitudinally in the respective gates, bobbins or cops mounted on bobbin spindles or creel pegs carried by the vertically disposed creel or bobbin supporting bars, and clamps thereon to prevent rotation of said spindles or creel pegs, brackets mounted upon said bobbin supporting bars and guides upon said brackets for conducting yarn from said bobbins or cops.

1,814,204. WINDOW BLIND AND CURTAIN FIXTURE. SAMUEL M. DAVIS, Altoona, Pa. Filed Apr. 20, 1928. Serial No. 271,429. 1 Claim. (Cl. 156—24.)



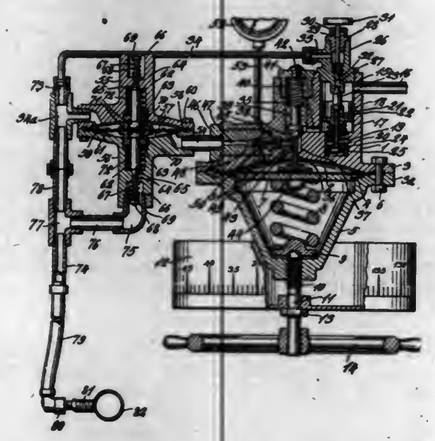
A curtain supporting fixture comprising a base member of T-shaped cross section, a bracket slidably mounted on said base member, said bracket having a formation of T-shaped cross section slidably interfitting with the base, and a pair of curtain supporting arms extending outwardly from opposite ends of said bracket, one within horizontal planes defining the upper and lower limits of the other one of said arms having a curtain roller receiving formation and the other of said arms extending outwardly beyond said first mentioned arm and outwardly of said first mentioned arm being provided with curtain pole supporting means, said bracket being cast to include a reinforcing web connecting the longer of said arms with the body portion of the bracket.

1,814,205. WINDOW BLIND AND CURTAIN FIXTURE. SAMUEL M. DAVIS and HARRY F. DAVIS, Bellwood, Pa. Filed July 24, 1929. Serial No. 380,672. 1 Claim. (Cl. 156—24.)



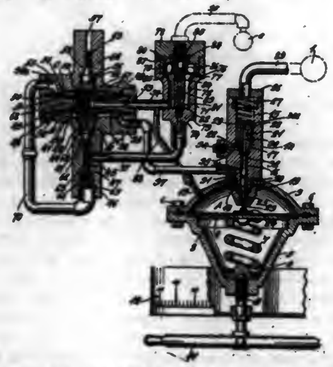
A combined shade roller and curtain rod support comprising a U-shaped sheet metal bracket inclusive of a pair of spaced arms, means for detachably mounting said bracket on a window frame, and a shade roller supporting formation and a curtain rod supporting formation on said arms, respectively, said shade-roller-supporting formation comprising a member integral with its related arm extending downwardly therefrom and bent first laterally from said arm and then forwardly to lie in a plane parallel to said arm below the latter.

1,814,206. INFLATING AND DEFLATING DEVICE. WILLIAM L. DONKIN and WORTH G. MCCARTY, Longmont, Colo. Filed Nov. 19, 1928. Serial No. 320,362. 5 Claims. (Cl. 50—4.)



1. A pressure reducing valve having a chamber formed from a rigid member having a concave side and a flexible diaphragm, means for securing the edges of the diaphragm to the rigid member, resilient means for urging the diaphragm towards the rigid member, said rigid member having an inlet passage, one end of which is in communication with the chamber by an aperture of small area, two valves located in the inlet passage, each of which is normally retained in closed position by means of a spring, the valve nearest the inner end of the inlet passage having means associated with it whereby it may be moved to open position when the diaphragm moves towards the rigid member, the other valve comprising a piston slidably mounted in the outer end of the inlet opening, said piston having an axial opening provided with a valve seat at its outer end, a valve associated with the valve seat and provided with a stem extending through the piston, resilient means for urging the valve against the seat, resilient means for urging the piston towards the outer end of the inlet passage, means for opening the valve in the piston when the latter moves a predetermined distance towards the inner end of the inlet passage, the rigid member having an outlet passage whose inner end is in communication with the chamber between the diaphragm and the rigid member, and a nozzle having one end in communication with the inlet passage between the inner valve and the chamber, the other end of said nozzle extending into the outlet passage whereby when the valve in the inlet passage are open a stream of air will flow through the nozzle and into the outlet passage, thereby producing a suction that tends to reduce the pressure in the chamber to a value below that in the outlet passage.

1,814,207. AUTOMATIC INFLATING AND DEFLATING DEVICE. WILLIAM L. DONKIN and WORTH G. MCCARTY, Longmont, Colo. Filed June 29, 1929. Serial No. 374,879. 12 Claims. (Cl. 56—4.)



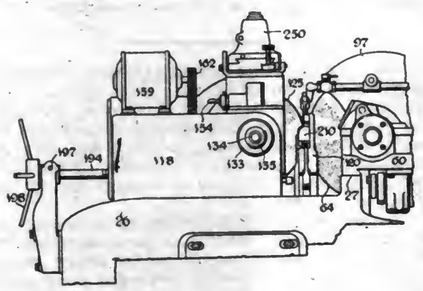
1. An inflating and deflating device comprising, in combination, a source of air under pressure, a container to be inflated to a predetermined pressure less than that of the source, means for making connection between the source of air under pressure and the container, means made operative when the pressure in the container is below a predetermined point for connecting it directly to the high pressure source, whereby air will be delivered to the container at a pressure higher than that to which it is to be inflated, means for shutting off the flow of air from the high pressure source, means for measuring the value of the air pressure in the container and for reestablishing the connection between the container and the high pressure source if the pressure in the container is below the predetermined pressure and means for connecting the interior of the container with the atmosphere when the pressure within the same is above the predetermined pressure.

1,814,208. PROCESS OF PURIFYING CELLULOSE ETHERS. EDUARD DÖRR and OTTO LEUCHS, Elberfeld, and LEO ROSENTHAL, Vohwinkel, near Elberfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 20, 1929, Serial No. 364,691, and in Germany Mar. 31, 1927. 6 Claims. (Cl. 260—152.)

1. The process of purifying ethyl cellulose with an ethoxy content of 42–48% which process comprises dissolving an ethoxy cellulose with an ethoxy content of 42–48% in a hydrocarbon of the group consisting of benzene, of aliphatic and hydroaromatic hydrocarbons having a boiling point of at least 80° C. at elevated temperature, cooling the solution and separating the ethyl cellulose.

1,814,209. CENTERLESS GRINDING MACHINE. SOL EINSTEIN, Cincinnati, Ohio, assignor, by mesne assignments, to Cincinnati Grinders, Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Dec. 31, 1924, Serial No. 759,119. Divided and this application filed Oct. 5, 1928. Serial No. 310,545. 6 Claims. (Cl. 51—103.)

1. The combination with a grinder having a regulating wheel, of an irreversible speed reducing drive therefor comprising a close-fitting worm and worm-wheel, the worm-wheel being rigidly connected with the regulating wheel;

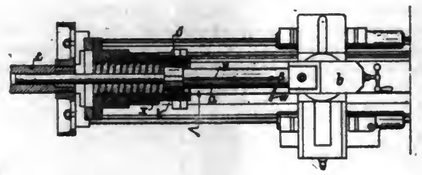


an adjustable stop serving to limit the closeness of engagement of said worm and worm-wheel; and resilient means urging said worm and worm-wheel together.

1,814,210. PROCESS FOR MANUFACTURING YEAST. CHARLES N. FREY and ALFRED SCHULTZ, New York, N. Y., and ARTHUR P. HARRISON, Washington, D. C., assignors, by mesne assignments, to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed June 30, 1927. Serial No. 202,745. 15 Claims. (Cl. 195—20.)

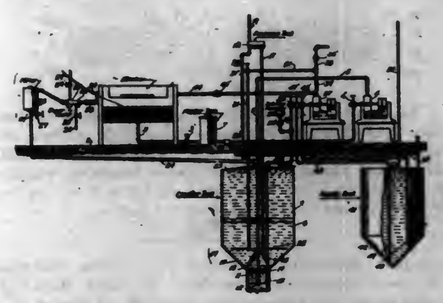
11. In a process of manufacturing bakers' yeast by propagation with aeration in a yeast nutrient solution containing molasses as a principal source of yeast-assimilable sugar, in combination, the improvements which comprises supplying requisite amounts of yeast-assimilable nitrogen by the addition of appropriate amounts of urea, adding a small amount of urease, and adjusting the initial acidity of the yeast nutrient solution to a pH of approximately 4.2–4.5.

1,814,211. TOOL HOLDER. JOSEF GARBAREK, Walsum-on-the-Rhine, Germany. Filed Feb. 21, 1929, Serial No. 341,776, and in Germany Nov. 20, 1926. 1 Claim. (Cl. 82—1.)



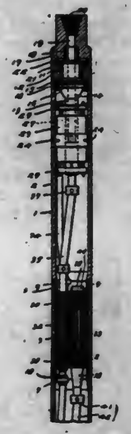
A tool holder with cutting tool clamped on the slide rest and guided in the bore of the face plate, the cutting tool being automatically returned after the termination of the cut, comprising in combination with a cutting tool, a hollow casing, a transverse sleeve in said casing, a hollow block having a transverse hole in its wall shiftably mounted in said sleeve, a tool holder proper for said tool loosely mounted in said block, a spring-controlled pin in said casing engaging with said hole of said block when the block is in the operative position, a V-shaped head of said pin, a shiftable rod on said casing having a V-shaped notch adapted to register with the head of said spring-controlled pin, and a spiral spring inserted between said sleeve and said block adapted to suddenly push back said block and tool when said block is released by said spring-controlled pin.

1,814,212. CLOSED DRY CLEANING SYSTEM. WILLIAM C. GLOVER, Kansas City, Mo., assignor to Butler Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed Apr. 12, 1926. Serial No. 101,241. 2 Claims. (Cl. 68—38.)



1. In a continuous dry cleaning system, a clarifying tank, a washer, a conduit leading from the top of the tank to the washer, a circulating pump, a second conduit leading from the washer to the pump, a third conduit leading from the pump to the bottom of the clarifying tank whereby liquid passing through the second conduit rises through the clarifying tank and is returned to the washer in a continuous flow, a separate supply tank, a service pump connected with said supply tank, a discharge line connected with the service pump terminating in an agitator in the lower portion of the clarifying tank for flushing the clarifying tank, and connections with the service pump for withdrawing fluid from the clarifying tank.

1,814,218. ROTARIAN. NOLAND W. GRAVES, Taft, and PANSY GRAVES and GROVER E. GRAVES, Santa Cruz, Calif. Filed Aug. 24, 1929. Serial No. 389,596. 14 Claims. (Cl. 255—35.)



9. A well tool of the character described comprising an elongated casing, a threaded tool joint at each end of said casing, a pair of shafts extending longitudinally in the casing each having one end extended through and rotatably mounted in an end of the casing and coupled with the adjacent joint to turn therewith, the inner ends of said shafts being in overlapping relation, gear elements connecting the inner ends of the shafts, and means operating upon engagement of one of said joints with a body disposed in a well bore whereby said casing will be anchored against rotation.

1,814,214. LAMINATED SPRING. SIEGFRIED GROSS, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Aug. 3, 1928, Serial No. 297,210, and in Germany Oct. 27, 1927. 3 Claims. (Cl. 267—47.)



1. In a spring system individual spring plates of equal length, and diverging thickness from their centers, said spring plates contacting at their centers, means rigidly uniting said plates, and head pieces rotatably engaging the ends of at least two of said plates and having supports for the ends of the other spring plates.

1,814,215. GRINDING GRAPHITE. GEORG HANEKOP, Hanover, Germany. Filed Mar. 31, 1928, Serial No. 266,444, and in Germany Mar. 16, 1925. 6 Claims. (Cl. 83—94.)

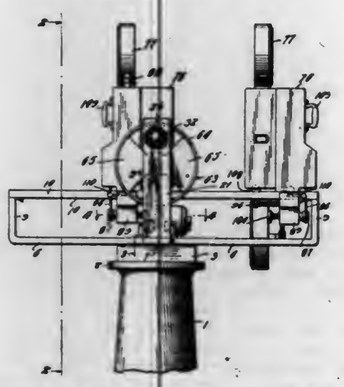
1. The process of highly disintegrating graphite, which comprises grinding up and treating graphite with salts possessing substantially the physical and chemical properties of rock-salts.

1,814,216. WEEDER. CHARLES M. HARTWELL, Springfield, Ohio. Filed Nov. 12, 1928. Serial No. 318,857. 1 Claim. (Cl. 55—148.)



A weeder comprising a sectional body portion, means at the ends of the sections of the body portion for securing the sections together, means secured between the sections for holding the sections in spaced relation throughout a portion of their lengths, a finger piece pivotally mounted within the space between the sections, a blade having a shank secured between the sections at one end of the body portion, a blade pivotally mounted on the shank, a rod connected with the pivoted blade and having connection with the finger piece to operate the pivoted blade when the finger piece is operated.

1,814,217. MOTION PICTURE MACHINE. THEODORE HILL, Baltimore, Md. Filed Feb. 29, 1928. Serial No. 257,921. 10 Claims. (Cl. 88—17).



1. A motion picture machine comprising a base, an elongated frame adjustably mounted on the base, a shutter mechanism supported on the frame, a plurality of projector machines laterally movable on the frame and operating means comprising a motion transmission mechanism positively connected to the shutter and adapted to be detachably coupled with each projector machine.

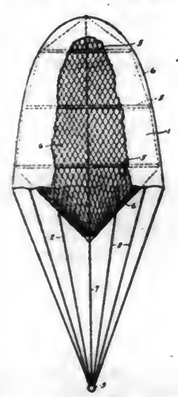
1,814,218. DYESTUFFS CONTAINING CHROMIUM AND PROCESS OF MAKING. KARL HOLZACH, Ludwigshafen-on-the-Rhine, HANS KÄMMERER, Mannheim, and WERNER MÜLLER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1927, Serial No. 180,337, and in Germany Apr. 15, 1926. 3 Claims. (Cl. 260—12.)

1. The process of producing dyestuffs containing chromium which consists in treating an azo dyestuff free from chromium, but containing chromable groups with a chromium compound in such a proportion as to provide less than 1 atom of chromium to each chromable group in the dyestuff molecule.

1,814,219. PROCESS OF IMPROVING CERTAIN PHYSICAL PROPERTIES OF SYNTHETIC PRECIOUS STONES. MAX JAEGER and HERMANN ESPIG, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 20, 1929, Serial No. 341,569, and in Germany May 17, 1926. 5 Claims. (Cl. 63—32.)

1. The process of improving certain physical properties of synthetic precious stones which comprises subjecting synthetic precious stones containing oxidisable substances as a dyeing agent in a bedding of a reducing substance to a bright red heat for from 8 to 12 hours, and then slowly cooling the stones.

1,814,220. PARACHUTE CONSTRUCTION. ANDREW JOHNSON, Tacoma, Wash. Filed Dec. 27, 1927. Serial No. 242,625. 1 Claim. (Cl. 244—21.)

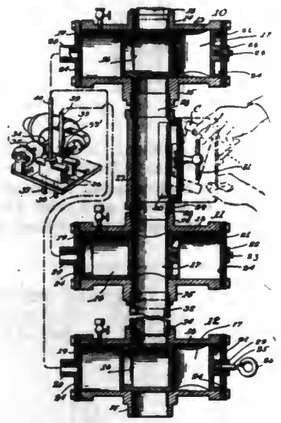


A parachute of the character described, comprising an inverted, bag-like envelope, load suspending means attached to the open edge of the envelope, a series of hoops of graduated diameters adapted to be collapsed with the envelope substantially into the same plane, a sleeve of open mesh connecting the hoops in spaced relation axially of the parachute, said sleeve being connected at its upper end to the top of the envelope and at its lower end to the load suspending means; said envelope and sleeve being adapted to be collapsed and also being adapted to be drawn out by a weight applied to the load suspending means to open the envelope; said hoops being of substantially the same diameter as the envelope in the planes of their open position.

1,814,221. HOSIERY PROTECTING COMPOUND. ROY M. METCALFE, Olympia, Wash. Filed May 31, 1928. Serial No. 282,053. 1 Claim. (Cl. 134—1.)

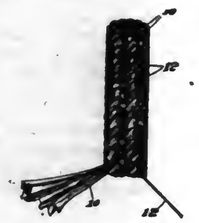
A hosiery protecting compound comprising substantially sixty percent paraffin and substantially forty percent hard soap.

1,814,222. PNEUMATIC TUBE SYSTEM. HARRY W. MOREHOUSE, Garden City, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Dec. 27, 1930. Serial No. 505,150. 7 Claims. (Cl. 243—2.)



1. In a pneumatic tube system for carriers, a set of valves controlling the passage of the carriers through the tube or tubes of the system comprising an intermediate valve and a pair of valves arranged one on each side of the intermediate valve, each of said valves being mounted to move transversely of the tube and arranged to completely close the tube in one position and to permit free passage therethrough in the other position, and actuating means arranged to open and close the pair of valves in unison and in timed alternation with said intermediate valve.

1,814,223. TUBULAR FABRIC. DANIEL H. MURPHY, West Hartford, Conn., assignor to The Wiremold Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 16, 1928. Serial No. 319,885. 5 Claims. (Cl. 247—40.)



1. A flexible conduit comprising a tubular fabric formed of binding strands and substantially untwisted strips of paper that are crumpled into rounded strands which are suficiently soft and compressible to spread laterally to a pronounced degree between and partly around the binding strands to close the interstices in the tubular fabric, and the soft crumpled strands of paper being interlocked with the binding strands so that the latter sink deep in the paper strands to facilitate the closing of the interstices in the fabric.

1,814,224. WOVEN TUBULAR FABRIC. DANIEL H. MURPHY, West Hartford, Conn., assignor to the Wiremold Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 16, 1928. Serial No. 319,886. 3 Claims. (Cl. 247—40.)



1. A conduit of woven tubular fabric comprising warp strands having weft strands interwoven therewith and formed of substantially untwisted strips of paper that are crumpled into thick strands that are sufficiently soft and compressible to spread laterally in the fabric to a pronounced degree between and partly around the binding warp strands to close the interstices in the woven fabric.

1,814,225. INDUCTION HEATING APPARATUS. OSKAR NEISS, Hamburg, Germany, assignor of one-half to Hermann Bollmann, Hamburg, Germany. Filed Dec. 5, 1928, Serial No. 323,810, and in Germany Dec. 7, 1927. 5 Claims. (Cl. 219—47.)



1. An induction heating apparatus of the type set forth comprising a plurality of primary windings and a tube or conduit system for containing the medium to be heated and constituting a secondary winding, each primary winding being embedded with the secondary winding in a common closed core, and the secondary winding being prolonged beyond each core, said primary windings presenting a plurality of independent rotary fields in phase displacement to regulate the heating effect.

1,814,226. JACK. GEORGE L. NOLETTE, Worcester, Mass., assignor of one-half to Abraham Nolette, jr., Worcester, Mass. Filed Feb. 3, 1928. Serial No. 251,547. 7 Claims. (Cl. 254—102.)

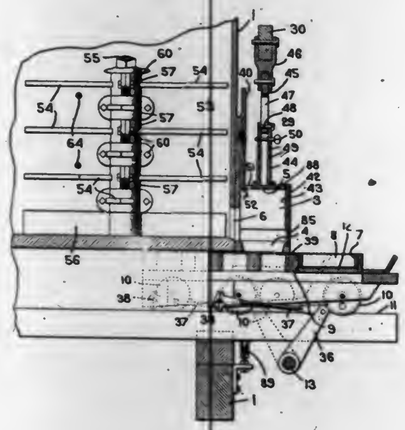
1. A jack comprising a standard, and three telescoping screws, the outer one of which is threaded into said standard, the middle one of which is threaded into the outer screw, and slidably keyed to said standard, and the inner one of which is slidably keyed to said middle screw; and an operating sleeve for the screws threadedly engaging

said inner screw, and slidably keyed to said outer screw; said outer screw having threads reverse of the other two screws, whereby rotation of said operating sleeve effects



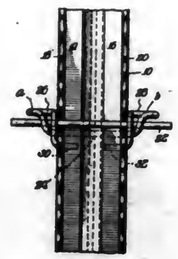
vertical movement of all of said screws, each with a different rate of travel from that of its neighboring screws, in the same direction relative to the said standard.

1,814,227. BRICK MAKING MACHINE. ROBERT A. PARRY, Belmont, Mass., assignor to Boston Brick Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 4, 1929. Serial No. 352,412. 8 Claims. (Cl. 25—50.)



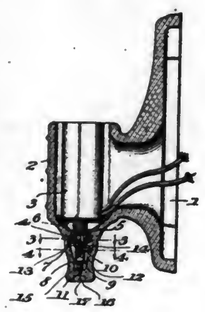
1. In a brick forming machine, the combination with a feed chamber having an open bottom, of a mold carrier movable to bring a mold into and out of position to receive clay from said chamber, a plunger operating in the chamber to force clay through the open bottom thereof into the mold, a rock shaft situated beneath the mold carrier, arms on said rock shaft, a connection between one arm and the mold carrier and between another arm and the plunger, and means to oscillate the shaft.

1,814,228. FENCE POST CLAMP. LEONARD W. PETERS, Duluth, Minn. Filed May 25, 1929. Serial No. 365,927. 8 Claims. (Cl. 256—57.)



2. A fence post clamp having, in combination, a body and a plurality of unjointed extremities, one of said extremities comprising a post engaging terminal and a wire engaging intermediate portion, said wire engaging portion being looped and adapted to be deformed when applying the clamp.

1,814,229. SIDE WALL LIGHTING FIXTURE. ROY W. SCHWEIKER, Lansdale, Pa. Filed Dec. 29, 1925. Serial No. 78,122. 1 Claim. (Cl. 240—78.)

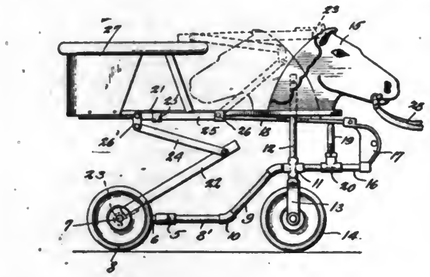


In a side wall lighting fixture having an upright socket or holder, the combination with a lamp socket and a switch carried by the holder of the fixture, and the means for securing said lamp socket to the holder, of switch operating means extending through the bottom of the said fixture holder from the exterior to the interior thereof, an insulating pendant operating lever extending below the fixture holder and forming a continuation thereof and having its upper end closely fitting the bottom of the holder and also universally fulcrumed thereat so that it may rock laterally in any direction, said pendant operating lever covering and protecting the means for securing the lamp socket to the holder and being connected to the switch operating device and wholly housing that part thereof which lies outside the fixture holder.

1,814,230. TOY. WILLIAM E. SPERRY, La Mesa, Calif. Filed June 6, 1930. Serial No. 459,560. 2 Claims. (Cl. 208—165.)

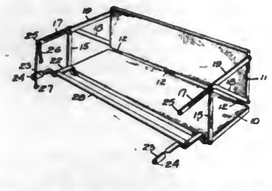
1. An exercising device comprising a wheel supported frame, a spring member, means for securing the forward end of the spring member to the frame, said spring member extending to a point over the rear portion of the frame, a seat secured to the rear end of the spring member, a foot board pivotally mounted under the spring member, pivoted

links connected with the foot board and the seat to connect the seat and foot board, and said foot board adapted



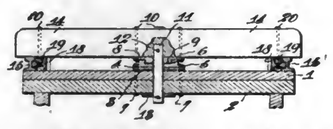
to receive the feet of the person seated on the seat, to raise and lower the seat when the foot board is pressed by the operator.

1,814,231. WINDOW BENCH OR SCAFFOLD. MORRIS STONE, Brooklyn, N. Y. Filed Mar. 14, 1929. Serial No. 346,950. 1 Claim. (Cl. 304—24.)



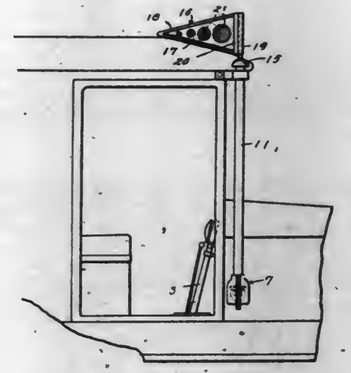
In a window cleaner's bench, a rectangular seat and a rectangular back rest hinged together along their adjacent longer sides, pairs of pivotally connected arms, one arm of each pair being pivoted on one end of the seat and the other arm of each pair being pivoted to one end of the back rest, each pair of arms forming with the seat and back rest a parallelogram, an angle bar for each end of the bench, one end of the bar being pivoted to the end of the back rest adjacent the hinged connection thereof, the said bar projecting diagonally of the parallelogram and being pivotally connected at its angle on the pivoted connection of the arms, the free end of the bar beyond said pivot being provided with a slot to accommodate the latter and having an eye at its extreme end, a rod for each end of the bench having a horizontal portion upon which one end of the seat is superimposed, an upright portion against which the front side of the seat abuts, a second horizontal portion, adapted to overlie the sill of a window, a second upright portion, and a third horizontal portion having a twisted end provided at its free extremity with an eye, chains connected to the eyes and having hooks at the ends thereof adapted to engage eyes on the window frame, and a tie rod having its ends attached to the first named rods at the portions thereof which overlie the sill.

1,814,232. LOG BUNK. ARCHIBALD STURROCK, Victoria, British Columbia, Canada. Filed Mar. 20, 1930. Serial No. 437,460. 4 Claims. (Cl. 105—160.)



1. The combination with the top of a flat car having a cross sill, and a log bunk; a swivel bearing therefor comprising an upper male casting secured to the bunk, a lower female casting mounted on the flat car, a king pin passing through said castings and keyed to the bunk, and pairs of frictions located at the sides of the flat car and adjacent the outer ends of the bunk, one of each pair of frictions being secured to the flat car sill and the other to the bunk, said pair of frictions comprising interprojecting elements.

1,814,233. VEHICLE SIGNAL. ERNEST B. THOMAS, North Manchester, Ind. Filed Nov. 18, 1930. Serial No. 496,517. 5 Claims. (Cl. 116—46.)



1. In a motor vehicle signal including a signal element and rotary means for moving it to and from signaling position, an operating shaft designed to be mounted transversely of the vehicle adjacent the dash thereof, a means connecting said shaft and rotary means whereby the same may be simultaneously oscillated, and means for connecting said transverse shaft with an oscillatable element of the vehicle for oscillating said shaft with said element.

1,814,234. FISHING REEL. SAMUEL T. THORPE, Bristol, Conn., assignor to The Horton Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Feb. 7, 1929. Serial No. 338,172. 9 Claims. (Cl. 242—84.4.)

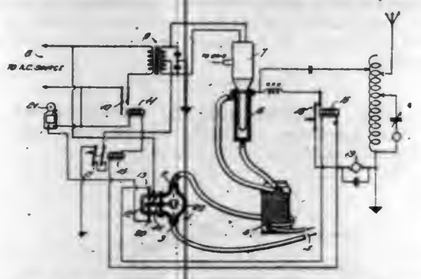


1. In a fishing reel, a frame, a spool, a traversing shaft, a guide bar, a line guide carriage surrounding said shaft and bar and slidable thereon, said carriage comprising separable sections detachably connected together with each section only partially surrounding said shaft and bar, and a pawl in said carriage engaging said shaft.

1,814,235. FLUID FLOW INDICATOR. ARTHUR M. TROGNER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1928. Serial No. 325,108. 12 Claims. (Cl. 200—81.)

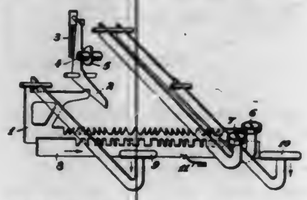
1. A fluid flow indicator comprising in combination a double sweep T casing having an inlet and discharge connection, a resilient diaphragm on one side of said casing, a horizontal rod secured through and perpendicular to the

plane of said diaphragm, an orifice member carried by said rod and enclosed by said casing in alignment with the inlet



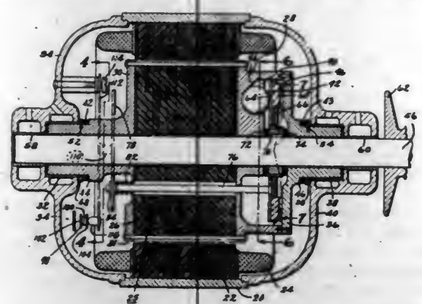
and discharge connections thereto, and contact means adapted to be closed by the movement of the opposite end of said rod.

1,814,236. TYPE PRINTING TELEGRAPH APPARATUS. HERBERT WÜSTENEY, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Oct. 2, 1929, Serial No. 396,606, and in Germany Oct. 25, 1928. 5 Claims. (Cl. 178—17.)



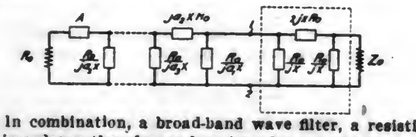
1. In a keyboard transmitter for type printing telegraphs in which the same transmission sign is used for two types belonging to different groups, a separate key for each type, and means for blocking the transmission of the group of types not desired at the time.

1,814,237. ELECTRIC MOTOR. ZERBE C. BRADFORD, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 5, 1929. Serial No. 352,847. 5 Claims. (Cl. 172—120.)



1. An electric motor comprising, in combination, a stator including a frame; a rotor including an armature core and a pair of tubular trunnions attached to the core, said trunnions being journalled in bearings mounted in the frame; a freely rotatable shaft passing through the armature core and coaxially mounted with respect to said tubular trunnions; and a clutch for connecting said rotor to said shaft when a predetermined speed of the rotor has been attained, said clutch including coaxially rotatable driving and driven members, said driving member being fixed to the armature core, a clutch floating plate carried by the driving member, said plate being axially movable, a driven plate located between the floating plate and one of the trunnions and connected with the driven member, said driven plate being axially movable relative to the driven member, and centrifugal means for causing the driven plate to be gripped between said floating plate and said trunnion and including weights carried by the driving member and guided thereby for lateral and oblique movement relative to its axis, said weights directly engaging the floating plate.

1,814,238. WAVE FILTER. HENDRIK W. BODE, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,670. 5 Claims. (Cl. 178—44.)



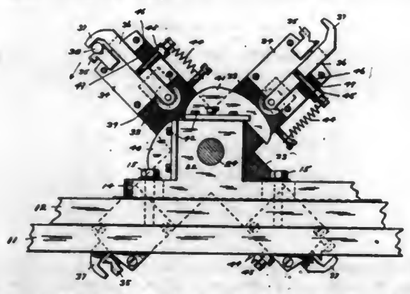
1. In combination, a broad-band wave filter, a resistive load impedance therefor, and an impedance correcting network connected between the terminals of said filter and said load impedance, said correcting network comprising a plurality of impedance branches disposed in series and shunt relation and proportioned with respect to the characteristic impedance of the filter to equalize the resistance component thereof to a substantially constant value throughout the transmission band and an additional reactive impedance for neutralizing the reactance introduced by the resistance correcting branches.

1,814,239. CONCRETE RAILROAD TIE. JOHN C. BUCKBEE, Chicago, Ill. Filed Dec. 6, 1929. Serial No. 412,079. 3 Claims. (Cl. 238—30.)



2. A reinforced concrete railroad tie comprising a beam adapted to support the rails at points inwardly from each end and having a relatively narrow top section with beveled sides extending the length of the tie, tie plates seating over said top section at the points of rail support, and rail anchoring members embedded in the top face of the tie beneath said tie plates, and comprising hollow castings having integral tubular extensions through said tie.

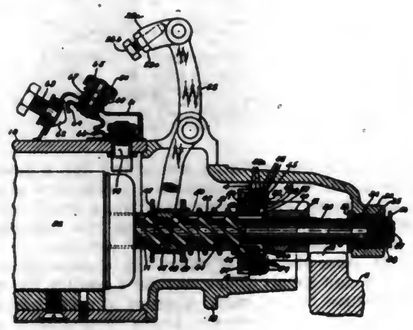
1,814,240. MACHINE FOR CUTTING PEARL BUTTON STOCK. STEPHEN BUTSKO, Poukhkeepsie, N. Y., assignor, by mesne assignments, to Pioneer Pearl Button Company, Poughkeepsie, N. Y., a Corporation of New York. Filed Sept. 16, 1929. Serial No. 393,003. 1 Claim. (Cl. 79—15.)



In a machine for dividing fresh water pearl stock into two parts, comprising a base having alined bearings and

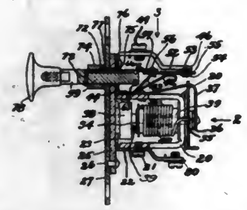
formed with a central opening, a shaft rotatably mounted in said bearings and means for rotating the same, arms carried by said shaft, heads formed on the ends of said arms and provided with a radial slot, a stationary jaw projecting from the end of said head, a movable jaw slidably mounted in the radial slot and coacting with the stationary jaw, a roller carried by the rear end of said movable jaw, cams mounted on one of the bearings in the path of said roller and adapted to contact with said roller to operate the movable jaw to open the same, said movable jaw being formed with a transverse slot, an arm pivoted to the side of said head, said head formed with an opening in the side thereof, a pin depending from said arm and extending through said opening and engaging the slot in said movable jaw, and a spring secured to said arm and to said head for normally retaining the jaws in a closed position.

1,814,241. ENGINE STARTING APPARATUS. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 29, 1923. Serial No. 665,727. 18 Claims. (Cl. 74—7.)



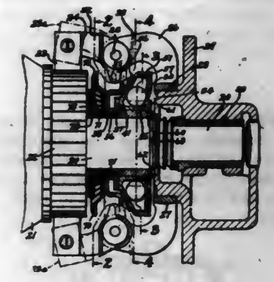
1. In an engine starting system, the combination of a motor; a motor driven shaft; an engine gear, a pinion slidably and rotatably mounted on the shaft and normally disengaged from the gear; a stop abutted by the pinion when driving the gear; a friction clutch including a member connected with the pinion and a nut threadedly connected with the shaft; and manually operable means for moving the clutch and pinion until the pinion is substantially in mesh with the gear but is spaced from the stop; said threaded connection providing for moving the nut endwise to engage the clutch in response to the turning of the shaft by the motor, and for disengaging the clutch in response to the engine becoming self-operative regardless of failure to release the manual means.

1,814,242. ELECTRIC SWITCH. WILLIAM A. CHRYST, Dayton, Ohio, and HARRY E. NORVIEL, Anderson, Ind., assignors to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 5, 1927. Serial No. 210,897. 15 Claims. (Cl. 200—5.)



1. An electric circuit breaker unit comprising a base, a terminal bracket secured to the base, a magnet frame supported by the bracket, a magnet coil and a movable armature supported by the frame, interrupter contacts supported by the frame, one being insulated and connected with the magnet coil, a leaf spring conductor attached to the frame and carrying the other contact, a second leaf spring conductor attached to the frame, a second terminal bracket secured to the base, and insulated from the frame, a movable conductor for making contact with the second terminal bracket and the second leaf spring conductor, and means for moving said movable conductor to open and close circuits through said second mentioned terminal bracket and leaf spring conductor.

1,814,243. ELECTRIC MOTOR. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 3, 1928. Serial No. 290,144. 3 Claims. (Cl. 172—279.)



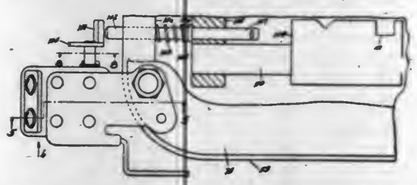
1. An electric motor comprising, in combination, a frame; a rotor having a shaft journalled in said frame and provided with a commutator; brushes for said commutator; means carried by the shaft for short circuiting the commutator; a speed responsive device carried by the shaft adjacent the short circuiting means, said device having a portion movable toward said means in response to increasing speeds of the rotor shaft, and means interposed between the said means and device for lifting the brushes as the short circuiting means is moved into engagement with the commutator.

1,814,244. METHOD OF MAKING INTERLOCKING ELEMENTS FROM SHEET MATERIAL. WILLARD H. COBB, Brooklyn, N. Y., assignor to The Shoe Hardware Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 18, 1928. Serial No. 278,698. 4 Claims. (Cl. 78—81.)



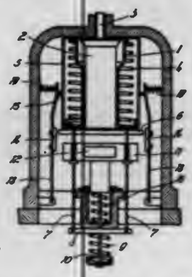
1. The method of forming an aligned and complementary socket and projection on opposite sides of sheet material, which comprises forming, simultaneously, a spherically curved socket on one side of less than hemispherical dimension and on the other side a projection of the same dimensions and curved on the same radius and enlarging the projection to substantially hemispherical dimensions, by flowing the material of the sheet into the projection from a point adjacent to a portion of the surface of the curved socket, while maintaining the superficial area of the remainder of the socket intact.

1,814,245. ELECTRIC SWITCH. HARRY C. DOANE, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 13, 1927. Serial No. 198,339. 4 Claims. (Cl. 200—59.)



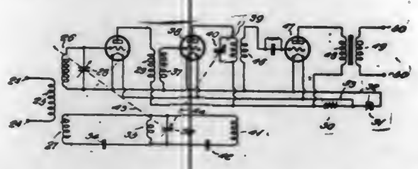
4. The combination with a vehicle, having a brake mechanism and a transmission gear housing containing gear shifting mechanism, of a switch having a case supported by the gear housing and a rotary shaft supported by the case and extending beyond opposite sides thereof, a lever attached to each end of the shaft, separate devices respectively engageable with said levers and respectively actuated by the gear shifting mechanism and by the brake mechanism for rotating the shaft into circuit-closing position, and resilient means for urging the shaft into circuit-open position.

1,814,246. ELECTRIC SWITCH. FRITZ DÖRING, Berlin-Frohnau, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin, Siemensstadt, Germany, a German Corporation. Filed Jan. 3, 1929, Serial No. 330,024, and in Germany Jan. 9, 1928. 5 Claims. (Cl. 200—82.)



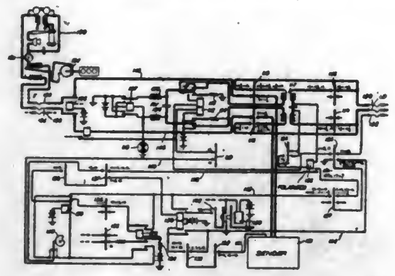
1. In an electric switch operated by compressed gas, in combination, a cylinder having an extension for connecting an air pipe, a piston disposed to reciprocate in said cylinder, and a spring arrangement tending to keep said piston in its position of rest, a contact device operated by said piston, a locking device for maintaining said contact device in contact closing position during the major portion of the return stroke of the piston, means operated by said piston for releasing said locking device near the end of the return stroke of said piston, and a spring tending to return said contact device into its inoperative open contact position.

1,814,247. AMPLIFICATION SYSTEM. EDWARD W. FEARING, East Orange, N. J. Filed June 1, 1927. Serial No. 195,828. 13 Claims. (Cl. 179—17.)



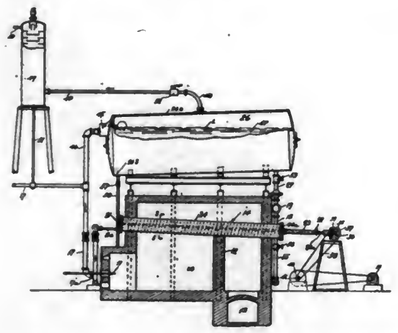
1. In a radio frequency amplifying circuit having grid plate and cathode elements, means for neutralizing undesirable capacitive couplings between said elements consisting of an electrically independent circuit magnetically coupled to said amplifier circuit, means for tuning a portion of said independent circuit, a capacity in said independent circuit to adjust the translation of energy through said circuit, the value of said capacity being adjusted according to the ratio of total inductance of the amplifier circuit to total inductance of the independent circuit times the capacity of the undesirable capacitive couplings.

1,814,248. TELEPHONE SYSTEM. JOHN W. GOODERHAM, Larchmont, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 20, 1930. Serial No. 476,548. 11 Claims. (Cl. 179—18.)



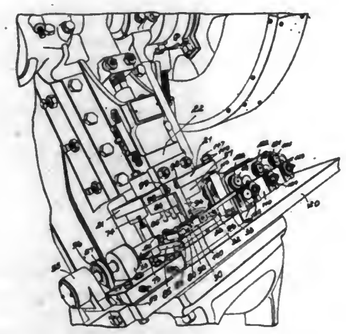
1. In a telephone system, a subscriber's line, a message register at the substation responsive to the flow of current in said line, an operator's position, a trunk leading to said position, means for extending the subscriber's line to said trunk, a source normally connected to said trunk to cause the flow of current in a given direction therein, a cord circuit at the operator's position for making connection to said trunk, a source of current in said cord circuit, means responsive to the connection of said cord to the trunk for disconnecting said first source from the trunk and responsive to the disconnection of said cord for reconnecting said first source to said trunk, means responsive to the connection of said cord to said trunk for extending the talking conductors of said line through to the source of current in said cord, and means for reversing the connection of said first source to cause current to flow in the opposite direction in said trunk when said first source is reconnected thereto.

1,814,249. CRACKING STILL. WILLIAM T. HANCOCK, Long Beach, Calif. Filed Aug. 21, 1929. Serial No. 387,380. 4 Claims. (Cl. 196—122.)



4. In a cracking still, a plurality of inclined heating tubes, each of said tubes having a liquid inlet and outlet at its upper and lower ends respectively, a rotatable shaft extending longitudinally therethrough, free balls within the tube, and means on said shaft for engaging and agitating the balls; drive means for rotating the shafts, a reaction chamber above said tubes and into which heated liquid is discharged from the tubes through said outlets, said reaction chamber being inclined to cause solid carbon precipitate therein to settle toward one end of the chamber, a valve controlled purge line at the lower end of said chamber, a line communicating with said chamber at a point above the bottom thereof and communicating with the inlet ends of said tubes, means for controllably maintaining a high pressure in said tubes and the reaction chamber, and valve controlled purge lines at the lower ends of the heating tubes.

1,814,250. MACHINE FOR MAKING PIVOT PINS. JOHN Q. HOLMES, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,314. 8 Claims. (Cl. 29—33.)

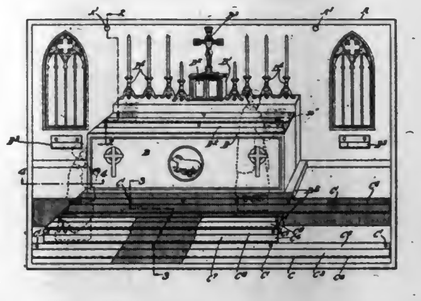


1. Apparatus for making pivot pins, comprising in combination, a stop member, means for feeding a rod against the stop member, means for clamping in fixed position a portion of the rod adjacent the stop, means for severing the portion clamped from the remainder of the rod, means for moving the stop away from the end of the rod so that the end will be exposed, and means for chamfering the exposed end of the rod.

8. Apparatus for making pivot pins, comprising in combination, a base, an operating head reciprocable at right angles to the base, a work holder comprising a jaw mounted on the base and a jaw mounted on the head, means mounted on the base and operated by the head for feeding a rod between the jaws of the work holder, means operated by the head for severing the portion clamped between the work holder jaws from the remainder of the rod, a stop member against which the rod is fed by the feeding means, means operated by the head for moving the stop member away from the end of the rod as the head moves toward the base in order to clamp the work and to shear the portion clamped from the remainder, a rotary chamfering tool movable axially toward the head, a frame for supporting the chamfering tool for said axial movement, means operated by the head for moving the frame, and means operated by the head for ejecting the work from the work holder when the jaws are separated.

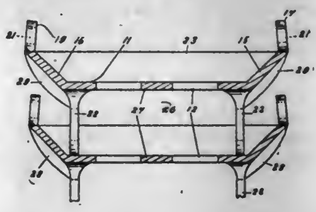
1,814,251. ILLUSTRATIVE CHART. WILLIAM S. KING, Winnetka, Ill. Filed Mar. 8, 1929. Serial No. 345,403. 6 Claims. (Cl. 35—12.)

1. As a new article of manufacture, a chart for ecclesiastical instruction which comprises a base having thereon a representation of an altar, a plurality of supporting elements mounted at different levels, the supporting portions being in different planes and adapted to



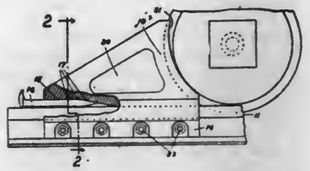
receive figures representing the celebrant or celebrants of mass and the objects employed in the celebration of the mass.

1,814,252. TRAY-LIKE SUPPORT. EUGENE A. LEARY, Cincinnati, Ohio. Filed Oct. 10, 1928. Serial No. 311,446. 4 Claims. (Cl. 220—97.)



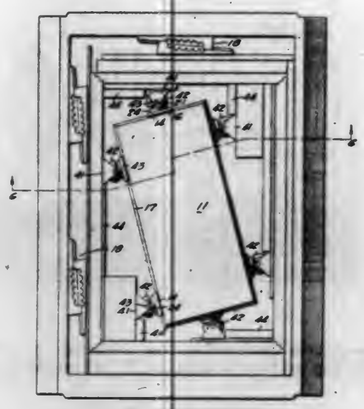
1. In a device of the class described, the combination of a perforate platform having a substantially flat upper surface and a reinforcing ribbed under surface, lifting lugs extending upwardly from the substantially flat upper surface, and integral depending legs on the under surface said legs being so disposed relative to the lifting lugs that a plurality of platforms may be stacked vertically with the legs of one platform disposed between the lugs of another platform.

1,814,253. WHEEL STOP. EUGENE A. LEARY, Cincinnati, Ohio. Filed Dec. 30, 1930. Serial No. 505,491. 8 Claims. (Cl. 104—258.)



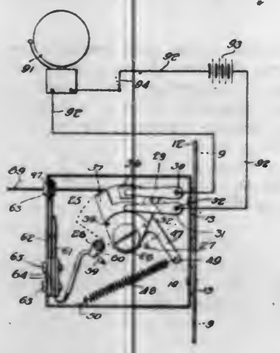
1. A wheel stop for railway rails comprising a one piece cast metal member having a longitudinal way therethrough for slidably receiving the head of a rail, the way having a tapered enlargement at one end for receiving an ordinary rail spike, the cast member having a tapered upwardly extending portion arcuately cut away at the end opposite the spike receiving way.

1,814,254. ADJUSTABLE CLAMP. HARRY LEVISON, San Francisco, Calif. Filed Aug. 9, 1929. Serial No. 384,716. 6 Claims. (Cl. 101—383.)



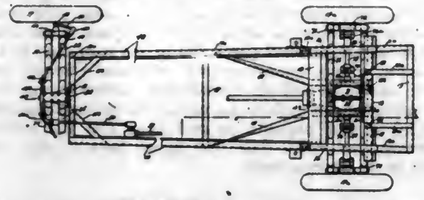
1. As a new article of manufacture for use in securing a printing plate to a block and for moving the secured plate and block to a desired position, a clip having an inwardly extending lip and an inwardly extending projection spaced from said lip adapted to engage the block, and adjustable means secured to said clip to move said secured block and plate simultaneously to the desired position.

1,814,255. FLOOR TRAP FOR BURGLAR ALARMS. HENRY LOEDING, Chicago, Ill. Filed May 11, 1929. Serial No. 362,314. 3 Claims. (Cl. 177—314.)



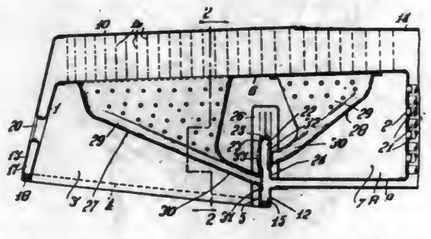
2. In an apparatus of the kind described, a casing, a rotatable switch member mounted in the casing, a trap cord extending through an aperture in one wall of the casing, said cord having one end fastened to the switch member and the other end fastened to a fixed member, a spring fastened to said switch member and yieldingly holding said cord stretched tight, an annular guide member mounted to move freely in said aperture and out of contact with said casing in a manner to prevent wedging contact of said cord with the wall of said casing, said cord passing through said annular member, a spring plate having one end fixedly mounted on and insulated from said casing, said annular member mounted on the other end of said plate, a contact member adjacent to said plate, said cord being operable to move said plate to contact with said contact member upon release of said cord after wedging the cord in said guide member.

1,814,256. VEHICLE CHASSIS. OSCAR F. LUNDELIUS and JOHN R. DILLON, Los Angeles, Calif., assignors to Lundelius & Eccleston Motors Corporation, Las Vegas, Nev., a Corporation of Delaware. Filed Jan. 9, 1929. Serial No. 331,229. 11 Claims. (Cl. 180—73.)



1. A vehicle chassis of the character described embodying a substantially rectangular frame, supporting members connected directly to the sides of the frame at intermediate longitudinal points thereon and converging toward the rear of the frame, and a differential mounted exclusively on said supporting members.

1,814,257. LOCOMOTIVE BOILER. ERNEST J. NOEL, Ironton, Ohio, assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 392,978. 1 Claim. (Cl. 122—68.)



A locomotive boiler embodying therein, a firebox, a transverse water wall therein and communicating at its ends with the side water legs of the boiler, and including spaced sheets, a thermic siphon in said firebox opening at one end through the crown sheet of the firebox and having a tubular neck at the other end and a flexible diaphragm in one of said sheets in which said neck is secured, the other sheet having an outwardly dished portion in line with said diaphragm.

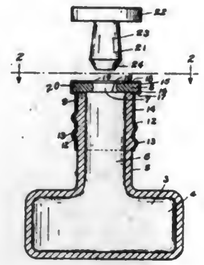
1,814,258. IGNITION SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 13, 1929. Serial No. 354,761. 16 Claims. (Cl. 200—42.)



1. A standardized ignition coil and lock switch unit comprising a rotatable switch contact, means resiliently supporting said contact, a reciprocable lock plunger and cooperating cup means connecting said lock plunger for movement of said contact member.

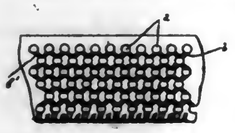
1,814,259. FILLING DEVICE. GEORGE W. OWEN, Baltimore, Md. Filed June 2, 1930. Serial No. 458,999. 5 Claims. (Cl. 120—69.)

1. In combination a container for fluid substance having a hollow fluid collecting chamber with an opening therein, a perforate cap for the container, a flat perforate resilient cleaning and sealing element receivable in the cap the perforation therein being of lesser diameter than the perforation of the cap, means on the cap for holding the



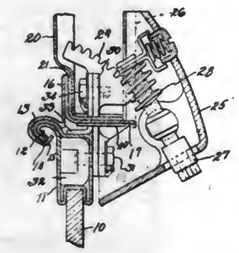
sealing element in position upon the edge of the fluid collecting opening, and cooperative means on the cap and container for removably securing the cap to the container.

1,814,260. THE MANUFACTURE OF SHOE UPPERS. ANDRÉ PERUGIA, Paris, France. Filed Oct. 8, 1928, Serial No. 310,050, and in France Apr. 12, 1928. 3 Claims. (Cl. 41—17.)



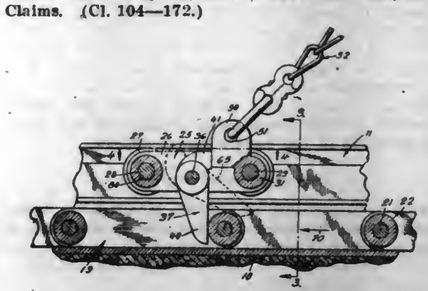
1. An ornamental shoe upper blank, comprising a body portion formed with a plurality of perforations arranged in predetermined relation to one another, and continuous strands or thongs interwoven in said perforations, and exposed upon said body portion, said strands or thongs, also embracing the exposed edge of the blank which is exposed when the blank is incorporated in a shoe.

1,814,261. VEHICLE WINDSHIELD. ALBERT T. PORTER, Detroit, Mich., assignor, by mesne assignments, to Ainsworth Manufacturing Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 1, 1929. Serial No. 351,605. 2 Claims. (Cl. 296—92.)



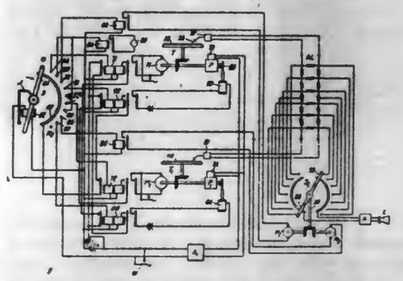
1. In combination, a stationary element of a vehicle, an elongated hinge element secured thereto along an edge thereof, a windshield, and a frame member secured thereto and having an elongated hinge element integral therewith, and cooperating with the first mentioned hinge element, the first mentioned hinge element including a portion abutting the bottom edge of the stationary element, a portion at right angles thereto fitting agains the side of the stationary element of the vehicle, and a hook like portion projecting from the second mentioned hinge element portion.

1,814,262. DOLLY. ALGENON A. REDFORD, Hollywood, Calif. Filed July 21, 1930. Serial No. 469,618. 9 Claims. (Cl. 104—172.)



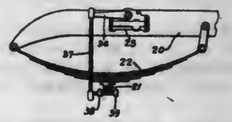
1. In combination: a track; a driven member movable longitudinally of and adjacent to said track; and a dolly comprising a carriage movable on said track, tow means secured to said carriage and adapted to be connected to a towable body, and an engager mounted on said carriage and adapted to engage said driven member for the purpose of towing said towable body with said driven member.

1,814,263. ELECTRICAL CONTROL SYSTEM. JOHN LOUIS REYNOLDS, Long Island City, N. Y., assignor, by mesne assignments, to Electrical Research Products Inc., a Corporation of Delaware. Filed Apr. 1, 1927. Serial No. 180,327. 7 Claims. (Cl. 88—16.2.)



1. In a synchronized sound and motion picture projecting system, a sound reproducer, a plurality of devices for producing sound modulated currents, means comprising an adjustable current attenuating network for associating said devices with said reproducer, a motion picture projecting machine, a motion picture film embodying a control record along its length, means comprising an inertialess relay controlled by said control record on the film when passing through said projecting machine, and means controlled by said relay for effecting the automatic adjustment of said network to switch said reproducer from one to another of said devices.

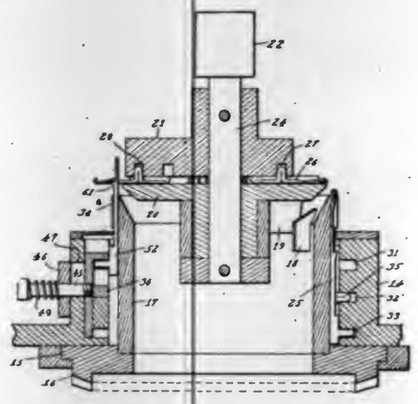
1,814,264. SHOCK ABSORBER. WALTER W. RIEDEL, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 7, 1929. Serial No. 391,025. 6 Claims. (Cl. 188—88.)



1. A shock absorber comprising in combination, a casing presenting a fluid reservoir and a cylinder; a piston in said cylinder forming two compression chambers therein; a duct providing communication between said chambers; and

means for controlling the flow of fluid through said duct, said means comprising a constant flow orifice adapted constantly to restrict the flow of fluid through said duct in both directions, a valve adapted to establish a restricted flow of fluid around said constant flow orifice in one direction only, in response to increased fluid pressure in the one compression chamber, and a valve adapted to establish an increased flow of fluid around said constant flow orifice in both directions in response to still greater fluid pressures in the compression chambers.

1,814,265. CIRCULAR KNITTING MACHINE. FRED H. SCHABACKER, Rockford, Ill., assignor to Rockford Mitten & Hosiery Company, Rockford, Ill., a Corporation of Ill. Filed Oct. 21, 1929. Serial No. 401,070. 4 Claims. (Cl. 66—24.)



1. In a circular knitting machine, the combination of a circular frame, a cylinder rotatable therein, a dial cooperating with the cylinder and rotatable therewith, the cylinder having needles operable thereon and the dial having needles operable thereon in transverse relation to one another, said frame having a pair of continuous tracks thereon one above the other in either of which the cylinder needles are arranged to be disposed, at one level for the transfer of work thereon and at the other level for knitting, means for switching the needles from one track to the other, said frame having a third track at still another elevation, a plurality of transfer points in the nature of needle dummies arranged to be disposed normally on said track at an out-of-the-way level with respect to the cylinder needles but adapted to be switched to one of the other tracks to the same level as the cylinder needles when the latter are having work transferred thereto whereby to have certain stitches transferred onto said transfer points, the latter being arranged subsequently to transfer the stitches therefrom to the dial needles, and means for switching the transfer points to and from the last mentioned track.

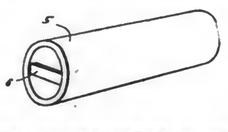
1,814,266. SAW GAUGE. EMANUEL STAUDER, Rochester, N. Y., assignor to Huther Brothers Saw Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed July 5, 1928. Serial No. 290,448. 9 Claims. (Cl. 33—202.)

1. In a saw gauge, the combination with a member adapted to be movably mounted on a saw, of means for guiding the movements of said member relative to said saw, a device carried by said member and lying in the plane of the saw and angularly adjustable in said plane relative to said member, said device being settable to a position corresponding to certain angular characteristics of



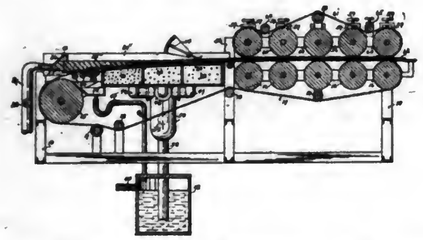
teeth on said saw whereby to gauge said characteristics, and scale means cooperating with said device for indicating the position to which it is adjusted.

1,814,267. CYLINDER SLEEVE AND METHOD OF PRODUCING THE SAME. CARL H. SWARTZ, Freeport, Ill., assignor to Stover Manufacturing & Engine Co., Freeport, Ill., a Corporation of Illinois. Filed Sept. 20, 1929. Serial No. 393,876. 8 Claims. (Cl. 29—156.4.)



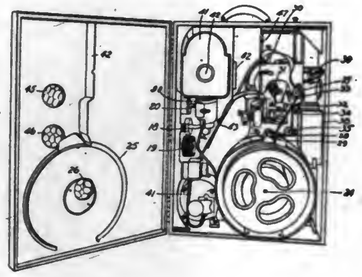
1. A new article of manufacture comprising an oversize cylinder sleeve adapted to be eventually turned down to the proper size for a press fit in a cylinder bore, said sleeve being open at one end thereof and having a web in the other end thereof provided with a center hole.

1,814,268. MACHINE FOR PRODUCING INSULATING LUMBER. ORLAND R. SWEENEY, Ames, Iowa, assignor to Iowa State College of Agricultural and Mechanical Arts, Ames, Iowa, a Corporation of Iowa. Filed Oct. 19, 1929. Serial No. 400,996. 14 Claims. (Cl. 92—39.)



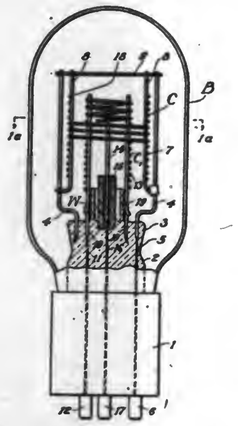
1. In a device of the class described, a frame, a continuous metallic screen mounted for rotation, a means for causing said screen to maintain a logarithmic curve in a portion of its travel, a distributing member for depositing pulp on said screen at the point of its logarithmic curve, and a means for producing a suction under said screen at a point in its logarithmic curve.

1,814,269. PORTABLE TALKING MOTION PICTURE PROJECTOR. ROY V. TERRY, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 8, 1928. Serial No. 298,275. 1 Claim. (Cl. 88—16.2.)



In a portable talking motion picture apparatus a casing, a door in said casing, a motion picture projecting device mounted in said casing, an illuminant for said projector, a light sensitive device controlled by the film passing through said projector, a shield attached to said casing and partially shielding said light sensitive device from said illuminant, and a second shield affixed to said door, and adapted to cooperate with said first shield to effectually shield said light sensitive device from said illuminant.

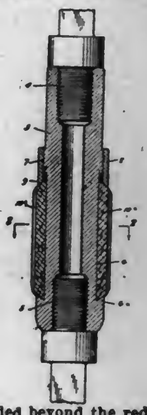
1,814,270. GLOW DISCHARGE DEVICE. CHARLES TRAVIS, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 17, 1928. Serial No. 247,293. 2 Claims. (Cl. 250—27.5.)



1. A gaseous discharge device comprising anode structure, and a cathode comprising a wire-like helix of molybdenum and a closed loop of tantalum.

1,814,271. SUCKER ROD JOINT. FRED B. VAUGHN, Maywood, Calif., assignor to John Grant, Los Angeles, Calif. Filed June 1, 1926. Serial No. 112,760. 1 Claim. (Cl. 308—4.)

A sucker rod connector comprising a cylindrical tubular body having a reduced portion intermediate its ends with an external undercut shoulder at one end thereof, the bore of said connector being internally threaded at the ends to receive sucker rod sections, a wear sleeve of wood having bevelled ends and of greater external diameter than any portion of said body split longitudinally into sections and resting against said shoulder, said body be-



ing externally threaded beyond the reduced portion at the other end thereof, a longitudinally adjustable jam collar mounted on said threaded portion and providing an undercut seat for engaging the other end of said wear sleeve to lock the latter in place between it and said shoulder.

1,814,272. REFRIGERATOR DOOR CONSTRUCTION. VIRGIL P. WARREN, Atlanta, Ga. Filed Dec. 26, 1928. Serial No. 328,469. 5 Claims. (Cl. 20—35.)



2. In combination with framework having an opening therethrough leading to a compartment therein, a door for said opening hinged to said framework and provided with a groove in the striking edge thereof, and means inserted in said groove to bend said striking edge arcuately.

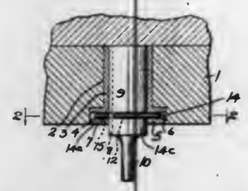
1,814,273. PROTECTING DEVICE. SIDNEY BOYDEN WHITTIER, Chattahoochee, Ga. Filed Nov. 27, 1929. Serial No. 410,162. 2 Claims. (Cl. 128—133.)



1. A device for use on the arm of a child to prevent bending thereof comprising, in combination, a continuous

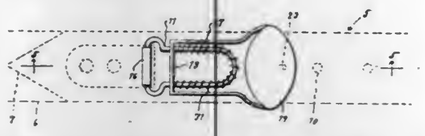
piece of wire having each of the ends thereof bent to form a ring, one of said rings adapted to loosely encircle the wrist and the other of said rings adapted to loosely encircle a portion of the upper arm, another ring formed at an intermediate point along said wire and adapted to loosely encircle the arm substantially at the elbow, said rings being in spaced alignment with each other, straight ring connecting portions formed in said wire between said rings and extending in a direction parallel to the axis thereof; and a separate means for securing said wire to the arm.

1,814,274. TOOL SUPPORTING ARRANGEMENT. FLOYD M. WILLIAMSON, Detroit, Mich. Filed Nov. 1, 1928. Serial No. 316,607. 4 Claims. (Cl. 279—79.)



1. In a tool arrangement of the character described, the combination of a tool having a shank thereon, a tool holder having a bore to receive said shank and an annular groove around its periphery, a resilient supporting member in said groove extending partly around the latter, said tool holder having a radial passage therethrough from the bottom of said groove opening into said bore, and one end of said supporting member extending through said passage and bearing against said tool shank and means for positively holding said shank against rotation in the bore of the tool holder.

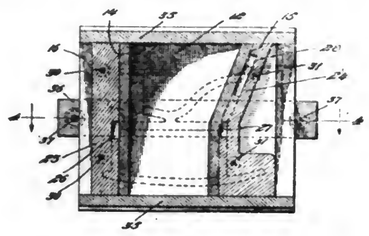
1,814,275. BELT BUCKLE. DORSEY M. WIRTH, Bucyrus, Ohio. Filed Dec. 30, 1930. Serial No. 505,644. 4 Claims. (Cl. 24—163.)



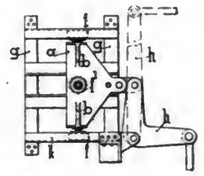
1. A belt buckle of the type described comprising a belt connector loop, a U-shaped yoke carrying the loop slidably in its bight, a spring on the loop for resisting longitudinal separation of the loop and the yoke, a buckle body connected with the yoke, a belt hole engaging tongue on the buckle body for adjustably retaining one end of a belt, the other end of the belt being fixedly retained by attachment to the loop.

1,814,276. MOLD FOR FORMING MOLDED ARTICLES. JOSEPH ANOSKOPAY, Providence, R. I. Filed Sept. 19, 1929. Serial No. 393,690. 8 Claims. (Cl. 18—34.)

3. A mold for forming a skeleton structure having a central unobstructed passage which comprises, a central member having plain outer faces, certain of said outer faces being tapered, side sections shaped to fit against the outer faces of said central member and positioned thereround, said side sections being provided with recesses formed upon the faces thereof which fit against the outer faces of the central member and having certain of said recesses extending continuously entirely around the central member when the several parts are in assembled position, whereby when the recesses formed in the side sections are filled with vulcanizable material and positioned about the central member the material will form a complete skeleton shape having certain of the parts connected together to provide a unitary structure.

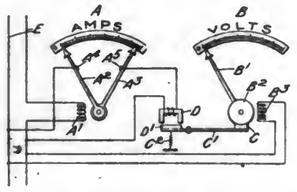


1,814,277. SHAKING CONVEYING DEVICE. PETER AURICH, Bochum, Germany, assignor to Gebr. Eickhoff, Maschinenfabrik U. Eisengiesserei, Bochum, Germany. Filed July 20, 1928, Serial No. 294,219, and in Germany July 20, 1927. 4 Claims. (Cl. 198—220.)



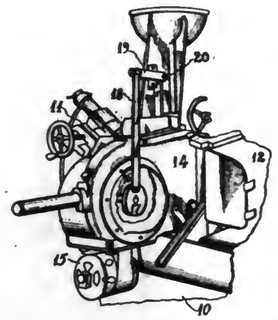
1. In a shaking conveyer of the character described the combination of a pair of coupled conveyer sections and the motive means for shaking the sections, of a reciprocable body member positioned underneath the sections and connected to the coupling means, and means for retaining the reciprocable body member against extended movement in either a vertical or transverse horizontal direction.

1,814,278. INDICATING APPARATUS. JAMES ROBERT BEARD, Kensington, London, and GRAHAM LEIGH PORTER, Manchester, England, assignors to Electrical Improvements Limited, Newcastle-Upon-Tyne, England, a Company of Great Britain. Filed Apr. 3, 1930, Serial No. 441,378, and in Great Britain May 29, 1929. 11 Claims. (Cl. 171—95.)



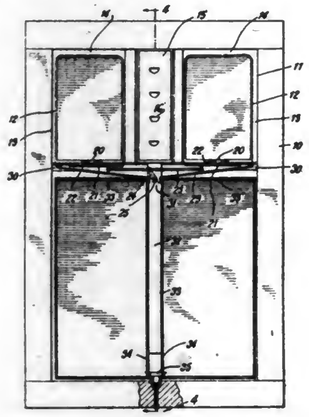
1. In indicating apparatus the combination of two instruments adapted to indicate two quantities, a pointer for one of the instruments, a brake for the pointer, and means controlled by the other instrument for releasing the brake so that the pointer is operated to indicate the value of one quantity in relation to a predetermined value of the other quantity.

1,814,279. HOPPER FEED. GEORGE W. BINNS, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed June 4, 1929. Serial No. 368,261. 12 Claims. (Cl. 51—215.)



1. The combination with a centerless grinder of a feed mechanism therefor including a hopper, a discharge member for the hopper, an agitator movable within the hopper, a discharge line from the hopper, and means in the discharge line for automatically determining the manner of eventual discharge of pieces therefrom.

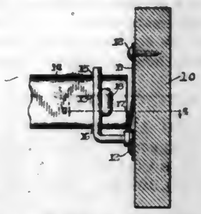
1,814,280. REFRIGERATION SYSTEM AND METHOD. WALTER LIGHT BODMAN, New York, N. Y., assignor to The Insulation Corporation, a Corporation of Delaware. Filed Mar. 25, 1926. Serial No. 97,393. 7 Claims. (Cl. 62—46.)



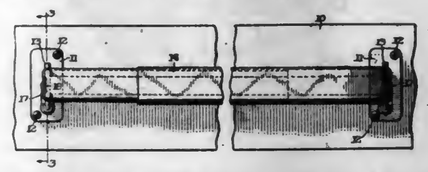
1. A refrigerator having a cooling chamber and a preserving part, a closed container having a frozen refrigerant therein in said cooling chamber, means directing a circulation of air through the preserving part of the refrigerator and in proximity to but out of contact with the refrigerant container, and means permitting a portion only of the air thus circulating to circulate in and out of the cooling chamber and thus come into direct contact with the refrigerant container.

1,814,281. CURTAIN FIXTURE. JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 22, 1930. Serial No. 454,597. 3 Claims. (Cl. 156—22.)

2. A curtain fixture bracket adapted for cooperation with a hollow curtain rod having registering holes in its top and bottom walls, said bracket comprising a base plate, an L-shaped hook mounted thereon adapted to be engaged with the holes in said rod, and a protuberant member on said base plate above the base of said hook adapted to cooperate with the lower portion of the rod to block said lower portion against movement toward the base plate.

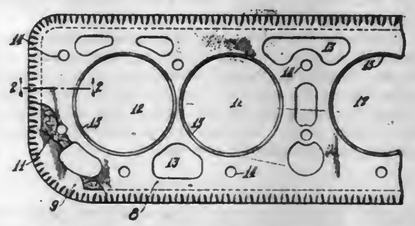


1,814,282. CURTAIN FIXTURE. JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Original application filed May 22, 1930, Serial No. 454,597. Divided and this application filed Dec. 19, 1930. Serial No. 503,407. 2 Claims. (Cl. 156—19.)



1. A hollow curtain rod adapted for cooperation with a bracket having an L-shaped hook, said rod being formed with registering holes in its top and bottom walls adapted to be engaged by the upright limb of said hook, and with an internal guide member on a side wall of the rod serving, through relative sliding engagement with said upright limb as the rod is entered on the hook, to guide the tip of the hook through the hole in the top wall of the rod.

1,814,283. GASKET. STEPHEN W. BRANER, Chicago, Ill., assignor to Victor Manufacturing & Gasket Co., a Corporation of Illinois. Filed Oct. 15, 1928. Serial No. 312,534. 7 Claims. (Cl. 288—1.)



1. A gasket comprising an outer and inner metallic layer and alternating layers of refractory and metallic material therebetween, said metallic layers extending beyond the edges of said refractory layers to provide a cooling means.

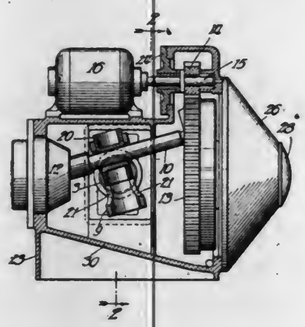
1,814,284. PROCESS OF OBTAINING POTASSIUM SODIUM SULPHATE. GEORGE B. BURNHAM, Reno, Nev., assignor to Burnham Chemical Company, Reno, Nev., a Corporation of Nevada. Filed Nov. 16, 1925. Serial No. 69,271. 20 Claims. (Cl. 23—1.)

1. The process of recovering a given salt from a liquor supersaturated with the same and a second salt which comprises bringing the liquor into intimate contact with agitated crystals of the second salt to crystallize the second salt, recovering the second salt, bringing the liquor

into intimate contact with agitated crystals of the given salt to crystallize the given salt, and recovering the given salt.

15. That step in a process of forming crystals of a salt from a solution supersaturated with respect to the salt comprising flowing the solution under crystallizing conditions and controlling flow velocity to control crystal size.

1,814,285. PUMPING APPARATUS. JOHN M. BUTLER, Evanston, Ill., assignor to King Pneumatic Tool Company, Chicago, Ill., a Corporation of Illinois. Filed May 14, 1926. Serial No. 109,011. 8 Claims. (Cl. 230—58.)



1. In an apparatus of the class described, the mechanical motion comprising a revolving lever inclined to the axis about which it revolves, a member reciprocating in a line transverse of said axis, and connecting means between said lever and member having up and down, rocking and turning movements.

1,814,286. PROCESS FOR CONTROLLING THE VULCANIZATION OF RUBBER AND SIMILAR MATERIALS AND PRODUCTS OBTAINED THEREBY. SIDNEY M. CADWELL, Leonia, N. J., assignor to the Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Original application filed June 25, 1923, Serial No. 647,757. Divided and this application filed Nov. 1, 1927. Serial No. 230,385. 4 Claims. (Cl. 18—53.)

1. A process for controlling the vulcanization of rubber containing sulphur, amine, metal in combination, and a material containing carbon disulphide, which comprises causing the amine contained in rubber to react with an aldehyde to check the usual vulcanizing action on the rubber of the amine, treating the rubber with a quantity of amine, and vulcanizing the rubber.

1,814,287. PROCESS FOR CONTROLLING THE VULCANIZATION OF RUBBER AND SIMILAR MATERIALS AND PRODUCTS OBTAINED THEREBY. SIDNEY M. CADWELL, Leonia, N. J., assignor to the Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Original application filed June 25, 1923, Serial No. 647,757. Divided and this application filed Nov. 1, 1927. Serial No. 230,386. 9 Claims. (Cl. 18—53.)

1. A process for controlling the vulcanization of rubber containing sulphur, amine, metal in combination, and a material containing the group

$$\begin{matrix} CS, \\ \| \\ X \end{matrix}$$

where X is sulphur or an equivalent element or group which comprises causing the amine contained in rubber to react with a nitroso compound to check the usual vulcanizing action on the rubber of the amine, treating the rubber with a quantity of amine, and vulcanizing the rubber.

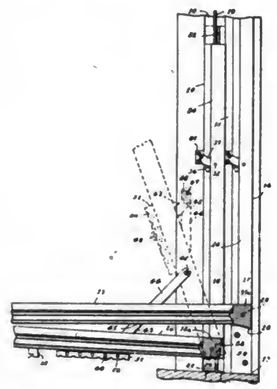
1,814,288. PROCESS FOR CONTROLLING THE VULCANIZATION OF RUBBER AND SIMILAR MATERIALS AND PRODUCTS OBTAINED THEREBY. SIDNEY M. CADWELL, Leonia, N. J., assignor to the Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Original application filed June 25, 1923, Serial No. 647,757. Divided and this application filed Nov. 1, 1927. Serial No. 230,391. 10 Claims. (Cl. 18—53.)

1. A process for controlling the vulcanization of rubber which comprises reacting upon an active metal M in combination, in the presence of an amine, a material containing the group

$$\begin{matrix} CS, \\ | \\ X \end{matrix}$$

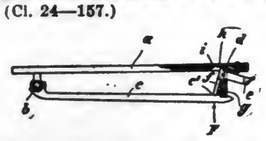
and a sulphur-containing material in rubber, with a substance to check the vulcanizing action of the active metal M in combination, then treating the rubber with an active metal M in combination, and vulcanizing the rubber.

1,814,289. WINDOW. LESLIE M. CALDWELL, Rockford, Ill. Filed Mar. 25, 1929. Serial No. 349,607. 37 Claims. (Cl. 20—49.)



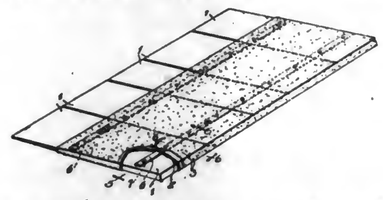
1. In a window construction comprising a window frame providing ways therein, slides operable up and down in said ways, a window sash trunnioned on the slides for swinging movement relative thereto from normal upright position, and a weather strip on the inner side of each slide interlocking with a weather strip on the side rail of the sash serving to hold the sash against outward swinging movement with reference to the slides, a dog pivotally mounted on at least one of said slides for swinging movement in a plane parallel to the plane of swinging movement of the sash, there being, in the case of the sash and dog elements a lateral projection provided on the side of the one element arranged to enter a recess provided therefor in the dog, the dog being arranged when moved to a certain position with the projection engaged in the recess to serve to hold the sash in upright position and against inward swinging movement relative to the slides, and a keeper on the frame, there being in the case of the keeper and dog elements, a recess provided in the one element, and a lateral projection on the other element arranged to be received in said recess when the sash is swung out of normal upright position whereby to hold the slides against movement.

1,814,290. BROOCH CLASP. LOUIS JOSEPH CARTIER, Budapest, Hungary, assignor to Cartier, Societe Anonyme, Paris, France, a Company of France. Filed Apr. 24, 1930, Serial No. 446,959, and in France Mar. 7, 1930. 2 Claims. (Cl. 24—157.)



1. A self closing clasp for brooches comprising a pin hinged to the brooch plate, an axis on the brooch plate located opposite the end of the pin, a safety ring adapted to pivot on said axis, a projection on said safety ring adapted to transmit the closing motion of the pin to the safety ring and to move said safety ring round the end of the pin, and a lyre shaped spring fitted in the safety ring for keeping the pin in position therein.

1,814,291. WOODEN BUILDING STRIP AND METHOD OF MAKING SAME. MAURICE L. CATON, Minneapolis, Minn., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 16, 1927. Serial No. 233,645. 3 Claims. (Cl. 108—8.)

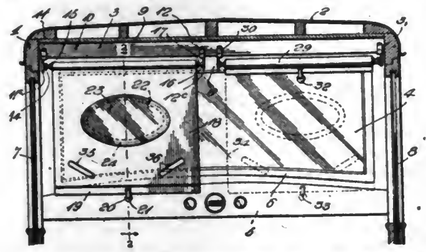


3. A building strip comprising a plurality of wooden members, a substantially rigid metallic member having struck up portions engaging each of said wooden members for retaining them in spaced relation, and a coating of water repellant material over and between said wooden members and covering said spacing member.

1,814,292. CONCRETE WATERPROOFING COMPOUND. MARTIN B. CHITTICK, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Apr. 19, 1930. Serial No. 445,833. 3 Claims. (Cl. 106—27.)

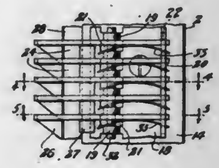
1. A composition comprising a small percentage of metallic soap combined in solution in a much larger percentage of mineral oil, and an emulsifying agent containing a sulphonated oil in such relative proportions as to form when mixed with water a water-proofing compound for concrete and cement.

1,814,293. AUTO-VISION CURTAIN. VINCENT J. CHRISTIE, Scenic, S. Dak. Filed Mar. 21, 1930. Serial No. 437,873. 1 Claim. (Cl. 296—97.)



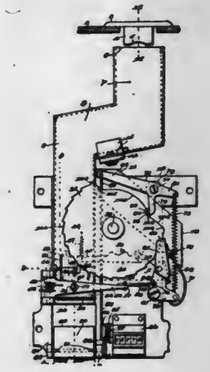
An auto-vision curtain comprising a roller adapted to be mounted adjacent the hingedly mounted windshield of a motor vehicle, and an opaque curtain carried by said roller and adapted to be extended laterally of said windshield before the driver's seat on the interior side thereof remote from the direction of movement of the windshield, in, semi-transparent material covering the aperture in said curtain and softening the effect of light rays which penetrate the aperture in said curtain, the opaque material in said curtain operating to exclude undesired glare upon the driver of the motor vehicle, the opaque portion of said curtain having angularly disposed slots extending in opposite directions in opposite corners thereof below said semi-transparent material for reducing the effects of wind pressure against said curtain when said hingedly mounted windshield is opened, whereby the semi-transparent material in said curtain may be maintained in stretched position independently of the pressure of the wind against said curtain.

1,814,294. LOOM FOR WEAVING TUFTED PILE FABRIC. EUGENE F. CLARK, Damariscotta, Me., assignor to Marshall Field Mills Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1930. Serial No. 419,765. 9 Claims. (Cl. 139—9.)



1. A tuft yarn frame comprising a body bar provided with means for carrying a tuft yarn spool, a row of laterally spaced and laterally movable plates forming passages between them for yarn strands delivered from said spool, means connecting said bar and said plates, and spring means maintaining said plates normally in predetermined positions and permitting them to yield laterally from such positions.

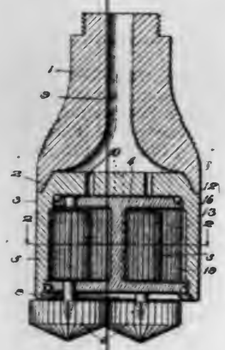
1,814,295. COIN CONTROLLED MECHANISM. WELLS H. CLAUSSEN, Seattle, Wash., assignor to Apple Vender Co., Seattle, Wash., a Corporation of Washington. Filed Jan. 3, 1930. Serial No. 418,334. 9 Claims. (Cl. 194—97.)



9. In a coin controlled mechanism, a coin chute adapted to receive entities, means for arresting an entity in said chute for detection purposes and then releasing such

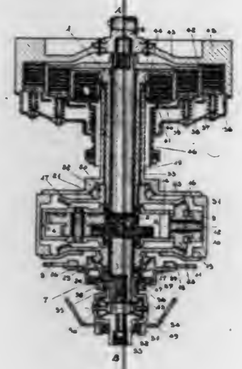
entity, means for detecting spurious from genuine entities while the entity is arrested in said chute, a device connected with said means to operate the latter or be operated thereby, and an element engaging said device and having a portion permitting operation of said device by said means responsive to a spurious entity for arresting a vending operation or operating said device responsive to a genuine entity to permit a vending operation.

1,814,296. ROTARY DRILL BIT. CHARLES A. DEAN, Coalinga, Calif. Filed Oct. 18, 1927. Serial No. 227,037. 5 Claims. (Cl. 255—71.)



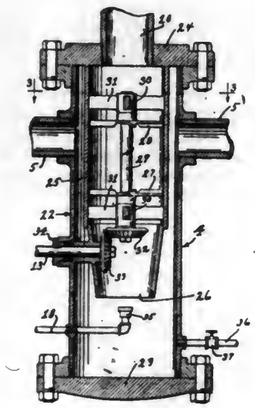
1. A rotary drill comprising a collar rigidly connected to a drill rod and geared internally, a carrier rotatably mounted within said collar, said carrier being mounted loosely with respect to said rod and bearing rotatable cutter shafts having geared connection with said inner collar surface.

1,814,297. CHANGE SPEED DEVICE. JOSEPH DE BACKER, Uccle-Brussels, Belgium. Filed Oct. 6, 1928, Serial No. 310,788, and in Belgium Apr. 14, 1928. 15 Claims. (Cl. 74—34.)



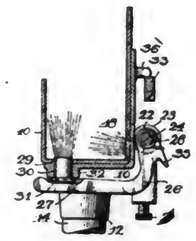
1. In a change speed device, in combination, a spur gear train including a driving shaft, a driving pinion on the shaft, a driven shaft aligned with the driving shaft, a driven pinion thereon, intermediary pinions between the driving pinion and the driven pinion for transmitting the driving movement of the driving pinion to the driven pinion, a differential epicyclic gear train including planetary pinions and two sun wheels meshing with the planetary pinions, the said sun wheels mounted on the same axis of rotation as the driving and driven shafts, and a casing in which the intermediary and planetary pinions are journalled and rotatable on the driving shaft and driven shaft for being driven at variable speeds independently of the angular speed of the said driving pinion.

1,814,298. METHOD OF AND APPARATUS FOR DEMULSIFYING PETROLEUM. CHESTER P. DENNHARDT, Los Angeles, Calif. Filed Sept. 6, 1927. Serial No. 217,749. 3 Claims. (Cl. 196—4.)



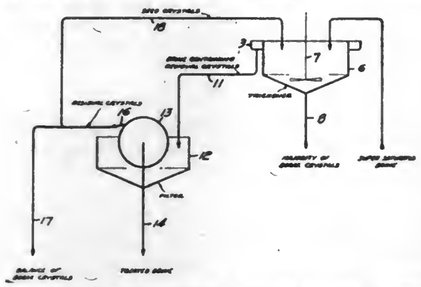
1. An apparatus of the character described comprising a means forming a passage, a nozzle positioned to throw a spray into said passage, a means to supply a liquid chemical under pressure to the nozzle, and a means within the passage to squeeze a liquid flowing through the passage.

1,814,299. FLASH LAMP. GEORGE A. DAUCKER, Chicago, Ill., assignor to Burke & James, Inc., Chicago, Ill., a Corporation of Illinois. Filed Oct. 3, 1929. Serial No. 396,963. 10 Claims. (Cl. 67—28.)



6. A flash lamp embodying a charge holder, a handle connected therewith, spark producing means embodying two relatively movable elements contacting with each other, an explosive spark producing means, an element connected with the movable one of the first said elements for exploding the last said means, means tending normally to move said element to explode the second said means, means for locking the said element against movement by the third recited means, and means for rendering the said locking means inactive at will.

1,814,300. PROCESS OF RECOVERING SUPERSATURANTS. LIONEL H. DUSCHAK, Berkeley, Calif., assignor to Burnham Chemical Company, Westend, Calif., a Corporation of Nevada. Filed Oct. 10, 1927. Serial No. 225,375. 10 Claims. (Cl. 23—41.)



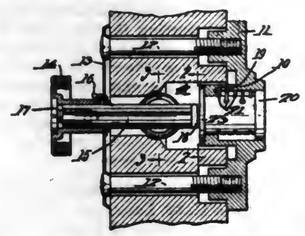
1. A process of recovering a supersaturant comprising agitating supersaturated brine to promote crystallization, removing crystals from the brine, passing the remaining brine through a filter cake of similar crystals to remove additional crystals from said brine, and using some of said additional crystals as seed in brine being agitated.

1,814,301. SIGNALING DEVICE FOR AUTOMOBILES. GASTON DUVAL, Rouen, France, assignor to Etablissements Jean Schwarze et H. Mahe, Societe a Responsabilite Limitee, Paris, France. Filed Feb. 16, 1928, Serial No. 254,866, and in France Feb. 21, 1927. 1 Claim. (Cl. 116—51.)



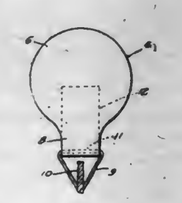
A direction signaling device for automobiles comprising a casing having an opening on each side, a two part folding arm for signaling pivotally mounted and normally occupying a folded position within said casing invisible from without, said arm being arranged to turn on its pivot in both directions for display through either of said openings, a stationary sprocket wheel mounted on said pivot, another sprocket wheel integral with the outer part of the arm and mounted at the point of articulation of both parts, and a continuous chain passing on both sprocket wheels, whereby the rotation of the arm on its pivot automatically causes the two parts of said arm to unfold and to maintain a position of alignment when said arm is swung in either direction.

1,814,302. MORTISE BOLT LOCK. MORRIS FALK, Fitchburg, Mass. Filed Apr. 10, 1930. Serial No. 443,200. 5 Claims. (Cl. 70—46.)



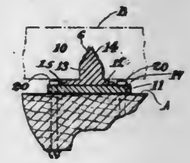
1. In a lock, the combination with a cylinder, a plug rotatably and slidably mounted therein, locking tumblers in the plug, the cylinder having a shoulder against which the last locking lever on the plug engages when the levers are in locking position, to prevent the sliding of the plug inwardly, a retainer on the inner end of the plug, said cylinder having a shoulder against which said retainer engages when the plug is moved out to its outermost position, and a bolt operating device rotatably mounted, the retainer and bolt operating device having inter-engaging means for positively connecting together so that the turning of the plug by its key will operate the bolt.

1,814,303. ARTICLE SUSPENSION DEVICE. TOLL N. M. FINLAY, Detroit, Mich. Filed Jan. 26, 1931. Serial No. 511,426. 3 Claims. (Cl. 40—145.1.)



1. As a new article of manufacture, a suspension accessory comprising a double-ply gummed tab including a depending loop-like saddle, a triangular frame hung in said saddle, a suspension hook carried by said frame and a reinforcing strip folded upon itself and located between the parts of the saddle and between portions of the double ply pad with a part of the triangular frame passing through the loop part of the reinforcing strip.

1,814,304. MEANS FOR HOLDING DEMOUNTABLE BODIES ON VEHICLES. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 5, 1930. Serial No. 500,159. 7 Claims. (Cl. 105—366.)



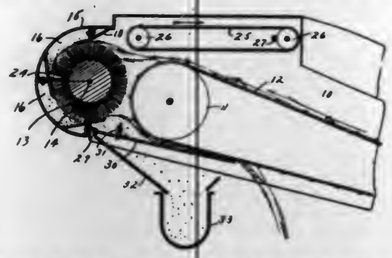
1. A device for holding demountable bodies on vehicles comprising a member having an upstanding body with a tapered top, said member having a base projecting to a considerable extent in all directions and means engaging the projecting base for holding the device in place.

2. The means for holding demountable bodies on vehicles comprising a member having an upstanding body terminating in a substantially conical top, said member having a base projecting to a considerable extent in all directions and provided with openings for the passage of fastening devices.

1,814,305. THRASHING MACHINE. ROBERT GRAHAM FLEMING, Chico, Calif., assignor to Guy H. Hall, Evanston, Ill. Filed Jan. 23, 1930. Serial No. 422,792. 4 Claims. (Cl. 130—27.)

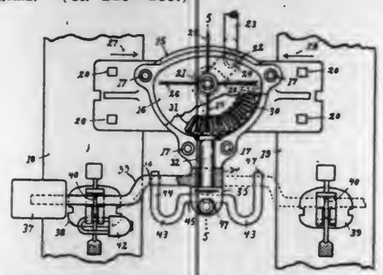
1. In a thrashing machine, the combination of a rotary cylindrical brush having flexible bristles, two baffle devices for directing material toward and temporarily holding it in the path of the brush, a pocket formed between the baffle devices, in which the smaller particles of the material being operated on are temporarily retarded

and again presented to the action of the brush by the second baffle device, and a perforated retarding device,



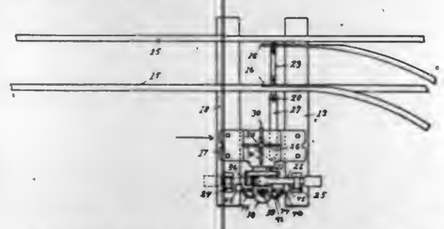
positioned adjacent to the first baffle device and extending a short distance toward the second baffle device and located close to the brush, for the purposes stated.

1,814,306. RAILWAY SWITCH STAND. WALLACE M. GRAY, Cincinnati, Ohio, assignor to The American Valve and Meter Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 12, 1929. Serial No. 377,841. 11 Claims. (Cl. 246—289.)



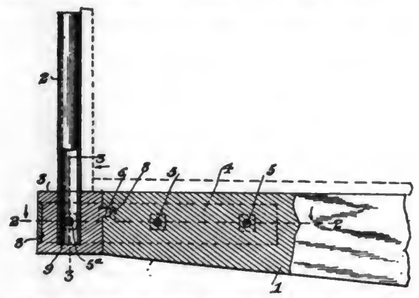
1. A switch stand comprising a switch stand casing, a crank shaft journaled to said casing and provided with a switch actuating crank, a signal target actuated in unison with the movements of said crank shaft, a connecting rod connecting said crank with a switch, an actuating shaft journaled to said casing and operatively connected through driving means with said crank shaft, an actuating lever located exteriorly of said casing to rock said actuating shaft, means to latch said actuating lever at opposite extremities of its rocking movement, and a bendable member interposed between said actuating lever and said actuating shaft and adapted to yield by bending when said switch is forced by the passage of rolling stock in a reverse direction through said switch.

1,814,307. RAILWAY SWITCH APPARATUS. WALLACE M. GRAY, Cincinnati, Ohio, assignor to The American Valve and Meter Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 19, 1929. Serial No. 400,924. 12 Claims. (Cl. 246—289.)



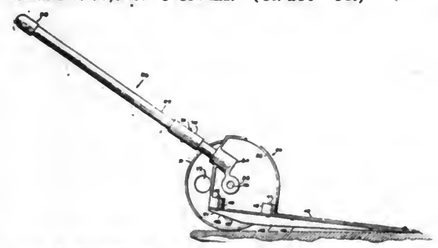
1. A railway switch actuating mechanism comprising an actuating lever adapted to be latched in position to normally hold a switch at opposite extremities of its adjustment, a crank shaft adapted to be actuated by the movement of said actuating lever to actuate and hold said switch, a target adapted to indicate the position of said crank shaft, and means interposed between said actuating lever and crank shaft adapted to yield under abnormal strain for a fraction of a normal throw of the switch and to retain connection with and control over the switch and target to prevent a full normal throw of either.

1,814,308. STANDARD MOUNTING FOR BOLSTERS. BENJAMIN F. GREEN, Homer, La. Filed May 21, 1930. Serial No. 454,388. 4 Claims. (Cl. 280—143.)



1. The combination with a truck or trailer bolster, of a block placed against the outer end thereof, abutting faces of the block and bolster being formed, one with a seat and the other with a projected part engaged in the seat, fastening means having portions extending along opposite sides of the bolster and block in contacting and bridging relation thereto and secured to the block and bolster, and a standard removably fitted to the holder.

1,814,309. TRUCK. JOHN S. GULLBORG, Chicago, Ill., assignor to Alemite Die Casting & Mfg. Co., Woodstock, Ill., a Corporation of Illinois. Filed Dec. 17, 1925. Serial No. 75,919. 8 Claims. (Cl. 280—53.)



1. In a vehicle of the class described, an axle, a pair of spaced wheels mounted thereon, a pair of counterweights mounted on the axle outside of the said wheels, one counterweight being associated with each of the said wheels, a handle for enabling the manual propulsion of the vehicle comprising two legs, one being connected to each of the said counterweights, a carrying platform connected to the counterweights for supporting the object to be conveyed, the said counterweights serving at all times to urge the handle upwardly and to urge the platform downwardly into engagement with the floor, a foot rod connecting the two legs of the handle, and means for adjusting the position of the said foot rod to meet the requirements of the trucker.

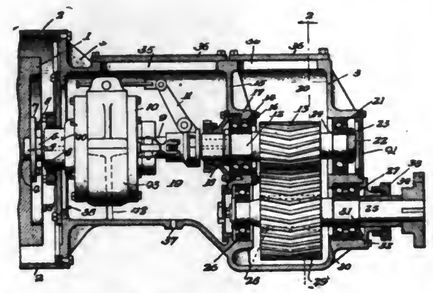
1,814,310. METHOD OF REPRODUCING MULTICOLOR DESIGNS. FRANK HART, Los Angeles, Calif. Filed Jan. 3, 1928. Serial No. 244,334. 18 Claims. (Cl. 41—38.6.)

1. The method of reproducing designs from a colored original which consists in making a positive tracing of all of the colored areas on the original, making a single negative from said tracing, blocking out in opaque paint on the negative, one color after another in accordance with a previously determined color sequence, making successive



prints on screens from the same negatives for the colors in order, blocking out on the screens the areas of the preceding colors in order, and printing the colors, one upon another through said screens.

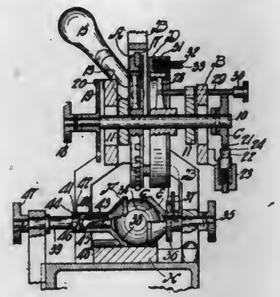
1,814,311. MARINE REDUCTION REVERSE GEAR UNIT. PAUL D. HARVEY, Chicago, Ill. Filed Oct. 31, 1927. Serial No. 229,892. 3 Claims. (Cl. 74—7.)



1. In a marine reduction reverse gear unit, a one-piece housing having an integral dividing wall defining two compartments and having openings in the walls of each compartment for accessibility to the interior thereof, one of the end walls of said housing and said dividing wall having aligned openings therein, bearings in said openings, a driven shaft journaled in said bearings and extending across one compartment and into the other compartment, a herring bone gear fixed on the portion of said shaft extending across said compartment, said dividing wall and said end wall having other aligned openings therein, bearings in said openings, a counter-shaft journaled in said bearings and extending across the compartment adjacent the end wall and parallel with the first shaft and out through said bearing to extend beyond said end wall, said shaft having a splined portion thereon, another herring bone gear meshed with said first-named herring bone gear and mounted on the splined portion of said shaft, the intermeshing of said herring bone gear preventing axial movement of said other herring bone gear on said splined portion, a reverse unit including a shaft connected to the end of said driven shaft extended into said other compartment, a packing gland arranged about said driven shaft in the compartment containing said reverse unit, a plate for closing the opening in said end wall having the bearing therein in which said driven shaft is journaled, a plate for closing the opening in said dividing wall in which a bearing for said counter-shaft is journaled, and a packing gland on said end wall about said shaft extending beyond said end wall.

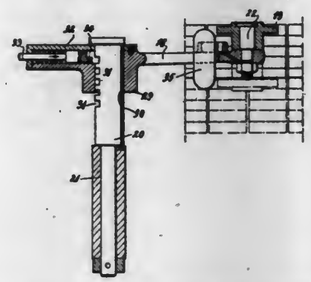
1,814,312. MARKING MEANS. GEORGE W. HEENE, Cleveland, Ohio. Filed Jan. 16, 1928. Serial No. 246,961. 10 Claims. (Cl. 197—6.4.)

1. A device of the character described including a type holder with character printing type thereon mounted on the device to move to mark an article and to rotate to selectively bring any one of the printing type thereon into marking position, a heating element mounted on the device to be moved into contact with said type holder and to various distances from the same to heat the same to various degrees of temperature to burn the character of the positioned type into the article to various degrees, a handle



means to move said type holder to mark the article, and a holding means for the article including a selectively operable article clamping means and a character spacing means for the article in operative connection with said handle means to move the spacing means and the articles for character spacing thereon during the initial movement of said handle means for a marking operation.

1,814,313. CAM MECHANISM. SYDNEY HUNT, Birmingham, England, assignor to John Walker & Sons Limited, London, England, a British Company. Filed Jan. 3, 1928, Serial No. 244,355, and in Great Britain June 22, 1927. 12 Claims. (Cl. 49—14.)

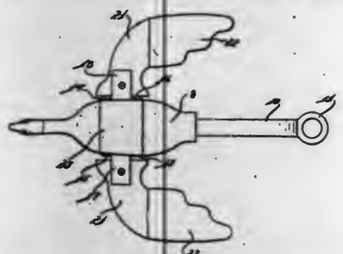


12. In a machine for the manufacture of glass articles, the combination with a fixed control column; of a frame work mounted for rotation about the column; a stepped cam mounted on the column; a follower lever rockable about an axis on said frame work and adapted to selectively cooperate with the several steps of the cam; a second lever rockable about an axis on said frame work and transverse to the axis of the follower lever; a connection between the two levers and always at the same distance from the axis of the second lever irrespective of the positions of said levers, said connection comprising a plate on one of said levers, and a tappet on the other lever and in engagement with said plate; a valve for controlling the admission of air in the process of blowing glass articles; and connections between the valve and the second lever.

1,814,314. RADIATOR ORNAMENT. JOHN C. KANE and WILLIAM WEISS, Detroit, Mich. Filed Nov. 11, 1929. Serial No. 406,199. 4 Claims. (Cl. 46—40.)

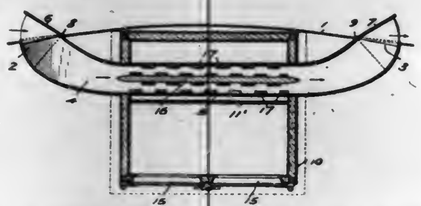
1. A radiator ornament of the class described comprising: an image forming body having a cavity formed

therein; a pair of wings each positioned at opposite sides of said body, each of said wings comprising a forward and a rearward section; means for swingably connecting the forward section and the rearward section of each of said



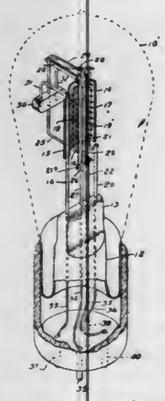
wings in such a manner that the rearward section may swing downwardly at an inclination to the forward section; and means for connecting the forward section of each of said wings swingably on said body.

1,814,315. REFRIGERATOR FOR VEHICLES. CHARLES D. KOCH, Torresdale, Pa., assignor to Keystone Aircraft Corporation, Bristol, Pa., a Corporation of Delaware. Filed Aug. 15, 1928. Serial No. 299,857. 12 Claims. (Cl. 62—90.)



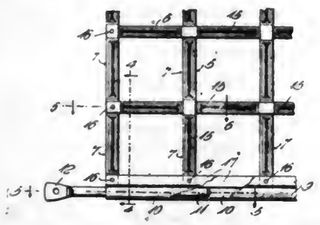
1. In combination with an airship a device of the character described including a structure having two ends opening through the skin of an airship or the like at two different points thereon forming an air duct and means for introducing a volatile liquid to the interior of the air duct.

1,814,316. TUBE CONSTRUCTION. WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Oct. 31, 1927. Serial No. 229,881. 5 Claims. (Cl. 250—27.5.)



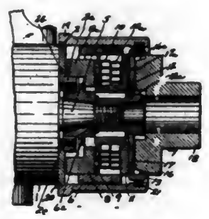
5. In a thermionic tube comprising an envelope and a base, said envelope containing electrodes consisting of an anode, grid, cathode and heater in spaced relation, said heater adapted to be energized by alternating or fluctuating current; four terminals on said base, said base and terminals being so arranged as to fit into a socket adapted for use with direct current tubes; means to support the upper ends of said anode, grid, cathode and heater in spaced relation; and means to support all of said electrodes and said spacing and supporting means solely upon the conductors therefor.

1,814,317. SCREEN DOOR GRILLE. HARRY J. LEDHERZ, Frederick, Md., assignor to The Everedy Company, Frederick, Md., a Corporation of Maryland. Filed June 4, 1929. Serial No. 368,392. 4 Claims. (Cl. 20—71.)



1. A grille structure comprising a multiplicity of laterally and longitudinally extending strip members interwoven with each other in tensioned engagement at the junctures thereof, outstruck ribs formed in said strip members between the junctures thereof, laterally extending marginal members at the top and bottom of said grille, said marginal members receiving the ends of said longitudinally extending strips, a cylindrical recess in each of said marginal members and pin members projecting into the cylindrical recesses in said marginal members for frictionally engaging the inner walls of the cylindrical recesses in said marginal members for supporting said grille structure.

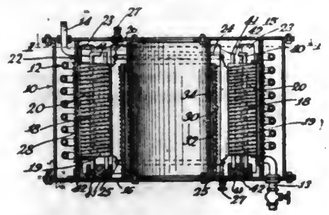
1,814,318. IMPULSE COUPLING. JOHN K. LENCKE and HERMAN SCHMID, Kingston, N. Y., assignors to Apollo Magneto Corporation, a Corporation of Delaware. Filed Dec. 3, 1929. Serial No. 411,294. 4 Claims. (Cl. 123—149.)



1. In combination with a generator having a shaft, a catch plate secured to the generator, a coupling mechanism carried by said shaft including an intermediate driving member, a nut member for securing the coupling mechanism to the shaft and having a beveled surface for maintaining the alignment of the intermediate driving member with the other coupling parts, and a casing secured to said plate and forming with said intermediate driving member a chamber enclosing the coupling mechanism.

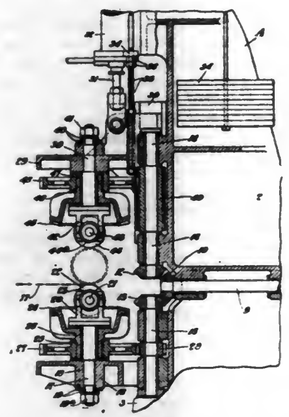
1,814,319. ELECTRIC WATER HEATER. ROBERT W. LINVILLE, San Fernando, Calif., assignor of thirty per cent to Irving S. Watson, Burbank, Calif. Filed Oct. 21, 1929. Serial No. 401,059. 3 Claims. (Cl. 219—39.)

1. An electric water heater comprising a cylindrical casing, a resistance coil mounted in the center of said casing, a plurality of resistance coils arranged in circular formation within said cylindrical casing, a wall encircling



said plurality of resistance coils, a second resistance coil wound on said circular wall, and a pipe coil encircling said circular wall.

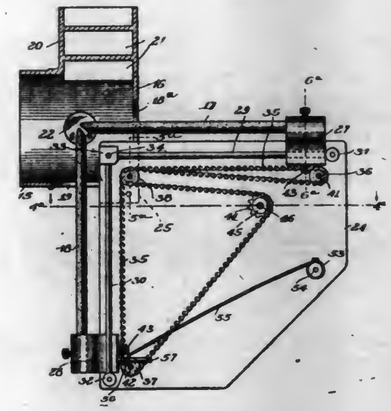
1,814,320. PIPE WRAPPING MACHINE. HARRY B. LYNCH, McKeesport, Pa. Filed June 12, 1928, Serial No. 284,681. 5 Claims. (Cl. 242—11.)



1. In a machine for wrapping pipes and the like, a housing, a shelf-like support rigidly mounted on and projecting from the forward vertical face of said housing, a vertically disposed feed-roller spindle journaled in said support, means for releasably locking said spindle against rotation, a knurled feed-roller journaled in the upper end of said spindle, vertically extending guideways on the upper portion of the forward vertical face of said housing, a supporting member slidably mounted in said guideways, a fluid pressure cylinder rigidly mounted on said housing and having its piston rod connected to said supporting member so as to adjustably support said supporting member in said guideways, means for limiting the vertical movement of said supporting member, a vertically disposed feed-roller spindle journaled in said supporting member, means for releasably locking said spindle against rotation, a knurled feed-roller journaled in the lower end of said spindle, and means for simultaneously rotating said rollers.

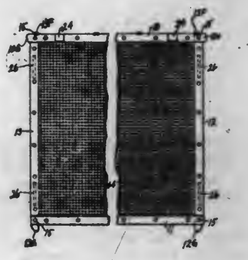
1,814,321. ARC LAMP. ALLAN F. MARTIN, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 9, 1925. Serial No. 7,796. 13 Claims. (Cl. 176—72.)

1. In an arc lamp, a frame, a pair of electrodes mounted for movement upon the frame one toward another, a flexible driving connection for simultaneously advancing the electrodes toward each other, and independent devices for driving said connection, one including a rotary part



for advancing the connection and the other a yieldable element arranged to urge the connection in the direction of its movement by the rotary part.

1,814,322. AUTO WINDOW SCREEN. ALFRED D. MC CORMACK, Mankato, Minn. Filed Dec. 4, 1929. Serial No. 411,529. 5 Claims. (Cl. 156—14.)

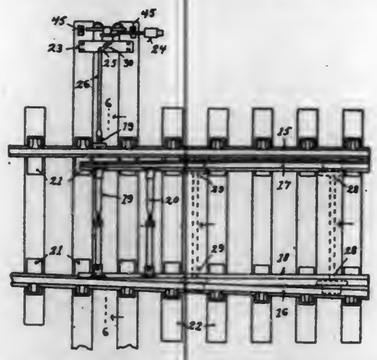


4. In a screen for windows of the class described, said screen comprising four bars connected rigidly together to conform to the shape of the window opening, each bar comprising two members secured together with the edge portions of a screen retained between them, an auxiliary side bar adapted to be adjustably fixed to either side bar of the screen frame for extra width, one of said guide means comprising an outward integral extension of the upper end of said auxiliary bar, anti-rattling means fixed on said auxiliary bar and comprising bowed flat springs intermediate its ends, the lower part of said auxiliary bar formed with a downward and forwardly directed, curved extremity below the lower horizontal bar, and a forwardly directed, integral hook extending from the upper extremity of said auxiliary bar, like hooks extending forward from the top bar of the screen in alinement with said top hook member of the auxiliary bar.

1,814,323. RAILWAY SWITCH APPARATUS. JOHN T. MCGARRY, Cincinnati, Ohio. Filed Oct. 4, 1930. Serial No. 486,425. 10 Claims. (Cl. 246—289.)

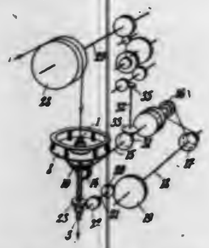
1. In combination with a railway switch, a switch stand of the automatic or breakable type, a connecting

bar operatively connecting the movable switch members together, means operatively connecting said connecting bar



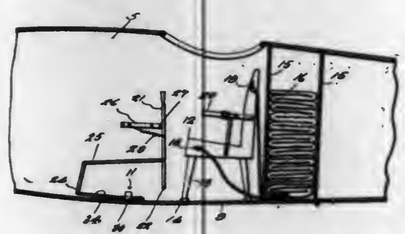
with said switch stand, and a guiding and supporting member adapted to guide and support said connecting bar adjacent to one of the movable switch members.

1,814,324. MACHINE FOR KNITTING TUBULAR ENVELOPES. FRANZ MEIWALD, Vienna, Austria. Filed Nov. 22, 1929, Serial No. 408,961, and in Austria Dec. 18, 1928. 2 Claims. (Cl. 66—9.)



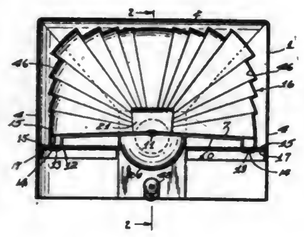
1. Machine for circum-knitting tubular cords for electric conductors, including a needle bed, a cam cylinder, and a spool carrier, drive means for the cam cylinder, and an additional drive means which is adapted to impart to the needle bed a rotary movement which is slow relative to the rotary speed of the cam cylinder and which causes the tubular cord to be twistedly deformed.

1,814,325. SAFETY DEVICE FOR AEROPLANES. LEON M. MIYASAKI, Los Angeles, Calif. Filed Nov. 5, 1929. Serial No. 404,931. 2 Claims. (Cl. 244—21.)



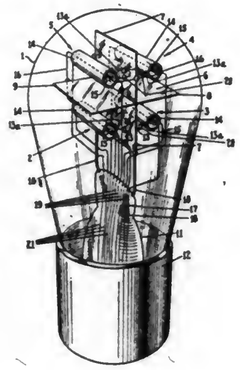
1. In combination with an aeroplane having a longitudinal opening in the bottom thereof, a pivotally mounted trap door opening longitudinally of said aeroplane for closing said opening, sockets on the inner side of said trap door, a rigid chair having like members engageable within said sockets, a partition disposed transversely of said aeroplane and rearwardly of said chair having a parachute therein, means connecting said parachute to said chair, and means for releasing said trap door to permit said chair and parachute to drop completely through said opening.

1,814,326. HEADLIGHT. BURTON E. MELTON, Chicago, Ill. Filed Aug. 2, 1929. Serial No. 382,970. 3 Claims. (Cl. 240—41.35.)



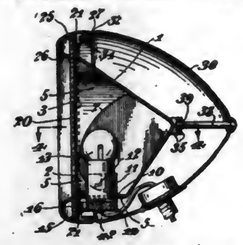
1. A headlight comprising a casing having an open bottomed reflector disposed therein, said casing being provided with a hingedly mounted floor to cover the bottom of the reflector, said floor being formed to provide a depressed portion, the floor being cut to provide a secondary reflector arranged in operative relation with said depressed portion, a lamp disposed within the depressed portion and behind said secondary reflector, and means for holding the floor in a normal position.

1,814,327. THERMIONIC DEVICE. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Mar. 11, 1927. Serial No. 174,487. 1 Claim. (Cl. 250—27.5.)



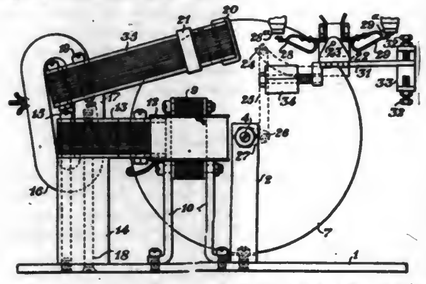
An electron tube comprising a plurality of independent sets of electrodes, each set comprising grid, filament and plate electrodes, and each supported within the same evacuated envelope and having their axes parallel; a metallic shield comprising a plurality of intersecting plates portions of which extend between adjacent sets of electrodes, said plates intersecting each other along an axis parallel to the axes of said sets of electrodes, and the axes of said sets of electrodes each being located at substantially the same distance from the axis of intersection of said plates.

1,814,328. COMBINATION LAMP AND REFLECTOR. VICTOR L. OESTNAES, Westfield, N. J., assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Sept. 10, 1929. Serial No. 391,588. 5 Claims. (Cl. 240—41.36.)



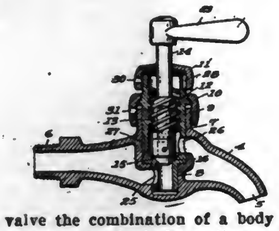
1. A combination lamp and reflector device comprising a hollow reflector having light reflecting surfaces upon its inner side arranged in right angular relation to each other, the outer edges of which surfaces are curved, and the said reflector having portions circular in cross section located between the outer edges of adjoining reflector surfaces, one of the said circular portions having an opening therethrough, a lamp socket located in said opening, and means for supporting said socket in said opening.

1,814,329. ELECTRICAL RELAY. BERNARD E. O'HAGAN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 2, 1931. Serial No. 512,928. 11 Claims. (Cl. 175—33.8.)



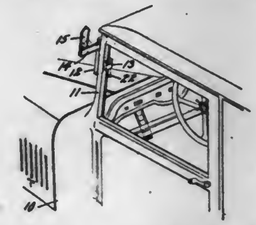
1. A relay comprising a rotatable vane, two operating windings, means responsive to alternating currents in said windings for passing through said vane fluxes which cooperate to create a main torque on said vane which tends to rotate the vane in one direction, and means responsive to current in one said winding for creating a second torque which opposes said main torque and which is substantially equal to such main torque at one frequency of the current in said one winding but which is of lesser magnitude than such main torque at another frequency of such current.

1,814,330. VALVE. SAMUEL W. ORR, Peoria, Ill. Filed Oct. 4, 1929. Serial No. 397,184. 2 Claims. (Cl. 277—82.)



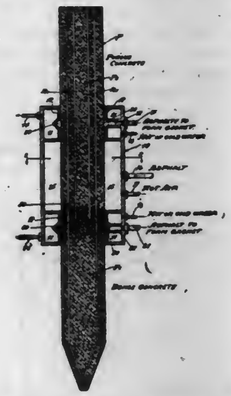
1. In a valve the combination of a body portion, inlet and outlet passages in the body portion, a plug receiving portion and comprising a portion in communication with the inlet passage and a portion of larger diameter in communication with the outlet passage and a seat portion at the junction of the other two portions, a plug having an enlarged cylindrical upper portion, a reduced cylindrical lower portion and a seat formed at the junction of the two portions and being provided with passages to register with the inlet and outlet passages of the body portion and having a valve seat formed between the passages of the plug, a valve closure co-operating with the valve seat of the plug, and means for holding the plug portion in adjusted position in the valve body and for forcing it into contact with the seat between the two diameters of the plug receiving portion.

1,814,331. DIRECTION INDICATOR. ELMER A. OSMON, Denver, Colo. Filed Jan. 10, 1931. Serial No. 507,859. 12 Claims. (Cl. 116—52.)



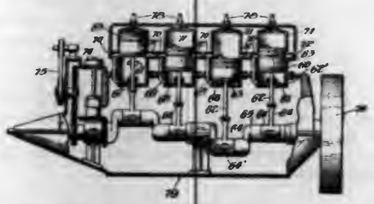
1. A direction indicator comprising: a first arm member pivoted at its one extremity to a supporting structure; a second arm member pivoted to the extremity of the first arm member; an arm spring for urging said first member to a horizontal position; a second arm spring for urging the second arm member to an aligned position with the first member; and a flexible medium secured to the second arm member and arranged, when drawn upon, to first fold the second member on the first member and thence swing both said members to a vertical position.

1,814,332. ART OF PROTECTING CONCRETE PILING. RAYMOND G. OSBORNE, Los Angeles, Calif. Filed May 22, 1928. Serial No. 279,838. 11 Claims. (Cl. 61—54.)



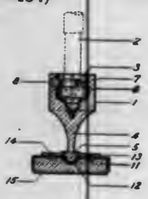
1. The method of protecting a part-length of a concrete pile or the like, that includes closing the interstitial pores of the pile approximately at the section chosen to limit the protected part from the unprotected part, thereby providing a barrier to fluid flow through the pores beyond one side of that section, and applying an impregnating fluid under pressure to the part-length to be protected at the opposite side of said section and thereby filling the interstitial pores at that side of the section.

1,814,333. INTERNAL COMBUSTION ENGINE. THOMAS J. PARKER, Chicago, Ill., assignor of one-half to William McGuineas, Chicago, Ill. Filed Jan. 17, 1930. Serial No. 421,480. 5 Claims. (Cl. 123—74.)



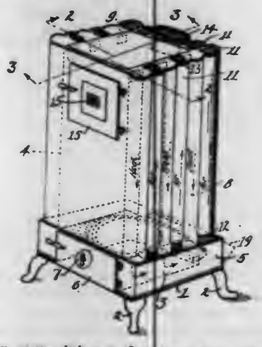
3. A two-cycle internal combustion engine comprising a crank case, a crank shaft mounted in the case, the crank case being apertured at a plurality of places, a cylinder closed at one end and flanged adjacent its open end, secured to the crank case with the flange surrounding one of said openings, a cup-shaped member secured to the inside of the crank case to close the open end of the cylinder, an auxiliary compression chamber adjacent the cylinder and in communication with the interior of the cylinder, a conduit extending from the cup-shaped member to the auxiliary compression chamber, a piston movable in the cylinder, a piston rod connected to the piston and extending through an aperture in said cup-shaped member into the crank case, and pivotal connections between the piston rod and the crank shaft.

1,814,334. TRIPOD FOOT. ARMEN POTIGIAN, Davenport, Iowa. Filed Sept. 19, 1929. Serial No. 393,871. 8 Claims. (Cl. 248—43.)



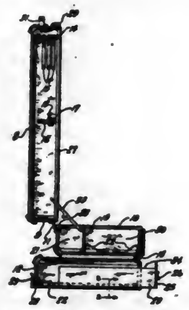
1. In a structure of the character described, a socket member having a substantially cylindrical opening in the interior for the end of a tripod leg and having a slot in a wall thereof for the reception of a locking member, a locking member in said slot and pivoted to swing from a position entirely external to the cylindrical opening to a position partially closing the same whereby a tripod leg may be held within said opening.

1,814,335. HEATER. LAWRENCE ELMER REILEY, Goldfield, Nev. Filed Apr. 27, 1929. Serial No. 358,689. 2 Claims. (Cl. 126—67.)



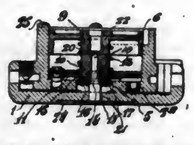
1. A heater comprising a fire box, an outlet flue, a plurality of vertical passageways for the products of combustion leading from the top of the fire box to the bottom thereof, and a horizontal passageway connecting the bottoms of the first named passageways with the flue, the entrance openings of the vertical passageways being smallest for the ones disposed nearest the back of the firebox and increasing in size for the ones disposed near the front, whereby a uniform flow of heat will pass through all of the passageways.

1,814,336. FOLDABLE WARDROBE CASE. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 14, 1929. Serial No. 407,105. 5 Claims. (Cl. 190—41.)



1. A wardrobe case, comprising a main section, a small section hingedly connected to an inner end portion of the same, a second small section hingedly connected to the free end portion of the first-mentioned small section and foldable from a position of alignment with respect thereto to a reversed position against the outer wall of said first-mentioned small section, and a drawer slidably mounted in one of said small sections.

1,814,337. SWITCH. CHARLES HILAIRE HENRI RODANET, Versailles, France, assignor to The Society Etablissements Ed. Jaeger, Levallois-Perret, France. Filed Aug. 22, 1929, Serial No. 387,760, and in France Sept. 1, 1928. 2 Claims. (Cl. 200—4.)



1. A switch of the class described comprising a casing having a recess therein, contact strips on the base of the recess, a circular series of contact pieces in the base of the recess, a piston member slidably and rotatably mounted in the recess, a rod fixed to the piston and movable therewith, a plate of insulating material slidably mounted on the rod and rotatable therewith, contact projections carried by the plate for selective engagement with the contact pieces upon rotation of the piston, a guide rod slidably connecting the piston rod and the casing, a contact ring encircling the guide rod and adapted to engage the contact strips upon axial movement of the piston.

1,814,338. STORAGE OF ACETYLENE. MAX ROHRSCHNEIDER, Hamburg, Germany, assignor to Svenska Aktiebolaget Gasaccumulator, Stockholm-Lidingo, Sweden. Filed May 19, 1928, Serial No. 279,204, and in Germany Sept. 27, 1927. 8 Claims. (Cl. 252—2.5.)

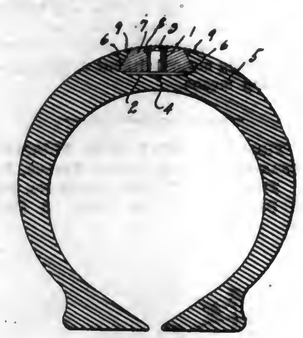
1. A method of preparing an absorbent filling material which comprises admixing leather and an inorganic heat resistant material.

1,814,339. PLANT SHIELD. ZENTARO SATO, Santa Ana, Calif. Filed May 16, 1929. Serial No. 363,510. 4 Claims. (Cl. 47—29.)



2. A plant shield, comprising a conical body, having opposed walls, one being relatively thin, and the other relatively thick, and a series of corrugations on the thicker wall.

1,814,340. AUTOMOBILE TIRE. IRA J. SHELTON, Detroit, and CHARLES V. JACOBI, Grosse Pointe Farms, Mich. Filed Jan. 5, 1928. Serial No. 244,595. 5 Claims. (Cl. 152—16.)



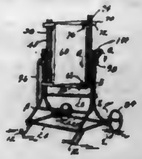
5. In an automobile tire, a tire casing having a circumferential groove in the tread, a series of studs mounted in the groove in spaced relation circumferentially of the tire and a tread strip positioned in the groove and having apertures through which the studs extend normally flush with the tread face of the strip and tend to project to contact with the road surface through the flexing of the strip at the points in contact with the road surface.

1,814,341. DRESS FASTENER. ANNA SMIDO, Roseville, Mich. Filed Apr. 21, 1930. Serial No. 446,013. 7 Claims. (Cl. 24—73.)



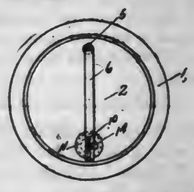
1. A dress fastener comprising a hook member having spaced substantially parallel arms integrally connected at one end of said member, one of said arms being formed at the other end of said member with an opening, a keeper member pivoted upon the last named arm at one side of said opening and having a portion normally extending across said opening transversely of said arm, and an elongated, flexible holding member formed with a loop at one end thereof passing through said opening and engaging said keeper member, said keeper member being restrained by its pivotal mounting from movement along the pivotal axis.

1,814,342. HOLDER AND STAND. AUGUSTUS T. SMITH, St. Joseph, Mo. Filed Dec. 2, 1929. Serial No. 411,063. 3 Claims. (Cl. 248—58.)



1. A device of the character described, comprising spaced frame members each formed of metallic elements shaped to form a base and an upright, the base and upright each including portions of the metallic elements arranged in spaced parallel relation to form a slot between them, cross rods mounted in said slots for rigidly connecting the spaced frame members, and a support mounted for pivotal adjustment between said uprights, said support being provided with pivotal connections carried by the slots of the uprights and vertically adjustable therein.

1,814,343. CLOSURE FASTENER. MILTON F. SMITH, Yakima, Wash. Filed July 31, 1929. Serial No. 382,341. 3 Claims. (Cl. 70—123.)

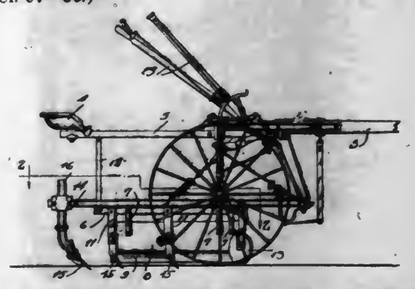


3. The combination with a drum, and a head for the drum having spaced flanged openings, of a vent plug and a closure plug in said openings, a square perforated boss on the vent plug and a bifurcated, perforated, rigid, handle-strap hinged on the boss, said strap having a slotted free end, a perforated lug on the closure plug to receive said slotted end, and a lock for co-action with said perforated lug and slotted strap.

1,814,344. REDUCTION OF YELLOWING OF MATERIALS WITH AGE. WALTER O. SNELLING, Allentown, Pa. Filed Apr. 11, 1930. Serial No. 443,617. 8 Claims. (Cl. 92—21.)

7. Paper tinted with a relatively permanent blue and a fugitive yellow, each in amount insufficient to impart color to the paper when used in combination.

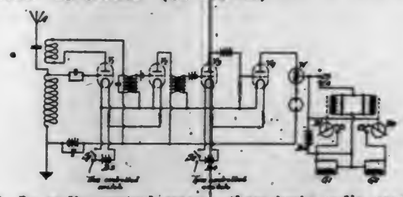
1,814,345. CULTIVATOR. HERMAN STEFFENS, Concordia, Mo. Filed Dec. 27, 1927. Serial No. 242,682. 1 Claim. (Cl. 97—56.)



In a cultivator, a wheel supported-frame, a seat-supporting member extending rearwardly therefrom, bars depend-

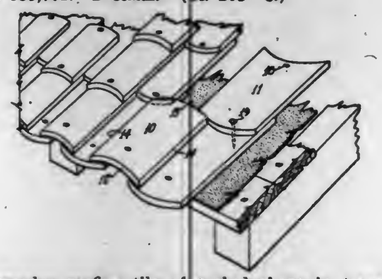
ing from said member and carrying longitudinally-extending rearwardly convergent bars, and hilling blades attached to said last-mentioned bars in spaced parallel vertical relation, said blades being crimped inwardly to provide a scraping edge.

1,814,346. RADIO REMOTE CONTROL DEVICE. DAVID ALAN STEVENSON, Edinburgh, Scotland. Filed Mar. 28, 1927, Serial No. 177,749, and in Great Britain Apr. 9, 1926. 13 Claims. (Cl. 250—2.)



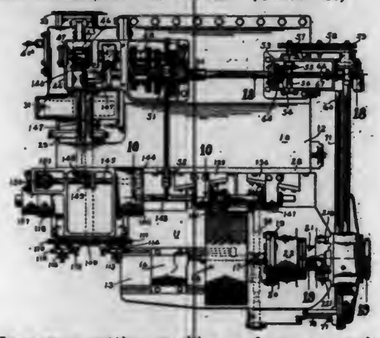
1. In radio control means, thermionic radio receiving means, automatic actuating means, means for restraining said automatic actuating means from operating, automatic time controlled switching means connected with said thermionic receiving means, to render said means operative at predetermined times, said thermionic receiving means being connected to operate said restraining means whereby the actuating means are prevented from operating so long as a signal synchronously transmitted at predetermined time intervals is incident upon said receiving means during the time intervals that said receiving means are rendered operative.

1,814,347. IMITATION ROOFING TILE. VICTOR H. STREET, Aberdeen, Wash. Filed May 2, 1929. Serial No. 359,771. 1 Claim. (Cl. 108—8.)



A wooden roofing tile of arched shape in transverse section, and cut to said shape directly from a bolt.

1,814,348. MACHINE FOR CUTTING GEAR TEETH. WILLIAM E. SYKES, Buffalo, N. Y. Filed Jan. 31, 1927. Serial No. 164,825. 68 Claims. (Cl. 90—9.)

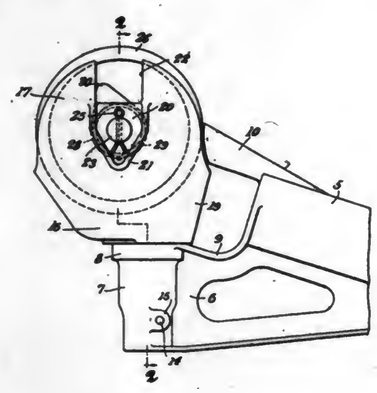


1. In a gear cutting machine, a frame, a carriage reciprocably mounted thereon, a clamp shaft carried by said carriage, said shaft extending in the direction of the reciprocating movement of said carriage, cutter supports adjustably mounted upon said carriage for adjustments in directions parallel to the direction of the reciprocating movement of said carriage, and means to secure said supports to said carriage and operable from a position remote from said supports by said clamp shaft.

10. In a gear cutting machine of the type described, cutter twisting mechanism including a sleeve-like part of said machine, a member having a helical groove therein and adapted to slide through the sleeve-like part of said machine, and a guide nut cooperating with said member within said groove, said guide nut comprising a pair of members movable relatively to each other and having cooperating surfaces, the surfaces on one of said members being inclined, and means to move one of said nut members relatively to the other to adjust the over-all width of said nut whereby a proper bearing thereof within said groove is obtained.

64. In a gear cutting machine, work rotating means, means to reciprocate a cutting tool across the face of the work in synchronism with the rotation thereof, means to manually operate said work rotating means, gearing connecting said work rotating means and said cutting tool reciprocating means, said gearing including a worm and a worm wheel, a worm supporting bracket slidably mounted on said machine, and means to slide said bracket to move said worm substantially radially with respect to said worm wheel to unmesh it therewith to permit manual operation of said work rotating means without operating said cutting tool reciprocating means.

1,814,349. TROLLEY HEAD FOR ELECTRIC TRACTION. CHARLES CLIFFORD GHENT TAYLOR, Forest Gate, England. Filed Aug. 17, 1929, Serial No. 386,520, and in Great Britain Sept. 14, 1928. 5 Claims. (Cl. 191—60.)

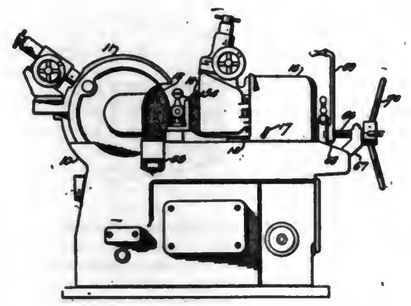


1. In a caster trolley head, a spring washer and a plain washer for the maintenance of electrical contact said plain washer being flat throughout its entire area and having an upstanding lug in the same plane, and means in said head to engage said lug to prevent rotation of the washer.

1,814,350. GRINDING MACHINERY. FREDERICK J. THELER, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed May 20, 1929. Serial No. 364,377. 20 Claims. (Cl. 51—103.)

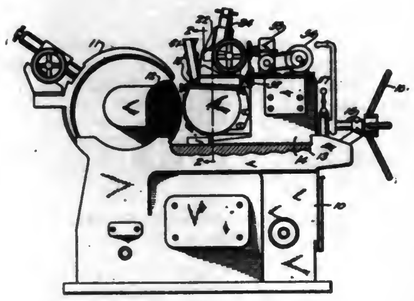
1. The combination with a centerless grinder, including opposed grinding and regulating wheels and an intermediate

work support, of an oscillatable axially movable work positioning member disposed adjacent the throat, and



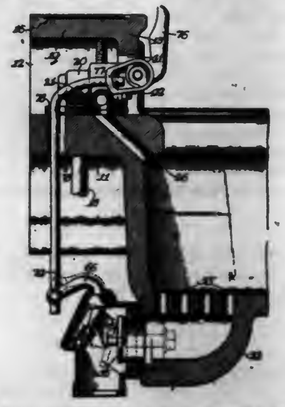
means for imparting successive axial and oscillatable movements to the holder to present, withdraw and eject a work piece.

1,814,351. GRINDING MACHINERY. FREDERICK J. THELER, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 5, 1929. Serial No. 383,459. 20 Claims. (Cl. 51—103.)



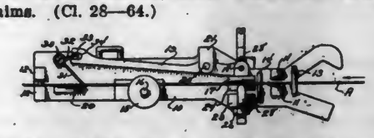
1. A grinding machine including a grinding wheel rotatable at a high grinding rate of speed and an opposed slowly rotating regulating wheel member disposed in opposition to the grinding wheel but spaced therefrom to provide an intermediate work receiving throat, the regulating wheel being rotatable at a slow work controlling rate of speed with its operative face moving in opposition to the direction of movement of the grinding wheel, and a work carrier circumscribing the operative portion of the regulating wheel in eccentric relation thereto, said overlying portion projecting into the throat between the grinding and regulating wheels and having a plurality of terminally open pockets formed therein for support of work pieces during grinding, the width of said member being less than the minimum width of the grinding throat whereby work pieces carried thereby will project at opposite ends of the pockets for engagement respectively by the grinding and regulating wheels as the work pieces are carried through the throat.

1,814,352. LAVATORY. EARL G. WATROUS, Chicago, Ill. Original application filed Mar. 18, 1929, Serial No. 348,056. Divided and this application filed Aug. 23, 1929. Serial No. 387,870. 4 Claims. (Cl. 4—166.)



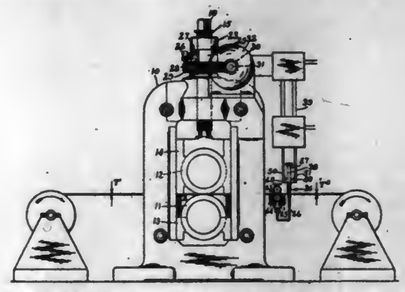
1. A lavatory comprising a bowl having an upwardly extending wall at the back thereof with a rearwardly projecting shelf at the top of the wall with a chamber below the same of sufficient size to enclose supply valves for the lavatory.

1,814,353. SLUB CATCHER. RALPH WEBBER, Clover, S. C. Filed June 28, 1926. Serial No. 119,264. 7 Claims. (Cl. 28—64.)



1. A slub catcher, comprising a knife adjacent to the yarn, a detector having a fixed element across which the yarn is drawn, an outwardly movable element opposite the fixed element at the other side of the yarn and restrained against movement in the direction of travel of the yarn, a positive connection between the movable element and the knife which brings the cutting edge of the knife against the yarn when the movable element is moved away from the fixed element by the entry between them of the imperfection in the yarn, and a spring serving at the same time to urge the movable element of the detector towards the yarn and to urge the knife away from the yarn.

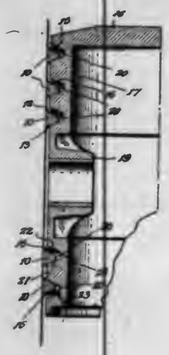
1,814,354. METAL ROLLING MILL SCREW DOWN CONTROL. WILLIAM R. WEBSTER and WALTER R. CLARK, Bridgeport, Conn. Filed Dec. 15, 1928. Serial No. 326,333. 7 Claims. (Cl. 80—56.)



7. In a gauge controlling system for a rolling mill wherein the size of the pass between a pair of metal re-

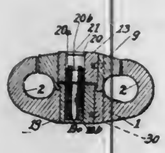
ducing rolls is adjusted by a reversible electric motor, the combination of a pair of relatively movable members between which material may be received to be gauged, a collapsible liquid chamber on one of said members, said chamber being of relatively large cross-sectional area, means on the other member cooperating with the liquid chamber to collapse the same to vary the liquid contents thereof according to the gauge of the material received between the members, and a second liquid chamber connected to said first named chamber, said second liquid chamber being of relatively small cross-sectional area, the liquid level in said second named chamber being controlled by the amount of liquid retained in the first named chamber, and means controlled by the liquid level in the second chamber for controlling the operation of the motor.

1,814,355. PISTON AND RING ASSEMBLY. JUDSON WILLIAMS, Philadelphia, Pa. Filed Dec. 3, 1927. Serial No. 237,452. 6 Claims. (Cl. 74—109.)



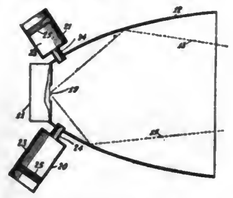
1. An assembly of the character described including a piston having a ring groove provided with a beveled side wall, a piston ring disposed in said groove and having an annular beveled face to coact with the beveled wall of the groove, and tensioning means in said groove between the piston ring and other side wall of the groove normally substantially flat and held under tension by said ring for pressing the ring when the ring is pressed inwardly towards the beveled wall of said groove and urging the piston ring outwardly.

1,814,356. LOCK. SOLOMON WISE, Cincinnati, Ohio. Filed Aug. 17, 1926. Serial No. 129,854. 21 Claims. (Cl. 70—47.)



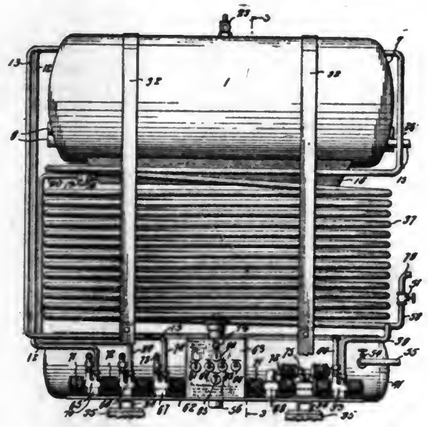
2. In a padlock, a casing, a rotatable member for forming a locking closure with said casing mounted in said casing, said casing having a chamber, and tubular elements resiliently supported in said chamber, said rotatable member also having a chamber with tubular elements therein, said chambers being equally eccentric of a concentric axis, and the tubular elements in the chamber of the casing adapted to extend within said rotatable member so as to lock said rotatable member with relation to said casing against rotation.

1,814,357. ACOUSTIC DEVICE FOR SOUND PICK UP. IRVING WOLFF, New York, and HARRY F. OLSON, Bronx, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed June 27, 1929. Serial No. 374,174. 24 Claims. (Cl. 181—27.)



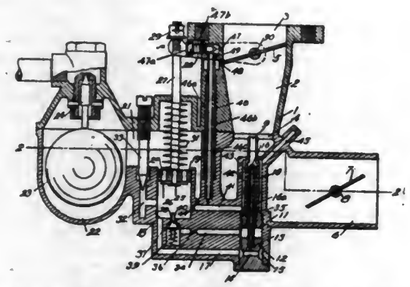
1. The method of transferring energy from a source of sound to a microphone which consists in providing a plurality of equal length paths for the sound waves between the source of sound and the microphone, and in absorbing excess energy thus transferred to the microphone.

1,814,358. REFRIGERATION APPARATUS. LEONARD KAY WRIGHT, Long Island, N. Y. Filed Mar. 1, 1928. Serial No. 258,358. 10 Claims. (Cl. 62—118.)



1. A generator-absorber comprising a container, abutting heating and cooling coils therein.

1,814,359. CARBURETOR. FREDERICK O. BALL and THOMAS M. BALL, Detroit, Mich., assignors to Ball and Ball Carburetor Company, Detroit, Mich., a Partnership composed of Frederick O. Ball and Cornelia M. Ball, Detroit, Mich. Filed Mar. 30, 1928. Serial No. 265,920. 13 Claims. (Cl. 261—41.)

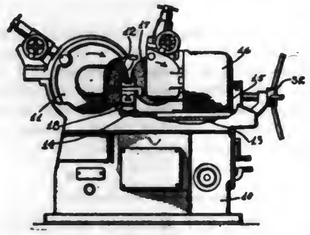


1. In a carburetor, the combination of a suction passage; a normal fuel delivery passage leading to the suction passage; a manually operable throttle; a barrel in the normal fuel delivery passage; a plunger in the barrel by which the normal supply of fuel flows; a check valve on the plunger closed with a movement of the plunger in the direction of the flow of fuel to the suction passage; and means directly responding to throttle movements actuating the plunger in a forcing direction as the throttle opens.

1,814,360. PRODUCTION OF FERRIC AND CHROMIC CHLORIDES. JOHN K. BERRESFORD, Niagara Falls, N. Y., assignor, by mesne assignments, to Frank S. Low, Niagara Falls, N. Y., and A. W. Berresford, Detroit, Mich. Filed Jan. 7, 1929. Serial No. 330,975. 5 Claims. (Cl. 28—87.)

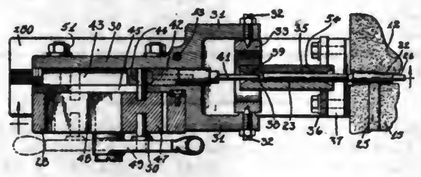
2. The method of producing chromic chloride and ferric chloride which comprises subjecting a fused bath of ferrous and chromous chlorides to chlorination.

1,814,361. GRINDING MACHINERY. CLEMENT BOOTH, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 9, 1928. Serial No. 268,542. 14 Claims. (Cl. 51—103.)



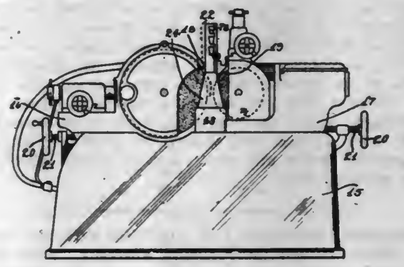
1. A machine for the production of substantially cylindrical work pieces including a work rest, a grinding wheel disposed at one side of the work rest and having its operative face moving at a high grinding rate of speed in the direction of the work rest, a work regulating member disposed on the opposite side of the work rest and having its surface moving in the opposite direction from that of the grinding wheel to control the rate of rotation of a work piece on the machine, the rest having a work engaging surface ascending toward the grinding wheel, and a steadying member for and overhanging portion of the work having a work engaging surface substantially parallel with that of the work rest and a second surface substantially parallel with that of the regulating member for simultaneous engagement with an overhanging portion of the work to steady the latter during grinding.

1,814,362. CENTERLESS GRINDING MACHINERY. CLEMENT BOOTH, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 9, 1928. Serial No. 268,543. 11 Claims. (Cl. 51—103.)



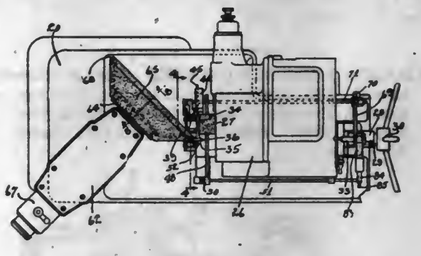
1. A machine for the centerless production of concentric work piece surfaces comprising opposed grinding and regulating wheels forming a work receiving throat therebetween, a work rest projecting within the throat for supporting work pieces therein and a work supporting fixture mounted adjacent said throat and including a work holding member for engaging a terminal portion of the work and oscillatable from a work receiving position to a position to present a projecting portion of the work on the work rest in the throat between grinding and regulating wheels, and means supporting the fixture for free floating movement to permit the work to automatically adjust itself to the grinding throat.

1,814,363. GRINDING MACHINERY. CLEMENT BOOTH, Cincinnati, Ohio, assignor to The Cincinnati Grinders, Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed May 9, 1928. Serial No. 276,480. 27 Claims. (Cl. 51—103.)



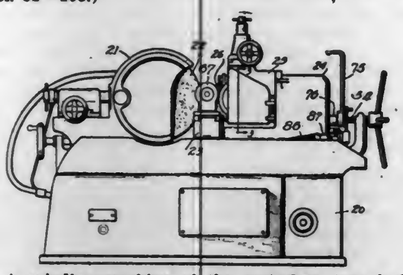
1. A centerless grinder including opposed grinding and regulating wheels forming a work receiving throat therebetween, a work rest blade disposed within the throat, means for reciprocating the work rest blade vertically through the throat, and a hopper for depositing work pieces on the work rest when the said work rest is at its upper limit of movement.

1,814,364. VALVE GRINDER. CLEMENT BOOTH, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed July 18, 1928. Serial No. 292,456. 25 Claims. (Cl. 51—103.)



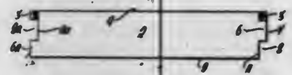
1. A grinding machine including a work rest and a regulating wheel disposed adjacent thereto and operable at a slow work controlling rate of speed, means disposed in opposition to the regulating wheel for urging a work piece on the rest into engagement with said wheel means laterally displaced as respects said regulating wheel for grinding a projecting terminal portion of the work piece, a stop for limiting axial movement of the work, and means for urging the work toward the stop during the grinding operation.

1,814,365. GRINDING MACHINERY. CLEMENT BOOTH, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 27, 1929. Serial No. 350,410. 22 Claims. (Cl. 51—103.)



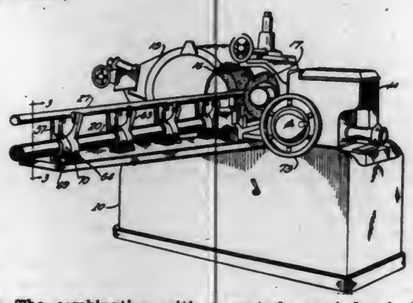
1. A grinding machine of the centerless type including a bed or support, a grinding wheel carried thereby and operable at a high grinding rate of speed, a work supporting slide carried by the bed and having a work centering mechanism projecting adjacent the operative surface of the grinding wheel, a supplemental slide carried by the first slide and bearing a regulating wheel, means yieldingly urging the regulating wheel in the direction of the work support and means for jointly shifting the regulating wheel and work support in the direction of the grinding wheel.

1,814,366. MACHINE FOR CUTTING BORDER SLUGS. ARTHUR CARSON, Surrey Hills, Australia. Filed June 7, 1928. Filed June 7, 1928. Serial No. 283,627. 6 Claims. (Cl. 164—47.)



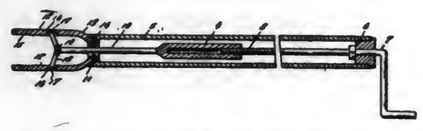
3. A machine for forming mitered faces and locking elements at the end of border slugs comprising a slug support, a mitering tool, a guide for the mitering tool inclined to said support, slotting tools disposed one at each side of said mitering tool, a guide for said slotting tools extending at right angles to said slug support, means to assist in placing pairs of slugs upon the support so that an end portion of each slug is aligned with said mitering and slotting tools, and means connected to a common operating element for operating said mitering and slotting tools.

1,814,367. LONG BAR GRINDER. JOHN E. CASTER, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed May 20, 1929. Serial No. 364,442. 12 Claims. (Cl. 51—103.)



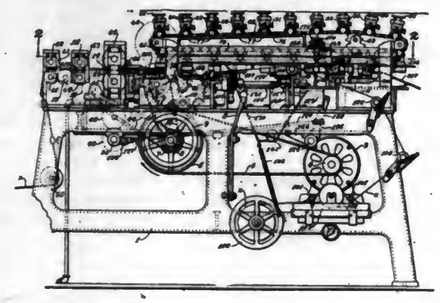
1. The combination with a centerless grinder including opposed grinding and regulating wheels, of a work supporting mechanism for presentation of work in the grinding throat between said grinding and regulating wheels including a supporting bracket, a work rest blade carried by the bracket, means for securing the blade in adjusted position as respects the bracket, outboard supports carried by the bracket including a series of supporting arms, rollers adjustable on the arm for alignment with the work supporting plane of the work rest blade, additional arms carried by the bracket, work supporting rollers on the arms, and means for adjusting the second series of rollers for engagement with the work at circumferentially spaced points from the first series of roller in correspondence with the circumferential spacing between engagement of the work rest blade and the regulating wheel with the work.

1,814,368. STUB AXLE PULLER. EDWARD L. CHAPMAN, Tulsa, Okla. Filed May 2, 1930. Serial No. 449,266. 3 Claims. (Cl. 29—84.)



1. A tool of the character described comprising a barrel, a rotatable crank at one end of the barrel, said crank being provided with a threaded extension, a rod slidable through one end of the barrel, an internally threaded head at one end of the rod, said head being adapted to receive the threaded extension of the crank, and a pair of pivotally mounted jaws on the barrel to which the said rod is connected.

1,814,369. PAPER BOX MAKING MACHINE. ORPH W. COWGILL, University City, Mo., assignor to St. Louis Label Works, St. Louis, Mo., a Corporation of Missouri. Filed July 21, 1927. Serial No. 207,450. 19 Claims. (Cl. 93—40.)



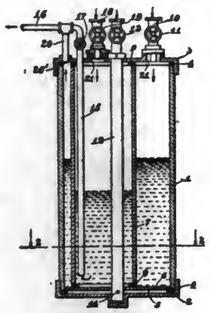
1. In a machine of the character described, the combination with blank forming mechanism, of means moving at an accelerated speed and engaging the blank edges adapted to deliver the blank to said forming mechanism.

9. In a machine of the character described, wrapping mechanism comprising, a carrier, a band applying element thereon, means for reciprocating said carrier, and means for moving said element on said carrier and so as to engage three sides of the wrapped article.

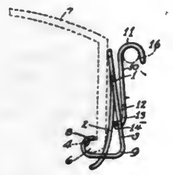
1,814,370. ATTACHMENT FOR INTERNAL COMBUSTION ENGINES. MICHAEL J. DAVIS, Brooklyn, N. Y. Filed Aug. 30, 1928. Serial No. 302,975. 4 Claims. (Cl. 123—25.)

1. An attachment for an internal combustion engine comprising a pair of annularly spaced cylinders, water

tight and air tight with respect to each other, an air inlet on each of said cylinders, an air outlet on one of said cylinders and a pipe leading to the manifold of the engine connected to said air outlet and said liquid outlet the cylinder having the air outlet carrying water and the cylinder having the liquid outlet carrying oil.

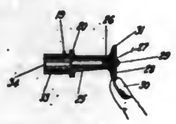


1,814,371. LUGGAGE CLAMP. MATTHEW F. DESMOND, Burlingame, Calif. Filed Sept. 12, 1930. Serial No. 481,537. 5 Claims. (Cl. 24—84.)



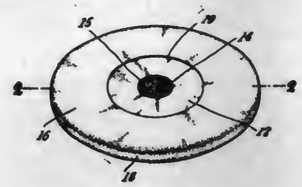
5. A luggage clamp comprising a member having a U-shaped end and a slot, a tongue carried by said member and projecting through the slot, a second member having a portion extending through the slot and a second portion engageable with the first member and with the tongue for holding the latter against movement, the opposite end of the second member being hook-shaped for receiving a rope.

1,814,372. ELECTRIC MANICURE. IDA M. ELDRIDGE, Los Angeles, Calif., assignor of one-half to Lena B. Hoefler, Los Angeles, Calif. Original application filed May 8, 1926, Serial No. 106,519. Divided and this application filed Mar. 14, 1928. Serial No. 261,642. Renewed Dec. 17, 1930. 3 Claims. (Cl. 132—74.)



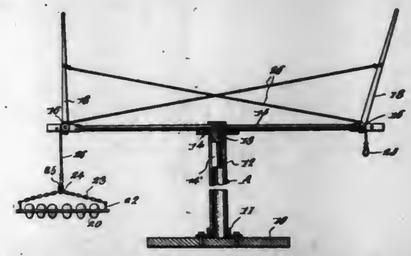
8. In a nail treating device, a housing, a spindle journaled in the housing, a thin flange formed on the housing, and a disc of abrasive material fastened to the end of the spindle and within and close to said flange, whereby the flange overhangs the edge of the disc.

1,814,373. POWDER PAD AND CASING. CHARLES P. EVANS, New York, N. Y. Filed Aug. 15, 1930. Serial No. 475,476. 4 Claims. (Cl. 132—78.5.)



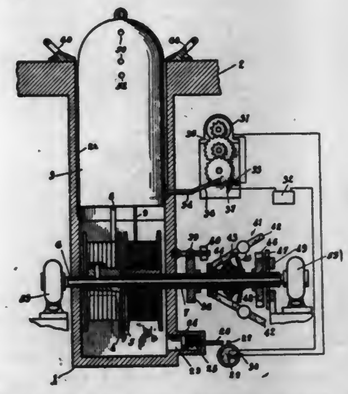
1. A powder pad comprising a pile fabric under element, a rubber upper element having a central opening, an uninterrupted internal seam connecting said elements, and cushioning material disposed between said elements.

1,814,374. MACHINE FOR PROCESSING AND WASHING EGGS. LORENZO W. FINLEY, Phoenix, Ariz. Filed May 5, 1930. Serial No. 449,930. 4 Claims. (Cl. 146—198.)



1. An egg handling machine for the purpose set forth comprising a standard, a rotatable head carried by the standard, a pair of diametrically extending supporting arms rotatable with the head, guide pulleys carried by the opposite ends of the arms, operating levers pivotally connected to the opposite ends of the arms, cables trained over the pulleys and having their inner ends connected to the levers intermediate the ends of the levers, and detachable egg receiving trays connected with the outer ends of the cables.

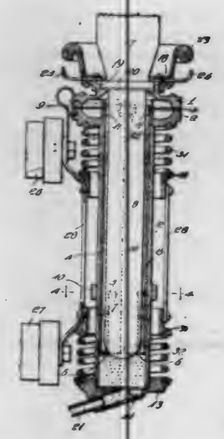
1,814,375. SUBMARINE LIFE SAVING AND SALVAGING DEVICE. JESSE B. FOLTZ, Sparks, Nev. Filed Dec. 3, 1928. Serial No. 323,397. 14 Claims. (Cl. 114—16.5.)



1. A submarine life-saving device comprising a releasable buoy, a receptacle for the buoy, time-controlled means

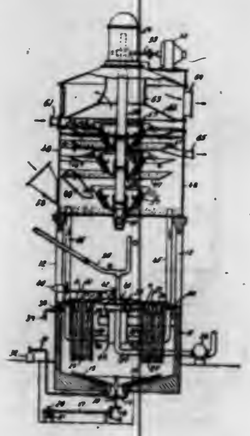
for freeing said buoy after said means has been set in operation for a predetermined period of time, and fluid pressure-actuated means for starting the movement of said time-controlled means and including a cylinder opening into the bottom of the receptacle, and a piston mounted in the cylinder.

1,814,376. ELECTRON TUBE APPARATUS. LOUIS A. GEBHARD and CORRIE F. RUDOLPH, Washington, D. C., assignors, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed May 3, 1927. Serial No. 188,484. 9 Claims. (Cl. 250—27.5.)



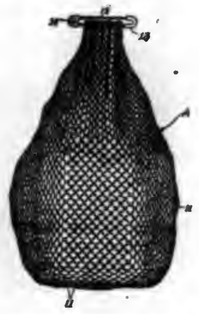
1. A mounting for a high power electron tube having an elongated depending anode comprising a resiliently supported jacket, connections for circulating fluid through said jacket and a removable sleeve arranged to be inserted in or removed from said jacket for modifying the cross-sectional area of said jacket.

1,814,377. GAS SCRUBBING DEVICE. ALBERT L. GENTER, Salt Lake City, Utah, assignor to Genter Thickener Co., Salt Lake City, Utah, a Corporation of Delaware. Filed Aug. 23, 1927. Serial No. 214,817. 8 Claims. (Cl. 261—91.)



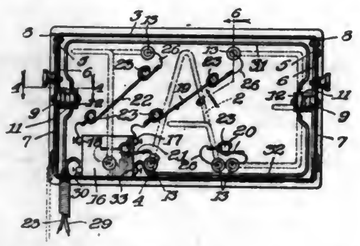
1. An apparatus for recovering entrained particulate matter from gases, which comprises a scrubber, means having an unobstructed passage for introducing particle-laden gases into the scrubber, means for bringing a liquid into intimate contact with the gases to remove the particulate matter from said gases, a receptacle for receiving the liquid containing the particulate matter, and filter means for separating said particulate matter and said liquid.

1,814,378. METALLIC LAUNDRY NET. HELGE A. GILBERTSON, RICHARD J. CURTIN, and RAYMOND C. JACOBS, Chicago, Ill. Filed Mar. 8, 1928. Serial No. 260,218. 2 Claims. (Cl. 150—1.)



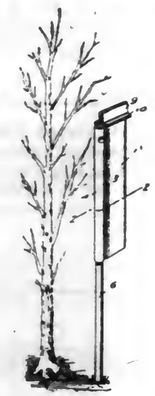
1. A laundry net for holding fabric articles immersed within a liquid to be mechanically agitated for the purpose of treating the articles contained therein, comprising a metallic meshing constructed of inter-laced rings, said rings having complete continuity and smoothness throughout, and composed of metal having non-corrosive properties.

1,814,379. ELECTRIC SIGN. EDWIN G. GODDARD, Chicago, Ill., assignor of one-half to Flashtric Sign Works, Chicago, Ill., a Copartnership composed of Fred Parker and Harry S. Parker. Filed Feb. 20, 1928. Serial No. 255,589. 3 Claims. (Cl. 40—130.)



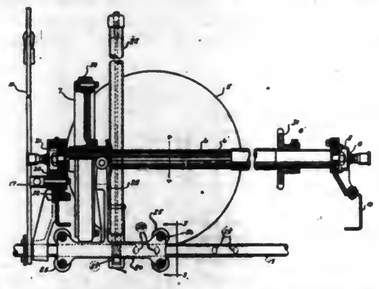
3. An electric sign of the luminescent gas filled tube type, comprising in combination a hollow casing forming the body of the sign, one or more gas filled tube characters supported by the casing in position for display thereon, primary and secondary circuits for the tube characters, a transformer through which the circuits are connected for stepping up the low voltage of the primary circuit to the high voltage required for the secondary circuit to illuminate the characters, said transformer and circuits being located in the casing and exposed for access through a closure for said opening, and a switch mechanism for the closure included in the primary circuit for automatically making and breaking both circuits in the closing and opening of the closure to render the sign inoperative and shock-proof when the closure is open and to condition the sign for operation when the closure is closed, the secondary circuit being provided by bare or uncovered wires to avoid inflammable insulating covering and supported far enough from the walls of the sign casing to prevent short circuiting to eliminate fire hazard.

1,814,380. PLANT MARKER. PAUL P. GREDELL, Quincy, Ill. Filed Feb. 6, 1930. Serial No. 426,883. 5 Claims. (Cl. 40—19.)



1. A device of the class described comprising a sheet metal casing open at one end, one wall of said casing having an inturned flange providing an edge wall, the opposite wall of said casing extending beyond said first mentioned wall and being provided with an inwardly curved portion the outer surface of which has a yielding engagement with the outer surface of said flange, a carrier rod insertible in said curled portion and frictionally engaged thereby, and a marker insertible in said casing to said open end and having one edge bearing against said flange.

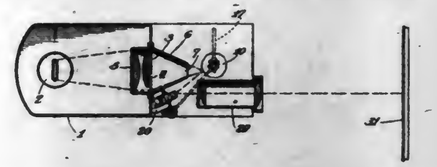
1,814,381. FRICTION TRANSMISSION. CHARLES GROSS, Three Rivers, Mich., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 22, 1927. Serial No. 221,348. 5 Claims. (Cl. 74—26.)



1. In combination in a frictional speed-change device, a disc, a wheel adapted to rotate at an angle with the disc, a shaft for the wheel, a pair of bearing arms for the shaft, a self-aligning bearing carried by each of the bearing arms, a pivot for one of the arms, means for moving said arm about the pivot, adapted to effect a pressure adjustment between the disc and the wheel, a shifting carriage for the wheel, rollers on said carriage, a guide shaft between certain of the rollers, and means for shifting the carriage independently of said movement to effect pressure adjustment.

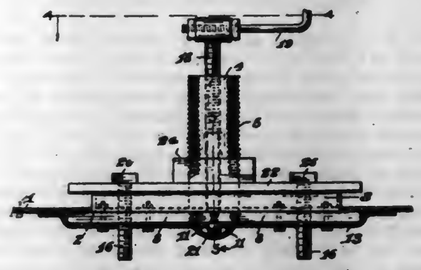
1,814,382. TELEVISION RECEIVING APPARATUS. VICTOR G. GUSTAFSON, Joliet, Ill. Filed Dec. 3, 1928. Serial No. 323,298. 1 Claim. (Cl. 178—6.)

A television receiving apparatus comprising a glow lamp, means arranged to define the light from said lamp as a beam, said means comprising condensing lenses and a truncated pyramidal hood in the path of the light, a wheel having a plurality of flat reflecting surfaces revolvably mounted in the path of the beam of light, a second revolvable wheel having a plurality of flat reflecting surfaces thereon arranged to receive the beam of light reflected by the first wheel, the axis of the rotation of one



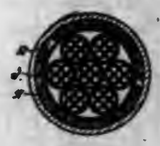
wheel being normal to the axis of rotation of the other, and the reflecting surfaces of one wheel being arranged in angular relation to the reflecting surfaces of the other, and means for revolving said wheels in geared association and at different rotative speeds with respect to each other.

1,814,383. PATCH. LOUIS HADFORD, Spokane, Wash. Filed Aug. 7, 1930. Serial No. 473,698. 4 Claims. (Cl. 114—227.)



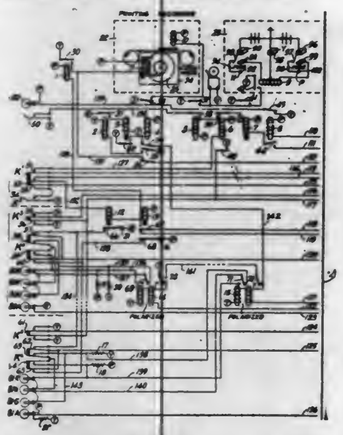
1. A patch device comprising a supporting member adapted to be inserted through a hole and given a quarter turn therein, leaves hingedly mounted on the end of the support with their free ends normally held together beyond the support for insertion through a hole, a member mounted in the support and extending through the end thereof to engage the hinged ends of the leaves and swing them apart after the support and the leaves have been given a quarter turn, and a leak-resisting element carried by the leaves.

1,814,384. LEAD-COVERED SUBMARINE CABLE. FERDINAND HANFF, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Apr. 29, 1929, Serial No. 358,914, and in Germany May 1, 1928. 2 Claims. (Cl. 178—266.)



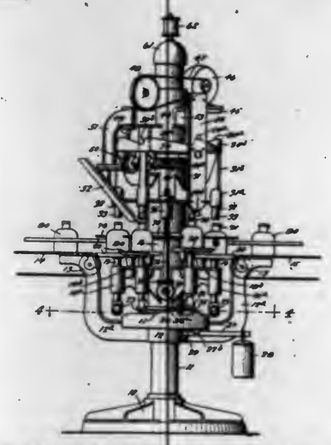
1. A lead-covered submarine cable, comprising a supporting tubular shell underneath the lead cover, said shell consisting of wires of higher compressive strength and wires of lower compressive strength, said wires of higher compressive strength contacting with one another and being provided with adjoining recesses, said wires of lower compressive strength being located in said adjoining recesses.

1,814,385. REMOTE CONTROL SYSTEM. HARRY E. HERSHEY, Oak Park, Ill., assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Oct. 11, 1926, Serial No. 140,777. Divided and this application filed Apr. 24, 1929. Serial No. 357,690. 14 Claims. (Cl. 234—1.5.)



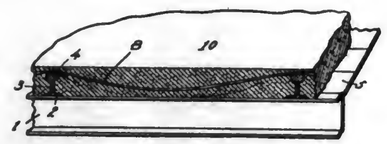
1. In a recording system, a selective switch having access to a plurality of switching devices, a second selecting switch having access to a plurality of supervisory devices, said supervisory devices corresponding to said switching devices and normally indicating the operated or non-operated condition of said switching devices, a printing recording mechanism comprising a designation disc and an operating magnet therefor, means for simultaneously operating said selective switches to select a particularly switching device and the supervisory equipment associated therewith, and for simultaneously operating said designation disc to set said recording mechanism accordingly, means for then operating said switching device, and means responsive to the operation of said switching device for adjusting said supervisory equipment to correspond therewith and for operating said printing record to make a record thereof.

1,814,386. BOTTLE CAPPING MACHINE. ROLAND E. HILL, Decatur, Ill., assignor to Williams Sealing Corporation, Decatur, Ill., a Corporation of Illinois. Filed Jan. 11, 1926. Serial No. 80,530. 12 Claims. (Cl. 226—81.)



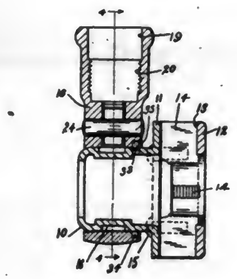
5. In a machine for applying bottle caps, the combination with a plurality of revolving bottle lifters, of a non-yielding head arranged in alignment with each bottle lifted and with which the cap on the bottle is brought into engagement by said bottle lifter, said non-yielding head revolving in unison with the lifter, a fixed tripping device operating upon the cap at a predetermined time, and means connected with the revolving non-yielding head for actuating said tripping device.

1,814,387. ROOF AND FLOOR CONSTRUCTION. EDWARD CLYDE HOGE, Cincinnati, Ohio, assignor to Lathrop-Hoge Construction Company, Cincinnati, Ohio, a Partnership composed of Jay C. Lathrop and Edward Clyde Hoge. Filed Feb. 19, 1924. Serial No. 693,884. 2 Claims. (Cl. 72—71.)



1. A roof or floor structure comprising in combination with interspaced girders, interspaced supporting bars disposed crosswise on the girders and mounted thereon, with rounded upper portions, reinforcing metal disposed across between the bars, said metal disposed over the rounded upper portions of the bars and extending in concave arch formations between the bars, and poured cementitious material enclosing the reinforcing metal and forming with the lower surfaces of the interspaced bars an unbroken under surface for the structure.

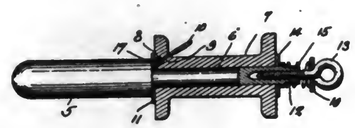
1,814,388. STAMPED RATCHET DIE HEAD. RALPH E. HYDE, Cleveland, Ohio, assignor to The Oster Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 8, 1928. Serial No. 304,784. 9 Claims. (Cl. 10—124.)



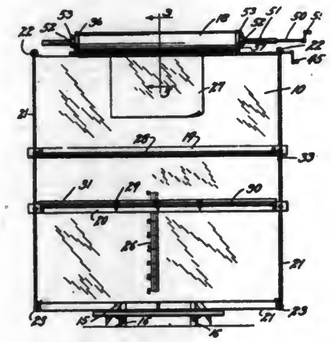
1. A die stock comprising a substantially cylindrical sheet metal member, an integral annular flange at one end of said member, said member being formed with a series of equally spaced, longitudinally extending stamped depressions about its periphery adjacent its opposite end, said depressions defining teeth therebetween.

1,814,389. CHALK LINE HOLDER. BERNHARD JACOBSEN, Meeker, Colo. Filed Nov. 6, 1928. Serial No. 317,658. 1 Claim. (Cl. 242—96.)

In a chalk line holder, a handle, an extension formed integral with the handle and providing a shoulder, said extension having a threaded bore in the end thereof, a washer mounted on the extension and engaging the shoulder, a spool on the extension, said spool having end flanges, one of the flanges having an opening extending through the end thereof, a cord extending through the opening and knotted within the opening, a screw eye fitted in the threaded bore, a washer on the screw eye, a coiled spring on the extension, said spring being held between one end of the spool and the washer of the screw eye, said spring adapted to normally urge the spool into engagement with the washer at the shoulder, and said cord adapted to be held between one end of the spool and washer engaging the shoulder of the handle.



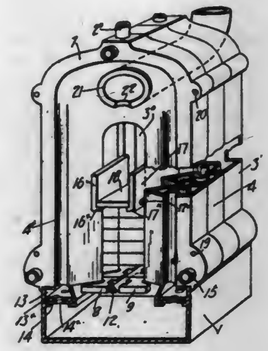
1,814,390. PROJECTION BOARD FOR ENLARGING MACHINES. JESSE HOYT JOHNSON, Denver, Colo. Filed July 2, 1928. Serial No. 289,960. 7 Claims. (Cl. 88—24.)



1. Means for aligning and holding sensitized paper upon a projection board for enlarging machines comprising: an endless cord trained along two sides of said board and extending across the same; an upper guide member supported by one side of said cord; a lower guide member supported by the other side of said cord; an eccentric roller carried by said upper guide member and arranged when in one position to clamp said paper to said member; a lower guide member extending across said board supported by the other sides of said cord; a shaft extending along and secured to said lower guide member, and spring clips slidable along said shaft and arranged to engage said paper.

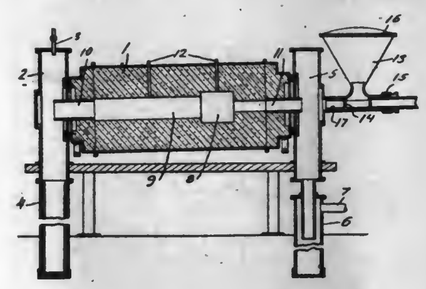
1,814,391. FURNACE. HANS CHRISTIAN JORGENSEN, Montreal, Quebec, Canada. Filed Oct. 11, 1928. Serial No. 311,918. 1 Claim. (Cl. 122—225.)

In a furnace, a body of inverted U-shaped form forming a central fire pot and combustion chamber thereover, a grate extending across the bottom of the open fire pot, a series of vertical flues formed in the walls of the furnace body at each side of the fire pot, hollow ribs projecting into the fire pot and located between the flues and forming water spaces the interspaces between the ribs communicating with the interior of the flues and with the fire pot and combustion chamber, means for supplying heated air to the lower ends of the flues, a curtain wall located at each side of the fire pot and extending across the open inner side of each interspace above the level of the fire bed and carried by the aforesaid rib, a removable plate carried between the curtain walls and adapted to be passed outward through the fire door opening and to form directing means whereby the hot gases are directed from the fire bed into the interspaces between the water spaces



to pass inward over said curtain walls into the combustion chamber, a preheating air chamber located at the bottom ends of the flues and within the ash pit and so formed as to receive the hot rays from the fire bed on the walls thereof, and having a perforated bottom and a slide damper provided with perforations to control the size of the opening formed by the perforations of the preheating chamber.

1,814,392. CHLORINATION OF FERROCHROME. FRANK S. LOW, MAURICE C. TAYLOR, and JOHN K. BERRESFORD, Niagara Falls, N. Y., assignors, by mesne assignments, to Frank S. Low, Niagara Falls, N. Y., and A. W. Berresford, Detroit, Mich. Filed Jan. 7, 1929. Serial No. 330,707. 6 Claims. (Cl. 23—87.)



1. The method of chlorinating ferrochrome and of producing ferric and chromic chlorides, which comprises subjecting ferrochrome to chlorination in the presence of a fused bath of ferrous and chromous chlorides, separating the ferrous and chromous chlorides thereby produced from unchlorinated ferrochrome while maintaining the same in a fused state, and subjecting the fused chlorides to further chlorination to form ferric and chromic chlorides therefrom.

1,814,393. CHLORINATION OF FERROCHROME. FRANK S. LOW, Niagara Falls, N. Y., assignor, by mesne assignments, to Frank S. Low, Niagara Falls, N. Y., and A. W. Berresford, Detroit, Mich. Filed Jan. 7, 1929. Serial No. 330,974. 4 Claims. (Cl. 23—87.)

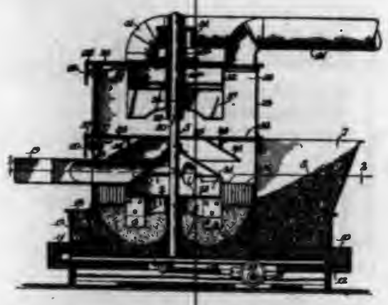
1. The method of chlorinating ferrochrome which comprises subjecting it to the action of a regulated current of gaseous chlorine in the presence of a fused bath of ferrous and chromous chlorides.

1,814,394. GASOLINE GAUGE. HANS LUNDQUIST, Chicago, Ill. Filed Jan. 7, 1927. Serial No. 159,590. 12 Claims. (Cl. 73—31.)



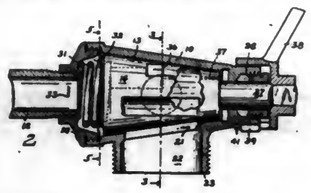
4. In a gauge of the character described, a distributor element provided with means for dividing a portion of a pressure actuated indicating liquid into a plurality of equal sized horizontal parallel branches at different heights having each a portion thereof exposed to view.

1,814,395. MATERIAL REDUCING AND CLASSIFYING DEVICE. HENRY G. LYKKEN, Minneapolis, Minn. Filed Mar. 29, 1929. Serial No. 350,995. 27 Claims. (Cl. 83—11.)



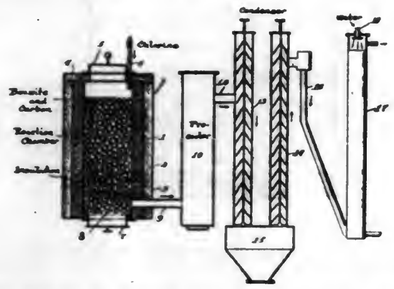
11. A method of reducing materials, comprising the steps of introducing a reducing fluid uniformly over the material for eroding the material and entraining particles of material in the fluid, producing a vorticose movement of the fluid and entrained particles evenly against the body whereby the particles are uniformly mulled against each other to reduce their size, and conducting away the material laden fluid.

1,814,396. TOILET FLUSH VALVE. RODNEY H. MARCHANT, Oakland, and ALBERT E. JUBB, Piedmont, Calif., assignor to National Sanitary Valve Corporation, Carson City, Nev., a Corporation of Nevada. Filed May 7, 1928. Serial No. 275,597. 2 Claims. (Cl. 251—104.)



1. A valve comprising a casing defining a cavity providing a conical seat for a valve plug, a pair of transversely opposed ports in said seat, an outlet port in said seat, a conical valve plug turnably mounted in said seat, an intake leading to the casing cavity at a portion thereof other than at said seat, and port means in said plug for alternately connecting said first ports with said outlet port and said inlet, said port means comprising separate passages extending from the larger end of the plug valve through and opening on opposite sides of the valve, and a passage extending transversely through the plug and independent of said separate passages.

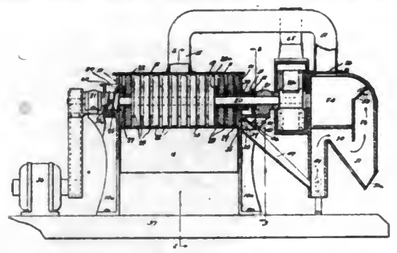
1,814,397. PROCESS OF MAKING ALUMINUM CHLORIDE. ALMER MCDUFFIE MCAFEE, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed June 1, 1927. Serial No. 195,773. 1 Claim. (Cl. 23—95.)



The process of making vapors of aluminum chloride from a mixture of hot alumina and hot carbon with the aid of chlorin in thermally self-supporting manner, which comprises establishing a pervious vertical charge of such a hot mixture of substantial height and a diameter of three feet or more in a thermally insulated chamber, said materials being supplied at a temperature of at least 1000° F., feeding a current of chlorin to and through the charge at as rapid a rate as is consistent with substantially complete utilization of such chlorin, interrupting the feed of chlorin when free chlorin in amount over about one per cent appears in the effluent vapors, restoring the initial height of the column by charging fresh hot bauxite and carbon thereto and resuming the rapid feed of chlorin.

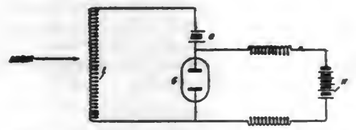
1,814,398. GRAIN HULLER. EDWARD MCKAIN, Los Angeles, Calif. Filed Sept. 24, 1927. Serial No. 221,642. 1 Claim. (Cl. 83—30.)

A grain huller or the like, comprising a horizontal shaft, a plurality of abrasive wheels on the shaft, a horizontal cylindric screen completely surrounding the shaft, a suction chamber wall surrounding the upper half of the screen, means to apply suction to that chamber and thus to that part of the screen surrounded by the suction chamber wall, an air inlet surrounding the other half of the cylindric screen and communicating with the suction chamber only through the cylindric screen, a material



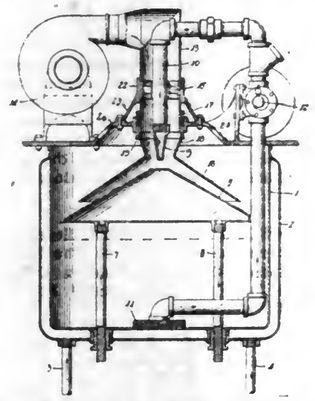
outlet at the bottom of an end of the screen enclosed chamber, and a material inlet at the opposite end of the screen enclosed chamber.

1,814,399. INDICATOR. ALEXANDER MEISSNER and OTTO VON BRONK, Berlin, Germany, assignors to Gesellschaft fur Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, a Corporation of Germany. Filed Aug. 19, 1927, Serial No. 214,098, and in Germany Aug. 21, 1926. 2 Claims. (Cl. 175—368.)



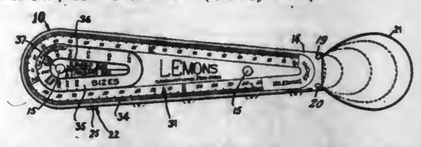
1. In combination, a glow discharge device, a source of potential for keeping said device in a critical condition, a piezo electric crystal and an inductor in series with said glow discharge device, and means for supplying an alternating potential to said inductor.

1,814,400. VISCOSITY REDUCER. SWINFEN BRAMLEY-MOORE, White Plains, N. Y. Filed Feb. 10, 1930. Serial No. 427,396. 14 Claims. (Cl. 257—71.)



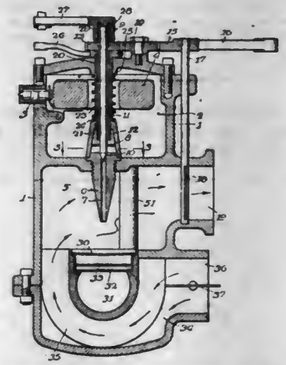
1. An appliance of the character described comprising a container, a member in said container, means for discharging chocolate or other material in a stream under pressure into said container against said member, means for delivering a stream of air under pressure against said member to mix with said material, said member having a surface for spreading said material, and a shield near said surface to confine the stream of air close to said surface.

1,814,401. FRUIT CALIPER. CHARLES W. MORRELL, South Pasadena, Calif. Filed May 13, 1929. Serial No. 362,482. 6 Claims. (Cl. 33—179.)



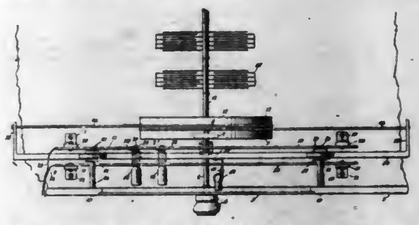
1. In a caliper, an elongated body portion, side members secured to said body portion, means to form a channel around the top, bottom and one end of said body, the opposite end being open, and a measuring band comprising a strip of non-stretchable material secured at one end adjacent said open end and extending in said channel around said body portion.

1,814,402. CARBURETOR. JAMES F. MULLEN, Jr., Chicago, Ill. Filed May 31, 1927. Serial No. 195,229. 17 Claims. (Cl. 261—12.)



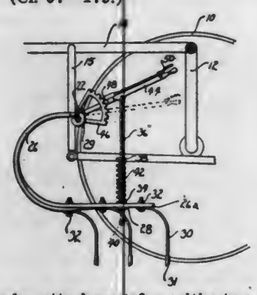
1. In an internal combustion engine carburetor, a fuel chamber, a mixing chamber, valve mechanism operable about a vertical axis for continuously feeding the liquid fuel by gravity from said fuel chamber into said mixing chamber, controllable manually to start and stop the engine, means providing a vaporizing surface upon which the liquid fuel drips or falls continuously, formed to support the liquid until it is fully vaporized, an air inlet for said chamber, and a mixture outlet for said chamber, said mechanism comprising a needle valve and a shut-off valve, each valve operable independently of the other, in combination with a throttle valve for said mixture outlet, and means for simultaneously controlling said needle valve and throttle valve.

1,814,403. RADIO DIAL. FRED MULLER, New York, N. Y., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Jan. 22, 1930. Serial No. 422,521. 21 Claims. (Cl. 116—124.4.)



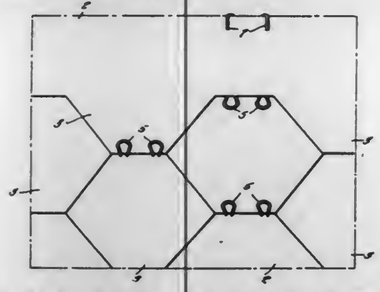
1. The combination with a non-transparent dial, of one or more differentially colored sources of illumination, and a non-linear, low-loss optical path disposed between at least one of said sources and said dial.

1,814,404. WEEDER ATTACHMENT. JOHN MURPHY, Jefferson, Iowa. Filed Oct. 28, 1929. Serial No. 402,934. 2 Claims. (Cl. 97—179.)



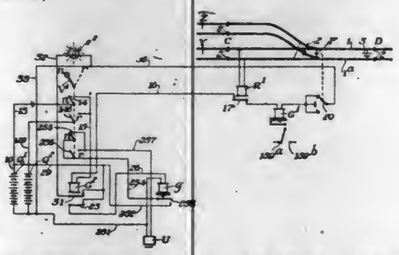
1. In a weeder attachment for cultivators, a supporting bar adapted to be secured to the frame of a cultivator, a weeder frame comprising a pair of teeth bars pivoted at spaced points on said supporting bar, curved forwardly, downwardly and rearwardly, the rearward extending portions being crossed and weeder teeth extending downwardly from the rearwardly extending portions, said teeth starting at the crossing point whereby they are arranged in V formation.

1,814,405. SHINGLE CLIP. ALVIN MYHRE, Colorado, Tex. Filed Aug. 18, 1930. Serial No. 476,123. 4 Claims. (Cl. 108—33.)



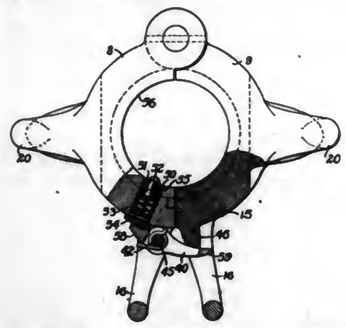
1. A shingle clip of the character described comprising a wire bent to provide a substantially yoke-shaped intermediate portion having bendable loops formed on the opposite ends thereof terminating in a pair of arms having integral hooks on their free ends for engagement with a shingle strip in a manner to secure the clip thereof, the loops adapted to be bent over a butt of a superposed shingle strip in a manner to maintain the same flat.

1,814,406. TRAIN INDICATING APPARATUS. EASTON E. PARRILL, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1929, Serial No. 405,550. Renewed Feb. 6, 1931. 7 Claims. (Cl. 246—3.)



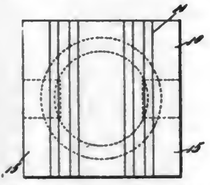
1. In combination, a railway track switch, a manually operable device, an indication relay, a control circuit for said switch including said indication relay and controlled by said device, a slow-release relay controlled by said indication relay, and indication means controlled by said device and by said slow-release relay.

1,814,407. ELEVATOR. NILES PEBBLES, Dallas, Tex., assignor of one-half to B. A. Marriner, Baton Rouge, La. Filed Oct. 2, 1929. Serial No. 396,828. 11 Claims. (Cl. 294—90.)



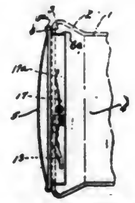
1. In combination with an elevator, a latching mechanism therefor including a pivotal latch member, a lug adapted to be engaged by said latch in closed position, and means to normally retain said member in unlatched position, said means including a spring surrounding a bolt upon which said member is pivoted and engaging both the body of the elevator and said latch member.

1,814,408. FOLDING CUSHION SEAT. CHARLES G. POLLEYS, Providence, R. I., assignor of one-half to Ralph J. Regnier, jr., Providence, R. I. Filed Jan. 12, 1929. Serial No. 332,060. 2 Claims. (Cl. 155—131.)



1. A portable cushion seat comprising a cover having substantial rigidity to support the body of the user and having creases therein to permit folding, a support beneath said cover being flexible to be collapsed, means for loosely connecting said support to said cover, the cover being foldable along said creases about the support when the same is collapsed to serve as a container therefor.

1,814,409. CLOSURE. JAMES S. REID, Cleveland, Ohio, assignor, by mesne assignments, to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 30, 1928. Serial No. 289,581. 6 Claims. (Cl. 301—108.)



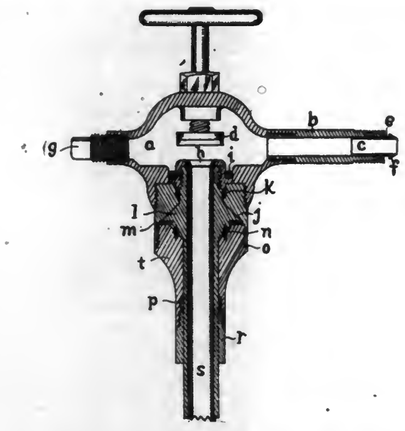
1. A closure of the class described, comprising a cup-shaped body member provided with a skirt, and locking

members pivotally attached to said skirt and extending circumferentially thereof in each direction from the point of attachment.

1,814,410. PROCESS FOR PURIFYING AND REFINING HYDROCARBON OILS. ADOLF RICHTER and WILHELM SCHÄFER, Dessau in Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 7, 1929, Serial No. 330,957, and in Germany Feb. 24, 1926. 8 Claims. (Cl. 196—28.)

1. Process for purifying a hydrocarbon mixture which comprises passing the same, in the gaseous state, over hydrated iron oxide maintained at a temperature of from about 300° to about 400° C., condensing the hydrocarbon mixtures subjecting the mixture, in the liquid state to further treatment with activated carbon in the presence of a condensation catalyst, filtering and redistilling.

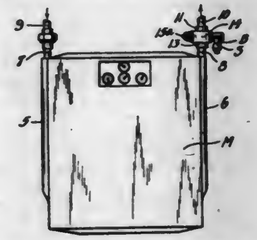
1,814,411. VALVE. OLIN F. RUSSELL, Los Angeles, Calif. Filed July 12, 1926. Serial No. 121,878. 6 Claims. (Cl. 251—157.)



6. A valve comprising a hollow stationary member provided with an alignment rib rigid therewith, and a valve seat provided on its inner end, a hollow outer member carrying a valve handle, stem and disk and provided with an outlet spigot, a sleeve member held in threaded engagement with the hollow outer member, an inwardly beveled upper end on said sleeve, and a beveled shoulder near the lower end of the hollow outer member, the said two beveled ends adjoining to form a V shaped groove adapted to receive the alignment rib provided on the stationary member, and packing means provided on the sleeve member

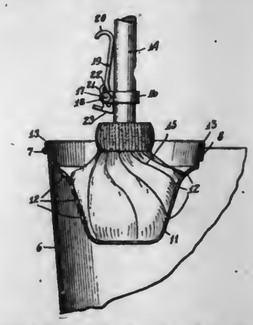
1,814,412. SEALING DEVICE. FRANK M. RUTTEN, Sioux City, Iowa, assignor, by direct and mesne assignments, of ten per cent to Goltz & Brown, a Firm consisting of Carlos W. Goltz and Bernard A. Brown, and ten per cent to Edwin M. Brown. Filed July 8, 1929. Serial No. 376,637. 1 Claim. (Cl. 70—122.)

A sealing device for couplings and nuts comprising a pair of independent semi-circular shell members of U-shape in cross section, each having a pair of spaced semi-circular flanges, the edge of one of which is adapted to over-lap the shoulder of an enlarged head, constituting a part of a pipe coupling and the other of which is adapted to overlap the outer end of the rotary nut of a coupling, said shells having cooperating lock hinge elements at corresponding ends thereof and having abutting projections at the opposite ends thereof, a sealing element engaging said abutting projections to retain said shells in locked position, and said lock hinge elements comprising a plate or ear on one of said shell members lying substantially in



a common plane with the abutting projection of said member and having a lateral aperture therein, said second shell member having at the corresponding end a projecting tongue having an angular offset extremity interlocked with the apertured portion of said ear.

1,814,413. MOP WRINGER WITH LEVER ATTACHMENT. SOLOMON SCHULMAN, New York, N. Y. Filed Nov. 23, 1929. Serial No. 409,200. 7 Claims. (Cl. 15—260.)

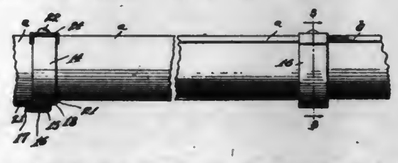


1. The combination of a pail, a drain cup carried thereby and supported thereupon, a mop for fitting into said drain cup, and mechanism carried by said mop and provided with a hook mounted to swing relatively thereto for the purpose of engaging the rim of said pail, in order to enable the handle of the mop to be subjected to leverage and thus drain the mop.

1,814,414. TREE BAND. EDOUARD HORACE SIEGLER, Sligo, Md. Filed Apr. 11, 1928. Serial No. 269,318. 3 Claims. (Cl. 167—49.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

3. A method of destroying the codling moth, comprising the application to trees in which the codling moth larvæ cocoon, of tree bands impregnated with a solution of beta-naphthol and oil.

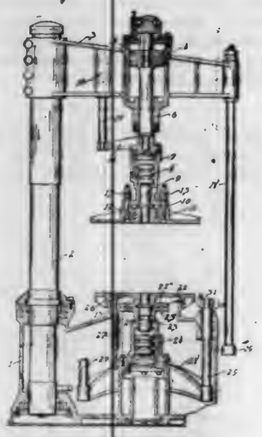
1,814,415. JOINT CONNECTION. BURTON SMITH, Grants Pass, Oreg. Filed Jan. 19, 1929. Serial No. 333,671. 5 Claims. (Cl. 61—15.)



1. A slip-on joint connection for sections of a flume or other trough-like structure comprising a blank of sheet

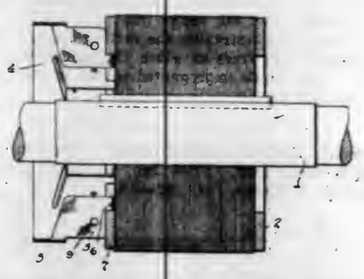
metal folded upon itself to form an upper portion, an intermediate portion and a lower portion between which the opposed ends of the adjacent of the said sections are to be engaged, the free longitudinal side edges of the said upper and lower portions being extended beyond the lines of fold of these portions with respect to the said intermediate portion, the outer portions of the said extended free edges being infolded to form solid beads adapted to bear against the adjacent walls of the engaged ends of the said sections.

1,814,416. MOLDING APPARATUS. JOHN T. STONEY, Cleveland, Ohio, assignor to Raymond E. Stoney, Lakewood, Ohio. Original application filed Nov. 6, 1926, Serial No. 146,670. Divided and this application filed Mar. 14, 1929. Serial No. 346,918. 8 Claims. (Cl. 22—45.)



1. Molding apparatus comprising a table, a movable presser member mounted above said table, means for raising and lowering the said presser member, and vibrating mechanism centrally arranged with respect to said presser member whereby the vibrating mechanism imparts blows to the said presser member.

1,814,417. FAN FOR COOLING DYNAMO ELECTRIC MACHINES, ETC. STIMAN BLACKWELL TAYLOR, Cleveland, Ohio, assignor to The Reliance Electric and Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 2, 1927. Serial No. 217,047. 3 Claims. (Cl. 230—134.)



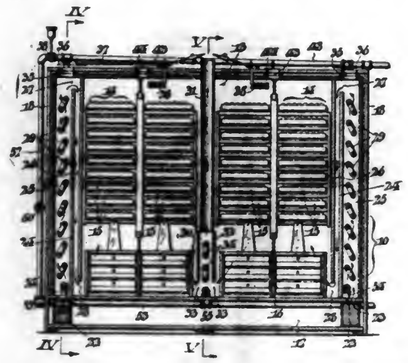
1. A fan for dynamo-electric machines comprising a plurality of blades terminating in portions extending at right angles to the axis of such machine adapted to be secured by such portions to the rotor of a dynamo-electric machine, and a cylindrical deflector integral with and extending axially beyond the opposite ends of said blades.

1,814,418. SAFETY RAZOR AND SAFETY RAZOR BLADE. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed July 3, 1930. Serial No. 465,480. 14 Claims. (Cl. 30—12.)



1. A safety razor comprising a holder including two clamping members for gripping a blade and holding it in position for shaving, said members having parts cooperating to corrugate portions of a normally flat blade in such a direction as to reduce the width of the blade, and means for relatively moving said members into their blade clamping and corrugating relationship.

1,814,419. INCUBATOR. TOLBERT K. TIFFANY, Trenton, N. J., assignor to James H. Bell, Philadelphia, Pa. Filed May 20, 1925. Serial No. 31,510. 4 Claims. (Cl. 119—42.)



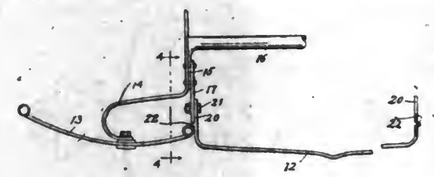
1. In an incubator, the combination of an incubating chamber, an up-and-down passage via which air enters said chamber at the bottom and in the up-portion only whereof it is heated, a by-pass set apart in the down-flow portion of said passage connecting with the exterior of the incubator to permit escape by way of the by-pass of heated air from said passage, and thermostatic means automatically controlling such escape in accordance with temperature conditions prevailing in the incubating chamber.

1,814,420. PRODUCTION OF RUBBER. HANS TOCHTERMANN, Mannheim, and CLAUS HEUCK, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 19, 1929, Serial No. 387,080, and in Germany Sept. 5, 1928. 11 Claims. (Cl. 18—50.)

6. A process for the production of valuable plastic and elastic materials particularly stable for storing and proof against "ageing" from emulsions of polymerization products of diolefines, which comprises intimately mixing aldol-alpha-naphthylamine in an emulsified state with a product prepared by the polymerization of isoprene in a state of emulsion, and coagulating.

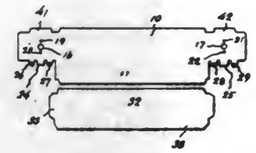
1,814,421. CONNECTING MEANS FOR BUMPERETTES. GEORGE W. VEALE, Cleveland Heights, Ohio, assignor to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 1, 1930. Serial No. 449,062. 6 Claims. (Cl. 293—55.)

1. In combination, a vehicle, bumperette supporting means secured to said vehicle, a pair of bumperettes, means connecting said bumperettes with said supporting means including a substantially forwardly extending member having a tapered portion, and a connecting member



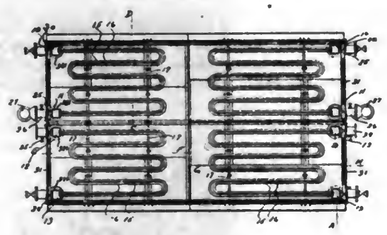
having end portions thereof clamped to said forwardly extending member and provided with lugs arranged to engage said tapered portion.

1,814,422. CASING FOR SHADE ROLLERS. PHILIP WARNICK, Jersey City, N. J. Filed Oct. 20, 1930. Serial No. 490,018. 4 Claims. (Cl. 156—10.)



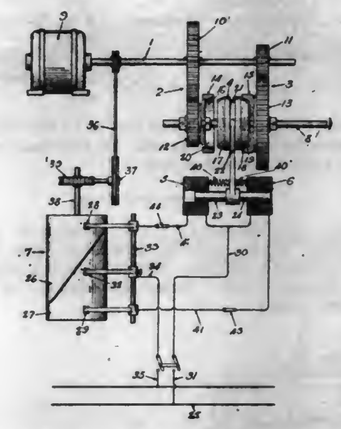
3. A window shade roller casing consisting of a single piece of material having a bottom wall, a front wall, opposed end walls having flanges thereon, stops provided on said end walls for engaging said first wall, bearings formed in said end walls for a roller, and another piece of material forming a rear wall and being spaced from said bottom wall for receiving the shade of a roller, said second piece of material including terminal flanges for embracing said first flanges.

1,814,423. FLUID HEATER. PAUL LOUIS GASTON ALBERT, Aulnay-sous-Bois, France, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed June 16, 1921, Serial No. 477,876, and in France Oct. 1, 1920. 11 Claims. (Cl. 122—355.)



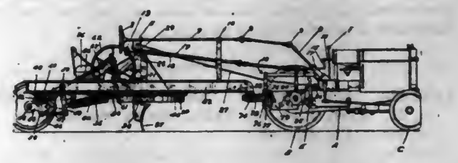
1. A fluid heater and its setting comprising a pair of parallel headers spaced apart and bent tubes connecting the headers, each tube lying in a plane at right-angles to the axes of the headers with the end portions of the legs of the tube extending in a substantially straight line from the bent portion thereof to the respective headers and connected to the headers, the space between the headers being sufficiently wide and the bent portion of each tube possessing sufficient flexibility to be withdrawn in its own plane between the headers without permanent deformation of the bent portion of the tube, and the setting being arranged to permit such tube to be so withdrawn, the tubes being located entirely within the setting.

1,814,424. VARIABLE SPEED MECHANISM. JOHN M. BARR, Milwaukee, Wis., assignor to The Louis Allis Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 6, 1923. Serial No. 661,231. 9 Claims. (Cl. 74—59.)



1. A periodic change speed drive comprising driving means, driven means, speed controlling means to cause said driving means to drive said driven means at different speeds, means controlling said speed controlling means to cause said driven means to be operated alternately at different speeds for predetermined periods to obtain an intermediate average speed, and means to vary the period each speed is maintained to vary the intermediate average speed.

1,814,425. COMBINATION TRACTOR GRADER. JOSEPH L. BECKER, Minneapolis, Minn. Filed Apr. 9, 1928. Serial No. 268,547. 4 Claims. (Cl. 37—168.)

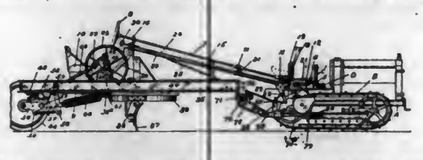


2. A road grading machine comprising a transversely tiltable frame, a grader blade secured under and to the frame so as to be transversely tiltable and vertically adjustable therewith, a pair of laterally disposed crank members pivotally secured to the rear end of the frame, ground wheels secured to the cranks, worm wheels for oscillating the cranks to adjust the frame and grader blade with respect to the ground wheels, worm screws for operating the worm wheels, a pair of hand wheels mounted on the frame, an operator's station arranged substantially between and slightly rearward of the hand wheels, pinions operated by the hand wheels, shafts extending from the respective pinions to the worm screws and disposed at rearwardly converging angles with respect to the longitudinal axis of the frame, universal joints connecting the rear ends of said shafts to the worm screws, and universal joints connecting the front ends of said shafts to the said pinions.

1,814,426. CONTROLLING DEVICE FOR MOTOR VEHICLES. JOSEPH L. BECKER, Minneapolis, Minn. Filed Apr. 12, 1928. Serial No. 269,458. 6 Claims. (Cl. 180—77.)

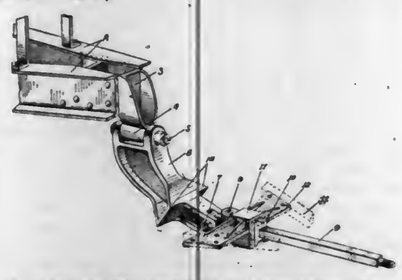
1. A device for steering a tractor from a vehicle connected to and drawn thereby, comprising a frame carried

by the rear end of the tractor, a shaft journaled in the frame and having an extension reaching to the vehicle, means for connecting the shaft to the normal steering



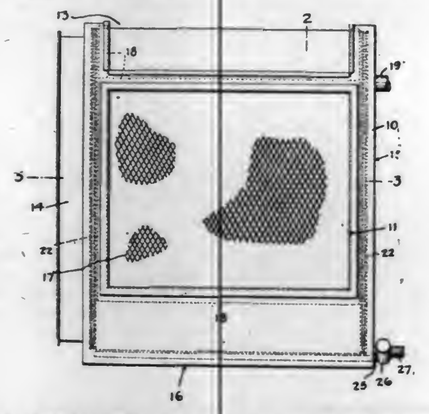
post of the tractor, a crank arm carried by the shaft and a spring attached to the crank arm for yieldingly retaining it in its normal position of rest.

1,814,427. COUPLING DEVICE. JOSEPH L. BECKER, Stillwater, Minn. Original application filed Apr. 12, 1928, Serial No. 269,458. Divided and this application filed Nov. 22, 1929. Serial No. 409,102. 6 Claims. (Cl. 280—33.9.)



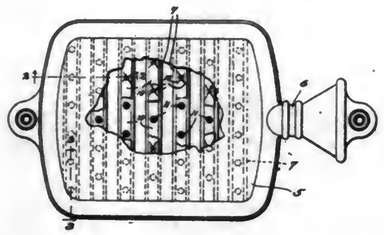
1. A coupling mechanism for supportably connecting the front end of a vehicle to a tractor, comprising a draw bar yieldably secured to the tractor, a bracket member rigidly secured at the forward end of the vehicle, and a coupler member disposed between the bracket member and draw bar to support the former on the latter, a pivot connection between the coupler and bracket members, and a universal joint connection between the draw bar and the forward end of the coupler member.

1,814,428. AIR FILTER. EDMUND BISHOP, New York, N. Y. Filed Mar. 29, 1930. Serial No. 439,909. 9 Claims. (Cl. 183—63.)



1. A device of the character described having in combination a substantially rectangular casing provided with air inlets at both sides, an air inlet at the top and an air outlet at one end, and a continuous filter medium adapted to pass over both of said side inlets and said top inlet.

1,814,429. HOT WATER BOTTLE. CHARLES H. BORST, Cuyahoga Falls, Ohio. Filed Feb. 8, 1930. Serial No. 426,956. 3 Claims. (Cl. 150—1.)



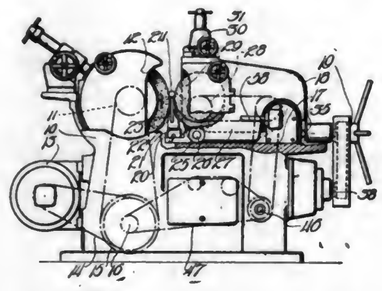
1. A hot water bottle comprising a body portion formed of flexible material, stays embodying cords embedded in non-elastic material and secured to the sides of the body portion, and said stays being arranged in spaced relation with each other throughout the length of the body portion to hold the sides of the body portion against movement beyond a predetermined point.

1,814,430. CEMENTING MACHINE. CARLOS H. BOWLEN, Haverhill, Mass., assignor to Irving L. Keith, Haverhill, Mass. Filed Nov. 6, 1929. Serial No. 405,117. 5 Claims. (Cl. 91—47.)



5. An elongated grid for applying liquid adhesive to sock linings of shoes comprising two series of transversely disposed bars arranged at the opposite ends of the grid and an intermediate series of longitudinally extending bars mounted at their ends in the adjacent transverse bars, all of said bars having adhesive applying surfaces arranged for simultaneous engagement with the lining when placed thereon.

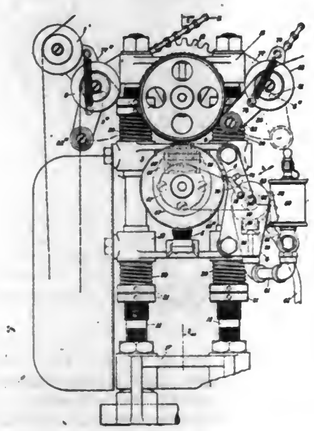
1,814,431. GRINDING MACHINERY. JOHN E. CASTER, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 16, 1927. Serial No. 220,023. 12 Claims. (Cl. 51—103.)



1. A centerless grinder including a bed, ways on the bed, opposed grinding and regulating wheels carried by the bed, the grinding and regulating wheels having a grinding throat between them, means for rotatably supporting the grinding wheel in a fixed position on the bed, a slide on the ways of the bed, a regulating wheel unit pivotally supported on the slide, a plunger adjustably reciprocatable through the regulating wheel unit, and a cam rotatably carried by the slide and adapted to engage the plunger for raising and lowering the regulating wheel unit about its pivot and urging the regulating wheel toward and from the grinding wheel to vary the grinding throat.

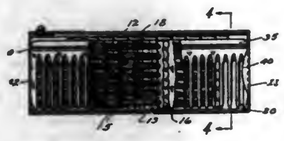
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1,814,432. NUMBERING MACHINE. OLIVER E. CONKLIN, Parlin, and GEORGE ROCKER, Westfield, N. J., assignors to Du Pont-Pathe Film Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Feb. 17, 1928. Serial No. 254,929. 2 Claims. (Cl. 101—75.)



1. In a numbering machine, a supporting frame, a rotating drum-like element carried thereby, means for rotating such element, a numbering mechanism carried by said element and including a shaft arranged in chord position on said element and a ratcheted number disc rotatable on said shaft, and means for rotating said disc upon rotation of said element; such means comprising a cam-follower carrier radially slidable upon said element, a lever fulcrumed upon said shaft and pivotally connected to said carrier, a pawl pivotally connected with said lever and engaging the ratchet of said disc, a cam-follower carried by said carrier, and a cam stationarily carried by said frame and in engagement with said follower, said cam being contoured to slide the carrier during rotation of the element thereby to actuate the lever, pawl and number disc.

1,814,433. TOILET ARTICLE. JAMES F. CONNOR, Cleveland, Ohio. Filed Dec. 22, 1930. Serial No. 504,079. 4 Claims. (Cl. 132—86.)

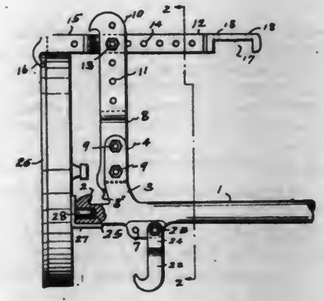


1. In a toilet article, a casing, open at the top, a folding brush disposed within the casing and adapted to lie entirely within the casing when in folded position, and to extend through the top of the casing when in open position, and a comb adapted to overlie the brush and having substantially the same length and width as the interior of the casing and being adapted to provide a closure for the casing.

1,814,434. FROTH FLOTATION PROCESS. ORIN D. CUNNINGHAM, Provo, Utah, assignor to Peter C. Reilly, Indianapolis, Ind. Filed Sept. 10, 1928. Serial No. 305,141. 10 Claims. (Cl. 209—166.)

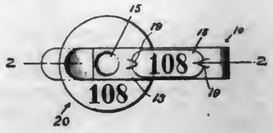
1. A flotation process in which ore is subjected to froth-flotation in the presence of a ketone-condensation sulfur product which can be formed from ketone and carbon bisulfide.

1,814,435. HAND TOOL. JAMES C. DE LANEY, Houston, Tex. Filed June 17, 1927. Serial No. 199,492. 4 Claims. (Cl. 81—15.)



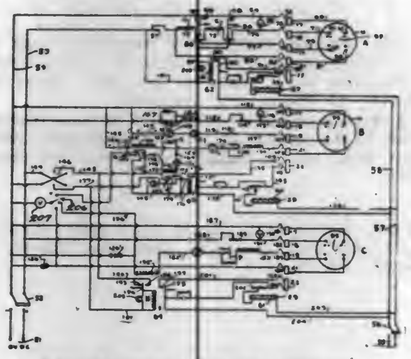
1. An implement of the character described including an operating handle, there being a lateral projection adjacent one end of said handle, a lug carried by the handle approximately opposite said projection, a tension bar, means for connecting said tension bar to said projection and a hook detachably secured to said lug.

1,814,436. CHECKING DEVICE. WILLIAM P. DE SAUSSURE, Jr., Englewood, N. J., assignor to De Saussure Equipment Company, West New York, N. J., a Corporation of Delaware. Filed Aug. 22, 1928. Serial No. 301,233. 7 Claims. (Cl. 40—23.)



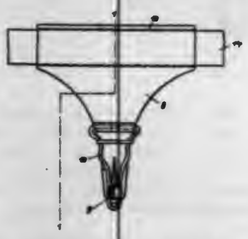
1. A duplicate check device, comprising a garment check and duplicate check holder consisting of a strip of resilient sheet material bearing on its outer face an identification mark and bent to form a loop and gripping jaws, one of which jaws has its end bent angularly outward to form a tapered garment edge entrance, and a duplicate check bearing the same identification mark removably held between the jaws of the garment check.

1,814,437. APPARATUS AND METHOD FOR TESTING ELECTRICAL DEVICES. ALLEN B. DU MONT, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 16, 1927. Serial No. 168,541. 27 Claims. (Cl. 209—81.)



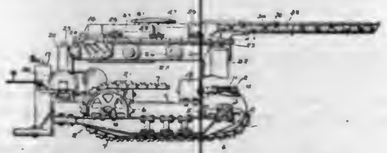
1. An electrical testing apparatus comprising an electrical circuit, means for temporarily moving a device to be tested in operable relation to said circuit for the flow of electrical energy therethrough and means operable upon an insufficient or excess flow of energy through said device to remove said device from said circuit.

1,814,438. GARTER. MORITZ FELDMANN, Barmen, Germany. Filed Oct. 18, 1927, Serial No. 226,892, and in Austria Apr. 30, 1927. 1 Claim. (Cl. 241—6.)



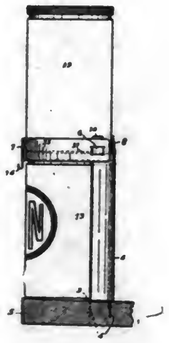
A garter comprising a leg band and a stocking engaging member slidably mounted thereon; the said stocking engaging member comprising a block of material, a clasp pivotally mounted in a central raised portion of said block of material, a structurally integral button shaped protrusion at the lower end of said block of material, adapted to cooperate with said clasp, and a transverse slot extending through and across the upper end of said block of material for reception of said leg band.

1,814,439. COAL MINING MACHINE. DUDLEY T. FISHER, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 26, 1923, Serial No. 682,735. Renewed Dec. 2, 1930. 5 Claims. (Cl. 262—28.)



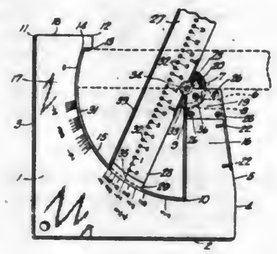
1. In a mining machine, the combination with a movable base, of self-contained traction and guiding means therefor, a cutter bar projecting from the base in pivotal relation thereto, motor driven means to swing the bar about its pivot point in an arc across the front of the base from a projecting position at one side thereof to a projecting position at the other side thereof, the base remaining stationary, means for locking the bar in fixed position relative to the base, and means for manipulating the machine as a whole through said traction and guiding means to swing the bar thus locked about a shiftable pivot point through an arc similar to that above mentioned.

1,814,440. MERCHANDISE DISPLAY HOLDER. CLIFFORD A. FOGEL and FRED O. NELSON, Pittsburgh, Pa. Filed Nov. 23, 1929. Serial No. 409,372. 4 Claims. (Cl. 248—65.)



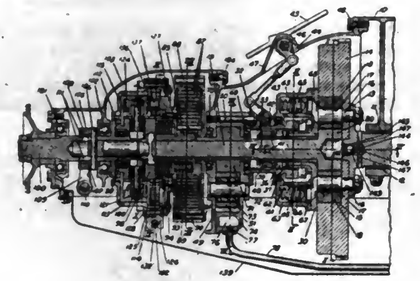
1. A merchandise display holder of the character described comprising a vertically disposed support, means for securing said support in position, a retaining band having its ends detachably connected to the top of said support and being disposed horizontally and inwardly extending seating elements formed integral with said retaining band.

1,814,441. DRAFTING INSTRUMENT. WILLIAM WALTER FORD, Oklahoma City, Okla. Filed Oct. 19, 1929. Serial No. 400,970. 5 Claims. (Cl. 33—75.)



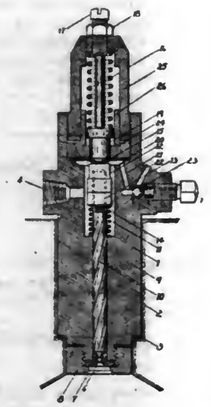
1. A device, as described, embodying a flat, square base member having a portion of its top and one side adjacent one of its upper corners cut away toward its center in a manner forming a sector of a circle, a flat rectangular blade pivotally mounted upon said base member adjacent said upper corner, the lower end of said blade slidably contacting and conforming to the arc of the edge of said sector, the upper end portion extending beyond the top edge of said base member, said blade having a longitudinal dividing line with a plurality of spaced perforations thereon, said base member having graduations adjacent said sector for co-acting with said line for laying out brick courses with different thicknesses of mortar joints on drawings of different scales by marking through said perforations.

1,814,442. VEHICLE TRANSMISSION. ALVA B. GILBERT, Elyria, Ohio. Filed Feb. 21, 1929. Serial No. 341,714. 30 Claims. (Cl. 74—14.)



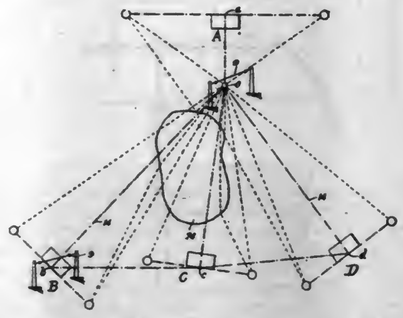
1. In mechanism of the class described, a drive member, a driven member, a clutch adapted to hold said members against rotation at different speeds, and means independent of the relative speeds of rotation of said members for automatically setting and releasing said clutch periodically.

1,814,443. FUEL INJECTOR FOR OIL ENGINES. MORRIS J. GOLDBERG, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1923. Serial No. 664,479. 3 Claims. (Cl. 187—153.)



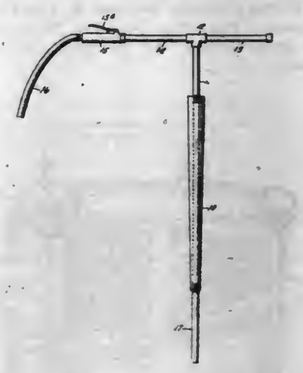
1. In a diaphragm-type injector for solid-injection engines, a diaphragm arranged for movement responsive to fuel discharge by the injector, means forming a metallic reinforcement for all parts of the diaphragm, on one side thereof, an endwise movable valve member on the opposite side of the diaphragm, a spring carried by the valve member and tending to bias the member toward open position, screw threaded means disposed between the valve member and diaphragm, and adapted for adjusting the effective length of the valve member and loading of said spring, and means for yieldably urging the valve member toward closed position.

1,814,444. GEOPHYSICAL METHOD AND APPARATUS. HARVEY C. HAYES, Washington, D. C. Filed May 15, 1928. Serial No. 277,966. 11 Claims. (Cl. 181—0.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. The method of exploring the earth's surface which comprises the generation of compressional waves below the surface, and the detection of such waves at a plurality of stations at substantially the same time, some of said stations being arranged in substantially a straight line and at least one of said stations being arranged at a side of the point where the compressional waves are generated opposite from those stations arranged in a straight line.

1,814,445. SELF TAMPING AERATION TOOL. CHARLES F. IRISH, Bratenahl, Ohio. Filed Dec. 24, 1928. Serial No. 328,226. 4 Claims. (Cl. 47—49.)

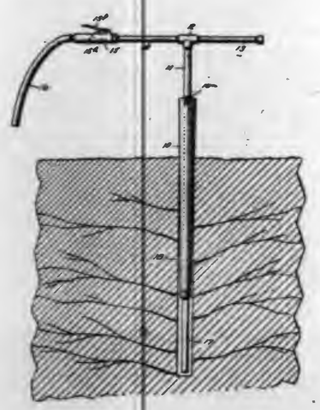


1. A self tamping aeration tool comprising a relatively long gradually tapered tube adapted to be inserted in a preformed hole in the soil and to seal with its upper portion the upper portion of such hole and internally threaded at each end, a T-shaped handle threaded to the larger end of said tube and provided with a duct extending from one end thereof to the point of connection of the handle with said tube, and a valve on the end of said handle which is provided with said conduit and adapted to be connected to a supply of compressed air, and an extension tube threaded into the smaller end of said tapered tube.

1,814,446. PROCESS OF TREATING SOIL. CHARLES F. IRISH, Bratenahl, Ohio. Filed Nov. 7, 1929. Serial No. 405,856. 8 Claims. (Cl. 47—48.)

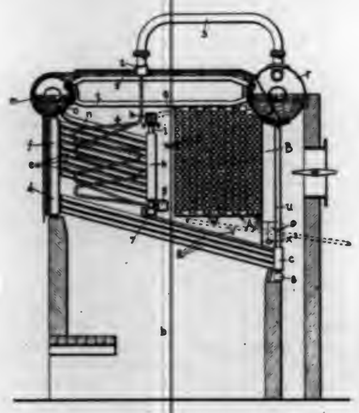
1. The process of treating soil which consists in preforming a hole of material depth therein, supplying air

under high pressure, through a tool introduced into said hole, to the bottom of the hole and thence to the major portion of the wall area of such hole, surrounding said tool, and maintaining a seal between said tool and the



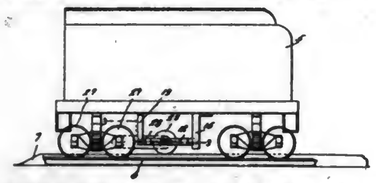
upper portion of said hole whereby the soil will be disrupted immediately radially outwardly from the portion of the wall so treated without escaping upwardly around the tool.

1,814,447. WATER TUBE STEAM GENERATOR. EDWIN WALTER JONES, Lincoln, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 13, 1924, Serial No. 749,578, and in Great Britain Nov. 23, 1923. 10 Claims. (Cl. 122—303.)



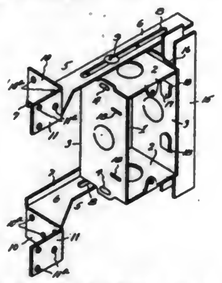
1. In a water-tube boiler, a lower bank of horizontally inclined water tubes, a second bank of tubes above said lower bank, said second bank being of less extent lengthwise of the tubes of said lower bank, a chamber being formed above said lower bank and at the rear of said second bank of tubes, a steam and water drum, heat transferring means other than a superheater located in said chamber, supply means for said upper and lower banks of tubes, and a common delivery therefrom to said drum.

1,814,448. ELECTRICAL CONTACTOR. JOSEPH E. KUYKENDALL, San Antonio, Tex. Filed Apr. 18, 1930. Serial No. 445,516. 8 Claims. (Cl. 191—49.)



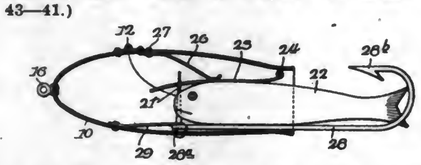
1. An electrical contactor for delivering energy from railroad rolling stock to third rails; comprising a pivoted support, a spring suspension for the support, a contactor wheel on the support, means for delivering energy thereto, and drive means between one of the axles of the rolling stock and the said wheel.

1,814,449. SWITCH BOX. JOSEPH MORGENSTERN, Cleveland, Ohio. Filed Oct. 24, 1924. Serial No. 745,559. 4 Claims. (Cl. 247—21.)



1. In combination with a switch box of the class described, brackets adapted to be attached to the opposite ends thereof and extend laterally therefrom for supporting the box from a stud or the like, each bracket comprising a base and a flange along one side of the base, the box fitting within the angle between the base and flange, and means adjustably securing the brackets to the box, each bracket terminating at one end in an attaching plate for application to the stud.

1,814,450. FISH BAIT. RICHARD NELSON, Chicago, Ill., assignor of one-half to Frank Rosner, Chicago, Ill. Filed Oct. 20, 1928. Serial No. 313,675. 6 Claims. (Cl. 43—41.)

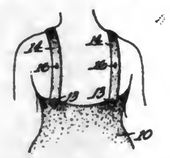


1. In a fish lure a hollow casing shaped and finished to suffice alone as a lure, means furnishing access to the inside of the casing, means for securing a hook within the casing so that it projects therefrom and means engaging the jaw of a live fish for fastening said fish therein for projection from the casing without injury to such bait.

1,814,451. BATHING SUIT. ALBERT A. NEVEU, Northboro, Mass., assignor to The Worcester Knitting Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 6, 1930. Serial No. 473,376. 4 Claims. (Cl. 2—67.)

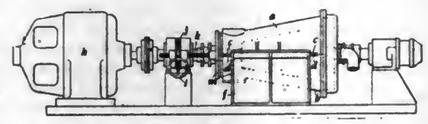
1. A bathing suit having a body portion and a pair of shoulder straps having means of attachment to the

suit at both ends thereof, one of said straps having an intermediate means of attachment to the suit spaced from the ends of the strap, and said suit having cooperating means of attachment to the straps at the front and rear



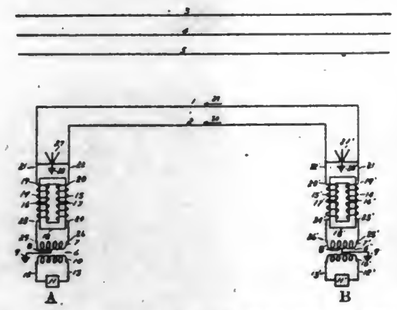
of each shoulder portion, the distance between said intermediate means of attachment and one of said end means of attachment being less than the distance between the cooperating means on the rear of the suit.

1,814,452. PULP BEATING OR REFINING MACHINE. THOMAS DOWNHAM NUTTALL, Bury, England, assignor of one-half to Bentley & Jackson Limited, Bury, England, a British Company. Filed Apr. 23, 1930, Serial No. 446,707, and in Great Britain May 21, 1929. 1 Claim. (Cl. 92—27.)



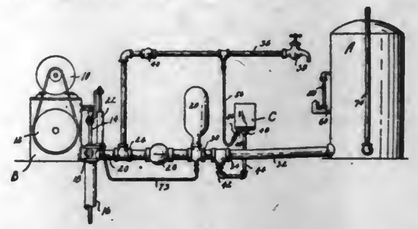
In pulp beating or refining machines of the type specified, the division of the conical casing or housing axially into top and bottom similar halves or sections having radial flanges at diametrically opposite points for bolting together, fixed pedestals or brackets supporting said casing by said bolted flanges, said pedestals or brackets forming guides for the casing during axial adjustment movements, and means for adjusting the casing along said guides.

1,814,453. PROTECTIVE DEVICE FOR COMMUNICATION APPARATUS USED WITH COMMUNICATION LINES SUBJECTED TO EXTRANEOUS VOLTAGE. RALPH WILLOUGHBY OSBORNE, Toronto, Ontario, Canada. Filed July 21, 1930. Serial No. 469,555. 5 Claims. (Cl. 179—78.)



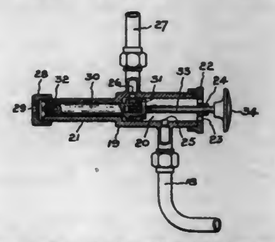
1. In a protective device for communication apparatus used with communication lines subjected to extraneous voltage, the combination with a communication line, of means comprising a pair of windings each in inductive relation to the other and wound around a common magnetic core and connected respectively in the same relative polarity in series relation with the two wires of the communication line and means comprising gaps in the said magnetic core for adjusting the impedance of the said pair of windings.

1,814,454. DEEP WELL WATER SUPPLY SYSTEM. ALBERT PENN, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa. Filed Feb. 18, 1930. Serial No. 428,101. 15 Claims. (Cl. 103—6.)



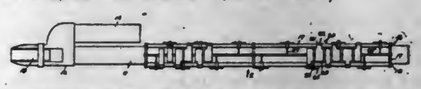
1. In a water supply system, the combination with a supply pipe, a pump for supplying air and water to the pipe and a fresh water take-off from the pipe, of a control mechanism for starting and stopping operation of the pump, said control mechanism being hydraulically connected with the fresh water take-off and hydraulically connected through a reduced passageway with the supply pipe, and means for preventing air from the pump being discharged into the fresh water, as it is withdrawn.

1,814,455. SHADE OPERATING DEVICE FOR MOTOR CARS. JAMES VICTOR WILSON PHILLIPS, New Westminster, British Columbia, Canada. Filed Jan. 30, 1928. Serial No. 250,678. 3 Claims. (Cl. 156—28.)



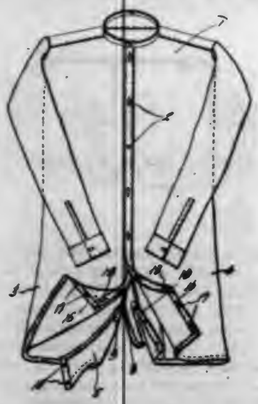
2. A spring roller shade operating means, comprising a vacuum cylinder, a piston therein, a flexible element connecting the shade and piston, a second cylinder communicating with the vacuum cylinder, a suction pipe communicating with the second mentioned cylinder, a piston in the second mentioned cylinder, a rod connected with the piston to manually operate the latter in one direction and establish communication between the suction pipe and vacuum cylinder, whereby the piston in the latter is moved in one direction to lower the shade, the piston of the second mentioned cylinder being automatically returned by suction to its normal position to cut off said communication, and means for retarding the movement of the last mentioned piston to its normal position.

1,814,456. MUSICAL WIND INSTRUMENT. LOGAN RIVES, Los Angeles, Calif. Filed July 8, 1930. Serial No. 466,452. 11 Claims. (Cl. 84—381.)



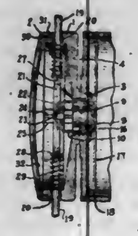
4. A musical wind instrument comprising in combination a tube with a mouthpiece and having a plurality of openings, a pivot pin extending longitudinally of the tube and having a plurality of keys pivotally mounted thereon, said keys operating in parallel planes, and a stopper operatively connected to each key, the said keys when operated in consecutive order playing a chromatic scale, certain pairs of keys being sufficiently close together to be depressed by a single finger, and such pairs with the adjacent keys playing a diatonic scale.

1,814,457. COMBINATION GARMENT. BEATRICE SPIERS, Philadelphia, Pa. Filed May 28, 1930, Serial No. 456,729. Renewed May 29, 1931. 2 Claims. (Cl. 2—77.)



2. A garment comprising a shirt and drawers open in front throughout its length, said open front adapted to be detachably secured together in overlapping relation, said garment being further provided with an arcuate slit in its rear extending from its lower end to an intermediate portion thereof and providing leg sections for disposition around the leg of a wearer, an integral extension on one of the leg sections, gores secured to the rear portion of the other leg section adjacent the slit, a flap secured to said other leg section at the rear thereof, and extending therefrom across the slit for detachable connection in overlapping relation on the first named leg section, said flap disposed longitudinally with one of the gores and stitched thereto, said flap extending forwardly and upwardly between the legs of a wearer in a manner to provide a crotch and detachably connected to the overlapping front portions of the garment adjacent the lower end thereof, the extension passing between the leg of the wearer and detachably connected to the front portion of its respective leg section.

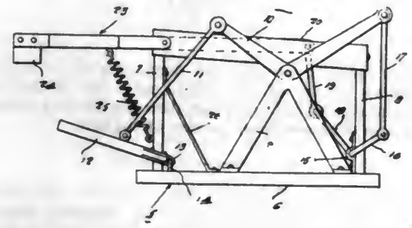
1,814,458. TELEPHONE TRANSMITTER SILENCER. JAMES EVERETT STEINBERG, Oklahoma City, Okla. Filed July 28, 1930. Serial No. 471,126. 5 Claims. (Cl. 179—180.)



1. A transmitter silencer embodying an open faced cup-shaped member having an aperture through its rear wall, said wall adapted to connect the diaphragm casing of a sound transmitter, a transverse rod extending through and projecting outwardly from said member, and means for contacting the transmitter diaphragm upon longitudinal movement of said rod.

1,814,459. MECHANICAL HAMMER. FELIX TAURIAC, Jennings, La. Filed June 30, 1930. Serial No. 464,997. 1 Claim. (Cl. 78—32.)

A device of the class described comprising a base, a front upright and a rear upright carried by the base, a front shaft journalled in the front upright, a yoke having the ends of its limbs connected to the ends of said shaft, a hammer carried by the free end of the yoke, a spring connected with the yoke and with the lower part of the front upright for normally holding the yoke and the hammer in lowered position, a rocker arm pivoted to the shaft and having its front end connected with the free end of the yoke, a crank shaft journalled to the lower part of the rear upright, a link connecting the crank of said shaft to



the rear end of the rocker arm, a third upright on the base, a bell crank pivoted thereto, a link connected to the end of one arm of said bell crank, the crank shaft having an arm with which the link is connected, a foot pedal pivotally connected with a front part of the base and a link connecting the pedal to the front end of the bell crank whereby the depression of the pedal will raise the yoke and the hammer to permit the spring and gravity to lower the yoke and hammer when the foot is removed from the pedal.

1,814,460. VALVE CLOSURE. MAURICE C. TETLEY, Syracuse, N. Y. Filed Aug. 4, 1930. Serial No. 472,966. 2 Claims. (Cl. 221—60.)

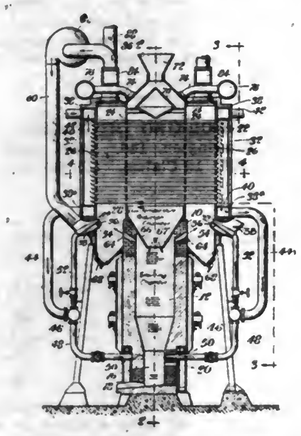


1. A valve closure for collapsible tubes including a disk having a threaded opening to receive the threaded discharge neck of the tube, a cap disposed over and about the periphery of the disk and having an eccentric discharge opening, and means to connect the cap to the disk for rotation about the latter, said threaded opening of the disk being disposed eccentrically of the latter, whereby in one position of the cap to cause the discharge opening thereof to register with the discharge neck of the tube and in a second position to lie out of register with said discharge neck thereby to close the latter.

1,814,461. PROCESS OF PRODUCING METALS FROM THEIR OXIDE ORES. WALTER E. TRENT, New York, N. Y., assignor to The Trent Process Corporation, a Corporation of Delaware. Filed Feb. 28, 1928. Serial No. 257,686. 13 Claims. (Cl. 75—14.)

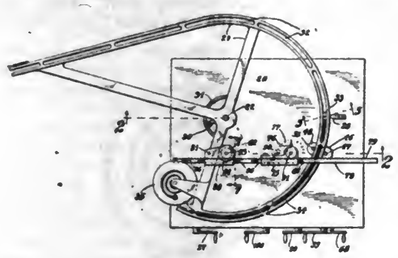
1. A process of reducing oxide ores which comprises indirectly heating a mixture of ore, fuel and flux to a temperature sufficient to initiate reduction of the ore by carbon but below an agglomerating or sintering temperature;

continuing the heating until substantial reduction is brought about; then introducing the reduced charge to an adjacent and independent smelting zone and heating



directly by combustion of carbon therein; withdrawing the gaseous products from the smelting zone and utilizing them in indirectly heating a fresh charge in the reducing zone.

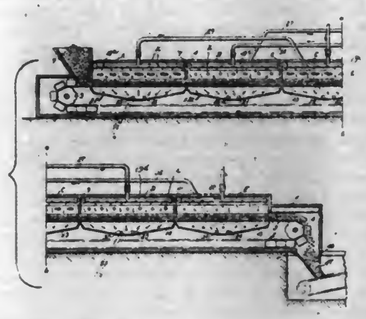
1,814,462. TORPEDO COURSE CALCULATOR. ALBERT D. TRENOR, Gloucester, Mass., assignor to John Hays Hammond, Jr., Gloucester, Mass. Filed Dec. 18, 1928. Serial No. 326,802. 4 Claims. (Cl. 33—75.)



4. An instrument for mechanically predetermining the meeting point of two moving bodies comprising first and second course members corresponding respectively to the courses of said moving bodies, first and second travelers corresponding respectively to said moving bodies and mounted on said course members, means for voluntarily moving said travelers along their respective course members at speeds corresponding to said bodies but independently of said bodies, and means for voluntarily relatively shifting said course members to cause said travelers to meet as they move along their respective coures to obtain data for setting the relative courses of said bodies.

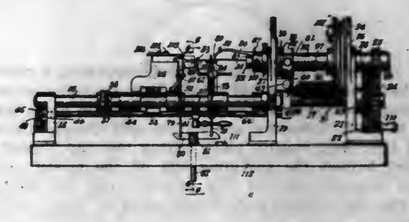
1,814,463. PROCESS FOR CARBONIZING MATERIALS. WALTER EDWIN TRENT, New York, N. Y., assignor to Trent Process Corporation, New York, N. Y., a Corporation of Delaware. Filed May 18, 1925. Serial No. 31,221. 4 Claims. (Cl. 202—19.)

1. A process of the character described, comprising passing a body of solid carbonizable fuel successively through zones, of progressively increasing temperatures, under carbonizing conditions, removing volatiles from one zone and passing said volatiles to a succeeding zone of



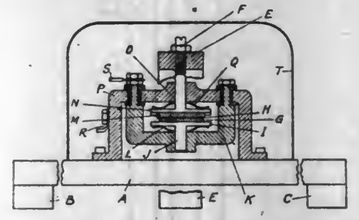
a higher temperature sufficient to crack the hydrocarbon vapors contained in said volatiles into light oil vapors but insufficient to completely decompose said volatiles.

1,814,464. MACHINE FOR SNELLING FISHHOOKS. LOUIS E. BALTZLEY, Glen Ridge, N. J. Filed Jan. 14, 1930. Serial No. 420,653. 27 Claims. (Cl. 117—84.)



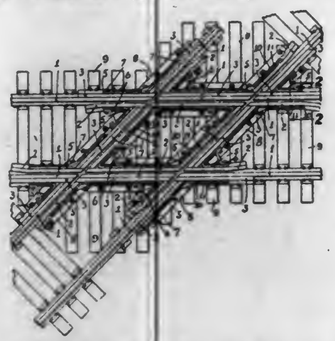
1. A machine for snelling fish hooks, comprising means for holding a fish hook and a snell non-rotatively in a properly related overlapping relation and a rotating winder for applying a wrapping about the overlapping portions of the thus related hook and snell.

1,814,465. SIGNALING AND INDICATING APPARATUS. ANDRÉ BECQ, Paris, France. Filed Feb. 27, 1930, Serial No. 431,938, and in France Feb. 27, 1929. 2 Claims. (Cl. 246—251.)



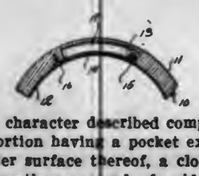
2. In a railway signaling apparatus, the combination with a track rail, of a contact element, consisting of a metal body having a compound of the same metal formed on its surface, associated with said rail, means for transmitting pressure to said element, and means operable by the passage of a vehicle wheel over said rail for varying said pressure.

1,814,466. RAIL-CROSSING. CARL J. BERGUNDTHAL, Alameda, Calif. Filed Nov. 29, 1930. Serial No. 499,008. 3 Claims. (Cl. 246—464.)



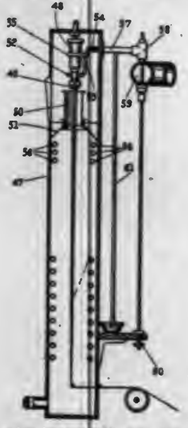
1. A rail-crossing of the built-up type comprising rail sections; and reinforcing bars fitted to said rail sections in the intersecting angles of said sections, said bars being welded to said rail sections.

1,814,467. RING. HYMAN CEDAR, Superior, Wis. Filed Oct. 1, 1930. Serial No. 485,767. 1 Claim. (Cl. 63—15.)



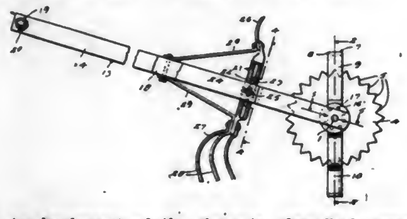
A ring of the character described comprising a relatively thick body portion having a pocket extending outwardly from the inner surface thereof, a closure plate, means for hingedly mounting one end of said closure plate on said ring, said closure plate having one end thereof extended beyond the adjoining end of the pocket, and a screw disposed through said extended end and engaging the ring for holding said closure plate in closed position.

1,814,468. PROCESSES AND APPARATUS FOR THE PRODUCTION OF ARTIFICIAL FILAMENTS OR THREADS. HENRY DREYFUS, London, EDWARD KINSELLA, JOSHUA BOWER, and WILLIAM IVAN TAYLOR, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Nov. 29, 1927, Serial No. 236,448, and in Great Britain May 23, 1927. 24 Claims. (Cl. 18—8.)



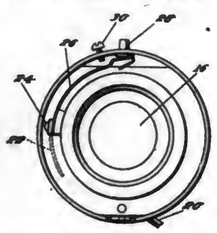
1. Process of spinning artificial filaments or threads from solutions of cellulose acetate or other cellulose derivatives comprising spinning the filaments into a current of evaporative medium which for the major part of its flow passes through an area substantially greater than that occupied by the filaments in the neighborhood of the spinning orifices and constricting the passage of the evaporative medium in the said neighborhood, so that a definite proportion of the evaporative medium is constrained to pass through the immediate vicinity of the spinning orifices.

1,814,469. EARTHWORKING IMPLEMENT. CLARENCE ELY FINNEY, Huntington, Ind. Filed June 26, 1930. Serial No. 464,023. 10 Claims. (Cl. 97—58.)



1. An implement of the character described, comprising a shaft, a plurality of disks mounted on said shaft, a handle having pivotal connection with each end of said shaft, a substantially U-shaped frame having each side portion pivotally connected adjacent its free end with one end of said shaft and having the portion intermediate the side portions formed to provide a cutting blade, and a connection between said handle and the side portions of said U-shaped frame normally securing the same against independent oscillation and separable to facilitate the oscillation of the frame to shift the same to an adjusted position.

1,814,470. MICROPHONE RADIO CUT-OUT SWITCH. JAMES R. FOUCH, Los Angeles, Calif. Filed Jan. 12, 1931. Serial No. 508,190. 5 Claims. (Cl. 179—2.)



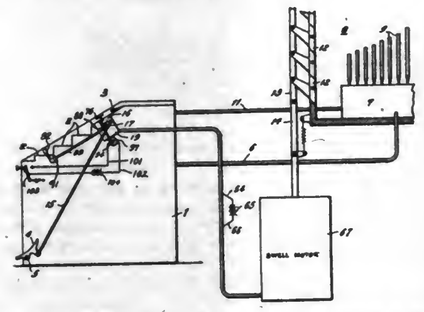
1. A microphone, adapted to be connected to a radio set, including the usual diaphragm and connecting wires, one of said wires adapted to be grounded to the set, and the other adapted for connection with the tube actuating the loud-speaker, and a switch as an integral part of said microphone for cutting off the radio reception and cutting in the microphone.

1,814,471. ART OF MAKING VERMIN DESTROYING MATERIAL. WILLIAM EDGAR GROVE, Chambersburg, Pa. Filed Sept. 29, 1930. Serial No. 485,270. 2 Claims. (Cl. 91—68.)



1. The method of preparing saturated tree bands and like articles from single faced corrugated board which comprises cutting a strip of the board with the corrugations extending transversely to the length of the strip, winding the strip into a spiral roll with the corrugations substantially parallel to to the axis, dipping the roll into a hot saturating solution, and cooling by maintaining the roll with its axis vertical in an upwardly directed air current whereby to drive any hanging drops upwardly into the roll.

1,814,472. ORGAN CONTROL. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Nov. 26, 1929. Serial No. 409,819. 11 Claims. (Cl. 84—346.)

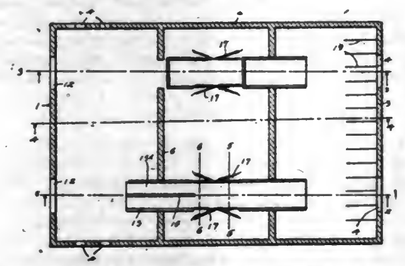


6. In an organ, a plurality of swell chambers, a set of shutters associated with each of said swell chambers, a swell control means for operating all of said sets of shutters together, and means for selectively retarding or advancing the action of any one set of shutters with respect to the other sets.

1,814,473. COLLOIDAL DISPERSION OF PLASTIC COMPOSITIONS SUCH AS CAOUTCHOUC, GUTTA PERCHA, BALATA, ARTIFICIAL RUBBER (FACTIS), AND THE LIKE. ERNST ALFRED HAUSER, Frankfort-on-the-Main, Germany, and REGINALD HARRY WATTS, Herne Bay, England, assignors to Dewey and Almy Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Original application filed Oct. 2, 1930, Serial No. 486,048, and in Germany Dec. 22, 1928. Divided and this application filed Apr. 15, 1931. Serial No. 530,444. 2 Claims. Cl. 18—58.)

1. Method of forming rubber casts comprising immersion of a mold-form in a thixotropic aqueous dispersion of rubber, allowing the said dispersion to assume the gel condition in contact with said mold-form surface, withdrawing the mold-form and an adherent layer of thixotropic gel from the surrounding dispersion, and thereafter removing the aqueous dispersion medium.

1,814,474. BUILDING STRUCTURE. JOSEPH W. HOLMAN, Nashville, Tenn. Filed Mar. 20, 1930. Serial No. 437,418. 3 Claims. (Cl. 20—1.18.)



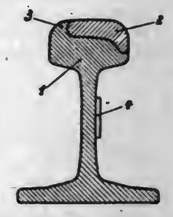
1. In a building, a plurality of superposed floors separated into portions disposed in the same horizontal planes and connecting between opposite walls of the building, partition walls separating the portions of the floors and having passage openings therethrough mezzanine floors disposed between the first mentioned or main floor portions and arranged in planes intermediate the same and also connecting between said opposite walls, a series of ramps facilitating passage of vehicles from the first main floor to the top mezzanine floor, each ramp extending on an unbroken incline from one floor portion to the remote next higher floor portion and disposed transversely of and passing through an intermediate mezzanine floor, and a second series of ramps facilitating downward travel of vehicles from the said top mezanine floor to the first floor of the building including ramps leading from a main floor portion through and transversely of an adjacent mezzanine floor at an unbroken downward inclination to the next lower remote floor portion, said mezzanine floors being warped at each side of each ramp which passes therethrough to facilitate the smooth passage of a vehicle from the unbroken inclined surface of the ramp onto or off of the adjacent mezzanine floor, each of said ramps having guard curbs extending along a portion of each side thereof from a main floor portion to the adjacent warped portion of the adjacent mezzanine floor.

1,184,475. CLASP FOR BRACELETS, STRAPS, LINKAGES OR THE LIKE. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Apr. 21, 1931. Serial No. 531,733. 6 Claims. (Cl. 24—206.)



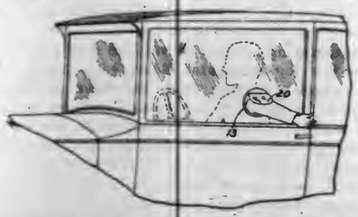
1. A clasp for the purpose specified comprising a base-member having a series of openings for receiving the end links of a chain or bracelet, a member hinged to said base-member and foldable into position thereagainst to hold one of the end links in adjusted position thereon, and a second member hinged to the base-member and foldable across the top of the first folding member to retain the parts in closed relationship with the ends of the bracelet connected thereto.

1,814,476. RAIL STRUCTURE. HEINRICH KURZ, Duisburg-Ruhrort, Germany, assignor to the Firm Vereinigte Stahlwerke, Aktiengesellschaft, Dusseldorf, Germany. Filed Apr. 4, 1930, Serial No. 441,622, and in Germany May 4, 1929. 2 Claims. (Cl. 238—148.)



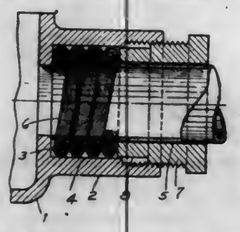
1. The rail structure, wherein the rail head has a wear resisting zone consisting of hard steel which forms with the other part of the rail consisting of soft steel a single inseparable unit, characterized by the fact that the soft steel forms the foot and web of the rail also the lower part of the rail head and extends in the form of a web along the outer surfaces of the head and parts of the head respectively up to the upper edge of the rail head thus embracing the wear resisting zone formed of hard steel.

1,814,477. SIGNAL GATE FOR MOTOR VEHICLES. EDWARD J. MCALLISTER, Los Angeles, Calif. Filed Mar. 12, 1930. Serial No. 435,286. 2 Claims. (Cl. 296—44.)



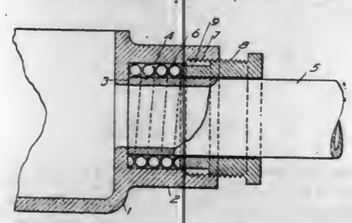
1. In a signal gate for motor vehicles having a glass window with a circular opening, rings and a filler ring secured to the glass at the opening, and a gate hinged to the rings and the filler ring, the combination of a latch bolt construction, there being a recess in the filler ring and a socket in the gate, a latch bolt mounted on a rotatable stem, said stem being journaled in the filler ring and having an operative finger piece, said latch bolt being turnable from a position in the recess to a position in the socket to unlock and lock said gate.

1,814,478. CONNECTER FITTING. GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1928. Serial No. 267,433. 1 Claim. (Cl. 285—166.)



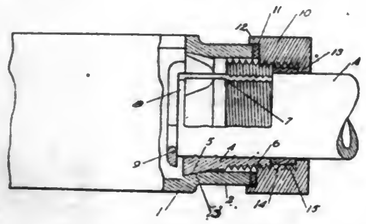
In a connecter fitting, the combination of a walled socket; a gripping device in the socket comprising a plurality of annular wraps of deformable non-compressible filler and a hard wire armor for the filler, the wire encircling the filler and having a cross sectional shape forming ribs on the surface of the device, said wraps giving to the device a tubular form; and means compressing the device axially in the socket to change its dimension radially and adapted to force the wire-formed ribs into clamping and gripping engagement with an inserted member.

1,814,479. CONNECTER. GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1928. Serial No. 267,439. 2 Claims. (Cl. 285—166.)



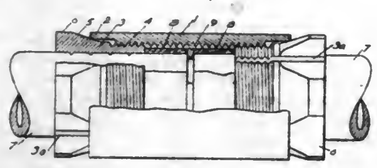
1. In a connecter, the combination of a coil formed of a tube of hard resilient metal; and means compressing the coil axially distorting the cross shape of the tube to force the walls of the coil radially into clamping engagement with a member to be connected.

1,814,480. CONDUIT FITTING. GEORGE RALPH METCALF, Jr., and FRANK JAMES RAYBOULD, Erie, Pa., assignors to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Sept. 8, 1927. Serial No. 218,326. 3 Claims. (Cl. 247—25.)



3. In a conduit fitting, the combination of a body having a conduit-receiving opening; a contractible sleeve in the opening, the walls of the opening in the sleeve having wedging surfaces brought into engagement by an axial movement of the sleeve; means exerting endwise pressure on the sleeve; a gland at one end of the sleeve surrounding the conduit, the end of the sleeve extending into and forming one compressing wall of the gland, the gland having greater axial length than width; and a packing in the gland formed of material compressible with relation to its volume whereby variations in the endwise movement of the sleeve to compensate for variations in conduit and fitting are accommodated by the packing.

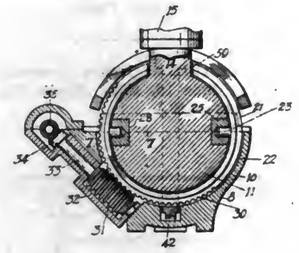
1,814,481. CONDUIT FITTING. GEORGE RALPH METCALF, Jr., and FRANK JAMES RAYBOULD, Erie, Pa., assignors to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Sept. 8, 1927. Serial No. 218,327. 2 Claims. (Cl. 247—25.)



1. In a conduit fitting, the combination of a body having a conduit-receiving opening therethrough, inner screw threads, and wedging surfaces at its outer ends; slotted contractible sleeves extending into each end of the opening, each sleeve having a screw-thread at its inner end and a wedging surface engaging a wedging surface of the body; and an elongated packing of material compressible with relation to its volume at the inner end of each sleeve between the body and adapted to surround an inserted conduit, said packing being compressed by the endwise movement of the sleeve, the length and compressibility of the packing forming a closure under variations of compression incident to variations of conduit and fitting.

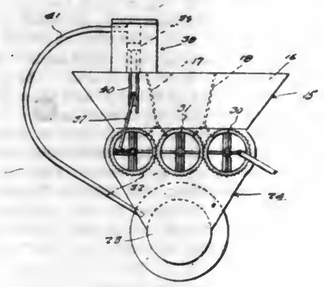
1,814,482. OPERATING TABLE. WILLIAM J. MILLER, Columbus, Ohio, assignor to F. O. Schoedinger, Columbus, Ohio. Filed Nov. 15, 1929. Serial No. 407,530. 9 Claims. (Cl. 45—50.)

1. In an operating table, a base, a table section, a ball and socket mounting supported by said base and connected with said table section to maintain the latter in a plurality of operating positions, said mounting comprising a socketed member turnable about a vertical axis passing through said base, a ball member positioned in said socketed member, said ball member being connected with said table section for movement in unison therewith, a split ring surrounding said ball member and connected with the latter by trunnions, a second ring surrounding said ball member and disposed in a plane perpendicular to said first named ring, guide means for maintaining



said rings in their fixed relative planes of operation, a slotted connection between said second named ring and said ball member, gear teeth provided upon said rings, and worm gearing engaging with said teeth to effect the rotation and locking of said rings and their connected ball member and table section in various positions of relative adjustment.

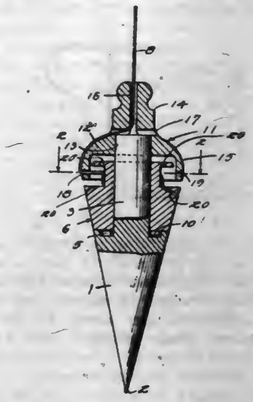
1,814,483. MEASURING AND MIXING MACHINE. WILLIAM T. MORGAN, Neodesha, Kans. Filed Mar. 21, 1930. Serial No. 437,884. 3 Claims. (Cl. 83—73.)



1. In a mixing and proportioning machine of the class described, a hopper provided with partitions dividing it into individual compartments and including a receiver chute, a plurality of bladed pocket forming feeders mounted for rotation in the hopper and in alinement with the discharge end of said compartment, a plurality of intermeshing gears connecting said feeders together for operation in unison, a water tank, associated with the hopper and including a pump, a delivery pipe leading from the pump to said chute, an eccentric pitman connected with the pump piston, and an adjustable connection between said pitman and one of said gears, whereby to permit the water to be proportioned with respect to the delivery of the various ingredients into said receiver chute.

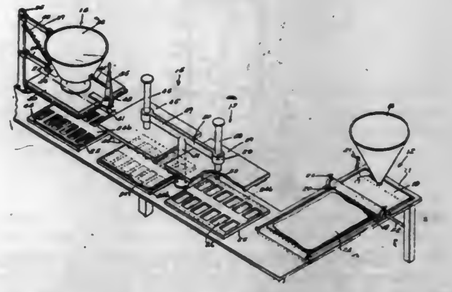
1,814,484. PLUMMET. EARL H. MORRIS, Paducah, Ky. Filed Feb. 15, 1930. Serial No. 428,769. 5 Claims. (Cl. 33—217.)

1. In combination, a plummet, a spool, a plumb line wound on the spool, a spindle connecting the plummet and spool to permit the plummet to move downwardly and rotate with respect to the spool when suspended by the spool, and interlocking elements carried by the plummet



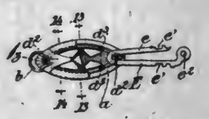
and spool and adapted to engage each other when the plummet is suspended by the plumb line to hold the plummet against rotation with respect to the spool.

1,814,485. PIE MAKING PROCESS. ELIZABETH MOSS, Los Angeles, Calif. Substitute for abandoned application Serial No. 130,834, filed Aug. 28, 1926. This application filed Apr. 18, 1931. Serial No. 531,212. 8 Claims. (Cl. 107—54.)



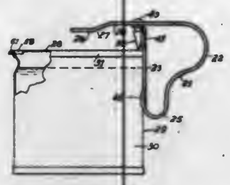
1. A method of producing pies which comprises forming masses of crust dough into thin sheets in contact with a flexible porous member; and molding a lower crust sheet of dough while said porous member remains adherent thereto.

1,814,486. JEWELRY CLASP. THOMAS A. MOUNTFORD, Newark, N. J., assignor to Blancard & Co., Inc., New York, N. Y., a Corporation of New Jersey. Filed Sept. 17, 1930. Serial No. 482,407. 3 Claims. (Cl. 24—230.)



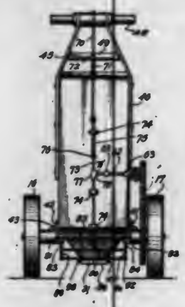
3. A jewelry clasp or the like of the type comprising a box-like body member having a perforated side wall adapted to receive a snap latch, said clasp body member having similar, separately formed top and bottom elements and a side wall having continuous top and bottom edges, said top and bottom elements being connected respectively to the top and bottom continuous edges of the side wall.

1,814,487. COMBINED PERFORATOR AND HANDLE. ARTHUR W. MUELLER, Cincinnati, Ohio. Filed Mar. 14, 1929. Serial No. 347,151. 7 Claims. (Cl. 220—51.)



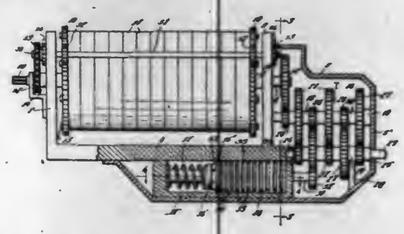
1. A combined can perforator and handle comprising a handle portion, an upright resilient portion arranged to extend in upright direction alongside the can, and an overhanging shank arranged to extend over the cam and provided with a fulcrum part acting on the top of the can, said last-named shank provided with a perforating part having a notch presented toward said resilient portion, and said resilient portion arranged to press said perforating part toward the side of the can for locating the margin of the hole made by said perforating part in said notch.

1,814,488. MARKING DEVICE. LOUIS MURNAHAN, Washington, D. C. Filed Aug. 29, 1930. Serial No. 478,743. 5 Claims. (Cl. 275—2.)



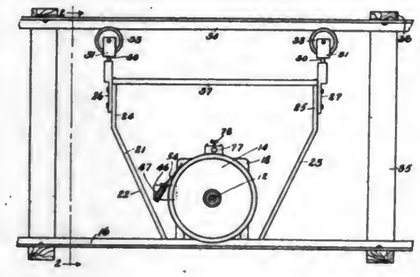
1. A marker comprising a supporting frame, a container mounted on the frame and terminating in a hopper having its outlet near the ground, and a bipartite adjustable closure having a unitary control, said closure being disposed transversely of the hopper outlet and adapted to define an aperture of variable width.

1,814,489. ENGINE. YOSHIO NAKAGAWA, Broderick, Calif. Filed Oct. 28, 1929. Serial No. 403,099. 7 Claims. (Cl. 185—37.)



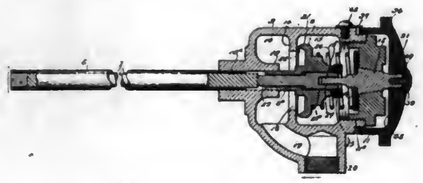
1. In an engine of the class described, a rotatably mounted shaft, a pair of spaced apart gears mounted on said shaft, a plurality of coiled springs circumjacent the shaft between said gear wheels, said springs being arranged in end to end relation, means operatively connecting said springs to each other and said gear wheels, a horizontal shaft, means for rotatably mounting said horizontal shaft, pinions on said horizontal shaft in mesh with said gear wheels, a chain and sprocket connection between said shafts, a power shaft, transmission gearing for transmitting the movement of the first-mentioned shaft to said power shaft, and fluid pressure control means for controlling the speed of said engine.

1,814,490. LURE CARRIER. HARRY OVERBERG, Cincinnati, Ohio. Filed June 16, 1930. Serial No. 461,423. 5 Claims. (Cl. 140—149.)



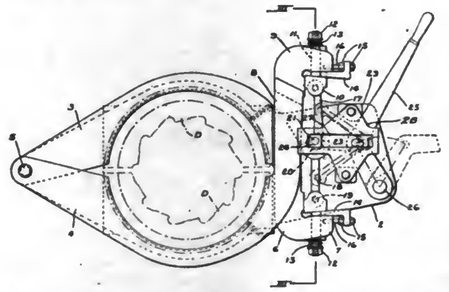
1. The combination with a pair of endless metal tracks, of a device adapted to run upon said tracks and comprising a pair of metal wheels fixed upon a common shaft and electrically insulated from said shaft, a motor mounted upon the shaft intermediate the wheels and adapted to drive the shaft, a pair of parallel arms attached one each to one side of the motor and extending upwardly therefrom in divergent relationship, an overhanging support structure erected at one side of the tracks, a flanged rail attached to the overhanging portion of said support above and in alignment with said divergent arms, a pulley pivotally mounted at the upper end of each of said arms, means normally urging the pulleys upwardly into association with said flanged rail and means attached to the car and normally contacting the wheels thereof, said means being electrically connected to the motor whereby electric current passed through the tracks is transmitted to the motor for effecting movement of the car upon the tracks.

1,814,491. THERMOSTATIC FUEL CONTROLLING DEVICE. HENRY W. O'DOWD, Jersey City, N. J., assignor to Standard Gas Equipment Corporation, a Corporation of Maryland. Filed June 8, 1928. Serial No. 283,809. 2 Claims. (Cl. 236—102.)



2. In or for a thermostatic fuel controlling device, the combination of a valve casing divided into inner and outer chambers for the fuel by a partition wall extending radially inwardly from the side walls of the casing, said chambers being wholly offset axially from each other, said partition wall being formed with an aperture therethrough for the passage of the fuel, a valve arranged in one of said chambers and adapted to be seated upon said partition wall, a rotatable adjusting member connected to the valve and mounted gas tight in a bearing opening in the outer wall of the casing, and a spring arranged to bear at one end against said valve and at the other end against said valve adjusting member.

1,814,492. THREADING DIE HOLDER. HARLEY D. PENNINGTON, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 3, 1927. Serial No. 210,802. 6 Claims. (Cl. 10—100.)

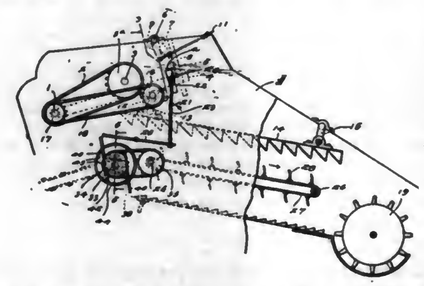


3. The combination with die holders pivotally connected and having crossed opposing buttresses, of an extensible toggle mechanism comprising a pair of substantially straight pivoted toggle arms, pivot blocks at the ends of said arms for engagement with said buttresses, the mounting of said blocks and arms on their pivots being loose so that force may be transmitted directly therebetween without stressing the pivots, and means for extending said arms to clamp said holders together.

1,814,493. CATALYST FOR CHEMICAL REACTIONS. ADOLF PFANNENSTIEL, Berlin-Tempelhof, and HANS KAUTSKY, Berlin-Charlottenburg, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 17, 1927. Serial No. 234,033. 6 Claims. (Cl. 23—233.)

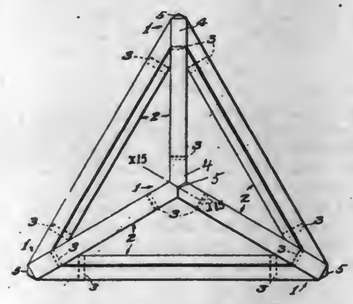
3. The method of producing a catalyst for chemical reactions which comprises precipitating a metal from a solution of a salft thereof by means of siloxene.

1,814,494. THRESHER. PAUL QUINTUS and CHARLES QUINTUS, Garner, Iowa. Filed Nov. 5, 1927. Serial No. 231,839. 1 Claim. (Cl. 130—1.)



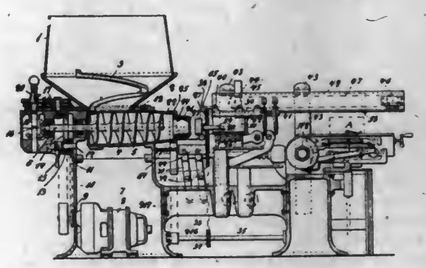
In a thresher, a straw conveyor and a drive shaft therefor, a bundle conveyor and a drive shaft therefor, a member loosely mounted upon said bundle conveyor shaft and driven from said straw conveyor shaft, a lever pivotally mounted on said bundle conveyor shaft and releasably engaged with said member, a rake overlying the straw conveyor, arms each pivotally supported at one end above the rear end of the rake, means suspending said end of the rake from the arms, a rock shaft overlying the free ends of the arms, arms carried by the rock shaft, links connecting the free ends of said first arms to the rock shaft arms, another arm carried by the rock shaft, a spring connected to said other rock shaft arm and functioning to yieldingly support the rear end of the rake, a lever pivoted between its ends for movement into and out of the path of said first lever, a rod engaged with said second lever, an eye carried by one of said first arms and having said rod passing therethrough, and a spring mounted upon the rod between said eye and second lever.

1,814,495. SKELETON TETRAHEDRON FOR JETTIES AND CURRENT DEFLECTORS. DANIEL F. SHELDON, Montalvo, Calif. Filed Oct. 31, 1928. Serial No. 316,125. 3 Claims. (Cl. 61—4.)



1. A corner member for a skeleton tetrahedron comprising divergent stubs flaring from a common source, each stub being provided with reinforced rods co-extensive the length thereof and terminating in spaced loops.

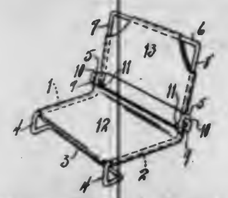
1,814,496. MACHINE FOR AUTOMATICALLY FORMING AND DIVIDING PLASTIC MASSES. HERBERT AUGUST LEONARD SWÄRD and ANTON GUSTAF HILDORIUS SWÄRD, Nassjo, Sweden, assignors to Svenska Jastfabriks Aktiebolaget, Stockholm, Sweden. Filed Oct. 24, 1927, Serial No. 228,435, and in Sweden Oct. 30, 1926. 12 Claims. (Cl. 107—21.)



1. A machine for automatically forming and dividing plastic masses, comprising in combination means for feeding and forming a homogeneous blank rod, means for cutting off blank pieces of a predetermined length from said rod and adapted to take part in the continuous movement of the latter so that the cutting off will take place dur-

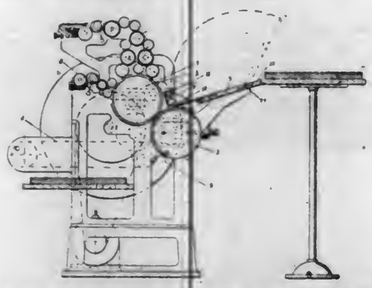
ing the movement of the rod, a reciprocating carriage adapted to automatically seize, move and deliver said blank pieces to a wrapping place, means for automatically and periodically coupling the cutting off means to and releasing the same from the carriage, so that the same takes part in the movement of the latter over a predetermined distance, and means for periodically rotating said cutting off means when coupled to the carriage, so that the cutting off means is caused to move through the blank rod during the continuous movement of the same for cutting off blank pieces having cutting surfaces at right angles to the longitudinal direction of the rod.

1,814,497. FOLDING SEAT FOR STADIUMS AND THE LIKE. EDWIN I. THOMPSON, Fort Worth, Tex. Filed Oct. 27, 1930. Serial No. 491,423. 1 Claim. (Cl. 155—133.)



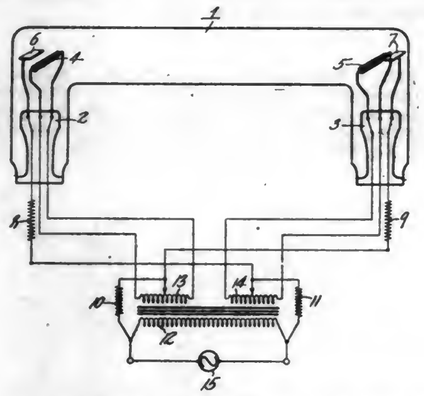
A foldable seat comprising a front bar and side arms and hooks formed at the juncture of said bar and arms and spacing said bar from said arms and positioning said bar below said arms, said arms terminating at the rear ends with upstanding standards and eyes formed on said standards, and a back member having top bar and integral arms extending downwardly and terminating with hooks engaging said eyes and the beaks of said hooks engaging said standards for bracing said back member in operative position.

1,814,498. SURFACE-PRINTING, ROTARY SHEET-PRINTING-PRESS. ALBERT TRUTZEL, Stendal, Germany, assignor to the Firm Schwarz-Presse, Aktiengesellschaft, Stendal, Germany. Filed Dec. 22, 1928, Serial No. 327,880, and in Germany Jan. 2, 1928. 1 Claim. (Cl. 101—145.)



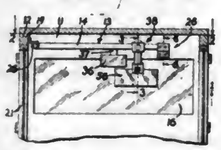
In a rotary sheet-printing press designed for surface printing, the combination of relatively large cylinders of equal size, one carrying the printing form and the other serving as an impression cylinder, of a feed table including a fixed part arranged in spaced relation to said cylinders, and a movable part hinged to the fixed part remote from said cylinders with its free edge positioned immediately adjacent said cylinders for sheet feeding purposes and furniture carried by the free edge of and movable with said movable table part, the hinged mounting of the movable part permitting such part to be arranged bodily and wholly beyond a vertical plane passing through the hinge in a direction away from the cylinders, the movable part having such length that when swung upwardly on its hinged connection ample space is provided between the fixed part and the cylinders to permit a workman to operate directly on the press.

1,814,499. CIRCUITS FOR DISCHARGE TUBES. CARL J. R. H. VON WEDEL, Berlin, Germany, assignor, by mesne assignments, to Electrons, Inc., a Corporation of Delaware. Filed Feb. 17, 1928, Serial No. 264,921. Renewed Mar. 6, 1931. 10 Claims. (Cl. 176—124.)



1. In a glow lamp system including an envelope having a gas therein, a plurality of incandescent electrodes spaced apart therein and auxiliary electrodes in close proximity to each of said incandescent electrodes, the combination of a transformer having a primary and a plurality of secondaries corresponding in number to said incandescent electrodes, connections between each secondary and each terminal of said primary, each connection containing a current limiting resistance and a connection between each terminal of said primary and the auxiliary electrode adjacent the incandescent electrode electrically connected to the other terminal of said primary, whereby the electron field around the incandescent electrode acting as an anode is dispersed and ionization of the gas surrouunding said electrode is developed.

1,814,500. GLARE SHIELD. WILLIAM J. SUMMERBELL, Los Angeles, Calif. Filed Apr. 10, 1929. Serial No. 354,158. 1 Claim. (Cl. 296—97.)

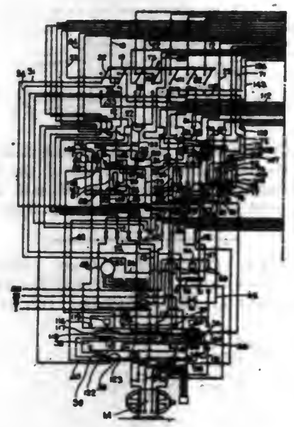


A glare shield for a vehicle having a front window and a side window, comprising a track curved intermediate its ends, brackets adapted to be secured to said vehicle and to support said track over both of said windows, a head embracing said track and adapted to be slid thereon to a position over either of said windows, a bar extending slidably through said head angularly with respect to said track, a spring interposed between said head and said bar and pressing said bar against said track to increase the friction therebetween, a set screw threaded through said head and adapted to press said bar against said track to lock both the head and the bar in selected position with respect to said track, and a shield mounted upon said bar.

1,814,501. MOTOR CONTROL SYSTEM FOR ELECTRIC ELEVATOR INSTALLATIONS. EDWIN O. ANDERSON, Jersey City, N. J. Filed May 20, 1927. Serial No. 192,856. 10 Claims. (Cl. 187—29.)

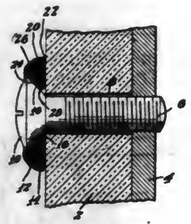
1. In a motor control system for electric elevator installations, the combination of an electric driving motor

for driving an elevator car, car push button switches for controlling the circuit of said motor to effect travel of the car to any desired landing, landing push button switches operable independently of the operation of the car push buttons to effect movement of the car to any desired landing, said landing push buttons being inoperative on



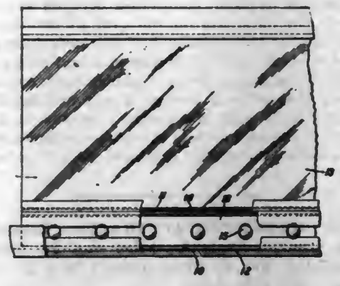
up motion of the car under the control of a car push button, and operable on down motion of the car at intermediate landings independently of the car push buttons but dependently of the position of the car with respect to the desired intermediate landing, and means for automatically effecting restarting of the car from an intermediate landing without operation of the car push button.

1,814,502. WASHER. LEON JOACHIM BARWOOD, Cambridge, Mass. Filed Dec. 19, 1929. Serial No. 415,204. 1 Claim. (Cl. 85—50.)



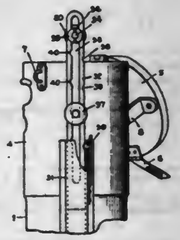
A padded ring washer comprising a metal ring element and a fibrous ring element, the metal ring element having a plurality of prongs along its opening extending into the fibrous ring element and embedded in the fibrous ring element along the opening of the fibrous ring element, whereby the ring elements are assembled together side by side in a unitary structure so as to be manipulated as a unit, the fibrous ring element being yielding and adapted to engage against an article upon which the washer is adapted to be mounted so as to act as a padding, the fibrous ring element being wedged into the metal ring element, and the washer being adapted to be secured to the article by a member extending through the openings of the ring elements and into the article.

1,814,503. TRACK FOR SLIDING SASH. FRED S. BEIGER, Los Angeles, Calif., assignor to The Eustis Specialty Co., Los Angeles, Calif., a Corporation of California. Filed Apr. 22, 1929. Serial No. 357,145. 3 Claims. (Cl. 16—100.)



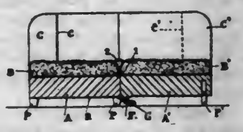
2. A support for sliding closures having a bearing comprising a plurality of balls and a tubular cage for the balls having apertures in its sides through which the balls project.

1,814,504. CYLINDER TYPE FUMIGATING APPLICATOR. CHARLES D. COLLINS, New York, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Aug. 23, 1928. Serial No. 301,449. 1 Claim. (Cl. 221—103.)



A device of the character described comprising a container, a pump extending within the container for withdrawing liquid therefrom, means for limiting the stroke of the pump, said means comprising a vertically adjustable link engaging the pump and a spring latch engageable with a series of notches on the link, the latch being carried by the container.

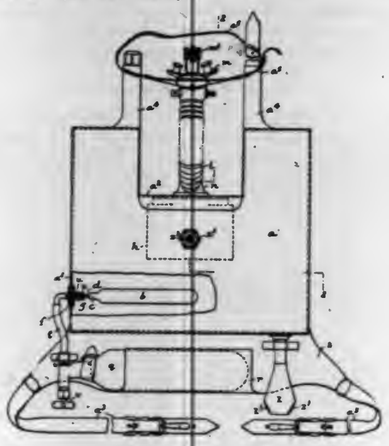
1,814,505. SOFA CAPABLE OF BEING CONVERTED INTO A BED. MARIE LOUIS ADOLPHE HENRI DAUPHIN, Paris, France. Filed Aug. 10, 1928, Serial No. 298,860, and in France Sept. 15, 1927. 1 Claim. (Cl. 5—38.)



A combined convertible sofa and bed comprising a stationary horizontal seat, a back connected for vertical swinging movement to the rear longitudinal edge of the seat and adapted to be arranged in a vertical position for use as a sofa or extended into a horizontal position aligning with the seat when the device is to be used as a bed, side panels connected to both the stationary seat and to the back, the panels of the seat having rectilinear horizontal top edges and the panels of the back having rectilinear vertical front edges, the panels on the seat being recessed on their inner surfaces to leave vertical shoul-

ders engageable by the front edges of the panels on the back to limit the forward movement of the latter when the device is used as a sofa, while the panels on the back are recessed on their outer surfaces to leave transverse shoulders which are adapted to overlie and contact with the upper edges of the seat panels when the device is used as a sofa, an operable connection between the adjacent panels on the back and on the seat to permit the back panels to follow the movement of the back during its displacements, means carried by the back and seat panels for releasably maintaining the back panels in an engaged position when the device is used as a sofa and permitting of a disengagement and displacement of the back section panels when the said back is extended to a horizontal position and means to support the back when in a horizontal position.

1,814,506. BREATHING APPARATUS. ROBERT HENRY DAVIS, London, England. Filed Aug. 20, 1929, Serial No. 387,119, and in Great Britain May 21, 1929. 3 Claims. (Cl. 128—191.)



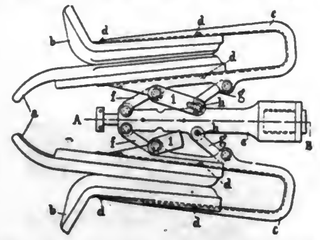
1. A breathing apparatus, comprising a breathing bag, a canister containing an absorbent of carbon dioxide arranged in communication with said breathing bag, a mouthpiece operatively connected thereto, a cylinder charged with a respiratory gas under pressure in valve-controlled communication with said breathing bag to furnish the normal supply of breathing gas to said bag, and at least one capsule charged with a respiratory gas under pressure disposed within the said breathing bag in such a position as to be breakable to liberate an emergency supply of gas into the said breathing bag by a wrenching movement applied from the exterior of said bag.

1,814,507. GLASS. CHARLES EDWIN GOULD, WILFRED MARSH HAMPTON, and HAROLD SHARPE MARTIN, West Smethwick, England, assignors to Chance Brothers and Co. Limited, West Smethwick, England. Filed Mar. 14, 1929, Serial No. 347,170, and in Great Britain Mar. 19, 1928. 2 Claims. (Cl. 106—36.1.)

1. A batch for making glass especially transparent to ultra-violet radiation of wave lengths below 3200 Angstrom units consisting of silica 560 parts, borax 527 parts and powdered metallic zinc 8 parts.

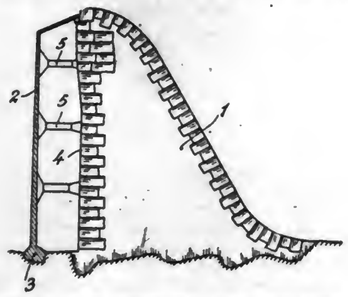
1,814,508. RECEPTACLE CLEANING MEANS. ALFRED GRIFFITHS, Strand, London, England, assignor to Kleenglas (1929) Limited, London, England, a British Company. Filed July 8, 1929, Serial No. 376,645, and in Great Britain Aug. 18, 1928. 2 Claims. (Cl. 15—101.)

1. Means for washing, drying and polishing tumblers and like articles, comprising, in combination, a rotatable hollow and perforated stem, pairs of links pivotally connected to said stem, one link of each pair having an elongated hole at its pivoted point, U shaped elements



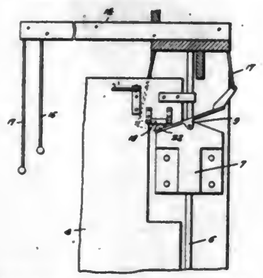
each pivotally attached to one pair of said links, squeegees secured to the inner side of each leg of the U elements and means limiting the movements of said U elements away from said stem under centrifugal force.

1,814,509. DAM. CHRISTIAN FREDRIK GRÖNER, Oslo, Norway. Filed June 11, 1929, Serial No. 370,072, and in Norway May 11, 1929. 1 Claim. (Cl. 61—30.)



A permanent dam comprising the combination with a main concrete dam adapted to withstand all the load of the water pressure, of a thin water tight wall located a certain distance away from the upstream face of the dam, and means for supporting the thin wall against the dam including a number of independent columns adapted to yield in all directions in such a manner that the said thin wall is permitted to expand or contract in its own plane independent of the main dam.

1,814,510. CLOSURE OPERATOR. JOHN GUNDERSON, Concrete, Wash. Filed Sept. 24, 1928. Serial No. 308,011. 1 Claim. (Cl. 268—61.)



A door operator comprising a swingably mounted door, a hinged edge portion of the door being provided with an indenture, a roller on the door enclosed within said indenture, an arcuate-shaped track, a support adapted to be mounted on a stationary structure adjacent the door so that its bulk will be accommodated by the indenture in the door, the upper portion of said support being provided with inclined surfaces leading toward an intermediate high point, a rockable connection between the middle portion of the track and the intermediate high point of the support, said roller being adapted to ride on the said track, and means for tilting the said track so as to change the inclination of the said track and a rib on the outer part of the track gradually sloping downwardly from one end of the track to a point adjacent the center thereof, said rib being engaged by the roller and acting as a check to the opening movement of the door.

1,814,511. LADY'S HOSE SUPPORTER. ANNA O. HEBNER, Los Angeles, Calif. Filed May 28, 1930. Serial No. 456,652. 3 Claims. (Cl. 241—1.)



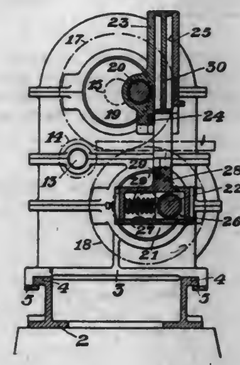
1. A lady's hose supporter comprising a waist-encircling band, a plurality of spaced buttons along the lower front edge thereof, a plurality of eyelets, an elastic webbing passing through said eyelets, garter clasps slidable on said elastic webbing, and a plurality of non-elastic tabs each in the shape of a loop comprising a front and rear portion, the latter being provided with a button-hole for engagement with a button so that said button is disposed within said tab.

1,814,512. THERMOSTATIC CONTROL FOR SHOWER HEADS. ROBERT HETHERINGTON, Sharon Hill, Pa. Filed Dec. 9, 1929. Serial No. 412,814. 11 Claims. (Cl. 236—93.)



3. In a conduit shower equipment, a throttled inlet conduit, a shower nozzle having shower outlets, an intermediate conduit between the inlet and outlets, a safety outlet conduit adapted to drain away the liquid entering the intermediate conduit to prevent it reaching the shower outlets, a valve for the safety outlet opening against the liquid pressure inside the intermediate conduit, and a resilient thermostat inside the intermediate conduit connected to the valve and adapted to pull the valve open at a high temperature by overcoming the said liquid pressure.

1,814,513. APPARATUS FOR SHEARING MATERIAL. LANE JOHNSON, Ingram, Pa., assignor to United Engineering and Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 25, 1928. Serial No. 256,919. 4 Claims. (Cl. 164—68.)



3. Shear structure for severing moving material, comprising cutting means, supporting structure therefor, rotatable driving means for opposed portions of the supporting structure, and a resilient connection between one of such portions of the supporting structure and its driving means.

1,814,514. SHOE, BOOT, AND THE LIKE. GEORG EMANUEL KARLSON, Stockholm, Sweden. Filed Feb. 7, 1930, Serial No. 426,634, and in Sweden Jan. 3, 1929. 1 Claim. (Cl. 36—76.)

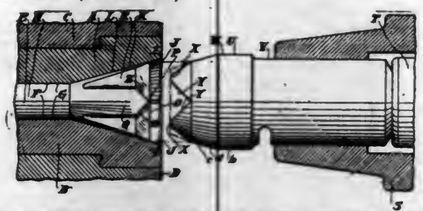


A shoe, boot or the like provided with a shank piece placed between the soles, said shank piece comprising a stiff but resilient plate, an elastic protective cover completely surrounding said plate, and a dome-shaped swell on said cover, stiffened by and in the vicinity of the foremost end of the plate, the shank piece serving as a support for the longitudinal and transverse arches of the foot.

1,814,515. MANUFACTURE OF MATERIALS OF THE NATURE OF CATALYSTS FOR THE OXIDATION OF OXIDIZABLE GASES IN ADMIXTURE WITH AIR OR OXYGEN. BERTRAM LAMBERT, Oxford, England, assignor to National Processes Limited, London, England, an English Limited Liability Company. Filed Aug. 23, 1928, Serial No. 301,096, and in Great Britain Sept. 6, 1927. 4 Claims. (Cl. 23—234.)

1. In the manufacture of catalytic materials, for the oxidation of oxidizable gases in the presence of oxygen, the step of causing a chromium hydrogel to adsorb at least one slightly soluble base.

1,814,516. DOLLY FOR DRILL SHARPENERS. CHARLES LARSON, Baxter Springs, Kans., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 27, 1928. Serial No. 295,720. 3 Claims. (Cl. 76—95.)



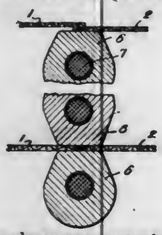
1. A dolly comprising a head having a frusto-conical portion, there being a forming element on one end thereof, and a conical peripheral surface on said element and of greater degree of inclination than the frusto-conical portion.

1,814,517. INVERTED FLATIRON HOLDER. EMMA E. MCDOWELL, Monrovia, Calif. Filed May 28, 1930. Serial No. 456,629. 9 Claims. (Cl. 6.8—27.)



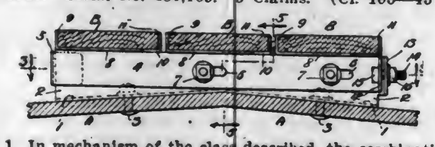
1. An iron holder having a lower and an upper frame connected together, there being an open space at one end of the upper frame for the insertion of an iron, the upper frame supporting the iron inverted with the handle extending toward the lower frame, the lower frame having a handle engaging device adapted to engage and to center the handle.

1,814,518. SHOE LINING AND PROCESS OF MAKING THE SAME. MICHAEL J. MCGRAIL, Gardiner, Me., assignor, by mesne assignments, to Boston Machine Works Company, a Corporation of Massachusetts. Filed Sept. 5, 1929. Serial No. 390,521. 9 Claims. (Cl. 154—42.)



1. A lining for a shoe upper comprising pieces of strong, pliable, pervious, and compressible sheet material of a kind suitable for use as a shoe lining, said pieces being overlapped to form a multi-ply joint, the overlapping plies at the joint being so condensed that the aggregate thickness of the several plies is not substantially greater than the thickness of a single ply of the normal sheet material.

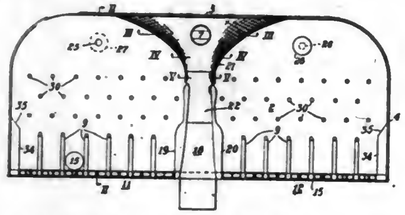
1,814,519. RUNNING BOARD ANCHOR FOR RAILWAY CARS. JOHN MCMULLEN, Buffalo, N. Y. Filed Sept. 11, 1930. Serial No. 481,169. 5 Claims. (Cl. 105—457.)



1. In mechanism of the class described, the combination with a running board or platform for railway cars, of means for anchoring the same on the car roof, comprising essentially a cross member secured permanently to the roof and having a series of supporting flanges with clamping ends for engaging the running board, and a second cross member alongside of the first and having a series of flanges with clamping ends that clamp to opposite edge of the running board, and means for drawing the clamping ends tightly together.

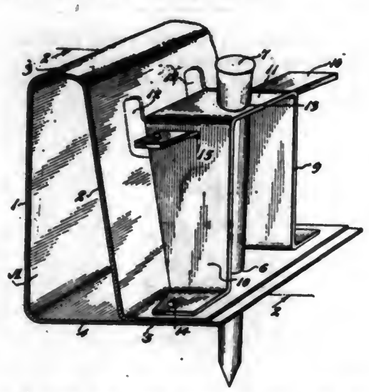
2. In mechanism of the class described, the combination of a freight car running board, of a flanged stationary supporting member secured to the car roof, whose flanges are angularly bent to engage the running board at one edge, and a cooperating flanged adjustable member alongside of the stationary member, whose flanges are angularly bent to engage the running board at the opposite edge, and means for drawing the engaging ends tightly against the running board.

1,814,520. AMUSEMENT DEVICE. ALEXANDER MILLER, Donora, Pa., assignor to Mose Miller, Donora, Pa., and himself, as trustees. Filed Mar. 7, 1930. Serial No. 433,903. 8 Claims. (Cl. 273—124.)



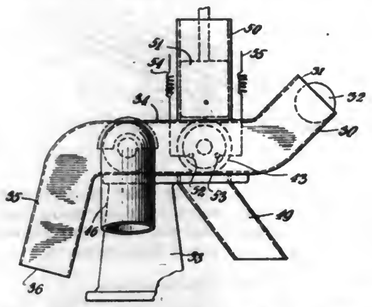
1. A game device comprising an inclined base having an enclosure at the back and sides thereof, a guideway entering from the front thereof and terminating in a raised knoll of complex curvature sloping symmetrically on opposite sides of the runway and merging into the surface of the base.

1,814,521. STAKE BOX. GEORGE H. MILLER, Milwaukee, Wis., assignor to Metal Forms Corporation, Milwaukee, Wis., a Corporation. Filed Feb. 20, 1929. Serial No. 341,518. 3 Claims. (Cl. 25—118.)



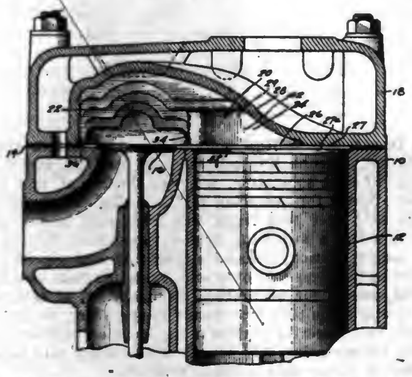
1. In a road rail construction of the class described, the combination with a rail comprising a side member having a slot therein, of a stake box including a vertical wall substantially at right angles to the side member of the rail, and fastening means between the box and rail comprising a projection on the vertical wall of the box which completely fills the slot in the rail, the base of the stake box abutting with the base of the rail so that the box forms a brace for the rail.

1,814,522. METHOD OF AND APPARATUS FOR TESTING METALS AND ALLOYS. MAX A. MILLER, New York, N. Y., assignor to Milwell Electric Devices Corporation, New York, N. Y. Filed Jan. 5, 1929. Serial No. 330,564. 11 Claims. (Cl. 194—101.)



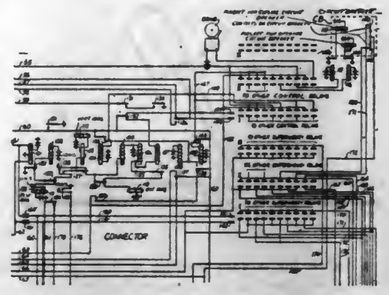
1. In a device of the class described, the combination with a longitudinal passage through which metal disks may be made to travel, of a magnet transversely arranged at one side thereof, said magnet being regulated to exert practically no action upon disks containing a predetermined amount of magnetic metal, and to repel disks made of diamagnetic metal, an opening through one of the sides of said passage located at a point nearer to the point of insertion of said disks, another magnet placed in cooperative relation to said opening, adapted to attract through said opening disks containing a relatively high amount of magnetic material, and means for detaching from said magnet, the disks thus attracted.

1,814,523. COMBUSTION CHAMBER CONSTRUCTION FOR INTERNAL COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1930. Serial No. 440,693. 18 Claims. (Cl. 123—191.)



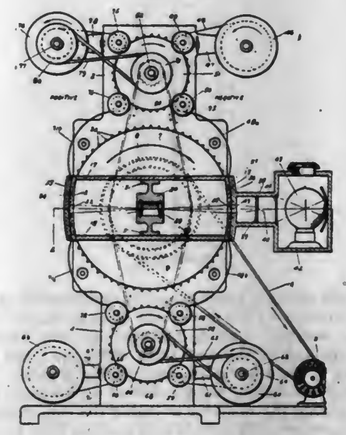
1. An internal combustion engine comprising a cylinder block having a cylinder bore therein, intake and exhaust valve disposed laterally relative to the cylinder bore, and a cylinder head including a relatively low portion having a substantially flat lower surface overlying the portion of the cylinder bore adjacent to the intake valve to form a highly restricted clearance over the piston in the top center position thereof and including a relatively reduced angular portion forming a combustion chamber over the valves and over the remaining portion of the cylinder bore adjacent to the exhaust valve, said relatively low portion forming the inner lateral wall of the combustion chamber and providing a vent between said clearance and said combustion chamber adjacent to the intake valve.

1,814,524. REMOTE CONTROL SYSTEM. MARTIN L. NELSON, Park Ridge, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Aug. 3, 1927, Serial No. 210,241. 17 Claims. (Cl. 177—353.)



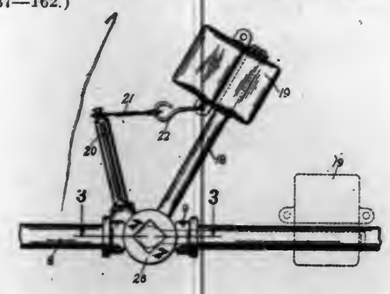
3. In a remote control system, a plurality of groups of devices, a remote control station from which said devices may be operated, automatic means for operating said devices, a finder switch having access to said devices, a sender, means responsive to an operation of one of said devices for starting said finder to find the device, means controlled by the finder for arranging said sender to send a code indicating the device operated, and the operation performed, and means controlled from said control station for starting said sender to transmit said code and a code indicating the group.

1,814,525. CONTINUOUS PRINTER. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed July 18, 1927. Serial No. 206,590. 2 Claims. (Cl. 88—24.)



1. A printing apparatus comprising a feed member consisting of a circular rotary disk provided with peripheral teeth acting on a negative film at one side and on a positive film at the other side, curved film guides supporting said films in driving relation to said feed member and independently thereof, the radius of the arc of said film guides being greater than that of said feed member, a lens between said films adjacent said feed member, a light source outside said negative film and in alignment with said lens.

1,814,526. FUSIBLE LINK CONTROLLED VALVE. GEORGE B. PICKOP, New Haven, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn. Filed Jan. 30, 1928. Serial No. 250,705. 3 Claims. (Cl. 137—162.)



3. In a valve for a fuel feeding system or the like, a valve casing adapted to be mounted closely adjacent a floor, a valve within said casing, a weighted lever connected to said valve and urging the latter into closed position, a fusible link normally holding said valve in open position, means on said lever which may contact with a part of the system upon the valve becoming fully closed, and means extending from said lever adapted to engage the floor to prevent said means from engaging the part of the system when the valve is closed by the lever.

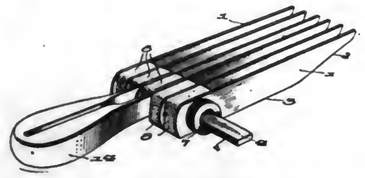
1,814,527. MOP WRINGER. CHARLES CLINTON POTTER, Jr., Los Angeles, Calif., assignor of one-half to R. Lagrand Derfer, South Pasadena, Calif. Filed May 28, 1929. Serial No. 366,589. 3 Claims. (Cl. 15—120.)



1. A mop wringer comprising the combination of a mop holding member on the lower end of said handle; a mop wringing member turnably mounted on said handle for holding one end of the mop cloth while the other end of said cloth is held by said mop holding member; and a transversely extending handle on said mop wringing member for turning the same for wringing the mop cloth, there being a space between said handle and the body portion of said wringing member to receive the fingers of a hand grasping said handle.

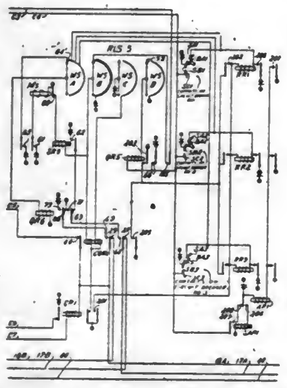
1,814,528. MULTIPLE BLADE KNIFE WITH ADJUSTABLE BLADES. LAURENCE J. PURCELL, New York, N. Y. Filed Aug. 23, 1930. Serial No. 477,434. 8 Claims. (Cl. 146—210.)

1. A multiple blade knife comprising a plurality of blades each having a non-circular opening therein, a blade supporting shaft of non-circular cross section passing through said openings, a plurality of resilient washers each having a non-circular opening adapted to receive therethrough the non-circular supporting shaft, said



washers being positioned on the shaft between each pair of blade members, and means for compressing the resilient washers to uniformly and simultaneously decrease the distance between the individual blade members.

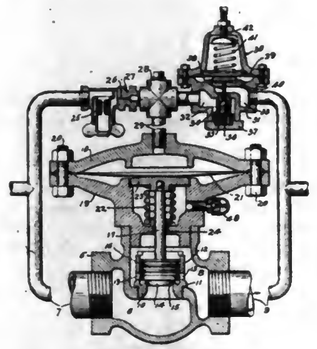
1,814,529. REMOTE CONTROL SYSTEM. CHARLES REMINGTON, Liverpool, England, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Feb. 6, 1926, Serial No. 86,383, and in Great Britain Feb. 13, 1925. Divided and this application filed May 15, 1926. Serial No. 109,325. 7 Claims. (Cl. 177—353.)



2. In a remote control system, a control station and a substation, a trunk line between said stations, switching devices at said substation, selecting devices at said substation, means for operating said selecting devices by impulses sent over said trunk line from said control station to select a switching device, supervisory devices at said control station, means for operating said supervisory devices by impulses sent over said trunk line from said substation, means for preventing the operation of said second means while said first means is operating, means for holding said selecting devices in an operated position, and means for operating said second means while said selecting devices are in said operated position.

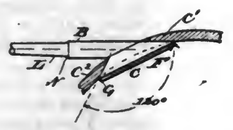
6. In a remote control system wherein circuit closing devices are manually operated from a distance to their closed positions and are automatically tripped to their open positions in response to circuit conditions, a supervisory contact for each of said devices, means on each of said devices for placing a potential on its corresponding supervisory contact when the device is in its closed position and for disconnecting such potential therefrom when said device is moved to its open position, a relay energized responsive to the operation of one of said devices from its open to its closed position for connecting a like potential on the corresponding supervisory contact, means for maintaining said relay energized irrespective of the position of said device, supervisory devices for indicating at a distance the position of said devices, means for operating said supervisory devices in accordance with the potential connected to said supervisory contacts, automatic means for thereafter deenergizing said relay to disconnect the said like potential from said supervisory contact, and means common to said circuit-closing devices and operated responsive to the deenergization of said relay for reoperating said supervisory devices to again check and indicate the position of said circuit-closing devices.

1,814,530. REGULATING VALVE. PAULSEN SPENCE, Orange, N. J. Filed Oct. 21, 1925. Serial No. 63,920. 3 Claims. (Cl. 50—10.)



1. In a regulating valve, a valve casing having a high pressure side and a low pressure side, a valve for controlling the flow of fluid from one side of said valve casing to the other, a diaphragm chamber, a diaphragm therein, means for causing said valve to be actuated in at least one direction by said diaphragm, means for bleeding fluid under pressure to each side of said diaphragm, valve means for quickly venting pressure fluid from each side of said diaphragm at different times, and a spring in said diaphragm chamber on the valve casing side of said diaphragm, said spring being located out of the path of fluid through said valve casing and being completely housed by said diaphragm chamber.

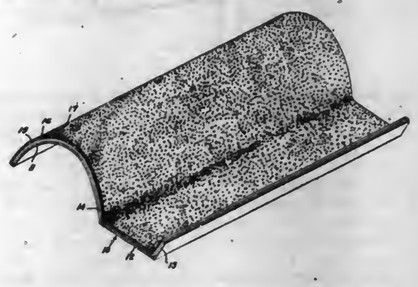
1,814,531. WIRE SPOKE. EDWARD W. STOLER, Mansfield, Ohio, assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Original application filed Apr. 13, 1927, Serial No. 183,489. Divided and this application filed Apr. 16, 1928. Serial No. 270,283. 2 Claims. (Cl. 301—59.)



1. In a tension wheel a hub member provided with cone shaped spoke receiving sockets extending in a substantially radial direction, spokes having headed ends received in said sockets and straight body portions extending tangentially of said hub member, the planes of junction between said body and head being substantially tangential to a circle within said hub member.

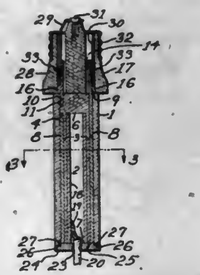
2. In a tension wheel a hub member provided with cone shaped spoke receiving sockets extending in a substantially radial direction, spokes having headed ends received in said sockets and straight body portions extending tangentially of said hub member, the planes of junction between said body and head being substantially tangential to a circle within said hub member and normal to the axis of said cone shaped sockets.

1,814,532. ROOFING TILE. WILLIAM A. SUTHERLAND, Los Angeles, Calif. Filed July 31, 1928. Serial No. 296,507. 2 Claims. (Cl. 154—40.)



1. The method of making roofing tiles and the like comprising preparing flexible material consisting of a layer of paper, adhesive applied to the paper, and comminuted material applied to the adhesive, forming a layer of sheet material into the form it is desired to give to the finished tile, applying a layer of weather resisting adhesive thereto, and then applying the paper with its adhesive and comminuted material to the layer of adhesive on the sheet material.

1,814,533. RADIO CONNECTION. HARRY UNGAR, St. Louis, Mo., assignor, by mesne assignments, to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 5, 1923. Serial No. 629,956. 3 Claims. (Cl. 175—41.)

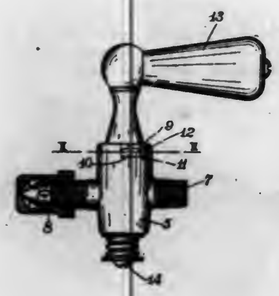


1. In a radio connection, a member formed of insulating material, a plug attached to said member and adapted for insertion in a lamp socket, said member having concentric recesses leading in from the free end thereof, a tube positioned in the outer recess and having an extension for engaging one terminal of said plug, a second extension insulated from said tube and adapted for connection with the other of said plug terminals, a second tube positioned in the other recess and being insulated from the first-mentioned tube and means for attaching said second tube to a radio set and subsequent inductive connection to said socket.

1,814,534. GAS COCK. SCOTT VAN ETTEN, Marysville, Ohio. Filed Apr. 4, 1928. Serial No. 267,291. 2 Claims. (Cl. 251—152.)

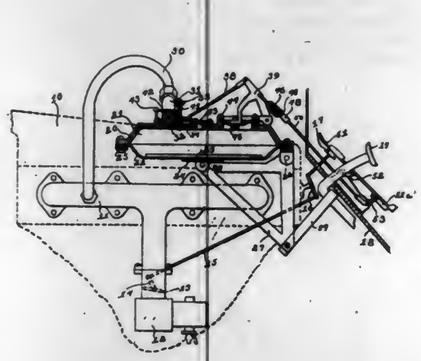
1. In a rotary valve including a valve casing having a plug seat and a plug to fit in said seat, one of said parts

provided with a single semmental groove lying entirely below the plane of the entrance of the casing and the other with two sockets spaced apart a distance substantially equal to the distance between the terminals of the groove,



and a stop member adapted normally to occupy jointly said groove and one of said sockets to limit the oscillation of the plug for right or left hand operation, according to the socket occupied by the stop, for opening and closing the plug in said seat.

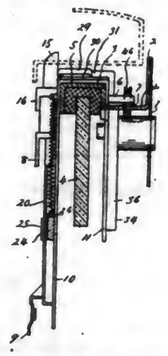
1,814,535. BRAKE MECHANISM. JOY V. WIGLE, Chattanooga, Tenn., assignor to American Automobile Appliance Company, Chattanooga, Tenn., a Corporation of Delaware. Filed Mar. 1, 1929. Serial No. 343,666. 16 Claims. (Cl. 188—152.)



13. In combination, an internal combustion engine having a throttle controlled intake connection, a brake operating device, a vacuum chamber having a fixed wall provided with a port and a diaphragm wall, a duct connection from the diaphragm chamber to the intake connection, a valve for the port for controlling the duct and fluid tension controlled diaphragm means for operating the valve.

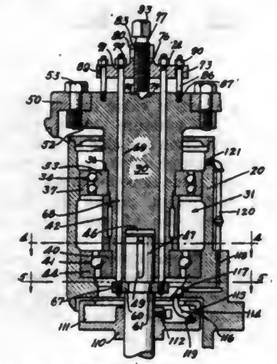
1,814,536. DOORLOCK. CLIFFORD J. WILLIAMS, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 2, 1925. Serial No. 6,433. 15 Claims. (Cl. 292—173.)

5. The combination with a door having a run-way for a vertically movable glass panel, of a latch having a case plate secured to said door, a bolt movable over a portion of the case plate, a roll-back upon the inner side of the door for retracting the bolt, and means movable longitudinally



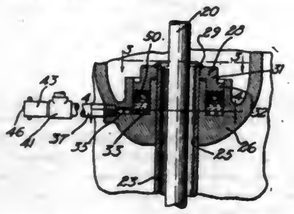
and exteriorly of the door and in advance of the run-way for actuating the roll-back to retract the bolt from the outside of the door.

1,814,537. SHAFT POSITIONING DEVICE. JOHN A. WINTROATH, Los Angeles, Calif., assignor to Peerless Pump Company, Los Angeles, Calif., a Corporation of California. Filed June 1, 1925. Serial No. 34,136. 15 Claims. (Cl. 287—58.)



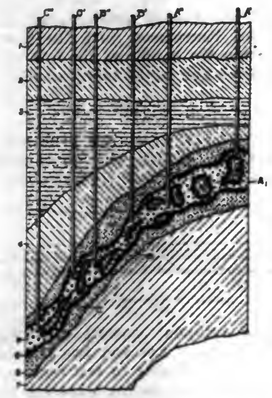
7. a shaft adjusting mechanism comprising: a spindle; a shaft drivably attached to said spindle; supporting members for supporting said shaft; and means engaging said spindle and said supporting members for changing the position of said supporting members relative to said spindle whereby said shaft is moved.

1,814,538. TUBING TENSIONING DEVICE. JOHN A. WINTROATH, Los Angeles, Calif., assignor to Peerless Pump Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 10, 1927. Serial No. 239,250. 6 Claims. (Cl. 103—102.)



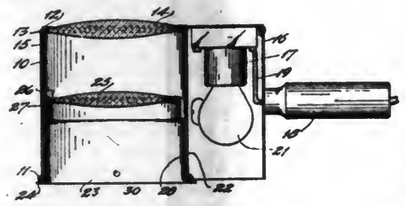
1. In a pump, the combination of: a pump head; a shaft-enclosing tubing, one end of which extends into said pump head, the other end thereof being restrained from axial movement and hydraulic means for drawing said shaft-enclosing tubing a distance into said pump head to place a tension on said shaft-enclosing tubing.

1,814,539. METHOD OF MINING SULPHUR. BENJAMIN ANDREWS, Houston, Tex. Filed Dec. 15, 1928. Serial No. 326,173. 12 Claims. (Cl. 262—3.)



1. A method of mining sulphur which comprises introducing into the mine a superheated solution having a density which is lighter at the time it is introduced than the density of the ground water present in the mine, but which upon cooling below the melting point of sulphur has a greater density than the ground water in the mine.

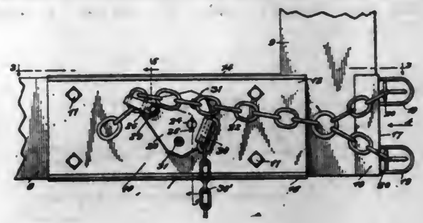
1,814,540. READING GLASS. JACOB B. BANDER, Newark, N. J. Filed Mar. 4, 1930. Serial No. 433,149. 10 Claims. (Cl. 88—39.)



1. In a reading glass, an open bottomed body having a lateral window in its lower portion, a lamp housing fixed to the body around said window, a lamp in said housing, a lens closing the upper end of the body, and a second lens removably fitted in the body above said window, said lamp being positioned in the housing at such distance from the window as to be hidden from observation through the upper lens and to have all rays emanating therefrom and striking a surface being read reflected from the surface to points without the periphery of the upper lens.

1,814,541. BUNK AND POST CONNECTING MEANS. UBNER J. BERGHLY, Spokane, Wash. Filed Jan. 23, 1930. Serial No. 422,890. 4 Claims. (Cl. 280—147.)

1. A bunk having a post seat at one end, a chain anchored to one side of said bunk and adapted for passage around the post, a chain-tightening plate pivoted to the other side of said bunk and having a notched lug to receive the free end of said chain, said plate being provided with means for swinging it to tighten the chain, and a



spring-pressed locking pin transverse to and mounted slidably in said bunk, said plate having openings to receive said pin.

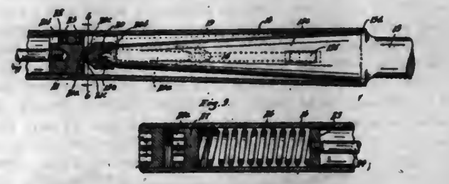
1,814,542. MANUFACTURE OF VISCOSE. GALO W. BLANCO and CARLETON HENNINGSEN, Buffalo, N. Y., assignors, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed June 12, 1926. Serial No. 115,478. 14 Claims. (Cl. 260—10.)

1. In the method of manufacturing viscose the steps which comprise wetting sheets of raw material with a steeping liquor while holding the greater portions of the sheets out of contact with one another to permit free passage of the steeping liquor to substantially all portions thereof, steeping said sheets in the liquor, pressing the sheets to extract the excess liquor therefrom, and reusing the liquor thus extracted for steeping other raw material.

1,814,543. MANUFACTURE OF VISCOSE. GALO W. BLANCO and CARLETON HENNINGSEN, Buffalo, N. Y., assignors, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 4, 1927. Serial No. 231,089. 4 Claims. (Cl. 260—100.)

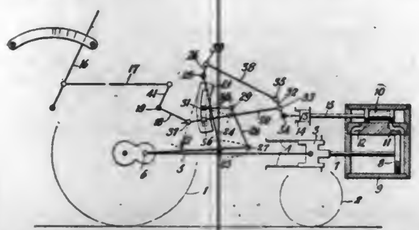
1. The method of shortening the time of ripening of a viscose solution which comprises adding hemi-celluloses thereto at some stage during the preparation thereof.

1,814,544. WRENCH OF YIELDING AND ADJUSTABLE STRUCTURE. ROBERT L. CAIRNCROSS, Chicago, Ill., and GEORGE H. GOODELL, St. Paul, Minn., assignors, by direct and mesne assignments, to the National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed Feb. 13, 1928. Serial No. 253,986. 18 Claims. (Cl. 81—53.)



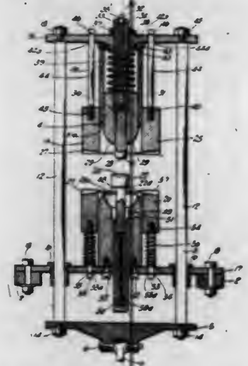
1. A wrench having in combination, a bar having means at one end for engaging a nut, a tube constituting a handle in which one end of said bar is received and with respect to which it is relatively movable, a member engaging the inner end of said bar so as to be movable therewith, a block slidable in said tube having a shallow recess therein engaged by said last mentioned member, a spring in said tube urging said block against said member, and means engaging said spring and movable relatively to said tube for compressing the spring to vary the pressures on said block.

1,814,545. VALVE GEAR. EDWIN DE H. CALDWELL, Fredonia, N. Y., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1927, Serial No. 174,430. 4 Claims. (Cl. 121—163.)



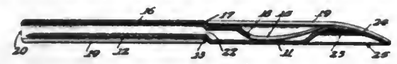
1. In a valve gear, the combination with the main crank pin for driving the locomotive, of an eccentric rod pivoted thereon, a reversing link, a valve stem, a combination lever pivoted at one end to the valve stem, a lap and lead lever, a reach rod connecting the short arm of the lap and lead lever to the other end of the combination lever, a radius rod having one end pivoted to the combination lever at a point between its ends and having its opposite end mounted for sliding movement in the reversing link, actuating mechanism for the link pivoted to the eccentric rod, and a pivotal connection between the long arm of the lap and lead lever and the eccentric rod.

1,814,546. MACHINE FOR FORMING HEMISPHERICAL CAPS WITH SEALING LIPS. WILLIAM H. CARSON, Norman, Okla. Filed Mar. 21, 1929. Serial No. 348,893. 5 Claims. (Cl. 93—60.)



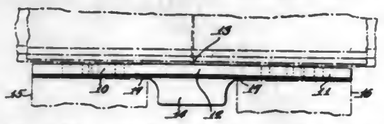
1. Apparatus for the purposes described embodying a horizontal rigid base, a frame having an upper and a lower cross-plate and having side guide rods rigidly connecting said plates, said rods slidably mounted through said base, removable bearings for said rods, a centrally bored fluting die having upper peripheral teeth mounted upon said base between said rods, a slightly shorter female die mounted upon said base and within the bore of said fluting die, said female die having a hemispherical cavity in its upper end and having an annular beveled flange forming portion surrounding said cavity, a downstanding centrally bored fluting die supported by said upper plate in vertical alinement with said first mentioned fluting die, a male die within the bore of said downstanding fluting die, said male die having a hemispherical convex lower end, a beveled ended flange forming die surrounding said male die, means connected to said lower plate for vertically reciprocating said frame, and means carried by said male and said female dies for holding a blank of fibrous material between the dies supported by said base and the dies carried by said upper plate, said dies adapted to form a fluted hemispherical cap with an annular outstanding flange upon each complete reciprocal motion of said frame.

1,814,547. EATING INSTRUMENT COMPACTS. ALRAH B. EDWARDS, Abilene, Tex. Filed Apr. 26, 1928. Serial No. 273,027. 2 Claims. (Cl. 30—22.)



1. An eating instrument compact comprising an instrument having a handle indented at its outer end and curved on its opposite side to provide a spoon bowl, and a handle carrying an instrument with a bowed termination, the first named instrument being receivable within the handle of the last-named instrument, with the bowed termination nesting within the handle of the first named instrument in opposed relation to the curvature of the spoon.

1,814,548. PLATE SUPPORT FOR RAIL JOINTS. ROBERT FARIES, St. Davids, Pa. Filed Aug. 12, 1929. Serial No. 385,253. 9 Claims. (Cl. 238—213.)



1. An integral rail-joint support comprising a truss member to bridge spaced ties and two tie plates, one at each end of the truss member to rest each on one of the ties, the truss member presenting a bearing surface longitudinally upwardly cambered to a crown near the middle of the truss and adapted with heavy loads to be engaged by the rail substantially from tie to tie.

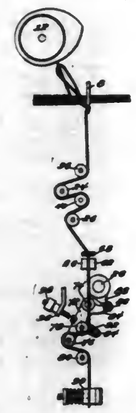
1,814,549. BACK PRESSURE VALVE. JAMES C. FORTUNE, New York, N. Y. Filed Aug. 30, 1928. Serial No. 302,964. 9 Claims. (Cl. 137—69.)



1. A rotary tool joint, in which the pin member of the joint has the bore and the lower end of the same faced to form valve seats and a cooperating valve member sliding in said valve seat faced bore and engaging the valve seat faced end of the pin member to provide a double seal.

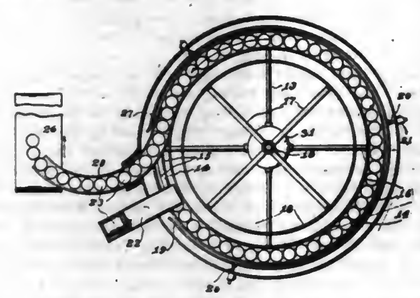
1,814,550. SEWING MACHINE. ALFRED B. FOWLER, deceased, Beverly, Mass., by Mary F. Fowler, administratrix, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 11, 1926. Serial No. 115,201. 6 Claims. (Cl. 112—36.)

2. A lockstitch sewing machine having, in combination, stitch forming and setting devices including a hook needle, a take-up acting to pull the needle loop from the loop taker partially back through the work, a loop taker acting to set the stitch, a pull-off which forms a yielding



resistance against which the stitch is set, a thread lock interposed between the pull-off and take-up, and a thread tension to prevent thread from being pulled from the supply during the operation of the stitch setting devices.

1,814,551. CAN WASHING MACHINE. BOLESLAUS GRABAN, Chicago, Ill. Filed Feb. 25, 1930. Serial No. 431,220. 3 Claims. (Cl. 141—7.)



3. In a can washing machine of the class described, the combination of a casing, a circular rotatable perforated hollow ring for supporting the cans to be washed, means to direct a sprny of hot water and steam into the interior of said cans through said ring and its perforations including a rotatable centrally positioned vertical inlet pipe connected with said ring, a pair of wall members attached to said perforated ring forming a channel for said cans, a circular wall member supported from said vertical pipe and rotating therewith, said last-named member extending around the inner side of said perforated ring, an outer resilient circular member having an open portion, adjustable means for fastening said resilient member to said casing whereby the diameter of said resilient member may be increased or decreased, and means to rotate said vertical inlet pipe and said perforated pipe.

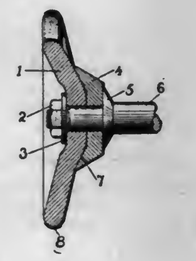
1,814,552. SIEVE. ERNST HEYMAN, Frankfort-on-the-Main, Germany. Filed June 23, 1928, Serial No. 287,806, and in Germany July 2, 1927. 1 Claim. (Cl. 209—381.)

A device for sifting, sorting or separating and conveying material, comprising a working sieve having a stationary and immovable frame and composed of meshes, distorting prongs rigidly connected to said meshes, at spaced points from the surface of said sieve, a plurality of spaced rollers mounted adjacent to said sieve, driving means for commonly imparting uni-directional motion to



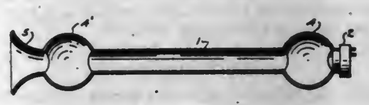
said rollers, and prong-like extensions on the periphery of said rollers, said prong-like extensions being cooperative with said distorting prongs.

1,814,553. FINISHING TOOL. ERNEST HOPE, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 31, 1930, Serial No. 440,366, and in Great Britain Apr. 12, 1929. 9 Claims. (Cl. 51—190.)



4. In combination, a disk of yieldable material, a band of finishing material adapted to be carried upon the periphery of said disk, said disk in its normal condition being too large to fit said band, and means for deforming said disk to diminish the diameter of the periphery of said disk to enable said band to be mounted upon the periphery of said disk.

1,814,554. HORN HAVING RESONATING CHAMBERS AT ANTINODAL POINTS. MILLER REESE HUTCHISON, Llewellyn Park, West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y., a Corporation of Delaware. Filed May 24, 1927, Serial No. 193,814. Renewed Dec. 2, 1930. 11 Claims. (Cl. 181—27.)



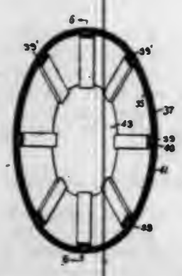
1. A sound propagating device comprising a vibrating diaphragm, a tubular member associated therewith and adapted to form an air column resonant to waves of a definite frequency, said column having nodal and antinodal points, and a resonator located at one of said antinodal points tuned to the same frequency as said tubular member.

1,814,555. FURNACE. DAVID S. JACOBUS, Montclair, and HOWARD J. KERR, Westfield, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 10, 1927. Serial No. 232,240. 2 Claims. (Cl. 122—479.)



1. In combination, a row of superheater tubes disposed closely together but with narrow spaces therebetween, said row having one side thereof subjected to the heat of a furnace chamber, means on the other side of said row forming a gas chamber, and means for supplying gas under pressure to said gas chamber.

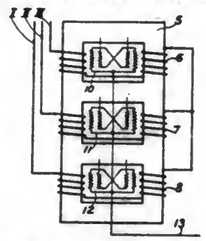
1,814,556. AIRPLANE CONSTRUCTION AND METHOD THEREFOR. JOHN BROWN JEWETT, Jr., Newtown, Ohio. Filed Apr. 15, 1929. Serial No. 355,145. 4 Claims. (Cl. 244—31.1.)



1. The method of constructing the fuselage of an airplane, comprising a mold, said mold provided with recesses, successive layers of paper secured together applied to said mold with recesses formed therein, longérons secured in said formed recesses, additional layers of paper secured together and to said longérons and said first named layers for forming an integral structure.

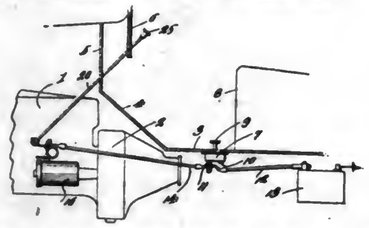
1,814,557. ELECTRIC TRANSFORMER. JULIUS JONAS, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Feb. 2, 1929, Serial No. 337,068, and in Germany Feb. 13, 1928. 2 Claims. (Cl. 175—356.)

1. In an electric transformer supplying a voltage on which is impressed a harmonic component, a plurality of windings, each constituting the primary of a single phase transformer, said single phase transformers having their cores juxtaposed to form a single core element, and a plurality of secondaries for said transformers in operative



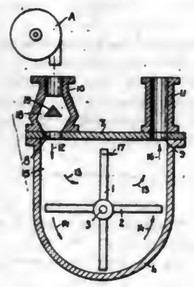
relation respectively with said primaries, said secondaries comprising windings inducing a harmonic voltage opposing said harmonic component.

1,814,558. DASH SPRING STARTER SWITCH. CHARLES A. KELLY, Monroe, Wis. Filed Dec. 31, 1927. Serial No. 243,893. 1 Claim. (Cl. 200—159.)



As an article of manufacture, a control switch for an engine starting motor adapted to be mounted directly on said motor comprising a substantially U-shaped resilient body formed from a single strip of material and comprising a pair of parallel legs and a connecting bight portion, the lower leg having an aperture for receiving securing means for connecting said body to the terminal post of the motor, a contact pin extending through and transversely of the upper leg of the member for contact with the terminal post extending through the lower leg when said upper leg is flexed, means for connecting the lead wire of a source of electrical energy directly with said contact pin, an upwardly extending angularly disposed ear formed with and extending from the free end of the upper leg and extending beyond said lower leg, and a push rod connected directly with said ear and disposed at an angle to said upper leg, all as and for the purposes set forth.

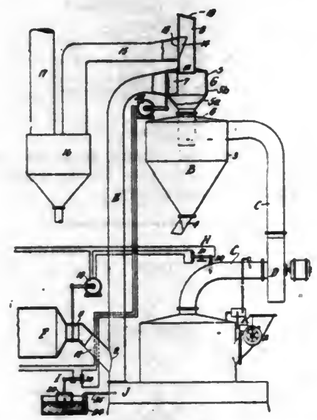
1,814,559. BEETLING MILL WITH CLOSED CASING. ERWIN KRAMER, Berlin, Germany, assignor to Hartstoff-Metall Aktiengesellschaft, Berlin-Kopenick, Germany. Filed February 14, 1929, Serial No. 339,935, and in Germany Feb. 17, 1928. 4 Claims. (Cl. 83—11.)



1. A beetling mill comprising a closed casing, beetling elements therein rotatable on a horizontal axis, the top

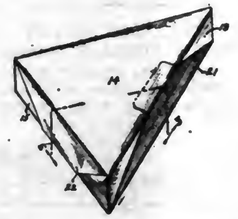
of said casing having a passage therein disposed for the introduction of material to be treated and a current of air therethrough into the casing tangential to the path of travel of said beetling elements and counter to their direction of rotation, and means for introducing through said passage a current of air sufficiently strong to overcome any counter air current produced by the beetling elements during their rotation.

1,814,560. FUEL PREPARING AND HANDLING SYSTEM. HENRY KREISINGER, Piermont, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 23, 1929. Serial No. 334,590. 11 Claims. (Cl. 83—11.)



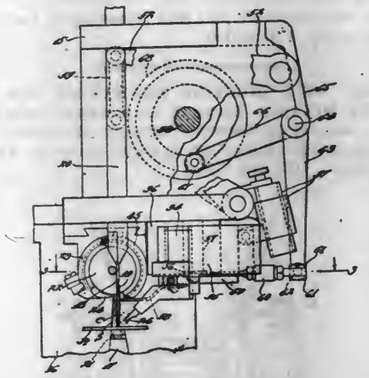
1. In a fuel preparing and handling system, the combination of a pulverizer mill, separator means, a delivery line from the mill to the separating means, a return line from the separating means to the mill, means for setting up an air current in the system, means for introducing heat into the system, means for controlling the introduction of the heat, means responsive to the temperature in the system for effecting such control and thereby maintaining a predetermined temperature in the system and means responsive to the pressure in the system for maintaining a predetermined pressure in the system.

1,814,561. BOX. WILLIAM L. KRUMM, Chicago, Ill. Filed Aug. 25, 1928. Serial No. 301,991. 7 Claims. (Cl. 229—22.)



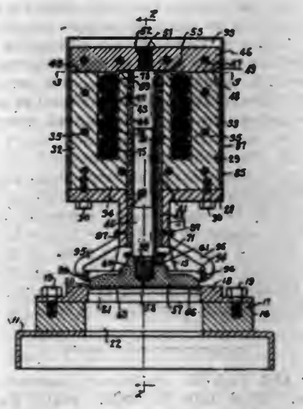
1. A triangular box-forming blank having folding lines arranged to form a triangular base member, two rectangular side members one at each side of the base member, a triangular top member at the outer side of one of the side members, an end member at the outer side of said top member, tucks at certain of the ends of the side members, a flap formed with the free side of each of said top and bottom members, and tongues formed with each of said flaps at the free edges thereof and arranged to be inserted through slits in the end member and one of said side members, whereby when the blank is folded a triangular box is formed having the said flaps lying flat against the said end member and one of said side members, one of said tongues being inserted through the top of said box and the other of said tongues being inserted through the bottom of said box.

1,814,562. LOCK-STITCH SHOE SEWING MACHINE. OSCAR L. LAWSON, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 12, 1926. Serial No. 115,457. 4 Claims. (Cl. 112—36.)



1. In a lock-stitch shoe sewing machine, in combination, a hooked needle, means for reciprocating said needle to cause the same to penetrate the work and be withdrawn therefrom, means for forming a loop of thread about the needle hook when said needle has penetrated the work, a shuttle having a beak to receive the needle loop when said needle is withdrawn from the work, a loop spreader, a carrier for said loop spreader, a link mounted at one end to swing about a fixed pivot and connected at its opposite end to said carrier, and means for reciprocating said carrier.

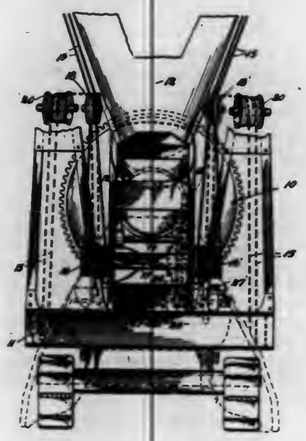
1,814,563. ELECTRICAL OPERATING MEANS. LEO R. LE TANG, Cincinnati, Ohio. Filed Aug. 27, 1928. Serial No. 302,270. 2 Claims. (Cl. 175—344.)



1. The combination of a frame, a solenoid mounted thereon, said solenoid comprising an intermediate limb,

side limbs spaced therefrom, a connecting bar connecting one of the ends of all said limbs, and a plurality of coils about said intermediate limb and located in the spaces between said intermediate limb and said side limbs and extending outwardly beyond the planes of said limbs, said coils including a plurality of sets, each set including coils arranged in parallel and the coils of the respective sets arranged in series, said intermediate limb and said cross-bar provided with a bore, a plunger in said bore, an actuated member carried by said plunger, and an armature at the other of the ends of said limbs having operative connection with said plunger, the end portions of said armature arranged to seat on said side limbs when said armature is attracted and the middle portion of said armature provided with a recess proximate to and line with said intermediate limb for forming an air gap between said armature and said intermediate limb when said armature is attracted.

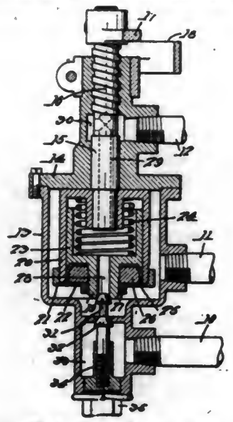
1,814,564. SKIP HOISTING MECHANISM FOR CONCRETE MIXERS. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Sept. 5, 1929. Serial No. 390,578. 4 Claims. (Cl. 214—130.)



1. In concrete mixing apparatus of the class described, the combination of a supporting frame, a skip pivotally mounted on said frame and in its swing adapted to rise above the frame at its outer end, cable means for swinging the skip, spaced cable winding means therefor arranged within the frame in relatively closer relation than the width of the skip at the points of connection of the cable means therewith, cable sheaves mounted at the upper part of said frame substantially in the vertical planes over the cable winding means, guide sheaves mounted upon the end of the supporting frame spaced apart a greater distance than the cable sheaves aforesaid, the distance between said guide sheaves corresponding substantially to the distance between the sides of the skip at the points of connection of the cable means therewith, said guide sheaves being engaged by said cable means in its swing to loading position and adapted to hold the side reaches of the cable beyond the end of the frame substantially in the spaced relation corresponding to the connection points with the skip aforesaid when the skip is in its lowermost position.

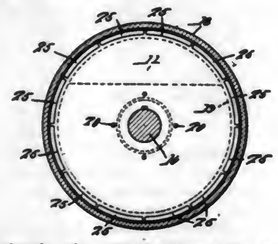
1,814,565. AIR VALVE. NATHANIEL LOMBARD, Worcester, Mass. Filed July 16, 1929. Serial No. 378,765. 8 Claims. (Cl. 303—54.)

8. In an air controlling valve, the combination with a casing, of a hollow cylinder bodily movable therein, a piston fitting in the cylinder, means for forcing the piston toward the open end of the cylinder, said piston having



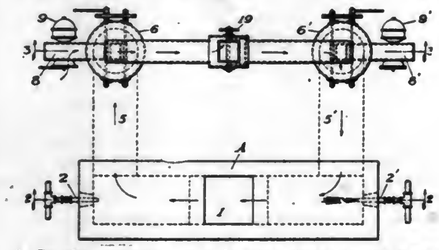
means for controlling the exhaust from the casing, and simultaneously operating valves for controlling the exhaust and admission respectively.

1,814,566. CLUTCH. NATHANIEL LOMBARD, Worcester, Mass. Filed Aug. 16, 1929. Serial No. 386,379. 2 Claims. (Cl. 192—105.)



2. In a clutch, the combination with a driving and driven member, of a flexible closed container having liquid therein and rotatable by the driving member, a ring around the flexible container consisting of a series of separate segments, a casing having a cylindrical surface against which said segments are adapted to bear, whereby upon the rotation of the driving member the liquid will be thrown out to the circumference of the container and will force said segments outwardly to apply pressure to said cylindrical surface to drive the driven member.

1,814,567. RECIRCULATING SYSTEM AND APPARATUS FOR WASTE FURNACE GASES. GUSTAV A. MERKT, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 16, 1929. Serial No. 393,100. 18 Claims. (Cl. 263—15.)

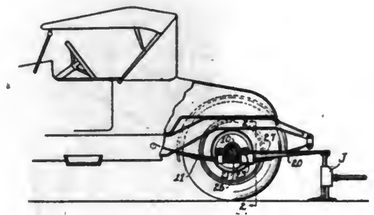


1. In the operation of a heating furnace, the improvement which consists in entraining the waste furnace gases by a blast of air on the outgoing side of the furnace, and using a portion only of the resulting mixture of air and waste gases on the ingoing side of the furnace to support combustion therein.

1,814,568. PROCESS FOR VOLATILIZING PHOSPHORUS AND POTASH AND FOR PRODUCING POTASH-BEARING PHOSPHORIC ACID. ROBERT D. PIKE, Oakland, Calif. Filed Nov. 14, 1927. Serial No. 233,325. 8 Claims. (Cl. 23—28.)

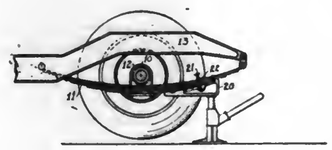
4. The process for the substantially complete volatilization of phosphorus and potash from phosphate rock and a potash-bearing silicate, which consists in charging into a c ke-fired blast furnace one part of phosphate rock with not more than eight-tenths part of potash-bearing silicate, together with the necessary amount of coke for furnishing heat and a strongly reducing condition in the hearth and bosh of the furnace, flushing the slag from the furnace after a sufficient time of residence to insure the substantially complete volatilization of phosphorus and potash, and recovering said phosphorus and potash.

1,814,569. AUTOMOBILE ATTACHMENT FOR JACKS. FRED T. ROBERTS, Jr., Montclair, N. J. Filed Nov. 15, 1926. Serial No. 148,368. 4 Claims. (Cl. 254—133.)



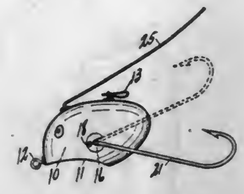
3. The combination with a car axle and a longitudinal spring secured thereto, of a bar extending lengthwise of the car at a different height from the spring, said bar being associated with the axle and having laterally extending lips engaging the spring on opposite sides of the axle, whereby the relative rotation of the bar about the axle is prevented.

1,814,570. JACK ATTACHMENT FOR AUTOMOBILES. FRED T. ROBERTS, Jr., Montclair, N. J. Filed Jan. 8, 1927. Serial No. 159,814. 8 Claims. (Cl. 254—134.)



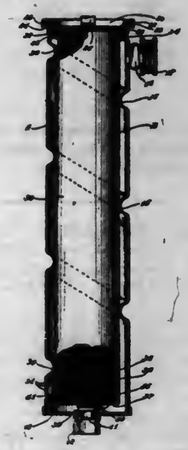
1. An automobile jack pad comprising a block formed to engage the underside of an automobile spring, a yoke carried by said block and extending upwardly and then above the upper side of the spring while open at the opposite side, and a downwardly acting screw mounted on said yoke.

1,814,571. FISH BAIT. CLAUDE M. RODGERS, Clay Township, St. Joseph County, Ind., assignor to South Bend Bait Company, South Bend, Ind. Filed May 13, 1929. Serial No. 362,773. 10 Claims. (Cl. 43—39.)



1. In a fish bait, a bait body, a tubular bearing carried by said body, and a hook journaled in said bearing, said bearing being formed to limit the rotation of said hook therein.

1,814,572. FERTILIZER DISPENSING DEVICE. RANDOLPH SHAFFER, Atlanta, Ga. Filed Sept. 6, 1927, Serial No. 217,617. Renewed Dec. 1, 1930. 6 Claims. (Cl. 299—83.)



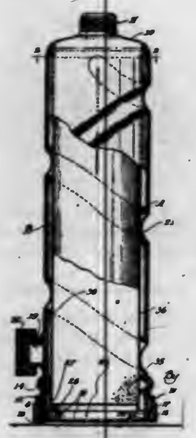
1. In a device for producing solutions, the combination of a casing having an inlet and an outlet, a perforated cartridge in the casing, water soluble material in the cartridge, a spiral vane between the inner wall of the casing and the outer wall of the cartridge, and a water soluble coating covering the cartridge, the thickness of the coating being greater at one end of the cartridge than at the other.

1,814,573. FERTILIZER DISPENSING DEVICE. RANDOLPH SHAFFER, Evanston, Ill. Filed Feb. 18, 1928. Serial No. 255,223. 19 Claims. (Cl. 299—84.)

1. In a device for producing solutions the combination of a casing having an inlet and an outlet, a cartridge in the casing, water soluble material in the cartridge, said cartridge having longitudinally spaced perforations therethrough, and water soluble material closing said perforations, the material in certain of said perforations being more highly soluble than that in other of said perforations.

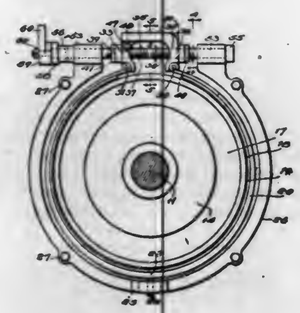
2. In a device for producing solutions the combination of a casing having an inlet and an outlet, a cartridge in the casing, water soluble material in the cartridge, said cartridge having perforations therethrough in its side

walls the perforations at one end of the cartridge adjacent the inlet of the casing being smaller in total area



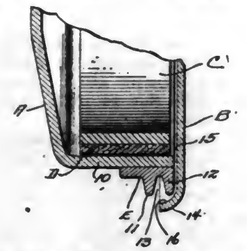
than the perforations adjacent the outlet end of the casing, and a normally stable but water soluble filler for the cartridge perforations.

1,814,574. BRAKE MECHANISM. JOHN W. TATTER, Chicago, Ill., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 3, 1926. Serial No. 145,970. 8 Claims. (Cl. 188—77.)



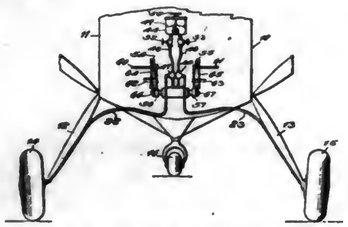
1. The combination with a brake drum, of a brake band having a friction lining engageable with the drum interengaging members secured to the ends of the brake band and constrained to move in a straight line toward or away from each other without tipping toward each other, and means for causing relative movement between said members to bring said friction lining into effective engagement with the brake drum.

1,814,575. BRAKE. JOHN W. TATTER, Chicago, Ill., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 29, 1928. Serial No. 315,743. 3 Claims. (Cl. 188—218.)



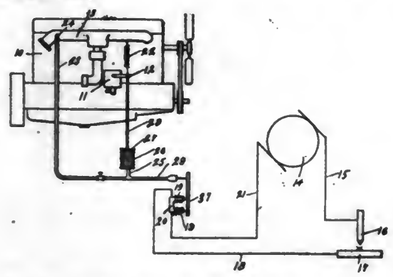
1. A device of the class described comprising in combination, a brake drum, a closure plate, a band having a plurality of baffles carried by the drum, said closure plate having an edge portion curving inwardly of the drum and outwardly over one of said baffles, said edge portion terminating short of the other of said baffles.

1,814,576. STEERING AND BRAKING DEVICE. JOHN W. TATTER, Chicago, Ill., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 11, 1929. Serial No. 391,782. 9 Claims. (Cl. 244—2.)



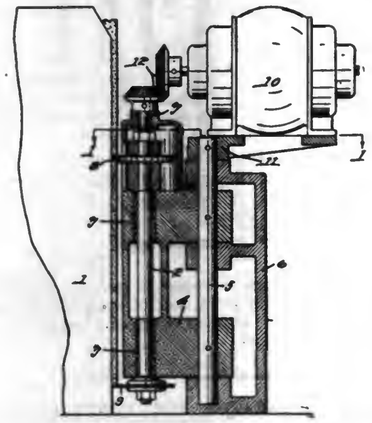
1. In a device of the class described, the combination of a plurality of brake drums, brake elements operatively related thereto, a plurality of fluid pressure operated means for actuating said elements, a housing having a plurality of chambers formed therein communicating respectively with said pressure operated means, means for supplying fluid under pressure to said chambers and pressure operated means, and manually operated means for selectively increasing the pressure in one or another or all of said chambers for actuating said brake elements.

1,814,577. AUTOMATIC SPEED CONTROL. EDWARD H. WINDLE, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 29, 1929. Serial No. 389,221. 9 Claims. (Cl. 290—40.)



9. In electric arc welding apparatus, the combination of a welding current generator, driving means for such generator, and means for varying the operating characteristics of such driving means at the expiration of a predetermined time interval after the welding arc is ruptured.

1,814,578. STEREOTYPE PLATE TRIMMING MACHINE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 23, 1925, Serial No. 71,015. Renewed Dec. 11, 1930. 8 Claims. (Cl. 29—21.)



1. In a printing plate trimming machine, the combination with a core on which the stereotype plates are cast rotatable on its axis, of a frame pivoted on an axis parallel to the axis of the core to swing toward and from the surface of the core, a saw spindle mounted on said frame, a trimming saw on said spindle, and an electric motor directly connected to the saw spindle, whereby the cast plate will be trimmed by the rotation of the core.

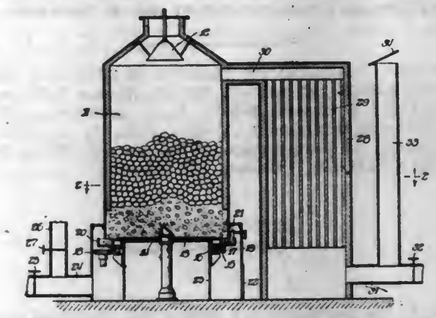
1,814,579. HAMMOCK. FLETCHER AMES, Berkeley, Calif., assignor to Ames Harris Neville Co., San Francisco, Calif., a Corporation of California. Filed Aug. 21, 1929. Serial No. 387,359. 2 Claims. (Cl. 5—122.)



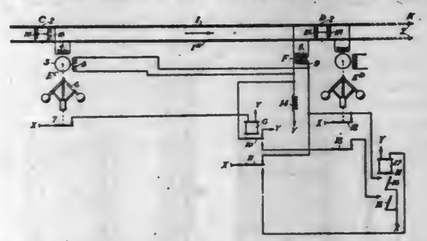
1. In a hammock, a sheet-like body portion having a loop at an end thereof, a spreader member substantially of the same width as said body portion and within said loop, suspension means passing through said loop and attached to said spreader member, and an apron, said suspension means extending beyond said apron and said apron extending from said body member adjacent the end thereof to said suspension means adjacent the end thereof and covering the parts therebetween, said suspension means passing through said apron.

1,814,580. METHOD FOR MAKING PRODUCER GAS. CHARLES W. ANDREWS, Duluth, Minn., assignor, by direct and mesne assignments, to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 31, 1925. Serial No. 65,940. 3 Claims. (Cl. 48—203.)

1. The method of making producer gas, which comprises admitting mixtures of air and gases containing a substantial quantity of carbon dioxide gases, said gases being capable of forming more combustible gases through endothermic reactions in a highly heated deep fuel bed, said admissions being alternately from the top and bottom of a gas producer, the periods of alternation being so timed as to cause the sensible heat of the out-going gases to be largely transferred to the incoming gases, and continuously breaking up and removing mechanically the ashes and clinkers which form.

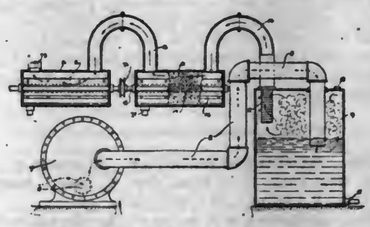


1,814,581. RAILWAY TRAFFIC CONTROLLING APPARATUS. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 19, 1931. Serial No. 516,923. 7 Claims. (Cl. 246—34.)



3. In combination, a rear and a forward section of railway track, a track circuit for the rear section including a track transformer and a track relay, means operating when said track relay is closed to supply the primary of said track transformer with uninterrupted alternating current, means operating when said track relay is open and the forward section is unoccupied to supply the primary of said transformer with uninterrupted alternating current and for periodically placing said primary on short circuit at one rate, and means operating when said track relay is open and the forward section is occupied to supply the primary of said transformer with alternating current periodically interrupted at a different rate.

1,814,582. SMOKE CLEANER. JOHN BENKERT and ENGELBERT STRAUB, Chicago, Ill. Filed Aug. 6, 1930. Serial No. 473,428. 2 Claims. (Cl. 183—16.)



1. In a device of the class described a blower adapted to receive gases of combustion from a heating plant, a wa-

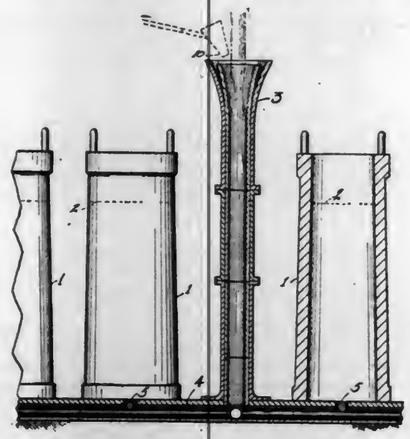
ter container, a conduit leading from said blower into the container and ending underneath the water level, a sieve tube extending into the container, and a tank connected with a source of water, communicating with the sieve tube, and having an outlet for gases of combustion.

1,814,583. METHOD OF MAKING ELECTRICAL RESISTANCES. RAYMOND C. BENNER, Niagara Falls, and EVERETT S. CAPRON, Buffalo, N. Y., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Apr. 5, 1927. Serial No. 181,078. 7 Claims. (Cl. 201—76.)



6. In the manufacture of resistor rods comprised principally of silicon carbide, the step of impregnating the perviously formed and matured rods with a compound such as paraffin capable of decreasing the resistance of the rods and possessing a high dielectric constant.

1,814,584. METHOD FOR PURIFYING STEEL. HENRY A. BOST, Euclid Village, and EDGAR C. HUMMEL, Shaker Heights, Ohio, assignors to The Otis Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 27, 1930. Serial No. 431,691. 8 Claims. (Cl. 22—215.)



3. A method of deoxidizing and purifying steel or steel alloys in the bottom pouring process which consists of pouring the open molten metal substantially free from any deoxidizing agent into a central pouring tube and discharging the molten metal into runners forming passages into the bases of molds whereby the metal is introduced into a plurality of mold cavities at the bottom thereof and rises in the molds concurrently forming therein a column of substantially open steel, and introducing a deoxidizer into said central tube near the end of the pouring operation whereby the deoxidizer is melted and carried into the molds in liquid state when the molds are substantially filled.

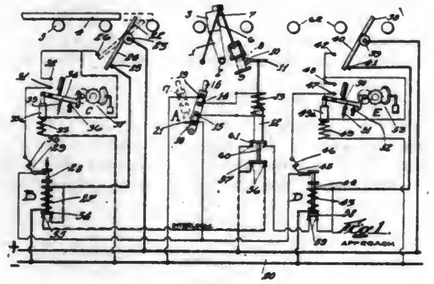
1,814,585. HYGRO-THERMOSTAT. CLIFFORD C. BRADBURY, Oak Park, Ill. Filed Oct. 6, 1920. Serial No. 415,130. 9 Claims. (Cl. 297—2.)

3. The combination in a device of the class described of a thermostat comprising a pair of elements adapted to deflex subject to a rise and fall in temperature of the atmosphere, a saturated hygro-static wick, contacting with the element of said pair having the greater coefficient of expansion, the moisture of said wick being subject to evaporation depending upon the relative humidity of the at-



mosphere, and alternate electrical contacts closed by the flexure of said thermostatic pair of cause the operation of a heater controller whereby to effect a regulation of the temperature of a room.

1,814,586. APPARATUS FOR CONTROLLING THE SHEARING OF MOVING MATERIALS. FRED B. CROSBY, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1929. Serial No. 382,688. 6 Claims. (Cl. 164—49.)

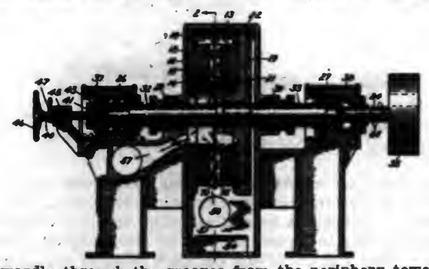


1. Apparatus for shearing moving material comprising a flying shear, a flag in the approach to said shear for operation by the advancing end of said material, a second flag beyond said shear for operation by the advancing end of material passing through the shear, and time delay relays cooperating with both of said flags and with said shear to control both the length of the front crop cut by said shear and the lengths of the billets cut by said shear.

1,814,587. PULP REFINING APPARATUS. FRED H. DANIELS, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 31, 1928. Serial No. 266,347. 3 Claims. (Cl. 92—26.)

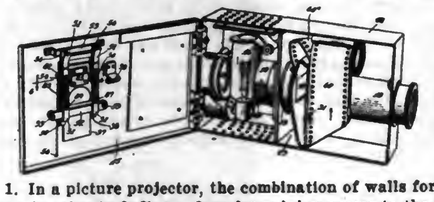
1. A pulp refining apparatus comprising an annular grinding wheel having a centrally located fluid outlet, a second grinding wheel laterally opposed to and in operative grinding relation with the other wheel, the operative side of each wheel being plane faced and one wheel having spaced grooves in its side face which extend from the outer periphery to the inner outlet for transporting

pulp therethrough, means for rotating one of the wheels, and means for causing a part of the pulp to circulate



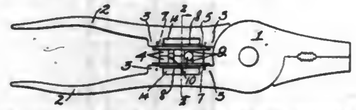
inwardly through the grooves from the periphery towards the center of the wheel, while some of the material is being ground between the plane faces.

1,814,588. PICTURE PROJECTOR. RALPH P. DE VAULT, Villa Park, Ill., assignor to Society for Visual Education, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 14, 1927. Serial No. 191,313. 11 Claims. (Cl. 88—29.)



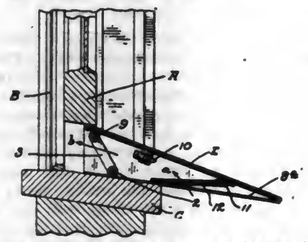
1. In a picture projector, the combination of walls forming a housing including a door for gaining access to the interior of the housing, means providing a projection aperture within the housing, means within the housing for holding a flexible film for travel past the projection aperture, and means mounted on the door of the housing adapted to engage the film when the door is closed for moving the film step by step, and means for operating said film-engaging means.

1,814,589. PLIERS. ROY H. ENDSLEY, Mishawaka, Ind., assignor of one-third to John L. Bowman, South Bend, Ind., and one-third to Abel R. Endsley, Tucson, Ariz. Filed Feb. 23, 1928. Serial No. 256,379. 2 Claims. (Cl. 81—9.5.)



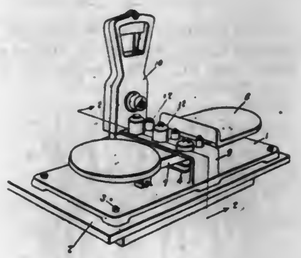
1. The combination with pliers having pivoted handle members, of angularly converging blades and means for connecting said blades to said handles in spaced relation, said blades having cooperating recesses formed in their cutting edges.

1,814,590. WINDOW VENTILATOR. HARRY P. FISHER, San Francisco, Calif. Filed Mar. 5, 1929. Serial No. 344,269. 6 Claims. (Cl. 98—99.)



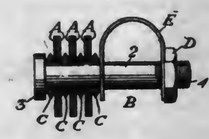
1. The combination with a window frame, its sill, a window vertically slidable in the frame of a hood-shaped ventilator and a link member pivotally connecting the hood to the frame, said link permitting one side of the hood to be swung into the window opening between the sill and the window so as to be secured by the window resting thereon, said hood also adapted to be swung about the link member in an outward direction from the window to permit closing of the window.

1,814,591. WEIGHING SCALE. THOMAS B. FLANAGAN, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed June 5, 1928. Serial No. 283,019. 6 Claims. (Cl. 265—54.)



1. In a weighing scale, an off-set weight indicating mechanism housing and a center bearing cover, said center bearing cover embodying a weight rack.

1,814,592. APPARATUS FOR USE IN THE MANUFACTURE OF RECTIFIERS. PAUL H. GEIGER, Ann Arbor, Mich., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 22, 1929. Serial No. 387,654. 4 Claims. (Cl. 263—1.)



1. A support for holding flat apertured rectifier blanks during heat treatment, comprising a rod having a shank passing freely through the apertures in the blanks said rod having an enlarged head at one end and the shank being threaded at the other end, apertured spacers mounted to slide on the shank of said rod, the blanks being mounted in pairs with one spacer located on each side of each pair of blanks, a nut on the threaded end of said shank, and a spring coacting with said nut and with the spacer nearest to said nut to urge all of the blanks and spacers toward the head of said rod.

1,814,593. PROCESS FOR WIDENING ROLLED METAL PRODUCTS. HARVEY M. GERSMAN, Buffalo, N. Y. Continuation of application Serial No. 49,849, filed Aug. 12, 1925. This application filed June 21, 1926. Serial No. 117,326. 17 Claims. (Cl. 80—66.)

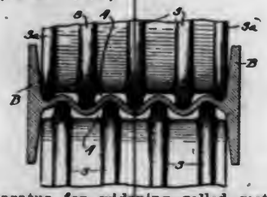
17. The method of producing an imperforate structural shape from a heated rolled blank having a web and flanges which consists in passing the web through opposed ribbed rolls and preventing any reduction in the mutual spacing of the flanges and by means of said rolls stretching the web by displacing and stretching transversely successive transverse components alternately in opposite directions and without squeezing the web and then passing the web through rolls which press the stretched components back

toward the original plane of the web and permit certain of said components to shift laterally outward, incident to



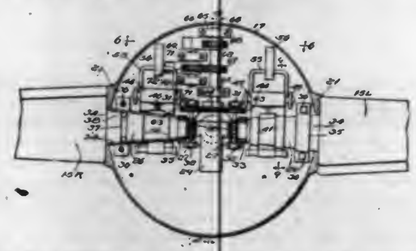
the inward displacement of adjacent components, thereby to widen the web to the extent which conforms to the extent of stretching.

1,814,594. APPARATUS FOR WIDENING ROLLED METAL PRODUCTS. HARVEY M. GERSMAN, Buffalo, N. Y. Filed June 21, 1926. Serial No. 117,327. 8 Claims. (Cl. 80—31.1.)



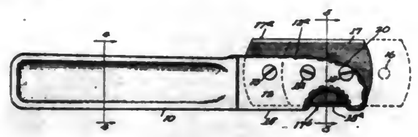
5. In apparatus for widening rolled metal products, means for so altering the transverse section of the part as to form longitudinal corrugations therein and transversely stretch the same and opposed flattening rolls through which the stretched part is passed, the lower of said rolls serving as a support for said part and being formed with a series of oppositely inclined surfaces and the upper roll having inclined surfaces which conform to certain of the inclined surfaces of the lower roll and having between its inclined surfaces clearances which aline with the remaining inclined surfaces of the lower roll, said inclined surfaces and clearances being determined to cause the reduction of the corrugations with the resultant outward lateral extension of the part.

1,814,595. PROPELLER. FERDINAND A. GILL, Chicago, Ill. Filed May 14, 1930. Serial No. 452,324. 10 Claims. (Cl. 170—163.)



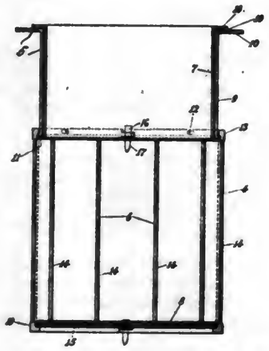
1. In a propeller, a rotatable shaft, a member providing bearing support for the shaft, radially extending blades rotatable with the shaft, bearings for said blades permitting their axial rotation, mechanism rotatable with the shaft and operable to rotate the blades a predetermined amount about their axes, means locking said blades against rotation, cam means mounted on said support and movable into the paths of said locking means and actuating mechanism, the resulting contact of said locking means with said cam mechanism operating to unlock said blades, and the resulting contact of said actuating mechanism with said cam means operating to cause said mechanism to rotate said blades, and trip means operable to move said locking means into locking engagement with said blades upon completion of said predetermined amount of rotation of the blades.

1,814,596. KNIFE. OTTO W. HAMEL, Chicago, Ill. Filed Mar. 19, 1928. Serial No. 262,689. 1 Claim. (Cl. 30—9.)



A holder for a substantially wide, short, thin and substantially rectangular razor blade of the character described comprising a pair of plate-like clamping members corresponding in shape and face to face, a handle member integral with one of said clamping members and extending therefrom, the clamping members being substantially the length of the blade to be held, means for forcing the clamping members toward each other to hold the blade tightly between them with a narrow portion of the entire length of the blade exposed along a portion of the front edges of the clamping members, the front edges of the free end portions of the clamping members respectively being formed on corresponding lines slanting from front to rear to expose a substantially large corner portion of the blade, the clamping members terminating substantially at the free end of the blade and being sufficiently wide to cover a substantially large part of the rear edge of the blade when the blade is normally assembled with the holder, the rear edge of each clamping member having a blade-exposing recess, said recesses being opposite each other and being adapted to expose a portion of the blade for cutting purposes.

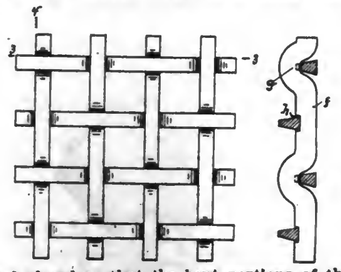
1,814,597. GAUZE OR SCREEN CATALYST HOLDER OR SUPPORT. STANLEY L. HANDFORTH, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 12, 1929. Serial No. 377,666. 13 Claims. (Cl. 23—288.)



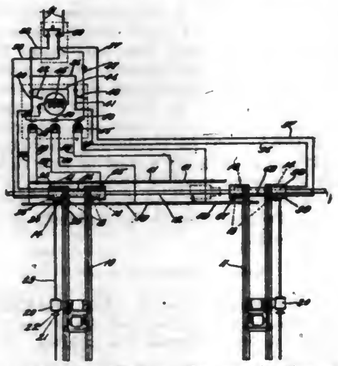
1. In a screen holder, in combination, a sleeve or shell, and a clamping and supporting cage for the screen, adapted at its upper edge to engage the lower edge of the sleeve or shell.

1,814,598. PROCESS FOR MAKING MESH-SIEVES. RUDOLF HERRMANN, Dresden, Germany. Filed Feb. 16, 1928. Serial No. 254,828. 1 Claim. (Cl. 140—3.)

The process for the manufacture of mesh-sieves from bars or wires, which process includes forming a bend in one portion of each wire, forming a groove in an adjacent portion of the same wire, and retaining the wire positively against bending at all points except that where the said bend is formed, said bend and groove being formed at points a predetermined fixed distance apart, in a single procedure without readjusting the position of the wire, and by forming motion in a direction substantially perpendicular to the straight longitudinal direction of the wire; the wires thus bent and grooved being then interwoven and placed so that the bent portions of the wires running in one direction rest in the grooves formed in the wires running transversely thereto at each crossing point.



1,814,599. SAFETY MECHANISM FOR CRANES. RALPH Z. HOPKINS and GEORGE T. DAVEY, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 12, 1928. Serial No. 292,249. 8 Claims. (Cl. 104—153.)



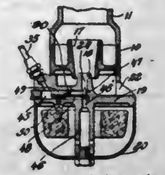
1. In a crane installation, the combination of a plurality of cranes movable towards and away from one another, a source of power, mechanism for moving said cranes, means for connecting said mechanism and source of power, a device operable by said source of power for stopping said mechanism automatically, and means for connecting said device and source of power when adjacent cranes have moved to predetermined relative positions including a member movable with each of said cranes, and a stationary control member adapted to cooperate with said movable members.

1,814,600. METHOD OF PREPARING METAL SURFACES TO RECEIVE PERMANENT COATINGS. RALPH Z. HOPKINS and ALBERT E. FELLERS, Detroit, and OSCAR T. COFFELT, Grosse Pointe, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 29, 1928. Serial No. 329,307. 8 Claims. (Cl. 91—68.)

1. The method of protecting metal surfaces and preparing them for subsequent permanent coating which includes treating the surface with acid, and then applying a solution which neutralizes the acid residue and also leaves on the sheet a substance which will combine with the permanent coating.

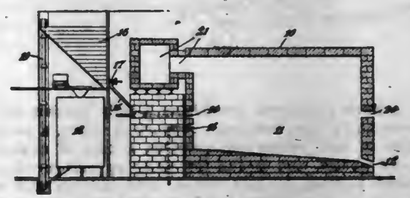
1,814,601. CARBURETOR. CHESTER F. JOHNSON, Detroit, Mich. Filed Mar. 24, 1923. Serial No. 627,468. 11 Claims. (Cl. 161—39.)

1. A carburetor comprising a receptacle for liquid fuel adapted to maintain fuel therein at substantially a constant level, a mixing chamber, a passage through which fuel is discharged from said receptacle into said mixing chamber under the influence of suction in the chamber, and means for reducing the suction applied to said fuel



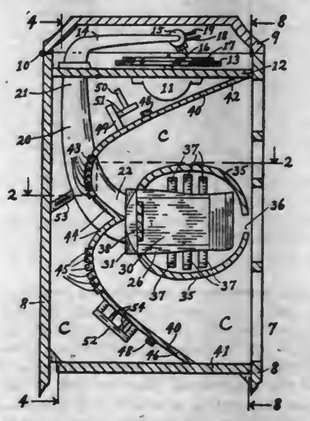
including a passage for supplying air to said fuel passage above the normal level of liquid in said receptacle and thermostatic means including a thermostat positioned in said air passage for controlling the discharge into the chamber of the air and fuel supplied to said fuel passage.

1,814,602. METHOD OF TREATING ORES. ALBERT J. KOEBEL, Daisy, Wash. Filed Mar. 8, 1928. Serial No. 260,230. 1 Claim. (Cl. 75—17.)



A method of treating arsenical pyrites ores containing lead, zinc, silver, and gold, which includes injecting the ore in finely divided form in a furnace, subjecting the ore to the action of a flame while the ore is in suspension in the furnace to drive off said metals in the form of a fume, collecting and precipitating the volatilized products of the said metals driven off, separating said products by fractional volatilization by heating said products to the volatilizing temperature of arsenic oxide and driving off the arsenic oxide, then adding a reducing agent, and raising the temperature to the volatilizing temperature of zinc and driving off the zinc, and then drawing off the remainder containing the lead, silver, and gold.

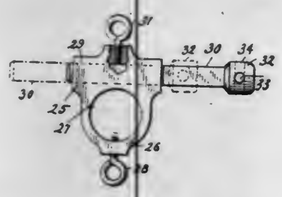
1,814,603. ART OF THE TRANSMISSION OF SOUND WAVES. CHESTER ALFRED LINTON, Kansas City, Mo. Continuation of application Serial No. 666,489, filed Oct. 4, 1923. This application filed Aug. 4, 1927. Serial No. 210,657. 20 Claims. (Cl. 181—27.)



1. In an acoustic device, sheet material adapted for vibratory purposes, and abbreviated filamentous means

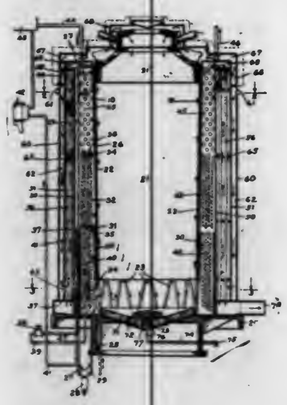
connected therewith, said means at angles to particular parts only of said sheet material for tensioning the same, and for operatively vibrating therewith, the relations of elasticities and masses in said sheet material and in said means being found in the adaptation, whereby the use of said means in connection therewith obtains differing properly spaced areas of resonance for a required scale of forced frequencies.

1,814,604. FLUSH GUIDE ARM. MILTON H. MARTINDELL, Trenton, N. J, assignor to Jos. Stokes Rubber Co., Trenton, N. J., a Corporation of New Jersey. Filed June 24, 1930. Serial No. 463,427. 6 Claims. (Cl. 4—57.)



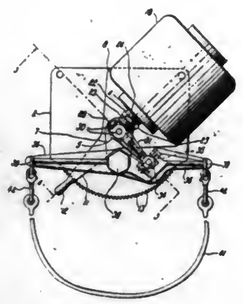
1. A flush guide arm comprising a body portion having a recess and a bore forming a supporting collar, a member slidable in said recess and carrying a pair of angularly disposed guides, and means for clamping said member in adjusted position in said recess, said member and said recess being so constructed and arranged that said member may be clamped therein to permit the use of either of said angularly disposed guides.

1,814,605. STEAM GENERATOR. KARL A. MAYR, New York, N. Y., assignor to Siemens-Schuckertwerke Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Oct. 4, 1927. Serial No. 223,856. 10 Claims. (Cl. 122—250.)



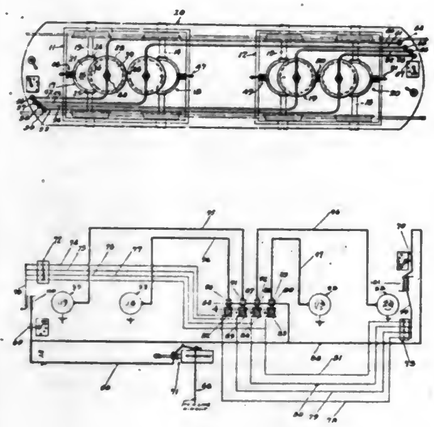
1. A steam generator comprising in combination a combustion chamber of tapered cylindrical contour which inwardly tapers towards the bottom thereof, and heat absorbing tubes of corresponding contour, other heat absorbing tubes without said first mentioned tubes, said contour of the combustion chamber and of the first mentioned tubes facilitating assembly and disassembly of the tubes by permitting upward withdrawal of the first mentioned tubes with the other tubes in position.

1,814,606. VIBRATORY MACHINE. RICHARD T. NEWTON, New York, N. Y. Filed Nov. 22, 1929. Serial No. 408,999. 5 Claims. (Cl. 128—63.)



3. A vibratory machine of the character described comprising, a stationary base, a motor having a base pivotally mounted on said stationary base, said motor having a rotatable motor shaft, a crank secured to said motor shaft, a rocker arm pivotally mounted on said stationary base, a connecting rod having its inner end universally connected to said crank and its outer end universally connected to said rocker arm for translating the rotary motion of said crank to a vibratory motion of said rocker arm, said motor base being turnable about its pivotal connection with said stationary base during the operation of said motor to effect variation in the amplitude of vibration of said rocker arm.

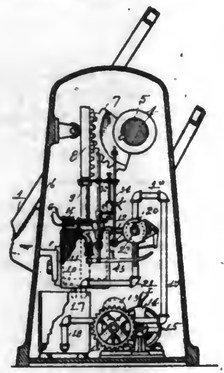
1,814,607. POWER STORAGE AND TRANSMISSION MECHANISM. OSCAR L. SANDERS, San Francisco, Calif. Filed Jan. 18, 1929. Serial No. 333,506. 6 Claims. (Cl. 105—26.)



3. In mechanism of the class described, the combination with a power propelled vehicle, means associated with

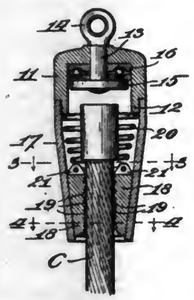
the driving axles thereof to cause the storing of momentum due to the idling of said axles when the power is shut off, and means for the retransmission of said stored momentum to said axles for starting purposes.

1,814,608. VALVES AND VALVE-CONTROLLED MEANS FOR OPERATING GATES. LEON B. SCHUH and CLARENCE J. BAILEY, Minneapolis, Minn.; said Bailey assignor to Daveletta D. Bailey, Jacksonville, Fla. Filed Mar.. 10, 1926. Serial No. 93,618. 5 Claims. (Cl. 137 Sub 139.)



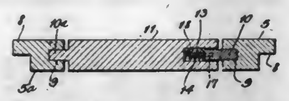
1. In combination with a valve; quick-operating mechanism therefor which comprises a pair of disks carrying the opposite ends respectively of a spring and having an inter-relatively turning movement in either direction to adjust the spring and a contrary movement under the pressure of the spring to move the valve in either direction, the disks having means for holding them in spring-adjusting relation; a swingably-mounted arm having a cam adapted to release said means in the swinging of the arm in one direction, the arm having also a projection engaged by a lug carried by one of the disks for swinging the arm in the opposite direction by the movement of said disk to spring-adjusting position; means for swinging the arm in the first-mentioned direction; means for releasably holding the arm against the operation of the last-mentioned means.

1,814,609. LINE OR CABLE CONNECTER. ERNEST C. SMITH, Ventura, Calif. Filed May 29, 1930. Serial No. 456,879. 7 Claims. (Cl. 24—126.)



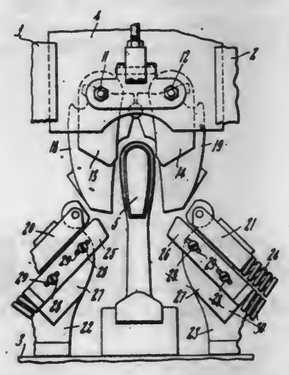
1. In a line or cable connecter, a hollow member provided with a tapered portion, a plurality of spring pressed slips arranged within the tapered portion of said hollow member, a pin mounted for rotation in the end of said hollow member and an antifriction bearing arranged between said pin and hollow member.

1,814,610. COUNTERBALANCE WEIGHT. NATHAN STEVELMAN, New York, N. Y., assignor of one-half to Solomon Golub, New York, N. Y. Filed May 8, 1929. Serial No. 361,365. 3 Claims. (Cl. 187—95.)



1. A counterbalance weight for lifts of the class described, said weight having a guide flange arranged longitudinally of one side edge thereof, the other side edge of said weight having a longitudinal recess and an elongated flange strip mounted in said recess and of a length substantially equal to the longitudinal dimensions of the weight, a portion of said strip projecting beyond said side edge of the weight to form a guide flange, and resilient means within said recess and cooperating with said strip to normally support the same in extended and operative position.

1,814,611. COUNTER MOLDING MACHINE. JOHN HAMMOND STEWART, Lynnfield, Mass. Filed Nov. 23, 1929. Serial No. 409,202. 5 Claims. (Cl. 12—66.)

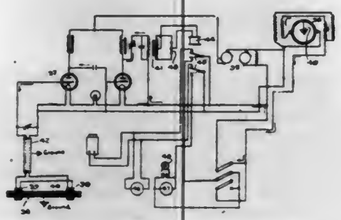


1. A counter molding machine comprising a last having on the side which corresponds to the bottom of an ordinary last, an extension of smaller area than the body of the last end of generally similar outline thereto, and having a shoulder adjacent to such extension, the face of which intersects the lateral bounding face of the extension at a sharp angle, molds complemental to the body of said last for conforming the body of a shoe counter to the sides thereof, a carrier movable in a plane parallel to the last bottom and in the longitudinal direction thereof, pressers mounted on said carrier in position to embrace said extension when the carrier is advanced, and means for moving said pressers relatively to the carrier with advance of the latter so as to bring them in closely embracing relationship to said extension; said pressers having inner faces forming an outline similar to the bounding surface of the extension and a rear face adjacent to the face of said shoulder, whereby the pressers are caused to indent the edge part of a counter blank protruding from between the last body and molds, and form the same into an inturned flange and an outwardly projecting lip.

1,814,612. TRAIN CONTROL. CHARLES S. WILLIAMS, Kingston, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 31, 1928. Serial No. 303,134. 3 Claims. (Cl. 246—63.)

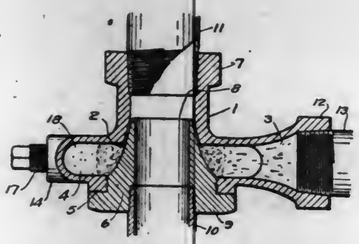
1. In an automatic train control locomotive circuit, in combination, a direct current generator, an amplifier cir-

cuit having an output transformer, an alternating current receiver included in said amplifier circuit for energizing the primary of said transformer, said receiver being grounded through a capacitive condenser, and means for insulating the armature of said generator against the



grounding of one or more of the current generating coils thereof whereby to effectually preclude the generation of an alternating current which flows between said grounded coil and said grounded receiver through the primary of said transformer.

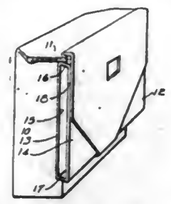
1,814,613. PERIPHERAL JET PUMP. SPENCER C. WOODY, Seattle, Wash. Filed Nov. 10, 1929. Serial No. 408,195. 1 Claim. (Cl. 103—262.)



In a peripheral jet of the character described, two abutting pipe sections with a space between their ends, a casing into which one of said sections is screwed, said casing having an enlarged circular interior opening, the large diameter of said opening being approximately three times the diameter of the said pipe sections providing space for an air cushion in the outer part thereof, a plug screwed into the side of the said casing opposite to that in which the section of pipe is screwed, said plug extending through the said circular opening in the said casing and a considerable distance beyond the adjacent wall thereof, the outer surface of the said plug tapering outward from the end thereof, and said casing having a corresponding tapering surface over the portion of the plug that extends beyond the said adjacent wall of the opening in the said casing, the other section of pipe screwed into the outer end of the said plug and in axial alignment with the former section, said casing having a suitable inlet opening at one side connecting with the said interior opening and also having a plug at the opposite side of the said interior opening, and the area of the central continuous opening extending through the said plug and casing being not less than the area of the said pipe sections.

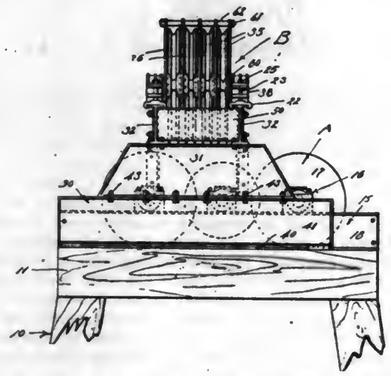
1,814,614. POUCH. LESLIE W. BARNES, Stratford, Conn. Filed Sept. 27, 1927. Serial No. 222,266. 9 Claims. (Cl. 150—3.)

1. A pouch comprising an article containing body having an openable side, a frame supported upon said article containing body and including an upper surface adjacent said openable side, a lower surface in spaced relation to said openable side, and a side surface, and a member slidable along the side surface of said frame, said member in-



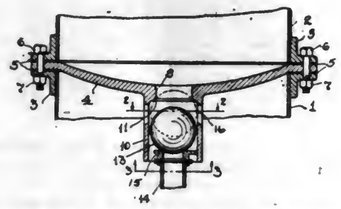
cluding an element adapted to engage said openable side and to clamp the engaged portion of said pouch against the upper surface of said frame, and a resilient element adapted to engage the lower surface of said frame to hold said element in clamping relation against said pouch.

1,814,615. CROWN BLOCK. MILLARD SUMTER BLACK, Huntington Park, Calif., assignor to Baash-Ross Tool Company, Incorporated, Los Angeles, Calif., a Corporation of California. Filed Jan. 21, 1928. Serial No. 248,345. 12 Claims. (Cl. 254—190.)



1. A crown block including a lower section to be mounted directly on a derrick, and an upper section to be mounted directly on the derrick to extend transversely of the lower section, the upper section including a beam, means for supporting the beam above the lower section and for adjustment in one direction, a sheave, and means supporting the sheave on the beam for adjustment in another direction.

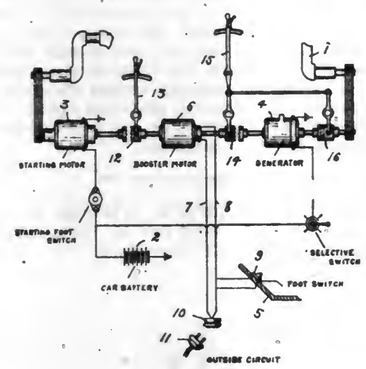
1,814,616. PRESSURE OPERATED SAND BLAST VALVE. GEORGE A. BOESGER, Cleveland, Ohio, assignor to The W. W. Sly Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 9, 1926. Serial No. 140,495. 5 Claims. (Cl. 51—12.)



1. In a pressure operated sand blast, the combination of a wall having a valve opening and provided with a down-

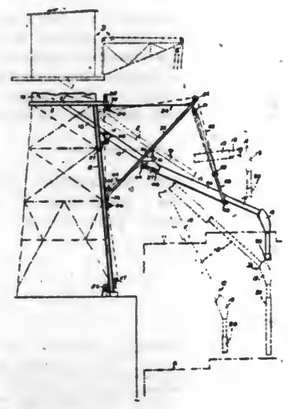
wardly extending cylindrical flange surrounding said opening, and having a series of apertures adjacent the wall, an air pipe extending into said flange and forming therewith a valve cage and a valve ball mounted in said cage and adapted to be forced upwardly to close said opening.

1,814,617. ENGINE STARTING AND LIGHTING SYSTEM. ORA S. BROWN, Virginia, Minn. Filed Mar. 20, 1930. Serial No. 437,451. 2 Claims. (Cl. 290—36.)



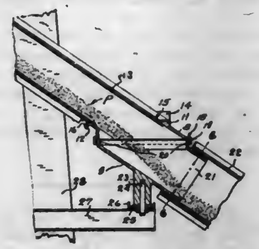
1. In a starting and lighting system for vehicles, a starting motor, a generator, a storage battery, a booster motor having an operating electric circuit apart from the vehicle, and selective means whereby to operate either the starting motor or the generator by the booster motor.

1,814,618. DOCK SPOUT. EDWARD F. CARTER, Vancouver, British Columbia, Canada. Filed Feb. 18, 1929. Serial No. 340,772. 9 Claims. (Cl. 193—3.)



2. A dock-spout embodying a relatively fixed upper spout section, a second spout section disposed in substantially the same inclined plane as said upper spout section, a turnhead connecting said two spout sections and permitting horizontal swinging movement of said second spout section, and lower spout sections pivotally connected with the lower end of said second spout section and adjustable vertically relative to the same.

1,814,619. TURNHEAD FOR DOCK SPOUTS. EDWARD F. CARTER, Vancouver, British Columbia, Canada. Filed Feb. 19, 1929. Serial No. 341,222. 7 Claims. (Cl. 193—22.)



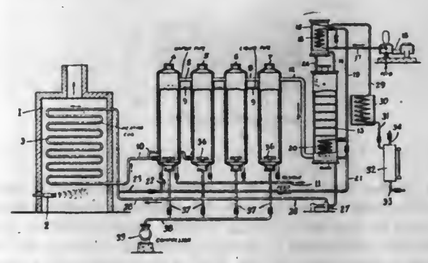
1. A turnhead for a spout, embodying two hollow turnhead members disposed in substantially the same inclined plane and each having oblique ends arranged to register with each other whereby a substantially straight unobstructed passageway may be formed through said turnhead members, said oblique ends being of larger cross sectional area than the spout sections which they pivotally connect.

1,814,620. MAILING FOLDER AND ENVELOPE AND METHOD OF MAKING SAME. HERBERT N. CHAPMAN, Kansas City, Mo. Filed Dec. 30, 1929. Serial No. 417,444. 6 Claims. (Cl. 229—921.)



1. The method of making a blank for a mailing folder and envelope consisting in providing in a rectangular sheet two longitudinal alined slots, at opposite sides respectively of the middle portion of the sheet, and cutting opposite edge portions of the sheet to intersect said slots adjacent to the outer ends thereof, thereby forming a rectangular body having at one edge between said slots a flap having, at opposite ends respectively, two tabs.

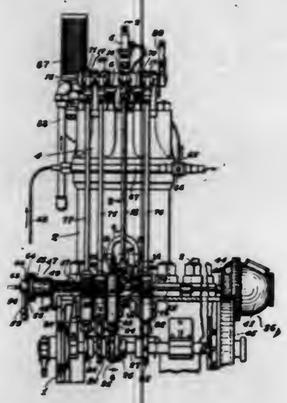
1,814,621. PROCESS FOR DECOMPOSING ORGANIC MATERIALS. RICHARD J. DEARBORN, Summit, N. J., and GEORGE W. GRAY, New York, N. Y., assignors, by mesne assignments, to the Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 20, 1926. Serial No. 103,253. 7 Claims. (Cl. 196—65.)



7. The process of decomposing hydrocarbon materials in a substantially liquid state, which comprises passing the liquid into the first of a series of interconnected heat

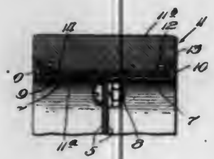
insulated converting vessels to form a substantial depth of liquid in each vessel, maintained under conditions of superatmospheric pressure and temperature of over 300° F. suitable to active decomposition, compensating for heat losses in the vessels by introducing into the lower part of each vessel regulated quantities of a free oxygen containing gas, removing the generated vapors in heat exchange relationship with the fresh charge and condensing therefrom the constituents less volatile than motor fuel, separately returning the condensate to the first vessel for further treatment while raising it to a high temperature in transit, and withdrawing residual material from the last vessel.

1,814,622. VALVE ACTUATING AND CONTROLLING MECHANISM. ADRIAN C. ESTEP, Seattle, Wash. Filed Jan. 27, 1926. Serial No. 84,005. 12 Claims. (Cl. 123—32.)



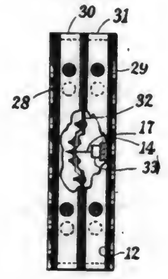
1. The combination with the power cylinder of an internal combustion engine, of a fuel injection valve for said power cylinder, a lever to lift the stem of the valve, an oscillative lever eccentrically mounted at one end, a rod connecting the outer end of said lifting lever with said oscillative lever at a point substantially midway its length, a cam actuated tappet for oscillating said oscillative lever, and means operable by the engine for changing the fulcrum of the eccentrically mounted lever to vary the lift of the said valve stem.

1,814,623. RUBBER-TIRED WHEEL. WALTER S. FINNELL, Elkhart, Ind. Filed Sept. 2, 1927. Serial No. 217,058. 1 Claim. (Cl. 152—1.)



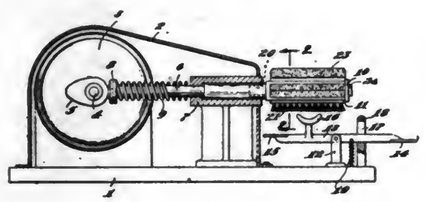
A rubber tire which is adapted to be supported upon an attaching rim of a character which is channel-shaped in cross section with its upper edges turned inwardly substantially horizontal to provide confining channels at the opposite side edges of the rim; which comprises a comparatively thick tread section of rectangular-like shape in cross section and of substantially the same width as the outside dimension of said rim whereby no part of the rim projects laterally beyond said tread portion throughout its entire circumference, a comparatively thin base portion of a normal width substantially equal to the inside dimension of the main rim channel and of a uniform normal thickness substantially equal to the width of said confining channels formed by the inturned rim edges, a perforated metal plate closely approximating the thickness of said base portion molded into said base portion with the rubber on the opposite sides of the plate integrally molded through said plate perforations, said plate extending throughout the width of said base rendering it rigid throughout, a neck portion between said base and tread portion of lesser width than said base portion of a depth substantially equal to the thickness of the metal of the inturned edges of said rim, the relative sizes of said tire portions forming around the tire at each side horizontal grooves into which the inturned rim edges are adapted to extend for confining without distortion said base portion and for supporting said tread portion, whereby the edges of said tread portion, and said base portion, are firmly and uniformly supported.

1,814,624. ACOUSTIC DEVICE. ABRAHAM J. FLECK, Bradley Beach, N. J. Filed Dec. 15, 1928. Serial No. 326,262. 18 Claims. (Cl. 181—31.)



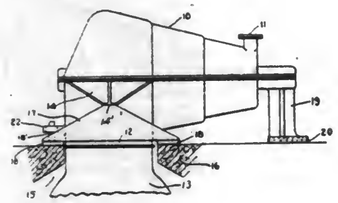
1. A sound amplifying device comprising an apertured diaphragm, an apertured backing member with the diaphragm, a substantially non-vibratory member connecting the diaphragm and backing member and forming therewith a sound propagating chamber, the apertures in said diaphragm and backing member being in unaligned relationship.

1,814,625. FINGER NAIL POLISHER. CHARLES J. FORESTER, Newton, Mass. Filed Sept. 27, 1929. Serial No. 395,709. 8 Claims. (Cl. 132—74.)



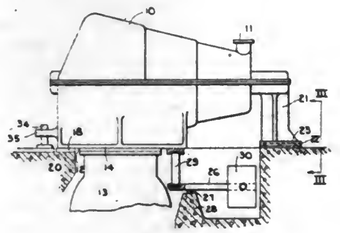
1. Apparatus of the class described comprising a plunger, a tool removably connected to the plunger at one end, the tool having a plurality of faces and having cleaning or polishing elements mounted on the respective faces, the tool being angularly adjustable with respect to the plunger so that any selected element may be positioned upon the under side of the tool, a finger support spaced beneath the tool, and means for reciprocating the plunger.

1,814,626. TURBINE SUPPORT. ROBERT C. ALLEN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 12, 1926. Serial No. 141,136. 11 Claims. (Cl. 60—95.)



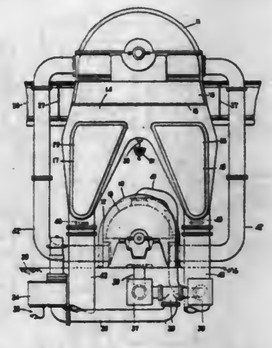
4. The combination of an elastic fluid turbine having a condenser disposed thereunder and connected to the exhaust chamber of the turbine, a foundation having a space in which said condenser is disposed, and longitudinal beams disposed on either side of said turbines and across said space and having its ends supported on the foundation on opposite sides of said space, the cylinder structure of said turbine having a point at each side supported from one of said beams intermediately of its points of support.

1,814,627. TURBINE SUPPORT. ROBERT C. ALLEN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 27, 1926. Serial No. 151,153. 4 Claims. (Cl. 60—95.)



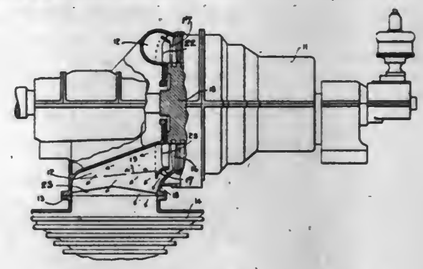
4. In combination, a foundation, a turbine cylinder structure having a high pressure and a low pressure end and resting upon the foundation at three and only three points, one point being at the high pressure end and the other two being at the low pressure end on opposite sides of the cylinder structure, a condenser secured to and depending from the cylinder structure, a fulcrum supported from the foundation, a lever fulcrumed on said fulcrum, means for applying a constant gravitational force to said lever, and means including the condenser for transmitting from said lever to the cylinder structure intermediate the ends thereof a constant force resulting from said gravitational force and acting upwardly on the cylinder structure.

1,814,628. COMPOUND TURBINE AND CONDENSER ARRANGEMENT. FRANCIS HODGKINSON, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 30, 1930. Serial No. 448,747. 8 Claims. (Cl. 60—95.)



1. In a compound turbine and condenser arrangement, the combination of a high-pressure turbine, a low-pressure turbine located above the high-pressure turbine, and a condenser located between said turbines, said condenser being connected to the low-pressure turbine and straddling a part of the high-pressure turbine.

1,814,629. ELASTIC FLUID TURBINE. HENRY J. HANZLIK, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 12, 1928. Serial No. 312,131. 6 Claims. (Cl. 60—64.)

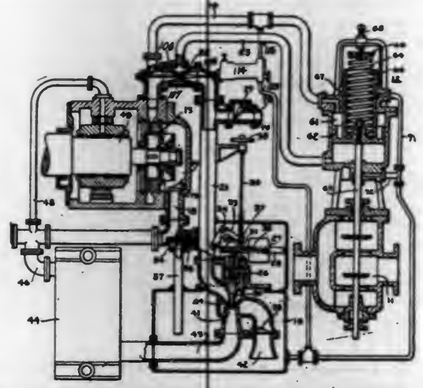


1. In an elastic fluid turbine, the combination of a casing having an exhaust chamber therein, a rotor within the casing, cooperating rows of blades carried by the casing and the rotor and discharging the motive fluid flowing therethrough into said exhaust chamber, the casing being formed to divert the elastic motive fluid discharged by said rows of blades from the path in which it is discharged, and means for diverting the moisture in the motive fluid from a path across the path provided for the motive fluid by the exhaust chamber comprising means for separating and deflecting fluid adjacent the last row of blades and at the outer periphery of the path in which it is discharged.

1,814,630. GOVERNOR. JOHN S. MYERS, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 15, 1925. Serial No. 43,811. 12 Claims. (Cl. 264—14.)

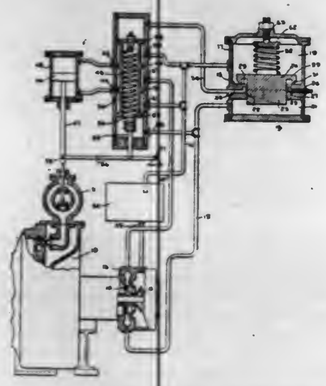
1. The combination with a prime mover, of a pump driven thereby for developing a fluid pressure varying with the speed thereof, a fluid reservoir, a discharge conduit leading from the pump to the fluid reservoir, a converging-diverging passage within the discharge conduit, a biased relief valve for maintaining a substantially constant pres-

sure at the discharge side of the converging-diverging passage, an ejector operated by fluid pressure passing the relief valve for supplying fluid under pressure to the inlet side of the pump, means for maintaining the pressure supplied to the inlet side of the pump substantially con-



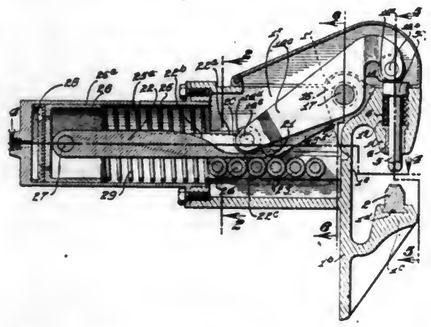
stant, a fluid pressure operated governor including a biased element movable in response to variations in fluid pressure, means for subjecting one side of said element to the pressure delivered by the pump, and means for subjecting the other side of said element to the variable pressure in the converged portion of the passage.

1,814,631. FLUID PRESSURE GOVERNOR. JAMES L. RAY, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 15, 1928. Serial No. 285,673. 1 Claim. (Cl. 264—7.)



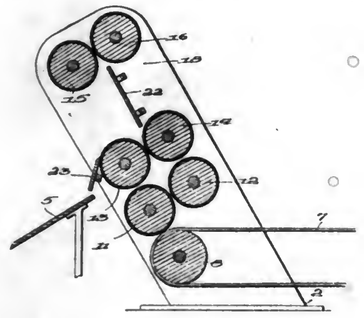
In a fluid-pressure governor for a prime mover having an admission valve, the combination of a pump developing a fluid pressure varying with its speed, means providing an enclosed space, means providing a restricted flow of fluid under pressure into said enclosed space, means responsive to said fluid pressure for controlling the escape of fluid from said enclosed space and thereby controlling the pressure therein inversely to the first-mentioned fluid pressure, valve operating mechanism for controlling the admission valve and including a pressure responsive element and a spring biasing the element, said mechanism operating upon change in spring deflection to provide a valve movement proportional to the change in spring deflection, means for applying the first-mentioned fluid pressure to the pressure responsive element in valve closing direction, and means for applying the fluid pressure in said enclosed space to said element in opposition to the first-mentioned fluid pressure so that the variations in the former fluid pressure assist the variations in the latter fluid pressure to provide increased spring deflection and consequent increased valve movement.

1,814,632. RIVETING MACHINE. FREDERICK H. ROHR, San Diego, Calif., assignor to Solar Aircraft Company, San Diego, Calif., a Corporation of Delaware. Filed June 6, 1929. Serial No. 368,975. 11 Claims. (Cl. 78—52.)



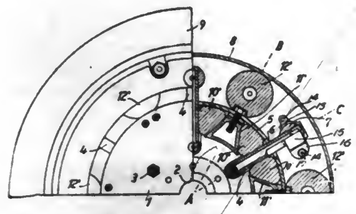
1. In a riveting machine, a casing, a riveting plunger, a riveting die, lever means engageable with said plunger, and cam means engageable with said lever, a cylinder connected with the said casing and receiving an end of said cam means, a fluid actuated piston therein connected to said cam means, said piston adapted to force a portion of said cam means into engagement with said lever, independently operable vise means mounted adjacent to said plunger for holding the work acted upon by said plunger and vise operating lever means for actuating said vise means, said vise lever means engageable by another portion of said cam.

1,814,633. METHOD AND APPARATUS FOR SEPARATING STRING BEANS. FRANK PITTIS RYDER and WILLIAM DONALD CHISHOLM, Niagara Falls, N. Y. Filed Oct. 1, 1929. Serial No. 396,568. 15 Claims. (Cl. 209—71.)



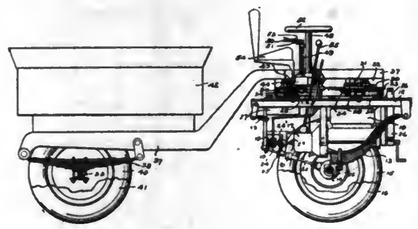
1. The method of separating string beans from stalks of greater length than the beans which comprises so imparting movement of translation to the beans and stalks in a straight line that the stalks of greater length will be caused to bridge an opening of less length than such stalks but of greater length than the beans and continuing the further movement of the stalks while permitting the beans to drop.

1,814,634. ELASTIC WHEEL. TEODORO SANMARTI, Sabadell, Barcelona, Spain. Filed Feb. 29, 1928, Serial No. 257,969, and in Spain Mar. 26, 1927. 2 Claims. (Cl. 152—28.)



1. An elastic wheel comprising a central part having a peripheral wall, a surrounding annular rim, radial arms pivotally connected at the inner extremities within the central part and passing with clearance through the peripheral wall thereon, trunnions in the annular rim through which the other extremities of the radial arms pass, cushions of resilient material disposed between the peripheral wall of the central part and the annular rim in fixed positions between the radial arms, blocks of resilient material disposed in the central part against the peripheral wall on either side of the radial arms, and retention members secured to the central part and forming with the peripheral wall thereof means for the retention in position of the resilient blocks.

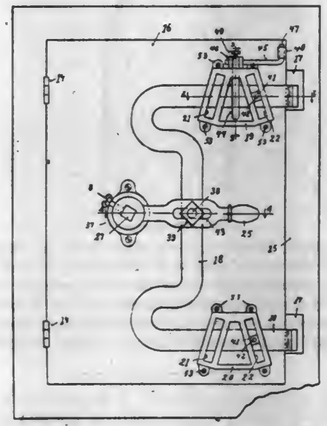
1,814,635. MOTOR TRUCK. CHRISTIAN H. SCHLUNDT, Indianapolis, Ind. Filed Feb. 12, 1930. Serial No. 427,742. 2 Claims. (Cl. 180—52.)



2. In a truck, the combination with a pair of rear wheels and a frame supported at its rear end by said wheels, of a pair of front wheels, a sub-frame carried by the front wheels, a power plant carried by the sub-frame, a bearing plate carried by the front end of said frame, a bearing ring rotatably contacting and secured to said plate to permit horizontal rotation of the ring around said plate, said bearing ring being secured to said sub-frame, gear means interposed between said plate and said ring, and means for rotating said gear to cause rotation of the ring relative to said plate, means for shifting said gear means to permit reverse travel, a seat supported by said ring, and power plant controls extending upwardly through said ring.

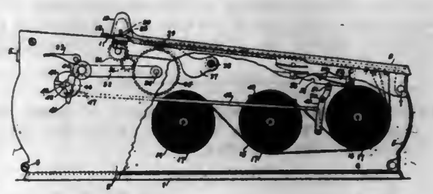
1,814,636. DOOR LATCH. FREDERICK SCHMIDGALL, Cincinnati, Ohio. Filed June 28, 1928. Serial No. 288,981. 6 Claims. (Cl. 292—161.)

1. A latch mechanism comprising in combination with a door and door frame, a gravity actuated latch member supported near opposite ends thereof by means of hangers mounted stationarily upon the door and serving to guide said latch member in a plane parallel to the door and to guide the latch member in an inclined direction within said plane to extend and retract the ends of the latch member, latch engaging members carried by the door frame in position to be engaged by opposite ends of the



latch member, a pawl carried by the door adapted to engage and hold the latch member in its retracted position while the door is open, means to engage and trip said pawl and release said pawl when said door is closed, and actuating means to lift said latch member when it is desired to open said door.

1,814,637. AUTOGRAPHIC REGISTER. MAX SCHNEIDER, Denver, Colo., assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 13, 1928. Serial No. 325,829. 33 Claims. (Cl. 282—21.)



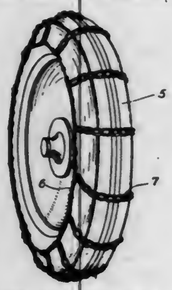
29. In an autographic register, feed means for feeding apertured strips, an aligning pin, means for projecting said pin into the strip apertures, a crank for operating the feed means, a releasable stop for the crank, a rod connected to said stop, and means actuated upon movement of said rod to withdraw the pin from the paper apertures.

1,814,638. BOTTLE. SAMUEL SCHOFIELD, Liverpool, England. Filed Feb. 23, 1929, Serial No. 342,180, and in Great Britain Mar. 1, 1928. 1 Claim. (Cl. 215—31.)



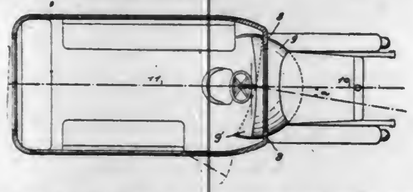
A receptacle having a neck adapted to be closed by a closure of the crown cork type comprising in combination a body, a flange adapted to receive a crown cork, and recessed to lessen resistance to removal of a crown cork, and a number of recesses beneath said flange spaced intermediate and equi-distantly to the recesses in said flange.

1,814,639. ANTISKID CHAIN. JOHN SENFT, York, Pa., assignor to United States Chain & Forging Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,661. 2 Claims. (Cl. 152—14.)



1. An anti-skid cross chain composed of inter-connected links each twisted through approximately 90°, and barlike calks welded at their mid portions to those projecting portions of the links which result from the twisting thereof, each calk extending in a direction diagonally to the longitudinal center line of its link, and extending in both directions beyond the adjacent end of the underlying link.

1,814,640. VEHICLE BODY. ARTHUR J. SLADE, New York, N. Y. Filed Dec. 17, 1923. Serial No. 681,112. 10 Claims. (Cl. 280—33.1)



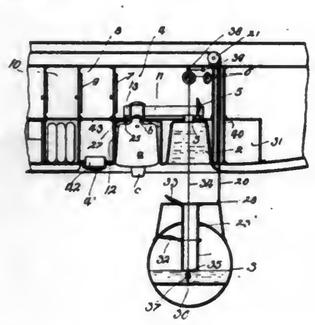
1. In a vehicle, two or more articulated units, means on the end of one of said units to receive an adjacent unit and complementary means on said adjacent unit adapted for extended interfitting closure engagement with said first named unit independent of any relative angular movement between said units.

1,814,641. IMITATION PEARL AND METHOD OF MAKING SAME. HARRY E. SMITH and WILLIAM BOWKER, Newark, and HARRY CONROW, Lyndhurst, N. J., assignors to Celluloid Corporation, a Corporation of New Jersey. Filed Oct. 6, 1927. Serial No. 224,313. 8 Claims. (Cl. 18—47.5.)



1. The process of making imitation mother of pearl having a base of a thermoplastic substance comprising forming sections of said substance containing a lustrous material, mingling said sections in a stack of predetermined dimensions, heating said stack and subjecting it to pressure in one direction while permitting it to spread as a whole in another direction so as to produce a consolidation of said sections and a drift of the pattern of said lustrous material in the direction of said spreading, and slicing said consolidated material into sheets in the general direction of said drift.

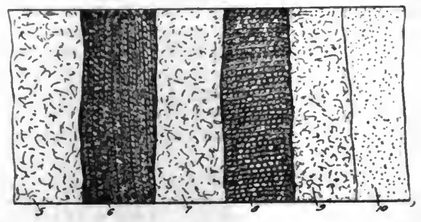
1,814,642. RESCUE SUBMARINE. LAWRENCE Y. SPEAR, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Sept. 1, 1928. Serial No. 303,513. 4 Claims. (Cl. 114—16.6.)



1. In a submarine boat, two juxtaposed chambers opening through the bottom of the hull, a rescue compartment above the chambers and communicating therewith, removable closures between said compartment and the chambers, a diving compartment communicating with said rescue compartment and having a hatch opening through the bottom of the hull, a removable closure for said opening, said diving compartment being disposed closely adjacent one of said chambers, a decompression tank communicating with the diving compartment and with the interior of the ship, and removable closures for said tank.

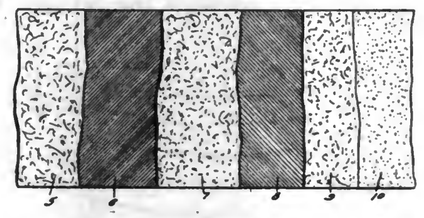
1,814,643. COMPOSITE MATERIAL. WILLIAM O. STODDARD, Jr., Detroit, Mich. Filed Apr. 9, 1925. Serial No. 21,976. 4 Claims. (Cl. 154—46.)

4. As an article of manufacture, a substitute for woven covering material which consists of a pliable mass composed of a plurality of laminated layers of unspun and unwoven fibers having some of the layers composed of interlocking fibers of relatively greater strength than the



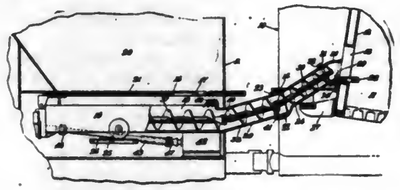
fibers of other of said layers, said layers being adhesively secured to each other and a substantially water-proof cover adhesively secured to the mass.

1,814,644. COMPOSITE MATERIAL. WILLIAM O. STODDARD, Jr., Detroit, Mich. Filed Apr. 9, 1925. Serial No. 21,977. 5 Claims. (Cl. 154—46.)



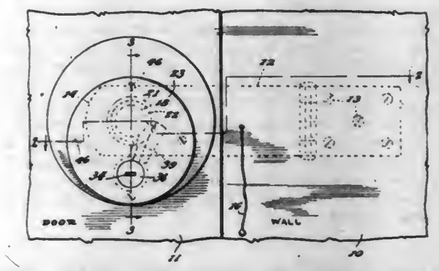
5. As an article of manufacture, a substitute for woven covering materials which consists of a pliable mass composed of a plurality of layers of unspun and unwoven fibers, the fibers of every other layer being of relatively greater strength than the fibers in the contiguous layers and being disposed in substantially parallel relation to each other and extending in diverse directions relative to the fibers of the other strong layers, all of said layers being adhesively secured together, and a substantially water-proof cover adhesively secured to the mass.

1,814,645. STOKER CONVEYER. CHARLES J. SURDYKOWSKI, Tuckahoe, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Oct. 3, 1930. Serial No. 486,095. 2 Claims. (Cl. 198—15.)



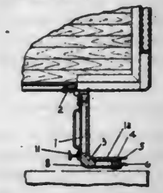
1. In a locomotive, provided with a backhead having a firing opening therein, and a tender, a fuel conveying system comprising a conduit fixed rigidly to said backhead and communicating with said firing opening, a unitary transfer conduit movably mounted on the tender having an upwardly inclined forward portion and universally connected at its forward end to the rearward end of said fixed conduit, a screw in the rearward portion of said transfer conduit, a screw in the inclined forward portion thereof, said screws being flexibly connected adjacent the bend in said transfer conduit, and a screw in said fixed conduit flexibly connected at its rearward end with the screw in said inclined forward transfer conduit portion.

1,814,646. LOCK. GEORGE R. TERRILL, McALESTER, Okla. Filed Aug. 25, 1930. Serial No. 477,717. 5 Claims. (Cl. 70—5.)



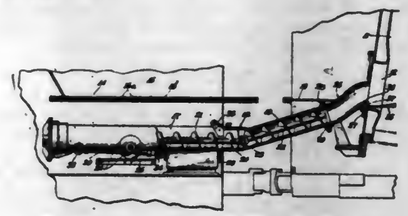
1. A lock comprising a post having a circumferential groove therein, a hasp operatively connected to the post, a barrel having a recess receiving the post, said barrel being formed of a pair of longitudinal parts connected by a mortise dove-tail joint, there being a radial recess formed in one of the parts, a longitudinal recess formed in said barrel communicating with said radial recess, a housing keyed to said barrel, a pin tumbler core rotatably mounted in said longitudinal recess, a radially disposed locking catch secured to said core and rockable therewith as a unit, said catch being adapted to be rocked into and out of said circumferential groove, and key operated means carried by said core for locking said core stationary in said housing.

1,814,647. CORNER DOOR CONSTRUCTION. KENNETH J. TOBIN and WILLIAM W. DARROW, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 27, 1928. Serial No. 308,851. 5 Claims. (Cl. 180—46.)



2. In a corner door construction for house cars, a door hinged to the rear wall of the car and comprising a rear section terminating in a corner post and a side section extending from said corner post and a sheet metal panel covering said rear section and bent around said post and covering said side section.

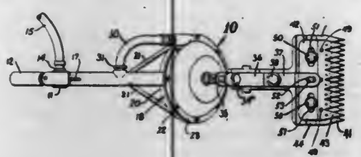
1,814,648. STOKER CONVEYER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Sept. 15, 1930. Serial No. 481,834. 2 Claims. (Cl. 198—15.)



1. In combination, a locomotive provided with fire-box having a backwall with a firing opening therein, a tender,

a fuel conveying system comprising a tubular conduit fixed rigidly to said backwall and communicating with said firing opening, a unitary transfer conduit composed of a rearward substantially horizontally disposed portion movably mounted on the tender and an upwardly inclined forward portion at its forward end flexibly attached to and in end to end relation with the rearward end of said tubular conduit, and a sectional screw in said transfer conduit comprising the sole fuel advancing means in said fuel conveying system comprising a screw section in said rearward portion and a screw section in said forward portion, the latter section terminating adjacent the rearward end of said tubular conduit and the two screw sections being universally connected at the juncture of the rearward and forward portions of the transfer conduit.

1,814,649. COMBINED LAWN AND HEDGE TRIMMER. FRANCIS W. WADE, Canon City, Colo. Filed Dec. 28, 1929. Serial No. 417,176. 4 Claims. (Cl. 56—25.)



1. In a combined lawn and hedge trimmer, a frame, said frame including a base, a water motor on said base, means to conduct water to said motor to operate the same, a fixed blade mounted on said frame, a movable blade coacting with said fixed blade, an operating member pivoted on said frame, means to connect said operating member with said movable blade and other means to connect said operating member to said motor, there being a forwardly and downwardly directed aperture in said base in communication with the discharge from said water motor whereby the water is discharged forwardly and downwardly.

1,814,650. MEDICANT CONTAINER. RALPH B. WAITE, Springville, N. Y., assignor to The Antidolor Mfg. Co. Inc., a Corporation of Delaware. Filed Nov. 16, 1928. Serial No. 319,897. 1 Claim. (Cl. 215—37.)



In combination, a bottle, a closure means therefor, said closure means having a recess in the outer surface thereof, and gauze or the like passing through the closure means in line with the recess, said recess enabling the gauze to be withdrawn from the bottle through the recess so that after severance of the gauze a projecting portion will remain in said recess for gripping.

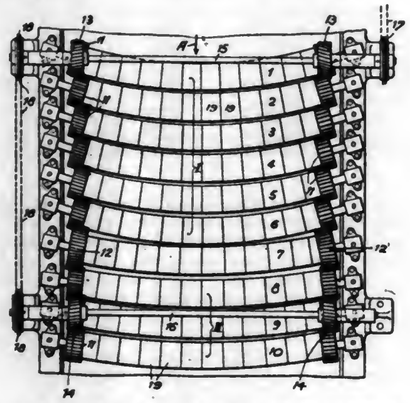
1,814,651. COLLAR BUTTON. WILLIAM F. WATSON, Bradenton, Fla. Filed Dec. 15, 1930. Serial No. 502,528. 1 Claim. (Cl. 24—101.)

A collar button comprising a base bar consisting of a flat strip of rigid material of an even thickness throughout its length and width, an element to engage through buttonholes of a collar band projecting from the rear face of said base bar adjacent one end thereof intermediate its width and having a shank rigid with the base bar and provided with a head, the shank being of greater width than thickness with its greater dimension extending longitudinally of the base bar and having flat side faces, the head being formed with flat inner and outer faces and extending transversely of the base bar with its end portions projecting from opposite side faces of



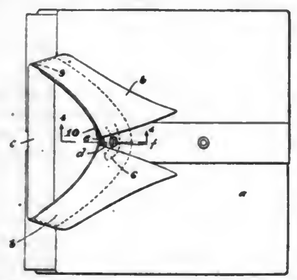
the shank, side edges of the head being flush with edge faces of the shank, and an element to engage through buttonholes of a collar projecting from the front face of the base bar adjacent the other end thereof intermediate its width and consisting of a shank rigid with the base bar and provided with a head at its free end.

1,814,652. DEVICE FOR STRETCHING FABRICS WIDTHWISE. HANS WEISS, Uzwil, Switzerland, assignor to the Firm Maschinenfabrik Benninger A. G., Uzwil Switzerland. Filed May 1, 1930, Serial No. 449,030, and in Germany May 6, 1929. 3 Claims. Cl. 26—63.)



1. In a device for stretching fabrics widthwise of the type described, in combination, a series of stretching rollers of the same character and of continuous curvature, said curvature of the rollers decreasing from the entrance end towards the delivery end of the device.

1,814,653. COLLAR SHAPE PRESERVER. EDWARD W. WILSON, Nashua, N. H., assignor to Nashua Surehold Company, Nashua, N. H., a Corporation of Massachusetts. Filed Feb. 2, 1931. Serial No. 512,906. 5 Claims. (Cl. 223—18.6.)



1. A form preserver comprising a flat flexible strip having a concave edge to fit inside the neck band portion

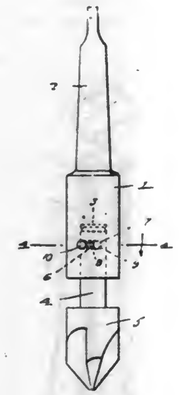
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of a shirt, said strip having a button-engaging tongue intermediate its width in position to cooperate with the upper button of the shirt.

1,814,654. PRODUCTION OF CETYL ALCOHOL. MERRILL A. YOUTZ, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Aug. 1, 1927. Serial No. 210,018. 10 Claims. (Cl. 260—156.)

1. The method of producing cetyl alcohol which consists in hydrolyzing spermaceti and extracting the cetyl alcohol from a water, alcohol mixture by a solvent which is substantially immiscible with said mixture, and adding alcohol thereto to prevent formation of gels and emulsions.

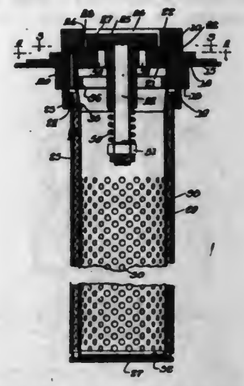
1,814,655. TOOL HOLDER. RUDOLF WILLIAM ANDREASSON, Detroit, Mich. Filed May 28, 1930. Serial No. 456,620. 1 Claim. (Cl. 279—76.)



A tool holder comprising a socket member having a bore and a transverse passage tangentially intersecting the bore with its inner end terminating in a ball seat open to and substantially opposite the center of the bore, a spring pressed ball in said passageway normally seated in said ball seat and partly extending into the said bore and retractible in the passageway, a tool having a shank inserted in the said socket, said shank being provided with a tangential flat bottom notch formed on one side thereof to receive the part of the ball which extends into the said bore, said notch having one end thereof engageable with the said ball for unseating and moving the same in the passageway upon movement of the tool shank in one direction and having its opposite end engageable with the ball for confining the same to its seat upon movement of the tool shank in the reverse direction.

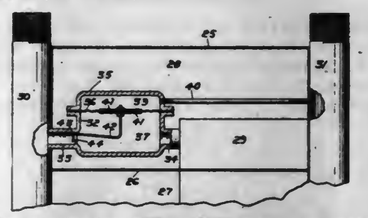
1,814,656. FILLING AND VENTING DEVICE. RUDOLPH JANSCHICKS, Chicago, Ill., assignor to Protectoseal Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 9, 1928. Serial No. 291,379. 1 Claim. (Cl. 220—86.)

In a device of the class described, a pair of foraminous tubular members closed at one end and telescoping each other with a space therebetween, means engaging the open ends of said tubular members and adapted to close a tank or the like, said means having a flange forming a recess, said means also having a perforation therein, and a valve seated in said recess, said valve having a face yieldingly seated over said perforation and adapted to be unseated



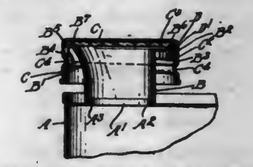
upon the exertion of a predetermined pressure on said face, the depth of said recess being greater than the maximum movement of said valve.

1,814,657. DEMAND LIMIT DEVICE FOR FLUID METERS. JAMES R. ARMSTRONG, Ingram, Pa., assignor by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 17, 1923. Serial No. 632,642. 4 Claims. (Cl. 73—1.)



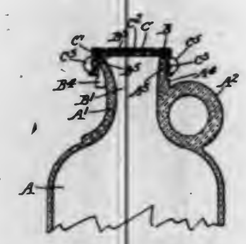
1. The combination with a fluid meter for measuring the quantity of fluid passing therethrough, of means contained within the meter and associated therewith for restricting the rate of flow of fluid through the meter to a predetermined maximum, said means including an enclosed diaphragm having one side subject to pressure on the incoming side of the meter and one side subject to pressure on the outgoing side, said diaphragm being responsive to the difference in pressure, a valve, and means operatively connecting the valve and the diaphragm whereby when the differential pressure exceeds a predetermined maximum the valve will be closed.

1,814,658. POURING NOZZLE AND CLOSURE THEREFOR. HENRY E. BARROLL, Chicago, Ill., assignor to Henry Barroll & Co. Inc., Chicago, Ill., a Corporation of New York. Filed Apr. 23, 1928. Serial No. 272,104. 11 Claims. (Cl. 220—24.)



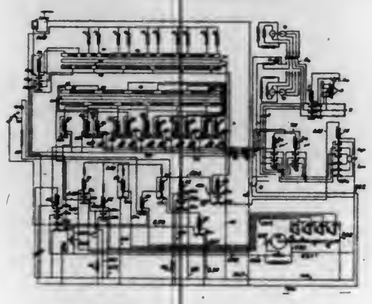
1. In a pouring nozzle, a sealing surface lying in a single plane, a screw thread member positioned about and beneath said sealing surface, said screw thread member having an interruption, and a pouring lip, in line with said interruption, formed in said sealing surface.

1,814,659. POURING NOZZLE. HENRY E. BARROLL, Chicago, Ill., assignor to Henry Barroll & Co. Inc., Chicago, Ill., a Corporation of New York. Filed Jan. 21, 1929. Serial No. 334,066. 6 Claims. (Cl. 215—31.)



6. In a pouring container, a neck, a generally circular head on said neck, and a sealing surface lying in a single plane on the upper face of said head, the plane of said sealing surface being generally perpendicular to the axis of the neck, the periphery of said head being generally circular but eccentric in relation to the axis of the neck, the sealing surface being laterally deformed to form a pouring lip, the head being recessed beneath said pouring lip, and a generally circular cap adapted to engage said head in locking engagement and to engage said sealing surface in sealing contact, the head being provided with circumferential wedging locking means, such means being interrupted adjacent the pouring lip, the cap being flanged to engage such wedging locking means.

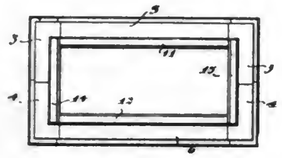
1,814,660. SYSTEM OF CONTROL FOR ELEVATORS. CYRUS W. BASSETT and HAROLD J. FEAR, Montclair, N. J., assignors to Elevator Supplies Company, Inc., Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 15, 1927. Serial No. 184,082. 16 Claims. (Cl. 187—29.)



1. In a control system for elevators, an elevator car and a hoisting mechanism therefor, means located at a controlling station for controlling said hoisting mechanism, said means operating to start the car and to arrest it automatically at a predetermined landing and automatic means for operating the hoisting mechanism controlling means to cause the car to depart from said landing at a predetermined time after its arrival at said landing and continue on its course until it reaches another pre-selected landing, said controlling means operating to again arrest the car at said second landing.

1,814,661. REFRIGERATOR CLOSURE. GEBHARD C. BOHN, St. Paul, Minn. Filed Apr. 28, 1928. Serial No. 273,548. 3 Claims. (Cl. 20—35.)

3. A refrigerator door having a metal plate with a recess about the edges thereof, a collapsible frame comprising a pair of end members having a bead on their outer edges and ends, and a groove on their inner edges, and a pair of longitudinal members mounted between said end members and having tongue and groove engagement there-



with, said longitudinal members being slidable laterally to be positioned both on one pair of end members, leaving the other pair free for removal.

1,814,662. DISPENSING APPARATUS OF THE VISIBLE TYPE. RAYMOND W. BOND, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Dec. 17, 1928. Serial No. 326,650. 22 Claims. (Cl. 221—100.)

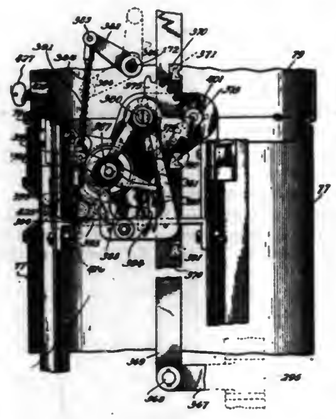


1. In dispensing apparatus, the combination with dispensing mechanism, of means for operating the same, an operator's controlling lever connected to said operating means, quantity stop mechanism for predetermining the amount of liquid to be delivered by said dispensing mechanism and comprising manual means for setting the same, a quadrant plate connected to said manual means to be moved laterally thereby, and interlocking mechanism between said quadrant plate and said operator's controlling lever to prevent operation of said manual means until after said operator's controlling lever has been operated for completing a predetermined cycle of movements to effect a dispensing operation.

1,814,663. TOTALIZING COUNTER-MECHANISM FOR DISPENSING PUMPS. RAYMOND W. BOND, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Jan. 25, 1929. Serial No. 334,981. 2 Claims. (Cl. 235—94.)

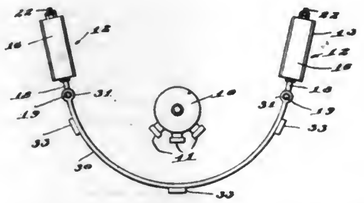
1. In counter-mechanism, the combination with a totalizer, of means for driving the same comprising a double-armed rocking lever, a radially stepped stop plate for limiting the movement of said lever in driving direction, another rocking lever having a predetermined rocking

movement, a sleeve pivoted to said first-named lever, a rod pivoted to said second-named lever and slidable through



said sleeve, and a spring on said rod between said second-named lever and said sleeve to operate said first-named lever to the extent permitted by said stopplate.

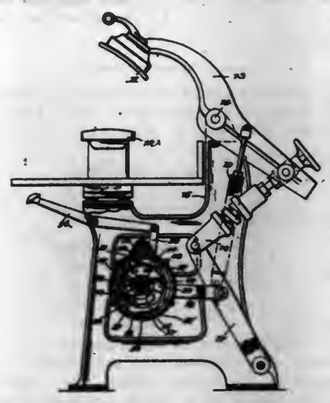
1,814,664. FIRE-HYDRANT GUARD. JOHN J. CAHILL, Malden, and GEORGE R. CARGILL, Medford, Mass. Filed Dec. 16, 1929. Serial No. 414,434. 2 Claims. (Cl. 256—1.)



2. In a guard for fire-hydrants and the like comprising a series of semi-circular horizontal bars partially surrounding said hydrant, buffers comprising vertically located channels located in the ground to the rear and at one side of said hydrant, said channel adapted to receive a compressible plate maintained in compression by means of compressios springs located within said channel and between said channel back and said plate, means for attaching said bars to said plate for the purpose of transmitting lateral forces thereto.

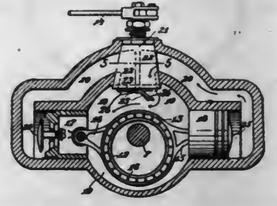
1,814,665. GARMENT PRESS. JOHN L. CARD, Baltimore, Md., ass'gnor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed May 28, 1929. Serial No. 366,693. 4 Claims. (Cl. 68—9.)

1. In a garment press, the combination of a fixed pressing element; a movable element adapted to be moved into pressing relation with said fixed element by the operator; constantly operated power means; crank means connected to said movable element for applying pressure thereto; clutch means for connecting said power means to said pressure applying means, said clutch means being connected to said crank means and rotatable therewith; means constantly urging said clutch means towards engaging position; means normally hold'ng said clutch means in disconnected position; and operator operated means for shifting said holding means to permit said urging means to effect actuation of said clutch means only when said elements



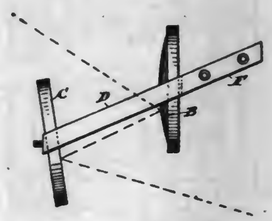
are in pressing relation to apply heavy pressure and upon a subsequent operation of the operator operated means to open the press.

1,814,666. BRAKE. WILLIAM BELL CHARTERS, Sooke, British Columbia, Canada. Filed Jan. 30, 1928, Serial No. 250,663, and in Canada Feb. 4, 1927. 4 Claims. (Cl. 188—99.)



1. A brake mechanism for automotive vehicles comprising an oil pump, said pump consisting of a plurality of cylinders having pistons driven by suitable gear in connection with the driving axle of said vehicle, a non-return valve fitted in the head of each of said pistons, a central chamber connecting the inner ends of said cylinders, a conduit connecting the outer ends of said cylinders with the said central chamber, means whereby the flow of oil discharged from the outward ends of said pistons is delivered to the inward ends of the opposite and corresponding pistons, and adjustable means for restricting the said flow.

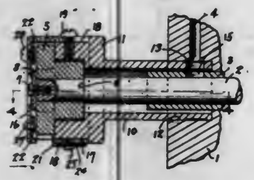
1,814,667. TRAFFIC SIGNAL INDICATOR. ARTHUR L. COWDREY, Cleveland Heights, Ohio. Filed Dec. 6, 1926. Serial No. 152,919. 1 Claim. (Cl. 88—1.)



In a front reflector for overhead traffic signals, a support comprising a shank affixed to the visor of a car,

and provided with lateral arms arranged at different levels thereon, a convex mirror upon the upper arm, and a concave mirror upon the lower arm, said upper mirror being inclined to reflect the rays from said overhead traffic signal to said lower mirror, and thence to the eye of the driver of the car.

1,814,668. COMBINATION CUTTER AND GUARD. ROBERT J. CROSSMAN, San Francisco, Calif. Filed Dec. 27, 1927. Serial No. 242,735. 6 Claims. (Cl. 12—91.)



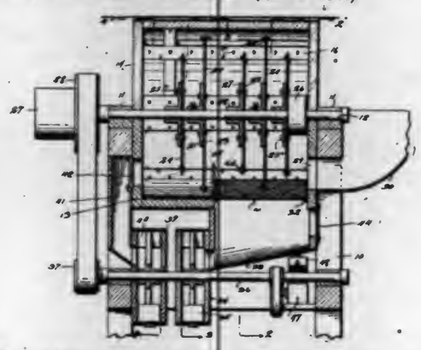
1. The combination with a cutter having angularly-shaped teeth, of a housing for said cutter, and blunt edged guards carried by said housing, said guards limiting the cutting effect of the width and depth of the cutter.

1,814,669. PARKING LAMP. GEORGE H. CUSHING, Washington, D. C. Original application filed Nov. 25, 1924, Serial No. 752,214, and Nov. 20, 1929, Serial No. 408,643. Divided and this application filed Dec. 5, 1929. Serial No. 411,919. 14 Claims. (Cl. 240—8.22.)



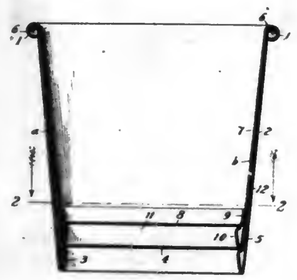
5. A lamp structure for vehicles comprising a housing, a light source in the lower portion thereof, a parabolic reflector surrounding said light source and adapted to project light from said source upwardly, a multi-directional reflector positioned above said light source so as to receive rays reflected from said parabolic reflector, said multi-directional reflector being adapted to project light falling thereon through a plurality of oppositely disposed openings in said housing.

1,814,670. MATTRESS PICKER AND RENOVATOR. DAVID F. DOUGAN, Memphis, Tenn. Filed May 17, 1930. Serial No. 453,300. 3 Claims. (Cl. 19—90.)



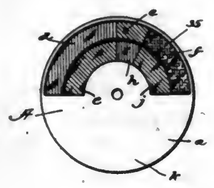
3. A picker and renovator of the character described comprising a fixed drum having inwardly projecting teeth, a hopper opening through one end wall of the drum into the interior of the drum, the other end wall of the drum having a stock outlet, a shaft extending through the drum and carrying pickers thereon, a dust box communicating with the drum adjacent the hopper thereof, an exhaust fan driven from the shaft and having a housing communicating with the interior of the dust box, a discharge chute extending below the bottom of the drum and communicating with the interior thereof through said stock outlet, and a rotatable fan having a housing communicating with the interior of the chute.

1,814,671. RECEPTACLE. GERMAINE DUFOUR, Easton, Pa., assignor to Individual Drinking Cup Company, Inc., Easton, Pa., a Corporation of Pennsylvania. Filed Aug. 4, 1927. Serial No. 210,594. 3 Claims. (Cl. 229—5.5.)



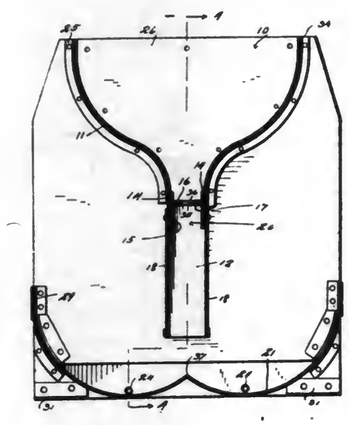
1. A double walled receptacle including an outer cup-like member having a normally closed bottom and an upper open mouth portion, and an inner cup-like member positioned within the outer member by placing the same through the open mouth thereof and supporting the same on the bottom of the outer member, the two members being connected at their mouth portions by bending the upper edge of the inner member over the upper edge of the outer member.

1,814,672. COLOR PHOTOGRAPHY. MAX B. DU PONT, Los Angeles, Calif., assignor to Max B. Dupont Vitacolor Corporation, Los Angeles, Calif., a Corporation of Delaware. Filed Jan. 18, 1926. Serial No. 81,992. 27 Claims. (Cl. 88—16.4.)



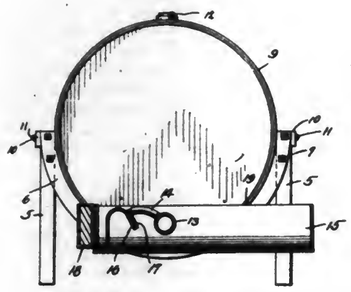
1. A method of registering color vibrations on a film sensitive to all colors of the visible spectrum which consists in exposing each frame of the film to an admixture of color vibrations resulting from the action of light passing through a composite filter comprising major filter sections whose color vibrations are approximately of the same wave length, one of such major sections being disposed at each end of the filter, and an intermediate filter of a toning color having a different actinic value, less total exposure, and a different color wave length from said major filters.

1,814,673. HOG FEEDER. JOSIAS D. DUUCK, Sequim, Wash. Filed Apr. 22. 1930. Serial No. 446,357. 4 Claims. (Cl. 119—56.)



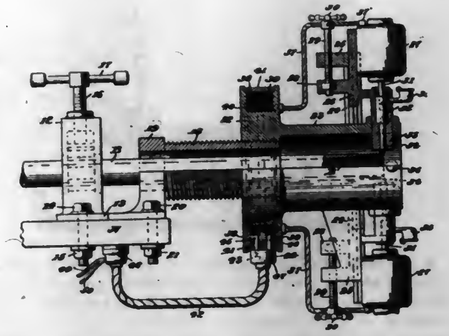
1. A hog feeder of the character described comprising a feed reservoir, a feeding trough, guard means depending from said reservoir, a guide member secured to said reservoir, a removable apertured bottom member loosely positioned in said guide member, and a slidable apertured closure member loosely positioned in said guide member.

1,814,674. STOCK WATERING TROUGH. STANLEY G. ELLIS, Hannibal, Mo. Filed June 16, 1930. Serial No. 461,493. 3 Claims. (Cl. 119—81.)



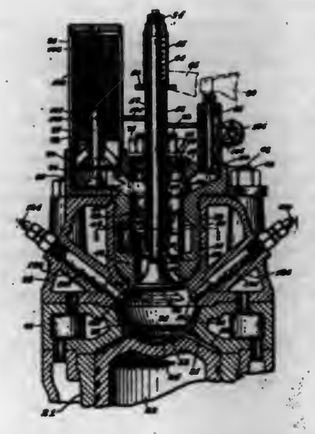
3. A stock watering trough comprising a supply tank, a supply pipe leading from the tank, a trough section pivotally mounted on the pipe adjacent to one end of a trough section, means at one end of the trough section to overbalance one end of the trough section when the trough section is empty, means for limiting pivotal movement of the trough section in one direction, one end of said trough section adapted to swing downwardly under the weight of water discharged into the trough section, and means controlled by the downward movement of the trough section, for regulating the flow of water to the trough section.

1,814,675. POWER CUTTER FOR ROUND METAL OBJECTS. FREDERIC W. ERICKSON, Larchmont, N. Y. Filed Oct. 24, 1930. Serial No. 491,030. 6 Claims. (Cl. 10—154.)



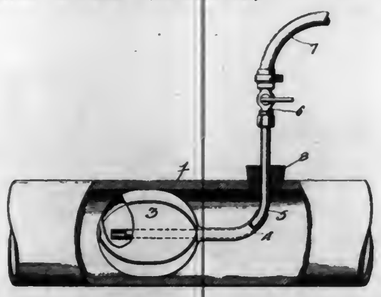
1. A tool for cutting a round metal object while the latter is stationary, said tool comprising a rotary body having a cutter extending inwardly toward the axis of rotation of said body, an electric motor radially mounted on said body for actuating said cutter, and means for adjusting said motor and cutter radially.

1,814,676. INTERNAL COMBUSTION ENGINE. ADRIAN C. ESTEP, Seattle, Wash. Filed Mar. 7, 1923. Serial No. 623,418. 7 Claims. (Cl. 123—32.)



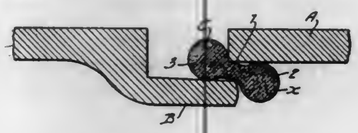
1. An internal combustion engine having a combustion chamber supplied with combustion air and fluid fuel and provided with fuel injection means delivering a charge of fluid fuel thereinto, an inlet-outlet valve disposed in the wall of said chamber, in combination with a power cylinder communicating with said combustion chamber, through a restricted opening, a reciprocative piston disposed in said cylinder having a frusto-conical centrally concaved working face adapted to co-operate with said opening at top dead center to form the lower wall of said chamber, and valve actuating mechanism whereby said fluid fuel is injected into the chamber at or about compression dead center.

1,814,677. STOPPER FOR PIPE LINES. ALBERT FENNEMA, Kenosha, Wis. Filed May 3, 1930. Serial No. 449,542. 1 Claim. (Cl. 137—76.)



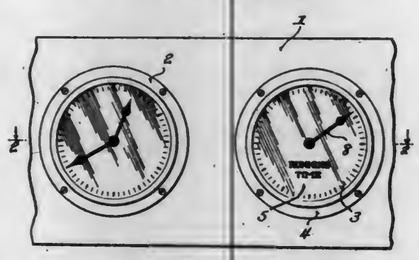
A gas main stopper including an inflatable bulb having a flexible stem, a rigid tube having one end passed through the stem and into the ball, the ends of said tube being disposed at right angles to each other with a curved portion between said ends, and a yieldable plug slidably mounted upon the other end of the tube.

1,814,678. METHOD OF JOINING BELL AND SPIGOT PIPES. WILLIAM C. FERGUSON, St. Louis, Mo. Filed Aug. 4, 1927. Serial No. 210,699. 1 Claim. (Cl. 285—163.)



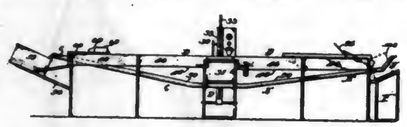
A method of joining bell and spigot pipe, which consists in arranging a deformable gasket between a pipe bell and a longitudinally aligned spigot in such a way that part of said gasket is positioned inside of the bell and part of said gasket is positioned on the exterior of the bell, producing relative longitudinal movement between the bell and spigot in a direction to deform the gasket and cause the spigot to enter the bell, holding a portion at the inner side of the gasket against movement relatively to the spigot during said deforming operation, and holding a portion at the outer side of the gasket against movement relatively to the bell during said deforming operation, whereby the part of the gasket originally positioned in the bell will be spread over the inner surface of the bell and more or less of the part of the gasket originally positioned on the exterior of the bell will be packed in the space between the bell and spigot.

1,814,679. CLOCK MECHANISM. FRANK M. FICHTEN, Davenport, Iowa. Filed Jan. 21, 1926. Serial No. 82,722. 1 Claim. Cl. 161—15.)



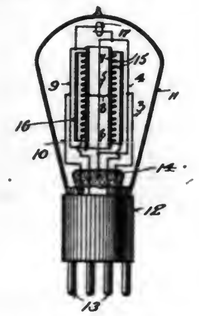
In an automobile, the combination of clock mechanism adapted for continuous operation and a registering device, both said clock mechanism and registering device being enclosed in a casing, a two-part shaft directly geared to said clock mechanism and to said registering device, a magnetic clutch for operatively coupling the two parts of said shaft, and a manually operable ignition switch for positively closing the electric circuit of said clutch when said ignition is turned on.

1,814,680. EGG TREATING MACHINE. BURDETTE E. FORD, Chicago, Ill., assignor to The Sterolene Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 14, 1927. Serial No. 232,987. 14 Claims. (Cl. 99—2.)



1. In an egg-treating machine having means for conducting eggs in racks to said means proper from a loading station and away from said means proper to an unloading station, the combination therewith of guide means including a section thereof extending slantingly downward from a place closely adjacent to the unloading station for returning the racks with a sliding motion to the vicinity of the loading station.

1,814,681. VACUUM DEVICE. ALBERT W. FRANKLIN, New York, N. Y. Filed June 11, 1927. Serial No. 198,059. 2 Claims. (Cl. 250—27.5.)



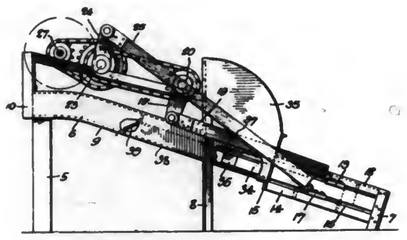
1. The combination in a vacuum device of an electron emitter, means for heating said emitter and terminals for said heater, said emitter being connected at its ends to one terminal, said heater being connected at both ends to the other terminal and said heater and emitter being connected together centrally.

1,814,682. LAMINATED SPRING. ARTHUR ERNEST FROST, Sheffield, England. Filed Aug. 14, 1929, Serial No. 385,829, and in Great Britain Apr. 6, 1929. 7 Claims. (Cl. 267—47.)



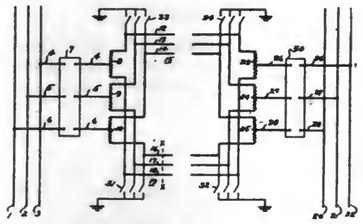
1. A laminated spring comprising a plurality of laminations wherein the supporting or suspending means comprises an articulated member disposed within the laminations so arranged and adapted as to accommodate itself to the varying curvature of the laminations under stress, said articulated member being bound together with the laminations.

1,814,683. FEEDING DEVICE. JOSEPH H. FULMER, Nazareth, Pa. Filed Apr. 24, 1930. Serial No. 447,050. 2 Claims. (Cl. 198—219.)



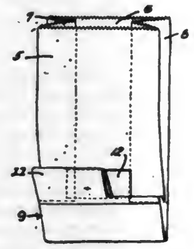
1. A device for conditioning forage material for curing purposes, comprising an inclined body portion formed of spaced upper and lower walls, said body portion having a restricted portion providing a forming chamber, reciprocating members operated in the body portion, a hopper for direct material to the body portion, and means for operating the reciprocating members to force material through the body portion.

1,814,684. POWER TRANSMISSION SYSTEM. FRAZER W. GAY, Newark, N. J. Filed Oct. 12, 1928. Serial No. 312,085. 6 Claims. (Cl. 171—97.)



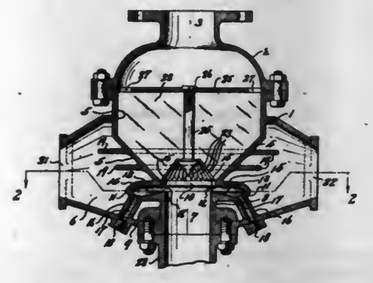
1. A transmission system comprising, a polyphase station bus having a plurality of phase conductors, a pair of polyphase transmission lines, each having a plurality of phase conductors, a plurality of transformers corresponding in number to the number of phase conductors in said bus, each of said transformers having a continuous winding with a mid-tap connected to one of said bus phase conductors, the ends of each said winding being connected to a phase conductor of each of said transmission lines.

1,814,685. BAG. JACKSON C. E. GLASS, Oakland, Calif. Filed Aug. 23, 1928. Serial No. 301,615. 1 Claim. (Cl. 229—53.)



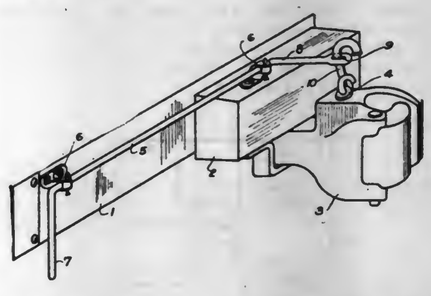
In a foldable paper bag, a bottom member, a side wall joined to the member, a transparent portion in said side wall, and a fold line arranged transversely around the bag below the transparent portion and in such relation that the bottom member and a contiguous part of the side wall will overlie the transparent portion when said bag is folded.

1,814,686. VAPORIZER. ERNEST R. GODWARD, New York, N. Y., assignor to The Eclipse Petrol Economiser System Company, Limited, Christchurch, New Zealand, a Corporation of New Zealand. Filed Oct. 1, 1930. Serial No. 485,705. 4 Claims. (Cl. 48—180.)



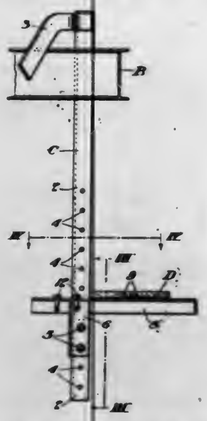
1. In a vaporizing apparatus of the kind described, a vaporizing chamber having a central carburetted fuel mixture intake leading upwardly thereinto and a downwardly and centrally sloping bottom heating plate heated by exhaust gases terminating in an opening above and exceeding the diameter of said intake, and an annular catch-basin also heated by exhaust gases intermediate said sloping chamber bottom and said intake, said basin having a catch-lip beneath the periphery of said opening and an annular opening above said intake and communicating with said heating plate opening.

1,814,687. CAR COUPLER OPERATING DEVICE. CARL M. GOLDINGER, Tarentum, Pa., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 28, 1929. Serial No. 335,588. 1 Claim. (Cl. 213—170.)



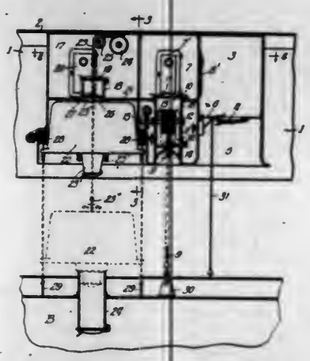
In an operating device for a railway car coupler, the combination of an operating rod provided with a vertically disposed eye, a connector comprising a substantially vertical shank arranged for slidable and non-rotative movement through said eye, a semi-circular hook at the upper end of said shank having an enlargement at its extremity, and a helical open loop at the lower end of the shank for engagement with an eye of a coupler lock lifter, said loop being positioned on the same side of the shank as the hook, said crank also provided with lateral projections so positioned and proportioned that the connector can only be assembled with the operating rod eye with the upper hook projecting toward the outer side of the eye.

1,814,688. SCAFFOLD. CHAUNCEY MARSH GOODRICH, Windsor, Ontario, Canada. Filed Sept. 9, 1929. Serial No. 391,359. 2 Claims. (Cl. 304—15.)



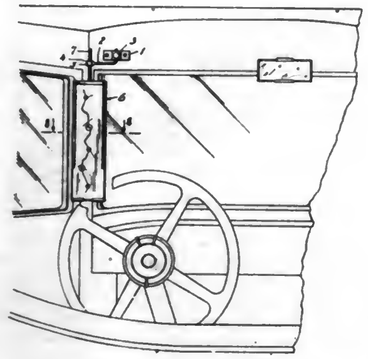
1. A scaffold construction comprising two spaced pairs of rigid hangers, each of said hangers comprising a vertically disposed angle-iron support, a hook member fixedly secured to the upper end of said angle-iron support and having its hooked end extending downwardly and outwardly on an angle to the longitudinal axis of said support, said angle-iron support having its flanges provided with a series of vertically spaced holes, a lug removably secured to said support by bolts mounted in selected ones of said holes, said lug extending parallel with said support and having its upper end spaced from said support, a horizontal bar bridging the space between and connecting the hangers of each of said pairs of hangers, said bar being mounted in the spaces between said lugs and said supports, said bars being provided with a plurality of spaced apertures adjacent each end, pins mounted in selected ones of said apertures in said bars at each side of said lugs to prevent longitudinal movement of said bars relative to said lugs, and planking bridging the space between said pairs of hangers and supported on said horizontal bars.

1,814,689. SALVAGE AND RESCUE SUBMARINE. HUGO E. GRIESHABER, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Aug. 31, 1928. Serial No. 303,200. 9 Claims. (Cl. 114—16.6.)



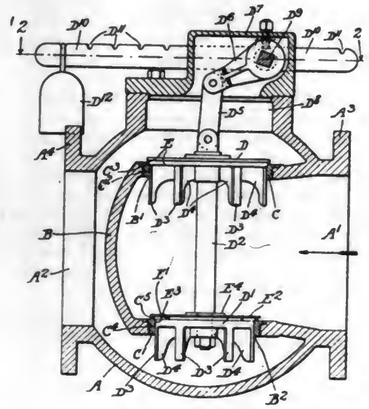
1. In a submarine boat, a rescue compartment, a trunk leading thereto from below, a cover for said trunk, a rescue buoy having an exit hatch for association with said trunk, and means for suspending said buoy from within said compartment through said trunk.

1,814,690. VEHICLE MAP RACK DEVICE. WILLIAM F. HAACK, Newark, N. J., assignor of one-half to Alphonso W. Rahn, New York, N. Y. Filed July 27, 1929. Serial No. 381,653. 5 Claims. (Cl. 40—10.)



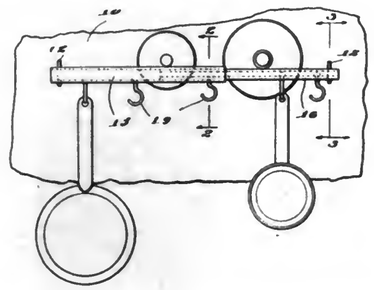
1. A map-rack device for vehicles, including a supporting member having one end pivoted to the vehicle and having the other end a sufficient horizontal distance from the pivot to lie behind a corner post of the vehicle, and a map-retaining member supported by the corner-post end of said supporting member.

1,814,691. VALVE. GEORGE J. HACHMEISTER, Des Plaines, Ill., assignor to G. M. Davis Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed May 20, 1929. Serial No. 364,358. 3 Claims. (Cl. 251—82.)



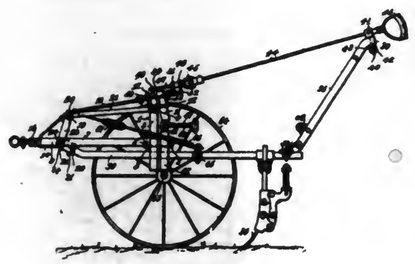
1. In combination, a cylindrical valve seat, a cylindrical valve mounted for reciprocation therethrough, there being working clearance between the valve and the seat, a flange projecting upwardly from one end of the seat, concentric therewith, there being a clearance radially between the inner periphery of the flange and the inner periphery of the valve seat, the flange having a plane surface perpendicular to the line of reciprocation of the valve, a boss on the valve projecting upwardly above the seat engaging the periphery thereof and having a plane surface parallel with the plane surface on the flange, a flexible plate, means for holding it on the boss, the plate projecting radially to overlie said flange.

1,814,692. RACK. CHARLES R. HARRIS, East Boston, Mass. Filed Feb. 27, 1930. Serial No. 431,831. 1 Claim. (Cl. 211—128.)



A rack comprising two hollow semi-circular telescopically associated sections each having its under face flattened and provided with an aligning slot, hooks passed through the slots and having head portions which bridge the slots and rest on the bottom wall of the rack section, said rack sections having openings adjacent their ends, hooks screwed in a support and having their backs passed through said openings whereby to sustain the rack body away from the support, as and for the purpose set forth.

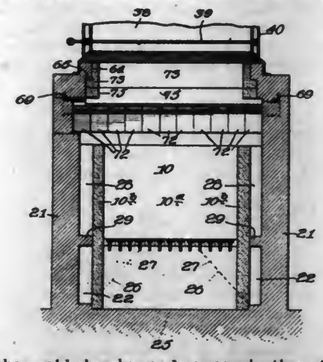
1,814,693. CULTIVATOR. HENRY A. HARRIS, Nacogdoches, Tex. Filed Nov. 9, 1929. Serial No. 405,993. 6 Claims. (Cl. 97—149.)



1. In a device of the class described, an arched axle including a top and depending ends, ground wheels carried by the axle, a U-shaped lower frame member connected at its rear axle end to the ends of the axle, a support connected at its rear end to the top of the axle, and connected to the intermediate forward portion of the frame member, the support being supplied at its forward end with a rearwardly prolonged extension, a transverse rod mounted at its ends in the frame member and mounted in its intermediate portion in the extension of the support, a rearwardly extended beam, means for mounting the forward end of the beam to swing on the rod, and soil engaging means on the beam.

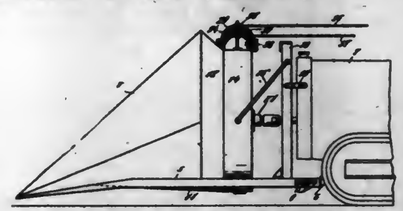
1,814,694. FURNACE STRUCTURE. BRYCE M. HESS, Chicago, Ill. Filed Sept. 6, 1929. Serial No. 390,749. 4 Claims. (Cl. 110—1.)

1. A furnace comprising side walls and having a combustion chamber the rear wall of which extends in spaced relation to the rear wall of the furnace providing an upwardly extending passage, the lateral walls of said furnace containing passages at the sides of said chamber and of less



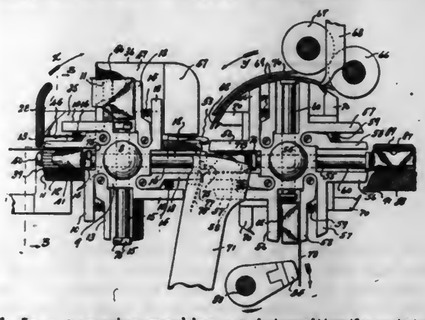
height than said chamber and communicating at their rear ends with said first-referred-to passage below the upper end of the latter.

1,814,695. ROTARY SNOW REMOVER. GEORGE M. HINELINE, Rice Lake, Wis. Filed Aug. 28, 1928. Serial No. 302,559. 2 Claims. (Cl. 37—43.)



1. In a snow plow construction, a scoop, a fan casing having an outlet therein, a fan in the casing, a deflecting flange joining the scoop and fan casing, a pair of spaced bars connected at their forward ends to the scoop and at their rear ends, adapted to be connected to a vehicle chassis frame, a crade bar joined at the opposite ends to said bar, an intermed'ate portion of said cradle bar arranged in underlying abutment to the fan casing for supporting the latter, said spaced bars formed with inwardly directed channels, the ends of the cradle bar being anchored to said channels, an upright inverted U-shaped frame disposed rearwardly of the fan casing and having the ends thereof anchored to the spaced bars, and straps secured to the U-shaped frame and the fan casing for supporting the fan casing.

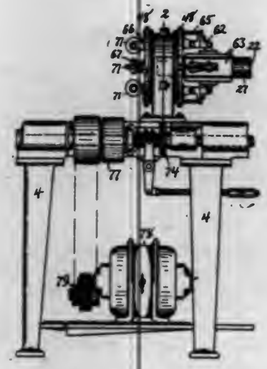
1,814,696. WRAPPING AND BANDING MACHINE. GEORGE I. HOHL, Newport, R. I. Filed July 12, 1929. Serial No. 377,685. 4 Claims. (Cl. 93—2.)



1. In a wrapping machine, an intermittently rotatable carrier head having radial pockets to receive articles to be

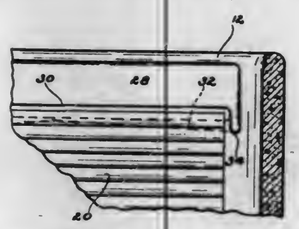
wrapped and wrappers thereto, stationary wrapper folding elements adjacent to the forward side and to the ends of said carrier head to produce certain longitudinal and end folds of the wrapper, oscillatable folder blades for infolding the end folds of the partially folded wrappers, and means for ejecting the wrapped articles from the carrier head.

1,814,697. TUBE WINDING MACHINE. CHARLES HOLLMANN, Fort Wayne, Ind. Filed Apr. 8, 1929. Serial No. 353,388. 12 Claims. (Cl. 93—80.)



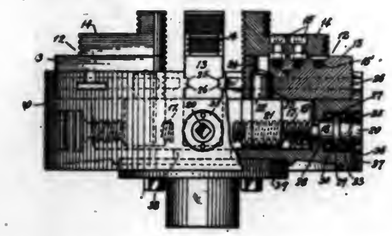
1. In a paper tube winding machine, a supporting bed; a driving head fixed on said bed; a compression appliance fixed on said bed spaced from and axially alined with said head; a hollow rotary windle axially alined with said head and appliance; and connected at one end with said driving head, the opposite end thereof extending into said compression appliance, said windle having longitudinally and radially movable tube-supporting bars; a stationary rod fixed in said head and extending axially through said windle, one side of said rod having a flat face, the other portion of the exterior surface of the rod about its axis being uniformly distant therefrom, said rod being disposed so as to limit inward radial movement of said supporting bars with respect to said windle; a lever mechanism operatively related with said head and supporting bars whereby said bars are reciprocated longitudinally as said head is revolved; and means for simultaneously rotating said driving head and compression appliance, said appliance having shoes that bear frictionally upon and conform to said supporting bars a paper tube formed upon the windle.

1,814,698. COMBINATION LAUNDRY TRAY AND WASHBOARD. MARIE W. HUBER, Seattle, Wash. Filed June 5, 1930. Serial No. 459,307. 1 Claim. (Cl. 68—31.)



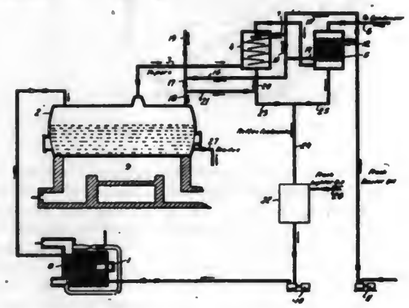
The combination in a laundry tray having an inclined front wall and an inner inclined face on said wall, of a corrugated area on said inner face forming a washboard, said wall having a niche in its upper portion above the washboard and extending the length of the washboard, the bottom wall of the niche being perpendicular to the plane of the washboard, said bottom wall declining laterally from its center toward its ends and terminating in discharge openings from the niche.

1,814,699. LATHE CHUCK. MINOTT P. HUBBELL, Ashburnham, Mass. Filed May 8, 1928. Serial No. 276,059. 2 Claims. (Cl. 279—112.)



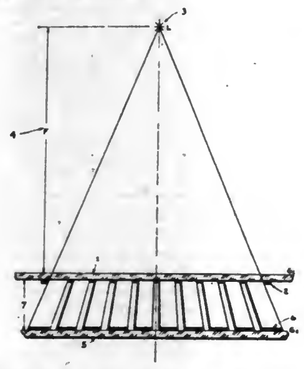
1. In a lathe chuck, the combination of a chuck body having a guideway, a work-piece engaging jaw positioned in said guideway for movement longitudinally thereof, guiding elements on said jaw extending the whole length thereof, cooperating guiding elements in said guideway extending the whole length thereof for maintaining guiding contact between the jaw and guideway throughout their overlapping lengths to prevent upward or downward displacement of said jaw, a screw rotatably mounted in said chuck body, a driving nut separate from said jaw and mounted on said screw for longitudinal movement therealong, the inner end of said screw being unsupported except for said nut, said body having a recess at its center of greater diameter than said nut, whereby the latter may be inserted through said recess and threaded onto said screw, and a connection between the nut and the jaw, whereby movement of said nut is transmitted to said jaw.

1,814,700. ART OF CRACKING HYDROCARBON OILS. EDWARD W. ISOM, Scarsdale, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Apr. 9, 1927. Serial No. 182,355. 5 Claims. (Cl. 196—48.)



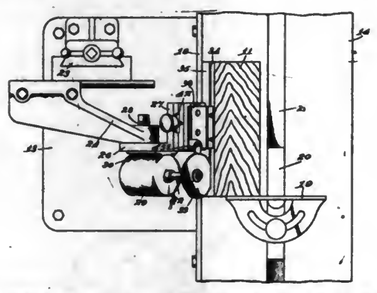
4. An improved method of cracking hydrocarbon oils, which comprises forcing oil in a single pass through a heating conduit and heating it to a cracking temperature therein, discharging the hot oil from the heating conduit into an enlarged chamber, taking off vapors of the cracked oil from the enlarged chamber and subjecting these vapors successively to a first and second refluxing operation, introducing fresh oil containing heavy and intermediate constituents into direct contact with the vapors in the first refluxing operation, vaporizing intermediate constituents from the fresh oil in the first refluxing operation and condensing heavier vapors therein, condensing in the second refluxing operation intermediate constituents vaporized from the fresh oil in the first refluxing operation, supplying admixed reflux condensate and unvaporized fresh oil from the first refluxing operation to the enlarged chamber, and supplying reflux condensate and condensed intermediate fresh oil constituents from the second refluxing operation to the heating conduit.

1,814,701. METHOD OF MAKING VIEWING GRATINGS FOR RELIEF OR STEREOSCOPIC PICTURES. HERBERT E. IVES, Montclair, N. J., assignor to The Perser Corporation, New York, N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 458,304. 4 Claims. (Cl. 95—81.)



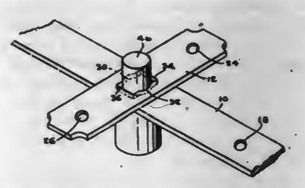
1. The method of making gratings for viewing relief or stereoscopic pictures, made by the use of a large stationary lens, consisting of exposing to a substantially punctiform light source a sensitive plate, and causing the light rays to pass through a grating complementary in its spacing to the grating used in taking the relief picture negative, the distance between the light source and complementary grating bearing the same ratio to the distance between the grating and the sensitive plate, as the distance between the taking grating and the lens of the camera which made the picture to be viewed, bore to twice the distance between the taking grating and the negative plate when the picture was made.

1,814,702. ART OF WOOD JOINING. CARL C. JENSEN, Chicago, Ill. Filed Feb. 16, 1931. Serial No. 516,191. 2 Claims. (Cl. 144—136.)



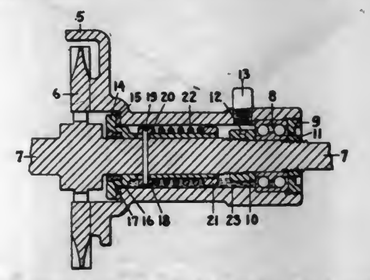
1. Apparatus for cutting a vertical cut with a cross cut substantially at the base thereof, including; a rotary cutter for cutting the vertical cut; a work support, means for causing relative feeding movement between the rotary cutter and the work; and a reciprocating cutter following the rotary cutter, said reciprocating cutter having a part lying in the vertical cut and provided with cross teeth adapted to make a cross cut substantially at the base of the vertical cut.

1,814,703. PROCESS OF MAKING COUPLINGS. EDWARD E. JOHNSON, St. Paul, Minn., assignor to Edward E. Johnson, Incorporated, St. Paul, Minn., a Corporation. Filed Mar. 3, 1928. Serial No. 258,861. 8 Claims. (Cl. 29—148.)



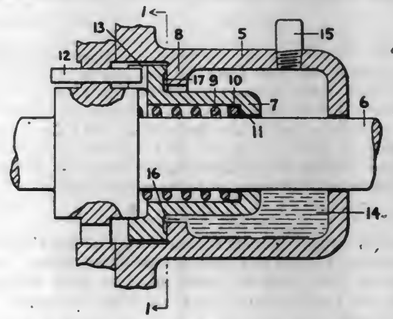
1. The process of making couplings which consists in providing a shank having a reduced end member, assembling on said reduced member, a strip of sheet metal provided with an opening, heating said reduced member in situ, heading said reduced member to form a rivet having means to prevent relative movement between the parts of the coupling, and bending said strip to form wings.

1,814,704. PACKING. BRYAN P. JOYCE, Davenport, Iowa. Filed Oct. 22, 1928. Serial No. 314,142. 8 Claims. (Cl. 286—7.)



1. The combination with a casing wall and a rotatable shaft extending therethrough, of a cylinder surrounding said shaft and projecting through the wall, said cylinder having a radial flange adapted to contact the inner side of the casing wall, packing at the inner end of the cylinder between the cylinder and the shaft, means adjacent the longitudinal middle of the cylinder and engaging the shaft and the cylinder, adapted to prevent rotary movement between them and means acting between the cylinder and the first mentioned means to press the cylinder flange against the casing wall.

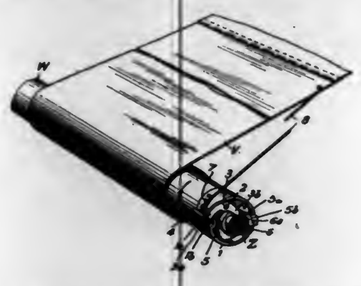
1,814,705. PACKING. BRYAN P. JOYCE, Davenport, Iowa. Filed Dec. 3, 1928. Serial No. 323,462. 10 Claims. (Cl. 286—7.)



8. The combination with a rotatable shaft and a wall through which it extends; of a packing member sur-

rounding said shaft and having an annular sealing friction surface contacting said wall, means engaging the shaft and the packing member to prevent rotary movement between them but permitting longitudinal movement, a thin, resilient metal packing ring seated within the packing member, between it and the shaft, resilient means acting between the shaft and said packing ring to maintain said ring upon its seat and to press the packing member against the wall, a lubricant reservoir secured to the wall opposite the contact of the packing member with said wall, lubricant within said reservoir and said lubricant being adapted to be fed under centrifugal pressure, to the contact of the packing member with the wall, when said shaft is in movement.

1,814,706. MACHINE FOR TREATING WEBS OF FABRICS IN THE OPEN STATE. HANS KARRER, Uzwil, Switzerland, assignor to Firm Maschinenfabrik Benninger, A. G., Uzwil, Switzerland. Filed July 9, 1930, Serial No. 466,840, and in Germany July 20, 1929. 5 Claims. (Cl. 8—19.)



1. In a machine for treating webs of fabric in the open state, in combination, a vat, winding drums and guide rollers in the vat, a driving mechanism for the drums including a sectional shaft and a differential mechanism, a reversing gear in said driving mechanism, a short rod rotatably mounted on one end of each winding drum and housed in a recess of the drum in its inoperative position and means influenced by said rod for actuating said reversing mechanism when the rod is permitted to leave its recess.

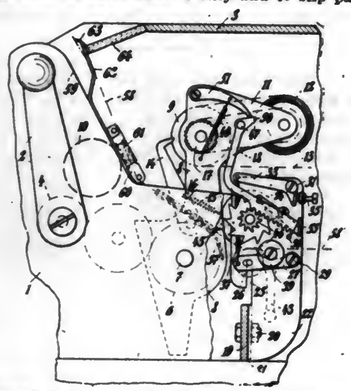
1,814,707. SUPERHEATER. HOWARD J. KERR, Westfield, N. J., and JAMES FLETCHER, New Brighton, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed June 24, 1926. Serial No. 118,210. 5 Claims. (Cl. 122—476.)



2. In a device of the character described, a header of substantially uniform cross section and having an inlet for a fluid under pressure, a plurality of tubes extending transversely from said header and adapted to receive said fluid therefrom, and a core disposed in said header and increasing in size in the direction of flow of said fluid, the flow of fluid being unobstructed along the portion of the header wall in which said tubes are located.

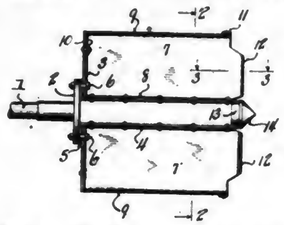
1,814,708. FEED DEVICE FOR THE PAPER STRIP OF ADDING MACHINES AND CASH REGISTERS. ALOIS KNOTZ, Graz, Austria. Filed Sept. 20, 1929, Serial No. 393,875, and in Austria Sept. 26, 1928. 3 Claims. (Cl. 101—289.)

1. A feed device for the paper strip of adding machines and cash registers comprising a tiltable holder for the printing roller, a toothed rod tiltably mounted on the said tiltable holder, a driving roller for the strip, a cog-wheel attached to the said driving roller, the teeth of the toothed rod being adapted to engage in the teeth of the said cog-wheel in one direction only and to slip past them



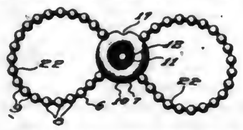
when moved in the other direction, and a double-armed lever, the one arm of which being adapted to co-operate with the end of the said toothed rod when the holder is tilted back to its original position, the other arm of the said double-armed lever being adapted to engage in a ratchet wheel attached to the said driving roller.

1,814,709. PROPELLER. JOSEPH KOENIG, Manitowoc, Wis.; Remus Koenig and Ruby K. Ellis administrators of said Joseph Koenig, deceased. Filed Mar. 25, 1929. Serial No. 349,626. 1 Claim. (Cl. 170—168.)



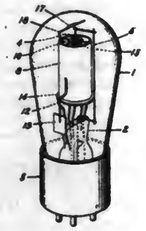
In a propeller of the class described, a central shaft, a plurality of blades mounted upon the shaft and secured thereto, said blades radiating from the shaft with their outer ends all curved in the same general direction, a band encircling the blades at their outer ends, and having connection with each blade adjacent the curved end, a disc mounted upon the shaft at the inner end of the blades and connected to each blade for closing the inner end of the propeller.

1,814,710. KEY-HOLDING DEVICE. JOSEPH KOMOROUS, Riverside, Ill., assignor to Parisian Novelty Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 2, 1929. Serial No. 396,746. 10 Claims. (Cl. 24—116.)



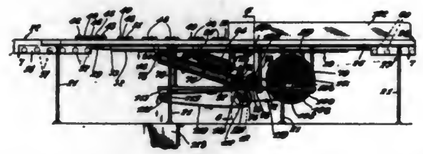
7. A key-holding device comprising a flexible element and a coupler therefor comprising separate sections between which the ends of said elements are releasably confined, said element extending at an intermediate portion between said coupler sections and held thereby against lengthwise displacement.

1,814,711. ELECTRON DISCHARGE DEVICE AND METHOD OF FABRICATING THE SAME. KENNETH H. KINGDON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 6, 1926. Serial No. 92,946. 1 Claim. (Cl. 250—275.)



An electrical discharge device comprising an evacuated container, electrodes having supply conductors sealed closely adjacent one another into said container, and a charge of alkali metal in said container, the inner surface of said container adjacent the seals for said electrodes containing sufficient water to cause alkali metal condensed on said surface to assume the form of discontinuous specks incapable of causing substantial electrical leakage between said electrodes.

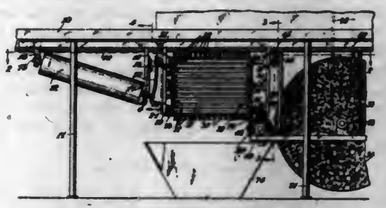
1,814,712. MACHINE FOR THE TREATMENT OF RUBBER FORMING DEVICES. YERVANT H. KURKJIAN, Hawthorne, N. J., assignor to Carl J. Schmid, Inc., New York, N. Y., a Corporation of New Jersey. Filed Feb. 21, 1929. Serial No. 341,788. 12 Claims. (Cl. 18—2.)



12. In a device of the character described, in combination, a plurality of revoluble longitudinally movable molds, means for imparting a revoluble movement to said molds, means for imparting a longitudinal movement to said molds, an inclined revoluble brush extending beyond the extremities of said mold and abutting upon said molds, the revolution of which will remove rubber forms carried by said molds, means for revolving said brush, an inclined revoluble brush positioned above said first mentioned brush and abutting upon said molds, means for revolving said upper brush, a revoluble brush abutting upon the lower end of said molds after said molds have passed from contact with said brush, means for revolving said brush, a revoluble disc abutting upon the side of said molds after said molds have passed from contact with said brushes and means for revolving said disc.

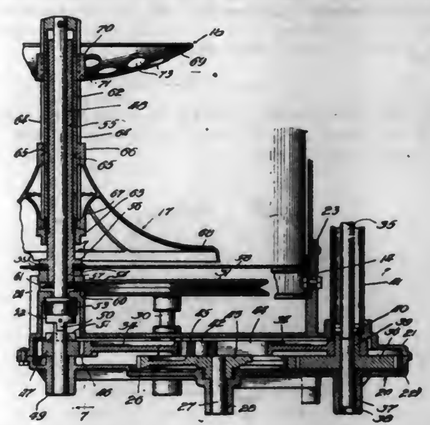
1,814,713. DEVICE FOR THE REMOVAL OF ARTICLES FROM FORMERS. YERVANT H. KURKJIAN, Hawthorne, N. J., assignor to Carl J. Schmid, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 435,948. 16 Claims. (Cl. 18—2.)

6. In an article removing device, in combination, a platform, a plurality of revoluble formers carried by said platform, means capable of revolving said formers, a plurality of spaced revoluble curtain brushes the axis of each brush being in a plane at right angles to the longitudinal axis of the formers, means capable of revolving said brushes, and means capable of moving said platform between said brushes causing said revolving brushes to



abut upon the faces of said revolving formers and causing each of said brushes to simultaneously abut upon the greater portion of the longitudinal length of a former.

1,814,714. WASHING MACHINE. ARTHUR H. LABISKY and OTTO E. ZAHN, West Bend, Wis., assignors to The Barton Corporation, West Bend, Wis., a Corporation of Wisconsin. Filed Mar. 3, 1928. Serial No. 258,703. 5 Claims. (Cl. 74—14.)



3. In a washing machine, the combination of a tub, a motor, transmission gearing driven by said motor and comprising power transmission elements disposed below the tub in horizontal planes, a housing for said elements, a dolly shaft extending into said tub and housing, a clutch mechanism connecting said elements and shaft, and a convex washer on said shaft and overhanging said clutch mechanism for shedding water away therefrom.

1,814,715. TIE SCUPPER. ARTHUR G. LEAKE, Bridgeport, Conn. Filed Jan. 9, 1930. Serial No. 419,562. 8 Claims. (Cl. 14—74.)



1. A tie scupper for bridges and the like comprising a U-shaped member of corrosion proof material, and flanges

projecting laterally from the sides thereof adapted to be forced into the sides of the ties.

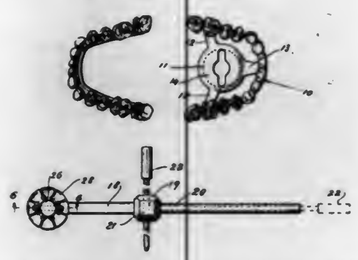
7. In a railroad bridge having the usual stringers, ties and rails thereon, a scupper of corrosion proofed material for protecting the stringers against the corrosive action of train drippings, comprising a bottom member, side members projecting angularly upward therefrom, toothed flanges projecting laterally from said side member, said flanges being adapted to be pressed into the ties to hold the scupper in place, and drip lips at either end of the bottom members.

1,814,716. ANTISKID CHAIN. FRED H. LEWIS, York, Pa., assignor to United States Chain & Forging Company, Pittsburgh, Pa., a Corporation of Delaware. Filed June 11, 1930. Serial No. 460,395. 8 Claims. (Cl. 152—14.)



1. Anti-skid cross chains composed of links which are twisted through approximately 180°, and calks secured to and in parallelism with one of the diagonally-extending portions of each twisted link.

1,814,717. DENTURE. JULIUS F. MAIZNER, White Plains, N. Y. Filed Nov. 15, 1928. Serial No. 319,503. 5 Claims. (Cl. 32—4.)



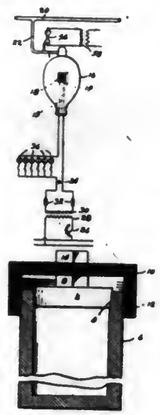
1. The process of producing dentures, which comprises, selecting a ready-made articulated teeth set-up corresponding in size and shape to the jaws of a patient, placing a trial plate over the upper jaw of the patient, supplying a pliable substance to the seating face of the plate, inserting and temporarily seating the upper half of the set-up upon said trial plate, adjusting said upper half so that its occlusal plane is parallel to two imaginary lines, one drawn from the ear to the nose and the other connecting the eyes of the patient, firmly securing the upper set-up half with the trial plate, placing a trial plate over the lower jaw of the patient, supplying a pliable substance to the setting face of the lower trial plate, temporarily joining the lower half of the set-up with the upper half thereof and permitting the patient to press the lower half set-up against the lower trial plate so as to establish proper seating thereon, separating the set-up halves, firmly securing the lower half of the set-up to the lower trial plate, removing the set-up halves, now joined with their respective trial plates, from the patient's mouth, joining the set-ups temporarily in their articulated setting, inserting into the trial plates, casts of the patient's jaws, mounting the casts in an articulator, removing the upper set-up half and substituting for the upper trial plate a pliable base plate, fastening to the base plate artificial teeth so as to register with the teeth of the lower set-up, permanently fixing the artificial teeth of the upper jaw in their setting, removing the lower half of the set-up replacing the lower trial plate by a pliable base plate, setting artificial teeth upon said base plate to register with the artificial teeth of the upper jaw, fixing the now set teeth to the trial plate and finishing the dentures for the use of the patient.

2. The combination with a ready-made articulated teeth set-up having an upper teeth set, of a device attachable to and detachable from the latter for facilitating leveling of the upper teeth set to the correct occlusal plane, said device comprising a bar adapted to extend partially into the patient's mouth, spring controlled attaching means provided at one end of said bar, another bar detachably associated with the first mentioned bar and disposed at right angles to the latter.

1,814,718. METHOD OF PRESERVING ETHER. EDWARD MALLINCKRODT, Jr., St. Louis, and HENRY V. FARR, Ferguson, Mo., assignors to Mallinckrodt Chemical Works, St. Louis, Mo., a Corporation of Missouri. Original application filed Nov. 17, 1927, Serial No. 233,908. Divided and this application filed Oct. 31, 1928. Serial No. 316,218. 8 Claims. (Cl. 23—240.)

1. The method of packaging ether which comprises treating the tinned interior surfaces of metal packages for ether with an oxidizing gas to oxidize said surfaces, and introducing ether therein.

1,814,719. DUCTILE THORIUM AND METHOD OF MAKING THE SAME. JOHN WESLEY MARDEN and HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 5, 1924. Serial No. 717,940. 30 Claims. (Cl. 75—17.)



1. The method of forming coherent, rare refractory metals, the oxides of which are not completely reducible by hydrogen, from a decomposable compound thereof, which comprises heating such a decomposable compound to the decomposition temperature, removing the products of the decomposition except the metal and continuing the heat treatment above the decomposition temperature until all of the metal is in a coherent, homogeneous form, said operations being conducted under non-oxidizing conditions and without exposure of the metal between said heat treatments to oxidizing conditions.

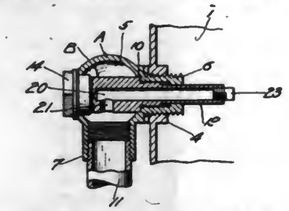
1,814,720. PREPARATION OF DUCTILE VANADIUM. JOHN WESLEY MARDEN and MALCOLM N. RICH, East Orange, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 6, 1925. Serial No. 796. 9 Claims. (Cl. 75—17.)

1. The method of preparing vanadium which comprises reducing an oxide of vanadium by means of calcium in the presence of an alkaline earth halide capable of taking up calcium oxide formed during the reaction and which does not contaminate the vanadium.

1,814,721. PREPARATION OF DUCTILE URANIUM. JOHN WESLEY MARDEN, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 13, 1925. Serial No. 2,158. 12 Claims. (Cl. 75—17.)

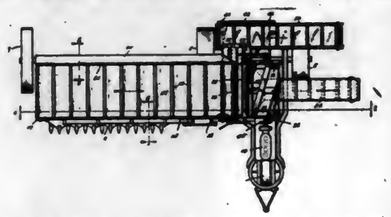
1. The process of preparing rare metal powders of predetermined particle size which comprises reducing a salt of a rare metal by means of calcium in the presence of a predetermined amount of calcium chloride.

1,814,722. TEMPERATURE RELIEF DEVICE. JOSEPH A. MAYNARD, Boston, Mass. Filed Aug. 17, 1929. Serial No. 386,728. 5 Claims. (Cl. 137—161.)



2. A temperature relief device comprising a casing provided with an inlet branch having an interiorly threaded portion, an outlet branch at right angles thereto, and a chamber intermediate said branches; said chamber having opposite walls provided one with an opening and the other with an annular recess terminating in a shoulder adjacent said inlet branch; a one piece removable member of stepped formation to provide an annular shoulder surrounding said opening, an annular shoulder fitting into said recess, and a tubular portion of less diameter extending through said inlet branch provided with a threaded portion cooperating with said first named threaded portions; the passage of the tubular portion communicating with said outlet branch, and a removable fusible plug closing the end of said tubular portion.

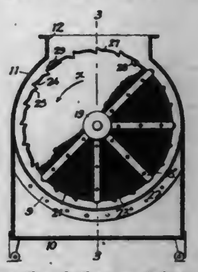
1,814,723. COMBINATION CORN HARVESTER. WALLACE F. MACGREGOR, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Apr. 12, 1927. Serial No. 183,204. 10 Claims. (Cl. 56—18.)



1. In a machine of the class described, a harvester element, stalk cutting means on the harvester, a conveyer, a chain-rake between the cutting means and conveyer, and a stalk retarding wall on the harvester for supporting the upper ends of the stalks as the chain-rake propels the butt-ends of the stalks to precipitate the latter into endwise position on the conveyer.

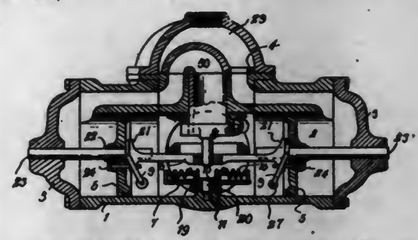
1,814,724. WASHING MACHINE. PETER J. MCCORMICK, Hagerstown, Md. Filed Nov. 2, 1928. Serial No. 316,865. 1 Claim. (Cl. 68—18.)

A washing machine comprising a vessel, a cylindrical clothes container journalled in said vessel and providing therewith a constricted annular space for the washing solution; said container comprising two stub-shafts journalled in the sides of the vessel, spider arms mounted on said stub-shafts and having inturned end portion, screen sections overlying said arms and providing water passageways, and a sheet metal drum fitting within the inturned ends of and connecting said spider arms and



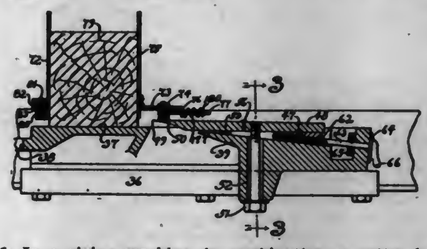
therewith providing the clothes container, said drum having a plurality of apertures, each of said apertures being formed by outwardly and inwardly metal expanded portions, said portions being immediately adjacent and oppositely disposed providing orifices for scooping-in water when the container is rotated, substantially as set forth.

1,814,725. LIQUID METER. DONALD H. MCGOGY, McMinnville, Oreg., assignor to McGogy Pump Co. Inc., McMinnville, Oreg., a Corporation of Oregon. Filed Apr. 21, 1928. Serial No. 271,914. 8 Claims. (Cl. 73—30.)



1. In a liquid meter of the character specified including a casing comprising a cylinder and a piston therein, an adjustable stop in the path of the piston within the casing, a piston rod loosely engaged in the piston, and a check lever pivotally mounted upon the piston and adapted to impinge against said stop to gradually arrest the movement of the piston when approaching the limit of its travel in one direction, and coacting means between the piston and piston rod to prevent relative turning of the piston within the cylinder.

1,814,726. RIVING MACHINE. EDWARD MILLER, Adrian, Mich., assignor, by direct and mesne assignments, to Evans Products Company, Detroit, Mich., a Corporation of Delaware. Filed Aug. 27, 1928. Serial No. 302,209. 8 Claims. (Cl. 144—180.)



1. In a riving machine, in combination, a cutter head provided with a knife, means for directing stock into posi-

tion to be operated upon by said knife, the cutting edge of said knife being positioned in advance of the body thereof in respect to the direction of feed of said stock, and spaced button members movable with said knife for preventing the body of said stock for contacting with the body of said knife.

1,814,727. CAMERA USING ROLL FILMS. GEORGE MILLIGAN, Manchester, England. Filed Oct. 29, 1929, Serial No. 403,149, and in Great Britain Nov. 16, 1928. 3 Claims. (Cl. 95—32.)



1. In a roll film camera, a body portion having a back, a film-supplying spool and a film-receiving spool disposed in said body portion respectively at opposite ends of said back, a guide roller adjacent to each of said spools and over which the film passes, and a flexible member carried by said back in proximity to the guide roll adjacent the film-receiving spool, said flexible member being normally out of contact with the film but adapted under manual pressure to exert a drag on said film during the winding thereof whereby the film is tightly wound on the receiving spool.

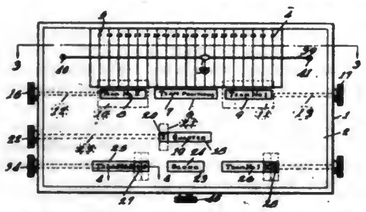
1,814,728. COMBINED REAR VIEW MIRROR AND PARKING LIGHT FOR AUTOMOBILES. GEORGE MOORE, Flint, Mich. Filed June 5, 1930. Serial No. 459,403. 2 Claims. (Cl. 40—130.)



2. A device of the character described comprising a clamp, a figure mounted on said clamp, a parking lamp mounted on the figure, a tubular post mounted on said clamp to the rear of said figure having transparent name plates mounted in its sides, an electric light bulb mounted in said post having electrical connection with the light of said parking lamp and a rear view mirror adjustably carried by said post.

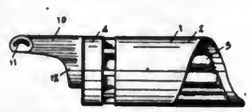
1,814,729. FOOTBALL SCORE BOARD. ALBERT M. MONROE, Palo Alto, Calif. Filed July 7, 1930. Serial No. 466,313. 7 Claims. (Cl. 116—120.)

1. A football score board comprising a surface representing a football field, said surface having two openings, one arranged adjacent to one-half of the field and the other arranged adjacent to the other half of the field, a roller disposed in back of each opening and having names of



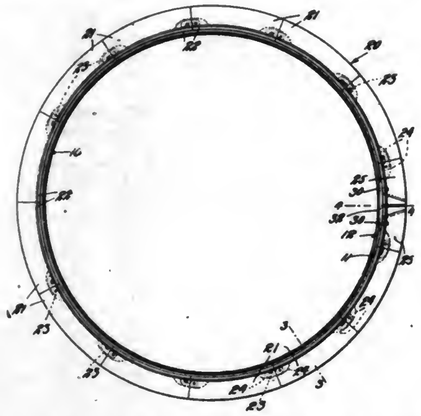
the opposing teams thereon, and means for rotating the rollers for bringing the desired names into registration with the openings.

1,814,730. SOUND INSTRUMENT. HUBERT A. MYERS, Toledo, Ohio, assignor of one-half to Arthur S. Hickok, Toledo, Ohio. Filed Mar. 21, 1930. Serial No. 437,724. 2 Claims. (Cl. 84—330.)



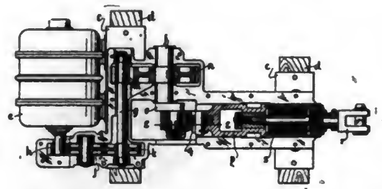
1. In a sound instrument, a mouthpiece, a plurality of air current actuated sound producing vibrant elements rotatably connected to the mouthpiece, the mouthpiece disposed at an angle to the elements for producing a lateral air pressure in the sound production of the vibrant elements to rotate the elements and produce their characteristic sound in succession.

1,814,731. APPARATUS FOR MAKING CUSHION TIRES. EDWARD NELSON and GEORGE NELSON, Belleville, N. J., assignors to Overman Cushion Tire Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 18, 1930. Serial No. 445,247. 6 Claims. (Cl. 18—45.)



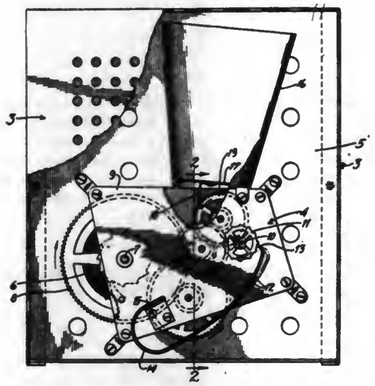
1. Apparatus for making a hollow vulcanized-on cushion tire, comprising a metal base-band having an undercut circumferential groove in its outer periphery and a longitudinal slot registering with a part of said groove, an annular core consisting of arcuate core sections having lateral flanges fitting loosely in said groove under the overhanging edges thereof, and means for expanding said core circumferentially located in said slot and lying wholly outside the inner surface of the base-band.

1,814,732. ELECTRICALLY DRIVEN SHAKER CONVEYER. TAGE GEORG NYBORG and MARK FREDERICK HIGGINS, Worcester, England. Original application filed Feb. 17, 1927, Serial No. 169,117, and in Great Britain Sept. 15, 1926. Divided and this application filed May 28, 1928. Serial No. 281,321. 7 Claims. (Cl. 198—220.)



1. In a driving device for shaker conveyers, a driven shaft, a crank arm connected with said shaft, a cross head, a connecting rod connecting said crank arm and cross head, a coupling member for connection with a shaker conveyer, said cross head slidable relative to the coupling member and opposing relative motion between the cross head and coupling member in both directions, and a single spring disposed between said cross head and coupling member in both directions, thereby absorbing shocks and effecting changes in acceleration on both strokes.

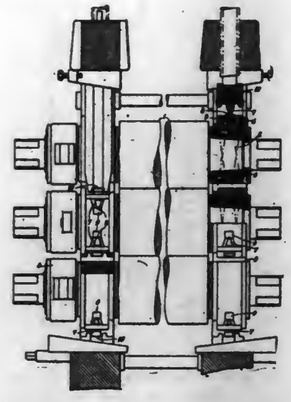
1,814,733. AUTOMATIC FIRE ALARM. HAROLD C. OSBORN, Palatine, Ill. Filed Jan. 24, 1931. Serial No. 510,953. 9 Claims. (Cl. 116—102.)



1. An automatic fire alarm comprising in combination an alarm sounding device including a spring motor having a train of speed increasing gears, and a thermostatic element anchored at one end, its other end engaging the last element of the train of gears and normally preventing operation of the spring motor under normal thermal conditions.

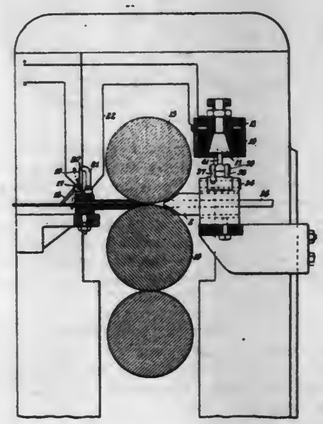
1,814,734. PRESSURE DISTRIBUTING MEANS FOR BEARINGS. PER GUNNAR PALMGREN, Gottenborg, Sweden, assignor to Aktienbolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed Nov. 14, 1925. Serial No. 68,961. 4 Claims. (Cl. 80—31.1.)

4. The combination with a frame, of a bearing housing carried by the frame, a bearing having a part mounted for rotation in the housing, the housing being adapted to shift in the direction of the axis of rotation of the bearing part, and a pressure distributing device having a cylindrical surface engaging and adapted to roll upon a bearing surface on the frame and an edge parallel with



the axis of the said cylindrical surface and disposed transversely of the said axis of rotation for engaging the housing constantly at the same region during such rolling.

1,814,735. ROLLING MILL GUIDE. PER GUNNAR PALMGREN, Gottenborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed Oct. 17, 1929, Serial No. 400,207, and in Sweden Oct. 23, 1928. 3 Claims. (Cl. 80—51.)

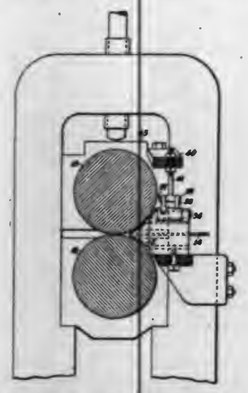


3. The combination with a rolling mill, of a guide for material adapted to open and close, and electro-magnet for actuating the guide, a circuit closer for the circuit of the magnet, and a pivoted arm associated with the circuit closer and adapted to lie in the path of movement of the material coming from the rolls.

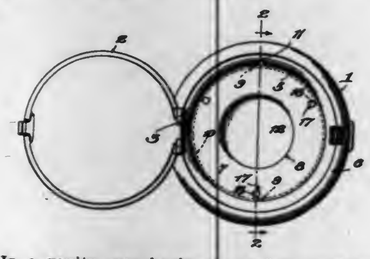
1,814,736. ROLLING MILL GUIDE. PER GUNNAR PALMGREN, Gottenborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed Oct. 17, 1929, Serial No. 400,209, and in Sweden Oct. 23, 1928. 2 Claims. (Cl. 80—51.)

2. The combination with a mill having a frame and provided with rolls and bearings supporting such rolls, of

guides for the material adapted to open and close, and means associated with the bearings and adapted to follow the up and down movement of one of the rolls as the material enters or leaves the pass for closing and opening the guides.

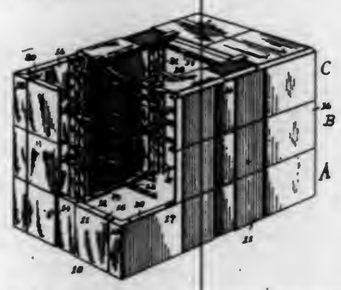


1,814,737. VANITY CASE. WINFRED T. PARKIN, Providence, R. I., assignor to Theodore W. Foster & Bro. Co., Providence, R. I. Filed Dec. 4, 1930. Serial No. 499,905. 2 Claims. (Cl. 132—83.)



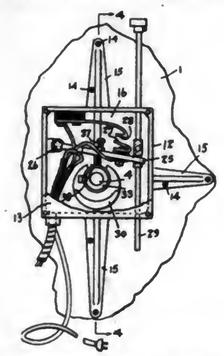
2. In a vanity case having a powder compartment, a top having a central opening and having a plurality of struck-out portions near its edge, valve means for said central opening having a plurality of equally spaced radial arms which latter have elongated arcuate portions concentric with the top and spaced from the periphery thereof and projections on the free ends of the arms extending into said struck-out portions of the top and being bent into engagement therewith.

1,814,738. MAN HOLE FORM OF ADJUSTABLE SECTIONS. AUGUSTUS J. PENOTE, Shaker Heights, Ohio. Filed Nov. 14, 1928. Serial No. 319,196. 6 Claims. (Cl. 25—124.)



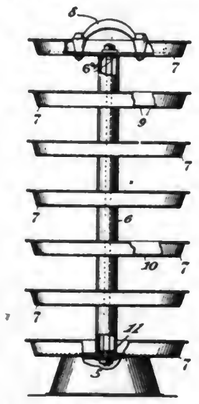
5. In a form for molding concrete construction, vertical wall members each comprising a plurality of superposed courses, each course of the entire form comprising four counterpart corner sections and four counterpart intermediate sections, each intermediate section being longitudinally adjustable and having side flanges integral therewith, and an adjustable cover member for resting upon said vertical members and comprising cross end members, each having over-lapping plates which are slidably adjustable to vary its length and comprising a plurality of longitudinally adjustable, flanged sections adapted to be fastened together side by side by means of locking bolts inserted in a series of spaced apertures in contiguous flanges of the said sections, and adjustable side members for said cover each being longitudinally adjustable by the provision of over-lapping plates whose ends contact the sides of said end members and having over-lapping means for detachable connection with the said end members, the side members being themselves spaced laterally apart to provide a central opening in the said cover.

1,814,739. AUTOMATIC REWIND SWITCH. WALTER G. PREDDEY, San Francisco, Calif. Filed Aug. 27, 1928. Serial No. 302,290. 10 Claims. (Cl. 200—52.)



1. An automatic rewind switch having contacts normally held in open position, a revolving shaft, manual means for closing said contacts, automatic means for keeping said contacts closed when said shaft revolves at a predetermined speed, said automatic means including means for keeping said contacts from closing unless said manual means is again actuated.

1,814,740. CANDY COOLER. EMMANUEL D. RAPP, Moran, Kans. Filed May 24, 1930. Serial No. 455,315. 2 Claims. (Cl. 211—133.)



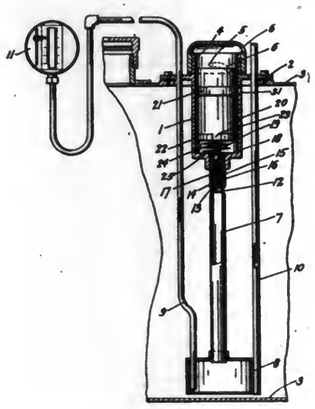
1. In a stand of the character indicated, a base sectional columns supported thereon, trays in superimposed

relation to each other on the sections of the columns, the bottoms of said trays having lugs projecting therefrom into the said sections for engaging the walls thereof for holding the parts in assembled relation to one another, and means extending through the column sections for binding the trays and columns together.

1,814,741. HEAT GENERATING COMPOUND. JOHN R. DULANY, Pittsburgh, Pa., assignor to The Chamberlain Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1927. Serial No. 218,865. 2 Claims. (Cl. 44—3.)

1. A chemical compound of the class described containing dry caustic alkali and aluminum dross.

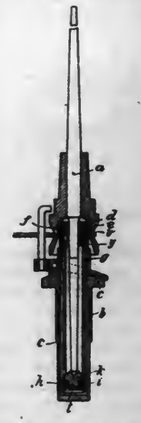
1,814,742. INERTIA OPERATED PUMP. THEODORE EARLE, Denver, Colo. Filed Sept. 21, 1929. Serial No. 394,320. 16 Claims. (Cl. 230—34.)



1. In an inertia-operated pump, the combination of a ported cylinder, a spring-held discharge valve in communication with the cylinder, a piston-supporting spring in the cylinder, an inertia-operated piston in the cylinder in contact with said spring and uncovering the cylinder port during a part of its up-stroke, and uncovering said port and engaging said valve during a portion of its down-stroke.

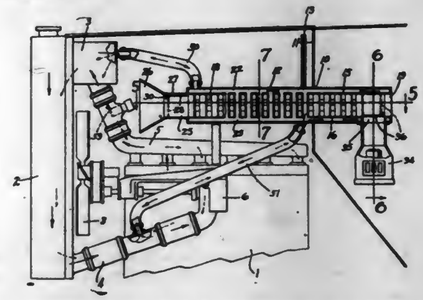
1,814,743. SPINNING SPINDLE. FRIEDRICH EISENLOHR and CARL UEBELEN, Stuttgart, Germany; Gerichtsnotar Stellrecht, administrator of said Carl Uebelen, deceased, assignors, by mesne assignments, to Norma-Hoffmann Bearings Corporation, a Corporation of New York. Filed Mar. 22, 1924, Serial No. 701,032, and in Germany Mar. 24, 1923. Renewed May 27, 1930. 3 Claims. (Cl. 308—228.)

1. A spinning spindle, a bolster tube, a bolster sleeve resiliently supported within the bolster tube, and having an exterior spherically shaped enlargement acting upon the inner wall of the bolster tube for permitting the oscillation of the bolster sleeve in respect to the bolster tube, a foot step bearing rigidly built into the lowermost end of the bolster sleeve and having resiliently held ball bearings interposed between the footstep bearing and the inner wall of the bolster tube, permitting said oscillation of the bolster sleeve, dust and oil proof closing means for said footstep bearing, a roller bearing rigidly built into the upper end of the bolster sleeve comprising a hard ground plate supported by said bolster sleeve, a plurality of rollers, a cage for said rollers having its lowermost portion bevelled and resting upon said plate, and an enclosing top member for



said rollers and cage secured to said bolster sleeve, and a spindle proper having a whirl and bearing upon said roller bearings and footstep bearing.

1,814,744. AUTOMOBILE HEATING SYSTEM AND HEATER. VERNER G. ELLEN, Minneapolis, Minn. Filed Aug. 11, 1928. Serial No. 298,960. 10 Claims. (Cl. 123—174.)

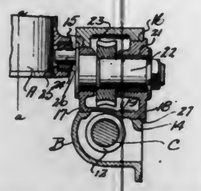


1. In combination with an automobile including a passenger compartment, an engine, radiator, and conduits for obtaining circulation of water through the engine and radiator, and an auxiliary radiator including an air conduit delivering into the passenger compartment, and water circulating conduits arranged to warm air passing through the air conduit, branch connections between the water circulating conduits of the engine and said auxiliary radiator arranged to obtain circulation of heated water through the auxiliary radiator when the engine is running, and a heater connected and arranged to circulate hot air through the air conduit of the auxiliary radiator to establish water circulation in both radiator systems when the engine is not running.

1,814,745. COMPOSITION OF AND METHOD FOR THE TREATMENT OF HYDROCARBON COMPOUNDS. WILLIAM E. ELLIOTT, Struthers, Ohio, assignor to Bypro Manufacturing Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 28, 1927. Serial No. 209,187. 10 Claims. (Cl. 44—9.)

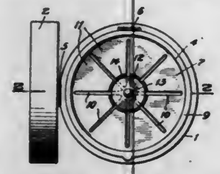
1. A material for the treatment of petroleum distillates and other hydrocarbons consisting of naphthalene in powdered granular form and having relatively small quantities of lemon colored oil of mirbane, paraffine oil and oil soluble red aniline mixed therewith.

1,814,746. SLEEVE VALVE ENGINE. WALTER A. FREDERICK, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Apr. 16, 1927. Serial No. 184,237. 8 Claims. (Cl. 123—81.)



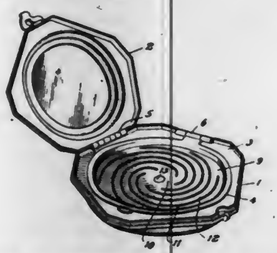
1. A sleeve valve driving mechanism comprising in combination; a sleeve valve; a layshaft; a driving worm carried by said layshaft; a driven cross shaft; a worm wheel carried by the cross shaft; a supporting frame having concentric spaced openings; an eccentric bearing member having concentric spaced portions respectively rotatable within the said concentric spaced frame openings; said eccentric member journalling the cross shaft eccentrically with respect to said concentric frame openings for moving the worm wheel into or out of engagement with the driving worm; said mechanism being constructed and arranged to permit the eccentric bearing member, cross shaft and worm wheel, to be moved as a unit longitudinally of the cross shaft axis into position within said frame openings with the layshaft and driving worm in operative position.

1,814,747. TOILET ACCESSORY. WILLIAM FRIEDMAN, New York, N. Y., assignor to Lupe, Inc., New York, N. Y., a Corporation of New York. Filed July 26, 1929. Serial No. 381,121. 10 Claims. (Cl. 132—82.)



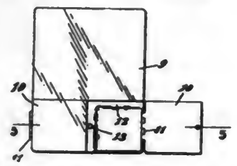
1. A device of the character described comprising a resilient plate having a plurality of segments in substantial continuation of the surface of the plate so as to be readily wiped, said segments being separated by slots, said slots being connected to each other and arranged so as to permit the segments to be flexed.

1,814,748. TOILET ACCESSORY. WILLIAM FRIEDMAN, New York, N. Y., assignor to Lupe, Inc., New York, N. Y., a Corporation of New York. Original application filed May 5, 1928, Serial No. 275,310. Divided and this application filed Aug. 2, 1929. Serial No. 383,055. 10 Claims. (Cl. 132—82.)



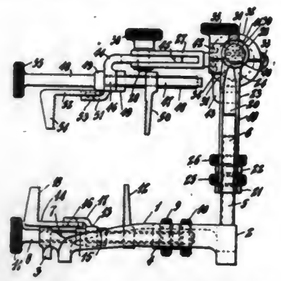
A device for dispensing powdered substances comprising a resilient plate having a plurality of openings formed therein, and means normally closing said openings, said means adapted to be temporarily removed from said openings for permitting passage of powder through said openings, said means operable to open position upon depression of said resilient plate.

1,814,749. TOILET ACCESSORY. WILLIAM FRIEDMAN, New York, N. Y., assignor to Lupe, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 20, 1929. Serial No. 394,123. 6 Claims. (Cl. 132—83.)



1. A toilet accessory comprising a body portion having a mirror surface and having a container below said surface, and a cover for said container also having a mirror surface supplementing that of the body portion.

1,814,750. DENTAL ARTICULATOR. CONRAD FRITZENWALLNER, Cincinnati, Ohio. Filed May 2, 1928. Serial No. 274,506. 10 Claims. (Cl. 32—1.)



1. In a dental articulator, a pair of jaws to clamp a model, a screw journaled in and held against axial movement relatively to one jaw and threaded to the other jaw, a support on which said jaws are slidable in the direction of the axis of said screw, a nut threaded on said screw, means on said support preventing axial movement of said nut, whereby said jaws and screw may be slid along said support by turning said nut, and means for holding another model for fitting to the model held by said jaws.

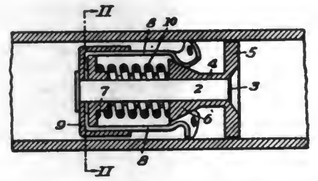
4. In a dental articulator, a trunnioned socket comprising sections hinged together beside one trunnion and clamped together beside the other trunnion, a ball clamped by said sections, and means connected to said socket and said ball, respectively, for holding models to be fitted to each other.

10. In a dental articulator, two model-holding means, one comprising an upward extension, and the other comprising an arm movably connected to said extension and having a horizontally opening slot, a slide in said slot adjustable universally in a horizontal plane and means for clamping said slide in said slot.

1,814,751. PROCESS OF MAKING CORNSTALK FIBER COMPOSITION. SAMUEL A. GILL, Ames, Iowa, assignor of one-half to Zac D. Dunlap and Harry B. Dunlap, Ames, Iowa. Filed Mar. 3, 1928. Serial No. 258,961. 3 Claims. (Cl. 18—47.5.)

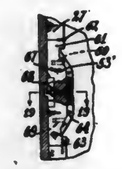
The process of making compact and homogeneous masses or articles having the characteristics described which comprises the dry intermixing of finely divided vegetable and asbestos fiber, the addition to said first mixture of a cellulose binder fluid at normal temperatures, the subsequent addition of a binder retarding agent to said admixture and the final heat treatment of the plastic thus formed under pressure to set the binder and solidify the mass.

1,814,752. TUBE CLEANER. CECIL M. GRIFFIN, Pittsburgh, Pa. Fild July 21, 1928. Serial No. 294,390. 7 Claims. (Cl. 15—104.06.)



1. A tube cleaner comprising a central stem member having a head member at one end thereof and having an end member with a conical surface slidably mounted on the other end thereof, a compression spring interposed between the end member and the head member, and a plurality of scrapers surrounding the stem, said scrapers having stem portions and scraper portions, the end of the stem portions being secured about the head member, the scraper portions being in cooperative engagement with the cone of said end member.

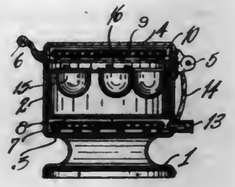
1,814,753. SWINGING-SLIDING WINDOW. MENYHERT HEVESI and RUDOLF METZGER, New York, N. Y. Filed Dec. 9, 1929. Serial No. 412,644. 2 Claims. (Cl. 20—12.)



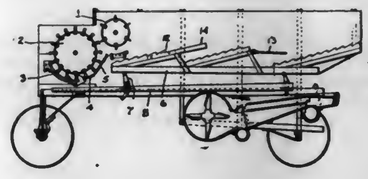
1. A device of the class described, comprising a window frame, inner and outer sash guide strips attached on said frame, central spacer strips mounted between said guide strips, a sash frame mounted between said guide strips and extending over the spacer strips, and adjustable means for preventing lateral movement of the sash frame consisting of a central spacer strip portion hingedly connected on said spacer strip and formed with a protuberance intermediate the ends, means for latching the strip portion to the strip, a channel plate formed to fit the surface of the strip portion having projecting pegs engaging apertures in the strip portion, a boss integrally intermediate the ends of said plate formed with an aperture aligning with the threaded aperture in said strip portion, an adjusting screw rotatively supported in the aperture in said boss and extending thru the threaded aperture of the strip into a recess formed in the rear of the strip, and a nut engaged on the rear of the screw for locking the plate in adjusted positions relative to the spacer strip portion.

1,814,754. ELECTRIC COOKER. HETTIE JAMES, Seattle, Wash. Filed Nov. 5, 1928. Serial No. 317,158. 2 Claims. (Cl. 219—43.)

1. In an electric cooker the combination with a vessel receiving casing having a base and an annular flange, a removable housing supported on the flange and a heating element in said housing, of a hinged lid for the casing, a removable housing supported in the lid and a heating element in said housing, electrical connections to the first element, and flexible electrical connections from the first element to the second element.

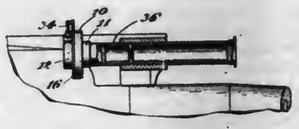


1,814,755. GRAIN THRASHER. JOSEPH JOHNSON, Butterfield, Minn. Filed Apr. 20, 1927. Serial No. 185,237. 1 Claim. (Cl. 130—24.)



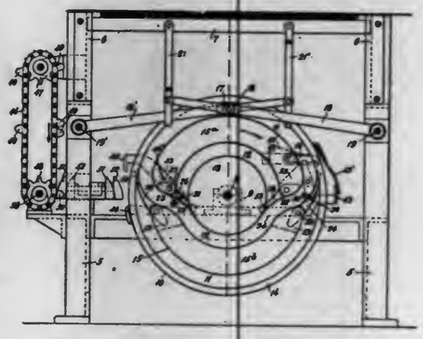
A straw rack for threshing machines comprising a plurality of inclined sections, a single central slat projecting rearwardly from one of said sections to force the straw passing over said rack to engage said slat and to move to both sides thereof and thus prevent the straw becoming heaped up centrally and thinned out adjacent the edges of the adjacent section.

1,814,756. GUN SIGHT. LAWRENCE LEVY, New York, N. Y., assignor to Lawrence Ley, New York, N. Y. Filed July 9, 1927. Serial No. 204,527. 8 Claims. (Cl. 33—48.)



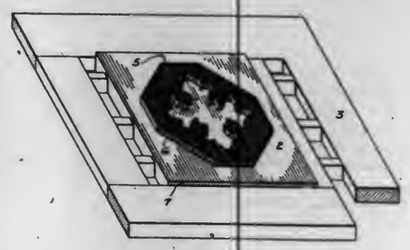
1. In a device of the character described, in combination, a gun, a gun-sight carried by said gun, a shutter within said gun-sight, a firing-key, means controlled by said key for closing said shutter at a predetermined time after a pressure upon said firing-key, and means returning said shutter to open position.

1,814,757. AUTOMATIC SWITCH CAM. JONATHAN LUCAS, Savannah, Ga., assignor to Lucas-Lamborn Loom Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1929. Serial No. 344,150. 18 Claims. (Cl. 74—1.)



1. In combination, a shaft, a cam thereon having a pair of separate grooves and a pair of circumferentially spaced non-intersecting channels connecting said grooves, a switch pivoted adjacent to one channel and movable across one of said grooves, and a second switch pivoted adjacent to the other channel and movable across the other groove.

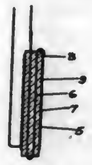
1,814,758. PRINTING BLOCK AND METHOD OF MAKING THE SAME. J. CLARENCE MCCARTHY, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Apr. 5, 1927. Serial No. 181,085. 7 Claims. (Cl. 101—401.1.)



1. The method of making a printing block comprising clamping a plurality of units together, said units being formed with bases having upstanding portions thereon and shoulders for spacing adjacent upstanding portions apart, cutting away undesired parts of the upstanding portions to form a design, making a mold conforming to the contour of the remaining upstanding portions and casting a printing block in the mold so formed.

7. The method of making a printing block which comprises assembling a plurality of units in such manner as to form a master block having a base with a plurality of upstanding portions thereon, which portions are spaced apart and have their tops lying substantially in a plane, said top portions, while spaced, lying sufficiently close to one another to form a printing surface capable of laying a continuous film of paint over substantially the entire composite area thereof, said composite area forming the outline of the desired figure to be printed, forming a mold from such block and producing from the mold a printing block from a suitable material, the block having a base with integral upstanding portions thereon corresponding to the upstanding portions of said assembly.

1,814,759. CATHODE STRUCTURE. FREDERICK S. MCCULLOUGH, Edgewood, Pa. Filed Feb. 10, 1926. Serial No. 87,312. 2 Claims. (Cl. 250—27.5.)



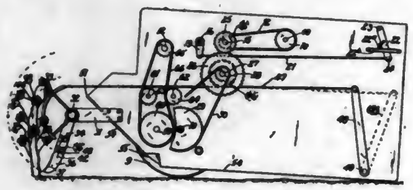
1. In a cathode structure, a cylindrical shell of nickel open at each end thereof, a refractory mass within the shell, a heating wire passing through the refractory mass, a protective coating of metal over the shell, such protective coating being more resistant to oxidation than the nickel, and a coating of emitting substance on the outside of the shell over the p otective coating.

1,814,760. FASTENING MEANS. JAMES A. MILLER, Jr., New Rochelle, N. Y. Filed Oct. 16, 1929. Serial No. 399,970. 3 Claims. (Cl. 2—265.)



1. A connector, for a multi-ply band having button holes in its overlapping ends, comprising an elastic tape attached only at one end to said band between the plys and remote from the button hole and in alinement therewith, a button carried on the free end portion of said tape to engage in both button holes when in register, and means on the free extremity of said tape to prevent the tape from entering the button holes.

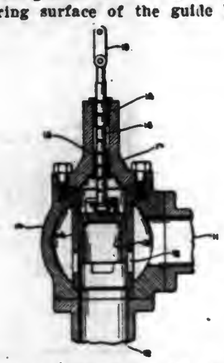
1,814,761. COMBINED HARVESTING AND COTTON CLEANING MACHINE. JOHN B. MITCHELL, St. Louis, Mo. Filed May 4, 1927. Serial No. 188,648. 16 Claims. (Cl. 56—14.)



1. A cotton harvesting machine comprising a portable cotton receiving body, means for propelling the same over the ground, a cotton stripping member pivotally mounted on and positioned beyond the forward end of said body, and comprising spaced parallel blades having free ends normally positioned relatively close to the ground, and means for imparting a forward, upward and backward swing to said cotton stripping member about its pivot at will.

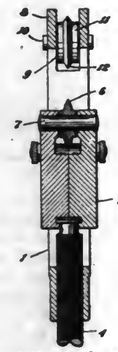
1,814,762. VALVE STRUCTURE. NORMAN L. MOCHEL, Ridley Park, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 31, 1929. Serial No. 382,394. 2 Claims. (Cl. 251—75.)

2. In a valve structure for controlling the flow of relatively high temperature fluids, the combination of an axially movable valve having a valve stem provided with a bearing surface and a stationary guide having a bearing surface coacting with the bearing surface of the valve stem, the bearing surface of the guide being hardened



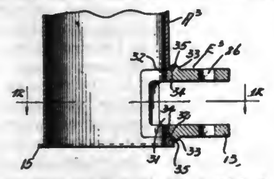
by nitriding and the bearing surface of the valve stem being composed of a metal having corrosion-resisting properties.

1,814,763. CUTTING TOOL. CHARLES NEUBAUER, Bridgeport, Conn., assignor to The Armstrong Mfg. Co., Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 23, 1927. Serial No. 242,067. 1 Claim. (Cl. 81—192.)



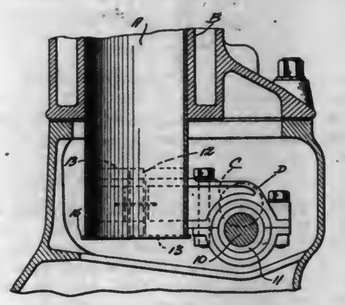
A cutting tool comprising a plurality of cutters, one of said cutters having a less depth than the other or main cutter and a proportionately greater flare than the other cutter so as to open the groove laterally for the effective depth of that cutter while the other cutter deepens the groove, said shallow cutter having co-axial cylindrical shoulders at the base thereof for cooperating therewith to roll down a burr on the pipe and to simultaneously maintain a groove in the pipe wider than the main cutter so as to avoid again raising a burr by return passage of the main cutter around the groove.

1,814,764. SLEEVE VALVE AND METHOD OF MAKING SAME. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed July 15, 1927. Serial No. 205,973. 27 Claims. (Cl. 123—81.)



1. A tubular sleeve valve provided with a driving lug secured thereto, said lug provided with parallel ears integrally connected by spaced bridge portions.

1,814,765. SLEEVE VALVE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Original application filed July 15, 1927, Serial No. 205,973. Divided and this application filed Aug. 23, 1928. Serial No. 301,445. 13 Claims. (Cl. 123—81.)



1. A tubular sleeve valve for internal combustion engines formed with an annular reinforcing flanged portion and an integral ribbed portion and a sleeve lug welded to said portions.

1,814,766. GUN FOR DRIVING SLUGS. WILLIAM F. OBERHUBER, Lansdowne, Pa., assignor to Franklin Development Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 6, 1929. Serial No. 338,012. 4 Claims. (Cl. 15—104.06.)



1. A gun for use in passing slugs through condenser tubes or the like, comprising a barrel having a discharge end adapted to seal against and register with the open end of a tube, and having a lateral opening near its discharge end adapted to pass a sulg into the barrel, a plunger adapted to be reciprocated in the barrel so that its forward end moves forwardly and rearwardly past the opening, and means for using the forward and rearward movement of the plunger to admit fluid pressure to the front face of the plunger when the plunger has reached an advanced position and to close it from said fluid pressure when the plunger is in rearward positions.

1,814,767. HORN ATTACHMENT FOR STRING MUSICAL INSTRUMENTS. JOSÉ MA PEÑA, Tampico, Mex. Filed Dec. 14, 1929. Serial No. 414,011. 2 Claims. (Cl. 84—296.)

1. In a device of the class described, a tubular barrel open at one end and closed at the other end for attachment

to the soundboard of a violin, a U shaped jaw on the closed end of the barrel for receiving vibrations, a vibration adjuster slidably engaged within and projecting

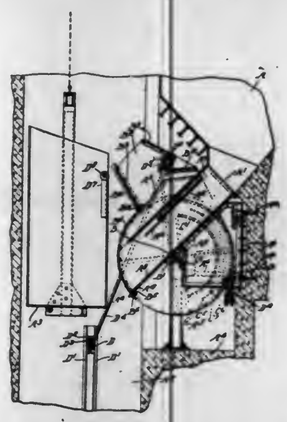


out of the barrel for adjusting the quality of music from the violin, and means for moving said slidable vibration adjuster.

1,814,768. PROCESS OF MAKING A WATER RESISTANT, ANIMAL PROTEIN ADHESIVE, AND THE PRODUCT THEREOF. HUGH F. RIPPEY, CHARLES N. CONE, GLENN DAVIDSON, IRVING F. LAUCKS and HARRY P. BANKS, Seattle, Wash. Filed Apr. 24, 1926. Serial No. 104,455. 14 Claims. (Cl. 87—17.)

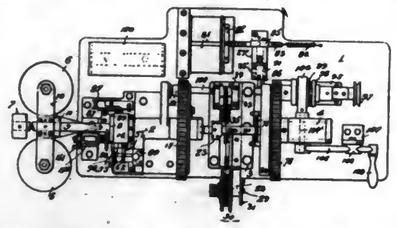
1. The process of manufacturing a water resistant adhesive which comprises treating an adhesive mixture containing protein of animal origin in aqueous media with carbon bisulphide.

1,814,769. AUTOMATIC LOADER. WILLIAM W. SAYERS, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 4, 1928. Serial No. 251,835. 4 Claims. (Cl. 214—125.)



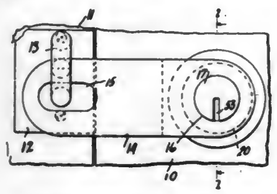
1. In combination with a hoisting skip, a fixed chute covered thruout the major portion of its length, a combined gate and chute pivoted adjacent the end of and adapted to receive material from the fixed chute and to discharge it to the skip, the combined capacities of the chutes being materially less than the capacity of the skip, means for oscillating the pivoted chute and gate between delivery and closed positions, the fixed chute cover being enclosed within the side walls of the pivoted chute when the latter is in the closed position and when so enclosed forming one wall of a storage pocket adapted to receive material from the pivoted chute as it moves toward the closed position and to return such material to the pivoted chute as it moves toward the delivery position, means for guiding the skip along a vertical path toward and from the loading position.

1,814,770. GRID MAKING MACHINE. CARL R. SCHENK, Jersey City, and SYLVESTER W. CROWLEY, Hudson Heights, N. J., assignors to De Forest Radio Company, Jersey City, N. J., a Corporation of Delaware. Filed Aug. 3, 1926. Serial No. 126,832. 41 Claims. (Cl. 140—71.)



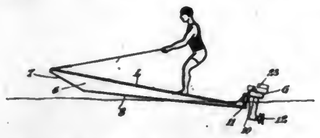
1. In a grid making machine, means for winding wire around spaced supports, means for welding said wire to said supports, means for cutting the finished structure into desired lengths, and means for rendering said cutting means automatically effective at regularly recurrent intervals.

1,814,771. LOCK. MORRIS SHEINMAN, New York, N. Y. Filed Apr. 11, 1929. Serial No. 354,273. 8 Claims. (Cl. 70—5.)



1. A door lock comprising a housing, a key operated cylinder rotatably mounted in the housing, sets of locking tumblers in operative engagement with the housing and cylinder, a threaded portion on the cylinder extending beyond the housing, and a bar adapted to be suspended from the door frame and having a threaded opening to engage the threaded portion on the cylinder for the purpose specified.

1,814,772. MOTOR SURF BOARD. FRANK W. STERLING, Long Island, N. Y., assignor to Skiboard Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1927. Serial No. 217,905. 17 Claims. (Cl. 115—17.)



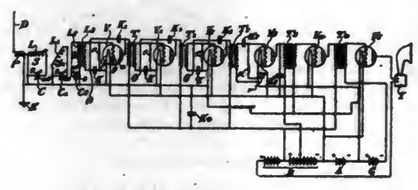
1. In a surf board comprising a rudderless floatable body providing a platform for supporting a rider upon its upper surface adapted to be guided by shifting of the weight of the rider and consequent tipping of the board and reins connected with the forward portion of the body at points spaced apart transversely of said forward portion arranged to be grasped by the rider for assisting in balancing the body and the rider, the combination therewith of a rudderless motor and a propeller connected thereto, the propeller being located beyond the rear end of the body and below the plane of the bottom surface of the body constituting a rudderless propelling means for the body, together with means extending from the motor arranged to be operated by the rider for controlling the motor.

1,814,773. SEAL. ALLEN P. STILLMAN, Brooklyn, N. Y., assignor to Ancira Lock & Seal Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1927. Serial No. 229,545. 12 Claims. (Cl. 229—78.)



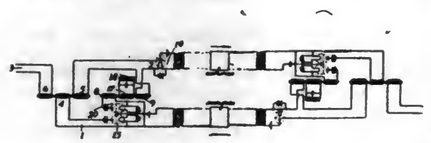
1. A seal of the character described comprising interengaging male and female members, the male member having a perforated flat tongue insertable in the female member, the female member comprising a sheet metal blank folded to provide a casing and within said casing a plurality of projections engageable with perforations in said tongue from both sides thereof.

1,814,774. RADIO RECEIVING APPARATUS. SARKES TARZIAN, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1926. Serial No. 158,175. 18 Claims. (Cl. 250—20.)



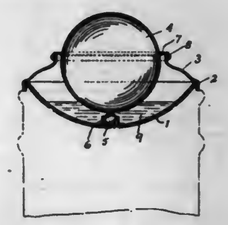
1. Radio receiving apparatus comprising absorption structure, a plurality of cascaded tuned circuits operatively related to said structure, means for grounding said tuned circuits, a three-electrode thermionic device, and an untuned input circuit therefor including an input element coupled to one of said tuned circuits and connected to the grid and to a point between which and the cathode there exists a substantial alternating potential difference.

1,814,775. TELEPHONE REPEATER CIRCUIT ARRANGEMENT. JAMES URMSTON and FREDERICK STRETTON SMITH, London, England. Filed Feb. 11, 1930, Serial No. 427,592, and in Great Britain Feb. 15, 1929. 3 Claims. (Cl. 179—170.)



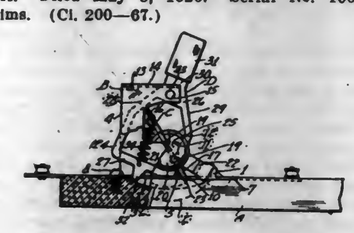
1. A telephone repeater circuit arrangement comprising an incoming circuit, an outgoing circuit, a local circuit, two inductive coupling devices between the incoming and outgoing circuits, opposing each other in their effects in the outgoing circuit when energized by currents which arrive at the junction through the incoming circuit; one of said coupling devices being the junction transformer by which the outgoing and the local circuits are coupled with the incoming circuit and the other of said devices being the coupling transformer, for coupling the incoming and the outgoing circuits; an amplifier arrangement, said amplifier arrangement comprising two similar amplifiers one of which is inserted in the incoming circuit and feeds the junction transformer and the other of which is connected on its input side in parallel with the input of the first amplifier and on its output side is connected with a winding of the coupling transformer.

1,814,776. MOISTENING DEVICE. THOMAS C. WAUGH, Ingram, Pa. Filed Aug. 7, 1929. Serial No. 384,215. 2 Claims. (Cl. 91—54.4.)



1. A moistening device including a reservoir for water and a ball mounted therein to rest partially in the water, together with a bearing for vertically supporting the ball so resting in the water, which bearing is adapted to permit universal rotation of said ball.

1,814,777. ELECTRIC SNAP SWITCH. WILLIAM WURDACK, Jr., St. Louis, Mo., assignor to Wm. Wurdack Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed May 5, 1926. Serial No. 106,874. 6 Claims. (Cl. 200—67.)

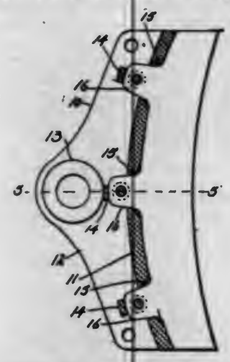


6. An electric snap switch including, in combination, a slotted base, a pair of spaced rigid walls upstanding from the base and having a pair of aligning bearings, a slotted plate connecting said walls, a member mounted upon said bearings for oscillatory movement relatively to the walls, contact-blades carried by said member, a manipulating member supported for oscillation by said walls, a spring having engagement with the blade-carrying and manipulating members for imparting snap rocking movement to the blade-carrying member upon oscillation of the manipulating member, said manipulating and blade-carrying members being of relative dimensions that the manipulating member is out of impinging engagement with the blade-carrying member both when the blades are in "on" and "off" position, and oppositely disposed extensions on the manipulating member working respectively in the slot of the plate and in the slot of the base.

1,814,778. RAILROAD BRAKE SHOE. LUDWIG ZIMMERMAN, Philadelphia, Pa. Filed Mar. 8, 1928. Serial No. 260,215. 2 Claims. (Cl. 188—242.)

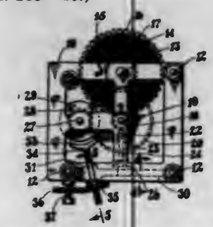
1. A brake shoe comprising a face plate having openings therethrough; side plates formed with the face plate, said side plates having holes therethrough for the passage of

attaching bolts; strengthening cross-bars connecting the side plates, said side plates also having tapered holes



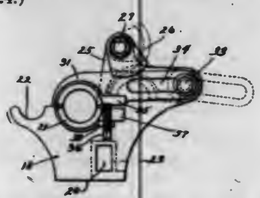
therethrough coinciding with the openings through the face plate for the passage of tapered bolts for the securement of a liner to the shoe.

1,814,779. MOTOR DEVICE. VICTORIANO ALCALÁ, Elota, Mexico. Filed Dec. 28, 1927. Serial No. 243,180. 2 Claims. (Cl. 185—40.)



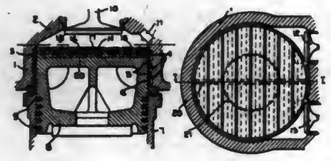
1. A spring motor device comprising, a frame, a driver shaft mounted in said frame, a spring connected at its inner end to the driver shaft and at its outer end to the frame, a ratchet wheel rigidly secured to said driver shaft, a gear wheel rotatably mounted on said driver shaft, a spring pressed pawl pivoted to said gear wheel for engaging said ratchet wheel, a driven shaft mounted in said frame and slidable axially therein, a pinion secured to said driven shaft and engaging the gear wheel on the driver shaft in all positions, a gear wheel secured to said driven shaft and engaging said ratchet wheel when the driven shaft is in one position of its axial movement, means for making and breaking connection between said gear wheel on the driven shaft and the ratchet wheel, said means comprising a grooved wheel mounted on the driven shaft and a two pronged yoke pivoted to the frame and engaging the grooved wheel.

1,814,780. BEAM SUPPORTING MEANS FOR TEXTILE MACHINERY. WILLIAM H. BAHAN, Greenville, S. C. Filed July 11, 1929. Serial No. 377,403. 6 Claims. (Cl. 308—24.)



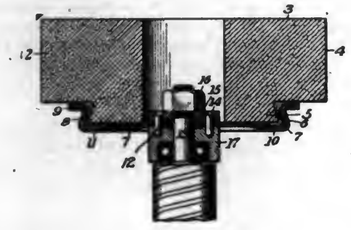
1. In a loom, beam supporting means comprising a stand adapted to be secured to each side of the loom, means for adjusting the stand with relation to the loom, an approximately semi-circular bearing portion in each of the stands, a slidable member mounted on each stand and having a semi-circular bearing portions in the lower face thereof adapted to register with the bearing portion in the stand, means for adjusting the movable member vertically with relation to the stand, and means for securing the movable member in adjusted position.

1,814,781. INTERNAL COMBUSTION ENGINE. RICHARD WILLIAM BAILEY, Altrincham, England, assignor, by mesne assignments, to Associated Electrical Industries, Ltd., England. Filed May 3, 1928, Serial No. 274,915, and in Great Britain May 4, 1927. 7 Claims. (Cl. 123—191.)



1. In an internal combustion engine, the combination of a combustion chamber having a solid interior surface, a thin metallic plate structure disposed closely adjacent to and parallel with said combustion surface, and means for supporting the plate structure from the surface of the combustion chamber and providing for minimum heat conduction between the combustion chamber surface and the plate structure, said plate structure having a plurality of openings distributed thereover so as to afford free circulation of gas between the combustion chamber on the one side of the plate structure and the space intervening between the other side of the plate structure and the adjacent surface of the combustion chamber.

1,814,782. GRINDING WHEEL AND HOLDER. HOBART C. BEACH, Covington, Ky., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Apr. 14, 1926. Serial No. 101,926. 4 Claims. (Cl. 51—209.)



2. In a grinding wheel assembly, a grinding wheel having one face and its periphery adapted to be used for grinding, said wheel having a projecting portion of reduced diameter on its other face, a drive shaft, and a semi-rigid driving connection of a diameter less than that of the wheel between the shaft and said projection on the wheel.

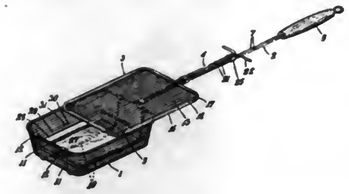
1,814,783. METHOD OF DYEING TEXTILE FABRICS. ALEXANDER J. BELOKOPYTOFF, Norwalk, Conn., assignor, by mesne assignments, to Katherine L. Mayehoff, Norwalk, Conn. Filed June 20, 1929. Serial No. 372,266. 5 Claims. (Cl. 41—26.)

1. The method of dyeing textile fabrics comprising placing a plurality of drops of dye-carrying gelatinous-like solutions upon a supporting surface, each solution carrying a distinctive color dye, moving a mixing member through said drops to partially mix the same and produce



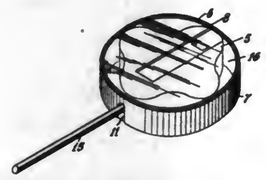
a printing bed of predetermined types of color patterns, and laying a sheet of textile material on said printing bed to permit the dyes to enter said material.

1,814,784. UTENSIL. JOHN L. BENNETT, Decature, Ill., assignor to U. S. Manufacturing Corporation, Decatur, Ill., a Corporation of Illinois. Filed May 1, 1928. Serial No. 274,184. 19 Claims. (Cl. 53—4.)



1. A device of the character described including, in combination, a basket or receptacle and a handle therefor, a lid or cover for said basket or receptacle formed of a wire frame in the form of a loop having a handle portion extending therefrom and material secured to said loop to serve as a cover, said handle of the lid or cover being slidably mounted upon said first-mentioned handle and having a plurality of bent portions therein adapted to frictionally engage said first-mentioned handle, clamping means positioned in said bent portions to hold said handles in slidable relation to each other.

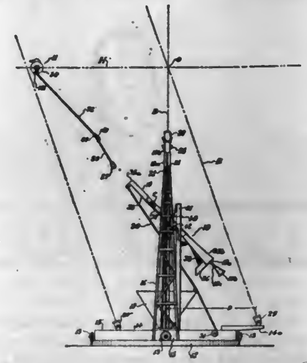
1,814,785. CONTAINER. WILLIAM C. BROADWELL, Brooklyn, N. Y., assignor, by mesne assignments, to John F. Henningsen, Eastport, Long Island, N. Y. Filed Oct. 31, 1927. Serial No. 229,815. 7 Claims. (Cl. 206—44.)



1. A container comprising inner and outer telescoped members, and tensioned closures overlying the opposite ends of said inner member and having their margins confined intermediate said members.

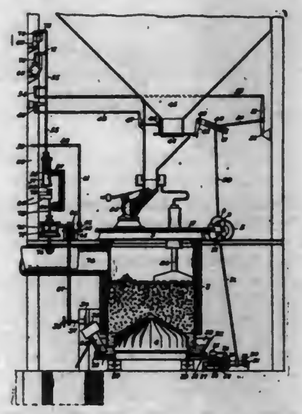
1,814,786. AIRCRAFT SIGNALING APPARATUS. MANUEL CASTRO, Canton, Ohio. Filed July 3, 1929. Serial No. 375,805. 6 Claims. (Cl. 177—352.)

2. Signaling apparatus for aircraft and the like including a plurality of means each emitting a light beam, and the beams extending upwardly and towards each other in a plane at right angles to the desired course, and the beams intersecting at a point in the course having a predetermined elevation and location between the light emitting means, and means for emitting a course indicat-



ing light beam in the vertical plane of the course, the course indicating beam passing through the point of intersection of the first mentioned beams.

1,814,787. GAS PRODUCER. REINHARDT DAAE, Youngstown, Ohio. Filed May 20, 1925. Serial No. 31,523. 9 Claims. (Cl. 48—87.)

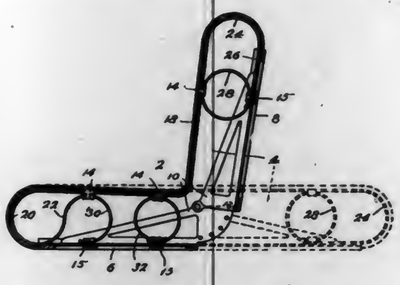


3. In combination with a gas producer having an adjustable fuel feeding me hanism, steam and air supplies, and an adjustable ash removing mechanism, a motor movable in response to fluctuations in the total gaseous pressure in the producer, and means controlled by the movement of said motor for adjusting said fuel feeding mechanism, said steam and air supplies, and said ash removing mechanism, said motor and said means being actuated by fluid at different pressu es.

1,814,788. PHOTOGRAPHIC REVERSAL PROCESS. AUGUSTUS R. DE TARTAS, Douglas Manor, Long Island, N. Y. Filed Apr. 9, 1929. Serial No. 353,898. 11 Claims. (Cl. 95—88.)

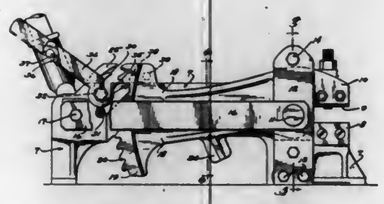
7. A process of making photographic positive images by reversal from photographic negative images comprising the following steps, performed without exposure to white light and in their order of sequence: (1) developing the exposed emulsion into a negative image (2) placing the emulsion in a fixing bath to partially remove undeveloped salts from the silver image (3) removing the silver image from the emulsion and (4) re-developing the remaining emulsion into the final positive image.

1,814,789. COMBINATION BED AND SEAT. JOHN M. DORTON, Bonner Springs, Kans. Filed Dec. 15, 1928. Serial No. 326,261. 5 Claims. (Cl. 155—179.)



5. In a device of the character described, a flexible strip consisting of a long portion, end portions joined to said long portion, and a lower portion joined to one of said end portions and arranged in the form of a compound curve.

1,814,790. BAR CUTTER. REID A. EDWARDS, Albert Lea, Minn. Filed Dec. 22, 1930. Serial No. 503,903. 7 Claims. (Cl. 164—46.)



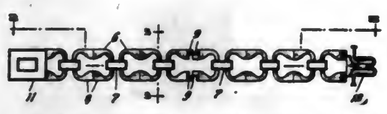
1. In a device of the class described, a frame, a jaw pivoted to the frame, cooperating cutting knives on the frame and jaw, means for operating the jaw to produce cutting action including ratchet teeth and a cooperating lever-actuated pawl, a lock dog, and a control for the lock dog constructed and arranged when set in one position to yieldingly hold the lock dog for action on the ratchet teeth and when set in another position to hold the lock dog inoperative, said pawl being under strain to move into operative relation with the ratchet teeth, the relative arrangement of the pawl and lock dog being such that the lock dog when moved to an inoperative position automatically moves the pawl into a like position and thus holds the same.

1,814,791. DIATHERMY. FRANK M. ENDE, New York, N. Y. Filed May 4, 1928. Serial No. 275,154. 8 Claims. (Cl. 174—89.)



1. Therapeutical apparatus for destruction of tissue by high frequency current comprising bipolar electrodes, means for supporting same at a predetermined distance from each other, which is a small fractional part of an inch, so that such distance remains fixed during use, means for connecting up said electrodes to complete the output circuit of a source of high frequency electrical current through tissue intervening between and in contact with the electrodes, and a non-conducting handle.

1,814,792. BRACELET. FREDERICK W. ENGEL, Elmhurst, Long Island, N. Y., assignor to Engel Brothers, Inc., New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,225. 2 Claims. (Cl. 59—80.)



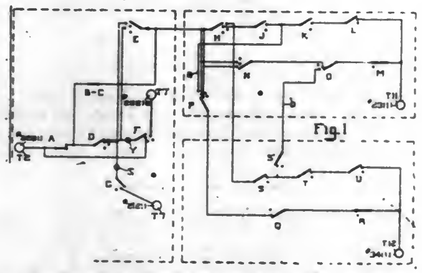
2. A bracelet comprising in combination a plurality of links alternately disposed transversely with respect to each other, adjacent portions of alternate links being rigid with respect to the connecting links, said adjacent portions of alternate links being hinged with respect to other portions of said links.

1,814,793. WINDOW BRACKET. CHARLES V. EVANS, Pittsburgh, Pa. Filed Jan. 18, 1929. Serial No. 333,320. 1 Claim. (Cl. 156—24.)



A combined curtain bracket and roller shade support comprising a strap having curtain rod attachments formed integrally therewith and having an offset portion forming a looped projection and adapted for engagement with a window frame, a clamping member of the shape of said offset portion adapted for engagement with the window frame in alinement with the offset portion of said strap, a screw for fastening said members, and a roller shade bracket adjustably mounted on said strap.

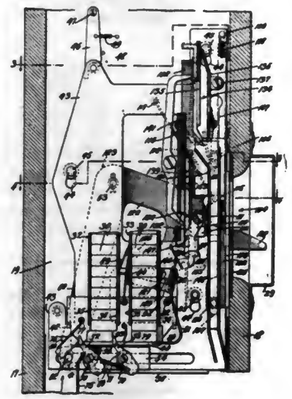
1,814,794. TELEPHONE SYSTEM. HERBERT M. FRIENDLY, Portland, Oreg.; Milton S. Friendly, and Central Trust Company of Illinois, executors of said Herbert M. Friendly, deceased. Filed June 29, 1921, Serial No. 481,259. Renewed Mar. 9, 1927. 119 Claims. (Cl. 179—18.)



1. An automatic switch which will primarily rotate its wipers on its normal level responsive to directive control, means for releasing the wipers to normal position responsive to predetermined directive control after rotating, means

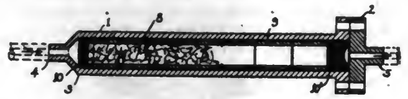
for again rotating the wipers responsive to a second application of directive control, means responsive to predetermined directive control involved in the said second application for again releasing the wipers and for adapting the switch to then step the wipers vertically.

1,814,795. VENDING MACHINE. HARVEY GILES, Brooklyn, N. Y., assignor to Artemas Ward Inc., a Corporation of Delaware. Original application filed Jan. 23, 1928, Serial No. 248,829. Divided and this application filed Aug. 1, 1929. Serial No. 382,670. 6 Claims. (Cl. 312—67.)



6. In a vending machine of the character described having article delivery means including a plurality of article-engaging fingers, a plurality of vertically-positioned hoppers arranged in a file, there being a finger corresponding to each hopper, a feeler member for engaging the articles in a hopper to determine when they have been exhausted to a predetermined extent, a guard held by the feeler member under the articles in the next succeeding hopper, and means effective when the articles in the first hopper have been exhausted to a predetermined extent to move the feeler member and retract the guard from under the articles in its hopper.

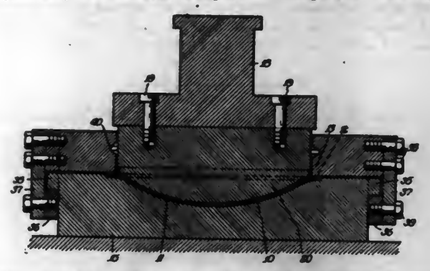
1,814,796. AUTOCLAVE. JOHN J. GREBE, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 23, 1930. Serial No. 446,679. 8 Claims. (Cl. 23—289.)



1. In apparatus of the character described, the combination of a metal pressure vessel, a dissimilar catalyst-metal disposed therein, and electrically insulating means preventing contact between said catalyst-metal and said vessel.

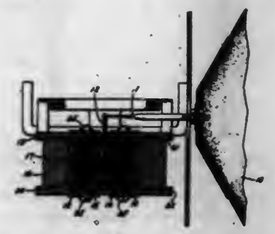
1,814,797. MOLD. ERIK G. GRUNDSTROM, Chicago, Ill. Filed Aug. 7, 1929. Serial No. 384,051. 7 Claims. (Cl. 22—67.)

1. Apparatus for molding articles of metal which is normally non-malleable comprising a lower forming member having a die cavity therein and an upper forming member adapted to be moved to cooperate with said lower forming member to cause the metal in a molten state to flow and take the form of the mold, said lower forming member including a portion upwardly extending from the top edge of the formed article and having formed therein a plurality of recesses adapted to cooperate with said



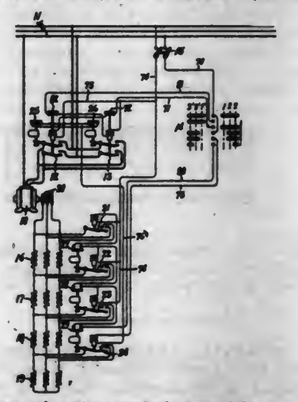
upper forming member to form a plurality of restricted passages permitting the escape of the gases and the excess metal.

1,814,798. APPARATUS FOR PRODUCING SOUND. EMILE C. GUEDON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 14, 1929. Serial No. 347,060. 6 Claims. (Cl. 175—339.)



1. In a sound producing apparatus, a coil spool having a wall provided with an inwardly projecting flexible portion formed from said wall, and an armature arranged to move within said spool and rigidly attached to said portion.

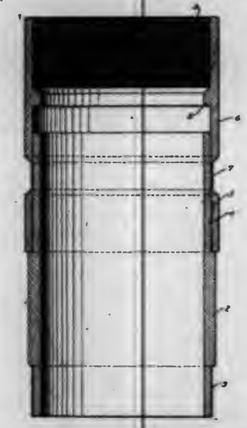
1,814,799. MOTOR CONTROL SYSTEM. LLEWELLYN C. HARDESTY, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 18, 1928. Serial No. 326,722. 8 Claims. (Cl. 172—179.)



1. A system of motor control comprising a reversible alternating current induction motor having a secondary winding, a pair of reversing switches for said motor, a resistor connected to be inserted in said secondary winding, switching mechanism for controlling said resistor and a pair of time element switching mechanisms for controlling the latter switching mechanism each being oper-

ated responsively to the operation of one of said reversing switches so that said resistor is inserted in said secondary winding for a predetermined interval of time upon said reversing switches being operated to reverse said motor while running and is short circuited upon either of said switches being operated to accelerate said motor from rest.

1,814,800. WELL APPLIANCE. JOSEPH W. HEETER, Butler, Pa. Filed May 16, 1928. Serial No. 278,259. 1 Claim. (Cl. 166—4.)



The combination of an inner tubular member having an externally screw-threaded portion near to but spaced from one of its free ends, the portion immediately adjacent said free end having a smooth and substantially cylindrical periphery, and an outer tubular member having an internally screw-threaded portion immediately adjacent one of its free ends adapted to engage the first-mentioned screw-threads, said outer member having a weakened portion in the rear of its screw-threaded portion and so proportioned that said weakened portion will surround and engage the smooth and substantially cylindrical portion of said first-mentioned member.

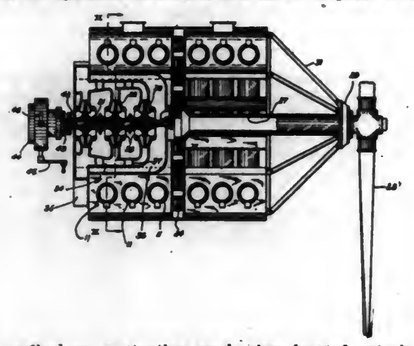
1,814,801. DEVICE FOR TRANSFORMING ELECTRICAL VARIATIONS INTO SOUND VARIATIONS. FRIEDRICH W. HEHLGANS, Berlin-Hermsdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 1, 1930, Serial No. 440,855, and in Germany Apr. 23, 1929. 3 Claims. (Cl. 88—61.)



1. A device for transforming electrical variations into variations of light including spaced electrodes and toluidin therebetween through which the light may be passed.

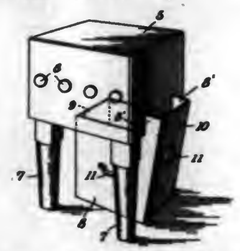
1,814,802. STARTING SYSTEM FOR INTERNAL COMBUSTION ENGINES. HERBERT T. HERR, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 19, 1929. Serial No. 379,450. 3 Claims.. (Cl. 123—51.)

1. The combination with an internal combustion engine embodying a plurality of polygonal sets of cylinders disposed in side-by-side relation and defining a polyhedron, crank shafts interposed between adjacent cylinders and extending longitudinally of the polyhedron and transmission means extending transversely of the polyhedron and located centrally of the ends thereof for interconnecting the crank shafts for operation in unison, of a blower disposed within



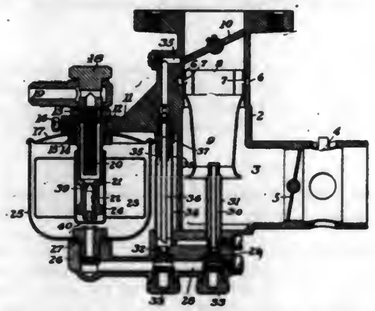
the polyhedron, a starting mechanism located exteriorly of the polyhedron, and means, including speed transformation means, for connecting both the blower and the starter to the engine crank shafts, said connecting means embodying at least a portion of said transmission means.

1,814,803. REFUSE RECEPTACLE. GEORGE HERZBERGER, Stamford, Conn. Filed Sept. 14, 1929. Serial No. 392,505. 1 Claim. (Cl. 220—1.)



A container for use in connection with a meat chopping block having supports at its corners, said container comprising a metal can of rectangular cross section adapted to enter between two of the block supports below the block, and raised, outwardly flaring extensions on opposed portions of the side walls and outer wall of said can limiting the entrance of the can below said block.

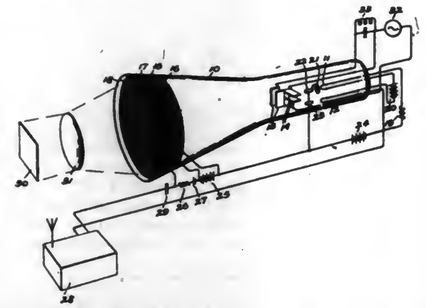
1,814,804. CARBURETOR. VICTOR R. HEFTLER, Detroit, Mich., assignor to Societe du Carburateur Zenith, Lyon, France, a Corporation of France. Filed June 22, 1922. Serial No. 570,117. 3 Claims. (Cl. 137—104.)



1. In a carburetor, a main body member having a laterally projecting shelf, a resilient cover secured thereto,

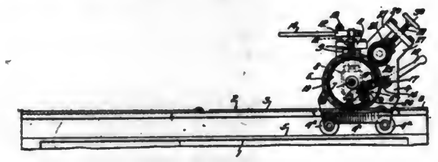
a base member directly and rigidly secured to said main body member at a point laterally of said shelf and independently thereof and having a portion projecting laterally in spaced relation to said shelf but disconnected therefrom, and a float chamber carried by said portion at its lower end and cooperating with said resilient cover at its upper end.

1,814,805. CATHODE RAY DEVICE. WILLIAM J. HITCHCOCK, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 26, 1929. Serial No. 409,957. 5 Claims. (Cl. 250—27.5.)



1. A device including a plurality of cathodes to be maintained at different potentials, an anode, a photoelectric control element interposed between said anode and cathodes, means for concentrating the ray emitted by one of the said cathodes and means for causing said ray to scan said photoelectric element.

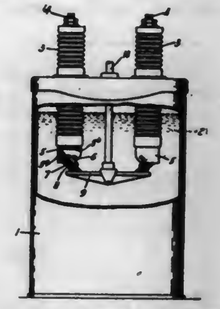
1,814,806. IMPRINT-TRANSFER MECHANISM. AUGUST HORMEL, Hudson Heights, N. J., assignor of one-half to Charles Wagner. Filed Sept. 19, 1929. Serial No. 393,667. 5 Claims. (Cl. 101—252.)



1. Imprint-transfer mechanism embodying, in combination, a cylinder mounted to rotate, a pair of rails mounted on said cylinder in adjustable relationship to each other, one member of each pair being arranged on each side of the middle portion of the roller, a blanket having a soft printing composition mounted on said cylinder between said rails, and a transfer roller of hard material mounted to rotate adjacent to said cylinder and to contact upon rotation with said rails and with the surface of said blanket, said rails having a thickness adapted to compensate for the thickness of the blanket and to equalize the pressure of said roller on the surface thereof.

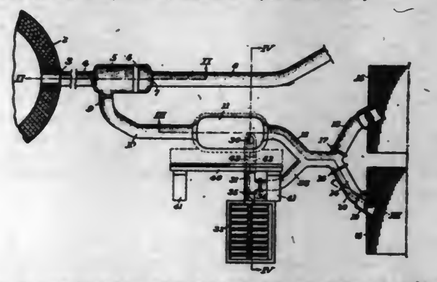
1,814,807. CONTACT STRUCTURE. HERMAN J. H. HUBER, Upper Darby, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 29, 1929. Serial No. 389,303. 10 Claims. (Cl. 200—87.)

1. A switch contact structure comprising a pair of stationary contact members each having a plane contacting surface, a relatively movable contact bridging member, a pair of brush members each comprising a plurality of laminæ of conducting material, each brush member interposed between a stationary contact and said movable bridging member whereby each lamina engages at its opposite ends the corresponding plane contacting surface and said bridging member, and means for mounting said brush



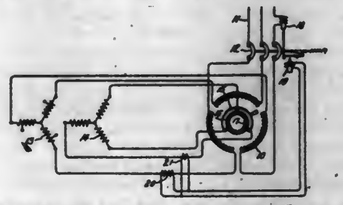
members so that the magnetic forces of the current traversing said switch force the opposite ends of said laminæ into good contacting engagement with said contact and bridging members.

1,814,808. METHOD AND APPARATUS FOR TREATING SLAG. JOHN M. HUGHES, Youngstown, and RICHARD C. BUTLER, Lowellville, Ohio. Filed June 3, 1930. Serial No. 459,100. 5 Claims. (Cl. 266—38.)



1. In combination with a blast furnace skimming runner having means for separating the molten slag from the iron therein, a slag runner for receiving the slag separated by said means, and a settling tub communicating with said slag runner and adapted to cause globules of iron suspended in the slag to settle in the tub, said tub being spaced a substantial distance from the skimming runner and in communication therewith through the slag runner, the settling tub being substantially wider than the slag runner in order to decrease the velocity of the slag flowing through the tub so as to cause the suspended globules of iron to settle to the bottom of the tub.

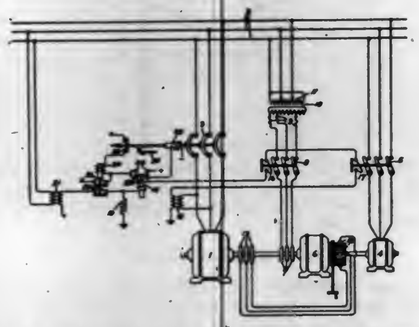
1,814,809. PROTECTIVE SYSTEM FOR ALTERNATING CURRENT COMMUTATOR MOTORS. JOHN I. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 20, 1928. Serial No. 271,592. 4 Claims. (Cl. 175—294.)



1. In a protective system a source of alternating current supply, an alternating current commutator motor

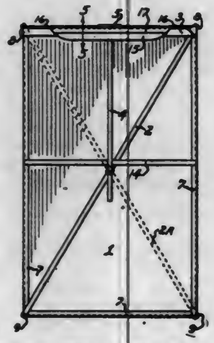
supplied thereby, a transformer connected between the primary and secondary windings of said motor, a circuit breaker between said motor and source of supply, and means responsive to undesirable saturation of said transformer for opening said circuit breaker.

1,814,810. CONTROL SYSTEM. GEORGE H. JUMP, Buffalo, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 16, 1930. Serial No. 421,282. 4 Claims. (Cl. 171—118.)



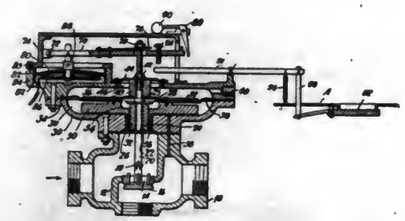
1. In combination, two alternating current circuits, a relay having a winding connected to one of said circuits so as to be responsive to the voltage thereof, a second relay controlled by said first mentioned relay for connecting said relay winding between said circuits when the voltage of said one of said circuits exceeds a predetermined value so that said first mentioned relay is energized in accordance with the voltage difference between said circuits, and means controlled by said relays for interconnecting said circuits when a predetermined phase and magnitude condition exists between the voltages of said circuits.

1,814,811. KITE. JOSEPH KRAMER and RUDOLPH KRAMER, Detroit, Mich. Filed Nov. 12, 1930. Serial No. 495,082. 2 Claims. (Cl. 244—22.)



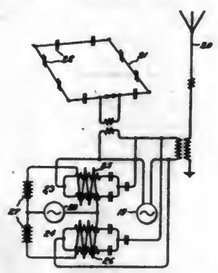
1. In combination with a kite having a body portion supported by diagonally disposed strips, one of the said strips adjacent the front surface of the said body portion, and the opposite strip adjacent the rear surface of the same, the uppermost end of the said strips tied to a crosswise extending strip, a vertical strip for the device, the upper end thereof secured to the said cross-wise strip, the aforesaid diagonal strips and the said vertical strip connected in the common center of the kite; means detachable, relative to the kite for causing the same to assume the act of looping the loop, and this means comprising a strip for inserting in the aforesaid framework of strips slightly above the center of the kite.

1,814,812. FLUID FLOW REGULATING MECHANISM. ALBERT L. KLEES, Long Beach, and BENJAMIN GREENFIELD, Jackson Heights, N. Y., assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Jan. 29, 1930. Serial No. 424,153. 17 Claims. (Cl. 236—78.)



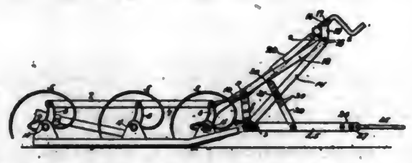
1. In a combined pressure regulator and cut-off mechanism, the combination of a valve casing, a regulating diaphragm and chamber communicating with the outlet of said casing, a valve within said casing connected to said diaphragm, and means independent of the outlet pressure in said casing operable to actuate said valve with an instantaneous snap action independently of said diaphragm to cut off the flow of fluid through said casing.

1,814,813. RADIO SIGNALING SYSTEM. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 30, 1925. Serial No. 72,128. 6 Claims. (Cl. 250—17.)



1. The combination of means for radiating carrier waves polarized in one plane, means for radiating carrier waves polarized in another plane, means for supplying high frequency current to said radiating means, and means for alternately shunting said current past said first and second mentioned radiating means thereby alternately to deenergize said radiating means.

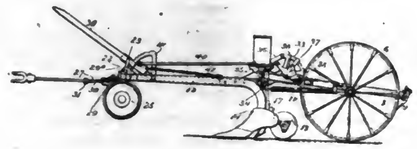
1,814,814. HARROW. HERMAN E. ALTGELT, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Original application filed Dec. 11, 1924, Serial No. 755,236. Divided and this application filed July 23, 1925. Serial No. 45,555. 5 Claims. (Cl. 55—104.)



1. In a spring tooth harrow, the combination with a frame and spring teeth carried thereby, said frame including an upwardly and forwardly projecting portion,

of draft means pivotally connected with the frame adjacent the upper and forward ends of said upwardly and forwardly projecting portion, adjustable means between said upwardly and forwardly projecting portion of the frame and said draft means, said adjustable means normally holding said draft means rigid, and link means attached to the forward end of said draft means.

1,814,815. AGRICULTURAL IMPLEMENT. HERMAN E. ALTGELT, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Aug. 8, 1927. Serial No. 211,569. 7 Claims. (Cl. 97—234.)



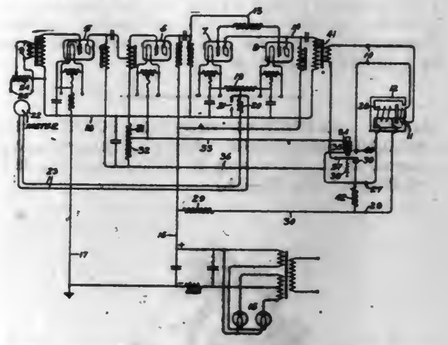
1. In a tractor-drawn lister, the combination with the framework and soil-engaging means, of a lifting lever located at the forward end of the frame so as to be within reach of an operator on a tractor, a supplemental lever connected with said soil-engaging means, lifting connections between said levers whereby said lifting connections and levers are so relatively arranged that the hand grip end of said first named lever will be in raised position when the soil engaging means are raised, and in lowered position when the soil-engaging means are in working positions.

1,814,816. AUTOMATIC FOLDING CONTAINER. ISAAC APPELBAUM, Brooklyn, N. Y., assignor to Hangerette Folding Box, Ltd., New York, N. Y., a Corporation. Filed Sept. 6, 1930. Serial No. 480,076. 3 Claims. (Cl. 206—7.)



1. A blank for forming a folding container of the character stated, comprising foldable body panels and an intermediate base, foldable side flaps for said panels forming side walls, foldable, diagonally scored corner pieces carried by the ends of said side flaps, a foldable end strip integral with one of said body panels in detached relation to the juxtaposed corner pieces, including an integral handle and a locking tab enclosed within said handle, reinforcing members integral with the outer edge of said end strip on either side of and detached from said handle, said reinforcing members being adapted to be folded over and secured, at their inner ends to the juxtaposed portions of said end strip, and a foldable end strip integral with the other of said body panels and including a hanger, a handle enclosed within and detached from said hanger, and reinforcing members intermediate said hanger and said end strip, on either side of said handle, said reinforcing members being adapted to be folded over and secured, at their inner ends to the juxtaposed portions of said end strip, there being a slot in said body panel for receiving and engaging said locking tab.

1,814,817. PROTECTIVE MEANS FOR SOUND REPRODUCERS. KIRBY B. AUSTIN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 26, 1928. Serial No. 308,478. 3 Claims. (Cl. 179—171.)



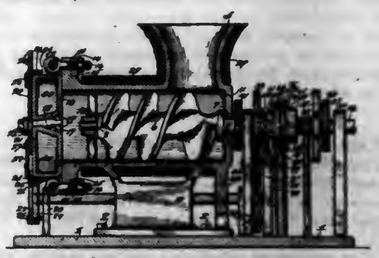
3. The combination with an electrical sound reproducer provided with field and actuating windings and means for energizing said windings, of a relay arranged to complete the circuit of said actuating winding only when said field winding is energized.

1,814,818. SHIRT COLLAR. ALBERT T. BARD, Chicago, Ill., assignor to Reliance Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 25, 1931. Serial No. 518,110. 2 Claims. (Cl. 2—131.)



1. A collar comprising inner and outer facings with a stiffening lining therebetween, turned-in adjacent folds, margins of the respective facings at the end edges of the collar, the lining extending to said edges and being formed with a plurality of superposed additional plies along said turned-in folds, all of which are co-extensive therewith, and a line of stitching spaced inwardly from the end edge of the collar and passing through the several plies and inturned folds for holding the several plies and the inturned folds in superposed position, whereby a stiffening or reinforcing bead is formed along and within the end edges of the collar.

1,814,819. MACHINE FOR EXTRUDING OPHTHALMIC MOUNTINGS. ROBERT A. BOSWELL, Washington, D. C. Filed Aug. 7, 1925. Serial No. 48,701. 12 Claims. (Cl. 18—14.)



11. The herein set forth process, consisting of extruding a plastic composition through an opening having the

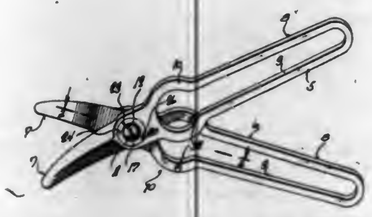
shape of an ophthalmic mounting to form an article of corresponding shape in cross sectional contour, dividing of the composition as it enters the opening, and subsequent progressive decreasing of the area of the composition as it leaves the opening causing the particles of the walls of the mounting to bind together in a homogeneous mass, constantly forming the article and cutting the article transversely immediately after it is formed, thereby making ophthalmic mountings.

1,814,820. EXTRUDING DIE FOR FORMING OPHTHALMIC MOUNTINGS. ROBERT A. BOSWELL, Washington, D. C. Filed Aug. 7, 1925. Serial No. 48,702. 16 Claims. (Cl. 18—14.)



1. A die for extruding ophthalmic mountings, comprising a body with an opening, whose contour adjacent the outlet portion of the opening conforms to the configuration of an ophthalmic mounting, said die having cores fixedly supported in the circular portions of the opening for forming the eyes of a mounting, the die being hollow around the walls of said circular portions, said hollow extending between the circular portions, whereby a cooling fluid may temper the bridge of the mounting.

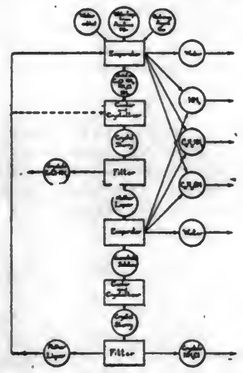
1,814,821. SHEARS. LAURANCE H. BOTTS, De Land, Fla. Filed July 28, 1930. Serial No. 471,185. 6 Claims. (Cl. 30—13.)



1. In a tool of the character described having complementary members pivotally connected for relative movement about their pivotal connection, a single yieldable means for normally maintaining the members in predetermined relative positions of movement about said pivotal connection and for preventing accidental separation of said members.

1,814,822. SEPARATION OF CUPROUS AND AMMONIUM CHLORIDES. EDGAR C. BRITTON and HAROLD R. SLAGH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 5, 1930. Serial No. 449,766. 17 Claims. (Cl. 23—97.)

1. The process of separating cuprous chloride and ammonium chloride from an aqueous solution containing the same which comprises establishing therein a free ammonia content in excess of one molecular equivalent of the cuprous chloride present, crystallising cuprous mono-

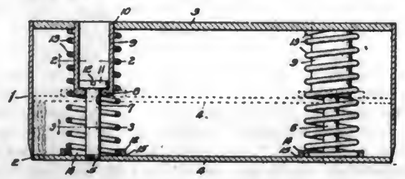


amino-chloride, $CuCl.NH_3$, therefrom separating the crystals and crystallizing ammonium chloride from the mother liquor.

1,814,823. PAINT FOR APPLICATION TO RUBBER AND RUBBER SURFACES. DENIS JOSEPH BURKE, London, England, assignor to Philip Schidrowitz, London, England. Filed May 15, 1928, Serial No. 278,054, and in Great Britain July 16, 1927. 7 Claims. (Cl. 134—39.)

1. A process of manufacture of a paint for application to the surface of rubber, which process comprises the steps of grinding a pigment in a liquid plasticizer so as to form a dispersion of the pigment therein, dissolving a gum in a low-viscosity solution composed of a cellulose derivative dissolved in a high-boiling solvent, the amount of plasticizer used in the pigment dispersion being not less by weight than 75% of the weight of cellulose derivative employed in the cellulosic solution of gum, admixing the dispersion of pigment and the cellulosic solution of gum so as to form a homogeneous paste, and thereafter thinning the paste so formed by adding to it a diluent composed of a liquid hydrocarbon.

1,814,824. CUTTING DIE STRUCTURE. CHRISTIAN A. CADENBACH, St. Louis, Mo., assignor to Independent Die & Supply Co., St. Louis, Mo., a Corporation of Missouri. Filed Nov. 9, 1928. Serial No. 318,123. 2 Claims. (Cl. 164—29.)



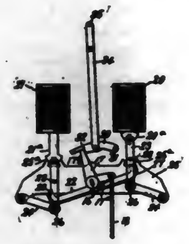
1. In combination with a cutting die including a female member having a cutting edge and an ejector plate therefor, of telescopic means connecting the back of the female member with the ejector plate and for limiting outward movement of the ejector plate, a ring member fixed to the inner face of the ejector plate in axial alignment with the telescopic means, coiled resilient means encircling the telescopic means and contacting at one end with the inner face of the back of the female member and at its opposite end with the inner face of the ejector plate within the bounds of the ejector plate ring member and one member of the telescopic means adapted to engage the inner face of the ejector plate within the bounds of the ring member thereof to limit inward movement of the ejector plate.

1,814,825. NONMETALLIC GEAR WHEEL AND METHOD OF MANUFACTURING THE SAME. HUGH J. CAMERON, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Aug. 5, 1930. Serial No. 473,277. 7 Claims. (Cl. 74—28.)



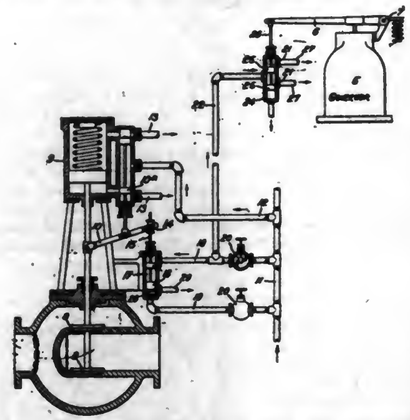
1. In a gear of the type composed of fibrous material held together by a synthetic resin binder, a fiber material protruding from the surfaces of the teeth.

1,814,826. ELECTRIC SWITCH. CHARLES F. CARPENTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 27, 1928. Serial No. 273,377. 15 Claims. (Cl. 200—107.)



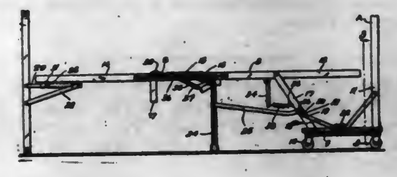
1. A switch comprising two sets of stationary contacts, two sets of normally open movable contacts for cooperating therewith, operating means connected to said contacts whereby either of said sets may be moved into interengagement, a latch operably connected to said movable contacts so as to lock either set thereof in its position of interengagement with the stationary contacts, and releasing means for either of said contacts operably connected to said latch.

1,814,827. HYDRAULIC CONTROL SYSTEM. REED J. CAUGHEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 7, 1929. Serial No. 369,212. 6 Claims. (Cl. 121—42.)



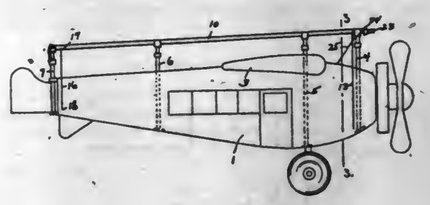
1. In a control system of the character described, a movable abutment, means for applying fluid pressure to one side of the abutment, means for varying the pressure on said side of the abutment to move the latter, a control device having a moving control part connected with said pressure varying means to operate the same, means for applying fluid pressure to the opposite side of said abutment in opposition to said first named fluid pressure for positioning the abutment, means controlled by movement of the abutment for varying the fluid pressure on said opposite side of said abutment, and a controlled device having a movable past connected with the abutment to be moved thereby.

1,814,828. FOLDING BED. WOOLF CHACKES and THEODORE J. BOSSERT, St. Louis, Mo., assignors to Coopersmith Bed Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 23, 1928. Serial No. 248,651. 4 Claims. (Cl. 5—155.)



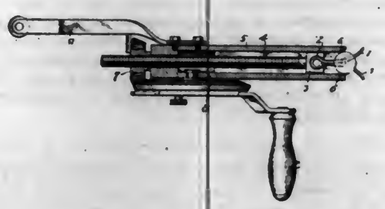
1. In a folding bed, a main supporting frame, a folding bed frame, links pivotally connected to the main supporting frame and to the folding bed frame and adapted to support the latter in folded and unfolded positions and to swing the folded bed frame into and out of the main supporting frame, means connected to said supporting links and to said main frame for limiting the outward swinging movement of said supporting links, said means comprising links pivotally secured to said main supporting frame and having pin and slot connections with said supporting links, and means carried by the folding bed frame and cooperating with the links that limit the outwardly swinging of said supporting links for locking the latter against inward swinging movement in the unfolded position of said bed frame.

1,814,829. SAFETY AIRPLANE. MARGARET CHEETHAM, Youngstown, Ohio. Filed Oct. 14, 1929. Serial No. 399,505. 2 Claims. (Cl. 244—12.)



1. In a device of the class described, a pair of folding auxiliary wings, said wings provided with a central rod, a plurality of supports for said central rod, a plurality of arm members attached to said central rod, outer ends of said plurality of arms hinged to an outer securing rod, a flexible covering for said wings, a plurality of reinforcing cords positioned above said covering of wings, means which holds said auxiliary wings in a folded position, a spring means for starting the opening of said wings, substantially as described.

1,814,830. COTTER-PIN PULLER. GEORGE THOMAS COOKE, South Norwalk, Conn. Filed Dec. 26, 1929. Serial No. 416,331. 3 Claims. (Cl. 29—86.1.)



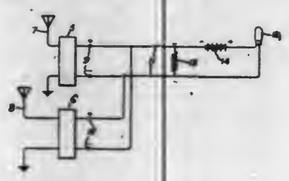
1. A cotter-pin puller comprising a frame having a passage therein, a rod movable in said passage and having block provided with a pocket for receiving a cotter-pin head, the side walls of said pocket embracing said head, and means for applying pressure to the rod and frame in opposite directions.

1,814,831. LUMINOUS TUBE SIGN. CLARENCE F. COVEY, Pittsburgh, Pa., assignor to The McAuley Automatic Trap Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 18, 1929. Serial No. 400,528. 3 Claims. (Cl. 248—30.)



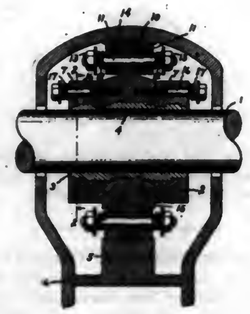
1. In an elevation post for luminous tube signs, a post member of insulating material having a stem with a seat at the top thereof, a helical spring into which the stem projects, a projection on the stem entered between adjacent convolutions of the spring, and a vertically extending rib on the stem adapted to contact with the end of the spring and limit relative movement between the post member and the spring.

1,814,832. FADING CONTROL SYSTEM FOR RADIO RECEPTION. ROBERT B. DOME. Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 18, 1929. Serial No. 364,282. 5 Claims. (Cl. 250—8.)



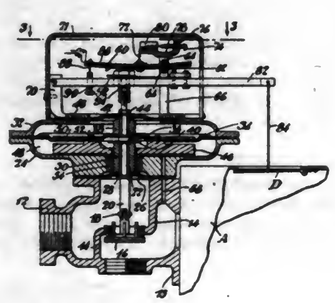
1. A method of reducing the effects of fading in a double channel receiving system, which comprises applying to a voltage responsive light-emitting receiving device a voltage just sufficient to maintain said device in operation, applying rectified output voltage from one channel to said device in opposition to said first named voltage, and applying the rectified output voltage from the other channel to said device in aiding relation to said first named voltage.

1,814,833. SHAFT BEARING. JOHN H. DORAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 20, 1929. Serial No. 372,287. 10 Claims. (Cl. 308—73.)



1. The combination with a shaft and a bearing for the shaft, there being a clearance between the shaft and the top wall of the bearing, of yielding means for holding the shaft down in its bearing, and friction means associated with the shaft and bearing for opposing vibration of said shaft relative to the bearing.

1,814,834. FLUID FLOW REGULATING APPARATUS. ALBERT L. KLEES, Long Beach, and BENJAMIN GREENFIELD, Jackson Heights, N. Y., assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed June 14, 1930. Serial No. 461,113. 12 Claims. (Cl. 236—68.)



1. In a controlling system for burners, the combination with a valve and valve seat in a supply line through which fuel is supplied to the burner, of automatic valve-operating mechanism operatively associated with the said valve, this mechanism comprising a bimetallic member having respective concave and convex surfaces and adapted when energized to reverse its curvature with an instantaneous snap action, a support on which said member is fulcrumed, means for adjusting the said bimetallic member about its fulcrum, means connecting said valve and member, and means for energizing said member.

1,814,835. RAIL JOINT BAR. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Filed Apr. 25, 1930. Serial No. 447,122. 7 Claims. (Cl. 238—243.)

1. A rail joint bar having a head element and a foot element provided with fishing surfaces adapted for both center and end fishing contact with the rail ends when the bar is applied in a joint, the outer side of the bar being substantially straight laterally and the inner side of the respective elements being curved inwardly and



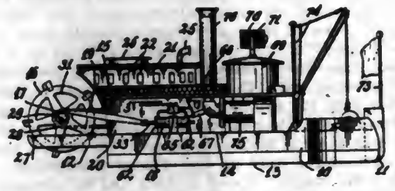
lengthwise of the bar when the bar is out of a joint and free from lateral tension, said elements having different degrees of inward curvature.

1,814,836. SHAFT COUPLING. JOHN E. LEDERMAN, Milwaukee, Wis., assignor to Hydro Electric Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 9, 1928. Serial No. 291,198. 3 Claims. (Cl. 64—91.)



1. In a shaft-drive coupling, the combination with a pair of shafts, of a disk of insulating material interposed between the shafts and provided with coupling-pin-receiving openings, and tapered coupling pins associated with each of said shafts and having substantially line contact engagement with the walls of said openings.

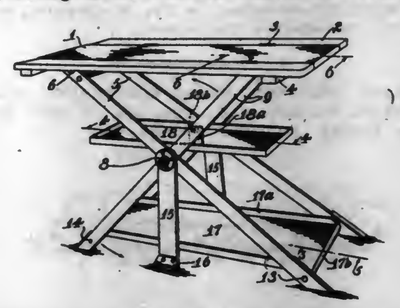
1,814,837. MINIATURE TOY STERNWHEEL STEAMBOAT. WILLIAM C. LEIBER, Port Washington, N. Y. Filed June 20, 1930. Serial No. 462,473. 3 Claims. (Cl. 46—181.)



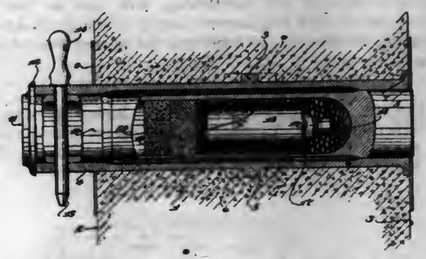
1. A toy boat, comprising a hull portion having a bow, a stern, a keel, and a deck, a cabin portion on said deck, a paddle wheel on said stern, radial cranks on the axis of said paddle wheel, cylinder and piston structures on said deck, connecting rods between said pistons and cranks, and means including said cylinder and piston structures for reversing operation of said paddle wheel.

1,814,838. FOLDING TABLE. BRUNO MARTIN, Saginaw, Mich. Filed Sept. 13, 1929. Serial No. 392,418. 2 Claims. (Cl. 45—74.)

1. In combination, a folding table including a top, pairs of crossed legs, a spindle connecting said pairs of legs at their intersection, a pair of depending legs pivotally secured at their upper ends to said spindle, transverse rails connecting the adjacent lower ends of said legs, a tray comprising a single piece of sheet metal removably supported at its ends upon said crossed rails, the ends of which are downwardly flanged for engagement with said rails whereby the tray and flanges together act as a stiffening member to hold the lower ends of said legs in normal rectangular alinement, and a second tray having on its bottom a U-shaped downward projection arranged to engage said spindle, an upwardly projecting lug on said tray and means releasably securing said lug to one of the legs of said second pair.



1,814,839. PROTECTOR FOR VAULT VENTILATORS. OLIVER B. MCCLINTOCK, Minneapolis, Minn., assignor to O. B. McClintock Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 18, 1930. Serial No. 482,754. 4 Claims. (Cl. 109—6.)



1. A vault ventilator comprising a tubular casing adapted to be anchored in a vault wall, a hollow plug removably fitting the casing and having a closed outer end and a displaceable head closing the inner end thereof, a fragile container in the plug holding a volatile liquid, a cushion encasing the container and holding the same out of contact with the casing, a body of cushioning material between the closed outer end of the plug and the adjacent end of the cushion, a second cushioning body in contact with the other end of the cushion, and a body of cement secured in the plug against said second cushioning body and holding the two cushioning bodies and the cushion against shifting movement away from the closed outer end of the plug.

1,814,840. CONDENSER. DAVID W. R. MORGAN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 30, 1930. Serial No. 448,705. 11 Claims. (Cl. 257—33.)



1. A surface condenser comprising a shell having an inlet, a nest of tubes within the shell, means for separat-

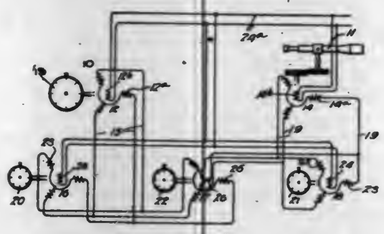
ing the tubes into a plurality of condensing compartments, and into a like number of cooling compartments, and means for controlling the flow of circulating media through the respective compartments.

1,814,841. MAGNETIC BRAKE FOR TRAINS. JOSEPH MOSLEH, Brooklyn, N. Y. Filed Apr. 17, 1930. Serial No. 444,984. 7 Claims. (Cl. 188—60.)



1. In combination with a truck of a train, a solenoid supported on the truck and provided with a plunger extendible towards the side of a wheel on said truck, a block radially adjustable on said wheel, an arm pivoted at one end on said block and formed with an offset portion at the other end for engaging against said plunger when extended, stops on the wheel on opposite sides of said arm, resilient means for drawing said arm inwards upon slowing down or turning of said wheel which reduces centrifugal force so that said offset front end engages said extended plunger to stop said wheel, and said block being adjustable for positioning said arm so that all shock due to said stoppage is carried by the pintle of said arm or distributed between the pintle and one of said lugs.

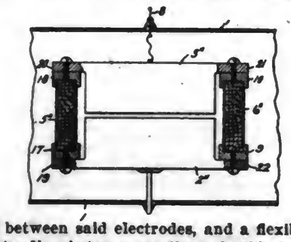
1,814,842. INDICATOR SYSTEM. EDWIN J. MURPHY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 8, 1927. Serial No. 197,502. 4 Claims. (Cl. 177—351.)



1. A target bearing indicator system for ships comprising a gyrocompass mounted on said ship, transmitting means driven by said gyrocompass for transmitting the compass bearing the ship, an indicator member responsive to said transmitter means for indicating the compass bearing of the ship, a sighting device on said ship, means for transmitting the bearing of said sighting device with relation to said ship, an indicator member responsive to the latter of said transmitting means for indicating the bearing of said sighting device with relation to said ship, and an indicator actuated jointly by said transmitting means so as to indicate the compass bearing of the target, said indicating members being arranged in close alignment whereby the bearings may be readily compared.

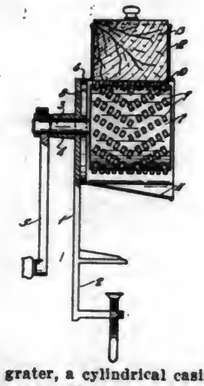
1,814,843. KERR CELL. ALBERT NARATH, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Dec. 26, 1929, Serial No. 416,318, and in Germany June 4, 1929. 7 Claims. (Cl. 88—61.)

1. A light control device including a receptacle, a plurality of electrodes mounted within said receptacle, a rigid member extending between one of said electrodes and the wall of said receptacle, rigid insulation spacing means



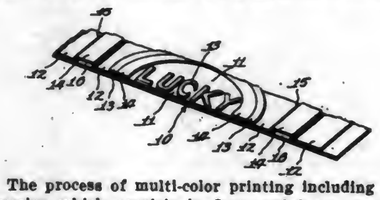
interposed between said electrodes, and a flexible terminal member extending between another of said electrodes and the wall of said receptacle.

1,814,844. VEGETABLE GRATER. LEONARD C. NOTBOHM, Rome, Wis. Filed Aug. 7, 1929. Serial No. 384,024. 1 Claim. (Cl. 146—89.)



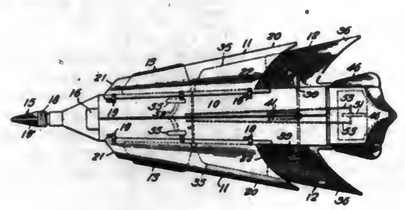
In a vegetable grater, a cylindrical casing, a grater cylinder rotatably mounted therein, the latter having a plurality of rows of cutting teeth outstanding upon its outer cylindrical surface and adapted to move closely to the inner surface of the casing without contacting therewith, the said rows of teeth extending angularly from a line defined upon the outer surface of the cylinder by a plane passed transversely through the center of the cylinder, towards either end of the cylinder, in V-shaped formations, so that upon the rotation of the cylinder in the required direction the teeth more centrally located in the several rows will move in advance of those teeth located towards the ends of the rows at the ends of the cylinder, said teeth being channel shaped in form and so arranged and positioned on the drum and in the said rows that the channels of the teeth extend in the direction of their respective rows, whereby the grated vegetable is pushed along diagonally between the said rows of teeth from the center towards either end of the grating cylinder and off the grating cylinder.

1,814,845. COLOR PRINTING PROCESS. CHRISTEN OLSEN, Chicago, Ill., assignor to Manx Corporation, Chicago, Ill., a Corporation of Illinois. Filed July 7, 1930. Serial No. 466,369. 5 Claims. (Cl. 101—211.)



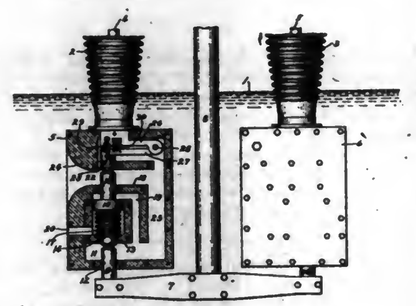
5. The process of multi-color printing including a gold impression which consists in first applying one or more color inks, including as an added element a gum adhesive, and then applying a moist gold ink while the first named colors are wet.

1,814,846. AEROPLANE. GUST PAPPADAKES, Bronx, N. Y. Filed May 22, 1930. Serial No. 454,605. 3 Claims. (Cl. 244—17.)



1. An aircraft comprising a substantially elongated body, a pair of relatively stationary fins near the upper end thereof, said fins being disposed lengthwise of said body and tapering from the aft to the fore regions, a pair of oscillatory fins mounted below the forward part of said stationary fins, a motor, means for operating said last named fins from the motor, and a pair of pivotally mounted fins for causing the deflection of said aircraft.

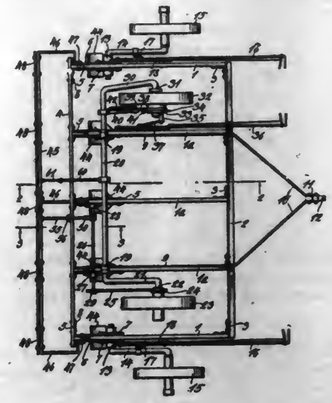
1,814,847. CIRCUIT INTERRUPTING DEVICE. WILLIAM E. PAUL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 20, 1929. Serial No. 394,062. 12 Claims. (Cl. 200—150.)



1. Circuit interrupting apparatus of the fluid-break type comprising relatively movable contacts, means for effecting in response to opening movement of one of said contacts a break for drawing an initial arc, and means for subsequently effecting opening movement of another of said contacts at substantially a minimum current value to form a second break, the pressure developed by the initial arc being effective to force a stream of cooling insulating fluid across the last-named break.

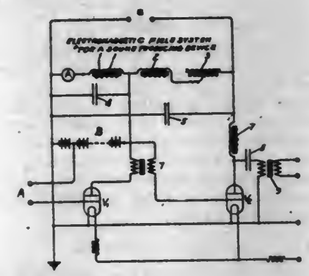
1,814,848. LISTER. CHARLES T. PEACOCK, Arriba, Colo. Filed Sept. 16, 1930. Serial No. 482,253. 4 Claims. (Cl. 97—55.)

1. A lister comprising, in combination, a frame provided with a plurality of spaced lister shovels adapted to form spaced trenches, a bar extending in the direction of the width of the lister, the ends of the bar having bracket arms that are pivotally connected with the frame, a plurality of scraper plates attached to the bar and adapted to project into the trenches, and means for periodically



raising and lowering the bar and the plates when the lister is moving whereby spaced dams are formed along the trenches.

1,814,849. AMPLIFYING SYSTEM. ARTHUR PRIMROSE YOUNG, Kenilworth, England, and JOSEPH HUTT, deceased, Kenilworth, England, by Cecilia Elizabeth Hutt, executrix, Kenilworth, England, assignors to General Electric Company, a Corporation of New York. Filed Aug. 7, 1928, Serial No. 298,057, and in Great Britain Oct. 15, 1927. 3 Claims. (Cl. 250—27.)

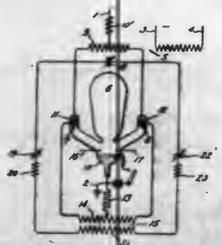


1. The combination with an amplifier embodying thermionic valves, of current supply terminals, a series of reactors connected between said terminals, said reactors being adapted to draw a certain excitation current from said terminals and to smooth fluctuations in voltage at said terminals, and at least one of said reactors constituting an electromagnetic field system for a sound reproducer, current controlling means in series with said reactors for adjusting said excitation current, and anode circuits for said thermionic valves connected with said reactors at different points and separated electrically by at least one of said reactors whereby different operating potentials for said circuits are received from said reactors when the supply terminals are energized.

1,814,850. VAPOR ELECTRIC APPARATUS. DAVID C. PAINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 12, 1926. Serial No. 141,186. 4 Claims. (Cl. 250—36.)

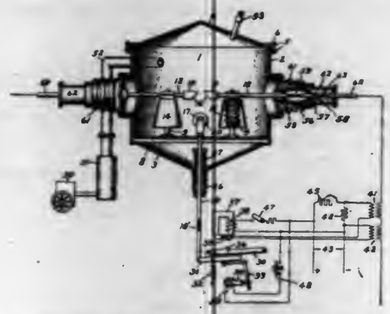
1. The combination of alternating and direct current circuits, vapor electric apparatus comprising a cathode and anode connected between said circuits and a grid ar-

ranged to control the current transmitted between said cathode and anode, a grid potential control circuit con-



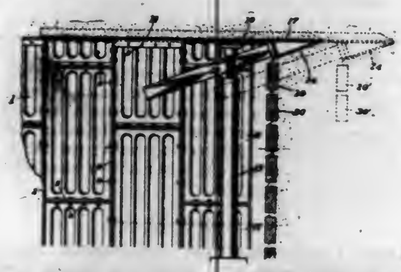
nected directly to said anode, said control circuit having such constants that said circuit is resonant at a frequency slightly above that of said alternating current circuit.

1,814,851. CIRCUIT CONTROLLING APPARATUS. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1928. Serial No. 264,114. 8 Claims. (Cl. 200—144.)



1. A vacuum switch comprising an enclosing casing, a pair of fixed contacts therein, means firmly supporting the contacts in spaced relation, said contacts having opposed faces arranged at approximately right angles to each other, and a movable bridging member for said contacts comprising a flexibly mounted roller adapted simultaneously to engage said opposed faces.

1,814,852. TUNNEL APPARATUS. ROBERT V. PROCTOR, Youngstown, Ohio, assignor to The Commercial Shearing & Stamping Company, Youngstown, Ohio, a Corporation of Ohio. Filed May 4, 1928. Serial No. 275,137. 3 Claims. (Cl. 61—85.)

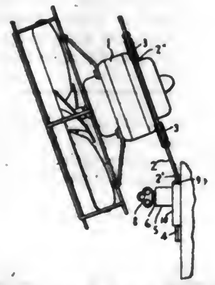


1. Tunneling apparatus comprising a tunnel liner, and a sectional shield composed of a plurality of metallic poling plates having ribs extending longitudinally thereof and being provided along their side edges with flanges which extend toward the tunnel and contact with the flanges of adjacent poling plates, said plates being supported by the tunnel liner and having substantially wedge shaped projections on their lower surfaces for cooperation with means for driving the poling plates forward.

1,814,853. METHOD OF PURIFYING METHYL SALICYLATE. MARK E. PUTNAM, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Jan. 13, 1930. Serial No. 420,640. 5 Claims. (Cl. 260—104.)

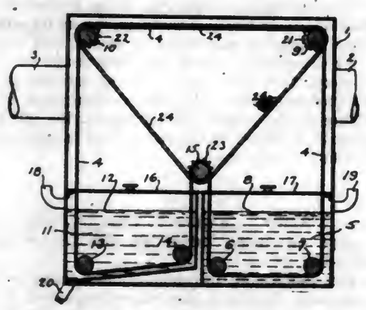
5. In a method of purifying crude methyl salicylate, the steps which consist in adding methyl alcohol to the impure salicylate, cooling the so diluted salicylate, adding to the so cooled mixture methyl salicylate crystals characterized by having a melting point approximating —1.0° C. to initiate the production therein of further crystals of that type and separating the crystals so formed from the mother liquor.

1,814,854. SUPPORT LOCK FOR ELECTRIC FANS. CLARENCE RINGWALD, North Hampton, Ohio, assignor to Robbins & Myers, Inc., Springfield, Ohio, a Corporation of Ohio. Filed Sept. 30, 1929. Serial No. 396,076. 5 Claims. (Cl. 70—14.)



1. In a support of the character described, a two-part supporting device consisting of a shank member and a socket member to receive said shank member, a lock carried by one of said members having a key operated projecting rotatable bolt, the cross-sectional area of which is greater in one direction than the other, the other member having an opening approached by a slot to receive said bolt when the members are placed together and prevent withdrawal thereof when said bolt is turned.

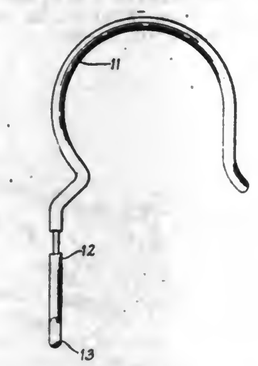
1,814,855. STEEL WOOL FILTER. WILLIAM H. ROBBINS, Springfield, and HARRY A. TOULMIN, Jr., Dayton, Ohio, assignors to The Williams Company, London, Ohio, a Corporation of Ohio. Filed Mar. 31, 1927. Serial No. 179,973. 5 Claims. (Cl. 183—63.)



1. In a filter, a casing having inlet and exit openings and a steel wool belt adapted to move across said open-

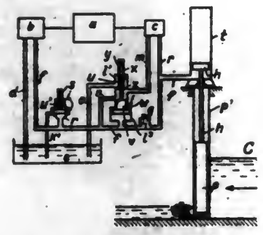
ings to intercept the gases passing through said casing, and means for actuating said belt, and means for automatically applying to said belt a coating of dust collecting material as the belt is actuated, and means for removing the dust collecting material and the dust collected thereby on the belt as the belt is so moved.

1,814,856. SKIRT RETAINING DEVICE. CAROL RHOADES ROBINSON, New York, N. Y. Filed Oct. 29, 1930. Serial No. 491,919. 6 Claims. (Cl. 24—72.)



6. A skirt-retaining device, comprising a spring member adapted to envelop the outer side of a limb and an extension projecting in a plane parallel to the horizontal plane of said member toward the other limb and in the vertical plane normally occupied by a garment encircling the limbs, the end of said extension being widened to retain the garment in the vertical plane of said extension.

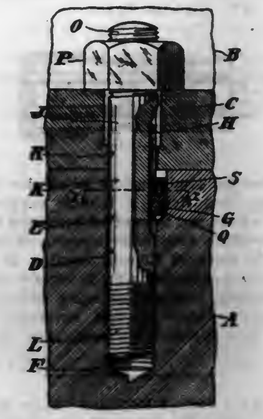
1,814,857. CONTROLLING APPARATUS FOR CONDUITS. HEINRICH ADOLF RÖSLE, Heidenheim-on-the-Brenz, Germany, assignor to J. M. Voith, Heidenheim-on-the-Brenz, Germany. Filed Dec. 1, 1928, Serial No. 323,066, and in Germany Nov. 28, 1927. 7 Claims. (Cl. 137—139.)



1. Apparatus for actuating to open position the closure gate of a pressure fluid conduit comprising a pair of pumps, means for actuating the pumps, and connections comprising conduits and valves for enabling the pumps to be connected first in series to cause said gate to commence its opening movement and then in parallel to cause the gate to complete said movement.

1,814,858. LOCKING DEVICE FOR BOLTS. JOHN A. RUTTER, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 18, 1928. Serial No. 313,264. 1 Claim. (Cl. 151—32.)

In a locking device for stud bolts, the combination of a support having a recess, a groove in the support opening into the recess and extending longitudinally thereof, a stud bolt in the recess having a groove to register with the first groove, a key in the grooves preventing the bolt

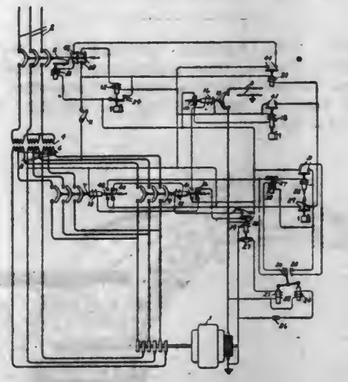


from being rotated and removed from the recess, and a threaded aperture in the key adapted to receive withdrawing means to remove the key from the grooves.

1,814,859. TIPPED LACES. JULIUS SCHWARZ, Budapest, Hungary. Filed Mar. 21, 1929, Serial No. 348,975, and in Germany July 26, 1926. 3 Claims. (Cl. 24—143.)

2. As an article of manufacture, a lace having a tip formed of an impregnated end portion of the lace, the impregnating agent consisting of an acetonic celluloid solution containing colophony.

1,814,860. AUTOMATIC CONTROL SYSTEM. HAROLD T. SEELEY, Yeadon, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 13, 1929. Serial No. 406,955. 9 Claims. (Cl. 171—118.)



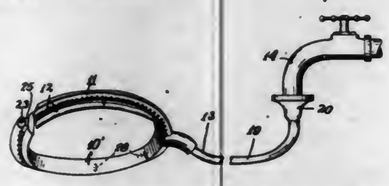
6. In combination, an alternating current supply circuit, a direct current load circuit, a rotary converter, automatic switching means for connecting said converter to said supply circuit and subsequently to said load circuit, timing means for effecting the disconnection of said converter from said supply circuit if said converter is not connected to said load circuit within a predetermined time interval, and means controlled by the speed of said converter for effecting the disconnection of said converter from said supply circuit independently of said timing means if said converter fails to start within a predetermined time after it is connected to the supply circuit.

1,814,861. SOUND RECORDING AND REPRODUCING APPARATUS. JOSEPH F. SIAS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 4, 1930. Serial No. 418,625. 2 Claims. (Cl. 179—100.31.)



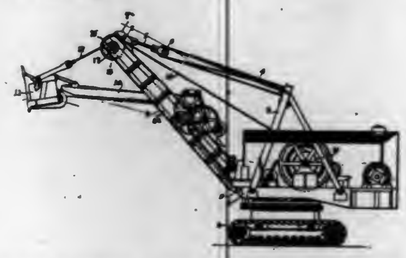
1. Apparatus for producing an adjustable light line on a moving film, comprising a tubular support having a lens mounted at one end thereof adjacent the film and having an intermediate transverse opening therein, a member detachably mounted in said opening having a light aperture therein and having a guide surface extending longitudinally thereof, shutters engaging said guide surface at the respective ends of said aperture, and screws mounted in said member for adjusting the respective shutters.

1,814,862. BATH SPRAY DEVICE. JOHN SEMKOW, New York, N. Y. Filed Feb. 3, 1930. Serial No. 425,377. 5 Claims. (Cl. 4—157.)



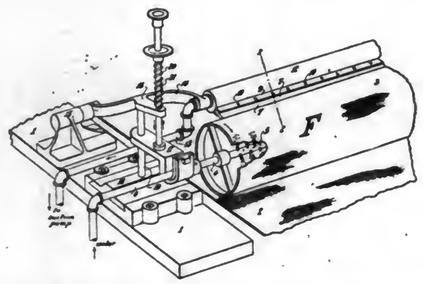
1. A bath spray, comprising a neck strap for encircling one's neck and resting upon the shoulder, a water tube attached on the outside of the strap slightly above its lower edge and formed with bottom apertures constituting spraying nozzles, a flexible water supply system for conveying water from a faucet to said tube, and means for changing the angle of discharge from said nozzles upon a user.

1,814,863. EXCAVATING APPARATUS. DWIGHT J. SHELTON, Marion, Ohio, assignor to The Marion Steam Shovel Company, Marion, Ohio, a Corporation of Ohio. Filed Sept. 13, 1929. Serial No. 392,322. 1 Claim. (Cl. 214—135.)



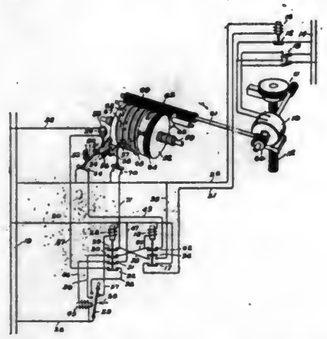
In an excavating machine, a supporting structure, an inclined boom on said structure having its upper end portions spaced apart, a dipper stick movably mounted on said boom, a dipper carried by said stick, plates arranged between and secured to the spaced upper portions of said boom, said plates being spaced apart and having portions extending beyond the upper edge of said boom, a pair of drums arranged between and supported by said plates, said drums being of different diameters, a cable wound on the smaller drum, having one end secured thereto and having its other end connected with said dipper, a second cable wound on the larger drum, having one end secured thereto and having its other end connected with actuating mechanism on said supporting structure, a trapezoidal element having the shorter side thereof connected near its ends with the respective plates, and boom supporting cables connected with the longer side of said element near the respective ends thereof and leading to said supporting structure.

1,814,864. WIPER OR CLEANER FOR THE DANDY ROLLS OF PAPER MAKING MACHINES. PETER S. SINCLAIR, Holyoke, Mass. Filed Oct. 22, 1929. Serial No. 401,475. 9 Claims. (Cl. 92—50.)



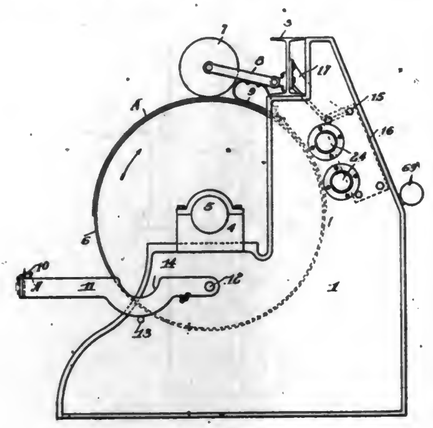
1. In a paper making machine having a dandy roll, suction means for removing the accumulations of pulp from the interstices of the roll comprising a trailer engaging the roll, said trailer having flexible members which are spaced from each other.

1,814,865. SYSTEM OF MOTOR CONTROL. GEORGE B. STARR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,807. 10 Claims. (Cl. 172—239.)



1. A system of control for electric motors comprising an electromagnetic control switch for the motor circuit, a relay switch for controlling the operating circuit of said control switch, a holding device for maintaining said relay switch in closed circuit position, means driven by the motor for operating said holding device to open said relay switch, means movable to a predetermined position to close said control and relay switches, said means being biased to another position, and means operated by said control switch for closing a control circuit therefor through said relay switch.

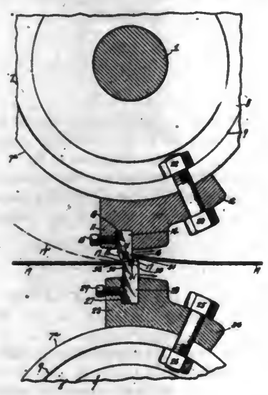
1,814,866. CARPET CLEANING MACHINE. WILLIAM T. STRIDE, Rochester, N. Y., assignor, by mesne assignments, to The American Laundry Machinery Co., a Corporation of Ohio. Filed Sept. 30, 1926. Serial No. 138,631. 15 Claims. (Cl. 15—7.)



1. In a rug cleaning machine, the combination with a rotatable bearing drum for the rug, of means associated with the drum for scouring a rug carried thereon, a vacuum device also associated with the drum and adapted to suck water out of a rug thereon and a rinsing device arranged in the throat of the vacuum device and adapted to project water under pressure into the rug.

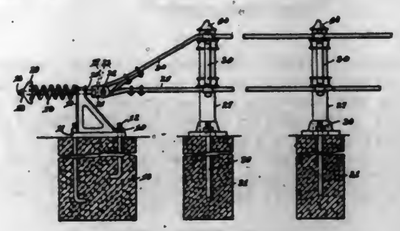
11. In a rug cleaning machine, the combination with a rug carrier and a frame extending transversely of the direction of travel of the rug thereon and provided with transverse guides, of a reservoir for cleaning fluid provided with a valve, a nozzle communicating therewith, a nozzle carriage on said guides and adapted to be moved by contact with a rug against said nozzle, and cam means on said carriage adapted to trip said valve when said carriage is moved.

1,814,867. BLANK SLITTING AND SLOTTING MACHINE. GEORGE W. SWIFT, Jr., Bordentown, N. J., assignor to George W. Swift, Jr., Inc., Bordentown, N. J., a Corporation of New Jersey. Filed Mar. 18, 1930. Serial No. 436,768. 19 Claims. (Cl. 164—66.)



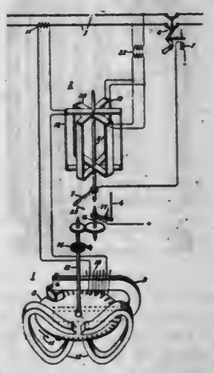
1. In a device of the character described, the combination of two cutter blades revolvable about parallel axes into cooperation with each other as they approach the plane common to said axes, one of said cutter blades having a spiral cutting edge constructed on an increasing radius with respect to and from one end to the other of its axis of revolution.

1,814,868. GUARD RAIL. GEORGE R. TARBOX, Troy, N. Y., assignor to The Eastern Malleable Iron Company, Bridgeport, Conn., a Corporation of Connecticut. Filed June 5, 1928. Serial No. 282,913. 5 Claims. (Cl. 256—13.1.)



1. In a safety guard rail of the class described, a series of round posts each having a pin therein, a bracket for each post, each bracket having a hole to receive the post and having a groove to receive the pin in a way to permit of interlocking rotatable connection of bracket to post.

1,814,869. CIRCUIT PROTECTION. OLIVER C. TRAVER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 20, 1925. Serial No. 51,499. 10 Claims. (Cl. 175—294.)



1. In combination with an electric circuit, two relatively movable members, each arranged for movement in the path of movement of the other, a time limit electroresponsive device for moving one of said members at a speed dependent on the relative values of the current and potential of the circuit and means comprising current and potential windings for positioning the other member in accordance with an ohmic characteristic of the circuit between two points thereof, whereby to control the time required by the first member to engage the other.

1,814,870. CERAMIC VESSEL AND METHOD OF PRODUCING THE SAME. WARREN I. TYCER, Columbus, Ohio. Filed May 28, 1928. Serial No. 281,004. 4 Claims. (Cl. 25—156.)

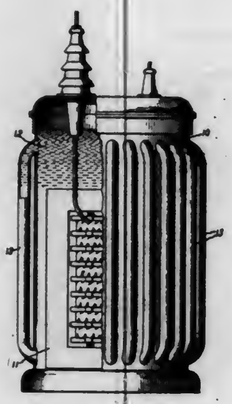
2. A method of producing fire-clay cooking receptacles which consists in mixing one-eighth part of sandstone

clay, one-half part of fire-clay and three-eighths part of lower vein clay with a relatively small quantity of powdered manganese by means of a pug mill or mixer and for a sufficient period of time and with sufficient water



to produce a plastic clay body of uniform materials throughout capable of being molded into desired form, molding said materials into receptacle form, and then applying to the interior of said receptacle liquid glaze consisting of Michigan and Albany clay, which after firing, produces a black vitreous surface upon the interior of the receptacle of such opacity as to conceal the manganese in the outer clay body.

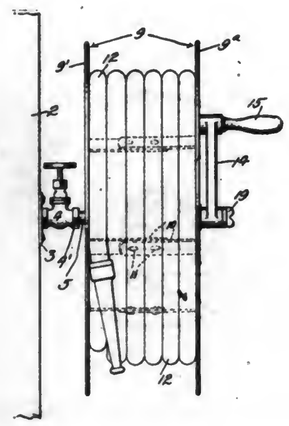
1,814,871. TUBULAR CASING FOR ELECTRICAL APPARATUS. MAGNUS UNGER, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 2, 1930. Serial No. 486,030. 2 Claims. (Cl. 257—191.)



1. The combination with an electrical apparatus casing having two openings of a heat radiating tube, the end portions of said tube being bent and meeting the casing wall at acute angles at said openings, the extreme end edges of said tube being further bent to form integral flanges extending at right angles to the casing wall, said flanges and the edges of said openings being welded together to form liquid tight joints.

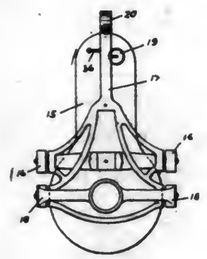
1,814,872. HOSE REEL. CHARLES WAGNER, Grantwood, N. J. Filed Sept. 16, 1929. Serial No. 392,797. 2 Claims. (Cl. 299—78.)

1. A hose reel embodying, in combination, a rotatable hose reel comprising a pair of side members having a hose support extending between the same, a hose mounted on said support, a water conduit mounted radially on one side member at the outer side thereof, and revolvable about the axis thereof, a fixed connection between one end of said water conduit and a terminal of said hose, a supply pipe extending axially through said hose reel and forming a support for both side members, a water-tight connection between the revolving opposite end of said water conduit and the said source of water supply, said last-mentioned connection embodying a coupling casing having a contact surface and a rotatable coupling member having a contact surface abutting against the contact



surface of the casing, and a spring for forcing said two surfaces together to provide a water-tight joint therebetween.

1,814,873. SCALE. GEORGE WALKER, Brooklyn, N. Y., assignor to the Jacobs Bros. Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 21, 1929. Serial No. 348,755. 16 Claims. (Cl. 265—59.)

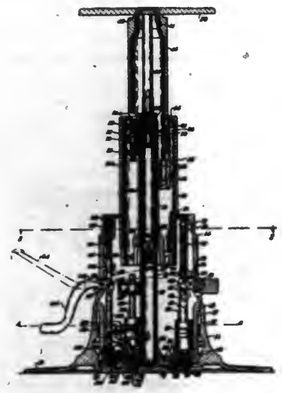


1. A scale including a rockingly mounted beam, a resilient element disposed in a substantially horizontal plane and adapted to be flexed transversely of its body, a registering mechanism including an indicating member connected to said element and extending substantially at right angles to the body thereof and means connecting said element to said beam.

1,814,874. DENTAL CHAIR ELEVATOR. HENRY B. WEBER, Canton, Ohio, assignor to the Weber Dental Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Nov. 3, 1928. Serial No. 316,969. 3 Claims. (Cl. 138—9.)

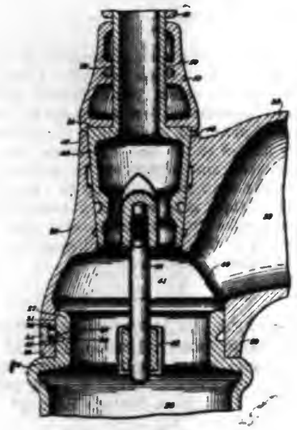
1. A jack for a dental chair elevator and the like, including a cylinder, a load supporting and lifting piston operatively mounted in the cylinder and adapted to be elevated by the introduction of fluid into the cylinder, means for introducing fluid into the cylinder, and the

piston having a bottom wall and an upper tubular portion forming a relief chamber therein, a load carrying strut having a lower tubular portion supported within the tubular portion of the piston, an outlet passageway communicating between the chamber and fluid introducing



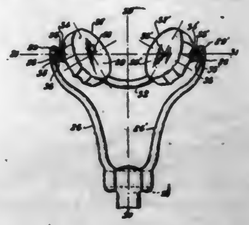
means, the bottom wall of the piston having an inlet aperture formed therein, a closure member slidably mounted in the lower tubular portion of the strut for movement towards and from closing position across the inlet aperture, and yielding means normally maintaining the closure member in closing position.

1,814,875. DENTAL UNIT STANDARD. HENRY E. WEBER, Canton, Ohio, assignor to the Weber Dental Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Nov. 10, 1928. Serial No. 318,338. 3 Claims. (Cl. 248—1.)



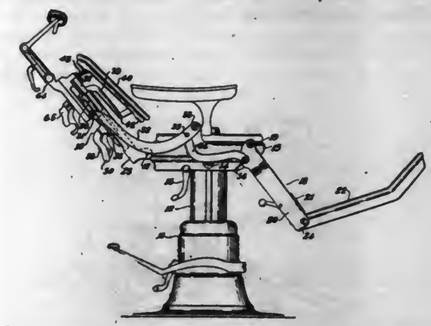
1. A standard for dental units and the like, including a lower section, an upper extension section, a rotatable sleeve interposed between the sections, means preventing rotation of the extension section including a member extending between and in abutment with both sections, the sections being coaxial, and the member being offset from the common axis.

1,814,876. HEADREST. HENRY E. WEBER, Canton, Ohio, assignor to The Weber Dental Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Nov. 26, 1928. Serial No. 321,877. 5 Claims. (Cl. 155—177.)



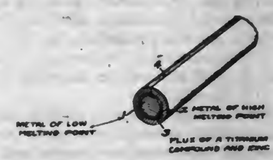
1. A head rest including supporting arms, a rest pad mounting member rotatably mounted on a horizontal axis on the arms rotatable through an arc of 360°, and spaced rest pads stationarily mounted on the member, the axis of rotation of the member passing through the centers of the rest surfaces of the pads.

1,814,877. DENTAL CHAIR. HENRY E. WEBER, Canton, Ohio, assignor to The Weber Dental Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Dec. 31, 1928. Serial No. 329,474. 3 Claims. (Cl. 155—25.)



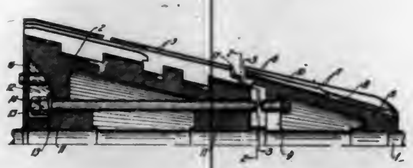
1. A dental chair including a seat, a back rest support pivotally mounted on the seat, a foot rest pivotally mounted on the seat, means operatively connecting the back rest support and the foot rest for simultaneously pivotally moving the one when the other is pivotally moved, a mounting bracket secured upon the support and including a member extending therefrom and spaced from the operating means for clearing the same during movement thereof, a back rest pivotally mounted on the member, and means connected between the foot rest and seat for yieldingly resisting pivotal movement of the back rest.

1,814,878. ARC WELDING ELECTRODE. JAMES M. WEED, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 13, 1925. Serial No. 2,208. 7 Claims. (Cl. 219—8.)



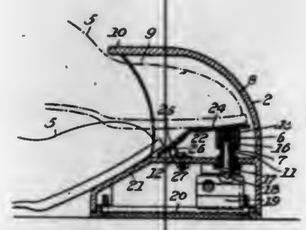
1. An electrode for arc welding comprising a metal to be deposited and a flux containing approximately one part of a titanate to two parts of a metal of the class constituted by the metals zinc and tin.

1,814,879. JORDAN ENGINE PLUG. HARRY N. WEIR, Hoosick Falls, N. Y., assignor to The Noble & Wood Machine Co., Hoosick Falls, N. Y., a Corporation of New York. Filed Aug. 26, 1929. Serial No. 388,426. 11 Claims. (Cl. 92—27.)



1. The combination with a jordan plug, of a metal sleeve, having integral knives, fitting over and forming the smaller end of the plug.

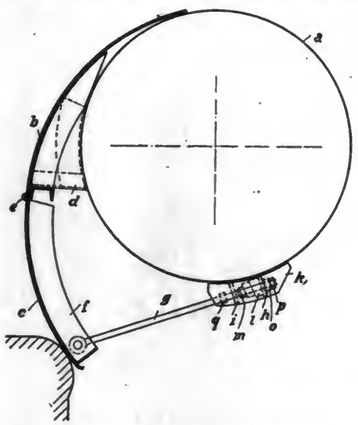
1,814,880. FOOT CONTROLLED DEVICE. JOHN YOUNG, Ben Avon, Pa., assignor to Federal Laboratories Incorporated, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 22, 1928. Serial No. 313,989. 8 Claims. (Cl. 200—52.)



1. A foot controlled device comprising a hood having a foot-receiving opening therein, a circuit controlling device within the hood, a toe-rest extending from said opening for supporting an operator's toe while the heel is on the floor, and means for actuating the circuit controlling device comprising a guard having a portion in alinement with the foot supporting surface of said toe-rest and forming a continuation thereof and another portion accessible to the operator's toe when said toe is moved into a substantially horizontal position within said hood for actuating the circuit controlling device.

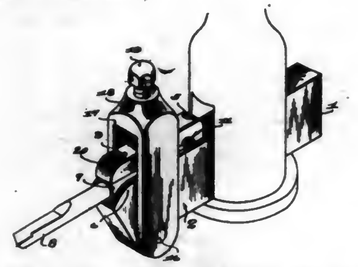
1,814,881. BOTTOM PACKING FOR WEIR-LOCKS. KARL ZIMMERMANN, Darmstadt, Germany, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Nuremberg, Germany, a Corporation of Germany. Filed Oct. 4, 1929, Serial No. 397,415, and in Germany Oct. 5, 1928. 4 Claims. (Cl. 61—22.)

1. In combination with a weir, a bottom packing therefor comprising a dam element carried by the weir for swinging movement with respect thereto and adapted to seal against the floor of the water channel controlled by the weir, an abutment on the weir, a strut connected at one end with the dam element and slidable at its other and through said abutment, an abutment on said strut, and a spring between said abutments reacting from the abutment on the weir against the abutment



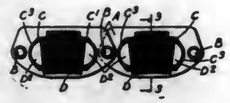
on the strut to urge the latter in a direction to maintain the dam element sealed against the floor of the water channel.

1,814,882. TOOL HOLDER. JOSEPH J. ZINSLEN, Canton, Ohio. Filed Nov. 6, 1929. Serial No. 405,235. 8 Claims. (Cl. 29—98.)



1. A tool holder comprising a support bar having a recess with an arcuate bottom and side walls, a holder member to fit in the recess being slotted to receive a tool shank and comprising jaw components respectively level on top and arranged underneath to conform to the recess, a yoke hinged to the bar, straddling the side walls and holder member and adjustable to maintain a position perpendicular with said level top at any arcuate adjustment of the holder member, and a compression screw carried by said yoke to bear upon said level top and apply pressure in a direction perpendicular to the major axis of a tool held by the holder.

1,814,883. POWER TRANSMISSION MECHANISM. GEOFFREY JOSEPH ABBOTT, London, England, assignor to P. I. V. Chain Gears Limited, London, England, a Company of Great Britain. Filed Sept. 9, 1930, Serial No. 480,891, and in Great Britain Sept. 21, 1929. 7 Claims. (Cl. 74—64.)

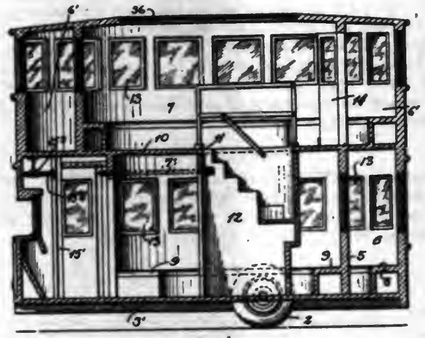


1. For use with a variable speed gear having driving and driven members one of which comprises an expanding

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pulley having projections and depressions formed on the opposite driving flanges thereof, a transmission member including in combination a slotted support, a group of plates disposed in each slot so as to be capable of independent sliding movement transversely of the slot and to project laterally from either side thereof to form driving teeth of variable pitch each consisting of at least two mutually supporting plates, a part-cylindrical bearing surface at each end of the slot and a plate at each end of the group of plates having a corresponding part-cylindrical bearing surface engaging the part-cylindrical bearing surface at the adjacent end of the slot, the part-cylindrical bearing surface at each end of each slot subtending an angle of less than 180° and being bounded by tangential portions connecting it to the longitudinal walls of the slot.

1,814,884. OBSERVATION BUS. LORENZO AMODEO, New York, N. Y. Filed Dec. 31, 1929. Serial No. 417,696. 5 Claims. (Cl. 296—24.)



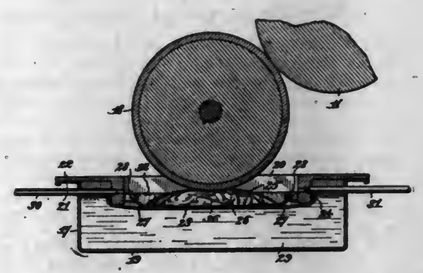
1. A vehicle of the type described comprising a closed body having outer and inner walls, and double floors forming lower and upper decks with outer passages, having seating capacity, and with central compartments enclosed by the inner walls, and communicating with each other by a central stairway between the upper and lower floors.

1,814,885. MULTIPLE TOE HOSE. HARRY AUST, Philadelphia, Pa. Filed Oct. 19, 1928. Serial No. 313,554. 1 Claim. (Cl. 66—182.)



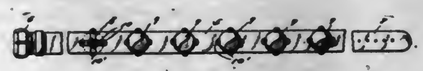
In a process for knitting multiple toe hose on a circular machine, the steps consisting in knitting the hose to a line adjacent the toe portion thereof, running a preknitted toe section having the usual loopers rounds on to the needles which are knitting the foot section, and then knitting an outer toe section over the inner toe section but separate therefrom, the initial starting knitting steps of the outer toe section being simultaneous with the attaching of the inner toe section, knitting the outer toe section so that the loopers rounds thereof register with the loopers rounds of the inner toe section, leaving portions of both toe sections free and unattached, and then finally closing the free and unattached portions by means of a looper.

1,814,886. PRINTING MACHINE. EUGENE CHARLES BAECK, Lake Ronkonkoma, N. Y. Filed Apr. 9, 1930. Serial No. 442,934. 9 Claims. (Cl. 101—350.)



1. In an ink distributor for printing machines, the combination of an ink tray having a bottom made of flexible material, an absorbent pad resting on said bottom and immersed in the ink in the tray, and an ink distributor in rolling contact with said pad.

1,814,887. UMPIRE'S BELT. FREDERICK W. BENDER, Louisville, Ky. Filed Oct. 12, 1928. Serial No. 312,104. 1 Claim. (Cl. 224—26.)



In combination, a flexible belt, a plurality of crossed substantially U-shaped resilient ball-holding members disposed laterally with respect thereto, and extending therefrom a distance equal to the diameter of the ball to be held, one of said members being arranged substantially vertical and at a right angle to the belt whereby a portion thereof will be disposed directly under the center of an engaged ball, and a fastening means having a square shank disposed in square openings of said members and securing the intermediate portions of said members to the belt and against rotation relatively thereto, whereby the construction will resiliently support an engaged ball in substantially all directions and enable removal thereof only in a direction away from the belt.

1,814,888. PROCESS FOR THE RECOVERY OF ESSENTIAL OILS FROM LEMONS AND OTHER FRUITS OF TREES OF THE GENUS CITRUS. ALEXANDER HUTCHISON BENNETT, London, England. Filed Aug. 9, 1930, Serial No. 474,312, and in Italy June 2, 1930. 7 Claims. (Cl. 87—0.)

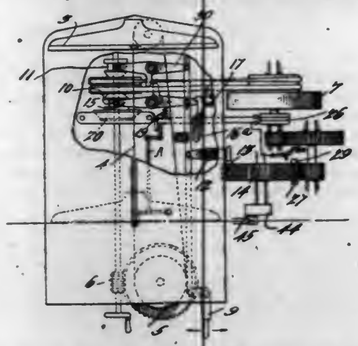
1. A process for the recovery of essential oils from the fruits of trees of the genus citrus consisting in subjecting the fruits to a rasping or grating action to liberate the oils therefrom, spraying an alkaline solution over said fruits to carry away the liberated oils, collecting the alkaline solution containing the oils and separating the oils from said solution.

1,814,889. DISAPPEARING WALL STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed July 9, 1928. Serial No. 291,147. 18 Claims. (Cl. 228—50.)



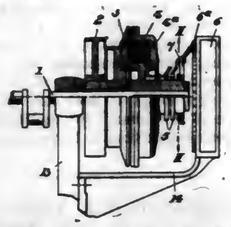
18. The combination of a disappearing stairway with a frame defining a ceiling opening comprising a stair structure movable between a vertical position projecting through one end of the frame and an inclined position with its upper end supported at said end of the frame, and means for pivotally and slidably supporting the upper end of the stairway at said end of the frame, said means comprising interengaging elements on the stair structure and said end of the frame adapted to be disengaged by lifting the stair structure, whereby the stair structure is readily removable.

1,814,890. CUTTING MACHINE FOR PAPER, CARDBOARD, AND SIMILAR MATERIAL WITH AUTOMATIC FEED. KARL BLAGOSCH, Leipzig, Germany. Filed July 11, 1930, Serial No. 467,236, and in Germany Oct. 9, 1928. 8 Claims. (Cl. 164—48.)



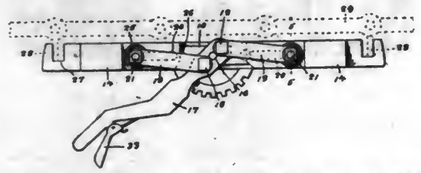
1. A cutting machine for paper, cardboard and the like, comprising a pusher therefor, means for actuating the pusher including in combination driven clutch members, a clutch lever for operating the clutch elements, a locking element for such clutch lever adapted to lock said lever in the engaging positions while material is to be fed to the cutting instrumentality of a cutting machine, means for automatically disengaging said locking element at any desired point comprising in combination with the locking element an electromagnet, a light sensitive element such as a photo-cell, and marks movable with a sheet to be cut and adapted to pass under the said light sensitive element, whereby the locking element releases the clutch lever.

1,814,891. POWER TRANSMISSION DEVICE FOR PRESSES AND THE LIKE. JULIUS BING, Eisenach, Germany, assignor to the Firm Magnet-Werk G. m. b. H. Eisenach Spezialfabrik fur Elektromagnet-Apparate, Eisenach, Thuringia, Germany. Filed Oct. 29, 1928, Serial No. 315,888, and in Germany Mar. 7, 1927. 5 Claims. (Cl. 192—84.)



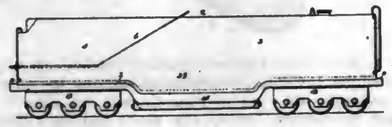
1. A power transmission device for machines with a rotary working shaft, comprising: an electromagnetic friction clutch having an exciting circuit, a resistance coil in the said circuit, the said resistance coil consisting of a plurality of sections, a series of contacts being electrically connected with said sections, and contacting means in the said circuit, said contacting means being adapted to be moved in dependence of said shaft and to slip on said series of contacts.

1,814,892. EXPANDING AND CONTRACTING TOOL. JOSEPH BOYER, L'Anse, Mich., assignor of one-fourth to Leo J. Brennan, L'Anse, Mich. Filed June 21, 1929. Serial No. 372,689. 1 Claim. (Cl. 254—78.)



In a tool of the character described, a base bar having its opposed edges formed with longitudinally disposed grooves, with the parallel walls of each groove of relatively different heights, a pair of identically constructed adjustable bars mounted upon the base bar, upper and lower angle shaped tongues projecting from each adjustable bar and received by the grooves of the base bar, said adjustable bars being arranged in end to end relation and spaced apart, jaws carried by the outer ends of the adjustable bars, the corresponding inner ends of said adjustable bars being longitudinally slotted, an operating lever pivotally mounted upon the base bar at a point between its ends, connecting links having their inner ends pivotally connected with the lever upon opposite sides of the pivot for the latter, pivot bolts extending through the outer ends of the connecting links and adjustably secured in the slots of said adjustable bars, and means for holding said lever and adjustable bars fixed with relation to the base bar in a given position.

1,814,893. TENDER FRAME. CONRAD C. C. BURKHARDT, Philadelphia, Pa. Filed Nov. 29, 1930. Serial No. 499,100. 11 Claims. (Cl. 105—231.)



1. An integral frame for a locomotive tender, having a depressed section at the center thereof; longitudinal side

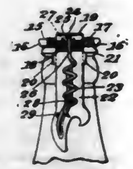
sill; and two central sills extending the full length of the tender, the central sills extending the full depth of the depressed section of the frame and forming truss members for the frame.

1,814,894. OIL WELL TESTER. HUGH F. CAMERON, Hondo, Tex., assignor of three-fourths to Eddie C. Cameron and George Muennink, sr., Hondo, Tex., and Joe C. Johnson, Three Rivers, Tex. Filed May 24, 1930. Serial No. 455,409. 10 Claims. (Cl. 166—1.)



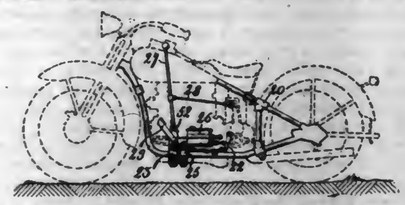
1. An oil well testing device, comprising a "rat hole" closing body adapted to be lowered into a well on the end of a drill stem, a rotary element connected to said body and adapted to be attached to the drill stem, a tubular body carried upon the lower end of said first mentioned body for extension into the "rat hole", and longitudinally shiftable means within said tubular body having connection with said rotatable body whereby it may be shifted when the rotatable body is turned for the admission of fluid from the "rat hole" into the tubular body.

1,814,895. COMPOUND APPLIANCE. ALBERT W. CHARBONNEAU, Boston, Mass., assignor to The Roberts Specialty Manufacturing Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Nov. 17, 1928. Serial No. 320,080. 2 Claims. (Cl. 215—46.)



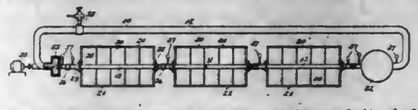
1. A compound appliance of the character described comprising a bottle cap having spring fingers provided with means for engaging the bottle neck, one of said fingers having an extension beyond its neck engaging means, and a corkscrew hinged to said cap, said extension having a socket disposed opposite the point of said corkscrew but at one side thereof when the latter is in normal position and opening away therefrom, said corkscrew being adapted to be sprung laterally to engage said point with said socket.

1,814,896. CLUTCH CHECK AND RELEASE APPARATUS. ADJUTOR CHARTIER, Sherbrooke, Quebec, Canada, assignor of twenty-five per cent to Arthur Lagueux and twenty-five per cent to Joseph Emile Pelletier, Quebec, Canada. Filed June 13, 1929. Serial No. 370,705. 3 Claims. (Cl. 192—114.)



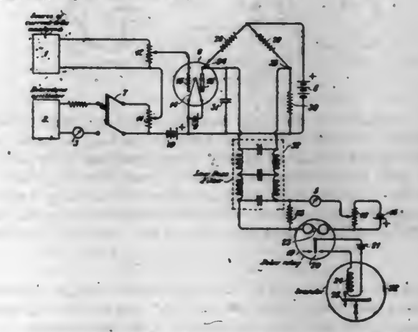
1. In apparatus of the character described, the combination with a clutch crank and foot controlled mechanism for swinging said crank from its normal motor engaging position to a disengaging position, of a casing, a piston mounted for reciprocating movement in the casing and attached to the clutch crank, a second casing above the first communicating therewith and holding a supply of fluid, check valve means for automatically inserting fluid from the second casing pressure against the piston to retain the clutch in disengaged position, and means for releasing the check valve means to permit return of the fluid to the casing and thereby enable the clutch and clutch crank to assume their normal engaged positions.

1,814,897. APPARATUS FOR UTILIZING SOLAR HEAT. EDMUND J. D. COXE, Philadelphia, Pa. Filed Jan. 22, 1926. Serial No. 83,098. 7 Claims. (Cl. 126—270.)



1. In a solar generator, an endless fluid conduit of elongated loop form, one of the longer sides of said conduit loop being of a reduced cross sectional area, a plurality of heat insulating jackets enclosing intermediate portions of the side of the conduit of the lesser cross sectional area and having openings in the same through which the enclosed portions of the conduit are exposed, transparent closures for the said openings, and a reflecting means supported exteriorly of each of said packets for concentrating the solar rays on said transparent closures and through them onto the exposed portion of said conduit.

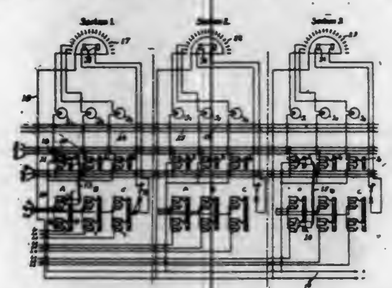
1,814,898. MEASURING SYSTEM. RALPH W. DEARDORFF, Kensington, Calif., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 13, 1925. Serial No. 15,846. 7 Claims. (Cl. 175—183.)



1. In combination, a detector tube, a source emitting a current of unknown frequency, a heterodyne oscillator

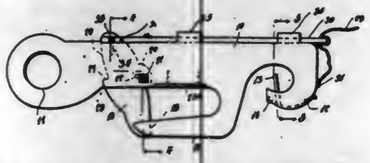
emitting a current of known frequency, potentiometers to equalize the voltage values of said currents, said currents being impressed on the input circuit of said detector tube, a resistance serially arranged in the output circuit of said detector tube, a potentiometer connected across the terminals of a battery which may be adjusted to have a potential drop across its terminals to equal the potential drop across the terminals of said resistance in said output circuit, a meter, a polar relay, said meter and the winding of said polar relay being serially arranged in a circuit with said resistance and said potentiometer, the pointer of said meter indicating when said currents in said input circuit are equal in voltage, and also indicating by its movement the differences between the frequencies of said currents in said input circuit, and a sounder, actuated by the armature of said polar relay, audibly indicating the difference between the frequencies of said currents.

1,814,899. BUSY TRUNK LINE SIGNAL SYSTEM. EUGENE A. DEMONET, Brooklyn, N. Y., and PRESTON S. COPENHAVER, Bayonne, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 19, 1930. Serial No. 469,130. 13 Claims. (Cl. 178—75.)



1. A busy trunk line indicating system for a pin jack switchboard comprising a plurality of trunk lines, a jack for each trunk line, a plurality of signal devices for each trunk line, means acting upon insertion of a cord plug in any of said trunk line jacks for preparing a circuit to the signal devices associated with that particular trunk line and means universal to all of said circuits for completing the circuits to those signal devices which are associated with busy trunk lines.

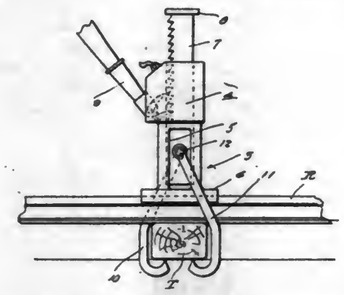
1,814,900. LOCK HOOK. C G HENRY DEPPE, Portland, Oreg. Filed Jan. 14, 1931. Serial No. 508,772. 6 Claims. (Cl. 24—241.)



1. A device of the class described having a body, a hook formed integral with said body, a locking member for coacting with the end of said hook, coacting shoulders on the body and locking member to prevent disengagement of articles from the hook, spring means maintaining the locking member in position with said shoulders engaged, and a slip connection between the locking member and body.

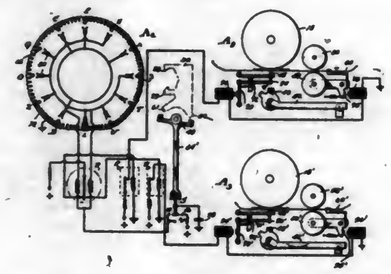
1,814,901. RAIL AND TIE HOLDING JACK. OLIVER JOHN DICKSON, East Peoria, Ill. Filed Oct. 10, 1929. Serial No. 398,705. 2 Claims. (Cl. 254—121.)

1. In a railway appliance of the class described, a lifting jack comprising a hollow standard having a grooved base adapted to register on the head of the rail, and a back portion rising from the said base in a perpendicular line, a toothed lifting bar slidable in said standard, operating



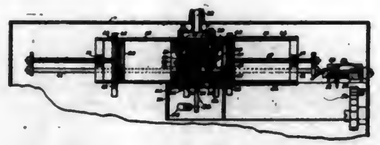
means for said bar mounted on said standard, and tie engaging hooks pivotally connected to the lifting bar, the pivotal ends thereof being movable in the side openings of said standards.

1,814,902. TELEGRAPH SYSTEM FOR DIVIDING RECEIVED INTELLIGENCE INTO GROUPS. ROBERT F. DIRKES, Jamaica, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 424,966. 16 Claims. (Cl. 178—4.)



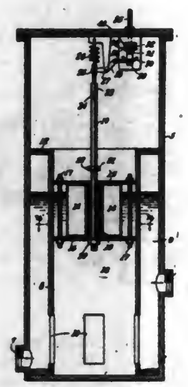
1. The method of classifying received intelligence in a telegraph system which consists in automatically directing the intelligence into one or another predetermined channel determined by the initial character in each group of intelligence characters.

1,814,903. VACUUM MOTOR. EMMANUEL DOBROWSKY, New York, N. Y., assignor to Motor Car Advertising Device Co., Inc., New York, N. Y., a Corporation of New York. Original application filed May 9, 1927, Serial No. 189,956. Divided and this application filed Aug. 29, 1928. Serial No. 302,821. 2 Claims. (Cl. 121—164.)



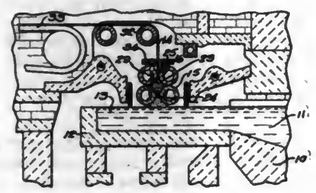
1. A suction motor, comprising a pair of alined cylinders, a central head between the cylinders, pistons in the cylinders, a pair of spring-pressed valves located in the head and having ports in their respective ends, an outlet manifold connected to the head and communicating with the ports in one end of each valve, springs exerting pressure on the valves to move them in one direction, said valves having beveled ends projecting beyond the head, a sliding plate engaging the beveled ends of the valves and causing them to shift from one position to another, a pivoted arm, a spring engaging one end of the arm and adapted to throw the same from side to side after the arm has passed its dead center, enlargements on the plate engaged by the arm to shift the position of the plate, and means operated by the suction motor to move the arm.

1,814,904. AUTOMATIC VALVE. HARRY E. DOBSON, New York, N. Y. Filed June 20, 1930. Serial No. 462,612. 5 Claims. (Cl. 137—69.)



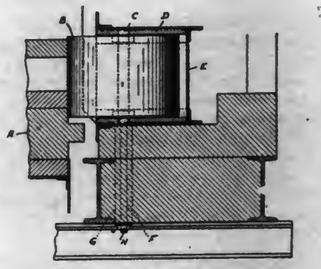
3. An automatic air release for liquid flow lines, comprising in combination, a pressure storing liquid holding chamber having an air vent and said air vent being provided with a valve seat and a valve track extending to one side of said seat, a valve disc having free self-aligning sliding movement over said valve track and valve seat, a lever having a loose connection with said valve disc for sliding the latter over and away from the valve seat while permitting self-aligning movements of said valve disc in its travel over and away from the valve seat independent of the lever alignment, a spring between the lever and valve disc, the spring being sufficiently weak to maintain only a slight friction surface contact between the valve disc, valve track and seat and a float operating in the liquid chamber and connected to actuate said lever.

1,814,905. PROCESS AND APPARATUS FOR FORMING SHEET OR PLATE GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 5, 1926. Serial No. 99,714. 13 Claims. (Cl. 49—33.)



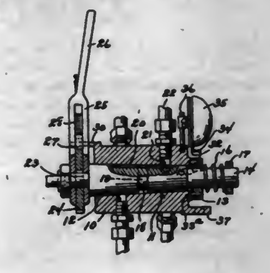
6. In sheet glass apparatus, a receptacle containing a mass of molten glass, a plurality of pairs of superimposed rotatable members arranged above said mass of molten glass, the rotatable members of the upper pair cooperating with the rotatable members of the lower pair to form a substantially closed pocket between their coacting peripheries, and means for rotating said rotatable members in a manner to feed a supply of molten glass upwardly into said pocket wherein it is maintained under pressure and then reduced to sheet form.

1,814,906. TUNNEL KILN. ARTHUR MCDOUGALL DUCKHAM, London, England. Filed May 13, 1930, Serial No. 452,115, and in Great Britain July 8, 1929. 4 Claims. (Cl. 25—142.)



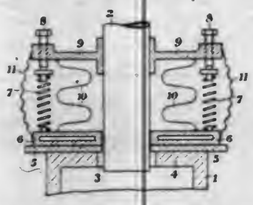
1. In tunnel kilns a device for ensuring that the normal width of the traveling platform or its equivalent will not be exceeded so as to prevent its smooth re-entry into the tunnel, consisting of surfaces disposed at opposite sides of the platform and spaced to smooth out or replace by pressure any parts of the platform projecting laterally beyond the normal width thereof.

1,814,907. MULTIPLE CONTROL VALVE. EDD DUGAN, Wichita Falls, Tex. Filed May 1, 1929. Serial No. 359,532. 1 Claim. (Cl. 251—107.)



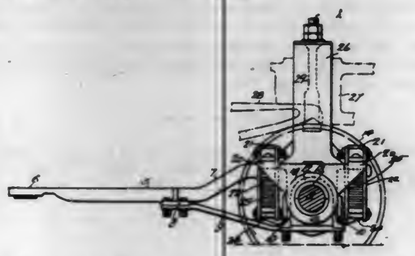
A multiple control valve, comprising a housing having a valve chamber provided with a plurality of spaced outlet ports arranged in two circumferential series about the chamber and an inlet port located between the two series of outlet ports, a plug mounted for rotation in said chamber and having an annular groove in communication with the inlet port and grooves extending longitudinally of the plug and in communication with the annular groove and adapted to be brought into communication with respective series of the outlet ports to provide communication between said inlet and outlet ports, a spring influenced ratchet mechanism to rotate the plug and provide communication between the inlet and outlet ports, said ratchet mechanism having a tooth for each outlet port, means to limit rotary movement of the plug at each operation of the ratchet mechanism to position each longitudinal groove in register with the respective outlet port, and yieldable means to hold the plug in such position.

1,814,908. PACKING. EMIL EDWIN, Trondhjem, Norway, assignor to Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Filed Sept. 9, 1927, Serial No. 218,543, and in Germany May 20, 1927. 3 Claims. (Cl. 286—11.)



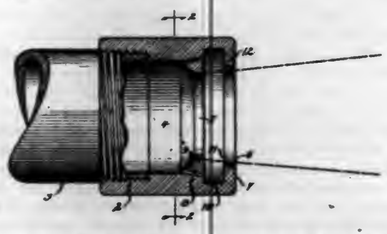
1. In a device of the class described, a revoluble drum for containing highly heated matter, said drum having an opening therein, a stationary member associated with the opening of said drum, and packing means between said drum and stationary member surrounding said opening, said packing means comprising plates on said drum and stationary member having packing surfaces extending transversely to the axis of the drum, packing material between said packing surfaces, said packing material being solid at ordinary temperatures and having the property of melting upon moderate heating, and means for cooling one of said plates.

1,814,909. LOCOMOTIVE TRUCK. EDWARD O. ELLIOTT, Jenkintown, Pa. Filed Feb. 11, 1930. Serial No. 427,528. 3 Claims. (Cl. 105—174.)



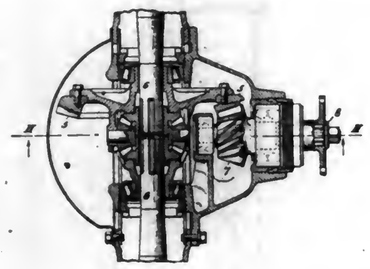
1. The combination in a two-wheel truck having inside bearings, of a housing U-shaped in cross-section extending transversely of the truck and through which the axle extends, said housing having bearings at each end for the reception of bushings in which the axle is mounted; and an integral radius bar extending from the upper portion of each bearing and terminating in a pivot bearing, said bearings having depending portions and inwardly extending lugs to which a brace of the radius bar can be secured.

1,814,910. BLAST BURNER. WILLIAM B. ENSIGN and LLOYD H. V. REYNOLDS, New York, N. Y., assignors to Ensign-Reynolds, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 22, 1928. Serial No. 307,636. 4 Claims. (Cl. 158—116.)



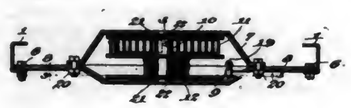
2. A blast burner forming a hollow body having at one end two flanges spaced apart with a chamber therebetween, the inner flange having an opening smaller than the outer flange, the inner flange being also formed with a plurality of gas passageways surrounding said inner passageway and positioned to direct gas through said chamber and against said outer flange, said gas being adapted to be deflected laterally through the opening formed centrally of the outer flange, whereby when the gas from said passageways is ignited a plurality of lighting flames will be provided for gas passing directly through the central opening of said inner flange.

1,814,911. GEARING. ERNEST L. FICKETT, Fitchburg, Mass., assignor, by mesne assignments, to Scurlock Gear Corporation, New York, N. Y., a Corporation of New York. Filed June 11, 1928. Serial No. 284,487. 3 Claims. (Cl. 74—41.)



1. The combination with shafts lying at an angle to each other and in different planes of intermeshing spiral bevel gears carried thereby, said gears having teeth of such a length that the tops of the teeth of one gear bear with a sliding and rolling contact against the other gear in the spaces between the teeth thereof to provide thrust-resisting engagement, substantially as described.

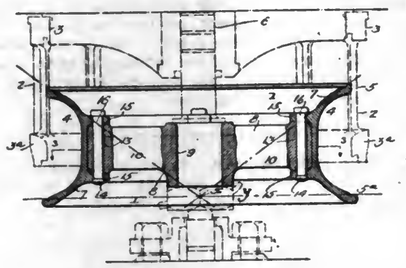
1,814,912. VEHICLE TOWING DEVICE. WARREN J. GEIB, Madison, Wis. Filed July 30, 1929. Serial No. 382,198. 1 Claim. (Cl. 242—107.)



In a device of the character described, a reel comprising a casing formed of two sections, one section having oppositely projecting attaching arms and a curved slot concentric to the axis of the section and having a roller at each end, the other section having flanges opposite the said arms and secured thereto, a shaft mounted in the casing, members on the shaft and forming therewith two drums, a coiled spring in one drum, and a cable wound on the shaft in the other drum and passed through the said slot and having a hook at its end, said cable being adapted to be passed over either roller of the slot so as to extend either in a forwardly or rearwardly direction.

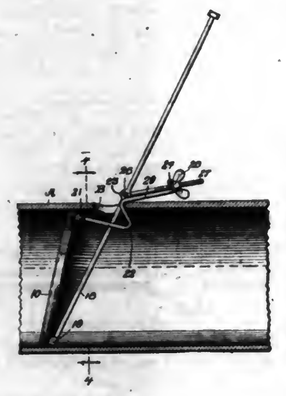
1,814,913. POPPET VALVE. HARRY GLAENZER, Philadelphia, Pa. Filed Apr. 30, 1930. Serial No. 448,751. 3 Claims. (Cl. 251—83.)

3. The combination in valve mechanism, of a valve chest having upper and lower seats; a valve spindle; a spider having a hub mounted on the spindle, said hub having arms; a valve ring proper having an annular recess therein and upper and lower seats, the upper seat being conical



and the lower seat being flat and adapted to the seats of the valve chest; and means for securing the valve ring proper to the arms of the spider.

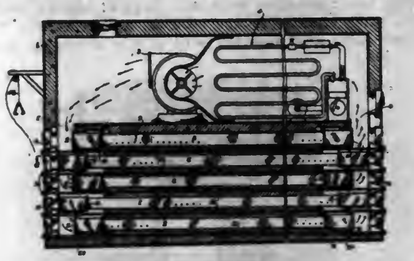
1,814,914. CONDUIT STOPPER. PATRICK GOODMAN, Brooklyn, N. Y.; MARY GOODMAN and ELIZABETH A. GOODMAN administratrices of said Patrick Goodman, deceased. Filed Dec. 1, 1928. Serial No. 323,117. 5 Claims. (Cl. 137—76.)



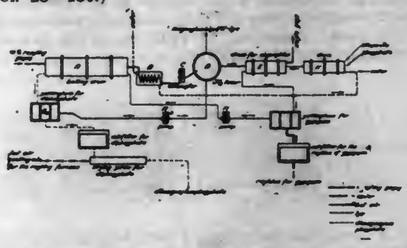
1. A conduit damming device including a normally contracted expansible stopper member adapted for insertion through a tap hole in the conduit, a pair of rods respectively connected to opposite ends of said member for effecting, upon relative movement thereof, the expansion of the member after its insertion through the tap hole and an offset portion of the rod which is connected with the end of the stopper member which lies nearest the taphole presenting a shoulder for gauging the proper spacing of that end of the member which is disposed nearest the taphole.

1,814,915. REFRIGERATION SYSTEM. RALPH V. GRAYSON, Macon, and CLAUD M. FOSTER, Atlanta, Ga., assignors of forty one-hundredths to Polar Products, Inc., a Corporation of Georgia. Filed Apr. 9, 1930. Serial No. 442,884. 10 Claims. (Cl. 62—102.)

1. Refrigeration system comprising a continuous conduit for the closed circulation of refrigerative air, including a refrigerating unit for chilling the air, a plurality of horizontal tunnels arranged in parallel in said system with their ends communicating with vertical limbs of said system, and a blower for forcing refrigerated air through said tunnels.

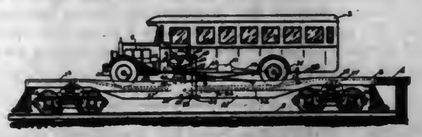


1,814,916. MANUFACTURE OF BISULPHITE LIQUOR AND DIMAGNESIUM PHOSPHATE. HEINRICH HACKL, Heuford, Germany. Filed Mar. 21, 1929, Serial No. 348,999, and in Germany Mar. 27, 1928. 10 Claims. (Cl. 23—130.)



1. The method of producing lime free bisulphite liquors comprising the steps of adding magnesium sulphate to a solution of crude phosphate in sulphurous acid, separating the resulting liquid and solid matters, precipitating dimagnesium phosphate from the said liquid by boiling the same and separating such dimagnesium phosphate from the final bisulphite liquor.

1,814,917. BUS TRANSPORTATION SYSTEM. WILLIAM J. HAGMAN, Philadelphia, Pa. Filed May 31, 1928. Serial No. 281,897. 8 Claims. (Cl. 105—159.)

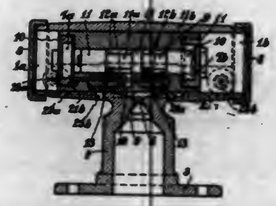


1. The combination with a railway car provided with an air-brake system having a compressor and a driving motor therefor, of a road vehicle adapted to be removably mounted on said railway car and provided with an electrical power plant, and means whereby energy may be supplied to the driving motor for said compressor from the electrical power plant of said road vehicle.

1,814,918. PULSATOR. ADOLF STRANGE HANSEN, Malmo, Sweden. Filed Sept. 1, 1928, Serial No. 303,502, and in Sweden Sept. 7, 1927. 3 Claims. (Cl. 31—70.)

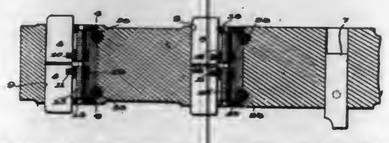
1. A pulsator for milking machines, comprising a cylinder having an elongated suction port, and also having a pair of nipples adapted to be connected to the teat cup lines; a hollow outer piston valve slidable within the cylinder and formed with two pairs of spaced lateral ports, and with a central port located between one of said pairs

of lateral ports and constantly communicating with said suction port, the other pair of lateral ports being in constant communication with said nipples; and an inner piston valve slidable in the bore of, and relatively to, the outer valve and provided with a pair of spaced, annular



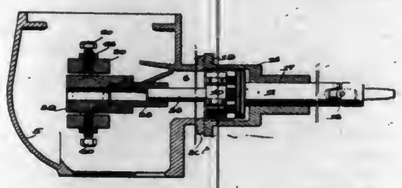
circumferential grooves which constantly communicate with the second-named pair of lateral ports in said outer valve; both valves being mounted concentrically in said cylinder to be actuated pneumatically in opposition to each other, the inner valve distributing the air at different pressures alternately to the nipples.

1,814,919. BORING BAR. FLOYD S. HARTWELL, Cleveland, Ohio, ass'gnor to Kelly Reamer Company, Cleveland, Ohio. Filed Aug. 23, 1926. Serial No. 131,031. 3 Claims. (Cl. 77—56.)



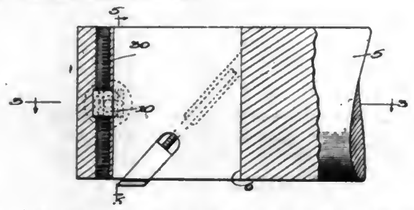
1. A boring bar comprising a body having an opening of substantially the same width throughout, a cutter in said opening, a carrier within said opening and having a channel, the intermediate portion of which has a bridge, an adjusting screw having shoulders engaged with said bridge, nuts on said screw, and cutters having connection with said nuts, the carrier having a longitudinal groove the side walls of which are undercut, the nuts having enlarged body portions received in said groove whereby the undercut groove walls hold the nuts in place, lugs extending from the nuts to engage the cutter, said carrier being wholly at one side of the cutters, the latter having recesses to receive said lugs, the recesses being deeper than the projective length of the lugs, and means for wedging said carrier against one edge of said cutters whereby to force the same against the opposite wall of said opening, said carrier having the side edges thereof bearing directly against said cutters.

1,814,920. PORTABLE BORING MACHINE. FLOYD S. HARTWELL, Cleveland, Ohio. Filed Sept. 14, 1926. Serial No. 135,407. 3 Claims. (Cl. 77—2.)



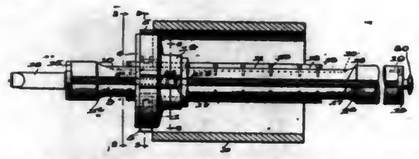
1. A cylinder boring device adapted for the machining of a crank case having a plurality of cylinders and opposed crank shaft bearings whose axes are alined in a plane at right angles to the axes of the cylinders, said device comprising a rotary cutter having a forwardly extending pilot, a locating block having trunnions adapted to be secured in said bearings, carriers slidably mounted in said block and substantially alined with the respective cylinders, said carriers being independently adjustable in a plane at right angles to the axes of their respective cylinders, said carriers having guide means to receive said pilot, and centering means positionable in one of said cylinders to engage in the guide of the carrier associated therewith whereby to hold the locating block in a set position at right angles to the axes of the cylinders while another cylinder is being bored.

1,814,921. BORING BAR. FLOYD S. HARTWELL, Cleveland, Ohio. Filed Sept. 30, 1926. Serial No. 138,741. 5 Claims. (Cl. 77—56.)



1. A boring bar comprising a body having removable cutting unit, receiving and sustaining means therefor, said body being provided with an opening extending substantially transversely of the cutting unit and communicating laterally therewith, a locking and locating block in said opening, a locking screw, the block and screw having means for effecting a rotatable connection between the same and permitting movement of the block lengthwise of the cutting unit, a bushing threaded into said body and through which said screw is threaded, and locating means to engage said block to move the same laterally.

1,814,922. TAPER BORING TOOL. FLOYD S. HARTWELL, Cleveland, Ohio. Filed Dec. 17, 1926. Serial No. 155,505. 7 Claims. (Cl. 77—57.)

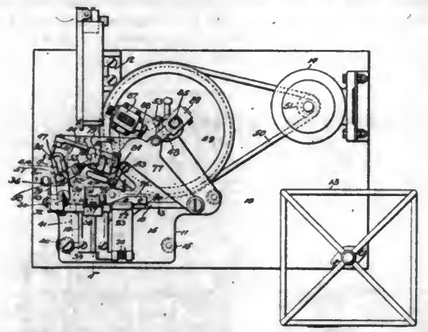


1. In a boring tool of the class described comprising a bar having means for attachment to a rotating drive means, a head slidable on said bar and means for slidably mounting said head upon said bar; said head having a recess opening from said bar and a slot communicating from said recess through the side of the head, a bit carried in said slot and having a shouldered base portion, said bar having a longitudinal guide groove for receiving the base portion of said bit, strips carried by said bar and overhanging said groove to confine the base portion therein, said strips terminating short of one end of said groove, and the ends of said groove having outwardly inclined portions leading to the surface of the bar, whereby the shouldered base portion of said bit will be actuated into said recess when the head is slid past the end of said groove.

1,814,923. TAG PRINTING MACHINE. GEORGE W. HENRY, Jr., Philadelphia, Pa., assignor to Soabar Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 6, 1929. Serial No. 368,783. 19 Claims. (Cl. 101—291.)

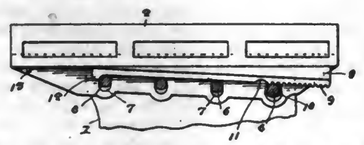
1. In tag-printing mechanism, a platen, supports over which the tag strips fed to the platen in different direc-

tions pass, a reciprocating pawl mechanism adapted to operate over each support and engaging the strip passing



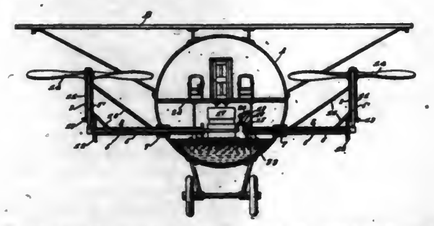
thereover to advance the same, and a common operating means for said pawl mechanisms adjustable to simultaneously vary the positions of the strokes thereof.

1,814,924. CROSSHEAD. WALTER E. HENRY, Baltimore, Md. Filed Feb. 16, 1927. Serial No. 168,715. 13 Claims. (Cl. 308—3.)



1. In a cross head of the class described, wedges for adjusting the shoes on the head, each wedge having a rack part, bolts for connecting the shoe with the head, at least one of the bolts having teeth engaging the rack teeth for adjusting the wedges when the bolts are turned.

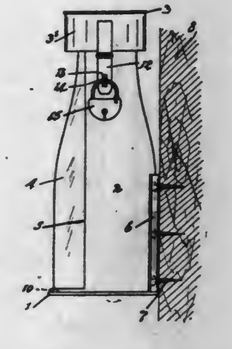
1,814,925. AIRSHIP. JOSEPH J. HICKS, Los Angeles, Calif. Filed Sept. 23, 1929. Serial No. 394,525. 2 Claims. (Cl. 244—25.)



2. An aircraft comprising a body, a transversely arranged shaft passing through the body and extending beyond the sides thereof, a rightangular extension on each end of said shaft, tubular shafts on said shaft and its extensions, gears connecting the tubular shaft on each extension with the tubular shaft on the transverse shaft, a propeller connected with the outer end of the tubular shaft on each extension, means for imparting movement to the tubular shafts on the transverse shaft, and supporting means for the tubular shafts rotatably connected with the body, whereby the propellers can be placed in horizontal or vertical positions.

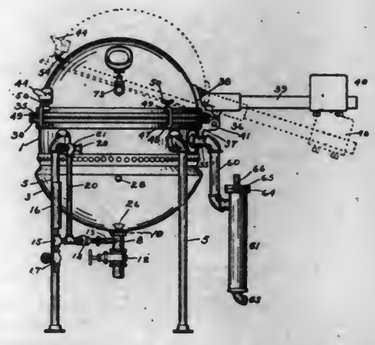
1,814,926. MILK BOTTLE HOLDER. CHARLES HONEY, Winnipeg, Manitoba, Canada. Filed May 26, 1928. Serial No. 280,732. 2 Claims. (Cl. 232—41.)

1. A milk bottle holder comprising a casing having a closed bottom and an open top and provided at the front side with an entrance opening to permit of the insertion of a milk bottle into the casing, the said casing having the width of the entrance opening somewhat less than the diameter of the bottle at its various points, a cover



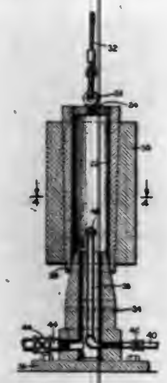
hinged to the top of the casing, means normally locking the cover closed and a spring pressed plate contained within the casing and adapted to engage the top of the inserted bottle and press the same firmly seated on the base of the casing.

1,814,927. VACUUM KETTLE. ALVIN HOCK, Cincinnati, Ohio. Filed Aug. 19, 1929. Serial No. 386,987. 1 Claim. (Cl. 159—23.)



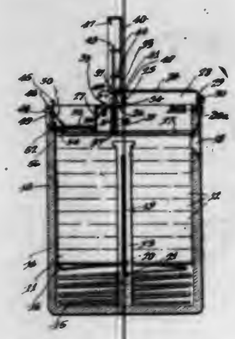
In a vacuum-kettle, the combination of a cooking kettle or pan, a pivotally-mounted or hinged lid or dome on the upper edge or rim of the said kettle and having air-tight joint therewith, cast-off means on said joint, a counterbalancing weighted-arm extending from said hinged dome, a suitably valved heating chamber or jacket in the bottom of said kettle, and a vacuum-producing means and steam inlet and water outlet means located on the kettle below the level of its rim and with the upper suction-end of said vacuum-producing means extending into said dome but not in secured or other contact therewith and following the inner contour of the cover and terminating directly beneath the inner central point of the cover, the said kettle and dome both being provided with smooth and unobstructed inner surfaces for both cleansing and draining purposes and the device as a whole having none of its vacuum and controlling valve mechanism located above the said level of the kettle rim, substantially as shown and described.

1,814,928. CORE REMOVING DEVICE. JOSEPH HOURIGAN, New Kensington, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 31, 1929. Serial No. 403,704. 9 Claims. (Cl. 22—93.)



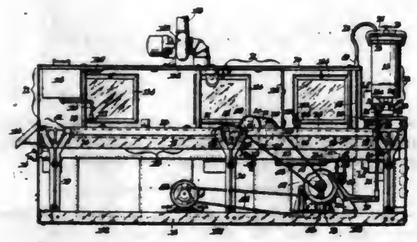
1. In apparatus of the class described, in combination, a hollow core adapted to have a billet of metal cast thereabout, means for cooling the interior of said core whereby it tends to shrink away from the billet, and means for simultaneously hammering said core to separate said core from said billet.

1,814,929. SMOKER'S OUTFIT. NIKOLAOS P. HRISSULAKIS, Chicago, Ill. Filed Apr. 2, 1928. Serial No. 266,789. 1 Claim. (Cl. 206—41.4.)



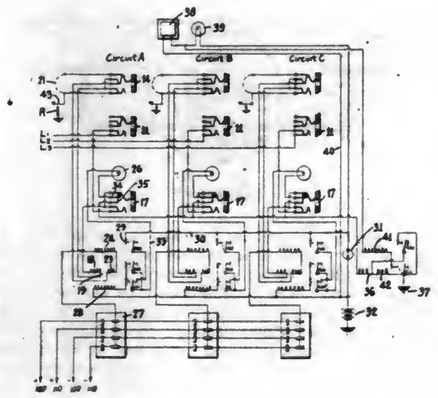
A device of the class described comprising a housing having a partition extending across one end thereof in spaced relation to said end, means for forcing articles toward said partition, said housing having a discharge opening therein in alignment with the article in engagement with said partition, said partition having an opening therein in the end thereof remote from said opening in said housing, said housing having an opening in the portions thereof extending beyond said partitions disposed in juxtaposition to the opening in said partition, finger gripping means extended through said last named opening in said housing, article engaging means extending through the opening in said partition into engagement with the article engaging said partition, said article engaging means including an L-shaped member having a foot portion extended over said partition, a rod extended parallel of said partition and thereabove, a collar slidably mounted on said rod, said collar being connected to the foot portion of said L-shaped member, an arm pivotally connecting said collar to said finger gripping portion, a spring member for urging said L-shaped member and said finger gripping portion into inoperative position, whereby movement of said finger gripping portion will be transmitted to the article engaging portion of said L-shaped member to force the article in engagement with said partition through said discharge opening.

1,814,930. COOKING APPARATUS. HERBERT T. HUNTER, Catonsville, Md., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 10, 1928. Serial No. 311,609. 13 Claims. (Cl. 53—7.)



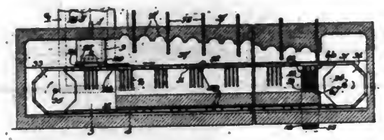
5. In apparatus for cooking articles such as stick doughnuts with hot cooking liquor, a receptacle for the cooking liquor, a conveyor with individual pockets to maintain the articles definitely separated incidental to progression at the surface of the liquor in the receptacle during the initial stage of the cooking, and an adjustable overflow dam enabling regulation of the liquor level in the receptacle to prevent floating and turning over of the articles in the pockets of the conveyor.

1,814,931. SWITCHBOARD SIGNAL SYSTEM. GEORGE W. JANSON, Nutley, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 11, 1930. Serial No. 467,343. 13 Claims. (Cl. 178—69.)



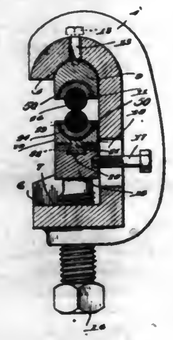
1. A signal system for a telegraph switchboard at which a plurality of line circuits terminate, comprising a signal lamp associated with each line circuit, a loop circuit included in each line circuit, means for causing said lamp to glow in response to a signal originating at said loop circuit, and means for causing said lamp to glow in a different manner in response to a faulty condition of said line circuit.

1,814,932. METHOD AND APPARATUS FOR DRAWING, CUTTING, GRIPPING AND CONVEYING SHEET PLATE GLASS. CHARLES J. JORDAN, Woodbury, N. J., assignor of one-fourth to Rudolph D. Schaub, Woodbury, N. J. Filed Nov. 23, 1928. Serial No. 321,397. 8 Claims. (Cl. 49—3.)



1. In an apparatus as set forth, the combination with a plurality of glass extruding outlets, of a supporting guide immediately under the plurality of outlets, said supporting guide having transverse abutments, a cutting frame in the supporting guide provided with transverse cutting knives, between the cutting edges of which and the abutments the extruded glass passes, and pneumatic means operatively associated with the cutter frame for severing the glass.

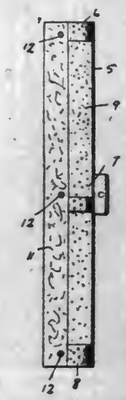
1,814,933. WIRE ROPE CLAMP. GEORGE J. KEEN, Oklahoma City, Okla. Filed Sept. 2, 1930. Serial No. 479,340. 5 Claims. (Cl. 24—126.)



4. A clamp for gripping portions of cables and the like, which tend to move in opposite directions, comprising a body member having clamping portions, surfaces associated with said clamping portions, and inclined in opposite directions, and tapered slips engageable with said surfaces and oppositely disposed relative to one another for engagement with the portions of said cable, whereby upon movement of said cable portions in opposite directions said slips will be moved inwardly to grip said portions with greater force.

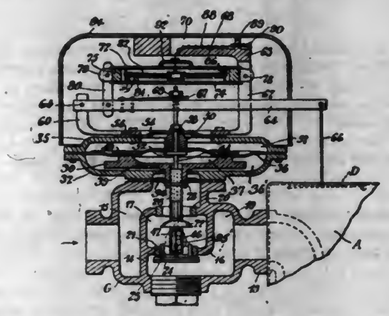
1,814,934. WINDSHIELD WIPER. SAMUEL I. KELLEY, St. Lawrence, S. Dak. Filed Jan. 16, 1930. Serial No. 421,245. 1 Claim. (Cl. 15—251.)

A windshield wiper of the type described comprising an elongated nonforaminous cylindrical container entirely filled with common normally dry table salt, and having a longitudinal opening extending substantially the length of the container, parallel flanges extended from and co-extensive with each edge of said opening and an inturned retaining lip on the outer edge of each of said flanges, and an absorbent wiper strip between said flanges and in direct intimate contact with the salt and maintained so positioned by said retaining lips, and rivets through said plates and said wiper strip for maintaining them securely assembled, and removable plugs closing the ends of said container, and a removable plug within the container separating it into compartments,



said wiper strip adapted to convey moisture from the windshield to the said salt for forming a salt solution in the strip only for distribution by said wiper.

1,814,935. FLUID FLOW REGULATING APPARATUS. ALBERT L. KLEES, Long Beach, and BENJAMIN GREENFIELD, Jackson Heights, N. Y., assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed June 14, 1930. Serial No. 461,112. 15 Claims. (Cl. 236—68.)

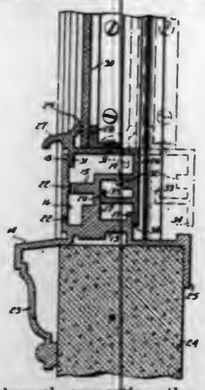


1. In a combined pressure regulator and cut-off valve mechanism of the character described, the combination of a valve casing having inlet and outlet ends, a central chamber therein in communication with the respective inlet and outlet ends through apertures in the chamber walls, a valve in each of said apertures, a pressure regulating diaphragm and chamber, a pair of concentric valve stems, one of the latter being operatively interposed between one of the valves and the pressure-regulating diaphragm, the other of said valve stems being adapted to operatively associate the other valve with an independent valve-actuating means.

1,814,936. WEATHERPROOF CASEMENT WINDOW CONSTRUCTION. JERRY KUBELKA, Ridgewood, N. Y. Filed Nov. 28, 1928. Serial No. 322,401. 1 Claim. (Cl. 189—69.)

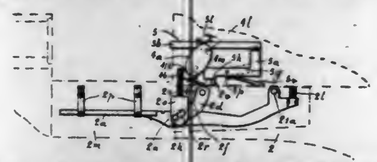
In a casement window, a frame comprising a bottom bar having a plurality of upstanding portions defining inner, outer and intermediate walls, a return portion on the intermediate wall terminating in a stop, a sash movable in respect to the frame having a plurality of abutments to re-

spectively engage a portion of the outer wall, the stop and a portion of the inner wall, and having another abutment extending to a point of engagement with the intermediate



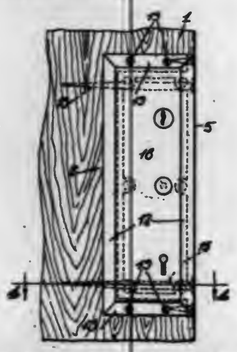
wall, and a channel connecting the intermediate and outer walls receiving the thrust of said other abutment and bracing the outer and intermediate walls.

1,814,937. SPORTING GUN. CHARLES LEVÊ, Cannes, France. Filed Mar. 9, 1929, Serial No. 345,687, and in Belgium Mar. 9, 1928. 8 Claims. (Cl. 42—18.)



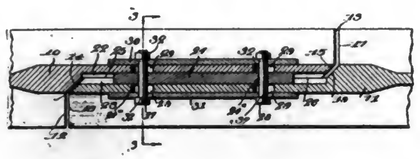
1. A gun having a magazine for cartridges, means permitting automatic or single fire, said means permitting the blocking of the advancing of the cartridges in said magazine, mechanism for withdrawing the cartridges from the chamber of the barrel controlling said means, and said mechanism having associated therewith an extractor controlled by the percussion apparatus of the gun.

1,814,938. LOCK. FRED LINDQUIST and ORA L. NAVE, Sacramento, Calif. Filed Aug. 27, 1929. Serial No. 388,796. 1 Claim. (Cl. 70—16.)



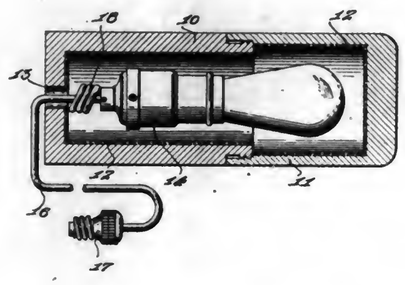
A lock casing adapted to be inserted in a notched portion of the free edge of a door, and consisting of a rectangular housing composed of edge walls, a side wall and top and bottom walls formed of an integral casing, with projecting flanges to embrace and overlap the door and having a removable side wall secured to the front and back walls and having escutcheon plates attached to the side plates.

1,814,939. RAILWAY RAIL JOINT. HENRY J. LOEFFELHOLZ, Perry, Okla. Filed Feb. 20, 1930. Serial No. 430,041. 1 Claim. (Cl. 238—237.)



A rail joint comprising a pair of rails in end to end abutting relationship, the abutting ends of the rails having similarly formed but oppositely disposed cut-away portions, the remaining portions providing longitudinal wall members, elongated recesses formed in the walls and extending over a major portion of said walls and together defining a closed chamber, a single elongated reinforcing member disposed in said chamber and of slightly less length than said chamber, reinforcing plates upon opposite sides of said rail members and said walls, said re-inforcing plate members having apertures for reception of fastening means, the apertures of said rail members having an elongated formation whereby said rail members may have limited longitudinal movements with respect to said reinforcing member.

1,814,940. BED WARMER. VERNE VICTOR LONG, Torrington, Wyo. Filed Sept. 16, 1929. Serial No. 392,977. 1 Claim. (Cl. 219—45.)

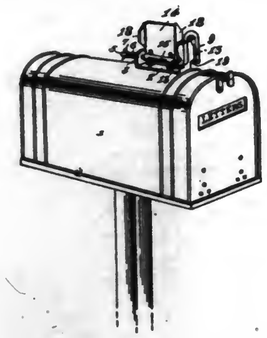


A device of the character described comprising a wood casing of cylindrical contour, including two sections adapted to be threadedly connected together, and asbestos lining for each section, one of the sections having a central opening in the end thereof, an electric light socket and bulb slidably arranged within the casing, with the bulb projecting beyond the open end of said section, whereby it can be conveniently removed from the socket when desired and an electric cord leading from the socket and passed through said opening, said cord being knotted within the casing adjacent said opening to relieve the socket of strain where it is connected with the cord.

1,814,941. INDICATOR FOR MAIL BOXES. ALVIN LUTZ, Edinburg, Va. Filed May 27, 1930. Serial No. 456,157. 3 Claims. (Cl. 232—35.)

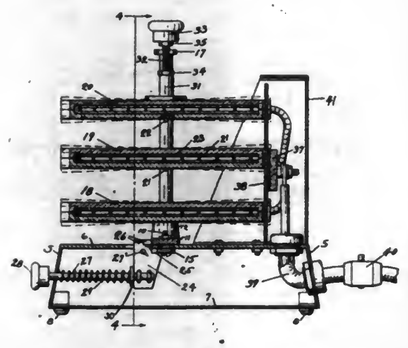
1. A signal for rural mail boxes, comprising a substantially U-shaped bracket fixed on the box, a shaft swingable and longitudinally movable through the arms of the bracket, one arm of the bracket having upper central

and lower sides notches therein, the shaft having an offset portion to be received in either of such notches and



to be held therein by a spring, a handle on the said end of the shaft and a signal plate fixed on the shaft between the arms of the bracket.

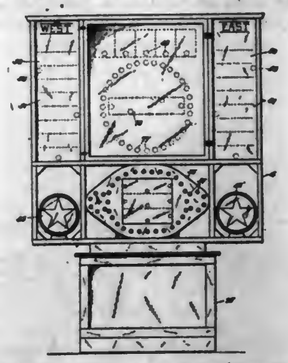
1,814,942. DOUBLE ELECTRIC TOASTER. CHARLES W. MABEY, Indianapolis, Ind., assignor to Mabey Electric and Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Jan. 20, 1930. Serial No. 421,879. 10 Claims. (Cl. 53—5.)



1. In a toaster, a plurality of hot-plates, means comprising a pair of posts having plate lifting pins which are disengaged from the plates in the lowered positions of the plates, and means for lifting the posts to contact the pins with the plates and lift the plates to separate them for the insertion and removal of slices of bread, and means for contacting the plates with the bread during the operation of toasting by releasing the lifted plates.

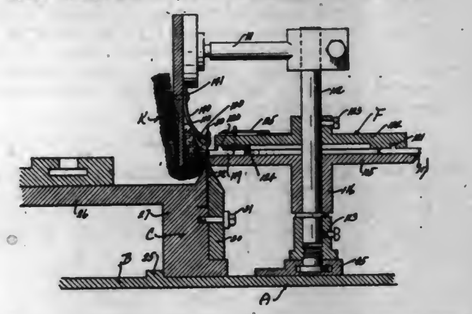
1,814,943. CONTROLLER FOR ELECTRICAL SIGNS. THOMAS J. MAIN, Lamar, Colo. Filed Feb. 3, 1928. Serial No. 251,696. 3 Claims. (Cl. 200—28.)

1. A controller for use with electric signs, comprising a drum, a ring contact on one end of the drum, a fixed main contact in constant engagement with the ring contact, a plurality of peripheral contacts spaced circumferentially and axially on the drum and connected to the ring contact, a plurality of fixed contacts arranged about the drum individually and in groups in the paths of the peripheral con-



tacts of the drum, and means for rotating the drum for closing the contacts in various combinations as the drum rotates.

1,814,944. TERRY LOOP FABRIC KNITTING MACHINE. HARRY MCADAMS, Atlantic City, N. J. Filed Dec. 31, 1929. Serial No. 417,712. 18 Claims. (Cl. 66—80.)

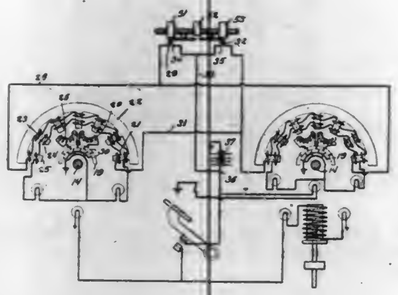


1. In a knitting machine for producing terry loop knitted fabric having long prominently extending terry loops thereupon, the combination of a set of needles, means to knit a base web upon the needles, means cooperating with the needles to introduce upon the base web during its formation a terry looping yarn in long prominently projecting loops from one face of the base web, with the said terry looping yarn knitted in with certain definite relatively spaced knitted stitch loops at the base web in any course of the base in which said terry looping yarn is placed, and means cooperating with the needles to introduce upon the base web a second terry looping yarn in long prominently projecting loops from the face of the base web opposite that upon which the first mentioned terry loops are projected, with the second terry looping yarn knitted in with certain definite relatively spaced knitted stitch loops in different courses of the base web than those courses in which the first mentioned terry looping yarn is introduced and knitted.

1,814,945. ELECTRIC MOTOR. JOHN MCCRACKEN, Davenport, Iowa. Filed Mar. 11, 1927. Serial No. 174,623. 2 Claims. (Cl. 172—36.)

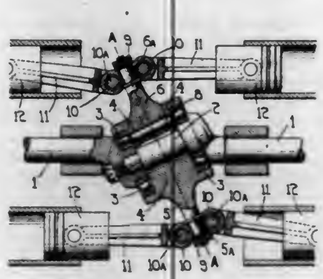
1. In a motor of the oscillating type, an operating shaft, a series of stationary magnets arranged in arc-like formation around said shaft, each magnet including a double set of field windings oppositely wound for permitting a reversal of polarity, a series of movable magnets rigidly connected to said shaft and disposed for magnetic coaction with said first mentioned stationary magnets, a stationary commutator encircling said shaft in spaced relation with said movable magnets including insulated segments certain

of which are electrically connected with the windings of the stationary magnets and others of which are grounded for controlling the travel of current to and from the stationary magnets, a switch means for controlling the polarity of said stationary magnets and causing the shaft to operate in an



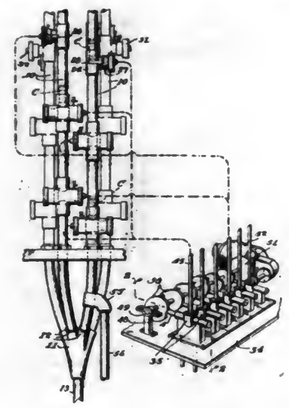
direction, switch means for reversing the polarity of said stationary magnets and cause the shaft to operate in an opposite direction and means for rendering both of said mentioned switch means inactive, and means electrically connected to the movable magnets having brushes bearing upon said commutator.

1,814,946. MEANS FOR CONVERTING RECTILINEAR MOVEMENT TO ROTARY MOVEMENT. HUBERT JOHN MCGEORGE, Temuka, New Zealand. Filed Dec. 3, 1929, Serial No. 411,246. Renewed Apr. 28, 1931. 2 Claims. (Cl. 74—14.)



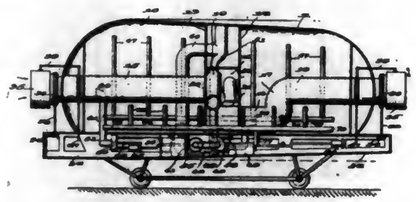
1. Means for converting rectilinear movement to rotary movement comprising the combination of an inclined cranked portion on a shaft to be rotated, roller bearings around the ends of said inclined cranked portion between the latter and a ring shaped member positioned co-axially therewith, an arm formed integrally with said ring shaped member and projecting radially therefrom, and a plurality of equi-distantly spaced radial arms pivotally secured to the ring shaped member so as to be capable of movement about their pivots in the direction of the circumference of said ring shaped member, but not in a direction longitudinally of the latter, means for preventing rotary movement of the ring shaped member and radial arms about the shaft, and means for connecting the reciprocating mechanism to the outer ends of the radial arms.

1,814,947. AUTOMATIC SELECTIVE PNEUMATIC TUBE CARRIER RELAY. WILLIAM V. MCGUINNESS, Flushing, N. Y., and WILLIAM H. FRANCIS, Jersey City, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 30, 1930. Serial No. 471,746. 6 Claims. (Cl. 243—16.)



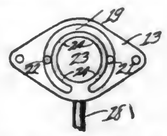
1. In a pneumatic tube system for transmitting carriers, a series of branch tubes, a plurality of spaced movement controlling valves for said carriers in each branch tube, and means for actuating the valves in each tube in alternation.

1,814,948. AERIAL NAVIGATION MACHINE. CHARLES R. MINER, San Francisco, Calif., assignor to American Airship Corporation, Wilmington, Del. Filed Jan. 23, 1930. Serial No. 422,760. 7 Claims. (Cl. 244—10.)



1. In an aerial navigation machine of the lighter-than-air type, having a tubular passage extending lengthwise of the machine, with means for producing rapid movement of air through said tubular passage, in combination, a by-pass communicating with said central passage for withdrawing a limited quantity of air therefrom, a manifold in communication with said by-pass, individual pipes leading from said manifold to a place of use for said air, and valves for controlling said individual pipes.

1,814,949. GAS MIXING DEVICE. PHILLIP MORGAN, Stockton, Calif. Filed June 17, 1929. Serial No. 371,455. 1 Claim. (Cl. 48—180.)



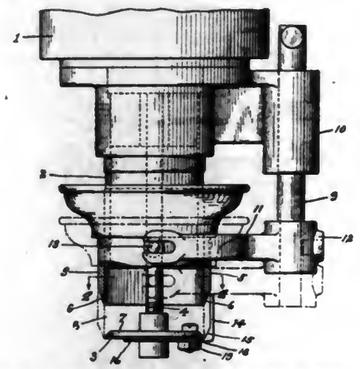
In a device of the character described, a plate having a central bore formed therein, a groove formed upon one side of said plate and concentric with said bore, a groove formed upon the opposite side of said plate passages extending between said grooves, said second groove being concentric with said bore, passages connecting said second mentioned groove and said central bore, and means for delivering air to said grooves.

1,814,950. SAFETY DEVICE. FRANCIS MOSCATO, Brooklyn, N. Y. Filed Dec. 2, 1927. Serial No. 237,239. 2 Claims. (Cl. 200—59.)



1. The combination with a gear shift lever of a motion transmission means; of a plate arranged for movement by said lever, a plurality of electrical contacts adapted to coact with each other, one of said contacts being fixedly mounted and the other contact being carried by said plate, the contact carried by said plate being brought into engagement with the fixed contact when the lever is in a neutral position, and the contact carried by the plate being moved out of engagement with the fixed contact by the plate when the lever is moved into any of its gear shifting positions.

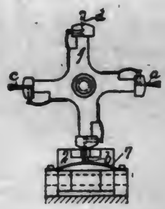
1,814,951. ATTACHMENT FOR DOUGHNUT BLANK CUTTING MACHINES. JOHN H. MÜLLER, Philadelphia, Pa., assignor to John Baumann. Filed Apr. 3, 1930. Serial No. 441,342. 9 Claims. (Cl. 107—14.)



1. In a doughnut blank cutting machine, a dough extruding tube having an annular discharge opening, an annular knife slidable across said opening to cut the dough extruded therethrough, and a member wholly arranged outwardly of the tube and extending across said opening to divide the dough as it is extruded through said opening.

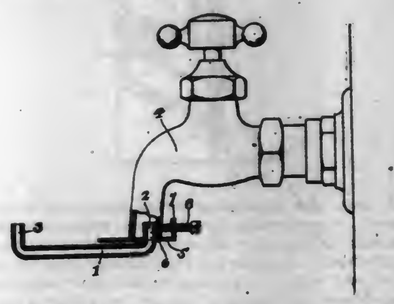
1,814,952. MANUFACTURE OF HORSESHOE NAILS. HANS CLARIN HOVIND MUSTAD, Oslo, Norway, assignor to O. Mustad & Son, Oslo, Norway. Filed Apr. 24, 1928, Serial No. 272,529, and in Germany Apr. 26, 1927. 4 Claims. (Cl. 10—69.)

1. In a machine for making horseshoenails the combination with a carrier having a step by step movement and having grippers to hold the shank of a horseshoenail radially by friction, of a press of the four die type having two pairs of dies, each pair mounted on a movable holder capable of a lateral movement relative to the blanks held by said grippers, thereby allowing the blank to enter the space between the two pairs of dies in a lateral direction at right angles to the movement of said die holders, and a spring or other yielding member so placed below the dies that during the press operation the head of the nail blank may have a yieldable rest on said member, the latter



serving also to further push the shank of the blank into the gripper device of the carrier after the end of the pressing operation to restore the former extent of its protrusion, and a jumping tool for operating upon the head of said blank in another position of said carrier.

1,814,953. PORTABLE DRINKING FOUNTAIN. JOHN H. NELSON and SVERRE QUISLING, Madison, Wis.; said Nelson assignor to said Quisling. Filed May 31, 1929. Serial No. 367,566. 1 Claim. (Cl. 299—17.)

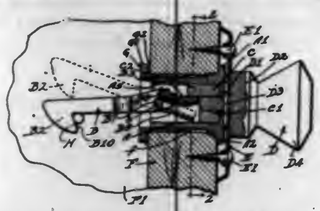


A portable drinking fountain for detachably connecting to a faucet comprising a flat closure disk for abutment against the mouth edge and of materially greater diameter than the mouth of the faucet, said disk formed with an eccentrically disposed opening of materially less diameter than that of the faucet mouth, a portion of the wall of said opening for registry with the inner face of the faucet, a drinking tube having a horizontal intermediate portion and a pair of vertically disposed end portions, one of said end portions extending through and snugly engaging the wall of said opening and for abutment against the inner face of the faucet, an upstanding ear integral with the edge of the disk, opposing and arranged in close proximity to said opening and formed with an aperture having a threaded wall, and a clamping screw engaging with said threaded wall for binding against the outer periphery of the faucet for detachably securing the fountain to the latter.

1,814,954. LATCH. FRANZ NETSCHERT, Los Angeles, Calif., assignor to Technical Glass Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 31, 1928. Serial No. 329,519. 2 Claims. (Cl. 292—124.)

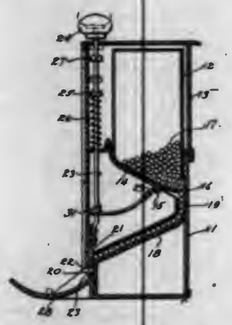
1. In a latch, a latch member, a strike-piece to be engaged by said latch member, a cam for disengaging said latch member from said strike-piece, an escutcheon provided with an opening, means for securing said escutcheon to the latch support, a knob, a stem on said knob extended

through said escutcheon opening and into operative and detachable engagement with said cam, and means engag-



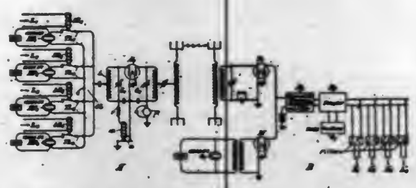
ing said stem and the inner side of the wall of said escutcheon for detachably maintaining said stem and knob in operative position.

1,814,955. SANITARY TOOTHPICK DISPENSER. GUSTAV ADOLF ODDSEN, Brooklyn, N. Y., assignor to Odd Sanitary Toothpick Dispenser, Inc., Brooklyn, N. Y. Filed Nov. 7, 1929. Serial No. 405,418. 1 Claim. (Cl. 312—79.)



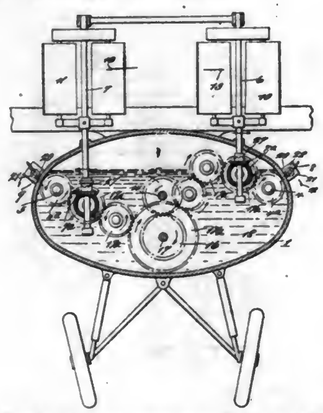
A tooth pick dispensing device comprising a box like housing, a rearwardly inclined wall within said housing and terminating short of the rear wall of said housing to provide a passage, an agitating member pivotally mounted on said wall, and forming a portion of the discharge edge thereof, a forwardly inclined chute having its upper entrance end disposed below said passage, and its lower discharge end adjacent the front wall of said housing, a slide plate for singly receiving tooth picks from the discharge end of said passage, a plunger for operating said slide plate, an arm projecting from said agitating member to a point closely adjacent said plunger, and a collar carried by said plunger and adapted upon each operation thereof to engage said arm to operate said agitating member.

1,814,956. RADIO SIGNALING SYSTEM. RUSSELL S. OHL, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 26, 1925. Serial No. 52,652. 1 Claim. (Cl. 250—9.)



In a radio signaling system, in combination, a transmitting station including a plurality of oscillators connected in parallel relationship producing currents of different high frequencies which are closely spaced, a plurality of piezo-electric devices one coupled to each oscillator and maintaining the frequency of its current constant within very narrow limits, a plurality of relays one associated with each oscillator, the armature of each relay controlling the output of the corresponding oscillator, a plurality of lines one extending to the winding of each relay, currents of different low frequencies being transmitted over said lines each interrupted in accordance with signals and means capacitatively coupled to said high frequency oscillators for transmitting the high frequency currents modulated in accordance with said signals, and a receiving station including means for receiving said high frequency currents modulated in accordance with said signals, a first oscillator producing current of a frequency different from those frequencies received by said receiving means, a piezo-electric device coupled to said first oscillator for maintaining the frequency of the current produced thereby constant within very narrow limits, a three-element vacuum tube system to the output circuit of which said first oscillator is connected, said vacuum tube system beating the current of the frequency of said first oscillator with the plurality of currents of high frequencies modulated in accordance with signals received by said receiving means and producing a plurality of currents of intermediate frequencies interrupted in accordance with the same signals, a second oscillator, and means for beating the various currents of said intermediate frequencies interrupted in accordance with said signals and the current of said second oscillator in order to reproduce low frequency currents interrupted in accordance with said signals.

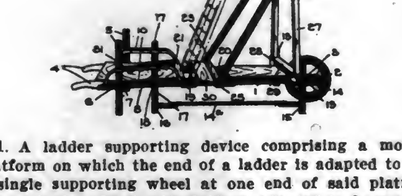
1,814,957. AIRCRAFT. CHARLES H. OHLRICH, Philadelphia, Pa., assignor of one-half to Louis W. Hummel, Philadelphia, Pa. Filed Dec. 13, 1929. Serial No. 413,857. 4 Claims. (Cl. 244—16.)



4. In an aircraft, the combination with a fuselage having an oil housing at its forward portion and a motor and a motor shaft, the latter passing through the housing, of a frame on the fuselage, ascension propulsion means arranged in said frame and including horizontal shafts, forward traveling propulsion means mounted in said frame and having vertical shafts, and gearing means in the oil housing and operatively connecting all of said shafts of said propulsion means, thereby insuring free movement of the gearing means.

1,814,958. CORDAGE YARN AND METHOD FOR PRODUCING SAME. JOHN A. PALMER, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Apr. 20, 1927. Serial No. 185,198. 2 Claims. (Cl. 117—2.)

1. As a new article of manufacture, a unitary body of fibers formed into a spun yarn with all the fibers lying substantially parallel to one another in spirals around a single axis, said fibers being of different colors with fibers of



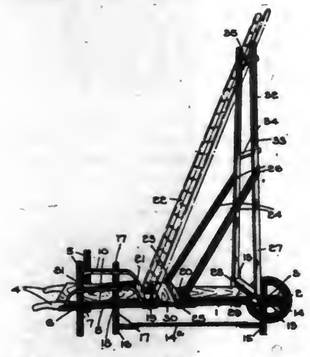
the same color grouped together in the yarn to form distinct lines of color extending parallel to each other continuously throughout the length of the yarn.

1,814,959. SCISSORS. MORGAN PARKER, New York, N. Y. Filed Mar. 7, 1927. Serial No. 173,528. 18 Claims. (Cl. 30—13.)



1. Scissors comprising the combination of a shank having a curved operative edge, and a blade normally straight flexible transversely in any direction mounted thereon and slidable longitudinally onto and off the shank and cooperating means on said blade and shank for preventing lifting or tilting of the blade.

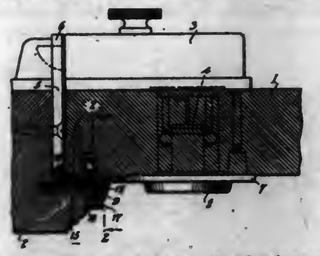
1,814,960. LADDER. JOSEPH MATTHEW PARRY, Weobley, England. Filed Sept. 5, 1929, Serial No. 390,566, and in Great Britain July 23, 1929. 7 Claims. (Cl. 228—16.)



1. A ladder supporting device comprising a movable platform on which the end of a ladder is adapted to rest, a single supporting wheel at one end of said platform, legs at both ends of said platform adapted to form a support therefor when it is not being moved, a collapsible frame mounted on said platform for supporting a ladder intermediate its ends, collapsible supporting means for retaining said ladder support in an erected position and means for adjusting the position of said legs.

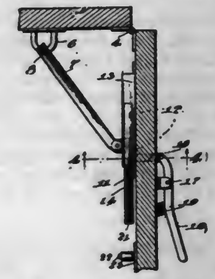
1,814,961. LOCKING PLATE. JAMES EDWIN PHILLIPS, New York, N. Y. Filed Jan. 23, 1930. Serial No. 422,859. 6 Claims. (Cl. 70—16.)

1. A pair of locking plates comprising a jamb plate and a door plate, said plates at their point of contact being formed with interlocking projections so that when the jamb plate is in contact with the door plate the plates cannot be forced apart except in one direction, the in-



terlocking projection on the jamb plate having an extending portion provided with a flange overlapping the projections on said door plate.

1,814,962. CLOSURE FASTENING MECHANISM. CHARLES A. REDFIELD, San Diego, Calif. Filed Sept. 4, 1929. Serial No. 390,316. 4 Claims. (Cl. 292—267.)



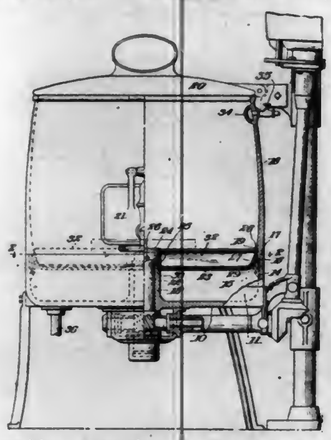
1. In a closure fastening mechanism, means for stopping and holding a door at predetermined opened positions thereof, comprising a movable member pivotally swingable on the door-jamb, a guide having a slot on said door in which said movable member is slidably mounted and means for holding said movable member against disengagement from said guide slot comprising a pivotally mounted stop member adapted to be movable transversely of the path of movement of said movable member for abutting engagement therewith.

1,814,963. DRILL ARM FOR METAL DRILLING MACHINERY. ALBERT E. ROBINSON, Cincinnati, and WILLIAM L. SCHELLENBACH, Wyoming, Ohio, assignors to The American Tool Works Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 20, 1928. Serial No. 300,874. 7 Claims. (Cl. 77—28.)



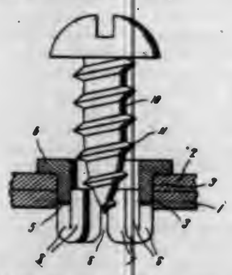
1. A radial drill-arm for a radial metal drilling machine, said drill-arm comprising a cast body of metal having an upright bearing portion arranged to be received about the upright column of the drilling machine and a laterally extending overhanging arm-portion, a tension member extending obliquely in said arm-portion of said cast body throughout the greater portion of the length of said arm-portion, and means whereby said tension member is anchored obliquely in a single direction at its respective ends to said cast body, and said cast body between said anchoring means being under compression and said tension member being under tension to resist deflection in said drill-arm.

1,814,964. SPINACH, ETC., WASHING MACHINE. HENRY ROBINSON, New York, N. Y. Filed Apr. 14, 1930. Serial No. 444,306. 7 Claims. (Cl. 259—107.)



1. A machine of the class described having a cylinder, a bowl-shaped base for said cylinder, a disk to support material in said cylinder to be washed, said disk having a marginal perforated wall inclined and spaced from the adjacent portion of the cylinder, said disk being overlapped by said cylinder, said cylinder and base being separable to enable operative positioning of the disk, and an agitator movable over said disk to cause discharge through the marginal perforated wall.

1,814,965. ART OF ANCHORAGE. HEYMAN ROSENBERG, New York, N. Y. Filed Dec. 16, 1925. Serial No. 75,830. 4 Claims. (Cl. 85—2.4.)



1. Anchorage means comprising a sleeve rivet adapted to receive a rotary expander, said sleeve rivet having a lateral rib to prevent rotation, and a return fold to enable buckling located to first receive the action of such expander.

1,814,966. ART OF ANCHORAGE DEVICES. HEYMAN ROSENBERG, New York, N. Y. Filed Jan. 27, 1928. Serial No. 249,900. 25 Claims. (Cl. 85—41.)



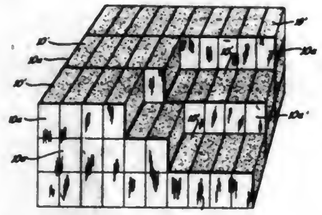
1. An anchorage device comprising a metal pin having a hardened portion and a soft portion, the hardened portion having an outstanding projection shaped to cause the hardened condition to contribute to the anchorage capacity of the device, and the soft portion being adapted to be manipulated incident to its soft condition.

1,814,967. BAG. THOMAS M. ROYAL, Philadelphia, Pa., assignor, by mesne assignments, to Royal-Allen-Mair, Inc., Dover, Del., a Corporation of Delaware. Filed Apr. 11, 1928, Serial No. 269,231, and in Great Britain Feb. 11, 1928. 6 Claims. (Cl. 229—53.)



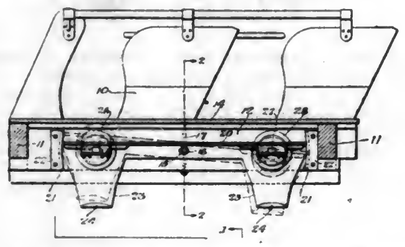
1. A paper bag made of a section of a composite sheet consisting of two strips of flexible material and a transparent strip of flexible material so arranged that one edge of each of the first-named strips is in opposed spaced relation to one edge of the other strip with the transparent strip located between and secured to said opposed edges; the outer edges of said composite sheet being overlapped and permanently secured together in tube formation and all of the strips of said composite bag being of substantially the same length.

1,814,968. SHIELD FOR PILING BRICKS. EDWIN J. SCHARIO, Canton, Ohio. Filed July 26, 1930. Serial No. 471,068. 4 Claims. (Cl. 206—46.)



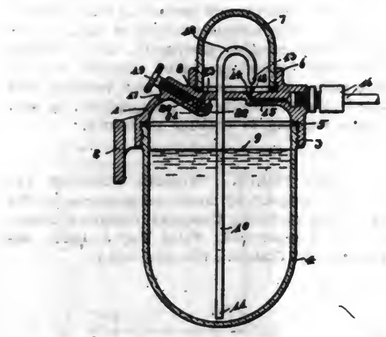
1. A pile or pack of bricks and the like, and protective means for the abutting surfaces of all the bricks including a shield for each brick protecting three adjoining surfaces extending from a common corner of the brick.

1,814,969. AMUSEMENT CAR. HERBERT P. SCHMECK, Philadelphia, Pa. Filed May 16, 1930. Serial No. 452,965. 7 Claims. (Cl. 104—248.)



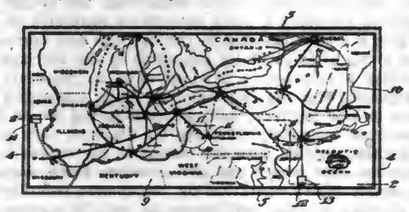
1. In an amusement car, a frame, a pair of longitudinally-spaced supporting wheels arranged at one side of the frame and rigidly connected thereto, a longitudinally-extending beam pivotally connected to the frame at the opposite side thereof and a pair of supporting wheels carried by opposite ends of said beam.

1,814,970. LUBRICATOR. HARRY T. SCOTT, Los Angeles, Calif., assignor of one-half to William H. Dilks, Los Angeles, Calif. Filed May 7, 1928. Serial No. 275,824. 4 Claims. (Cl. 261—78.)



1. In a lubricator, a well portion for holding a lubricant, a cup portion having a connection by which lubricant may be drawn, a partition between the well and the cup portion including a passage whereby a lubricant may be drawn from the well to a point close above the said connection so that the lubricant may be caused to drip into the connection in proportion to the drawing force applied to the connection, means whereby air from the outside may be caused to supplant any lubricant drawn from the well portion, and an adjustable control whereby air may be passed in various amounts from the well to the cup portion.

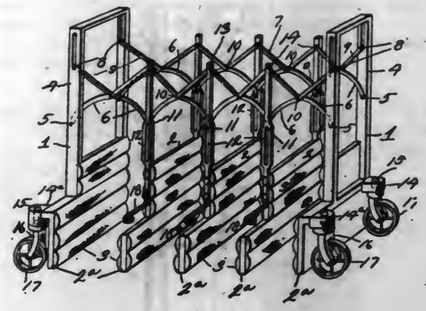
1,814,971. GAME. NEVILLE C. SEYMOUR, Jersey City, N. J. Filed Dec. 28, 1927. Serial No. 243,189. 1 Claim. (Cl. 273—109.)



A game comprising a game board having a perfectly smooth flat plane surface, and a plurality of wickets positioned at predetermined varied irregular locations on said smooth flat plane surface of the board, and a line consisting of broken arrows indicative of an irregular route to define an uninterrupted direction of irregular travel passing through the irregularly located wickets, an arrow head adjacent each wicket indicative of the direction of passage through said wicket, said line of direction arrows having starting and ending points, said game board being manually tiltable whereby a rolling member is operable to move on the plane surface of the board and adapted to pass through the wickets according to the direction of travel indicated by the arrow heads adjacent the wickets, the passage of the rolling member through any wicket backwards or out of order of travel indicated by the line of broken arrows penalizing the player to retraverse said line of broken arrows.

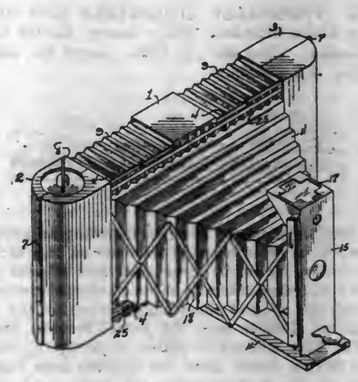
1,814,972. PORTABLE STALL GATE. RAYMOND C. SHELDON, Omaha, Nebr. Filed May 28, 1929. Serial No. 366,060. 1 Claim. (Cl. 119—15.5.)

A portable stall comprising a plurality of vertically disposed walls comprising end and intermediate walls, the end walls having upwardly extending U-shaped frames, lazy tong connections between said U-shaped frames, upwardly extending arms carried by the intermediate walls and connected to the lazy tong connection



and supported thereby whereby upon movement of the end walls towards or away from each other all of the walls will move in parallel relation and ground engaging wheels carried by the end walls and forming means for supporting all the walls spaced from the ground.

1,814,973. CAMERA. ALADIN A. SILVA, Moratuwa, Colombo, Ceylon. Filed Sept. 4, 1926. Serial No. 133,589. 4 Claims. (Cl. 95—32.)



1. A camera of the class described comprising a central chamber and a pair of end chambers, foldable means connecting the end chambers with the central chamber so that the end chambers can be pushed against the central chamber, bellows connecting the tops, bottom and rear portions of the end chambers with the central chamber, a bellows at the front of the camera, a lens frame connected therewith, a swinging member hinged to the bottom of the central chamber and forming a track for the shutter frame, means for holding spools in the end chambers and spring winding means in the end chambers for pulling portions of the front bellows into said chambers when the end chambers are moved against the central chamber.

1,814,974. AUTOMATIC ELECTRIC MIXER. ALDEN M. SNIDER, Mansfield, Ohio. Filed Feb. 2, 1931. Serial No. 512,984. 14 Claims. (Cl. 259—1.)

1. In apparatus of the character described, a tubular standard, a post reciprocable therein and carrying an

electric motor, a whipping blade operatively carried by the motor, a table mounted on the standard and having limited rotary movements, switch elements for the motor mounted on the standard, means on the table to influence rotary movement in one direction, means on the

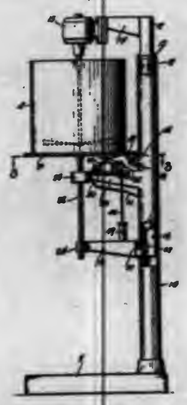


table to be engaged by one of the switch elements for holding the table against rotary movement with the switch elements separated, and means operated during lowering movement of the post to disengage the switch element engaged with the table and move the same into engagement with the other switch element.

1,814,975. VERTICALLY ADJUSTABLE GUN SIGHT. JOSEPH ELIAS STEWARD, Prince George, British Columbia, Canada. Filed Mar. 3, 1928. Serial No. 258,906. 1 Claim. (Cl. 33—58.)



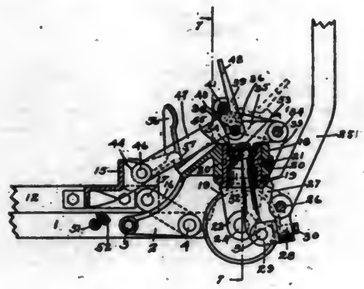
An adjustable sight for firearms including an elongated plate fixed at a point between its ends on the barrel, a sight projecting upwardly from each end of said plate, said sights including laterally directed extensions projecting beyond the opposed longitudinal edges of the plate, second plates slidable upon the barrel beneath the free end of the first mentioned plates respectively, and upstanding flanges rising from the opposed side edges of each end of the second mentioned plate, said flanges having notches of progressively increasing height whereby said second plate may be slid to engage said extensions with selected notches to adjust the height of the sight.

1,814,976. LEVELING DEVICE. OSCAR A. STROMER, Sheboygan, Wis. Filed Nov. 9, 1927. Serial No. 232,097. 1 Claim. (Cl. 33—215.)



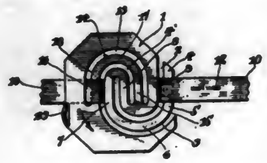
A level including a substantially rectangle frame having a transversally extending substantially circular opening provided therein, bearing bars fixed to said frame at opposite ends of said opening and adapted to extend diametrically thereacross, said bearing bars having inwardly disposed offset portions and having screw thread openings formed therein at substantially the midpoint in the extent thereof, screw members mounted in said screw threaded openings having sockets formed therein in the ends thereof directed toward each other, circular indicating means in said opening, trunnions on said indicating means adapted to be journaled in said sockets whereby to support said indicating means for rotative movement, weight means associated with said indicating means whereby to urge said indicating means into a predetermined position, and indices mounted in said opening in juxtaposition to said indicating means adapted to register therewith.

1,814,977. LIFTING TRUCK. WILLIAM STUBBING, Jr., Cincinnati, Ohio, assignor, by mesne assignments, to The Yale & Towne Manufacturing Company, Stamford, Conn., a Corporation of Connecticut. Filed May 5, 1924. Serial No. 710,983. 27 Claims. (Cl. 254—10.)



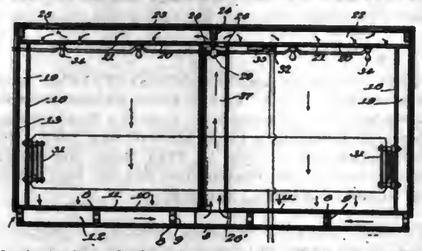
1. In a lifting truck, a wheel-supported carriage, an elevatable platform supported by the carriage, a pivoted steering tongue for the carriage movable about a vertical axis, platform-lifting means connecting the tongue and platform including a strut operatively connected to said tongue, a lever connected to the carriage and bearing on said strut, arms pivotally connected to the carriage and carrying a cross-bar, a pawl mounted on the lever and engageable with the cross-bar, and links connecting said arms to said platform, said platform-lifting means being capable of completely elevating the platform from lowest to highest position with one motion of the tongue in one direction, said tongue and lifting means being connected to permit lifting operation by the tongue regardless of its steering position, and means for so altering the relation of the parts that upon slight reverse movement of said tongue after the platform has been completely elevated, operative disengagement is effected whereby said elevatable platform may descend without movement of said tongue.

1,814,978. BUCKLE. ELMER C. SWANSON, Larchwood, Iowa. Filed Sept. 16, 1930. Serial No. 482,319. 5 Claims. (Cl. 24—198.)



1. A buckle comprising, a plate formed with a pair of spaced, arcuate slits opening through the periphery thereof and providing therebetween an arcuate tongue having a free end adapted to be inserted through a looped strap, said plate further being formed with a slot in spaced relation to one of said slits and coacting therewith to provide an arcuate tongue anchored at its ends and adapted to extend through a looped strap oppositely disposed with respect to the first mentioned strap, said plate being rotatable to slide the tongues relative to the straps for drawing the latter towards each other.

1,814,979. COMBINATION CHICK STORAGE, BROODER AND INCUBATOR. IRVIN A. TAYLOR, Frenchtown, N. J., assignor to Kerr Chickeries, Inc., Frenchtown, N. J., a Corporation of New Jersey. Filed Apr. 18, 1929. Serial No. 356,066. 3 Claims. (Cl. 98—33.)

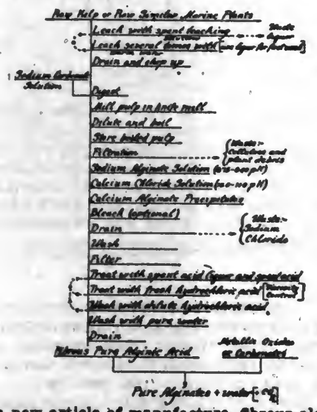


1. A device of the character described comprising a box-like housing having openings through its top, a floor having a plurality of openings therethrough, joists supporting said floor and providing an air space therebeneath, said joists having a series of spaced openings for admitting air therethrough, a ceiling spaced from the top of the housing having openings therethrough, and means establishing communication between the space above the ceiling and the space below the floor to provide circulation of the air from the lower to the upper space.

1,814,980. PROCESS FOR THE PRODUCTION OF TRINITROTOLUENE. FRIEDRICH THOMAS, Gross-Salze, Germany. Filed Apr. 7, 1928, Serial No. 268,374, and in Germany July 29, 1927. 2 Claims. (Cl. 260—142.)

1. A process for the production of trinitrotoluene by the treatment of dinitrotoluene with mixed acids, which comprises making the dinitrotoluene in a fused state, at temperatures of 80 to 95° C. to flow into the mixed acids preliminarily heated to 80° C., whilst stirring.

1,814,981. PROCESS OF PREPARING ALGINIC ACID AND COMPOUNDS THEREOF. FRED CURTIS THORNLEY, Coronado Beach, Calif., and MICHAEL J. WALSH, London, England, assignors, by mesne assignments, to Kelco Company, Los Angeles, Calif., a Corporation of Delaware. Filed Aug. 6, 1927. Serial No. 211,192. 45 Claims. (Cl. 260—108.)

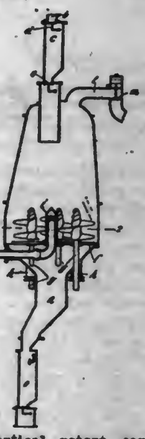


1. As a new article of manufacture, fibrous alginic acid.

6. The process of preparing pure fibrous alginic acid which comprises converting a soluble alginate into an insoluble alginate by adding such alginate to an agitated substantially non-acid solution containing a salt of a metal which will form with alginic acid an insoluble alginate, washing said insoluble alginate free from impurities, and treating the thus obtained insoluble alginate with an acid capable of forming a soluble salt with the mineral constituent of the insoluble alginate.

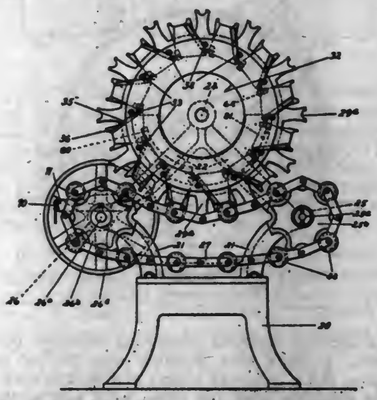
31. Substantially neutral metal alginates substantially free from salts other than alginates.

1,814,982. CARBONIZING OR LIKE RETORT. CHARLES TURNER, Airdrie, Scotland. Filed Mar. 21, 1928, Serial No. 263,349, and in Great Britain May 31, 1927. 2 Claims. (Cl. 202—215.)



1. A carbonizing vertical retort comprising a shell adapted for unimpeded descent of a charge of solid material through the upper part thereof, a hollow member of substantially inverted cone shape constituting the bottom of the retort, a plurality of vertical shafts extending through the said hollow member into the lower part of the shell, and an Archimedian screw fixed to the upper part of each of the said shafts, said screws being adapted to together support and discharge a charge of solid material in the shell and each of them intermeshing with and adapted to rotate at the same speed in the same direction as the adjacent screws.

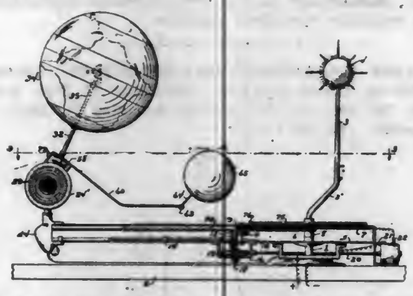
1,814,983. FISH DEHEADER. WILLIAM E. URSCHEL, Valparaiso, Ind. Filed Nov. 25, 1925. Serial No. 71,305. 28 Claims. (Cl. 17—4.)



1. In a fish deheading machine, a rotatable vessel to loosely confine fish and having a discharge opening, dis-

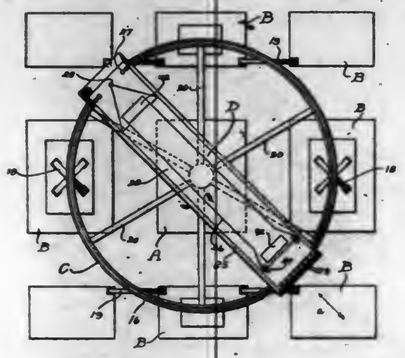
charge means adapted to release fish from said vessel head foremost, and severing means in the path of said fish to remove the heads thereof.

1,814,984. TELLURIAN. HENRY M. VANDERRIDER, Weslaco, Tex. Filed Nov. 23, 1928. Serial No. 321,384. 8 Claims. (Cl. 35—3.)



1. In a device of the character described, a base including a vertically arranged flanged hub-like portion, a post rising from the base and passed through said member and offset at its upper end, a spherical member on said post representing the sun, an elongated housing rotatably supported on said post and reposing upon the flange of the hub-like member, a stationary gear carried by the housing, motor operated means including a gear meshing with the stationary gear to rotate the housing about said post, a casing formed by one end of the housing, an annular frame supported by and above said casing and including inwardly directed bearings, a motor operated shaft journaled in said casing, a vertically disposed driven shaft journaled in the casing and in one of the gearings of said frame and operated by the last mentioned shaft, an additional shaft arranged above and at an angle with relation to said vertical shaft, and journaled in the other bearing of said frame, gearing supported by said frame and providing a connection between the last mentioned shafts for simultaneous rotation thereof, a spherical member carried by the angularly disposed shaft and representing the earth, a laterally extending arm supported by the angularly disposed shaft for rotation, and a spherical member carried by said arm and representing the moon.

1,814,985. AIRCRAFT LANDING APPARATUS. PABLO VILAR FLORIDO, U. S. Navy. Filed Nov. 26, 1930. Serial No. 498,460. 17 Claims. (Cl. 244—2.)



1. An aircraft terminal comprising habitable pier-like structures, a frame work mounted upon the top of the structures, and a combined hangar and landing deck horizontally rotatable upon the frame work and having entrance openings to one of the pier-like structures.

1,814,986. ALGINATES IN FINELY DIVIDED FORM DERIVED BY SPRAY-DRYING DILUTE SOLUTIONS THEREOF. MICHAEL J. WALSH, San Diego, Calif., assignor, by mesne assignments, to Kelco Company, Los Angeles, Calif., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,799. 17 Claims. (Cl. 252—1.)

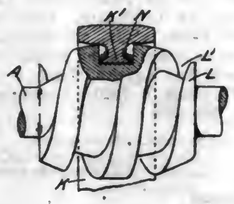
1. The process of producing comminuted substantially dry alginic acid compounds which comprises forming a solution containing such compounds and then spraying same into an atmosphere relatively unsaturated as to the solvent whereby said solvent is converted into the vapor phase and the solute into individual minute particles of alginic acid compounds, and recovering said particles.

1,814,987. PICTURE TRANSMITTING SYSTEM. ALLAN WEAVER, Brooklyn, N. Y., and DAVID ERNEST BRANSON, Bloomfield, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Original application filed Dec. 19, 1923, Serial No. 681,593. Divided and this application filed Feb. 25, 1925. Serial No. 11,537. 5 Claims. (Cl. 178—7.)



1. The method of producing colored pictures, which comprises progressively anaylsing a colored object for each of a plurality of primary colors, transmitting to a distant point a plurality of separate series of electrical impulses each series corresponding to the varying values of one of said primary colors and utilizing each of said separate series of impulses to produce corresponding separate primary color records which, when used together, produce a picture of the original object in its original natural colors.

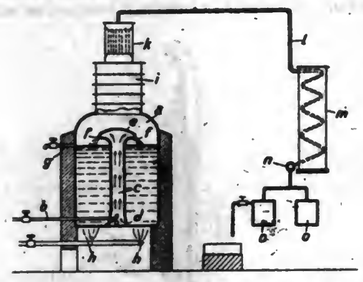
1,814,988. GEAR. SEPTIMUS BERESFORD WELLER, Surbiton, England. Filed Jan. 31, 1930, Serial No. 424,971, and in Great Britain Feb. 26, 1929. 9 Claims. (Cl. 74—36.)



1. In a gear of the kind which includes a follower engaging a screwthreaded shaft, the combination of a screwthreaded shaft, a follower block engaging the thread and having curved recesses in those surfaces adjacent to the sides of the thread, a bearing member freely mounted in each recess and having a flattened part which bears against the adjacent side of the thread, and a connection between the block and the member to be moved thereby.

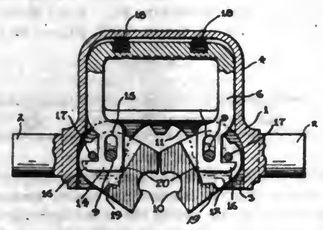
1,814,989. PROCESS FOR THE DISTILLATION OF COAL TAR AND DEVICE FOR CARRYING OUT SUCH PROCESS. CARL WESSEL, Essen-Borbeck, Germany. Filed June 18, 1927, Serial No. 199,813, and in Germany June 29, 1926. 2 Claims. (Cl. 196—76.)

1. In a process of treating coal tar, the method which firstly comprises driving off water, light oils by heating up, then distillating off the naphthalene alone and separately by a current of steam passing directly into the tar at



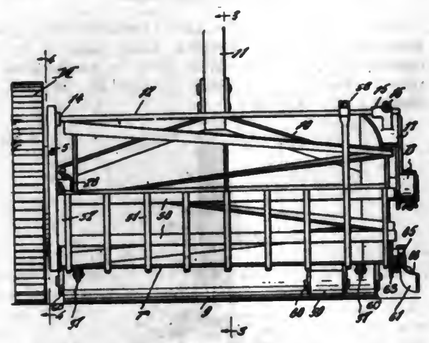
below the distilling temperature of the naphthalene oil, in which operation a restricted quantity of the tar is being subjected to the action of steam.

1,814,990. SUCKER ROD OR TUBING ELEVATOR. BURTON G. WESTON, Tulsa, Okla., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Filed Mar. 10, 1931. Serial No. 521,598. 14 Claims. (Cl. 294—91.)



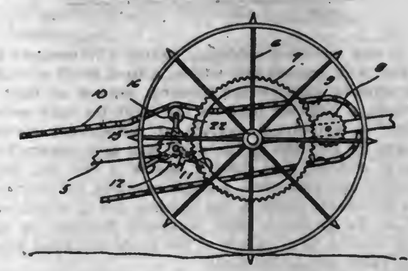
1. An elevator of the character described comprising a housing, gripping elements independently fulcrumed at oppositely disposed points in said housing and provided with jaws, an actuating member, means on said member operatively, but loosely engaging said gripping elements for rotating the latter on their pivots to open said jaws.

1,814,991. LAWN MOWER. JULIAN N. WETMORE, Miami, Fla. Filed Sept. 16, 1929. Serial No. 392,864. 4 Claims. (Cl. 56—249.)



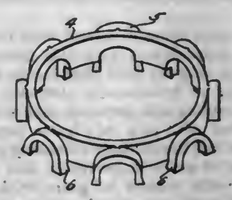
1. A lawn mower of the class described comprising a side plate disposed in a vertical plane, a horizontal member extending from the bottom of the plate, a horizontal rod extending from the top of the plate, a side member supported by the horizontal rod and member, a shaft journaled in the side member and the plate, a ground engaging wheel operatively connected for rotating the shaft, a cutter reel on the shaft, a roller under the cross member, a knife adjustably mounted on the cross member to cooperate with the cutter reel, arms extending rearwardly from the cross member, an elongated roller, means for journalling the elongated roller between the rear extremities of the arms, a guard frame across the front ends of the side members and plate including upper and lower cross members and a plurality of vertical rods attached thereto in spaced relation, a guard on the side of the mower remote from the wheel hingedly mounted on the cross member, and spring means urging the guard outwardly.

1,814,992. POTATO DIGGER CONVEYER SHAKER. FRANK WHEELER, Del Norte, Colo. Filed Mar. 20, 1928. Serial No. 263,177. 1 Claim. (Cl. 209—308.)



A shaker for use in potato diggers and the like, consisting essentially of a hub, spaced spoke arms, of channel form in cross section, radiating from the hub and having apertured bottoms, a plurality of spokes one in the channel of each spoke arm and extending outwardly from the arms, lateral journals carried by the extended portions of the spokes, rollers mounted to turn on said journals and held against displacement therefrom, and means extending through the apertures in the bottoms of the arms and detachably connecting the spokes thereto.

1,814,993. RETAINER FOR THE BALLS OF BALL BEARINGS. HARRY WICKLAND, Philadelphia, Pa. Filed Apr. 11, 1928. Serial No. 269,205. 1 Claim. (Cl. 308—201.)



A cage for ball bearings comprising a plurality of relatively fixed substantially U-shaped ball-receiving pocket elements the extremities of the arms of which are of greater thickness than the other parts of said arms and have their excess thickness at the outer faces thereof whereby the outer faces of said extremities flare outwardly to project transversely beyond the normal outer side faces of the arms.

1,814,994. FOOD PRODUCT AND PROCESS OF MAKING THE SAME. CLARENCE P. WILSON, Pomona, and EARL D. STEWART, Corona, Calif., assignors to California Fruit Growers Exchange, Los Angeles, Calif., a Corporation of California. Filed Jan. 15, 1927. Serial No. 161,461. 3 Claims. (Cl. 99—5.)

3. A new food product in finely divided dry form consisting essentially of the solids of citrus fruit juice and

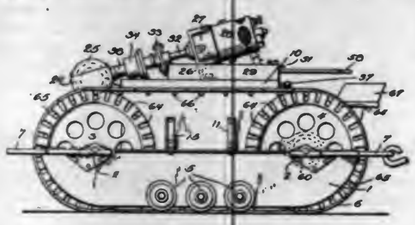
milk, said product being made from a homogeneous mixture of milk and fruit juice the individual particles containing solids of both milk and fruit juice, whereby upon solution of the product the undissolved solids are dispersed throughout the solution as a very fine curd.

1,814,995. SIGN. JAMES FREDERICK WINER, Miami, and NATHAN NEWSOM MAYO, Ocala, Fla. Filed May 21, 1930. Serial No. 454,374. 2 Claims. (Cl. 40—132.)



1. A sign including a housing having a translucent face provided with transparent letters, a fixed shaft extending longitudinally through the housing, sources of light on the shaft, a reflector fixed on the shaft for such sources of light, a cylindrical lantern of transparent material mounted for rotation on the shaft, and said lantern being variably colored, said lantern having a cap end which is peripherally apertured, a pintle engaging the apertures, speed decreasing gears in the housing, one of which being fixed to the pintle, a shaft journaled through the ends of the housing fixed on one of the gears and wind wheels on the outer ends of the shaft.

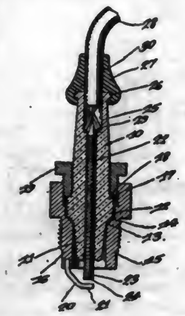
1,814,996. TRACTOR. WILLIAM F. WINSTEAD, New Orleans, La. Filed Nov. 3, 1930. Serial No. 493,173. 4 Claims. (Cl. 180—9.1.)



1. A tractor comprising a pair of side frame members, tractive means journaled in said side frame members, a saddle extending between said side frame members, said saddle including a horizontally disposed portion and downwardly depending side portions, said side portions being interconnected with said side frame members, driving means carried by the horizontally extending portion of said saddle, a system of gears supported by said saddle, means interconnecting said system of gears with the tractive means carried by each of said side frame members, and a control lever journaled in said saddle for differentially controlling the connection between said drive means and said tractive means.

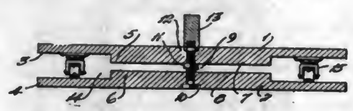
1,814,997. SPARK PLUG. EDWARD F. WITTNER, Chicago, Ill. Filed Apr. 2, 1928. Serial No. 266,776. 1 Claim. (Cl. 123—169.)

A spark plug including a sleeve, a plug structure in which one end of said sleeve is mounted, said sleeve having a longitudinal bore extending therethrough and having an enlarged portion at the end thereof opposite the end retained in said plug structure, an electrode extending through said bore having a conical end disposed in said enlarged portion, said enlarged portion being of a diameter substantially equal to the diameter of a wire inserted thereinto whereby when said wire is inserted into said portion the strands thereof will be forced into engagement with said conical end portion to be spread outwardly to wedge said wire in said portion, a flange on said sleeve at the end thereof opposite the end retained in said plug



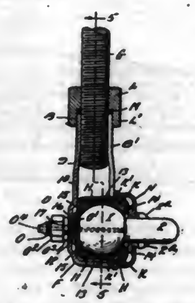
structure, a resilient cap member disposed around said wire and engaging said flange to retain said wire in position and to prevent passage of moisture into said enlarged portion and said bore.

1,814,998. REVOLVING CARPET ROLL SUPPORT. HENRY H. YOCUM, Shamokin, Pa. Filed Sept. 19, 1930. Serial No. 483,096. 1 Claim. (Cl. 211—185.)



Revolving display pedestal comprising upper and lower disks and a central connecting means secured to one of said disks and about which the other is freely revoluble, said disks being each relatively thick adjacent the center, affording elongated longitudinal support for the connecting means to ensure uprightness of said means, and said disks having confronting annular rabbets together forming an annular race-way having its upper and lower faces extending to the periphery of the pedestal and lying throughout, in planes perpendicular to the axis of the rotatable disk, casters mounted on one of said disks in said race-way and rolling on the other of said disks and a detachable dolly axially disposed on the upper face on the upper disk for centralizing the roll to be displayed upon said pedestal.

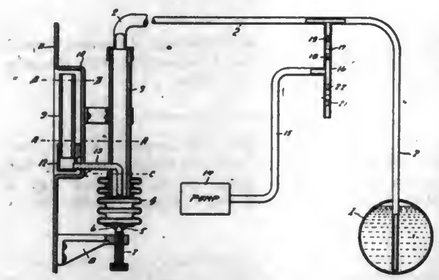
1,814,999. BALL AND SOCKET CONNECTION. DAVID BENJAMIN, Cleveland Heights, Ohio, assignor to the Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 12, 1928. Serial No. 312,043. 8 Claims. (Cl. 287—90.)



5. A socket mounting comprising a housing having an open front and a wall at the back thereof, a cup adapted

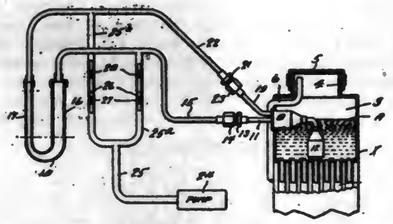
to be inserted into said housing through the open front wall thereof and having a rear wall with an opening therethrough registering with an opening in the rear wall of the housing, a bearing for a ball within the said cup, and a connection for supplying lubricant to the interior of said cup and to the bearing therewithin, the said connection extending through the openings in the rear walls of the cup and housing.

1,815,000. PRESSURE GAUGE. JOHN D. DURANT, Cleveland, Ohio, assignor to the Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 18, 1929. Serial No. 347,842. 2 Claims. (Cl. 73—31.)



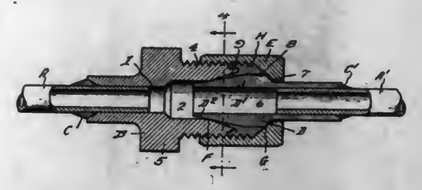
1. A liquid containing gauge comprising a vertically extending tube open at both its ends, an elongated bellows-like receptacle secured at its upper ends to the lower portion of said tube and extending therebelow, a gauge glass tube at one side of the first mentioned tube, a conduit of restricted bore in sealed communication at one end with the bottom of said gauge tube and sealed through one side of the first mentioned tube at a point above the end thereof and having a portion extending downwardly inside said tube, means engaging the lower end of said bellows-like receptacle for moving such end toward and from the first tube thereby to vary the effective length and capacity of said receptacle, and means supporting the various parts in proper relation to each other.

1,815,001. LIQUID LEVEL INDICATOR. EUGENE L. BEECHER, Cleveland, Ohio, assignor to the Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 5, 1929. Serial No. 352,630. 1 Claim. (Cl. 73—54.)



In a system for indicating variations of the level of the liquid in a receptacle and comprising an indicating device of the U-tube type containing an indicating liquid, a conduit connected at one end with one of the branches of said device and a conduit connected at one end to the other branch of the said device, a fitting for placing the opposite ends of the conduits in communication with the liquid in said receptacle, the said fitting comprising a cylindrivel, pointed, horizontally extending, air chamber sealed through a wall of said receptacle, said air chamber having a relatively small opening in the bottom thereof and one of said conduits being sealed through the wall thereof which projects outside said receptacle, the air chamber being otherwise air tight, the other of said conduits being sealed through the wall of said chamber outside said receptacle and thruogh the pointed portion and being bent downwardly and terminating in a flaring portion below the bottom of said air chamber.

1,815,002. CONNECTER FOR HYDROSTATIC CONDUITS. EUGENE L. BEECHER, Cleveland, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 1, 1929. Serial No. 382,672. 3 Claims. (Cl. 285—124.)



1. As a means for connecting a pair of conduit sections, a connecting member adapted to be secured to an end of one of said sections and having a bore therethrough, the rear of the bore being of outwardly flaring frusto-conical form, a connecting member adapted to be secured to an end of the other conduit section and having a bore therethrough, the exterior of the second member being formed into a head having at the rear thereof a forwardly and outwardly flaring frusto-conical surface and having at the front thereof an inwardly tapered frusto-conical surface, the front end of said head being of less external diameter than the rear of the frusto-conical portion of the bore of the first member, and a retaining nut mounted on the second member and having within the rear portion thereof an outwardly flaring frusto-conical surface of less angularity than the frusto-conical surface at the rear of said head, whereby the front end of the rear frusto-conical surface of the head will engage the frusto-conical surface of the nut in a line contact, the said nut being adapted to be threaded on the adjacent end of the first member, the first member being of harder material than the head of the second member and the head of the second member being of harder material than the retaining nut whereby circular indentations of small contact area will be formed where the front end of the head engages the front end of the frusto-conical bore of the first member and where the top of the frusto-conical surface at the rear of the head engages the frusto-conical surface in the retaining nut.

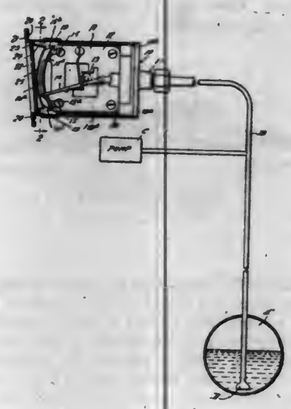
1,815,003. VANE FOR SHOCK ABSORBERS. EUGENE L. BEECHER, East Cleveland, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 22, 1930. Serial No. 422,520. 11 Claims. (Cl. 188—89.)



1. A vane for shock absorbers comprising in combination an inner reinforcing body having an opening there-

through for the reception of a shaft, and an outer body die cast about the inner body and also having an opening for the shaft aligned with an end of the opening in the reinforcing body.

1,815,004. INDICATOR. DAVID BENJAMIN, Cleveland Heights, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 21, 1930. Serial No. 469,619. 8 Claims. (Cl. 116—114.)



1. In a recording gauge, the combinat'on of a plate having a rib thereon, and a second plate superposed upon said first plate, said second plate having a color contrasting with that of said first plate and a slot through which said rib extends, said slot being of such size that substantially only said rib is visible therethrough.

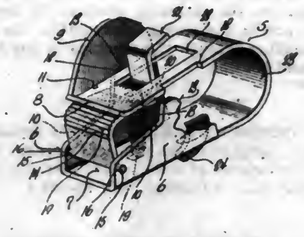
1,815,005. EXHAUST GAS MUFFLER. FRANCIS F. HAMILTON and HAROLD E. VAN VOORHEES, Indianapolis, Ind. Filed Dec. 5, 1928. Serial No. 323,831. 8 Claims. (Cl. 137—160.)



1. In a gas muffler, means for obtaining flows of gas of varying lengths comprising a tube open at one end and closed at the other, and a pipe inserted longitudinally within the tube having a plurality of openings spaced apart along the length within the tube, said pipe being much smaller in diameter than the tube and being located eccentrically therein.

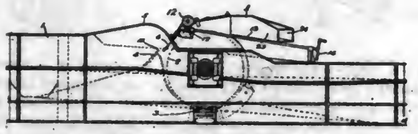
1,815,006. CLIP. BERNARD F. HORSTING and GEORGE C. LEPPLA, Chicago, Ill. Filed Jan. 13, 1928. Serial No. 246,492. 13 Claims. (Cl. 24—252.)

12. A device for stretching leather and the like, comprising a pair of spaced members, gripping means carried by the members for gripping the leather or the like, a stretching tension applied to the device increasing the effectiveness of the gripping means but tending to spread the members, means for tying the members together, means carried by said tying means and disposed adjacent the point at which maximum gripping of the leather takes place for receiving the strain produced by the tendency



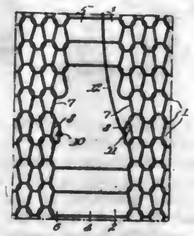
of the members to spread under tension to prevent spreading of the members, and means cooperable with the gripping means for releasing the same.

1,815,007. BEATER ENGINE. WILLIAM V. KNOLL, Dayton, Ohio, assignor to Midwest-Fulton Machine Co., Dayton, Ohio, a Corporation of Ohio. Filed Aug. 6, 1928. Serial No. 297,841. 11 Claims. (Cl. 92—24.)



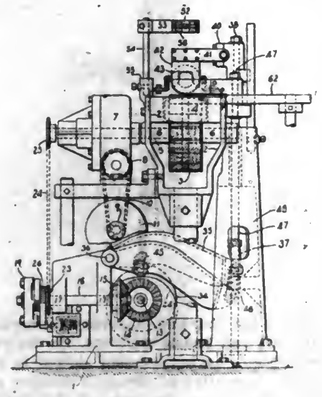
1. In a beater engine, or the like, the combination with a beater roll and back fall, an adjustable deflector plate located at the discharge side of the roll and in spaced relation above the backfall and permitting the flow of the pulp stream therebetween, but intercepting pulp material discharged by centrifugal influence in a trajectory above the level of the pump stream said deflector plate being adjustable toward and from the back fall in a direction substantially tangential to a circle concentric with the axis of the roll, and a receiving compartment located forwardly of the beater roll into which the lighter portions of pulp will be discharged by centrifugal influence from the roll, said compartment having an outlet discharging beyond the beater engine.

1,815,008. METHOD OF REPAIRING LOOPED FABRICS. CAROLINE KUDELA, Beaver Dam, Wis., assignor to Paramount Textile Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed June 9, 1930. Serial No. 460,023. 10 Claims. (Cl. 66—1.)



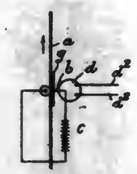
1. The method of repairing looped fabrics damaged by dropped loops resulting from broken threads in adjacent courses which includes the step of securing together the ends of said threads on the same side of said dropped loops.

1,815,009. SETTING-UP MECHANISM. EDWARD H. LORENZ, West Hartford, and JOHN E. SCHRODER, Hartford, Conn., assignors to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 18, 1927. Serial No. 234,197. 14 Claims. (Cl. 198—33.)



1. In setting-up mechanism, the combination of a conveyor to move objects in a predetermined path, a lifting device arranged to engage the forward ends of the objects and raise them into a vertical posture, and means for preventing the raised objects from backward toppling.

1,815,010. RECORDING AND REPRODUCING SOUND. ARCHIBALD FULTON POLLOCK and DAVID ALEXANDER POLLOCK, Jedburgh, Scotland, assignors of one-third to Edwin King Scheftel, Paris, France. Filed Nov. 1, 1929, Serial No. 403,952, and in Great Britain Nov. 9, 1928. 8 Claims. (Cl. 179—100.2.)



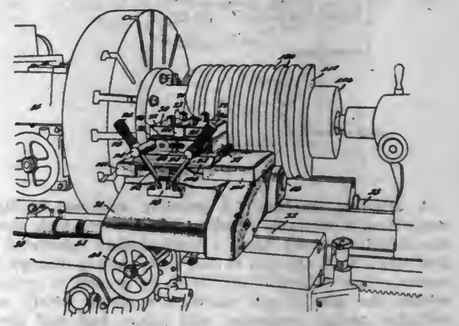
1. A method of producing a phonogram of magnetic material, consisting in producing an electric arc between an electrode and a surface travelling relatively to said electrode, displacing by the effects of sound said electrode relatively to said surface, and filling-in with magnetic material the phonogram engraved in said surface by said arc.

1,815,011. SEALING RING FOR CANS AND PAILS. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Oct. 15, 1930. Serial No. 488,981. 8 Claims. (Cl. 220—61.)



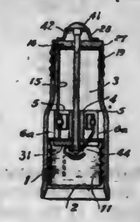
1. A sheet metal sealing ring of the character described, comprising a body, arcuate in cross section, and a skirt, said skirt being formed by prolonging downwardly the outer edge portion of said body, said skirt having therein definite pre-formed lines of deformation along which, upon the application thereto of inwardly directed bending force, it readily collapses to effect absorption of excess material thereof.

1,815,012. TOOL ATTACHMENT FOR LATHES. WILLIAM L. SCHELLENBACH, Wyoming, Ohio, assignor to The American Tool Works Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 19, 1929. Serial No. 371,993. 10 Claims. (Cl. 82—1.)



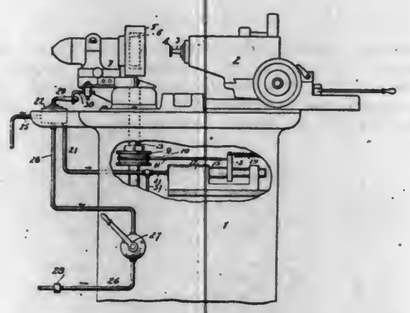
1. Apparatus for forming irregular grooves in a cylindrical surface, said apparatus comprising, a lathe structure adapted to rotate the cylindrical surface, a cross slide, a shaft mounted in said cross slide, said shaft rotatively synchronized with the cylindrical surface, two tool holders mounted upon said cross slide, cutting tools secured in said holders, two cams mounted upon said shaft, mechanism associating said cams and said tool holders so that the cams vary the position of the tool holders in relation to the center of rotation of the work radially, and a third cam mounted on said shaft, said latter cam associated with said tool holders so that the same contouring determines the spacing of the tool holders axially in relation to the center of rotation of the work.

1,815,013. ELECTRIC SOCKET. HAROLD E. SLADE, Glen Ridge, and JOHN GEHRING, Jersey City, N. J., assignors to Beaver Machine & Tool Co., Inc., Newark, N. J. Filed Apr. 25, 1928. Serial No. 272,776. 2 Claims. (Cl. 173—334.)



1. A current tap socket comprising a one piece casing having a lower cavity and an upper cavity; a receptacle shell located within said lower cavity; a plug shell mounted on the walls forming the upper cavity with the base of the said shell resting on the rim of said walls; a bridge within said lower cavity against which rests the base of the said receptacle shell; tap clips disposed on either side of said bridge; a flexible contact depending within the said receptacle shell; a central stud; said stud co-operating to clampingly engage said shells and depending contact with said casing.

1,815,014. GRINDER. JOHN W. SMITH, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed May 9, 1927. Serial No. 189,898. 1 Claim. (Cl. 51—97.)



A grinding machine for grinding spherical surfaces comprising a rotatable grinding wheel, a rotatable chuck mounted in a chuck head, a vertical shaft connected to said chuck head, the axis of said shaft passing through the center of the spherical surface to be ground, a cylinder within the base of said machine, a piston within said cylinder, means connecting said piston and said shaft, fluid pressure means for moving said piston, a valve for controlling said fluid pressure means, a pipe leading from said valve to said cylinder, a handle for operating said valve, said handle being positioned outside the frame of said machine so as to be accessible for hand operation, and an actuator carried by said chuck head and adapted to move said handle so that said chuck will be automatically oscillated.

1,815,015. SEAL. ALLEN P. STILLMAN, Brooklyn, N. Y., assignor to Ancira Lock & Seal Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1927. Serial No. 178,637. 8 Claims. (Cl. 229—78.)



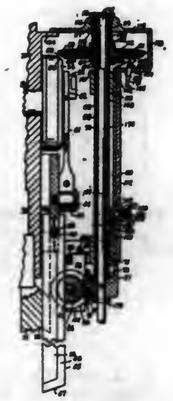
1. A seal of the character described comprising interengageable male and female members, the male member having a tongue insertable in the female member with a retaining hook thereon, the female member comprising a sheet metal blank having a central body portion, an end portion folded back upon the central body portion and formed to provide a slot adjacent one edge of the body portion and at its free end a central retaining catch engageable with the hook of the male member and on either side a lateral confining wall, a second end portion also folded back upon the central body portion and over-lying the first mentioned end portion, and side portions cooperating with the central body portion and both end portions to completely enclose the tongue and retaining catch to prevent access to disengage the catch and hook.

1,815,016. SEAL. FREDERICK G. STREET, East Orange, N. J., assignor to Ancira Lock and Seal Corporation, New York, N. Y., a Corporation of New York. Filed June 22, 1926. Serial No. 117,680. 11 Claims. (Cl. 229—78.)



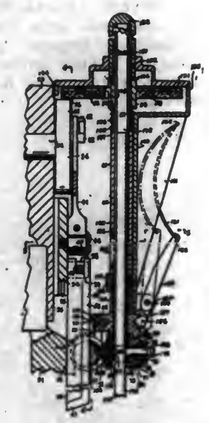
1. A seal of the character described comprising interengageable male and female members, the female member comprising a blank having one end slotted to provide an opening for the insertion of the male member and folded inwardly and back upon the body of the blank to form a retaining element and its other end folded inwardly and back upon the body of the blank to enclose said retaining element and having its sides folded inwardly and cooperating with the said other end to completely enclose the said retaining element.

1,815,017. CLOTH CUTTING MACHINE. ALBERT G. WAGNER, Covington, Ky., assignor to The Wolf Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 17, 1928. Serial No. 278,359. 33 Claims. (Cl. 164—75.)



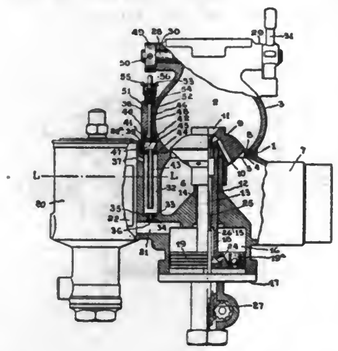
1. In a cloth cutting machine, the combination with a reciprocating knife having a cutting edge and a bevel-face at said cutting edge, and means automatically reciprocating said knife, of a rotary grinder for said knife, means rotating said grinder independent of contact with said knife, said rotary grinder having an axis of rotation extending at substantially right angles to the plane of said knife and provided with an end grinding face, means mounting said grinder with relation to said bevel-face, and resilient means for said grinder normally moving said grinder with relation to said bevel-face.

1,815,018. CLOTH CUTTING MACHINE. ALBERT G. WAGNER, Cincinnati, Ohio, assignor to The Wolf Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 8, 1929. Serial No. 345,514. 20 Claims. (Cl. 164—75.)



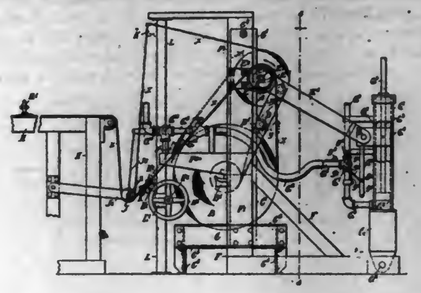
1. In a cloth cutting machine of the type having a reciprocating knife, the combination with the frame thereof, of rotary knife grinding means, means for rotating the latter comprising a telescoping shaft substantially parallel with the path of reciprocation of the knife, a drive-wheel for said telescoping shaft, a complemental drive-wheel for the latter, means normally separating said drive-wheels, and manual means for interengaging said drive-wheels, said last-named means including a manually movable part in line with said telescoping shaft and extending above said frame.

1,815,019. CARBURETOR. WALTER H. WEBER, Detroit, Mich., assignor to Detroit Lubricator Company, Detroit, Mich., a Corporation of Michigan. Filed June 2, 1927. Serial No. 195,985. 9 Claims. (Cl. 261—41.)



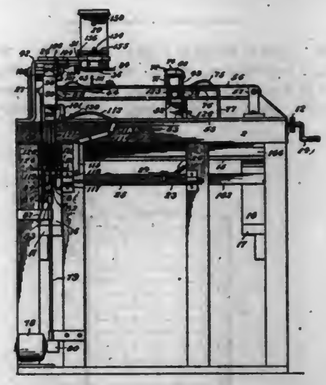
1. In a carburetor of the character described, a casing having a mixing chamber, main air and fuel inlets to said mixing chamber, a mixture outlet from said mixing chamber, said casing having a power well, a valve chamber for said power well, a conduit having one end opening adjacent the bottom of said power well and at its other end opening into said valve chamber, a port connecting said valve chamber and said mixing chamber, said power well having a fuel inlet and an air inlet, a valve in said valve chamber to close said port, said valve having a stem reciprocable through said casing, means to normally maintain said valve in closed position, a shaft journaled in said casing at said outlet and projecting beyond said casing, said shaft having its longitudinal axis in a plane through the longitudinal axis of said valve stem, a throttle in said outlet and fixed on said shaft, and a cam fixed on said shaft and adapted to engage directly said valve stem to open said valve.

1,815,020. METHOD OF AND APPARATUS FOR SEPARATING SHEET MATERIALS. HARRY S. ALEXANDER and FRED B. PFEIFFER, Akron, and JOHN W. WHITE, Barberton, Ohio, assignors to Seiberling Rubber Company, a Corporation of Delaware. Filed Aug. 17, 1928. Serial No. 300,214. 25 Claims. (Cl. 242—55.)



1. In a machine for separating joined sheet materials, the combination of means for feeding the materials longitudinally, and means disposed in the path of the material for causing a divergence of the respective sheets, said feeding means operating directly on the sheets to jerk them apart.

1,815,021. POWER SILK SCREEN PROCESS PRINTER AND COATER. LOUIS BLAND, Rochester, N. Y. Filed May 31, 1930. Serial No. 458,632. 22 Claims. (Cl. 101—123.)

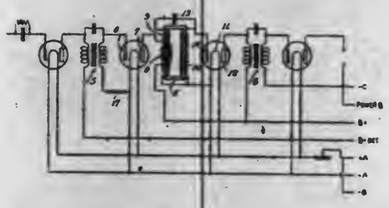


1. An apparatus for the purpose set forth comprising a printing frame, said printing frame having a screen bottom, a squeegee device movable from end to end of the printing frame in contact with the screen bottom thereof, a tank supported above the plane of travel of the squeegee device, means for automatically reversing the travel of the squeegee device, and means actuated by said squeegee device to discharge coloring matter from the tank into the printing frame as said device nears one limit of its travel.

1,815,022. HYDROCARBON OIL AND PROCESS FOR MANUFACTURING THE SAME. GARLAND H. B. DAVIS, Baton Rouge, La., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 3, 1930. Serial No. 449,693. 14 Claims. (Cl. 87—9.)

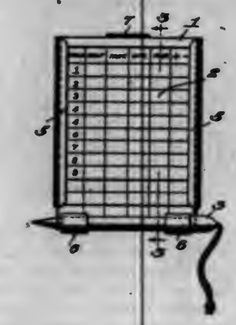
1. An improved lubricating oil comprising a blend of a viscous hydrocarbon fraction containing a solid waxy constituent in proportion sufficient to give a relatively high pour point and a synthetic hydrocarbon oil formed by the condensation of a waxy hydrocarbon material with an aromatic hydrocarbon.

1,815,023. AMPLIFIER COUPLING. HAROLD P. DONLE, Meriden, Conn., assignor, by mesne assignments, to Radio Inventions, Inc., a Corporation of New York. Filed Feb. 19, 1927. Serial No. 169,563. 3 Claims. (Cl. 179—171.)



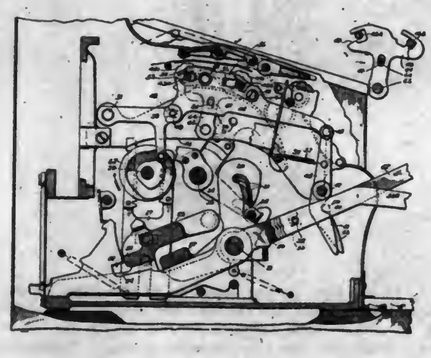
3. A vacuum tube coupling device comprising a primary winding for the energy input of the device, two secondary windings electromagnetically coupled with substantially different degrees of coupling to the primary winding, a conductor making connection to one end of each secondary winding and constituting one terminal of the output circuit of the device, a condenser with one terminal connecting to the opposite end of the first secondary winding and a conductor making connection to the other terminal of the condenser and the other end of the second secondary winding and constituting the other terminal of the output circuit of the device.

1,815,024. GOLF SCORE CARD HOLDER. WILLIAM C. FOSTER, Providence, R. I., assignor to Theodore W. Foster & Bro. Co., Providence, R. I. Filed Dec. 4, 1930. Serial No. 499,911. 4 Claims. (Cl. 281—44.)



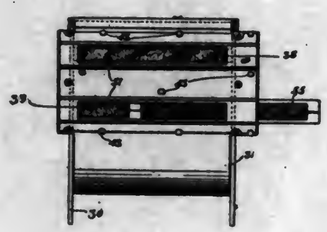
4. In a golf score card and pencil holder, a frame, means carried by said frame to guide and removably hold a card, and means adjacent to the bottom of the frame and adapted to retain a pencil and to exert a positive pressure through said pencil upon the card.

1,815,025. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Original application filed Oct. 20, 1925, Serial No. 63,695. Divided and this application filed June 14, 1927. Serial No. 198,842. 81 Claims. (Cl. 235—6.)



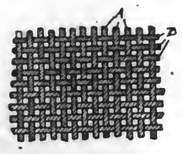
1. In a machine of the class described, a plurality of totalizers, actuators therefor, a main operating mechanism, a member operated by said main operating mechanism for selectively causing the engagement of said totalizers with the actuators, a key controlling said member to select a totalizer for engagement with the actuators, and one or more keys for controlling said member to prevent the engagement of any totalizer with the actuators.

1,815,026. RIBBON FRAME. CHARLES W. GREEN, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Jan. 24, 1929. Serial No. 334,747. 2 Claims. (Cl. 197—151.)



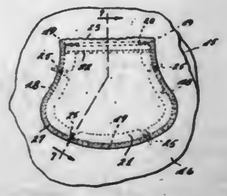
1. As a new article of manufacture, a reinforcing member of substantially I-shaped form when in blank construction and having a longitudinally disposed opening therein, ink carrying material disposed along said member, said reinforcing member provided with prongs, said member being adapted to be so bent that it grips the said ink carrying material about its periphery and assumes a rectangular shape exposing said ink carrying material on both sides thereof.

1,815,027. TEXTILE MATERIAL AND PROCESS OF MAKING. FRANK GILMAN MURCH, Methuen, Mass. Filed June 8, 1928. Serial No. 283,908. 5 Claims. (Cl. 139—426.)



1. A woven cloth of which both the warp and filling yarn are made of a plurality of worsted threads twisted together beyond the point of greatest strength and almost to the breaking point, such twist having been permanently set in the yarn by treating with steam and then drying.

1,815,028. POCKET AND METHOD OF FORMING THE SAME. FRED BURCH, Milford, Mich., assignor to Van Dresser Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 30, 1930. Serial No. 457,633. 13 Claims. (Cl. 150—0.5.)



3. In a pocket, a substantially rigid panel constituting the back wall of the pocket, a frame portion defining an edge of the pocket secured to the panel, and a cover for said frame forming the front wall of the pocket, said cover having an edge portion enclosing said frame portion.

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Patents Nos. 1,815,029 to 1,815,886

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Reissues	6—No.	18,130 to No.	18,135, inclusive.
Designs	55—No.	84,669 to No.	84,723, inclusive.
Patents	858—No.	1,815,029 to No.	1,815,886, inclusive.
Total	1,141		

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,656,006, Wm. H. Lieber, Hydraulic machine, decided June 8, 1931, claims 1, 2, 3, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, and 17.

Pat. 1,784,588, C. E. Lucke, Air heater, decided June 11, 1931, claims 4 and 13.

Pat. 1,761,142, Wm. C. McCoy, Piston, decided June 9, 1931, claims 1, 2, and 3.

Suggestion for the Use of Coupons

The execution of orders for printed copies of U. S. patents, trade-marks, etc., will be considerably expedited if coupons are used. Such coupons may be purchased at the Patent Office in lots of 20 at $2.00 and 100 at $10.00.

Coupon orders do not have to be accompanied by letters of transmittal. They require nothing but the filling in of the patent number, the name of the inventor, the date of issue, and the name and address of the party desiring the service.

Adverse Decisions in Interference

Where the claims of a patent are affected by adverse decision or concession of priority as the result of an interference, a notice as to the patented claims thus affected will be published in the OFFICIAL GAZETTE after final decision in the proceedings.

Applicant's Address

The requirement of Rule 33, that the post-office address of the applicant must be stated in the petition, means that the applicant must give the post-office address at which he customarily receives his mail.

The rule was made in order that the Office in necessary cases might correspond directly with the applicant and not through his attorney. The address of the attorney with instructions to send communications to the applicant in his care will not be accepted as a compliance with this rule.

Interference Defined

RULE 93. An interference is a proceeding instituted for the purpose of determining the question of priority of invention between two or more parties claiming substantially the same patentable invention. In order to ascertain whether any question of priority arises the Commissioner may call upon any junior applicant to state in writing the date when he conceived the invention under consideration. All statements filed in compliance with this rule will be returned to the parties filing them. In case the applicant makes no reply within the time specified, not less than ten days, the Commissioner will proceed upon the assumption that the said date is the date of the oath attached to the application. The fact that one of the parties has already obtained a patent will not prevent an interference, for, although the Commissioner has no power to cancel a patent, he may grant another patent for the same invention to a person who proves to be the prior inventor.

Disbarred Attorneys

It is hereby directed that any person who has been disbarred from practice before the Patent Office by order of the Commissioner will be denied access to the files of the Office, either in his own capacity or as the representative of any other person or firm.

Renewal of Forfeited Cases

A petition for the renewal of a forfeited application need not be signed by the inventor or assignee, but may be signed by the attorney.

A power of attorney in the original application authorizing an attorney to transact all business in the Patent Office in connection with the application construed to be of sufficient scope to include the signing of a petition for renewal and the subsequent prosecution of the application. (*Ex parte Agee*, 101 O. G., 1609.)

Condition of Applications Under Examination at Close of Business July 3, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 91,479; Trade-Mark Division, 1,166. Oldest new case, Nov. 3, 1930; oldest amended, Nov. 3, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	†Feb. 14	†Feb. 25	774
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	†Jan. 6	†Jan. 7	1,437
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Feb. 3	†Apr. 6	853
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Feb. 3	†Feb. 2	786
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	†Jan. 12	†Jan. 19	745
318	6. LEWERS, A. M., Carbon Chemistry	Dec. 10	Dec. 13	2,055
106	7. JARBOE, C. G., Optics; Photography	Dec. 8	Dec. 8	2,045
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 17	Dec. 17	1,611
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 6	†Jan. 6	1,394
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	†Feb. 7	†Feb. 20	1,004
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Feb. 13	†Feb. 24	755
380	12. HENRY, C. C., Machine Elements	Nov. 7	†Jan. 9	1,274
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 17	†Jan. 21	1,132
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Jan. 12	†Jan. 27	1,182
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 12	Dec. 15	2,510
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Mar. 20	†Apr. 1	769
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Dec. 5	Dec. 6	1,453
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 5	†Jan. 7	1,105
236	19. KENNEDY, A. R., Furnaces; Heating Systems: Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Nov. 12	Nov. 20	1,959
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 23	†Jan. 29	919
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	†Jan. 12	†Mar. 13	964
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Feb. 9	†Feb. 23	800
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Nov. 8	Nov. 8	1,049
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Jan. 7	†Jan. 13	915
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	†Jan. 5	†Jan. 7	1,536
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	†Jan. 12	†Jan. 21	951
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	†Jan. 14	†Jan. 19	1,125
225	28. BENSON, A. R., Internal-Combustion Engines	†Jan. 4	†Jan. 6	1,712
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	†Feb. 18	†Mar. 10	548
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Feb. 5	†Apr. 4	872
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Nov. 3	Nov. 3	2,601
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Feb. 5	†Feb. 5	1,297
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	†Jan. 7	†Jan. 7	2,403
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles: Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Mar. 6	†Mar. 11	787
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Apr. 13	†Apr. 11	937
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Nov. 17	Nov. 11	2,269
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	†Jan. 5	†Jan. 8	1,483
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Apr. 7	†Apr. 2	532
220	39. COWLES, A. W., Fluid-Pressure Regulators: Multiple Valves; Valves; Water Distribution	†Jan. 13	†Jan. 15	1,597
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Dec. 5	†Jan. 12	2,923
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	†Feb. 5	†Feb. 6	736
223*	42. CUTTING, H. O., Electric Signaling	†Jan. 6	†Jan. 5	1,384
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	†Jan. 12	†Jan. 13	1,636
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Nov. 5	Nov. 8	2,224
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Dec. 1	Dec. 3	2,087
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	†Jan. 16	†Jan. 26	1,118
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	†Jan. 9	†Jan. 8	2,118
212*	48. ROEPKE, C. B., Electricity, General Applications	†Jan. 4	†Jan. 4	1,127
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Feb. 13	†Feb. 8	1,333
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Dec. 2	Dec. 4	2,467
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Nov. 14	Nov. 14	2,166
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Feb. 2	†Feb. 2	1,507
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 28	†Mar. 7	795
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Nov. 12	Nov. 12	2,751
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery		†May 25	†May 18	178
	{Designs		†June 15	†June 26	212
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 4	Dec. 4	1,770
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	†Jan. 6	†Feb. 5	763
270*	58. DOWELL, E. F., Abrading; Typewriting	Dec. 4	Dec. 1	1,501
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	†Jan. 22	†Jan. 27	1,674
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Dec. 4	Dec. 4	1,937
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Nov. 6	Nov. 18	2,073
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Nov. 15	Nov. 15	2,555
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Nov. 18	Nov. 18	2,304
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND... {Trade-Marks		†June 6	†June 24	1,021
	{Labels and Prints		†June 8	†June 24	145

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

HARTOG *v.* LONG

No. 2,510. Decided February 25, 1931

INTERFERENCE—PRIORITY.

Evidence review and *Held* to establish that L., the senior party, was the first to conceive the invention set out in counts 2 and 3 of the issue of the interference and that priority was properly awarded to him.

APPEAL from the Patent Office. Affirmed.

Mr. Wm. L. Symons, Messrs. Bacon & Thomas, and *Messrs. Rippy & Kingsland* for Hartog.

Messrs. Swan & Frye, Mr. Wm. M. Swan, and *Mr. Geo. Rex Frye* for Long.

GRAHAM, *P. J.:*

On August 13, 1919, the appellee, Elmer C. Long, filed his application, Serial No. 317,273, for an improvement in pistons for internal-combustion engines. On February 16, 1920, the appellant, Stephen D. Hartog, filed a like application for patent, Serial No. 359,137. On July 7, 1923, an interference proceeding was instituted and declared between said copending applications and other applications.

As originally framed, this interference had but a single count herein known as count 1. Thereafter, said interference had consolidated with it an interference No. 49,581, which originally was set up with but a single count and which now constitutes count 2 of this interference. This interference was based on an application by Long, Serial No. 281,175, of March 7, 1919. By a subsequent action of the Patent Office, interference Nos. 49,581 and 49,585 had been consolidated, the latter having also but a single count, which constitutes count 3 of the present interference and which was also based upon the present application of Long of August 13, 1919. It will thus be seen that the three counts are taken from three separate interference proceedings, but which are between the same parties, and with closely-related subject matter.

On a hearing of this interference, after the taking of testimony, the Examiner of Interferences awarded priority on all counts to Long, the senior party. On appeal to the Board of Appeals, priority was awarded to the junior party Hartog as to count 1, while the decision of the Examiner as to counts 2 and 3 was affirmed. Hartog has appealed from that decision.

It is conceded by the parties that the sole and only question here is as to the priority of conception and disclosure of the parties of the invention, as set out in counts 2 and 3 of the interference. We had one branch of this litigation before us in *Jardine* v. *Hartog*, 17 C. C. P. A. (Patents) 764, 36 F.(2d) 606, 392 O. G. 738, where the decision of the Commissioner of Patents awarded priority to the party Hartog on counts which were as follows:

1. In a piston of the class described, a cup-like head comprising a pressure receiving end and a wall portion, a skirt circumferentially disconnected from the wall portion of the head and divided from end to end, and skirt carriers connecting said skirt to the pressure receiving end, said skirt carrier being disconnected from the wall portion of the head and susceptible of being slightly flexed radially.

2. A piston comprising a head, a skirt having resilient sections separated from said head by a slit extending continuously around the piston, and means for yieldingly connecting said skirt sections with said head.

The record made by Hartog, in that interference, is identical with the record filed in this interference. Although the counts therein are confined to the device which is the subject matter of count 3 of this interference, there is no evidence in that record which leads to any different conclusion of facts here on either counts 2 or 3. In the case cited, we held that Hartog conceived and disclosed the invention to others—

as early as December 1918; that neither party had reduced the invention to practice prior to the filing of their respective applications;

Inasmuch as no other or different record is here presented, we are not justified in coming to any other conclusion as to Hartog's conception or disclosure than as above stated.

We observe that the piston described in count 2 is distinctly different in formation from that described in count 3, in this respect, mainly, that the piston set out in said count 3 has a head which is separated from the skirt portion of the piston by an annular slot cut entirely through the thickness of its peripheral wall, while the piston the subject of count 2, has slots extending only part of the way around said wall of the piston.

Both of the Patent Office tribunals found that Long had established conception and disclosure to others early in the year 1916 of the piston known as case D, and which piston was of the split-skirt type but without a circumferential slot completely separating the head from the skirt. Hartog questions this finding, and insists that the testimony offered in support of Long's claims in this respect is uncertain, unsatisfactory and uncorroborated. We have read this record, in view of these suggestions, with much care, and we are unable to agree with Hartog's contentions in this regard. Long, according to his testimony, not only conceived and disclosed this piston in the early part of 1916, but the evidence is quite satisfactory that during the same year, or at least in the early part of 1917, it was reduced to actual practice and used in automobiles.

Louis M. Stellmann, a witness whose testimony displays an intelligent grasp of the situation, and who was, at that time, chief engineer of the Franklin Manufacturing Co., testifies that, in the early part of the year 1916 he talked with Long, and that Long displayed to him and others a piston of the type in question and which, according to his testimony, may be read plainly upon the second count of the interference. The witness Cotter testified that

he made such a piston during this period. Long's testimony is further corroborated by the witness Royalty, and by other witnesses whose testimony appears in the record. No doubt is left in the reader's mind, from an inspection of this testimony, that Long had a complete conception, and made a complete disclosure, of this invention at that time.

As to the subject matter of count 3, that is, a piston having a head separated from the skirt by a circumferential slot, the testimony, in our opinion, is sufficient to establish a conception and complete disclosure by Long, in the summer of 1917.

It is suggested by counsel for Hartog, that in the record now before us there is no testimony by Long on this subject. However, the parties hereto have stipulated that the testimony taken and incorporated in interference No. 49,569, which, in turn, incorporated the record in interference No. 49,570, might be filed and considered in this case. It is stated by counsel for appellee that, by inadvertence, a deposition of the party Long had been omitted from this record, and reference is made to the record in interference No. 49,570 to supply the deficiencies in this respect. The failure to incorporate a copy of said record in the printed record in this case has occasioned the court some difficulty in the examination of the testimony in the case, and is regrettable. However, the stipulations are sufficient to include the omitted portion, and rather than to decide this controversy as to count 3 on a technical error in the printing of the record, we have concluded to, and have, examined the record in said companion interference.

The testimony is quite sufficient to show that Long conceived, disclosed and constructed a piston known as style F, and which was of the type covered by count 3 of the interference, in the summer of 1917. The witness Cotter fully corroborated this. Not only is this true, but it is apparent he installed such pistons in one or more Franklin automobiles during that year. The witness Royalty tells of discovering pistons of this type in a Franklin car upon which he was working in the summer of 1918, which pistons were undoubtedly, from the testimony, made by Long.

The weight of the testimony is plainly in support of the decision of the Board of Appeals as to both counts 2 and 3. The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE JOHNSON AND CHALMERS

No. 2,604. Decided February 25, 1931

1. PATENTABILITY—COMBINATION OF OLD ELEMENTS.
   A combination of old parts in order to be patentable must not only produce a new and useful result but must not be such as is obvious to the mechanic.
2. SAME—SHEET FEEDING APPARATUS.
   Certain claims for a sheet feeding apparatus *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

LENROOT, *J.*, concurring specially.

Mr. Otto R. Barnett and *Mr. Percival H. Truman* for Johnson and Chalmers.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

The subject matter of this appeal is for certain improvements in mechanism for feeding sheets, particularly metal sheets, to a lithographing press. Some nine claims were allowed in the Patent Office and four claims, which were broader in scope, were rejected by the Primary Examiner on the ground of lack of invention in view of three references: Cameron, 1,283,659, Nov. 5, 1918; Conran, 1,301,799, April 22, 1919; Kronquest, 1,395,232, Oct. 25, 1921.

The claims which were rejected are as follows:

14. In sheet feeding apparatus the combination of a support for a stack of sheets, a vertically reciprocating vacuum cup arranged above said support adapted to be exhausted when in contact with the sheet and to be open to the atmosphere when in elevated position, mechanism for raising the cup *and thereafter releasing the same*, and a *spring* which presses the cup *when released* into contact with the upper sheet of the stock.

15. In sheet feeding apparatus the combination of a support for a stack of sheets, a vertical reciprocating vacuum cup arranged above said support adapted to be exhausted when in contact with the sheet and to be open to the atmosphere when in elevated position, mechanism for raising the cup *and thereafter releasing the same*, a *spring* which presses the cup *when released* into contact with the upper sheet of the stack, and a horizontally reciprocating element adapted to engage the edge of the sheet on the cup when raised and give said sheet movement laterally away from the stack.

16. In sheet feeding apparatus the combination of a support for a stack of sheets, a vertically reciprocating *resilient* vacuum cup arranged above said support adapted to be exhausted when in contact with the sheet and to be open to the atmosphere when in elevated position, mechanism for raising the cup *and thereafter releasing* the same, and a *spring* which presses the cup *when released* into contact with the upper sheet of the stack.

17. In sheet feeding apparatus the combination of a support for a stack of sheets, a *plunger* vertically arranged above the support and provided with an *air port therethrough* and with a *resilient* vacuum cup at its lower end, means providing a *vacuum duct*, a rotating cam which raises the plunger putting said port in communication with the atmosphere, a *spring operative when the plunger is released* by said cam *for forcing the cup into contact with the stack* of sheets *and bringing said port into register with said vacuum duct*, and a horizontally reciprocating element adapted to engage the edge of the sheet on the cup when raised and give said sheet movement laterally away from the stack.

The italicized words are qoted from the claims as they appear in appellant's brief and are by him stated to be so italicized for the purpose of differentiating the claims from the cited patents.

The Board of Appeals, by a majority decision, affirmed the action of the Primary Examiner in rejecting the claims. One member of the Board of Appeals dissented from the decision of the majority.

The mechanisms of the reference Conran and applicant's disclosure are so complicated that no useful purpose would be served by describing the same in detail here. The structures of applicant's disclosure and of the references are, we think, sufficiently described in the decision of the majority of the board and in the dissenting opinion.

Appellant in this court states that—

> it is well settled that where the claimed invention is for a *combination* of parts, such combination is patentable if new *as a combination* even though *all* of the parts are separately old and *some* of them are found in combination. [Italics quoted.]

He furthermore states that—

> The question is, therefore, whether the Conran patent does or does not disclose the same general organization of parts claimed by appellant.

[1] The first statement may be all right as far as it goes, but it does not go far enough. It should also state that the combination of old parts must produce a new and useful result and must not be such as is obvious to the mechanic. As to the second quoted statement, the issue is more than "whether the Conran patent does or does not disclose the same general organization of parts claimed by appellant." A little different arrangement, on the part of applicant, of the various parts shown in Conran, with slightly different functions, would not of necessity result in patentable invention. The latest expression of the law on this question, to which our attention has been directed, is found in the decision of the Supreme Court of the United States in *Powers-Kennedy Contracting Corp. and Fleck v. Concrete Mixing and Conveying Co.*, decided December 15, 1930, 282 U. S. 175, 402 O. G. 517. In an opinion by Mr. Justice Roberts, the law on this subject is summed up in the following language.

> For these reasons we find that the patent is invalid. It consists of a combination of elements all of which were old in the art. Its application to the transportation of concrete did not involve invention. Neither the combination of old elements or devices accomplishing no more than an aggregate of old results (*Hailes v. Van Wormer*, 20 Wall. 353; *Office Specialty Co. v. Fenton*, 174 U. S. 492, 87 O. G. 118; *Grinnell v. Johnson*, 247 U. S. 426, 254 O. G. 225) nor the use of an old apparatus or appliance for a new purpose (*Roberts v. Ryer*, 91 U. S. 150) is invention.

[2] We conclude after a careful study of appellant's disclosure and the Conran structure that Conran not only does not have the same structure or the same combination of parts as is shown in applicant's device, but that it is probable that the Conran patent can not operate in the same manner and do the same desirable things that can be done by appellant's structure. The same is true as to the other references and they are less pertinent. Appellant has devised a mechanism consisting of a plunger and vacuum cup in combination with a spring which, when released, makes accurate pressure upon a stack of sheets without regard to their exact height. Applicant's device does not require that the pile of sheets be raised so that the top of the same will always be at exactly the same height, which, to our minds, to say the least, is curing a very weak place in Conran's structure. Furthermore, it seems probable that applicant's machine will satisfactorily work on a material which could not be satisfactorily handled by the Conran device.

It seems to us that there is, at least, a reasonable doubt as to whether appellant has invented anything which the disputed claims cover. In this view we are, we think, supported by the fact that one of three members of the board is very positive that the appealed claims cover features of appellant's structure which required invention to produce.

We are, therefore, of the opinion that under such circumstances, the claims should have been allowed and the decision of the Board of Appeals is reversed.

Reversed.

LENROOT, *J.*, concurring:

I concur in the conclusion of the majority of the court. The court has, I think, properly found patentability of the claims in issue, based upon the fact that, as stated in the opinion:

> • • • Appellant has devised a mechanism consisting of a plunger and vacuum cup in combination with a spring which, when released, makes accurate pressure upon a stack of sheets without regard to their exact height. • • •

The Solicitor of the Patent Office, both in his brief and upon oral argument, contended that the reference Conran secured the same result by gravity, that is, by the weight of the parts pressing the cup toward the sheets, that appellant secures with a spring, and that the weight in Conran is the mechanical equivalent of a spring.

In view of this argument, I think the tribunals of the Patent Office might conclude from the opinion of the majority that the court does not agree with the contention that pressure produced by weight is the mechanical equivalent of a spring. I think it is, and if the reference Conran showed that the suction cup, through the action of gravity, pressed upon the upper sheet of the stack of sheets regardless of the exact height of the stack, then I should have been of the opinion that the reference fully anticipated appellant's disclosure and that the claims were not allowable. I am of the opinion, however, that the Conran reference clearly shows that the cup can only descend to a predetermined point, and that if the stack of sheets is lower than such point the cup will not come into contact with it. Conran provides certain adjustment blocks which prevent the cup from being lowered below a fixed point. It is for that reason that the argument of the Patent Office that weight is the mechanical equivalent of a spring has no application here, for weight in Conran will not accomplish, for the reason stated, what is accomplished by appellant's device.

I think the majority opinion should have clearly set forth this fact so as to make it clear that the court was not deciding that pressure produced by weight was not the mechanical equivalent of a spring where the weight would accomplish the same result as that secured by a spring. Had the majority opinion made this clear, I should have joined in the opinion as written.

U. S. Court of Customs and Patent Appeals

HARTOG *v.* LONG AND GULICK

No. 2,608. Decided February 25, 1931

1. INTERFERENCE—CONSTRUCTION OF THE ISSUE.
   "Counts of an issue of an interference are to be interpreted as broadly as the language will reasonably permit. But express limitations in the counts can not be ignored. Nor can details of structure be read into a count from a consideration of the disclosure when the language used in the count, if given its broadest meaning, does not reasonably embrace the subject matter."
2. SAME—PRIORITY—RIGHT TO MAKE THE CLAIMS.
   Record reviewed and *Held* that G. can make the claim in issue and that priority was properly awarded to him.

APPEAL from the Patent Office. Affirmed.

Mr. Wm. L. Symons and *Messrs. Bacon & Thomas* for Hartog.

Mr. Wm. C. McCoy, Mr. Jas. A. Hoffman, and *Messrs. Evans & McCoy* for Gulick.

BLAND, *J.*:

This is an appeal in an interference case by Hartog from the decision of the Board of Appeals of the

Patent Office, awarding priority of invention in two counts of an interference to appellee Gulick. Appellee Long did not appeal in this case, and the issue is between Hartog and Gulick.

When the case was first presented to this court it involved two counts, 1 and 2, and Hartog, as to the first count, contended that Gulick had no right to make the claim and that he, Hartog, had no right to make the claim, and that the claim was not patentable. Upon this ground Hartog moved to dissolve the interference, which motion was overruled. Since, under the circumstances of this case, patentability is not to be considered by this court, appellant at the hearing dismissed his appeal as to count 1. The patentability of count 1 will no doubt receive due consideration in the Patent Office.

The only issue presented in this case, as it now stands, is whether or not Gulick had the right to make the claim.

Count 2 reads as follows:

2. A piston having a head with top and side walls in combination with a guide structure connected thereto and *comprising diametrically opposite cylinder-engaging parts* formed with air spaces between their upper edges and the bottom edge of the side wall of the head, wrist pin bosses between the cylinder-engaging parts, and *means joining said bosses and cylinder-engaging parts together, the said joining means being resiliently yieldable* and arranged not to engage the cylinder. [Italics appellant's.]

The subject matter of the invention here in issue relates to pistons for internal combustion engines. Each of the parties sought to produce a piston that could be fitted to the engine cylinder with a minimum of clearance and that could be operated without binding when the same would expand from heat. Both structures, therefore, were provided with a piston skirt that would be flexible and would on account of the flexibility yield to pressure occasioned by expansion. The desired flexibility or resiliency of the skirt of the piston in both structures is obtained by separating the skirt portion of the piston from the head of the same and by slitting the skirt portion longitudinally with its axis. The skirt portion is connected to the head portion by webs placed inside the hollow portion of the piston and projecting downwardly from the head. Wrist pin bosses are connected to the skirt by the webs. Without the aid of a drawing a detailed description of the structure of the two pistons involved would not be helpful and no attempt to describe the same in detail will be made here except as to the particular portions of the structures directly involved in this controversy.

It is first contended by Hartog that Gulick's guide structure does not meet the term "comprising diametrically opposite cylinder engaging parts." In this we think appellant is in error since the combination in Gulick certainly has cylinder engaging parts which are diametrically opposite to each other—that is to say, there are parts of the skirt of the piston which engage the cylinder and which are opposite each other. Hartog argues that since Gulick has but one slit, there is, therefore, but one cylinder engaging *part* in Gulick's disclosure. This part of the count must be read in connection with the last part of the count in order to understand what the count really means. These "diametrically opposite cylinder engaging parts" joined by the bosses, which joining makes the same "resiliently yieldable," may be said to be the chief part of both structures. Unless the parts of the piston which engage the cylinder are made to yield in *opposite* directions the very purpose of the invention would fail and since we are to hereinafter hold that both disclosures have the "resiliently yieldable" feature, we think appellant's first contention cannot be sustained.

The main contention of appellant, and the chief subject matter in controversy in this long and hotly contested interference, is that Gulick's structure does not contain in its means for joining the cylinder engaging parts a *resilient yieldability*. On this question the tribunals of the Patent Office concur in holding that Gulick's disclosure does show such resilient yieldability and that he can make the claim.

This part of the issue in this case was before the Patent Office tribunals in an interference case between Gulick and Long. Long contended that Gulick's construction was rigid and could not operate to permit free expansion and contraction of the skirt portion. The Law Examiner held that—

the flanges or ribs 17 and 18 must allow such expansion and it is not material for the present purpose whether they move about one end or are slightly flexed laterally * * *.

Upon appeal to the Examiners in Chief they said:

If the webs 17, 18 were so rigid that they would not yield laterally, the slot would have no function.

Upon appeal to the Commissioner, he said:

The material of which both types of pistons are made will readily yield to the small extent required to bring the piston skirt to the proper diameter * * *.

Then upon appeal to the Court of Appeals of the District of Columbia, Mr. Justice Van Orsdel, speaking for the court, said "We think it clear that the object of the split is to permit of this expansion" and that Gulick had the right to make the claim "beyond question." *Long* v. *Gulick*, 57 App. D. C. 98, 17 F.(2d) 686,360 O. G. 262. The claim there at issue, while somewhat different from the count at bar, called for a split skirt "to permit free expansion and contraction of the skirt portion."

That Hartog's piston skirt has more flexibility than Gulick's and that the elements responsible for such flexibility in Hartog differ materially from the elements responsible for it in Gulick can not be denied. Hartog in argument and brief contends that the meaning of the count should be construed in connection with his specifications since the count came from Hartog's application, and that when so construed the particular springy flexibility of the Hartog structure is what is meant by the count and that the less resilient and almost rigid structure of Gulick is not described by the terms of the count. It seems from this line of argument that Hartog seeks to read into the count things suggested by the specification but which are not embraced within the language of the count when given its ordinary meaning.

[1] The law on this question, we think, is pretty well settled. Counts of an issue of an interference are to be interpreted as broadly as the language will reasonably permit. *Stern* v. *Schroeder*, 17 C. C. P. A. (Patents) 690, 36 F.(2d) 518, 393 O. G. 4. But express limitations in the counts can not be ignored. *In re Bijur*, 17 C. C. P. A. (Patents) 1134, 40 F.(2d) 999, 398 O. G. 355. Nor can details of structure be read into a count from a consideration of the disclosure when the language used in the count, if given its broadest meaning, does not reasonably embrace the subject matter. *Podlesak and Podlesak* v. *McInnerney*, 123 O. G. 1989, 1906 C. D. 265.

[2] It seems clear to us that if the slot in the skirt of the Gulick piston takes care of expansion, it is by reason of the fact that the cylinder engaging portions of the skirt flex or yield, which yielding or flexing must necessarily result, at least in part, from the resiliency of the joining means.

We conclude that Gulick had the right to make the claim. That Gulick should be regarded as the prior inventor of the subject matter of the count, if he had the right to make the claim, has not been seriously denied in this court.

The decision of the Board of Appeals, awarding priority of the subject matter involved in this appeal to Gulick, is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

HARTOG *v.* LONG AND GULICK

No. 2,609. Decided February 25, 1931

PRIORITY—RIGHT TO MAKE THE CLAIMS.

Record reviewed and *Held* that G. is entitled to make the claim in issue, that he was not estopped by reason of a decision in a prior interference, and that priority was properly awarded to him.

APPEAL from the Patent Office. Affirmed.

Mr. Wm. L. Symons and *Messrs. Bacon & Thomas* for Hartog.

Mr. Wm. C. McCoy, *Mr. Jas. A. Hoffman*, and *Messrs. Evans & McCoy* for Gulick.

BLAND, *J.*:

This appeal is from a decision of the Board of Appeals in the Patent Office awarding priority of invention in a single count to Edward J. Gulick in which the appellant and Elmer C. Long were parties. From the decision of the Board Hartog appealed here and Long did not.

The count in issue, which was taken from the Hartog application, is as follows:

1. A piston comprising a head and body, *internal yielding ribs supporting the head and body*, and means on said ribs adapted to form engaging connection with operable parts for said piston. [Italics appellant's.]

The issue in this case involves the same invention and the same applications and substantially the same question as was involved in *Hartog* v. *Long and Gulick*, patent appeal No. 2,608, interference No. 49,569, decided concurrently herewith, 18 C. C. P. A. Patents ——, —— O. G. ——, and we follow the reasoning of that case in the decision of this one.

The invention relates to an automobile piston, the apron of which is made flexible or resilient in order that it may yield from the pressure occassioned by expansion due to heat. The details of the disclosures need not be repeated here.

This interference originally was between several different parties and progressed in the Patent Office concurrently with *Hartog* v. *Long and Gulick*, interference No. 49,569, supra.

There are but two questions presented: First, had Gulick the right to make the count? Second, is Gulick estopped from making the count of this interference by reason of the decision in *Hartog* v. *Pomeroy*, interference No. 45,351?

The first question is, as found by the Board, "the most important point in the whole series of interferences." In determining whether Gulick had the right to make the count the crux of the whole question is the yieldable feature of the ribs of the two disclosures. In the instant case we think Gulick's disclosure meets the requirement of the claim in the phrase "internal yielding ribs supporting the head and body" for the same reasons that we concluded that his disclosure met the requirements of the phrase "being resiliently yieldable" in the count of the interference No. 49,569, supra. We approve the finding of the Board of Appeals which is expressed in the following language:

As previously stated, we find nothing in Gulick's file in regard to the question of resiliency. It is perfectly clear, however, that when the piston skirt was split it was for the purpose of allowing it to yield when the heat caused the piston to expand. If the piston expands and the skirt does not we consider that the support for the skirt must necessarily be resilient and that this is an inherent quality of all pistons of this general nature. We therefore concur in the opinion of the Law Examiner as referred to in the opinion of the Examiner of Interferences that Gulick has a right to make the count.

The case of *Long* v. *Gulick*, 17 F.(2d) 686, 57 App. D. C. 98, 360 O. G. 262, decided by the Court of Appeals of the District of Columbia and referred to by this court in *Hartog* v. *Long and Gulick*, interference No. 49,569, supra, passed upon an issue almost identical with the issue presented here by the first question raised.

As to the second question presented we also agree with the finding of the Board which is expressed in the following language:

Reference has also been made in the brief to the interference of *Hartog* v. *Pomeroy*, No. 45,351, but for reasons discussed in connection with the other interferences to which our attention has been called, we hold that the ruling in that interference is not binding upon us in this appeal. Hartog raises the question of estoppel and refers to prior interferences in which he contends the same parties in interest were involved. We fail to find any proof to substantiate this contention.

Hartog suggests that Gulick can not make the claim for the reason that he is barred from doing so by reason of the doctrine of equitable estoppel, arising from the fact that there was a community of interest or ownership of the subject matter of the interference in *Hartog* v. *Pomeroy*, supra, and the subject matter of the interference in the instant case. We find nothing in the record to justify the conclusion that such a community of interest exists as is suggested by appellant.

The Board of Appeals properly awarded priority of invention in the subject matter of the count

involved in this interference to Gulick over Long and Hartog and affirmatively found that:

We have carefully considered the decision of the Examiner of Interferences on this point and concur in his decision in holding that the evidence offered did not show conclusively that Long had established a date of conception prior to Gulick's filing date.

The decision of the Board of Appeals, awarding priority of invention to Gulick, is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE ESCHHOLZ

No. 2,583. Decided February 3, 1931; modified on rehearing May 25, 1931

PATENTABILITY—OIL COOLING TANK FOR ELECTRICAL APPARATUS.

Certain claims for the combination of an oil cooling tank for electrical apparatus and means to deoxidize the space in the tank above the oil *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Mr. Wesley G. Carr, Mr. Franklin E. Hardy, and *Mr. J. Baily Brown* for Eschholz.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

A large number of claims of appellant, Eschholz, were appealed to this court from an adverse decision of the Board of Appeals of the Patent Office which was in affirmance of prior decision of the Examiner. In his brief, appellant withdrew his appeal as to certain of them. During the oral argument others were withdrawn, and, following the argument, counsel for appellant filed a statement in writing, addressed to this court, from which we quote the following:

This will confirm the oral statement made by counsel during the argument of the above noted case today to the effect that applicant relies upon claims 12, 20, 21 and 23 of this appeal.

The other claims are withdrawn because it is believed that the said above noted claims adequately cover the invention.

Since the claims are brief they are here set out in full:

12. The combination with a casing for electrical apparatus adapted to be immersed in insulating liquid, and a space above said liquid for inert gas, of a liquid seal for isolating said space from the atmosphere under predetermined conditions and for permitting communication therebetween under other conditions, and means for removing oxygen from such air as may enter the tank through the liquid seal.

20. In combination, a tank, an insulating oil contained in the tank, electrical apparatus contained in the tank immersed in said oil, an atmosphere above the oil within the tank, a deoxidizing agent in contact with the atmosphere for coacting with oxygen in said atmosphere to produce a hygroscopic oxide, thus producing an inert and substantially dry atmosphere within said tank.

21. In combination, a tank, an insulating oil contained in the tank, electrical apparatus contained in the tank immersed in said oil, a gaseous blanket above the oil comprising an atmosphere sealed within the tank, a deoxidizing agent in contact with said atmosphere for removing the oxygen therefrom, whereby the deterioration of the oil and the formation of an explosive mixture above the oil is prevented.

23. The combination with a casing partially filled with a liquid medium and containing an overlying gaseous medium, and an electrical device submerged in said liquid medium, of means comprising a de-oxidizing agent for removing oxygen from said gaseous medium.

The claimed invention relates to the "operation and protection of large electrical apparatus, such as transformers and circuit breakers".

Appellant discloses a transformer tank containing a body of insulating and cooling oil. The tank has a cover around the outside of which there is provided a circumferential liquid seal to permit "breathing" between the air space above the oil and the atmosphere outside of the transformer tank under certain described conditions. In the tank cover there is a manhole which also has a cover. To the latter cover is secured a receptacle which is designed to contain a deoxidizing agent, such as phosphorus, to remove the oxygen from such air as may be within the transformer casing, and, when converted to phosphorous pentoxide, to absorb such moisture as may be contained in the atmosphere.

The references cited are: Blanchard, 96,371, November 16, 1869; Wallace et al., 1,154,145, September 21, 1915; Green, 1,326,049, December 23, 1919; Hauser, 1,534,448, April 21, 1925.

The claims specifically held by the tribunals of the Patent Office to be anticipated solely by Blanchard are among those withdrawn. The Examiner rejected claim 12 "on Green and Wallace in connection with Hauser", while claims 20, 21 and 23 were "technically rejected as not supported by the disclosure", the Examiner in his statement saying:

These claims recite an electrical device as an element of the combination. No such device is shown in the drawing and the object of the invention is stated to be to provide a tank adapted to contain electrical apparatus. Although it may be permissible to amplify the disclosure to show electrical apparatus it is believed that this group of claims would then be rejectible on the references now in the case.

Of these latter the Board said:

The Examiner has objected to the reference to electrical devices in some of the claims whereas none is shown in the drawings. While this is not believed to be patentably important in view of the state of the art, still for the purpose of complying with the rules and thereby maintaining accuracy in practice the heading of claims * * * 20, 21 and 23 should be made like claim 4 or some diagrammatic showing added to the drawing, preferably the former.

With these eliminations, corrections, etc., made, the gist of the matter before us, as expressed in the quoted claims, remains, as stated by the Board:

This application discloses attachments for the oil filled casings for high tension switches and transformers for rendering the gas in the expansion space above the oil inert, by removing all oxygen and moisture therefrom. This is accomplished in this instance by providing means to hold a quantity of chemical such as phosphorus which has an affinity for oxygen and indirectly for moisture at ordinary temperatures.

The Board then stated the prior art disclosed this matter, saying:

In the patent to Green an atmosphere of dehydrated nitrogen is provided, which may fluctuate between the free space and a gas-holder. No natural atmosphere is allowed to enter.

Hauser shows a transformer in which natural atmosphere may enter during changes of temperature of the apparatus and means to absorb moisture from any air that enters.

Wallace and Blanchard show that as a chemical step the oxygen may be directly removed from air leaving pure nitrogen. In Wallace the moisture would also necessarily be removed from the air or other gas treated since he uses phosphorus as the reagent to combine with the oxygen the same as in applicant's apparatus and the phophorous pentoxide would absorb moisture.

We have very carefully examined appellant's claims. That he has wrought an improvement in this art may be admitted, but, like the tribunals in the Patent Office, we fail to see wherein patentable invention appears.

It is true, as appellant argues, that Green's disclosure for preventing "air and moisture from entering the tank by pumping dry inert gas into it." Whether this can be successfully done as Green proposes we do not know. The point appears to be that he teaches the desirability of a gas free from oxygen and moisture, and proposes to procure this condition by preventing the natural atmosphere from entering. But if he be unable to do this and air does enter, as appellant contemplates, then Hauser and Wallace appear fully to have taught what appellant in his combination discloses, dehydration and deoxidation with means for accomplishing both.

The combination which appellant has made seems to be simply a combination of known elements, or elements taken from the prior art, which does not produce the new and useful result requisite under the law to render it patentable. *In re Bayer*, 17 C. C. P. A. (Patents), 614, 35 F.(2d) 66, 390 O. G. 4. *In re Appleburg et al.*, 17 C. C. P. A. (Patents) 820, 37 F.(2d) 620, 394 O. G. 7.

The decision of the Board of Appeals is affirmed.

ON REHEARING

This case was heard by us January 7, 1931, on appeal from the decision of the Board of Appeals of the United States Patent Office, and, on February 2, 1931, our opinion (by the writer) was rendered, affirming the Board's decision which denied all the appealed claims. 18 C. C. P. A. (Patents) ——, 46 F.(2d) 704.

Thereupon, on February 17, 1931, appellant filed petition for rehearing, which led us to again make a study of the case. The petition being granted, the case was reargued and upon reconsidering it in the light of the petition and argument, taken together with the original record, we have concluded that our former decision should be modified. In that decision we quoted the four claims at issue, 12, 20, 21 and 23. It is, therefore, deemed sufficient to here quote claim 20:

20. In combination, a tank, an insulating oil contained in the tank, electrical apparatus contained in the tank immersed in said oil, an atmosphere above the oil within the tank, a deoxidising agent in contact with the atmosphere for coacting with oxygen in said atmosphere to produce a hygroscopic oxide, thus producing an inert and substantially dry atmosphere within said tank.

The decision of the Board, as quoted in our former opinion, points out that a patent to Green, 1,326,049, of December 23, 1919, provides an "atmosphere of *dehydrated nitrogen* * * *, which may fluctuate between the free space and a gas holder," but it was further said that, in Green, "no natural atmosphere is allowed to enter." (Italics ours.)

It was further stated that patent to Hauser, No. 1,534,448, April 21, 1925, "shows a transformer in which natural atmosphere may enter during changes of temperature of the apparatus and means to absorb *moisture* from any air that enters," while Blanchard, No. 96,871, November 16, 1869, and Wallace et al., No. 1,154,145, September 21, 1915, show "that as a chemical step the *oxygen* may be directly removed from air leaving pure nitrogen." (Italics ours.)

A question is raised as to the validity of the Hauser patent as a reference here, it having been co-pending with appellant's application. This is an interesting issue, but, in view of our conclusion, it is not necessary to pass upon it in this case.

The disclosures of those patents are as stated, but we feel that probably in measuring appellant's device the tribunals of the Patent Office, and we ourselves, failed to give the weight which should have been given to the fact that the particular problem which appellant sought to solve, and, apparently, did solve, by his combination, concerned *hot oil* in a closed tank and the matter of keeping *oxygen* therefrom and also eliminating moisture.

In claim 20 in particular appellant has as the last element mentioned:

* * * a deoxidising agent in contact with the atmosphere for coacting with oxygen in said atmosphere to produce a hygroscopic oxide, thus producing an inert and substantially dry atmosphere within said tank.

There is thus disclosed a single means for removing both oxygen and moisture which, as appellant states in his petition, is not suggested by the prior art.

In our former opinion we took occasion to say that appellant had, apparently, wrought an improvement in the art and upon careful reconsideration we have become convinced that he has created a combination which, as such, produces a new and useful result, and that its production involved invention. He is entitled under the well settled rule of law to have the benefit of any genuine doubt which may exist.

We think, however, that claims 12, 20 and 21 contain all that is requisite to protect his invention.

Our former decision is modified to the extent that we hold claims 12, 20 and 21 to be patentable. The decision of the Board of Appeals is reversed as to these and reaffirmed as to claim 23.

Modified.

U. S. Court of Customs and Patent Appeals

IN RE PONDELICEK

No. 2,597. Decided February 25, 1931

1. APPLICATION—REFUSAL TO ENTER CLAIMS—APPEAL.

The question whether claims should be entered after a final rejection is one resting primarily in the discretion of the Examiner and after that in the discretion of the Board of Appeals and in the absence of the showing of an abuse of discretion the matter will not be reviewed by the court.

2. SAME—MULTIPLICITY OF CLAIMS.

"There are authorities which might be invoked that would justify a refusal of consideration on the ground of unnecessary multiplicity of claims, but we hesitate to take so drastic a step at this time. * * * To the end that we may be able to give due and proper consideration to all cases, it is highly important that, in formulating the issues to be presented, those responsible for their formulation shall avoid unecessary duplications and uncalled for prolixity."

3. PATENTABILITY—MECHANICAL MOVEMENT.

Claims for a mechanical movement particularly adapted to imparting intermittent movement to the film of a motion-picture projector *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Paul Carpenter, *Mr. B. J. McCann*, *Mr. Henry H. Benjamin*, and *Mr. R. B. Stewart* for Pondelicek.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

Applicant has appealed to this court from a decision of the Board of Appeals of the Patent Office, affirming the holding of the Examiner denying patent on numerous claims alleged to cover "improvements in mechanical movement."

[1] In all 39 claims are before us. Of these a group of ten comprised in numbers 47 to 56, inclusive, were offered by way of amendment in substitution for the other claims, after the Examiner had rendered his final decision. This offer was apparently made under rule 68 of the Patent Office with a view of putting the case in better condition for appeal.

Of this proposed amendment the Examiner said:

The Examiner has carefully considered this amendment and in an interview with applicant's attorney pointed out that the claims thereof were not patentable. As the claims depart somewhat from claims heretofore presented, they have not been admitted under the provisions of rule 68, as putting the case in better condition for appeal, as their rejection might involve the citation of further art.

The board sustained this action of the Examiner upon the authority of *Ex parte Moore*, 1923 C. D. 13, and appellant assigns error upon this holding in his appeal to this court. No error seems to have been assigned as to the Examiner's action upon it in the appeal to the Board.

We think this was a matter which rested primarily in the discretion of the Examiner and, after that, in the discretion of the Board, and there is no showing in the record that there was any improper exercise of that discretion. As was said in the Moore case, supra:

It is desirable that all claims, so far as possible, which an appellant desires reviewed on appeal, should be first presented to the Primary Examiner. He is regarded as the Office expert in the particular art involved in a given instance. His opinion and judgment should be before an appellate tribunal when the latter reviews the Examiner's holding.

Ex parte Sears, 148 O. G. 279; 1909 D. C. 198, was cited. See also *In re Cowles*, 54 App. D. C. 280, 297 Fed. 539, where the court declared that the Commissioner's exercise of discretion would be disturbed only for very cogent reasons.

Appellant's substitution was not proposed until after final decision by the Examiner. The reasons given for the latter's refusal to admit it are valid ones. So this assignment of error is overruled and claims 47 to 56, inclusive, will not be further considered here.

Twenty-nine claims remain.

[2] We may here say that we are wholly at a loss to understand why it was deemed necessary to file such a large number of claims in this case. There are authorities which might be invoked that would justify a refusal of consideration on the ground of unnecessary multiplicity of claims but we hesitate to take so drastic a step at this time. We do venture to direct attention to the fact that this court has the duty of carefully studying and considering a large number of appeals, in the effort to determine the rights of many claimants. To the end that we may be able to give due and proper consideration to all cases, it is highly important that, in formulating the issues to be presented, those responsible for their formulation shall avoid unnecessary duplications and uncalled for prolixity.

The gist of applicant's claimed invention is stated in the brief filed in his behalf as follows:

This is an application for a patent on a mechanical movement, more particularly a mechanical movement suited to imparting intermittent movement to the film of a motion picture projector, and comprises a cam mechanism for converting continuous rotary motion into intermittent rotary motion.

The fundamental feature in the accomplishment of the result claimed appears to be a pair of relatively staggered cam elements radially disposed on the beveled portions of the peripheral cylindrical surface of a wheel, the cylindrical surface being intercepted between the cams by a depression extending diagonally across the peripheral face from one cam to the other cam. This depression accommodates the angular portions of a star wheel as it passes through a cyclic movement and aids in imparting the desired motion to the star wheel.

Claims Nos. 28, 30 and 44 are typical and are here quoted:

28. A mechanical movement comprising a constantly rotatable disc having a flat peripheral face with a hill and dale cam groove extending from one side in a generally spiral direction towards the other side terminating at said flat face on each side, in combination with an intermittently driven member having its axis at substantially right angles to the axis of the disc and having an angular head each peripheral face of which is laterally curbed for engagement with the respective sides of the cam groove, the intermediate face thereof being flat for cooperation with the flat face of said disc, the portions of the head at the juncture of adjacent flat sides entering the groove as the disc is rotated whereby to rotate the driven member at each revolution of the driving member at varying rates of acceleration an angular distance corresponding to the angular faces of said driven member.

30. In a device of the character described, in combination, relatively angularly disposed revoluble shafts, one of said shafts having a disc revoluble therewith, a polygonal enlargement on the other shaft, and means on said disc for intermittently imparting partial rotation to said enlargement.

44. In a device for transmitting intermittent curvilinear movement, in combination, a driven element, a rotatable driving element and a connection between the two which produces a motion of the driven element, which constantly increases in lineal speed at varying rates of acceleration.

The references to prior art are: Curtis, 157277, Dec. 1, 1874; Howe, 222909, Dec. 23, 1879; Richards, 815979, Mar. 27, 1906; Wright, 1194689, Aug. 15, 1916; Blake, 1241911, Oct. 2, 1917; Hucal, 1387054, Aug. 9, 1921.

The Examiner divided the claims into two groups and held the group comprising in numbers 9, 10, 21, 35 and 36 and 41 to 45, inclusive (typified in 44, supra), to be functional and rejected them upon this ground, as well as upon the prior art.

The board disagreed with the Examiner as to their being functional, but affirmed upon the ground that the claims—

are so broad as not to define appellant's invention and are therefore indefinite, as they give no conception of the structural nature of the means employed by appellant.

The other claims typified by numbers 28 and 30, supra, stand rejected by both Examiner and Board, upon the references.

Illustrative claim 30, supra, reads fully upon the Hucal patent, since the latter discloses "relatively angularly disposed revoluble shafts", that is two shafts at right angles. One of these shafts of Hucal, as it appears in his drawings, has upon it a "revoluble disk" and the other has a cam block which constitutes the "polygonal enlargement". In the revoluble disk is a cam groove which serves for "intermittently imparting partial rotation to said enlargement".

The structures of Howe, Richards and Wright show cam elements and grooves in arrangement designed to impart intermittent rotary motion.

But it is claimed that in appellant's device an accelerated motion is imparted to the film by the provision of the cam members which act on the follower block that is mounted on a shaft for driving the film, these—

cam members having their camming surfaces progressively curved so as to cause the block to rotate with varying degrees or rates of acceleration.

[3] Assuming this to be correct, it remains true that appellant does not disclose any method of designing a cam, nor any specifically formed new cam formation which will produce the desired result. It is left to the ingenuity of one who would use the device to work out the cam shape. This is virtually an admission that shaping the cam is obvious to one skilled in the art. Cams shaped very similarly to those of appellant are disclosed in the prior art cited, and it would seem that these obviously would produce varying rates of acceleration.

In its rejection of the first group of claims, above set forth, the Board said:

In this instance where appellant is claiming broadly a mechanical movement and not a combination with specific parts of some particular machine, it is believed he should be restricted in some manner to the particular type of movement.

With this we agree.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

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1,108,098, Roberts and Gibson, Basket for centrifugal machine, D. C. R. I., Doc. 349, *The Western States Machine Co.* v. *J. C. Ferguson.* Decree for injunction May 23, 1931.

1,125,476, G. Claude, System of illuminating by luminescent tubes, filed May 18, 1931, D. C. Oreg. (Portland), Doc. E 9203, *Claude Neon Electrical Products, Inc., et al.* v. *Higbee-Dunlap Neon, Inc., et al.* Doc. E 9204, *Claude Neon Electrical Products, Inc., et al.* v. *Oregon Neon Signs, Inc., et al.* Doc. E 9205, *Claude Neon Electrical Products, Inc., et al.* v. *Rann Sign Co., Inc., et al.* Doc. E 9206, *Claude Neon Electrical Products, Inc., et al.* v. *C. A. Canfield, et al. (Canfield-Lewis Co.)* Doc. E 9207, *Claude Neon Electrical Products, Inc., et al.* v. *Eugene Neon Sign Co., et al.* Doc. E 9208, *Claude Neon Electrical Products, Inc., et al.* v. *Dempster Mfg. Co., et al.* Doc. E 9209, *Claude Neon Electrical Products, Inc., et al.* v. *Nelson Bros., Inc., et al.*

1,146,988, M. Arendt, Depositing repair metal across an alternating current arc, filed May 21, 1931, D. C., N. D. Calif. (San Francisco), Doc. 2892–S, *F. C. Owen* v. *Steel Weld Equipment Corp. et al.*

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1,290,060, A. J. Boland, Enameling furnace, D. C., N. D. Ohio, W. Div., Doc. E 882, *A. J. Boland* v. *Surface Combustion Co.* Dismissed without prejudice May 20, 1931.

1,291,167, E. J. Rueb, Storage battery electrode and process of making same, filed May 19, 1931, D. C., W. D. Okla. (Oklahoma City), Doc. 1227, *A. F. Rueb et al.* v. *Harrison Smith Co.*

1,342,885, E. H. Armstrong, Method of receiving high frequency oscillations, D. C., N. D. Ohio, E. Div., Doc. 3237, *Radio Corp. of America et al* v. *The G. W. Walker Co.* Dismissed without prejudice May 19, 1931.

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. N. Y., Doc. E 50/22, *A. B. Dick Co.* v. *Alladin Dry Stencil Corp.* Decree for plaintiff May 20, 1931. Doc. E 50/55, *A. B. Dick Co.* v. *Wansco Paper Products Co., Inc.* Decree as above.

1,530,590, C. W. Beck, Steering wheel and method of forming same, D. C., N. D. Ohio, E. Div., Doc. E 3038, *The Beck-Frost Corp.* v. *Aetna Rubber Co.* Dismissed without prejudice May 23, 1931.

1,551,426, R. Pavella, Hoist, D. C., S. D. N. Y., Doc. E 54/369, *R. Payson* v. *Hydraulic Ash Hoist Co.* Decree for plaintiff May 20, 1931.

1,559,520, Fairbairn and Valdespino, Putting green and similar playing surface, D. C., S. D. N. Y., Doc. E 50/384, *Miniature Golf Courses of America, Inc., et al.* v. *H. Sparling.* Consent and order of discontinuance May 15, 1931. Doc. E 57/11, *Miniature Golf Courses of America, Inc., et al.* v. *Park Lexington Corp.* Decree as above.

1,598,395, L. C. Safir, Slipper display support, D. C., S. D. N. Y., Doc. E 40/380, *L. C. Safir et al.* v. *Royal Robes, Inc.* Decree for plaintiff Nov. 14, 1928.

1,612,762, F. M. Flynn, Detailing mechanism for candy coating machines, C. C. A., 8th Cir., Doc. 8943, *United Drug Co.* v. *Ireland Candy Co. et al.* Decree affirmed May 21, 1931.

1,690,776, F. R. Elston, Woven material, appeal filed Sept. 30, 1930, C. C. A., 3d Cir., Doc. 4499, *B. F. Miller* v. *M. Swartz & Sons.*

1,706,662, W. Guyot, Desk set, filed May 22, 1931, D. C., S. D. N. Y., Doc. E 60/62, *Pen Desk Set Co.* v. *Mable, Todd & Co.*

1,719,558, O. L. Mills, Electric arc furnace, D. C., S. D. Calif. (Los Angeles), Doc. E P–116–H, *Mills Alloy, Inc.* v. *National Tool & Metals, Inc., et al.* Dismissed for want of equity Apr. 17, 1931. Doc. E P–117–H, *Mills Alloys, Inc.*, v. *Mineral Conversion Co. et al.* Decree as above.

1,720,911, H. Marles, Steering gear for mechanically propelled vehicle, D. C., E. D. Mich., S. Div., Doc. 4436, *The Marles Steering Gear Co. of America, Inc., et al.* v. *General Motors Corp.* Dismissed May 16, 1931.

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1,734,627, J. E. Kalgren, Ironing board, filed May 25, 1931, D. C. Minn., 4th Div., Doc. 2023, *The J. R. Clark Co.* v. *H. V. Keller Mfg. Co. et al.*

1,789,901, F. Hotchner, Electrode, filed May 20, 1931, D. C. Wis. (Milwaukee), Doc. 3172, *Q. R. S. Neon, Inc., et al.* v. *Metal Products, Inc.*

Re. 16,292, C. E. Evans, Bundle binding and tying machine, D. C., N. D. Calif. (San Francisco), Doc. E 2401–S, *G. D. Parker et al.* v. *A. Fox et al.* Doc. E 2404, *G. D. Parker et al.* v. *Custom House Packing Corp. et al.* Doc. E 2405, *G. D. Parker et al.* v. *International Wood Products Co. et al.* Doc. E 2427, *G. D. Parker et al.* v. *C. H. Karran et al.* Doc. E 2604, *G. D. Parker et al.* v. *The Long Bell Lumber Co. et al.* Patent held not infringed, bill dismissed May 20, 1931, in each of above cases.

Re. 17,885, J. H. Janowitch, Shirt collar stiffener, filed May 15, 1931, D. C., S. D. N. Y., Doc. E 60/1, *Lakewood's Patents Corp.* v. *W. Nemeroff.* Doc. E 59/72, *Lakewood's Patents Corp.* v. *H. H. Newman et al.* Consent order of discontinuance May 18, 1931.

Des. 70,209, J. Berlinger, Wedding ring, D. C., S. D. N. Y., Doc. E 51/110, *J. Berlinger* v. *H. Davidson.* Doc. E 51/112, *J. Berlinger* v. *E. Pearlman.* Doc. E 51/270, *J. Berlinger* v. *M. Simson et al.* (*Pilgrim Wedding Ring Co.*). Dismissed May 26, 1931, in each of above cases.

Des. 76,612, A. Von Frankenberg, Lamp, D. C., S. D. N. Y., Doc. E 51/268, *Frankart, Inc.* v. *A. Beck & Co., Inc.* Consent decree for plaintiff (notice received May 27, 1931).

Des. 77,204, A. Von Frankenberg, Ash receiver, D. C., S. D. N. Y., Doc. E 51/31, *Frankart, Inc.*, v. *A. Beck & Co., Inc.* Consent decree for plaintiff (notice received May 27, 1931).

Des. 78,161, A. R. Kanne, Supporting pedestal for lamps, D. C., S. D. N. Y., Doc. E 50/146, *Kanne & Bessant, Inc.* v. *E. Laudell et al.* (*Art Metal Spinning Co.*). Consent decree for plaintiff May 18, 1931.

Disclaimers

1,626,431.—*John A. Seede*, Schenectady, N. Y. ELECTRIC FURNACE. Patent dated April 26, 1927. Disclaimer filed July 1, 1931, by the assignee, *General Electric Company.*

Hereby enters the following disclaimer to claims 4, 5 and 6 of the said Letters Patent, to wit:

The invention set forth in claim 4 except when the connections of one of the sets of windings defined in said claim are changed to give high, intermediate and low voltages, and except when the high and intermediate voltages are obtained by delta connections and the low voltage by means of a star connection.

The invention set forth in claim 5 except when portions of the primary windings defined in said claim are connected in delta to give a high voltage, larger amounts of the primary windings are connected in delta for an intermediate voltage and portions of the primary windings are connected in star for a low voltage.

The invention set forth in claim 6 except when portions of the primary windings defined in said claim are connected in delta to give a high voltage, the entire primary windings are connected in delta for an intermediate voltage and portions of the primary windings are connected in star for a low voltage.

1,693,926.—*Ronald Smith Horsfall* and *Leslie Gordon Lawrie*, Blackley, Manchester, England. PROTECTION OF ANIMAL FIBERS AGAINST THE EFFECTS OF ALKALINE OR ACID MEDIUMS. Patent dated December 4, 1928. Disclaimer filed July 1, 1931, by the assignee, *British Dyestuffs Corporation Limited.*

Therefore disclaims from the scope and meaning of the claims of said Letters Patent No. 1,693,926, any interpretation of the liquid media therein referred to other than such liquid media which without addition of a soluble condensation product of an urea with formaldehyde or without the addition of dimethylolurea would be of such a character that they would in some degree or manner deleteriously affect the animal fibers treated.

1,747,169.—*Henry Hovland*, Huntington, N. Y. CONNECTER-SWITCH CIRCUITS. Patent dated February 18, 1930. Disclaimer filed July 2, 1931, by the assignee, *Bell Telephone Laboratories, Incorporated.*

Hereby enters this disclaimer to the said claim of said Letters Patent which is in the following words to wit:

"4. In a telephone system, a calling line, a called line, a train of switches for extending a connection from said calling line to said called line, a line relay and first and second slow releasing relays controlled by said calling subscriber to govern the setting of the last switch of the train, said first slow relay being operable over a front contact of said line relay and said second slow relay being operable over a back contact of said line relay and a front contact of said first slow relay, a holding circuit extending from the last switch of the train to the preceding switches, a first ground connection for said holding circuit controlled by said first slow relay, a second ground connection for said holding circuit controlled over a back contact of said second slow relay, a resistance for insertion in series with said second slow relay to render it quicker to release, and circuit connections whereby when said calling subscriber restores his receiver before said called subscriber, said line relay releases followed in succession by the operation of said second slow relay to open said second ground connection, by the release of said first slow relay to open said first ground connection, thereby causing the release of preceding switches, and by the release of said second slow relay to again apply said second ground connection to thereby render said line switch unselectable."

1,761,076.—*George Wellington Hamilton*, Evanston, Ill. WOOD-POLE-PROTECTIVE MEANS. Patent dated June 3, 1930. Disclaimer filed June 30, 1931, by the assignee, *Locke Insulator Corporation.*

Hereby enters this disclaimer to that part of the claim in said specification, which is in the following words, to wit:

"3. In a transmission line system a supporting structure having a wooden cross arm, a line conductor and means for supporting the same including a metallic bolt carried by said cross arm, an arcing horn detachably connected to said bolt and a second arcing horn supported on said structure and connected to ground and in spaced relation to said first named horn, the adjacent portions of said horns being spaced apart so that the insulating value of the air gap separating the same is less than that of said supporting structure.

"4. In a supporting structure for transmission lines including a wooden cross arm, a string of insulators mounted thereon by means of a metallic connector and arcing horn adapted to be detachably connected to one end of said metallic connector, a brace for said cross arm connected to ground and another arcing horn electrically connected to said brace and spaced from said first named horn."

1,811,923.—*Gerhard Flintermann*, West Orange, N. J. FLEXIBLE SUPPORT. Patent dated June 30, 1931. Disclaimer filed July 2, 1931, by the patentee.

Hereby does disclaim from the scope of claims 1, 2, 3, and 6, all flexible supports in which the resilient member is placed under compression by forces other than the weight of the load carried thereby.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 21, 1931

[VOL. 408. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 301,661. LEICHTMETALLVERWERTUNGSGESELLSCHAFT M. B. H., Trier, Germany. Filed May 29, 1930.

Albugen

For Mineral Raw Products Used in the Manufacture of Paints, Enamels, Ceramic Tile, and Varnishes, More Particularly, the Mica Silicates Such as Lepidolite and Other Minerals of the Mica Classification and Having Similar Characteristics, Including Lepidocrocite, Lepidomelane, and Lepidomorphite, Whether Isolated or in Compound Form.

Claims use since Sept. 1, 1928.

CLASS 2

Receptacles

Ser. No. 311,128. COHN & ROSENBERGER, INC., New York, N. Y. Filed Feb. 17, 1931.

FASHION SQUARE

For Display Trays Made of Wood.
Claims use since Feb. 3, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 309,827. THE SPRINGFIELD LEATHER PRODUCTS COMPANY, Springfield, Ohio. Filed Jan. 10, 1931.

CASTLE

For Billfolds.
Claims use since Feb. 1, 1930.

Ser. No. 314,488. DE LUXE SADDLERY CO., Baltimore, Md. Filed May 13, 1931.



De Luxe Saddlery Co.

For Saddles, Bridles, Telescope Bags, Sample Cases, Toilet Cases, Hand Bags, Knapsacks, Leather Portfolios, Purses, Money Bags and Belts, Music Rolls, Pocket Books, Satchels, Bits, Stirrups, Spurs, Halters, Rubber Horse Covers, Horseshoes, Snap Hooks, Curry Combs, and Harness Stitching Straps, Brief Cases, Harness Buckles, Visiting Cardcases; Horse, Stable, and Dog Blankets; Metal and Leather Baggage Straps and Checks, Back Bands for Horses, Auto Trunks, Belly Bands, Bill Folds, Calks, Horse Boots, Collar Tags and Harness Slide Loops, Breast and Breeching Straps, Check Reins, Harness Pads, Neck Yokes, Saddle Bags, Harness Sweat Pads, Harness Traces, Suitcases, Portmanteaus, Trunks, Wallets, and Valises.

Claims use since Mar. 1, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

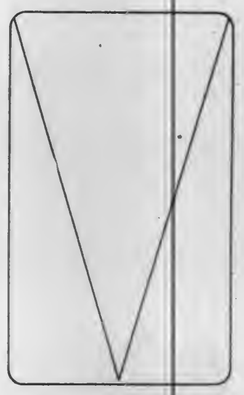
Ser. No. 305,289. STANCO INCORPORATED, New York, N. Y. Filed Sept. 3, 1930.

TRIM

For Liquid Preparation for Cleaning and Polishing Glass, Marble, and Metal and Other Polished Surfaces, Including Painted, Lacquered, and Enameled Surfaces.

Claims use since Aug. 1, 1930.

Ser. No. 305,291. STANCO INCORPORATED, New York, N. Y. Filed Sept. 3, 1930.



For Liquid Preparation for Cleaning and Polishing Glass, Marble, and Metal and Other Polished Surfaces, Including Painted, Lacquered, and Enameled Surfaces.
Claims use since Aug. 1, 1930.

Ser. No. 305,293. STANCO INCORPORATED, New York, N. Y. Filed Sept. 3, 1930.



The drawing is lined to indicate the colors red and green.
For Liquid Preparation for Cleaning and Polishing Glass, Marble, and Metal and Other Polished Surfaces, Including Painted, Lacquered, and Enameled Surfaces.
Claims use since Aug. 1, 1930.

Ser. No. 312,921. FRANK J. LE DOYEN CO., Baltimore, Md. Filed Apr. 3, 1931.

WONDER WHITE

The word "White" is disclaimed apart from the mark as shown on the drawing.
For Dressing and Polish for White Kid Shoes, Belts, Gloves, Pocket Books, Hand Bags, and All Finished White Leathers.
Claims use since Jan. 1, 1921.

Ser. No. 312,928. JOHN W. SAUER, doing business as Secure-Lab, San Francisco, Calif. Filed Apr. 3, 1931.

SE KŪR

For a Cleaning Compound and a Metal Polish Preparation in the Nature of a Soap for Cleaning and Polishing Painted Surfaces, Tiling, Automobile Bodies, Furniture, Hardwood Floors, Linoleum, and Silverware.
Claims use since Mar. 15, 1930.

Ser. No. 313,057. D. W. CALL, doing business as Soonite Company, San Francisco, Calif. Filed Apr. 29, 1931.



For Powdered Cleansing Preparation for General Household Use.
Claims use since Apr. 25, 1931.

Ser. No. 314,724. R. R. STREET & CO., INC., Chicago, Ill. Filed May 18, 1931.

Mirasol

For Liquid Dry Cleaning Soap.
Claims use since Mar. 30, 1931.

Ser. No. 314,964. QUIGLEY COMPANY, INC., New York, N. Y. Filed May 23, 1931.

ANNITE

For an Improved Cleaning Compound in the Nature of Soap Powder for General Cleaning Purposes for Which Soap Powder is Used.
Claims use since July 1, 1925.

Ser. No. 315,201. INDIANAPOLIS PAINT & COLOR CO., Indianapolis, Ind. Filed May 29, 1931.

NU-DA

For Paint Cleaners.
Claims use since Jan. 15, 1931.

Ser. No. 315,434. MICHAEL ARON, doing business as Met Cleaning Products Company, Bloomfield, N. J. Filed June 5, 1931.

Met

For Preparation for Cleaning Metal and Woodwork and for Removing Paint, Tar, Road Oil, and Grease.
Claims use since May 9, 1931.

CLASS 5

Adhesives

Ser. No. 315,771. WILLIAM H. GARRETT, doing business as Garrett Manufacturing Company, Houston, Tex. Filed June 12, 1931.

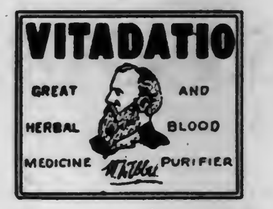


For Glue.
Claims use since May 9, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 301,358. S. A. PALMER LIMITED, Leeds, England. Filed May 27, 1930.



The essential features of the trade-mark are the word Vitadatio superimposed above a profile portrait of William Webber, deceased, underneath which appears a facsimile of his signature. On the left hand side of the portrait appears the words, "Great Herbal Medicine" and on the right hand side of the portrait appears the words "and Blood Purifier". No claim is made to these words "Great Herbal Medicine" and "and Blood Purifier".
For Herbal Medicine for Human Use.
Claims use since Jan. 6, 1915.

Ser. No. 310,031. ISIDOR TUCKER, Beacon, N. Y. Filed Jan. 16, 1931.



No claim is made to the exclusive use of the words "Guaranteed Pure," "Hair Restorer," "Trade Mark," "Before," "After." The pictures are fanciful.
For Hair Tonic.
Claims use since July 1, 1930.

Ser. No. 311,073. DR. RENTSCHLER & Co., Laupheim, Germany. Filed Feb. 14, 1931.

Melabon

For Medicinal Preparations for Treating Headaches, Rheumatism, Toothache, Arthritis, Gout, and Sciatica.
Claims use since Sept. 14, 1928.

Ser. No. 311,234. T. P. DOWNEY, Birmingham, Ala. Filed Feb. 19, 1931.

7 in 1 Healing Oil

No claim is made to "Healing Oil" apart from the mark as shown.

For Medicinal Preparation in Liquid Form for Both External and Internal Use in the Treatment of Rheumatism, Headache, Cramps, Sprains, Goiter, Bowel Troubles, Kidney Troubles, and Sores.

Claims use since February, 1929.

Ser. No. 311,580. WILLIAM C. WHITEHEAD, Hopson, Tenn. Filed Feb. 28, 1931.

SS & BB

For Snake Bite Medicines.
Claims use since Jan. 1, 1931.

Ser. No. 311,804. OWEN TRAVERS, Savannah, Ga. Filed Mar. 5, 1931.

DELDOC

For Embrocation for the Relief of Muscular Pain and Soreness.
Claims use since Jan. 25, 1931.

Ser. No. 313,110. T. C. FOX & SONS, Newfield, N. J. Filed Apr. 6, 1931.

FOX

PRODUCTS OF PROGRESS

The words "Products of Progress" are disclaimed apart from the mark as shown.

For Medicinal Poultry Preparations—Namely, Cod Liver Oil, Carbolineum.

Claims use since May, 1930.

Ser. No. 313,668. PEEK AND VELSOR, INC., New York, N. Y. Filed Apr. 22, 1931.



The representation of the figures being fanciful. No claim being made to the exclusive use of the words "Crude Botanical Drugs" apart from the mark as shown in the drawing.

For Botanical Drugs—Namely, Barks: Angostura, Barberry Root, Bayberry, Bittersweet, Blackberry Root, Black Haw Root, Black Haw Tree, Buckthorn (Cut and Sifted), Butternut, Canella, Cascara (Sagrada, Ground), Cascarilla (Quills), Cherry (Wild, Thin Green, Thin Nat. Ground, Heavy Ground), Red Chinchona (Chips, Powdered, Quills), Yellow Chinchona (Broken, Powdered), Cocillana, Condurango, Cotton Root, Cramp (Genuine), Dogwood (Jamaica), Elm (Powdered), Fringe Tree, Hemlock, Oak (Cut and Sifted), Pine (White, Ground), Pomegranate Tree, Poplar, Prickly Ash, Quebracho, Sassafras (Sifted, Cut and Sifted, Grinding and Ground), Soap (Cut and Sifted), Tonga, Waahoo (Root, Tree), White Ash, Willow (Black), Witch Hazel;—Berries: Hawthorn, Huckle, Juniper, Laurel, Palmetto (Saw, Ground), Poke, Prickly Ash, Raspberries, Sumac;—Flowers: Arnica, Borage, Calendula, Chamomile (Hungarian, Roman), Clover (Red), Elder, Hops, Insect Powder (Japanese, Coarse, Fine), Lavender (Select, Medium), Malava (Black, Blue), Orange, Poppy (Red), Rose (Red, Pale), Rosemary, Saffron (American), Tilia (no Leaves, with Leaves), Violet; Gums: Aloes (Cape Powdered, Curacao, Powdered, Socotrine Powdered), Arabic (Tears, Granulated, Powdered), Asafœtida (Powdered), Benzoin (Sumatra Powdered), Catechu (Powdered), Gamboge (Pipe, Powdered), Guaiac (Powdered), Guarana (Powdered), Karaya Powdered, Myrrh (Powdered), Olibanum (Siftings, Powdered), Tragacanth (Ribbons, Powdered);—Herbs and Leaves: Arbor Vitæ, Balmony, Belladonna (Powdered), Blessed Thistle, Boneset, Broom Tops, Buchu (Short, Ground), Buckbean, Bugleweed, Cannabis, Catnip, Celandine, Centuary (Foreign, Cut), Chestnut, Coltsfoot, Corn Silk, Damiana, Deer Tongue (Powdered), Digitalis, Ephedra Vulgaris, Eucalyptus, Euphorbia Pil., Eyebright, Gravel Plant, Grindelia Robusta, Henbane, Henna (Egyptian, Powdered Special Brown, Powdered Special Green), Horehound, Hyssop, Jaborandi, Johnswort, Laurel, Lettuce (Wild), Life Root, Liverwort, Lobelia (Powdered), Maiden Hair, Malva, Marjoram, Matico, Melissa, Mugwort, Mullein, Nettle, Pansy, Passion Flower, Patchouli, Peach, Pennyroyal, Peppermint, Pichi, Pipsissewa, Plantain, Poison Oak, Pulsatilla, Rosemary, Rue, Sage (Hand Picked), Savory, Scouring Rush, Skullcap (N. F., Western), Senna (Alex, Siftings, Cut and Sifted, Pods), Sideritus, Spearmint, Speedwell, Squaw Vine, Stramonium (Powdered), Sundew, Tansy, Tarragon, Thyme, Uva Ursi, Walnut (Black), Wintergreen, Witch Hazel, Woodruff, Wormwood, Yarrow, Yerba Santa;—Miscellaneous: Almond Meal, Areca Nuts (Powdered), Balm Gilead Buds, Bittersweet Twigs, Breast Tea (N. F.), Cactus in Alcohol, Calabar Beans, Cantharides (Chinese, Powdered, Russian, Powdered), Cassia Fistula, Colocynth Pulp (Powdered), Com'd Licorice Powd., Cudbear, Cuttle Bone Large (Straps), Cuttle Bone Small (Straps), Dragon's Blood Reeds, Ergot (Ground), Grains Paradise, Iceland Moss, Irish Moss (Bleach, Nat'l, Powdered), Kamala, Kola Nuts, Lemon Peel, Licorice Extract (Powdered), Lycopodium, Manna (L. F., S. F.), Nutgalls (Powdered), Nux Vomica (Powdered), Orange Peel (Bitter, Sweet), Poppy Heads, Quassia Chips, Red Pepper (Powdered), Red Saunders Chips, Sandalwood Chips (Powdered), Sea Wrack, Tarmarinds, White Pine Compound (N. F.);—Roots: Aconite, Aletris, Alkanet, Althea (Cut), Angelica (Domestic), Asparagus, Belladonna, Berberis Aquifolium (Ground), Beth, Black Indian Hemp, Blood (Powdered), Blue Flag, Bryony, Burdock, Calamus (Bleached, Natural, Ground), Canada Snake, Cohosh (Black, Blue, Ground), Colchicum, Colombo, Comfrey, Cranesbill, Culvers, Dandelion, Doggrass (Cut), Echinacea, Elecampane, Galangal, Gelsemium, Gentian (Powdered), Ginger (Jamaica, Ground), Golden Seal (Powdered), Helonias, Hydrangea, Ipecac (Powdered), Jalap (Powdered), Kava Kava, Lady Slipper, Licorice (Cuttings, Cut Spanish, Cut Russian, Powdered), Lily of Valley, Lovage, Mandrake, Muira Puama, Musk, Orris (Fingers, Florentine Powdered, Verona Powdered), Pareira Brava, Pink, Pleurisy, Poke, Queen of Meadow, Phatany (Ground), Rhubarb (Powdered), Sarsaparilla (American, Honduras, Mexican, Ground), Senega, Serpentaria, Skunk Cabbage, Spikenard (Ground), Squills (Sliced), Stillingia (Ground), Stone (Ground), Turkey Corn, Turnip (Wild), Turpeth, Twin Leaf, Valerian, White Pond Lily, Wild Indigo, Wild Yam, Yellow Dock;—Seeds: Anise (Spanish, Star), Caraway, Cardamom (Bleached, Decort, Ground), Celery (Ground), Colchicum (Ground), Fennel (Roumanian, French, German), Flaxseed (Ground), Flea (German, Indian), Fœnugreek (Powdered), Larkspur (Powdered), Lobelia, Mustard (Yellow, Powdered), Pumpkins, Psyllium, Quince (Handpicked, Large, Medium, Small, Cape, Sabadilla, Stavesacre, Strophanthus, Worm (American, Levant).

Claims use since Jan. 2, 1931.

Ser. No. 313,875. WAGNER BROS. FEED CORP., Brooklyn, N. Y. Filed Apr. 27, 1931.

WBFC

RAY-DEE-O

For Deodorizer, Disinfectant, Bird and Poultry Tonic, Skin Lotion and Salves for Poultry, Birds, and Livestock and Preparations for the Treatment of Diseases of Livestock, Birds, and Poultry.

Claims use since Mar. 22, 1930.

Ser. No. 314,049. FLORADERM LABORATORIES, Long Island City, N. Y. Filed May 1, 1931.

FLORADERM

For Face Creams, Face and Hand Lotions, Toilet Waters, Face Powders, Lipsticks, Rouges, and Perfumes.

Claims use since Jan. 2, 1931.

Ser. No. 314,066. NATIONAL CARBON COMPANY, INC., New York, N. Y. Filed May 1, 1931.

EVEREADY RUSTONE

For Chemical Preparations for the Prevention of Rust or Scale in Water Containing Devices.

Claims use since Mar. 24, 1931.

Ser. No. 314,347. GEORGE CHRISTIAN ULRICH, doing business as Ven-Zol Co., Portland, Oreg. Filed May 8, 1931.

VEN-ZOL

For Pile and Household Ointment.
Claims use since Apr. 30, 1931.

Ser. No. 314,377. PROTEX CORPORATION OF AMERICA, Springfield, Mass. Filed May 9, 1931.

POINTER PRODUCTS

No claim is made to the word "Products" apart from the mark, as shown.

For Insecticide.

Claims use since Apr. 1, 1931.

Ser. No. 314,390. MUSCLE SHOALS LABORATORIES, INC., New York, N. Y. Filed May 8, 1931.

AZEADA

For Toilet Preparations—Namely, Hair Dressing.
Claims use since Apr. 4, 1931.

Ser. No. 314,470. LEON TAUB, INC., New York, N. Y. Filed May 12, 1931.

SALV-O-HAIR
BY
Leon Taub
HAIR SPECIALIST



The portraits appearing on the drawing are fanciful. Applicant hereby disclaims the words "By", "Hair Specialist," "47 W. 42 St., N. Y." apart from the mark as shown on the drawing.

For Medicinal and Pharmaceutical Preparations for Use on the Scalp and Hair.

Claims use since Apr. 10, 1931.

Ser. No. 314,600. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

ÉMAUX

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, Vegetal.
Claims use since Apr. 10, 1931.

Ser. No. 314,610. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

EPISODE

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, Vegetal.
Claims use since Apr. 10, 1931.

Ser. No. 314,611. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

PARENTHESE

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, Vegetal.
Claims use since Apr. 10, 1931.

Ser. No. 314,613. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

SPORTS D'ÉTÉ

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, Vegetal.
Claims use since Apr. 10, 1931.

Ser. No. 314,614. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

SPORTS D'HIVER

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, Vegetal.
Claims use since Apr. 10, 1931.

Ser. No. 314,689. JOHN H. DZWONCZYK, doing business as The Amitin Co., Scranton, Pa. Filed May 18, 1931.

Amitin

For Tablets for the Relief of Headaches, Head Colds, Muscular Pains, Neuralgia, and Pains After Tooth Extractions.
Claims use since Apr. 1, 1929.

Ser. No. 314,774. STERLING PRODUCTS (INCORPORATED), Wheeling, W. Va. Filed May 19, 1931.

HYLO-ZIN

For Analgesic.
Claims use since Apr. 20, 1931.

Ser. No. 314,775. STERLING PRODUCTS (INCORPORATED), Wheeling, W. Va. Filed May 19, 1931.

HYLODOL

For Analgesic.
Claims use since Apr. 20, 1931.

CLASS 10

Fertilizers

Ser. No. 315,544. LEFFINGWELL RANCHO COMPANY, Whittier, Calif. Filed June 8, 1931.

ENERGY
N-ER-G

For Fertilizers.
Claims use since Apr. 15, 1931.

CLASS 12

Construction Materials

Ser. No. 302,358. TRUSCON STEEL COMPANY, Youngstown, Ohio. Filed June 12, 1930.

Ferrobord

For Structural Units of Metal for Buildings.
Claims use since Nov. 12, 1929.

Ser. No. 308,260. M AND M WOOD WORKING COMPANY, Portland, Oreg. Filed Nov. 24, 1930.

THE M&M STURDY LINE

The words "Sturdy Line" are disclaimed apart from the mark as shown.
For Doors and Other Mill Work and Ply Wood.
Claims use since Aug. 12, 1923.

Ser. No. 312,042. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn. Filed Mar. 12, 1931.



For Copper Downspouts; Metal Dividing Strips for Use in Concrete Floors, to Support Plaster at the Molding or Corners, and to Hold Linoleum; Brass Railings; Brass Channels for Use with Windows, Doors, and Other Apertures, and with Ornamental Metal Work; and Brass Moldings.
Claims use since May 14, 1928, on copper downspouts, metal dividing strips, and brass railings; May 15, 1928, on brass channels; May 16, 1928, on brass moldings.

Ser. No. 313,481. W. C. TOWNSEND & COMPANY, Zanesville, Ohio. Filed Apr. 17, 1931.

RAYNHAM

No claim is made to the word "Raynham" apart from the mark as shown in the accompanying drawing.
For Quarried Dressed Stone Ready for Use, Including Granite.
Claims use since Dec. 11, 1930.

Ser. No. 313,525. AMERICAN BITUMULS COMPANY, Wilmington, Del., and Oakland, Calif. Filed Apr. 20, 1931.

PETROMULS

For Asphalt, Pavement Materials, Asphaltic Binders, Asphaltic Emulsions, and Compounds.
Claims use since Feb. 26, 1931.

Ser. No 313,645. J. C. BURKE, Bakersfield, Calif. Filed Apr. 22, 1931.

THE SIGN OF COMFORT
MARCO-POLO

For Knocked Down Portable Insulated Buildings.
Claims use since Apr. 7, 1931.

Ser. No. 315,023. MARK B. WHITE, Hanover, Ill. Filed May 25, 1931.

Walzawool

For Insulating Material for Walls and the Like.
Claims use since Jan. 8, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 309,337. THE FAIRFACTS COMPANY, New York, N. Y. Filed Dec. 26, 1930.



For Bath-Room Accessories of the Built-In and Projecting Types, Comprising Soap Holders, Tumbler Holders, Sponge Holders, Tooth Brush Holders, Roll Paper Holders, Sheet Paper Holders, Grab Rails, Wall Grips, Shelves, Towel Bars, Towel Hooks, Robe Hooks, Shelf Brackets, Utility Shelves, Shelf Posts, Strop or Douche Hooks, Combination Soap Holders, Combination Grips and Soap Holders, Combination Tumbler and Soap Holders, Combination Tumbler Tooth Brush and Paste Holders, Combination Soap and Tooth Brush Holders, Combination Tumbler and Tooth Brush Holders, Combination Tooth Brush and Tooth Paste Holders, Cigar and Cigarette Holders, Combination Soap and Sponge Holders, Razor Blade Holders, and Door Stops.
Claims use since Aug. 6, 1930.

Ser. No. 314,516. J. H. SPECIALTY MANUFACTURING CORP., New York, N. Y. Filed May 13, 1931.

I-WIRE-I

No claim to the word "Wire" being made apart from the mark as shown.
For Coil Springs for General Use.
Claims use since February, 1931.

Ser. No. 315,341. CLARENCE K. BEYER, South Bend, Ind. Filed June 8, 1931.

SPRINKL STIK

No claim is made to the representation of the goods apart from the mark as shown.
For Hose Holders.
Claims use since May 25, 1931.

Ser. No. 315,428. STAR EXPANSION BOLT COMPANY, New York, N. Y. Filed June 4, 1931.

SLUGIN

For Bolt Anchors.
Claims use since Mar. 15, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 315,552. PAGE STEEL AND WIRE COMPANY, Adrian, Mich., and Bridgeport, Conn. Filed June 8, 1931. Under 10-year proviso.

PAGE

For Steel and Iron Rods, Steel and Iron Wire, Steel and Iron Single Wire Strand, Welding Filler Metal and Wire Metal Products—Namely, Spring Wire, High and Low Carbon Wire, and Wire Rod.
Claims use since July 1, 1883.

CLASS 15

Oils and Greases

Ser. No. 311,346. STANDARD OIL COMPANY OF NEW YORK, New York, N. Y. Filed Feb. 21, 1931.

PEGASUS



For Petroleum and Products of Petroleum, with or without Admixture of Other Materials, for Illuminating, Heating, Power, Burning, Lubricating, Greasing and Tempering, Quenching, Slushing, and Flushing.
Claims use since Apr. 12, 1911.

Ser. No. 312,609. ROBERT B. LEWIS, doing business as State Line Oil Service, Unionville, N. Y. Filed Mar. 27, 1931.

LUBRIGAS

For Compounded Lubricated Gasoline Fuel for Use in Internal-Combustion Engines.
Claims use since Mar. 21, 1930.

Ser. No. 313,008. SIGNAL OIL & GAS COMPANY, Los Angeles, Calif. Filed Apr. 6, 1931.

SIGNAL

For Gasoline.
Claims use since Mar. 23, 1931.

Ser. No. 314,389. LUBRIPLATE CORP., New York, N. Y. Filed May 8, 1931.

LUBRIPLATE

For Lubricating Oils and Greases.
Claims use since Feb. 20, 1931.

Ser. No. 314,459. PENN-JERSEY AUTO STORES, INC., Easton, Pa. Filed May 12, 1931.

PENNSEY MOTOR OIL

The words "Motor Oil" being descriptive of the goods are disclaimed apart from the other features of the mark shown in the drawing.
For Gasoline and Lubricating Oils and Greases.
Claims use since Mar. 1, 1931.

Ser. No. 314,861. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla. Filed May 21, 1931.

Phil-Blue

The word "Blue" is disclaimed apart from the mark shown in the drawing.
For Gasolines.
Claims use since Apr. 22, 1931.

Ser. No. 315,162. SINCLAIR REFINING COMPANY, New York, N. Y. Filed May 28, 1931.

SuperFlame

For Kerosene.
Claims use since May 5, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 312,405. THE AMERICAN POLISH COMPANY, Chicago, Ill. Filed Mar. 23, 1931.

KOLORTONE
TRADE MARK REG.
MADE IN U.S.A.
THE AMERICAN POLISH COMPANY CHICAGO
MADE IN TEN COLORS
AUTO POLISH

No claim is made by reason of this registration to the exclusive use of the words "Trade Mark Reg., Made in U. S. A., Made in Ten Colors, Black, Gray, Red, Dark Green, Light Green, Orange, Blue, Light Blue, Neutral, Brown, Chicago" apart from the mark in its entirety as shown.
For Polishes—Namely, Polishes in Paste Form Especially Suitable for Use on Automobiles.
Claims use since Feb. 21, 1931.

Ser. No. 313,205. PAUL OMER ALEXIS REAU, Glenay, Par Saint Varent, France. Filed Apr. 10, 1931.

Ré'o

For Paint in Powdered Form, Ready Mixed Paint, and Imitation Stone Paint.
Claims use since Oct. 28, 1930.

Ser. No. 314,605. HENRY FELTES, Chicago, Ill. Filed May 15, 1931.

HF

For Paints, Liquid and Paste, Paint Enamels, Varnishes, Lacquer, and Kalsomine.
Claims use since January, 1924.

Ser. No. 315,501. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed June 6, 1931.

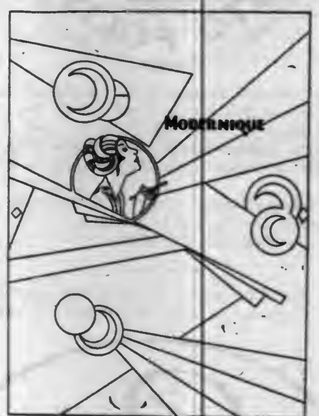
METALHIDE

For Liquid and Paste Paints.
Claims use since Feb. 19, 1931.

CLASS 17

Tobacco Products

Ser. No. 302,666. BATT BROTHERS, New York, N. Y. Filed June 21, 1930.



For Cigarettes.
Claims use since Mar. 1, 1921.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 302,941. GAS AND ELECTRIC HEATER CO., La Porte, Ind. Filed June 28, 1930.



For Electric Water Supply Heaters.
Claims use since June 1, 1929.

Ser. No. 303,407. UNA WELDING & BONDING COMPANY, Cleveland, Ohio. Filed July 11, 1930.

UNA

For Electric Welders.
Claims use since Dec. 1, 1924.

Ser. No. 308,676. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed Dec. 5, 1930.

DUO-LUX

For Electric Lighting Fixture Units.
Claims use since Nov. 1, 1929.

Ser. No. 309,926. ELEKTROTECHNISCHE FABRIK SCHMIDT & Co., Berlin, Germany. Filed Jan. 14, 1931.



For Flash-Lamps and Lanterns, Bicycle Lamps and Other Battery-Operated Lamps, and Incandescent Electric Bulbs for Such Aforementioned Lamps and for Automobile Lamps, Dry-Cell Batteries, Radio Batteries, and Fuses.
Claims use on flash-lamps and lanterns, bicycle lamps and other battery-operated lamps, and incandescent electric bulbs for such aforementioned lamps and for automobile lamps, dry-cell batteries, and radio batteries since about July, 1924, and for fuses since about December, 1924.

Ser. No. 312 020. THE STANLEY WORKS, New Britain, Conn. Filed Mar. 11, 1931.

STANLEY

Applicant is the owner of trade-mark registration No. 247,955, dated Oct. 9, 1928.
For Electric Tools Consisting in Drills, Hammers, Screw Drivers, Grinders (Bench, Aerial, and Pedestal), Saws, Shears, and Sanders.
Claims use since February, 1928.

Ser. No. 314,153. BENJAMIN A. COVER, Jr., doing business as Tilton Manufacturing Company, New York, N. Y. Filed May 4, 1931.

EX-STAT

For Radio Items and Parts—Namely, Ignition Filter Systems of Automobile Radios, Spark Plug Suppressors, Distributor Suppressors, Resistors, Resistor Kits, Condensers, and Condenser Kits.
Claims use since June 13, 1930.

Ser. No. 314,255. STANDARD STORES, INCORPORATED, Boston, Mass. Filed May 6, 1931.

ZELTON

For Radio Electron Tubes, Radio Chassis, Radio Receiving Sets, and Radio Speakers.
Claims use since Apr. 1, 1931.

Ser. No. 314,594. WHOLESALE RADIO SERVICE CO. INC., New York, N. Y. Filed May 14, 1931.

Trutest

For Radio Receiving Sets and Parts Thereof, Transformers, Condensers, Loud Speakers, and Rheostats.
Claims use since Apr. 2, 1931.

Ser. No. 314,717. ARTHUR S. PRYBESKY, doing business as Detroit Electric Specialties Co., Detroit, Mich. Filed May 18, 1931.



The drawing is shaded to indicate the color red.
For Heating Elements for Use in Hot Plates, Toasters, Portable Electric Heaters, Portable Water Heaters, and for Water Heaters of the Portable Immersible Type, Hot Plates, Toasters, and Portable Electric Heaters of the Glow Type.
Claims use since Mar. 1, 1931.

Ser. No. 315,052. HURLEY-TOWNSEND CORPORATION, New York, N. Y. Filed May 26, 1931.

H-T

For Spark Plugs.
Claims use since Aug. 20, 1930.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 306,852. HERBERT D. CLAYTON, doing business as Clayton and Company, Hill City, Kans. Filed Oct. 17, 1930.



QUEEN OF PLAYTIME

The picture forming a feature of the mark is a fanciful representation of a young school girl. Applicant makes no claim to the exclusive use of the words "Carry-More" apart from the mark as shown.
For Merry-Go-Rounds.
Claims use since Feb. 15, 1930.

Ser. No. 308,641. CHESTER W. ROSS, Medford, Mass. Filed Dec. 5, 1930.

DEFLECTO

For Portable Practice Device for Golf Comprising a Casing and Runway.
Claims use since Nov. 11, 1930.

Ser. No. 314,918. S. H. KRESS & Co., New York, N. Y. Filed May 22, 1931.

GLENDALE



Applicant disclaims the use of the word "Glendale" apart from the mark as shown.
For Playing Cards.
Claims use since May 15, 1931.

Ser. No. 315,072. RUTH WEST, New York, N. Y. Filed May 26, 1931.

Alphanimals

For Educational Blocks.
Claims use since May 16, 1931.

Ser. No. 315,084. JAMES H. BOYE MANUFACTURING CO., Chicago, Ill. Filed May 27, 1931.



No claim is made to the representation of the goods apart from the mark as shown in the drawing.
For Golf Clubs and Golf Balls.
Claims use since May 8, 1931.

Ser. No. 315,150. OMER LAMIREAUD, New York, N. Y. Filed May 28, 1931.

ALPHAGAME

No claim is made to the word "Game" apart from the mark shown on the drawing.
For Instructive Educational Games Comprising Cards Forming the Letters of the Alphabet.
Claims use since July 1, 1930.

Ser. No. 315,214. SYNDICATE POSTER & EQUIPMENT CO., Chicago, Ill. Filed May 29, 1931.

FELT-O-GRAM

Board Games and Puzzles Played by Assembling Pieces and Picture Puzzles Comprising Assembly of Varied Designs and Shapes.
Claims use since May 18, 1931.

Ser. No. 315,215. SYNDICATE POSTER & EQUIPMENT CO., Chicago, Ill. Filed May 29, 1931.

BUCK-TEE

Applicant disclaims exclusive use of the word "Tee" except in the association shown.
For Ball Projecting and Teeing Devices Used in Practicing the Game of Golf.
Claims use since May 18, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 292,473. THE VOLLRATH COMPANY, Sheboygan, Wis. Filed Nov. 15, 1929.



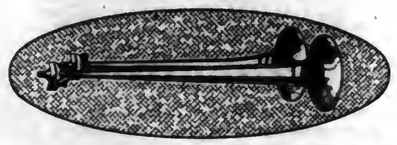
The linings in the drawing of the mark are the official ones for indicating the colors red and blue.
Applicant disclaims any specific color as a feature of the mark without waiving any common law right to color in the design.
For Enameled Metal Ware—Namely, Enameled Metal Spoons.
Claims use since Apr. 22, 1929.

Ser. No. 308,273. UNITED CONVEYOR CORPORATION, Chicago, Ill. Filed Nov. 24, 1930.

HYDROVEYOR

For Conveyors and Conveying Systems Comprising Conduits Through Which Granular and Comminuted Material is Transported by Means of Water, the Flow of Water to be Created by Gravity or by Pumps.
Claims use since May 1, 1928.

Ser. No. 308,402. TAICO PRODUCTS CORPORATION, Buffalo, N. Y. Filed Nov. 28, 1930.



The lining in the drawing indicates orange color. The representation of the goods is disclaimed apart from the mark as shown.
For Fluid Operated Horns.
Claims use since Oct. 1, 1930.

Ser. No. 311,958. FENWICK REDDAWAY MFG., CO., Newark, N. J. Filed Mar. 10, 1931.

WAJAX

For Portable Water Pump for Fires.
Claims use since June 15, 1930.

Ser. No. 312,048. L. H. GILMER CO., Philadelphia, Pa. Filed Mar. 12, 1931.

MILLCORD

For Sheaves for Belt Drives.
Claims use since September, 1930.

Ser. No. 312,128. THE H. C. HART MFG. CO., Unionville, Conn. Filed Mar. 18, 1931.



For Table Knives, Table Forks, Table Spoons, Ticket Punches, Pliers, Can Openers, Nut Crackers, Industrial Nail Clips, and Slip Joint Pliers, All Made of Base Metal.
Claims use since 1857.

Ser. No. 314,825. TOLAND & SON, INC., Baltimore, Md. Filed May 20, 1931.



The applicant disclaims the words "Extra," "Steel," "Tough Tempered," "Toland & Son Inc.," and Baltimore, Md. apart from the mark as shown.
For Moulding Knives and Saws, and Knives and Other Special Tools Made to Specification.
Claims use since Jan. 26, 1931.

Ser. No. 314,903. EMPORIA MACHINE CO. INC., Emporia, Va. Filed May 22, 1931.

NO. 12¼C

The notation "No. 12¼" is disclaimed apart from the other features of the mark shown in the drawing.
For Plows.
Claims use since Jan. 1, 1906.

Ser. No. 315,688. IDEAL CLAMP MFG. CO. INC., Brooklyn, N. Y. Filed June 11, 1931.

LemonAider

For Fruit Juice Extractors.
Claims use since Apr. 1, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 310,067. PANTEX PRESSING MACHINE, INC., Pawtucket, R. I. Filed Jan. 17, 1931.

PRESSET

For Garment Steaming and Pressing Machines and Parts Thereof.
Claims use since November, 1930.

Ser. No. 314,218. J. B. TIMBERLAKE & SONS, INC., Jackson, Mich. Filed May 5, 1931.

"TinyTot"

For Frames Used in the Drying of Stockings, Shirts, and Infant Garments.
Claims use since May 4, 1929.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 300,245. TRAVELTONE PICTURES, INC., San Diego, Calif. Filed May 9, 1930.

TRAVELTONE

For Motion Picture Films and Motion Pictures.
Claims use since Apr. 10, 1930.

Ser. No. 312,720. PERRY MANUFACTURING COMPANY, INC., New York, N. Y. Filed Mar. 30, 1931.

COINPASSOR

For Combination Turnstiles and Registering Fare Boxes.
Claims use since Nov. 1, 1928.

Ser. No. 314,899. DU PONT PATHÉ FILM MANUFACTURING CORPORATION, New York, N. Y. Filed May 22, 1931.

DUPAC

For Photographic Film.
Claims use since May 19, 1931.

Ser. No. 315,683. GEVAERT PHOTO-PRODUCTEN NAAMLOOZE VENNOOTSCHAP, Oude-God, near Antwerp, Belgium. Filed June 11, 1931.

GEVALOR

For Sensitized Photographic Papers, Plates, Films, Roll Films, Portrait Films, Studio Films, Plan Films, Pack Films, Radiofilms, Cinematographic Films, Cameras and Parts Therefor, Developing Apparatus, Cinematographic Cameras and Projectors.
Claims use since June, 1930.

Ser. No. 315,684. GEVAERT PHOTO-PRODUCTEN NAAMLOOZE VENNOOTSCHAP, Oude-God, near Antwerp, Belgium. Filed June 11, 1931.

Gevaert
EXPRESS

For Sensitized Photographic Papers, Plates, Films, Roll Films, Portrait Films, Studio Films, Plan Films, Pack Films, Radiofilms, Cinematographic Films, Cameras and Parts Therefor, Developing Apparatus, Cinematographic Cameras and Projectors.
Claims use since October, 1930.

Ser. No. 315,685. GEVAERT PHOTO-PRODUCTEN NAAMLOOZE VENNOOTSCHAP, Oude-God, near Antwerp, Belgium. Filed June 11, 1931.

GEVAREX

For Sensitized Photographic Papers, Plates, Films, Roll Films, Portrait Films, Studio Films, Plan Films, Pack Films, Radiofilms, Cinematoghaphic Films, Cameras and Parts Therefor, Developing Apparatus, Cinematographic Cameras and Projectors.
Claims use since Mar. 1, 1930.

Ser. No. 315,686. GEVAERT PHOTO-PRODUCTEN NAAMLOOZE VENNOOTSCHAP, Oude-God, near Antwerp, Belgium. Filed June 11, 1931.

Gevaert
X
OSRAY
FILM

For Sensitized Photographic Papers, Plates, Films, Roll Films, Portrait Films, Studio Films, Plan Films, Pack Films, Radiofilms, Cinematoghaphic Films, Cameras and Parts Therefor, Developing Apparatus, Cinematographic Cameras and Projectors.
No claim is made to the exclusive use of the word "Film" apart from the other features of the mark shown in the drawing.
Claims use since Sept. 1, 1930.

Ser. No. 315,722. PERFECTED BIFOCALS, INC., Indianapolis, Ind. Filed June 12, 1931.

PANOPTIK

For Bifocal Lenses.
Claims use since Jan. 27, 1931.

Ser. No. 315,725. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed June 12, 1931.

COMPANION

For Field and Opera Glasses.
Claims use since May 27, 1931.

CLASS 27

Horological Instruments

Ser. No. 282,467. FILS DE R. PICARD & CIE., La Chaux-de-Fonds, Switzerland. Filed Apr. 16, 1929.

EVEREST

For Watches, Watchcases, Watch Movements and Parts of the Same.
Claims use since July 31, 1907.

Ser. No. 315,126. AUDAK COMPANY INC., New York, N. Y. Filed May 28, 1931.

AUDAX

For Horological Instruments.
Claims use since Dec. 30, 1930.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 299,317. BENJAMIN & EDWARD J. GROSS CO. INC., New York, N. Y. Filed Apr. 23, 1930.

"MODERN BRIDE"

For Finger Rings and Mountings Therefor.
Claims use since March, 1930.

Ser. No. 310,084. BETA THETA PI, New York, N. Y. Filed Jan. 19, 1931.

ΒΘΠ

For Fraternity Badges, Lapel Buttons, Scarf, Lapel, and Breast Pins, Cuff Links, Tie Clasps, Charms, Finger Rings, Belt Buckles, and Ornamental Shields, All of Precious Metal.
Claims use since 1840.

Ser. No. 311,885. THE PHI KAPPA TAU FRATERNITY, Oxford, Ohio. Filed Mar. 7, 1931.

ΦΚΤ

For Fraternity Pins and Badges Made of or Plated with Precious Metals.
Claims use since 1917.

Ser. No. 312,164. M. H. SHIMAN & CO., INC., New York, N. Y. Filed Mar. 14, 1931.

RAYS OF LOVE

For Finger Rings of Precious and Semi-Precious Metals.
Claims use since Jan. 18, 1931.

Ser. No. 313,662. NATHANIAL M. KIRSHNER, Los Angeles, Calif. Filed Apr. 22, 1931.



For Finger Rings, Bracelets, Belt Buckles, Clasps, Pendants, Neck and Watch Chains, Brooches, Watch Guards, Emblems, Lockets, Charms, and Amulets, All Made of or Plated with Precious Metal.
Claims use since Mar. 30, 1931.

Ser. No. 313,709. ELGIN AMERICAN MANUFACTURING CO., Elgin, Ill. Filed Apr. 28, 1931. Under 10-year proviso.

Elgin
American

For Jewelry for Personal Adornment, Cigarette Cases, Vanity Cases, Card Cases, and Toilet Articles Made of or Plated with Precious Metal, Flat and Hollow Tableware.
Claims use since 1893.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 312,584. SEISHIN KIYA, Los Angeles, Calif. Filed Mar. 25, 1931.

Air-Plane

For Tooth Brushes.
Claims use since Sept. 1, 1930.

Ser. No. 313,554. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed Apr. 20, 1931.



The trade-mark consisting of a diagonal red stripe extending around the handle of the brush. The representation of the brush handle appearing on the drawing is merely to define the position of the trade-mark and forms no part of the trade-mark per se.

For Painters' Brushes.

Claims use since Nov. 13, 1930.

Ser. No. 313,555. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed Apr. 20, 1931.



The trade-mark consisting of a diagonal blue stripe extending around the handle of the brush. The representation of the brush handle appearing on the drawing is merely to define the position of the trade-mark and forms no part of the trade-mark per se.

For Painters' Brushes.

Claims use since Nov. 13, 1930.

Ser. No. 313,556. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed Apr. 20, 1931.



The trade-mark consisting of a diagonal white stripe extending around the handle of the brush. The representation of the brush handle appearing on the drawing is merely to define the position of the trade-mark and forms no part of the trade-mark per se.

For Painters' Brushes.

Claims use since Nov. 13, 1930.

Ser. No. 313,557. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed Apr. 20, 1931.



The trade-mark consisting of a diagonal green stripe extending around the handle of the brush. The representation of the brush handle appearing on the drawing is merely to define the position of the trade-mark and forms no part of the trade-mark per se.

For Painters' Brushes.

Claims use since Nov. 13, 1930.

Ser. No. 313,558. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed Apr. 20, 1931.



The trade-mark consisting of a diagonal black stripe extending around the handle of the brush. The representation of the brush handle appearing on the drawing is merely to define the position of the trade-mark and forms no part of the trade-mark per se.

For Painters' Brushes.

Claims use since Nov. 13, 1930.

CLASS 33

Glassware

Ser. No. 315,194. ELITE IMPORT CO. INC., New York, N. Y. Filed May 29, 1931.

ELITE

For Glassware.

Claims use since January, 1928.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 314,543. AUTOMATIC FLORZONE HEATING COMPANY, Conshohocken, Pa. Filed May 14, 1931.

NEW-DAY

For Heating Apparatus—Namely, Gas Water Heaters and Radiators and Parts Thereof.

Claims use since May 6, 1931.

Ser. No. 314,544. AUTOMATIC FLORZONE HEATING COMPANY, Conshohocken, Pa. Filed May 14, 1931.

FLORZONE

For Heating Apparatus—Namely, Radiators and Gas Water Heaters and Parts Thereof.

Claims use since Apr. 30, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 309,273. JARVIS & JARVIS, INC., Palmer, Mass. Filed Dec. 28, 1930.

PERMAFLEX

For Composite Solid Non-Metallic Caster Tires Having a Soft Rubber Outer Annulus and an Inner Annulus of Harder Material.

Claims use since Jan. 2, 1930.

Ser. No. 314,904. FERODO AND ASBESTOS INCORPORATED, New Brunswick, N. J. Filed May 22, 1931.

FERO-GRIP

Applicant claims ownership of registration No. 102,887, dated Feb. 23, 1915; and of registration No. 223,099, dated Jan. 18, 1927.

For Friction Materials for Brake Linings and Clutch Facings.

Claims use since May 7, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 308,378. N. V. KÜCHENMEISTER'S INTERNATIONALE ULTRAPHOON-MAATSCHAPPIJ, Berlin, Germany. Filed Nov. 28, 1930.

Ultrola

For Phonographs and Phonograph Records, Phonographic Sound Recording Devices, and Records for Reproduction by Player Pianos.

Claims use since 1926.

CLASS 37

Paper and Stationery

Ser. No. 302,568. JOSEPH BAGNOLS, doing business as Sun Rise Press, Roseland, N. J. Filed June 19, 1930.



SUN RISE PRESS

Exclusive use of the word "Press" is hereby disclaimed except in the relation in which it is associated with other details of the mark.

For Letter Heads, Blank Forms, and Mailing and Correspondence Envelopes, Sold to the Trade as Such.

Claims use since Mar. 19, 1930.

Ser. No. 312,037. ASSOCIATED STATIONERS SUPPLY COMPANY, Chicago, Ill. Filed Mar. 12, 1931.



For Printed Forms, Typewriter Paper, and Stenographer's Note Books.
Claims use since Feb. 12, 1931.

Ser. No. 313,626. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

IMPERATOR

For Black Lead Pencils; Colored, Copying, and Indelible Pencils.
Claims use since April, 1913.

Ser. No. 314,683. CENTRAL WAXED PAPER COMPANY, Chicago, Ill. Filed May 18, 1931.



No claim is made to the exclusive use of the wording shown on the drawing with the exception of the word "Aristocrat".
For Waxed and Paraffined Paper Bread Wrappers.
Claims use since Nov. 24, 1930.

CLASS 38

Prints and Publications

Ser. No. 302,056. JULIET M. SMITH, doing business as Munson School for Private Secretaries, San Francisco, Calif. Filed May 31, 1930.

MUNSONWISE

For Publication.
Claims use since Jan. 1, 1927.

Ser. No. 302,651. SYNDICATE POSTER & EQUIPMENT CO., Chicago, Ill. Filed June 20, 1930.



The second and fourth triangular sectors from the left are indicated in black and the arbitrary word "Speco" is indicated in red.
For Stenciled, Printed, or Lithographed Signs and Posters; Stenciled, Printed, or Lithographed Window Display Signs; Posters in General, Advertising Cards, and Advertising and Poster Letters.
Claims use since May 9, 1930.

Ser. No. 312,955. CHARLES E. LEWIS, New York, N. Y. Filed Apr. 4, 1931.

MANAGERS' ROUND TABLE CLUB

For Department or Section of a Periodical.
Claims use since June 9, 1928.

Ser. No. 313,143. CLARENCE M. MEEHAN, Philadelphia, Pa. Filed Apr. 9, 1931.



For Special Publications—Namely, Scratch Sheets and for Column Head for Newspaper Columns Relating to Racing Matters.
Claims use since Dec. 8, 1930, on periodicals; Mar. 14, 1931, on scratch sheets.

Ser. No. 314,021. SIGMA ALPHA PHI SORORITY, Plainfield, Newark, Paterson, Montclair, Closter, N. J.; New Canaan, Meriden, Waterbury, Conn.; and Washington, D. C. Filed Apr. 30, 1931.



For Books, Pamphlets, Bulletins, and Periodic Magazines.
Claims use since November, 1923.

Ser. No. 314,190. U. S. BOTTLERS MACHINERY CO., Chicago, Ill. Filed May 1, 1931.

BOTTLING AND PACKAGING ENGINEER

DEVOTED TO

MORE OUTPUT WITH LESS LABOR

For Magazine.
Claims use since Jan. 1, 1921.

Ser. No. 314,445. J. MCKEEN CATTELL, doing business as The Science Press, New York, N. Y. Filed May 12, 1931.

THE AMERICAN NATURALIST

For Magazine.
Claims use since Jan. 31, 1867.

Ser. No. 314,523. THE WASHINGTON PLANOGRAPH COMPANY, INC., Washington, D. C. Filed May 13, 1931.

planoprinting

For Completely Printed Literature Sold to the Trade as Such—Namely, Printed Blanks, Booklets, Bulletins, Books, Catalogue Clippings, Cards for All Occasions, Charts, Circulars, Compilations, Comical Picture Sketches, Copy, Cut Outs, Data, Display Cards, Forms, General Advertising Matter, Guides, Graphs, House Organs, Lectures, Lessons, Letters, Lists, Maps, Music, Notices, Poems, Post Cards, Printed Office Forms, Photographs, Programs, Problems, Publications, Receipts, Salesmen's Price Lists, Seals, Printed Signs, Statistical Data, Tabular Matter, Talks, Testimonial Letters, Test Layouts, and Views.
Claims use since Apr. 1, 1928.

Ser. No. 314,555. DAILY CREDIT BROADCAST, INC., New York, N. Y. Filed May 14, 1931.



For Credit Circular or Pamphlet Published Periodically.
Claims use since Jan. 1, 1931.

Ser. No. 315,192. THE CHEF AND STEWARD CO., Chicago, Ill. Filed May 29, 1931.

The Chef and Steward

For Periodical.
Claims use since 1902.

Ser. No. 315,213. THE SOCIAL SCIENCE PUBLISHING COMPANY, INC., Winfield, Kans. Filed May 29, 1931.

SOCIAL SCIENCE

For Periodical.
Claims use since November, 1925.

Ser. No. 315,459. CRAWFORD J. KAMES, Philadelphia, Pa. Filed June 5, 1931.

Semak's Official Track Selections

For Columns or Sections of Daily Newspapers.
Claims use since Apr. 1, 1930.

Ser. No. 315,601. THE METHODIST BOOK CONCERN, New York, N. Y. Filed June 9, 1931.

THE
CHRISTIAN
ADVOCATE

For Periodical.
Claims use since Jan. 4, 1866.

Ser. No. 315,640. KELLER-DORIAN PAPER CO., INC., New York, N. Y. Filed June 10, 1931.



For Greeting Cards and Announcements.
Claims use since Mar. 10, 1931.

Ser. No. 315,645. PHYSICAL CULTURE PUBLISHING CORPORATION, New York, N. Y. Filed June 10, 1931.

NUTRITION
NEWS

For Monthly Magazine.
Claims use since Feb. 1, 1931.

Ser. No. 315,753. MACFADDEN PUBLICATIONS, INC., New York, N. Y. Filed June 12, 1931.

THE WOMAN
IN LOVE

For Monthly Magazine.
Claims use since June 2, 1931.

Ser. No. 315,836. GRIGSBY-GRUNOW COMPANY, Chicago, Ill. Filed June 15, 1931.

The
Majestic
Eagle

For Publication in Magazine Form.
Claims use since June 1, 1930.

Ser. No. 315,852. M. S. M. DEVELOPING AND PRINTING CO., Clifton, N. J. Filed June 15, 1931.



No claim is made to the words "Developing" and "Printing" apart from the trade-mark as shown.
For Photographic Prints.
Claims use since June 12, 1929.

Ser. No. 315,853. M. S. M. DEVELOPING AND PRINTING CO., Clifton, N. J. Filed June 15, 1931.

VERGO

For Photographic Prints.
Claims use since May 23, 1931.

CLASS 39
Clothing

Ser. No. 311,188. THE GUARANTEE SHOE COMPANY, San Antonio, Tex. Filed Feb. 18, 1931.



The words "Every Woman's Foot Looks Good and Feels Good in Heel Fitter" are hereby disclaimed, except in the particular association shown.
For Shoes of Leather, Fabric, Rubber, and Combinations Thereof.
Claims use since November, 1930.

Ser. No. 311,311. JANOME RAYON CORPORATION, Brooklyn, N. Y. Filed Feb. 20, 1931.

Palm-Ray
RUN-RESIST
FABRIC

The descriptive words "Run-Resist Fabric" are hereby disclaimed apart from the mark as shown on the drawing.
For Men's, Women's, and Children's Underwear.
Claims use since Dec. 21, 1929.

Ser. No. 311,410. EDWARD E. HOGUE, Los Angeles, Calif. Filed Feb. 24, 1931.



For Hosiery.
Claims use since July 4, 1928.

Ser. No. 312,281. MME. CÉLESTE BETTER FORM FOUNDATION GARMENT, New York, N. Y. Filed Mar. 18, 1931.

Mme. Céleste
BETTERFORM
FOUNDATION GARMENT

Applicant disclaims the right to the exclusive use of the expressions "Better Form" and "Foundation Garment" apart from the rest of the mark.
For Ladies' Corselets.
Claims use since June 1, 1930.

Ser. No. 312,347. I. MILLER & SONS, INCORPORATED, Long Island City, N. Y. Filed Mar. 20, 1931.

TORSION TRAM

The exclusive right to the word "Tram" is hereby disclaimed apart from the mark as shown.
For Ladies' Hosiery.
Claims use since Feb. 15, 1931.

Ser. No. 312,359. ELISE AUVRAY BESANÇON, New York, N. Y. Filed Mar. 21, 1931.

Le Corset
Jouvence

Applicant disclaims the right to the exclusive use of the words "Le Corset," which appear on the drawing.
For Corsets and Brassières.
Claims use since July 1, 1930.

Ser. No. 313,687. VAN RAALTE COMPANY, New York, N. Y. Filed Apr. 22, 1931.

POLKA

For Hosiery.
Claims use since Apr. 10, 1931.

Ser. No. 314,525. THE LUCILE SOMARCO BRASSIERE, New York, N. Y. Filed May 12, 1931.



Applicant disclaims the right to the exclusive use of the descriptive expression "openet."
For Brassières, Corsets, Bandeaux, and Corset and Brassière Combinations.
Claims use since May 1, 1931.

Ser. No. 314,596. LOUIS BASKIND & CO., INC., New York, N. Y. Filed May 15, 1931.

NUVALU



BROADCLOTH

The word "Broadcloth" is disclaimed apart fr mark shown on the drawing.
For Men's and Boys' Dress, Negligee, and W Pajamas, and Underwear.
Claims use since Feb. 15, 1930.

Ser. No. 315,601. THE METHODIST BOOK CONCERN, New York, N. Y. Filed June 9, 1931.

THE
CHRISTIAN
ADVOCATE

For Periodical.
Claims use since Jan. 4, 1866.

Ser. No. 315,640. KELLER-DORIAN PAPER CO., INC., New York, N. Y. Filed June 10, 1931.



For Greeting Cards and Announcements.
Claims use since Mar. 10, 1931.

Ser. No. 315,645. PHYSICAL CULTURE PUBLISHING CORPORATION, New York, N. Y. Filed June 10, 1931.

NUTRITION
NEWS

For Monthly Magazine.
Claims use since Feb. 1, 1931.

Ser. No. 315,753. MACFADDEN PUBLICATIONS, INC., New York, N. Y. Filed June 12, 1931.

THE WOMAN
IN LOVE

For Monthly Magazine.
Claims use since June 2, 1931.

Ser. No. 315,836. GRIGSBY-GRUNOW COMPANY, Chicago, Ill. Filed June 15, 1931.

The
Majestic
Eagle

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Ser. No. 315,852. M. S. M. DEVELOPING AND PRINTING CO., Clifton, N. J. Filed June 15, 1931.



No claim is made to the words "Developing" and "Printing" apart from the trade-mark as shown.
For Photographic Prints.
Claims use since June 12, 1929.

Ser. No. 315,853. M. S. M. DEVELOPING AND PRINTING CO., Clifton, N. J. Filed June 15, 1931.

VERGO

For Photographic Prints.
Claims use since May 23, 1931.

CLASS 39
Clothing

Ser. No. 311,188. THE GUARANTEE SHOE COMPANY, San Antonio, Tex. Filed Feb. 18, 1931.



The words "Every Woman's Foot Looks Good and Feels Good in Heel Fitter" are hereby disclaimed, except in the particular association shown.
For Shoes of Leather, Fabric, Rubber, and Combinations Thereof.
Claims use since November, 1930.

Ser. No. 311,311. JANOME RAYON CORPORATION, Brooklyn, N. Y. Filed Feb. 20, 1931.

Palm-Ray
RUN-RESIST
FABRIC

The descriptive words "Run-Resist Fabric" are hereby disclaimed apart from the mark as shown on the drawing.
For Men's, Women's, and Children's Underwear.
Claims use since Dec. 21, 1929.

Ser. No. 311,410. EDWARD E. HOGUE, Los Angeles, Calif. Filed Feb. 24, 1931.



For Hosiery.
Claims use since July 4, 1928.

Ser. No. 312,281. MME. CÉLESTE BETTER FORM FOUNDATION GARMENT, New York, N. Y. Filed Mar. 18, 1931.

Mme. Céleste
BETTERFORM
FOUNDATION GARMENT

Applicant disclaims the right to the exclusive use of the expressions "Better Form" and "Foundation Garment" apart from the rest of the mark.
For Ladies' Corselets.
Claims use since June 1, 1930.

Ser. No. 312,347. I. MILLER & SONS, INCORPORATED, Long Island City, N. Y. Filed Mar. 20, 1931.

TORSION TRAM

The exclusive right to the word "Tram" is hereby disclaimed apart from the mark as shown.
For Ladies' Hosiery.
Claims use since Feb. 15, 1931.

Ser. No. 312,350. ELISE AUVRAY BESANÇON, New York, N. Y. Filed Mar. 21, 1931.

Le Corset
Jouvence

Applicant disclaims the right to the exclusive use of the words "Le Corset," which appear on the drawing.
For Corsets and Brassières.
Claims use since July 1, 1930.

Ser. No. 313,087. VAN RAALTE COMPANY, New York, N. Y. Filed Apr. 22, 1931.

POLKA

For Hosiery.
Claims use since Apr. 10, 1931.

Ser. No. 314,525. THE LUCILE SOMARCO BRASSIERE, New York, N. Y. Filed May 12, 1931.



Applicant disclaims the right to the exclusive use of the descriptive expression "openet."
For Brassières, Corsets, Bandeaux, and Corset and Brassière Combinations.
Claims use since May 1, 1931.

Ser. No. 314,596. LOUIS BASKIND & CO., INC., New York, N. Y. Filed May 15, 1931.

NUVALU



BROADCLOTH

The word "Broadcloth" is disclaimed apart from the mark shown on the drawing.
For Men's and Boys' Dress, Negligee, and Work Shirts, Pajamas, and Underwear.
Claims use since Feb. 15, 1930.

Ser. No. 314,693. GREENEBAUM BROTHERS, Philadelphia, Pa. Filed May 18, 1931.

Coltan

For Children's, Misses', and Ladies' Waists, and for Children's and Boys' Blouses, Shirts, Pyjamas, and Underwear.

Claims use since Mar. 20, 1911, on children's, misses', and ladies' waists; since Jan. 15, 1931, on children's and boys' blouses, shirts, pyjamas, and underwear.

Ser. No. 314,705. LUXITE SILK PRODUCTS CO., Milwaukee, Wis. Filed May 18, 1931.

Shad-o-Sheer
BY LUXITE

The words "By" and "Sheer" are disclaimed apart from the other features of the mark as shown in the drawing.

For Underwear for Men and Women.

Claims use since May 11, 1931.

Ser. No. 314,743. ANSONIA BOOTERY, INC., New York, N. Y. Filed May 19, 1931.

BROOKLYN CERTIFIED HAND-TURNED

The words "Brooklyn, Certified" and "Hand Turned" are disclaimed apart from the mark as shown on the drawing.

For Shoes Made of Leather.

Claims use since Feb. 1, 1931.

Ser. No. 314,824. STRAWBRIDGE & CLOTHIER, Philadelphia, Pa. Filed May 20, 1931.

S&C
FOOT GRACE ARCH SHOE

No claim being made to the words "Arch Shoe" apart from the mark as shown.

For Women's and Children's Shoes Made of Leather, Rubber, Canvas, and/or Any Combinations Thereof.

Claims use since Apr. 21, 1931.

Ser. No. 315,041. EARNSHAW KNITTING COMPANY, Newton, Mass. Filed May 26, 1931.

WATER WOOLIES

For Bathing Suits.

Claims use since Apr. 14, 1931.

Ser. No. 315,051. HOOVER HOSIERY COMPANY, Concord, N. C. Filed May 26, 1931.

Lo'Lene

For Hosiery.

Claims use since May 7, 1931.

Ser. No. 315,071. VIDALOU, Manila, P. I. Filed May 26, 1931.

VIDALOU

For Women's and Children's Dresses.

Claims use since June 1, 1927.

Ser. No. 315,092. L. GREIF & BRO., INCORPORATED, Baltimore, Md. Filed May 27, 1931.

PAR LONG

For Top Coats, Overcoats, Coats, Vests, Trousers, and Knickerbockers for Men, Youths, and Boys.

Claims use since June 17, 1930.

Ser. No. 315,137. THOMAS DALBY COMPANY, Watertown, Mass. Filed May 28, 1931.

ME DO

For Children's Underwear.

Claims use since Apr. 15, 1929.

Ser. No. 315,151. LANE BROS. CO., Boston, Mass. Filed May 28, 1931.

STITCHFLEX

For Boots and Shoes of Leather, Fabric, or Combinations Thereof.

Claims use since Jan. 1, 1925.

Ser. No. 315,169. MILWAUKEE GLOVE COMPANY, Milwaukee, Wis. Filed May 28, 1931.

Elkay

For Cloth and Leather Gloves and Mittens.

Claims use since Mar. 31, 1931.

Ser. No. 315,495. S. MAKRANSKY AND SONS, INC., Philadelphia, Pa. Filed June 6, 1931.

TROPSHIRE

For Men's Suits, Overcoats, and Top Coats.

Claims use since Oct. 9, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 283,334. MRS. GEORGE HERZOG, doing business as The Closet Shop, New York, N. Y. Filed May 1, 1929.

THE CLOSET SHOP

For the Following Named Articles Made of Textile Fabrics: Bed Linens, Bath Linens, Table Cloths, Napkins, Shelf and Drawer Pads, Shelf Edgings; Lamp Shade Coverings, Unmade-Up Window Shades; Hat, Dress, and Purse Covers; Removable Furniture Coverings, Curtains for Closets and Windows Not Including Fixtures Therefor.

Claims use since Feb. 1, 1927.

Ser. No. 309,080. HINDUSTAN ART CO., INC., New York, N. Y. Filed Dec. 17, 1930.



In the drawing the lining indicates shading.

For India Prints of Cotton or Linen.

Claims use since Aug. 31, 1925.

Ser. No. 314,103. JAMES H. DUNHAM & CO., New York, N. Y. Filed May 2, 1931.

PUNJAB FABRICS
JHD
QUALITY

The words "Fabrics" and "Quality" are disclaimed apart from the mark as shown. Applicant is owner

of registration No. 101,674 of the mark "Punjab" effected on the ground of exclusive use for 10 years next preceding Feb. 20, 1905.

For Knitted, Netted, and Textile Fabrics Made of Cotton, Rayon, Artificial Silk, Silk, and/or Combinations of Said Materials.

Claims use since February, 1928.

Ser. No. 315,095. HAAS BROTHERS FABRICS CORPORATION, New York, N. Y. Filed May 27, 1931.

ADEERA

For Silk Piece Goods, Cotton Piece Goods, and Woolen Piece Goods and Fabrics Consisting of Mixtures of Silk, Cotton, and Wool.

Claims use since June 10, 1928.

Ser. No. 315,306. ETABLISSEMENTS SCHAEFFER & CIE., Pfastatt-le-Chateau, France. Filed June 2, 1931.



For Piece Goods of Cotton, Linen, Hemp, Jute, Flax, Silk, Artificial Silk, or Rayon, Wool, Hair.

Claims use since Apr. 1, 1931.

Ser. No. 315,307. ETABLISSEMENTS SCHAEFFER & CIE., Pfastatt-le-Chateau, France. Filed June 2, 1931.



For Piece Goods of Cotton, Linen, Hemp, Jute, Flax, Silk, Artificial Silk, or Rayon, Wool, Hair.

Claims use since Apr. 1, 1931.

Ser. No. 315,423. ARTLOOM CORPORATION, Philadelphia, Pa. Filed June 4, 1931.

ARTKARA

For Seamless Wilton Rugs.

Claims use since Jan. 1, 1931.

Ser. No. 315,424. ARTLOOM CORPORATION, Philadelphia, Pa. Filed June 4, 1931.

IRISTAN

For Seamless Wilton Rugs.

Claims use since Jan. 1, 1931.

Ser. No. 315,436. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed June 5, 1931.

Passe-Partout

For Pile Fabrics in the Piece.

Claims use since May 27, 1931.

Ser. No. 315,437. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed June 5, 1931.

Proteam

For Pile Fabrics in the Piece.

Claims use since May 27, 1931.

Ser. No. 315,487. CRAMERTON MILLS, INCORPORATED, Cramerton, N. C. Filed June 6, 1931.

SWAGGER GINGHAM

No claim being made to the exclusive use of the word "Gingham" apart from the mark as shown.

For Cotton Piece Goods.

Claims use since January, 1929.

Ser. No. 315,629. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 10, 1931.

WINCELLA

For Fabrics Made Wholly or Partially of Cellulose Derivatives.

Claims use since June 8, 1931.

Ser. No. 315,675. CHARLES R. DE BEVOISE COMPANY, Newark, N. J. Filed June 11, 1931.

AIRO-LASTIC

For Elastic Fabrics.

Claims use since May 25, 1931.

Ser. No. 315,734. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed June 12, 1931.

Chongora

For Woolen Piece Goods.

Claims use since May 1, 1931.

Ser. No. 315,735. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed June 12, 1931.

Destina

For Woolen Piece Goods.

Claims use since May 1, 1931.

Ser. No. 315,737. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed June 12, 1931.

Falda

For Woolen Piece Goods.

Claims use since May 1, 1931.

Ser. No. 315,738. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed June 12, 1931.

Jorna

For Woolen Piece Goods.

Claims use since May 1, 1931.

Ser. No. 315,740. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed June 12, 1931.

Kashmirac

For Woolen Piece Goods.

Claims use since May 1, 1931.

Ser. No. 315,743. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed June 12, 1931.

Oringa

For Woolen Piece Goods.

Claims use since May 1, 1931.

CLASS 43

Thread and Yarn

Ser. No. 313,568. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed Apr. 20, 1931.

FLOSSINE

For Cotton and Rayon Yarn.

Claims use since Mar. 28, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 309,778. DR. HILTEBRANDT ZAHNFABRIK AKTIENGESELLSCHAFT, Essen, Germany. Filed Jan. 9, 1931.

TELEOFORM

For Artificial Teeth.

Claims use since Aug. 16, 1928.

Ser. No. 310,351. THE ROSSEN-NESSOR COMPANY, Akron, Ohio. Filed Jan. 24, 1931.



The words "Liquid Latex" and "Age Resisting" which appear on the drawing are not made a part of the trade-mark.

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.

Claims use since July 1, 1929.

Ser. No. 313,300. LANTEEN LABORATORIES, INC., Chicago, Ill. Filed Apr. 13, 1931.

Lanteen

For Applicators for Injection of Vaginal Prophylactic Substances, Vaginal Tampons, and Diaphragms.

Claims use since Sept. 1, 1928.

Ser. No. 313,732. FOREST CITY RUBBER COMPANY, Cleveland, Ohio. Filed Apr. 24, 1931.

Comfort

For Corn, Bunion, and Callous Pads, Foot Straighteners and Bandages.
Claims use since Feb. 7, 1931.

Ser. No. 314,663. THE STERILEK COMPANY INC., Brooklyn, N. Y. Filed May 16, 1931.

IRIS

For Sanitary Napkins.
Claims use since Mar. 2, 1931.

Ser. No. 314,820. NEW YORK HAIR CO., INC., New York, N. Y. Filed May 20, 1931.

MILADY

For Permanent Wave Machines for Human Hair and Parts Therefor—Namely, Hair Waving Pads, Heaters, and Hair Clips.
Claims use since 1928.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 298,581. ZOYA MATZKA, Rye Hill, Monroe, N. Y. Filed Apr. 9, 1930.

Zoya's

For Non-Alcoholic Maltless Fruit Juices Sold as Soft Drinks, and Mineral and Spring Water.
Claims use since Mar. 14, 1930.

Ser. No. 301,511. JAMES R. RICHARDSON, doing business as Adelanto Cider Mill, Los Angeles, Calif. Filed May 28, 1930.



The drawing is lined to indicate a red-orange color and black. Applicant disclaims the representation of a barrel apart from the mark as shown. Owner of registration No. 244,508.
For Non-Alcoholic, Maltless Beverages—Namely, Apple Cider, Cider Ale, and Grape Juice.
Claims use since July 25, 1927.

Ser. No. 315,856. HARRY E. MEADE, doing business as Mo-Ja Company, Tulsa, Okla. Filed June 15, 1931.

MO-JA
DRINK OF THE HOUR

The words "The Drink of the Hour" are disclaimed apart from the mark as shown on the drawing.
For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since February, 1931.

Ser. No. 315,898. CLICQUOT CLUB COMPANY, Millis, Mass. Filed June 16, 1931.

PHENIX

For Carbonated Non-Alcoholic Noncereal Maltless Beverages Sold as Soft Drinks, and Syrups, Extracts, and Concentrates Used in Making the Same.
Claims use since 1904.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 249,011. JOE LOWE CO. INC., Brooklyn, N. Y. Filed May 14, 1927.

10-10
SUNSHINE A A
JO LO

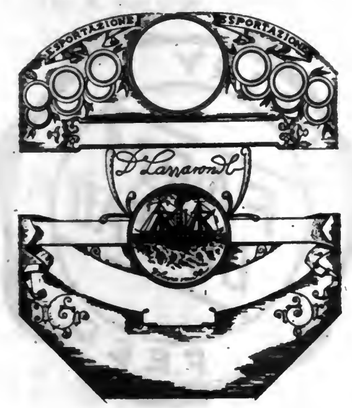
No claim is made to the lining on the drawing which indicates yellow.
For Dehydrated Whole Eggs, Dehydrated Egg Yolk and Dehydrated Egg Albumen.
Claims use since Jan. 1, 1924.

Ser. No. 282,685. TEITELBAUM BAKING CO., INC., Brooklyn, N. Y. Filed Apr. 19, 1929.

VITASAN

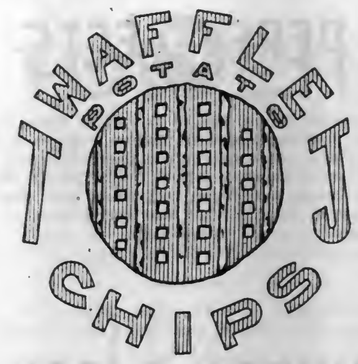
For Bread and Doughnuts and Crullers.
Claims use since September, 1928.

Ser. No. 285,978. D. LAZZARONI & C., Saronno, Italy. Filed June 22, 1929.



For Crackers.
Claims use since 1878.

Ser. No. 293,164. TOLAND & JULIEN, Ventura, Calif. Filed Dec. 2, 1929.



The section lining of the drawing designates the color red. No claim is made to the words "Waffle," "Potato," and "Chips" nor to the pictorial representation apart from the rest of mark.
For Fried Potato Chips.
Claims use since Sept. 21, 1929.

Ser. No. 297,188. GOLDEN EAGLE MILLING CO., Petaluma, Calif. Filed Mar. 12, 1930.



The lining shown on the drawing is for the color red, but no claim is made to any particular color, no claim being made to the words "Lacto Milk Feeds" apart from the mark shown.
For Prepared Poultry Feeds.
Claims use since June 1, 1929.

Ser. No. 299,795. PHILLIPS SALES COMPANY, INC., Cambridge, Md. Filed May 1, 1930.

ABSCO

For Canned Vegetables and Catsup.
Claims use since 1870.

Ser. No. 301,291. A. H. PERFECT & CO., Fort Wayne, Ind. Filed May 26, 1930.

PERFECT'S

For Canned Fruits, Canned Vegetables, Coffee, Canned Oysters, Sardines, Spaghetti, Prepared, Macaroni, Apple Butter, Olives, Mayonnaise, Chili Sauce, Cane and Maple Syrup, Canned Soups, Corn Meal, Peanut Butter, Mustard, Canned Shrimp, Evaporated Milk, Mince Meat, Rice, Catsup, Vinegar, Sweet Pickles and Dill Pickles, and Egg Noodles.
Claims use since 1904.

Ser. No. 301,533. THE VAN CAMP PACKING CO., INCORPORATED, Indianapolis, Ind. Filed May 28, 1930.

WHITE DAISY

For Cotton-Seed Oil.
Claims use since July, 1904.

Ser. No. 308,993. MAPLE GROVE CANDIES, INC., St. Johnsbury, Vt. Filed Dec. 15, 1930.

THE OLD SAP BUCKET

For Maple Sugar (Pure Vermont Maple Sugar, Maple Hearts, Grandfather's Stirred Sugar).
Claims use since 1928.

Ser. No. 308,994. MAPLE GROVE CANDIES, INC., St. Johnsbury, Vt. Filed Dec. 15, 1930.



For Maple Sugar (Pure Vermont Maple Sugar, Maple Hearts, Grandfather's Stirred Sugar).
Claims use since Nov. 17, 1930.

Ser. No. 310,162. DAVIES & SULLIVAN COMPANY, New York, N. Y. Filed Jan. 20, 1931.

Bosama

For Coffee.
Claims use since Jan. 12, 1931.

Ser. No. 310,167. OLAF HERTZWIG TRADING CO. INC., New York, N. Y. Filed Jan. 20, 1931.

A-LA-CARTE

For Sardines, Olive Oil, and Cheese.
Claims use since Dec. 22, 1930.

Ser. No. 311,093. FRENCH MAID COCOLAT COMPANY, INC., New York, N. Y. Filed Feb. 16, 1931.

FRENCH MAID FUDGE

"SUNDAE'S BEST DRESS"

Applicant disclaims the right to the exclusive use of the words "Fudge" and "Sundae's" apart from the mark shown.
For Fudge Powders.
Claims use since Dec. 17, 1930.

Ser. No. 311,458. ADAM SCHEIDT BREWING COMPANY, Norristown, Pa. Filed Feb. 25, 1931.

LUCKY PAL

For Malt Syrup Used as a Food Product.
Claims use since Feb. 18, 1931.

Ser. No. 312,196. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio. Filed Mar. 16, 1931.



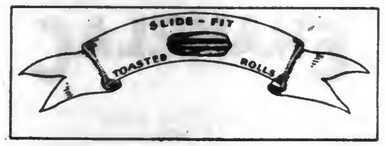
No claim is made to the words "Dairy Feed" apart from the mark as shown on the drawing.
For Dairy Feeds.
Claims use since Nov. 7, 1929.

Ser. No. 313,544. THOMAS HEDLEY & COMPANY LIMITED, Newcastle-on-Tyne, England. Filed Apr. 20, 1931.



For Olive Oil for Use as Food.
Claims use since May, 1930.

Ser. No. 314,366. MARYAN J. HUBERT, doing business as Hubert's Baking Co., Maspeth, N. Y. Filed May 9, 1931.



Applicant disclaims unqualifiedly the representation of the roll. No claim is made to the words "Slide-Fit, Toasted Rolls" apart from the mark shown on the drawing.
For Toasted Rolls.
Claims use since Apr. 22, 1931.

Ser. No. 314,375. J. C. MILLETT COMPANY, San Francisco, Calif. Filed May 9, 1931.

TRYDANTRU

For Malt Syrup.
Claims use since Apr. 24, 1931.

Ser. No. 314,940. GOLBUR, INC., Chicago, Ill. Filed May 21, 1931.

DAIS-I-GOLD

For Potato Chips.
Claims use since May 2, 1931.

Ser. No. 314,985. JOSEPH DI SANTO, doing business as Di Santo & Company, Duluth, Minn. Filed May 25, 1931.

MAZZINI

For Fresh Artichokes, Bread, Cakes, Ripe Olives, Catsup, Live Poultry, Dressed Poultry, Canned Pork and Beans, and Canned Pumpkin.
Claims use since May 17, 1930.

Ser. No. 315,032. CALIFORNIA TROPICAL FOODS, LTD., Pasadena, Calif. Filed May 26, 1931.

TOWER

For Ice Cream.
Claims use since May 8, 1931.

Ser. No. 315,089. DAVIDSON BISCUIT COMPANY, Mount Vernon, Ill. Filed May 27, 1931.

Ultra Sunalized

For Bread, Cookies, and Crackers, Pies, Cakes, and Pastries.
Claims use since May 11, 1931.

Ser. No. 315,266. OSCAR B. KAPLAN, doing business as The Kay Company, New York, N. Y. Filed June 1, 1931.



For Malt Syrup Used for Baking Bread and Cake.
Claims use since May 13, 1931.

Ser. No. 315,373. TASTY BAKING COMPANY, Philadelphia, Pa. Filed June 3, 1931.

TASTY-PIE

The trade-mark consists of the words "Tasty-Pie" joined together by a hyphen and printed in fanciful letters shown in the drawing. The mark includes a representation of a young girl in short skirts and socks with a ribbon on her hair standing behind and leaning atop of the initial letter "T" and engaged in eating a piece of cake.
The applicant disclaims the right to use the word "Tasty" and "Pie" apart from the mark as shown on the drawing.
For Pies.
Claims use since May 25, 1931.

Ser. No. 315,391. EAGLE MACARONI COMPANY, Chicago, Ill. Filed June 4, 1931.



For Alimentary Pastes Including Macaroni, Spaghetti in Different Sizes and Shapes, Vermicelli, and Egg Noodles.
Claims use since Apr. 1, 1931.

Ser. No. 315,566. A. SCHILLING & CO., San Francisco, Calif. Filed June 8, 1931. Under 10-year proviso.

Schilling

For Spices, and Particularly Ground Spices, Including Black Pepper, White Pepper, Cayenne Pepper, Mustard, Cinnamon, Cloves, Ginger, Allspice, Nutmeg, Mace, Sage, Thyme, and Savory.
Claims use since 1881.

Ser. No. 315,567. A. SCHILLING & CO., San Francisco, Calif. Filed June 8, 1931. Under 10-year proviso.

Schilling

For Food Flavoring Extracts, Including Vanilla, Lemon, Rose, Peppermint, Orange, Almond, Wintergreen, Nutmeg, Strawberry, Raspberry, Pineapple, Cherry, and Anise.
Claims use since 1881.

Ser. No. 315,732. R. E. COTTER COMPANY, San Francisco, Calif. Filed June 12, 1931.

HUSKY

For Animal Foods—Namely, Dog Food.
Claims use since Apr. 18, 1931.

Ser. No. 315,839. JOHN F. JELKE COMPANY, Chicago, Ill. Filed June 15, 1931.



Applicant hereby disclaims the word "Nut" apart from the other features of the mark shown in the drawing. The drawing is lined for color, the words "Jelke Nut" being shown in blue letters on a yellow background superimposed on a red oval outlined with a blue line.
For Oleomargarine.
Claims use since June 5, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 278,785. ENAMELED STEEL SIGN COMPANY, Chicago, Ill. Filed Feb. 2, 1929.

ENAMELAC

For Non-Electrical Advertising Signs.
Claims use since Feb. 15, 1928.

Ser. No. 285,453. GENERAL CABLE CORPORATION, New York, N. Y. Filed June 12, 1929.

LEONIC

For Tinsel, Tinsel Ribbon, Tinsel Cord, Tinsel Gift Dressings, Tinsel Garlands, Tinsel Pendants, Lead Foil Icicles, Mica Snow, Lahn, Visca Ribbon, and Christmas Trees Made in Whole or in Part of Tinsel.
Claims use since January, 1924.

Ser. No. 313,042. I. B. KLEINERT RUBBER COMPANY, New York, N. Y. Filed Apr. 7, 1931.

SOFTEX

For Shower Curtains and Window Drapes in Sets of Waterproofed Fabrics.
Claims use since 1927.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JULY 21, 1931

285,208. ELECTRIC APPLIANCES—NAMELY, ELECTRIC LIGHT PLANTS FOR HOMES AND FARMS, BATTERIES, PUMPS, AND VACUUM CLEANERS. THE ELECTRIC EQUIPMENT CORPORATION, Davenport, Iowa.
Filed February 24, 1931. Serial No. 311,872. PUBLISHED MAY 5, 1931. Class 21.

285,209. PEARLS, NECKLACES, BRACELETS, ETC. COHN & ROSENBERGER, INC., New York, N. Y.
Filed February 26, 1931. Serial No. 311,469. PUBLISHED MAY 5, 1931. Class 28.

285,210. PHOTO PRINTS, PHOTOSTATS, AND PHOTOGRAPHIC REPRODUCTIONS. CHARLES BRUNING COMPANY, INC., New York, N. Y.
Filed March 4, 1931. Serial No. 311,719. PUBLISHED MAY 5, 1931. Class 38.

285,211. PEARLS AND PRECIOUS STONES (REAL OR IMITATION), SET AND/OR UNSET; ARTICLES OF JEWELRY CONSISTING OF NECKLACES, BRACELETS, EAR-RINGS, PINS, AND FINGER RINGS. MAYBAUM BROTHERS, INC., New York, N. Y.
Filed March 4, 1931. Serial No. 311,744. PUBLISHED MAY 5, 1931. Class 28.

285,212. MONTHLY PERIODICAL. NATIONAL PETROLEUM PUBLISHING COMPANY, Cleveland, Ohio.
Filed March 9, 1931. Serial No. 311,924. PUBLISHED MAY 5, 1931. Class 38.

285,213. APPAREL BELTS, SUSPENDERS, BRACES, AND GARTERS. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed March 10, 1931. Serial No. 311,971. PUBLISHED MAY 5, 1931. Class 39.

285,214. APPAREL BELTS, SUSPENDERS, BRACES, AND GARTERS. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed March 10, 1931. Serial No. 311,972. PUBLISHED MAY 5, 1931. Class 39.

285,215. APPAREL BELTS, SUSPENDERS, BRACES, AND GARTERS. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed March 10, 1931. Serial No. 311,973. PUBLISHED MAY 5, 1931. Class 39.

285,216. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,107. PUBLISHED MAY 5, 1931. Class 15.

285,217. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,104. PUBLISHED MAY 5, 1931. Class 15.

285,218. MOUTH HARMONICAS. S. S. KRESGE COMPANY, Detroit, Mich.
Filed January 30, 1931. Serial No. 310,591. PUBLISHED MAY 5, 1931. Class 36.

285,219. SOLES MADE OR FORMED OF A COMBINATION OF RUBBER AND FABRIC FOR SHOES. THE LIMA CORD SOLE AND HEEL COMPANY, Lima, Ohio.
Filed February 2, 1931. Serial No. 310,648. PUBLISHED MAY 5, 1931. Class 39.

285,220. SOLES MADE OR FORMED OF A COMBINATION OF RUBBER AND FABRIC FOR SHOES. THE LIMA CORD SOLE AND HEEL COMPANY, Lima, Ohio.
Filed February 2, 1931. Serial No. 310,649. PUBLISHED MAY 5, 1931. Class 39.

285,221. HOSIERY AND MEN'S, WOMEN'S, AND CHILDREN'S UNDERWEAR. MILLION DOLLAR HOSIERY CO., New York, N. Y.
Filed February 3, 1931. Serial No. 310,690. PUBLISHED APRIL 21, 1931. Class 39.

285,222. LEATHER SHOES. WM. HAHN & COMPANY, Washington, D. C.
Filed February 11, 1931. Serial No. 310,940. PUBLISHED MAY 5, 1931. Class 39.

285,223. INCANDESCENT ELECTRIC LAMP BULBS. BUTLER-KOHAUS, INC., St. Louis, Mo.
Filed February 19, 1931. Serial No. 311,227. PUBLISHED MAY 5, 1931. Class 21.

285,224. CERAMIC INSULATORS. ISOLANTITE COMPANY OF AMERICA, INC., Belleville, N. J., now by change of name ISOLANTITE, INC.
Filed March 17, 1931. Serial No. 312,230. PUBLISHED MAY 5, 1931. Class 21.

285,225. RADIO RECEIVING SETS AND PARTS THEREOF. DELCO RADIO CORPORATION, Dayton, Ohio.
Filed February 19, 1931. Serial No. 311,233. PUBLISHED MAY 5, 1931. Class 21.

285,226. METAL GAS BOTTLES, FLASKS, DRUMS, AND TANKS FOR STORING AND SHIPPING GASES UNDER PRESSURE. "GRIESOGEN" GRIESHEIMER AUTOGEN VERKAUFS-GESELLSCHAFT M. B. H., Frankfort-on-the-Main-Griesheim, Germany.
Filed January 7, 1931. Serial No. 309,682. PUBLISHED MAY 5, 1931. Class 2.

285,227. HOG FOOD AND THE FOLLOWING NAMED POULTRY FEEDS: CHICK MASH, CHICK FOOD, OTHERWISE KNOWN AS BUTTERMILK STARTER, GROWING MASH, HEN SCRATCH, LAYING MASH, POULTRY FATTENER, HUSKY SCRATCH, AND CRATE FATTENER. THE CRETE MILLS, Crete, Nebr.
Filed July 28, 1926. Serial No. 235,252. PUBLISHED FEBRUARY 7, 1928. Class 46.

285,228. AUTOMOBILES, MOTOR BOATS, AIRSHIPS, ETC. HUGO JUNKERS, Dessau, Germany.
Filed February 26, 1929. Serial No. 279,926. PUBLISHED MAY 5, 1931. Class 19.

285,229. TOILET SOAPS. BETTS & MUMPETON INC., New York, N. Y.
Filed May 24, 1929. Serial No. 284,559. PUBLISHED JULY 16, 1929. Class 4.

285,230. WELDING AND BRAZING RODS. MILLS ALLOYS, INC., Los Angeles, Calif.
Filed November 4, 1929. Serial No. 291,998. PUBLISHED JULY 1, 1930. Class 14.

285,231. RUBBER AND BRASS STAMPS AND BRANDS. PRECISION ELECTROTYPE COMPANY, San Francisco, Calif.
Filed November 4, 1929. Serial No. 292,009. PUBLISHED MAY 5, 1931. Class 37.

285,232. SINK FIXTURES. BOHN ALUMINUM & BRASS CORPORATION, Detroit, Mich.
Filed February 24, 1930. Serial No. 296,888. PUBLISHED MAY 5, 1931. Class 13.

285,233. CHEESE. SCHACHTELKÄSEFABRIK FRANZ ZWICK, Kellmunz (Schwaben), Germany.
Filed March 22, 1930. Serial No. 297,782. PUBLISHED MAY 5, 1931. Class 46.

285,234. FACE CREME AND VANISHING CREME. EL ESTADO PRODUCTS COMPANY, Seattle, Wash.
Filed March 29, 1930. Serial No. 298,092. PUBLISHED MAY 5, 1931. Class 6.

285,235. GLAZED KID LEATHER. GONZALO BOZA & CO. INC., New York, N. Y.
Filed April 14, 1930. Serial No. 298,807. PUBLISHED APRIL 28, 1931. Class 1.

285,236. LIP STICK, ROUGE, FACE POWDER, AND SKIN CREAM. SINDER'S CUT RATE STORES, INC., Jersey City, N. J.
Filed May 14, 1930. Serial No. 300,545. PUBLISHED JULY 8, 1930. Class 6.

285,237. NON ELECTRICAL HAIR WAVERS, NON-ELECTRICAL HAIR CURLERS AND HAIR PINS, MADE OF NON-PRECIOUS METAL. H. GOODMAN & SONS, INC., New York, N. Y.
Filed February 16, 1931. Serial No. 311,096. PUBLISHED MAY 5, 1931. Class 40.

285,238. DETERGENT PREPARATIONS FOR GENERAL CLEANING PURPOSES. RONUK, LIMITED, Portslade, near Brighton, England.
Filed February 18, 1931. Serial No. 311,202. PUBLISHED MAY 5, 1931. Class 4.

285,239. PAINTS, VARNISHES, AND LACQUERS. ARMAND J. P. VANDERMYN, doing business as Vandermyn Paint Company, Pittsburgh, Pa.
Filed February 18, 1931. Serial No. 311,219. PUBLISHED MAY 5, 1931. Class 16.

285,240. COSMETIC TOILET CLAY PREPARATION FOR THE AID OF BEAUTY. THE DENVER MUD COMPANY, INC., Denver, Colo.
Filed February 20, 1931. Serial No. 311,266. PUBLISHED MAY 5, 1931. Class 6.

285,241. SANITARY NAPKIN BELTS. HUMPHREY STATTER, Jr., doing business as The American Girl Products Co., Sioux City, Iowa.
Filed February 25, 1931. Serial No. 311,414. PUBLISHED MAY 5, 1931. Class 44.

285,242. OIL BURNERS. GILBERT & BARKER MANUFACTURING COMPANY, West Springfield, Mass.
Filed February 26, 1931. Serial No. 311,475. PUBLISHED MAY 5, 1931. Class 34.

285,243. SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed February 27, 1931. Serial No. 311,513. PUBLISHED MAY 5, 1931. Class 4.

285,244. DANDELION KILLER COMPRISING A CHEMICAL IN POWDERED FORM. ARMIN BARTELDES, Denver, Colo.
Filed March 2, 1931. Serial No. 311,593. PUBLISHED MAY 5, 1931. Class 6.

285,245. INHALANTS FOR THE RELIEF OF INFECTIONS OF THE NASAL CAVITY. HART DRUG CORPORATION, Miami, Fla.
Filed March 4, 1931. Serial No. 311,727. PUBLISHED MAY 5, 1931. Class 6.

285,246. WASHING POWDER PREPARATION. SOCIETE DES ETABLISSEMENTS EUGENE KOENIG (EUGENE KOENIG ET CIE., SOCIETE EN COMMANDITE PAR ACTIONS), Marseille, France.
Filed August 22, 1930. Serial No. 304,931. PUBLISHED MAY 5, 1931. Class 4.

285,247. WASHING COMPOUND. GARDINER MANUFACTURING COMPANY, INC., Buffalo, N. Y.
Filed September 16, 1930. Serial No. 305,751. PUBLISHED MAY 5, 1931. Class 4.

285,248. CLEANSING PREPARATIONS FOR CEMENT, WOOD, GLASS, MARBLE, OR THE LIKE. TAR PRODUCTS CORPORATION, Providence, R. I.
Filed October 14, 1930. Serial No. 306,750. PUBLISHED MAY 5, 1931. Class 4.

285,249. RADIO AND WIRELESS TELEVISION INSTRUMENTS, LOUD-SPEAKERS, RADIOTUBES, ETC. JOHN A. ALEXANDER, New York, N. Y.
Filed October 28, 1930. Serial No. 307,245. PUBLISHED MAY 5, 1931. Class 21.

285,250. ALUMINUM CABLE, STEEL-REINFORCED ALUMINUM CABLE, AND CONDENSER BLADES, ALL FOR ELECTRICAL USE. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,873. PUBLISHED MAY 5, 1931. Class 21.

285,251. ALUMINUM CABLE, STEEL-REINFORCED ALUMINUM CABLE, AND CONDENSER BLADES, ALL FOR ELECTRICAL USE. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,874. PUBLISHED MAY 5, 1931. Class 21.

285,252. MEN'S, WOMEN'S, AND CHILDREN'S SHOES, SANDALS, AND SLIPPERS MADE IN WHOLE OR IN PART OF LEATHER OR OF LEATHER AND FABRIC. HERMAN DAVID, doing business as The R. Stern Company, New York, N. Y.
Filed November 15, 1930. Serial No. 307,928. PUBLISHED MAY 5, 1931. Class 39.

285,253. BOOTS AND SHOES MADE WHOLLY OR PARTLY OF LEATHER. THE FLORSHEIM SHOE COMPANY, Chicago, Ill.
Filed November 21, 1930. Serial No. 308,158. PUBLISHED MARCH 3, 1931. Class 39.

285,254. OXYGEN INHALATION APPARATUS. DEUTSCHE GASGLUEHLICHT-AUER-GESELLSCHAFT MIT BESCHRAENKTER HAFTUNG, Berlin, Germany.
Filed December 1, 1930. Serial No. 308,482. PUBLISHED MAY 5, 1931. Class 44.

285,255. A PREPARATION FOR THE TREATMENT OF RINGWORM. HEALATOE LABORATORY, Harrisburg, Pa.
Filed December 31, 1930. Serial No. 309,521. PUBLISHED APRIL 21, 1931. Class 6.

285,256. PROPRIETARY COUGH MEDICINE FOR HUMAN USE. MARIA LÆTITIA KEMPE HOMEYARD, doing business as The Mother Job Cure Laboratory and Liqufruta Laboratories, London, England.
Filed January 5, 1931. Serial No. 309,618. PUBLISHED MAY 5, 1931. Class 6.

285,257. PERFUMES, TOILET WATERS, EAU DE COLOGNE, FACE AND SCALP LOTIONS, FACE POWDERS, TALCUM POWDERS, DUSTING POWDERS, POWDER COMPACTS, SACHETS, AND BRILLIANTINES. LENTHERIC, INCORPORATED, New York, N. Y.
Filed January 17, 1931. Serial No. 310,058. PUBLISHED MAY 5, 1931. Class 6.

285,258. SURGICAL ADHESIVE PLASTER. THE DEANE PLASTER CO., Yonkers, N. Y.
Filed February 4, 1931. Serial No. 310,718. PUBLISHED MAY 5, 1931. Class 44.

285,259. PAINT. TRUSCON STEEL COMPANY, doing business as The Truscon Laboratories, Hamtramck, Mich.
Filed February 2, 1931. Serial No. 310,667. PUBLISHED MAY 5, 1931. Class 16.

285,260. ANTISEPTIC AND GERMICIDE FOR USE AS A MOUTH WASH, GARGLE, DEODORANT, NASAL SPRAY, OR DOUCHE. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed January 30, 1931. Serial No. 310,556. PUBLISHED MAY 5, 1931. Class 6.

285,261. FLAT PAINT. TRUSCON STEEL COMPANY, doing business as The Truscon Laboratories, Hamtramck, Mich.
Filed February 2, 1931. Serial No. 310,668. PUBLISHED MAY 5, 1931. Class 16.

285,262. SOAP, WASHING POWDER, AND OTHER CLEANING PREPARATIONS. GORDON CORPORATION, LTD., Berkeley, Calif.
Filed February 12, 1931. Serial No. 310,993. PUBLISHED MAY 5, 1931. Class 4.

285,263. PORCELAIN AND ENAMEL CLEANING COMPOUND. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed February 12, 1931. Serial No. 310,996. PUBLISHED MAY 5, 1931. Class 4.

285,264. ELECTRIC CLOCKS. MAJESTIC SPECIALTIES MFG. CO., Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill.
Filed May 24, 1930. Serial No. 301,184. PUBLISHED SEPTEMBER 9, 1930. Class 27.

285,265. NAILS, TACKS, BRADS, AND STAPLES. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo.
Filed July 7, 1930. Serial No. 303,240. PUBLISHED MAY 5, 1931. Class 13.

285,266. PADLOCKS. INDEPENDENT LOCK COMPANY, Fitchburg, Mass.
Filed March 5, 1931. Serial No. 311,782. PUBLISHED MAY 5, 1931. Class 25.

285,267. THERAPEUTIC SOLUTIONS USED IN THE TREATMENT OF THE BILIARY TRACT. ALBERT E. CONNELL, doing business as The Daker Chemical Company, Cleveland, Ohio.
Filed March 6, 1931. Serial No. 311,826. PUBLISHED MAY 5, 1931. Class 6.

285,268. OINTMENTS FOR RELIEVING MUSCULAR AND NERVE PAIN AND SORENESS AND FOR USE AS A DEODORANT. WALTER H. SAMMONS, doing business as Samaco Chemical Company, Philadelphia, Pa.
Filed March 6, 1931. Serial No. 311,849. PUBLISHED MAY 5, 1931. Class 6.

285,269. COMPLEXION POWDER, CLEANSING CREME, TISSUE CREME, ASTRINGENT LOTION, ETC. SCRUGGS-VANDERVOORT-BARNEY, St. Louis, Mo.
Filed March 9, 1931. Serial No. 311,933. PUBLISHED MAY 5, 1931. Class 6.

285,270. MEN'S AND BOYS' HATS AND CAPS. ROGERS PEET COMPANY, New York, N. Y.
Filed March 10, 1931. Serial No. 311,977. PUBLISHED APRIL 21, 1931. Class 39.

285,271. STIMULANT IN CARDIAC AND RESPIRATORY FAILURE AND FOR THE BLOOD CIRCULATION. I. G. FARBENINDUSTRIE-AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed March 16, 1931. Serial No. 312,186. PUBLISHED MAY 5, 1931. Class 6.

285,272. INSECTICIDES. THE LEWY CHEMICAL COMPANY, New York, N. Y.
Filed March 16, 1931. Serial No. 312,189. PUBLISHED MAY 5, 1931. Class 6.

285,273. HENNA, QUICK WAVE SET, AND WAVE SET POWDER COMPOUND. MURRAY AND NICKELL MANUFACTURING COMPANY, Chicago, Ill.
Filed March 16, 1931. Serial No. 312,195. PUBLISHED MAY 5, 1931. Class 6.

285,274. PETROLEUM JELLY. JOMOL PETROLEUM PRODUCTS, Philadelphia, Pa.
Filed March 17, 1931. Serial No. 312,232. PUBLISHED MAY 5, 1931. Class 6.

285,275. ANESTHETIC. SUTLIFF & CASE CO., INC., Peoria, Ill.
Filed March 18, 1931. Serial No. 312,285. PUBLISHED MAY 5, 1931. Class 6.

285,276. CABINET GAS RANGES, GAS COOKERS, COMBINATION COAL AND GAS RANGES, WARM AIR FURNACES, COAL FIRE WATER HEATERS, AND COAL RANGES. CHARLES TISCH, INC., Brooklyn, N. Y.
Filed March 20, 1931. Serial No. 312,351. PUBLISHED MAY 5, 1931. Class 34.

285,277. HEALING AND PROTECTIVE OINTMENT FOR EXTERNAL USE UPON POULTRY AND A REPELLENT AGAINST POULTRY CANNIBALISM. BONIDE CHEMICAL CO. INC., Utica, N. Y.
Filed March 23, 1931. Serial No. 312,408. PUBLISHED MAY 5, 1931. Class 6.

285,278. PREPARATION FOR THE TREATMENT OF DISORDERED CONDITIONS OF THE STOMACH OR BOWELS, TEETHING DISORDERS, INDIGESTION, NONASSIMILATION, DIARRHEA, AND ORDINARY CHILDREN'S AILMENTS. FRET CHEMICAL CO., Greensboro, N. C.
Filed March 23, 1931. Serial No. 312,423. PUBLISHED MAY 5, 1931. Class 6.

285,279. POWDER FOR USE IN THE TREATMENT OF HEADACHE, COLDS, AND NEURALGIA. JAMES D. GREGG, doing business as Foster Chemical Co., Liberty, N. C.
Filed March 23, 1931. Serial No. 312,428. PUBLISHED MAY 5, 1931. Class 6.

285,280. MERCURY. RESEARCH PRODUCTS CORPORATION, New York, N. Y.
Filed March 25, 1931. Serial No. 312,531. PUBLISHED MAY 5, 1931. Class 6.

285,281. DROPSY MEDICINE. GLADYS G. HARBIN, Atlanta, Ga.
Filed March 26, 1931. Serial No. 312,560. PUBLISHED MAY 5, 1931. Class 6.

285,282. HOUSE ORGANS PUBLISHED MONTHLY. THE CURTIS PUBLISHING COMPANY, Philadelphia, Pa.
Filed March 24, 1931. Serial No. 312,480. PUBLISHED MAY 5, 1931. Class 38.

285,283. HOUSE ORGANS PUBLISHED MONTHLY. THE CURTIS PUBLISHING COMPANY, Philadelphia, Pa.
Filed March 24, 1931. Serial No. 312,481. PUBLISHED MAY 5, 1931. Class 38.

285,284. WEEKLY MAGAZINE. PARADE, INCORPORATED, Cleveland, Ohio.
Filed March 28, 1931. Serial No. 312,663. PUBLISHED MAY 5, 1931. Class 38.

285,285. REFINED, SEMIREFINED, AND UNREFINED OILS MADE FROM PETROLEUM, BOTH WITH AND WITHOUT ADMIXTURE OF ANIMAL, VEGETABLE, OR MINERAL SUBSTANCES, FOR ILLUMINATING, BURNING, POWER, FUEL, AND LUBRICATING PURPOSES, AND LUBRICATING GREASES. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed March 28, 1931. Serial No. 312,671. PUBLISHED MAY 5, 1931. Class 15.

285,286. APPAREL BELTS, SUSPENDERS, AND BRACES. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed March 10, 1931. Serial No. 311,974. PUBLISHED MAY 5, 1931. Class 39.

285,287. APPAREL BELTS, SUSPENDERS, AND BRACES. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed March 10, 1931. Serial No. 311,975. PUBLISHED MAY 5, 1931. Class 39.

285,288. KEYS AND BADGES, ALL MADE OR PLATED WITH PRECIOUS METAL. KAPPA DELTA PI, Tiffin, Ohio.
Filed March 12, 1931. Serial No. 312,052. PUBLISHED MAY 5, 1931. Class 28.

285,289. CLEANSING TISSUE PAPERS. DERMAY PERFUMERS, INC., New York, N. Y.
Filed March 13, 1931. Serial No. 312,096. PUBLISHED MAY 5, 1931. Class 37.

285,290. TOILET PAPER. MODERN TISSUES CORPORATION, doing business as Antoinette Doré, New York, N. Y.
Filed March 13, 1931. Serial No. 312,111. PUBLISHED MAY 5, 1931. Class 37.

285,291. PHOTOGRAPHIC FLASH LAMPS. JACK GLASSBERG, doing business as Universal Distributing Co., Newark, N. J.
Filed March 16, 1931. Serial No. 312,183. PUBLISHED MAY 5, 1931. Class 21.

285,292. HOUSE ORGAN. O. M. SCOTT & SONS COMPANY, Marysville, Ohio.
Filed March 18, 1931. Serial No. 312,270. PUBLISHED MAY 5, 1931. Class 38.

285,293. REFINED, SEMIREFINED, AND UNREFINED OILS MADE FROM PETROLEUM BOTH WITH AND WITHOUT ADMIXTURE OF ANIMAL, VEGETABLE, OR MINERAL SUBSTANCES FOR ILLUMINATING, BURNING, POWER, FUEL, AND LUBRICATING PURPOSES, AND LUBRICATING GREASES. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed March 18, 1931. Serial No. 312,274. PUBLISHED MAY 5, 1931. Class 15.

285,294. SHOES MADE OF LEATHER, CANVAS, RUBBER, CLOTH, OR COMBINATIONS THEREOF. CAMPBELL E. MILLER, Butler, Pa.
Filed March 19, 1931. Serial No. 312,304. PUBLISHED MAY 5, 1931. Class 39.

285,295. MEN'S GARTERS. S. H. KRESS & CO., New York, N. Y.
Filed March 20, 1931. Serial No. 312,344. PUBLISHED MAY 5, 1931. Class 39.

285,296. PAPER NAPKINS AND HANDKERCHIEFS. THE TISSUE COMPANY, Saugerties, N. Y.
Filed March 20, 1931. Serial No. 312,352. PUBLISHED MAY 5, 1931. Class 37.

285,297. COMIC STRIP OR SECTION FOR NEWSPAPER PUBLICATION. PRESS PUBLISHING COMPANY, New York, N. Y.
Filed March 21, 1931. Serial No. 312,386. PUBLISHED MAY 5, 1931. Class 38.

285,298. BUTCHERS' WRAPPING PAPER. THE CHATFIELD PAPER CORPORATION, Cincinnati, Ohio.
Filed March 23, 1931. Serial No. 312,411. PUBLISHED MAY 5, 1931. Class 37.

285,299. CERTAIN NAMED WEARING APPAREL. COHEN, GOLDMAN & CO. INC., New York, N. Y.
Filed March 23, 1931. Serial No. 312,415. PUBLISHED MAY 5, 1931. Class 39.

285,300. MONTHLY MAGAZINE. THE CROWELL PUBLISHING COMPANY, New York, N. Y.
Filed March 23, 1931. Serial No. 312,418. PUBLISHED MAY 5, 1931. Class 38.

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

285,301. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) HOCHSCHILD, KOHN & Co., Baltimore, Md. Filed May 6, 1930. Serial No. 300,024.

BELMONT

For Gas Ranges.
Claims use since Mar. 1, 1930.

285,302. (CLASS 21. ELECTRICAL APPARATUS, MACHINES AND SUPPLIES.) E. A. LABORATORIES, INC., Brooklyn, N. Y. Filed Apr. 26, 1930. Serial No. 299,501.

TWINS

For Electrically-Actuated Horns and Their Adjuncts, Such as are Utilized on Automobiles, Motor Boats, and Motor Cycles.
Claims use since Jan. 25, 1930.

285,303. (CLASS 39. CLOTHING.) THE SAFETY EQUIPMENT SERVICE COMPANY, Cleveland, Ohio. Filed May 5, 1930. Serial No. 299,997.

SAFETY

SERVICE

For Shoes, Leggings, Asbestos and Leather Gloves, Mittens, Aprons, Hats, Caps, Helmets, Body-Protective Shields, and Suits for Workers.
Claims use since 1925.

285,304. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MINNIE MORESKY, New Castle, Pa. Filed Apr. 18, 1930. Serial No. 299,078.

NIAGARA

For Malt Syrup.
Claims use since Jan. 10, 1920.

285,305. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) JOSEPH H. COHEN, doing business as The Perfection Motor Products Company, Bridgeport, Conn. Filed Apr. 18, 1930. Serial No. 299,044.

GLO-LITE

For Electric Cigar Lighters.
Claims use since Jan. 15, 1930.

285,306. (CLASS 39. CLOTHING.) NOVELTY SHOE COMPANY, Chicago, Ill. Filed Jan. 27, 1930. Serial No. 295,271.

Ray Parker

For Boots, Shoes, and Slippers, Made Wholly or in Part of Leather, Fabric, Rubber, or Combinations Thereof.
Claims use since Jan. 5, 1927.

285,307. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE HUNNEWELL SOAP COMPANY, Cincinnati, Ohio. Filed Feb. 14, 1929. Serial No. 279,359.

SHINE-ALL

For Cleaning and Scouring Soaps.
Claims use since Mar. 20, 1899.

285,308. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) COMPAÑIA RON BACARDÍ, S. A., Santiago, Cuba. Filed Dec. 12, 1930. Serial No. 308,879.

BACARDI

For Rum.
Claims use since January, 1900.

285,309. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) UNITED ELASTIC CORPORATION, Easthampton, Mass. Filed Nov. 20, 1930. Serial No. 308,141.

EVERWEAR

For Elastic Fabrics.
Claims use since 1918.

285,310. (CLASS 2. RECEPTACLES.) TRAVER PAPER & MANUFACTURING CO., Chicago, Ill. Filed Oct. 31, 1930. Serial No. 307,435.

LOXTITE

For Box and Carton Partitions or Fillers Made of Paper and Providing Adjacent Compartments.
Claims use since Mar. 14, 1930.

285,311. (CLASS 2. RECEPTACLES.) THE CLOSGARD WARDROBE COMPANY, INC., South Washington, Va. Filed Oct. 7, 1930. Serial No. 306,491.

ALLPROOF

For Wardrobe Bags.
Claims use since July, 1918.

285,312. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) A. RUSSO & CO., Chicago, Ill. Filed Oct. 6, 1930. Serial No. 306,462.

RUSSO ITALIAN MACARONI

For Macaroni.
Claims use since June 1, 1930.

285,313. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) MARB-L-COTE, INC., Chicago, Ill. Filed Sept. 5, 1930. Serial No. 305,364.

Cedar-Cote

For Wall-Coating Material in the Nature of Paint.
Claims use since May 26, 1930.

285,314. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed Aug. 28, 1930. Serial No. 305,114.

Woodbrite

For Polish for Furniture and Woodwork Which May be Incidentally Used on Glass and Porcelain.
Claims use since Jan. 13, 1930.

285,315. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NEW YORK WHOLESALE GROCERY CO., INC., New York, N. Y. Filed Aug. 27, 1930. Serial No. 305,084.

NEW YORK'S BEST

For Canned Grapefruit, Canned Apple Sauce, Canned Corn, Peas, Prunes, Pineapple, Peaches, and Dried Carrots, Beets, and Beans.
Claims use since September, 1929.

285,316. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE PRINTZ-BIEDERMAN COMPANY, Cleveland, Ohio. Filed Aug. 13, 1930. Serial No. 304,578.

St. Moritz

For Woolen Textile Fabrics in the Piece.
Claims use since May 3, 1930.

285,317. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE PRINTZ-BIEDERMAN COMPANY, Cleveland, Ohio. Filed Aug. 13, 1930. Serial No. 304,576.

100% Alpacatuft

For Woolen Textile Fabrics in the Piece.
Claims use since May 3, 1930.

285,318. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE ROESSLER & HASSLACHER CHEMICAL COMPANY, New York, N. Y. Filed July 9, 1930. Serial No. 303,303.

BRITE-A-LOY

For Metal Anodes for Electroplating Purposes.
Claims use since June 3, 1930.

285,319. (CLASS 37. PAPER AND STATIONERY.) TILESTON AND HOLLINGSWORTH COMPANY, Boston, Mass. Filed Jan. 7, 1931. Serial No. 309,705.

MILTON

For Cover and Text Papers.
Claims use since May 14, 1913.

285,320. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) KOM-FUT ARCH SUPPORT CO., INC., New York, N. Y. Filed Mar. 13, 1931. Serial No. 312,104.

THE OXFORD ARCH SUPPORT

For Arch Supports.
Claims use since Apr. 15, 1921.

285,321. (CLASS 37. PAPER AND STATIONERY.) RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931. Serial No. 313,638.

YELLOWSTONE

For Lead Pencils.
Claims use since 1907.

285,322. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. E. BARKES PRODUCTS CO., Elkhart, Ind. Filed Apr. 27, 1931. Serial No. 313,827.

Barkes's

For Horseradish.
Claims use since Aug. 15, 1909.

285,323. (CLASS 15. OILS AND GREASES.) RADBILL OIL COMPANY, Philadelphia, Pa. Filed Apr. 30, 1931. Serial No. 314,014.

BRUNSWICK

For Motor Lubricating Oils.
Claims use since Feb. 18, 1930.

285,324. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) RICHARD DIENER, Oxnard, Calif. Filed May 2, 1931. Serial No. 314,102.

DIENER'S

For Horticultural Growths—Namely, Plants, Bulbs; Vegetable, Garden, and Field Seeds.
Claims use since Apr. 2, 1928.

285,325. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) GOODRICH ELECTRIC COMPANY, Chicago, Ill. Filed May 2, 1931. Serial No. 314,110.

SEPRABLE

For Unitary Electric Lighting Fixtures.
Claims use since Jan. 18, 1930.

285,326. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) ROSE BRAND WIPERS, INC., New York, N. Y. Filed May 2, 1931. Serial No. 314,128.

EVER-SHINE

For Polishing Cloths.
Claims use since Apr. 16, 1930.

285,327. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE SHARPLES SPECIALTY COMPANY, Philadelphia, Pa. Filed May 4, 1931. Serial No. 314,177.

VAPORTITE

For Centrifugal Machines and Parts Thereof.
Claims use since Apr. 27, 1926.

285,328. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE RUBEL BAKING CO., Cincinnati, Ohio. Filed June 2, 1931. Serial No. 315,333.

RYE TRIPLE BREAD

For Bread.
Claims use since Dec. 5, 1929.

285,329. (CLASS 39. CLOTHING.) DORCO MILLINERY COMPANY, Chicago, Ill. Filed May 29, 1930. Serial No. 301,600.

René Cordo

For Ladies' and Misses' Hats.
Claims use since May 1, 1930.

285,330. (CLASS 39. CLOTHING.) PEDIGO-WEBER SHOE CO., St. Louis, Mo. Filed May 29, 1930. Serial No. 301,693.

NO SO NO TACS PROCESS

For Shoes Made of Leather and of Leather and Fabric Combinations.
Claims use since May 16, 1930.

285,331. (CLASS 39. CLOTHING.) H. CHOATE & COMPANY, Winona, Minn. Filed July 28, 1930. Serial No. 303,877.

Sally Swaun

For Women's Wearing Apparel—Namely, Dresses, Coats, Hats, Gloves, Hosiery, and Underwear.
Claims use since May 1, 1930.

285,332. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE HERBRAND CO., Fremont, Ohio. Filed May 31, 1930. Serial No. 301,918.

MULTI GRIP

For Plier Wrenches.
Claims use since Apr. 9, 1930.

285,333. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) BAKER & COMPANY INC., Newark, N. J. Filed June 14, 1930. Serial No. 302,427.

FLESH TONE

For Optical Products—Namely, Eyeglass Frames.
Claims use since May 22, 1930.

285,334. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BROOME COUNTY GOLDEN GUERNSEY MILK CO., INC., Binghamton, N. Y. Filed June 24, 1930. Serial No. 302,767.

VITA MIN GUERN SEY

For Milk.
Claims use since May 20, 1930.

285,335. (CLASS 39. CLOTHING.) ALBERT BRUCKNER'S SONS, Jersey City, N. J. Filed June 25, 1930. Serial No. 302,809.

BERAYKAP

For Berets, Tam-O-Shanters, Hats, and Caps for Men, Women, and Children.
Claims use since May 15, 1930.

TRADE-MARK REGISTRATIONS RENEWED

36,450. SARSAPARILLA. Registered May 21, 1901. CLICQUOT CLUB BOTTLING & EXTRACT CO. Renewed May 21, 1931, to Clicquot Club Company, Millis, Mass., a Corporation of Rhode Island, successor.

36,592. BLANK-BOOKS, LOOSE SHEETS, AND CERTAIN NAMED STATIONERY SUPPLIES. Registered June 18, 1901. BAKER-VAWTER COMPANY, Chicago, Ill. Renewed June 18, 1931, to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware, successor.

36,950. SEWING MACHINES. Registered August 20, 1901. ILLINOIS SEWING MACHINE COMPANY, Chicago, Ill. Renewed August 20, 1931, to Consolidated Industries, Inc., Rockford, Ill., a Corporation of Illinois, successor.

36,975. SMOKING TOBACCO, CHEWING TOBACCO, CIGARS, CHEROOTS, CIGARETTES, AND SNUFF. Registered August 27, 1901. JOHN PLAYER & SONS LIMITED, Nottingham, England. Renewed August 27, 1931, to The Imperial Tobacco Company (of Great Britain and Ireland) Limited, Bedminster, England, a Corporation of Great Britain, assignee.

37,019. ANTIFRICTION METALS. Registered September 3, 1901. THE NATIONAL METAL CO. Renewed September 3, 1931, to The National Metal Company, Limited, Glasgow, Scotland, a Corporation of Great Britain, successor.

37,112. SMOKING TOBACCO, CHEWING TOBACCO, CIGARS, CHEROOTS, AND CIGARETTES. Registered September 24, 1901. B. MURATTI, SONS & CO., LIMITED, Manchester, England. Renewed September 24, 1931, to United Kingdom Tobacco Company (1929) Limited, London, England, a Corporation of Great Britain, assignee by mesne assignments.

37,113. SMOKING TOBACCO, CHEWING TOBACCO, CIGARS, CHEROOTS, AND CIGARETTES. Registered September 24, 1901. B. MURATTI, SONS & CO., LIMITED, Manchester, England. Renewed September 24, 1931, to United Kingdom Tobacco Company (1929) Limited, London, England, a Corporation of Great Britain, assignee by mesne assignments.

37,159. SMOKING TOBACCO, CHEWING TOBACCO, CIGARS, CHEROOTS, CIGARETTES, AND SNUFF. Registered October 1, 1901. JOHN PLAYER & SONS, LIMITED, Nottingham, England. Renewed October 1, 1931, to The Imperial Tobacco Company (Of Great Britain and Ireland) Limited, Bedminster, England, a Corporation of Great Britain, assignee by mesne assignments.

37,350. SMOKING TOBACCO, CHEWING TOBACCO, CIGARS, CHEROOTS, CIGARETTES, AND SNUFF. Registered November 26, 1901. JOHN PLAYER & SONS, LIMITED, Nottingham, England. Renewed November 26, 1931, to The Imperial Tobacco Company (Of Great Britain and Ireland) Limited, Bedminster, England, a Corporation of Great Britain, assignee.

81,780. WINE. Registered May 9, 1911. CALIFORNIA WINE ASSOCIATION. Renewed May 9, 1931, to Fruit Industries, Limited, San Francisco, Calif., a Corporation of California, assignee.

81,781. HOCK-TYPE WINE. Registered May 9, 1911. CALIFORNIA WINE ASSOCIATION. Renewed May 9, 1931, to Fruit Industries, Limited, San Francisco, Calif., a Corporation of California, assignee.

81,819. HAARLEM OIL. Registered May 9, 1911. OPRECHTE HAARLEMMER OLIE FABRIEK (VOORHEEN ONDER DE FIRMA G. DE KONING TILLY). Renewed May 9, 1931, to N. V. Oprechte Haarlemmerolie Fabriek, Haarlem, Netherlands, a Corporation of the Netherlands, successor.

82,139. STICKY FLY-PAPER AND OTHER FLY-CATCHING DEVICES. Registered June 6, 1911. MAX DAMETZ. Renewed June 6, 1931, to Pyramiden-Fliegenfanger-Fabrik Max Dametz m. b. H. Zeitz, Zeitz, Germany, an Association of Germany, assignee.

82,176. PAJAMAS, NIGHT-SHIRTS, NEGLIGÉE AND DRESS-SHIRTS. Registered June 6, 1911. E. ROSENFELD & CO. Renewed June 6, 1931, to The Faultless Manufacturing Company, Baltimore, Md., a Corporation of Maryland, assignee by mesne assignments.

82,180. CHEMICAL PREPARATION FOR KILLING FLIES. Registered June 6, 1911. HAROLD SOMERS. Renewed June 6, 1931, to Harold Somers, Inc., Brooklyn, N. Y., a Corporation of New York, assignee.

82,214. A REMEDY FOR COUGHS AND COLDS. Registered June 13, 1911. DAVIS & LAWRENCE CO., New York, N. Y., a Corporation of New York. Renewed June 13, 1931.

82,258. CEREAL FOODS CONSISTING OF ENTIRE WHEAT, ROASTED, AND A SMALL PER CENT. OF PURE MOLASSES. Registered June 13, 1911. POSTUM CEREAL CO., LIMITED, Battle Creek, Mich. Renewed June 13, 1931, to Postum Company, Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

82,331. A CERTAIN MEDICINAL REMEDY. Registered June 20, 1911. HORACE O. HURLEY. Renewed June 20, 1931, to H. O. Hurley Company, Louisville, Ky., a Corporation of Kentucky, successor.

82,415. CANDY. Registered June 27, 1911. THE CHANDLER AND RUDD COMPANY, Cleveland, Ohio, a Corporation of Ohio. Renewed June 27, 1931.

82,444. A NON-ALCOHOLIC TONIC BEVERAGE. Registered June 27, 1911. JERSEY-CREME COMPANY, Fort Worth, Tex., a Corporation of Texas. Renewed June 27, 1931.

82,464. DRESS-SHIRTS, WORK-SHIRTS, NIGHT-SHIRTS, AND NEGLIGÉE SHIRTS. Registered June 27, 1911. OPPENHEIM, OBERNDORF & CO., Baltimore, Md. Renewed June 27, 1931, to Gotham Silk Hosiery Company, Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

82,572. ROOFING-PAPER AND ROOFING-FELT. Registered July 11, 1911. THE CHATFIELD MANUFACTURING COMPANY, Cincinnati, Ohio. Renewed July 11, 1931, to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts, assignee.

82,800. CANNED SALMON. Registered July 25, 1911. KEY CITY PACKING CO., Port Townsend, Wash. Renewed July 25, 1931, to Pacific American Fisheries, South Bellingham, Wash., a Corporation of Maine, assignee by mesne assignments.

82,801. CANNED SALMON. Registered July 25, 1911. KEY CITY PACKING CO., Port Townsend, Wash. Renewed July 25, 1931, to Pacific American Fisheries, South Bellingham, Wash., a Corporation of Maine, assignee by mesne assignments.

82,802. CANNED SALMON. Registered July 25, 1911. KEY CITY PACKING CO., Port Townsend, Wash. Renewed July 25, 1931, to Pacific American Fisheries, South Bellingham, Wash., a Corporation of Maine, assignee by mesne assignments.

82,803. CANNED SALMON. Registered July 25, 1911. KEY CITY PACKING CO., Port Townsend, Wash. Renewed July 25, 1931, to Pacific American Fisheries, South Bellingham, Wash., a Corporation of Maine, assignee by mesne assignments.

82,889. CERTAIN TOILET PREPARATIONS. Registered August 1, 1911. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed August 1, 1931.

82,960. CLARET-WINE. Registered August 8, 1911. THE CALIFORNIA WINE ASSOCIATION. Renewed August 8, 1931, to Fruit Industries, Limited, San Francisco, Calif., a Corporation of California, assignee.

82,961. WINE, PURE CALIFORNIA PORT. Registered August 8, 1911. CALIFORNIA WINE ASSOCIATION. Renewed August 8, 1931, to Fruit Industries, Limited, San Francisco, Calif., a Corporation of California, assignee.

82,979. CANNED SALMON. Registered August 8, 1911. HAWK FISH COMPANY. Renewed August 8, 1931, to P. E. Harris & Co., Seattle, Wash., a Corporation of Washington, by change of name.

82,980. CANNED SALMON. Registered August 8, 1911. HAWK FISH COMPANY. Renewed August 8, 1931, to P. E. Harris & Co., Seattle, Wash., a Corporation of Washington, by change of name.

82,993. WATCHES, WATCHCASES, WATCH-MOVEMENTS, AND PARTS OF EACH THEREOF. Registered August 8, 1911. THE KEYSTONE WATCH CASE COMPANY, Philadelphia, Pa. Renewed August 8, 1931, to Keystone Watch Case Corporation, Riverside, N. J., a Corporation of Pennsylvania, assignee.

83,274. RUBBER HEELS FOR BOOTS AND SHOES. Registered August 29, 1911. O'SULLIVAN RUBBER COMPANY, Lowell, Mass. Renewed August 29, 1931, to O'Sullivan Rubber Company, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

83,479. CAMERAS AND PHOTOGRAPHIC DEVELOPING APPARATUS. Registered September 19, 1911. COMMERCIAL CAMERA CO. Renewed September 19, 1931, to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island, by change of name.

83,505. WHEAT-FLOUR. Registered September 19, 1911. MONTANA FLOUR MILLS CO., Harlowton, Mont. Renewed September 19, 1931, to Montana Flour Mills Company, Great Falls, Mont., a Corporation of Montana.

83,691. BITTERS. Registered October 3, 1911. J. RUSSAK, Kosten, Germany. Renewed October 3, 1931, to J. Russak, Fraustadt i. Schles, Germany.

83,728. WOOLEN, WORSTED, SILK, MOHAIR, AND COTTON PIECE GOODS AND PIECE GOODS MADE OF A COMBINATION OF TWO OR MORE OF THOSE FIBERS. Registered October 10, 1911. GEORGE J. GEER. Renewed October 10, 1931, to B. Priestley & Co., Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

83,870. A REMEDY FOR DISEASES OF THE URINARY ORGANS. Registered October 17, 1911. VIAL, Paris, France. Renewed October 17, 1931, to Laboratoire de Pharmacologie, Inc., New York, N. Y., a Corporation of New York, successor.

83,873. WATCH-MOVEMENTS, WATCHES, AND PARTS THEREOF. Registered October 17, 1911. WALTHAM WATCH COMPANY. Renewed October 17, 1931, to Waltham Watch Company, Waltham, Mass., a Corporation of Massachusetts, assignee.

83,943. A COMPOSITION TO BE APPLIED TO CEMENT AND CONCRETE STRUCTURES. Registered October 24, 1911. JOHN M. RAUHOFF. Renewed October 24, 1931, to Ironite Company, Chicago, Ill., a Corporation of Illinois, assignee.

83,952. WATCH-MOVEMENTS, WATCHES, AND PARTS THEREOF. Registered October 24, 1911. WALTHAM WATCH COMPANY. Renewed October 24, 1931, to Waltham Watch Company, Waltham, Mass., a Corporation of Massachusetts, assignee.

83,966. SELF-RISING FLOUR. Registered October 24, 1911. THE DAVIS MILLING COMPANY, St. Joseph, Mo. Renewed October 24, 1931, to The Quaker Oats Company, Chicago, Ill., a Corporation of New Jersey, assignee by mesne assignments.

84,008. WHEAT-FLOUR. Registered October 31, 1911. KEHLOR FLOUR MILLS COMPANY, St. Louis, Mo., and East St. Louis, Ill. Renewed October 24, 1931, to Hall Milling Company, St. Louis, Mo., a Corporation of Missouri, assignee.

84,021. BOYS' OUTER SUITS, COATS, VESTS, AND PANTS. Registered October 31, 1911. MERIT MANUFACTURING COMPANY. Renewed October 31, 1931, to Merit Clothing Company, Mayfield, Ky., a Corporation of Kentucky, by change of name.

84,023. ORANGES AND LEMONS. Registered October 31, 1911. MOUNTAIN VIEW ORANGE AND LEMON GROWERS ASSOCIATION. Renewed October 31, 1931, to Mountain View Fruit Association, Upland, Calif., a Corporation of California, assignee.

84,078. WHEAT-FLOUR, STOCK FEED, AND POULTRY FEED. Registered November 7, 1911. BROOKLYN ELEVATOR & MILLING COMPANY, New York, N. Y. Renewed November 7, 1931, to Brooklyn Elevator & Milling Company, Jersey City, N. J., a Corporation of New York.

84,124. A CHEMICAL WOOD-PRESERVATIVE, DISINFECTANT, AND INSECTICIDE. Registered November 7, 1911. THE NORTHEASTERN COMPANY, Boston, Mass. Renewed November 7, 1931, to The Northeastern Company, Cambridge, Mass., a Corporation of Massachusetts.

84,187. COFFEE. Registered November 14, 1911. NORWINE COFFEE COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed November 14, 1931.

84,188. FILTERING-PAPER, FILTERING-PASTEBOARD, AND FILTERING PAPER BLOCKS. Registered November 14, 1911. PAPIERFABRIK HAHNEMÜHLE GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Rellichausen, near Dassel, Germany. Renewed November 14, 1931, to Papierfabrik Hahnemühle Gesellschaft mit beschränkter Haftung, Hahnemühle, Germany, a Corporation of Germany.

84,233. A CHEMICAL COMPOUND FOR CASE-HARDENING IRON AND STEEL. Registered November 21, 1911. E. F. HOUGHTON & CO., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed November 21, 1931.

84,234. A CHEMICAL COMPOUND FOR CASE-HARDENING IRON AND STEEL. Registered November 21, 1911. E. F. HOUGHTON & CO., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed November 21, 1931.

84,323. CERTAIN FOODS. Registered November 28, 1911. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio, a Corporation of Ohio. Renewed November 28, 1931.

LABELS

REGISTERED JULY 21, 1931

39,429.—*Title:* CREST-ON. For Butter. JAMES I. BOYD, doing business as Boyd Creamery Co., Creston, Iowa. Published January 15, 1931.

39,430.—*Title:* CLIPPER. For Ship Paints. THE CLIMAX CLEANER MFG. COMPANY, Cleveland, Ohio. Published March 30, 1931.

39,431.—*Title:* MABAY. For Sugar. COMPANIA AZUCARERA CENTRAL MABAY, Habana, Cuba. Published March 19, 1931.

39,432.—*Title:* MOTHER CLAIR'S. For Cough Syrup. MRS. MAY FINN, Minneapolis, Minn. Published December 1, 1929.

39,433.—*Title:* FREIHOFER'S PULLMAN BREAD. For Bread. CHAS. FREIHOFER BAKING CO. INC., Troy, N. Y. Published October 14, 1929.

39,484.—*Title:* FRONTENAC—INDIA PALE—EXPORT ALE. For Ale. FRONTENAC BREWERIES, LIMITED, Montreal, Quebec, Canada. Published February 2, 1931.

39,435.—*Title:* HITTS DANGER LIGHTS. For Illuminating Signal Lights Used for Night Celebrations, Regattas, Outings, Etc. HITT FIREWORKS COMPANY, Seattle, Wash. Published April 5, 1931.

39,436.—*Title:* 'LO' LENE HOSIERY. For Hosiery. HOOVER HOSIERY COMPANY, Concord, N. C. Published May 7, 1931.

39,437.—*Title:* HYLYTE IMPROVED SULPHURIC ACID, MORE POWER-LIFE AND ACTION, ELIMINATES SULPHATION TROUBLES. For Sulphuric Acid. HYLYTE LABORATORIES, INC., Chicago, Ill. Published July 9, 1930.

39,438.—*Title:* KLEENZIT. For Preparation for Removing Corrosion from Radiators. INLAND MOTOR PRODUCTS COMPANY, Des Moines, Iowa. Published March 7, 1931.

39,439.—*Title:* SNOW KING. For Orangeade. LASH'S PRODUCTS COMPANY, San Francisco, Calif. Published March 7, 1931.

39,440.—*Title:* ARKITOY WOOD CONSTRUCTION SET. For Construction Sets. G. B. LEWIS COMPANY, Watertown, Wis. Published April 1, 1931.

39,441.—*Title:* FIT-TO-FORM UNDIES. For Under-Garments for Women and Misses. ALFRED LICHTENSTEIN, INC., New York, N. Y. Published April 10, 1931.

39,442.—*Title:* VEG-E-TONIC. For Chemical Compound for Plant Tonic. MCCLAIN BROTHERS COMPANY, Canton, Ohio. Published April 10, 1931.

39,443.—*Title:* WORMTOX. For Chemical Compound for Destroying and Eradicating Vermin of All Kinds in Soil. MCCLAIN BROTHERS COMPANY, Canton, Ohio. Published April 8, 1931.

39,444.—*Title:* KITCHEN KING. For Metal Sponges. NATIONAL POT-CLEANER COMPANY, Los Angeles, Calif. Published April 2, 1931.

39,445.—*Title:* CERTIFIED. For Mushrooms. PREMIER MUSHROOM COMPANY, West Chester, Pa. Published March 5, 1931.

39,446.—*Title:* FLY-TOX. For Insecticide. THE REX RESEARCH CORPORATION, Toledo, Ohio. Published March 30, 1931.

39,447.—*Title:* SANI-TISSUE. For Toilet Paper. SCOTT PAPER COMPANY, Chester, Pa. Published December 29, 1930.

39,448.—*Title:* SCOTTISSUE. For Paper Towels in Folded Form. SCOTT PAPER COMPANY, Chester, Pa. Published May 26, 1931.

39,449.—*Title:* CHASE AND SANBORN'S SEAL BRAND TEA. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published January 19, 1931.

39,450.—*Title:* DABS OF COTTON. For Sterilized Cotton for Facial Uses. IRVING TOW, Mount Vernon, N. Y. Published April 22, 1931.

39,451.—*Title:* FRESH ROASTED COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published June 17, 1931.

39,452.—*Title:* FRESH ROASTED COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published June 17, 1931.

39,453.—*Title:* WELDTITE. For Rubber Cement. WELDTITE PRODUCTS & MANUFACTURING CO., Du Bois, Pa. Published January 9, 1931.

PRINTS

REGISTERED JULY 21, 1931

13,298.—*Title:* AWREY BAKERY DAINTIES. For Bakery Dainties. AWREY BAKERIES, Detroit, Mich. Published April 1, 1931.

13,299.—*Title:* MY CARDS ARE ON THE TABLE. For Coal. JAMES C. BERANEK, doing business as Douglas Coal Company, Chicago, Ill. Published May 1, 1931.

13,300.—*Title:* DISEASE CONSCIOUS. For Incubators. THE BUNDY INCUBATOR COMPANY, Springfield, Ohio. Published October 1, 1930.

13,301.—*Title:* HILLS BROS. COFFEE—ADFORM 20. For Coffee. HILLS BROS., San Francisco, Calif. Published March 14, 1931.

13,302.—*Title:* DIDN'T I TELL YOU . . . . HILLS BROS. COFFEE HAS A FLAVOR NO OTHER COFFEE HAS—ADFORM 113. For Coffee. HILLS BROS., San Francisco, Calif. Published March 14, 1931.

13,303.—*Title:* CONTROLLED ROASTING IS THE FLAVOR SECRET—ADFORM 115A. For Coffee. HILLS BROS., San Francisco, Calif. Published March 14, 1931.

13,304.—*Title:* SEALZIT. For Preparation for Stopping Leaks in Radiators. INLAND MOTOR PRODUCTS COMPANY, Des Moines, Iowa. Published March 15, 1931.

13,305.—*Title:* JOHNSON CENTRI AUTOMATIC OIL BURNER. For Oil Burning Equipments. S. T. JOHNSON Co., Oakland, Calif. Published March 25, 1931.

13,306.—*Title:* THE MAGIC WAND. For Cleaning Devices for General Household Purposes, Especially Adapted for Cleaning Painted and Papered Walls, Etc. K. P. & B. Co., Decatur, Ill. Published January 8, 1929.

13,307.—*Title:* MARTIN'S AMBER-LYTE QUICK DRYING FINISHES. For Finishes for Walls, Houses, Porches, Etc. MARTIN VARNISH COMPANY, Chicago, Ill. Published May 23, 1931.

13,308.—*Title:* FLOORARTIST FLOORS JOEL PERKINSON F. A. For Floors. JOEL PERKINSON, New York, N. Y. Published April 3, 1931.

13,309.—*Title:* POSTOGRAPH. For Printed Blanks. THE POSTOGRAPH COMPANY, Baltimore, Md. Published June 22, 1931.

13,310.—*Title:* YUM YUM. For Water Ices and Soft Drinks. JAMES PROCACCI, doing business as Yum Yum Manufacturing Company, Camden, N. J.; Maria Procacci, administratrix of James Procacci, deceased. Published September 18, 1930.

13,311.—*Title:* GAIN CHECK. For Lubricating Greases, Motor Oil, and Gasoline. SINCLAIR REFINING CO., New York, N. Y. Published April 15, 1931.

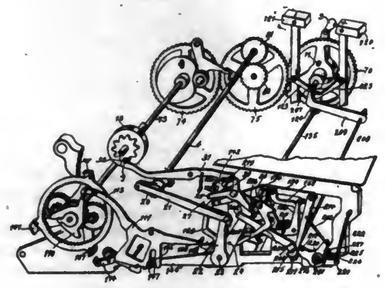
13,312.—*Title:* QUICK HENRY! THE FLIT (AT THE BEACH). For Insecticides. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Published July 15, 1930.

13,313.—*Title:* QUICK HENRY! THE FLIT (ON PARADE). For Insecticides. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Published July 9, 1930.

REISSUES

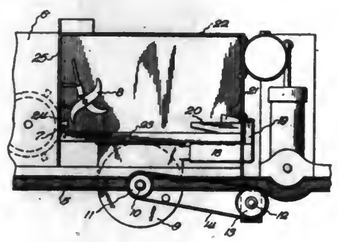
JULY 21, 1931

18,130. FULL-CYCLE POSITIONING MECHANISM. GEORGE C. CHASE, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Original No. 1,664,661, dated Apr. 3, 1928, Serial No. 67,676, filed Nov. 7, 1925. Application for reissue filed Mar. 18, 1930. Serial No. 436,915. 20 Claims. (Cl. 235—82.)



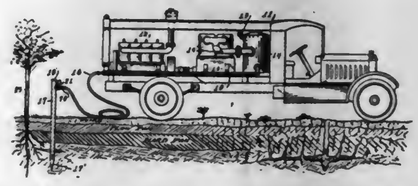
1. In a calculating machine having numeral wheels and actuating mechanism therefor, stopping means comprising the combination with means operable after the actuating mechanism passes through full cycle position to retard said mechanism and return the same to full cycle position, of means operable automatically to lock the actuating mechanism at rest in full cycle position.

18,131. PNEUMATIC FEEDING DEVICE FOR THRASHERS. MARTIN EISELE, Graymont, Ill. Original No. 1,749,475, dated Mar. 4, 1930, Serial No. 318,836, filed Nov. 12, 1928. Application for reissue filed Sept. 30, 1930. Serial No. 485,539. 14 Claims. (Cl. 130—1.)



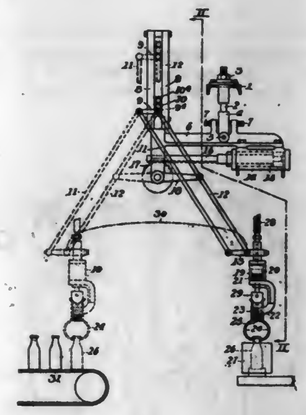
3. The combination with a thrashing cylinder of a receiving chamber having a continuous floor extending into said cylinder, and pneumatic means for carrying grain deposited in said chamber across said floor into said cylinder, said means including means for producing two distinct strata of air across said chamber above said floor.

18,132. METHOD FOR TREATING SOILS TO PROMOTE PLANT GROWTH. CHARLES H. SPENCER, Glendale, Calif., assignor, by mesne assignments, to Sub-Soil Aeration Company. Original No. 1,677,153, dated July 17, 1928, Serial No. 87,673, filed Feb. 11, 1926. Application for reissue filed July 17, 1930. Serial No. 468,719. 7 Claims. (Cl. 47—48.)



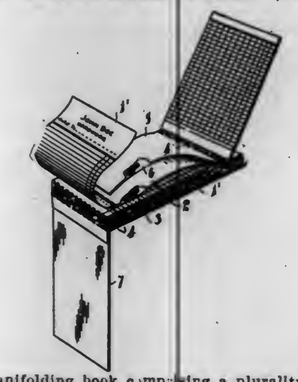
7. The method of treating soils; which consists of introducing atmospheric air to the ground at a point below the surface thereof at a moderate pressure until the adjacent ground is charged with air, and thereafter releasing high pressure air into the charged ground at a rate sufficient to cause a breaking up of the soil.

18,133. APPARATUS FOR HANDLING GLASSWARE. DANIEL B. WESTIN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original No. 1,766,573, dated June 24, 1930, Serial No. 117,745, filed June 22, 1926. Application for reissue filed May 8, 1931. Serial No. 536,047. 19 Claims. (Cl. 214—1.)



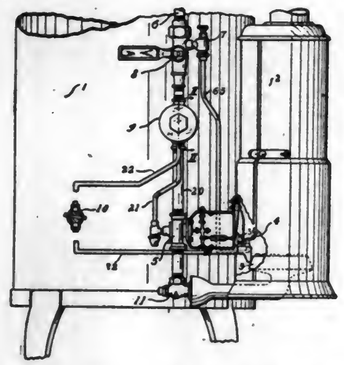
1. Apparatus for removing glassware from molds, comprising a vertically disposed guide, a member mounted for movement in said guide, a supporting arm and a guiding arm pivotally connected at their upper ends to said member on laterally offset axes, said arms forming a parallel-motion system, a ware-supporting device having pivotal connection with the lower ends of said arms, and a crank device rotatable about a fixed axis and pivotally connected to one of said arms between the ends thereof.

18,134. MANIFOLDING BOOK. LOUIS HUFFMAN, Toronto, Ontario, Canada, assignor to Toronto Type Foundry Company, Limited, Toronto, Canada. Original No. 1,730,148, dated Oct. 1, 1929, Serial No. 10,784, filed Feb. 21, 1925. Application for reissue filed May 19, 1931. Serial No. 538,529. 6 Claims. (Cl. 282—22.)



4. A manifolding book comprising a plurality of manifold units, each unit comprising a stub by means of which it is bound in the book, a duplicate record sheet detachably connected to the stub, an original uncarbonized record sheet secured to the outer end of the duplicate sheet and normally folded in parallel relation thereover and a carbon sheet united to the back of one of said record sheets adjacent the juncture of said sheets and adapted to transfer an inscription written on the original record sheet to the duplicate record sheet and being detachable with the unit to which it is attached, upon detachment of the unit from the book, to maintain its normal manifolding position in the unit after the unit has been detached from the book.

18,135. FLUID CONTROL SYSTEM. EDMUND J. TE PAS, Lakewood, Ohio, assignor to The Patrol Valve Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,683,213, dated Sept. 4, 1928, Serial No. 121,910, filed July 12, 1926. Application for reissue filed Sept. 30, 1929. Serial No. 396,339. 11 Claims. (Cl. 236—33.)

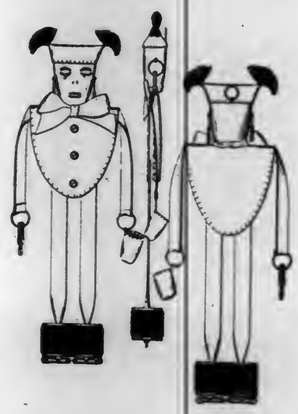


9. In a fluid fuel control system, a main burner, a thermally actuated valve for controlling the flow of fuel to said main burner, a heat responsive device for actuating said valve, a constantly burning pilot burner, an auxiliary burner ignitable by said pilot burner for supplying heat to said heat responsive device, thermostatic means independent of said valve to admit fuel to said auxiliary burner to open said valve and supply fuel to said main burner, means for regulating the amount of fuel flowing to said auxiliary burner, and a separate means to cut off the supply of fuel to the auxiliary burner to close said valve and thereby cut off the supply of fuel to said main burner.

DESIGNS

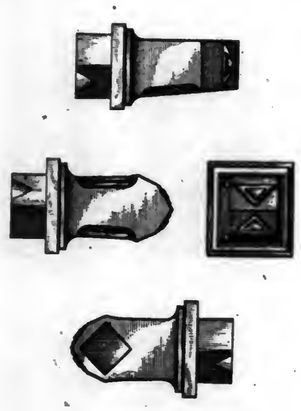
JULY 21, 1931

84,669. COMBINED SEWING IMPLEMENT AND PIN HOLDER. CARRIE BABBITT, Brooklyn, N. Y. Filed Apr. 6, 1931. Serial No. 39,385. Term of patent 7 years.



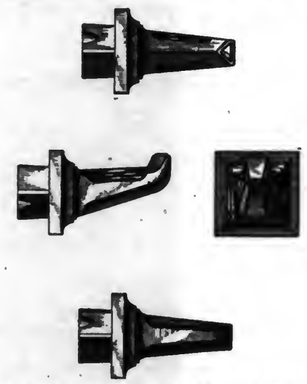
The ornamental design for a combined sewing implement and pin holder, as shown.

84,670. POST FOR A TOWEL BAR OR SIMILAR ARTICLE. STEPHEN D. BAKER, New York, N. Y. Filed May 13, 1931. Serial No. 39,835. Term of patent 14 years.



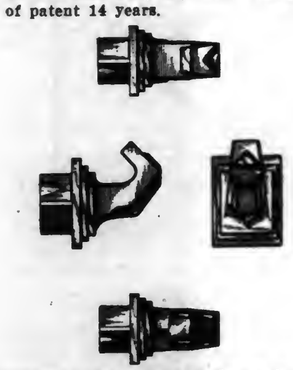
The ornamental design for a post for a towel bar or similar article, as shown.

84,671. BATHROOM BRACKET OR SIMILAR ARTICLE. STEPHEN D. BAKER, New York, N. Y. Filed May 13, 1931. Serial No. 39,837. Term of patent 14 years.



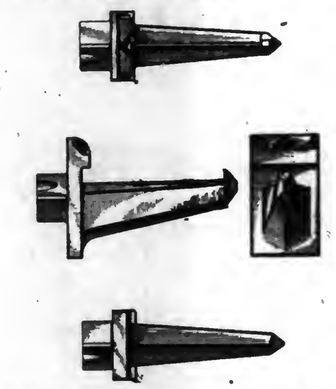
The ornamental design for a bathroom bracket or similar article, as shown.

84,672. BATHROOM HOOK. STEPHEN D. BAKER, New York, N. Y. Filed May 13, 1931. Serial No. 39,838. Term of patent 14 years.



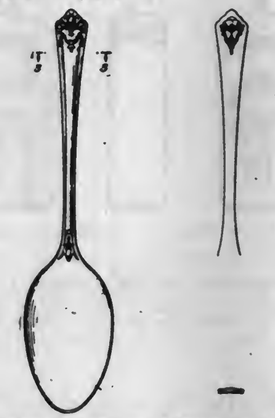
The ornamental design for a bathroom hook, as shown.

84,673. BATHROOM BRACKET. STEPHEN D. BAKER, New York, N. Y. Filed May 13, 1931. Serial No. 39,876. Term of patent 14 years.



The ornamental design for a bathroom bracket, as shown.

84,674. SPOON OR OTHER ARTICLE OF TABLEWARE. ERNEST T. BECK, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Mar. 17, 1931. Serial No. 39,118. Term of patent 14 years.



The ornamental design for a spoon or other article of table-ware substantially as shown.

84,675. LIGHTING FIXTURE OR ARTICLE OF SIMILAR NATURE. JULIUS J. BLUMENTHAL, New York, N. Y., assignor to Lighting Appliance Company, Inc., New York, N. Y. Filed Aug. 8, 1930. Serial No. 36,603. Term of patent 3½ years.



The ornamental design for a lighting fixture, or article of similar nature, as shown and described.

84,676. BOTTLE. ROYDEN A. BLUNT, Baltimore, Md. Filed May 5, 1931. Serial No. 39,723. Term of patent 14 years.



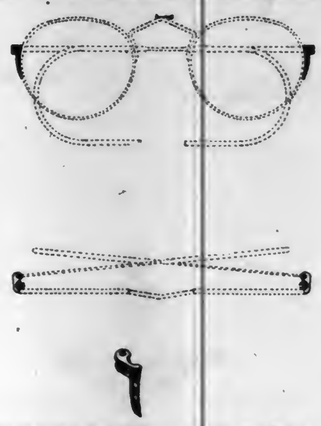
The ornamental design for a bottle as shown.

84,677. BOTTLE. ROYDEN A. BLUNT, Baltimore, Md. Filed May 5, 1931. Serial No. 39,724. Term of patent 14 years.



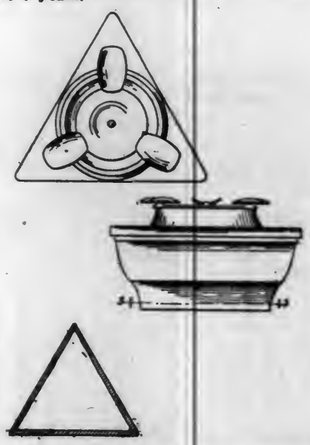
The ornamental design for a bottle as shown.

84,678. SPECTACLE FRAME. THOMAS E. BOSWORTH, Providence, R. I., assignor to Universal Optical Corporation, a Corporation of Rhode Island. Filed Apr. 30, 1931. Serial No. 39,664. Term of patent 14 years.



The ornamental design for a spectacle frame, substantially as shown and described.

84,679. ASH RECEIVER. ZIGMAN CHAPLICK, Chicago, Ill. Filed Mar. 21, 1931. Serial No. 39,195. Term of patent 7 years.



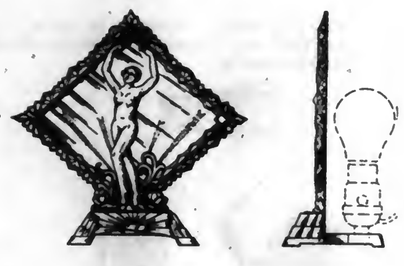
The ornamental design for an ash receiver as shown.

84,680. BRACELET. LEO COHN, Los Angeles, Calif. Filed Apr. 11, 1931. Serial No. 39,454. Term of patent 7 years.



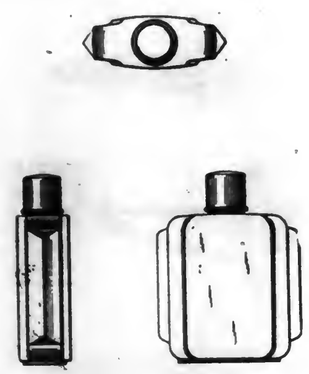
The ornamental design for a bracelet, as shown.

84,681. LAMP. PAUL CRICCHIO, Bronx, N. Y., assignor to Aljac Art Metal Products Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 34,971. Term of patent 3½ years.



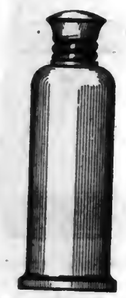
The ornamental design for a lamp, as shown.

84,682. BOTTLE. JOHN H. DAVIS, Watertown, Mass., assignor to Renaud et Cie. of America, Boston, Mass., a Corporation of Massachusetts. Filed May 23, 1931. Serial No. 39,948. Term of patent 14 years.



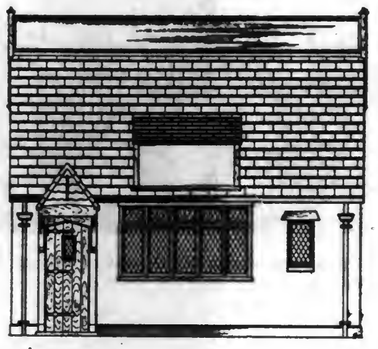
The ornamental design for a bottle, as shown.

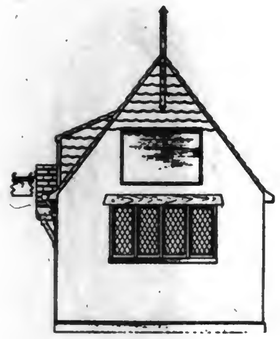
84,683. BOTTLE. JOHN H. DAVIS, Watertown, Mass., assignor to Renaud et Cie. of America, Boston, Mass., a Corporation of Massachusetts. Filed May 23, 1931. Serial No. 39,949. Term of patent 14 years.



The ornamental design for a bottle, as shown and described.

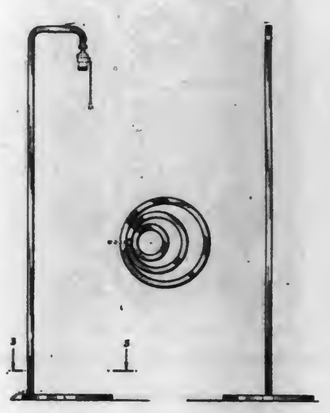
84,684. BUILDING. HARRY F. DUNCAN, Chevy Chase, and GEORGE E. STONE, Baltimore, Md. Filed Apr. 8, 1931. Serial No. 39,402. Term of patent 14 years.





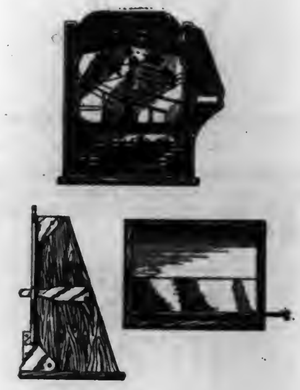
The ornamental design for a building, as shown.

84,685. LAMP STAND. CONSTANT ARMIN EGLI, Weehawken, N. J. Filed Apr. 1, 1931. Serial No. 39,313. Term of patent 3½ years.



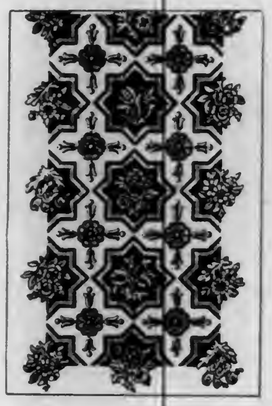
The ornamental design for a lamp stand, as shown.

84,686. AMUSEMENT DEVICE. LLOYD B. ELLIOTT, Chicago, Ill., assignor to Atlas Indicator Works, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Mar. 9, 1931. Serial No. 39,006. Term of patent 14 years.



The ornamental design for an amusement device, as shown.

84,687. CARPET. CORNELIA B. FARADAY, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Mar. 12, 1931. Serial No. 39,038. Term of patent 7 years.



The ornamental design for a carpet substantially as shown.

84,688. TABLE. ABRAHAM FRIEDMAN, Los Angeles, Calif., assignor to Earl Cohen, doing business as Novelty Manufacturing Company, Los Angeles, Calif. Filed May 26, 1931. Serial No. 39,994. Term of patent 7 years.



The ornamental design for a table as shown.

84,689. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed May 25, 1931. Serial No. 39,956. Term of patent 3½ years.



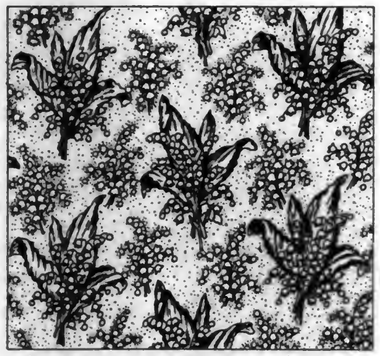
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,690. JAR. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 21, 1931. Serial No. 39,924. Term of patent 14 years.



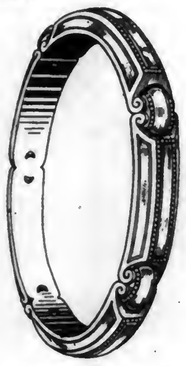
The ornamental design for a jar substantially as shown and described.

84,691. TEXTILE FABRIC OR SIMILAR SHEET MATERIAL. ALOISE GALL, Orange, N. J., assignor to Cyrus Clark Co., Incorporated, New York, N. Y. Filed May 1, 1931. Serial No. 39,676. Term of patent 3½ years.



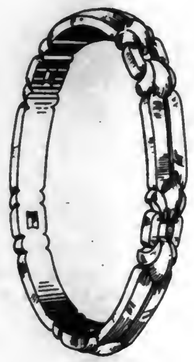
The ornamental design for a textile fabric or similar sheet material substantially as shown.

84,692. FINGER RING. JOSEPH GRANAT, San Francisco, Calif. Filed May 19, 1931. Serial No. 39,903. Term of patent 3½ years.



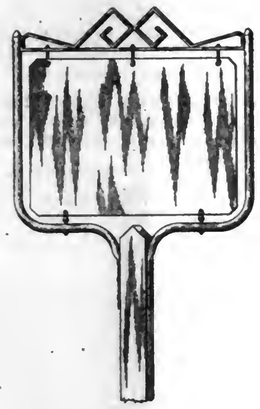
The ornamental design for a finger ring substantially as shown.

84,693. FINGER RING. JOSEPH GRANAT, San Francisco, Calif. Filed May 19, 1931. Serial No. 39,904. Term of patent 3½ years.



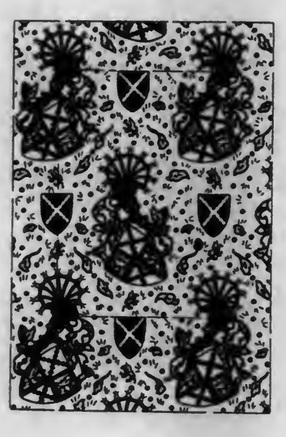
The ornamental design for a finger ring substantially as shown.

84,694. SIGN. CHARLES A. GRAVES, East Cleveland, Ohio. Filed Apr. 2, 1931. Serial No. 39,851. Term of patent 7 years.



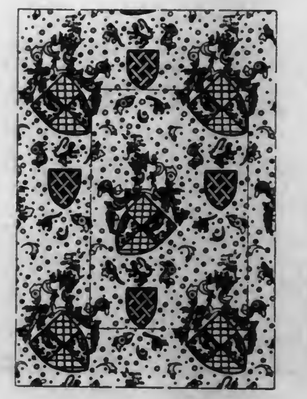
The ornamental design for a sign, substantially as shown.

84,695. TEXTILE FABRIC OR SIMILAR ARTICLE. ADOLPHE GRIVIN, Long Island City, N. Y., assignor to Sea Island Mills, Inc., New York, N. Y., a Corporation of New York. Filed May 16, 1931. Serial No. 39,867. Term of patent 3½ years.



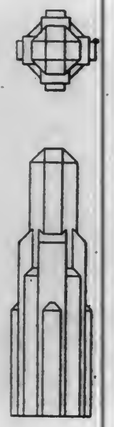
The ornamental design for textile fabric or similar article, substantially as shown and described.

84,696. TEXTILE FABRIC OR SIMILAR ARTICLE. ADOLPHE GRIVIN, Long Island City, N. Y., assignor to Sea Island Mills, Inc., New York, N. Y., a Corporation of New York. Filed May 16, 1931. Serial No. 39,868. Term of patent 3½ years.



The ornamental design for textile fabric or similar article, substantially as shown and described.

84,697. CAP FOR A LAMP STANDARD. CARL F. HAAS, South Bend, Ind., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 7, 1929. Serial No. 33,691. Term of patent 14 years.



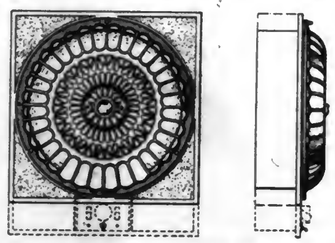
The ornamental design for a cap for a lamp standard substantially as shown.

84,698. STOCKING. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Nov. 13, 1930. Serial No. 37,633. Term of patent 14 years.



The ornamental design for a stocking as shown and described.

84,699. CASING FOR ELECTRIC AIR HEATERS. GEORGE D. HOFFMAN, Pasadena, Calif., assignor to Hoffman Specialty Company of California, Limited, Pasadena, Calif., a Corporation of California. Filed Nov. 26, 1930. Serial No. 37,793. Term of patent 14 years.



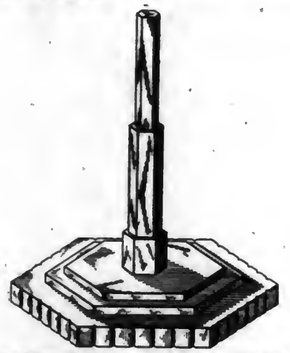
The ornamental design for a casing for electric air heaters as shown and described.

84,700. KNITTED HAT. ELMER N. JOHA, Wauwatosa, Wis., assignor to Reliable Knitting Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 9, 1931. Serial No. 39,799. Term of patent 7 years.



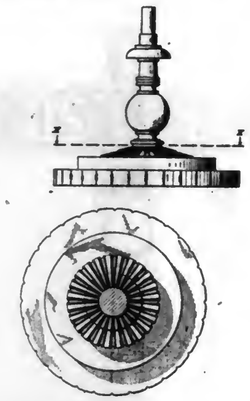
The ornamental design for a knitted hat, as shown and described.

84,701. COMBINATION BASE AND COLUMN FOR DISPLAY STANDS. WILLIAM E. KEHOE, San Francisco, Calif. Filed Apr. 18, 1931. Serial No. 39,544. Term of patent 3½ years.



The ornamental design for a combination base and column for display stands, substantially as shown.

84,702. COMBINATION BASE AND COLUMN FOR DISPLAY STANDS. WILLIAM E. KEHOE, San Francisco, Calif. Filed Apr. 18, 1931. Serial No. 39,545. Term of patent 7 years.



The ornamental design for a combination base and column for display stands, substantially as shown.

84,703. COMBINED RADIO CABINET AND CLOCK. ROBERT J. KOEPPE, Chicago, Ill., assignor to The Cheney Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 23, 1931. Serial No. 39,202. Term of patent 3½ years.



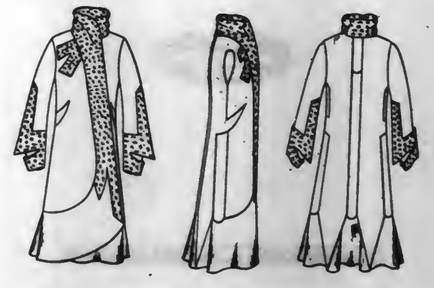
The ornamental design for a combined radio cabinet and clock as shown.

84,704. LADY'S COAT. MAX LEVITT, Brooklyn, N. Y. Filed May 22, 1931. Serial No. 39,934. Term of patent 3½ years.



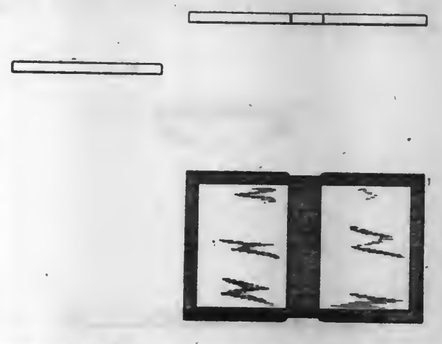
The ornamental design for a lady's coat, as shown.

84,705. LADY'S COAT. MAX LEVITT, Brooklyn, N. Y. Filed May 22, 1931. Serial No. 39,935. Term of patent 3½ years.



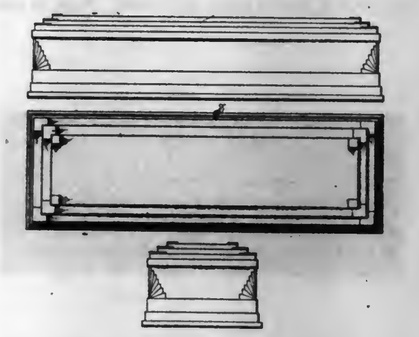
The ornamental design for a lady's coat, as shown.

84,706. TABLE TOP. JERROLD LOEBL, Chicago, Ill., assignor to John R. Thompson Co., Chicago, Ill., a Corporation of West Virginia. Filed Feb. 28, 1930. Serial No. 34,705. Term of patent 14 years.



The ornamental design for a table top, as shown and described.

84,707. CASKET. GEORGE B. MARKLE, Jr., Hazleton, Pa., assignor to Hazleton Manufacturing Co., Hazleton, Pa., a Corporation of Pennsylvania. Filed May 8, 1931. Serial No. 39,760. Term of patent 14 years.



The ornamental design for a casket, as shown.

84,708. WEDDING RING. GEORGE MONIN, Los Angeles, Calif. Filed Sept. 30, 1930. Serial No. 37,092. Term of patent 3½ years.



The ornamental design for a wedding ring substantially as shown.

84,709. WEDDING RING. GEORGE MONIN, Los Angeles, Calif. Filed Sept. 30, 1930. Serial No. 37,093. Term of patent 3½ years.



The ornamental design for a wedding ring substantially as shown.

84,710. LACE. H. MORMENTYN, Fils, Calais, France. Filed May 2, 1931. Serial No. 39,690. Term of patent 3½ years.



The ornamental design for lace, as shown.

84,711. COMBINATION MARKING PLATE AND REFLECTING LIGHT STANDARD. GROVER A. REBENTISCH, Portland, Oreg., assignor to National Bureau of Location and Statistics, Portland, Oreg., a Corporation of Oregon. Filed Sept. 9, 1929. Serial No. 32,711. Term of patent 3½ years.



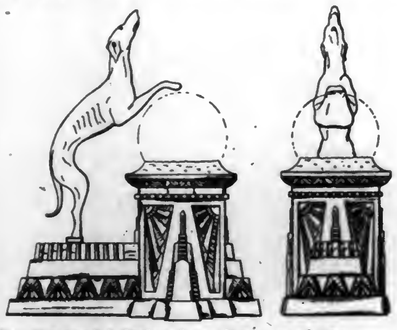
The ornamental design for a combination marking plate and reflecting light standard, as shown.

84,712. SUPPORTING BRACKET FOR DOOR AND DRAWER HANDLES. JOHN C. ROGERS, Cicero, Ill., assignor to Crown Stove Works, Cicero, Ill., a Corporation of Illinois. Filed May 18, 1931. Serial No. 39,886. Term of patent 7 years.



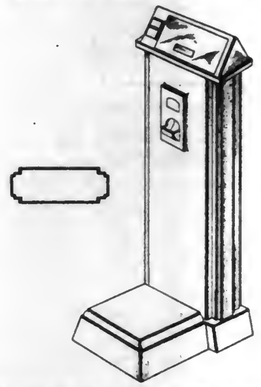
The ornamental design for a supporting bracket for door and drawer handles, as shown.

84,713. LAMP. WILLIAM H. SHLESINGER, Brooklyn, N. Y. Filed May 12, 1931. Serial No. 39,820. Term of patent 3½ years.



The ornamental design for a lamp, as shown.

84,714. COIN-CONTROLLED SCALE. VINCENT F. SLEZAK, New York, N. Y., assignor to International Ticket Scale Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 19, 1930. Serial No. 37,709. Term of patent 3½ years.



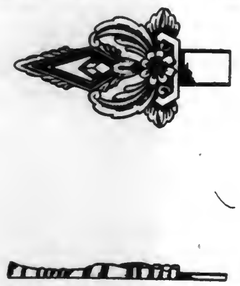
The ornamental design for a coin-controlled scale substantially as shown.

84,715. CENTER ORNAMENT FOR DRAPERY RODS OR THE LIKE. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed May 4, 1931. Serial No. 39,697. Term of patent 7 years.



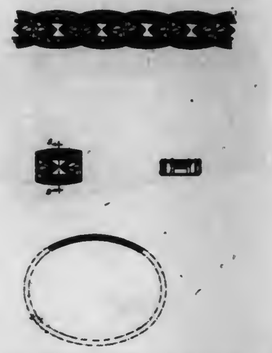
The ornamental design for a center ornament for drapery rods or the like, as shown.

84,716. END ORNAMENT FOR DRAPERY RODS OR THE LIKE. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed May 4, 1931. Serial No. 39,698. Term of patent 7 years.



The ornamental design for an end ornament for drapery rods or the like, as shown.

84,717. LINK BRACELET. FRITZ C. STETTER, Irvington, N. J., assignor to Simon Miller & Co., Newark, N. J., a Copartnership composed of Morris Miller and Emanuel Miller. Filed Oct. 25, 1930. Serial No. 37,391. Term of patent 7 years.



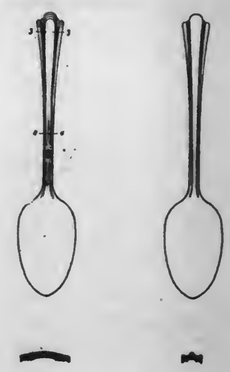
The ornamental design for a link bracelet, as shown.

84,718. BAR MATERIAL FOR OPHTHALMIC MOUNTINGS. VINCENT TANASSO, New York, and JACOB J. POMERANZ, Brooklyn, N. Y. Filed Apr. 17, 1931. Serial No. 39,539. Term of patent 14 years.



The ornamental design for bar material for ophthalmic mountings substantially as shown.

84,719. SPOON OR SIMILAR ARTICLE. WILLIAM S. WARREN, Meriden, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a Corporation. Filed May 29, 1931. Serial No. 40,024. Term of patent 7 years.



The ornamental design for a spoon or similar article as shown.

84,720. AUTOMOBILE TRUNK OR THE LIKE. LOUIS WEITZMAN, New York, N. Y. Filed Feb. 18, 1931. Serial No. 38,641. Term of patent 3½ years.



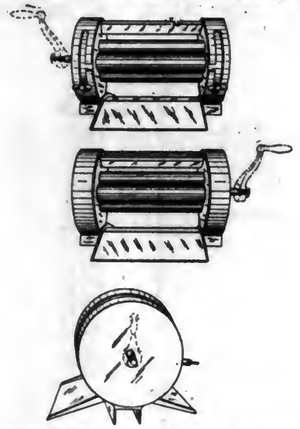
The ornamental design for an automobile trunk or the like substantially as shown and described.

84,721. AUTOMOBILE TRUNK OR THE LIKE. LOUIS WEITZMAN, New York, N. Y. Filed Feb. 13, 1931. Serial No. 38,642. Term of patent 3½ years.



The ornamental design for an automobile trunk or the like substantially as shown and described.

84,722. CLOTHES WRINGER FRAME. CHARLES B. WILLIAMS, Shaker Heights, Ohio. Filed Mar. 27, 1931. Serial No. 39,264. Term of patent 14 years.



The ornamental design for a clothes wringer frame substantially as shown.

84,723. INCANDESCENT ELECTRIC LAMP BULB. ALFRED BONNEY, Jr., Verona, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 20, 1931. Serial No. 38,399. Term of patent 3½ years.

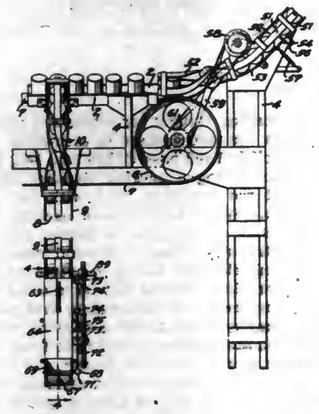


The ornamental design for an incandescent electric lamp bulb, as shown and described.

PATENTS

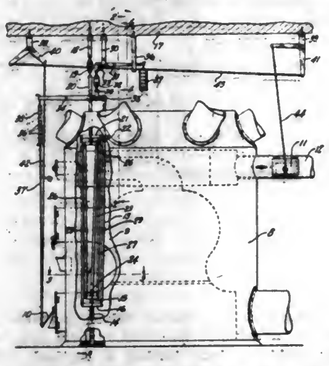
GRANTED JULY 21, 1931

1,815,029. DISTRIBUTING SYSTEM FOR OBJECTS. JOHN E. ALBERTOLI, San Francisco, Calif. Filed Apr. 24, 1929. Serial No. 357,729. 4 Claims. (Cl. 198—19.)



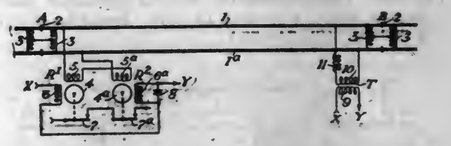
1. A distributing system for objects comprising a trackway, a chute opening from said trackway, a feed chute for passing cans onto the trackway, means for moving the objects along said trackway, a movably mounted gate comprising a section of the feed chute for closing the chute to stop the passage of objects, and means for yieldingly holding the gate open to allow the objects to pass thereby, said gate being movable to close the chute after a predetermined number of objects contact therewith.

1,815,030. THERMOSTATIC CONTROLLING DEVICE. DAVID S. ALMANADE, Milwaukee, Wis. Filed Mar. 23, 1929. Serial No. 349,371. 1 Claim. (Cl. 236—10.)



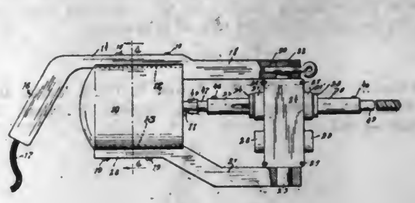
A thermostatic controlling device for a valve comprising a thermostatic member readily expansible and contractible under temperature changes, a lever pivotally supported at an intermediate point, a weight carried by an end of said lever, a supporting member extending downwardly from the other end of said lever, an operating lever pivotally connected at an intermediate point to said supporting member, said thermostatic member being pivotally connected to one end of said operating lever, and means connected between the other end of said operating lever and said valve for operating the latter upon expansion and contraction of the thermostatic member, said first mentioned lever and weight normally supporting said operating lever in a predetermined position, and excess movement of the thermostatic member operating against said weight to change the position of support of said operating lever without causing further movement of said valve.

1,815,031. TRACK CIRCUITS FOR ALTERNATING CURRENT ELECTRIC RAILWAYS. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 19, 1931. Serial No. 516,922. 5 Claims. (Cl. 246—37.)



1. In combination, a section of railway track carrying alternating propulsion current, a source of alternating track circuit current connected with the rails of said section and differing from the propulsion current in frequency, two induction motor track relays for said section each having a track winding and a local winding, the two track windings being supplied with current from the rails of said section, means for normally supplying said two local windings with alternating current of the same frequency as that of the track circuit current, and means associated with one winding of one relay for causing one relay to develop a reverse torque in the event that current of the propulsion frequency reaches the windings of said relays.

1,815,032. CHANGE SPEED GEARING. SOLON J. BOUGHTON, Shaker Heights, Ohio. Filed Oct. 19, 1928. Serial No. 313,450. 11 Claims. (Cl. 74—58.)

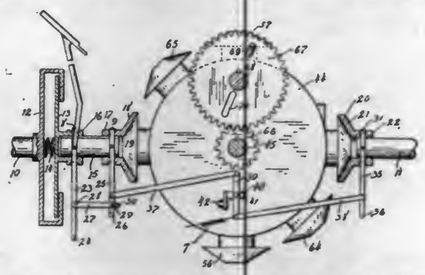


1. In combination, a gear carrier, a pair of trunnions therefor, and a pair of shafts rotatably mounted in said carrier and interconnected to turn at different speeds, said shafts being arranged in alignment at right angles to said trunnions.

1,815,033. CHANGE-SPEED TRANSMISSION. SOLON J. BOUGHTON, Shaker Heights, Ohio. Filed Dec. 17, 1928. Serial No. 326,639. 16 Claims. (Cl. 74—59.)

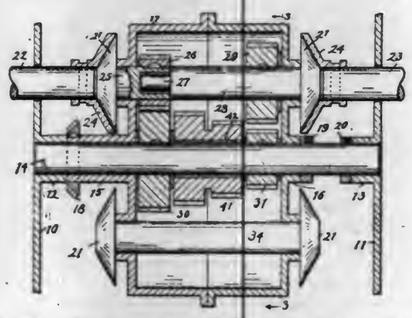
1. In combination, a gear carrier, a pair of trunnions therefor, a plurality of transmission units mounted in said

carrier, each unit comprising interconnected coupling portions arranged in alignment with their common axis inter-



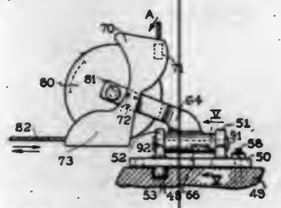
secting the axis of said trunnions, whereby any two of said units may be caused to exchange places by the rotational adjustment of the carrier upon its trunnions.

1,815,034. TRANSMISSION. SOLON J. BOUGHTON, Shaker Heights, Ohio. Filed Apr. 13, 1929. Serial No. 354,773. 6 Claims. (Cl. 74—59.)



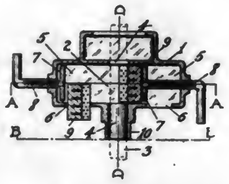
1. In combination, a gear carrier, a shaft around which said carrier is mounted, a plurality of transmission units mounted in said carrier, each unit comprising a pair of aligned coupling portions positioned at same distance from the said shaft, two of said units comprising gears supported upon and concentrically arranged with respect to said shaft and other gears operatively associated with the corresponding coupling portions, whereby any of said pairs of coupling portions may be brought into a common power transmitting position by the rotational adjustment of the carrier around the axis of said shaft.

1,815,035. DEFLECTOR. JAMES R. COLE, Tulsa, Okla. Filed Oct. 7, 1929. Serial No. 397,822. 9 Claims. (Cl. 254—190.)



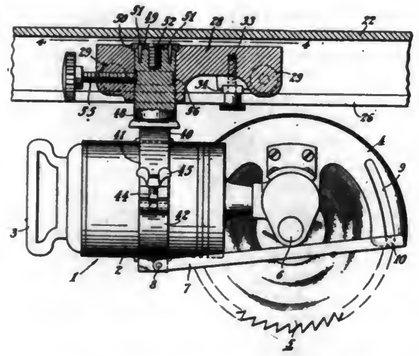
4. A device adapted to change the direction of motion of a flexible power element comprised of a base, a frame, means for mounting said frame on the base, a wheel, means for revolubly mounting said wheel in said frame, said first mentioned means having an aperture through its axis and said second means supporting the wheel so that a tangent therefrom will be in alignment with the aperture.

1,815,036. STUFFING BOX AND PACKING THEREFOR. JAMES R. COLE, Tulsa County, Okla. Filed May 15, 1930. Serial No. 452,602. 2 Claims. (Cl. 286—16.)



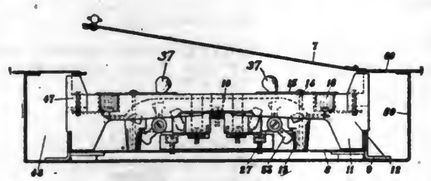
1. A breech loading stuffing box wherein a plurality of packing elements are used opposed to each other on opposite sides of a polished rod passed thru said box, and with said stuffing box having a packing chamber adapted to pass a polished rod therethru, and with said packing chamber being a closure wherein said packing elements may be compressed against the perimeter thereof and against a polished rod passed thru said chamber, and with said packing chamber having a breech at opposite ends thereof thru which packing may be inserted into said packing chamber; means of compressing said packing in said packing chamber and against a polished rod passed therethru wherein said means consist of a follower actuated by a compression screw to the rear thereof, and a compression screw as aforesaid threaded into a permanently affixed part of the body portion of said stuffing box, and a port in the under side of said body portion of said stuffing box and communicating with said packing chamber and adapted for the insertion of packing therethru.

1,815,037. SAWING MACHINE. RAYMOND E. DE WALT, Leola, Pa., assignor to De Walt Products Corporation, Leola, Pa., a Corporation of Pennsylvania. Filed Apr. 3, 1929. Serial No. 352,150. 2 Claims. (Cl. 143—6.)



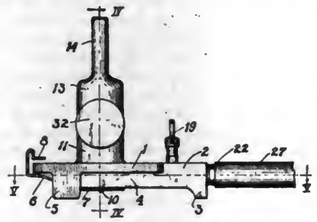
1. In a mounting for motor driven portable circular saws, an arm, a carriage mounted on said arm to travel therealong, said carriage having a vertical cylindrical opening extending therethrough and provided with an enlarged polygonal upper end, a motor clamp adapted to fit around the saw motor and secure the same in desired position, a shank extending upwardly from said clamp and having a cylindrical portion rotatably mounted in said opening, and a polygonal plate removably secured to the upper end of the shank in fixed relation thereto and forming a head on said shank normally seated in the polygonal upper end of the opening, said shank being of sufficient length to permit lifting of the head from its seat to allow rotation on a vertical axis of the clamp.

1,815,038. PANEL BOARD. FREDRICK B. ADAM, St. Louis, Mo. Filed May 28, 1921. Serial No. 473,839. 16 Claims. (Cl. 247—10.)



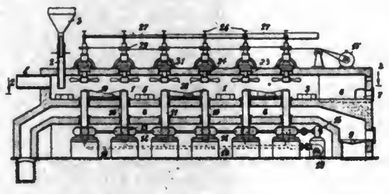
16. A panelboard section composed of a single piece of insulating material, a switch, and conducting elements; the switch mechanism and conducting elements being mounted on one face of the insulating material and the switch handle extending through the insulating material to the opposite face thereof.

1,815,039. BURNER. CHARLES R. BAKER, Evanston, Ill. Filed Mar. 18, 1929. Serial No. 347,869. 7 Claims. (Cl. 158—109.)



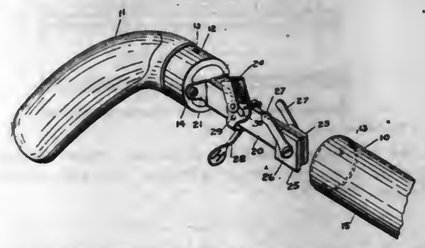
6. A burner of the class described comprising a passaged base, a passaged standard integrally formed thereon, an atmospheric control valve mounted on said base, a handle connected therewith for operating the same, legs formed on said base to support the same and to serve as stops for the movement of the atmospheric air control valve handle, a gas control valve mounted on said base to govern the supply of gas through said standard, a nozzle removably mounted on said standard and adapted to permit a supply of atmospheric air and gas to be ejected from the mouth thereof and lighted to produce a Bunsen flame, a compressed air supply jet axially mounted in said standard and projecting into said nozzle to direct a blast of compressed air axially through a gas flame to convert the same into a blow flame, and a compressed air control valve on said standard and connected with said jet to control the passage of compressed air therethrough.

1,815,040. METHOD OF AND MEANS FOR ROASTING ZINC BLENDE AND THE LIKE. GEORG BALZ, Tubingen, Germany, assignor to Balz-Erzröstung Gesellschaft mit beschrankter Haftung, Gleiwitz, Germany. Filed Oct. 25, 1928, Serial No. 315,059, and in Austria Oct. 31, 1927. 5 Claims. (Cl. 263—21.)



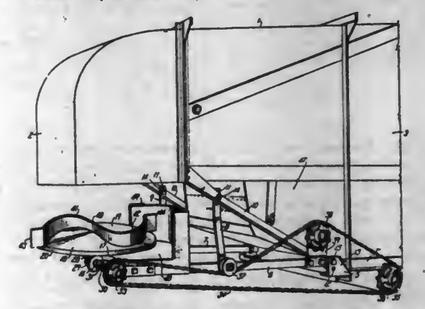
1. A method of roasting sulphur containing ores in mechanical furnaces with high roofed muffles, consisting in stirring the ore in the muffle, introducing into the muffle only enough air to carry out the roasting process, and agitating the air in the muffle independently of the mere introduction thereof so as to set up whirling air currents over the surface of the ore layer.

1,815,041. HANDLE SWITCH. JUDDSON E. BARRASS, Uniontown, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Nov. 4, 1927. Serial No. 230,969. 6 Claims. (Cl. 200—157.)



1. A handle for hand propelled tools comprising a main tubular portion, a grip portion and a circuit making device mounted on the base of the grip portion and housed in the tubular portion.

1,815,042. STRAW SPREADER. ELMER L. BARTELS, Independence, Mo., assignor to Gleaner Combine Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed Nov. 24, 1928. Serial No. 321,592. 6 Claims. (Cl. 275—8.)



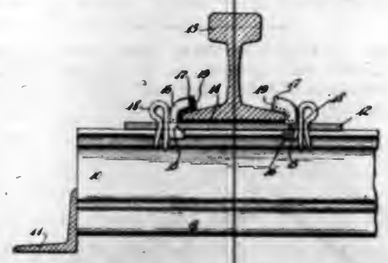
1. A straw spreader including a rotatable platform and fins on the platform having concaved body portions terminating in adjustable flat blade portions extending radially from the periphery of the platform.

1,815,043. ATTACHMENT PLUG. ALAN L. BECKET, East Orange, N. J. Filed Jan. 27, 1928. Serial No. 249,810. 2 Claims. (Cl. 173—361.)



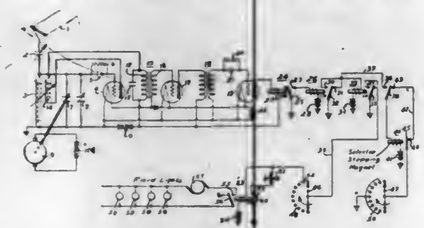
1. An attachment plug comprising a screw threaded cap and a screw threaded plug, said plug being provided with recesses on the opposite sides thereof and electrical terminals seated therein, said terminals being provided with tongues for engaging electric wires, the ends of said tongues engaging said cap when it is in place.

1,815,044. INSULATOR. JOHN D. BEEBE, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 17, 1929. Serial No. 355,872. 6 Claims. (Cl. 238—107.)



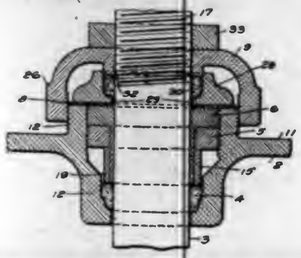
1. An insulator comprising a resilient rubber cushion, and a rigid wear-surface of abrasion resisting material vulcanized thereto.

1,815,045. RADIO SIGNALING SYSTEM. CLARENCE A. BODDIE and RICHARD C. CURTIS, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1928. Serial No. 296,293. 11 Claims. (Cl. 250—2.)



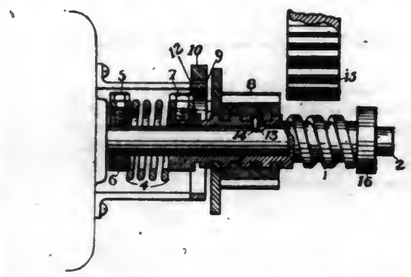
1. In combination, oscillatory radio receiving apparatus, tuning means therefor for causing the receiver to be periodically and sequentially responsive to a plurality of frequencies within a predetermined band, an output circuit for said receiver comprising means for deriving a direct current from a definite beat-frequency, a source of power, a load, and means responsive to said direct current for controlling the application of power from said source to said load.

1,815,046. OUTLET-BUSHING STRUCTURE. GORDON A. BURR, Wilkinsburg, and JAMES H. FRAKES, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 23, 1929. Serial No. 334,450. 7 Claims. (Cl. 287—1.)



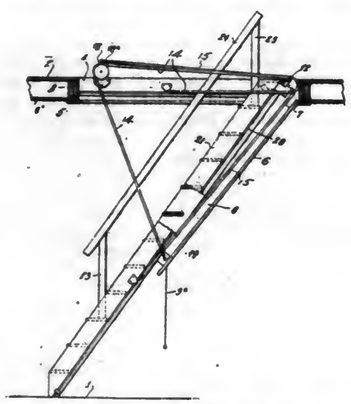
4. In combination, a member having a through opening, a member extending through said opening, means in the opening including a body of packing material and a member for compressing the material to seal the opening, a medium in the opening over the outer end of said compressing member and extending along one side of the compressing member to said packing material for sealing the compressing member, and tertiary means for sealing said medium.

1,815,047. ENGINE STARTER. HENRY BURTON, Gardena, Calif. Filed Oct. 1, 1928. Serial No. 309,572. 6 Claims. (Cl. 74—7.)



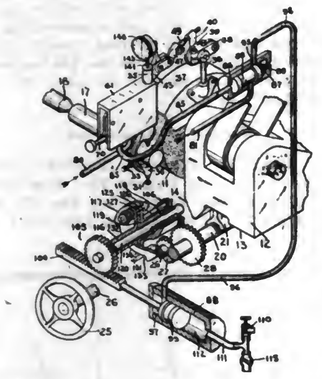
1. The combination in an engine starter of the character described, of a driving shaft, a driving member adapted to shift longitudinally of said driving shaft into and out of engagement with, a driven member; a locking means adapted to oppose rotation of the driving member, when said driving member is at rest in normal position and means, responsive to the centrifugal force of rotation of the driving members adapted to render the locking means inoperative during operation of the starter subsequent to engagement of the driving and driven members.

1,815,048. STAIR CONSTRUCTION. HARRINGTON CHAMBERS, Flushing, Long Island, N. Y. Filed Dec. 6, 1928. Serial No. 324,095. 7 Claims. (Cl. 228—50.)



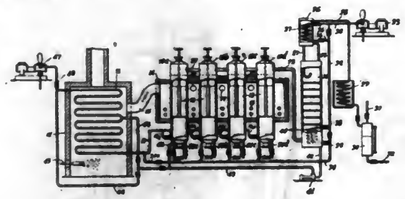
1. In a stair construction adapted to be used between lower and upper floors, the latter of which is provided with a stair well opening, a trap door adapted when in horizontal position to close the opening and which door is hinged to be opened into a downwardly inclined position, guide rollers mounted near the free end of the door, a shaft extending across the well opening at the end thereof at which the door is hinged and which shaft is supported at its opposite ends on the jamb of said well opening, rollers carried by said shaft, a rigid stair embodying stringers and treads mounted with the lower edges of the stringers bearing upon the rollers on the door and shaft to mount said stair for longitudinal movement, said stringers being provided with longitudinal guides, guide members associated with the rollers and engaging with the guides to hold the stringers in engagement with the rollers, helical coil springs for counterbalancing the weight of the stair in the direction of its length and the weight of the door and stair in a substantially vertical direction, and locking means to lock the stair in its lowered position against inadvertent lifting movement.

1,815,049. WORK SIZE MECHANISM FOR GRINDING MACHINES. RAYMOND A. COLE, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 8, 1927. Serial No. 204,390. 11 Claims. (Cl. 51—165.)



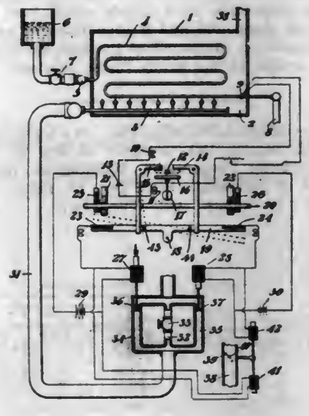
1. In a grinding machine, a work support and grinding element relatively movable to effect a grinding feed, feeding mechanism, a calipering device, a fluid pressure system operating under low pressure and including a valve governed by said calipering device, and a high pressure system for operating the feeding mechanism controlled in its action by the valve of said low pressure system.

1,815,050. METHOD FOR TREATING HYDROCARBON OILS. RICHARD J. DEARBORN, Summit, N. J., and WILL K. HOLMES, Port Arthur, Tex., assignors to The Texas Company, New York, N. Y., a Corporation of Texas. Filed Aug. 5, 1927. Serial No. 210,760. 2 Claims. (Cl. 196—48.)



1. In the conversion of higher boiling hydrocarbons into lower boiling ones, the process that comprises subjecting hydrocarbon oil in a vaporizing zone to a cracking temperature under superatmospheric pressure, introducing fresh charging stock into said vaporizing zone, passing another fresh charging stock through a heating coil to thereby raise said stock to a cracking temperature in transit through the coil, delivering the oil thus heated in the coil to said vaporizing zone, dephlegmating vapors evolved from the vaporizing zone to form a reflux condensate in a heated condition and delivering said reflux condensate to the heating coil to be commingled therein with the fresh charging stock at a point in the coil where the temperature of the fresh charging stock in transit approximates that of the reflux condensate.

1,815,051. APPARATUS AND METHOD FOR FUEL CONTROL. LUIS DE FLOREZ, Pomfret, Conn., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Original application filed Aug. 4, 1922, Serial No. 579,603. Divided and this application filed Jan. 25, 1924. Serial No. 688,406. 18 Claims. (Cl. 236—70.)

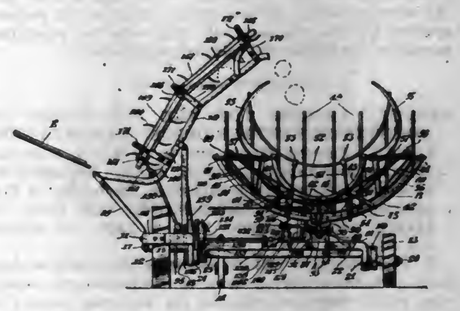


1. In a device of the kind described means for controlling a fluid fuel supply comprising a supply line having a fixed opening, a normally open auxiliary line and a normally closed auxiliary line and means to close and open the auxiliary lines in response to temperature changes.

1,815,052. ALUMINO-THERMIC STEEL. JOHN H. DEPPELER, Weehawken, N. J. Filed Apr. 17, 1929. Serial No. 355,982. 2 Claims. (Cl. 75—1.)

1. Alumino-thermic steel containing from .55% to .80% manganese, from .20% to .40% carbon, and from .01% to 1% aluminum.

1,815,053. STOOKING MACHINE. JOHN DRIEDGER, Venda, Saskatchewan, Canada. Filed Sept. 18, 1930. Serial No. 482,725. 20 Claims. (Cl. 56—411.)

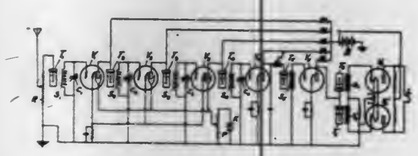


1. A stooking machine comprising a portable frame, a pedestal mounted on the frame, a stook receiving basket rotatably mounted on the pedestal, means on the frame for delivering sheaves to the basket to form a stook, means for rotating and tilting the basket to discharge the stook, and means for returning the basket to normal position.

1,815,054. METHOD OF PRODUCING TANTALUM AND OTHER RARE REFRACTORY METALS BY ELECTROLYSIS OF FUSED COMPOUNDS. FRANK H. DRIGGS, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 4, 1928. Serial No. 275,264. 8 Claims. (Cl. 204—19.)

1. The process of producing rare refractory metals which comprises electrolytically depositing the rare refractory metal from a fusion mixture composed of alkali metal halides, a proportion of a double alkali rare refractory metal halide compound and a proportion of an ionizable oxygen containing compound of the rare refractory metal which is soluble in the halide fusion mixture.

1,815,055. SIGNALING SYSTEM. WILLIAM LESLIE EDISON, Wilmington, Del., assignor to The W. L. Edison Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 18, 1929. Serial No. 414,919. 17 Claims. (Cl. 179—171.)



1. An amplifying system including a thermionic tube having cathode, grid and plate elements, a grid circuit joining the grid and cathode of the tube, a coil in the grid circuit, and a cell including a body of liquid, said body of liquid being in the field of the coil.

1,815,056. PRODUCTION OF INDUSTRIALLY VALUABLE BERYLLIUM SALTS FROM BERYLLIUM-BEARING MINERALS. HELLMUT FISCHER, Berlin-Friedenau, Germany, assignor, by mesne assignments, to Metal & Thermit Corporation, New York, N. Y., a Corporation of New Jersey. Filed Dec. 13, 1928, Serial No. 325,928, and in Germany Dec. 17, 1927. 4 Claims. (Cl. 23—18.)

3. The method of obtaining industrially valuable beryllium salts, which comprises heating a mixture of a beryllium-bearing mineral with a silico fluoride at a temperature above 600° centigrade for so long a time that the mixture sinters without fusing, crushing the sintered product, leaching the same with cold water and separating beryllium salts from the solution so obtained.

1,815,057. PROCESS FOR THE PRODUCTION OF HOMOGENEOUS RUBBER DEPOSITS FROM RUBBER LATEX. FRANCIS GÁBOR and PAUL KLEIN, Budapest, Hungary, and ANDREW SZEGVÁRI, Akron, Ohio, assignors, by mesne assignments, to American Anode, Inc., a Corporation of Delaware. Filed July 22, 1926, Serial No. 124,285, and in Germany Sept. 4, 1925. 18 Claims. (Cl. 204—1.)

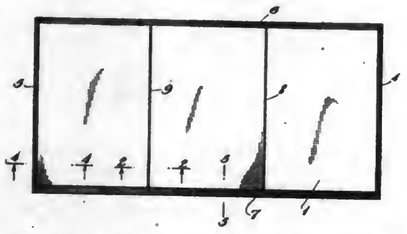
9. The process of making homogeneous rubber deposits from ammonia-preserved latex by electrophoretic deposition which comprises reducing the ammonia content of the latex by adding thereto substances capable of reducing the alkalinity thereof, immersing in the treated latex a deposition base comprising a metal substantially incapable under the influence of an electrophoretic depositing current of forming gases thereon and passing through such treated latex and deposition base an electric current capable of electrophoretically depositing rubber from said latex at said base.

1,815,058. MEANS FOR ATTACHING PIN-TONGUE MOUNTINGS TO JEWELRY. MAX GENSER, Providence, R. I., assignor to Genser Manufacturing Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Jan. 23, 1929. Serial No. 334,515. 5 Claims. (Cl. 63—20.)



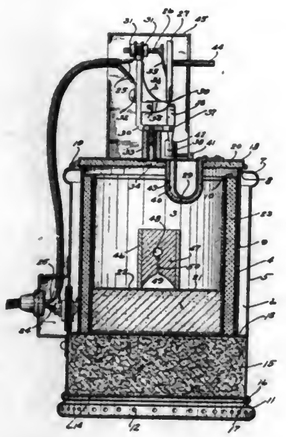
1. In an article of jewelry, a frame having an opening, a pin-tongue support having a base seated against the back of the frame and provided with an opening registering with the opening therein, and a gem-setting provided with a reduced neck portion inserted through the opening in the frame and the opening in the pin-tongue support and riveted over on the base of the latter to secure the parts permanently in place.

1,815,059. DIAPER. EMANUEL GOLDSTEIN, New York, N. Y., assignor to Baby Grands, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 27, 1930. Serial No. 478,027. 7 Claims. (Cl. 139—410.)



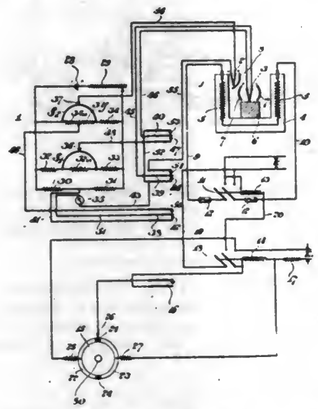
1. A diaper of double thickness with a border of single thickness completely surrounding the diaper.

1,815,060. DENTAL WAX ELIMINATOR. GEORGE W. HARRIS, Fergus Falls, Minn. Filed Sept. 10, 1928. Serial No. 304,968. 5 Claims. (Cl. 219—35.)



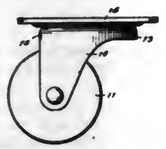
1. The combination with an open top oven, and a displaceable cover normally closing the same and having an external pocket extending into the oven and movable therefrom with the opening of the cover, of an electric circuit for the heating element including a switch carried by the cover, and means including a thermally influenced element in the pocket for opening the switch.

1,815,061. CONTROL SYSTEM. JOHN W. HARSCH, Ambler, and WILLIAM R. SCHOFIELD, Jr., Philadelphia, Pa., assignors to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 9, 1929. Serial No. 345,766. 12 Claims. (Cl. 236—69.)



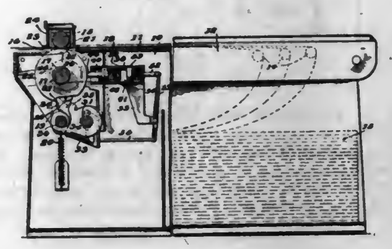
1. In combination, a source of heat, a furnace, means for controlling supply of heat to said furnace, thermo-responsive means jointly responsive to the temperatures of said source and a material heated thereby for actuating said first-named means, and means for alternately recording the temperature of said material and the difference in temperature between said material and said source.

1,815,062. CASTER. WALTER F. HEROLD, Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 4, 1929. Serial No. 360,581. 1 Claim. (Cl. 16—21.)



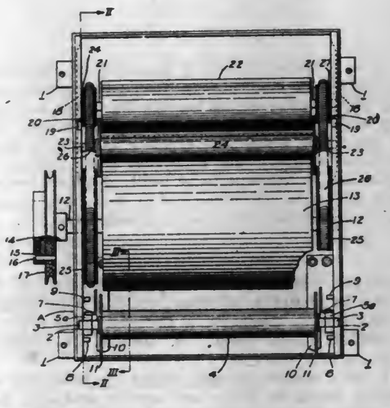
In a caster, a floor engaging element including a wheel, a sheet metal horn having a top portion, a pair of spaced side portions rotatably carrying said wheel and downturned rim portions continuous with said side portions and extending between them and defining a lateral space at the under side of the horn top, said horn top comprising an annular marginal portion adjacent said rim and side portions, a downwardly pressed circular ball-race portion inwardly of and adjacent said marginal portion and disposed in said lateral space, the upper surface of the ball race portion being of a depth at its outer side adjacent said marginal portion slightly less than the ball diameter, and an upwardly dished centrally apertured annular portion inwardly of the ball race having its upper surface in a plane below the upper surface of said marginal portion and providing a space at the upper side of the horn top inwardly of and defined by said outer side of the ball race, balls disposed in said race, an attaching element including a sheet metal top plate overlying said horn top having a downwardly dished centrally apertured annular portion opposed to said upwardly dished annular portion of the horntop and having its under surface disposed in said space at the upper side of the horn top, said balls being engaged with the under surface of said top plate outwardly of said downwardly dished annular portion, and a center stud rotatably connecting said horn top to said plate.

1,815,063. MANIFOLDING REGISTER. ARTHUR A. JOHNSON, Bridgeport, Conn., assignor to Autographic Register Company, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 24, 1929. Serial No. 416,260. 16 Claims. (Cl. 282—21.)



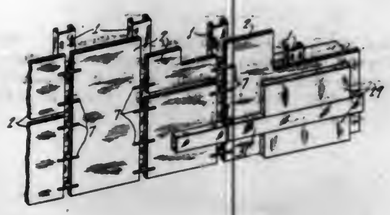
1. In a manifolding machine having a platen over which a strip is advanced; feeding means for advancing the strip a predetermined length, including means for rendering the feeding means temporarily inoperative to continue to advance the strip after the strip has advanced said predetermined length; and means automatically made operative as an incident to cessation of movement of the feeding means for causing the feeding means to again become operative for strip advancement when it is next desired to advance the strip a predetermined length.

1,815,064. OPERATING MECHANISM FOR A RECORD-RECEIVING MEMBER. JOSEPH W. LEGG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 31, 1927. Serial No. 195,400. 10 Claims. (Cl. 242—66.)



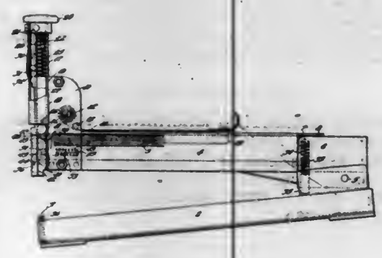
1. The combination with supply and take-up reels carrying a record-receiving member, of a drum engaged by said member during transfer thereof, a drum for driving said take-up reel, driving means directly connecting said drums, and means for driving said first-named drum.

1,815,065. BUILDING CONSTRUCTION. THOMAS A. LUCY, Birmingham, Ala. Filed May 25, 1929. Serial No. 365,880. 17 Claims. (Cl. 72—46.)



1. In a partition wall construction of the character described, a supporting frame member of angular section having a face thereof provided with a fastening element extending inwardly of said angle, a sheet of wall board positioned against said face, and means cooperating with said fastening element to secure said board in place.

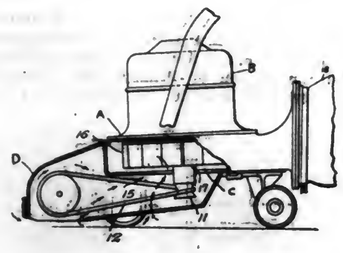
1,815,066. STAPLING MACHINE. ARTHUR H. MAYNARD, Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me., a Corporation of Maine. Filed Jan. 28, 1930. Serial No. 424,052. 10 Claims. (Cl. 1—3.)



1. In a device of the type specified, the combination of a reciprocable staple-driver, means for successively feeding staples into position beneath the driver, and a staple-supporter pivotally mounted to extend across the path of the driver whereby to engage the staple to hold it in elevated position, said supporter being mounted at its upper end to adapt it to be bodily displaced rearwardly with respect to the driver and to then swing on its pivot as the driver descends along its forward face.

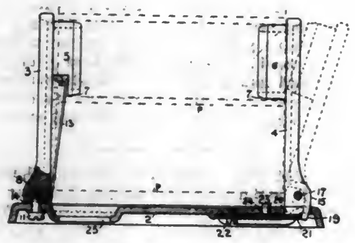
1,815,067. SUCTION SWEEPER. MARVIN E. NULSEN and BENJAMIN J. BUCHTEL, Canton, Ohio, assignors to The Hoover Company, a Corporation of Ohio. Filed May 5, 1926. Serial No. 106,830. 4 Claims. (Cl. 15—8.)

1. In a suction sweeper, means for producing suction, driving means on which said suction producing means is mounted, and on the lower end of the driving means a driving pulley, a nozzle having an intake and an agitator revolubly mounted in the nozzle, the agitator having a driven pulley formed thereon, driving means connecting the driving and driven pulleys, a casing for the suction producing means, the casing having an inlet, a suction conduit connecting the nozzle intake to the suction producing means casing inlet, and an auxiliary air inlet port in the suction conduit positioned slightly in advance of the forward edge of the inlet of the casing of the suction



producing means and adjacent the driving pulley to admit a current of air at substantially right angles to the normal flow from the nozzle intake to the suction chamber inlet.

1,815,068. TOILET PAPER DISPENSING DEVICE. PHILIP D. PARSONS, Swarthmore, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Mar. 6, 1930. Serial No. 433,831. 7 Claims. (Cl. 242—55.2.)

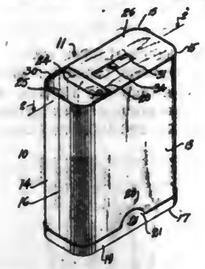


1. A toilet paper dispensing device comprising a tubular paper roll core portion for holding a paper roll to be dispensed, a fixedly positioned base frame having an arm fixedly secured to one end of the base frame and extending laterally therefrom, combined with an adjustable arm hinged to the other end of the base frame and also extending laterally therefrom, said arms respectively provided with hub-like portions rigidly secured to the arms and projecting in opposite directions and having diameters which fit into the ends of the core portion for supporting the paper roll between them, a locking means on the base frame normally snapping into locking position with respect to the hinged arm, and means for permitting said locking means to be moved into unlocking position.

1,815,069. POCKET CIGARETTE CASE AND DISPENSER. JOSEPH J. PETRO, New York, N. Y. Filed Apr. 28, 1930. Serial No. 447,850. 2 Claims. (Cl. 220—41.)

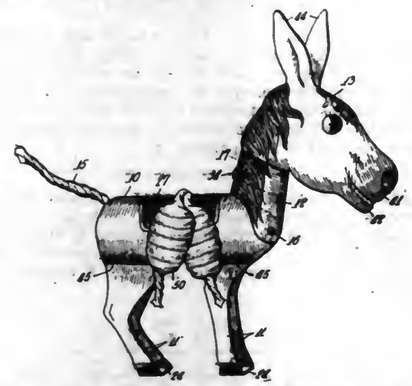
1. In a cigarette package case having a substantially rectangular container and a removable cover at one end thereof for receiving the package, said container including a closure means for the opposite end of the container, said closure means including a plurality of spaced panels and a slidable closure member therebetween, said panels being spaced from a narrow wall of the container to afford an opening, said closure member being movable to close said opening, said panels including an outer panel and an inner

panel both rigidly connected to the container, the outer panel having a marginal flange extending into the space



between the panels, said flange including an integral projecting flange portion extending along the edge of said opening and secured thereto for re-enforcing the same.

1,815,070. TOY ANIMAL. LOUISE PRAHAR, Baldwin, N. Y. Filed Mar. 21, 1930. Serial No. 437,673. 9 Claims. (Cl. 46—40.)



1. A toy animal, including a flexible sheet cut and bent to form a tubular body portion, leg members extending downwardly from each side of the body portion and laterally to points beneath the opposite side of said body portion, and means for interlocking said leg members in crossed and interlocked relation to retain the body portion in tubular form.

1,815,071. NONFERROUS ALLOY. WILLIAM B. PRICE, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 16, 1931. Serial No. 530,735. 2 Claims. (Cl. 75—1.)

1. An alloy comprising essential amounts of copper, aluminum and nickel in proportions substantially within the following ranges:

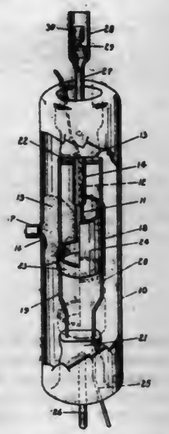
	Per cent
Copper	80 to 85
Copper	1 to 2½
Nickel	1 to 2½

the remainder being mostly zinc.

1,815,072. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. MARION C. REED, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,923. 14 Claims. (Cl. 18—50.)

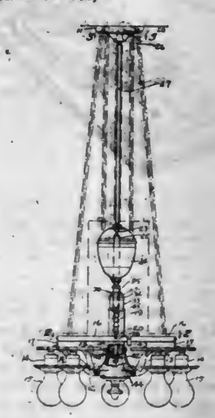
1. The method of preserving rubber which comprises treating rubber with a primary amino derivative of a diaryl ether.

1,815,073. URANIUM PHOTO-ELECTRIC TUBE. HARVEY C. RENTSCHLER, East Orange, and DONALD E. HENRY, Bloomfield, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 12, 1929. Serial No. 370,223. 9 Claims. (Cl. 250—27.5.)



7. A photo electric tube comprising an envelope transparent to ultra-violet light, an anode and a cathode therein, said cathode consisting of metallic uranium.

1,815,074. CHANDELIER. DAVID SCHAEFER, Brooklyn, N. Y. Filed Nov. 27, 1929. Serial No. 410,027. 2 Claims. (Cl. 240—69.)



1. An extensible lighting fixture of the character described comprising a chandelier, a counterpoise therefor, a guide for said counterpoise, an electrical conductor connecting said chandelier, and including an excess coiled portion, a telescopic connector for said guide and chandelier, and telescopic guiding means for said conductor serving to keep said telescopic member, chandelier and guide in sliding alignment.

1,815,075. STUD AND PARTITION CONSTRUCTION FOR BUILDINGS. FRED J. SERSEN, Brooklyn, N. Y., assignor of one-half to John H. Thomas, New York, N. Y. Filed Sept. 21, 1929. Serial No. 394,214. 2 Claims. (Cl. 72—115.)

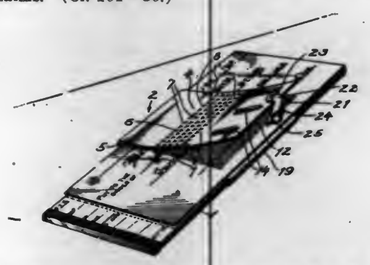
1. In building construction, a stud having a right-angled channel formed by two parallel webs and an integral inter-

mediate member, another member alongside one of said webs and widened to form a surface substantially larger than said web, the outer edge thereof being incut at intervals and the sections between the cuts being bent at an angle to form lugs in the same plane with the intermediate



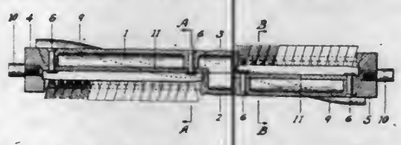
member of the channel, said lugs being perforated, and fastening means for wall boards being passed through one perforation, and fastening means for lathing being passed through another perforation, so that the lugs and fastening may hold the constituents of the wall close against the studs.

1,815,076. CHECK PROTECTOR. VICTOR H. SEVERY, Los Angeles, Calif. Filed Dec. 18, 1928. Serial No. 326,764. 5 Claims. (Cl. 101—30.)



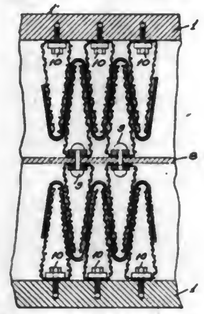
1. A check protector having a base-plate with a platen extending transversely on the same, and having a perforating plate connected to an edge of the base-plate of resilient material and operating to maintain itself normally disposed in a curve with its convex side disposed toward the base-plate, said perforating plate having a die with a plurality of rows of integral teeth struck down from the material of the same and projecting toward the base-plate, said perforating plate operating when depressed at its free edge to engage the platen on a contact line that moves progressively in a direction from the attached edges of said plates toward their free edges so that the rows of teeth cooperate in succession with the platen to perforate the check.

1,815,077. SUCTION CLEANER AGITATOR. CHARLES L. SHANK, North Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Jan. 2, 1929. Serial No. 329,871. 6 Claims. (Cl. 15—179.)



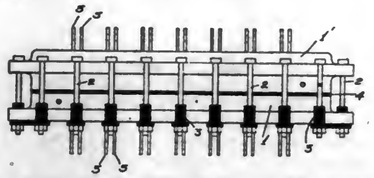
5. An agitator for suction cleaners comprising a rotatable body, members complementing each other in the formation of said body, solid sections on one of said members forming the ends for said body and supporting means carried by said ends.

1,815,078. ELECTROLYTIC CELL. JAMES NORMAN SMITH, Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 12, 1928. Serial No. 292,105. 10 Claims. (Cl. 204—5.)



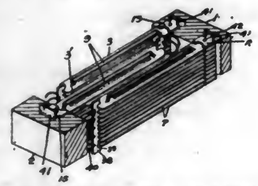
3. The combination with an electrolytic cell, of opposite and alternately disposed nested U-shaped electrode units with open inner ends and having the arms of adjacent units of opposite polarity in juxta-position, a pervious diaphragm inserted between juxtaposed arms of electrodes of opposite polarity, and auxiliary electrodes disposed between the arms of like polarity.

1,815,079. ELECTROLYTIC CELL. JAMES NORMAN SMITH, Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 12, 1928. Serial No. 292,106. 5 Claims. (Cl. 204—5.)



3. A group of electrolytic cells comprising a number of cell units arranged side by side and having interposed between the adjacent end walls a relatively soft conducting medium, means for pressing and holding adjacent end walls and said interposed conducting medium closely together to form with said interposed conducting medium a joint of relatively high conductivity and low resistance.

1,815,080. ELECTRODE FOR APPARATUS FOR ELECTROLYSIS OF WATER. JAMES NORMAN SMITH, Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 21, 1928. Serial No. 301,142. 16 Claims. (Cl. 204—5.)

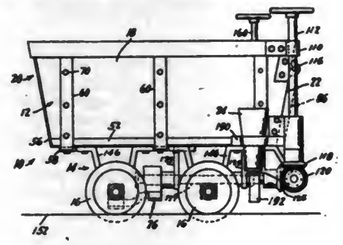


2. In an electrolytic cell, co-operating anode and cathode electrodes alternately positioned and supported by attachment at their ends to the respective end-plates of the cell, a diaphragm extending between the electrodes of opposite polarity, each of said electrodes being made up of alined, superposed, perforated metal strips to form a discharge channel intermediate the active edges of the electrode.

1,815,081. CHROMIUM PLATING. ERWIN SOHN and RALPH J. PADDOCK, Bellevue, Pa., assignors to Standard Sanitary Mfg. Co., Pittsburgh, Pa., a Corporation of New Jersey. Filed Nov. 5, 1928. Serial No. 317,475. 5 Claims. (Cl. 204—1.)

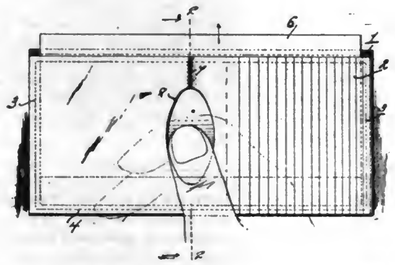
1. The process of chromium plating, which comprises passing an electric current through a bath containing from 150 to 450 grams of chromic acid, from 0.35 to 1.05 grams of sulphuric acid and from 0.30 to 3.0 grams per liter of hydrofluosilicic acid to the article to be plated as cathode.

1,815,082. MINE RAILROAD CAR. JACOB STEINBERG, Brooklyn, N. Y. Filed Nov. 18, 1927. Serial No. 234,084. 3 Claims. (Cl. 105—364.)



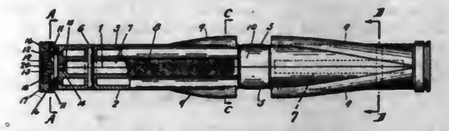
1. In combination, a car having demountable wall sections, straps detachably secured to the bottom of said car and having upstanding portions providing means for supporting the side walls of said car demountably in position, and channels attached to said side walls for slidably receiving side edge portions of the end walls of said car.

1,815,083. BILL FOLD. ABRAHAM WEINBERG, Linden, N. J., assignor to H. B. Hardenburg Corporation, Linden, N. J., a Corporation of New Jersey. Filed Mar. 13, 1929. Serial No. 346,576. 1 Claim. (Cl. 150—28.)



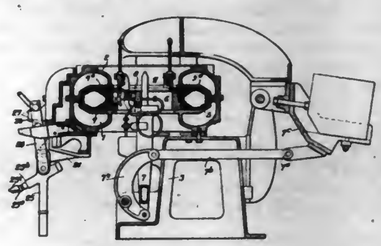
A wallet made from two sheets of material, each sheet being of uniform width throughout its length, the sheets being united at their lower and outer longitudinal edges to present a pocket for the reception of bank notes, and being foldable midway their length, one of said sheets being of less width than the other, whereby the upper longitudinal edge thereof will be spaced throughout its length at a uniform distance below the upper longitudinal upper edge of the other sheet, to facilitate the removal of the contents of the wallet, and being provided, at the folding portion thereof, with a finger-receiving opening adapted to receive the thumb of a hand to facilitate the removal of the contents of the wallet.

1,815,084. SUCTION CLEANER AGITATOR. HARRY B. WHITE, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Jan. 2, 1929. Serial No. 329,866. 5 Claims. (Cl. 15—179.)



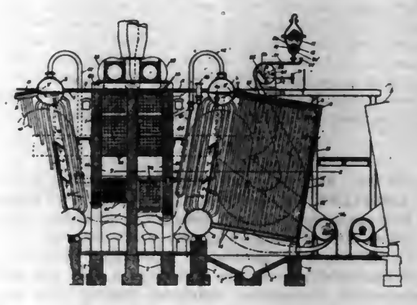
1. An agitator for suction cleaners characterized by the fact that said agitator comprises a plurality of complementary members forming a body, said members having cooperative reentrant portions forming in their assembled relation brush seats and brushes positioned in said brush seats.

1,815,085. APPARATUS FOR VULCANIZING TIRES. HARRY WILLSHAW, THOMAS NORCROSS, and FREDERICK GEORGE BROADBENT, Erdington, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a Corporation of New York. Filed Mar. 15, 1928, Serial No. 261,762, and in Great Britain Mar. 19, 1927. 9 Claims. (Cl. 18—17.)



7. Apparatus of the type described which comprises a pair of tire mold rings separable on a plane at a right angle to the axes of said rings, separable clip rings forming complementary parts to said mold rings, means for opening said mold rings in an axial direction, spring means for separating said clip rings from said mold rings, and releasing means for holding said clip rings to said mold rings and for releasing said spring upon the movement of said mold rings.

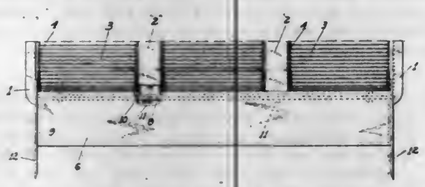
1,815,086. STEAM GENERATOR. ALBERT C. WOOD, Philadelphia, Pa. Filed Oct. 9, 1926. Serial No. 140,437. 7 Claims. (Cl. 122—235.)



1. A steam generator comprising a combustion chamber having a water cooled wall at one side thereof and a bank of up-flow generating tubes and a complementary

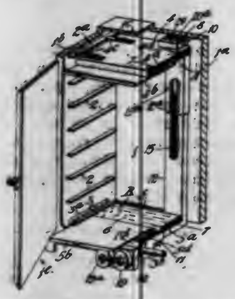
bank of down-flow generating tubes at the other side thereof, means for discharging combustible products at an angle across a substantial portion of said chamber and toward one side of said chamber and along said wall, and means for diverting the course of products of combustion from said combustible products toward the other side of said chamber and in contact with said bank of up-flow generating tubes and thence downwardly over said complementary bank of down-flow generating tubes.

1,815,087. BLADE MOUNTING FOR UNDERGROUND CROP DIGGERS. ROSCOE C. ZUCKERMAN, Stockton, Calif. Filed Oct. 4, 1929. Serial No. 397,236. 5 Claims. (Cl. 55—9.)



1. In a multiple-row digging machine for underground crops, side frames, intermediate frames parallel thereto, drapers disposed between adjacent frames, and a blade extending unbroken between the side frames ahead of the drapers and rigidly secured to the side and intermediate frames to both support the blade and brace the frames against lateral deflection.

1,815,088. GAS OVEN ELECTRIC HEATER. GEORGE WILLIAM ALLEN and AMBROSE WATERS, Malvern, Victoria, Australia. Filed Oct. 4, 1929, Serial No. 397,361, and in Australia July 4, 1929. 3 Claims. (Cl. 219—35.)

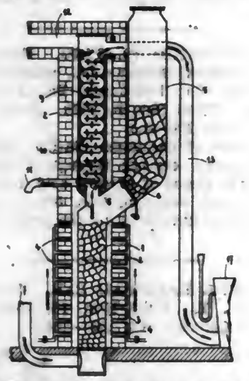


2. The combination with a gas stove oven, of a pair of electrically heated trays, means for supporting one tray at the top of the oven and the other at the bottom thereof, an electric conductor including a vertical and a horizontal member, each member consisting of adjustably connected sections, one section of each member having sockets carried thereby, and pins carried by the trays adapted to engage said sockets, as and for the purpose set forth.

1,815,089. PROCESS OF MANUFACTURING PLASTIC ASPHALTIC COMPOSITIONS FOR PAVEMENTS. FREDERICK C. ALSDORF, Chicago, Ill. Filed Oct. 15, 1928. Serial No. 312,738. 2 Claims. (Cl. 106—31.)

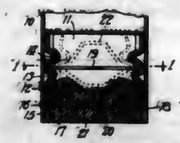
1. An improved method of producing asphaltic compositions which comprises adding to a cold mix asphalt composition comprising aggregate coated with asphalt fluxed with a liquefier normally used in the art, a small amount of water and an emulsifying agent to produce a partial emulsification only of the asphalt largely on the surfaces of the asphalt coated particles of mineral matter.

1,815,090. DEVICE FOR CONTINUOUSLY PRODUCING PURE HYDROGEN. JULIEN BELLAT, Brussels, Belgium. Filed Jan. 18, 1928, Serial No. 246,558, and in Belgium Jan. 26, 1927. 2 Claims. (Cl. 23—288.)



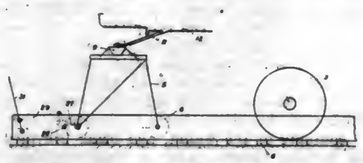
1. A device for continuously producing pure hydrogen by means of watergas, comprising in combination a cylindrical generator, means for adjustably heating the same from outside, means for injecting superheated steam into the lower part of same, a column containing layers of fireproof clay mixed with charcoal and forming an extension of said generator, means for injecting superheated steam into said column, a condensation purifier connected to said column, a tubular system connected to said purifier and means for adjustably heating the same from outside.

1,815,091. TREAD FOR SHOE HEELS. GEORGE L. BENNETT, Cleveland Heights, Ohio. Filed May 11, 1929. Serial No. 362,394. 13 Claims. (Cl. 36—36.)



1. A device of the character described comprising a shoe heel having a recess in the bottom thereof, said recess having a portion thereof above the bottom of the heel larger in cross-section than another portion thereof intermediate said first-named portion and the open end of said recess, a tread piece having a portion insertible in said recess, and means carried by said insertible portion expandable into said larger portion of said recess to secure said tread in place.

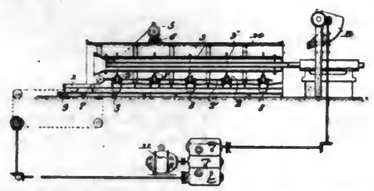
1,815,092. METHOD AND DEVICE FOR THE AUTOMATIC STARTING OF AEROPLANES. RAOUL BERNADY, Istres, France, assignor to Societe d'Etudes et de Construction d'Appareils de Telemecanique, Paris, France, a Corporation of France. Filed Jan. 7, 1931, Serial No. 507,240, and in France Jan. 18, 1930. 15 Claims. (Cl. 244—2.)



1. A method for automatically starting an aeroplane consisting in constraining this aeroplane to run forwardly

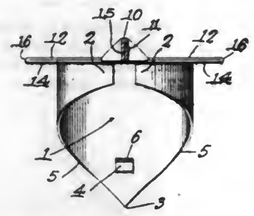
with a slightly greater incidence than in flight, guiding it laterally during this run, releasing it automatically from said constraint and stabilizing it automatically as soon as it has a sufficient speed.

1,815,093. CENTRIFUGAL TUBE-CASTING APPARATUS. ISIDORO BIONAMI, ERCOLE GALASSINI, EMILIO FRANCHI, and GIULIO PONS, Brescia, Italy, assignors to Societa Alti Forni, Fonderie, Acciaierie E Ferriere Franchi-Gregorini, Brescia, Italy. Filed May 20, 1929. Serial No. 364,616. 3 Claims. (Cl. 22—65.)



1. A centrifugal tube-casting apparatus, comprising a hollow, cylindrical casing; a longitudinally-moving carriage whereon the casing is mounted; a tubular mould mounted within said casing to move longitudinally therewith; means for rotating said mould relatively to the casing; a stationary pouring channel extending within said mould; a tiltable feeding reservoir to receive molten metal and discharge it into said channel; an electric motor; a driving connection between said motor and reservoir for tilting the latter; and a separate driving connection between the motor and carriage to effect the advance of said carriage.

1,815,094. CAN OPENER. JAMES D. BOLTON, Los Angeles, Calif. Filed Mar. 7, 1930. Serial No. 434,139. 1 Claim. (Cl. 30—3.)



A can opener fashioned from a single piece of metal, formed into a curved blade having free ends and supplied at its lower extremity with an entering point located diametrically opposite to its free ends, the blade being provided with means for lifting the portion of a can which is severed by the blade, there being an inwardly extended top strip connected at one end to the upper edge of the blade directly above the entering point, the top strip being contracted and folded together transversely, at a point adjacent to the free ends of the blade, to form a handle of unequal transverse dimensions, the longer transverse dimension of the handle being at right angles to the plane defined by the top strip, the top strip having oppositely-projecting lateral arms which are bent upon themselves to form underlying, inwardly extended fingers that rest on the upper edge of the blade near to the free ends thereof.

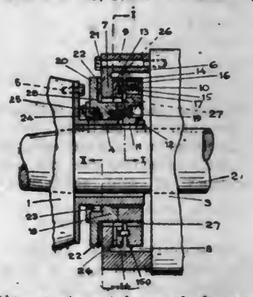
1,815,095. NUT LOCKING DEVICE. EUGÈNE BRANDT, Geneva, Switzerland. Filed July 10, 1929, Serial No. 377,285, and in Switzerland Mar. 15, 1929. 2 Claims. (Cl. 151—51.)

1. A device for locking nuts on their bolts, comprising a single resilient rod having a central portion extending between two bolts and forming two bolts embracing loops beneath the nuts, the portion of the rod extending between the two bolts forming a bridge, each end portion



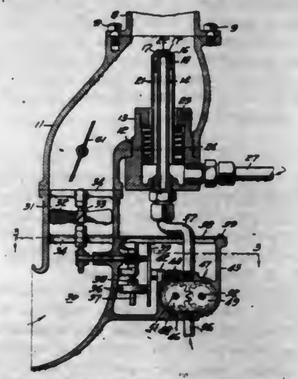
of the rod extending from the loop beneath the nut to the free end of the rod passing beneath the bridge and then returning towards the said nut and being raised to resiliently engage the sides and corners of the nut.

1,815,096. STUFFING BOX FOR SHIPS' PROPELLER SHAFTS. CARL WILHELM CEDERVALL, Gottenborg, Sweden. Filed May 16, 1928, Serial No. 278,103, and in Great Britain Feb. 18, 1928. 1 Claim. (Cl. 286—7.)



In combination, a stern tube, a shaft passing through said tube and a hub thereon, a stuffing box to prevent the admission of sea water to said tube, said stuffing box including a relatively stationary flanged ring attached to the stern tube having a sealing surface, a tightening flange mounted to revolve with said shaft and to slide axially thereof and having a sealing surface coacting with the first mentioned sealing surface and directly presented to the sea water, means acting to draw the sealing surfaces of the flange and ring into fluid tight relation, and a lubricant chamber to supply lubricant to the sealing surfaces and lying inside the latter whereby the centrifugal force developed during rotation of the shaft effects outward distribution of lubricant over the sealing surfaces.

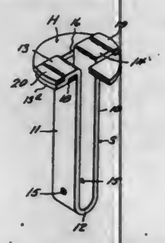
1,815,097. HYDROCARBON MOTOR CARBURETOR. CLINTON DAVIDSON, San Francisco, Calif. Filed May 21, 1929. Serial No. 364,731. 2 Claims. (Cl. 261—35.)



1. In a carburetor for a hydrocarbon motor including a mixing chamber and an air intake, an air motor positioned

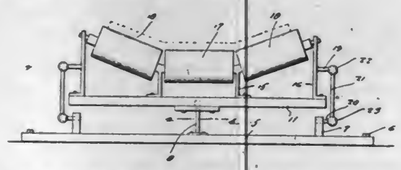
in the air intake so that air passing to the mixing chamber acts upon the motor, an atomizing nozzle for supplying atomized fuel to the mixing chamber, a pump for supplying fuel to the atomizing nozzle, and means connecting the air motor variably to the pump whereby the ratio of fuel supplied to the nozzle by the pump to air passing thru the air intake can be varied.

1,815,098. BOLT SUBSTITUTE. ALBERT C. EARHART, Shaker Heights, Ohio. Filed Jan. 3, 1931. Serial No. 506,377. 3 Claims. (Cl. 85—7.)



3. A bolt substitute including a U-shaped shank portion having out-turned end portions, and a head plate, said out-turned portions having parts extending under said head plate and parts extending over the same whereby to resist any tendency of said out-turned portions to straighten out.

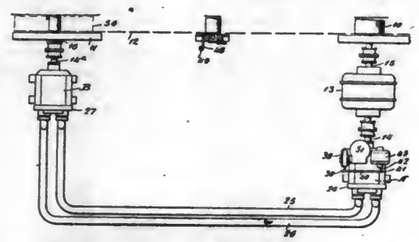
1,815,099. AUTOMATIC BELT GUIDE. GEORGE A. FOOTE, Miami, Okla. Filed Jan. 2, 1930. Serial No. 418,024. 2 Claims. (Cl. 198—202.)



1. In an apparatus of the class described, a plate, means for supporting the plate to allow the same to tilt in a vertical plane coincident with its longitudinal extension and prevent tilting thereof out of said plane, said means allowing the plate to swing, a plurality of rollers, means for mounting the rollers to swing with the plate, and means for causing the plate to swing when tilted, said rollers comprising a central roller having its axis parallel with the plate and a pair of side rollers having their axes diverging upwardly from each other, said supporting means comprising a standard terminating in a ball located in a pocket in the center of the plate and an auxiliary plate having an elongated slot through which the standard extends, said auxiliary plate being attached to the first mentioned plate so that the slot extends longitudinally of said first mentioned plate.

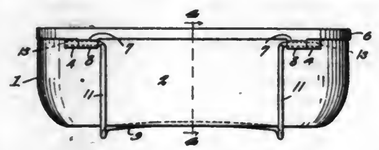
1,815,100. AUTOMATICALLY CONTROLLED MECHANISM FOR TRAVELING WEBS OF MATERIAL. DANIEL ROBERT FRANCIS, Waterbury, Conn., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 25, 1930. Serial No. 423,409. 6 Claims. (Cl. 242—55.)

1. The combination with a machine from which a web of material is fed and a winding machine for receiving said web from said first machine and winding it in a roll, of a fluid pressure motor for driving said winding machine, a fluid pressure pump for operating said fluid pressure motor, electrically controlled means for adjusting said fluid pressure pump to vary the driven speed of said fluid pressure motor, and means governed by said web for automatically controlling the operation of said electrically controlled means to maintain the driven speed of said



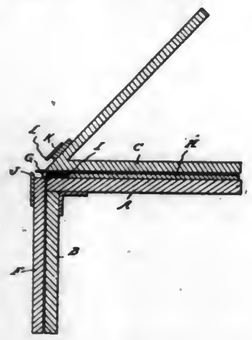
fluid pressure motor in properly timed relationship with the operative speed of said first machine to compensate for variations in the size of the roll being wound.

1,815,101. BAIT BOX. JACOB GOLDSTEIN, Wilkes-Barre, Pa. Filed Jan. 22, 1931. Serial No. 510,547. 4 Claims. (Cl. 43—31.)



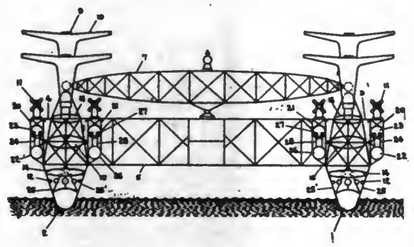
1. A bait box including a body, a lid, and a clip having integral pintles hingedly connecting the lid and body, said clip constituting means for engaging the bottom of the body to hold said body to a supporting belt or the like.

1,815,102. MACHINE FOR BENDING SHEET METAL. ROBERT M. HINAICH, Detroit, Mich., assignor to Drake-Avery Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 17, 1930. Serial No. 436,579. 8 Claims. (Cl. 153—16.)



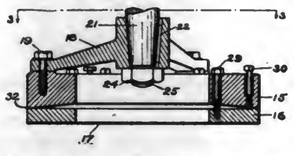
1. A sheet metal brake comprising a bed, a clamping head above said bed having an acute angular edge portion, a swinging leaf for bending a projecting portion of a blank clamped by said head and bed over said acute angular edge, co-operating means on said swinging leaf and said head for forming a reverse acute angular bend in said blank and a raised portion on said bed for supporting the blank removed from the edge to form a recess into which said reverse acute angular bends may be collapsed by the clamping pressure of said head to form in said blank an offset double return bend.

1,815,103. CABIN FOR AIR AND WATER CRAFT. SAMUEL E. HITT, Elyria, Ohio. Filed Mar. 5, 1931. Serial No. 520,264. 20 Claims. (Cl. 114—66.5.)



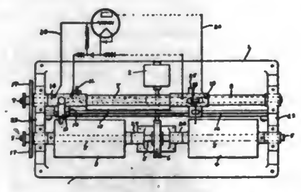
1. In a two hull unit aeroship or similar craft, the said hull unit consisting of an entirely enclosed hull reinforced by a compound truss composed of a truss proper and intermediate framing between the said hull and the said truss proper, bracket members overhanging both sides of the said truss proper and enclosed cabins of tubular formation mounted on the said bracket members parallel to and equidistant from the vertical central plane of the said hull unit, substantially as specified.

1,815,104. LAPPING MACHINE. SAMUEL HOLT, Ridgewood, N. Y., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1930. Serial No. 485,464. 6 Claims. (Cl. 51—201.)



1. A lapping machine comprising two opposed lapping members and a work cage interposed therebetween, one of which is rotatable relative to the other to cause a lapping action, said lapping members having their operative faces in parallelism, and means to deform one of said members after it has been worn out of true to again bring its operative surface into a true and accurate lapping plane.

1,815,105. CYLINDRICAL SCANNING. WALTER HOWEY, New York, N. Y. Filed June 20, 1930. Serial No. 462,667. 2 Claims. (Cl. 178—13.)



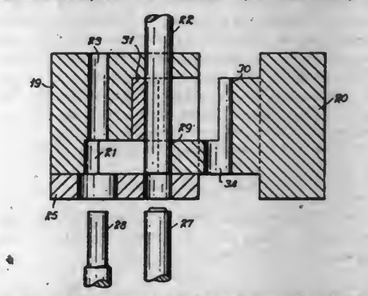
1. In devices for photoelectrically engraving plates for printing, in combination, a rotatable cylinder adapted to support a picture, a light sensitive scanning means, adjacent said cylinder, means for producing a transverse movement of the light sensitive scanning means relative to the picture, a resistance coupled amplifying system suitably connected to the output of the light sensitive scanning means, a suitable engraving device, adapted to engrave in a suitable plate a facsimile of the picture suitable for direct printing, connected to the output of the amplifying means, a second rotatable cylinder adapted to hold a plate to be engraved, means for moving the engraving device synchronously with the light sensitive scanning device and transversely relative to the cylinder holding the plate to be engraved, means for coupling the two cylinders each to the other and means for producing synchronous rotation of the cylinders.

1,815,106. HAND BAG CONSTRUCTION. BERNARD J. JOSTES, St. Louis, Mo. Filed July 21, 1928, Serial No. 294,363. Renewed Dec. 20, 1930. 1 Claim. (Cl. 150—28.)



A bag of the character described comprising in combination a container portion including bottom, side and end walls, a frame formed from wire and including sides and ends each of the sides of said frame being substantially inverted U-shape, means uniting the container portion to the frame, with the sides of the container portion connecting corresponding end portions of the sides of the frame; the bottom wall of the container portion connecting the ends of the frame; the respective end walls of the container portion connecting opposite end portions of the respective sides of the frame, and the bight or intermediate portion of the sides of said frame extending above the upper edges of the side and end walls of the container portion to provide opposed hand grips.

1,815,107. APPARATUS FOR MAKING PIPE COUPLINGS. JOHN LAMOND, Allison Park, Pa., assignor to Pittsburgh Pipe & Coupling Company, Allison Park, Pa., a Corporation of Pennsylvania. Filed Sept. 12, 1929. Serial No. 392,096. 4 Claims. (Cl. 164—11.)

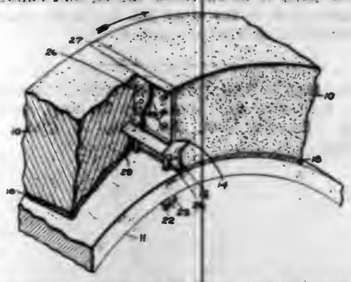


1. Apparatus for forming blanks from bar stock, comprising a pair of die blocks mounted for relative movement in directions laterally of a rod or bar being operated upon, co-operating bar gripping surfaces on said blocks, a tool positioned for movement against the forward extremity of a bar gripped by said surfaces, cooperating shearing die portions on the blocks located forwardly of the said gripping surfaces, a seating surface on one of said blocks located forwardly of and laterally offset from the said gripping surfaces, the said seating surface being in position to receive a blank sheared from the end of bar stock which has been advanced from between the gripping surfaces, and a tool for operating on a blank which is held on said seating surface.

1,815,108. GRINDING WHEEL. THURE LARSSON and HUGO W. H. BETH, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 17, 1928. Serial No. 326,546. 11 Claims. (Cl. 51—207.)

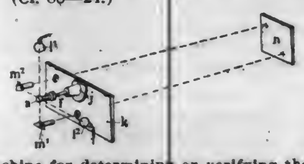
1. A grinding wheel comprising a rotatable support, a plurality of abrasive segments thereon, clamping means

to secure the segments on the support, and deformable non-elastic means located between a face of a segment and another part of the wheel which cooperates with the



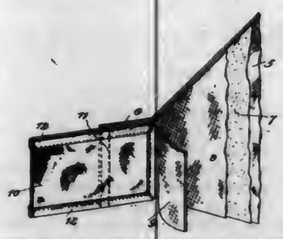
clamping means to hold the segment rigidly in position but will yield under excessive pressure due to temperature expansion of the wheel.

1,815,109. MACHINE SERVING TO DETERMINE OR VERIFY THE POSITION OF THE FILAMENT OF AN ELECTRIC LAMP. ANTOINE JEAN BAPTISTE MARSAT, Verrieres-le-Buisson, France. Filed July 22, 1925, Serial No. 45,434, and in France June 3, 1925. 5 Claims. (Cl. 88—24.)



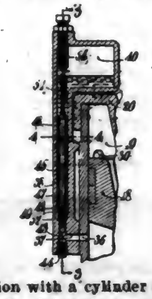
1. A machine for determining or verifying the position of the filament of an electric light relatively to the supporting member thereof, comprising a fixed optical system including a plurality of focusing elements and lights, and a focusing screen therefor, a fixed supporting member centered relatively to said optical system and adapted to selectively support any one of a plurality of lamp supporting units capable of supporting lamps of different sizes and each adapted to be removably secured to the fixed supporting member and sustain its associated lamp in relative centered position with respect to the optical system.

1,815,110. PLASTER BELT. PHIL S. MCQUIRK, Audubon, Iowa. Filed Jan. 3, 1930. Serial No. 418,320. 1 Claim. (Cl. 128—268.)



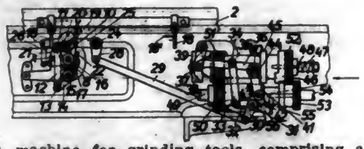
A plaster belt comprising a sheet of adhesive coated fabric having opposite tapered ends, fabric attaching strips secured to the adhesive at said ends and stitched to the sheet, whereby they are held both by the adhesive and the stitches, and cover enough of the adhesive so that a portion of said ends will never stick to the body of the wearer, a protective covering of crinoline or the like for said adhesive conforming to the outline of said sheet and overlying the stitching ends of the strips to leave loose parts which cover said stitching ends during packing and transportation and are accessible for convenient removal of the covering.

1,815,111. LUBRICATOR. HENRY H. MERCER, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 13, 1921. Serial No. 477,039. 12 Claims. (Cl. 184—69.)



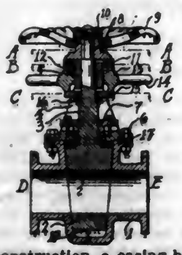
1. The combination with a cylinder and a piston therein having a piston rod, of inertia operated means for supplying lubricant to the interior of said cylinder, said cylinder having provision for maintaining a flow of gaseous fluid therein from said lubricant supplying means to said piston rod.

1,815,112. TOOL GRINDING MACHINE. KURT METZLER, Grossenhain, Germany. Filed Feb. 13, 1930, Serial No. 428,191, and in Germany Feb. 25, 1929. 7 Claims. (Cl. 51—232.)



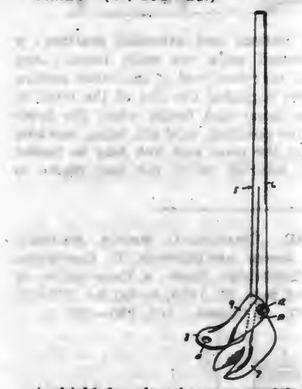
1. A machine for grinding tools, comprising a work spindle, a work spindle holder reciprocable in the longitudinal direction of the work spindle, means for rotating the work spindle according to the curvature of the edge of the tool to be ground, means for feeding the work spindle after each reciprocation of the work spindle holder, a driving shaft, reversible transmission gear adapted to connect the work spindle holder with the driving shaft for displacement in the longitudinal direction of the work spindle and for the spindle rotation, a clutch for actuating the reversible transmission gear, a second clutch for releasably connecting the work spindle feeding means with the driving shaft, means for automatically releasing the first clutch when the work spindle reaches one end of its travel, means for automatically engaging the first clutch when the work spindle reaches the other end of its travel, and means for automatically engaging the second clutch when the first clutch is released and releasing the second clutch when the first clutch is engaged.

1,815,113. VALVE. PETER NACHTSHEIM, New York, N. Y. Filed Aug. 16, 1930. Serial No. 475,811. 3 Claims. (Cl. 251—97.)



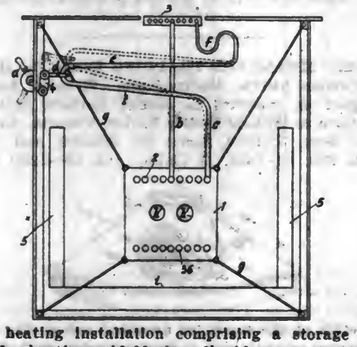
1. In a valve construction, a casing having an inlet and outlet and also provided with a tapered bore therethrough, a turn valve plug with a passage bore to register with inlet and outlet of casing when open, with the turn valve plug tapered to the bore of the casing and fitted therein, a bonnet yoke fastened to the casing, a ring locked to one end of the valve plug, an adjusting collar externally engaged on the casing and bonnet yoke, a washer sleeve interposed between the ring and collar and held against turning movement horizontally, but free to move vertically, another washer sleeve positioned below the collar and resting on a shoulder of the stem above said turn valve plug, held against turning movement horizontally but free to move vertically, means for moving said adjusting collar to effect tightening or loosening of said turn valve plug in its seat in the valve casing without affecting the rotation of the valve plug.

1,815,114. SHIELD ATTACHMENT FOR CLAW BARS. JOHN W. PETERSEN and EMERY BEVARD, Estherville, Iowa. Filed June 25, 1929. Serial No. 373,556. 1 Claim. (Cl. 254—25.)



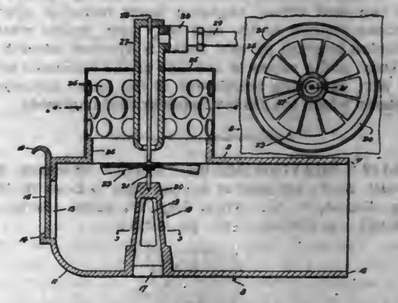
A shield for claw bars, comprising a body formed from a single blank of material and including a relatively large head portion merging into a relatively narrow elongated shank portion extending upwardly and outwardly from said head portion, said shank portion being substantially inverted U-shaped in cross section and adapted to receive between the sides thereof adjacent the free end of the shank, the handle portion of a claw bar, and a pivot bolt extending thru the sides of said shank portion and an adjacent portion of the claw bar for pivotally supporting said shield in operative position with respect to the claw of said claw bar, and the head portion of said shield remote from said shank provided with a sight opening.

1,815,115. HEATING INSULATION. WILHELM PFEIFFER, Kaaden-on-the-Eger, Czechoslovakia, assignor of one-third to Kurt Reiss, Saaz-on-the-Eger, Czechoslovakia. Filed Apr. 16, 1928, Serial No. 270,421, and in Germany Dec. 7, 1927. 8 Claims. (Cl. 126—20.)



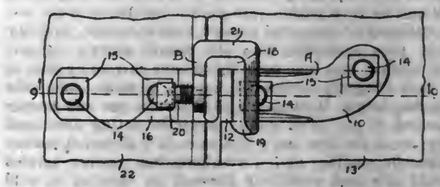
1. A heating installation comprising a storage block, means for heating said block, a liquid evaporator in said block, a heating station, a pipe line comprising an outflow and a return branch connecting said block with said heating station, a valve in said return branch adapted to control the flow of condensate therein, and automatic means controlled by the pressure in said pipe line for operating said valve in conformity with the pressure.

1,815,116. OIL BURNER. HUBERT C. ROBINSON, Dallas, Tex. Filed Mar. 10, 1930. Serial No. 434,637. 1 Claim. (Cl. 158—77.)



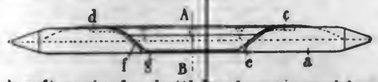
In a burner of the class described, a hollow body having a main air inlet at its top surrounded by an upstanding annular rim, said body being open at one end to provide a flame discharge, having an ignition hole at the opposite end and a closure therefor, the bottom of the body being formed with a secondary inlet and an upstanding hollow conical standard provided with air passages, the top of said standard being formed with a socket constituting a bearing, an apertured housing fitted telescopically over said rim, a nozzle fastened to said housing and depending down to the housing and into the air inlet, a fuel feed line connected with said nozzle, and a fan located in said body adjacent said air inlet and having a vertical shaft, the lower end of the shaft being journalled for rotation in the socket in said standard, the upper end portion of the shaft extending through the nozzle and being journalled for rotation in a bearing hole formed in the top of the nozzle.

1,815,117. RIM EXTENSION FOR TRACTOR WHEELS. PETER SHELBY, Jr., Fenton, Mich. Filed July 24, 1930. Serial No. 470,478. 5 Claims. (Cl. 301—40.)



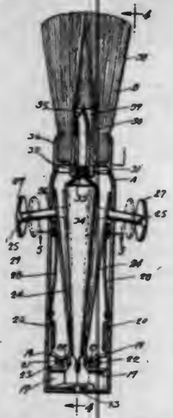
2. A connection for separably fastening a wheel rim and an extension rim together, said connection comprising a lug having a base for attachment to the inside circumference of the wheel rim said base and lug being angularly disposed so that the lug extends towards the axis of the wheel rim when attached thereto, a hook for engaging said lug and having a base for attachment to the inside circumference of the extension rim, said hook and base being respectively disposed so that the hook extends beyond the edge of the extension rim and the open end of the hook faces circumferentially about the inside of the extension rim when attached thereto, the inside face of one side of said hook having a projection formed at its end, said hook being formed to permit passage of said lug over said projection, and means for clamping said lug against the side of said hook having said projection.

1,815,118. SHUTTLELESS LOOM FOR WEAVING. OLIVER SHIMWELL, Manchester, England, assignor to Gawsworth Patents Limited, Manchester, England, a British Company, and Platt Brothers & Company Limited, Oldham, England, a British Company. Filed May 19, 1930, Serial No. 453,787, and in Great Britain July 4, 1929. 3 Claims. (Cl. 139—125.)



1. A weft carrier for shuttleless looms comprising a body part, two weft thread engaging hooks facing in opposite directions secured to the said body part, means whereby the thread engaged by said hooks is directed beneath the said body, and a recess in one side of the underside of the body part extending lengthwise of the latter adjacent to the places where the thread issues at said underside.

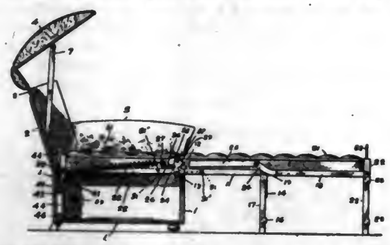
1,815,119. SHAVING BRUSH. RUDOLF SKVORECZ, Somerville, N. J., assignor of ten per cent to Leon W. Walling, Hazlet, N. J. Filed July 19, 1930. Serial No. 469,081. 6 Claims. (Cl. 15—13.5.)



1. A shaving brush comprising a hollow handle consisting of two hingedly connecting handle sections, a threaded discharge tube extending from one end of said hollow handle, catch means for holding said handle sections against swinging movement, means for suspending a collapsible tube within said hollow handle, a brush section detachably connected to said hollow handle, said discharge tube extending into the bristle portion of said brush section, and tube squeezing means carried by each of the said hingedly connected handle sections, said tube squeezing means including a jaw having one end loosely connected to the tube section, a spring acting upon said jaw to move the free end of the same in a direction toward the handle section, and a manipulating member carried by said jaw and extending through an opening in said handle section, by which said jaw may be moved inwardly against the action of said spring.

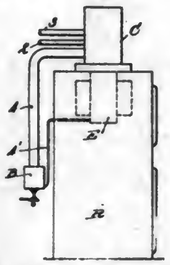
1,815,120. FOLDING BED DAVENPORT. ARTHUR L. SLEE, San Francisco, Calif. Filed Sept. 2, 1930. Serial No. 479,159. 4 Claims. (Cl. 5—46.)

1. A folding bed davenport comprising a main frame; a folding bed frame mounted upon the main frame and consisting of a center section pivoted at one edge thereof adjacent the front edge of the main frame, an outer end section pivoted to the free end of said center section and movable from a normal folded position within the back of the main frame to an extended position in the same horizontal plane with the center section, and an inner end section normally received within the bottom of the main frame and provided with means connecting said section to the center section to raise said inner end section into the common horizontal plane of the center and outer end sections when moved to extended position, said inner section being free at its rearward end and said connecting means supporting said inner section in counterbalancing relation to the center and outer sections as the bed frame



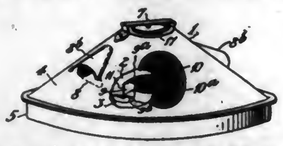
is moved between its normal and extended position; a slotted hand lever pivoted upon the main frame; and a link pivoted upon the rearward end of the inner section and provided with a pin engaging the slot of the lever to brace and support the inner end frame when the lever is moved to an operative position, said pin being movable within the slot whereby the lever and link may be folded to proximate parallel relation when the bed frame is folded.

1,815,121. GAS PUMP. CHARLES G. SMITH, Medford, Mass., assignor, by mesne assignments, to Cambridge Laboratories, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 22, 1924, Serial No. 739,007. Renewed Jan. 6, 1931. 8 Claims. (Cl. 230—101.)



1. A gas pump comprising a gaseous fluid duct having therein a restricted opening through which the fluid passes in gaseous form, means for producing throughout a narrow width at the side of said opening and predominantly toward the outlet end thereof, a molecular movement of vapor molecules, and means for supplying said vapor molecules to the side of said opening independent of said gaseous fluid, the width of said opening being of the order of the mean free path of the gas particles issuing therefrom.

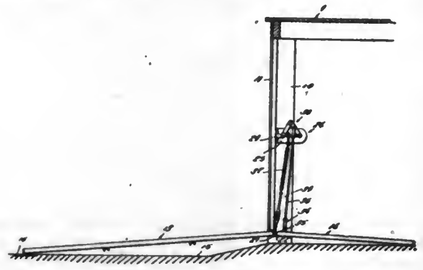
1,815,122. MEANS FOR TRAPPING INSECTS. HERBERT BLACKFORD SMITH, Murrumbeena, Victoria, Australia, assignor of one-third to Joseph Bartlett Splatt and one-third to William Dudley Taylor, Victoria, Australia. Filed Sept. 5, 1929, Serial No. 390,569, and in Australia Feb. 12, 1929. 1 Claim. (Cl. 43—120.)



A device of the character described comprising a base, a truncated cone-shaped casing connected with the base

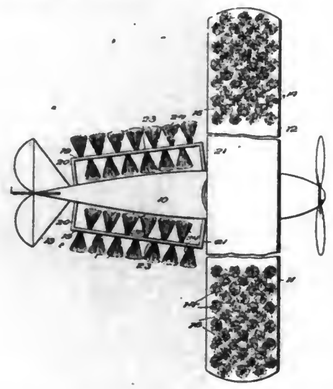
and terminating in a depending annular flange, the upper part of the casing having an opening, a flanged cover detachably engaged in said opening, said casing having a series of inlet openings, inwardly and downwardly directed funnels secured to the inner surface of the casing about the inlet openings, hoods connected to the outer surface of the casing above the inlet openings, and a lure holder mounted on the upper surface of the base and within the casing.

1,815,123. CLOSURE OPERATOR. WINFIELD SCOTT SMITH, Ossining, N. Y. Filed Nov. 5, 1930. Serial No. 493,656. 2 Claims. (Cl. 268—35.)



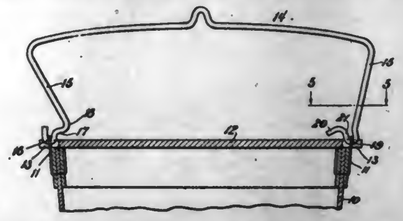
1. In a structural assembly of the class described, a door frame, a door hingedly mounted thereon, a bracket connected to one of the side members of the frame, a pair of links pivotally connected together, the outer end of one link being hingedly connected with the door and the outer end of the other link being pivotally connected to the bracket, a pair of detractable platforms located beneath the lower edge of said door and one located within the building and the other exteriorly thereof, pin connections between the adjacent edges of the platforms whereby said platforms are moved in unison, a spring connected with the bracket, means for connecting the other end of the spring to the pin, and a link connection between the inner platform and the inner link of the pair of links.

1,815,124. AIRPLANE CONSTRUCTION. JAMES E. SPEARY, Gresham, Nebr. Filed Sept. 27, 1930. Serial No. 484,896. 8 Claims. (Cl. 244—12.)



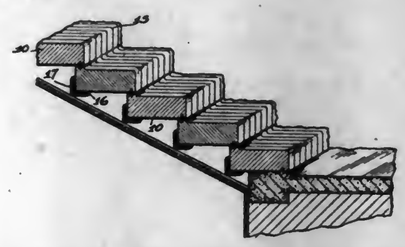
1. In an airplane having a body portion and a wing extending outwardly from each side thereof, airfoils on said wings adjacent their tips, each airfoil comprising bunches of feathers secured to, and arranged in row formation on the wing surfaces.

1,815,125. WIRE HANDLE FOR FRUIT BASKETS. FRANK B. TOWNSEND, Penn Yan, N. Y. Filed Mar. 17, 1928. Serial No. 262,482. 3 Claims. (Cl. 217—125.)



3. A wire handle for fruit baskets comprising a bail portion, a substantially U-shaped hook at one extreme end of the handle to be inserted in the basket staple from the inside; an inwardly and upwardly curved shoulder portion adjacent to the hook adapted to overlie the edge of the basket lid; a hook portion near the other end of the handle having an inwardly and downwardly curved end adapted to be inserted through its staple from the outside of the basket, said extension adapted to overlie the opposite edge of the lid; and both portions overlying the lid having sufficient clearance to permit the handle to swing down and lie flat on the lid and the bent portions being so arranged that the hooks cannot be accidentally disengaged from their basket staples.

1,815,126. STAIRWAY STEP. CHARLES L. WOOLDRIDGE, Pittsburgh, Pa., assignor to Charles L. Wooldridge, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1930. Serial No. 419,886. 2 Claims. (Cl. 72—96.)

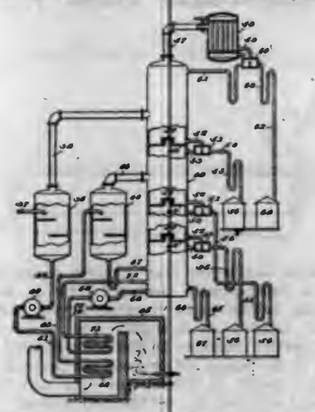


1. A block for use in stairway construction, said block being of relatively small width to permit a number to be assembled to constitute a step and being of a length greater than the desired width of the stairway tread and said block being formed with a recess in one face adjacent one end and with a second recess in the opposite face adjacent the opposite end, whereby the recess at one end of a block will register with the recess at the other end of a block of the next succeeding step, to receive a binding substance.

1,815,127. PROCESS OF FRACTIONATION OF MIXED FLUIDS. JOHN V. E. DICKSON, West New York, N. J., assignor, by mesne assignments, to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 11, 1925. Serial No. 8,318. 11 Claims. (Cl. 196—94.)

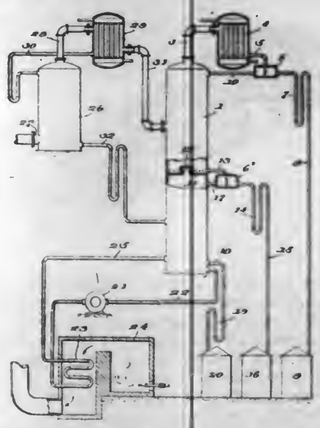
6. In the process of continuously fractionating mixed fluids, the step which comprises withdrawing from the fractionating means, heating to a predetermined temperature, and returning into said fractionating means a predetermined proportion of the liquid collecting at one level in said fractionating means, while separating into a first liquid fraction and a first vapor fraction said mixed fluids previous to their entry into said fractionating means, reheating and partially vaporizing said first liquid

fraction, separating the partially vaporized first liquid fraction into a second liquid fraction and a second vapor



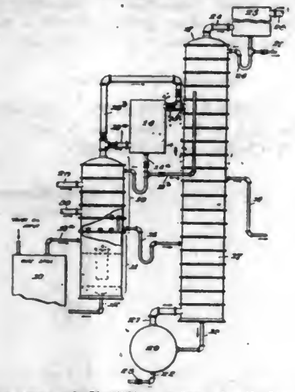
fraction, and introducing said first vapor fraction, said second vapor fraction and said second liquid fraction individually into said fractionating means at different levels.

1,815,128. DISTILLATION OF MINERAL OILS. JOHN V. E. DICKSON, Houston, Tex., assignor, by mesne assignments, to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Original application filed Feb. 11, 1925, Serial No. 8,318. Divided and this application filed Mar. 24, 1930. Serial No. 438,560. 9 Claims. (Cl. 196—94.)



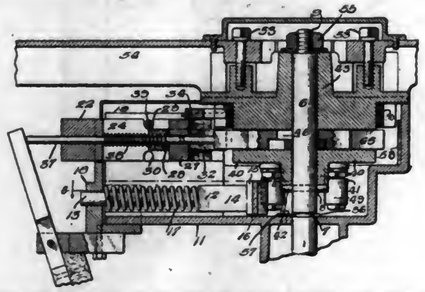
1. In the distillation of mineral oil for production therefrom of a gasoline fraction, a gas oil fraction, and an intermediate fraction, the process which comprises heating mineral oil to a temperature sufficiently high to vaporize desired constituents thereof, effecting a preliminary fractionation of said vapors to obtain on the one hand vapors consisting mainly of constituents lower boiling than kerosene, and on the other hand liquid consisting mainly of constituents higher boiling than kerosene, introducing the thus separated vapors and liquid, respectively, into a countercurrent fractionating column at different points, condensing vapor products issuing from the upper part of said column and refluxing to the upper part of said column a part of the resultant condensate, and withdrawing from a point in said column intermediate those at which said separated vapors and liquid were introduced a liquid product of boiling range intermediate those of gasoline and gas oil, respectively.

1,815,129. DISTILLATION OF MINERAL OILS. WILLIAM A. PETERS, Jr., Seattle, Wash., assignor to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 7, 1925. Serial No. 61,095. 2 Claims. (Cl. 196—94.)



1. The process of distilling mineral oil for production therefrom of a gasoline fraction, a gas-oil fraction, and an intermediate fraction, which comprises heating mineral oil in continuously successive stages to provide a corresponding plurality of vapor products of successively higher boiling points, introducing said plurality of vapor products simultaneously into a preliminary countercurrent fractionating column at different levels corresponding generally to the points at which the vapor products so introduced will be most nearly in equilibrium, respectively, with the vapors and liquid in said column, conducting from the upper part of said column a resultant vapor fraction consisting mainly of constituents lower-boiling than kerosene and passing the same into the upper part of a second countercurrent fractionating column, conducting from the lower part of said preliminary fractionating column a liquid consisting mainly of constituents higher-boiling than kerosene and introducing the same into said second column at a point substantially below that at which the vapor fraction was introduced, condensing and refluxing to the upper part of said second column a part of the vapor products issuing therefrom, and withdrawing from a point in said second column, intermediate the points at which the aforesaid vapor and liquid fractions were introduced, a liquid product of boiling range intermediate the boiling ranges of gasoline and gas-oil.

1,815,130. TURNSTILE. FRANK JOSEPH PEREY, Waltwick, N. J. Filed Aug. 22, 1924, Serial No. 733,582. Renewed Dec. 9, 1930. 28 Claims. (Cl. 39—3.)



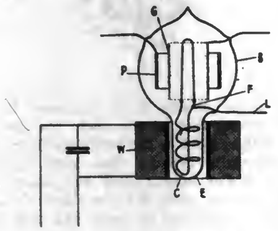
1. A turnstile having rotatable arms, means comprising superimposed slidable bolts, and means cooperating with said bolts for limiting the movement of said arms.

7. A turnstile having rotatable arms, means comprising unrestrained slidable and rotatable bolts, and means cooperating with said bolts for limiting the movement of said arms.

14. In a turnstile a rotatable mechanism having turnstile arms, a head plate and bearing plate between which are positioned superimposed bolts, and means cooperating with said bolts for limiting movement of said head plate.

21. The combination of a turnstile rotatable mechanism having turnstile arms, stop means, and a pair of slidable bolts in angular relation to each other and adapted to co-operate with said stop means to limit the movement of said mechanism.

1,815,131. MEANS FOR HEATING FILAMENTS. HENRY JOSEPH ROUND, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 14, 1921. Serial No. 507,756. 6 Claims. (Cl. 250—27.5.)



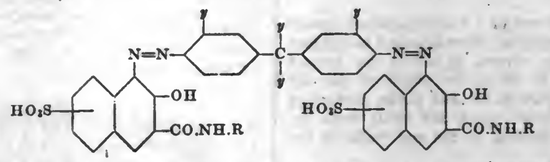
1. The combination of an evacuated container, a filament adapted to be heated located within said container, a coil located within said container and connected to said filament, a winding external to said container and arranged in inductive relation with said coil through the material of said container and means for controlling the potential of said filament including a single conductor passed through said envelope and connected to said filament.

1,815,132. PREPARATION OF CHEMICALLY PURE TUNGSTEN AND MOLYBDENUM TRIOXIDE. PAUL SCHWARZKOPF, Berlin, Germany, assignor to American Electro Metal Corporation, New York, N. Y. Filed July 14, 1928, Serial No. 292,913, and in Germany July 20, 1927. 8 Claims. (Cl. 23—17.)

1. A process for the production of a chemically pure substance of the group consisting of tungsten trioxide and molybdenum trioxide consisting in adding porous, carbon-containing material to the primary material containing one of the substances tungsten and molybdenum, subjecting the resulting mass to heat treatment in the presence of a current containing-oxygen, and obtaining the trioxide therefrom.

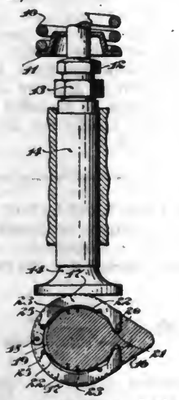
1,815,133. NEW AZO DYESTUFFS AND PROCESS OF PREPARING THEM. OTTO SOHST, Hochst-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1926, Serial No. 154,310, and in Germany Dec. 15, 1925. 12 Claims. (Cl. 260—77.)

2. As new products the azo dyestuffs of the general formula



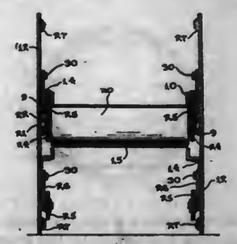
wherein R represents an aryl residue, and y represents hydrogen or any alkyl group.

1,815,134. EXPANSION COMPENSATING DEVICE FOR VALVE ACTUATING MECHANISM. JULIUS WEINER, Philadelphia, Pa., and SAMUEL B. SKLAR, Minneapolis, Minn. Filed Nov. 21, 1928. Serial No. 320,864. 9 Claims. (Cl. 74—1.)



1. An expansion compensating device comprising a cam, said cam having a groove therein, a pair of shoes mounted in said groove, leaf springs secured to the cam in the bottom of the groove, and the end portions of each spring engaging a shoe and yieldingly holding the same projected outwardly of the cam.

1,815,135. COAL CONVEYER. WASHINGTON B. WILLIAMS, Kenwood, Md. Filed July 2, 1929. Serial No. 375,447. 5 Claims. (Cl. 198—92.)

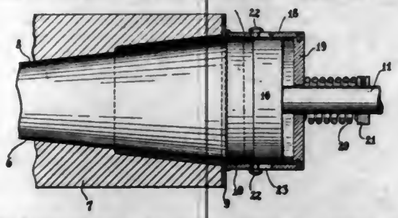


4. A conveyer, comprising a frame, a conveying element arranged therein, upper side members hinged to the frame and foldable from a plane at right angles to that of the conveyer element to one parallel therewith, and similar lower side members the upper side members serving to confine the conveyed material and the lower ones serving to support the conveyer element off the ground.

1,815,136. APPARATUS FOR MAKING PAPER CONTAINERS. EDWARD C. ANGELL, New York, N. Y. Filed Mar. 25, 1929. Serial No. 349,767. 10 Claims. (Cl. 93—39.)

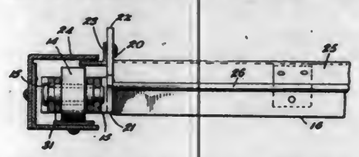
1. In a machine for forming paper containers with a flanged bottom inserted and secured in one end of a body, the combination with a carrier for the body that is advanced to bring the body to a certain station, means at one station for inserting a bottom in the body and means

at an advanced station to secure the bottom in the body end portion, of means at a station in advance of said stations to engage the body before the insertion of the



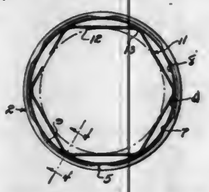
bottom which means is arranged to impart a special shaping to the body end portion adapted to receive the bottom and facilitate the securing of the bottom in the container.

1,815,137. TRAVELING WATER SCREEN. LLOYD G. BLEYER, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 27, 1926, Serial No. 131,954. Renewed Dec. 10, 1930. 9 Claims. (Cl. 210—175.)



1. A boot for the lower end of a traveling water screen having end walls, a non-rotating shaft adapted to support wheels for supporting the screen, in which are formed kerfs with flat bottoms in which the edges of the end walls of the boot are adapted to lie, and plates perforated to fit the shaft and through which the shaft ends are passed, the plates being secured to the end walls of the boot.

1,815,138. PISTON RING. JOHN W. BLOUNT, Pittsburgh, Pa. Filed Feb. 14, 1930. Serial No. 428,451. 1 Claim. (Cl. 74—109.)



A piston ring comprising a split annular member having overlapped ends and positioned in the groove of a piston, relatively spaced shoulders formed on the inner face of the member, a retaining ring engaging the shoulders, and an expansion ring including relatively spaced shoulder portions and substantially straight portions and positioned in the groove of the piston between the inner wall thereof and the retaining ring with the shoulder portions engaging the expansion ring between the shoulders of the annular member and having the substantially straight portions contacting with the inner wall of the groove of the piston.

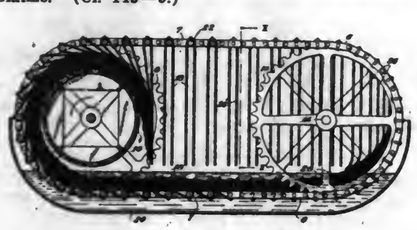
1,815,139. OSCILLATING SIGNAL. CARL F. CAPELL, Santa Monica, Calif., assignor of one-fourth to Herbert Cutler Brown, Los Angeles, Calif. Filed Apr. 3, 1929. Serial No. 352,268. 2 Claims. (Cl. 177—329.)

2. In an oscillatory signal of the illuminable type, the combination with a tubular carrier forming a conduit for a circuit connection and having an opening in proximity to its outer end for the passage therefrom for such connection, of a signalling element including a body portion having projecting from the top thereof a hollow neck terminating at its upper end in and opening into a tubular head extending inwardly at right angles to the neck, said head and neck providing for the passage of said circuit connection to a lamp supported within said body portion, and means for pivoting said head to the outer end of the



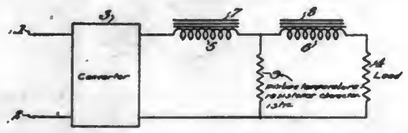
carrier, said pivot means being disposed in alignment with the vertical median of the neck, the inner diameter of said head with respect to the outer diameter of said carrier being materially greater than such outer diameter whereby said carrier coacts with the inner end of the head for limiting the pivot for the signal in opposite directions, said head open at its inner end and closed at its outer end.

1,815,140. LEATHER WORKING MACHINE. JOHN H. CONNOR, Boston, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed July 18, 1928. Serial No. 293,532. 12 Claims. (Cl. 149—9.)



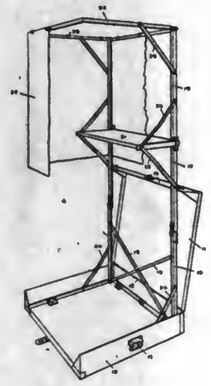
9. In a machine of the character described, a tank, a conveyor constructed and arranged to carry hides or skins through treating liquor in the tank, means for flexing the hides or skins during a portion of the travel of the conveyor, and members connected to the conveyor and adapted to be secured to opposite edges of the hides or skins to maintain them in extended condition while permitting them to flex during the selected portion of the travel of the conveyor.

1,815,141. VOLTAGE REGULATOR. GEORGE B. CROUSE, Woodcliff, N. J., assignor to Conner Crouse Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 14, 1926. Serial No. 154,790. 2 Claims. (Cl. 178—44.)



1. In an electrical system, the combination with a source of energy, a load, and a series transmission element therebetween having a positive temperature coefficient, of a resistance across said load having a positive temperature coefficient, said resistance being arranged in heat-transfer relation with said series element and so proportioned that its temperature-produced variation of resistance substantially neutralizes the effect upon the load voltage of the current-produced change of resistance of said element.

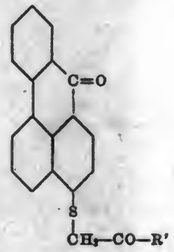
1,815,142. VOTING BOOTH. WALLACE R. DOUGLAS, WILLIAM H. DOUGLAS, and DONALD Q. DOUGLAS, Crete, Nebr. Filed Dec. 11, 1928, Serial No. 325,176. 3 Claims. (Cl. 20—3.)



1. A voting booth including a base, a pair of rear uprights pivotally secured thereto and foldable thereon, each of said uprights consisting of three sections pivotally secured together in end to end relation and foldable into parallelism, releasable means for maintaining said sections in erect relation, a top frame pivotally secured to the upper pair of said sections and foldable thereon, releasable braces between said top frame and said uprights for releasably maintaining said top frame in horizontal position, a shelf secured to said uprights at the pivotal connections between two of the pairs of said sections, and a pair of break joint braces at each side of said shelf and secured to said uprights at points above and below said shelf.

1,815,143. DERIVATIVES OF BENZANTHRONE. WILLY EICHHOLZ, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 7, 1928, Serial No. 324,583, and in Germany Mar. 12, 1928. 5 Claims. (Cl. 260—61.)

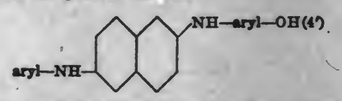
1. A process for the production of 2-alkyl-benzanthrones, which comprises treating a benzanthrone derivative corresponding to the general formula:



in which R' stands for a hydrocarbon radicle which may be substituted with an alkaline saponifying agent.

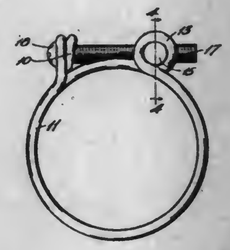
1,815,144. FAST SULPHUR DYESTUFFS AND PROCESS OF MAKING SAME. RICHARD HERZ, Frankfort-on-the-Main, and WILHELM HECHTENBERG, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 16, 1929, Serial No. 386,482, and in Germany Sept. 13, 1928. 13 Claims. (Cl. 260—18.)

1. The process which comprises heating with a sulfurising agent a 2-(4'-hydroxyarylamino)-6-arylamino-naphthalene of the general formula:



wherein the aryl residues may contain further substituents in the presence of a copper compound.

1,815,145. HOSE CLAMP. HERBERT EMBREE, Hamilton, Ontario, Canada. Filed Aug. 1, 1930. Serial No. 472,385. 3 Claims. (Cl. 24—19.)



3. In a hose clamp, a body formed of a single length of wire having a helix formed at its center and having the wire leading from opposite ends of the helix and forming a pair of spaced concentric and substantially parallel rings, each ring having a convolution formed therein in substantially the plane of the ring, said convolutions being axially alined to form bearings, a nut having alined journals extending from its sides and seated in said bearings, a screw extending through said helix and threaded through said nut, and expanded ends on said journals holding the bearings from spreading apart.

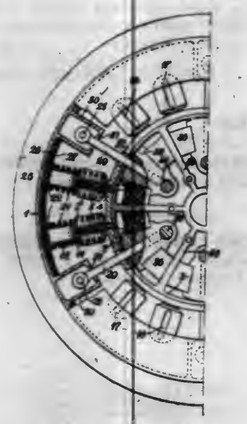
1,815,146. METHOD OF PRODUCING OPENINGS, PASSAGES, AND THE LIKE IN MOLTEN OR PRESSED GLASS BODIES. BERNHARD ERBER, Vienna, Austria. Filed Nov. 29, 1927, Serial No. 236,591, and in Austria Dec. 1, 1926. 1 Claim. (Cl. 49—77.)

A method of producing openings, passages, capillaries and the like in molten or pressed glass bodies, comprising fusing into the glass material a composite wire consisting of a metallic core, a metallic coating and a layer of graphite, talc and the like between said core and said coating, said composite wire having about the diameter of the opening to be made and a coefficient of expansion higher than that of the glass, and withdrawing said metallic core after cooling and leaving the free opening in the glass.

1,815,147. SPRING WHEEL FOR AUTOMOBILES AND OTHER VEHICLES. HERBERT HILL, Bradford, England. Filed July 9, 1930, Serial No. 466,857, and in Great Britain Aug. 30, 1929. 5 Claims. (Cl. 152—28.)

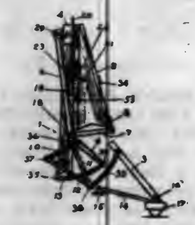
1. A wheel for vehicles comprising an outer rim element, a central element, an inner rim element located

on said central element, radial elements pivoted on the outer rim element, means associated with said central element adapted telescopically to engage said radial ele-



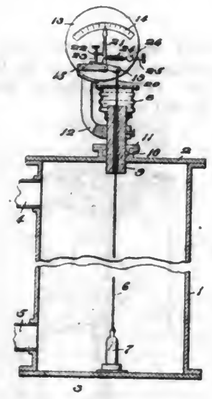
ments, resilient members located between said inner rim element and said outer rim element adapted to operate in compression both when they are above as well as when they are below the centre of the wheel.

1,815,148. AUTOMATICALLY CONTROLLED PUMPING APPARATUS. ADALBERT HAUSER, New York, N. Y. Filed May 11, 1921. Serial No. 468,773. 10 Claims. (Cl. 230—167.)



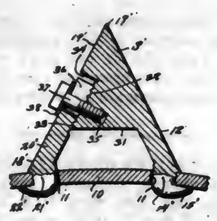
1. An automatically controlled pumping apparatus comprising in combination with driving means, a pump, a reservoir connected therewith, mechanical means including a pair of adjustable links between said pump and driving means, a regulating member therefor to change automatically during pumping the ratio of power transmission from the driving means to the pump, when with increasing charge, the resistanec to the driving means would increase, thereby maintaining available a substantially uniformly high charge to meet the maximum requirements.

1,815,149. APPARATUS FOR ELECTRICAL TREATMENT OF FLUIDS. JOHN J. JAKOSKY, Los Angeles, Calif., assignor to C & C Developing Company, Kansas City, Mo., a Corporation of Arizona. Filed June 12, 1928. Serial No. 284,750. 12 Claims. (Cl. 204—81.)



3. In apparatus for electrical treatment of fluids a treating chamber, a discharge electrode therein, and means connected to said electrode operable by the expansion and contraction of said electrode to indicate the temperature in said treating chamber.

1,815,150. DETACHABLE SPADE LUG FOR TRACTORS. OLE F. JEGLUM, Malta, and RICHARD E. HARTWICK, Regina, Mont.; said Hartwick assignor to Ray N. Rude, Malta, Mont. Filed Feb. 15, 1930. Serial No. 428,710. 5 Claims. (Cl. 301—44.)

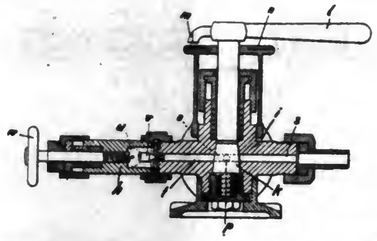


2. A spade lug adapted to be removably mounted on the rim of a tractor drive wheel having spaced openings therethrough, comprising front and rear outstanding members, depending securing lugs secured to said members at the lower edge portions thereof and adapted to removably engage the openings in said rim, and means for detachably securing said members to each other, said securing lugs having outwardly extending rim engaging portions whereby to detachably hold said front and rear members on the rim against outward movement.

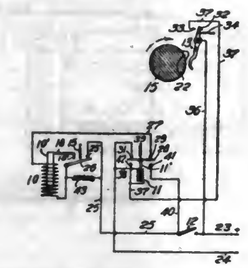
1,815,151. REGULATING AND TEST COCK FOR BOILER PIPING. WALTER KEIM, Stuttgart, Germany. Filed Sept. 24, 1927. Serial No. 221,779. 1 Claim. (Cl. 277—66.)

A valve and test cock particularly for locomotive boilers comprising a casing having four channels; a plug in said

casing and having a T-shaped passage therein adapted to cooperate with the channels; a handle connected to the plug and provided with an indicator hand adapted to cooperate with a scale or dial fixed on the casing to indicate the various positions of the plug and the degree thereof; and a socket secured to one of the channels and having a mouth piece, valve and handwheel to draw off samples of the boiler water for test purposes, the second channel being adapted to be placed in communication with the water tank and then the atmosphere, the third directly with the atmosphere and the fourth channel in communication with the boiler, the plug by means of the handle permitting any degree of adjustment.



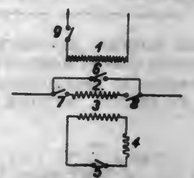
1,815,152. ELECTRICAL CONTROL MECHANISM. HEINRICH KLOTZ, Wheeling, W. Va. Filed Mar. 2, 1929. Serial No. 343,995. 1 Claim. (Cl. 175—335.)



Clutch operating mechanism comprising a lever pivotally mounted, a solenoid having a core engaged with said lever to move the lever in one direction when the solenoid is energized, an energizing circuit for said solenoid including a switch yieldingly held closed and disposed for engagement by said lever whereby the switch will be opened when the solenoid is energized, a manually controlled switch for closing said circuit, a shunt in said circuit paralleling the first switch for passage of current to the solenoid when the switch is opened, a bridge in said circuit yieldably held closed, an auxiliary solenoid for moving the bridge to an open position when energized, an auxiliary circuit, for the auxiliary solenoid cut into the first circuit having spaced contacts bridged by said bridge when the bridge is moved to break the circuit through the first solenoid, and a switch for the auxiliary circuit yieldably held open and adapted to be closed when engaged by a portion of a rotating shaft of a machine.

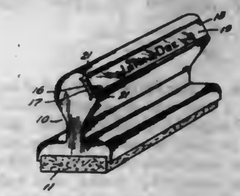
1,815,153. ARRANGEMENT FOR DISCONNECTING AND REMOVING SERIES CONNECTED TRANSFORMERS FROM THE CIRCUIT WITHOUT CAUSING DISTURBANCE. JOHANNES KÜBLER, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed Dec. 1, 1927, Serial No. 237,091, and in Germany Dec. 8, 1926. 5 Claims. (Cl. 175—294.)

1. An arrangement for disconnecting and removing a series connected transformer from a circuit including primary and secondary transformer windings, switch means connected with the primary winding, a network, switch means for connecting the secondary winding in series with



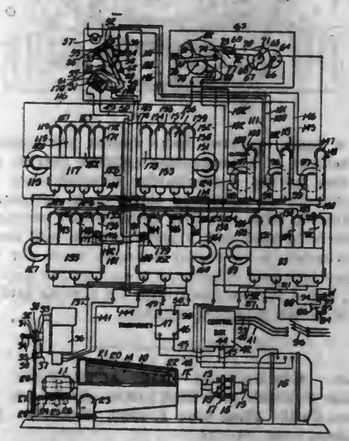
the network, a bridging switch in the network for short circuiting the secondary winding, a tertiary winding and resistance, and switch means to short circuit the tertiary winding through the resistance.

1,815,154. LABEL ATTACHING DEVICE. CLARENCE L. LARSON, Seattle, Wash. Filed Aug. 21, 1928. Serial No. 300,988. 1 Claim. (Cl. 40—110.)



A hand stamp having a relatively wide, shallow channel therein, the base thereof being at right angles to substantially parallel side walls, slots projecting outwardly from said base, a removable key member adapted for insertion therein in seating engagement to said base and in spaced disposition to said side walls, and a guard of a transparent material having downturned side flanges terminating in laterally projecting rib elements, said rib elements being adapted to project within said slots and said side flanges being adapted to be compressed in the space afforded between said side walls and key member, said guard providing a space intermediate the underneath surface thereof and the upper face of the key member for inserting a label therein.

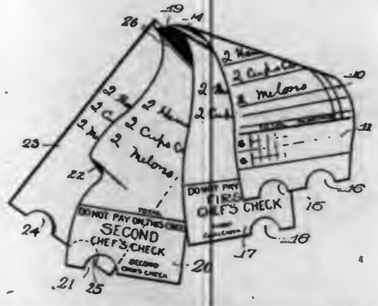
1,815,155. CONTROL MECHANISM FOR MACHINES. DARCY EDWIN LEWELLEN and EMMONS FREEMAN LEWELLEN, Columbus, Ind. Filed Oct. 8, 1928. Serial No. 311,134. 37 Claims. (Cl. 92—27.)



1. A control device for a mechanism for operating upon work comprising a motor for driving said mechanism and

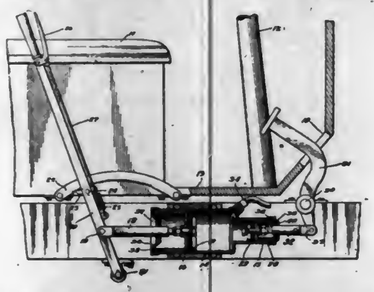
a device responsive to variations in the load on said motor for adjusting the said mechanism, substantially as set forth.

1,815,156. MEAL CHECK. EDWARD Z. LEWIS, Chicago, Ill., assignor to The General Manifold and Printing Company, a Corporation of Pennsylvania. Filed Sept. 11, 1928. Serial No. 305,157. 4 Claims. (Cl. 282—22.)



1. An article of the class described comprising a customer's check, a first and a second removable check, and a back secured together along one edge, said checks being carbon coated on their reverse sides, the color of the coating of the first removable check being different from the coatings of the remaining checks, said removable checks being perforated along their secured edges and each having a portion exposed on both sides by finger cut-outs in said back and other checks.

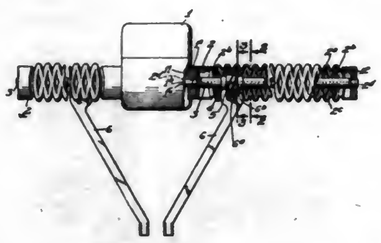
1,815,157. FLUID OPERATED BRAKE. MALCOLM LOUGHEAD, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 21, 1924. Serial No. 694,260. 6 Claims. (Cl. 60—54.6.)



1. In a liquid operated brake system, the combination with a vehicle, of a compressor cylinder carried by said vehicle and having a rearwardly directed open end, a second cylinder of relatively small cross sectional area communicating with said first cylinder and having a forwardly directed open end, a piston within said first mentioned cylinder, a forwardly movable lever for forcing said piston into said cylinder, a piston within said second cylinder, and a foot-actuated lever for forcing said second mentioned piston into said cylinder.

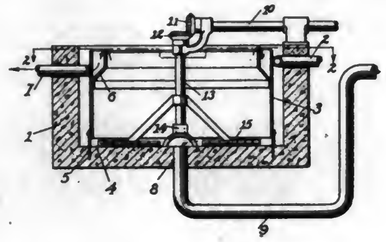
1,815,158. MECHANISM FOR ACTUATING WINDSHIELD WIPERS AND THE LIKE. HOWARD E. MARSH, Lompoc, Calif. Filed Sept. 1, 1928. Serial No. 303,538. 17 Claims. (Cl. 74—14.)

1. In a mechanism of the class described, a tubular member having internal threads, a spindle revolubly mounted therein, a slide non-revolubly mounted on said spindle but shiftable longitudinally thereon, and a shoe



mounted on said slide adapted to engage the internal threads of said tube and to be shifted longitudinally with respect to said spindle when the latter is rotated.

1,815,159. METHOD OF AND MEANS FOR SEPARATING COMMINUTED MATTER FROM THE LIQUID IN WHICH IT IS IMMERSED. CARL H. NORDELL, Chicago, Ill. Filed Dec. 7, 1928. Serial No. 324,585. 2 Claims. (Cl. 210—55.)

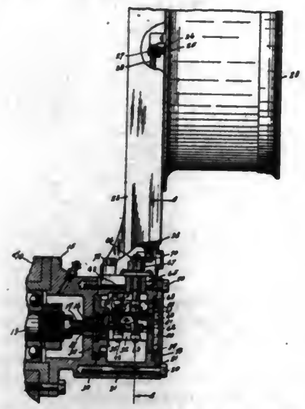


1. In an apparatus for separating sediment from the liquid in which it is immersed, the combination of an open substantially cylindrical tank, a substantially concentric baffle within and spaced from the tank, the baffle of somewhat less height than the tank and spaced above the inside of the bottom of the tank, a trough formed around the top of the baffle so as to permit liquid to overflow from the free top of liquid within the baffle into the trough, a fluid outlet from the trough to the exterior of the apparatus, an inlet admitting the mixed sediment and liquid to be treated to the space between the tank and baffle substantially tangentially of the baffle, and near the top of said space, a substantially axial opening in the bottom of the tank through which sludge is removed from the tank and a goose-neck conduit from said sludge outlet having its outlet end elevated above the tank bottom but somewhere below the inlet.

1,815,160. PROCESS FOR THE RECOVERY OF PROTEIN MATTER FROM LIQUIDS CONTAINING THE SAME. RUDOLPH S. OPPENHEIM, Seattle, Wash. Filed May 26, 1928. Serial No. 280,959. 8 Claims. (Cl. 99—11.)

6. A process for recovering protein matter from packing-house tank water and distillery slop, which consists of adding milk thereto and thoroughly intermixing the same therewith, coagulating said milk whereby the resultant coagulum unites with and precipitates said protein matter, discarding the supernatant liquid, and finally drying the precipitate.

1,815,161. INSTRUMENT. ROBERT H. OWENS, Connersville, Ind., assignor to The P. H. & F. M. Roots Company, Connersville, Ind., a Corporation of Indiana. Filed Nov. 14, 1928. Serial No. 319,831. 10 Claims. (Cl. 74—7.)



1. A measuring instrument adapted to be fixed to a fluid-handling apparatus, comprsing a casing having opposite attaching sides of complementary construction so that it may be attached to and support a similar casing, measuring apparatus mounted on said casing, mechanism in said casing for driving said apparatus, said mechanism having a coupling member accessible from the exterior of one of said casing sides and having a coupling member accessible from the exterior of the other of said casing sides, said coupling members being of substantially complementary form so that said mechanism may drive or be driven by an instrument having similar casing sides and coupling members.

1,815,162. SELF-LIGHTING CIGARETTE AND IGNITION BAND THEREFOR. JOHN PARSONS, Montclair, N. J., assignor to Pan-Ross Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 30, 1925, Serial No. 65,723. Renewed Nov. 15, 1930. 10 Claims. (Cl. 52—27.)



1. An ignition band of the character described comprising a paper base containing an extra oxidizing ingredient, a layer of moistureproofing fulminating substance, and a moistureproofing adhesive spread on the respective sides of said base.

1,815,163. PAPER FINISHING CORD. WADE E. SACKNER, Grand Rapids, Mich., assignor to Grand Rapids Fibre Cord Company, Grand Rapids, Mich. Filed Dec. 26, 1929. Serial No. 416,410. 7 Claims. (Cl. 117—60.)



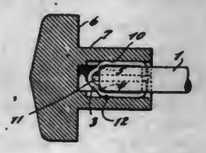
1. A cord or edge roll formed of strips of paper twisted and molded together with an attaching rib formed integral therewith by molding and condensing from the body of the cord and suitably perforated.

1,815,164. FOOTWEAR. HEINRICH SCHNEIDER, Erfurt, Germany. Filed May 15, 1930, Serial No. 452,619, and in Germany Sept. 4, 1929. 1 Claim. (Cl. 36—76.)



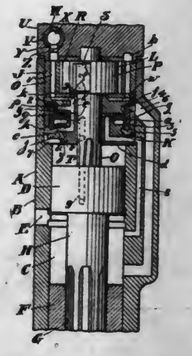
The combination with a shoe having a heel and sole, said heel being prolonged towards the sole to extend on the external edge of the foot substantially as far as the protuberances of the fifth metatarsal bone of the foot, said structure being gradually decreased in thickness below said protuberance to provide a resilient support therefor.

1,815,165. CONTROL KNOB FOR CONDENSERS. THEODORE J. SCOFIELD, Jackson, Mich., assignor to The Sparks-Withington Company, a Corporation of Ohio. Filed Oct. 30, 1929. Serial No. 403,529. 3 Claims. (Cl. 287—53.)



1. A control shaft member having transverse openings, a spring ball member having its ends secured in said openings, and a control knob having grooves therein adapted to fit over the end of said shaft and ball one of said members having means to cause the ball to be held in frictional contact with the bottom and side of each of said grooves.

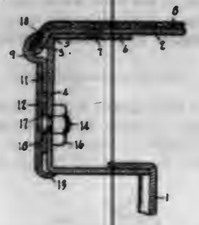
1,815,166. VALVE FOR ROCK DRILLS. WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 19, 1930. Serial No. 429,545. 3 Claims. (Cl. 121—24.)



1. In a fluid actuated rock drill, the combination of a cylinder having a piston chamber and a reciprocatory piston in the piston chamber, an exhaust port in the cylinder, a valve chest having a valve chamber and comprising an annular recess, inlet passages leading from the valve chamber to the piston chamber, a ring valve reciprocable in the valve chamber to control the inlet passages and encircling the annular recess, a flange on the inner surface of the valve dividing the annular recess into a pair of pressure chambers, opposed actuating surfaces on the flange, grooves on the inner surfaces of the valve to

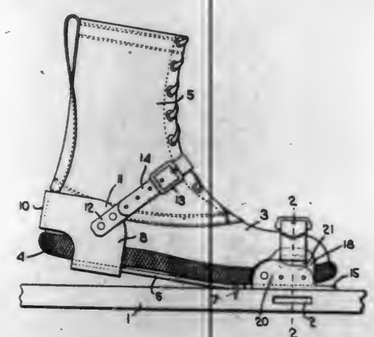
convey pressure fluid directly from supply into the pressure chambers for actuating and holding the valve, holding surfaces on the valve against which pressure fluid flowing to the inlet passages acts to assist in holding the valve, and piston controlled passages leading from the pressure chambers to the piston chamber for exhausting the pressure fluid from the said pressure chambers.

1,815,167. FURNITURE TOP. RAYMOND H. SOPER, Muskegon, Mich., assignor to Browne-Morse Company, Muskegon, Mich. Filed Sept. 8, 1930. Serial No. 480,814. 6 Claims. (Cl. 45—31.)



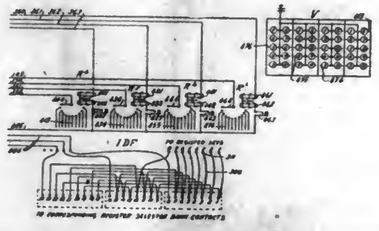
1. A top for furniture comprising a top plate having a down-turned outwardly curved flange at the edge thereof, an inwardly facing channeled rim secured to said top plate within its said flange, a facing arranged on said top plate with its edge overlapping the said flange thereof, a curved channeled inwardly facing binding strip embracing the edge of the facing and the flanged edge of said top plate with its upper edge in clamping engagement with the said facing, the upper edge of said binding strip being relatively thin, said binding strip having a depending flange on its lower edge, and a clamping strip engaging said flange of said binding strip and having attaching studs arranged through said rim and an inturned flange at its lower edge engaging the under side of said rim.

1,815,168. SKI BINDING. GOLDWIN S. SPRAGUE, Newton, Mass. Filed Oct. 6, 1930. Serial No. 486,561. 5 Claims. (Cl. 208—184.)



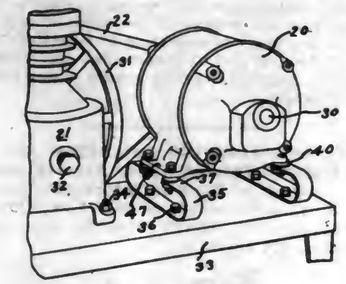
1. A ski binding comprising a longitudinally stiff sole plate, means for securing the forward end of the sole plate to the ski to permit the swinging movement of the plate on the ski, a heel counter projecting upward from the sole plate at each side of its rearward end and presenting a rearward loop allowing the counter to fit snugly around the counter of a boot with the boot sole heel projecting beneath the loop, an adjustable connection between the upper front portions of the binding counter to extend over the boot instep, and means for clamping the toe of the boot to the ski at the forward end of the sole plate.

1,815,169. MULTIOFFICE TELEPHONE SYSTEM. RUDOLPH F. STEHLIK, Chicago, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Original application filed Mar. 14, 1927, Serial No. 175,187. Divided and this application filed Dec. 31, 1928, Serial No. 329,490. Renewed July 14, 1930. 17 Claims. (Cl. 179—27.)



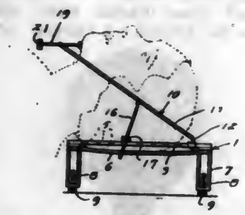
2. In a telephone system, a group of line switches having corresponding bank contacts connected in multiple, and means including an intermediate distributing frame for dividing the bank contacts of said switches into a plurality of groups and for introducing a slip multiple between bank contacts of said groups.

1,815,170. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 24, 1928. Serial No. 264,503. 2 Claims. (Cl. 248—16.)



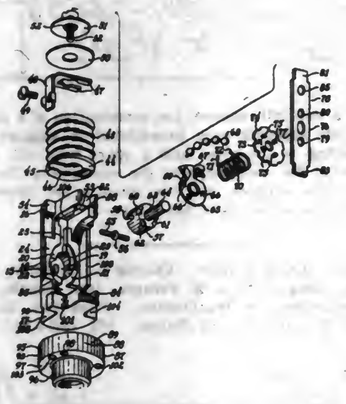
1. A support for a motor, comprising a plurality of substantially C-shaped metal springs having their adjacent edges secured to said motor, and sound deadening material between said motor and said springs substantially as described.

1,815,171. BODY HEADREST FOR UNDERTAKERS' USE. JOSEPH H. SWEENEY, Nashville, Tenn. Filed Apr. 8, 1930. Serial No. 442,572. 8 Claims. (Cl. 27—13.)



1. A head rest of the character described, comprising a base, a frame disposed at an inclination from the horizontal, above and horizontally adjustable on the base, the frame being designed to have a head positioned therein, means interposed between the frame and the base for vertically adjusting a transverse portion thereof, and means carried by the transverse portion for engaging a head resting upon the base to hold the head in position thereon.

1,815,172. ELECTRIC PULL SWITCH MECHANISM. WILLIAM C. TREGONING, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 21, 1929. Serial No. 415,853. 16 Claims. (Cl. 173—354.)



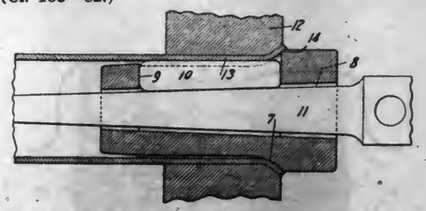
7. In a device of the character described, in combination, a one-piece molded insulating base having approximately cylindrical end portions and an intermediate portion of segmental form in cross section, pull switch mechanism located within said intermediate portion, a punched plate of insulating material bridging said end portions and adapted to retain the switch parts in assembled relation, center and screw shell lamp contacts secured to one of said end portions, and a cup-shaped metallic support within which the other end portion is adapted to fit, said last mentioned end portion and said support having integral interlocking elements to prevent relative movement therebetween, certain of said elements having clamping engagement with one end of said insulating plate to retain the latter in position.

1,815,173. PULL CHAIN SNAP SWITCH MECHANISM. WILLIAM C. TREGONING, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 10, 1930. Serial No. 480,845. 11 Claims. (Cl. 173—354.)



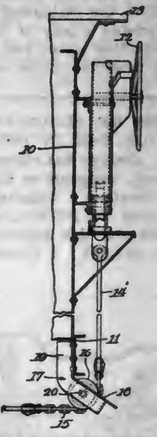
6. As an article of manufacture, a combined supporting bracket and terminal plate for electric snap switches, said bracket being formed from a metal strip of uniform width throughout its length, the opposite end portions of said strip being bent into parallel planes to provide base portions alined with each other, said strip being notched on opposite sides thereof adjacent to said base portions, and the intermediate portion of said strip as defined by said notches being bodily twisted, for the purpose set forth, said intermediate portion having a tapped opening for accommodation of a binding screw.

1,815,174. TUBE EXPANDER AND THE LIKE. GUSTAV WIEDEKE, Dayton, Ohio, assignor to Gustav Wiedeke Company, Dayton, Ohio, a Copartnership consisting of Gustav Wiedeke, Otto Wiedeke, and Robert Wiedeke. Filed Dec. 6, 1929. Serial No. 412,081. 6 Claims. (Cl. 153—82.)



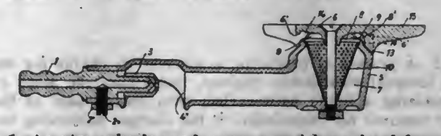
1. In a tube expander, a frame adapted to be inserted in a tube which is to be expanded, expanding devices carried by said frame, and means to rotate said frame and impart inward movement thereto, said frame having a part fixed against movement with relation thereto and arranged to engage and flare the end of said tube as said frame is rotated and moved inwardly.

1,815,175. RAILWAY CAR FRAME. HENRY I. WRIGLEY, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Sept. 6, 1929. Serial No. 390,733. 2 Claims. (Cl. 254—190.)



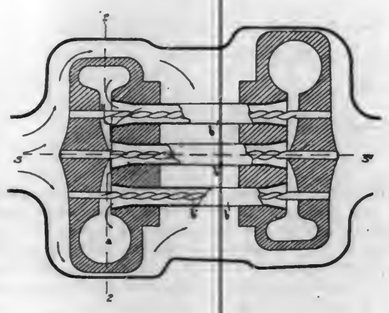
1. In a car frame, in combination, an end sill, a U-shaped bracket-bar of angle section, the ends of the bracket bar being attached to a vertical face of the sill and its loop being outwardly inclined therefrom, and a sheave pivotally mounted within the loop of the bracket.

1,815,176. GAS BURNER. JOSÉ PALAHI AUTER, Gerona, Spain. Filed Feb. 8, 1929, Serial No. 338,560, and in Spain Apr. 2, 1928. 5 Claims. (Cl. 158—113.)



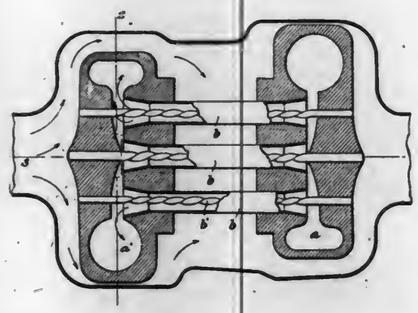
1. An atmospheric gas burner comprising a head formed with an annular throttling passage for the gas mixture, a surrounding expansion chamber in which the velocity of flow of the gas mixture is reduced by expansion and burner outlet orifices leading from the expansion chamber and of large area in relation to the area of the expansion chamber from which the gas mixture flows gently for combustion.

1,815,177. GAS MIXING APPARATUS. DMITRY BALACHOWSKY and PHILIPPE CAIRE, Paris, France, assignors to Societe des Brevets Catalex, Geneva, Switzerland. Filed Jan. 26, 1927, Serial No. 163,816, and in France Jan. 27, 1926. 6 Claims. (Cl. 48—180.)



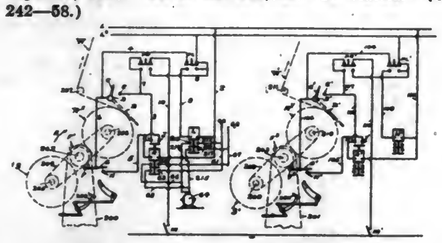
1. A catalytic mixer for insertion between a carbureter and an internal combustion engine, embodying an outer casing defining a chamber to be traversed by a hot fluid; and an inner chamber through which a mixture of air and hydrocarbons from the carbureter is circulated, said inner chamber comprising a pair of hollow heads and a bundle of tubes connecting them, and means within said tubes for exerting a catalytic action on the hydrocarbons.

1,815,178. PROCESS OF PRODUCING A COMBUSTIBLE CHARGE FOR USE IN INTERNAL COMBUSTION ENGINES. DMITRY BALACHOWSKY and PHILIPPE CAIRE, Paris, France, assignors to Société Brevets Catalex, Geneva, Switzerland. Original application filed Jan. 26, 1927, Serial No. 163,816, and in France Jan. 27, 1926. Divided and this application filed Oct. 10, 1928. Serial No. 311,663. 2 Claims. (Cl. 48—180.)



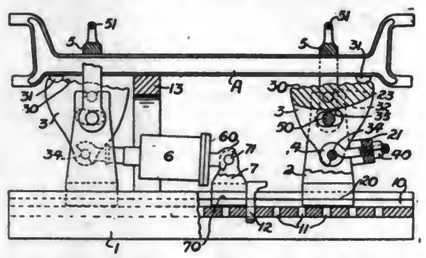
1. A process of producing a combustible charge for use in internal combustion engines, comprising the steps of atomizing a liquid hydrocarbon with only a part of the air required for combustion of the charge; subjecting the mixture of air and hydrocarbon to a stirring action while dividing it into thin streams; subjecting such streams to the action of a catalyst heated to a suitable temperature of approximately 300° to 350° C. to catalyze the hydrocarbon, whereby the air of the mixture oxidizes partially the products liberated by catalysis; and adding sufficient secondary air to support combustion after the initial mixture has undergone catalysis.

1,815,179. WEB ROLL CONTROLLING MECHANISM. HARRY V. BALL, Concord, Mass., and ALBERT J. HORTON, White Plains, N. Y., assignors to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 29, 1927. Serial No. 222,745. 10 Claims. (Cl. 242—58.)



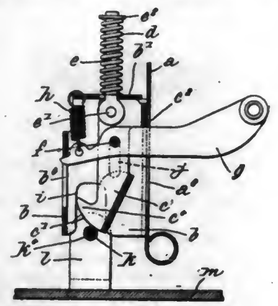
1. In a web roll renewer, the combination of a plurality of movable supports each capacitated to support a web roll running to the press and a spare web roll, a relay and circuit for each support for controlling the movement of the support, and tie circuits for causing the simultaneous operation of the relays.

1,815,180. AXLE PRESS. CLAUDE C. BENNETT, Seattle, Wash., assignor to A. E. Feragen, Inc., Seattle, Wash., a Corporation of Washington. Filed Oct. 21, 1929. Serial No. 401,222. 15 Claims. (Cl. 153—40.)



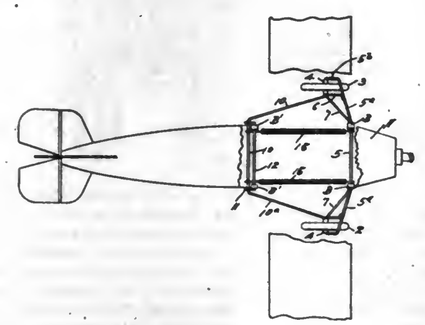
1. A gripping and bending apparatus, including a bed plate, a base, means for fixing said base in position upon the bed plate, holding means supported from said base for engaging the upper side of a bar to be held, a jaw pivotally supported from said base, means for forcing said jaw against and under side of such bar, and means for restraining the bar to prevent its bodily movement.

1,815,181. LOCKING DEVICE. ROBERT BIENAIMÉ, Paris, France. Filed Dec. 27, 1929, Serial No. 416,774, and in Belgium Sept. 14, 1929. 5 Claims. (Cl. 292—113.)



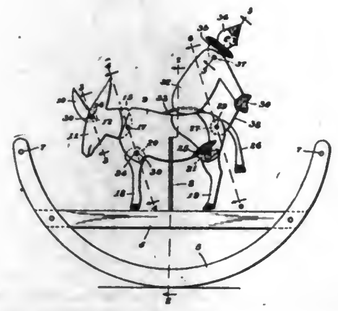
1. In combination, a fixed frame, a movable closure element, a rod mounted on said fixed frame at a fixed distance therefrom, a shell rigidly attached to said movable closure element, a pin traversing said shell, a spring tending to move said pin outwardly relatively to said shell, a latch oscillatably suspended from said pin, and adapted to engage with said rod, and a lever engaging with said latch and having a portion thereof formed to bear against said shell.

1,815,182. SYNCHRONOUS RUNNING GEAR FOR AIRPLANES. JOSEPH BLONDIN, Los Angeles, Calif. Filed Aug. 20, 1929. Serial No. 387,161. 19 Claims. (Cl. 244—2.)



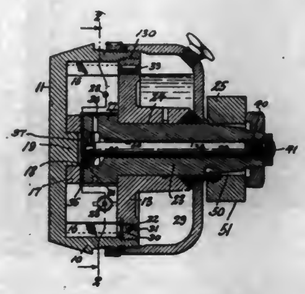
1. In a running-gear for airplanes, a trussed frame unit including a crank shaft journaled transversely of the longitudinal axis of the air plane and having rigid therewith, rearward and downward extending side arms whose rear ends carry land wheels on coaxial spindles which are axially unattached and provide clearance.

1,815,183. ROCKER TOY. LESTER W. BROWN and MARGUERITE E. BROWN, Seattle, Wash. Filed July 21, 1930. Serial No. 469,307. 2 Claims. (Cl. 46—40.)



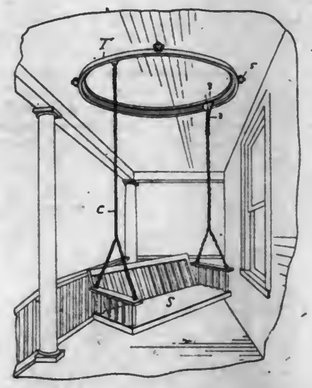
1. A rocker toy having in combination rocker means, a platform supported on the rockers, one or more figures supported for pivotal movement by the platform, a plurality of elements suspendedly connected to said figures for pivotal movement, elastic pivots forming the connections between said figures and elements, and elastic disposed in corresponding direction with the rockers forming resilient connections between some of the figures whereby back and forth swaying motion may be imparted to the figures thus connected.

1,815,184. SHOCK ABSORBER. ANTHONY B. CASPER, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Aug. 21, 1929. Serial No. 387,387. 10 Claims. (Cl. 188—89.)



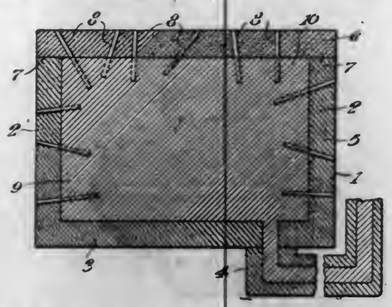
1. A shock absorber comprising a working chamber adapted to contain a resistance liquid, a piston movable back and forth in said chamber and having a hub containing a valve chamber and passages leading from said valve chamber to said working chamber, a disk valve seat mounted on the hub at one end of said valve chamber and provided with a port, and a flexible disk valve arranged in said valve chamber and movable toward and from said port and adapted to be flexed at its edge.

1,815,185. ADJUSTABLE SWING HANGER. PAUL COBB, Hope, Ark. Filed Oct. 4, 1929. Serial No. 397,410. 2 Claims. (Cl. 155—58.)



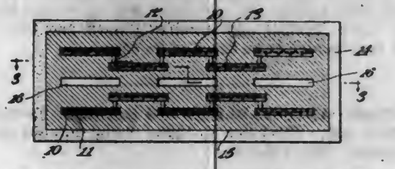
1. An apparatus of the class described comprising an annular track, a number of carriage hangers movably supported on the track independently of each other, each carriage comprising a body part and roller means carried by the body part and roller means carried by the body part and engaging the track, a flexible member depending from each carriage hanger and a swing supported by the flexible members.

1,815,186. METHOD OF CASTING METALS. HENRY L. COLES, Hamilton, Ohio, assignor to Guardian Metals Company, Hamilton, Ohio, a Corporation of Delaware. Filed Feb. 20, 1929, Serial No. 341,361. Renewed Jan. 12, 1931. 16 Claims. (Cl. 22—200.)



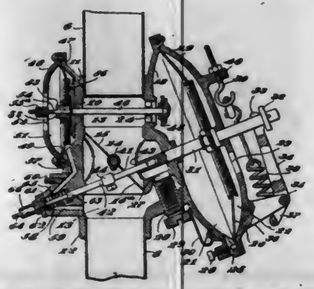
11. A support for cast metal masses, including a plurality of metal members embedded in the cope of a mold and projecting an appreciable distance into the mold chamber.

1,815,187. SAFE AND VAULT MEMBER AND CONSTRUCTION. HENRY L. COLES, Hamilton, Ohio, assignor to Guardian Metals Company, Hamilton, Ohio, a Corporation of Delaware. Filed Apr. 24, 1930. Serial No. 446,817. 2 Claims. (Cl. 109—1.)



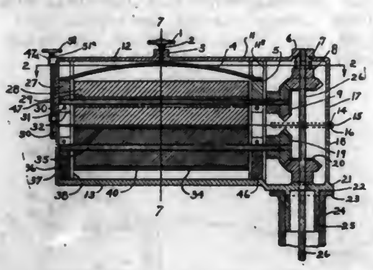
1. A safe and vault member comprising a cast metal matrix of high heat conductivity in which is embedded a plurality of slabs of metallic material in substantial parallelism, said slabs being tool-resistant and being made up of a composition consisting of 13 to 20% manganese, 13 to 18% chromium, 2 to 4% carbon and the balance iron.

1,815,188. POWER CONTROLLER. JAMES T. COWLEY, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Nov. 7, 1928. Serial No. 317,857. 29 Claims. (Cl. 243—9.)



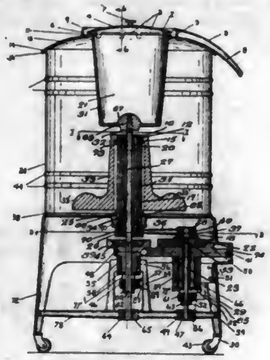
1. Power control apparatus for a pneumatic despatch system of the vacuum minimum flow type having a transmission tube and an exhauster connected to the tube, said apparatus comprising a valve for controlling the flow of carrier impelling air current in the tube, the valve turning about an axis transverse to the tube, actuating means for initiating the opening of the valve when a carrier is inserted in the tube, and stop means for limiting opening movement of the valve, the valve completing its opening movement independently of said actuating device.

1,815,189. CLOTHES WRINGER. HARRY J. CRINER, Davenport, Iowa, assignor of one-half to A. G. Bush, Davenport, Iowa. Filed Nov. 23, 1928. Serial No. 321,335. 13 Claims. (Cl. 68—32.)



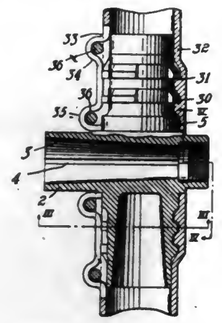
1. In a clothes wringer, the combination with upper and lower frames pivotally connected at one end by vertical pivoting means allowing relative horizontal rotation and having adjacent supporting collars formed upon the respective frames adapted to support the upper frame in various positions of adjustment, of latching means united thereto at the opposite end adapted to secure same in operative position when latched, rolls mounted in the upper and lower frames, 18, means for varying the pressure of the rolls against each other, and automatically adjustable means for driving the rolls simultaneously in opposite directions.

1,815,190. DRIVING MECHANISM FOR COMBINED WASHERS AND DRIERS. HARRY J. CRINER, Davenport, Iowa, assignor of one-half to A. G. Bush, Davenport, Iowa. Filed Dec. 3, 1928. Serial No. 323,528. 6 Claims. (Cl. 74—14.)



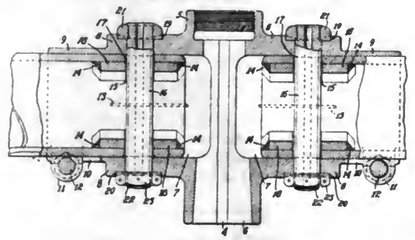
1. In a driving mechanism, a frame, a motor mounted upon the frame with belt pulley secured to the motor shaft, a boss secured to the frame, a drive pulley revolvably mounted within the boss and having a longitudinal opening through the center thereof and a clutch member united to said drive pulley, a shaft revolvably and slidably mounted within the opening of the drive pulley and bearing a complementary clutch member, such complementary clutch member carrying a crank pin, a supporting column mounted centrally of the frame, a sleeve revolvably mounted within the supporting column, a crank secured to the lower end of the sleeve, a connecting rod connecting the crank and crank pin, and means for throwing the clutch into and out of engagement.

1,815,191. PROPELLER. THOMAS A. DICKS, Pittsburgh, Pa., assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Dec. 31, 1927, Serial No. 244,021. Divided and this application filed Aug. 23, 1929. Serial No. 387,898. 5 Claims. (Cl. 170—162.)



1. In combination with a propeller hub having cylindrical blade shank receiving projections extending radially therefrom, and provided with outwardly projecting segmental shoulders, propeller blades each having a hollow cylindrical shank adapted to surround one of said shank receiving projections; each shank being split longitudinally and provided with shoulders on its inner surface adapted to engage the shoulders on the shank receiving projections and external means for clamping the blade shanks to the shank receiving projections.

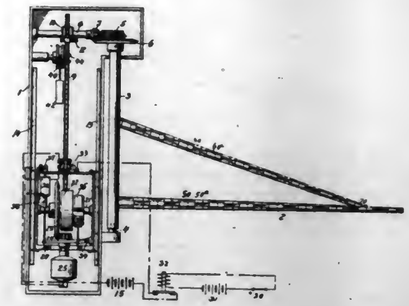
1,815,192. PROPELLER. THOMAS A. DICKS, Pittsburgh, Pa., assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 23, 1929. Serial No. 387,900. 7 Claims. (Cl. 170—173.)



1. In a propeller, a hub having a series of sockets radiating therefrom, the inner wall portion of each socket being relatively thick, a detachable tubular blade having a relatively thin walled shank adapted to fit within each socket, the thickened portion of the socket and the blade being provided with suitable openings for the reception of a cross bolt, and metal inserts secured to the inner wall of the inserted shank to reinforce the same at the point where the cross bolt passes therethrough.

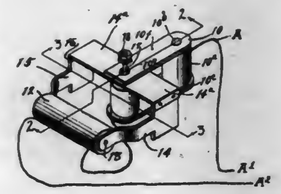
1,815,193. VEHICLE OPERATED GATE. HENRY DOESKEN, Los Angeles, Calif., assignor of one-half to Charles De Le Fond, Los Angeles, Calif. Filed Nov. 13, 1929. Serial No. 406,846. 9 Claims. (Cl. 39—7.)

1. In a gate, the combination with a tubular post, of a barrier hung on said post, a cage vertically slidable within the post to swing said barrier back and forth, a power circuit, an electric motor in said circuit to elevate said cage, a brake, a magnet in the circuit to set said brake normally to maintain the cage elevated, a switch, elements connected with the cage to throw said switch



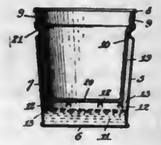
thereby to cut out said motor and cut in the said magnet, and a relay circuit operable by a passing vehicle to break said power circuit.

1,815,194. TELEPHONE RECEIVER. ARCHIBALD A. DUNCAN, Akron, Ohio. Filed Feb. 27, 1928. Serial No. 257,183. 5 Claims. (Cl. 179—114.)



1. In a receiver of the class described, a diaphragm, an electromagnet, a vibratory reed forming a pole piece of said magnet, said reed having the end free and arranged to be actuated by energizing said magnet, means operatively connecting the intermediate portion of said reed to said diaphragm and a second magnet, the intermediate portion of said reed operatively interposed between the poles of said second magnet.

1,815,195. HOLDER FOR FLOWER POTS AND CUT FLOWERS. JOSEPH FAVATA, Jr., Buffalo, N. Y. Filed Apr. 16, 1929. Serial No. 355,503. 4 Claims. (Cl. 47—35.)



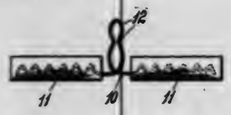
1. A holder for flowers having a symmetrically downwardly-tapered peripheral wall provided with a projection internally near its upper edge wholly within said symmetrically tapered wall, and a flower receptacle of smaller diameter than said holder having a downwardly-facing shoulder at its upper end adapted to rest upon said internal projection.

1,815,196. LADDER WEB FOR VENETIAN BLINDS. GEORGE FREDERICK FRENCH and ROGER FRENCH, Manchester, England. Filed Aug. 25, 1930, Serial No. 477,764, and in Great Britain Sept. 14, 1929. 4 Claims. (Cl. 139—384.)



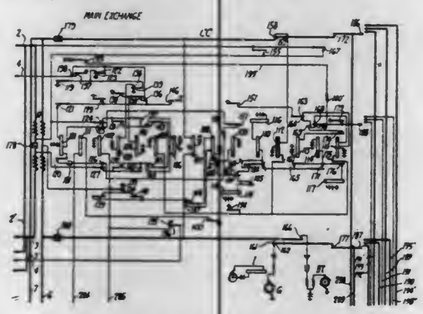
1. A ladder web for Venetian blinds, having double straps one of which is formed by selecting and holding out a number of warps from the other whilst the latter is being woven, as set forth.

1,815,197. CLEANING DEVICE. HARVEY WILSON GAMEL, Los Angeles, and CHARLES DENNIS HOLMES, Long Beach, Calif. Filed Aug. 12, 1930. Serial No. 474,700. 4 Claims. (Cl. 4—231.)



1. A cleaning device for toilet bowls, consisting of a single wire having solid cleaning, disinfecting, and deodorizing material disposed cylindrically along its horizontally extended end portions, and having its central portion bent upward to form a single central support, substantially as described.

1,815,198. AUTOMATIC TELEPHONE SYSTEM. THOMAS O. GILCHRIST and DURWARD MURPHY, Lorain, Ohio, assignors to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,681. 29 Claims. (Cl. 179—27.)



1. In a telephone system, a branch exchange, an incoming trunk, an attendant's circuit for intercepting incoming calls over the trunk, a switch including means adapted to be directively controlled by the attendant to further extend an incoming call to a subscriber's line, and means controlled by the attendant for causing said switch to extend an incoming call to said subscriber's line independent of all directive control.

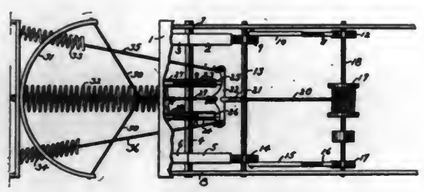
1,815,199. SPRING HINGE FOR FOLDABLE AWNING SUPPORTS. LOUIS B. GOLDBERG, NATHAN GOLDBERG, WILLIAM GOLDBERG, and JACOB M. GOLDBERG, Denver, Colo. Filed Apr. 2, 1931. Serial No. 527,080. 4 Claims. (Cl. 156—44.)

2. In an awning support having two arms, a hinge for connecting the arms, said hinge comprising a hinge member connected with one of the arms and provided with two spaced lugs projecting from one side thereof, the lugs having openings for the reception of a pivot pin, a second hinge member connected with the other arm, the last named hinge member having two spaced fingers adapted to project over the lugs, the ends of the fingers having openings for the reception of the pivot pin, a sleeve secured to the pivot pin intermediate the fingers,



a spiral spring surrounding the sleeve, means for attaching one end of the spring to the sleeve, means for attaching the other end of the spring to the first mentioned hinge member, the sleeve having one end provided with an outwardly extending flange having notches in its periphery and a latching pawl connected with the second mentioned hinge member and movable into and out of engagement with the notches in the flange.

1,815,200. DEVICE FOR ASSISTING IN THE LAUNCHING AND LANDING OF AEROPLANES. RUDOLF HAMBURGER, New York, N. Y. Filed Mar. 13, 1929. Serial No. 346,547. 4 Claims. (Cl. 244—2.)



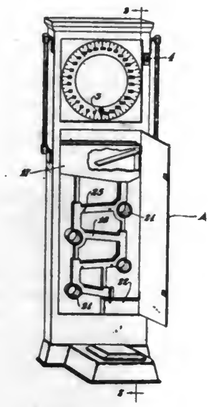
1. A launching device for aeroplanes comprising a platform, a plurality of resilient members, tension members retained by said resilient members, means for engaging an aeroplane, means for releasing said tension devices to cause them to expedite the movement of said aeroplane, and means for elevating said aeroplane at a pre-determined point in its forward movement.

1,815,201. PROCESSES FOR OBTAINING COPPER SULPHATE FROM THE WASTE LIQUORS IN THE PRODUCTION OF CUPRAMMONIUM SILK. AUGUST HARTMANN, Barmen, Germany, assignor to the Firm American Bemberg Corporation, New York, N. Y. Filed May 24, 1928, Serial No. 280,392, and in Germany May 31, 1927. 11 Claims. (Cl. 23—125.)

10. A process for the treatment of waste materials containing copper, such as those resulting during the production of cuprammonium silk, comprising heating the waste materials in the presence of sulphuric acid in excess of that required to convert the copper to copper sulphate and separating the crude crystallized copper sulphate from the mother liquor obtained.

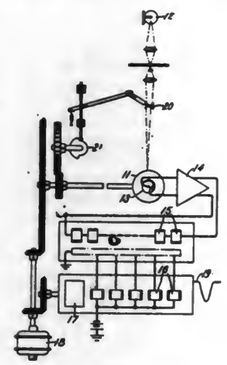
1,815,202. CHIME MECHANISM. EBEN C. IVES, St. Paul, Minn. Filed Oct. 19, 1928. Serial No. 313,497. 4 Claims. (Cl. 194—96.)

1. In combination with a coin controlled mechanism, zigzag guide means positioned to receive a coin after actuating said coin controlled mechanism, said track having vertical and downwardly sloping portions, a sound emit-



ting device positioned at the lower end of each vertical portion of said track to be struck by a coin dropping downwardly through said vertical portion of said track.

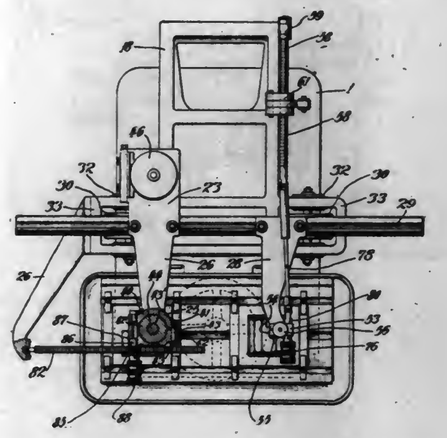
1,815,203. IMAGE PRODUCING SYSTEM. HERBERT E. IVES, Montclair, N. J., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y., a Corporation of New York. Filed July 30, 1929. Serial No. 382,100. 14 Claims. (Cl. 178—5.)



1. In an image producing system, a plurality of light controlling elements each having two opaque portions, one of which surrounds the other, and a light transmitting portion located between the inner boundary of one of said opaque portions and the outer boundary of the other of said opaque portions, the area enclosed by the inner boundary of the outer opaque portion being substantially of the same size and shape for each of said light controlling elements.

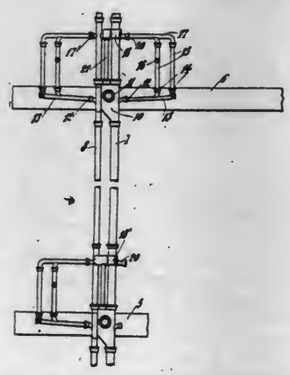
1,815,204. DIE-SINKING AND ENGRAVING MACHINE. JOHN E. JOHNSON, Aurora, Ill. Filed Sept. 23, 1929. Serial No. 394,610. 6 Claims. (Cl. 90—13.2.)

1. In a mechanism of the class described, the combination of a horizontally movable carriage, means for guiding said carriage in a horizontal plane, a horizontal longitudinally movable rocking track rod disposed at right angles to the path of movement of said carriage, a tiltable tool-supporting frame supported on and movable with said rocking track rod and adapted to tilt upon the horizontal axis of said rod, a pair of grooved supporting wheels journaled in suitable bearings on said carriage and in supporting engagement with said rocking track rod, a tool rotatively mounted on said tiltable frame, a guiding stylus supported in fixed relation to said tool for guiding the same, manually operable feeding means operatively



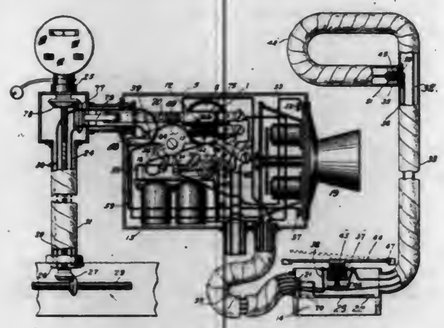
connected with said carriage and said tiltable tool-supporting frame for moving the same relatively to each other, means for supporting a pattern and material to be operated upon in position to be concurrently engaged by said stylus and tool respectively, and driving means on and movable with said carriage and operatively connected with said tool for rotating the same.

1,815,205. PLUMBING SYSTEM. EDWARD KENNEDY, New York, N. Y. Filed Aug. 7, 1930. Serial No. 473,559. 6 Claims. (Cl. 4—211.)



1. In combination with the waste and vent stacks of a plumbing system, means for connecting the waste stack with one or more fixtures, and means for venting the fixture or fixtures including a member having a continuously open passage independent of the waste stack extending horizontally across the waste stack and connected at one end with the vent stack, and vent pipe connections between the other end of said passage and the connecting means between the fixtures and the waste stack.

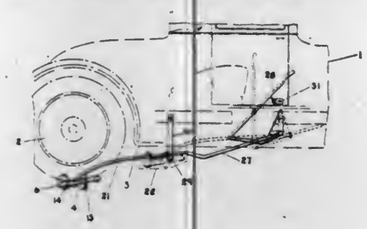
1,815,206. AUTOMATIC BURGLAR ALARM FOR AUTOMOBILES. SADIE L. MATHEWS, St. Louis, Mo. Filed Aug. 30, 1923. Serial No. 660,195. 12 Claims. (Cl. 177—314.)



7. An automobile alarm, comprising an alarm circuit having spaced contacts, a rotatable gear element movable across the space between the contacts to open and close the alarm circuit, a second gear element, means mounting the latter for rotation and for movement into and out of engagement with the first named gear element, driving means including a universal joint between said second named gear element and the automobile running gear, a lock having a movable member and means operated by the latter for moving said mounting means to throw the second gear element into and out of engagement with the first named gear element.

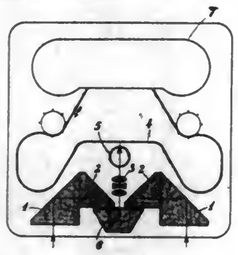
10. An automobile alarm, comprising an alarm circuit having spaced contacts, a rotatable gear element movable across the space between the contacts to open and close the alarm circuit, a second gear element, means mounting the latter for rotation and for movement into and out of engagement with the first named gear element, driving means between said second named gear element and the automobile running gear, a lock having a movable member and means operated by the latter for moving said mounting means to throw the second gear element into and out of engagement with the first named gear element.

1,815,207. VEHICLE PARKING AND LOCKING DEVICE. JOHN H. MOFFAT, Indianapolis, Ind. Filed Jan. 18, 1929. Serial No. 333,384. 3 Claims. (Cl. 180—1.)



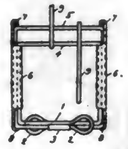
1. In a car parking device, a pair of wheel supporting shoes; a bar rigidly connecting said shoes; shafts carried by said bar on opposite sides thereof and in pairs, the shaft of one pair being out of alignment with the other shaft of the pair and in substantially radial alignment with the center of the forward axle of the car; straps supporting the outer ends of certain of said shafts and the forward ends of said shoes; traction wheels mounted on said shafts; and means for utilizing the driving force of the wheels of the car for driving one of said traction wheels, whereby the rear end of the car may be swung laterally in either direction.

1,815,208. CINEMATOGRAPHIC DEVICE. HENRI MORAZ, Thoune, Switzerland. Filed Mar. 11, 1927, Serial No. 174,645, and in Switzerland Mar. 12, 1926. 1 Claim. (Cl. 88—16.6.)



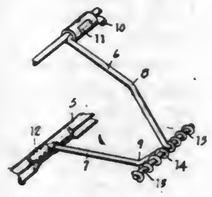
In a stereo-cinematographic camera and in combination a pair of spaced reflecting prisms arranged to receive the rays right angularly on one of the faces and to reflect the rays right towards the space between the prisms, a second pair of right reflecting prisms between the first pair to reflect the received images backwards, and a right reflecting prism adjacent to the back of the second pair of prisms and turned obliquely to bring the received images one above the other, two objectives arranged to receive the images from the oblique prism and means adapted to move a film perpendicularly to the plane of the rays of the objectives, the whole arrangement for the purpose of transmitting the true position of right and left in the received negative images to the positive images appearing on the film.

1,815,209. KEY HOLDER. JOHN P. NIKONOW, New York, N. Y. Filed Dec. 9, 1930. Serial No. 501,042. 5 Claims. (Cl. 59—96.)



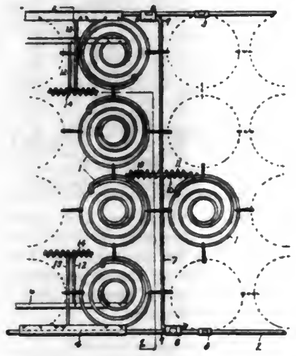
1. In a key holder, the combination with two substantially rectangular members adapted to slide in relation to each other in their common plane, said members being open at their rear ends to permit the assembling of keys on their front bars, said keys being provided with elongated holes for said bars, means to keep said front bars separated fitting in the ends of said holes and supporting said keys in the plane of said members, said front bars being adapted to be brought together for turning said keys between their operative and inoperative positions.

1,815,210. SPRING STRUCTURE. FALCONER O'BRIEN, Detroit, Mich., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed Sept. 19, 1929. Serial No. 393,640. 4 Claims. (Cl. 5—262.)



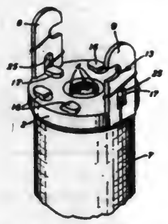
1. In a spring structure, the combination of a plurality of coiled body springs, a border frame, a tie member of channel cross section secured to a plurality of the body springs by clamping the flanges of the tie member on intermediate coils thereof, a coacting pair of angled brace members disposed with their angles facing oppositely, and a coiled spring coupling member for the inner ends of said brace members, said brace members having laterally disposed oppositely projecting coupling engaging portions engaged within the coils of said coupling member, said brace members having laterally turned portions at their outer ends, one being clamped within the tie member and the other secured to the border frame by means of a clip.

1,815,211. SPRING STRUCTURE. FALCONER O'BRIEN, Detroit, Mich., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Original application filed Sept. 19, 1929, Serial No. 393,640. Divided and this application filed May 15, 1930. Serial No. 452,616. 2 Claims. (Cl. 5—262.)



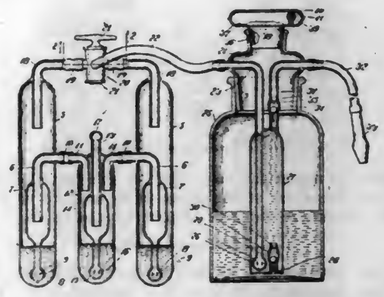
1. The combination in a spring structure of a plurality of coiled body springs, a border frame, a cross brace therefor comprising a pair of members connected to opposite sides of the border frame, and a coiled spring coupling member for said brace members, said brace members having laterally disposed coupling engaging members engaged within the coils of said coupling member, the coils of the ends of said coupling member being engaged with coils of adjacent body springs.

1,815,212. TERMINAL CONNECTER. ROBERT A. OGG, Towaco, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 18, 1930. Serial No. 482,713. 7 Claims. (Cl. 175—340.)



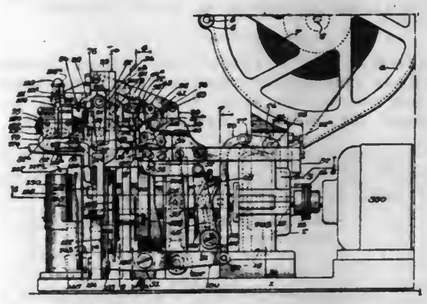
1. In an electrical element comprising a winding, a support therefor and a head member on the support, a terminal attached to the head member, said terminal having a lower portion engaging the under surface of the head member and attached to the head member at widely separated points, and an upper portion engaging the upper surface of the head member at a point intermediate the points of attachment of the lower portion.

1,815,213. RADIUM EMANATOR. JOHN W. O'NEILL, Chicago, Ill. Filed Nov. 23, 1925. Serial No. 70,798. 6 Claims. (Cl. 167—51.)



1. In a radium emanator, the combination of a sealed radium element holding receptacle having an outlet tube, a fluid holding receptacle provided with an inlet tube connected with the outlet tube of the radium element holding receptacle, said inlet tube extending toward the bottom within the fluid holding receptacle, a closed housing, sealed about the inner end of said inlet tube, terminating adjacent to the bottom of said fluid holding receptacle and extending substantially throughout the height of said receptacle, a valve inlet in the bottom of said housing closable against outflow from the housing, and a withdrawal tube sealed to and leading from the upper end of said housing to the fluid holding receptacle exterior.

1,815,214. PRICE TICKET TIE-ON MACHINE. ROBERT H. PLASS, Upper Montclair, N. J., assignor to A. Kimball Company, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,586. 85 Claims. (Cl. 112—104.)

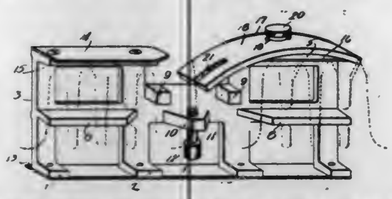


1. In a machine of the class described, the combination of means for stitching a price ticket to the goods, means for looping a loop of the thread to one part of the ticket, means for then severing the thread, and means for then securing the severed ends of the threads to another part of the ticket so that the ticket can be readily removed without severing or ripping the thread or tearing or ripping the ticket from the goods.

1,815,215. SAW GAUGE. ALFRED M. REMINGTON, Fitchburg, Mass., assignor to Simonds Saw and Steel Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed July 6, 1929. Serial No. 376,482. 3 Claims. (Cl. 33—202.)

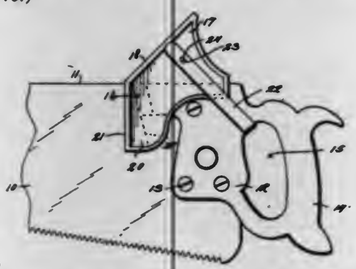
1. A tool of the class described comprising a frame, a fixed guide carried by the frame and adapted to seat upon the cutting teeth of a saw, a curved gauge plate of fixed

curvature having a recess therein to receive a raker tooth of the saw, and means for supporting the gauge plate from



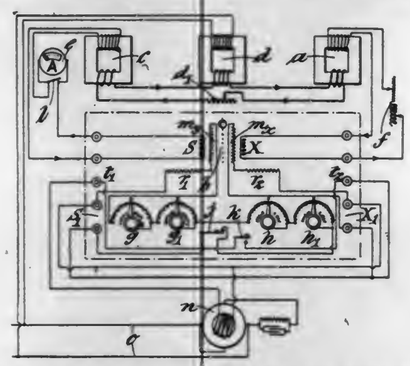
the frame for movement longitudinally substantially along the arc of curvature of the gauge plate so as to vary the position of said recess with respect to said guide.

1,815,216. SQUARE AND MITER ATTACHMENT FOR SAWS. JOSEPH H. SEARLES, Los Angeles, Calif. Filed Oct. 26, 1929. Serial No. 402,656. 3 Claims. (Cl. 33—75.)



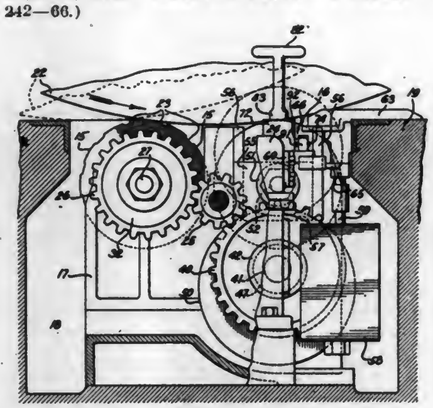
1. A combination square and miter attachment adapted to be removably secured to a saw, said miter comprising a body portion and inclined forward edge, said body portion having an elongated opening therein adapted to receive a portion of the saw, a strap adapted to removably engage the handle of the saw for holding said attachment on said saw and means for securing the strap to the miter.

1,815,217. ELECTRICAL TESTING APPARATUS. GEORGE FREDERICK SHOTTER, New Southgate, England. Filed Dec. 9, 1926, Serial No. 153,651, and in Great Britain Dec. 10, 1925. 2 Claims. (Cl. 175—183.)



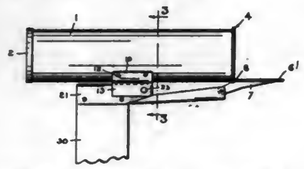
1. Means for ascertaining the ratio and angle errors in an instrument transformer comprising a double element dynamometer watt-meter to one coil of one element of which a winding of the transformer is to be connected and to one coil of the other element of which a winding of a transformer of predetermined characteristics is to be connected, phase shifting means connected to the other coils of the two elements, means which will constitute a function of the error present in the transformer under test connected to the potential circuit of one or other of the elements to the double element dynamometer watt-meter and a tapping key connected to said means.

1,815,218. APPARATUS FOR SUPPORTING AND HANDLING OBJECTS. JAY PARMLEY SPEAR, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 27, 1928. Serial No. 308,680. 8 Claims. (Cl. 242—66.)



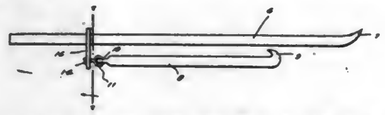
1. In an apparatus for supporting and handling objects, elements engaging the periphery of and cooperating to support an object, means for elevating one of the elements to effect a displacement of the supported object, and means for guiding the latter element along a straight vertical path during its elevation.

1,815,219. NEWSPAPER RECEPTACLE. HENRY STEEN, Vashon, Wash. Filed Aug. 14, 1929. Serial No. 385,887. 5 Claims. (Cl. 232—45.)



1. A newspaper receptacle, comprising a container closed at one end and open at the other end, a closure hingedly connected with the open end of the container, a bracket extending from the container, a support adapted to seat the container normally in a horizontal and receiving position, a pivotal connection for the bracket with the support and whereby the container may be tilted to an approximately vertical position with its open end disposed downwardly to signal that a newspaper has been deposited in the container, and a link pivotally connected with the closure and the support adapted to shut the closure simultaneously with the tilting of the container.

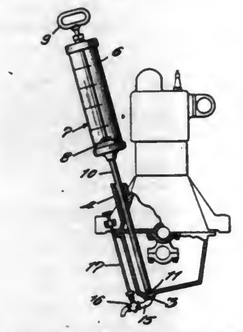
1,815,220. TOOL. WILLIAM T. STRONG, Norman, Okla. Filed Apr. 4, 1930. Serial No. 441,630. 3 Claims. (Cl. 254—131.)



1. In a tool of the class described, a relatively short lever having a claw at one end and a flattened apertured

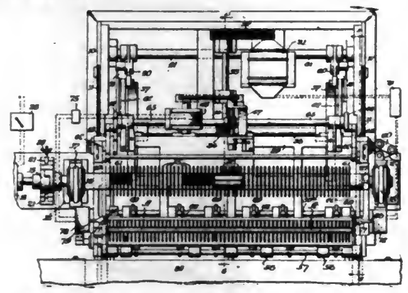
ear at the opposite end, a swivel connector including an eye connected with said ear, a stem, and a T-head, a connector plate having an aperture through which said stem passes, the head being disposed on one side of the plate and the eye on the opposite side whereby to form a loose swivel and sliding connection between the connector and plate, said plate having a hole therein spaced from the aperture and a long claw equipped lever having its handle portion passing through said hole.

1,815,221. METHOD AND APPARATUS FOR RAPIDLY DRAINING CRANK CASE OIL. ERNEST J. SWEETLAND, Hazleton, Pa. Filed June 2, 1924. Serial No. 717,389. 15 Claims. (Cl. 184—1.5.)



1. In an apparatus for removing used lubricating oil from the crank case of an internal combustion engine of the type described a vacuum tank, a vacuum line, leading therefrom a nozzle adapted to be extended into the breather opening of the crank case above the normal oil level and means for controlling the vacuum to said nozzle, including a push valve adjacent the top of said nozzle.

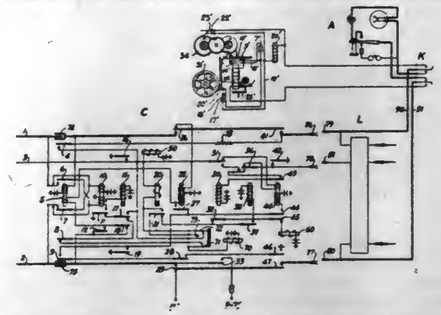
1,815,222. GANG SAW. JUSTIN R. SWIFT, Chicago, Ill. Filed Mar. 10, 1928. Serial No. 260,789. 10 Claims. (Cl. 143—33.)



4. In a machine of the class described the combination of blank severing means, a motor for continuously operating the same, a table, a motor for reciprocating the same, a blank holder mounted on the table, means including a separate motor for moving the holder into an inverted position, means actuated by the movement of the table for starting the movement of the holder, and means actuated by the movement of the holder for stopping its movement at the completion of a cycle of operation.

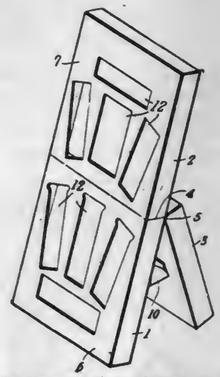
1,815,223. REPEATING-CONNECTER SWITCH. ROBBINS TILDEN and THOMAS A. TILDEN, High Point, N. C. Filed Dec. 13, 1928. Serial No. 325,723. 17 Claims. (Cl. 179—18.)

1. In an automatic telephone system, a connecter switch, calling telephone lines having access to said switch, called lines accessible to said connecter switch, number recording devices on said lines, means controlled over a calling line for operating said switch to set up a talking



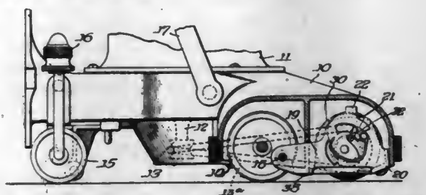
path to the station of a called line, and means in said connecter controlled over said calling line to operate the number recording device of the called line over said talking path.

1,815,224. DISPLAY CARTON. JOSEPH L. VISCOUNT, New York, N. Y., assignor to Snyder & Black, Incorporated, New York, N. Y., a Corporation of New York. Filed June 20, 1929. Serial No. 372,256. 4 Claims. (Cl. 206—44.)



1. The combination of three boxes so hinged together that two of them when positioned end to end present a substantially flat display front and another cooperates with these in forming an easel support.

1,815,225. CLEANER. HARRY B. WHITE, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Nov. 11, 1927. Serial No. 232,518. 6 Claims. (Cl. 15—8.)



1. In a suction cleaner having a body formed with a nozzle, a frame permanently secured to and movable relative to said body, a supporting member removably carried by said frame in said nozzle of such size as substantially to close said nozzle, and a polishing member revolubly and detachably mounted within said supporting member within said nozzle.

1,815,226. MARINE SIGNAL. ROBERT J. ANDERSON, Whitman, Mass., assignor to National Fireworks, Inc., West Hanover, Mass., a Corporation of Massachusetts. Filed May 20, 1929. Serial No. 364,421. 18 Claims. (Cl. 114—16.4.)

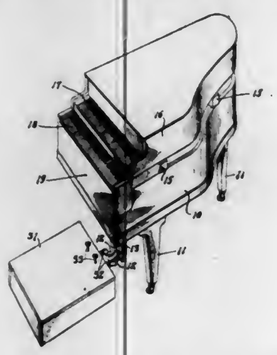


1. A marine signal comprising a float having a heavy base, a barrel having a chamber containing a pyrotechnical composition capable of burning continuously for substantially a predetermined period of time, means carried by said base for igniting said composition, means hermetically sealing said barrel to prevent admission of water under pressure to said pyrotechnical composition during submergence including fusible means of relatively smaller area than said barrel for venting the products of combustion of said composition when ignited during submergence.

1,815,227. METHOD OF PREPARING FOOD PRODUCTS. JAMES J. BARRY and WILLIAM T. MURRAY, Gloucester, Mass., assignors, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Jan. 5, 1927. Serial No. 159,238. 6 Claims. (Cl. 99—8.)

6. The hereindescribed method of preventing black deposit in cans of canned food products, consisting in steaming the food product prior to canning with the food product in the presence of lead while being steamed, and canning said product after said steaming.

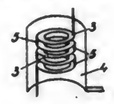
1,815,228. PIANO. HANS BARTH, New York, N. Y. Filed June 10, 1929. Serial No. 369,682. 9 Claims. (Cl. 84—175.)



1. In a piano, the combination with the usual grand piano box and keyboard therefor of a supplementary superposed piano box having quarter tone strings and keyboard therefor.

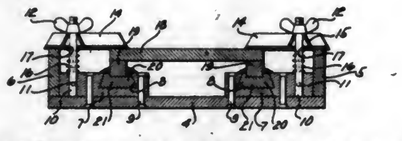
1,815,229. ELECTRON TUBE. RUDOLF G. BERTHOLD, Berlin-Siemensstadt, and ROBERT STRIGEL, Berlin-Charlottenburg, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Dec. 16, 1927, Serial No. 240,585, and in Germany Dec. 17, 1926. 4 Claims. (Cl. 250—27.5.)

1. In a thermionic tube a cylindrical anode and a thermionic cathode disposed within said anode and extending substantially in parallel to the anode cylinder axis, said cathode consisting of at least one conducting ribbon



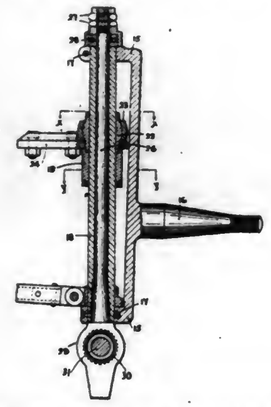
having its lateral surface substantially at right angles to the surface portion of the anode immediately adjacent to it.

1,815,230. ASSEMBLING FIXTURE. STANLEY EDWARD BOYNTON, Elizabeth, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1929. Serial No. 344,882. 4 Claims. (Cl. 144—259.)



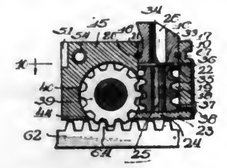
1. In a fixture for forming and combining parts into an assembly of predetermined configuration, a base member having approximately the desired configuration, a plurality of recessed members secured to the base member and having the recesses formed therein in accordance with a master member of the exact desired configuration for receiving and thereby forming accurately into the desired configuration one flexible part of the assembly and clamping means associated with the base member for clamping another flexible part against the first mentioned part to impart the desired configuration to the second mentioned part and thereafter to maintain the parts in predetermined relation during the assembly thereof.

1,815,231. STEERING GEAR FOR MOTOR ROAD VEHICLES AND THE LIKE. DONALD BROWN, Heaton, Newcastle-upon-Tyne, England. Filed Aug. 24, 1929, Serial No. 388,103, and in Great Britain Aug. 31, 1928. 4 Claims. (Cl. 280—96.2.)



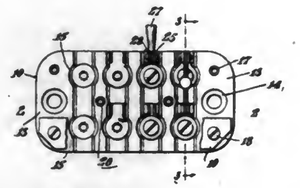
1. Steering gear for the front road wheels of motor road vehicles and the like comprising king pins, rigid connections between said king pins and the stub axles of said front road wheels, spring suspensions co-acting with said king pins to absorb the up-and-down movements of said road wheels, a boss on each of said king pins, a steering arm connected to said boss, and a connection between said boss and said king pin which allows vertical movement of said pin in said boss but prevents relative rotation therebetween.

1,815,232. PRINTER'S REGISTER HOOK. WILLIAM F. BRÜCKMANN, Evanston, Ill. Filed June 20, 1927. Serial No. 199,949. 23 Claims. (Cl. 101—388.)



3. A register book embodying a body, a gear mounted upon the body for propelling it, said body having grooves opening through the lateral walls thereof, a locking member disposed in each of the grooves, said members being pivotally mounted adjacent one end whereby the members will swing in horizontal planes, and resiliently yielding means disposed between the said members and operating to project the free ends of said members beyond the adjacent lateral walls of the said body.

1,815,233. TERMINAL BLOCK. JAMES BURKE, Erie, Pa., assignor to Burke Electric Company, a Corporation of Pennsylvania. Filed July 11, 1927. Serial No. 204,757. 9 Claims. (Cl. 175—369.)



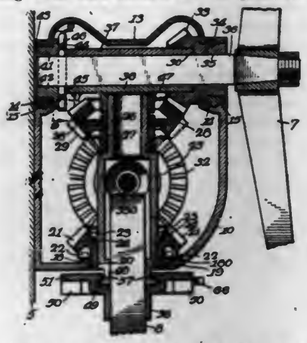
1. A terminal block comprising a solid body of insulating material, a series of transverse partitions forming grooves between said partitions, said partitions having cut away sections, a plurality of terminals disposed in said cut away sections at the base of said grooves and extending within the base of the block below the base of said grooves, and removable means for connecting the terminals transversely of the block, said removable means being wholly self-positioning.

1,815,234. DECORATED ARTICLE AND METHOD OF PRODUCING THE SAME. LAWRENCE C. BYCK and GILBERT L. PEAKES, Perth Amboy, N. J., assignors to Bakelite Corporation, New York, N. Y., a Corporation of Delaware. Filed June 30, 1922, Serial No. 572,085. Renewed Aug. 3, 1928. 15 Claims. (Cl. 18—61.)

1. The herein described method which includes providing a base, applying decorative matter thereto, covering the decorative matter with a transparent substance of sufficient fluidity to permit it to be poured over the decorative matter and capable of being rendered hard when subjected to heat, subjecting the transparent substance to heat, to harden the same, and to secure it to the base to form a block.

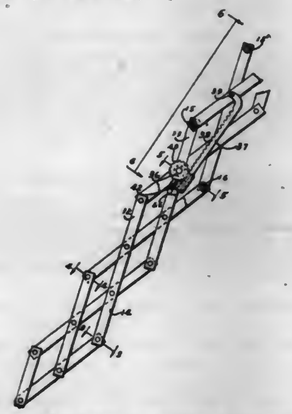
1,815,235. BRAKE MECHANISM. PERCY B. CAMP, Maywood, Ill. Filed Dec. 6, 1926. Serial No. 152,764. 11 Claims. (Cl. 74—119.)

3. In a brake operating mechanism, a casing, a closure for said casing, an operating shaft journalled in said closure, a gear on said shaft, a lever for rotating said gear and shaft, a gear mounted in the lower end of said casing and provided with an axial bore, a sleeve member journalled in said bore, a brake staff interlocked with said sleeve member, a laterally extending journal on said sleeve, a gear rotatably mounted on said journal and intermeshing with said second named gear, and a double



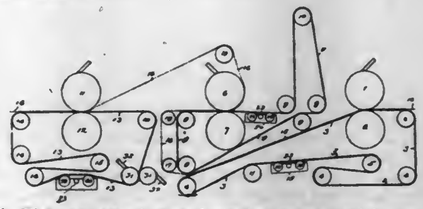
gear journalled on the upper end of said sleeve member and having teeth intermeshing with the teeth of said first and last named gears.

1,815,236. LADDER. ENOCH W. CARLSON, Jamestown, N. Y., assignor of one-half to Bertil Anderson, Jamestown, N. Y. Filed June 13, 1929. Serial No. 370,495. 11 Claims. (Cl. 228—19.)



1. An extensible ladder comprising a pair of rails, slats forming said rails, pivots connecting each of said slats with four adjacent slats, rungs mounted between and spacing said rails, means engaging and supporting the ends of said rungs on said rails and a manually operated gear and arm mechanism supported on connecting slats of one of said rails, said means being adapted to extend or retract said ladder.

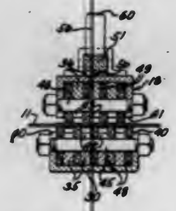
1,815,237. PROCESS AND APPARATUS FOR MAKING PAPER. LAWRENCE W. CASE, Manchester, Conn. Filed Mar. 12, 1929. Serial No. 346,275. 6 Claims. (Cl. 92—38.)



1. The process of manufacturing paper which consists in forming a web of pulp, carrying said web between

press rolls by means of an endless felt, and conditioning said felt by subjecting it to hot vapor while in motion and before it reaches the press rolls, whereby the felt is opened up, cleaned and heated and heat is transferred indirectly by the traveling felt to the traveling web previous to the passage of the web between the press rolls.

1,815,238. CLEANING DEVICE. GEORGE LAFAYETTE CHERRY, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1928. Serial No. 327,027. 9 Claims. (Cl. 15—102.)



1. In a cleaning device, a pair of relatively movable arms, removable, wiping members positioned on the arms and adjustable with respect thereto, and adjustable means for causing the wiping members to yieldably engage an article positioned therebetween.

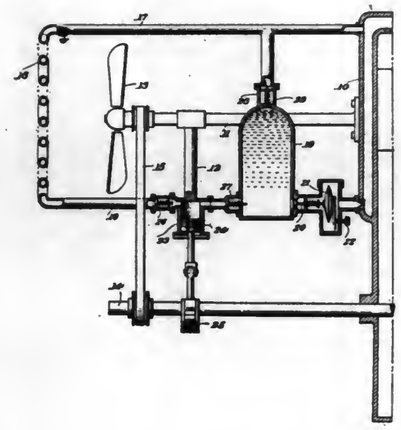
1,815,239. CASE WASHING MACHINE. GODFREY CHRISTENSEN, San Francisco, Calif., assignor to Golden State Milk Products Company, San Francisco, Calif., a Corporation of California. Filed Jan. 3, 1930. Serial No. 418,243. 6 Claims. (Cl. 15—56.)



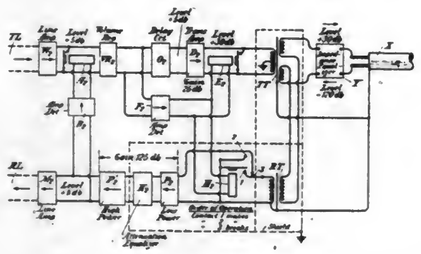
1. In a machine for washing the exterior vertical sides of a case, conveyor means for moving cases over a path, means on the conveyor means for engaging each case to retain the engaged case in a predetermined position relative to the conveyor means, a pair of brushes positioned on opposite sides of the conveyor means to engage and cleanse parallel and opposite vertical sides of cases moved relative to the brushes on the conveyor means, means for moving the case engaging means whereby each case is turned 90° in a horizontal plane relative to the conveyor means after engagement with the pair of brushes, and another pair of brushes positioned on opposite sides of the conveyor to engage and cleanse the unscrubbed parallel opposite vertical sides of said cases moved relative thereto on the conveyor means.

1,815,240. INTERNAL COMBUSTION ENGINE COOLING SYSTEM. WILLIAM HENRY CLEGG, Philadelphia, Pa. Filed Jan. 12, 1928. Serial No. 246,274. 2 Claims. (Cl. 123—170.)

1. An apparatus for cooling an internal combustion engine, including a pair of spaced upper and lower parallel pipes connected with the jacket of the engine, a vertically disposed reservoir supported between said pipes and adapted to contain a volatile cooling agent, a thermostatically operated valve connecting one side of the reservoir with the jacket and controlling the admission of the cooling agent from the reservoir into said jacket, a condenser supported by and communicating with the forward ends of said pipes, and through which the cooling agent passes as it circulates from the jacket on its return to the reservoir, a compressor arranged in the length of the lowermost pipe and supported by the other side of the reservoir, whereby the cooling agent is drawn from the condenser and transferred back to the reservoir, a valve controlling communication between the condenser and compressor, a vertical pipe establishing communication between the upper end of the reservoir and the other of said parallel pipes to take care of excess pressure within the reservoir, and a valve controlling communication between the upper end of the reservoir and the last mentioned parallel pipe.

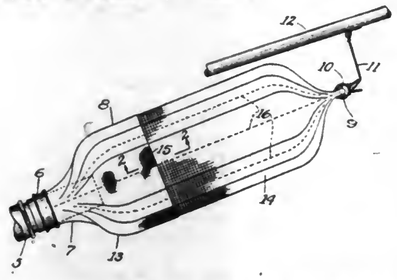


1,815,241. TRANSMISSION SYSTEM. GEORGE CRISSON, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 20, 1929. Serial No. 408,580. 8 Claims. (Cl. 178—44.)



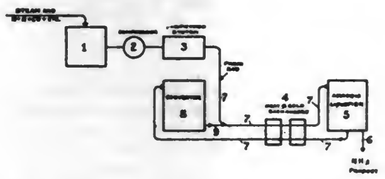
1. In a signaling system, a transmission path of large attenuation and whose characteristic impedance includes reactance of such value that in response to the cessation of applied signaling currents a relaxing current will flow out of the path having an initial value which is large as compared with attenuated signaling currents received over the path, and means to substantially suppress said relaxing current comprising a network associated with the transmission path, said network having such impedance characteristic that the impedance of the combination of network and transmission path will be substantially a pure resistance.

1,815,242. SUCTION CLEANER. WALTER C. DAVIDSON, North Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Apr. 18, 1929. Serial No. 356,099. 2 Claims. (Cl. 183—51.)



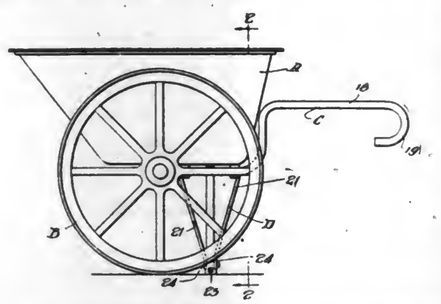
1. A dust bag for suction cleaners comprising a body portion made of air porous cellulose felt and the lower portion made of sateen, said portions being secured together substantially intermediate the center and one end of the bag.

1,815,243. PROCESS OF MAKING AMMONIA BY CATALYSIS. FREDRIK W. DE JAHN, New York, N. Y., assignor to Atmospheric Nitrogen Corporation, Syracuse, N. Y., a Corporation of New York. Filed May 12, 1923. Serial No. 638,451. 26 Claims. (Cl. 23—198.)



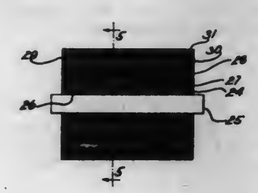
26. In conditioning gas to render it suitable for use in catalytic ammonia synthesis, that improvement which comprises bringing a gas which is to participate in said synthesis into contact with ammonia gas and cooling said mixture to a temperature at which ammonia liquefies therefrom.

1,815,244. TRUCK. CHARLES H. DODGE, Chicago, Ill., assignor to The Globe Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 15, 1929. Serial No. 347,337. 2 Claims. (Cl. 280—51.)



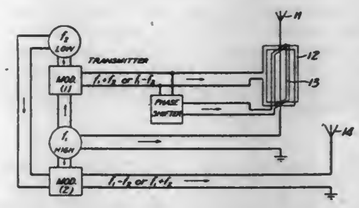
2. In a wheel supported truck having a sheet metal body, the latter having a flat bottom, the combination with four brackets welded to the underside of the body bottom, said brackets being arranged in pairs along each side of the bottom, each said pair of brackets having alined apertures and each bracket having also a vertically disposed depending apertured flange; of handle means for the truck, said means including two side members, each side member having its inner portion straight and the straight portions adapted to be inserted through and removed from said alined apertures of the brackets; and supporting legs including upwardly diverging straps, the upper ends of said straps being detachably secured to said depending flanges by means extended through the apertures of said flanges, whereby said legs and handle means are independently detachable from the brackets while the brackets remain welded to the body bottom.

1,815,245. COIL AND METHOD OF MANUFACTURING COILS. ARCHIE JOSEPH DOWD, Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 5, 1929. Serial No. 330,599. 8 Claims. (Cl. 175—21.)



1. An electrical coil comprising a core, a winding of conducting material permanently wound thereon, and a strand extending longitudinally of the core between the core and the winding and with its ends fastened intermediate the ends of the coil solely by the winding material, the whole forming a permanent assemblage of elements.

1,815,246. RADIO DIRECTION FINDER. CARL R. ENGLUND, Freehold, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,655. 3 Claims. (Cl. 250—11.)

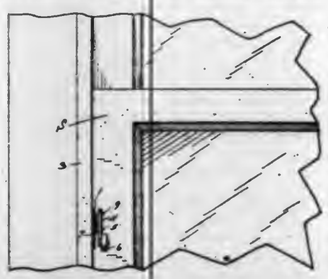


1. In combination, a pair of crossed loop antennæ, a non-directional antenna located centrally with respect to said loops, a second non-directional antenna, means for generating a wave of radio frequency, means for generating a wave of low frequency, means for intermodulating said waves, means for transmitting one side band of said intermodulated wave as a rotating wave from said crossed loop antennæ, means for transmitting said wave of radio frequency from said central non-directional antenna, and means for transmitting the other side band of said intermodulated waves from said second non-directional antenna.

1,815,247. ANTIRATTLER. GOTTFRIED FELLER, Milwaukee, Wis. Filed July 29, 1930. Serial No. 471,513. 1 Claim. (Cl. 292—239.)

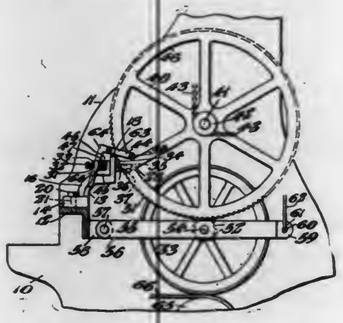
An anti-rattling device comprising an anchoring plate, an outstanding pin carried thereby, an arm mounted intermediate its ends upon said pin for swinging movement, a roller carried by one end portion of the arm, and

a spring member having one end portion engaged with the plate and its opposite end portion engaged with the



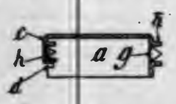
end portion of the arm remote from the roller, an intermediate portion of the spring member being coiled about the pin between the plate and arm.

1,815,248. ATTACHMENT FOR SHEET MEASURING MACHINES. ALBERT F. FOSTER, Philadelphia, Pa., assignor to F. F. Slocomb & Co., Inc., Wilmington, Del., a Corporation of Delaware. Filed July 25, 1930. Serial No. 470,719. 8 Claims. (Cl. 33—124.)



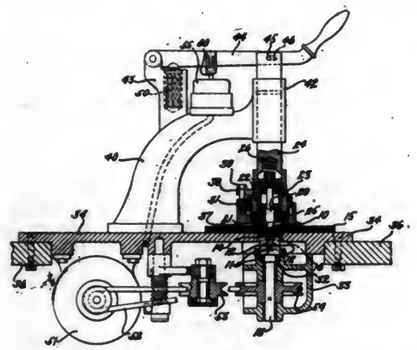
1. An attachment of the kind described for a sheet measuring machine including a bumper rod and a stop therefor, said attachment comprising a member detachably secured to the bumper rod for engagement with the stop, whereby said bumper rod may be laterally, vertically, or angularly adjusted.

1,815,249. CURTAIN RAIL SUPPORT. GEORGE FREDERICK FRENCH, Manchester, England. Filed May 7, 1929. Serial No. 361,208, and in Great Britain Oct. 26, 1927. 3 Claims. (Cl. 156—20.)



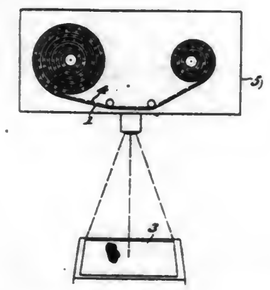
3. In a bracket for supporting a flat web section curtain rail, a body part composed of sheet metal cut and folded to form an inverted channel-shaped body part and to produce turned down end flaps, the flap at one end having an opening which breaks through the lower edge of the flap and the edge of which projects into the body part of the bracket in the form of spurs, while the flap at the other end of the bracket has a circular hole and rearwardly projecting spurs immediately surrounding the hole, said rear flap being wider than the body part of the bracket and having a further hole near each end, the vertical edges at the opposite and front end of the bracket having recesses for engagement with a flange at the top edge of the rail to be supported, and that part of each front vertical edge being set back out of the plane of the upper part, and a screw passing over the rail and through the flaps and into the casement to which the bracket requires to be fixed and on said screw being tightened up firmly holding by its head part the flange at the top edge of the rail in engagement with the recesses in the bracket and simultaneously driving all the spurs at the rear end of the bracket into the casement, as set forth.

1,815,250. APPARATUS FOR REWINDING ROLLS OF MATERIAL. HARLOW FARWELL GAYLORD, Congress Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 10, 1928. Serial No. 260,751. 6 Claims. (Cl. 242—55.)



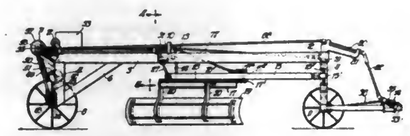
1. An apparatus for rewinding a roll of material, comprising means for supporting the roll, a radially expansible means for engaging and rotating the center of the roll, means for clamping the roll to the supporting means, rotatable means for expanding the means for rotating the center of the roll, means movable axially of the roll and resiliently supporting the clamping and the expanding means, a guide for the movable means, means for actuating the movable means, means for driving the means for rotating the center of the roll, and controlling means connected with the actuating means for operating the driving means concurrently with the application of the expanding means and the means for clamping the roll.

1,815,251. METHOD OF PRODUCING MOTION PICTURE FILMS. FRANK LYLE GOLDMAN, Mount Vernon, N. Y., assignor, by mesne assignments, to Audio-Cinema, Incorporated, Long Island City, N. Y., a Corporation of New York. Filed Mar. 7, 1927. Serial No. 173,367. 5 Claims. (Cl. 88—16.)



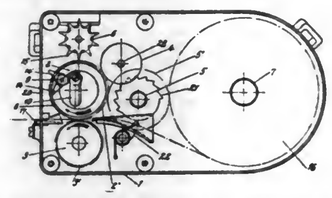
1. The method of producing negative films for animated pictures, consisting in selecting a transparent picture film containing a series of base pictures photographed upon it; manually executing on sheet material adapted to be positioned in front of a camera a series of pictures of a moving object in different positions upon a materially larger scale than the base pictures and providing each with a dark, blank background; manually executing a corresponding companion series of dark silhouette pictures of the object of the same size as said object pictures and in the same respective positions on sheet material and providing each with a light blank background; placing the said base picture film and an unexposed negative film in a camera with the base film in front of the negative film and both back of the camera lens; placing said silhouette pictures successively in front of the camera lens and photographing them in reduced size upon the negative film through successive picture areas of the transparent base picture film, and simultaneously printing the base pictures by reflection of light from the light, blank backgrounds of the silhouette pictures, whereby the base pictures will be projected upon the negative film with a portion of each negative picture area corresponding in outline with the dark silhouette, left unexposed; removing the base film from in front of the negative film; and placing the pictures of the object with the dark background successively in front of the camera lens and photographing them in reduced size upon said unexposed portion of successive picture areas upon the negative film.

1,815,252. POWER ADJUSTED ROAD GRADER. OWEN E. GRIGSBY, Park Ridge, Ill., assignor to Ryan Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 20, 1926. Serial No. 110,335. 8 Claims. (Cl. 37—156.)



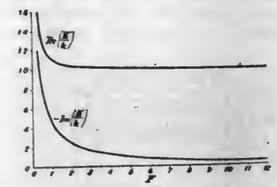
1. A road grader including a wheeled frame, a moldboard arranged beneath the same for tilting, axial, vertical and transverse adjustments, a common driven shaft, and selective means co-operating with the driven shaft for effecting any one of such adjustments.

1,815,253. APPARATUS FOR PRINTING AND REGISTERING FARE TICKETS AND THE LIKE. CURT HÄNEL, Berlin, Germany. Filed Nov. 28, 1928, Serial No. 322,535, and in Germany Sept. 13, 1927. 4 Claims. (Cl. 235—31.)



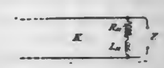
1. An apparatus for printing and registering fare tickets comprising a casing, a printing roller in said casing, means for rotating said roller, a type block arranged in said roller so as to allow being turned into and out of printing position, means on said roller for setting the type block in either end position, counters mounted in the casing, shafts mounted eccentrically in the roller and adjustable together with the type block, and cams mounted on said shafts in different rotary planes for operating different counters in different end positions of the block on the roller being rotated.

1,815,254. SHUNT TYPE IMPEDANCE EQUALIZER FOR ANY SMOOTH LINE. RAY S. HOYT, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 20, 1929. Serial No. 408,578. 8 Claims. (Cl. 178—44.)



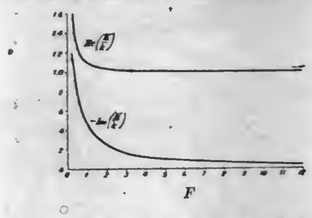
8. In a smooth line whose characteristic impedance includes reactance, means to equalize the characteristic impedance of said smooth line over a wide frequency range so that the resultant impedance is substantially a pure and constant resistance, said means comprising a network shunted across the line, said network comprising a plurality of parallel branches each including resistance in series with inductance.

1,815,255. IMPEDANCE EQUALIZER FOR ANY SMOOTH LINE. RAY S. HOYT, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 20, 1929. Serial No. 408,577. 14 Claims. (Cl. 178—44.)



2. In a smooth line whose characteristic impedance includes reactance, means to equalize the characteristic impedance of said smooth line over a wide frequency range comprising a network connected in shunt across the line and having such impedance with respect to that of the line that the impedance of the combination will be substantially a pure resistance.

1,815,256. SERIES TYPE IMPEDANCE EQUALIZER FOR ANY SMOOTH LINE. RAY S. HOYT, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 20, 1929. Serial No. 408,579. 10 Claims. (Cl. 178—44.)

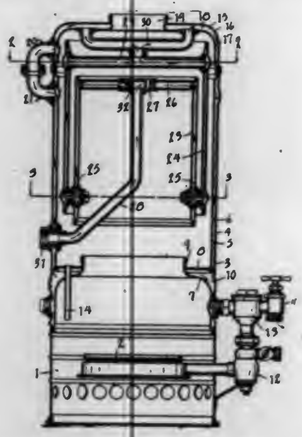


10. In a smooth line whose characteristic impedance includes reactance, means to equalize the characteristic impedance of said smooth line over a wide frequency range so that the resultant impedance is substantially a pure and constant resistance, said means comprising a network connected in series with the line, said network including a component unit connected in series and comprising a resistance in parallel with an inductance.

1,815,257. WATER HEATER. HERBERT S. HUMPHREY, Kalamazoo, Mich., assignor to Ruud Manufacturing Company, Pittsburgh, Pa. Filed May 7, 1928. Serial No. 275,723. 3 Claims. (Cl. 122—161.)

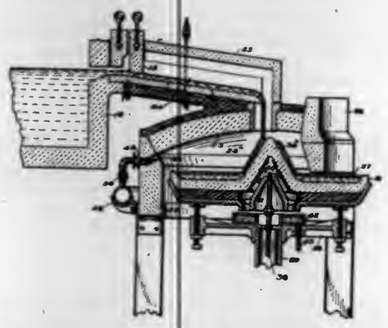
2. In a water heater, the combination of a cylindrical double-walled casing unit constituting a water reservoir,

said casing reservoir having a discharge at the bottom thereof, a double-walled casing top unit constituting a water reservoir and having a central vent opening therethrough, said casing water reservoirs having a circulating connection, inner and intermediate cylindrical annular water reservoirs disposed concentrically relative to each other and to said casing unit, the lower ends of said inner and intermediate water reservoirs having opposed circu-



lating connections, said inner reservoir having a head at its upper end provided with vent openings, a water supply conduit disposed within said inner water reservoir and connected centrally to said inner reservoir and the lower end of said supply conduit being connected to a coupling disposed in said casing, and a circulating connection for the upper end of said intermediate water reservoir to said casing top reservoir.

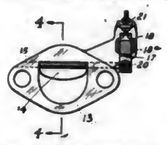
1,815,258. GLASS FURNACE. AUGUST KADOW, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 7, 1927. Serial No. 231,448. 20 Claims. (Cl. 49—56.)



1. The combination of a main furnace tank, a gathering pot, a conical distributer, and means for flowing a stream of glass from said tank onto said distributer and causing the glass to flow from said distributer into the gathering pot in sheet formation.

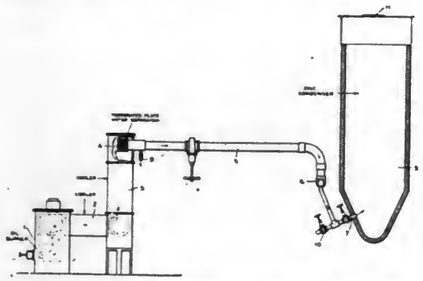
1,815,259. FUEL CONTROL DEVICE FOR GASOLINE AND OIL ENGINES. LELAND KELLY, Port Republic, N. J. Filed Jan. 3, 1928. Serial No. 244,171. 8 Claims. (Cl. 137—152.)

1. In a speed control device for gasoline engines, a body having a passage therethrough, said device being adapted to be positioned between a carburetor and a division of the intake manifold with the passage connecting the two, a shutter in the passage, a spring linked to the



shutter for controlling the movement thereof, and a looped member embracing the spring and adapted to bear thereagainst when the spring has been deformed to a certain extent.

1,815,260. METHOD OF PRODUCING ZINC. FRANK R. KEMMER, Larchmont, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed June 12, 1929. Serial No. 370,221. 3 Claims. (Cl. 75—28.)



1. A method of operating a condenser which includes the steps of forming gaseous combustion products, removing excess water therefrom, and displacing the atmosphere in the condenser by means of said gaseous products.

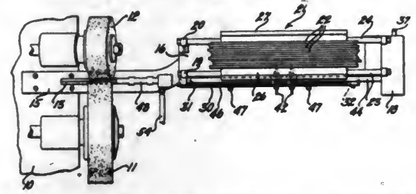
1,815,261. PACKAGE. EDWARD F. KEMP, Somerville, Mass. Filed Mar. 9, 1928. Serial No. 260,316. 3 Claims. (Cl. 206—46.)



1. A package of the character described comprising an article to be vended and a single wrapper completely inclosing the same consisting of a thin flexible sheet made up of three substantially parallel panels extending lengthwise thereof including an intermediate approximately invisible cellulose film-like panel of glass-like appearance and transparency wound lengthwise completely around said article to form a tubular container therefor, and two ornate article-embellishing marginal panel extensions, one at each side of said intermediate panel, having conspicuously distinctive visual characteristics by which they are clearly differentiated from said intermediate panel, said marginal panel extensions being twisted immediately adjacent the opposite ends of said article thereby to secure the wrapper in position on the latter and also provide outwardly flaring rosettes at said opposite ends that are axially alined with said transparents tubular container.

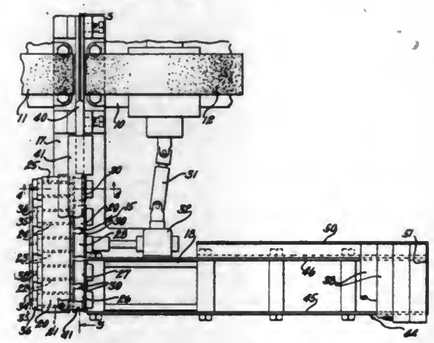
1,815,262. FEEDING MECHANISM. EINER WILLIAM LARSEN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1927. Serial No. 183,330. 6 Claims. (Cl. 51—215.)

1. In a mechanism for feeding articles to a grinding machine, a traveling belt for receiving and advancing an article, a member having a passage therein for guiding the article from the discharge end of the belt to the grinding machine, and means including a passage communicating



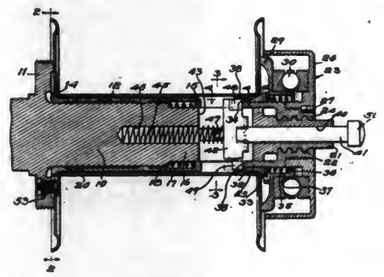
with the guide passage for directing a fluid under pressure to the surface of the article to advance it through said passage.

1,815,263. FEEDING MECHANISM. EINER WILLIAM LARSEN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1927. Serial No. 183,331. 6 Claims. (Cl. 51—215.)



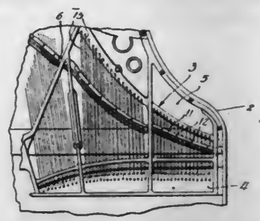
1. In an article feeding mechanism, a pair of magnetic rollers of opposite polarity, a hopper for successively delivering articles to said rollers, and means including a reciprocable bar for driving the rollers to advance an article delivered thereto.

1,815,264. SUPPORTING DEVICE. EINER WILLIAM LARSEN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 25, 1929. Serial No. 349,579. 6 Claims. (Cl. 242—68.)



1. In a device for removably supporting a rotatable object, a support, a member threaded upon the support and engaging the object for preventing displacement of the object with respect to the support, a spring pressed member carried by the support and engaging the side of the threaded member adjacent to the object for automatically locking the threaded member to the support, and means for disengaging the spring pressed member to permit the removal of the threaded member.

1,815,265. PIANO BRIDGE. LLOYD LOAR, Chicago, Ill., assignor to Gulbransen Company, Chicago, Ill., a Corporation of Illinois. Filed July 10, 1929. Serial No. 377,191. 3 Claims. (Cl. 84—213.)



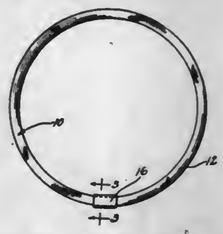
1. In combination in a piano bridge construction, a bridge strip having an abutment element adjacent its front face, a string bearing member seating upon the upper face of the strip in rear of and in contact with said element, and means for exerting pressure on the strings in the direction of the strip and in rear of the bearing member.

1,815,266. HAIR WINDER. CARL MACK, New York, N. Y., assignor, by mesne assignments, to Samuel Bonat and Harry Bonat, constituting the Firm of Samuel Bonat & Bro., New York, N. Y. Filed June 29, 1926. Serial No. 119,358. 4 Claims. (Cl. 132—33.)



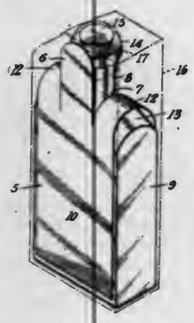
1. In a hair gripping device the combination of a mandrel, a sleeve adapted to cooperate with the mandrel and having a hair embracing portion in the form of a slot, means on said sleeve for forcing the hair into the base of the slot, and means for holding the last named means in adjusted position.

1,815,267. GARTER CONSTRUCTION AND THE LIKE. JAMES H. MACKALL, Akron, Ohio. Filed June 21, 1929. Serial No. 372,673. 6 Claims. (Cl. 241—5.)



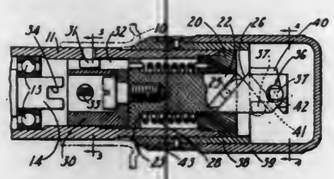
1. A garter of the character stated formed from a section of rubber tubing arranged in circular formation with the ends thereof abutting, a flexible connector inserted into the abutting ends of the tube section for joining the ends of said section, and a flexible sleeve fitted over the abutting ends of said section of rubber tubing to conceal the abutting ends at their juncture.

1,815,268. METHOD OF SADDLING LITERATION UPON BOTTLES. FENTON STANLEY NEWBERY, New Rochelle, N. Y., assignor to American Lithographic Company, Inc., New York, N. Y., a Corporation of New York. Filed June 11, 1929. Serial No. 370,014. 4 Claims. (Cl. 229—89.)



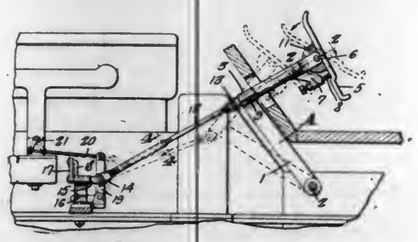
1. A portion of foldable sheet material comprising a plurality of sheets having a tab struck up from some of the sheets and another tab struck up from other of the sheets, when the entire folded structure is bent crosswise of the cuts for the tabs an opening being provided and the tabs having their free ends extending in the same direction, and when the sheet is folded the free ends of the tabs being adapted to lie in opposite directions.

1,815,269. APPARATUS FOR SUPPLYING MATERIAL. ROLAND R. NYDEGGER, Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1930. Serial No. 423,410. 9 Claims. (Cl. 242—68.)



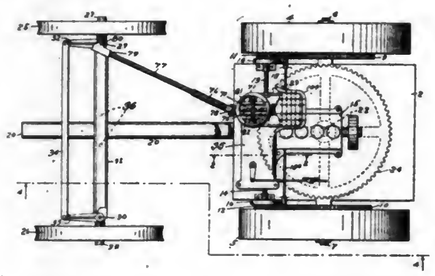
1. In an apparatus for supplying material, a rotatable arbor for supporting a supply of the material, a member for locking the arbor against rotation, and common means for securing the supply of material upon the arbor and for releasing the locking member to permit the rotation of the arbor.

1,815,270. COMBINATION BRAKE AND ACCELERATOR. ANSON E. RECTOR, Savannah, N. Y. Filed Nov. 25, 1929. Serial No. 409,622. 1 Claim. (Cl. 74—81.)



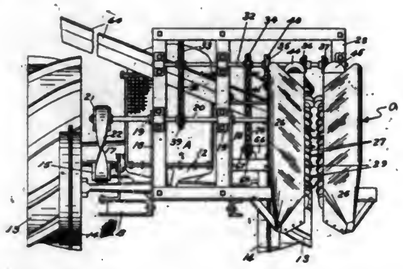
In a motor vehicle, a brake pedal having a tubular part passing through the floor boards, a tiltable foot plate on the rear end of said part, a shaft passing through the tubular part, means for imparting rotary movement to the shaft by the tilting of the foot plate, a telescopic shaft of non-circular shape in cross section, a universal joint connecting the front end of the shaft to the first shaft, a stub shaft, a universal joint connecting the rear end of the telescopic shaft to the stub shaft and means for operating a carbureter valve by the rocking movement of the stub shaft.

1,815,271. TRACTOR. ANDREAN G. RONNING and ADOLPH RONNING, Minneapolis, Minn., assignors, by mesne assignments, to Adolph Ronning; and Adolph Ronning and Jacob A. Ronning trustees of Andrean G. Ronning, deceased, Minneapolis, Minn. Original application filed June 21, 1918, Serial No. 241,133. Divided and this application filed Mar. 23, 1925. Serial No. 17,852. 9 Claims. (Cl. 180—18.)



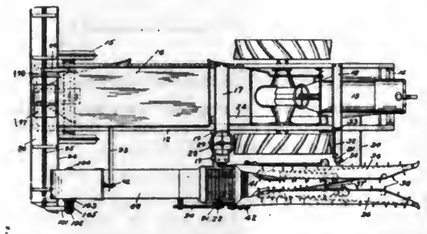
1. In a tractor, a frame; two traction wheels associated with said frame; driving mechanism through which said wheels are driven differentially, so that each may rotate slower than the other; steering mechanism independent of said driving mechanism whereby the tractor may be steered; two brake members associated one with each of said traction wheels; means for interrupting the operation of said steering mechanism; and means for connecting said steering mechanism with said brake members so that either may be applied independent of the other to the traction wheel with which it is associated.

1,815,272. TRACTOR-HARVESTER. ADOLPH RONNING and ERNEST A. HEDENSTROM, Minneapolis, Minn., and ANDREAN G. RONNING, deceased, Minneapolis, Minn., by Adolph Ronning, Minneapolis, and Jacob A. Ronning, St. Paul, Minn., executors. Original application filed Mar. 29, 1924, Serial No. 702,774, now Patent No. 1,660,767, dated Feb. 28, 1928. Divided and this application filed Feb. 27, 1928. Serial No. 257,536. 14 Claims. (Cl. 56—18.)



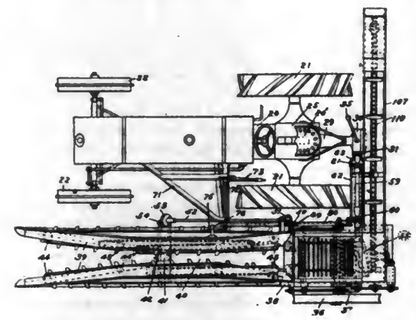
1. The combination with a power unit having ground members adapted to support, propel and steer the same, of an auxiliary frame arranged longitudinally of the power unit and secured thereto, an agricultural implement mounted at the front end of the frame and in advance of the ground members, a container mounted upon the rear end of the frame and rearwardly of the ground members, and a conveying device for conveying material from the agricultural implement to the container.

1,815,273. COMBINATION TRACTOR IMPLEMENT. ADOLPH RONNING, Minneapolis, and ANDREAN G. RONNING, deceased, Minneapolis, Minn., by Adolph Ronning and Jacob A. Ronning, Minneapolis, Minn., executors. Original application filed July 5, 1924, Serial No. 724,442. Divided and this application filed Dec. 19, 1928. Serial No. 327,137. 8 Claims. (Cl. 56—16.)



1. The combination including a tractor, a harvester supported by the tractor and disposed at the side thereof, and means for mounting the harvester to the tractor comprising devices for vertically adjusting either or both ends of the harvester.

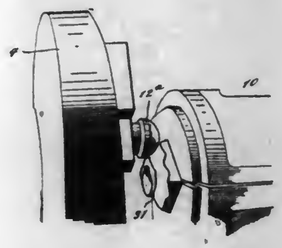
1,815,274. COMBINATION TRACTOR HARVESTER. ADOLPH RONNING, Minneapolis, Minn., and ANDREAN G. RONNING, deceased, Minneapolis, Minn., by Adolph Ronning and Jacob A. Ronning, Minneapolis, Minn., executors. Original application filed Aug. 13, 1923, Serial No. 657,176. Divided and this application filed Dec. 19, 1928. Serial No. 327,138. 2 Claims. (Cl. 56—15.)



1. In combination with a tractor, an implement frame disposed at the side of the tractor, a ground wheel at the rear of the frame, means including a power transmission device for pivotally connecting the rear end of the frame and supporting it with respect to the tractor so that the rear end of the frame is free to move, with its ground wheel, from the pivot connection, and means extending from the tractor to support the forward end of the frame.

1,815,275. METHOD OF CLOSING IN THE ENDS OF A CONDUIT. CORNELIUS R. SADLER, Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 20, 1925. Serial No. 3,692. 5 Claims. (Cl. 78—81.)

3. The method of manufacture of thick walled steel pressure vessels capable of withstanding high fluid pressure of the vessel bursting type, the method comprising, heating a tubular blank to working temperature, applying pressure with planetary motion to the edge only of the extended blank end, regulating that applied pressure so as to limit it to small and continuing amounts in such a manner that the edge is slightly upset at the start, that upset being at an incline toward the extended axis of the

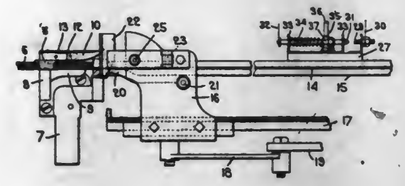


tube thus causing the upset metal to flow and form a radially inwardly directed upset flange, and further upsetting the flange and upset edge by planetary forging in a continuous manner to gradually flow the metal from the upset edge into the flange until said flange closes the tube end forming an upset end wall of the pressure vessel.

1,815,276. PROCESS OF MANUFACTURING SUGAR. CHARLES SCHWIEGER, deceased, Lage, Germany, by Alfred Schwieger, administrator, San Francisco, Calif., assignor, by mesne assignments, to Schwieger Chemical Co., a Corporation of Delaware. Filed Sept. 6, 1927, Serial No. 217,884. Renewed Oct. 7, 1930. 12 Claims. (Cl. 127—48.)

6. In the process of manufacturing sugar, the step of treating sugar juice with ammonium carbonate in addition to the carbonation process.

1,815,277. PILE WIRE LOOM STOPPING MECHANISM. ROBERT SPENDLOVE, Sanford, Me., assignor to Sanford Mills, Sanford, Me., a Corporation of Maine. Filed Feb. 13, 1930. Serial No. 428,004. 13 Claims. (Cl. 139—336.)

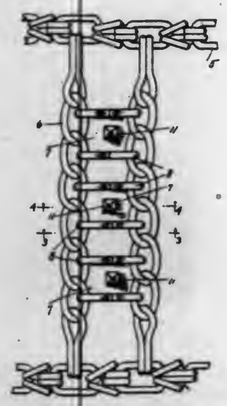


1. A loom for weaving pile fabric comprising bodily movable means for inserting and withdrawing pile wires including a normally depressed latch movable with said means and held elevated by a pile wire when engaged and being withdrawn by said means, and means actuated by the latch to stop the loom when the withdrawing movement of the said inserting and withdrawing means takes place with the latch depressed.

1,815,278. TIRE CHAIN. CHARLES STRACK and ELTON C. STRACK, Random Lake, Wis. Filed Mar. 17, 1930. Serial No. 436,594. 2 Claims. (Cl. 152—14.)

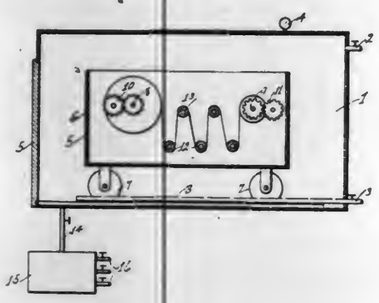
1. A tire chain comprising a pair of spaced side circumferentially extending holding chains and pairs of trans-

versely extending tread chains connected with the side chains, the tread chains of each pair being arranged in



relatively close relation, and a plurality of equidistantly spaced circumferentially extending tread plates connecting the tread chains of each pair together.

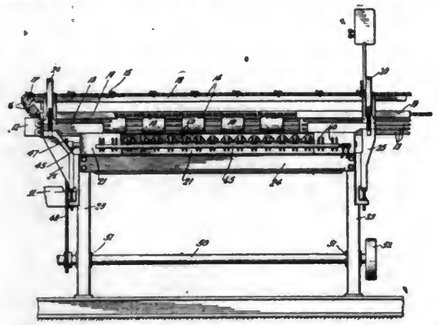
1,815,279. PROCESS OF DEGUMMING SILK. JOKICHI TAKAMINE, Jr., Ridgewood, N. J.; Hilda Takamine, executrix of said Jokichi Takamine, jr., deceased, assignor to Takamine Ferment Company, a Corporation of West Virginia. Filed Nov. 29, 1927. Serial No. 236,525. 8 Claims. (Cl. 8—2.)



2. The process of degumming silk which comprises submerging it in water and subjecting it to heat and pressure and treating it with about one-half of one per cent by weight of neutral soap in solution while agitating the silk.

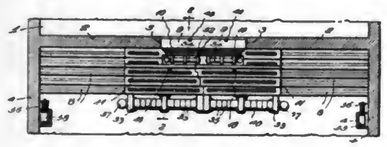
1,815,280. ELECTRIC SOLDERING MEANS. JOHN A. TOLEIK, West Orange, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Original application filed Jan. 30, 1926, Serial No. 84,815. Divided and this application filed Aug. 1, 1927. Serial No. 209,652. 5 Claims. (Cl. 219—44.)

1. In a device of the character described, the combination of a relatively shallow open topped container having sloping side walls and lateral top flanges, an insulation for the bottom of said container, a metallic plate covering said insulation, an insulation for said top flanges, a metallic plate covering said insulation for said top flanges, means for holding said insulation and covering plates in position, a plurality of solder melting units comprising metallic casings having neck portions extending over one of the top flanges of said container and beneath the heat insulation thereof, and electrical resistance elements em-



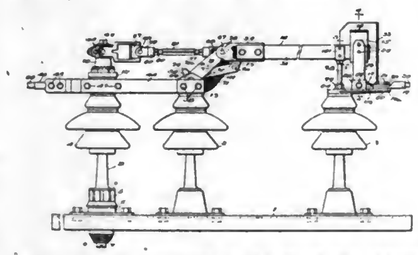
bedded in said metallic casings and passing through said neck and an electrical buss connection to the melting elements of each of said resistance units.

1,815,281. BANK VAULT SAFE. WILLIAM J. H. RUSCHMEYER, Toledo, Ohio. Filed Feb. 24, 1930. Serial No. 430,711. 4 Claims. (Cl. 109—1.)



1. A structure having a wall formed with an entrance intermediate its ends and other walls projecting from the first wall beyond the outer face thereof, tracks being provided between the second mentioned walls and extending across the entrance, inner doors hingedly mounted at opposite sides of the entrance and when closed having portions projecting outwardly and formed with stepped edge faces, means to releasably secure said doors when closed, outer doors slidable along said tracks and having facing edge faces abutting intermediate the width of said entrance when closed, portions of the sliding doors being thickened inwardly to bear against the outer face of the first wall and having stepped inner edge faces abutting the stepped edge faces of the extended portions of the swing doors when the inner and outer doors are closed, portions of the outer doors between the thickened portions being spaced from the inner doors to clear the securing means thereof when the doors are closed, and means to releasably secure the outer doors closed.

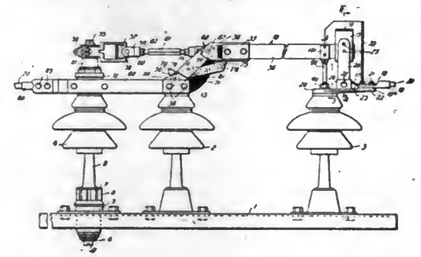
1,815,282. SWITCH. ALFRED ALSAKER and MEINICH SKAU, Chicago, Ill., assignors to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 3, 1927. Serial No. 230,759. 28 Claims. (Cl. 200—48.)



1. In a switch structure of the character described, a blade, a stationary contact, a pivot pin for the blade, a

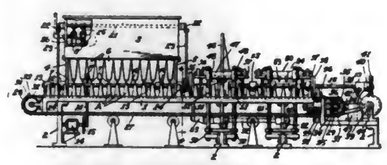
mounting for the pivot end of the blade having linkage permitting the blade to be swung about the pivot pin to engage the stationary contact, and means for moving the blade endwise out of the contact, said linkage collapsing during said movement and being extended during continued movement of said means to return the contact end of the blade to its original distance from the pivot pin.

1,815,283. SWITCH. ALFRED ALSAKER and MEINICH SKAU, Chicago, Ill., assignors to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Original application filed Nov. 3, 1927, Serial No. 230,759. Divided and this application filed Mar. 27, 1929. Serial No. 350,172. 7 Claims. (Cl. 200—48.)



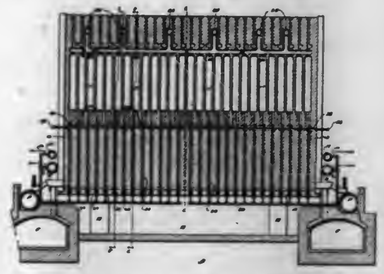
1. In a switch structure of the character described, two spaced insulators, a support on each insulator, one of said insulators being fixed and the other insulator being mounted for oscillatory movement, a second fixed insulator, a contact carried by the second fixed insulator, a blade cooperating with said contact, connections between the blade and the movable insulator for urging the blade toward and away from the contact in accordance with movement of said movable insulator, connections between the blade and the support on the first fixed insulator for opening and closing the blade in accordance with urging thereof away from and toward the contact, said connections including operating links pivoted at one end to the blade and at the other end to the blade support, spacing strips secured to the opposite sides of the support, contact strips secured to the spacing strips, flexible conductors connecting the blade to one end of the contact strips, the other ends of the contact strips being bent towards and into contact with one another, and a terminal lug connected to said other ends of the contact strips.

1,815,284. APPARATUS FOR SEALING CONTAINERS. EDWARD C. ANGELL, New York, N. Y. Filed Mar. 20, 1926, Serial No. 96,128. Renewed Jan. 26, 1929. 7 Claims. (Cl. 226—56.)



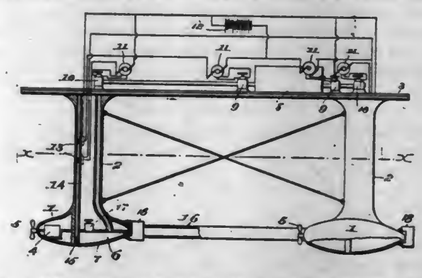
7. In a machine for sealing containers, the combination with means for presenting a container at a certain station, of a pair of closing members at the station, means connected with said members to cause them to be lowered and to advance to engage and collapse the container, said closing members upon further advance being caused to engage the container above the said engaged part by another part of the same members, whereby the closure strip will be sealed.

1,815,285. FUEL GAS DISTRIBUTING SYSTEM FOR COKE OVENS. JOSEPH BECKER, Pittsburgh, Pa., assignor to Koppers Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 11, 1927. Serial No. 225,451. 13 Claims. (Cl. 202—142.)



1. In a coking retort oven, in combination: a series of alternate coking chambers and heating walls therefor arranged laterally of each other in a row; each of said heating walls comprising vertical combustion flues; regenerators, separated by division walls, below said chambers and heating walls and adapted to supply to said combustion flues air, or air and a preheated combustible gas separately and simultaneously, and to remove products of combustion therefrom in alternation; a plurality of individual gas mains extending along said oven lengthwise thereof for feeding along said oven unpreheated combustible gases of different heating characteristics, respectively, for delivery to said combustion flues; a series of sets of leader conduits extending laterally from said gas mains in accessible passageways beneath said refrigerators, each of said sets comprising a plurality of leader conduits communicably connected with said gas mains, respectively, for leading off gases of different heating characteristics from the respective mains for delivery to the combustion flues; ducts respectively individual to and communicating with the respective combustion flues, each of the ducts for the respective flues extending upwardly from the passageways below the regenerators up to the combustion flues and being adapted for communicably connecting the respective flues with a plurality of leader conduits of one of the sets thereof independently of the regenerators; and connections in the passageways below the regenerators for connecting the ducts for each of said combustion flues individually with each of the leader conduits of the set thereof with which they are adapted to communicate.

1,815,286. SEAGOING CRAFT. WILLIAM R. BLAIR, Washington, D. C. Filed May 16, 1930. Serial No. 453,007. 7 Claims. (Cl. 114—0.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



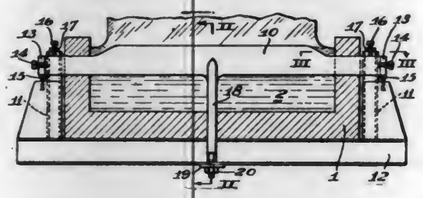
1. A sea going craft comprising a load-carrying superstructure; a plurality of supporting hulls positioned in the water beneath the disturbed sea surface; struts connecting said superstructure and supporting hulls, and adapted to project with said superstructure above the sea surface; and means positively operated with each of said hulls to control their buoyancy individually.

1,815,287. WALKING FIGURE WHEELED TOY. ALBERT BAESCH, St. Louis, Mo. Filed Nov. 25, 1929. Serial No. 409,684. 5 Claims. (Cl. 46—40.)



1. In a wheeled-figured toy, in combination, a body having spaced side walls, arms pivotally attached for oscillation upon said walls, a shaft comprising a crank mounted for rotation in said walls, a disk fixed to the shaft intermediate said walls, and means for alternately oscillating the arms on rotation of the disk, said means including a first link pivoted intermediate its ends upon the body, having slot-and-pin connection with one of said arms, and slotted connection with the crank, a second link pivoted adjacent an end upon the body and at its other end having slot-and-pin connection with the other arm, and a connection between said links.

1,815,288. APPARATUS FOR DRAWING SHEET GLASS. ROBERT L. CLAUSE, Sewickley, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed July 25, 1929. Serial No. 380,920. 8 Claims. (Cl. 49—17.)

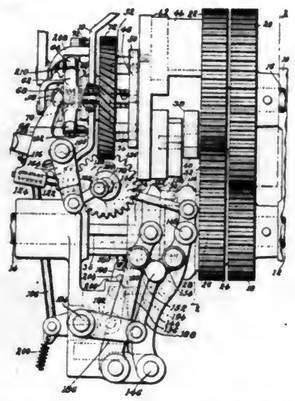


3. In combination in apparatus for forming sheet glass from a bath of molten glass, a metal guide member of heat resisting metal extending horizontally in the bath with its upper edge adjacent the level of the surface of the bath, an anchoring tie extending downward from the member intermediate its ends for preventing the member from bowing up, and means for drawing a sheet continuously from the bath in line with said member.

1,815,289. CONTROLLING SYSTEM. GARRETT P. S. CROSS, Grand Rapids, Mich., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 9, 1925. Serial No. 7,944. 108 Claims. (Cl. 192—149.)

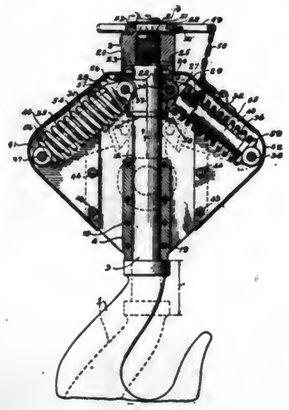
10. A controlling system comprising a driving member, a driven member arranged for connection to and disconnection from the driving member, movable means arranged to vary the connection of the members, and means for successively decreasing and increasing the rate of movement of an element of said connection-varying means in preparation for the variation of connection and for producing an intermediate period of rest of said element.

21. A speed-changing system comprising a driving shaft, a driven shaft, a jaw-clutch interposed between the driving and driven shafts, and automatic means arranged to disconnect the clutch to stop the driven shaft in a predetermined position.



108. A speed-changing system comprising a driving shaft, a projection revoluble by the driving shaft, a driven shaft, connection-varying means between the shafts, apparatus controlling the connection-varying means and including a Geneva gear movable bodily into and out of the path of the projection, a contact member rotatable with the Geneva gear, a spring acting to force the Geneva gear into the path of the projection, a cam acting upon the contact member to move the gear out of the path of the projection, and a cam arranged to assist the spring to move the gear and to prevent opposite movement at times other than during the action of the previously-mentioned cam.

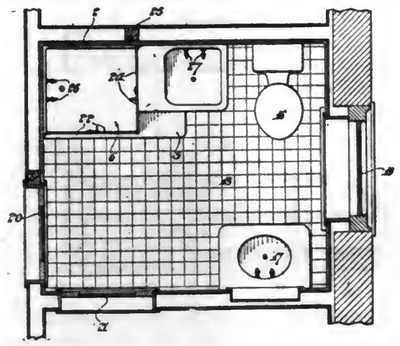
1,815,290. CASING HOOK FOR OIL WELLS. BRYANT DEDMAN, Glen Ellyn, Ill. Filed May 28, 1928. Serial No. 281,148. 16 Claims. (Cl. 294—82.)



1. A block, a hood rod slidable and rotatable in said block, compression springs pivoted at one end to said block on opposite sides of said rod, and means connecting the other ends of said springs pivotally to said rod.

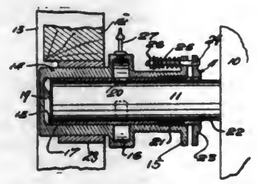
1,815,291. BATHROOM EQUIPMENT. JOSEPH ERLE DRUCKENMILLER, Edge Hill, Pa. Filed Mar. 31, 1930. Serial No. 440,203. 6 Claims. (Cl. 4—146.)

4. A bathroom fixture comprising a tub section having a body portion with a foot extension at an end thereof of less width than said body portion, the walls of said body portions and foot extension forming a re-entrant angle, a step located in the re-entrant angle between the



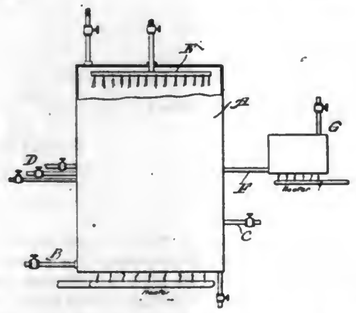
walls of said body section and foot extension and a basin section contiguous with said foot extension and disposed above the top of said tub section.

1,815,292. ELEVATOR PIT BEARING. ORSON W. DUNHAM, Webb City, Mo., assignor to Dunham Bearing & Manufacturing Co., Webb City, Mo., a Business Trust. Filed June 12, 1928. Serial No. 284,712. 5 Claims. (Cl. 308—121.)



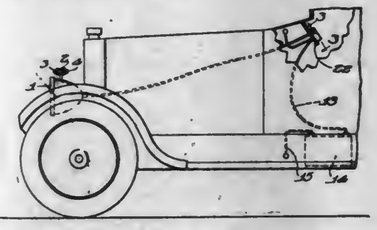
1. A shaft bearing comprising a tubular hub closed at one end having an annular lubricant-containing chamber inward of the closed end of the hub, a Babbitt metal sleeve disposed within and fitting the hub and having a plurality of openings in alignment with the chamber, means for holding the sleeve from rotation with reference to the hub, a packing gland at one end of the hub and sleeve, and means for supporting the tubular hub so that it may be rotatively adjusted upon the shaft into a plurality of different positions.

1,815,293. PROCESS OF REFINING TAR. TALIAFERRO J. FAIRLEY, Sterlington, La., assignor to Louisiana Pine Products Company, Inc., a Corporation of Louisiana. Filed Aug. 3, 1928. Serial No. 297,379. 4 Claims. (Cl. 202—60.)



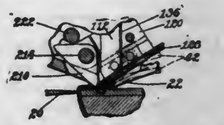
1. The process of recovering tar from a tar containing distillate obtained from the destructive distillation of wood, which comprises diluting the distillate with an organic liquid soluble in and inert with respect to said distillate and of lower specific gravity than the distillate to thereby lower the specific gravity of the mass, subjecting the diluted distillate to a washing fluid insoluble in and inert with respect to the diluted distillate and stratifying the diluted distillate separating out the layer of washed distillate and heating the washed distillate to drive off any moisture and the lower boiling fractions to recover the tar.

1,815,294. SAFETY DEVICE FOR AUTOMOBILES. HAROLD GILDNER, Sheboygan, Wis. Filed Dec. 30, 1927. Serial No. 243,631. 5 Claims. (Cl. 240—37.1.)



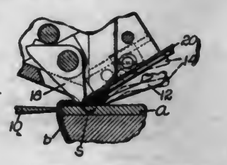
1. A safety device for automobiles comprising two main headlights, an auxiliary headlight associated with each main headlight and normally inoperative and means for automatically bringing the auxiliary headlight associated with either main headlight into operation when the main headlight with which it is associated ceases to operate.

1,815,295. MACHINE FOR INSERTING FASTENINGS. GEORGE GODDU, Winchester, Mass., assignor to The United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 29, 1927 Serial No. 209,299. 63 Claims. (Cl. 1—20.)



1. In a machine of the class described, the combination with shoe-positioning means, of means for fastening the upper of a shoe to the sole, said upper-fastening means comprising a driver movable in a direction inclined outwardly toward the edge of the sole to drive a fastening through the upper and into the sole and a deflector arranged to engage different portions of the fastening successively in the driving operation, before the different respective portions enter the sole, to curve them inwardly away from the edge of the sole.

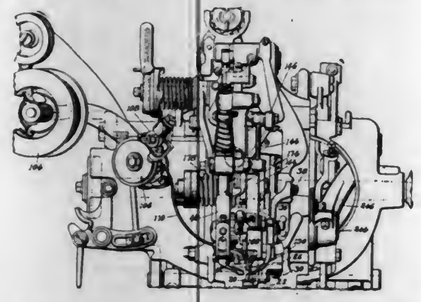
1,815,296. MANUFACTURE OF SHOES. GEORGE GODDU, Winchester, Mass., assignor, by mesne assignments, to The Littleway Process Company, Boston, Mass., a Corporation of Massachusetts. Original application filed July 29, 1927, Serial No. 209,299. Divided and this application filed Jan. 21, 1930. Serial No. 422,452. 18 Claims. (Cl. 12—142.)



1. That improvement in methods of fastening an upper to a sole which consists in driving a metallic fastening

through the upper and into the sole by force applied in a direction inclined outwardly toward the edge of the sole, and by engaging the fastening in the driving operation at the same side of the work from which it is driven deflecting it progressively in a curved path leading inwardly away from the edge of the sole to anchor it.

1,815,297. MACHINE FOR SHAPING UPPERS OVER LASTS. GEORGE GODDU, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed July 29, 1927, Serial No. 209,299. Divided and this application filed Jan. 21, 1930. Serial No. 422,453. 34 Claims. (Cl. 12—2.)



1. A machine of the class described having, in combination, means for subjecting an unlasted portion of an upper to lasting strain to shape it over a last and for positioning it in lasted relation to a sole on the last, and means for fastening the upper in lasted position comprising mechanism for driving a fastening through the upper and into the sole and for directing the fastening substantially throughout its length in a curved path leading inwardly away from the edge of the sole to anchor it in the sole.

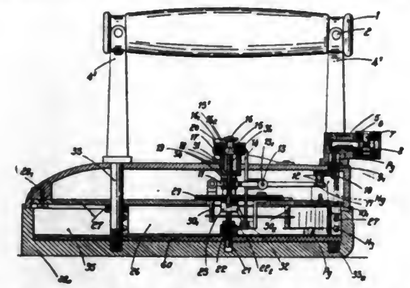
1,815,298. MANUFACTURE OF SHOES. GEORGE GODDU, Winchester, Mass., assignor, by mesne assignments, to The Littleway Process Company, Boston, Mass., a Corporation of Massachusetts. Original application filed July 29, 1927, Serial No. 209,299. Divided and this application filed Jan. 21, 1930. Serial No. 422,454. 11 Claims. (Cl. 12—145.)



1. That improvement in methods of lasting shoes which consists in conforming an unlasted portion of an upper to the shape of a last and laying its margin inwardly over a sole on the last, and while holding the upper in lasted position fastening it initially, yet permanently, to the sole by a metallic fastening anchored within the body of the sole by curvature thereof in a direction away from the edge of the sole.

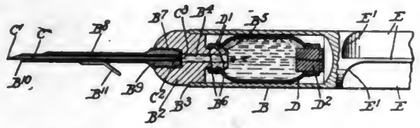
1,815,299. AUTOMATIC TEMPERATURE REGULATOR. ERNEST GREBY, Issy-Les Moulineaux, France, assignor, by mesne assignments, to Geo. M. Cressaty, Paris, France. Filed Aug. 11, 1924, Serial No. 731,496, and in France June 6, 1924. Renewed Oct. 16, 1928. 21 Claims. (Cl. 200—139.)

1. In a thermostatic circuit controller, a circuit controlling device including a movable member, an actuated member associated with the movable member, a thermo-sensitive element, a slide actuated by the thermo-sensitive element, an adjustable abutment on the actuating



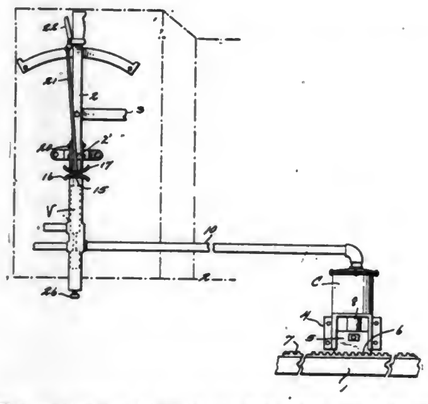
member engageable by the slide whereby to effect movement of the actuating member and the movable member for opening the circuit controlling device.

1,815,300. HYPODERMIC BULLET. BARNETT W. HARRIS, New York, N. Y. Filed June 21, 1928. Serial No. 287,115. 11 Claims. (Cl. 102—26.)



1. In a hypodermic bullet, a bullet body, a needle forwardly projecting therefrom, a container within the bullet body, adapted to contain a chemical charge, a closure normally interposed between such container and the needle, and means, responsive to the impact of the bullet against its target, for opening such closure and for permitting the escape of the charge through the needle.

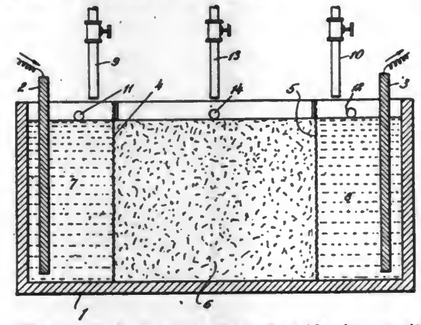
1,815,301. LOCKING MECHANISM FOR REVERSE GEARS OF LOCOMOTIVES. GEORGE W. HARWARD, Eldon, Iowa. Filed July 3, 1928. Serial No. 290,164. 1 Claim. (Cl. 121—40.)



The combination with the rod and operating lever comprised in a reverse gear mechanism, of a slidable valve, an intake pipe, an exhaust pipe, a discharge pipe, and locking means connected to said discharge pipe, said valve comprising an elongated cylinder having an intake port, an exhaust port and a discharge port, a pair of spaced pistons in said cylinder, said pistons being arranged for

movement within the cylinder to automatically close the exhaust port when the pistons are urged downwardly and to automatically open the exhaust port and close the intake port when the pistons are urged upwardly, a stem secured to one of said pistons, an arcuate head disposed across the outer end of said stem, a complementary arcuate member slidably mounted on said operating lever, and adjustable spring engaging means in said cylinder, said engaging means being adapted to urge the cylinders upwardly to maintain slidable contact between the arcuate members.

1,815,302. METHOD OF PRODUCING ALKALOIDS. ANTON HOOSTAD, Jr, St. Paul, Minn., assignor to The Northwest Paper Company, Cloquet, Minn., a Corporation of Minnesota. Filed Mar. 17, 1926. Serial No. 95,203. 3 Claims. (Cl. 204—9.)



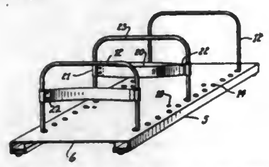
1. The method of extracting alkaloids from suitable starting material, and simultaneously partially separating the alkaloids from one another, which comprises passing an electric current through an aqueous suspension of the starting material, and correlating the current density in the liquor and the hydrogen ion concentration of the liquor.

1,815,303. HYDRO-SPEED SHIP. MAX KLOEN, Jamaica, N. Y. Filed Aug. 28, 1929. Serial No. 388,893. 7 Claims. (Cl. 114—66.5.)



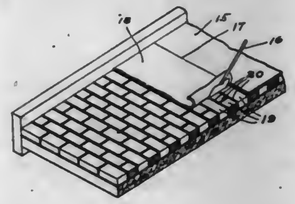
1. A vessel having a hull of greater width than depth forming a water displacement of greater width than depth, said hull composed of a longitudinally extending upper face convex in cross section, a plurality of longitudinally extending lower faces concave in cross section to form a deep centrally extending stabilizing fin, two lateral fins of less depth, the concave faces which form the outer faces of the lateral fins forming with said upper face diminished longitudinally extending lateral edges, air propellers for propelling said vessel, and means for guiding said vessel.

1,815,304. BOOKSTAND. ERIK L. KRAG, Chicago, Ill. Filed Jan. 27, 1930. Serial No. 423,667. 7 Claims. (Cl. 211—43.)



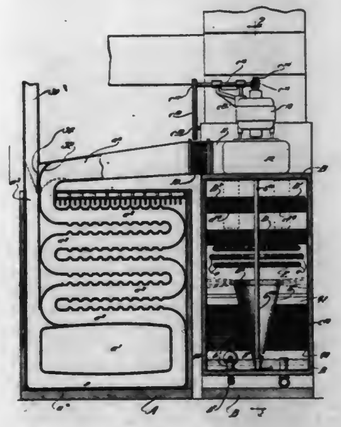
4. A book stand comprising a top plate, supports for the plate extending along and beneath two opposite edges of the plate, said supports comprising two spaced strips, said plate having a row of spaced openings over each support, and the upper strip of each support having a row of openings registering vertically with the corresponding openings in the plate, a plurality of U-shaped book supports mounted with their legs in said openings, a yielding resilient band extending across one of said supports, and one end being fastened to one of the legs of the support.

1,815,305. ADHESION PREVENTING SUBSTANCE AND METHOD OF USING THE SAME. THEODORE L. LAW, Lorain, Ohio, assignor of one-half to Montford Blake and one-half to Robert L. Beck, Cleveland, Ohio. Filed Sept. 24, 1930. Serial No. 484,132. 4 Claims. (Cl. 94—22.)



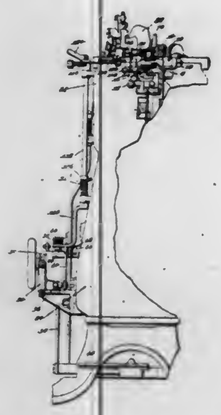
1. A method of paving which comprises the steps of laying the paving units in spaced relation, applying an adhesion preventing substance to the surface thereof, applying the binder material in large excess so as to form a surface sheet over the paving, and stripping the surface sheet at the top surface of the paving units, leaving the binder in the space between the units flush with the surface.

1,815,306. AIR SYSTEM. GEORGE R. LAWRENCE, Chicago, Ill., assignor to Lawrence Development Co., Detroit, Mich., a Corporation of Michigan. Filed Apr. 23, 1926. Serial No. 104,243. 10 Claims. (Cl. 183—18.)



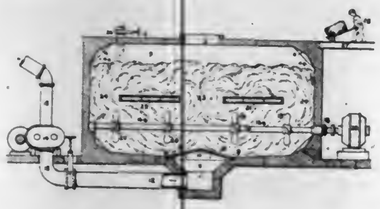
1. In an air supply system for buildings, the combination of a distributing duct, a heater connected to discharge air to said duct, an air-washer embodying a driven element, means for forcing air successively through the washer, the heater and said duct, and a motor for driving the air forcing means and washer.

1,815,307. SEWING MACHINE. BERNARD T. LEVEQUE, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Apr. 26, 1923, Serial No. 634,751. Divided and this application filed June 24, 1927. Serial No. 201,171. Renewed Oct. 15, 1930. 14 Claims. (Cl. 112—202.)



1. A sewing machine having, in combination, stitch forming mechanism, stop mechanism under the control of the operator for stopping the machine at will with the parts in a predetermined position, a thread cutter, mechanism for automatically actuating the cutter upon stopping the machine, and means under the control of the operator for rendering said automatic mechanism inactive to cut the thread upon the stopping of the machine by said stop mechanism.

1,815,308. METHOD AND MEANS FOR DISINTEGRATING PULP STOCK. HARRY LIEBECK, Swarthmore, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Aug. 10, 1929. Serial No. 384,820. 14 Claims. (Cl. 92—20.)



1. The herein described method for disintegrating pulp in the making of paper pulp stock for paper making machines, which consists in creating rapidly moving opposed currents of paper making pulp and water and thereby causing violent intermingling and agitation of the said currents of paper pulp and water, causing the violently agitated fluid bodies thus provided to act upon a mass of pulp material in a more or less dry condition and thereby induce a preliminary softening and disintegration thereof and for carrying the said pulp into circulation, thereafter subjecting the softened pulp to a mechanical disintegrating action to more thoroughly break down the pulp and cause it to be intermingled with other fluid content to form a more or less homogeneous mixture, and continuing the treatment of mechanical disintegration whereby a desired subdivision of the pulp is obtained.

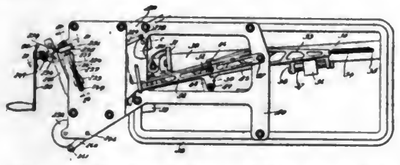
4. In apparatus of the character stated, the combination of a fluid containing tank having an inlet at the top and an outlet below the fluid level therein, oppositely acting disintegrating propellers rotating within the tank for producing violently opposed currents of the fluid therein, and wherein further, the tank is provided with transverse baffle plates above the propellers and said baffles separated at the middle portion of the tank and from the ends of the tank, whereby the circulating fluid is commingled and forced upward at the middle of the tank and between the baffle plates.

1,815,309. PENCIL. JOHN P. LYNN, Chicago, Ill., assignor to Dur-O-Lite Pencil Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 25, 1929. Serial No. 342,894. 3 Claims. (Cl. 120—38.)



1. A pencil having a body provided with a chamber which opens at the upper end thereof, and a closure for the chamber applied over the upper pencil end comprising an eraser supporting ferrule having a plurality of indented teeth which are adapted to be received within threads extending spirally around the exterior of the pencil body adjacent its upper end, there being a stop shoulder for determining the final position of the ferrule when applied over the pencil end, said ferrule being relatively thin-walled of a substantially uniform interior diameter throughout the extent thereof, whereby the eraser is adapted to abut the said pencil end to assure proper positioning thereof with respect to its supporting ferrule.

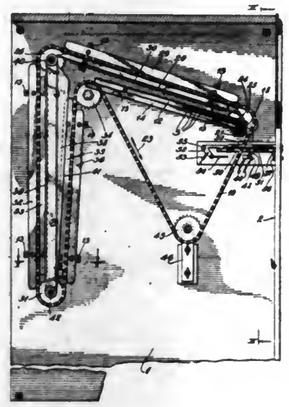
1,815,310. REGISTERING SCALE. OTTO MALCHER, Chicago, Ill. Filed Nov. 4, 1921. Serial No. 512,784. 105 Claims. (Cl. 265—5.)



1. The combination with a weight controlled scale beam, of a device connected with said scale beam and movable relative thereto, and means for yieldingly holding said device in a definite position relative to said scale beam against the action of limited force but arranged to move under force in excess of the limited amount.

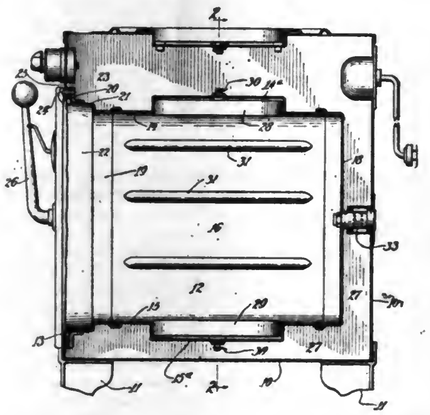
1,815,311. APPARATUS FOR DISPLAYING RUGS AND THE LIKE. JAMES NORMAN HARRIS, Queens Village, N. Y. Filed Nov. 9, 1929. Serial No. 405,917. 8 Claims. (Cl. 40—36.)

1. In an apparatus for displaying rugs and the like, a pair of spaced elongated supports, a plurality of carrier rods for the rugs or the like to rest at their ends on said supports, said supports being located at such a height that the said articles carried by the rods can be substantially suspended from the rods, supporting means for the rods located immediately above said pair of elongated supports and extending from substantially one end of each of said pair of supports to substantially the opposite end thereof, a pair of belts respectively adjacent said pair



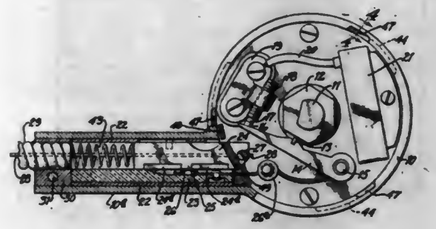
of supports for successively transferring the foremost of said carrier rods from said pair of supports to said supporting means, moving the same, supported by the latter, to adjacent the opposite ends of said pair of supports, and there replacing the carrier rods on the pair of supports, and pulleys supporting said belts, including a pair of pulleys the line of the axes of which passes close to those ends of said elongated supports from which the carrier rods are transferred to said supporting means.

1,815,312. OVEN CONSTRUCTION. ROSCOE S. HEISE, Dayton, Ohio. Filed July 5, 1928. Serial No. 290,315. 10 Claims. (Cl. 126—275.)



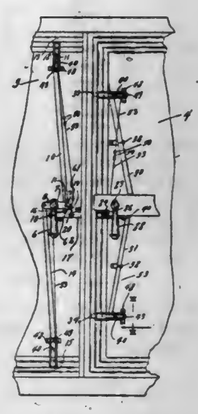
1. In an oven lining of sheet aluminum, front, back, top, bottom and side sections, the top, bottom and side sections being secured together by longitudinal body seams, and the front and back sections being secured to the top, bottom and side sections by transverse body seams, the meeting sections lying in substantially the same plane.

1,815,313. DISTRIBUTOR AND LOCK THEREFOR. ORVILLE S. HERSHEY and ERNEST J. VAN SICKEL, Chicago, Ill., assignors, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Nov. 7, 1928. Serial No. 317,822. 8 Claims. (Cl. 200—19.)



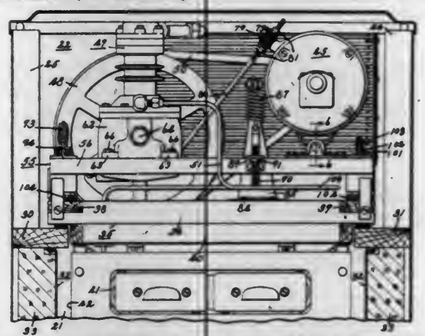
1. In a distributor, an interrupter, a metal casing for said interrupter, a metal cover for said casing, said casing having a lateral tubular extension, and means operable through said extension for rendering said interrupter inoperative, said means including a spring-operated plunger slidable within said extension and adapted when in a neutral position to render said interrupter operable and when in either its outer position or inner position to render said interrupter inoperative.

1,815,314. BURGLARPROOF LOCK. HAROLD KELLS and CHARLES F. MEILINK, Toledo, Ohio, assignors to The Meilink Steel Safe Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 18, 1927. Serial No. 176,314. 8 Claims. (Cl. 109—3.)



1. A wall having an opening, a closure for the opening, a plurality of bolts movable to locking position relatively to the closure and wall for anchoring the closure in the opening, bolt controlling mechanism for operating the bolts to manual locking position, shiftable means trippable to direct shifting of the means into bolt locking position directly for a plurality of bolts, and flexible resisting means for overcoming the shiftable means for holding said shiftable means clear of the bolts, said resisting means being susceptible to disturbance upon tampering with the controlling mechanism for thus releasing the shiftable means to have said means effective for directing and holding directly a plurality of the bolts in locking position.

1,815,315. REFRIGERATING APPARATUS. CHARLES F. KETTERING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Apr. 13, 1927. Serial No. 183,459. 5 Claims. (Cl. 248—16.)



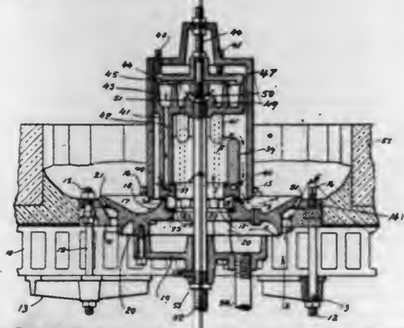
5. In combination, a system comprising a driven member and a driving member therefor, common means for supporting said members, the movement of said members, during normal operation, setting up oscillation of the system as a whole about an axis, and supporting and bracing means for resiliently supporting the system substantially at said axis and for yieldingly limiting the lateral movement of said system.

1,815,316. LADDER. CHARLES G. KINGSBURY, San Francisco, Calif. Filed Nov. 27, 1928. Serial No. 322,141. 7 Claims. (Cl. 228—31.)



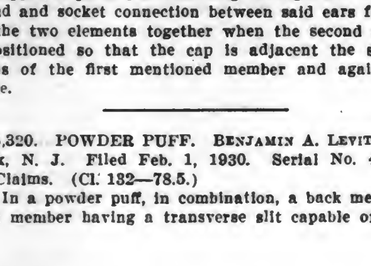
1. A ladder comprising steps, means to support said steps, prop means to support said ladder vertically from a point in offset laterally spaced relationship on either side of the transverse center of the ladder base, and a frame co-operating with said prop whereby the thrust of the support is directed on both sides of the transverse center of an upper portion of the ladder.

1,815,317. HEAT GENERATOR. PAUL M. KLEIN, Cedarhurst, N. Y. Filed Nov. 5, 1928. Serial No. 317,459. 7 Claims. (Cl. 158—53.)



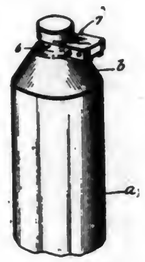
1. In an oil burner, a generator or converter for changing liquid into gaseous fuel, comprising a substantially closed chamber having a removable cover and downwardly extending gas discharge means, an air conveying member for delivering primary air to the discharging gas, said member adapted to substantially completely surround and cover said generator while being spaced therefrom, secondary air conveying means disposed below the generator and adapted to convey secondary air to the gas and air mixture, and tertiary air conveying means disposed externally to said generator adapted to deliver tertiary air for completing combustion.

1,815,318. VAPORIZER. WILLIAM C. KOCH, St. Paul, Minn. Filed Mar. 1, 1928. Serial No. 258,353. 5 Claims. (Cl. 167—3.)



3. The vaporizer specified in claim 2 in which said receiver projects downward from the bottom of said boiler and said connection communicates with said receiver at a point removed from the boiler.

1,815,319. SEALING DEVICE FOR SOFT METAL TUBES. STANLEY O. LAWRENCE, Chicago, Ill. Filed Apr. 18, 1928. Serial No. 270,818. 1 Claim. (Cl. 221—60.)



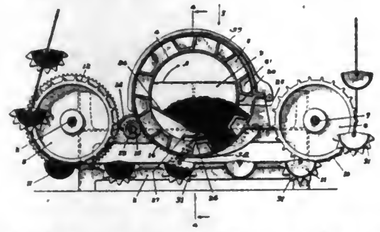
A sealing device for a container having a discharge nipple, comprising an elongated element formed of sheet metal and provided at one end thereof with an upwardly extending pivot ear and at its other end with means whereby it may be removably secured to the nipple, a second elongated element formed also of sheet metal and provided at one end with a depending pivot ear adapted to lap the pivot ear of the first mentioned element and at its other end with a cap for closing the open end of the nipple, a pivot pin extending through the ears, and a stud and socket connection between said ears for locking the two elements together when the second element is positioned so that the cap is adjacent the securing means of the first mentioned member and against the nipple.

1,815,320. POWDER PUFF. BENJAMIN A. LEVITT, Newark, N. J. Filed Feb. 1, 1930. Serial No. 425,289. 4 Claims. (Cl. 132—78.5.)

4. In a powder puff, in combination, a back member, a front member having a transverse slit capable of allowing the passage of back member therethrough, stitching connecting the entire edges of said two members with the raw edges of said members concealed within the device, a pocket formed by said back member above the exposed face of said front member and capable of receiving a portion of the device when it is in folded position, and a transverse line of stitches connecting the said members and concealing said slit.

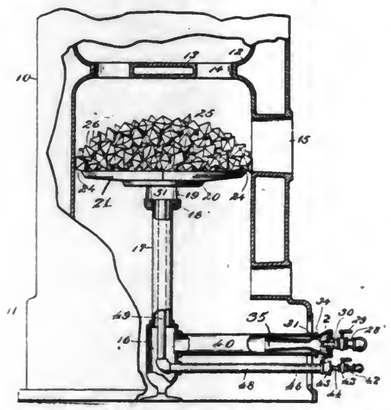


1,815,321. MACHINE FOR MEASURING AND FEEDING GRANULAR MATERIAL. THOMAS MARTIN, Hoopeston, Ill., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Filed Mar. 9, 1925. Serial No. 14,102. 13 Claims. (Cl. 221—106.)



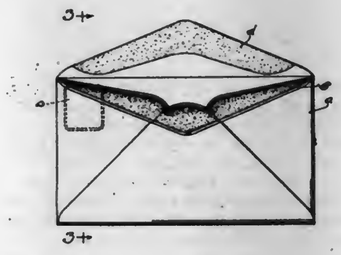
12. An apparatus for measuring and feeding granular material comprising a rotary member consisting of open compartments made up of segments and radial walls extending from the segment edges that are parallel to the axis of the rotary member thus dividing it into a plurality of spaced measuring compartments open at top and bottom, a hopper member forming a bearing around which said rotary member revolves and from which each compartment receives a charge of material in its movement thereround, a segment of a cylindrical wall positioned inside the said rotary member and spaced therefrom to form a by-pass for the free movement of excess material moving from the source of supply when a charge is separated therefrom whereby the said excess material may flow into either of two adjacent compartments.

1,815,322. GAS COMBUSTION APPARATUS. JOHN F. MEADER, New York, N. Y. Filed Dec. 6, 1927. Serial No. 238,146. 4 Claims. (Cl. 158—7.)



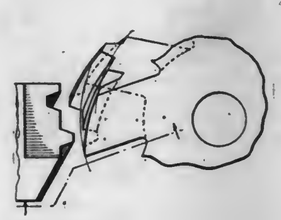
1. A gas-fired furnace having firebox walls enclosing the combustion space, a substantially imperforate metallic table mounted horizontally in the combustion space at such height as to leave chambers of substantial depth both below and above the table, said table being constructed in relation to the firebox walls to leave an upflow passage substantially peripherally around the table, a gas-air conduit arranged centrally in the lower chamber to deliver flame upwardly to impinge directly against the central portion of the under side of the table to maintain the central portion of the table at high temperature, and a firebed of refractory radiant bodies piled upon said table in loosely assembled relation to receive heat and become incandescent and radiate to the heat absorbing surfaces of the upper chamber.

1,815,323. ENVELOPE. HARRY F. NILES, Chicago, Ill. Filed May 22, 1929. Serial No. 365,036. 4 Claims. (Cl. 229—80.)



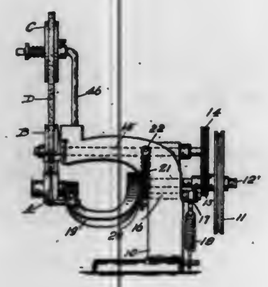
3. As a new and useful article of manufacture, an envelope having an imperforate portion thereof adapted to be overlapped by the sealing flap depressed and coated with an adhesive to co-operate with the adhesive on the sealing flap, the depression being formed without reducing its thickness.

1,815,324. METHOD OF MAKING MILLING CUTTERS. CARL G. OLSON, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed Aug. 9, 1927. Serial No. 211,725. 15 Claims. (Cl. 76—101.)



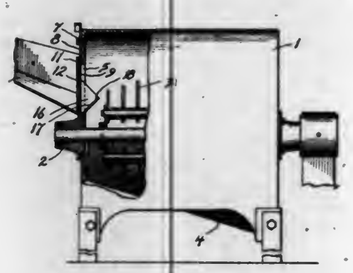
1. The method of producing cutters and the like consisting in rotating the work, presenting a tool to it with its cutting edge askew to the work axis, and moving the tool along an orbit tangential to the work and enveloping it.

1,815,325. SEAM FORMING AND STAYING MACHINE. GEORGE G. PERKINS, Lynn, Mass. Filed Dec. 31, 1928. Serial No. 329,442. 7 Claims. (Cl. 154—42.)



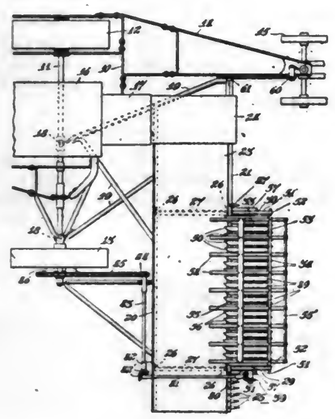
1. A seam pressing and staying device comprising a forming roll rotatably driven from a suitable source of power, a staying tape fed from a roll secured to the frame of the machine, a support for the seamed material, a shaft supported on a U-shaped frame, a central roll loosely mounted on a shaft for pressing down the seam, flexible side rolls also mounted on the shaft with sufficient clearance in relation to the adjacent members for pressing down the tape on both sides of the seam, a spring for putting the roll under pressure, an adjustable stop in the frame of the machine in relation to the forming roll to prevent the tape from being carried along with the rotation of the said forming roll, a swinging arm, and a guide on the arm for directing the tape.

1,815,326. GRINDER. RALPH PRATER, Oak Park, Ill. Filed Aug. 21, 1929. Serial No. 387,518. 3 Claims. (Cl. 83—44.)



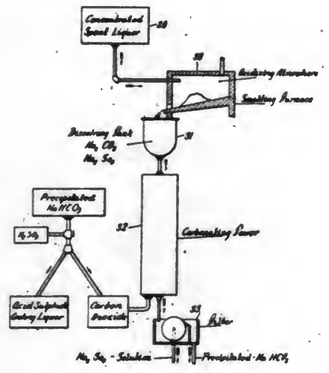
1. In a grinder the combination with a feed hopper, of a transversely disposed upwardly extending lip member at the discharge end of said hopper, and a transversely disposed downwardly extending lip member adjacently spaced inwardly of the hopper from said upwardly extending lip member and cooperating therewith to control the feed of material from said hopper, one of said lip members having an indentation at the feeding edge thereof, and means whereby one of said lip members is vertically adjustable with respect to the other lip member to adjust said feed.

1,815,327. PICK-UP ATTACHMENT FOR HARVESTER THRASHERS. CLEMMA R. RANEY, Riverside, and MELVILLE J. MITCHELL, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Sept. 30, 1927. Serial No. 222,960. 19 Claims. (Cl. 56—364.)



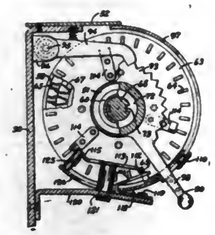
1. A pick-up attachment for the platform of a harvester thrasher, said attachment comprising frame members adapted for connection to the platform and to extend in advance thereof, a raking device carried by said members, a grain deck for said raking device, and a yielding packer to pack the grain against the deck and the platform.

1,815,328. PROCESS OF RECOVERING AND UTILIZING THE VALUABLE COMPOUNDS IN SPENT COOKING LIQUORS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Original application filed Nov. 23, 1927, Serial No. 235,333. Divided and this application filed Jan. 15, 1929. Serial No. 332,724. 8 Claims. (Cl. 23—48.)



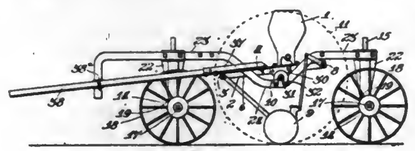
1. A process which comprises smelting the inorganic content of spent cooking liquor containing sodium-sulphur compounds in an oxidizing atmosphere to produce a smelt containing sodium carbonate and sodium sulphate, forming an aqueous smelt solution, carbonating the smelt solution to precipitate sodium bicarbonate, and removing the precipitated bicarbonate.

1,815,329. CASH REGISTER. WILLIAM H. ROBERTSON, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed July 9, 1925. Serial No. 42,512. 18 Claims. (Cl. 235—9.)



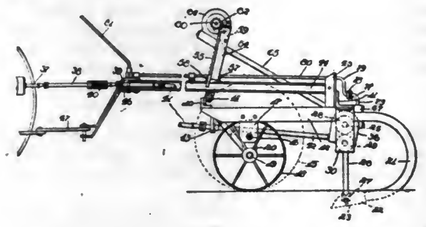
1. In a machine of the class described, a casing, a totalizer element, a movably mounted cover plate for the totalizer element, stops movably mounted in said element, and means operated by said cover plate for projecting any selected stop into functioning position.

1,815,330. DUPLEX GRAIN DRILL STRUCTURE. CHARLES W. ROBINSON, Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill., a Corporation of New Jersey. Filed July 13, 1929. Serial No. 377,997. 9 Claims. (Cl. 97—235.)



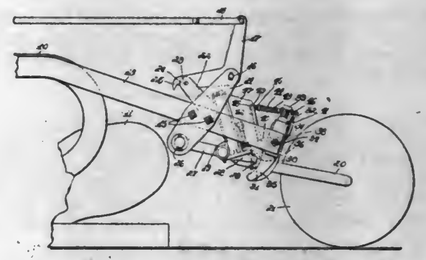
1. A duplex implement comprising two implement frames positioned side by side, a hinge pivotally connecting said frames at the adjacent sides, wheels mounted at the outer ends of the frames and a carriage supporting the connected sides, said carriage comprising a frame having side bars attached to the implement frames adjacent the hinge, and trucks mounted under the carriage frame.

1,815,331. POWER ACTUATED AGRICULTURAL IMPLEMENT. CHARLES W. ROBINSON, Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill., a Corporation of New Jersey. Filed July 28, 1930. Serial No. 470,213. 10 Claims. (Cl. 97—42.)



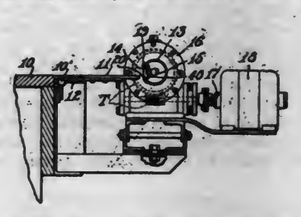
1. A rotary rod weeder comprising a supporting frame structure, beams attached to said structure and rotatably supporting a weeder rod, a driving shaft mounted on the frame structure, means for operatively connecting said shaft and the weeder rod, a draft frame hinged to the frame structure, said frame extending forwardly and being adapted to be secured to a tractor drawbar, means for adjusting the relative angular position of the frame structure and the draft frame whereby the position of the weeder rod with respect to the soil level may be adjusted, and power transmitting means adapted to be connected to a tractor power take-off and connected to said adjusting means and the driving shaft.

1,815,332. CASTER WHEEL LOCK FOR PLOWS. ARTHUR A. SCARLETT, Hamilton, Ontario, Canada, assignor to International Harvester Company, Chicago, Ill., a Corporation of New Jersey. Filed July 30, 1930. Serial No. 471,711. 4 Claims. (Cl. 97—127.)



1. A caster wheel attachment for plows comprising a rearwardly extending bar attached to the plow beam, a caster wheel supporting member mounted on a linkage connected to said bar for vertical movement with respect thereto, power operated means for moving said member, a caster wheel axle swiveled in said member on an upwardly extending axis, said axle having a rearwardly extending portion on which a caster wheel is mounted, and a locking member attached at the rear of the bar, said member having a notched portion attached to engage the caster axle and hold it against swiveling movement when the plow is in operative position.

1,815,333. RUG ROLLING MACHINE. PASCAL J. SHAMPAY, Indianapolis, Ind. Filed July 13, 1928. Serial No. 292,372. 13 Claims. (Cl. 242—55.)

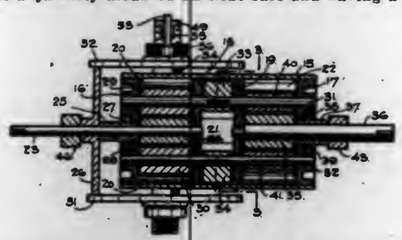


1. Means for winding articles into rolls, comprising a rotatable core, and pins permanently carried by said core for engaging one edge of such article and exerting a drawing force thereon at right angles to the axis of the core, said engaging pins being so supported on the core as to yield axially of the core when the wound article is withdrawn.

1,815,334. VARIABLE SPEED MECHANISM. LESLIE MITCHELL SHERIDAN, Coppercliff, Ontario, Canada. Filed May 3, 1930. Serial No. 449,584. 1 Claim. (Cl. 74—34.)

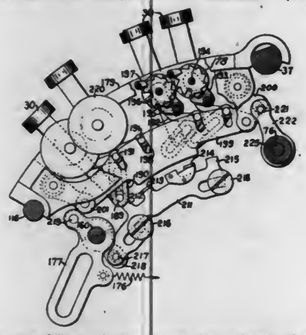
A variable speed mechanism comprising a driving shaft and a driven shaft journalled within the end walls of a cylindrical casing and intermediate walls therein supporting the ends of said shafts and sun gears fixedly secured to said shafts coacting with a plurality of planet gears fixedly secured to gear shafts and eccentric balance weights secured to said shafts intermediate of said planet

gears and a friction wheel secured to said driving shaft and a friction ring encircling said casing and a slidable frame adjustably mounted on slide bars and having a pair



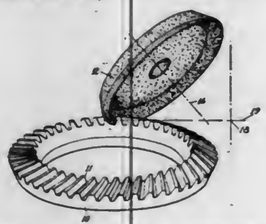
of friction wheels mounted thereon spring held into engagement with said first named friction wheel varying the rotative speed of the casing in relation to the speed of the driving shaft.

1,815,335. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Jan. 19, 1924, Serial No. 687,305. Divided and this application filed Apr. 9, 1927. Serial No. 182,370. 17 Claims. (Cl. 235—6.)



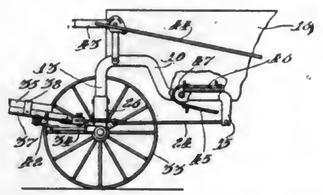
17. In a machine of the class described, the combination of a settable member; a counter; normally ineffective operating means for the counter; a driver which ineffectively actuates the operating means; power-transmitting means releasably connected with the driver; means shiftable into and out of effective position relatively to the operating means, to render the latter effective; an adjustable device; means actuated by the adjustable device when shifted to one of its positions, to disengage the connection between the power-transmitting means and the driver; and means to automatically restore such connection.

1,815,336. METHOD AND APPARATUS FOR GRINDING GEARS. BERNARD E. SHLESINGER, Irondequoit, and THOMAS M. DURKAN, Rochester, N. Y., assignors to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Feb. 28, 1929. Serial No. 343,329. 17 Claims. (Cl. 51—278.)



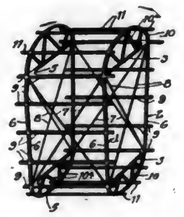
1. The method of grinding a longitudinally curved tooth gear which consists in rotating a grinding wheel on its axis while moving the wheel continuously in a closed path and imparting simultaneously to the gear a continuous rotary motion in such timed relation to the last named movement of the wheel that the gear is continuously indexed.

1,815,337. SPREADER BODY. ERNEST C. SMITH, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed July 21, 1928. Serial No. 294,382. 5 Claims. (Cl. 280—111.)



1. A manure spreader comprising, in combination, a load supporting body, upwardly bowed members rigid with the body at its forward end, a transverse strut rigid with the forward ends of said members and extending between them, an axle construction having spaced portions embracing the strut, means rigid with the strut at its central portion for rockably supporting the strut relative to the axle construction, a draft member rigid with the strut and positioned below the axle, a draft tongue connected to the draft member forwardly of the axle, and rearwardly diverging connecters attached to the draft member and the rear ends of the bowed members.

1,815,338. DIRIGIBLE FLYING MACHINE. JOSEPH B. STRAUSS, Chicago, Ill. Filed Dec. 29, 1923. Serial No. 683,342. 4 Claims. (Cl. 244—3.)

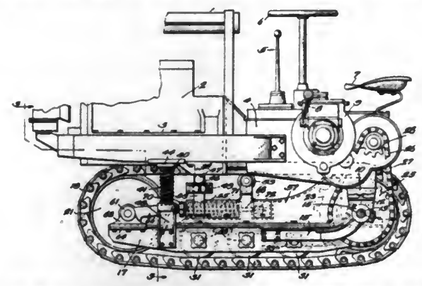


3. A dirigible flying machine comprising a main frame having two side frame elements, one at each side thereof, cross bracings connecting said side frame elements together, said side frame elements having vertical members with braces between them, supports for a passenger carrying conveyance connected with the side frame elements where the vertical members are located.

1,815,339. AUTOMOTIVE VEHICLE. FRANCIS TURZICKY, Chicago, Ill., assignor to Henry E. Bullock, Chicago, Ill. Filed Aug. 19, 1929. Serial No. 386,913. 1 Claim. (Cl. 180—9.1.)

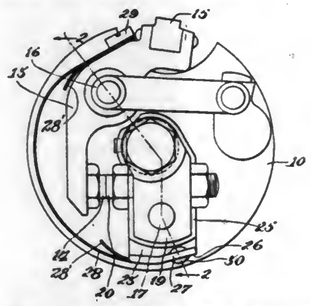
In a tractor, a body, endless chain tracks extending along the sides of the body respectively, truck frames surrounded respectively by said tracks, front and rear wheels carried by each truck frame and over which the related track chain passes, a shaft upon which said rear wheels are rotatably mounted, a drive sprocket wheel fixed to each of said rear wheels inwardly of the latter and also rotatably mounted upon said shaft, converging arms carried by the truck frames and having ends journaled upon the shaft

between the drive sprocket wheels, and sleeves fixed upon the shaft, each of said sleeves occupying the entire space between the hub of one of the drive sprocket wheels and



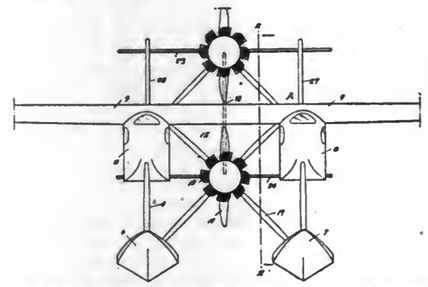
an adjacent end of one of the arms whereby said sleeves serve to hold the sprocket drive wheels against inward displacement on the shaft and the adjacent ends of said arms against outward displacement on the shaft.

1,815,340. CIRCUIT BREAKER. CHARLES A. UHEREK, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Oct. 14, 1929. Serial No. 399,411. 5 Claims. (Cl. 200—30.)



1. In a circuit breaker, a main disk carrying a post, a movable breaker arm on the post, a block carrying a stationary electrode secured to the disk, an anchor member between the block and disk, said member having an exposed free end, and a flat spring connected at one end to the movable breaker arm and at its other end to the free end of the anchor member.

1,815,341. AEROPLANE MACHINE. BASIL ZAHAROFF, Jamaica, N. Y. Filed Apr. 18, 1928. Serial No. 270,844. 4 Claims. (Cl. 244—14.)



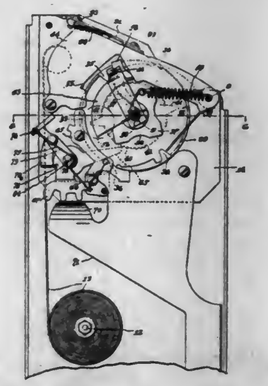
1. In an air craft machine a pair of motors arranged one above the other and having propellers disposed in vertical alinement and with their axis terminating adjacent to a vertical line passing through the center of gravity of the machine.

1,815,342. APPARATUS FOR HANDLING VOLATILE LIQUIDS. RUDOLPH J. ANSCHICKS, Chicago, Ill., assignor to Protectoseal Company of America, Chicago, Ill., a Corporation of Illinois. Filed Jan. 14, 1927. Serial No. 161,126. 5 Claims. (Cl. 158—35.)



1. A device of the kind described for handling volatile liquids and comprising a receptacle, a pipe projecting from the receptacle, means for controlling the flow of liquid from said receptacle into said pipe, and a nozzle positioned upon the outer end of the pipe, said nozzle comprising a tubular member having flame proof apertures therein, a wick wrapped around said tubular member and adapted to receive volatile liquid through said flame proof apertures, and an apertured shell surrounding and protecting said wick.

1,815,343. STAMP VENDING MACHINE. JAMES WILLIAM BARNES, Homestead, Pa., assignor, by mesne assignments, to National Postage Stamp Machine Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 27, 1927. Serial No. 186,866. 3 Claims. (Cl. 194—85.)



1. In a vending machine, dispensing mechanism, a coin magazine, a shutter adapted to receive and expel a coin from said magazine, said shutter being operatively connected to said mechanism, and means operable by said mechanism for vibrating said shutter in its coin-receiving position.

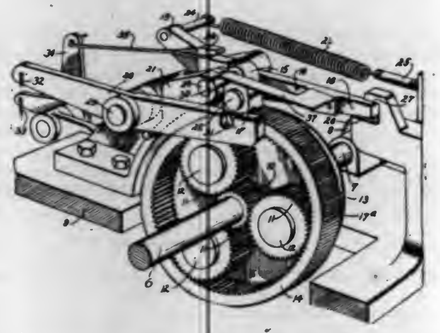
1,815,344. BUSHING BEARING AND METHOD OF MAKING IT. JOSEPH BRINCIL, Reading, Pa. Filed July 9, 1928. Serial No. 291,334. 3 Claims. (Cl. 29—149.5.)



1. The method of making a bushing bearing which comprises punching a series of lips in a strip of inexpensive

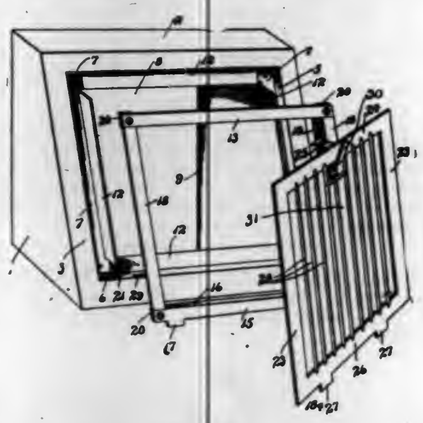
metal, forming said strip into cylindrical form with the lips outermost, then placing a core thru said formed strip, then placing said formed strip and core into a mold with the lips on said formed strip abutting the walls of the mold, and casting a molten bearing metal into the mold to envelop the said formed strip.

1,815,345. OVERLOAD RELEASE MECHANISM. HOWARD D. COLMAN, Rockford, Ill. Original application filed Feb. 5, 1927, Serial No. 166,086. Divided and this application filed May 31, 1928. Serial No. 281,830. 23 Claims. (Cl. 192—150.)



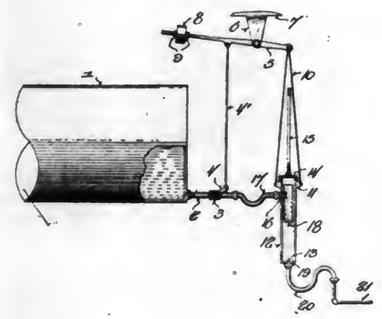
1. In a rotary driving mechanism, the combination of a driving member, a driven member, a driving connection between said members including two elements differentially operated from said driving member, one connected to said driven member, the other comprising a ring having a notched peripheral surface, a pivotal dog having spaced teeth for engaging said notches, yieldable means exerting an actuating force acting on said dog in a direction intermediate said teeth to urge the dog toward said peripheral surface whereby to produce torques resisting rotation of said ring in either direction.

1,815,346. FURNACE REGISTER. HAROLD S. COVELL, Holland, Mich., assignor to Hart & Cooley Manufacturing Company. Filed July 7, 1930. Serial No. 466,014. 8 Claims. (Cl. 98—114.)



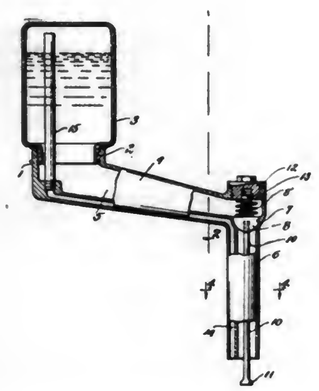
1. In combination, a register casing having a front opening and inwardly extending recessed portions around said opening having flanges in a plane parallel to the front of the casing, an open rectangular frame located in said recess against the flanges and secured thereto, and a grille located in said recess over the frame secured in place.

1,815,347. GRAVITY FEED CONTROL. THEODORE B. COWLES and CHARLES M. PARK, Madison, Wis. Filed Aug. 9, 1929. Serial No. 384,738. 2 Claims. (Cl. 137—68.)



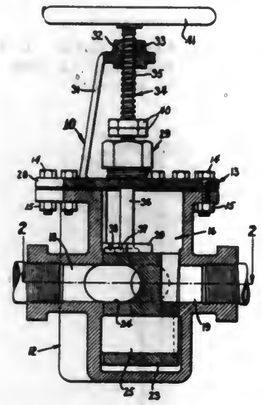
1. A gravity oil feed comprising a main storage tank, a counterbalanced auxiliary tank flexibly connected with said main storage tank and provided with an outlet, a counterbalanced lever for supporting said auxiliary tank, a valve controlling the feed of oil from said main tank, and a connection between said lever and valve for actuating the latter upon movement of said auxiliary tank.

1,815,348. AUTOMATIC BATTERY FILLER. WILLIS T. COX, Rivera, Calif. Filed Apr. 15, 1930. Serial No. 444,439. 2 Claims. (Cl. 221—17.)



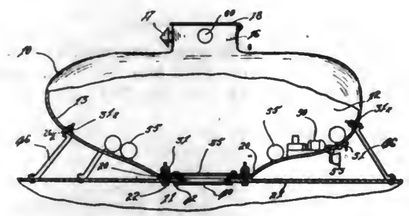
1. In a device of the character disclosed, a container for a liquid, a hollow body arranged for attachment to said container, and extending at substantially right angles thereto, a downwardly directed spout connected with said body and provided with a seat, a valve operable relatively to said seat to open or close the passageway therein, a stem on said valve and extending beyond the outlet from said spout, and yielding means to hold and force said valve upon its seat, said spout and body provided with a passageway for admitting air to the top of the container as the liquid therein discharges therefrom.

1,815,349. BALANCED HIGH PRESSURE VALVE. GLENN A. DOUGHTY and HERBERT A. JOHNSTON, Anaheim, Calif. Filed May 3, 1930. Serial No. 449,437. 9 Claims. (Cl. 251—59.)



1. A valve including a body having an inlet and an outlet, a closure member in said body, said closure including spaced bores, one of said bores in one position of said closure forming a passage to a dead end and the other bore when said closure is in another position forming a passage from said inlet to said outlet.

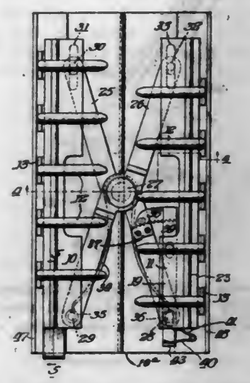
1,815,350. LIFE SAVING DEVICE FOR SUBMARINES. HENRY ECKEL and HARRY SCHUENHOFF, Hamilton, Ontario, Canada. Filed May 27, 1929. Serial No. 366,368. 1 Claim. (Cl. 114—16.7.)



In a life boat for submarines, a leakproof enclosed vessel adapted to be secured to the deck of the submarine and having a flattened under-surface with a central opening adapted to be in alignment with an opening in the submarine deck, hinged doorways closing in the openings, a plurality of bell-shaped casings bolted to the base portion of the vessel, each of said casings having a watertight chamber forming a container for a cap screw adapted to project through the base portion of the boat and into the deck of the submarine and forming a journal member for a socket wrench adapted to engage with the head of the vessel in the water-tight chamber, and projecting upwardly from the bell-shaped casing and adapted to be manually operated, a plurality of brace members bolted to the submarine deck and bolted at the other end to the underside of said vessel by means of cap screws enclosed in bell-shaped casings, and a plurality of ballast tanks secured in said vessel.

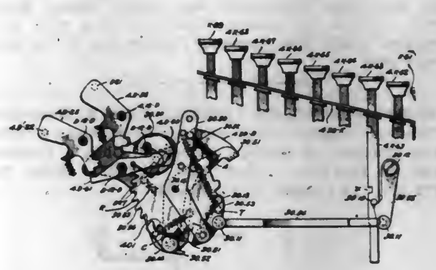
1,815,351. LOOSE SHEET HOLDER. JOSEPH EIFEL, Chicago, Ill. Filed Dec. 17, 1921. Serial No. 523,085. 7 Claims. (Cl. 129—13.)

1. In a device of the character described, in combination, a base member, a group of sheet-engaging members comprising prongs adapted to impale the sheets, means for supporting said group on said base for displacement



longitudinally of the base, and said sheet-engaging members being slidable in said supporting means for individual adjustment relative thereto.

1,815,352. AUTOMATIC ACCUMULATOR SELECTOR FOR CALCULATING MACHINES. EMIL JOHN ENS, Newark, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 5, 1928. Serial No. 323,915. 16 Claims. (Cl. 235—60.)

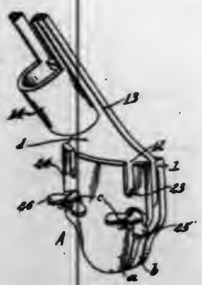


1. In a calculating machine, the combination with a frame, and a numeral keyboard on which members or amounts may be set up, of an accumulator, means whereby the numbers or amounts set upon said keyboard may be entered in said accumulator, accumulator-controlling-means, operating means adapted to carry on a cycle of operations to cause the aforesaid means to perform their functions, and selecting means mounted on the frame cooperating with said operating means and accumulator-controlling-means and automatically operated by said operating means on successive operations of the machine by which the accumulator may be automatically selected and utilized for the entry therein of the number or amount set up on the keyboard as determined by the condition of the selecting means at the time the machine is operated.

1,815,353. FLAGPOLE HOLDER. JOHN A. GEROW and ALFRED C. CANNON, El Segundo, Calif. Filed Aug. 11, 1928. Serial No. 298,915. 3 Claims. (Cl. 248—37.)

1. In a flag pole holder, a pair of transversely curved plates, one of said plates being provided with a rim flange, and the other of said plates being formed with a longitudinally extending slot, an object holding bracket pro-

vided with a portion adapted to be received between said plates and in engagement with the rim flange, said portion



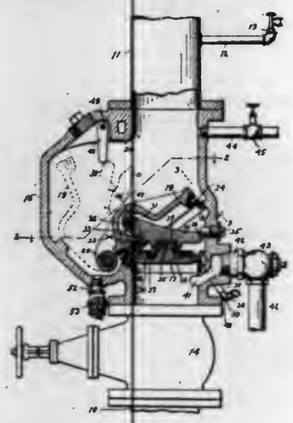
being provided with a transverse stud for reception within said longitudinally extending slot, and means for causing relative movement between said plates.

1,815,354. PISTON RING. GERALD M. M. GRANT, Los Angeles, Calif. Filed Nov. 8, 1930. Serial No. 494,345. 5 Claims. (Cl. 74—109.)



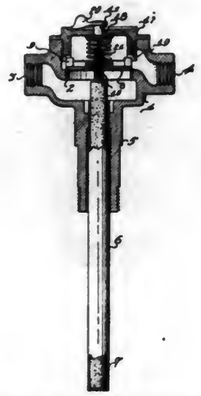
1. A packing ring having a peripheral groove formed therein, the said groove being of greater width within the body of the ring than at the periphery of said groove, the portion of said ring defining the inner wall of said groove being free from projections, said groove having downwardly inclined oil passages communicating with said peripheral groove and extending through and to the back of said ring.

1,815,355. SPRINKLER SYSTEM. JOHN R. HAMILTON, Cleveland Heights, Ohio, assignor to Automatic Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 7, 1927. Serial No. 173,231. 14 Claims. (Cl. 169—21.)



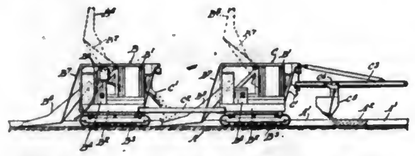
2. In dry pipe valves for sprinkler systems, the combination of a casing having two valve seats, a water valve cooperating with one of said seats, a lever having a universal joint connection with said valve, means for releasably fulcruming one end of said lever, a pivot in said casing, a clapper valve carried by said pivot and cooperating with the other of said seats, and means operatively connecting said clapper valve with the other end of said lever, said connecting means being pivoted to said clapper valve at a point between the axis of the latter and the axis of said pivot.

1,815,356. THERMOSTATIC VALVE. J. T. HUNTINGTON, Lansing, Mich. Filed May 14, 1930. Serial No. 452,453. 4 Claims. (Cl. 236—102.)



1. A thermostatic valve comprising a valve body having a valve seat, a cap detachably fitted to said body, a pin mounted in said cap, a screw having a sliding and permanent connection to said pin, a valve disk threaded on said screw and cooperating with said valve seat, means to prevent turning of said disk relatively to said cap, and an expansible thermostatic element mounted in said valve body and operative on said screw.

1,815,357. PROCESS OF MIXING CONCRETE. WILSON A. JAICKS, Chicago, Ill. Filed Mar. 19, 1931. Serial No. 528,709. 11 Claims. (Cl. 83—73.)

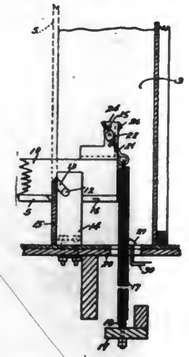


1. The process of mixing concrete and the like which consists in first preparing a properly proportioned batch of material, then conveying it to and discharging it into a mixing zone in the presence of the proper amount of water, then mixing such batch as a unit in the zone for a length of time too short to complete the mixing process, then discharging the batch from the mixing zone into a receiving zone, allowing it to fall freely under the influence of gravity thereto, then conveying and discharging such batch as a unit to a second mixing zone, there mixing it for such additional time as will complete the mixing process, and then discharging it to the work.

1,815,358. CHIMNEY BREAST-WALL BED. GEORGE D. MANVILLE, Los Angeles, Calif., assignor of one-fourth to Carrie W. Ford, Los Angeles, Calif. Filed May 31, 1930. Serial No. 457,774. 1 Claim. (Cl. 5—164.)

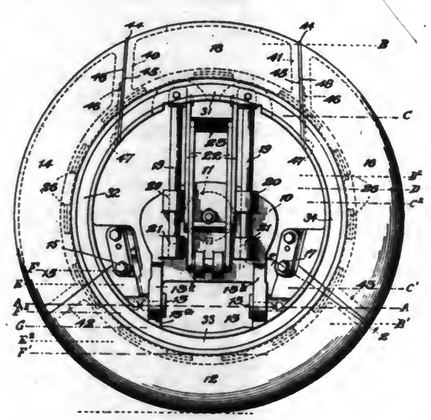
A bed frame, fixed side standards between and on which the frame is tiltably supported, one end of the frame projecting beyond the standards; fixed upright brackets on the cross end-piece of the said projecting

part of the frame and being provided with side faces set back from near corners of the frame; co-axial pivot pins swivelled in the brackets and having heads bearing against the said faces, eye-bolts threaded in said heads and having



the eye parts at their lower ends and adapted to swing to a stop position against the cross end-piece of the frame, and counterbalancing springs attached at their upper ends to said eye-parts and being anchored to fixed supports at their lower ends.

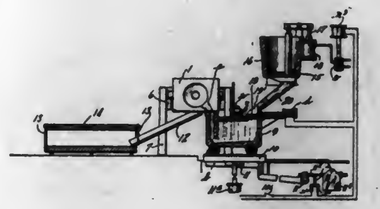
1,815,359. COLLAPSIBLE TIRE BUILDING CORE. FREEMAN D. MASON, Akron, Ohio, assignor to The Bridgwater Machine Company, Akron, Ohio, a Corporation of Ohio. Filed June 4, 1929. Serial No. 368,413. 3 Claims. (Cl. 154—9.)



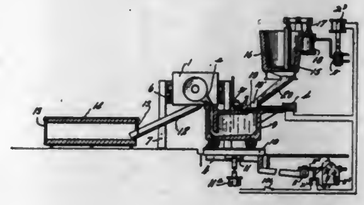
2. A collapsible tire-building form composed of segments each comprising an outer body portion made of relatively light metal and cast upon an inner portion made of relatively heavy and strong metal which has longitudinally-spaced anchor lugs interlocking with the metal of the body portion.

1,815,360. METHOD FOR CASTING METALS. ALBERT WOOD MORRIS, Drexel Hill, and SAMUEL PRICE WETHERILL, Jr., Haverford, Pa., assignors to Wetherill-Morris Engineering Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 19, 1929. Serial No. 341,142. 4 Claims. (Cl. 22—200.)

1. The method of enabling metals, having high melting temperatures like iron or steel or copper alloys or others all distinguishable from metals having low melting temperatures like type metal, to be cast in an automatic casting machine of the type employing a permanent mold and operable through rapidly repeated cycles beyond the normal control of the operator, which method consists in controlling the heat conditions of the metal being cast solely by the step of intermittently feeding quantities of the hot metal to the automatic casting machine at a temperature high enough above the desired mold charging temperature to compensate for heat radiation in the machine before the mold charging operation in the actual casting of such metal and feeding said metal in such small quantities relatively to the output of the machine that the temperature of such metal when fed to the machine need not be excessively above the right temperature for charging the permanent mold in the casting cycle whereby all firing operations and large hot metal storage means may be avoided within an automatic casting machine of the said type.



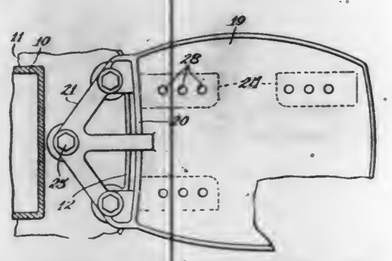
1,815,361. APPARATUS FOR CASTING METAL. ALBERT WOOD MORRIS, Drexel Hill, and SAMUEL PRICE WETHERILL, Jr., Haverford, Pa., assignors to Wetherill-Morris Engineering Company, Philadelphia, Pa., a Corporation of Delaware. Original application filed Feb. 19, 1929, Serial No. 341,142. Divided and this application filed Nov. 21, 1929. Serial No. 408,885. 6 Claims. (Cl. 22—57.)



5. An apparatus for use in the casting and heat treatment of metals comprising a metal mold, mold operating mechanism, a mold charging ladle, a major hot metal supply pot spaced from the mold, weighing mechanism to measure the quantity of metal in said charging ladle, means controlled by said weighing mechanism to deliver metal from said supply pot to the charging ladle whenever the weight in the charging ladle falls below a predetermined amount, means for transferring metal from the charging ladle to the mold, a normalizer compartment for self-annealing castings, conveying mechanism receiving successive castings directly from the mold and carrying them in a path within the normalizer for treatment by the casting heat, and timing mechanism coordinating the mold operating mechanism, the means for transferring metal from the charging ladle to the mold, and said conveyor mechanism so that a casting will be ejected

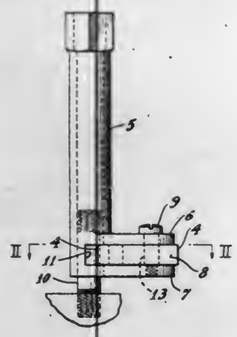
from the mold after a predetermined dwell therein and will be on its path within the normalizer before it is necessary to reheat the casting for softening it.

1,815,362. MOTOR BRACKET FOR CREAM SEPARATORS. JAMES H. PINSON, Richmond, Ind., assignor to International Harvester Company, a Corporation of New Jersey. Filed Oct. 22, 1928. Serial No. 314,014. 1 Claim. (Cl. 248—14.)



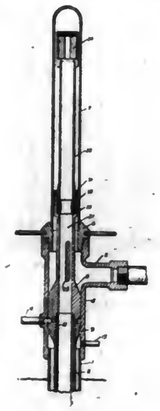
In a cream separator having a skirt, an attachment therefor comprising a shelf adapted for carrying a motor, means for connecting the shelf to the skirt in a manner to leave a space between adjacent edges of the shelf and skirt, said means comprising a tri-part trussed skeletonized extension of the shelf extending beneath the skirt and providing three spaced points of attachment, and means at each point for securing the extension to the under side of the skirt.

1,815,363. STUD WRENCH. HUBERT M. PROCTOR, Birmingham, Ala., assignor of one-half to T. M. Nesbit, Jr., Birmingham, Ala. Filed Oct. 6, 1930. Serial No. 486,623. 2 Claims. (Cl. 81—53.)



1. A stud wrench comprising a tubular member adapted to receive a stud, a pair of spaced ears formed on one end of the tubular member, means defining a slot opening into the tubular member, a gripping member having pivot holes therethrough near the ends thereof and spaced at relatively different distances from the ends and extending into the slot, a detachable pivot pin for pivotably mounting the gripping member between said ears in its remoter pivot hole from the slot, a concave gripping surface formed on each end of the gripping member, and teeth formed on said gripping surfaces and extending outwardly and oppositely on the two sides of the longitudinal axis of the gripping member.

1,815,364. CATCHER FOR SWAB PLUNGERS. NORMAN H. RICKER, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Oct. 14, 1929. Serial No. 399,654. 7 Claims. (Cl. 103—52.)

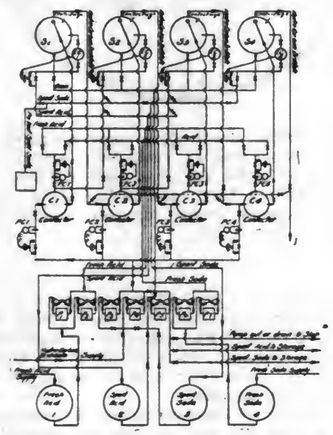


1. In a device of the character described including an eduction tube for wells, a plunger therein, means to introduce gaseous pressure fluid below said plunger to lift it upwardly, in combination with a yieldable device at the upper end of said tube to engage and hold said plunger when desired.

1,815,365. METHOD OF AFFIXING LABELS. JAMES E. SNYDER, Kenmore, N. Y., assignor to Du Pont Cellophane Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 7, 1930. Serial No. 473,755. 22 Claims. (Cl. 216—62.)

1. A method of affixing a gummed material to an article formed of or containing a water-insoluble material which comprises rendering the adhesive on the gummed material tacky, modifying the water-insoluble material and securing said gummed material to said article.

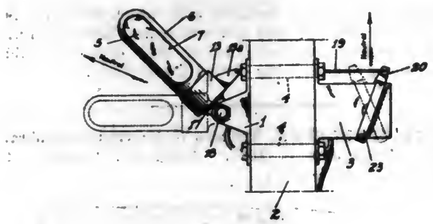
1,815,366. SYSTEM FOR TREATING PETROLEUM OILS. CHARLES WALCOTT STRATFORD, Kansas City, Mo. Original application filed Nov. 26, 1926, Serial No. 150,678. Divided and this application filed June 12, 1929. Serial No. 370,172. 5 Claims. (Cl. 196—40.)



1. A closed method for treating petroleum oils, comprising the steps of subjecting the oil to a plurality of rapid

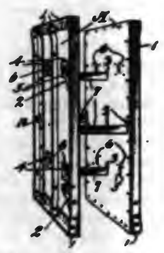
contact treating steps with acid, alternating with steps of centrifugal separation, the acid being circulated in counterflow relation to the oil so that the fresh acid initially contacts the oil in the final acid stage and progresses against the travel of the oil after each step of separation, and is discharged from the initial acid treating stage, said contact treating steps being limited substantially to the period of chemical reaction.

1,815,367. DIRECTION SIGNAL FOR MOTOR VEHICLES. JOHN P. WILLIAMS, Fresno, Calif. Filed Feb. 18, 1929. Serial No. 340,798. 1 Claim. (Cl. 116—54.)



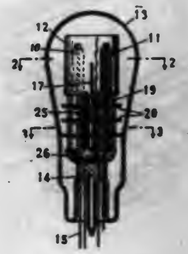
A direction signal structure for a motor vehicle comprising a signal member having a horizontal pivot to extend lengthwise of the vehicle, a support for said pivot adapted for attachment on the outside of a vertical body post of the vehicle, a relatively short arm projecting upwardly from the signal adjacent its pivot, another similar arm disposed inwardly of the post in transverse alignment with the signal arm, a fixed pivot for the lower end of said other arm parallel to and on a level with the signal pivot, a link connecting the upper ends of the arms, and hand means applied to the pivot of the inner arm to turn said arm.

1,815,368. SPREADER DEVICE FOR CONCRETE FORMS. FRED C. WOTNOSKE, Milwaukee, Wis., assignor to Metal Forms Corporation, Milwaukee, Wis. Filed Apr. 18, 1929. Serial No. 356,287. 4 Claims. (Cl. 25—131.)



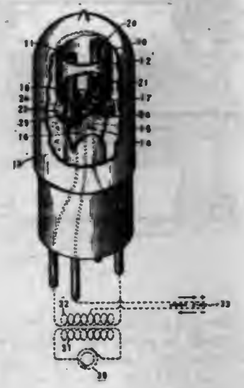
3. In a knock-down concrete form, the combination with spaced plates between which concrete may be poured, said plates having openings therein, of tie bars inserted through said openings and interlocked with the plates, the ends of said bars being deformed thereby preventing their unauthorized displacement from engagement with said plates, and said plates positively supporting said bars during deformation of the ends thereof to resist relative movement of the bars with respect to the plates.

1,815,369. RECTIFIER. HAROLD P. DONLE, Meriden, Conn., assignor to Radio Inventions, Inc., New York, N. Y., a Corporation of New York. Filed June 29, 1925. Serial No. 40,414. 18 Claims. (Cl. 250—27.5.)



1. A rectifier comprising a tube, two anodal conductors mounted therein, thermal insulators mounted on said conductors, heat radiating discs mounted on said insulators, a cathode surrounding parts of said anodal conductors and a conductor connected to said cathode and insulated from said discs.

1,815,370. RECTIFIER. HAROLD P. DONLE, Meriden, Conn., assignor to Radio Inventions, Inc., New York, N. Y., a Corporation of New York. Original application filed June 29, 1925, Serial No. 40,414. Divided and this application filed Sept. 17, 1927. Serial No. 220,153. 6 Claims. (Cl. 250—27.5.)

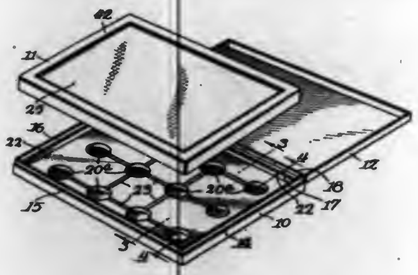


1. A full wave rectifier comprising a tube having a stem with conductors sealed therein, anodes extending from conductors, a plate positioned by another conductor, a cathode surrounding the tips of said anodes and supported on another of said conductors and tubes supported by said plate and surrounding the bases of the anodes between the cathode and the anodes.

1,815,371. INKING PAD. WILLIAM L. EDGARTON, Berwyn, Ill. Filed Mar. 30, 1929. Serial No. 351,173. 15 Claims. (Cl. 91—54.5.)

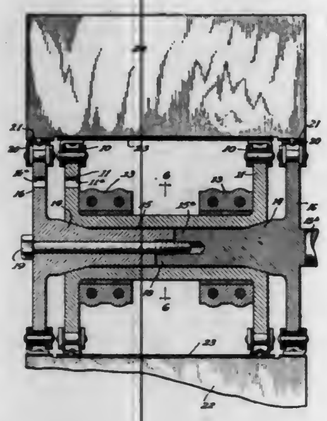
1. In an inking pad of the class described, the combination of a relatively stiff supporting member, an absorbent pad on top of said member, and a fabric cover over said

pad, said cover having oppositely extending flap portions folded under said supporting member, marginal portions



of said support, together with adjacent portions of said cover, being rebent inwardly so as to grip and hold said cover taut over said pad.

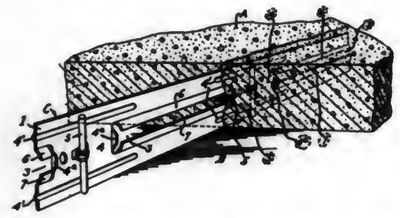
1,815,372. MACHINE FOR PRESSING BOOKS. PHILIP A. FRAZIER, Chicago, Ill., assignor to R. R. Donnelley & Sons Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 1, 1928. Serial No. 316,527. 6 Claims. (Cl. 198—180.)



2. A machine for pressing books comprising four sprockets aligned axially in pairs, two chains operably connecting said pairs of sprockets, a second set of four sprockets axially aligned with the first two sets of sprockets, two sprocket chains operably connecting the second set of sprockets, and plates carried by the last-mentioned sprocket chains and spaced from the first-mentioned plates to hold and press a book or other object therebetween.

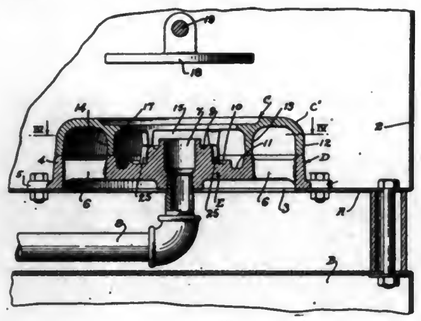
1,815,373. JOINT FOR CONCRETE SLABS. BENGT F. FRIBERG, St. Louis, Mo., assignor to Laclede Steel Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 15, 1930. Serial No. 502,286. 5 Claims. (Cl. 94—17.)

1. A joint for roadway slabs comprising a crack-locating element adapted to be embedded in a body of concrete constituting a slab of a roadway or similar structure immediately adjacent to the top surface thereof, a second element adapted to be embedded in the body of concrete adjacent to the bottom thereof, the first and second mentioned elements being of like characteristics and being separated from each other in a vertical direction to provide a free space therebetween and being permanently associated with each other, said free space being so located and pro-



portioned as to induce concrete with which the joint is associated to crack at said free space, and strengthening flanges extended longitudinally of said elements, said strengthening flanges being curved transversely.

1,815,374. OIL BURNER. THOMAS W. HUNTER, Alhambra, Calif. Filed Jan. 3, 1927. Serial No. 158,463. 4 Claims. (Cl. 158—91.)

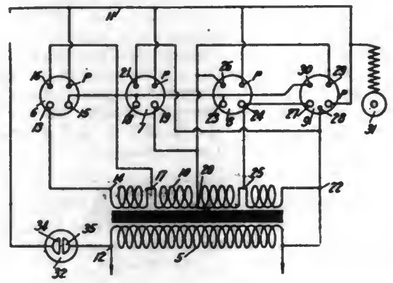


1. A liquid fuel burner comprising an annular base structure having a circular outer wall, a burner structure carried thereby and disposed centrally thereof, said structure comprising a disc-shaped pan from the floor of which rises a central conical structure having concentric corrugations therearound of successively reduced diameters, an oil well extending downwardly through the center of the said conical structure and adapted to be continuously supplied with oil to overflow the mouth of the well and to flow downwardly over the corrugations of the burner into the pan while combustion is taking place on the surface of the oil, an air passageway between the outer wall of the base and the burner pan, a cover carried by the base and having a circular flange resting upon the outer wall of the base and arcuate flanges resting upon the outer edge of the oil burner pan whereby a central annular oil passageway will be formed beneath the cover and around the pan within said base, said arcuate flanges being spaced a distance apart to provide diametrically opposed radial openings into the compartment enclosing the burner, the cover having a central opening in its top center directly over the burner to permit the flame to rise from the burning oil.

1,815,375. DEVICE FOR TESTING VACUUM TUBES. DAVID E. JOHNSON and PAUL F. JACKSON, Dayton, Ohio. Filed Nov. 21, 1929. Serial No. 408,903. 3 Claims. (Cl. 250—27.)

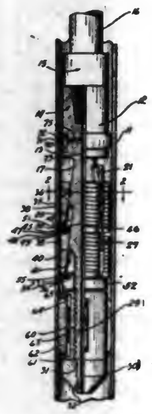
1. A tube testing device comprising a transformer having means for connecting the primary thereof across an alternating current source, a plurality of tube sockets adapted to receive vacuum tubes having different characteristics, the several sockets having their filament and grid

terminals so connected with the secondary of said transformer that the current supplied to tubes in the several sockets will create in the tube plate circuits currents of



similar values, a plate circuit connecting the plate terminals of the several tube sockets with said alternating current source, and a current indicating device in said plate circuit.

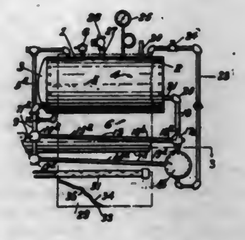
1,815,376. ROTARY SPEAR. WINFIELD S. JONES, Brea, Calif. Filed Oct. 6, 1928. Serial No. 310,741. 11 Claims. (Cl. 294—96.)



1. In a spear for recovering lost parts in a well, the combination of: a body having upper and lower tapered ways; upper jaws carried by said upper ways; lower jaws carried by said lower ways, said jaws being in contracted position in the upper ends of said ways and being expanded in the lower ends of said ways; connecting means in the form of interlocking lugs for connecting adjacent upper and lower jaws together, said connecting means permitting limited relative movement between said upper and lower jaws; and jaw operating means for moving said upper and lower jaws to contracted positions.

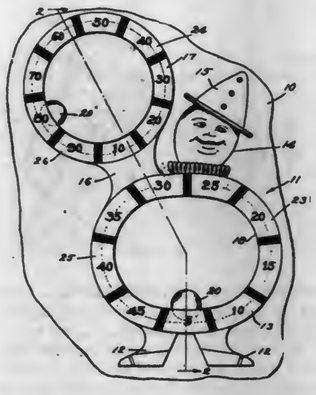
1,815,377. WATER TUBE BOILER. JOHN BERNARD MCKENNA, Los Angeles, Calif. Filed Apr. 3, 1928. Serial No. 267,101. 6 Claims. (Cl. 122—235.)

1. A combined liquid heat treatment and purification means, comprising a boiler, in combination with a heating chamber applied thereto, a preheater coil for conducting a liquid within said heating chamber to be initially heated therein, a cross-fitting, a pipe leading upwardly from said cross-fitting into said boiler, a pipe leading forwardly and somewhat downwardly from said cross-fitting, and extending through said heating chamber, a mud drum, a pipe and a cross-fitting uniting said second named pipe with said



boiler and said mud drum, a pipe leading downwardly from first said cross-fitting and extending through said heating chamber and terminating in said mud drum.

1,815,378. TOY. MORRIS MENKUS and BEN MENKUS, Los Angeles, Calif. Filed Aug. 26, 1929. Serial No. 388,890. 1 Claim. (Cl. 273—109.)

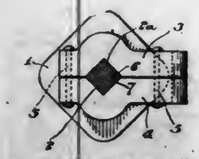


A toy comprising a ball, an annulus along the inner surface of which the ball is intended to roll, said inner face of said annulus being recessed to form opposite marginal flanges described on a sectional arc of shorter radius than the radius of the ball whereby the ball will tend to wedge between said marginal flanges during operation of the toy, the opposite side faces of the toy being flat and in parallel planes whereby the annulus may be temporarily rested upon a plane surface and given a gyratory motion until the ball has been set in motion to roll along the inner face of the annulus under its own momentum, said plane faces of the annulus being formed with graduations of different value so that when the annulus is disposed upon a plane surface and the centrifugal action of the ball has been exhausted the ball will come to rest upon the plane surface adjacent a graduation on the annulus.

1,815,379. PROCESS FOR VOLATILIZATION OF PHOSPHORUS. ROBERT D. PIKE, Oakland, Calif. Filed Nov. 14, 1927. Serial No. 233,323. 8 Claims. (Cl. 23—283.)

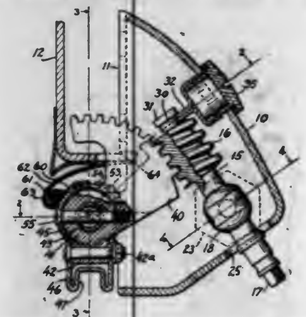
1. A single furnace method for the complete commercial volatilization of phosphorus from phosphate rock which consists in charging a blast furnace with phosphate rock, a flux to make a basic slag, a solid carbonaceous fuel, blasting the charge with a blast of air containing from 30% to 45% by weight of oxygen, regulating the furnace to a temperature on the hearth in excess of 1450° C., maintaining said temperature at least two hours, and allowing the slag to remain thereat from at least two to four hours.

1,815,380. MAGNETIC DEVICE. HARRY F. PORTER, Rochester, and DONALD M. SCOTT, Buffalo, N. Y. Filed Dec. 21, 1928. Serial No. 327,565. 8 Claims. (Cl. 175—356.)



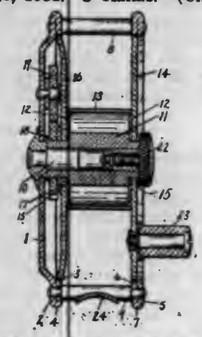
1. A magnetic device comprising coil structure, a core within said coil structure comprising laminations of noble magnetic material, and field structure of solid cross-section disposed exteriorly of said coil structure to form a path for the flux traversing said laminated core and whose reluctance is less than the reluctance of said core.

1,815,381. OPERATING DEVICE FOR WINDSHIELDS. ALBERT T. POTTER, Detroit, Mich., assignor, by mesne assignments, to Ainsworth Manufacturing Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 14, 1928. Serial No. 277,623. 4 Claims. (Cl. 296—84.)



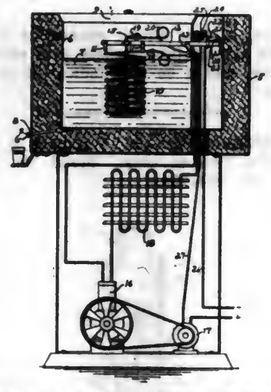
1. In combination, a windshield having a tubular hollow frame fixed on the top edge thereof, the latter having an aperture in the rear wall thereof, a gear sector for operating said windshield having a hub portion disposed within said frame and adjacent said aperture, the latter affording an entrance into the frame for the hub portion, and means in said frame fixing the hub against movement with respect to the windshield, the front and top walls of said frame presenting a surface which is substantially smooth and free from projections, said means including pilot members fixed in said frame by means on the rear wall thereof and having trunnions supporting the hub member.

1,815,382. FISHING REEL. SAMUEL G. RUSSELL, Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Sept. 19, 1928, Serial No. 306,795. Renewed Mar. 28, 1931. 5 Claims. (Cl. 242—84.6.)



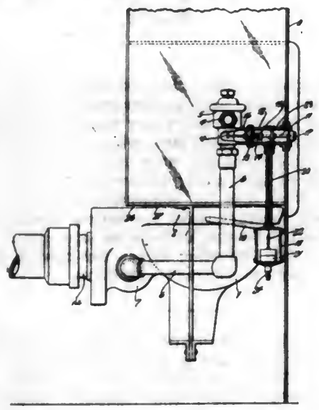
5. In a fishing reel, the combination of a frame comprising a plate-like end member, an annular end member and connecting pillars, a spool spindle carried by said plate-like end member, a spool rotatable on said spindle and comprising a shouldered hub, a tubular barrel, a pair of barrel supporting disks arranged on said hub against said shoulders fitting within said barrel, a pair of spool flanges arranged on said hub at the outer sides of said barrel supporting disks, a click pinion arranged on said hub at the inner side of the flange adjacent said plate-like end member, the ends of said hub being upset to secure the spool parts in assembled relation, a click mounted on the inner side of said plate-like end member to coact with said click pinion, a spool retaining member threaded into the end of said spindle to overlap the spool hub, and a handle secured to the outer of said spool flanges.

1,815,383. REFRIGERATING SYSTEM. HUGH J. SCULLEN, Detroit, Mich., assignor to Copeland Products Inc., a Corporation of Michigan. Filed Aug. 2, 1928. Serial No. 296,915. 5 Claims. (Cl. 62—4.)



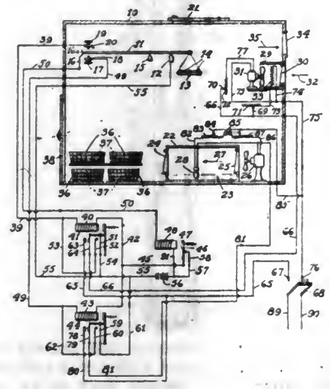
1. A refrigerating apparatus including a heat dissipating device and a movable heat absorbing device, and means, controlled by the movement of said heat absorbing device, independent of any movement of the heat dissipating device, for alternately operating said heat dissipating device.

1,815,384. SAFETY FLUSHING APPARATUS. MICHAEL J. TRACY, St. Louis, Mo. Filed Nov. 28, 1927. Serial No. 236,133. 17 Claims. (Cl. 4—75.)



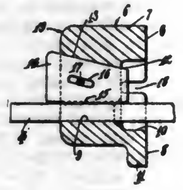
9. In combination, a bowl to be flushed, means for flushing the bowl, and means rendered active by the flushing of the bowl for preventing more than one successive operation of the flushing means, said last mentioned means being inaccessible to the user of the bowl.

1,815,385. HUMIDIFYING SYSTEM. ARTHUR E. WIGGLESWORTH, Chicago, Ill., assignor to Pathometric Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1930. Serial No. 430,214. 12 Claims. (Cl. 261—10.)



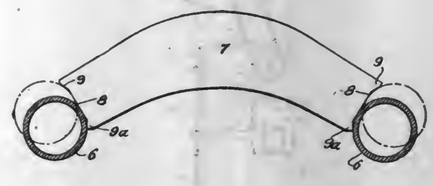
1. In a humidifying system, the combination of a receptacle for containing articles to be maintained at a desired liquid content, a scale beam in said receptacle, a carrier for supporting a desired number of said articles from said beam, means for balancing said beam with said desired liquid content in said articles so supported, electric contacts for actuation by said beam for its balanced condition and for weights of said supported articles greater and less than their balancing weight respectively, first electrically actuated devices for increasing the amount of liquor vapor in said receptacle, second electrically actuated devices for decreasing the amount of liquid vapor in said receptacle, third electrically actuated devices controlling the operation of said first and second devices, and electric circuits controlled by said contacts and extending therefrom to said devices and selectively controlling the operation of the latter.

1,815,386. CLAMPING DEVICE. JOHN MELVILLE WILLARD, Los Angeles, Calif. Filed Mar. 19, 1930. Serial No. 437,019. 7 Claims. (Cl. 24—136.)



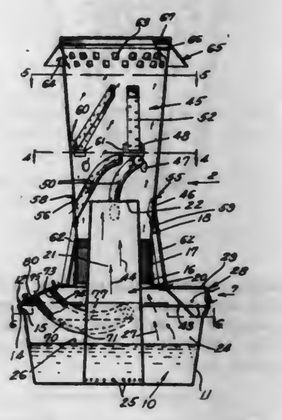
1. In a clamping device, the combination of a tie rod and a clamping device longitudinally adjustable thereon, said clamping device comprising a body portion provided with an opening adapted to slidably receive a rod, a slot in said body portion leading away from said opening, and a wedge slidably but irremovably retained in said slot and extending beyond said body portion in one direction only, retaining means for holding said wedge in said body portion and preventing said wedge from projecting beyond said body portion in one direction, said wedge being provided with teeth adapted to grip said rod and normally prevent motion of said clamping device in one direction, but permitting motion of the device on said rod in another direction.

1,815,387. LOCOMOTIVE ARCH CONSTRUCTION. ALFRED H. WILLETT, West Englewood, N. J., assignor to American Arch Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 22, 1927. Serial No. 221,174. 2 Claims. (Cl. 110—87.)



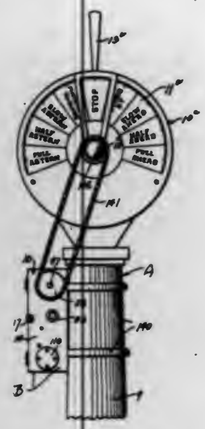
1. A locomotive arch construction including spaced-apart arch tubes, and a refractory brick extending between tubes, each end of said brick having a surface tangent to a tube and inclined between the vertical and horizontal for sliding adjustment between brick and tube, and, at each end of the brick, a pair of ribs projecting beyond the inclined surface, one extending along the upper and one along the lower edge thereof, respectively, the distance between the ribs of a pair bearing such a relation to the tube diameter that at least one rib of the pair will be out of contact with the tube in any normal position of the brick.

1,815,388. ORCHARD HEATER. BIRDIE V. WITT, Pasadena, Calif. Filed Apr. 14, 1928. Serial No. 269,927. 9 Claims. (Cl. 158—91.)



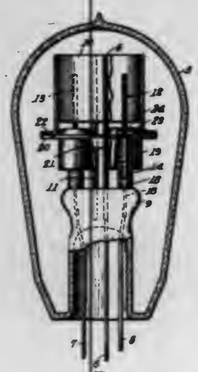
1. In an orchard heater the combination of: a fuel-retaining tank; a stack extending upward from said tank; and air tubes extending tangentially into said stack for introducing preheated air thereinto.

1,815,389. SHIP'S TELEGRAPH RECORDER. DARWIN M. WOLF, Long Beach, Calif. Filed June 21, 1928. Serial No. 287,092. 8 Claims. (Cl. 234—1.)



3. In a ship recorder, a pivoted marker, spring devices operating on the pivoted marker to urge it in opposite directions, one spring device being stronger than the other, and a scribing surface receiving the marker thereagainst as urged by the stronger spring.

1,815,390. RECTIFIER. FRANK A. YOUNG, Meriden, Conn., assignor, by mesne assignments, to Radio Inventions, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 7, 1926. Serial No. 100,266. 2 Claims. (Cl. 250—27.5.)



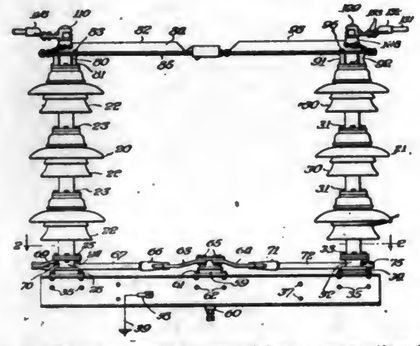
1. A rectifier comprising an envelope having a press, a wire sealed in said press, a metallic tube secured on said wire, an insulator on said tube, and a graphite anode with a plated base secured in said tube and a cathode adjacent to said anode.

1,815,391. CORE DRILL WITH AUXILIARY REAMER. JOHN A. ZUBLIN and FORD A. PILGRIM, Los Angeles, Calif., assignors to Universal Engineering Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 13, 1929. Serial No. 392,348. 11 Claims. (Cl. 255—72.)

1. In a core drilling tool of the character described: a core barrel including an annular wall structure having cutters at the lower end thereof for cutting an annular hole around a central core, and reaming members above and of less diameter than said cutters for preventing decrease in the outer diameter of said annular hole to a size smaller than the external diameter of said core barrel when said cutters have become worn so as to fail to maintain a diameter greater than that of said core barrel.



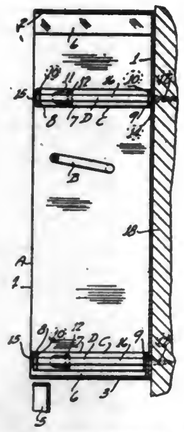
1,815,392. SWITCH. ALFRED ALSAKER, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 27, 1926. Serial No. 137,927. 7 Claims. (Cl. 200—48.)



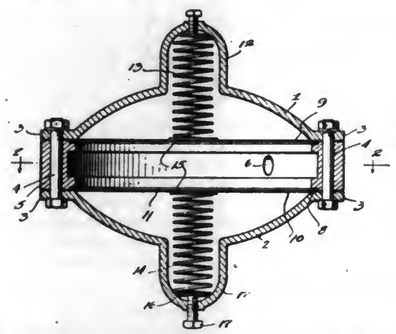
7. A disconnect switch comprising a supporting base, a pair of spaced parallel bearing members mounted thereon, parallel insulators mounted on said bearing members, a third bearing member mounted on said base substantially midway between said first bearings and extending substantially parallel to said first two bearings, means for rotating the movable element of said third bearing to actuate the switch, means including connecting rods for transmitting the actuating force from said third bearing to each of the two first named bearings for rotating the two insulator stacks, said means including means for rotating the two insulator stacks and the associated connecting rods always in opposite directions, and switch blades carried by the respective insulators and moved into and out of engagement with one another by rotation of said insulators.

1,815,393. WALL-BOX FOR ELECTRICAL DEVICES. HARRY C. ANDREWS, St. Louis, Mo., assignor to Killark Electric Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 9, 1928. Serial No. 298,561. 3 Claims. (Cl. 247—21.)

1. In a fastening means for a wall-box, a fastening element having its support-engaging end passed through the rear wall of the box and its head end disposed adjacent to the plane of the open end of the box, in combination with a member including a body-portion contiguous to a wall of the box having inturned end portions provided with aligning fastener-receiving apertures, one of said end portions being disposed for bearing engagement with the head of said fastening element, and means incorporated with said box-wall bendable thereover for engaging said body-portion therebetween.



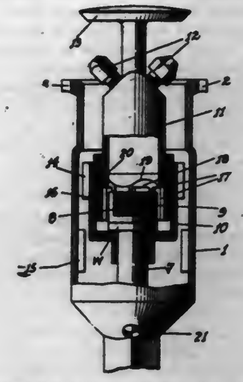
1,815,394. PRESSURE RELIEF VALVE. EDWARD W. N. BOOSEY, Detroit, Mich. Filed Dec. 29, 1928. Serial No. 329,285. 8 Claims. (Cl. 137—71.)



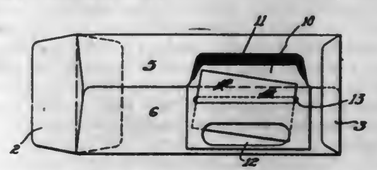
8. A device for preventing water hammer in water supply systems comprising a hollow casing formed of two parti-spherical shells of similar form, a ring secured between the opposed edges of the two shells, a diaphragm on each of the opposite side faces of the ring and held in contact at its edges between the respective shells and ring, an inlet conduit opening to within the ring, said conduit providing the sole means of communication with the water system whereby water under pressure may enter the chamber provided between the two diaphragms, a spring on the outer face of each of the diaphragms adjustable in tension to correspond to the normal pressure of the water in the system whereby a sudden and excess pressure known as "water hammer" may be relieved by deflection of the diaphragms and springs.

1,815,395. SLOW MOTION ROTARY SPRINKLER. WILLIAM A. BUCKNER, Fresno, Calif. Filed Jan. 21, 1930. Serial No. 422,282. 6 Claims. (Cl. 299—61.)

1. A rotary sprinkler including a vertical water passage spindle, a sprinkler head turnably mounted thereon and enclosing the upper end thereof, a ring turnably and slidably mounted in the head and about the spindle, means between the spindle and ring for causing the latter to be raised and rotated by water under pressure issuing from the spindle, and means between the ring and head for causing the latter to be rotated and also vibrated by the rotation of the ring.

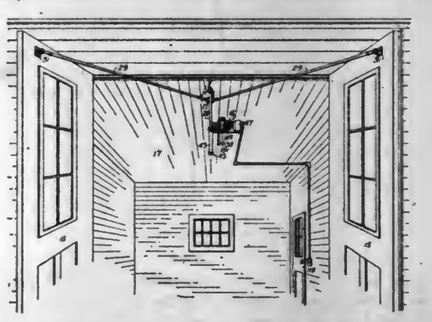


1,815,396. TWO COMPARTMENT ENVELOPE. CHARLES E. CATHER, Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass., a Corporation of Maine. Filed June 4, 1921. Serial No. 474,930. 7 Claims. (Cl. 229—72.)



1. As a new article of manufacture, an envelope formed wholly from a single sheet or blank and providing two independent compartments, one within the area of the other, the entrance to one of said compartments being a slit in one flap of the blank, and said flap having an integral extension adapted to form a closure for said slit, independent of the entrance closure of the other compartment.

1,815,397. MOTOR DRIVEN OPERATOR. HOWARD D. COLMAN, Rockford, Ill. Filed Feb. 5, 1927, Serial No. 166,086. Renewed Jan. 15, 1931. 28 Claims. (Cl. 268—63.)

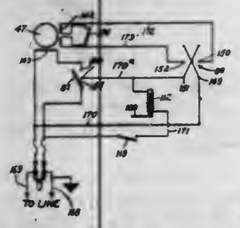


3. A power driving unit for a closure member having, in combination, a driving shaft, a motor adapted to drive said shaft, a driven shaft connected to said closure member, means providing a yieldable connection between said shafts

responsive to a condition of overload, locking means adapted to prevent yielding of said connection, a brake adapted when applied to hold said driving shaft against movement, and means operated from said driven shaft for operating said locking means and applying said brake.

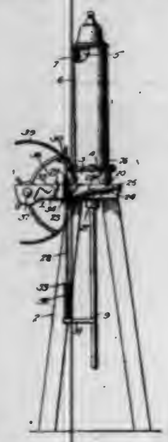
26. The combination with a door of an operator including an electric motor and adapted in successive operating cycles to open and close said door, means for locking said door in closed position, mechanically acting means arranged to receive energy from said motor during the door-closing cycle for actuating said locking means to unlock the door preliminary to the application of motive power to the door in the door-opening cycle of said operator.

1,815,398. MOTOR CONTROL MECHANISM. HOWARD D. COLMAN, Rockford, Ill. Original application filed Feb. 5, 1927, Serial No. 166,086. Divided and this application filed June 8, 1928. Serial No. 283,802. 24 Claims. (Cl. 172—239.)



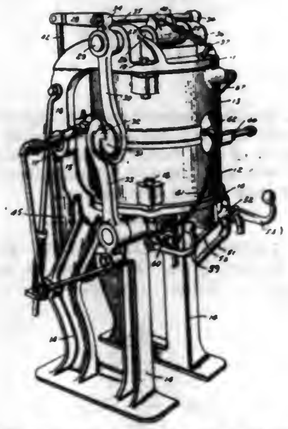
1. A motor control mechanism having, in combination with a part to be operated in successive cycles of predetermined length, a motor operatively connected with said part, a control device having two set positions, a tripping member for holding said device in one of said positions and withdrawable under manual control to start said motor, a second tripping member operable to hold said device in its other set position, and means operated as an incident to the movement of said part by said motor for withdrawing said last mentioned tripping member to stop said motor.

1,815,399. HYDRAULIC OIL WELL LIFT. ELMER CURNUTT, Garnett, Kans. Filed May 16, 1930. Serial No. 452,973. 2 Claims. (Cl. 60—52.)



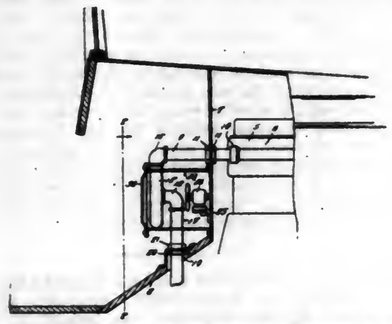
2. A motor of the class described, a vertical cylinder, a gravity-depressed piston slidable in the cylinder, a rod connected to the piston, a chamber for actuating fluid, a conduit communicating with the cylinder and with the chamber, a pump in the conduit and constituting means for transferring fluid from the chamber to the cylinder, to raise the piston, a member having a passage communicating with the cylinder and the chamber and constituting means for returning fluid from the cylinder to the chamber, a rocking valve controlling the passage, an arm secured to the valve, a bracket on the piston rod, a plunger rod slidable in the arm and secured in the bracket, an abutment on the plunger rod above the bracket, a compression spring on the plunger rod between the abutment and the bracket, a compression spring on the plunger rod and resting at its lower end on the arm, an abutment on the plunger rod above the last-specified spring, means for holding the last-specified abutment in adjusted position along the plunger rod, a spring detent having upper and lower shoulders, means for mounting the detent with the lower shoulder in the path of the arm as the arm moves upwardly, and with the upper shoulder in the path of the arm as the arm moves downwardly, and spring means for imparting sudden movement to the arm as it leaves each shoulder.

1,815,400. BALL MOLD PRESS. BARTHOLD DE MATTIA, Passaic, N. J. Filed July 24, 1929. Serial No. 380,576. 7 Claims. (Cl. 18—17.)



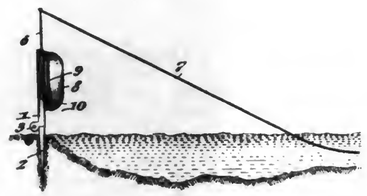
1. A vulcanizing press comprising a pair of opposed platens hingedly connected together, a lever for moving one of the platens toward and away from the other, said lever having a limited lost motion with reference to the movable platen, locking lugs on the fixed platen at opposite sides thereof, and clamping members pivoted at the opposite sides of the movable platen and adapted to be swung into and out of locking engagement with said lugs by the lost motion of said lever.

1,815,401. AUTOMOBILE HEATER. ARTHUR C. EMERSON and IRVIN C. CRANDALL, Superior, Wis. Filed June 9, 1930. Serial No. 459,962. 1 Claim. (Cl. 257—259.)



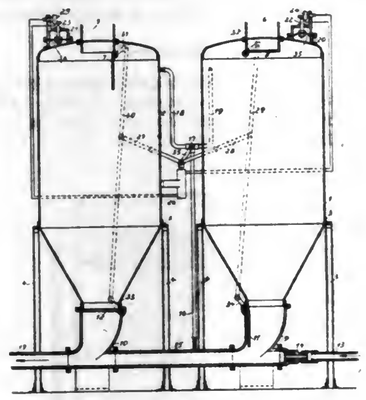
In an automobile and in combination with the exhaust manifold, a pipe coil located in the front part of the body of the automobile and an extension pipe for the exhaust manifold having its front end connected with the rear end of the manifold and forming a continuation of the manifold, the rear end of said pipe being connected with the outer end of the coil, an exhaust pipe connected with the inner end of the coil whereby all the exhaust gases from the engine pass through the coil and a fan arranged in front of the coil for forcing air through the spaces between the coil.

1,815,402. FISHING LINE ALARM. WILBUR ELDER FISHER, Evansville, Ind. Filed Aug. 19, 1929. Serial No. 387,003. 3 Claims. (Cl. 43—17.)



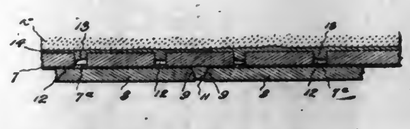
1. In a fishing line alarm, the combination with a hollow standard, of a vibratory reed secured to said standard and having a part of its length located within said hollow part thereof and extending beyond said standard, affording a connection for a fishing line, and an alarm connected to the standard and provided with means for its operation or release, said means projecting into the hollow part of the standard in position to be engaged by the reed when the latter vibrates.

1,815,403. APPARATUS FOR CONVEYING BULK-GOODS. PAUL GOEBELS, Dessau, Germany, assignor to Firm G. Polysius Aktiengesellschaft, Dessau, Germany. Filed Sept. 17, 1928, Serial No. 306,537, and in Germany Sept. 19, 1927. 13 Claims. (Cl. 302—39.)



1. An apparatus for conveying bulk material comprising, in combination, a plurality of containers, a common discharge conduit for conveying material from said containers, valves controlling discharge from said containers to said conduit, reversing means for opening one valve and closing the other valve, pressure sensitive diaphragms in the wall of each container and connections from said diaphragms to the reversing means adapted to reverse the position of the valves due to the pressure changes in the containers.

1,815,404. COVERING. SAMUEL GREENEBAUM, Kansas City, Mo. Filed Mar. 31, 1928. Serial No. 266,440. 2 Claims. (Cl. 72—23.)



1. A covering comprising a backing sheet, and tile simulations separate from each other, separate from said backing sheet and all permanently secured to said backing sheet before application of the covering to a building structure, said simultations being spaced apart both longitudinally and transversely to provide both longitudinal and transverse plastic-receiving-and-retaining and nail-receiving grooves, said tile simulations having all of their edges beveled to impart greater width to said grooves at their closed sides than at their open sides and to allow easy removal of said simulations from moulds if they be so formed, said permanently secured tile simulations and grooves occupying the entire area of said backing sheet.

1,815,405. PORTABLE REFRIGERATOR. MATTIE JANE HEWITT, New Orleans, La. Filed May 29, 1929. Serial No. 366,980. 12 Claims. (Cl. 62—32.)

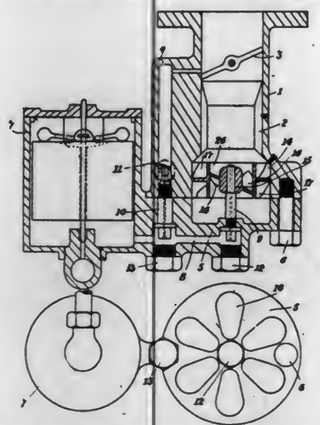


1. A refrigerator cover for portable receptacles comprising a lower tubular section designed to be mounted in an opening in the bottom of a receptacle and to extend to the upper portion thereof and provided with drain openings arranged exteriorly of the receptacle, an enlarged upper flexible hopper section foldable within the lower tubular section and normally extending above the receptacle, said hopper section being adapted to hold a supply of ice and secured to and communicating with the lower tubular section, the side walls of the latter being imperforate from the hopper section to the bottom of the said receptacle, and means for securing the hopper section to the top of the receptacle and for closing the same exteriorly of the hopper section.

1,815,406. CARBURETOR. HUGH HUTCHISON, Cambusiang, Scotland, assignor to "H. H." Carburetter Company Limited, Glasgow, Scotland. Filed Aug. 1, 1929. Serial No. 382,052. 3 Claims. (Cl. 261—79.)

1. In a carburetor having an upper body part, a lower body part, means for removably attaching the lower part to the upper part, a jet attached to and projecting upward from the lower part, a mixing sleeve fitting into

the upper part and comprising a ring, inner and outer oppositely inclined vanes, and a central boss supported



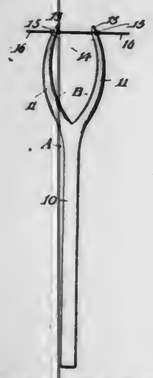
by said jet so that the mixing sleeve is secured in position by attaching the lower body part to the upper body part.

1,815,407. HOSE COUPLING. LEANDER J. JONES, High Point, N. C. Filed Aug. 27, 1929. Serial No. 388,745. 1 Claim. (Cl. 285—181.)



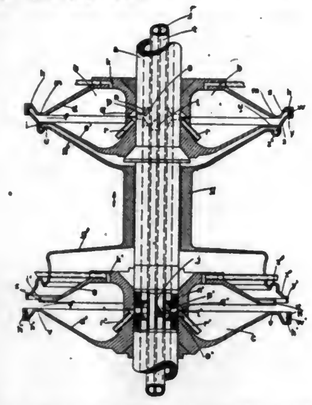
A hose coupling comprising an outer tubular section and an inner tubular section, said outer section having a longitudinal internal groove, a rib disposed longitudinally of the inner section and adapted to fit within the groove to prevent rotary movement of the sections with respect to each other, said inner section having a recess, a pivoted locking bar disposed transversely of the outer section and having a cut away portion providing a clearance for the inner section, and said pivoted locking bar adapted to move into the recess of the inner section to lock the sections together.

1,815,408. DENTAL FLOSS HOLDER. JAMES K. JORDAN, Atlanta, Ga. Filed Mar. 29, 1929. Serial No. 350,930. 1 Claim. (Cl. 132—91.)



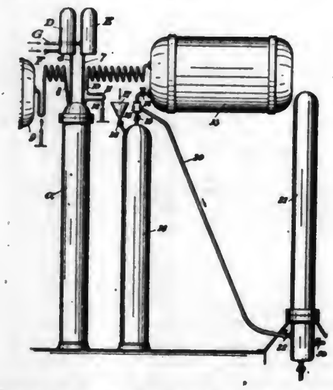
The combination with a length of dental floss having knots spaced from each other, of a holder forming a fork having resilient tines outwardly bulged with their free ends converging, each end having a straight bifurcation opening through the same and a socket merging into the inner end of said bifurcation and located at the outer side of said tine removed from its extremity, whereby the knots will become seated in the sockets when the floss has been inserted in the bifurcations and tensioned in bridging relation to the fork.

1,815,409. CENTRIFUGAL APPARATUS. ERNST KNÖTTEL, Kalkberge/Mark, Germany. Filed Feb. 15, 1928, Serial No. 254,448, and in Germany Feb. 22, 1927. 5 Claims. (Cl. 233—20.)



1. In an apparatus of the centrifugal type, a bowl in two sections which define between them a substantially lenticular annular chamber having a peripheral discharge slot of fixed width, and an axially displaceable annular slide adapted to substantially close said slot; the said bowl sections being provided with annular flanges and recesses adapted to co-operate with corresponding recesses and flanges on said displaceable slide, whereby upon closure of said discharge slot by said displaceable slide the solids tend to accumulate between the said flanges and recesses to prevent the discharge of material through said slot.

1,815,410. PROCESS AND MEANS FOR PRODUCING AMMONIA. FRANZ LAWACZECK, Munich, Germany. Filed Mar. 26, 1925, Serial No. 18,619, and in Germany Dec. 13, 1923. 17 Claims. (Cl. 23—199.)



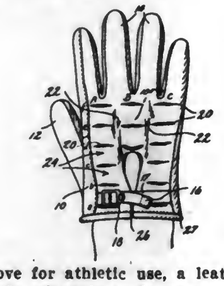
1. Apparatus for synthetic production of ammonia from hydrogen and nitrogen comprising a closed, pressure resisting electrolytic vessel for the production of hydrogen under pressure, a hydrogen collecting vessel connected with the hydrogen collecting chamber of said electrolytic vessel, heating means inserted between the two vessels for causing combination of traces of oxygen with hydrogen, means for mixing the hydrogen under the pressure aforesaid with nitrogen and means for conducting the mixture of hydrogen and nitrogen past catalytic material.

1,815,411. GLARE SHIELD. LONGWORTH B. LEWIS, Montross, Va. Filed Aug. 19, 1929. Serial No. 386,887. 6 Claims. (Cl. 296—97.)



5. In an anti-glare device, a shield adapted to swing on an axis; a shaft, armatures connected to the shaft, and angularly spaced apart; a magnet opposite each armature; and a circuit for energizing the magnets to gather in the armatures in succession.

1,815,412. HANDBALL GLOVE. EDWARD C. LINDFELT, Des Moines, Iowa. Filed June 17, 1929. Serial No. 371,520. 3 Claims. (Cl. 2—19.)



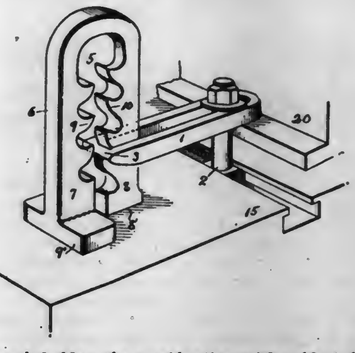
1. In a glove for athletic use, a leather back portion arranged in the glove in such manner that its greater tendency to stretch is transverse, said portion having a plurality of transverse rows of transversely elongated slits, which slits are likewise arranged in rows lengthwise of the glove.

1,815,413. FENDER. HENRY W. LOCKWOOD, Charleston, S. C. Filed Apr. 18, 1930. Serial No. 445,460. 2 Claims. (Cl. 114—219.)



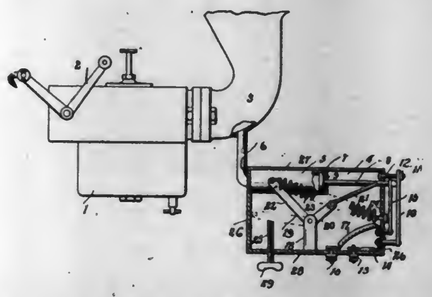
1. A fender for boats comprising a plurality of centrally apertured cushioned disks arranged one upon the other and tightly compressed with the apertures thereof in alinement, a flexible cable extending through the apertures of the disks, rigid disks engaging the end cushioned disks and of a diameter less than the diameter of the adjacent cushioned disks and having the cable extending therethrough, and looped attaching elements secured to the ends of the cable and bearing tightly against the rigid disks and constituting the sole clamping means, said flexible disks and flexible cable co-operating with each other in permitting a portion of certain disks to separate while the remaining portions of the respective disks bear tightly together when subjected to a pressure and allow the use of the device on a boat in the arc of a circle.

1,815,414. STRAP CLAMP AND BLOCK. ROBERT W. LORD, Portsmouth, N. H. Filed Apr. 15, 1930. Serial No. 444,541. 2 Claims. (Cl. 90—59.)



1. In a work holder, the combination with a block having an open interior provided with strap-engaging means, said block being provided with a gap or opening extending from the said open interior to the exterior thereof, of a strap straddling the block and having a locking cross-piece extending through the open interior of the block and adapted to engage the aforesaid strap-engaging means, said gap or opening being of slightly less width than the thickness of said cross-piece, thereby normally preventing passage of the cross-piece through the gap but permitting disconnection of the strap from the block by slightly springing the parts of the block away from each other to permit passage of the cross-piece through the gap.

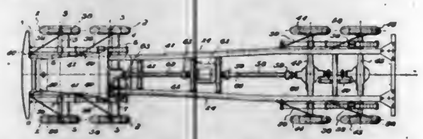
1,815,415. STARTING SWITCH FOR AUTOMOBILE ENGINES. CECIL T. MANSUR, Hardin, Mo. Filed Feb. 4, 1927. Serial No. 165,968. 2 Claims. (Cl. 200—82.)



1. A circuit breaker of the character described comprising a frame, contacts carried by said frame, one contact being movable towards and away from the other and normally remaining in engagement therewith, cylinder carried by said frame having one end adapted for connection

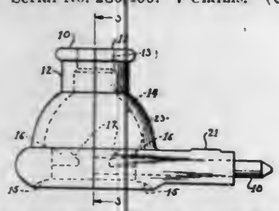
with suction exerting means, a piston slidable in said cylinder, a rod extending from said piston through the other end of said cylinder and connected to the movable contact whereby the movable contact may be moved out of engagement with the other contacts when the piston is moved by suction created in said cylinder, a lever pivotally connected with said frame, a link connecting said lever with the piston rod, and a spring having one end connected with said frame and its other end with said lever and serving to yieldably resist pivotal movement of the lever in one direction and normally retain the movable contact in engagement with the other contact.

1,815,416. ROAD VEHICLE. ARTHUR I. MARCUM, Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation, a Corporation of Delaware. Filed Sept. 4, 1925. Serial No. 54,560. 9 Claims. (Cl. 180—22.)



3. A road vehicle comprising a frame, a pair of axles disposed beneath the forward end of said frame, a pair of springs individual to each axle, each of said springs being connected at one end to said frame equalizing means connected to the frame and to adjacent springs on the same side of the vehicle, whereby said axles are capable of substantial swinging movement independently of the deflection of the springs individual thereto, a pair of dirigible wheels supporting each axle and connected thereto by king pins disposed with their axes lying in the substantially vertical plane that bisects the wheel tread, and frame supported steering means for simultaneously steering said dirigible wheels, and means connecting said frame supported steering means and said wheels, comprising arms pivoted to the frame at points approximating the points of connection between the springs individual to the axles and the frame.

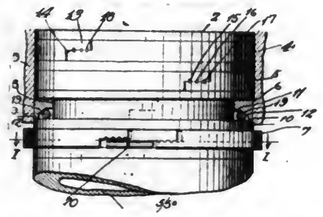
1,815,417. LOCKING DEVICE FOR GEAR SHIFT LEVERS. HARRY A. MILLER, Edmond, Okla. Filed June 18, 1928. Serial No. 286,406. 7 Claims. (Cl. 70—128.)



3. A device of the type described comprising a body portion composed of a male member, a female member, said members having arcuate-shaped recesses disposed therein for receiving a portion of a gear shifting mechanism provided with a ball-shaped portion, and locking keys extending inwardly from said members and having arcuate-shaped portions arranged to engage with said ball-shaped portion for holding said ball-shaped portion against displacement.

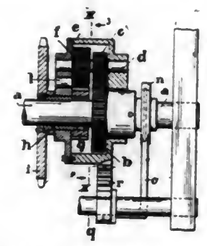
1,815,418. RADIALLY-EXPANSIVE PISTON RING DEVICE AND FUSIBLE LOCKING MEANS THEREFOR. WILLIAM GARVIN O'BRYAN, Seaside, Calif. Filed Nov. 14, 1929. Serial No. 407,205. 4 Claims. (Cl. 74—109.)

1. The combination with a cylinder, of a piston loosely fitting the same and provided with a ring groove, a trans-split ring in said groove, a counterbore in said ring, an auxiliary expansible member in the counterbore, one vertical wall, one horizontal wall and one sloping wall to the counterbore, said sloping wall tangential to the auxiliary ring and adapted for axial displacement and radial expansion of said trans-split ring under radial expansion



of said auxiliary member, upper and lower over-laps carried by companion ends of said trans-split ring, radial groove means in said engaging over-laps, said means being adapted to form regulated key-openings when said ring is compressed, said key-openings being adapted to receive a locking key to hold said ring under compression.

1,815,419. APPARATUS FOR FEEDING PAPER SHEETS. HANS PRAETZEL, Leipzig, Germany. Filed Sept. 22, 1928. Serial No. 307,702. 2 Claims. (Cl. 74—7.)



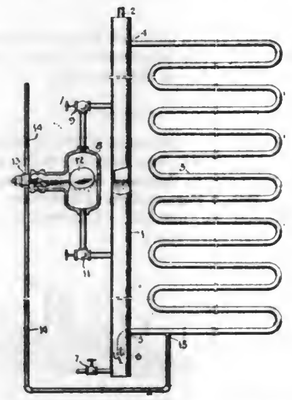
1. The combination, in an apparatus for feeding paper sheets, comprising a main shaft, of a casing for a differential gearing loosely turnable on said main shaft, a toothed sector on said casing, another toothed sector in gear therewith, and an eccentric gearing intermediate said main shaft and said last-mentioned toothed sector adapted to set the latter in uniformly reciprocating motion.

1,815,420. ADJUSTABLE TIE ROD. WILLIAM H. SAUVAGE, New York, N. Y., assignor, by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y., a Corporation of Delaware. Filed July 26, 1926. Serial No. 125,076. 3 Claims. (Cl. 287—61.)



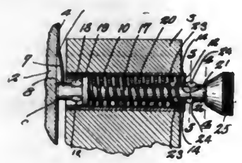
1. In an adjustable tie rod, in combination, end members normally anchored against rotation, one of the members having an internally threaded tubular portion, a rod having one end threaded to engage in the threaded tubular portion and being otherwise unthreaded throughout its length and having its other end housed in the other end member, means disposed at the entrance end of said tubular portion operative to snugly engage the unthreaded portion of said rod, whereby to protect the threads of the tubular portion and the rod from weather, dirt, and the like, a locking pin extending thru one of the end members and rod and adapted to lock said parts against relative rotation, and means for rotating the rod relative to the end members upon removal of the locking pin thereby to change the distance between the end members, said means abutting said end member to which the rod is locked to position the rod longitudinally in locking relation with respect thereto.

1,815,421. REFRIGERATION. THOMAS SHIPLEY, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Feb. 7, 1929. Serial No. 338,280. 12 Claims. (Cl. 62—126.)



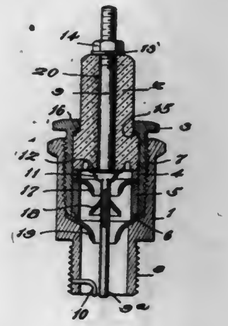
1. The method of refrigeration, which consists in establishing a closed evaporator circuit, maintaining in said circuit a definite liquid level substantially below the highest elevation in said circuit, withdrawing gaseous refrigerant from said circuit at a point adjacent the top thereof, introducing liquid refrigerant below the normal liquid level therein and at a pressure higher than evaporator pressure, and applying the resulting rapid evolution of vapor from the entering refrigerant to elevate liquid refrigerant and establish liquid circulation.

1,815,422. BOLT. SYLVESTER-ELMO SONGEY, Chicago, Ill. Filed Aug. 30, 1929. Serial No. 389,470. 1 Claim. (Cl. 292—60.)



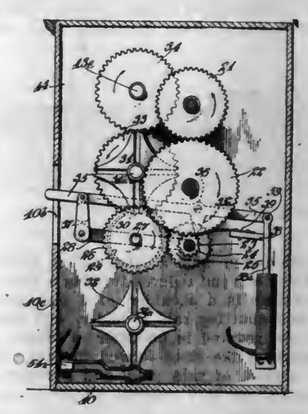
In a sash-holding device of the class described, a tubular casing open at its inner end, a face plate having an opening provided with reduced lateral extensions, a bolt slidable in the opening and of sufficient length to project beyond the inner end of the casing, the bolt being supplied with inner and outer shoulders spaced apart longitudinally of the bolt by a distance approximating the thickness of the face plate, the shoulders being so shaped as to pass through the lateral extensions of the opening when the bolt is moved longitudinally, spring means in the casing for advancing the bolt, the bolt being rotatable to engage the inner and outer shoulders with opposite sides of the plate, thereby to hold the bolt partially advanced, the bolt being rotatable to engage the outer edges of the outer shoulders with the inner surface of the plate when the bolt is fully advanced, thereby to hold the bolt in such position, the bolt being rotatable to engage the inner edges of the inner shoulders with the outer surface of the plate to hold the bolt completely retracted, and means for securing the face plate in place with respect to the casing.

1,815,423. SPARK PLUG. KENT THANET, Los Angeles, Calif. Filed Oct. 5, 1928. Serial No. 310,528. 15 Claims. (Cl. 123—169.)



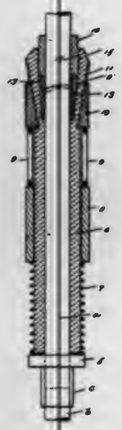
1. A spark plug comprising the following instrumentalities: a tubular metal shell, a tubular metal gland fitted within one end of said shell, an insulator fitted in the outer end of said gland so as to leave an extended heat path within the same and the shell in length not less than twice its own diameter, a metal spindle extending through the insulator, an electrode secured to said spindle and extending through said heat path axially of the shell to the open end thereof, an annular deflector or baffle secured in said shell approximately midway of the length of said heat path, surrounding said electrode with clearance between them, and a second annular baffle secured on said electrode between said first baffle and said insulator, together with a return spark member for said electrode, at the open end of the shell.

1,815,424. STREET INDICATOR. SALVATORE D. TOMASO, Chicago, Ill. Filed Sept. 27, 1926. Serial No. 138,027. 13 Claims. (Cl. 40—57.)



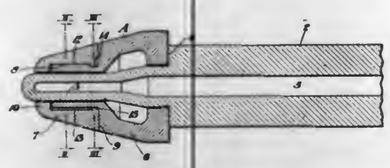
1. A crossing indicator for railways comprising parallel spools, an indicating ribbon wound on the latter, feed sprockets geared to the ribbon, a motor geared to the sprockets, a selector in the motor gearing to limit the drive to one sprocket for the propulsion of the ribbon in a given direction and to the other sprocket on the return course, a stop-motion element operative in the drive of the selected sprocket, a road-crossing stop, a cut-in motor switch actuated by the latter, and a cut-out motor switch actuated by the stop-motion element.

1,815,425. DEVICE FOR ATTACHING OIL WELL TUBING CATCHERS TO OIL WELL TUBING. BASCOM L. WALKUP and WILLIAM JUDSON SEGLER, Mexia, Tex. Filed Dec. 20, 1929. Serial No. 415,519. 2 Claims. (Cl. 24—263.)



1. In a device of the character described, and in combination, a well tubing catcher including a body provided adjacent its upper end with a tapered socket, longitudinally tapered slips fitting said socket and respectively provided with an external tapered face engaging the wall of said socket, transverse teeth on the inner face of each slip, and a lock nut threaded in the upper end of said socket and having its inner end adapted to engage the upper ends of the slips for wedging the latter between the wall of the socket and the well tubing extending through said body, whereby said teeth are forced into gripping engagement with the outer periphery of the well tubing.

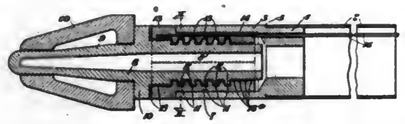
1,815,426. TUBE PIERCING AND EXPANDING PLUG. WILLIAM BARK, Gary, Ind., assignor to National Tube Company, a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,540. 2 Claims. (Cl. 80—11.)



1. The combination with a plug-bar for seamless tube machines having one end reduced forming a plug receiving shank terminating in a shoulder, of a plug mounted on said shank and abutting said shoulder, said plug having its forward end reduced in diameter to receive a removable nose, bayonet-like slots formed in said reduced diameter end portion of said plug, and a removable nose member mounted on said reduced diameter end of said plug, said nose member being provided with lugs adapted to be locked in said bayonet-like slots by a rotation of said nose member.

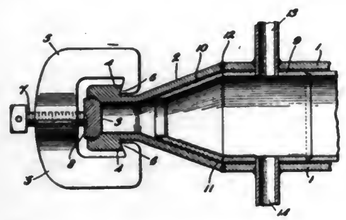
1,815,427. PLUG BAR FOR TUBE MAKING MACHINES. WILLIAM BARK and JAMES V. MAZURIE, Gary, Ind., assignors to National Tube Company, a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,541. 4 Claims. (Cl. 80—11.)

1. A plug bar for seamless tube machines comprising a relatively thin walled tubular body portion extending for the major portion of the length of said bar, a relatively heavy walled tubular bearing supporting member carried by the forward end of said body portion, a combined journal



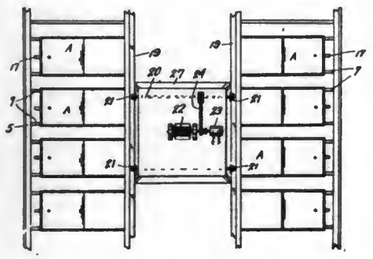
and thrust bearing sleeve mounted within said bearing supporting member, a plug supporting spindle journaled in said bearing, and a plug on said spindle.

1,815,428. DIGESTER FOR CRACKING HYDROCARBON OILS. JOHN C. BLACK, Los Angeles, Calif., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 25, 1922, Serial No. 596,837. Renewed Sept. 6, 1927. 7 Claims. (Cl. 196—133.)



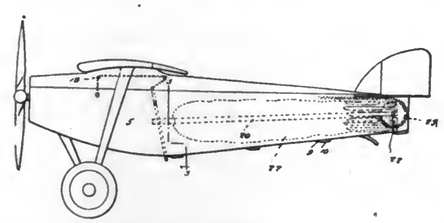
1. A digester for cracking hydrocarbons at an elevated temperature and pressure comprising a metallic casing in sections, the end sections being cone-shaped, and a middle section having pipes extending through its walls and connected with its interior, the small ends of the cone-shaped sections having shoulders on their exterior and being interiorly flared, a metallic closure for each end fitting within the flared ends and having on its exterior surface an indentation, and yokes fitting behind the shoulders on the exterior of the cone-shaped ends each having a bolt screw-threaded through the yoke and extending into the indentation of a metallic closure.

1,815,429. GARAGE. JESSE L. CANADAY, Memphis, Tenn. Filed Sept. 8, 1928. Serial No. 304,631. 2 Claims. (Cl. 189—1.)



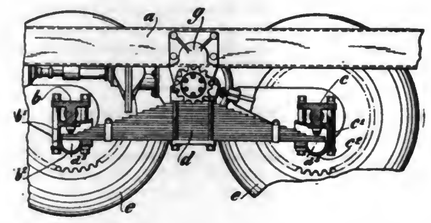
1. A garage of the class described, including a supporting structure, a plurality of pan like bottoms mounted in the supporting structure to form independent stalls for automobiles, each pan like bottom including upwardly curved side walls, a bottom, an end wall, said bottom being inclined downwardly toward the end wall.

1,815,430. AEROPLANE PARACHUTE. JOSEPH CHAB, Dorchester, Nebr. Filed Apr. 1, 1930. Serial No. 440,765. 2 Claims. (Cl. 244—21.)



1. In combination with an aeroplane having a compartment formed therein open at the bottom and the rear end, a bottom plate releasably mounted in the compartment, a bar pivoted in the rear end of the compartment, ribs hingedly mounted on the bar adjacent the free end thereof, a parachute cover having its edges secured to the ends of the ribs, cords secured to the ends of the ribs and to the bar adjacent the pivoted end thereof, the pivoted end of the bar having a disk formed thereon, a spring anchored to the disk and extending thereabout and anchored in the compartment and under tension to normally swing the bar out of the compartment when the bottom plate is released, said releasable means for holding the bottom in the compartment comprising sleeves on the fuselage and lugs on the bottom plate extending into the sleeves, and means for moving the bottom plate to release the lugs from the sleeves.

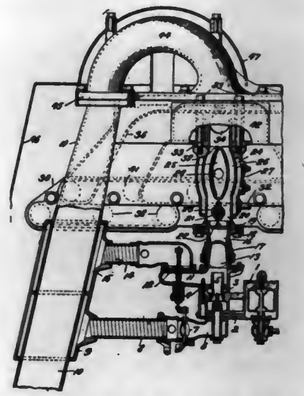
1,815,431. SIX WHEEL CHASSIS FOR MOTOR VEHICLES. FLOYD E. DAVIS, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1929. Serial No. 412,955. 3 Claims. (Cl. 180—22.)



3. In a vehicle having a wheel and a spring mounting the wheel upon the vehicle frame, means for mounting the wheel to an extremity of the spring, a bracket carried by the frame, a spherical bearing surface on the under portion of the bracket, a cooperating bearing member on the spring, a jack shaft housing, and means to journal the housing in the last named bearing member.

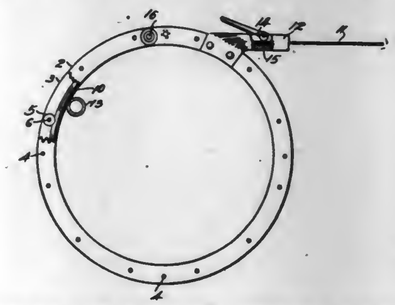
1,815,432. INTERNAL COMBUSTION ENGINE. WILLIAM P. DEPPÉ, Brightwaters, N. Y. Filed Dec. 27, 1920. Serial No. 433,179. 3 Claims. (Cl. 123—119.)

1. The method of preparing exteriorly of the combustion chambers, a homogeneous dry gaseous mixture of combustibles and air and products of combustion for use in internal combustion engines, which comprises forming a mixture of liquid combustibles and air in proper ratios, diffusing the vapors and liquids by turbulence, while heating the mixture to completely vaporize the liquid combustibles and render the mixture substantially dry and homogenous throughout, then adding hot products of combustion to the substantially dry homogeneous mixture without altering the homogeneity thereof, then heating



the last named mixture so as to maintain it as a dry homogeneous gaseous mixture for delivery and use in the engine as such.

1,815,433. FISH-TAPE REEL AND PULLER. THOMAS A. DUNAGAN, Los Angeles, Calif. Filed Mar. 8, 1930. Serial No. 434,342. 9 Claims. (Cl. 175—376.)



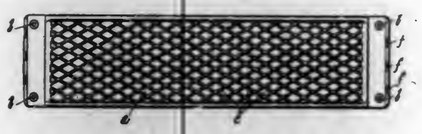
1. An electrician's hand tool comprising a frame structure of ring form, and an axleless running reel ring mounted therein and having side walls supported by peripheral guides provided in the frame.

1,815,434. METHOD OF BLIND EYELETING AND PRODUCT PRODUCED THEREBY. HAROLD A. EVANS, Lynn, Mass., assignor, by mesne assignments, to Parco Specialty Co., Lynn, Mass., a Corporation of Massachusetts. Filed Oct. 28, 1927, Serial No. 229,352. Renewed Dec. 16, 1930. 10 Claims. (Cl. 218—29.)



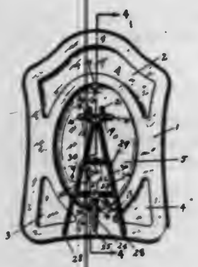
2. The improvement in the art of blind eyeleting which consists in laying a stay strip on the rear face of an outer ply, uniting such strip adhesively along its edges to the ply and leaving its longitudinal, central zone unattached thereto, at the same time so placing the strip that such zone coincides approximately with the areas in which the eyelets are to be located, then superimposing the before named ply upon a facing ply with the strip between them and setting eyelets in the facing ply and strip by the blind eyeleting process.

1,815,435. TRACTION TREAD. ROSWELL W. HARDING, Sedgwick, Me., and JOHN J. RICHARDS, Brookline, Mass. Filed May 24, 1929. Serial No. 365,757. 13 Claims. (Cl. 238—14.)



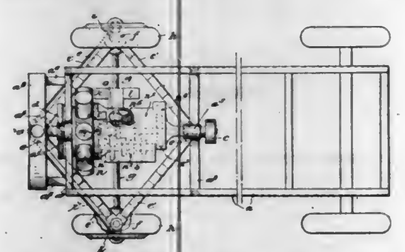
1. A traction tread device comprising a substantially imperforate body of vulcanized rubber adapted to be placed between the tread of a driving wheel and the ground, having projections on its under side adapted to indent soft or granular ground surface.

1,815,436. COMBINED EASEL AND MEDALLION. BENJAMIN HARRIS, New York, N. Y. Filed Feb. 24, 1931. Serial No. 517,922. 12 Claims. (Cl. 40—146.)



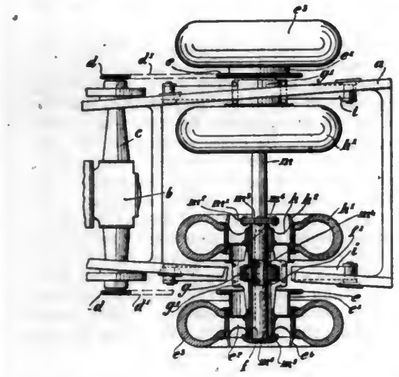
1. In a combined easel and medallion, a back wherein two pivotal fittings are drawn therefrom with end piercings therein facing each other on equal plane, a ribbed easel formed out of flat sheet metal, cross joined at intervals, having near the upper portion thereof two lateral pivots extending in opposite directions in fixed position for operative connection with said fittings, and at the lower portion thereof legs with ball-like terminals for contact with a resting surface, an undercut existing in one of said fittings for facilitating the insertion of said pivots to pivotal position on said back, the said latter fitting being also depressible to close up said cut, and stops at one end of said easel for limiting the outward movement of said legs a predetermined distance.

1,815,437. FRONT DRIVE POWER UNIT. LYMAN C. JOSEPHS, Jr., Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 17, 1930. Serial No. 421,341. 3 Claims. (Cl. 180—43.)



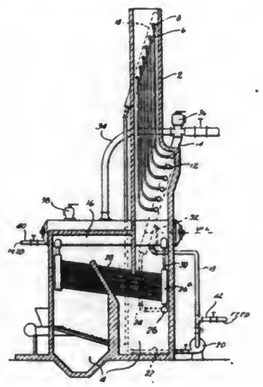
1. In combination with a vehicle frame, an engine, a transmission rearwardly of the engine and driven thereby, a driving axle on the frame, a plurality of springs disposed generally in the shape of a diamond mounted upon the frame at ends thereof at opposite corners of the diamond and mounting the axle at the other ends thereof, means to mount the engine and transmission as a unit within the diamond over the axle, a forwardly extending shaft driven from the transmission at the rear thereof, and means to drive the axle from the last named shaft.

1,815,438. CHAIN DRIVE FOR MOTOR VEHICLES. LYMAN C. JOSEPHS, Jr., and ERVING R. GURNEY, Allentown, Pa., assignors to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,609. 1 Claim. (Cl. 180—22.)



A device of the character described comprising a vehicle frame having springs at either side thereof, a plurality of wheels, a journal box carried by each of the springs, a tubular shaft section journaled in each journal box, means for mounting a plurality of wheels on each shaft section, a driving sprocket on each shaft section, a stabilizing shaft journaled in the shaft sections and formed with an intermediate section mounted thereon to be removed from the cooperating sections without dismounting the last named sections, and means for driving the wheels through the sprockets.

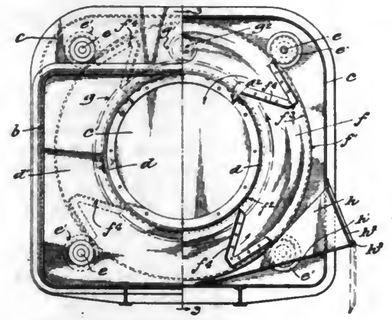
1,815,439. STEAM GENERATOR OR THE LIKE. WALTER DOUGLAS LA MONT, New Rochelle, N. Y., assignor to La Mont Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 4, 1926. Serial No. 79,096. 14 Claims. (Cl. 122—1.)



1. In steam generating apparatus, the combination with a boiler of the mass-boiling type and boiler heating means,

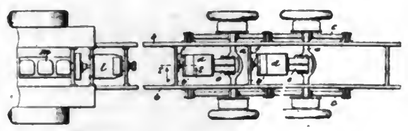
of auxiliary steam generating tubes exposed to the heat of said heating means and connected at their respective ends to said boiler to form therewith an auxiliary water circuit, said tubes being arranged for gravitation of the water therethrough, means for positively effecting a circulation of boiler water through said auxiliary circuit and means for so restricting the input of water to the respective elements with relation to the total amount of water supplied to the elements as to properly apportion it to each element and through which restricting means the water is positively forced under action of the pressure generator.

1,815,440. VEHICLE FOR COLLECTING ASHES. AUGUST H. LEIPERT, College Point, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1930. Serial No. 441,486. 6 Claims. (Cl. 214—67.)



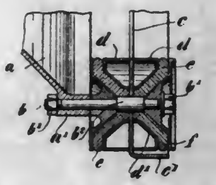
1. A vehicle having a dump body, a bin in the body adjacent the lower portion of the same to receive material to be loaded, the bottom of the bin sloping downwardly and inwardly, a trap door for the bin, an annular conveyor mounted rotatably in the body adjacent the inner extremity of the sloping bottom of the bin, a cylindrical drum in the conveyor having an open end adjacent the interior of the body and an aperture adjacent the upper portion thereof, and means to rotate the conveyor.

1,815,441. DRIVE FOR MOTOR VEHICLES. ALFRED F. MASURY, New York, N. Y., and FRANK E. QUEENEY, Teaneck, N. J., assignors to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 17, 1926. Serial No. 116,517. 1 Claim. (Cl. 180—57.)



In a vehicle having a transverse frame member and an axle housing, in combination with a motor having its axis substantially perpendicular to said axle housing and having one of its ends secured rigidly thereto, means to support the other end of the motor on said transverse frame member comprising an arm carried rigidly with the motor and having oppositely facing substantially horizontal seats and opposed substantially vertical transverse seats formed thereon, a housing secured to the transverse frame member and having an opening therein, the housing and vertical seats on the arm forming housings, a U-shaped arm having, at its ends, transverse bearing members formed thereon, the ends of said U-shaped arm being received within the aforesaid housings, seats formed on the interior of the housing carried upon the frame and in opposition to the bearing surfaces on the cooperating end of the arm, and yielding non-metallic material between the seats on the arm and the seats of the respective housings.

1,815,442. SHOCK INSULATED MOUNTING FOR AIRCRAFT ENGINES AND RADIAL MOTORS IN BUSSES. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 418,041. 3 Claims. (Cl. 244—31.)



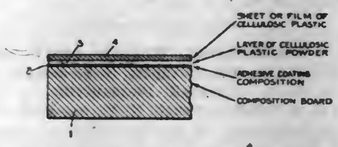
2. An engine mounting for vehicle engines comprising a mounting ring, conically shaped seats mounted upon opposite sides of the ring, blocks of yielding non-metallic material mounted in the seats, conical bearing members carried by the engine and disposed concentrically to the first seats, and means to maintain the bearing members in position with the yielding means under compression.

1,815,443. MEANS FOR SELF TEACHING OF WALKING AND DANCING. WELLS MITCHELL, Los Angeles, Calif. Filed Nov. 20, 1928. Serial No. 320,671. 1 Claim. (Cl. 35—12.)



A card-board in the form of a foot print adapted to be placed on a floor and used with other similar pieces to teach correct walking and dancing in combination with a removable heel clip adapted to be placed over the heel end of said card-board for the purpose specified.

1,815,444. METHOD OF UNITING ARTICLES AND PRODUCT THEREOF. WILLIAM HENRY MOSS, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 2, 1929. Serial No. 352,059. 8 Claims. (Cl. 154—40.)

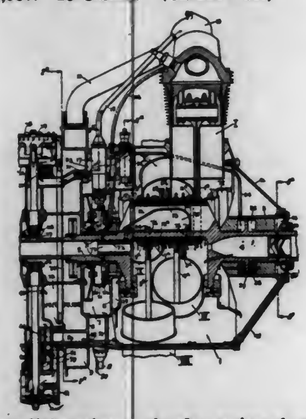


1. Method of uniting surfaces comprising applying a liquid adhesive coating composition containing a derivative of cellulose and a resin compatible therewith on at least one of the surfaces, then applying a powder containing a finely divided derivative of cellulose and then pressing the surfaces at suitable temperatures.

6. Articles of manufacture or surfaces like walls having therein a layer formed from an adhesive liquid coating

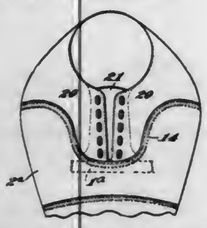
composition containing cellulose acetate and a resin and a powder containing finely divided cellulose acetate between and uniting the component parts.

1,815,445. INTERNAL COMBUSTION ENGINE. WARREN NOBLE, Detroit, Mich. Filed Nov. 17, 1927. Serial No. 233,957. 19 Claims. (Cl. 123—55.)



1. In a radial engine, a circular series of cylinders arranged with their axes in individual planes transverse to the axis of the engine and with adjacent cylinders in other than adjacent planes, a crankshaft having a common crank for said circular series of cylinders, and connecting rods connecting the pistons of said cylinders with said common crank.

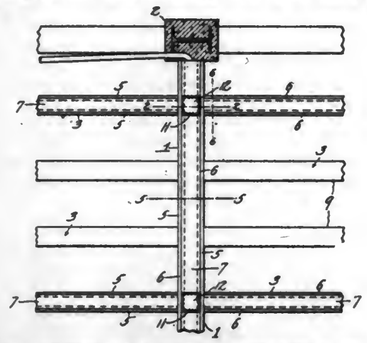
1,815,446. SHOE UPPER AND METHOD OF MANUFACTURE. WALTER F. PACKARD, Marlboro, Mass., assignor to Excel Taping Machine Co., Lynn, Mass., a Corporation of Massachusetts. Filed May 19, 1930. Serial No. 453,508. 9 Claims. (Cl. 36—45.)



1. Method of reinforcing a shoe vamp, comprising progressively feeding the vamp and an adhesively coated reinforcing strip into adhesive engagement by a pair of presser rolls engaging and feeding the vamp and strip respectively, while rotating the roll engaging the vamp at a higher peripheral speed than that of the other roll, thereby imparting a concave transverse curvature to the vamp face to which the strip is applied.

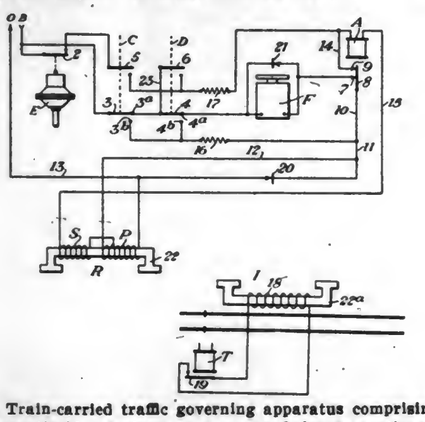
1,815,447. UNDERFLOOR WIRING DUCT SYSTEM. HENRY F. RICHARDSON, Northport, N. Y., assignor of one-fourth to Allan Coggeshall, Pleasantville, N. Y., one-sixth to S. R. Bradley, Nyack, N. Y., one-sixth to A. M. Cregier, Orangeburg, N. Y., one-sixth to Alonzo B. Bradley, New York, N. Y., and one-fourth to himself. Filed Mar. 13, 1929. Serial No. 346,598. 14 Claims. (Cl. 189—34.)

1. In an underfloor system of building construction, the combination of a longitudinal girder carrying a wire-receiving duct, transverse girders carrying wire-receiving ducts supported at their ends upon said longitudinal girder with their ducts in communication with the duct of the longitudinal girder, a floor-like covering supported upon said girders and extending over said communicating ducts, outlet boxes opening from said ducts at the



points of communication of the transverse girder ducts with the longitudinal girder duct; said outlet boxes extending through the floor-like covering.

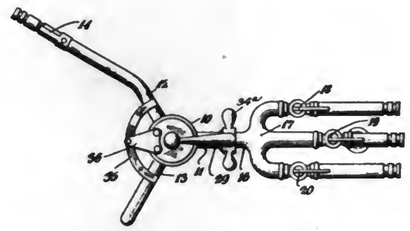
1,815,448. RAILWAY TRAFFIC CONTROLLING APPARATUS. HAROLD V. RUDOLPH, Wilkinsburg, Pa., and WALTER H. HORSCH, Wheaton, Ill., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1930. Serial No. 444,670. 5 Claims. (Cl. 246—63.)



1. Train-carried traffic governing apparatus comprising a magnetizable receiver core arranged for magnetic coaction with a trackway inductor and provided with a primary and a secondary winding, a relay, a brake controlling magnet effective to apply the brakes after the magnet has been deenergized for a given interval of time, an acknowledging switch having normally closed contacts and normally open contacts, and a source of current; a normal circuit for said primary winding extending from one terminal of said source through a normally closed acknowledging switch contact, said brake magnet, a contact of said relay and said primary winding to the other terminal of said source; a normal circuit for said secondary winding extending from said one terminal of said source through a normally closed acknowledging switch contact, said brake magnet, a contact of said relay, the winding of said relay, said secondary winding, and a portion of said primary winding to the other terminal of said source; a normally closed contact which opens when an automatic brake application occurs in response to deenergization of said brake magnet; an acknowledging circuit extending from said one terminal of the source through said brake controlled contact, a normally open acknowledging switch contact, the winding of said relay, said secondary winding, and the said portion of said primary winding to the other terminal of said source; and a second acknowledging circuit extending from said one terminal

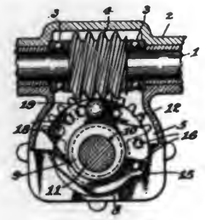
of the source through another normally open acknowledging switch contact, a resistance, and the primary winding to the other terminal of said source, said second acknowledging circuit having a branch which extends from acknowledging switch contact through a normal contact of said relay, the winding of the relay, the secondary winding, and the said portion of the primary winding to the said other terminal of the source.

1,815,449. VALVE MECHANISM FOR PROCTOTHERAPY APPARATUS. OSCAR BOTO SCHELLBERG, New York, N. Y. Filed Jan. 30, 1929. Serial No. 336,124. 2 Claims. (Cl. 137—111.)



1. A valve mechanism as characterized comprising a swinging bracket member having a fitting embodying multiple receiving passages converging into a single delivery passage, and a valve assembly embodying a cup-like casing having a plurality of tubular extensions, one of which being a receiving passage, is adapted for operative connection with said delivery passage on said swinging bracket, said assembly further embodying a rotatable valve body having a plurality of passages therethrough adapted to register the one with said receiving passage and simultaneously with one of said tubular extensions, and the other passage being adapted to register with said receiving passage and the other tubular extension when moved thereto; and means readily operable for operatively connecting and releasing said casing and said bracket, and separate means readily operable to operatively connect said casing and said valve body.

1,815,450. STEERING GEAR ADJUSTING DEVICE. ALOIS H. SCHMAL, Rahway, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 24, 1930. Serial No. 455,200. 1 Claim. (Cl. 74—79.)



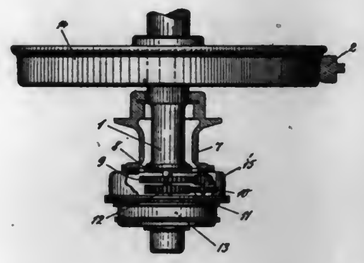
A housing, a driving shaft journaled in the housing and provided with a worm, a driven shaft, a sector on the driven shaft engaging the worm, a cylindrical sleeve on the housing, a bushing in the sleeve formed with an eccentric bore and lying on one side of the sector, a flange on the sleeve formed with a plurality of threaded apertures adjacent the periphery thereof, a flange on the bushing formed with apertures spaced coaxially with the first apertures, means engaging the apertures to secure the flanges together in a desired position, and means to journal the second shaft in the bushing.

1,815,451. PENCIL CASING. JOHN SCHNEIDER, Roselle Park, N. J. Filed Oct. 14, 1930. Serial No. 488,595. 5 Claims. (Cl. 120—18.)



1. A pencil holder comprising a casing to receive in one end thereof a pencil which includes a body and a lead slidable therein, means on said end of the casing section to clamp said pencil against movement therein, and means in said casing to engage and push said lead from said body.

1,815,452. ARRANGEMENT FOR LIGHTING TRAINS. KARL SCHMIDT, Berlin-Lichtenrade, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Nov. 5, 1929, Serial No. 404,916, and in Germany Nov. 16, 1928. 2 Claims. (Cl. 105—118.)

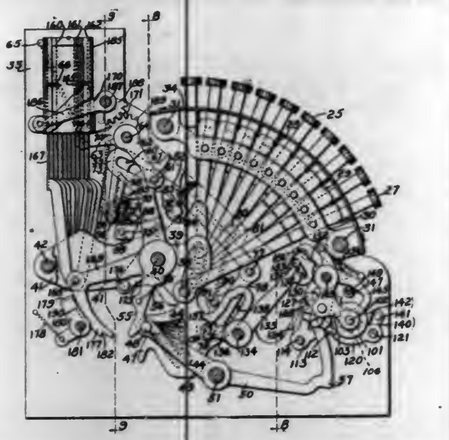


1. In a car lighting system, an axle stub, a generator, an armature shaft, said generator being mounted on the bearing of said axle and said shaft being in direct line with and connected to said axle by a gear train.

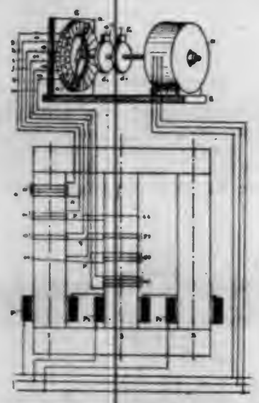
1,815,453. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed June 21, 1919. Serial No. 305,878. 28 Claims. (Cl. 235—7.)

1. In a machine of the class described, the combination of two series of depressible keys, normally ineffective locking means common to all keys of both series, a main operating member, locking means therefor, means oper-

ated by the depression of any key in either series of keys for rendering the key locking means effective and for releasing the locking means for the main operating member, and means operated by the main operating member for releasing an operated key of either series.



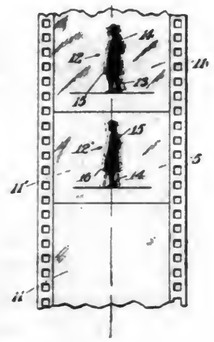
1,815,454. PHASE CHANGING TRANSFORMER. MARIO URBINATI, Rome, Italy. Filed July 10, 1928, Serial No. 291,663, and in Italy July 25, 1927. 4 Claims. (Cl. 172—238.)



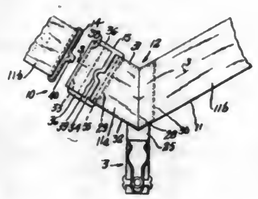
1. In transformers for polyphase currents of the type which being fed by a system of alternating currents comprising n primary phases transform it into a system of alternating currents comprising n m phases, the combination of n cores, n primary windings one for each of said cores through which circulate the n alternating currents of the feeding system, n secondary windings each comprising m distinct and separated sections, each section comprising a whole number of turns changing gradually in the successive sections in such a manner that all the numbers are of the form $k\,p$, in which k is an integer varying from l to m and p the number of the turns of the smallest of the sections.

1,815,455. METHOD OF PRODUCING MOTION PICTURES. FRED WALLER, Huntington, N. Y., assignor, by mesne assignments, to Paramount Publix Corporation, a Corporation of New York. Filed Sept. 3, 1926. Serial No. 133,352. 3 Claims. (Cl. 88—16.)

2. In the production of motion picture films the method which comprises exposing different portions of the frame of a film for predetermined fractions of the normal exposure period to successive phases of action of a subject, to produce on said frame, in different degrees of intensity, images of the said successive phases of action, exposing different portions of another frame of the film for predetermined fractions of the normal exposure period to successive phases of action of the subject, to produce on said frame images of different degrees of intensity, the longest exposure of the second frame being made to the same phase of action as the shorter exposure when exposing the first frame.



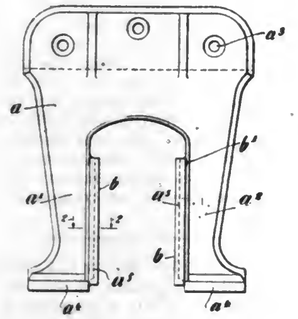
1,815,456. GARTER. GABRIEL ABRAHAM, New York, N. Y. Filed Jan. 10, 1931. Serial No. 507,829. 8 Claims. (Cl. 241—6.)



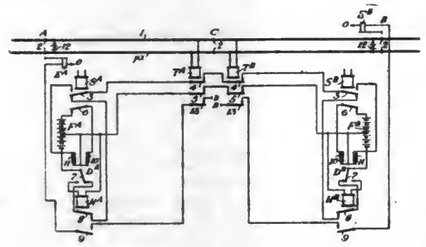
1. A garter made of strip material and having a fold at an angle thereto, a corner of the fold being cut away along a diagonal line leaving the parts of the strip integrally connected at one edge, said parts being stitched together along a diagonal line whereby said parts form an angle in the flat oppositely extending relation of said parts, a fastening member at an end of the band spaced from said fold, and a separate backing element having an angle coinciding with the angle aforesaid, said element being secured to the band at opposite portions of the fold and being further secured to the end of the band at said fastening member.

1,815,457. REMOVABLE PEDESTAL LINER. ROBERT G. ANDERSON, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1929. Serial No. 412,992. 1 Claim. (Cl. 105—225.)

A pedestal construction for railway trucks comprising spaced pedestal jaws, plates projecting beyond the opposed faces of the jaws, U-shaped liners, stops on the liners at one end thereof and extending between and lying flush with the sides thereof, and means to secure the liners to the jaws over the plates, the stops abutting the lower ends of the plates.

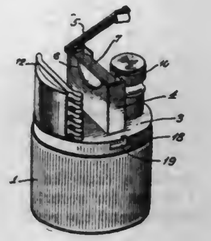


1,815,458. RAILWAY SIGNALING. CHARLES A. BROOKS, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 10, 1929. Serial No. 413,028. 8 Claims. (Cl. 246—21.)



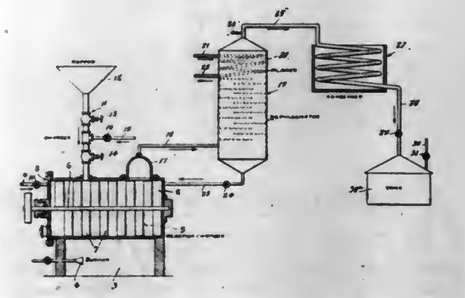
1. In combination, a block of railway track, track circuits including track relays for said block, a normally open remote controlled relay S for each end of said block, a directional relay D for each end of said block having a normal and a reverse winding and an armature which is moved to a normal or a reverse position according as the normal or reverse winding is energized and which remains in the position to which it was last moved when the relay becomes de-energized, a signal relay H for each end of said block, a circuit for the normal winding of each D relay including a back contact of the associated S relay, a circuit for the reverse winding of each relay D including a normal contact of the D relay for the other end of the block and a back contact of the H relay for the other end of the block and a back contact of the S relay for the other end of the block as well as a front contact of the associated S relay and front contacts of said track relays, a circuit for each H relay including a reverse contact of the associated D relay, and signals for said block controlled by said H relays.

1,815,459. SAFETY RAZOR CASE. PIERRE C. CARTIER, New York, N. Y., assignor to Cartier, Inc., New York, N. Y., a Corporation of New York. Filed May 7, 1929, Serial No. 361,102, and in France Feb. 7, 1929. 8 Claims. (Cl. 206—16.)



3. A safety razor case comprising a body having a top wall provided with openings conforming in shape to the cross sections of the head and handle of a safety razor, a central blade compartment extending above said top wall and provided with a cover, and a cover for said body.

1,815,460. PROCESS OF TREATING HYDROCARBON OILS WITH METALLIC HALIDES. MARVIN L. CHAPPELL, Los Angeles, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Nov. 6, 1926. Serial No. 146,646. 3 Claims. (Cl. 196—54.)

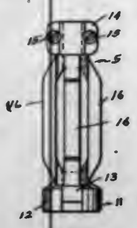


3. A process of treating hydrocarbon oils with aluminum chloride, comprising subjecting an oily residue containing aluminum chloride-hydrocarbon compounds and aluminum chloride, said residue resulting from the conversion of hydrocarbon oils with aluminum chloride, to a temperature sufficient to thermally decompose the hydrocarbons in said residue at a pressure above 4 atmospheres, passing the evolved thermally decomposed oil vapors and aluminum chloride vapors to a reflux zone, maintaining the aluminum chloride vapors in said reflux zone in vapor state, contacting the thermally decomposed oil vapors with said aluminum chloride vapors in said zone, and discharging purified thermally decomposed oil vapors from said reflux zone.

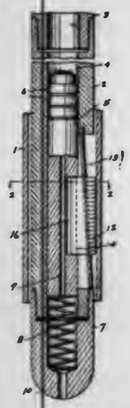
1,815,461. SUCKER ROD GUIDE. HARVEY J. DENNEY, Westlake, and JOSEPH GAUNT, Lake Charles, La. Filed May 24, 1928. Serial No. 280,191. 4 Claims. (Cl. 308—4.)

1. A rod guide formed of two longitudinal sections whose facing sides have registering, longitudinal, end grooves forming rod bearings, said sections being pro-

vided one with a transverse end mortise and the other with a transverse end tenon adapted to fit into said mortise, said guide having a cage-like construction between said bearings and means for securing the other ends of said sections together around the rod.

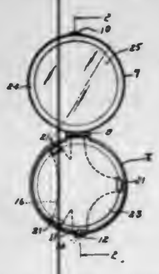


1,815,462. PIPE PULLER. HARVEY J. DENNEY, Westlake, La. Filed July 16, 1930. Serial No. 468,870. 5 Claims. (Cl. 294—96.)



1. A pipe puller including a cylinder having an external face, which is downwardly and outwardly inclined, a pipe engaging jaw slidable on said face, a plunger in the cylinder operatively connected with said jaw, a guide point attached to the lower end of the cylinder, a spring in said guide point on which the plunger is mounted, and a guide rod on which said jaw is mounted to slide.

1,815,463. VANITY BOX. LAURENCE P. DICKEY, Mountain Lakes, N. J., assignor to August Goertz & Co., Inc., a Corporation of New Jersey. Filed Jan. 2, 1930. Serial No. 417,988. 4 Claims. (Cl. 132—83.)

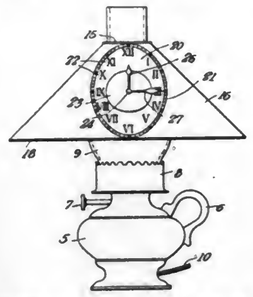


4. A vanity box comprising, a lower body section and a cooperating upper body section, said lower body section having indentations at opposite sides thereof, a cosmetic refill retaining clip positioned within said lower body section, said retaining clip having a central portion contacting with the inner bottom surface of said lower body section, oppositely extending resilient portions formed on said central portion, said resilient portions having their ends conforming to and engaging said indentations to thereby hold said retaining clip within said lower body section, and radiating prongs formed on said central portion, said prongs having resilient catch portions formed on the free ends thereof and extending upwardly from the inner bottom surface of said lower body section, said catch portions having bezels formed thereon for detachably gripping the marginal edges of a cosmetic refill, said catch portions being spaced inwardly from the side wall of said body section, thereby providing for free outward movement of said catch portions during the insertion or removal of a cosmetic refill.

1,815,464. WELDING ROD. FRANK A. FAHRENWALD, Chicago, Ill., assignor to American Manganese Steel Company, Chicago Heights, Ill., a Corporation of Maine. Filed Jan. 9, 1929. Serial No. 331,896. 4 Claims. (Cl. 219—8.)

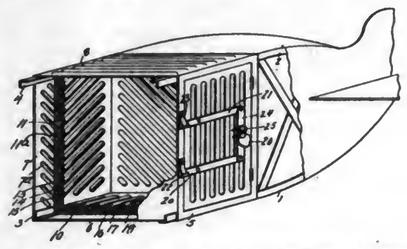
1. A welding rod or strip consisting essentially of a ternary alloy of iron, manganese and a non-ferrous iron group metal wherein the iron is present between the limits of 25% and 90%, the manganese between the limits of 5% and 25%, the non-ferrous iron group metal between .25% and 50%.

1,815,465. COMBINATION LAMP AND CLOCK SUPPORT. HENRY FANTEL, New York, N. Y. Filed Dec. 19, 1930. Serial No. 503,541. 5 Claims. (Cl. 240—2.)



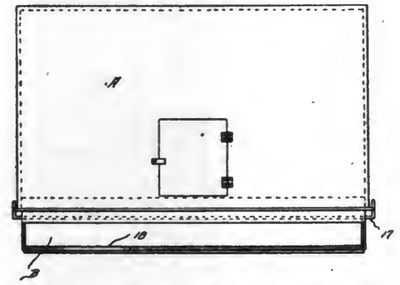
1. The combination of a clock having an outwardly flanged translucent dial over which the clock hands travel, said dial constituting an integral part of an annulus, a lamp, and means on said annulus to engage said lamp circumjacently whereby light may pass through said dial.

1,815,466. MAIL CARRYING AEROPLANE. ROY FISHER, Los Angeles, Calif. Filed Nov. 10, 1930. Serial No. 494,485. 7 Claims. (Cl. 244—30.)



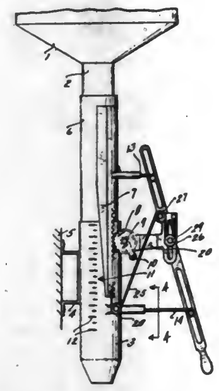
1. In an aeroplane, a mail compartment comprising, outer walls fastened to the corner beams of the plane fuselage, inner walls within said outer walls, and layers of asbestos sheeting intermediate said walls, the adjoining outer and inner walls being provided with corrugations directed in different planes.

1,815,467. SANITARY POULTRY AND PET STOCK MANURE DISPOSAL BASE. EDMOND D. CRAIG, Savannah, Ga., assignor to Bessie Clifton Craig, Savannah, Ga. Filed July 1, 1930. Serial No. 465,229. 4 Claims. (Cl. 119—19.)



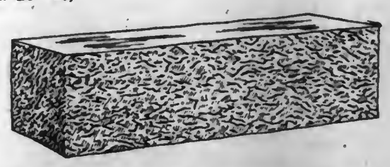
1. A base structure of the class described comprising a bottom, sides rising from the bottom, a perforated sheet across the sides above the bottom, a roll of paper journalled between the sides so that the paper may be stretched across the bottom, said roll of paper being journalled at one end of the base, a panel hingedly mounted at the other end of the base to engage the paper on the bottom.

1,815,468. MEASURING DEVICE. SILVIO FAVRO, Portland, Oreg. Filed Oct. 24, 1929. Serial No. 402,122. 2 Claims. (Cl. 221—118.)



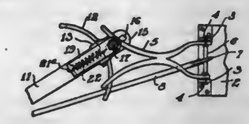
1. A device of the class described comprising a pair of cylindrical heads telescopically disposed one within the other, one of said heads maintained in fixed relation to the other of the heads that is reciprocably disposed within the fixed head, an opening disposed in each of said heads, pairs of guideways disposed in spaced relationship on each side of said openings, a bracket fixedly disposed near the upper end of the fixed head, said bracket having a slot vertically disposed at its free end, a shaft journaled within the bracket, a pinion disposed at one end of the shaft and a handle disposed at the other end of the shaft, a rack vertically disposed in spaced relations upon the reciprocating head and in direct alignment with the pinion, an actuating lever pivotally and slidably disposed within the slot disposed within the bracket, said lever having a slot disposed at each one of its ends, a pair of cut-offs slidably disposed within the openings, said cut-offs having their free ends slidably disposed within the actuating lever in working relationship when the moving head is reciprocated.

1,815,469. CLAY TEXTURING MACHINE. EDWARD G. FINZER and CHARLES S. FINZER, Sugar Creek, Ohio. Filed Oct. 11, 1928. Serial No. 311,871. 8 Claims. (Cl. 25—1.)



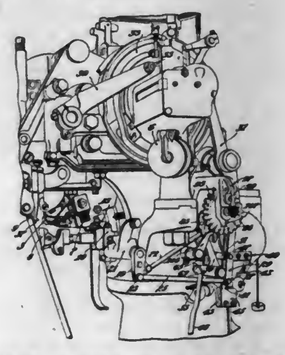
1. A machine for texturing surfaces of a moving clay column and the like, including a plurality of rotary cutters each adapted to rotate against a surface of a moving clay column, a single drive shaft, a driving connection between each of the cutters and the drive shaft, and oscillating arm means driven by the same drive shaft for clearing away the clay particles removed from the clay column by the cutters.

1,815,470. MEANS FOR CONNECTING PLOWS TO TRACTORS. JOHN GAISER, near Centerville, Ohio. Filed Feb. 3, 1931. Serial No. 513,153. 4 Claims. (Cl. 280—33.44.)



1. Means for connecting a trailing unit to a tractor, comprising a pull member pivotally secured at its front end to the tractor and at its rear end to the trailing unit, a plate secured to the trailing unit in front of the point of connection of the pull member thereto, a stud secured to the plate for a longitudinal movement along the latter, a fulcrum member projecting rearwardly from the tractor, and resilient means for thrusting the stud forwardly into pivotal engagement with the fulcrum member.

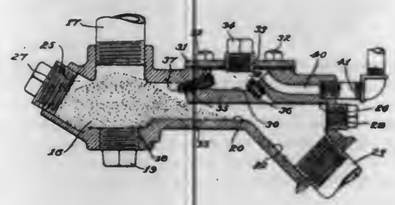
1,815,471. MACHINE FOR OPERATING ON WELTING. JOSEPH GOULDBOURN and REGINALD BOYD WOODCOCK, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 22, 1921, Serial No. 463,673, and in Great Britain July 21, 1920. Renewed Jan. 12, 1929. 10 Claims. (Cl. 112—46.)



1. A machine for operating on welting having, in combination, a welt slashing knife, mechanism for advancing

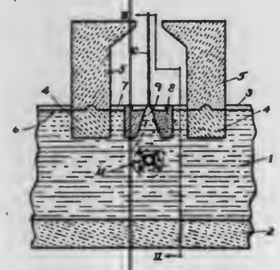
and retracting the slashing knife across the welt to make slashes in the welt, timing devices acting automatically after a predetermined number of slashes have been made in the welt to throw said mechanism out of operation and means for actuating said devices during the retracting movement of the welt slashing knife.

1,815,472. TRACK SANDER. JOHN H. HANLON, Somerville, and JOHN W. HANLON, Milton, Mass., assignors to Hanlon Locomotive Sander Company, Winchester, Mass., a Corporation of Massachusetts. Filed June 8, 1929. Serial No. 369,311. 3 Claims. (Cl. 291—11.)



1. A track sander having a sand supply chamber, a sand passage leading therefrom to a discharge outlet, an air passage adjacent said sand passage adapted to receive air under pressure, an air nozzle connecting said passages, an opening in said air passage opposite said nozzle, an air supply inlet opposite said opening, a detachable closure for said opening, and a normally closed clean-out opening in said closure.

1,815,473. METHOD OF AND APPARATUS FOR DRAWING SHEET GLASS. WAYNE E. HARDING and CECIL C. WEEKLEY, Fort Smith, Ark., assignors to Harding Glass Company, a Corporation of West Virginia. Filed Apr. 29, 1930. Serial No. 448,230. 5 Claims. (Cl. 49—17.)

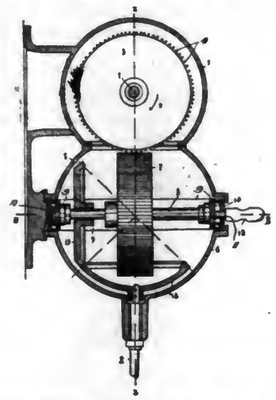


2. In apparatus for the manufacture of sheet glass by drawing the same upwardly from a bath of molten glass, the combination with a compartment containing the molten bath, a drawing block arranged in said compartment and having a drawing slot, means for drawing the sheet of glass upwardly through said slot, an agitator rotatably mounted in the glass bath beneath said slot and coextensive in length with the width of the sheet being drawn, and means for rotating the agitator.

1,815,474. MEANS FOR PREVENTING FREEZING OF WATER PIPES. ROSS HICKMAN, Wichita Falls, Tex. Filed Feb. 1, 1927. Serial No. 165,179. 2 Claims. (Cl. 137—72.)

1. The combination with a water supply line extending from a point below the surface of the ground and below the frost line to a point above the surface, of water controlled and air controlled means functioning automatically to cause the water to be forced back below the frost line by air pressure and rendering effective a measured quantity of air for holding said water below the frost line, time required to force back said water being determined by the time necessary for the mechanical operation of said means.

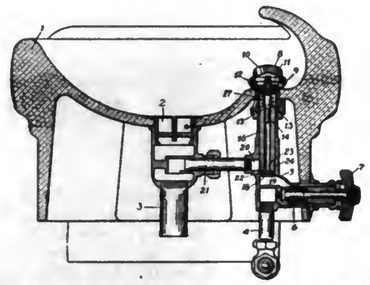
1,815,475. VARIABLE SPEED GEAR. LUIGI KAMBO, Rome, Italy. Filed Nov. 30, 1929, Serial No. 410,717, and in Italy Dec. 3, 1928. 3 Claims. (Cl. 74—57.)



1. In a variable speed gear of the type in which the variation of the ratio of transmission and the reversal of the movement are obtained by varying the angle between the planes of the driving wheel and of an intermediary cross wheel, the combination of a driving shaft carrying a driving wheel provided with retractile teeth, a driven shaft and an intermediary cross shaft on which a ribbed wheel is mounted which engages with the said driving wheel at various inclinations, a ring carrying the bearings of said cross shaft, which ring is mounted on its turn in such a way that it can revolve on itself and two conical wheels engaging in any position of the revolving ring, one of these wheels being keyed on the shaft of the ribbed cross wheel movable together with the ring, the other being keyed on the driven shaft, which is fixed against axial movement.

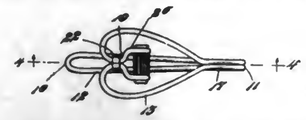
1,815,476. DRINKING FOUNTAIN. ROBERT LEFFEL, Louisville, Ky., assignor to Standard Sanitary Manufacturing Company, a Corporation of New Jersey. Filed Mar. 18, 1927. Serial No. 176,401. 6 Claims. (Cl. 299—13.)

1. A drinking fountain having in combination a water supply line, a fountain head communicating therewith, an orifice through which water in said supply line flows to said fountain head, a drain pipe spaced from said supply line, a by-pass connection between said supply line and said drain pipe and mechanism located wholly within said



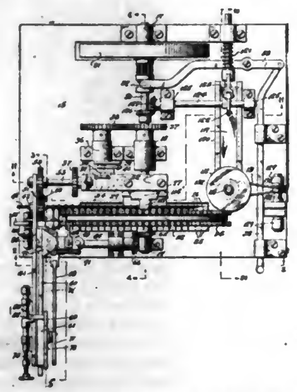
supply line for causing any surplus of water in said supply line to flow through said by-pass to said drain pipe so as to maintain a substantially constant flow through said orifice.

1,815,477. NECKTIE HOLDER. ALBERT W. LINDQUIST, Providence, R. I., assignor to Freeman-Daughaday Company, a Corporation of Rhode Island. Filed Apr. 18, 1931. Serial No. 531,143. 6 Claims. (Cl. 24—255.)



1. A necktie holder comprising a length of resilient wire folded upon itself to form opposed gripping jaws, one of said jaws terminating in spaced loops, a roll mounted between said loops and provided with trunnions extending therefrom for rotation in said loops, said roll having contact with the opposite jaw.

1,815,478. SWAB MAKING MACHINE. LEWIS MIR, Jersey City, N. J. Filed Feb. 24, 1928. Serial No. 256,662. 6 Claims. (Cl. 140—130.)

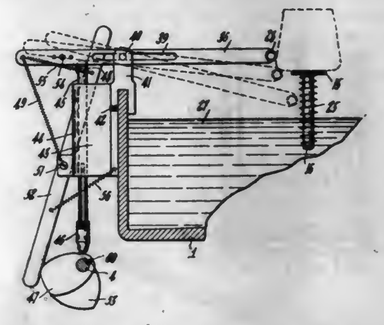


1. In a dauber making machine having means to apply handle shank wire to filamentary material, means to automatically feed wire from a continuous supply and cut the same into handle shank-forming portions for attachment to said filamentary material, comprising a guide track, a wire feeding carriage having a gripping means reciprocable on said guide track, and timed means to sever shank-forming portions from said wire operative on completion of the feeding stroke of said carriage.

1,815,479. ZINC BASE ALLOY. PASCAL J. MORELL, Waterbury, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 18, 1930. Serial No. 462,141. 12 Claims. (Cl. 75—1.)

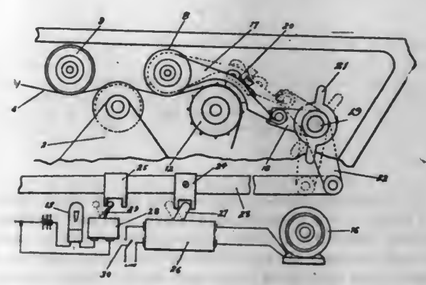
1. A zinc base alloy containing about 1 to about 15% copper, and about .005 to about 5% silicon.

1,815,480. CEMENT APPLYING MACHINE. WALTER V. NEAL, Lynn, Mass., assignor of one-half to William H. Davis, Lynn, Mass. Filed Mar. 23, 1928. Serial No. 264,056. 22 Claims. (Cl. 12—80.)



22. A shoe cementing machine comprising a tank adapted to hold cement, a support for a shoe rising from the bottom of said tank and normally located above the level of liquid therein, means for raising and lowering said support whereby to dip the bottom of a shoe placed thereon in the cement, lateral cement-applying means adapted to bear on the sides of the shoe upper adjacent to the bottom, arms connected to said lateral cement-applying means at different points thereof and being movable inwardly and outwardly from different sides of the tank toward and away from said support, and means for so moving said arms and also raising and lowering them to dip the applying means in the cement; said lateral applying means being flexible and certain of the arms being raised to different heights, and the operating means for the arms including springs through which the action of moving the arms inward is yieldingly transmitted, whereby said lateral applying means is conformed to the periphery of the shoe on lines at opposite sides thereof generally similar to the profile of the shoe bottom.

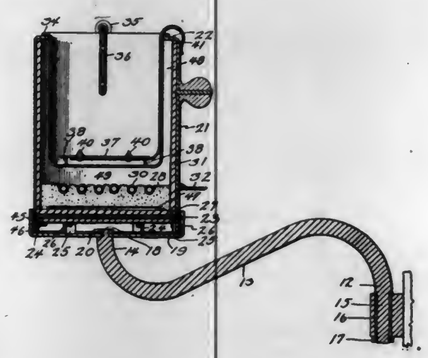
1,815,481. SOUND RECORDING AND REPRODUCING APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed July 31, 1929. Serial No. 382,568. 9 Claims. (Cl. 179—100.3.)



1. In sound recording and reproducing apparatus, the combination of a light station, a lamp for supplying light

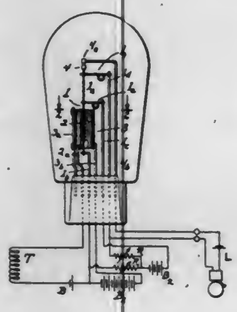
at said station, and a driving motor, rotatable means for causing a film to travel past said light station, a light sensitive element at said station for receiving the film modulated light, shiftable means for normally retaining said film in engagement with said rotatable means, means for shifting said retaining means into and out of operative position, and means actuated by said shifting means to control the motor and lamp circuits.

1,815,482. SHAVING MUG. JOHN WILLARD PETERSON, Sioux City, Iowa. Filed June 25, 1930. Serial No. 463,691. 4 Claims. (Cl. 132—80.)



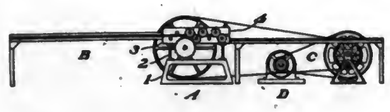
1. In a shaving apparatus, a mug comprising a casing, an asbestos lining in said casing including a side liner and a bottom disc, a heating element support comprising a disc of refractory material supported upon said bottom disc and snugly fitting within the side liner, a soap receptacle supported in the casing above said heating element support and a heating element carried by said support and spaced from the bottom of the receptacle by an air space.

1,815,483. ELECTRICAL RELAY. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Patents Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 6, 1927. Serial No. 238,218. 5 Claims. (Cl. 250—27.5.)



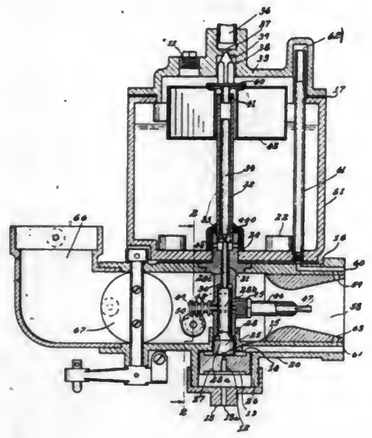
1. A thermionic relay comprising an envelope containing argon at low pressure, and anode, grid and thermionic-cathode elements, a fixed contact element and a movable contact element, all of said elements having external terminals, and said movable contact element being connected to said thermionic cathode element for movement therewith responsive to ionic bombardment of said cathode element.

1,815,484. ROLLER LEVELER. FRED A. SCHMITZ, Canton, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed June 14, 1928. Serial No. 285,268. 6 Claims. (Cl. 153—54.)



1. In a machine for straightening the ribs of ribbed expanded metal sheets, a series of lower rolls, each provided with spaced annular ribs, and a series of upper rolls arranged in staggered relation with said lower rolls and each provided with spaced annular ribs offset laterally with respect to the ribs of the lower rolls a sufficient amount to provide between the ribs of the upper and lower rolls straightening passes for the ribs of a sheet which is passed through the machine.

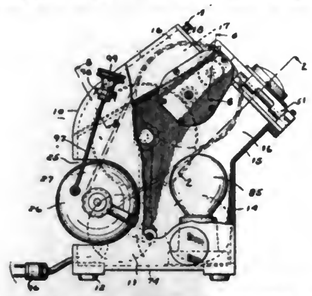
1,815,485. CARBURETOR. WILLIAM SCOTT, Medford, Mass., assignor to Self Feeding Carburetor Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Dec. 29, 1925. Serial No. 78,075. 14 Claims. (Cl. 261—72.)



1. In a carbureting system, in combination, a fuel nozzle having a needle valve, a fuel chamber having a passage to said nozzle and arranged to fuel thereto by gravity, a valve for opening and closing said passage, means operated by engine suction for controlling said valve, a feed conduit connecting said chamber with a source of supply, a valve for opening and closing said conduit, a float within said chamber for operating said valve, and means for varying by suction the pressure within said chamber to provide a vacuum thereto from the source of supply.

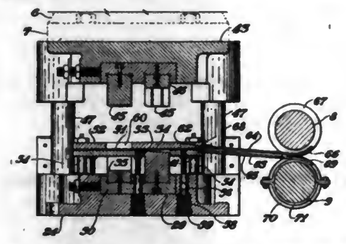
1,815,486. FILM VIEWING MACHINE. IWAN SERRURIER, Altadena, Calif. Filed Oct. 29, 1924. Serial No. 746,511. 6 Claims. (Cl. 88—17.)

1. In a film viewing machine, a casing having a lamp therein and having a motor thereon, an inspection opening in said casing adapted to be illuminated by said lamp, means operable by said motor to give a step by step motion to a film, a pair of leads, a circuit from one of said leads across said lamp to the other lead, a second circuit



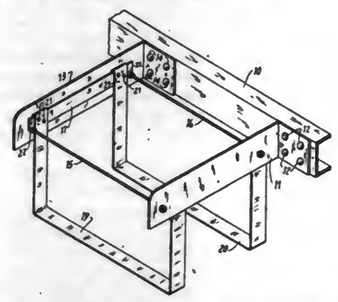
from one of said leads to the motor and back to the other lead, said second mentioned circuit including means for controlling said motor independent of the lamp.

1,815,487. APPARATUS FOR SLITTING METAL SHEETS. THOMAS A. SINDELAR, Canton, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Apr. 13, 1928. Serial No. 269,820. 17 Claims. (Cl. 164—6.5.)



1. In a metal slitting machine, the combination of an entrance roll and an entrance guide pivotally secured on said roll.

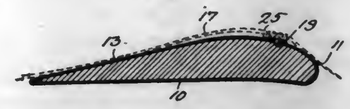
1,815,488. BATTERY SUPPORT. JAMES A. WILLARD, Greensboro, N. C. Filed Dec. 3, 1930. Serial No. 499,791. 3 Claims. (Cl. 180—68.5.)



1. In a battery support, two transversely disposed members, enlarged bearing surfaces on said members adapted to engage parallel rods for support, and two U-shaped members spaced apart from each other and having their ends secured to said transversely disposed members.

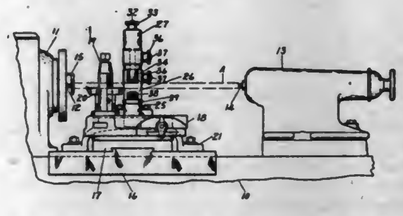
1,815,489. AIR FOIL LIFT CONTROL. JOHN R. ALBERS and GERHARD H. ALBERS, Cherokee, Iowa. Filed Sept. 2, 1930. Serial No. 479,152. 2 Claims. (Cl. 244—12.)

1. In combination with an air foil, a control device comprising an elongated lip normally recessed in the air foil in a position substantially parallel to and near the leading edge thereof and substantially flush with the air foil surface, said lip being mounted for rotation about its longitudinal axis to a position projecting above the air foil surface wherein it will interfere with air currents acting upon the air foil surface in such a manner as to decrease



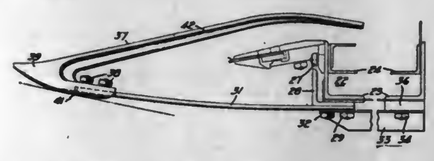
the effective lift of said air currents against the air foil surface, said lip having a relatively small cross sectional area, said lip throughout the majority of its length being substantially semi-cylindrical and the recess in the air foil being substantially semi-cylindrical and affording a bearing surface for the lip.

1,815,490. FOLLOW REST. CONSTANT BOUILLON, Torrington, Conn., assignor to The Hendey Machine Company, Torrington, Conn., a Corporation of Connecticut. Filed May 21, 1930. Serial No. 454,502. 5 Claims. (Cl. 82—35.)



1. A lathe carriage having slidably mounted thereon a transverse slide, a tool support mounted on said transverse slide, a bridge member secured to said carriage, dual follow-rests adjustably secured to said bridge member and movable with said carriage.

1,815,491. PICK-UP GUARD. AUGUST D. BRAASCH, LESTER McDOW, and JOHN TWELLS, Stockton, Calif., assignors, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed May 25, 1927. Serial No. 194,079. 1 Claim. (Cl. 56—312.)



In a harvester, a header, a plurality of pick-up guards, and means for attaching said guards to said header, including a bar adapted to be attached to the leading edge of said header, and braces adapted to be attached to said bar and said header.

1,815,492. METHOD OF CONSTRUCTING WITH CONCRETE. CLAUDE BRADLEY, Seattle, Wash. Filed Dec. 18, 1926. Serial No. 155,718. 7 Claims. (Cl. 72—48.)

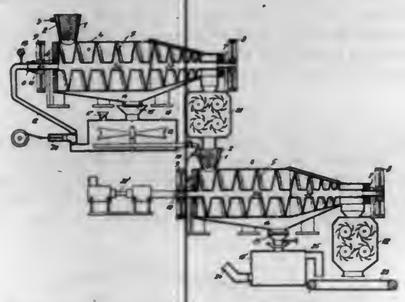
1. A reinforced concrete wall construction made from plastic concrete, embodying rigid metal uprights disposed at intervals along the medial plane of the wall, means for rigidly supporting said uprights from their bottom ends said means constituting the sole supporting means for the uprights until the concrete is placed and set, con-

crete retaining elements secured to said uprights, and horizontal reinforcing steel supported by said uprights, said uprights and said retaining elements being arranged



to become permanently embedded in the finished wall thereby reinforcing the same, said wall constituting a true reinforced monolithic structure which gains its stability as the construction proceeds.

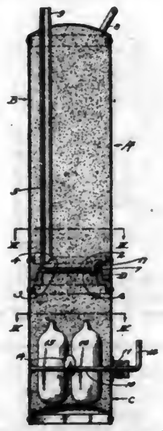
1,815,493. DEVICE FOR TREATING FIBERS. MICHAIL BUROFF, Moscow, Union of Socialist Soviet Republics. Filed Dec. 30, 1929, Serial No. 417,463, and in the Union of Socialist Soviet Republics Mar. 6, 1929. 4 Claims. (Cl. 8—17.)



1. In a device for treating fibers, the combination with a tubular housing, of a screw conveyor rotatively mounted in said housing, means to deliver material to be treated into said housing, means to deliver a treating liquid to said material in said housing, one portion of said conveyor being adapted to compress said material, means to collect the excess liquid from said housing, means to pump said liquid back into said housing, and means to loosen said compressed material from said conveyor.

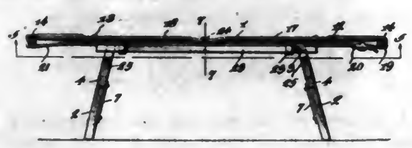
1,815,494. FIRE EXTINGUISHER. CLARENCE A. CAMP, Oakland, Calif. Filed Aug. 1, 1927. Serial No. 209,777. 3 Claims. (Cl. 169—32.)

3. A device of the character described comprising a cylindrical elongated container open at its lower end, said container adapted to be inverted and filled with a fire extinguishing chemical in a dry dust-like form, a discharge pipe extending from the lower end of the container and through the upper end, a second cylindrical shaped elongated container open at its upper end to receive an acid bottle and a chemical which reacts with the acid to form a gas, interengaging screw couplings on each container permitting them to be aligned and connected, moisture absorbing means interposed between the container



and separating the chemicals packed in each container, said moisture absorbing means permitting gas to escape from the second named container into the first named container, and means for breaking the acid bottle.

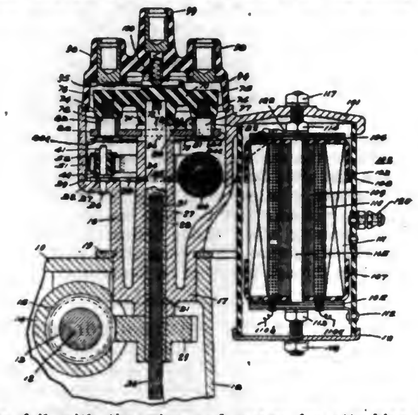
1,815,495. FOLDING DOUBLE COT. CARL C. CHITTIM, Springfield, Mo. Filed Dec. 28, 1928. Serial No. 329,030. 3 Claims. (Cl. 5—226.)



1. In a cot for occupation by two persons, a supporting frame structure including a main section, and head and foot sections, a bottom of flexible material stretched within the sections, each of the head and foot sections including a cross piece, a strap connected with the ends of the said bottom and extended over the cross pieces of the head and foot sections of the frame structure and beneath and secured to the said bottom and extending longitudinally medially thereof, a bar supported by said strap, and means for limiting downward movement of the bar whereby the bar will constitute means for sustaining the portion of the bottom which is stretched within the main section, from sagging under weight, substantially at its longitudinal middle.

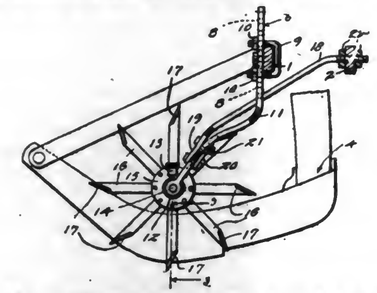
1,815,496. IGNITION APPARATUS. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Original application filed May 23, 1922, Serial No. 563,145, now Patent No. 1,678,934, dated July 31, 1928. Divided and application filed May 26, 1925, Serial No. 33,072. Divided and this application filed Oct. 6, 1927. Serial No. 224,487. 7 Claims. (Cl. 200—19.)

6. An electrical condenser for paralleling the contacts of an ignition timer-interrupter enclosed in a metal housing upon which one of the contacts is grounded, said condenser comprising, in combination, a tubular core, condenser foils wound upon the core and insulated from each other, a tubular metallic case enclosing the core and foils, end closures for the case, means located adjacent one of the end closures for connecting one of the foils with the case, an insulated wire for making connection with the insulated contact of the timer-interrupter passing through said end closure and through said tubular core, means adjacent said other end closure for connecting the



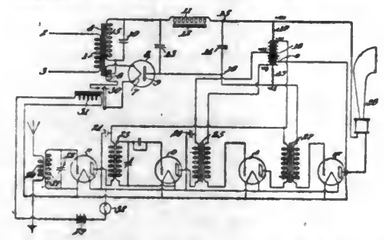
other foil with the wire, and means for attaching the case to the housing of the interrupter and for making an electrical connection therewith.

1,815,497. RUNNER CLEANER FOR PLANTERS. EDWIN H. COLSON, Oakland, Nebr. Filed Aug. 10, 1929. Serial No. 384,898. 3 Claims. (Cl. 97—194.)



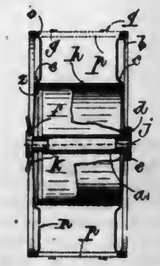
1. The combination with the runner of a seed planter, of a bracket member, means for vertically and horizontally adjustably attaching the bracket to a portion of the planter adjacent the runner, a stub shaft supported by said bracket, a series of knives carried by said shaft and arranged radially thereof and adapted to pass along the ground engaging edge of the runner to cut away trash, and a brace member engaging said bracket adjacent the shaft and adapted to be rigidly secured to the planter.

1,815,498. ELECTRIC CONVERTER. GEORGE B. CROUSE, Woodcliff, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 6, 1927. Serial No. 159,454. 11 Claims. (Cl. 250—27.)



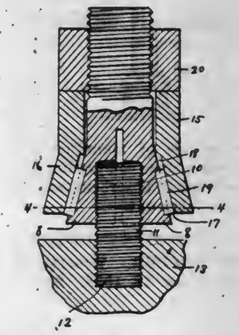
1. In apparatus for energizing the plate circuits of a plurality of audions from a source of direct current containing alternating components, a filter mesh comprising series and parallel impedance elements interposed between the said source and said plate circuits of audions, and an auxiliary source of smooth direct current potential connected across that portion of said mesh across which certain only of said plate circuits are connected.

1,815,499. DEMOUNTABLE METALLIC REEL FOR CABLES. GEORGES DECOMBE, Lyon, France. Filed Sept. 9, 1925, Serial No. 55,372, and in France, Oct. 10, 1924. 2 Claims. (Cl. 242—115.)



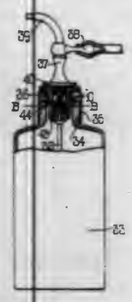
1. A metallic cable reel comprising a pair of end discs each having an annular seat on its inner side and concavo convex in cross section, the concave faces of said seats being opposed to each other, a drum having its ends arranged in said seats, a tube connecting said discs and extending through the center of the drum and provided with a threaded stud at one end extending through one of the discs and bearing against the outer side thereof, said tube and said threaded element coacting with said concavo convex seats to resiliently and detachably secure the drum in place.

1,815,500. STUD EXTRACTOR. ELMER M. DOAN, San Diego, Calif. Filed Mar. 17, 1930. Serial No. 436,595. 2 Claims. (Cl. 81—53.)



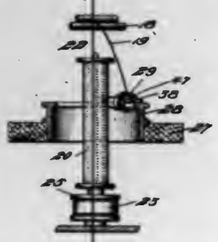
1. In a stud extractor of the class described, a shank having an upper threaded portion of uniform diameter, and a lower conical portion, said lower portion being split longitudinally to provide a pair of cooperating gripping jaws having outer semi-conical surfaces, a body member having a bore extending therethrough for accommodating said shank, said body member provided with an upper portion having external wrench gripping faces, and a lower conical portion, the bore of said body member at said lower conical portion provided with a conical mouth for accommodating the conical lower portion of said shank, and a nut threadedly engaging the threaded upper portion of said shank and adapted to engage the upper end of said body member.

1,815,501. DRAW OFF ARRANGEMENT FOR LIQUID CONTAINERS. HENRY FRANCIS and FRANCIS OLIVER, Hull, England. Filed Apr. 30, 1929, Serial No. 359,294, and in Great Britain Feb. 9, 1929. 4 Claims. (Cl. 225—23.)



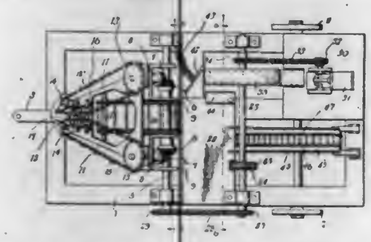
1. A closure for bottles comprising an open ended internally threaded ferrule adapted to encircle the neck of a bottle, an internally and externally threaded sleeve, the external thread of which engages with the internal thread of said ferrule, a valve having an upstanding externally threaded annular portion engaging with the internal thread of said sleeve, a liquid draw off member which is also threaded to engage with the internal thread of said sleeve, and interengaging means between said draw off member and said annular portion of said valve to regulate the degree of opening of said valve according to the position of said draw off member relatively to said sleeve.

1,815,502. MEANS FOR LUBRICATING SPINNING AND TWISTING RINGS. GEORGE H. GILLIGAN, Providence, R. I., assignor to U. S. Ring Traveler Company, Providence, R. I., a Corporation of Rhode Island. Filed Dec. 10, 1930. Serial No. 501,207. 10 Claims. (Cl. 118—61.)



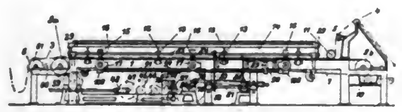
1. As a new article of manufacture, a traveler for spinning and twisting rings comprising an elongated metallic core, and a covering of absorbent material, said material adapted to carry a lubricant.

1,815,503. BEET TOPPER. WILLIAM C. GOOKIN, Corydon, Iowa. Filed Nov. 28, 1928. Serial No. 322,446. 1 Claim. (Cl. 146—85.)



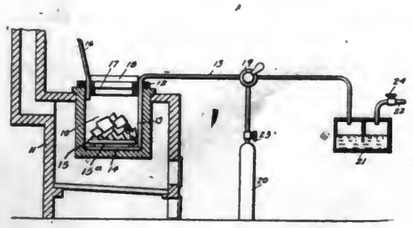
A beet topper comprising a portable frame, a platform thereon, a conveyer for topped beets leading rearwardly from the platform, a housing adjacent an end of the platform, said housing including a front cylindrical portion and a tubular portion leading rearwardly from said cylindrical portion and having an open rear end and the cylindrical portion having an opening through its front wall and a side wall, a rotatable fan within the cylindrical portion of the housing, cutting blades disposed radially on the fan with their cutting edges presented to the side of the housing to move across the opening therein for removing beet tops inserted through said opening, the tops being discharged by the fan through the open rear end of the housing, a rest plate for beet bodies on the platform adjacent the housing, a presser plate hinged adjacent the front of the housihg to bear upon the beets inserted in the opening in the housing, and a spring acting on said plate to hold it yieldably toward the housing and prevent beet tops being thrown through the front of the housing.

1,815,504. DEVICE FOR PRINTING COLORED PATTERNS ON PLUSH AND LIKE FABRICS. ARTHUR GÖRNER, Grefrath, near Krefeld, Germany, assignor to the Firm Pluschweberei Grefrath Aktiengesellschaft, Grefrath, near Krefeld, Germany. Filed Apr. 8, 1930. Serial No. 442,577. 11 Claims. (Cl. 101—115.)



1. In a device for printing colored patterns on plush and like fabrics, at least one vertically movable stencil of permeable fabric, a support for the fabric webs to be treated, means for intermittently feeding the fabric webs over said support, pushers for each stencil for distributing the color over the surface of said stencil, a carrier for said pushers and adapted to reciprocate over the surface of said stencil, a common vertically movable frame for said stencil and said pushers, and means whereby the relative position of said pushers to said stencil may be adjusted.

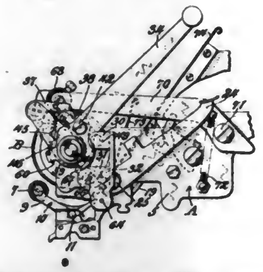
1,815,505. BRIGHT ANNEALING OF METALS. ROBERT G. GUTHRIE and OSCAR J. WOZASEK, Chicago, Ill., assignors to Peoples Gas By-Products Corporation, Chicago, Ill., a Corporation of Illinois; said Wozasek, now by change of name, Oscar J. Wilbor. Filed Nov. 15, 1929. Serial No. 407,438. 2 Claims. (Cl. 148—16.)



1. The method of bright annealing metals which consists in heating the metal to an annealing temperature, bringing the metal into contact with an atmosphere of oxidizing gas whereby to remove oily and carbonaceous films from the surface of the metal and produce a superficial film of oxide, and then bringing the metal into contact while so heated with a reducing atmosphere substantially free from unsaturated hydrocarbons whereby to reduce the said oxide film but without the deposit of soot upon the metal.

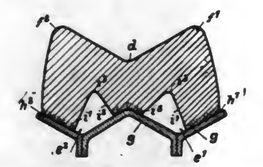
CARNEGIE LIBRARY OF ATLANTA

1,815,506. TYPEWRITING MACHINE. GEORGE F. HANDLEY, Glendale, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 11, 1928. Serial No. 325,320. 4 Claims. (Cl. 197—127.)



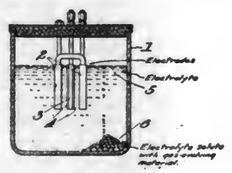
1. In a typewriting machine, the combination with a platen, of a line spacing mechanism associated with said platen including a ratchet wheel fixed to the platen, an arm pivoted to swing about an axis concentric with the axis of the platen, a spring pressed dog mounted on said arm for cooperation with the ratchet wheel, an operating lever, a latch pivoted on the lever and normally connected to said arm, and a fixed abutment engageable by the latch to disconnect the latter from the arm upon a predetermined movement in one direction of the operating lever.

1,815,507. RUBBER TIRE. LUDWIG HÄRTER, Berlin-Wannsee, Germany. Filed Aug. 31, 1929, Serial No. 389,818, and in Germany Sept. 8, 1928. 5 Claims. (Cl. 151—1.)



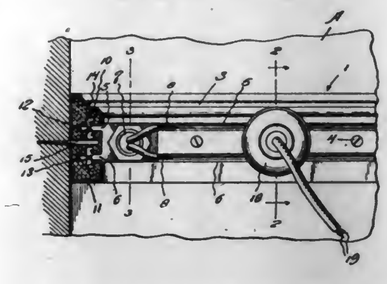
1. A resilient tire for vehicle wheels having a tread surface reentrantly U-shaped in cross section to provide two lateral vertices, and an inner or supporting surface which rises toward the tread surface both at the middle and adjacent the lateral faces of the tire and providing two vertices, the radially inner vertices on the inner or supporting faces of the tire lying nearer to the central plane of the tire than the radially outer vertices of said outer surface.

1,815,508. ELECTRIC CELL. GEORGE W. HEISE, Lakewood, Ohio, assignor to National Carbon Co., Inc., a Corporation of New York. Filed June 2, 1928. Serial No. 282,315. 9 Claims. (Cl. 136—153.)



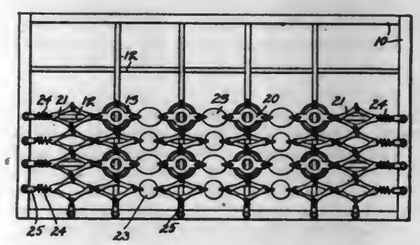
1. In a battery having a container, electrodes, and a solid soluble electrolyte substance, means in combination therewith comprising a gas evolving material therein for the agitation of the electrolyte substance during dissolving action.

1,815,509. ELECTRIC SOCKET CONSTRUCTION. PAUL V. HOECHER, Chicago, Ill., assignor of one-half to James C. Oliver, Chicago, Ill. Filed Apr. 15, 1929. Serial No. 355,391. 2 Claims. (Cl. 247—3.)



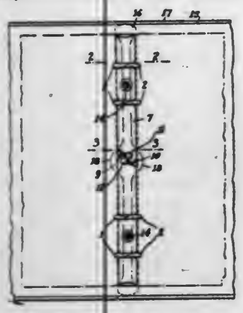
1. In a structure of the class described, an insulating base formed with spaced elongated slots, bus-bars arranged within the respective slots to provide an electric socket for receiving the contacts of a conventional cap, and lead in wires connected to the respective bus-bars, said bus-bars comprising a substantially U-shaped metallic member having the crown portion thereof disposed against the inner end of the respective slots, the free end portions of the arms of said U-shaped member being disposed normally in contacting relation to form opposed jaws between which the respective contacts of the cap unit is forcibly disposed, the free ends of the jaws being directed outwardly in opposite directions, the insulating base being formed with additional slots that intersect the aforementioned slots to accommodate the projecting ends of the arms of the respective U-shaped member.

1,815,510. CONSTRUCTION OF SPRING-SEATS AND MATTRESSES. OSCAR HOTTER, Hochstadt, Germany. Filed Nov. 23, 1928, Serial No. 321,464, and in Germany Dec. 9, 1927. 1 Claim. (Cl. 5—267.)



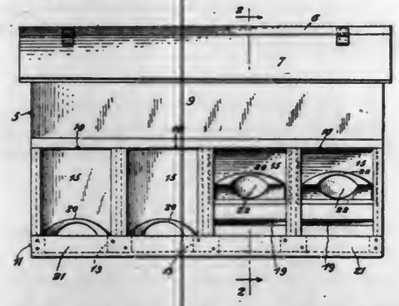
The combination with a mattress or cushion comprising a rigid frame having longitudinal and transverse supports, a group of vertical coil springs mounted on the supports and arranged within the frame in spaced relation to each other and in longitudinal and transverse rows at right angles to each other, of flexible tie means secured to and connecting the upper ends of the springs in each longitudinal row together, connecting devices between the springs of each transverse row and between the ends of each transverse row and the sides of the frame, said connecting devices comprising disks and fiber links, the latter being connected to form parallelograms and capable of expanding longitudinally or transversely and simultaneously contracting in the other direction, ties connecting the said parallelograms with the disks to form a series of longitudinally expansible tie elements alternating with the longitudinal rows of springs, and expansion springs connecting the ends of said tie means and said tie elements separately to the ends of the frame, substantially as set forth.

1,815,511. LOOSE LEAF BOOK. JAMES ADAMS KEENE, London, England. Filed June 22, 1929, Serial No. 372,850, and in Great Britain Dec. 29, 1928. 7 Claims. (Cl. 129—24.)



1. In a loose leaf book of the type referred to, a plurality of leaf-securing sectional loops, arranged with one series of sections adjacent a corresponding series of sections, means for hingedly securing the adjacent sections together at one end, so that the free ends of the same abut when in closed position, and a snap action device including adjacent ball heads, arranged to ride one over the other, for maintaining said loops in closed position.

1,815,512. HOG FEEDER. JOSEPH P. KOPETKA, Bloomfield, Nebr. Filed Aug. 22, 1930. Serial No. 477,163. 6 Claims. (Cl. 119—52.)



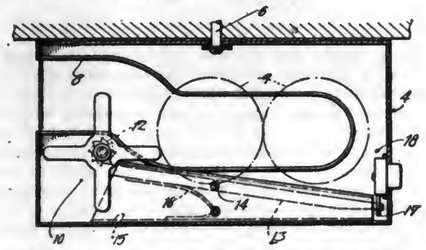
1. In a hog feeder, a feed trough, an upwardly and rearwardly swingable vertical door over and spaced rearwardly from the front end of said trough, and a weather excluding cowl rigidly secured to the lower end of said door and hence movable bodily with the latter, said cowl projecting forwardly from the door over the front end of the trough and being adapted to be raised by a hog's snout.

1,815,513. MANUFACTURE OF CELLULOSE FILMS. HANS KRULL, Scholwin, near Stettin, Germany, assignor to the Firm Feldmuhle, Papier- und Zellstoffwerke Aktiengesellschaft, Scholwin, near Stettin, Germany. Filed June 18, 1928, Serial No. 286,457, and in Germany May 10, 1927. 1 Claim. (Cl. 18—15.)



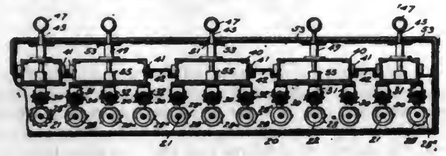
A device for manufacturing cellulose films of any desired length from aqueous cellulose solutions, preferably from a viscose solution, comprising a plurality of tanks and a plurality of transport rolls, each tank having coordinated therewith one of said transport rolls having a smoothly polished surface, individual adjustable drives for a number of said transport rolls whereby shrinkage of the film may be compensated for by appropriate adjustment of roll speed, a viscose pouring device in cooperative relation to that transport roll which is the first in the series of rolls, two idle rollers between each two adjacent transport rolls in the series of said rolls, one of said idle rollers adapted to take off the film from one roll of the two and the other idle roller adapted to receive the film and transmit it to the second one of the adjacent transport rolls, the film being thus so passed through said baths that one and the same surface of it only is subjected to the action of such baths, and its opposite surface is maintained smooth by contact with the polished surfaces of said rolls.

1,815,514. MILK BOTTLE HOLDER. JOHN LARSON, Bronx, N. Y. Filed Apr. 1, 1930. Serial No. 440,822. 3 Claims. (Cl. 232—41.5.)



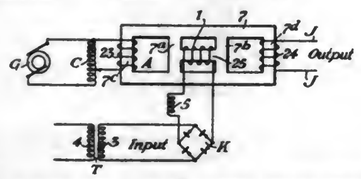
1. In a milk bottle holder of the class described, a protective housing having a slot in its bottom to accommodate the neck portions of one or more milk bottles, a turnstile mounted for rotation in a horizontal plane in said housing and having its arm portions projecting into said slot in the path of movement of the milk bottles, and key-controlled pawl and ratchet mechanism for regulating the action of said turnstile.

1,815,515. DENOMINATOR MACHINE. CELERINO LEANO, Manilla, P. I. Filed Apr. 2, 1928. Serial No. 266,758. 6 Claims. (Cl. 235—73.)



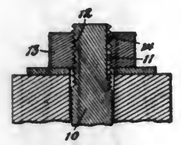
1. A denominator machine comprising a base, a plurality of sets of simultaneously rotatable denominising pinions supported thereon, a set of registering wheels associated with each set of pinions, and a slidably supported carriage on said base having a rotatable pinion cooperating with each set of said first pinions to selectively actuate the corresponding registering wheels.

1,815,516. ELECTRICAL TRANSLATING APPARATUS. FREDERICK W. LEE, Washington, D. C., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 26, 1929. Serial No. 409,828. 7 Claims. (Cl. 171—119.)



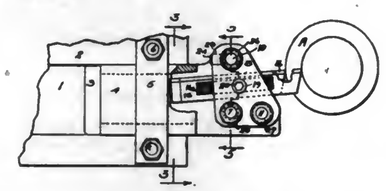
1. In combination a ladder shaped magnetizable core having two outer cross bars and two inner cross bars, a first winding on one outer cross bar supplied with alternating current, a second winding on the other outer cross bar for supply current to an output circuit, a bridging member connecting the mid points of said inner bars, and a third winding on said bridging member at times supplied with unidirectional current.

1,815,517. MEANS AND METHOD FOR INTERLOCKING BOLTS AND NUTS. JOHN LONG, Tipton, Iowa. Filed Feb. 3, 1930. Serial No. 425,647. 5 Claims. (Cl. 151—22.)



4. An externally screw-threaded element formed with a longitudinally disposed groove extending transversely to the threads of the element, and an internally threaded element in threaded engagement with the externally threaded element, one of the threads of the internally threaded element being deformed to form a teat for engagement with a part of the externally threaded element adjacent to the longitudinal groove of the externally threaded elcment for interlocking the two elements, said teat being adapted to be moved out of interlocking engagement with the externally threaded element to permit one element to be adjusted relatively to the other element.

1,815,518. TOOL. JOHN MILTON LUERS, Detroit, Mich. Filed Jan. 9, 1930. Serial No. 419,542. 11 Claims. (Cl. 29—96.)



1. In a tool of the character described, the combination of a guide having a longitudinally grooved side, a blade movable longitudinally in said groove having a serrated side, a member adjacent the grooved side of the guide against which the side of the blade remote from the guide is adapted to be held, said guide having a tapped hole provided transversely therein, a locking screw in threaded engagement with said tapped hole, a multi-sided locking member so mounted on said screw that the latter is independently rotatable, the end of the locking member remote from the screw having serrations thereon to coact with the blade serrations, and said tapped hole having angular slots formed in its wall extending axially therethrough to engage the corners of the multi-sided locking member.

1,815,519. ALIMENTARY SUBSTANCE AND ITS MANUFACTURE. CHARLES MAGAT, Paris, France. Filed Aug. 5, 1929, Serial No. 383,782, and in Great Britain Sept. 28, 1928. 1 Claim. (Cl. 99—11.)

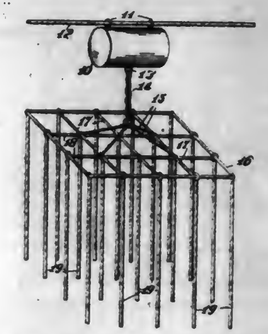
A method of making an edible chocolate product consisting in melting a vegetable fat at a temperature not exceeding 86° F., cooking finely ground chocolate in the fat until an intimate mixture is obtained, decreasing the cooking temperature to 68° F., adding the flavoring, casting the mixture into molds, and quickly cooling the mixture by means of ice.

1,815,520. GOLF TEE AND METHOD OF MANUFACTURING THE SAME. WARREN H. MCLEOD, Boulder, Colo. Filed Oct. 17, 1928. Serial No. 313,046. 1 Claim. (Cl. 273—33.)



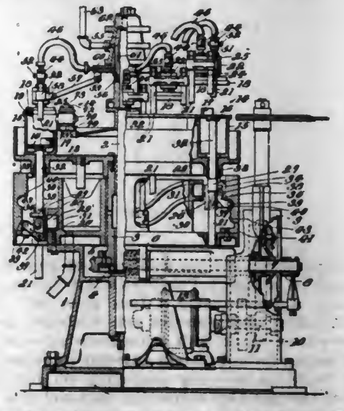
A preformed transportable golf tee disintegrable by impact of a golf club in play formed from a homogeneous, relatively insoluble non-viscous plastic earth containing no extraneous binder and having a dense relatively non-water absorbing surface.

1,815,521. APPARATUS FOR SETTING SEED SHELL-FISH. SHINSHO MIYAGI, Tokyo, Japan. Filed Apr. 23, 1930, Serial No. 446,564, and in Japan Apr. 24, 1929. 2 Claims. (Cl. 119—4.)



1. Apparatus of the class described comprising a float, a ring on the upper side of said float through which a supporting line may be passed, a ring on the under side of said float, a chain secured at one end to said last mentioned ring, a frame secured to the lower end of said chain, and a number of flexible ropes secured at their upper ends to different points of said frame and adapted to depend from said frame in the water and to carry the seed supporting compound.

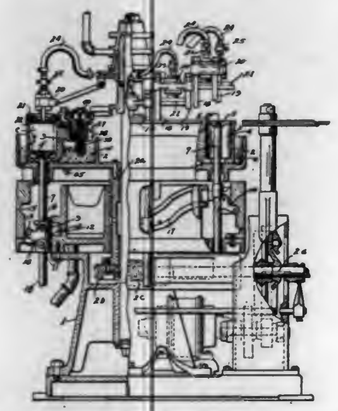
1,815,522. AUTOMATIC CAN TESTING MACHINE. JAMES H. O'NEIL and GEORGE FLOOK, Syracuse, N. Y., assignors to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed July 12, 1927. Serial No. 205,255. 20 Claims. (Cl. 73—51.)



1. A machine for testing cans for leaks including means for supporting and closing the can for testing, means for

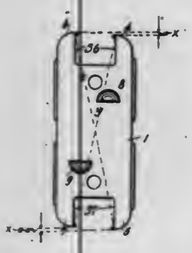
subjecting said cans to air pressure, means for forming about said can a chamber containing a non-compressible fluid, said chamber having a passage leading therefrom, and electrically controlled means operated by the displacement of the fluid from said chamber into said passage by air escaping from the can through a leak therein into the fluid, for separating the can having the leak from the perfect cans.

1,815,523. AUTOMATIC CAN TESTING MACHINE. JAMES H. O'NEIL, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 1, 1929. Serial No. 343,722. 13 Claims. (Cl. 73—51.)



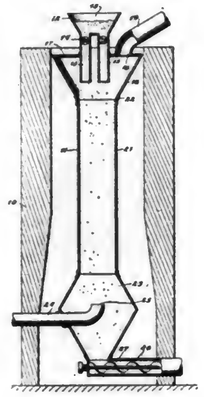
1. A machine for testing cans for leaks including means for forming an air chamber about the can, means for closing the can, means for establishing a difference in air pressure between the chamber formed in the can and the chamber surrounding the can, and means including a shiftable liquid column and an electric circuit controlled thereby whereby a change in the air pressure on the chamber surrounding the can caused by a leak in the can is utilized to eject the imperfect can.

1,815,524. REVERSIBLE CLIP FOR AMMUNITION. JOHN D. PEDERSEN, Jackson, Wyo. Filed Oct. 29, 1930. Serial No. 491,974. 8 Claims. (Cl. 42—50.)



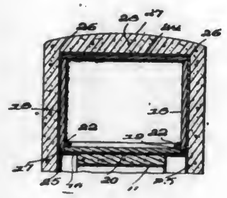
1. An ammunition clip for holding a stack of cartridges and adapted to be inserted therewith into the receiver of a gun, said clip comprising a back plate and two forwardly extending spring pressed side walls for embracing said ammunition stack with a compressing action, each side wall having formed therein adjacent its junction with the back plate an inwardly projecting rib for engaging in front of the cartridge extracting rims and also an outwardly projecting rib for engaging behind a shoulder in said receiver so as to position said clip within the receiver.

1,815,525. ACTIVATING CARBON. JAMES T. POWER, Wilmington, Del., assignor to Darco Corporation, Wilmington, Del., a Corporation of Delaware. Filed Apr. 18, 1927. Serial No. 184,611. 3 Claims. (Cl. 252—3.)



1. The process of activating carbon which comprises feeding finely divided and dispersed carbon particles continuously into the top of an upwardly flowing column of hot gases containing CO_2 and H_2O, said gases being preheated to a temperature substantially above 900° C. and the vertical upward velocity of the gases being great enough to retard but not great enough to prevent the fall of said particles through the gases, so adjusting the rate of flow of the gases and the rate of feed of the carbon in correlation with the height of the column and the preheat of the gases as to afford time for substantially complete activation of the carbon particles in their fall through the gases and removing the activated carbon from the bottom of said gas column.

1,815,526. BURIAL VAULT. JOHN SCHAEFFER, Enid, Okla. Filed Mar. 12, 1929. Serial No. 346,399. 2 Claims. (Cl. 72—7.)

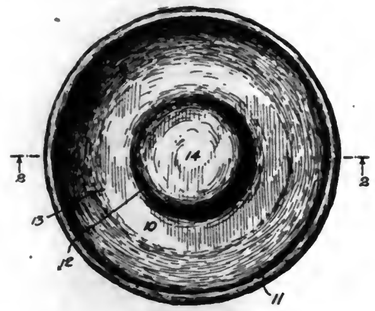


2. A burial vault comprising a pedestal to be placed in the bottom of a grave, a wooden box supported on said pedestal and adapted to receive a coffin, a perforated metal sealing member interposed between the bottom of the box and the pedestal, and a metal hood removably placed over the box, tightly fitting over the sealing member and extending to the bottom of the grave.

1,815,527. EDIBLE RECEPTACLE. RAMON S. SCRUGGS, Los Angeles, Calif. Filed July 22, 1929. Serial No. 380,081. 3 Claims. (Cl. 99—16.)

1. As an article of manufacture, an edible receptacle of cup shape adapted to receive and confine an edible filler therein and having a centrally disposed inverted cup

shaped portion on which a body of frozen confection is adapted to be placed and supported, said portion being

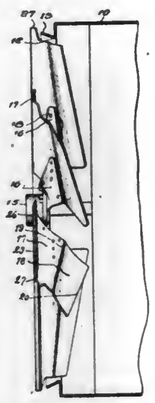


of sufficient height to support the body of frozen confection above the level of and out of contact with the filler in the receptacle.

1,815,528. LEAD ALLOY. ROBERT JAY SHOEMAKER, Chicago, Ill., assignor to S. & T. Metal Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 2, 1929. Serial No. 411,217. 10 Claims. (Cl. 75—1).

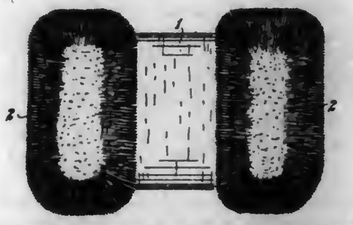
1. A slightly hardened, tough, non-corrosible lead alloy consisting essentially of lead and the following substances in amounts by weight substantially as follows: calcium 0.05% to 0.4% and cadmium 0.5% to 2.0%.

1,815,529. FAN CONSTRUCTION. WILFRED SHURTLEFF, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Feb. 8, 1929. Serial No. 338,404. 11 Claims. (Cl. 170—159.)



1. In a fan construction of the character described, the combination with means providing an opening; of a fan disposed in said opening and having a plurality of blades, each of which is mounted to position its trailing edge in a different plane of rotation than its leading edge, and each of which is curved across its width to provide longitudinally extending concave portions curved in the same direction, the trailing edge of said blade extending across one of said concave portions at an angle to the leading edge to provide a screw effect, and the leading edges of said blades being extended beyond the ends of said blades within said opening and disposed outside of the means defining said opening.

1,815,530. ARTICLE FOR PROTECTING THE WRISTS AND ARMS AGAINST COLD. ALFRED STONE, London, England. Filed June 27, 1930, Serial No. 464,181, and in Great Britain July 2, 1929. 4 Claims. (Cl. 2—170.)



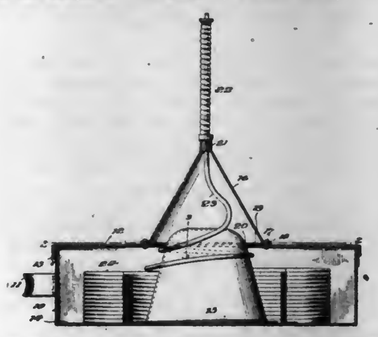
1. An article for protecting the wrists and arms against cold comprising a short sleeve, a lining for said sleeve, a band of cotton wool secured to each end of said lining, a band of fur at each end of the sleeve secured at one edge to the lining, and at the other edge to the sleeve so as to surround the cotton wool, and means located centrally of the sleeve for contracting it to the extent required to keep it in place when in use.

1,815,531. OIL TANK CONSTRUCTION. ROBERT R. TUCKER, Tulsa, Okla., assignor to National Tank Seal Company, Tulsa, Okla., a Corporation. Filed Mar. 5, 1928. Serial No. 259,868. 5 Claims. (Cl. 220—81.)



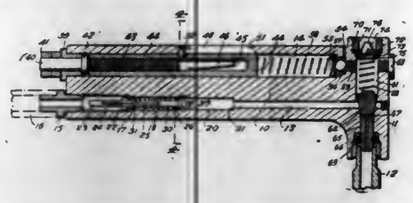
1. A storage tank having a roof and a side wall the roof havings its edge spaced inwardly from the side wall and flexible metal connecting elements connected to and extending across the space between the side wall and the roof and permitting relative movement of the side wall and roof, said metal connecting elements being composed of a plurality of circumferentially extending sections slidably engaged with each other.

1,815,532. WIRE DISPENSING MEANS. HENRY AUGUSTUS VESEY, Fort Smith, Ark. Filed Feb. 18, 1930. Serial No. 429,294. 7 Claims. (Cl. 242—128.)



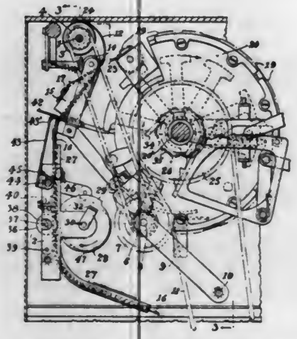
1. Coil dispensing means comprising a substantially rectangular container, a core secured therein and extending transversely thereacross, one wall of said casing being apertured in registry with said core, and substantially flexible means carried by said wall and cooperating with said core to impart frictional restraint to the material paid out from a coil when mounted on said core in the container.

1,815,533. TIRE CHUCK. JAMES A. VINCENT, Providence, R. I. Filed May 25, 1929. Serial No. 365,941. 2 Claims. (Cl. 152—11.5.)



1. A tire chuck comprising a substantially L-shaped casting having a pair of parallel spaced longitudinally disposed bores formed in the long portion thereof and communicating at one end with a transverse bore extending through the short portion thereof, a valve in said transverse bore having a seat common thereto and to one of said longitudinal bores and normally closing both said bores simultaneously, said valve being operable to open position by engagement of the chuck over a tire valve stem, that longitudinal bore which is closed by the valve having connection with means for supplying air thereto under pressure, and means operable in the other of said longitudinally disposed bores for controlling exhaust of air from said chuck at a predetermined pressure point.

1,815,534. PRINTING MACHINE. CHRISTOPHER FREDERICK WEBB, Kenton, England, assignor, by mesne assignments, to The Bell Punch and Printing Co. Limited, Uxbridge, Middlesex, England. Filed Aug. 24, 1928, Serial No. 301,843, and in Great Britain July 24, 1928. 12 Claims. (Cl. 101—227.)



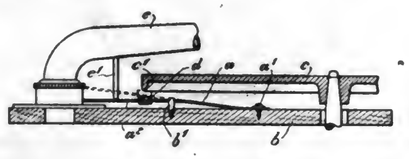
1. A machine of the class described, including strip guiding means, an intermittently operated printing member, motor operated means for intermittently actuating said member, and means operatively connected with the last mentioned means for utilizing the overrun of the driving motor for delivering a printed ticket.

1,815,535. SPRAY NOZZLE. HENRY C. WEITZEL, Shiner, Tex. Filed June 16, 1930. Serial No. 461,519. 6 Claims. (Cl. 299—129.)



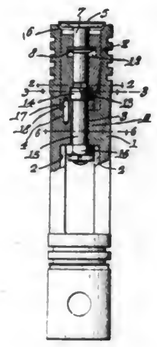
2. A spray nozzle for fluids comprising a tubular body portion having a discharge opening, a valve plate having a separate pivotal mounting upon the tubular body portion to cover the discharge opening, a spring actuated pressure lever carried by the tubular body portion and engaging the valve plate upon one side of its pivot, and an adjustable stop element carried by the tubular body portion and engaging the valve plate upon the opposite side of its pivot.

1,815,536. AUTOMATIC STOP FOR GRAMOPHONES. ROBERT WINKELMANN, Heathside, Hertford Heath, Hertford, England. Filed Nov. 15, 1928, Serial No. 319,628, and in Great Britain Nov. 16, 1927. 3 Claims. (Cl. 192—122.)



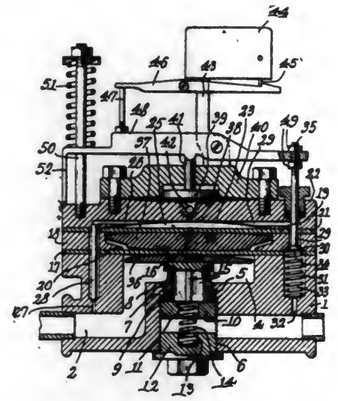
1. An automatic stop for gramophones, including an inherently resilient plate mounted relative to the motor board for swinging about a vertical axis, a brake block carried by the plate and arranged to engage the turntable when the plate is free to move under its own resiliency, a projection on the tone arm to engage the free end of the plate and depress the same to a position to maintain the brake block free of the turntable, said plate being formed with an opening to permit the passage of the projection on the tone arm to pass therethrough when the tone arm has reached the end of the record to release the plate to apply the brake block to the turntable under its own resiliency, and means for limiting the swinging movement of the plate.

1,815,537. VALVE. MICHAEL HENRY ACKERMAN, Mansfield, Ohio, assignor of one-half to Louis C. Sickel, Caledonia, Ohio. Filed Aug. 2, 1928, Serial No. 297,055. Renewed May 28, 1931. 7 Claims. (Cl. 251—127.)



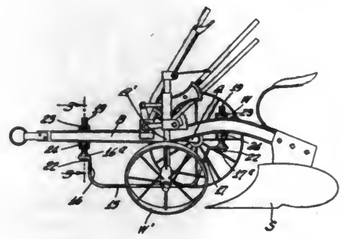
1. The combination with a structure having a space therein leading to a valve seat, of opposed members detachably mounted within and partly filling said space, said members being held together by opposed portions of the wall of the structure, there being a clearance space between the wall of the structure and one of the members providing a passage extending longitudinally within the structure to the valve seat, a valve having a stem mounted for reciprocation between said members, means on the stem housed by and cooperating with the members for limiting the movement of the valve relative to the seat, and means held at one end between the members and engaging said structure for holding the members to the structure.

1,815,538. AUTOMATIC VALVE. MICHAEL HENRY ACKERMAN, Mansfield, Ohio, assignor of one-half to Louis C. Sickel, Caledonia, Ohio. Filed Aug. 2, 1928. Serial No. 297,057. 14 Claims. (Cl. 62—2.)



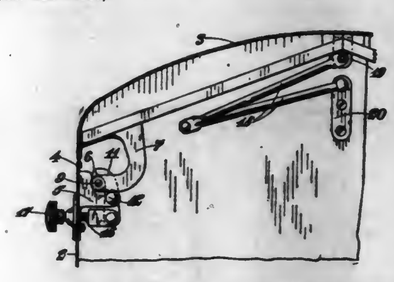
1. A pressure controlling valve including a casing having a fluid inlet and a fluid outlet, a valve for closing communication between the inlet and outlet, a diaphragm for receiving pressure from the inlet, a second diaphragm having a larger active area than the first named diaphragm, a by-pass from the inlet to the outlet for directing pressure on to the second diaphragm, means for transmitting motion from one diaphragm to the other, and pressure operated mechanism for controlling pressure over the second diaphragm.

1,815,539. PLOW ATTACHMENT. DONALD F. AINSLIE, Bishop, Calif. Filed Dec. 27, 1927. Serial No. 242,830. 1 Claim. (Cl. 91—190.)



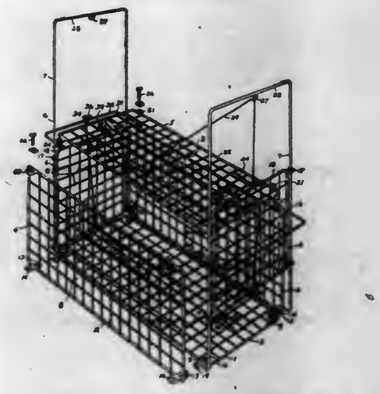
An attachment for earth-working implements, comprising a substantially U-shaped body having a relatively long and wide ground engaging base and lateral extremities, a pair of fastening members associated with the respective extremities of the body, each member comprising a screw-threaded shank rising from the respective extremity and provided at one end with an integral head abutting the upper side of the extremity, a threaded extension on the head and extending through the extremity with a nut on the lower end thereof for screwing the extension within the extremity and the shank against rotation, and a pair of nuts on the shank spaced apart to accommodate the beam of an earth working implement through which the shank is adapted to extend so as to secure the shank in the beam and yet permit vertical adjustment of the shank in the beam to vary the vertical position of the attachment on the implement.

1,815,540. FASTENING DEVICE. JOHN PAUL BLACK and EDWARD ARTHUR GREEN, Coventry, England, assignors of one-third to Humber Limited, Coventry, England, a British Company. Filed Aug. 12, 1929, Serial No. 385,127, and in Great Britain Jan. 17, 1929. 2 Claims. (Cl. 180—69.)



1. A fastening device, for two transverse panels for the hood of an automobile, comprising a hinge pin fixed on one panel, a bush on said hinge pin, a bracket fixed on the other panel, a finger pivoted on said bracket, said finger and bracket being adapted to clamp said bush between them, a threaded stem screwing into said finger, said stem extending through said other panel and being universally pivoted therein, such that rotation of said stem operates said finger into and out of clamping position.

1,815,541. ANIMAL TRAP. ROBERT LEE BOHANNON, Berkeley, Calif., assignor of fifty-one one-hundredths to August Adrian Thiel, Oakland, Calif. Filed May 5, 1928. Serial No. 275,292. 4 Claims. (Cl. 43—61.)

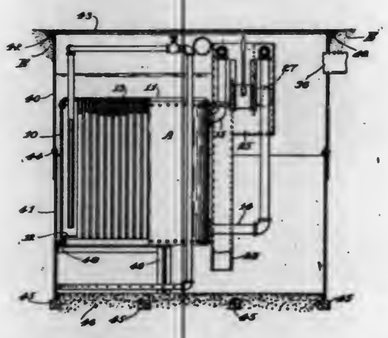


1. In a knock down animal trap, a bottom panel, opposed side panels releasably engaged with said bottom panel, a door for closing an end of the trap, a frame for said door releasably engaged with said side panels, a top panel, and means on said panels and frame whereby they may be releasably secured in relatively fixed relation, said means including members extending inwardly of and being integral with said frame and coacting members extending laterally outward from said panels.

1,815,542. CATCH BASIN FOR SOIL WATER HEAT RECLAIMERS. FRED S. BOLTZ, Mansfield, Mass. Original application filed Feb. 17, 1926, Serial No. 88,908. Divided and this application filed Feb. 23, 1928. Serial No. 256,127. 7 Claims. (Cl. 257—122.)

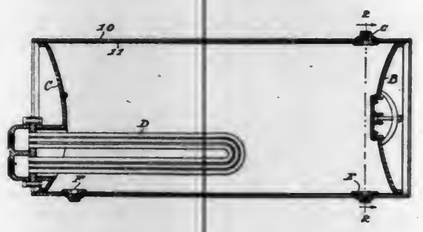
2. A catch basin for soil water comprising two tubular metallic sections both elliptical in cross section and ver-

tically disposed in axial alinement with each other, the lower section being of less diameter throughout its height than the upper section, the upper end of the lower section extending a short distance into the interior of the upper section, a pit in the earth in which said tubular members are sunk and a base for the lower section at the bottom of the pit, in combination with a cylindrical soil water heat reclaimer vertically disposed and enclosed within the said



basin, means whereby clean water may be admitted into and conducted from said heat reclaimer to a delivery place outside of the catch basin without mingling with the soil water, said heat reclaimer being of less height than the basin and of slightly less diameter than the shorter diameter of the basin and being positioned in one of the bays at one side of the center of said basin at some distance above the bottom and below the top of said basin.

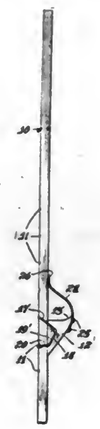
1,815,543. TANK. FRED S. BOLTZ, Mansfield, Mass. Original application filed Jan. 20, 1928, Serial No. 248,146. Divided and this application filed May 16, 1929. Serial No. 363,514. 3 Claims. (Cl. 220—63.)



1. A tank comprising an outer metallic shell and an inner lining shell, said lining shell being of non-corrodible sheet metal, said shells being formed with an orifice passing through both shells to receive a nipple, the rim of the orifice in the lining shell being formed with an outwardly extending flange, the orifice in the outer shell being of larger diameter than the orifice in the lining member and formed with a bevelled edge, a nipple inserted in said orifice, said nipple being of non-corrodible metal of less diameter than said orifice and a non-corrodible substance in the space between the nipple and the said lining member and outer shell uniting the nipple to both of said shells.

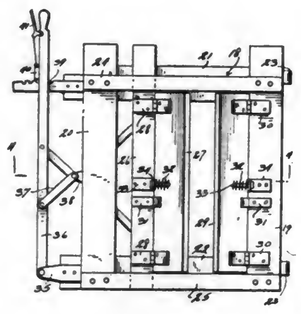
1,815,544. STILT. MILO W. BREWBAKER, Chicago, Ill. Filed Sept. 19, 1927. Serial No. 220,312. 3 Claims. (Cl. 272—702.)

1. A stilt comprising a pole having a plurality of transverse grooves on one side thereof, a step adjustably mounted on the other side thereof, and a single resilient member pivoted to said step having a portion engageable



with a groove in said pole and another portion embracing said pole for supporting and clamping said step to said pole.

1,815,545. HOG RINGING DEVICE. NEWELL BROWN, Selma, Iowa. Filed June 30, 1928. Serial No. 289,456. 6 Claims. (Cl. 119—99.)

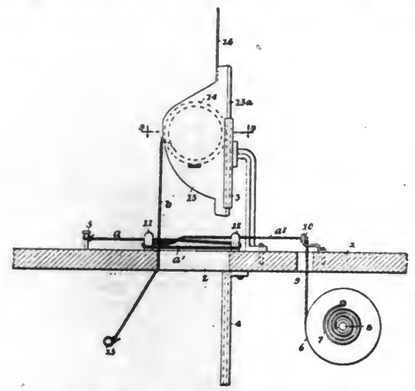


1. A gate for animal crates, the gate being provided with opposed hinged leaves yieldingly urged rearward toward a closed position but movable by the animal into a forwardly convergent position permitting the animal to insert its head between the leaves but preventing a retraction of the head, the leaves being supported for bodily adjustment one toward the other, and manually operable means for shifting one of said leaves toward the other leaf to thus adjust the space between the leaves.

1,815,546. TYING WEAVER'S KNOTS. THOMAS BROWNLEE, Clifton, N. J., assignor, by mesne assignments, to National Net & Twine Co. Inc., Boston, Mass., a Corporation of Delaware. Filed Dec. 4, 1930. Serial No. 493,882. 4 Claims. (Cl. 289—3.)

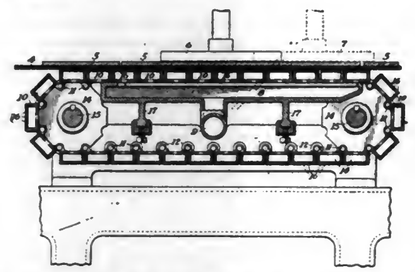
2. Mechanism for tying a weaver's knot comprising means to tension one strand, coactive means to releasably maintain the herein-defined looped hitch in said strand, and elastic yielding means cooperative with one of said coactive means to resist construction of the hitch upon

passing another strand from the reverse side of the hitch and through the loop thereof and at one side of the loop-bridging portion of the first strand and then back through



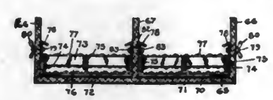
the loop and at the other side of said portion and upon also releasing the hitch from the other of said coactive means.

1,815,547. GLASS GRINDING. CLARENCE P. BYRNES, Sewickley, Pa. Filed Jan. 30, 1923. Serial No. 615,829. 15 Claims. (Cl. 51—235.)



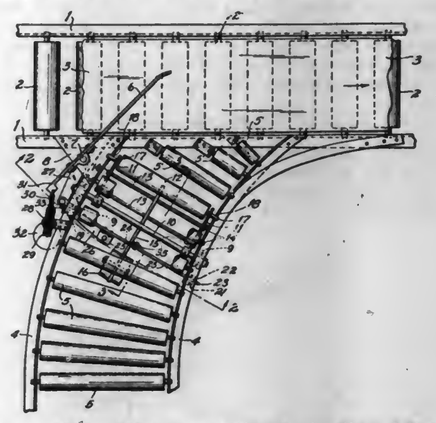
9. The combination with a surfacing car or table mounted for movement along a track and having a glass supporting surface, of a suction conduit leading from the table, means for applying the suction at a predetermined position of the table along the track and abradant mechanism arranged to act upon a glass plate mounted on the car or table.

1,815,548. GOLD-SAVING APPARATUS. GENERAL L. COVINGTON, Chehalis, Wash. Filed June 5, 1928. Serial No. 282,898. 3 Claims. (Cl. 209—485.)



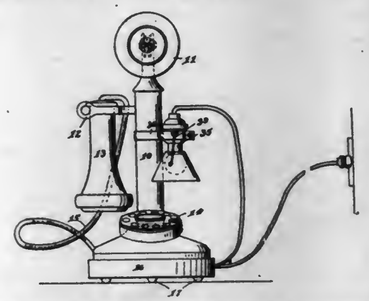
1. In an apparatus of the class described having a sluice box, an assembly of gold-saving elements therefor, comprising a section of carpet disposed in the bottom of the box, a plurality of strips of carpet laid on the section in spaced relation, a screen laid over said strips, a riffle, having a transversely extending and elevated body portion and a plurality of longitudinally extending and spaced supporting and riffle members, disposed on the screen, a second screen laid on top of the riffle, and a plurality of retainers bearing on the last-named screen for detachably securing said elements in superimposed position.

1,815,549. AUTOMATIC BLOCKING DEVICE FOR CONVEYER SYSTEMS. FRANK J. DIETZ, Baltimore, Md., assignor to Alvey Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 15, 1930. Serial No. 428,816. 8 Claims. (Cl. 198—21.)



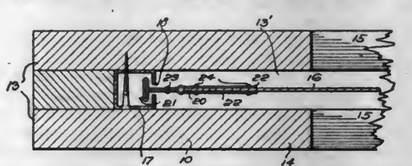
1. A conveyer system comprising a plurality of lines and interconnected mechanical means operable by articles on said lines for blocking the movement of articles on either of said lines by an article on the other line.

1,815,550. MEANS FOR AUTOMATICALLY ILLUMINATING DIAL TELEPHONES. LOUIS DI MATTEO, Bridgeport, Conn. Filed Jan. 9, 1931. Serial No. 507,612. 1 Claim. (Cl. 240—2.17.)



In an automatic lighting means for dial telephones, the combination with a dial telephone, of a stand including an electric switch having a normally projected push button to be engaged by a telephone when positioned thereon, a plug and socket, and wire connecting the socket and switch, a lamp bracket for detachable connection to the telephone, a lamp socket adapted to be supported in the bracket, and an electric wire connecting the lamp socket, switch and plug.

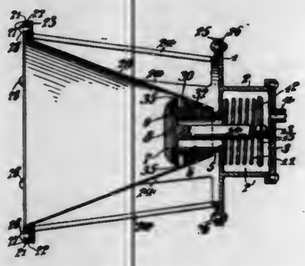
1,815,551. DARK ROOM SHADE CONSTRUCTION. HARRY W. DUNN, Brooklyn, N. Y. Filed Feb. 2, 1929. Serial No. 337,079. 4 Claims. (Cl. 156—26.)



3. A dark room window shade construction comprising a frame, a roller mounted therein, a shade attached

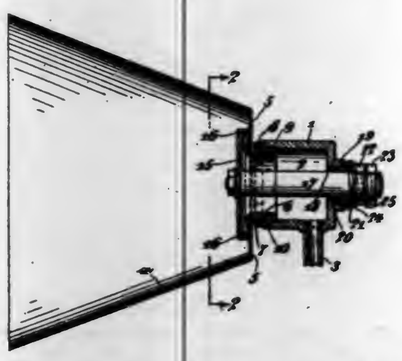
to and adapted to be wound on the roller, said frame having sides formed with channels adapted to, and receiving the edge portions of the shade in light-excluding relation, a closed housing for the roller forming a continuation of the frame and in light-excluding relation to the shade, said frame including also a bottom portion having a deep channeled light-excluding part to receive and coact with the lower edge portion of the shade in light-excluding relation, and means to operate the shade including flexible draft means extending into the lower part of the frame.

1,815,552. SOUND GENERATOR FOR AUTOMOBILES. WALTER L. ECKHARDT, Philadelphia, Pa. Filed Sept. 25, 1930. Serial No. 484,306. 17 Claims. (Cl. 116—139.)



1. A sound generating instrumentality comprising, in combination, a horn having inner and outer ends, the former being suspended and free to vibrate, a receptacle for the reception of a gas under pressure, said receptacle having a passageway leading through the adjoining inner end of the said horn, means for regulating the passage of gas from said receptacle through the said passageway, and means whereby the escape of gas from said passageway imparts vibrations to the horn to cause the same to emit sounds.

1,815,553. SOUND GENERATOR. WALTER L. ECKHARDT, Philadelphia, Pa. Filed Oct. 3, 1930. Serial No. 486,172. 7 Claims. (Cl. 116—142.)

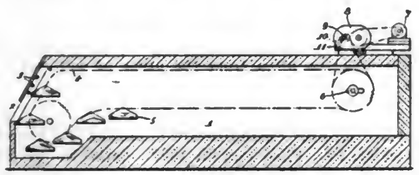


1. A sound generator comprising a receptacle having an opening through which gas under pressure is adapted to be discharged, a flexible resilient flange mounted upon the said receptacle, said flange surrounding said opening and extending laterally therefrom, the outer portion of said flange being free to vibrate, a valve having a portion in contact with a side of the said flange along a line intermediate the inner and outer edges thereof, said valve closing the opening from the said receptacle, and means unyielding in one direction for supporting the said valve and holding the said portion thereof in contact with the said flange.

1,815,554. PROCESS FOR SEPARATING ORGANIC GASES OR VAPORS OF ORGANIC PRODUCTS. ALFRED ENGELHARDT, Wiesdorf, near Cologne, Germany, assignor, by mesne assignments, to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 11, 1921, Serial No. 491,618, and in Germany Nov. 3, 1916. 2 Claims. (Cl. 252—4.)

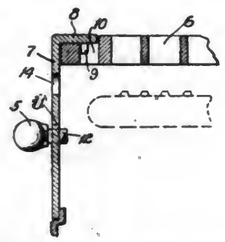
1. In a process of separating gases, passing a gaseous mixture into activated carbon and removing the adsorbable portion from said gaseous mixture by the activated carbon while allowing the unadsorbable portion to pass, expelling the adsorbed portion from the activated carbon by introducing steam into the carbon carrying the adsorbed gaseous material, cooling and collecting the gaseous matter thus expelled.

1,815,555. TRAVELING TRAY OVEN. HARRY FEIGE, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Mar. 31, 1930. Serial No. 440,298. 4 Claims. (Cl. 107—57.)



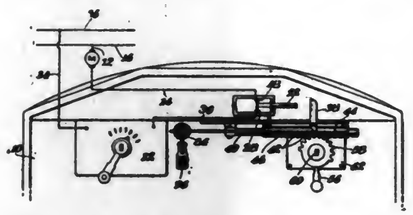
2. In combination with a bake oven having a conveyor and power-driven actuating mechanism therefor, a tripping device operatively associated with said conveyor actuating mechanism, a limit switch adapted to be tripped thereby each time said conveyor traverses a predetermined unit distance and arranged in a relay circuit to interrupt the power for driving the conveyor, a conveyor-starting mechanism adapted to be actuated independently of the movement of the conveyor and its drive mechanism, a limit switch adapted to be tripped by said conveyor-starting mechanism and arranged in said relay circuit to restore the power for driving the conveyor, continuously operated timing mechanism operatively associated with said conveyor-starting mechanism and adjustable to vary at will the frequency of action of the conveyor-starting mechanism.

1,815,556. DETACHABLE MANIFOLD COVER PLATE FOR RANGES. ALPHONSE E. FELLNER, Belleville, Ill. Filed May 15, 1930. Serial No. 452,537. 1 Claim. (Cl. 126—39.)



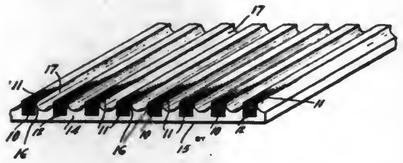
In combination with a range a detachable manifold cover plate having a right angle projection formed at its top with fingers formed thereon for engagement with a slot formed in said range, said detachable manifold cover plate having perforations formed therein and slots formed therein, the purpose of the latter being to permit the sliding of the cover plate over the valve stems of the valves of said range.

1,815,557. VEHICLE CONTROL APPARATUS. FRANK P. FRANKFORD, Ridgefield Park, N. J. Filed July 7, 1930. Serial No. 465,988. 1 Claim. (Cl. 303—19.)



A combined air brake and motor control apparatus for motor driven vehicles comprising an air brake valve having a toothed operating-handle removably engaged therewith, a slidable rack bar coacting with the latter, means normally tending to move said rack bar and handle to braking position, a motor, a switch coacting with said rack bar adapted to interrupt the supply of current thereto when the brake operating handle and rack bar is moved to braking position and means preventing closing movement of said switch when the operating handle is removed from said air brake valve.

1,815,558. FLOOR COVERING OR MAT AND METHOD FOR MAKING THE SAME. JOHN R. GAMMETER, Akron, Ohio. Filed Oct. 9, 1929. Serial No. 398,807. 5 Claims. (Cl. 154—49.)



2. That method for making coverings for the surfaces of floors or the like which comprises making strips comprising laminations of cords bonded together by prevulcanization with rubber with the cords in adjacent plies at opposite bias angles and the individual cords surrounded by rubber and with the ends of the cords exposed in faces of the strips, and embedding and vulcanizing said strips in a body of elastic rubber with said faces exposed.

5. A covering for the surfaces of floors or the like comprising an integral vulcanized structure including a body of elastic rubber and strips of rubberized cord material partly embedded in the upper face of said body to provide ribs, said strips comprising longitudinal laminations of cords bonded together by prevulcanization with rubber in which the individual cords are surrounded by rubber and the cords in adjacent layers are at opposite bias angles, the ends of the cords being exposed in the upper faces of the strips, and the grooves in the mat between said ribs being of such shape as to define buttresses for providing lateral supports for the sides of the strips.

1,815,559. VIBRATION ELIMINATOR FOR PHONOGRAPH TURNTABLES. CLARENCE G. GARRIGUS, Bristol, Conn., assignor to Wm. H. Bristol Talking Picture Corporation, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 10, 1929. Serial No. 353,947. 6 Claims. (Cl. 64—29.)

1. In a phonograph apparatus embodying a turntable and a synchronized driving member therefor: a vertically disposed transmission shaft for operating the turntable, comprising two telescopically mounted elements connected between the said turntable and driving member, and driving means connecting the telescopic elements and embodying radially displaced coupling elements unattached to each other and adapted for transmitting rotation therebetween.



1,815,560. MASSAGE INSTRUMENT. ARTHUR GEHM, Pittsburgh, Pa. Filed Aug. 27, 1929. Serial No. 388,722. 1 Claim. (Cl. 128—62.)

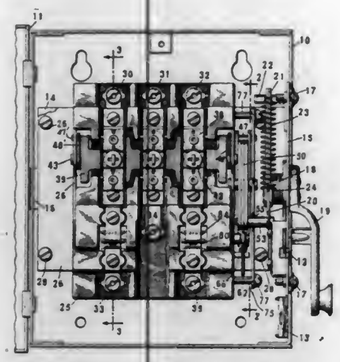


In combination, a massaging instrument of the character described comprising a rigid back plate having a forwardly extending peripheral flange, a rubber massaging pad secured to said back plate, said flange surrounding and engaging the edge of said massaging pad, the front of the latter projecting forwardly beyond said flange, a supporting rod having its upper end fixed to said back plate, and a detachable handle carried at the lower end of said supporting rod, said supporting rod having a forwardly projecting portion disposing said back plate and associated pad forwardly of said supporting rod and parallel to the latter.

1,815,561. AUTOMATIC SAFETY SWITCH. BENJAMIN E. GETCHELL, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Feb. 14, 1930. Serial No. 428,842. 9 Claims. (Cl. 200—116.)

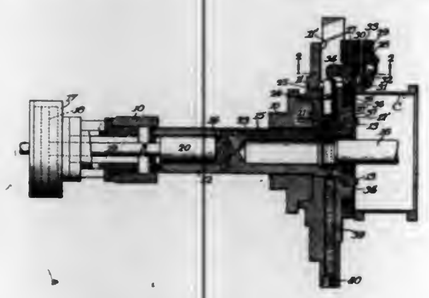
1. In an electric switch, a movable switch member, a lever connected thereto, a spring tending to move said switch member to the open circuit position, a rocker, a floating lever having means of connection with said rocker, one end of said floating lever being connected to

said first mentioned lever, a latch coacting with the opposite end of said floating lever, a rock shaft coacting with said latch, thermostatically actuating means for moving



said rock shaft to release said latch and means for oscillating said rocker including a handle and a snap action spring.

1,815,562. HYDRAULIC CHUCK. LOUIS E. GODFRIAUX, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a Corporation of Wisconsin. Filed July 28, 1930. Serial No. 471,111. 15 Claims. (Cl. 279—4.)

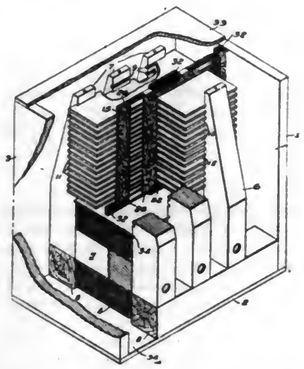


1. In a chuck, the combination of a rotary spindle, a chuck body fast on said spindle, work-gripping members mounted on said body, cylinders carried by said body, plungers in said cylinders at one end engaged with said work-gripping members, a duct connecting said cylinders, a chamber in said spindle, a plunger in said chamber, a duct connecting said chamber with said first-named duct, a viscous fluid filling the portion of said chamber in advance of said plunger, ducts, and the portions of said cylinders behind said plungers, and means for applying pressure to the fluid in said chamber.

1,815,563. PROCESS OF SWEETENING PETROLEUM DISTILLATES. LAWRENCE M. HENDERSON, Narberth, and HENRY C. COWLES, Jr., Philadelphia, Pa., assignors to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 15, 1928. Serial No. 262,042. 10 Claims. (Cl. 196—30.)

1. The process of repeatedly utilizing an aqueous solution of cupric chloride and a buffer for sweetening successive portions of a light petroleum distillate, which comprises treating a portion of the distillate with the solution, reactivating the solution by passing an oxygen-containing gas therethrough, and utilizing the regenerated solution for treatment of a second portion of the light petroleum distillate.

1,815,564. TRANSLATING DEVICE. JURJEN S. HIGH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 13, 1929. Serial No. 370,526. 19 Claims. (Cl. 179—115 5.)

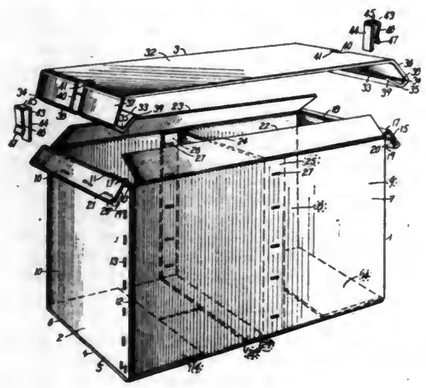


1. In a translating device for electric and acoustic energy, a sheet, a winding distributed over both faces of said sheet and flux-producing means cooperating with said winding throughout the major part thereof.

4. In a translating device for electric and acoustic energy, a magnetic circuit comprising a pair of sets of pole-pieces, the sets being located in opposed relation and the members of each set being spaced apart, an open work of magnetic material extending from one set of pole-pieces toward the other, a similar open work extending from the other set of pole pieces toward the first, whereby the adjacent extremities of the open work are on opposite sides of an air gap.

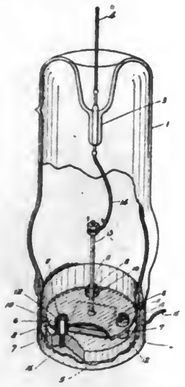
18. A diaphragm comprising a supporting sheet and a ribbon of conductive material wound flat on both faces of said sheet.

1,815,565. EGG SHIPPING CASE. IRVING HILL and ROSS H. CLAYTON, Lawrence, Kans., assignors to Lawrence Paper Manufacturing Company, Lawrence, Kans., a Copartnership. Filed July 13, 1928. Serial No. 292,385. 10 Claims. (Cl. 229—15.)



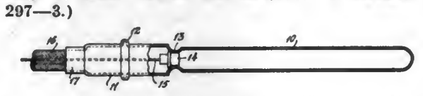
1. A box comprising a body portion having downturned hooks provided with backturned edge flanges, a cover for the box, means on the cover engageable with the downturned hooks and flanges to secure the cover to the box, and a member for latching said means with the hooks.

1,815,566. CONTROL DEVICE. RICHARD C. HITCHCOCK, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 22, 1927. Serial No. 200,722. 9 Claims. (Cl. 171—327.)



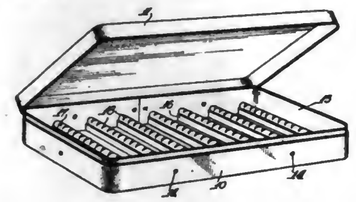
1. As an article of manufacture, a piezo-electric-crystal-holding device comprising an evacuated container having a transparent insulating portion, a conductor extending through a wall of said transparent portion, a metallic base portion, an electrode, means independent of the crystal for insulatingly supporting said electrode from said base portion, and a connection between said electrode and said conductor.

1,815,567. BULB ASSEMBLY FOR TEMPERATURE RESPONSIVE DEVICES. LAWRENCE C. IRWIN, Brooklyn, N. Y., assignor to Charles J. Tagliabue Mfg. Co., New York, N. Y., a Corporation of New York. Filed Aug. 1, 1928. Serial No. 296,850. 2 Claims. (Cl. 297—3.)



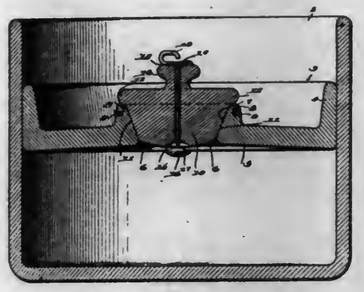
1. A bulb assembly adapted to be supported so as to project into a container and including a tubular member having at least a portion thereof including the section which extends within the container formed of one piece free of exterior joints, a capillary tube one end of which extends into said portion, and a plug on said tube for holding said tube within said portion, the latter having a constricted section, and said plug being adapted to fit against and be secured to said constricted section, said constricted section being so located that when the bulb assembly is in position upon the wall of a container the capillary tube is in communication with a portion of the tubular member located wholly within such container.

1,815,568. FLY BOX. FRED L. JACQMEIN, Monroe, N. Y. Filed Dec. 11, 1929. Serial No. 413,156. 10 Claims. (Cl. 43—32.)



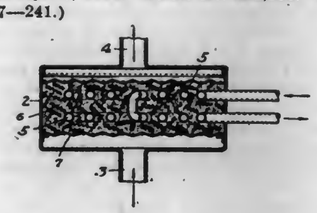
2. A device of the class described including a box, a cover, a liner for the box, and transverse support members held in position by the liner, said members including strips of cork or the like shaped to receive and support the hook portions of artificial flies stored in the box.

1,815,569. COOKING VESSEL. BRUCE B. JOHNSON, Long Beach, Calif. Filed Dec. 31, 1929. Serial No. 417,741. 2 Claims. (Cl. 53—1.)



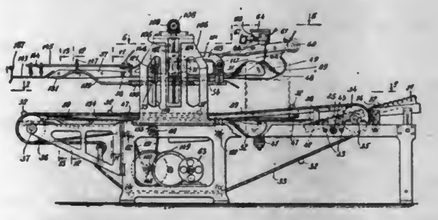
1. A gravitating follower cover for cooking vessels comprising a disk like member having an air escape opening therethrough with a bossed extension on its upper face, said opening having upwardly and outwardly inclined walls, and a closure plug for said air escape opening having a body portion tapered in coincidence with said wall inclines for frictional engagement therewith, and having a surmounting flange positioned to seat upon the top of said bossed extension.

1,815,570. HEAT TRANSFER APPARATUS. CHARLES L. JONES, Pelham, N. Y. Original application filed Aug. 7, 1928, Serial No. 297,953. Divided and this application filed Apr. 7, 1930. Serial No. 442,153. 8 Claims. (Cl. 257—241.)



1. A heat transfer apparatus comprising a bed of permeable metal composed of metallic particles bonded together, and a conduit for fluid embedded therein.

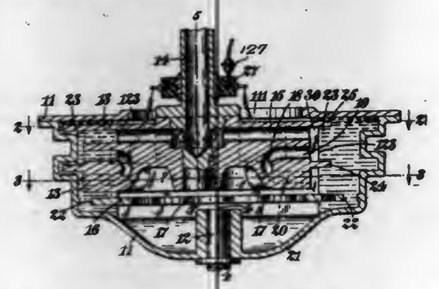
1,815,571. CARTON SEALING MACHINE. WALLACE D. KIMBALL and ARTHUR E. RIDEOUT, New York, N. Y., assignors, by mesne assignments, to Standard-Knapp Corporation, New York. Filed Nov. 30, 1926. Serial No. 151,663. 28 Claims. (Cl. 93—2.)



1. A machine for sealing filled cartons comprising means for receiving a carton resting on its bottom flaps with its bottom flaps closed but unsealed, means for advancing the carton off of said carton receiving means, carton sup-

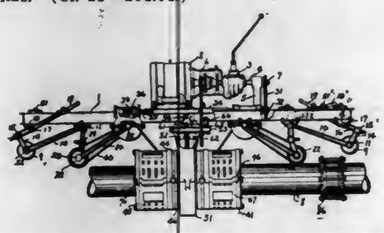
porting means in advance of said carton receiving means adapted to support the carton near its side edges and allow the inner margins of the outer bottom flaps to open partially, a pointed supporting table having the point thereof disposed in over-lapping relation with said carton supporting means so as to enter between the partially opened outer bottom flaps and engage the inner bottom flaps to support the carton and its contents and leave both outer bottom flaps free, means for opening said flaps outwardly into substantially horizontal position, means for applying adhesive to said open flaps, and means for thereafter folding said flaps against the inner bottom flaps to thereby seal the bottom of the carton.

1,815,572. INTERNAL COMBUSTION ENGINE. FREDERIC WHIGHAM MCCONNEL, Martley, England. Filed Mar. 9, 1928, Serial No. 260,472, and in Great Britain Aug. 31, 1927. 4 Claims. (Cl. 60—12.)



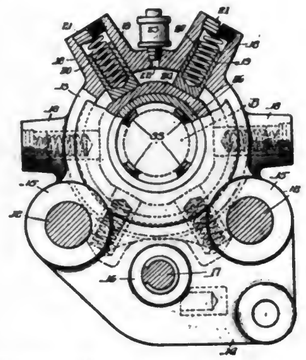
3. An internal combustion rotary engine comprising a rotatable casing having an open end, a rotatable member in the casing and rotatable about an axis of rotation that is parallel with and eccentric to that of the casing, a plurality of combustion chambers in the rotatable member, which extend outwardly with their outer ends open at the periphery of the rotatable member and their inner ends closed, a liquid lining in the rotatable casing, which lining is penetrated periodically at one part by the said outer ends of the combustion chambers in rotation, a hollow shaft for supporting the rotatable member extending through said open end of the casing, said hollow shaft serving as a supply conduit for the fuel radial conduits from said shaft to the circumference of the rotatable member adjacent to the open ends of the combustion chambers to deliver the fuel there, and an annular flange provided on and extending from the rotatable member at right angles to its axis of rotation and continuously penetrating the liquid lining at the whole of the outer circumference for preventing the escape of fuel from the outer open ends of the combustion chambers and the radial conduits through the said opening in the casing.

1,815,573. DEVICE FOR CLEANING THE OUTSIDE OF PIPES. FRED MCMANIS, Houston, Tex., assignor to W-K-M Company, Houston, Tex., a Corporation of Texas. Filed June 18, 1927. Serial No. 199,757. 26 Claims. (Cl. 15—104.04.)



1. In a pipe cleaner, a frame, traction wheels adjacent the ends of said frame, guide wheels on said frame, separate means to raise and lower said traction wheels and said guide wheels, pipe cleaning means depending from said frame, and means to operate said traction wheels and said cleaning means.

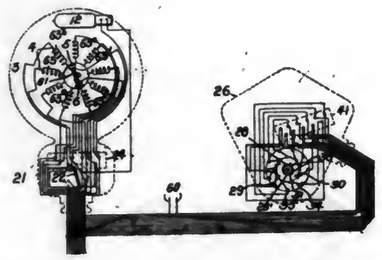
1,815,574. STOCK BAR FEEDER. RALPH J. MILLER, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a Corporation of Wisconsin. Filed May 24, 1930. Serial No. 455,173. 5 Claims. (Cl. 29—59.)



1. In a stock bar feeder of the type described, the combination of a casing mounted for sliding movement on a guide, a floating sleeve in said casing, a bar gripping member journaled in said sleeve, and spring-actuated means in said casing opposing lateral displacement of said sleeve under lateral vibrations of the stock bar.

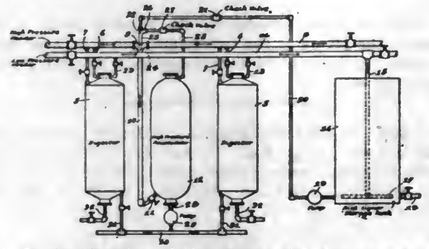
4. In a stock bar feeder of the type described, the combination of a casing mounted for sliding movement on a guide, a floating bearing sleeve in said casing formed with flat surfaces on its outer periphery, a bar gripping member journaled in said sleeve, and a group of spaced radial thrust spring plungers mounted in said casing at their inner ends seated on said flat surfaces and serving to hold said sleeve against rotation and cushion the lateral vibrations imparted to said gripping member and sleeve by the rotating stock bar.

1,815,575. INDICATING DEVICE. CHESTER B. MILLS, deceased, by Luella H. Mills, Brooklyn, N. Y., and The National City Bank of New York, New York, N. Y., coexecutors, assignors, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Original application filed Sept. 14, 1921, Serial No. 500,599. Divided and this application filed Aug. 16, 1927. Serial No. 213,428. 10 Claims. (Cl. 177—311.)



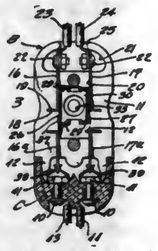
10. In a rudder angle indicating system, in combination, a rudder, an indicator, a transmitter, means whereby said transmitter actuates said indicator, and means whereby said rudder actuates said transmitter, said last-named means including a fine connection and a coarse connection whereby said transmitter is operated through unequal increments of angular movement corresponding to equal increments of movement of said member, means whereby said connections become successively effective, and means whereby said fine connection is effective within predetermined limits of movement of said rudder, and said coarse connection during movements of said rudder beyond said limits.

1,815,576. PROCESS AND APPARATUS FOR DIGESTING FIBROUS MATERIAL. PERCY W. NEIL, Quebec, Quebec, Canada, assignor to Thomas L. Dunbar, Watertown, N. Y. Filed Apr. 14, 1930. Serial No. 444,186. 28 Claims. (Cl. 92—7.)



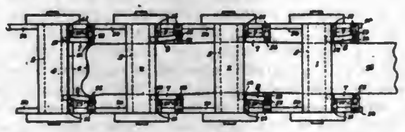
1. In the digestion of fibrous material, flowing a stream of chemical liquor to an accumulator chamber, utilizing the flowing stream to withdraw gases and vapors from said chamber, and mixing the withdrawn gases and vapors with the flowing stream.

1,815,577. SWITCH. JOSEPH F. NENZEL, Los Angeles, Calif. Filed Aug. 1, 1928. Serial No. 296,727. 13 Claims. (Cl. 200—16.)



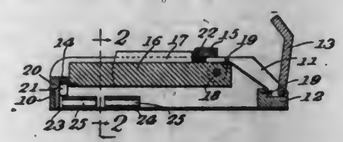
1. A switch comprising a body of insulating material constructed of a pair of sections co-operating to provide a compartment interiorly of the body, means for securing the sections together, a pair of spaced apart stationary contacts in the compartment, a block of insulating material slidably mounted in the compartment and having lugs at opposed ends, a contact member comprising a strip of resilient material having its ends bent to loosely embrace said lugs, to thereby connect the contact member to the block for movement by the latter, and manually operable means for actuating the block to move the contact member to bridging and non-bridging positions with respect to the stationary contacts.

1,815,578. ROLLING MILL. JEREMIAH J. O'BRIEN, Pittsburgh, Pa. Filed Aug. 27, 1929. Serial No. 388,710. 19 Claims. (Cl. 29—18.)



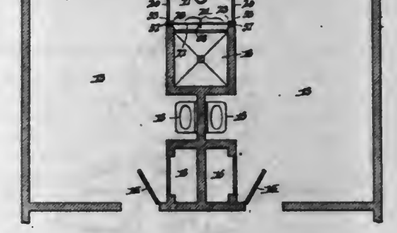
1. In a metal plate or sheet manufacturing process, the steps of reducing the plate or sheet which consists of passing the latter through successive stands of reduction rolls, and operating the latter alternately to first reduce said plate or sheet toward one side edge thereof and then to restore the uniform thickness of said plate or sheet.

1,815,579. PRACTICE KEYBOARD. RALPH A. OSTBURG, Jr., Winchester, Mass. Filed July 30, 1930. Serial No. 471,610. 14 Claims. (Cl. 84—467.)



1. A practice key-board comprising in combination a frame, a number of keys pivotally mounted in said frame so that the front ends of said keys may be depressed to simulate the action of playing a piano, means for raising said keys to their normal position, and a member against which said keys strike when depressed, said member being adapted to give a predetermined reasonance to the sound of the impact of said keys.

1,815,580. FASTENING MEANS FOR DOORS. OTHO M. OTTE, Tarentum, Pa., assignor to William T. Pierce, Reading, Pa. Filed Dec. 9, 1926. Serial No. 153,511. 13 Claims. (Cl. 292—218.)



1. Fastening mechanism for a series of associated doors comprising a common rotary actuator with headed termini adapted to cooperate with keepers on the respective doors and simultaneously secure all of said doors in closed position, and means co-acting with said termini to prevent movement of the actuator should any or all of the doors be open.

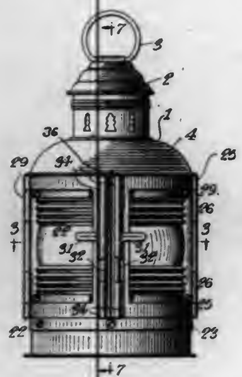
1,815,581. PRODUCTION OF PHOSPHORIC ACID AND HYDROGEN. GUSTAV PAUCKNER, Ludwigshafen-on-the-Rhine, and RUDOLF HUETTNER, Oppau, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 28, 1930, Serial No. 448,166, and in Germany May 13, 1929. 4 Claims. (Cl. 23—165.)

1. The process of producing hydrogen and oxygen acids of phosphorus which comprises heating phosphorus with substantially anhydrous phosphoric acid under pressure.

1,815,582. MARINE LAMP. FREDERICK PERKINS, New York, N. Y., assignor to Perkins Marine Lamp Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 25, 1928. Serial No. 272,632. 4 Claims. (Cl. 240—22.)

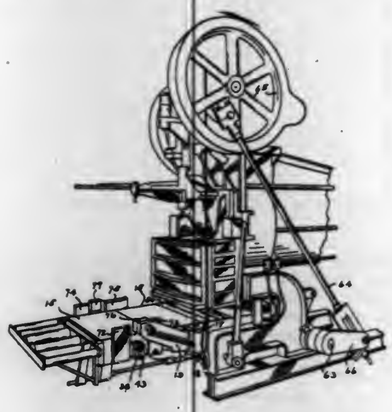
1. In a lamp of the class described, a frame, a door hingedly connected to said frame, a bolt mounted in the

free edge of the door opposite the hinge, a curved projection on said frame with a portion adapted to receive the bolt in one position and be free of the bolt when the



bolt is in another position and when the bolt is in the second position, it is so placed as to be a lever for operating against said curved projection for prying the door open.

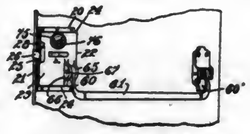
1,815,583. BRICK MOLD RAPPING MECHANISM. CLAYTON POTTS and WILLIAM S. MINTER, Indianapolis, Ind., assignors to C. & G. Potts Company, Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 7, 1929. Serial No. 338,105. 13 Claims. (Cl. 25—2.)



1. In a mold rapping device, a table adapted to carry molds thereon, mold arresting means, a hammer on each side of the table movable in relation thereto, means normally moving said hammers toward the table, means overcoming said first means for holding said hammers outwardly from the table, and actuating means alternately releasing said hammers from said second means to strike the molds and knock them in alternate opposite directions against one of the arresting means.

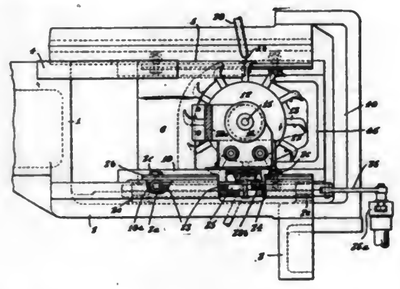
1,815,584. DOORBOLT MECHANISM. CARL J. PRINZLER, Indianapolis, Ind., assignor to Vonnegut Hardware Company, Indianapolis, Ind., a Corporation of Indiana. Filed Mar. 22, 1929. Serial No. 349,090. 12 Claims. (Cl. 70—29.)

2. A lock mechanism comprising a housing containing a bolt, a bell crank lever having one arm arranged to act on said bolt in a retracting direction, a second lever having a portion arranged to have a one-way engagement with the other arm of said lever and projecting toward the pivot of the first lever, said last-mentioned lever being



actuable from the exterior of the housing along a line between the pivots of the two levers, and a dogging lever movable into and out of blocking position relative to said second lever.

1,815,585. CLOTH SHEARING MACHINE. CHARLES G. RICHARDSON, Springfield, Vt., assignor to Parks & Woolson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Jan. 30, 1930. Serial No. 424,556. 20 Claims. (Cl. 26—7.)



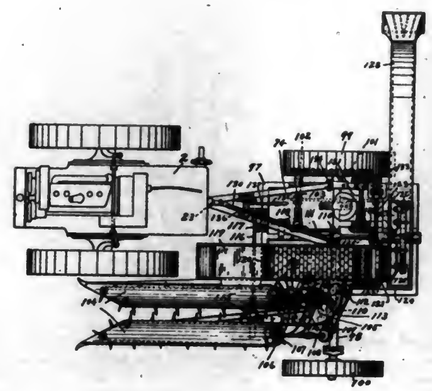
1. In a cloth shearing machine, the combination with a cloth rest disposed transversely of the travel of the cloth and arranged to guide the cloth travelling toward the shearing line into a salient path of travel, a loop cutter mounted to have its cutting edge move across the loop-carrying edge of the cloth in close proximity to the internal angle of said salient and thereby sever the loops.

1,815,586. PROCESS OF MAKING RUGS. JAMES BAXTER ROBERTSON, Paterson, and GEORGE ROBERTSON, Ridgewood, N. J., assignors to The Paratex Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 5, 1928. Serial No. 259,122. 6 Claims. (Cl. 28—4.)



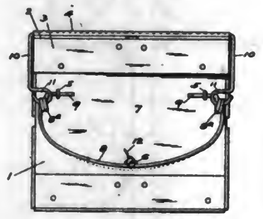
1. The method of treating a pile fabric, the pile of which is made by needling fibrous material through a base fabric, which comprises applying to the face of said pile fabric a blotching material adapted to prevent the impregnation into said face pile of an anchoring material applied to the other side, and thereafter coating the other side with a material adapted to anchor said needled fibres to the base fabric, by applying thereto a liquid adapted to effect penetration of the anchoring material into said fabric and to leave a coating of said anchoring material surrounding the fibers and anchoring them to the base fabric.

1,815,587. COMBINATION TRACTOR HARVESTER. ADOLPH RONNING, Minneapolis, Minn., and ANDREAN G. RONNING, deceased, Minneapolis, Minn., by Adolph Ronning and Jacob A. Ronning, Minneapolis, Minn., executors. Original application filed Apr. 29, 1920, Serial No. 377,564. Divided and this application filed Jan. 28, 1929. Serial No. 335,729. 11 Claims. (Cl. 56—10.)



1. The combination with a tractor, of a harvester arranged behind the tractor, a pair of laterally disposed wheels supporting substantially the entire weight of the harvester, a frame extending rearwardly from the tractor for connection with the harvester, and means, associated with said frame, for vertically adjusting the harvester, said frame being pivotally connected to the harvester by a transversely disposed pivot connection.

1,815,588. FASTENER. WILLARD KENNETH ROYCE, Clackamas, Oreg. Filed Oct. 24, 1928. Serial No. 314,658. 2 Claims. (Cl. 292—247.)



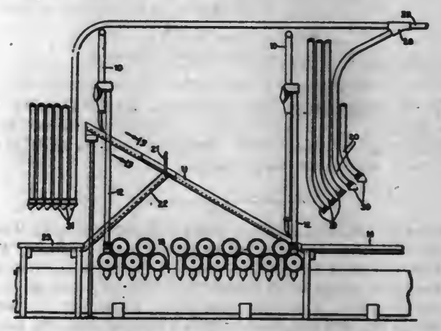
1. A fastening device having therein the combination of; a flexible bail formed with a right angled part adapted so as transversely and rigidly to engage a flat opposing surface, also having a hinging hook at right angles on each free end, a staple positioned conveniently near each end of the bail, a flexible locking member formed with double rings near each end which hingedly engage the opposing bail hooks, the ends of the member extending at right angles to a rotative position within the opposing staples, the member being adapted so as to remain at a slight angle to the bail when in locking position, and a screw rigidly positioned in alignment with the center of said member and adapted to receive the member on one side of the screw in a pre-determined tension produced position.

1,815,589. BATIK WAX LINING TOOL. THOMAS SAACHY, New York, N. Y. Filed July 12, 1928. Serial No. 292,313. 3 Claims. (Cl. 219—21.)



2. In a wax line forming tool, the combination of a reservoir terminating in a tracing tip, which tip is formed with a way having a conical end, a needle inserted in said way and formed with a conical closure tip and wax return grooves cut therein, and means for operating said needle substantially as, and for the purpose set forth.

1,815,590. PNEUMATIC CARRIER SYSTEM. JOSEPH M. SCANLAN, Great Neck, N. Y., assignor to G & G Atlas Systems, Inc., New York, N. Y., a Corporation of New York. Filed July 7, 1930. Serial No. 465,829. 10 Claims. (Cl. 243—19.)



1. In a central station for pneumatic carrier systems, an inclined runway, a plurality of tube terminals adapted to discharge carriers onto said runway, means for directing the carriers from said chute at will to any one of a plurality of dispatch stations, and tube inlets at said stations adapted to receive said carriers for transmission to their points of origin.

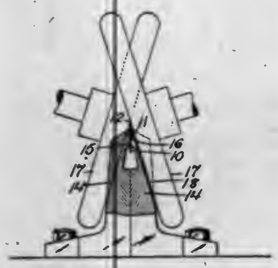
1,815,591. TROLLEY POLE. WILLIAM SCHAAKE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 4, 1930. Serial No. 441,537. 6 Claims. (Cl. 191—64.)



1. A trolley pole comprising, in combination, a section of steel tubing having one end adapted to be attached

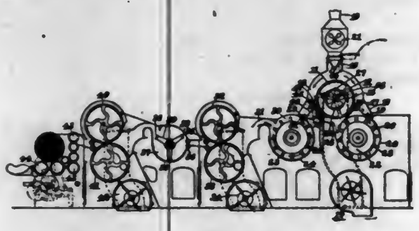
to a trolley base, a section of aluminum-alloy tubing disposed in alined end-to-end relation to the steel tubing, and means for securing the two sections together to make a rigid trolley pole.

1,815,592. METHOD OF MAKING BLADES. JACOB SCHICK, Stamford, Conn., assignor to Magazine Repeating Razor Company, a Corporation of New Jersey. Filed Mar. 17, 1927. Serial No. 176,001. 3 Claims. (Cl. 76—104.)



1. The method of making blades which consists in providing a flat blade with a projection thereon and sharpening the blade while passing it along a fixed path of travel defined by the projection.

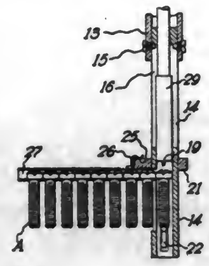
1,815,593. MACHINE FOR OPENING, SCUTCHING AND SIMILARLY TREATING COTTON AND OTHER FIBROUS MATERIALS. CHARLES SCHOFIELD, Bolton, England, assignor to Dobson and Barlow Limited, Bolton, England, a British Company. Filed Nov. 8, 1930, Serial No. 494,406, and in Great Britain Nov. 25, 1929. 9 Claims. (Cl. 19—93.)



1. In a machine for opening, scutching or similarly treating fibrous materials, a conveyor on to which the material is fed and by which it is conveyed and subjected to treatment while on said conveyor, means for reversing the direction of movement of the conveyor, and a plurality of devices arranged in series for further treating the material, to one or another of which devices the material is delivered by the conveyor according to the direction of its movement so that one at least of the material-treating devices is by-passed if the material is delivered directly to another of said devices.

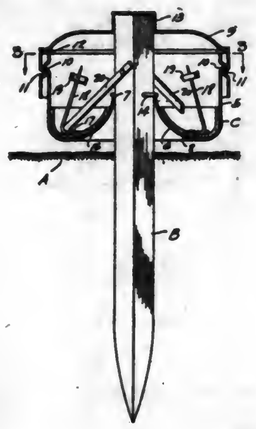
1,815,594. SCREW DRIVER SCREW HOLDING DEVICE. JOHN C. SHAW and ROBERT D. SHAW, Brooklyn, N. Y., assignors to Keller Mechanical Engineering Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 1, 1929. Serial No. 396,431. 1 Claim. (Cl. 144—32.)

A power screw driver screw-holding device, comprising a handle provided with a centrally extending rotary bit, a tubular member surrounding the upper portion of said bit and secured to said handle, a telescoping tube surrounding the lower end of said bit and adapted to slide in and in fixed relation to said tubular member, a compression spring in said tubular member for normally holding said telescoping tube projecting fully out of said tubular member, means for limiting the outward movement of said telescoping tube and preventing rotation thereof relative to said tubular member, spring fingers mounted on the lower



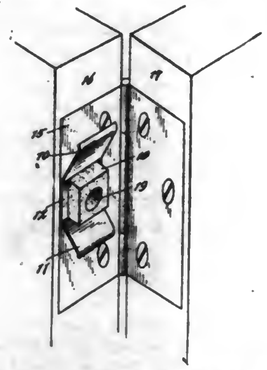
end of said telescoping tube and extending through slots therein for engaging and centering the screw, a collar-like annular flange above the lower end of said telescoping tube, means for attaching said spring fingers to said collar, said collar-like flange being provided with a lateral lug extension, and a sheet metal screw-holding chute having means for detachably engaging said lug, said chute being adapted to hold a plurality of screws and direct them one at a time into said tube between said spring fingers.

1,815,595. INSECT CONTROL DEVICE. ARTHUR E. SIMPSON, Los Angeles, Calif. Filed Dec. 31, 1929. Serial No. 417,652. 1 Claim. (Cl. 43—131.)



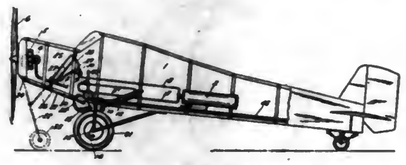
An insecticide container comprising a shell providing a chamber having an annular trough in the bottom and an entrance opening at the center disposed above the bottom of said trough to form a non-spillable chamber, a standard to support said container and to form an insect walk, said standard being inserted through said opening and providing insect entrances between the margins of said opening and said standard, and branch insect walks in said chamber extending from said standard to said trough.

1,815,596. ANTIRATTLING DEVICE FOR DOORS AND THE LIKE. LOUIS STARK, Brooklyn, N. Y., assignor to Kaster Specialty Manufacturing Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 15, 1929. Serial No. 386,131. 2 Claims. (Cl. 16—86.)



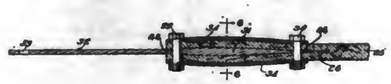
1. An anti-rattling device for doors and the like which comprises a bowed spring member with a central rubber cushion on one side of the member, said cushion and member having an aperture to receive a hinge plate screw.

1,815,597. AEROPLANE. CARL STICKLEY and RAYMOND L. ROBINSON, Davenport, Iowa. Filed Apr. 28, 1930. Serial No. 448,067. 7 Claims. (Cl. 244—2.)



4. An aeroplane having landing wheels, provided with brakes and brake actuating mechanism, said brake actuating mechanism including a cylinder and a piston, a source of compressed air, means to convey the compressed air to said cylinder, means connecting the piston with the brakes so that introduction of compressed air from the source thereof into the cylinder will cause actuation of the brakes, said machine having a wheel connected to the forward part of the fuselage, forwardly of the wheel and adapted to be let down to support the forward portion of the aeroplane and prevent nosing over when making a landing.

1,815,598. INSULATING MEMBER FOR HIGH TENSION CONSTRUCTION. CHARLES L. STROUP, Oak Park, Ill. Filed Apr. 19, 1929. Serial No. 356,492. 14 Claims. (Cl. 173—28.)



2. In combination, a wooden pole having an inverted U-shaped bracket embracing the top of the pole, a wooden cross arm, a bolt passing through the center of the cross arm and the pole, and through both legs of the bracket, insulators mounted on metal pins bolted onto the outer ends of the cross arm, an insulator mounted on the top of said bracket, and diagonal braces secured at their lower ends to the pole and at their upper ends to the cross arm on each side of the pole.

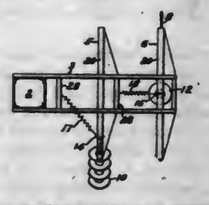
4. In combination, a wooden shaft of oblong cross section having an end slotted to bifurcate the same, a double tapered wedge piece of metal disposed in said slot, the bifurcated ends embracing opposite sides of both tapered parts of the wedge piece, and bolts holding said bifurcated ends firmly in engagement with said wedge piece and against movement in any direction with respect thereto.

14. In combination with a wooden pole, a wooden cross bar joined to the pole and having electric power conductor supporting means thereupon, and a diagonal brace connecting the cross-arm and the pole, said brace having a shaft of wood, metallic coupling means at each end of the brace binding the ends of the shaft and serving to couple the ends of the brace to the pole and to the cross-arm and bolts extending through a part of each coupling means and serving to secure the ends of the brace to pole and to the cross-arm respectively.

1,815,599. COMPOUND FOR CLEANING AND POLISHING SURFACES. LOUIS L. TUORTO, Pequanac, N. J. Filed Feb. 14, 1929. Serial No. 340,025. 2 Claims. (Cl. 87—5.)

1. The herein described compound consisting of approximately ten parts of lard, four parts of wax, one part of naphtha and one part of glycerine.

1,815,600. TRANSMISSION LINE STRUCTURE. ALBERT VAUPEL, Berlin-Grunewald, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 11, 1927, Serial No. 190,534, and in Germany May 12, 1926. 10 Claims. (Cl. 173—251.)



1. A transmission line structure comprising a main supporting element, an elongated element supported thereon extending in the direction of the line, an insulator longitudinally slidably mounted on said elongated element and a spring extending laterally to the line and located between the insulator and said main supporting element.

1,815,601. GASKET. JOSEPH B. VICTOR, Chicago, Ill., assignor to Victor Manufacturing & Gasket Co., a Corporation of Illinois. Filed July 24, 1926. Serial No. 124,656. 13 Claims. (Cl. 288—1.)



1. A gasket having an opening and comprising upper and lower metal layers spaced apart and a compressible core interposed between said layers the marginal portions of the layers about said opening being oppositely curved and interlockingly engaged and forming a curved double-layer wall at the opening, the marginal edge of each layer extending away from said opening in contact with the other layer and forming a double-layer wall at the top and at the bottom of the gasket adjacent the curved wall and the compressible core extending between said double-layer walls and to said curved wall.

1,815,602. GASKET. CASS B. RUSSELL, Detroit, Mich., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed July 26, 1930. Serial No. 470,852. 3 Claims. (Cl. 288—1.)

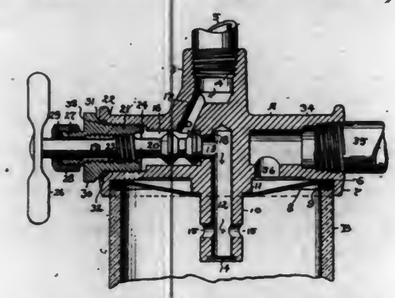
1. A gasket having openings therein and comprising facing layers and an interposed layer of heat-resisting ma-

terial, the facing layers having oppositely directed and overlapping marginal flanges binding the edges of said



openings, and a reenforcing ring of a different material from that of the overlapping flanges interposed between said flanges and conforming in shape thereto.

1,815,603. COVER FOR RECEPTACLES. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Oct. 27, 1926. Serial No. 144,626. 5 Claims. (Cl. 251—156.)



5. In a member having a recessed seat at the bottom, a horizontal valve chamber open at one end formed with a valve seat opposite said open end, a hub at the top of said member, a screw-threaded opening within said hub, an inclined fluid passage connecting said opening of said hub with the said valve chamber between said valve seat and the open end thereof, a hollow stem extending downwardly from said member centrally with respect to said recessed seat thereof, a communicating passage between said valve chamber and said hollow stem axially aligned with said valve seat, a valve member within said valve chamber opposite said valve seat, an operating stem for said valve member, and a supporting nut for said operating stem screwed into said chamber and screw-connected with said operating stem, said operating stem including means to seal the screw-threaded opening of said nut through which said stem extends.

1,815,604. ORGANIC MERCURY COMPOUND. AUGUST ALBERT, Munich, and JOHANNES PFLEGER, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, New York, N. Y., a Corporation of New York. Filed Oct. 27, 1923, Serial No. 671,076, and in Germany Oct. 31, 1922. 4 Claims. (Cl. 260—13.)

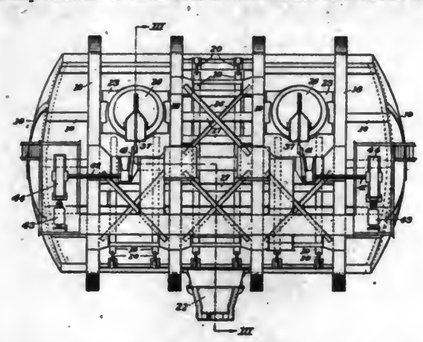
1. A new mercury compound having therapeutic properties comprising a compound of the general formula—

$$\begin{matrix} R \\ | \\ C{=}O \\ | \\ R_1 \end{matrix}$$

in which R represents a substituted aromatic residue and R_1 a mercurated aliphatic residue.

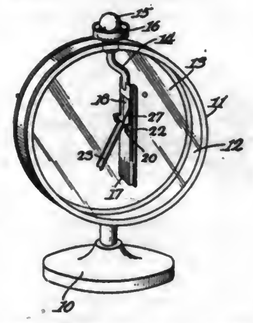
1,815,605. HOT METAL MIXER. LEE E. ALLEN, New Castle, Pa., assignor to Pennsylvania Engineering Works, New Castle, Pa., a Corporation of Pennsylvania. Filed June 16, 1928. Serial No. 285,836. 8 Claims. (Cl. 266—39.)

8. In a hot metal mixer for the mixing and storing of at least several hundred tons of molten metal, a foundation, rockers carried on the foundation, an elongated ladle carried on the rockers the lower portion of which is substantially cylindrical in transverse cross-section, said ladle having a covered top, said ladle having a charging opening in the top thereof at each side of the transverse center of the



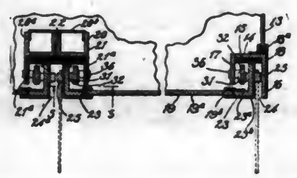
receptacle, and a single pouring spout at one side of the receptacle approximately midway between the two charging openings whereby metal may be charged into opposite ends of the mixer and flow from each end toward the center.

1,815,606. ELECTROSCOPE. ROGER BARTON, Chicago, Ill., assignor to Central Scientific Company, a Corporation of Illinois. Filed Sept. 27, 1929. Serial No. 395,509. 8 Claims. (Cl. 171—95.)



5. An indicating element for electroscopes comprising a sheet of gold leaf and a sheet of lens paper cemented together.

1,815,607. AIR-TIGHT DOOR FOR CABINETS. HARRY F. BEERS, Pelham, N. Y. Filed Dec. 18, 1929. Serial No. 414,903. 18 Claims. (Cl. 20—19.)



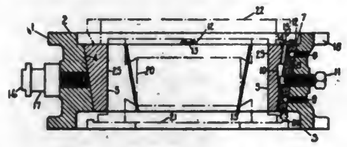
11. A door structure for cabinets of the class described, said door including inwardly directed top, bottom and side wall members, the cabinet having channels of a depth substantially equal to the width of the side wall members of the door and into which said side wall members are adapted to pass, and means arranged in said channels and inwardly of said side wall members of said door for coupling the door with the cambinet structure and for firmly retaining the same in closed position.

1,815,608. PROCESS OF MAKING A COMPOSITION SHEET OR SLAB. ALBERT H. BIRDSALL, Brooklyn, N. Y., assignor of one-third to George W. Mills, Jr., Brooklyn, N. Y. Filed July 8, 1927. Serial No. 204,211. 1 Claim. (Cl. 25—155.)



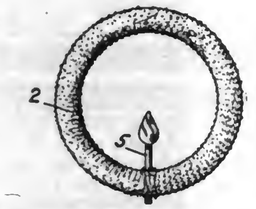
The improved process of producing artificial slabs which consists in first mixing asbestos and a binder, then moulding therefrom an indurated slab, providing the face of the slab with a protective coating, scoring the face of the slab so provided with the protective coating, and providing the scored face with a final coat of protective material.

1,815,609. CHUCK. AXEL W. BJORKMAN, Brooklyn, N. Y., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed July 14, 1928. Serial No. 292,776. 6 Claims. (Cl. 270—55.)



1. A chuck comprising a frame with a circular opening therein for the work, the diameter of said opening decreasing with the depth of the opening, segments of a tapered circular ring adapted to be wedged between the frame and the work, each of said ring segments having a portion cut in its outer surface in such manner that a surface of said cut-out portion is at an angle to the frame-engaging surface of said segment which is greater than the angle of taper of said segment, and members adjustably mounted on said frame to engage said surfaces of said cut-out portions for locking said ring segments in their wedged positions for a range of diameters of work.

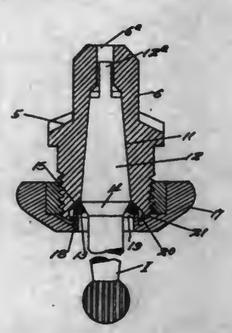
1,815,610. DECORATIVE WREATH. LOUIS ORRILL BOUCHARD, Philadelphia, Pa., assignor, by direct and mesne assignments, of two-thirds to C. Gwynne Douglas, Inc., a Corporation of Pennsylvania, and one-third to Paper Novelty Corporation, a Corporation of Pennsylvania. Filed Dec. 4, 1929. Serial No. 411,433. 5 Claims. (Cl. 41—12.)



1. A wreath including a continuous length of tube having a continuous decorative wrapping and adapted to assume straight line position for receiving the wrapping and to assume circular form with its two ends in confronting relation, and means for connecting the ends.

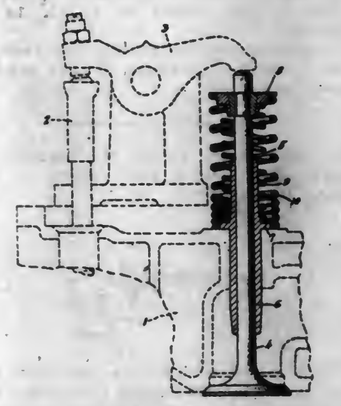
1,815,611. NONJAMMING TAPER SHANK TOOL. RAY W. BROWN, Altadena, Calif., assignor, by mesne assignments, to Henry Dalzell Wilson, Pittsburgh, Pa. Filed Jan. 30, 1929. Serial No. 336,316. 1 Claim. (Cl. 279—91.)

A socket member having a conical internal seat bore and having an inturned lip and an opposed abutment shoulder forming an annular seat groove, an expansive split ring resting in the said groove when free and inwardly overhanging the lip, a shank part insertible through the ring to seat in said bore and having a conical shoulder opposed to the abutment shoulder and of reverse angle



relative thereto, and means adjustable on said socket member to engage the ring and contract it from the groove and close it onto the shank shoulder and upward on the socket shoulder whereby to press the shank to its seat in the socket and hold it in place.

1,815,612. VALVE SPRING. BENTON CATALINE and EUGENE C. RICHARD, Flint, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Dec. 10, 1926, Serial No. 153,822. Divided and this application filed Oct. 19, 1927. Serial No. 227,154. 2 Claims. (Cl. 251—144.)

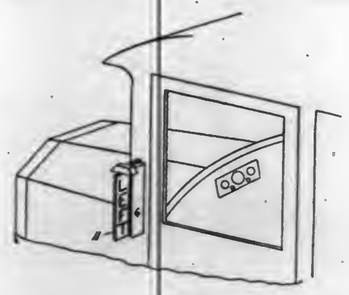


1. In combination with a reciprocable valve, a coil spring for moving said valve in one direction, said spring having some of its coils of progressively increasing pitch, said progressively increasing pitch coils being closed when the spring is in operative position.

1,815,613. COMPOSITION OF MATTER. GREGORY J. COMSTOCK, Pittsburgh, Pa., assignor to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1928. Serial No. 268,390. 2 Claims. (Cl. 75—1.)

1. A sintered aggregate comprising finely divided particles of tungsten carbide embedded in a matrix of alloy steel, the tungsten carbide constituting the major part of the aggregate, the alloy steel containing about 15% manganese and about 1% carbon, and having the property of hardening upon slow cooling.

1,815,614. RIGHT AND LEFT TURN VEHICLE SIGNAL. MARTIN J. DONER, Los Angeles, Calif. Filed June 3, 1929. Serial No. 368,069. 4 Claims. (Cl. 116—39.)

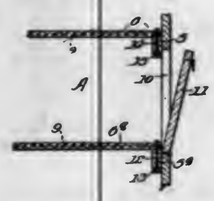


1. A vehicle turning signal device including a pair of vacuum cylinders having atmospheric pressure pistons, a valved vacuum tube to the cylinders, a pair of signal panels, a lazy-tongs bracket for each panel and connected to a respective piston to project a panel at will, and means for automatically retracting a projected panel and including a spring device reacting between arms of the lazy-tong bracket, said device consisting of a spring bar fixed to one member of the lazy-tong and bearing against a coacting member thereof.

1,815,615. SULPHURED COMPOSITION ADAPTED AS A BINDER FOR HOOD CAPS AND FOR OTHER PURPOSES. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Nov. 5, 1925. Serial No. 67,173. 18 Claims. (Cl. 106—38.)

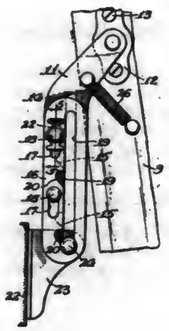
1. A composition comprising about four parts of carnauba wax to one part, by weight, of rosin fused with a small amount of sulphur.

1,815,616. BEDSTEAD. HIRAM H. FELDMAN, Pittsburgh, Pa. Filed July 5, 1929. Serial No. 376,010. 2 Claims. (Cl. 5—308.)



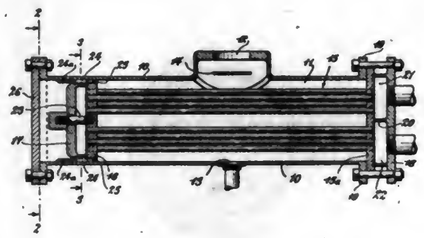
1. In a bedstead, the combination with a frame comprising head and foot boards, and main side connecting boards having openings therethrough, of hinged drop doors covering said openings and flush with the inner and outer faces thereof, inner longitudinal supporting members on the inner face of the main side boards, and transverse lower and upper partitions resting on the supporting members, said partitions consisting of main transverse bars secured by their ends to the inner members and having connecting panels forming a continuous surface above and below said inner members and the lower one of said partitions extending downwardly and upwardly respectively beyond the openings of the side boards and providing bearing abutments for the hinged doors when closed.

1,815,617. CHAIR. MARTIN FOX, Chicago, Ill., assignor to The Seng Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 6, 1928. Serial No. 297,861. 4 Claims. (Cl. 155—116.)



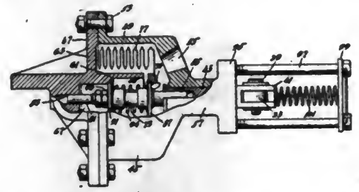
4. An adjustable supporting device for a chair seat or the like, comprising a slotted plate having notches at one side of the slot, and means for pivoting one end of the plate to a support, means forming a supporting projection relatively slidable in the slot of the plate and engageable with the notches of the plate, resilient means to draw the free end of the plate in a direction to hold the notches of the plate in engagement with the projection, and a bridging member having a limited, yielding slidable connection with the plate and having extremities engageable by the projection when it is near the ends of the slot of the plate for moving the member to cover and uncover the notches to control the engagement of the projection with the notches.

1,815,618. HEAT EXCHANGER. HAROLD M. GRAHAM, Buffalo, N. Y., assignor to Ross Heater & Mfg. Co. Inc., Buffalo, N. Y., a Corporation of New York. Filed Jan. 29, 1931. Serial No. 512,018. 8 Claims. (Cl. 257—239.)



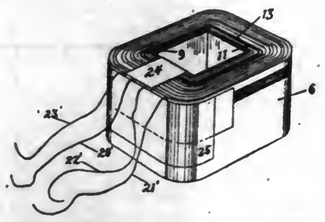
1. In a heat exchanger, a shell having inlet and outlet openings for one fluid medium, a bundle of tubes arranged in said shell and adapted to provide a path for the flow of the other fluid medium, a floating head in said shell including a cover and a support to which said tubes are connected, means for securing said cover against said support, said means being accessible from the end of the shell for tightening or loosening and means co-operating with said floating head for preventing angular movement of said head relative to the shell during tightening or loosening of said securing means, said means permitting movement of said floating head longitudinally of the shell during expansion and contraction of said tubes.

1,815,619. CONTROL MECHANISM FOR BRAKE BOOSTER CYLINDERS. GEORGE E. A. HALLETT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 6, 1927. Serial No. 211,118. 5 Claims. (Cl. 303—54.)



4. In a vacuum brake or the like, a valve, said valve comprising a chamber formed by two parts, a collapsible bellows within said chamber, one end of said bellows being clamped between said parts of said chamber, said valve including two valve members, one to at times cut off atmospheric air from entering said bellows and a valve seat for the other valve member at times engaged thereby to separate the bellows into two compartments, one compartment adapted to be connected to a source of suction, the other compartment adapted to be connected to a power cylinder, a valve seat carried by the other end of said bellows cooperating with one of said valve members, together with a reciprocable stem movable into said chamber and bellows, said valve members positioned on said stem, one of said valve members being fixed, an abutment on said stem to engage the other valve member, and a single spring between said valve members.

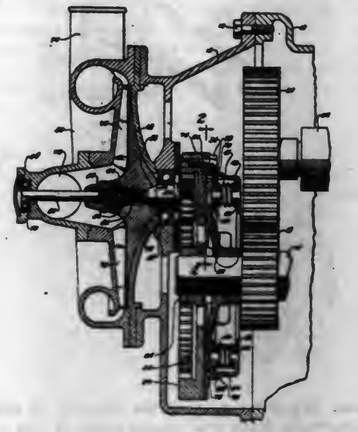
1,815,620. ELECTRICAL INDUCTION COIL AND METHOD OF MANUFACTURE THEREOF. GEORGE B. HORN, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Oct. 31, 1928. Serial No. 316,328. 19 Claims. (Cl. 175—356.)



1. A pack from which to make an induction coil unit, containing a winding formed of a wire arranged in a multiplicity of permanent layers disposed in successive order, one surrounding another, a number of removable initial turns of the wire at the commencement of the first of said layers, a removable medial portion consisting of a number of additional turns of the wire, said initial and additional turns being accessibly disposed respectively in the pack out beyond the adjacent ends of the corresponding permanent layers to permit withdrawal thereof to provide corresponding terminals for the coils of said unit, and means included in said pack for supporting said initial turns in accessible position beyond the adjacent ends of the permanent layers.

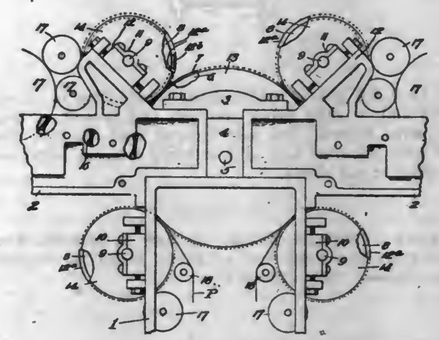
1,815,621. SUPERCHARGER DRIVE. ROLAND V. HUTCHINSON, Lansing, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 19, 1927. Serial No. 214,095. 8 Claims. (Cl. 74—7.)

1. In a power take-off mechanism as applied to prime movers having a crankshaft, a driving member mounted on said shaft, a driven member operatively connected to said driving member, and means for transmitting motion from the crankshaft to the driving member comprising an element secured to the shaft, a plate secured to



the driving member and enclosing said element, and a plurality of springs between said plate and element to cause operative engagement between said driving member and said element.

1,815,622. MULTICOLOR PRINTING PRESS. FRANK E. JAMISON, Kansas City, Kans. Filed Oct. 27, 1930. Serial No. 491,452. 2 Claims. (Cl. 101—178.)

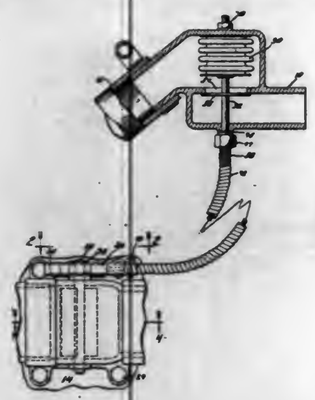


1. In a multi-color printing press, comprising a stand member, an impression cylinder supported from and at the upper end of the stand member, oppositely-projecting top members upon the stand member and spaced apart at their inner ends, the top members having upwardly-diverging arms equi-distant from and at opposite sides of the axis of the impression cylinder, bearings upon the said arms, form cylinders journaled in said bearings and geared to the impression cylinder, each form cylinder bearing such relation to the impression cylinder and to its respective supporting arm as to always make accessible more than fifty-per cent of its circumference.

1,815,623. CRANKCASE VENTILATION. HERBERT G. KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Aug. 18, 1927. Serial No. 212,698. 17 Claims. (Cl. 123—119.)

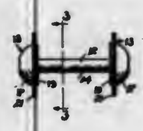
1. The combination with a liquid cooled internal combustion engine including an air intake and a crankcase, of

a connection establishing communication between the crankcase above the level of the oil therein, and the air



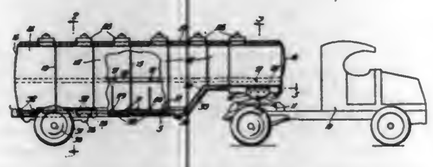
intake, and means for varying the capacity of said connection inversely with the temperature of the cooling system.

1,815,624. CUFF LINK. JOSEPH DEMPSTER KEILLOR, Aylmer, Ontario, Canada. Filed Nov. 24, 1930. Serial No. 497,786. 3 Claims. (Cl. 24—102.)



1. In a cuff link, a rubber shank terminating in an enlarged end, a shell fitted over the end thereof, a ring shouldered thereon, and lugs integral with the ring and bent over the shell and said enlarged end but terminating short of the shank.

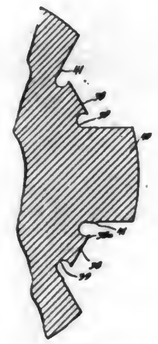
1,815,625. VEHICLE TANK. ANDREW A. KRAMER, Kansas City, Mo. Filed Apr. 13, 1927. Serial No. 183,536. 22 Claims. (Cl. 280—5.)



1. The combination with a vehicle tank having spaced supports of longitudinally extending tubular bracing means within said tank extending from end to end thereof over said supports and having open ends whereby the same serve as hose receptacles.

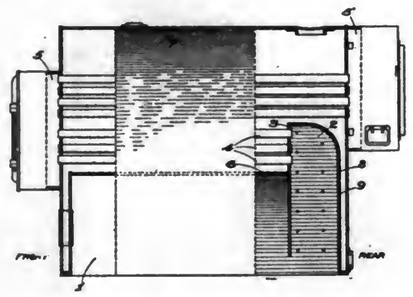
21. In a tank vehicle, an axle, wheels carried thereby, springs supported on said axle, a tank having an offset therein to provide a main body portion and a reduced end portion upwardly offset on the under side thereof from said main body portion and an integral combined tank bracing means and vehicle frame mounted directly on said springs and forming a unit with said tank, said bracing means comprising longitudinally extending members upwardly offset at the offset in said tank.

1,815,626. METHOD OF FINISHING SPLINE SHAFTS. CHARLES L. LEE, Dayton, Ohio, and CLAUDE H. STERLING, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 28, 1927. Serial No. 236,218. 2 Claims. (Cl. 29—148.)



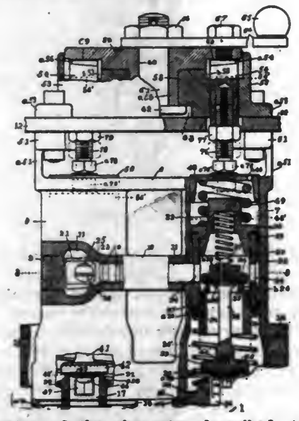
2. The process of making spline shafts which consists in machining a blank of steel so as to form an over-size shaft having grooves and lands, each groove having a bearing surface at its bottom separated from the lands by a longitudinal groove on each side, heat treating and hardening the blank, then progressively cold swaging the hardened blank from end to end between the lands, thereby bringing the shaft to final size, and straightening it.

1,815,627. STEAM BOILER AND METHOD OF FORMING THE SAME. JAMES J. MAYS, Oil City, Pa., assignor to Oil City Boiler Works, Oil City, Pa., a Corporation of Pennsylvania. Filed Apr. 14, 1930. Serial No. 443,952. 4 Claims. (Cl. 29—157.4.)



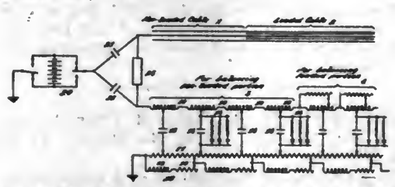
3. The herein described method of forming the firebox and auxiliary combustion chamber of a boiler of the type specified, which method is carried out by the employment of the following steps, namely; cutting two pieces of boiler plate to pattern so as to delineate upon each plate two sections, one of said sections being adopted to form the side wall and one half the crown of the fire-box and the other section to form the side wall of an auxiliary combustion chamber located at one end of and extending above said crown, a portion of which delineation consists of a kerf dividing a portion of one of said sections from the other; bending the crown section of one of said plates to form the lefthand portion of said crown; bending the corresponding portion of the other of said plates to form the righthand portion of said crown; uniting the longitudinal free edges of the crown sections so bent to form the main walls of a firebox having at each side of one end thereof an upwardly extending side wall of said auxiliary chamber; forming a tube sheet for the front wall of said combustion chamber; attaching said tube sheet in its position by placing its lower edge in said kerf and uniting the contacting edges of the adjacent sections to their respective faces of said tube sheet; forming a rear wall for said combustion chamber; attaching the lateral and top edges of said rear wall to the rear edges of said side walls and the top edge of said tube sheet.

1,815,628. CONTROL FOR A PLURALITY OF VARIABLE PRESSURE VALVES. SYDNEY S. MCINTYRE, Sedro-Woolley, Wash. Filed Jan. 22, 1929. Serial No. 334,880. 1 Claim. (Cl. 277—20.)



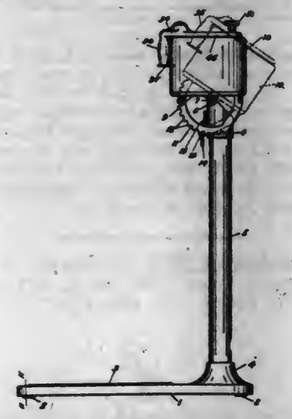
In apparatus of the character described, two similar variable-pressure valves each adapted to convey compressed air separately each having a piston mounted therein for reciprocation between opposing springs of unequal strength also having inlet and exhaust valves operable by the reciprocation of the pistons, two reciprocative plungers one end of each of which indirectly bears on one of the pistons with one of the stronger springs intervening, means to mount the plungers for reciprocation, an annular cam, and means to mount the cam for oscillation on an axis disposed centrally between the two plungers parallel therewith to bear on the other ends of the plungers, the annular cam having two diametrically opposite plane cam sectors of different lengths in the same plane to simultaneously bear on the plungers and fully open the pressure valves, two opposite plane cam sectors of equal length adjacent the shorter of the fully-open sectors to simultaneously bear on the plungers and fully close the pressure valves and intervening spiral cam sectors connecting the fully-open and fully-closed sectors to bear on the plungers at the same and at different levels to partly close the variable pressure valves to different extents depending upon the position of the annular cam in oscillation.

1,815,629. ARTIFICIAL LINE NETWORK. JOSEPH W. MILNOR, Maplewood, and WILLIAM D. CANNON, Metuchen, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Sept. 4, 1929. Serial No. 390,348. 17 Claims. (Cl. 178—63.)



1. An artificial line adapted to balance a submarine cable over a range of frequencies forming a signaling range, comprising a plurality of sections, each section including series impedance having resistance and inductive reactance, and shunt capacity, and a path containing inductance and resistance conductively connected in shunt to a portion of said series impedance, the values of the impedance elements being so related that both the resistance and the reactance of said artificial line vary with frequency substantially in accordance with the variation with frequency of the corresponding constants of the submarine cable over the whole of the range of signal frequencies.

1,815,630. VIBRATORY EXERCISING AND MASSAGING MACHINE. JOHN F. OHRBERG, Moline, Ill. Filed Apr. 6, 1929. Serial No. 353,226. 12 Claims. (Cl. 128—63.)



7. A device of the class described, comprising a support, a head rockingly mounted thereon, a vibratory member mounted on said head, and handles at the ends thereof, provided with pad-like terminals, an actuating member connected with said vibratory member, means for holding said head in adjusted positions, a motor carried by said head, connections between said handles and said motor for starting the same upon pressure being applied to said handles, a massage belt adapted for engagement with one or both of said handles, and held from release by said terminals, a given pressure on the massage belt applied to said handles actuating said connections, a motor drive shaft, and means for imparting the movement of said shaft to said actuating member, including gearing and a crank and pitman connection between said gearing and said actuating member.

1,815,631. CARBURETOR CHOKE CONTROL. OLE N. OLSON and LEONARD FRED JOHNK, Moorhead, Minn.; said Johnk assignor to said Olson. Filed Mar. 31, 1930. Serial No. 440,350. 3 Claims. (Cl. 74—39.)



1. A carburetor choke control comprising a spring seat having a pair of arms spaced to embrace a support in which a carburetor adjusting rod is mounted for endwise and turning movements, said arms being applicable to said rod for suspending the spring seat therefrom, and a

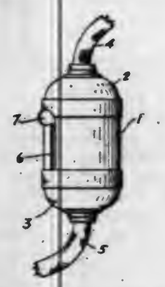
coiled spring mounted in said seat engaging the rod support as a base of resistance and under strain to move the spring seat away from the support and draw the rod laterally against the support.

1,815,632. METALLIC TAG STRIP. WILLIAM J. PANNIER, Jr., Pittsburgh, Pa., assignor to Pannier Brothers Stamp Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 7, 1930. Serial No. 466,104. 3 Claims. (Cl. 40—2.)



1. The method of making metallic tags of a comparatively soft strip of metal consisting in weakening the strip transversely by oppositely located notches, and entirely removing a portion of the strip in transverse register therewith to form inner reversely disposed V-shaped notches whereby to weaken the strip sufficiently to permit of subsequent ready subdivision into separate tags on such defined lines of weakness while preserving sufficient of the metal to permit winding of the strip.

1,815,633. ELECTRIC SWITCH. JOHANN G. PETERSON, West Hartford, Conn. Filed Jan. 4, 1927. Serial No. 158,946. 73 Claims. (Cl. 200—11.)



1. An electric switch device adapted to be grasped in one hand during operation and having therein contact adjusting mechanism including an operatively connected actuating member having a single operating portion projecting from the body of the switch and operative in a plurality of operative positions by a finger of that hand, and mechanism operative to change a plurality of circuit connections with a series of snap actions while moving the finger progressively in the same direction.

1,815,634. ELECTRIC SWITCH. JOHANN G. PETERSON, West Hartford, Conn. Filed May 21, 1927. Serial No. 193,327. 53 Claims. (Cl. 200—11.)



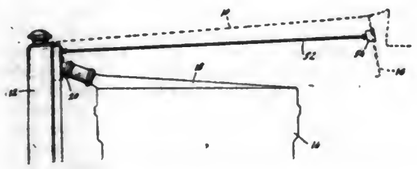
1. An electric switch including a base carrying stationary contacts and a stationary snap actuating element, and a manually engaged pivoted member movable in one direction to make and break a plurality of circuits and carrying both a cooperating contact and a cooperating snap actuating element riding over said stationary element.

1,815,635. ELECTRIC SWITCH. JOHANN G. PETERSON, West Hartford, Conn. Filed Dec. 16, 1927. Serial No. 240,438. 8 Claims. (Cl. 200—167.)



1. In combination, a switch casing normally holdable in the hand and having an outwardly curved side and a slot extending longitudinally in said side, a switch mechanism enclosed in and insulated by said casing having a projecting swinging actuating member movable in said slot, and an actuating portion for said member disposed substantially at right angles to said projecting member and substantially flush with the surface of said curved side outside said slot and normally operative by a finger of the hand holding said casing.

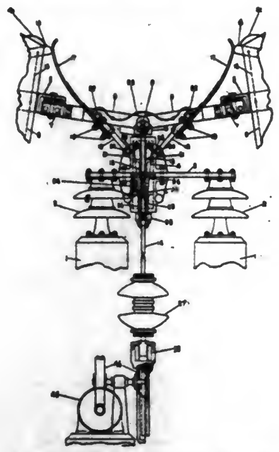
1,815,636. HEAT INDICATOR. FRANK D. SMITH, Jr., Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Aug. 17, 1927. Serial No. 213,627. 10 Claims. (Cl. 123—178.)



1. In combination with an automotive vehicle having an internal combustion engine equipped with a circulating water cooling system including a radiator and a water return pipe, an expandible and contractible heat responsive element positioned within the return pipe means operated by the element when heat is applied thereto to control the flow of water through the circulating system and means connected with the interior of and responsive to the pressure within the element for indicating temperature changes.

1,815,637. SWITCH. SYLVESTER M. VIELE, Altoona, Pa. Filed Mar. 11, 1926. Serial No. 93,829. 37 Claims. (Cl. 200—48.)

1. In a switch, the combination of a main contact; an auxiliary contact separated from the main contact; a main switch arm co-acting with the main contact; an auxiliary switch arm co-acting with the auxiliary contact, said arms being pivotally connected together intermediate

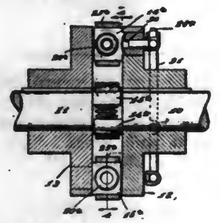


their ends; mountings for the ends of the arms remote from the contacts; and means separating the ends of the arms to open the switch.

1,815,638. PROCESS OF PLATING METAL. WILLIAM E. WATKINS, New York, N. Y., assignor to Copper Plate, Sheet & Tube Company, New York, N. Y., a Corporation of New Jersey. Filed May 24, 1929. Serial No. 365,785. 4 Claims. (Cl. 91—70.1.)

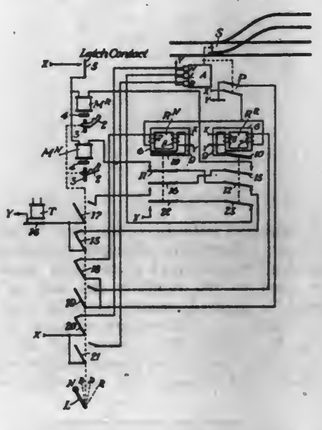
1. The method of forming a plating of an alloy of two or more metals on a metal base which comprises forming a liquid plating mixture containing the metals of the alloy in finely divided form, applying the plating mixture to the metal base, subjecting the coated metal to a temperature that will cause one of the plating metals to diffuse into the other to form the desired alloy, said temperature being less than the melting temperature of either of said metals, maintaining the temperature of the sheet below the melting temperature of the coating metals until an alloy of the coating metals is formed and then subjecting the coated metal to a temperature sufficient to form a non-stripping plating of the alloy on the metal base.

1,815,639. FLEXIBLE COUPLING. JOHN T. WILKIN and CLARENCE B. COLDWELL, Connersville, Ind., assignors to The Connersville Blower Company, Connersville, Ind., a Corporation of Indiana. Filed Aug. 16, 1928. Serial No. 299,926. 10 Claims. (Cl. 64—96.)



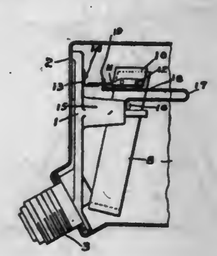
1. A flexible coupling for connecting rotary power-transmission shafts, comprising a driving member, a driven member, said driving and driven members being in general rotatable together and capable of only such movement relative to each other as is relatively small compared to a complete rotation, a plurality of variable-volume fluid-containing chambers through which power is transmitted from one of said members to the other and which normally have a similar action simultaneously, each of which chambers transmits but part of the entire power to be transmitted, and passages interconnecting said various fluid-containing chambers to equalize the fluid pressure within them.

1,815,640. RAILWAY TRAFFIC CONTROLLING APPARATUS. HENRY S. YOUNG, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 16, 1930. Serial No. 475,735. 6 Claims. (Cl. 246—135.)



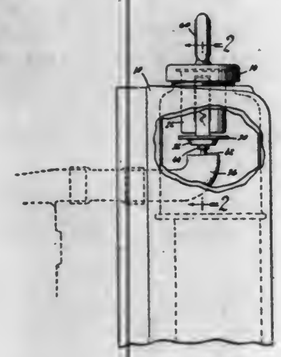
1. In combination, a railway switch, two relays, one of which responds only to currents of normal polarity and the other of which responds only to current of reverse polarity, means for supplying said relays with of reverse polarity, means for supplying said relays with current of normal or reverse polarity according as said switch is in its normal or its revese position, and indication means for said switch controlled by said relays.

1,815,641. THERMOSTATIC CONTROL. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Jan. 29, 1926. Serial No. 84,791. 4 Claims. (Cl. 264—4.)



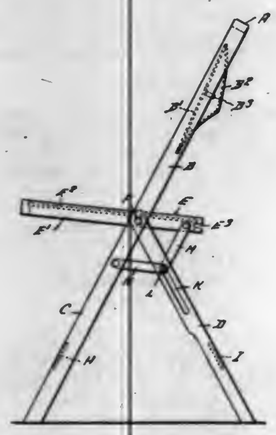
1. In a speed measuring instrument, a casing of magnetic material, a frame, a magnet having poles straddling a rotary indicating member, means to control the intensity of the magnetic field comprising a soft iron mass slidable along the outer face of a magnetic pole toward and away from said casing, actuating means including a movable member connecting the soft iron mass to the frame and a thermostat actuating the movable member at a point in its length such that the movable connecting member produces an amplified movement in the soft iron mass.

1,815,642. HEAT INDICATOR. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed July 1, 1927. Serial No. 202,867. 15 Claims. (Cl. 123—178.)



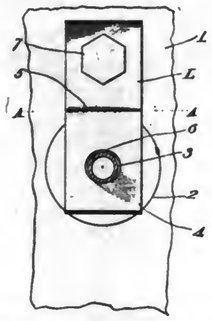
1. In combination with an automotive vehicle, a means for indicating temperature changes comprising a heat responsive element positioned at the inlet to the radiator, a member fixed to the radiator cap and to which the said element is secured, means movable with said element in response to temperature changes, a device on said means to control the opening of said inlet and operable by said element, and means outside said radiator operable from said element for indicating temperature changes.

1,815,643. FOLDING CHAIR. CLETUS N. ALLERDING, Mansfield, Ohio. Filed June 7, 1928. Serial No. 283,468. 13 Claims. (Cl. 155—143.)



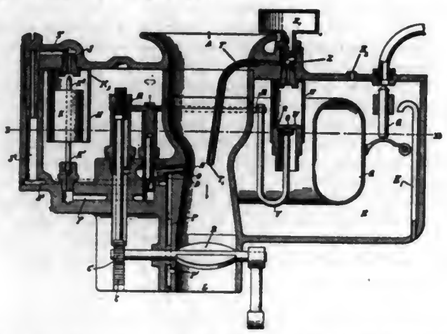
12. A folding chair comprising in combination, a main frame having spaced side members whose lower portions constitute legs; a seat pivoted on said main frame; rear legs pivoted to said main frame; tension members connecting said rear legs and main frame for limiting rearward movement of said rear legs with respect to said main frame, and tension members connecting said seat and rear legs for limiting downward movement of said seat, and members slidably mounted on the rear legs and to which said tension members are pivotally connected.

1,815,644. ROD OR PIPE CLAMP. HARLEY E. ANDERSON, Kansas City, Mo., assignor to Gustin-Bacon Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed July 25, 1928. Serial No. 295,181. 2 Claims. (Cl. 248—81.)



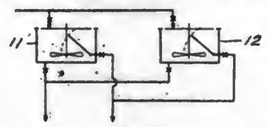
1. The combination with a support, of a clamp comprising a pair of plates each formed with an opening adjacent one end adapted to receive a member to be clamped and each plate having a fulcrum point intermediate its ends in contact with said support, and means engaging the support and plates tending to rock the plates on their fulcrum points to increase the force tending to hold the member to be clamped.

1,815,645. DOWNDRAFT CARBURETOR. RAYMOND M. ANDERSON, Detroit, Mich., assignor to George M. Holley, Detroit, Mich. Filed May 10, 1929. Serial No. 361,942. 3 Claims. (Cl. 261—34.)



1. In a carbureter having a throttle valve, accelerating means comprising a throttle operated pump, a cylinder made from material having a relatively high coefficient of expansion, a piston made from a metal having a relatively low coefficient expansion, said piston being adapted to be operated by said throttle.

1,815,646. PROCESS OF CAUSTICIZING. JOHN S. BATES, HARRIS S. CHALMERS, and PERCIVAL C. AUSTIN, Bathurst, New Brunswick, Canada; said Chalmers and Austin assignors to said Bates. Filed Aug. 9, 1926. Serial No. 128,286. 8 Claims. (Cl. 23—185.)

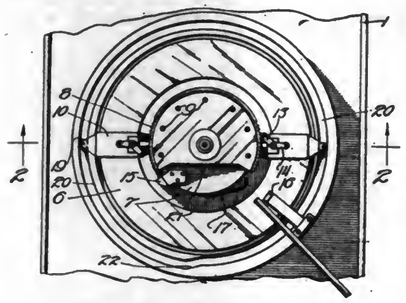


8. A process of causticising alkali metal carbonate green liquor of kraft or soda pulp processes, which comprises agitating an amount of alkali carbonate liquor with the sludge of a previous causticizing operation containing calcium hydroxide in amount less than the molecular equivalent of the alkali metal carbonate present until substantially all the calcium hydroxide is converted to calcium carbonate, partially settling the mixture and drawing off the partially causticized alkali liquor, adding a further amount of the alkali metal carbonate liquor to the partially treated liquor, and agitating the whole with calcium hydroxide in amount substantially the molecular equivalent of the alkali metal carbonate originally in both amounts of liquor, until substantially all the alkali metal carbonate is causticized.

4. A cyclic process of causticizing alkali metal carbonate green liquor of kraft or soda pulp processes, with substantially only the amount of calcium hydroxide theoretically necessary, which comprises in each cycle treating a portion of the alkali metal carbonate liquor with less than the theoretical equivalent of calcium hydroxide remaining from a previous cycle, adding another portion of alkali metal carbonate liquor to the first portion, and treating the two combined portions with fresh calcium hydroxide in amount substantially theoretically equivalent to the original alkali metal carbonate of the said two portions, the remaining unchanged calcium hydroxide of the second treatment serving for preliminary treatment in the next cycle.

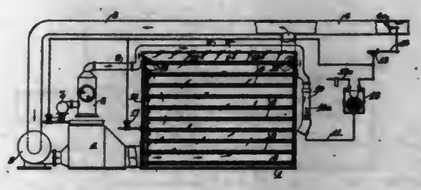
8. A process of causticizing alkali metal carbonate green liquor of kraft or soda pulp processes, which comprises agitating successive amounts of the alkali metal carbonate solution successively with materially less and materially more than the molecular equivalent of calcium hydroxide until in each agitation the reagent present in less than the molecular equivalent is completely converted, and using the unchanged excess of calcium hydroxide remaining from the final treatment of each amount for the first treatment of the succeeding amount.

1,815,647. BROACHING MACHINE. LOUIS H. BLOOD, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 13, 1926. Serial No. 148,183. 4 Claims. (Cl. 90—33.)



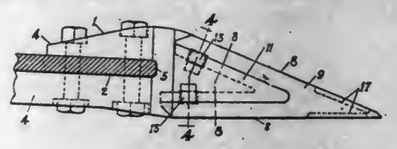
4. A broaching machine, including a bed, a column rising therefrom, a table rotatably supported by the column, a post rising above the column, a segmental cutter rigidly mounted on the post concentric therewith, slides permanently mounted on the table and movable toward and from the cutter, cam means on the bed cooperating with the slides for positively imparting a progressive in and out movement to said slides, automatic clamp mechanism carried by the slides, means on the post in advance of the active portion of the cutter for activating individual clamps to secure the work in position prior to the engagement of the cutter therewith, additional means carried by the bed and overlying the table for shifting the clamp into inoperative position subsequent to disengagement of the cutter with the work piece carried by the individual clamp, and resilient means carried by the post for compression by the work prior to release thereof for positively ejecting a finished work piece when the clamp is automatically released.

1,815,648. DRIER CONTROL. CLAYTON D. DE MEAS, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed July 24, 1930. Serial No. 470,288. 8 Claims. (Cl. 236—44.)



2. In apparatus of the character described, the combination with a treater chamber, of a conduit extending along the outer wall of the chamber, a plurality of tubular connections between the interior of the treater chamber and the conduit, means at one end of the conduit for maintaining a stream of conditioned air therethrough and means at the other end for determining variations in the moisture content of the stream, the relation of the tubular connections to the conduit being such as to withdraw sample streams from the treater atmosphere.

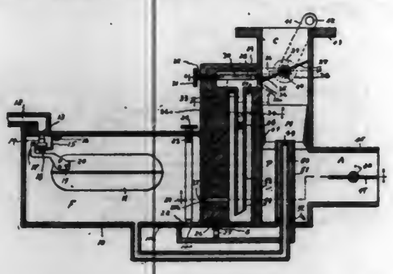
1,815,649. REPLACEABLE EXCAVATOR TOOTH. GLENN E. EDMUNDS, Columbus, Ohio, assignor to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed Feb. 24, 1930. Serial No. 430,709. 2 Claims. (Cl. 37—142.)



1. An excavating tooth formed to comprise a base member, a substantially wedge shaped nose extension projecting forwardly and integrally from said base member, said extension being of approximately the same width as said base member but of reduced thickness, there being inclined walls connecting the upper and lower surfaces of the extension with the corresponding surfaces of the base member, a reversible point member formed to include rearwardly diverging jaws providing between them a pocket in which said nose extension is receivable, said jaws being of substantially the same width as said extension and base member so that the point member will provide a symmetrical continuation of the base member, lugs projecting integrally from the inner surfaces of said jaws and receivable within grooves provided in the upper and lower surface of said extension, and upper and lower wedge keys positioned in transversely extending keyways formed in said extension and engageable with the walls of said recesses and said lugs to maintain the point and base members in secured frictional relationship, said wedge keys occupying reversed positions in said keyways with respect to each other whereby the thicker end of one of said keys will be disposed on one side of said teeth

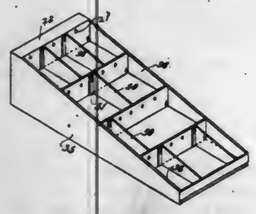
and the thinner end of the other of said keys extending on the opposite side of said tooth, the thicker ends of said wedge keys being turned at substantially right angles to the body portion thereof to lock said keys against longitudinal movement.

1,815,650. CARBURETOR. GEORGE A. EYNON, Parma, Ohio. Filed Jan. 11, 1930. Serial No. 420,026. 2 Claims. (Cl. 261—41.)



1. A carburetor including a mixing chamber, a throttle, an air inlet and a constant level fuel chamber, a main fuel supply nozzle communicating between said constant level fuel chamber and said mixing chamber, an auxiliary fuel supply nozzle communicating with said mixing chamber adjacent said main nozzle, a shaft carrying and controlling said throttle, a notch in said shaft, a passage in said carburetor body to atmosphere intersected by said shaft, a larger passage communicating with said constant level fuel chamber, said first passage and, through a restriction, with said auxiliary fuel supply pipe, said notch being so formed as to open the passage at closed throttle, gradually restrict said passage as said throttle is opened and to substantially close said passage through at least the last quarter of its throw.

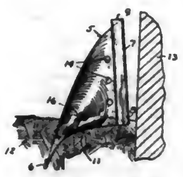
1,815,651. DISPLAY TRAY. JACOB L. FIELDSTEIN, Springfield, Mass. Filed May 11, 1929. Serial No. 362,354. 1 Claim. (Cl. 211—128.)



A display tray comprising opposite side pieces that are notched to form steps and risers, a filler piece connecting the upper ends of the side pieces, a continuous integral metal strip secured to the filler piece and folded upon itself to engage the steps and risers and form partitions and bottoms, its lower end being folded to provide openings, metal closure side pieces secured to the stepped side pieces and having their lower ends bent to enter the said openings and their upper edges bent inward in engagement with the folded partitions formed by the continuous metal strip, and wedge-shaped partitions located in the trays and secured to the partitions.

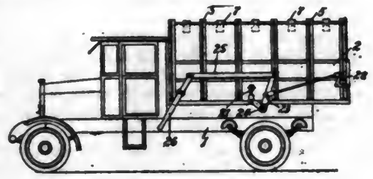
1,815,652. INSECT POISON FEEDER. GEORGE W. GEINO, Berkeley, Calif. Filed Dec. 5, 1927. Serial No. 237,690. 8 Claims. (Cl. 43—131.)

1. An insect poison feeder comprising an envelope for poison formed as of a tubular member by flattening out opposite end portions of the member to form seams, one of said seams being perpendicularly related to the longitudinal axis of the member and the other of said seams



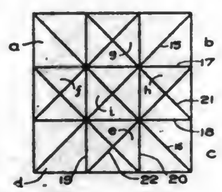
being appreciably inclined to said axis, said envelope having an insect entrance opening therein between the ends thereof.

1,815,653. DUMPING TRUCK. EDWARD N. JONES, Pittsburgh, Pa., assignor to The C. O. Bartlett & Snow Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 14, 1927. Serial No. 205,588. 13 Claims. (Cl. 298—24.)



1. In truck body construction an outer structure comprising a floor, a collapsible body structure in said outer structure, operable means for collapsing said collapsible body to dump material therefrom to the floor of the outer structure, a tail gate, a latch on the tail gate, and means connected with the body, collapsing means for withdrawing said latch.

1,815,654. FOLDER. ISRAEL LAZAR, Montreal, Quebec, Canada. Filed Oct. 28, 1929. Serial No. 403,044. 1 Claim. (Cl. 229—92.1.)

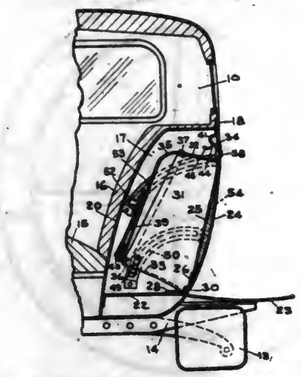


A folder comprising a single sheet of paper divided into sections in which a central square section for advertising matter is surrounded by a considerable number of triangularly shaped sections for advertising matter adapted to open out and disclose the advertising, said sections constituting diagonally folded corner square and diagonally folded outer mid-squares all folding inwardly over the central square without separation.

1,815,655. PLASTIC AND SOLUBLE DERIVATIVE OF CELLULOSE. HOWARD W. MATHESON, Montreal, Quebec, Canada, assignor to Canadian Electro Products Company, Limited, Montreal, Canada. Filed May 4, 1926. Serial No. 106,749. 1 Claim. (Cl. 134—79.)

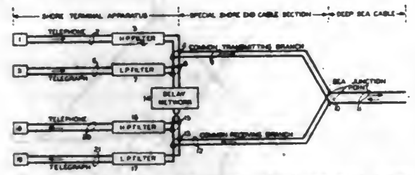
A composition of matter containing nitro-cellulose and ethyl mandelate.

1,815,656. VEHICLE BODY TRUNK. HARRIS D. MCMURRAY, Sioux City, Iowa. Filed July 19, 1929. Serial No. 379,432. 7 Claims. (Cl. 296—37.)



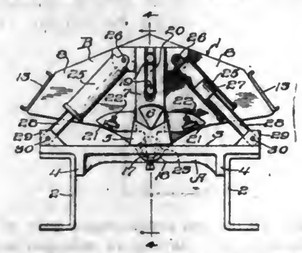
1. In combination a vehicle body, a vehicle body internal compartment, a door for the compartment hinged to the body, a trunk on the interior of the door and hinged therewith, and a cover carried by the trunk for closing the compartment above the trunk when the latter is swung out of said compartment.

1,815,657. SUBMARINE CABLE SYSTEM. RALPH E. A. PUTNAM, Mountain Lakes, N. J., assignor to International Communications Laboratories Incorporated. Filed Mar. 6, 1930. Serial No. 433,648. 21 Claims. (Cl. 179—4.)



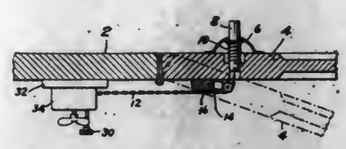
1. The method of transmitting telephone and telegraph currents simultaneously in both directions over a submarine cable having special shore end sections merging with the main cable at points remote from shore and containing transmitting and receiving conductors, comprising impressing a portion of each current on the transmitting conductors and passing the component part of the current through a delay network circuit which so affects the current that on passing into the local receiving circuit it cancels the current from the local transmitter which returns by way of the sea junction point and local receiving conductors to the local receiving circuit.

1,815,658. OSCILLATORY LIQUID DISTRIBUTOR. ROBERT D. SIMPSON, Columbus, Ohio. Filed Jan. 21, 1928. Serial No. 248,554. 8 Claims. (Cl. 221—95.)



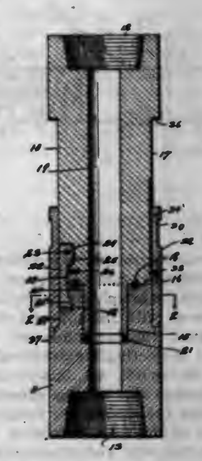
1. A liquid distributor of the character set forth comprising a base, an oscillatory trough pivotally mounted on said base, said trough being divided centrally and longitudinally into a plurality of liquid receiving compartments, and means permitting of the adjustment of said trough vertically with respect to its pivotal connection with said base.

1,815,659. COMBINED DOOR BELL AND ALARM. MAX SPIEGEL, Philadelphia, Pa. Filed Mar. 21, 1930. Serial No. 437,794. 3 Claims. (Cl. 116—91.)



1. A combined door bell and alarm mechanism including a bell, a hammer, hammer actuating mechanism, a manually operable member, connections between the manually operable member and the hammer actuating mechanism whereby operation of the member causes operation of the actuating mechanism, said connections being arranged whereby opening of a door in connection with which the mechanism is used serves to cause operation of the actuating mechanism, and restraining means for rendering the manually operable member ineffective to cause operation of the actuating mechanism while the connections remain operative upon opening of the door.

1,815,660. SLIP SOCKET TOOL JOINT. THOMAS M. WALKER, Kerlin, Ark. Filed Apr. 5, 1930. Serial No. 441,902. 5 Claims. (Cl. 285—173.)



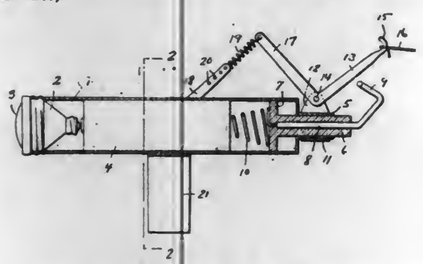
1. A slip joint of the character described, comprising an upper tubular section and a lower tubular section, the upper section and the lower section respectively having interfitting male and female portions, the two sections being formed with longitudinally alined grooves, locking arms pivoted in the grooves of one section and when depressed engaging in the grooves of the other section, the locking arms having shoulders at their upper and lower ends having overlapping engagement with confronting portions of the upper and lower sections, springs urging the free ends of the locking arms outward, and a sleeve slidingly mounted upon the upper section and adapted when lowered to force said locking arms inward into locking engagement with the lower section.

1,815,661. SIDE WALL SAMPLER. SAMUEL H. WILLISTON, Maracaibo, Venezuela, assignor, by mesne assignments, to Sperry-Sun Well Surveying Company, Philadelphia, Pa., a Corporation of Delaware. Filed July 17, 1925. Serial No. 44,155. 25 Claims. (Cl. 255—1.)



1. In a side wall sampler, a body, a sample collector mounted to slide in said body, and means for moving said collector laterally of the body to penetrate the soil to be sampled.

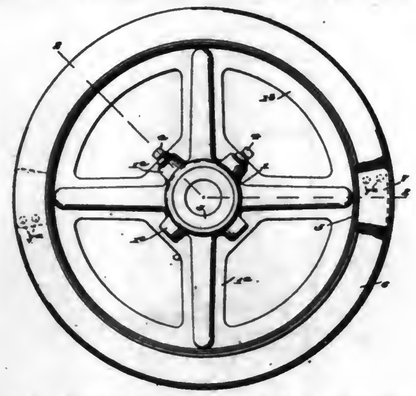
1,815,662. SIGNAL. LEONE G. BACON, Kent, Ohio. Filed May 20, 1930. Serial No. 454,066. 2 Claims. (Cl. 43—17.)



1. A signal for fishing tackle comprising a casing, means for detachably mounting the casing on a fishing pole, a battery in the casing, a lamp unit in one end portion of the casing in engagement with the adjacent end of the battery, a reduced, integral, tubular extension on the opposite end of the casing projecting longitudinally therefrom and communicating therewith, an insulating core disposed longitudinally through the tubular extension and projecting therefrom into the casing, an integral circular head on the inner end of the core, a contact member disposed longitudinally in the core and projecting from the outer end thereof, the projecting outer end portion of the contact member being disposed at an angle with respect to said contact member, a coil spring impinged against the head on the core and the adjacent opposed end of the battery for electrical connection therewith, said coil spring electrically connected with the contact member, and means for electrically connecting the contact member with the casing in a manner to energize the lamp unit.

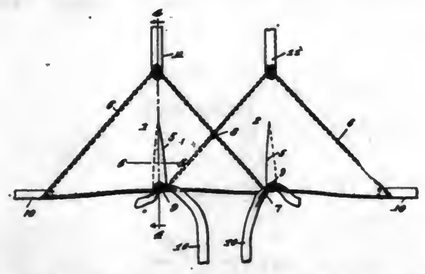
1,815,663. SOLID PRESSED STEEL PULLEY. NICHOLAS BARRY, Muscatine, Iowa. Filed May 24, 1929. Serial No. 365,729. 4 Claims. (Cl. 64—17.)

1. A sheet metal pulley having a hub portion provided with spoke members and with hollow radially disposed projections intermediate the spoke members, a bushing fitted within said hub portion and having peripheral radial



projections entered into the said hollow projections of the hub, one of said lugs having radial openings for passage of a bolt.

1,815,664. BRASSIÈRE. ROZE E. BENNETT, Miami, Fla., assignor of one-half to W. H. Sutcliffe and Louisa Parker, Miami, Fla. Filed May 31, 1930. Serial No. 458,228. 3 Claims. (Cl. 2—42.)



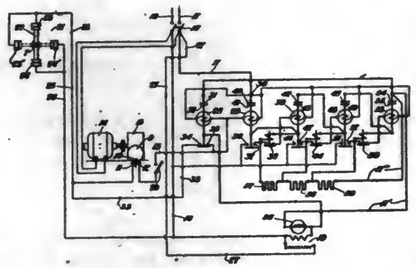
1. A garment of the class described comprising a pair of members having triangularly located attaching points and their inner lower portions overlapping, with the inner point of each member connected to about the center of the bottom part of the other member, ribbons connected with the lower outer points, ribbons connected to the upper points and adapted to pass over the shoulders of the wearer, the first mentioned ribbons passing around the waist of the wearer, a ring to which the rear ends of the shoulder ribbons are connected, the first mentioned ribbons passing through said ring and then brought forwardly around the body and fastened together at the front.

1,815,665. TOOL. GEORGE F. COLLEY, Memphis, Tenn. Filed Jan. 28, 1931. Serial No. 511,657. 5 Claims. (Cl. 294—92.)



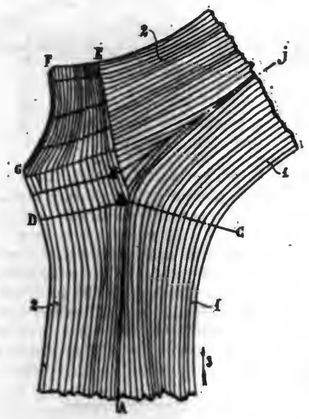
1. A battery lifting tool comprising a pair of pivotally connected handles, each having an enlarged boss transversely disposed at its free end, each of said bosses having a hole therethrough, bushings of dielectric material disposed in said holes, a pair of loop plates one for each of said handles, each of said plates having a post engaging hole therethrough and a forked extension to receive a handle boss, and said extension having pin receiving holes therethrough, a pin disposed through said extension holes and said bushing and washers of dielectric material between said boss and said extension part.

1,815,666. FURNACE CHARGING APPARATUS. HOWARD D. COOK, Elyria, and WILLIAM L. SCOTT, Lorain, Ohio. Filed Nov. 18, 1930. Serial No. 496,580. 5 Claims. (Cl. 214—23.)



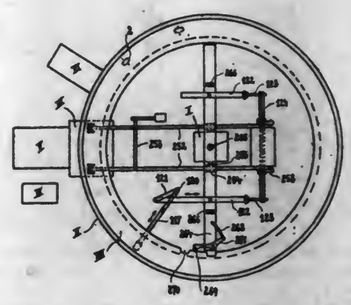
1. An automatic controller for billet charging mechanism comprising a motor for the pusher mechanism, a control circuit for said motor, a timer for periodically closing said circuit, and a limit switch operable by said motor for breaking said circuit.

1,815,667. VARICOSE STOCKING. FRANCISQUE DAMON, Lyon, France. Filed Nov. 11, 1929, Serial No. 406,420, and in France Nov. 19, 1928. 2 Claims. (Cl. 66—178.)



1. A method of manufacturing a stocking of the kind described on a rectilinear knitting machine having two banks of needles, comprising the following steps: first, to stop the work on the front face of the stocking when the heel portion is reached; second, to knit with both needle banks two double-thickness bands with reductions on their interior edges; third, to sew together the upper edges of said bands; fourth, to resume the work on the front face of the stocking and, at the same time, on the exterior edges of said bands.

1,815,668. ROTARY MACHINE FOR CONTINUOUSLY MAKING COMPRESSED SLABS OR FLOOR TILES WITH COLORED DESIGNS. HENRI DRUART, Lomme, France. Filed Aug. 24, 1929, Serial No. 388,210, and in Belgium July 12, 1929. 24 Claims. (Cl. 25—42.)



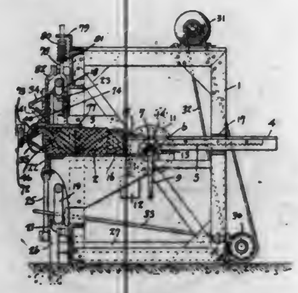
1. In a circular machine for making conglomerated slabs or tiles with or without colored designs, the combination with a circular machine frame, of a circular lower table adapted to run on said frame, a number of moulds supported by said lower table and uniformly distributed thereon, a circular upper table supported on said frame, operating devices causing said tables to be rotated in unison in one direction through an angle equal to that corresponding to the segment comprised between two successive moulds and locking the lower table after such rotation, at the same time rotating the upper table backwardly to its initial position, a pressure mechanism acting on a single mould upon the stopping of the lower table, colour delivering mechanisms placed according to the moulds and supported on the machine frame, said delivering devices upon the stopping of the lower table delivering one colour according to a given design to the mould moved below them, a mechanism for removing the finished articles from the moulds, and a mechanism for operating the pressure mechanism, the movement of which is started by the stopping of the lower table, substantially as set forth.

1,815,669. MEANS FOR CONDITIONING MATERIALS. GORDON D. HARRIS, Sound Beach, Conn., assignor to The Industrial Dryer Corporation, a Corporation of Connecticut. Filed June 1, 1926, Serial No. 112,988. Renewed Jan. 21, 1930. 4 Claims. (Cl. 99—2.)



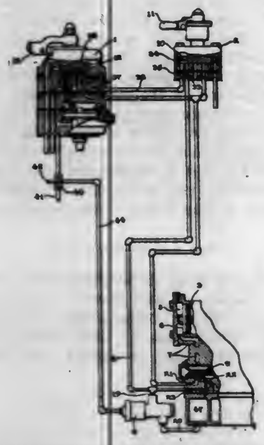
1. In a humidifying device, a chamber in which to place the material to be treated, a passageway beneath the floor of the chamber extending the full length thereof and communicating with its opposite ends, means in the passageway for heating air therein, and moisture supplying elements located in said passageway, to whose surfaces heated air is applied.

1,815,670. WOOD SLICING MACHINE. DE WITT C. HAWORTH, Bandon, Oreg., assignor of one-fourth to Charles Davis, one-fourth to O. L. Zentner, Bandon, Oreg., and one-fourth to J. T. Sullivan, Marshfield, Oreg. Filed Nov. 26, 1928. Serial No. 321,968. 10 Claims. (Cl. 144—162.)



1. A wood slicing machine comprising a support for blocks of wood, means for moving the blocks toward a cutting mechanism, a stop for limiting the movement of the blocks, a cutting knife associated with said stop for cutting pieces of veneer from the blocks, and means for uniformly heating the entire knife and the stop.

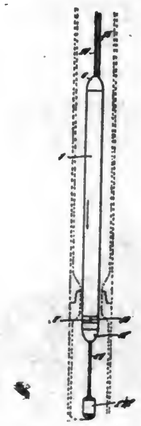
1,815,671. EQUIPMENT OF AIR BRAKES ON LOCOMOTIVES. WILLIAM M. JENKINS, Dalhart, Tex. Filed Oct. 14, 1929. Serial No. 399,717. 3 Claims. (Cl. 303—41.)



1. In a fluid pressure brake, the combination with a distributing valve having an application cylinder and chamber, of a valve casing in communication with the chamber, a piston slidably mounted in the valve casing, a check valve operated by said piston, a spring for resiliently holding said valve in closed position, said casing having a passage leading from one side of the check valve to the application chamber of the distributing valve and a passage leading from the other side of the check valve to the air brake release pipe.

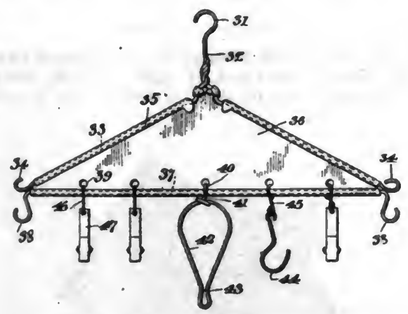
1,815,672. INSTRUMENT FOR RECORDING DEVIATIONS AND VERTICAL CORRECTIONS IN BOREHOLES. BOONE JONES, Cushing, Okla. Filed June 21, 1930. Serial No. 462,856. 19 Claims. (Cl. 234—1.)

1. An instrument for recording deviations in bore holes of the character described comprising a support, a plotting unit disposed on the support and including a slidably shiftable printing member, means for shifting said printing member and pressure responsive means mounted on



the support and operatively connected to the printing member in a manner to control the sliding movement thereof.

1,815,673. DRYING RACK. MILTON W. KELLEY, Austin, Tex. Filed May 23, 1930. Serial No. 455,110. 2 Claims. (Cl. 211—119.)

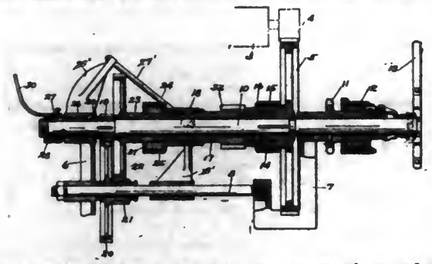


2. A drying rack including a hook, a substantially triangular wire structure carried thereby including downwardly diverging side members and a bottom member, means integral therewith and extending outwardly from the lower angles of the structure for supporting garment holders, a connection between said members and the bottom member of the structure for bracing said members against distortion relative to each other, and means supported by the bottom member for engaging and supporting articles of apparel.

1,815,674. TRACTOR. WILLIAM K. LIGGETT, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 26, 1924. Serial No. 709,253. 1 Claim. (Cl. 74—59.)

In a machine of the class described, a motor, an axially displaceable shaft driven by the motor, a drive element loosely mounted on said shaft, a driven member of a clutch secured to said drive element at each side thereof, means for preventing displacement of said drive element and said driven members longitudinally of said shaft, respective driving members of the clutches disposed on said shaft in proximity to the driven members, connections

for driving said driving members from said shaft in the same direction, each at a different speed, and means for



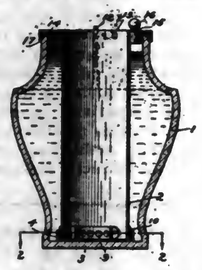
simultaneously displacing the driving members relative to the driven members of the clutches to selectively engage the clutches.

1,815,675. NECKTIE. JOSEPH M. I. MARIN and DAISY S. RUBENS, Jersey City, N. J. Filed June 8, 1929. Serial No. 369,313. 1 Claim. (Cl. 2—153.)



1. As a new article of manufacture, a necktie retainer formed from a single blank of resilient material having an intermediate portion folded upon itself to provide a substantial V—including a pair of diverging arm portions, the folded portions of said blank being cut longitudinally adjacent one edge of the blank whereby to provide a substantially truncated apex for said V, said arm portions of said retainer adapted to be disposed beneath the wings of a collar, and the truncated apex of said member adapted to accommodate the knotted portion of a necktie for retaining the latter in a supported position from said retainer.

1,815,676. MEANS FOR WATERING FLOWERPOTS. JULIUS F. MEDVECZKY, Redwood City, Calif. Filed Sept. 16, 1930. Serial No. 482,328. 8 Claims. (Cl. 47—38.)

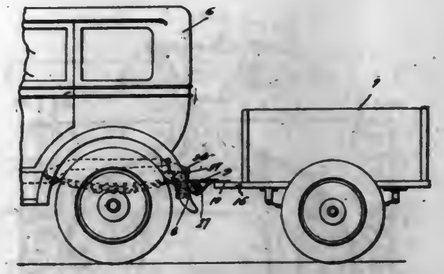


1. In combination, an inner earth-holding member having openings therein, an outer water-holding member having a portion covering the openings, said portion having a recess designed to register with the openings, the inner member being rotatable with respect to the outer member for bringing the recess in registration with the openings.

1,815,677. PROCESS FOR THE MANUFACTURE OF METHANOL. GIULIO NATTA, Milan, Italy. Filed Mar. 7, 1929, Serial No. 345,236, and in Italy Mar. 13, 1928. 6 Claims. (Cl. 260—156.)

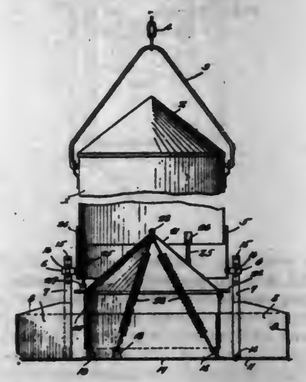
1. A process for the synthetic preparation of methyl alcohol and other oxygenated organic substances, comprising the step of subjecting a mixture of carbonic oxid and hydrogen to the catalytic action of mineral smithsonite.

1,815,678. TRAILER HITCH. JOSEPH W. ROGERS, Bodines, Pa. Filed June 20, 1929. Serial No. 372,491. 1 Claim. (Cl. 280—33.44.)



In combination with an automobile and a trailer, a horizontally arranged plate rigidly connected to the front end of the trailer and having a plurality of hinge barrels at its front edge, spaced apart, an intermediate plate having a depending flange at its front edge and a plurality of hinge barrels at its rear edge extending into the spaces between the first-mentioned barrels, a hinge pin passing through the barrels for connecting the intermediate plate with the first-mentioned plate, a brace member having one end connected to the lower edge of the flange and its other end bent over the hinge pin, means for fastening the brace member adjacent its bent end to the intermediate plate, a third plate attached to a part of the automobile and having a depending flange at its rear edge abutting the flange on the intermediate plate, a horizontal pivot passing thru the flanges at the center thereof and a brace connecting the lower edge of the flange on the third plate to a part of the front of said third plate.

1,815,679. FEEDING DEVICE. EMIL W. RUTH, Fruitville, Lancaster, Pa. Filed Dec. 11, 1930. Serial No. 501,641. 3 Claims. (Cl. 119—57.)

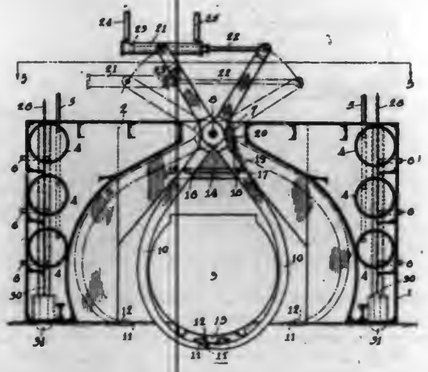


1. In a device of the class described, a receptacle, means for suspending the receptacle from an overhead support, a spreader between the pan and the receptacle, a pull spring connecting the spreader with the pan, means for connecting the spreader to the receptacle, a gate surrounding the lower end of the receptacle, means for connecting the gate to the pan.

1,815,680. PONTOON DIVER. LESLIE SALTER, Vallejo, Calif. Filed May 15, 1929. Serial No. 363,333. 3 Claims. (Cl. 114—53.)

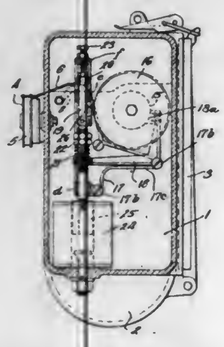
1. In means for raising a submerged boat, a floating unit having means for gripping the boat in a single op-

eration, means for lowering and raising the same, operating means for both of said means disposed outside of said



floating unit, and guide means for the unit supported by the same while it is floating and freeing itself automatically as the unit sinks.

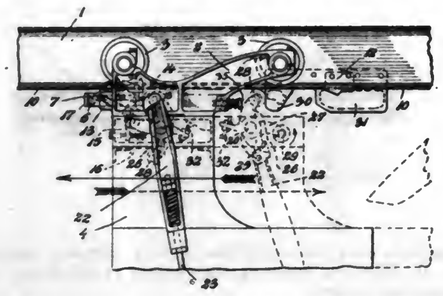
1,815,681. RECORDING MACHINE. EUGENE W. SCHELLENTRAGER, Cleveland Heights, Ohio, assignor to The Atlas Bolt & Screw Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 20, 1926. Serial No. 96,212. 4 Claims. (Cl. 242—55.)



1. In a recording machine, a casing provided in one of its walls with an inspection door opening, a door for said opening, means for supporting a rolled record sheet in said casing with its axis parallel to the plane of the door opening, and means for guiding the sheet downwardly across and generally parallel with the opening to present the sheet flatwise thereto, the lower part of the casing being of semi-cylindrical form and depending below said opening to automatically coil the sheet as it feeds beyond the opening.

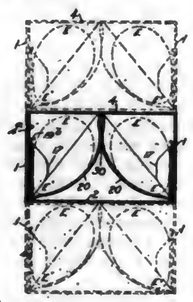
1,815,682. CONTROL MECHANISM FOR DISTRIBUTING BUCKETS. OSCAR SHECK and EMIL TRANAAS, Milwaukee, Wis., assignors to Koehring Company, Milwaukee, Wis., a Corporation. Filed Sept. 18, 1929. Serial No. 393,468. 10 Claims. (Cl. 214—59.)

1. In a distributing machine, the combination of a support, a carriage adapted to travel along said support, a cable operable in reverse directions to impart corresponding movement to the carriage, a bucket supported by said carriage, said bucket having an opening and closing member, means for retaining said opening and closing member in closed position, means for preventing movement of the



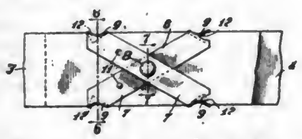
bucket in one direction, and means for releasing the same, said last named means constituting an actuating means for releasing the bucket opening and closing member.

1,815,683. PACKAGING MEANS. FRANCIS H. SHERMAN, Palmer, Mass. Filed Feb. 3, 1931. Serial No. 513,081. 17 Claims. (Cl. 217—26.)



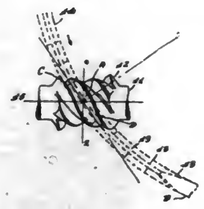
1. A receiver for eggs comprising a sheet of fibrous material including hinged parallel strips folded into substantial inverted-M-shape in cross section, its outer strips being approximately vertical and its inner strips being inclined from the lower edges of the outer strips to a line in the vertical plane midway between the outer strips and at least as high as the latter, said vertical strips having a longitudinal series of spaced transverse raised formations and said inclined strips having a corresponding series of concave formations respectively intermediate said raised formations, said formations together providing means for individually separating, cushioning and supporting eggs with their major axes distinctly inclined.

1,815,684. BAND AND CONNECTION. WALTER B. TEMPLETON, Chicago, Ill. Filed Apr. 21, 1930. Serial No. 445,857. 6 Claims. (Cl. 24—21.)



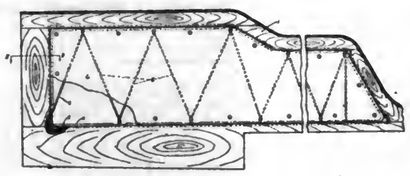
3. A device of the kind described each comprising a pair of flat strip members pivotally connected at a point between their ends and having a part of each end thereof bent downwardly to form portions adapted for engagement with the edges of a pair of overlapped band ends, which portions are intended to be indented into said edges of said band ends.

1,815,685. WORM GEARING. NIKOLA TESOJEVICH, Highland Park, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Aug. 6, 1928. Serial No. 297,765. 12 Claims. (Cl. 74—41.)



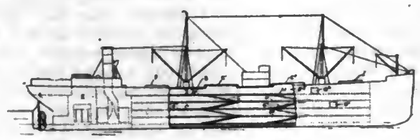
1. A worm rotatable about its axis comprising a body, a helical thread thereon so formed that its active surface is capable of contacting at any instant in a line contact with a longitudinally curved rack tooth having a predetermined cross section and a tooth axis conforming with a predetermined plane curve, when the said rack tooth is being rotated in a plane comprising the axis of the worm.

1,815,686. KICKBACK FOR BOWLING ALLEYS. GROVER O. WARDROP, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Co., Chicago, Ill., a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,881. 2 Claims. (Cl. 273—53.)



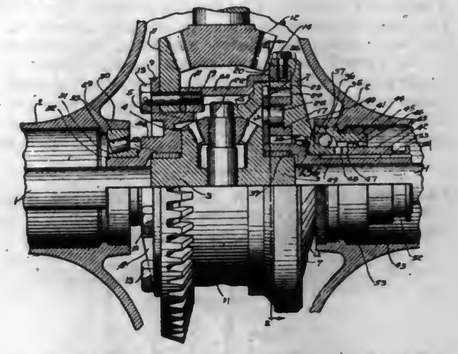
1. A kickback comprising a wooden frame having a groove in its inner face, a metal frame extending from top to bottom and end to end of said wooden frame, and comprising a flat strip received within said groove, and channel strips secured to said flat strip and projecting inwardly beyond said wooden frame, and a pair of strike members fitted within said wooden frame and extending over the areas of impact of pins against the kickback and engaging and being spaced apart by said channel strips and having their outer faces flush with the sides of said wooden frame.

1,815,687. CARGO SHIP. EDMUND H. WATTS, London, England. Filed Oct. 30, 1929, Serial No. 403,424, and in Great Britain Feb. 19, 1929. 14 Claims. (Cl. 114—72.)



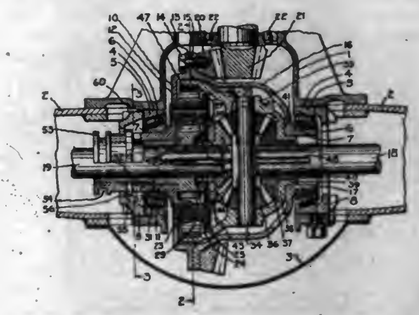
1. A ship adapted to be transformed from a general cargo vessel to one especially fitted for the transportation of vehicles, including permanent and portable decks, a hatchway affording communication with said decks, and a gangway in said hatchway adapted to connect said decks so that vehicles may be transferred from one deck to another on their own wheels.

1,815,688. TRANSMISSION. ARTHUR A. WIEDMAIER, Cleveland, Ohio, assignor to The Wiedmaier Company, Cleveland Heights, Ohio, a Corporation of Ohio. Filed May 13, 1929. Serial No. 362,775. 14 Claims. (Cl. 74—99.)



1. In an axle system, in combination with a pair of oppositely extending final drive axles, a differential gear mechanism disposed at the inner ends of the axles, adapted to differentially communicate rotative movement to the axles, said mechanism including a differential pinion supporting spider, a ring gear for communicating rotary movement from the engine to the spider, and a set of substantially planetary gearing elements comprising orbit, sun, and planet gears interposed between said ring gear and said spider, the orbit gear being independently rotatably supported, means to communicate rotary movement of the said orbit gear to the spider to effect rotation of the spider with the orbit gear, an annular element fixedly secured to and rotating with said ring gear, stud shafts fixedly secured to said annular element, each rotatably supporting a planet gear, said planet gears being continuously in mesh with both said orbit and said sun gears, an axle housing for said axles including an enlarged intermediate portion for encasing said differential gear mechanism said ring gear and said planetary gearing elements, and a manually operable clutch movable independently of the sun gear and adapted to be moved to alternate operative positions to alternately fixedly interlock said housing and sun gear, or, at the option of the operator, to fixedly interlock said sun-gear and said annular element.

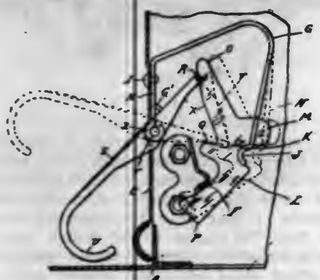
1,815,689. TRANSMISSION. ARTHUR A. WIEDMAIER, Cleveland Heights, Ohio, assignor to The Wiedmaier Company, Cleveland Heights, Ohio, a Corporation of Ohio. Filed Nov. 23, 1929. Serial No. 409,391. 12 Claims. (Cl. 74—99.)



1. In an axle driving mechanism for motor vehicles, a pair of axle sections to be driven, a differential gear mechanism interposed between and adapted to differentially drive the sections, means for transmitting power

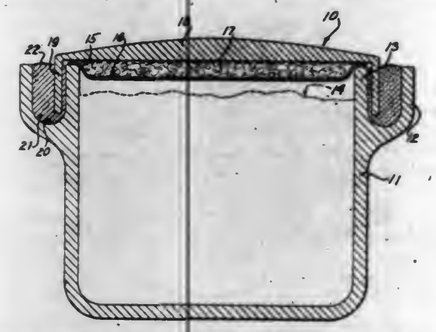
to the differential mechanism, said means comprising an orbit gear connected to the differential mechanism, a plurality of planet gears meshed therewith, a sun gear disposed within the planet gears and meshed therewith, a ring gear, a driving pinion meshed with the ring gear and a mounting for the planet gears associated with the ring gear, said mounting including an annular support for the ring gear, an annular base, the base being rigidly connected to the support in parallel spaced relation therefrom by a plurality of risers connecting them and a plurality of planet gear bearing elements connecting the base and annular support, the said base being disposed between the planet gears and the gears of the differential mechanism.

1,815,690. CATCH FOR MOTOR VEHICLE HOODS. WILLIAM R. WILEY, Detroit, Mich. Filed Dec. 6, 1929. Serial No. 412,013. 7 Claims. (Cl. 292—200.)



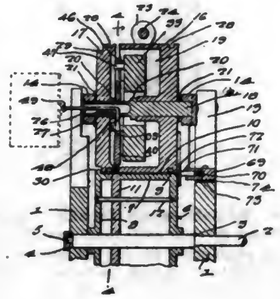
1. A hood catch adapted for operative attachment to a hood wall, comprising, in combination with an anchorage element fixedly supported from a conveniently adjacent part of a vehicle frame, a generally U-shaped resilient member, one branch of which is adapted to be secured to the hood wall adjacent an apertured portion thereof, a lever member operatively supported from the opposite section of said resilient member and capable of limited movement in a plane generally coincident with the plane of said resilient member as a whole, and an operating lever extending through the aperture in the hood wall and operatively engaging with its inner end a selected portion of said first named lever member, which latter is adapted to be moved into and out of holding engagement with said anchorage element by the manually actuated swing of said operating lever.

1,815,691. METHOD OF HEAT TREATING METAL PARTS. ROGER VERDEN WILSON, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 31, 1928. Serial No. 316,149. 8 Claims. (Cl. 148—1.)



1. A method of annealing parts which consists of associating with the parts in a container copper tinsel and a combustible metal of the group including magnesium and aluminum, sealing the container, and applying heat.

1,815,692. SOUND RECORDING MECHANISM. FERDINAND VON MADALER, Hampton Bays, N. Y., assignor, by mesne assignments, to Visionola Mfg. Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 1, 1926. Serial No. 91,483. 13 Claims. (Cl. 274—11.)



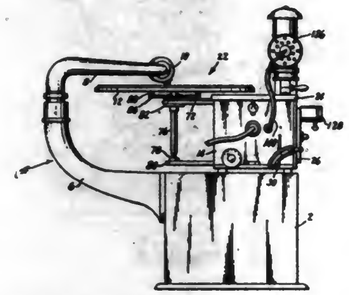
1. A mechanism for recording sound on a strip, comprising, in combination, a support for the strip having a supporting surface adapted to travel with the strip throughout a predetermined zone, and adapted for engagement by a recording mechanism operable to engage said strip within said predetermined zone, and means cooperating with said support for guiding the strip in a predetermined path, including a guide yieldably engaging one edge of the strip for retaining the same in intimate contact with the support in the zone of engagement of said recording mechanism therewith.

1,815,693. SYNCHRONIZED MOTION PICTURE AND SOUND REPRODUCING MACHINE. ARTHUR DE MADALER, Rochester, N. Y., assignor, by mesne assignments, to Visionola Mfg. Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 5, 1927. Serial No. 231,362. 3 Claims. (Cl. 74—7.)



1. In a synchronized motion picture and sound reproducing machine of the class described. a rotary motor shaft, a second driven shaft, a film feeding element carried by said second shaft, a Maltese cross also carried by said second shaft, a disk rigidly mounted on said first motor shaft and located in close spaced parallel relation to said Maltese cross, a concentric annular rim carried by one face of the disk and located for cooperation with the wing of said Maltese cross, said rim being formed with an opening on one side to accommodate the wings in a customary manner during the rotation of said Maltese cross, a flat arcuate spring rigidly fastened at one end to the disk, bridging the opening in said rim and loosely fastened at its opposite end to said disk, said springs flexing outwardly and away from the disk at the last-named end, and being located to move into contact with one side of the Maltese cross, and a roller equipped pin on the central portion of said spring located for successive reception in the seats of said Maltese cross.

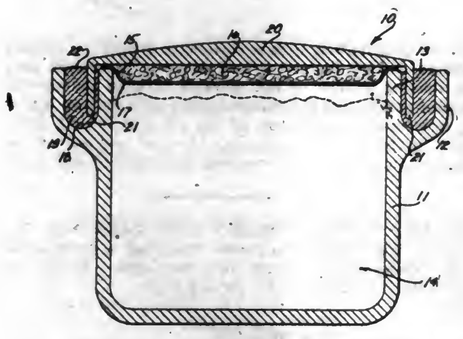
1,815,694. SYNCHRONOUSLY OPERATED MOTION PICTURE AND SOUND REPRODUCTION APPARATUS. ARTHUR DE MADALER, Hampton Bays, N. Y., assignor, by mesne assignments, to Visionola Mfg. Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Nov. 5, 1927, Serial No. 231,362. Divided and this application filed Dec. 6, 1928, Serial No. 324,075. Renewed June 27, 1930. 13 Claims. (Cl. 88—16.2.)



8. A combination sound and picture reproduction apparatus, single power means therefor, a drive connection for said sound apparatus from said power means and including means capable of driving operation in one direction only, whereby the turntable may be manually rotated to bring the same in synchronism with said picture apparatus when starting the machine, and disconnectible means for transmitting power from said power means to said picture reproduction apparatus.

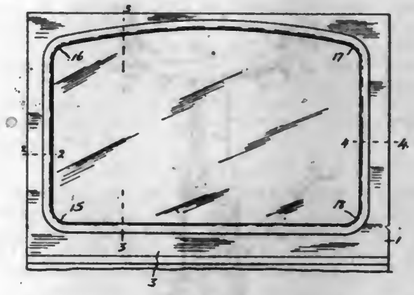
9. In sound and light reproduction apparatus a panel; a base; sound reproduction apparatus comprising a shaft and turntable mounted on said base; light reproduction apparatus comprising an operating shaft, film feeding mechanism and feeding and take-up reels; a motor; operating connections from said motor to the respective shafts; the light reproduction apparatus being so mounted with respect to said panel that the film feeding and reeling mechanism is separated from the sound reproducing apparatus and the drive mechanism.

1,815,695. METHOD OF AND MATERIAL FOR SEALING CONTAINERS. BETHEL JAY BABBITT, Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 31, 1928. Serial No. 316,146. 4 Claims. (Cl. 263—49.)



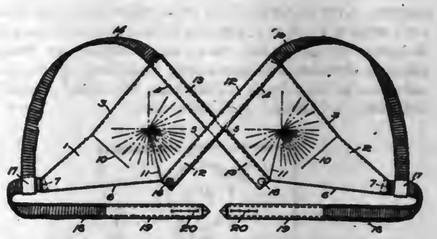
1. A method of sealing heat treating containers which consists in applying a packing material to the apertures to be sealed, covering the packing material with a mixture of lead borate and a highly refractory glass, and fusing the mixture.

1,815,696. MOLDING ASSEMBLY. ALBERT P. BALL, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 27, 1930. Serial No. 423,791. 4 Claims. (Cl. 296—44.)



1. In a molding assembly, a panel having an opening therein and provided at certain edges of said opening with inturned flanges, and a one-piece framing for the opening snapped upon the inturned flanges aforesaid and constituting a trim or molding therefor.

1,815,697. BREAST SUPPORT. FLORA M. BAUCKMAN, West Somerville, Mass. Filed May 25, 1929. Serial No. 366,053. 1 Claim. (Cl. 2—42.)

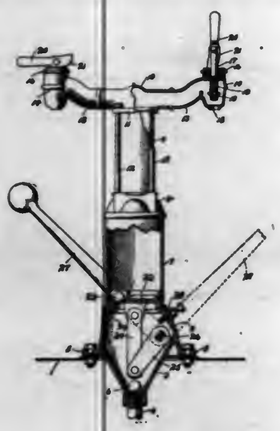


A breast supporter comprising pockets for the breasts, the adjacent edges of the pockets being of strap-like structure in X-like relation and connected only at their point of contact, a body strap on the outer end of each pocket constructed to pass beneath the wearer's arm and about her body and engage the lower end of the X-strap below the opposite pocket, a pair of shoulder straps respectively extending from the top ends of the X-related straps over the shoulders and down to the body straps, the foregoing construction providing pockets each of which is individually movable angularly from the other about the said contacting point of the pockets in response to pull from the upper and lower X-strap ends to separate and support the breasts.

1,815,698. TWO SIDED DISPENSING PUMP. THOMAS B. BENNETT and LE ROY A. PRESCOTT, Muskegon, Mich., assignors to Bennett Pumps Corporation, Muskegon, Mich., a Corporation of Michigan. Filed July 17, 1928. Serial No. 293,381. 1 Claim. (Cl. 103—178.)

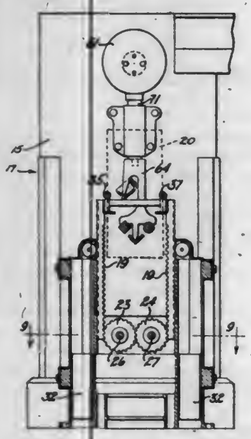
A pump comprising a vertical cylinder having an inlet end and an outlet end, a chamber below the inlet end of the cylinder, a one way valve opening into the chamber, a piston in said cylinder, a one way valve leading upwardly through the piston, a lever located outside of said chamber and having a shaft extending into said chamber, a crank arm on said shaft, a link connecting the crank arm and the piston, said link and crank arm being about the same length whereby the said link is oscillated about its connection to the piston through an angle substantially equal to the degree of oscillation of the crank arm when the lever is actuated,

said lever being accessible from opposite sides of the pump for manual operation, a conduit communicating with the outlet end of the cylinder and extending to opposite sides



of the cylinder and having outlet openings at its respective opposite ends and manually and independently operable means for opening or closing each of said outlet openings.

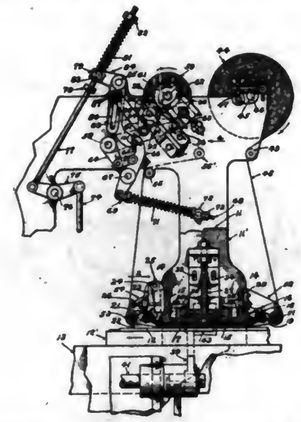
1,815,699. APPARATUS FOR POSITIONING AND HOLDING WORK FOR MATERIAL WORKING APPARATUS. WALTER BONSOR, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 15, 1926. Serial No. 141,796. 5 Claims. (Cl. 164—59.)



1. The combination with a material working element, of an adjustable table, a plurality of oppositely disposed racks supporting the table, a pair of gear wheels engaging the oppositely disposed racks and meshing with each other, and means for rotating one of said gear wheels causing a rotation of the other wheel whereby the table is adjusted.

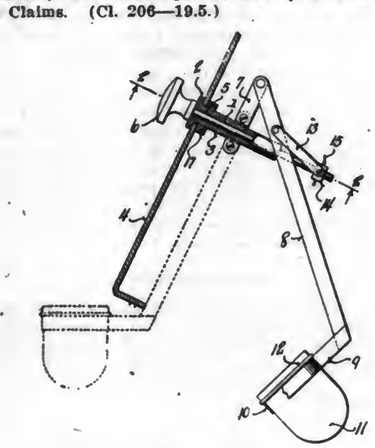
1,815,700. WIPER MECHANISM FOR INTAGLIO PLATE PRINTING MACHINES. CHARLES F. BRYAN, North Plainfield, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Oct. 31, 1929. Serial No. 403,763. 3 Claims. (Cl. 101—168.)

1. In a wiper mechanism of the class described, a roll from which a web of wiper fabric is drawn, a core on which the fabric is rewound into a roll, intermittently operated advancing means to rotate said core, and a con-



trol member bearing against the surface of the rewound roll and acting to regulate the movement of the advancing means.

1,815,701. ASH RECEIVER. CARL T. BUTSCHER, Milwaukee, Wis. Filed Apr. 18, 1929. Serial No. 356,250. 2 Claims. (Cl. 206—19.5.)



1. In combination with a stationary support, a tubular member carried thereby, a movable arm supported upon the tubular member, a rod movable through the tubular member and having pivotal connection with the arm whereby reciprocating movement of the rod will impart movement to the arm, a supporting band at one end of the arm and an ash receiver removably supported by said band.

1,815,702. GARTER. TILLMAN CAHN, Elkins Park, Pa., assignor to Pioneer Suspender Company, a Corporation of Pennsylvania. Filed July 30, 1930. Serial No. 471,659. 4 Claims. (Cl. 241—6.)



1. A garter comprising a pad, a leg band having one end permanently secured thereto, disengageable connecting

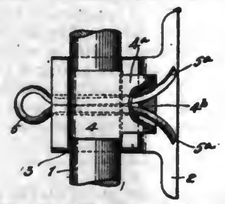
elements, comprising a hook member secured to the free end of the leg band, a loop element of horse-shoe formation and a slotted plate, the loop element provided with points near the heel thereof adapted to pass through a pad layer and through the slots in the plate and clench therewith.

1,815,703. ADJUSTMENT SLIDE. TILLMAN CAHN, Elkins Park, Pa., assignor to Pioneer Suspender Company, a Corporation of Pennsylvania. Filed July 30, 1930. Serial No. 471,660. 1 Claim. (Cl. 24—184.)



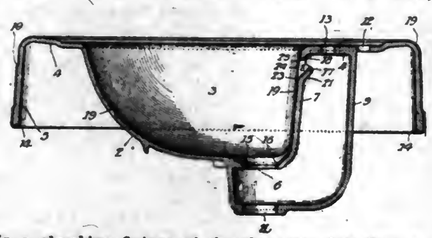
An adjustable slide for a garment supporting band, comprising sheet metal members in pivotal relationship, one member operating disengageably to clamp the web in position of adjustment, the other member comprising a flat plate having one straight margin and provided along the opposite margin thereof with a plurality of fingers adapted to be bent over the said plate but extending short of said straight margin, said fingers formed at their outer ends with straight sharpened marginal edges extending beyond the plane of their inner sides and adapted permanently to clamp the band near its end to the flat surface of said plate, the part of the band adjacent said end being bent over said fingers and extending in direction opposite the finger extension, while the portion of the band engaged by the pivotal clamp is separated from said end portion by said plate.

1,815,704. ROD SUPPORT AND HOLDER. GEORGE T. COOKE, South Norwalk, Conn. Filed May 31, 1930. Serial No. 457,785. 1 Claim. (Cl. 213—171.)



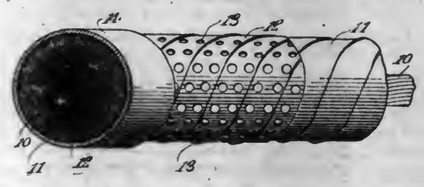
In a device of the character described, a U-shaped bracket for rotatably supporting a rod, a keeper block removably mounted in the U-shaped part of said bracket to overstand a rod therein, a lug on said block, extended so as to lie along one of the outer walls of said bracket, said bracket, block and lug having pin passages to receive a pin for holding said lug in place in said bracket, and a wedge in the passage through said lug, the apex thereof facing the passage through said bracket and block to engage and spread the ends of a cotter pin passed through said lug.

1,815,705. ENAMELED IRON PLUMBING FIXTURE. CHARLES R. CRANE, 2d, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed May 8, 1929. Serial No. 361,272. 1 Claim. (Cl. 4—166.)



In a plumbing fixture of the character described, a receptacle formed of cast metal having a coating of vitreous enamel thereon, said receptacle having an upstanding wall provided with an elongated overflow orifice, said orifice being provided with an elongated horizontally extending upper edge, portions of the wall at the sides and bottom of the orifice extending outwardly and upwardly of the receptacle and providing an elongated horizontally extending lip substantially the same thickness as the wall thickness and terminating in a lower elongated horizontally extending edge disposed rearwardly of said upper edge of the orifice whereby the orifice is substantially concealed from the view of a casual observer, said coating of vitreous enamel extending over the interior side of said receptacle including said lip.

1,815,706. METHOD OF IMPREGNATING CABLES. WILLIAM A. DEL MAR, Greenwich, Conn., assignor to Habirshaw Cable & Wire Corporation, New York, N. Y., a Corporation of New York. Filed May 7, 1928. Serial No. 275,608. 6 Claims. (Cl. 173—266.)



4. The method of impregnating an absorbent envelope of insulating material surrounding an electrical conductor and in turn surrounded by an envelope which ordinarily impedes passage of the impregnating material, which method comprises causing the second mentioned envelope to expand with respect to the said first mentioned envelope, and subjecting the assemblage in such condition to impregnating insulating material to cause the latter to pass from the outside of the second mentioned envelope inwardly through openings in the second mentioned envelope into contact with the first mentioned envelope.

1,815,707. HIGH FREQUENCY TRANSFORMER OR THE LIKE. FELIX GERTH, Berlin-Tempelhof, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed May 4, 1929, Serial No. 360,579, and in Germany May 5, 1928. 7 Claims. (Cl. 175—356.)



1. A high frequency transformer or the like comprising an annular core, a winding for coaction with the core, an annular casing of insulating material surrounding the core and about which the winding is wound, said casing being formed to provide an annular series of chambers for circulation of a cooling medium, each chamber having an inlet at one end and an outlet at its opposite end and the inlet end of each chamber lying adjacent the outlet of an adjacent chamber.

1,815,708. CONSTRUCTIONAL TOY. ALFRED C. GILBERT, New Haven, Conn. Filed May 12, 1930. Serial No. 451,590. 4 Claims. (Cl. 46—135.)

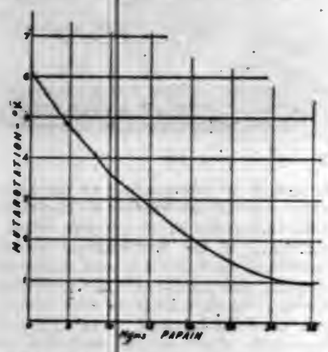
1. A constructional toy boat comprising in combination a plurality of sections adapted to be connected together to form a water-tight hull and provided with spaced perforations about the upper edges thereof, and a plurality

of flanged deck sections equal in number to the number of hull sections and corresponding therewith said deck sections being provided with spaced perforations in the



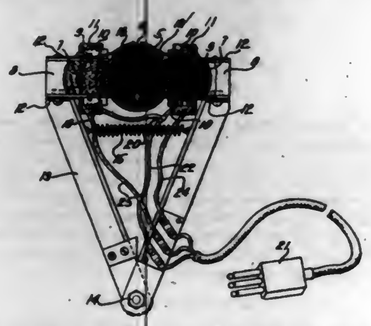
flanges thereof adapted to register with said perforations in the hull sections whereby the deck and hull sections may be connected together to form models of various lengths.

1,815,709. METHOD OF MEASURING PROTEOLYTIC ACTIVITY. HERBERT C. GORE, Scarsdale, and CHARLES N. FREY, New York, N. Y., assignors, by mesne assignments, to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed June 19, 1929. Serial No. 372,016. 6 Claims. (Cl. 23—230.)



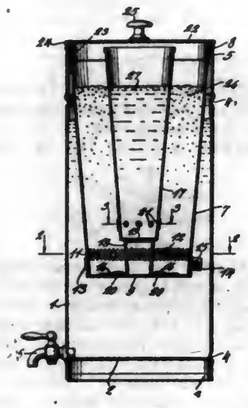
1. A method of determining proteolytic activity of a liquid, which includes mixing different amounts of said liquid with a gelatin solution, incubating the mixture, taking polariscopic readings of each mixture at 35° C. and below 35° C., and calculating the amount of gelatin converted in the mixtures.

1,815,710. APPARATUS FOR DETECTING A DIFFERENCE IN THE THICKNESS OF MATERIALS. ERNST A. GUILLEMIN, Brookline, Mass., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,835. 8 Claims. (Cl. 175—183.)



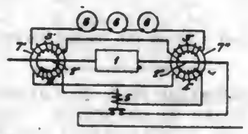
1. In an apparatus for detecting a difference in the thickness of different portions of a metallic tube, electrical detecting means placed in direct contact with the different portions and conformable to the contour thereof, and means for electrically balancing the detecting means with each other to indicate the difference in thickness.

1,815,711. SIRUP PERCOLATOR. SAMUEL T. HENSEL, Denver, Colo. Filed July 5, 1929. Serial No. 376,253. 2 Claims. (Cl. 87—28.)



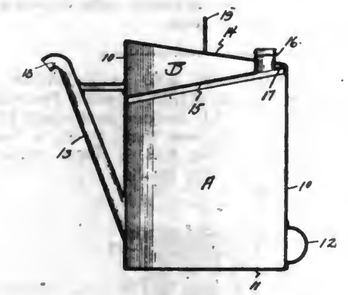
1. A simple sirup percolator, comprising a sugar container whose body portion is frustro-conical in shape and provided at the end having the smaller diameter with an imperforate bottom, the wall of the container having a plurality of perforations a short distance above the bottom, said perforations being covered with wire screens of suitable mesh, the upper surface of the bottom having secured to it two anchoring plates (16) symmetrically located on opposite sides of a diameter, the adjacent edges of the plates being spaced from the bottom, a frustro-conical water container located within the sugar container, the two containers having the same taper, the water container having an imperforate bottom and having its wall provided with openings directly above the bottom, the openings being covered with a suitable screen, the bottom of the water container having a U-shaped support whose lower ends have outwardly extending feet adapted to engage the spaces between the plates and the bottom and to serve to hold the water container in position.

1,815,712. DIFFERENTIAL PROTECTIVE SYSTEM FOR ELECTRICAL MACHINERY AND APPARATUS. IVAR HERLITZ, Magnet, Ludvika, Sweden, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Corporation of Sweden. Filed Nov. 8, 1927, Serial No. 231,936, and in Sweden Apr. 12, 1927. 4 Claims. (Cl. 175—294.)



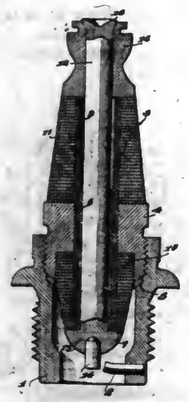
1. Fault responsive and current measuring devices for electrical apparatus comprising in combination, a current transformer having one primary winding connected to one terminal of the apparatus, two secondary windings and a common iron core, a second current transformer having one primary winding connected to the other terminal of said apparatus, two secondary windings and a common iron core, current responsive means connected in circuit with one secondary winding of the first current transformer and one secondary winding of the second current transformer which counteract each other, and conductors connecting the other secondary windings of the current transformers so as to allow their secondary currents to flow in the same direction.

1,815,713. GASOLINE MEASURE. PETER A. HOLM, Sioux City, Iowa. Filed June 25, 1928. Serial No. 287,925. 1 Claim. (Cl. 73—62.)



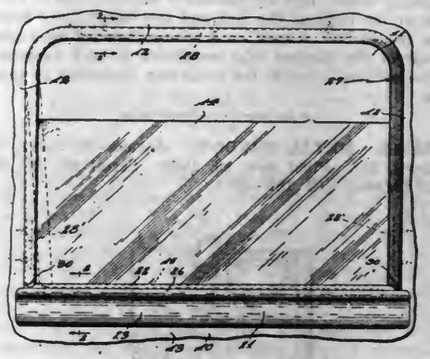
A gasoline measure comprising a side wall, a spout communicating therewith, a bottom and an intermediate wall secured to said side wall to form a main container, the intermediate wall being spaced from the upper edge of the side wall and inclined downwardly toward the spout, an upper wall closing the space above the intermediate wall and inclined upwardly toward the spout to form, together with the side wall and intermediate wall, an overflow chamber, the intermediate wall being provided with an opening near its highest extremity forming a communicating passage between the container and overflow chamber, and a filling nozzle secured to the intermediate wall and extending through the upper wall.

1,815,714. METHOD OF MAKING SPARK PLUGS. ROY T. HURLEY, Dobbs Ferry, N. Y., assignor to Hurley-Townsend Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Mar. 18, 1930, Serial No. 435,461. Divided and this application filed Mar. 7, 1931. Serial No. 520,948. 9 Claims. (Cl. 29—155.5.)



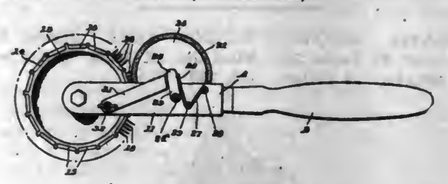
1. The method of making a spark plug adapted for heavy duty work where it is subjected to high temperature and pressure conditions and severe vibrations, including the provision of a rigid body having a smooth bore, introducing therein a relatively yieldable tubular insulating member and a copper-like sleeve disposed interiorly of said member, said insulating member and sleeve extending exteriorly of said bore, assembling mica-like washers on said extended portion, and forcibly expanding said sleeve throughout said bore to an extent sufficient to effect a coextensive rigid clamping and sealing of the insulating member between the rigid body and the expanded sleeve.

1,815,715. GARNISH MOLDING. HOMER G. KELLOGG, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Original application filed Apr. 22, 1929, Serial No. 357,149. Divided and this application filed Mar. 10, 1930. Serial No. 434,747. 3 Claims. (Cl. 296—44.)



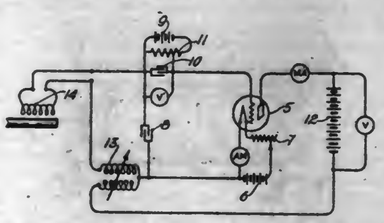
1. The combination with a body structure provided with a window opening, of anchorage means associated with the edges of said opening and an integral finish strip adapted for snap-on engagement with said anchorage means and extending around three sides of said opening.

1,815,716. MEAT MARKER. JOHN ORMOND KER, Ottawa, Ontario, Canada. Filed July 27, 1929. Serial No. 381,548. 6 Claims. (Cl. 101—24.)



1. A meat marker comprising a frame, a rotatable marking cylinder carried thereby, rigid meat marking projections extending from said cylinder, an inking roller rotatably carried by said frame and comprising an inking pad penetrable by said projections, means providing for relative approaching and receding movement between said roller and cylinder, and means for adjusting the extent of said approaching movement to limit the extent of penetration of said inking pad by said projections and thereby limit wear and tear upon said pad.

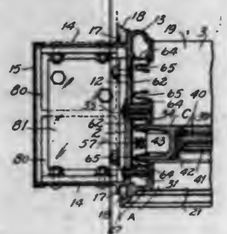
1,815,717. APPARATUS FOR MEASURING VARIATIONS IN THICKNESS OF METALLIC BODIES. HERMANN ERNEST KRANZ, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 12, 1926. Serial No. 80,855. 3 Claims. (Cl. 175—183.)



1. In a measuring apparatus, a tuned grid oscillator circuit having a vacuum tube plate, a grid and filament

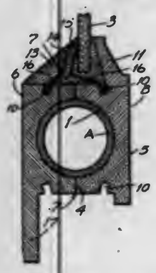
included therein, means for adjusting said circuit to produce resonance therein, an independently operable measuring coil connected with said circuit with the oscillating current flowing therethrough, a support for said measuring coil shaped to be placed in direct contact with a metallic body, the thickness of which is to be measured, said oscillator circuit varying responsive to variations in thickness of the body as the coil and the support are moved over the surface thereof, and means included in a plate circuit of the vacuum tube responsive to such variations in the oscillator circuit for indicating variations in thickness.

1,815,718. METAL WINDOW. ALFRED M. LANE, St. Louis, Mo. Filed Nov. 26, 1928. Serial No. 321,828. 13 Claims. (Cl. 189—75.)



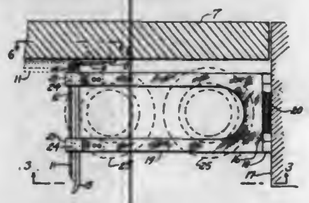
1. A metal window framing member comprising a body portion provided along one margin with an integral molding constituting a stop for a sash, said molding being hollow and having an opening in the sash opposing wall thereof communicating with the hollow therein.

1,815,719. METALLIC WINDOW SASH. ALFRED M. LANE, St. Louis, Mo. Filed Oct. 12, 1929. Serial No. 399,141. 14 Claims. (Cl. 189—76.)



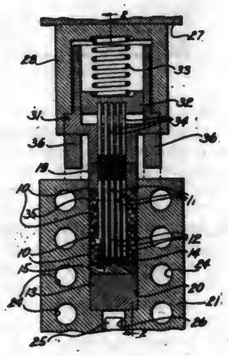
1. A metallic frame comprising a continuous one-piece metallic supporting frame, and a casing completely enclosing said metallic supporting frame.

1,815,720. MILK BOTTLE LOCK. ATTILIO MARELLI, Union City, N. J. Filed Jan. 18, 1930. Serial No. 421,834. 8 Claims. (Cl. 232—42.)



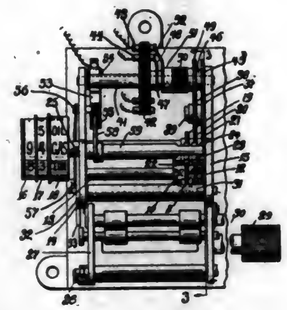
1. A milk bottle lock comprising a member hinged to a door, and a member hinged to the door frame, the pivotal axes of said members being substantially at right angles to each other, and locking means upon said members for locking them to each other when brought together, said members being suitably formed to enclose a suitable area when locked to each other to enable them to lock a milk bottle by its neck between them.

1,815,721. METHOD OF AND APPARATUS FOR MANUFACTURING ARTICLES. GEORGE POLLOCK MCGRAW, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1929. Serial No. 344,827. 13 Claims. (Cl. 18—59.)



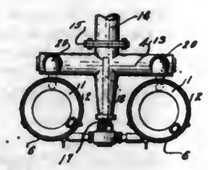
7. In a molding apparatus, means providing a molding cavity, means for maintaining an insert in a predetermined position in the cavity, including a formation on a surface of the means providing the cavity cooperating with a surface on the insert, and pressure means for molding material inserted in the cavity and around the insert.

1,815,722. INDICATOR. JOHN B. MILLS, Dayton, Ohio, assignor to Ohmer Fare Register Company, Dayton, Ohio. Filed Jan. 23, 1924. Serial No. 688,043. 12 Claims. (Cl. 235—23.)



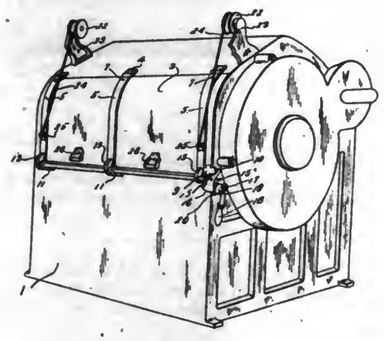
1. In combination, an indicating device comprising a plurality of electric circuits, a single contact device adapted to connect with any one of said circuits, a setting device for said contact device, a source of current supply including a switch, a spring tending to close said switch, a detent device for retaining said switch open, an operating element, means by which said operating element disables said detent device thereby closing said switch, and means whereby a subsequent movement of said setting device opens said switch and again renders said detent device effective.

1,815,723. COUPLING MEANS FOR HEATERS. CLARENCE H. MORROW, Cleveland, Ohio, assignor to The Hotstream Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 8, 1927. Serial No. 211,509. 1 Claim. (Cl. 122—14.)



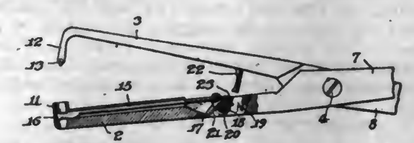
A manifold adapted for connection to spaced twin water heaters, and comprising a hollow body portion having two aligned horizontally extending arms, each provided with a vertical opening adapted for connection to one of said heaters, and having a rearward arm adapted for connection with a water circulating pipe, said body portion intermediate its ends having a horizontal well arm aligned with said rearward arm and extending forwardly and open at its end, whereby said well arm may receive the thermally responsive elements of a thermostat having its head positioned at the well arm end opening, and the thermally responsive elements of said thermostat will extend into the path of flow between said rearward arm and said horizontally extended arms.

1,815,724. CASING DOORLOCK. CHARLES M. OTIS, Rochester, N. Y., assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 27, 1928. Serial No. 288,588. 8 Claims. (Cl. 292—215.)



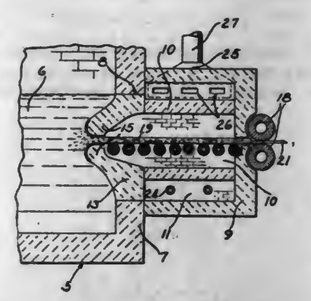
1. In a machine of the class described, a casing having a door opening, a door carried by the casing and adapted to close said opening, clamping and latching mechanism therefor comprising a shaft, a door clamp carried thereby, an actuating member for said shaft and comprising a trip in the path of the door as it closes causing the clamping members to engage with the door, a clamping arm having a peripheral arc-shaped portion concentric with the shaft, and an operator operated latching device comprising an arc-shaped surface for engagement with the arc-shaped surface of the actuating member to hold the same against accidental movement, a cam surface for engaging the edge of said actuating member to clamp the device, and means tending to move the arc-shaped surface of said latching device into engagement with the arc-shaped periphery of said actuating member.

1,815,725. SUTURE FORCEPS. CHARLES J. PILLING, Lansdowne, and BRUNO F. WIEGAND, Philadelphia, Pa., assignors to The George P. Pilling & Son Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 3, 1930. Serial No. 425,553. 5 Claims. (Cl. 128—334.)



3. A forceps comprising first and second connected members movable toward and from each other, a tube on an end portion of said first member directed toward said second member, a needle extending fixedly from an end portion of said second member and directed toward said tube and being adapted to enter the same when the members are moved toward each other, said needle having an eye in its free end portion adapted to receive a suture and carry a loop thereof into the tube when the members are moved toward each other, a retaining part slidable longitudinally within an opening in said first member and adapted to be moved into the tube and across the needle and through a suture loop carried thereby when the needle is within the tube, a lever fulcrumed on said first member and connected to said part yielding means acting upon said part and said lever and tending to move said part into the tube to an operative position across the needle and means carried by said second member and adapted to engage said lever and operate it to move said part away from said operative position and thereafter release said lever after the needle enters the tube and crosses the path of said part when the members are moved toward each other.

1,815,726. METHOD AND APPARATUS FOR PRODUCING SHEET GLASS. JOSEPH A. RHECE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 15, 1926. Serial No. 148,448. 8 Claims. (Cl. 49—33.)

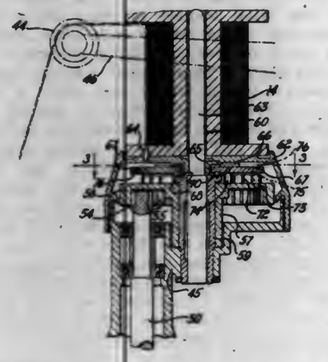


1. In sheet glass apparatus, a tank containing a mass of molten glass and having an end wall, a member arranged within said wall and projecting rearwardly within the tank and having a slot therein beneath the level of said molten glass, a housing mounted in opposition to said member, a partition wall within the housing dividing the interior thereof into a heating chamber and a somewhat larger conditioning chamber, rotatable means within the conditioning chamber for receiving a stream of molten glass issuing from said slot and carrying it through said chamber in a generally horizontal direction, means for heating the heating chamber, and a pair of forming rolls for receiving the stream of molten glass and reducing it to a sheet of substantially predetermined and uniform thickness.

1,815,727. FOOD PRODUCT AND PROCESS. MARVIN C. REYNOLDS and ALBERT K. EPSTEIN, Chicago, Ill. Filed Aug. 8, 1929. Serial No. 384,464. 6 Claims. (Cl. 99—13.)

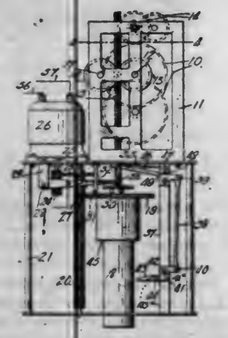
4. The method of producing an improved margarine which comprises adding gelatine to fresh unripened milk, inoculating the milk with a lactic acid producing organism whereby the action of the organism on the milk in the presence of the gelatine produces a ripened milk with very small curds, and finally churning said ripened milk with oleaginous material to produce a margarine emulsion.

1,815,728. STRAND REELING APPARATUS. DUER CYRUS ROBSON and JOHN NILSEN SELVIG, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 31, 1926. Serial No. 126,151. 8 Claims. (Cl. 242—45.)



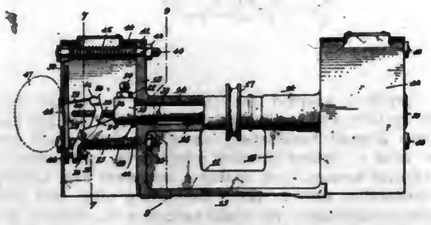
1. In a strand reeling apparatus, a vertically mounted take-up spool, a friction disk for driving said spool, means for driving said friction disk and the driving means, for maintaining the strand under a uniform tension, and means for varying the effectiveness of the spiral spring to vary the tension maintained in the strand.

1,815,729. WINDING MECHANISM. JOSEPH V. ARMSTRONG and JOHN F. RISBECK, Akron, N. Y. Filed Oct. 20, 1927. Serial No. 227,446. 14 Claims. (Cl. 185—33.)



1. A winding mechanism for mechanical motors of clocks and other devices having a power shaft, comprising a rotary worm wheel for connection to said power shaft, a worm screw meshing approximately in a tangential direction with said worm wheel and free to move endwise of itself and to rotate about its own axis, means for urging said worm screw yieldingly in an endwise direction and causing operation of the screw as a driving rack tending to rotate said worm wheel, and means for rotating said worm screw to cause endwise movement thereof against the action of said urging means, and having driving engagement with the exterior of the screw throughout its descent and rise.

1,815,730. CORING MACHINE. WILLIAM A. CHAPMAN, EDWARD J. MACHEMER, and FREDERICK J. PAUL, Silver Creek, N. Y., assignors to Huntley Manufacturing Co., Brocton, N. Y., a Corporation of New York. Filed May 19, 1928. Serial No. 279,028. 15 Claims. (Cl. 146—52.)



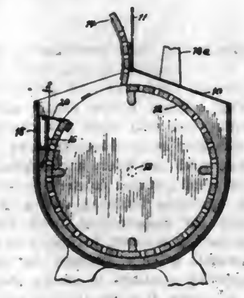
1. A machine for coring tomatoes and the like, comprising a coring knife adapted for circular travel and a guard against which the tomato to be cored is placed, said guard being movable parallel to the axis of the circular path of said coring knife, and means between said guard and said coring knife to thrust said knife through said guard into the tomato componently with its circular course of travel when moving said guard.

1,815,731. PRINTING DEVICE. GUSTAVE A. FRIESS, Forest Hills, N. Y. Filed Nov. 27, 1929. Serial No. 410,203. 11 Claims. (Cl. 105—157.)



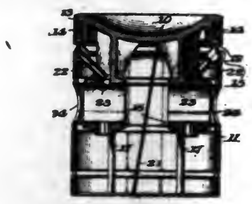
1. In a printing device, in combination, an immovable flexible doctor blade and rigid means for holding said doctor blade, said doctor blade extending beyond said holding means and means capable of longitudinally tensioning said blade.

1,815,732. SPACE GUARD FOR DRY CLEANING MACHINES OR THE LIKE. EDWARD B. GROSS, Buffalo, N. Y. Filed July 5, 1927. Serial No. 203,291. 3 Claims. (Cl. 68—38.)



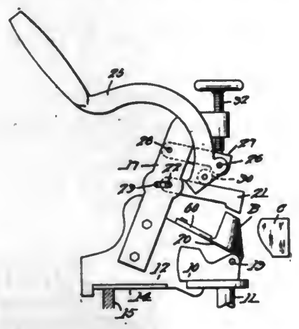
1. In a dry cleaning machine, an outer casing and an enclosed cylinder, each provided with doors, in combination with an apron, supporting members for said apron having guideways formed therein in which said apron is slidably and pivotally mounted, said supporting members being mounted within said casing adjacent the casing door and formed to support said apron in either of two positions; in one of which it extends vertically without obstructing the space between the casing and cylinder and in the other of which it extends substantially horizontally across said space with its free edge overlying and resting upon the lower wall of the door opening of the cylinder.

1,815,733. PISTON. EDWARD J. GULICK, Elkhart, Ind., assignor, by mesne assignments, to The Cleveland Trust Company, a Corporation of Ohio. Filed Nov. 30, 1917. Serial No. 204,661. 43 Claims. (Cl. 74—108.)



1. A piston comprising a head, a skirt separated at its periphery from the head, and pin bosses connected to the head and to the upper and lower parts of the skirt, said skirt being split longitudinally at one side between its connection to said bosses.

1,815,734. WOOD HEEL JACK. WALTER H. HALL, Winchendon, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Jan. 4, 1928, Serial No. 244,530. Divided and this application filed Apr. 15, 1929. Serial No. 355,221. 5 Claims. (Cl. 12—87.5.)

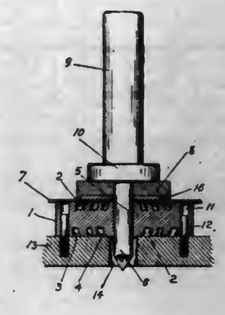


1. In a wood heel jack, a heel blank support having an upward extension, a clamping bar pivoted on said support extension, a hand lever, an arm for said lever pivoted on said support extension and to said lever, a roll on said lever engaging said clamping bar, and means to adjust said lever arm relative to said support.

1,815,735. CRYSTALLIZATION PROCESS. SHELDON B. HEATH, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 24, 1928. Serial No. 264,572. 13 Claims. (Cl. 23—128.)

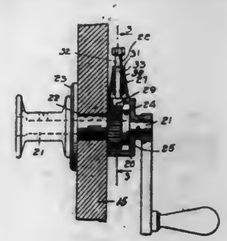
1. The process of producing uniform crystals of a salt which comprises preparing a hot, crystal-free solution thereof, vacuum-cooling such solution to produce a condition of supersaturation until crystals form spontaneously therein, interrupting such cooling until the degree of supersaturation is materially reduced, and then subjecting the solution to further vacuum-cooling with moderate agitation to induce continued crystal growth upon said first crystals as nuclei.

1,815,736. APPARATUS FOR CUTTING METAL AND OTHER MATERIALS. JOSEPH JAMIESON, Belmain, near Sydney, New South Wales, Australia. Filed July 18, 1928, Serial No. 293,623, and in Australia Sept. 16, 1927. 1 Claim. (Cl. 164—32.)



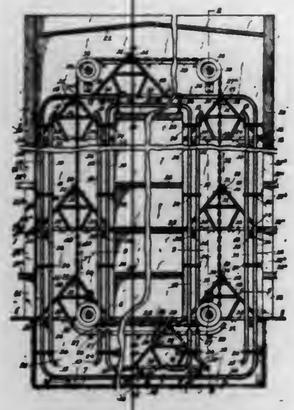
Cutting apparatus comprising an alignable metal die having an opening centrally thereof and a series of concentric cutting grooves therein, each of said grooves forming a complete circle, the outer walls of each of said grooves being inclined and the inner walls thereof being chamfered, a piercer adapted to enter said opening in the die during cutting operations of blanks after the said piercer has passed through a blank, and a concentric cutter on said piercer adapted to cooperate with one of said grooves to cut a blank after passage of said piercer through the blank to be cut.

1,815,737. WINDING DRUM FOR WALL DRIERS. LOUIS JUDELSON, New York, N. Y. Original application filed July 8, 1927, Serial No. 204,248. Divided and this application filed May 14, 1929. Serial No. 363,061. 1 Claim. (Cl. 188—81.)



In a winding drum for a wall drier, the combination therewith of a ratchet wheel, a pawl guided radially of the wheel, a spring urging the pawl in the direction of the wheel and means for supporting the pawl out of the path of the teeth of said wheel in one position and for allowing the pawl to engage the said teeth in another position, said means comprising a fixed housing for the pawl having a free end provided with cross cuts, one cut being deeper than the other, and a pin disposed transversely of the pawl to locate in one or the other of said cuts to assume its two operative positions.

1,815,738. AUTOMOBILE PARKING AND STORAGE APPARATUS. ISAAC MACDONALD, Buffalo, N. Y.; Martha Gerretsen, Buffalo, N. Y., administratrix of said Joseph Gerretsen, deceased, assignor of one-half to Isaac MacDonald. Filed July 9, 1924. Serial No. 725,041. 15 Claims. (Cl. 214—16.1.)

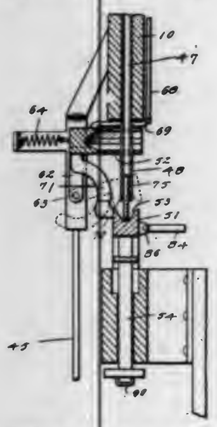


1. An apparatus of the kind described, having two elevator shafts, elevator ways connecting said shafts at the top and bottom, storage space divided into floors between said elevator shafts, a series of elevators movable through said shafts and ways, and means for causing said elevators to travel and for causing any one of said elevators to be stopped in line with any desired floor of said storage space.

1,815,739. IMPROVED MARGARIN AND PROCESS. MARVIN C. REYNOLDS and ALBERT K. EPSTEIN, Chicago, Ill. Filed Aug. 8, 1929. Serial No. 384,465. 9 Claims. (Cl. 99—13.)

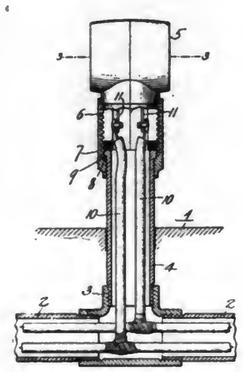
8. A process for producing margarin having anti-spattering properties, which comprises introducing a relatively small amount of lecithin into unripened milk, subsequently ripening the milk and finally churning the ripened milk with suitable oleaginous material to form a margarin.

1,815,740. COIN CONTROLLED LIQUID VENDING APPARATUS. EDWARD E. RICE, Irvine, Ky. Filed July 26, 1930. Serial No. 470,955. 16 Claims. (Cl. 194—70.)



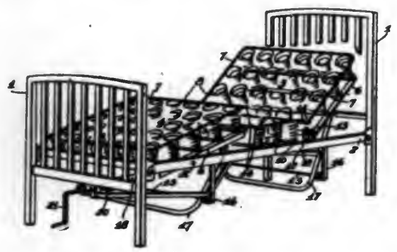
13. A liquid vending apparatus, comprising a measuring chamber, a pump communicating with the chamber, a rocker lever for operating the pump, members carried by the lever and stand and normally engaging each other to lock the lever against operation, one of said members being movable to free the other and the other of said members being movable to effect said movement of said first member through the medium of a coin, means for directing a coin between the members, and means by which said other member may be manually operated.

1,815,741. FLOOR RISER. HENRY F. RICHARDSON, Northport, N. Y., assignor of one-fourth to Allan Coggeshall, Pleasantville, N. Y., one-sixth to S. R. Bradley, Nyack, N. Y., one-sixth to A. M. Cregier, Orangeburg, N. Y., and one-sixth to Alonzo B. Bradley, New York, N. Y. Continuation of application Serial No. 327,019, filed Dec. 19, 1928. This application filed Jan. 21, 1931. Serial No. 510,239. 4 Claims. (Cl. 247—6.)



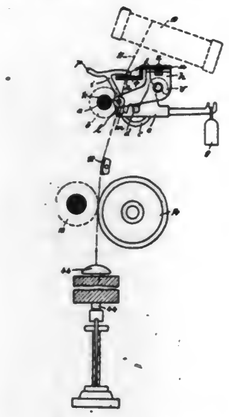
4. A floor riser comprising an outlet member having wiring terminals and provided with an apertured threaded neck through which said terminals are accessible, a tubular support for said outlet member, and a threaded sleeve rotatably secured on said tubular support and adapted to be screwed over the apertured threaded neck of said outlet member to secure said fitting to its support and cover the wiring terminals.

1,815,742. ADJUSTABLE COILED SPRING BED. JOSEPH H. SCHIFFHOUER, Pittsburgh, Pa., assignor to A. J. Logan Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 14, 1929. Serial No. 407,146. 4 Claims. (Cl. 5—68.)



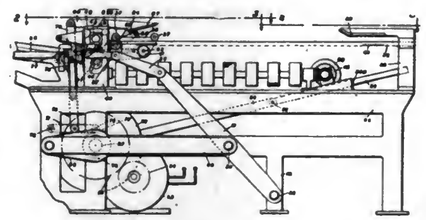
1. In an adjustable bed, coiled spring sections each including an upper border frame and coiler springs connected thereto, at least one of said sections being adjustable, and said border frames at adjacent ends of successive sections being disposed below the top plane of the sections.

1,815,743. STOPPING DEVICE FOR SPINNING AND DOUBLING MACHINES. EMIL STUTZ-BENZ, Landsberg-on-the-Warthe, Germany. Filed Sept. 5, 1928, Serial No. 304,102, and in Germany Sept. 26, 1927. 7 Claims. (Cl. 117—30.)



1. In a spinning or doubling machine of the character described, a stopping device for the raw material, comprising in combination, a stationary bracket mounted upon a rail extending across the width of said machine, a rocking frame suspended from said stationary bracket and having bearings open at the top, a driven supply cylinder, a draw roller carried by said rocking frame in said bearings and held in contact with said supply cylinder by the weight of said frame, a stopping lever pivoted on the machine, a detent on said stopping lever, and a bevelled extension on said rocking frame in front of said open bearing and extending into the path of said detent when said stopping lever is rocked into stopping position, said detent adapted to swing said frame into a position, in which said draw roller is removed from said supply cylinder to stop the feeding of material.

1,815,744. SHEET DIVIDING AND COMPILING MECHANISM. JAMES E. SULLIVAN, Cincinnati, Ohio, assignor to The Sullivan Printing Works Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 25, 1930. Serial No. 470,694. 10 Claims. (Cl. 270—58.)



1. In a device for dividing and compiling sheets the combination of a feed table, a series of cooperating slitters, a conveyor arranged for intermittent movement transversely of the cutting line of the slitters, a carriage reciprocable transversely above the conveyor, normally closed grippers mounted on the carriage and movable between adjacent slitters to grasp a sheet positioned on the feed table and means to first open and then close the grippers adjacent the slitters and to again open the grippers adjacent the remote side of the conveyor for depositing the severed portions of the sheet upon the conveyor.

1,815,745. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Original application filed Apr. 25, 1929, Serial No. 358,114. Divided and this application filed Dec. 3, 1930. Serial No. 499,744. 8 Claims. (Cl. 30—12.)



7. A safety razor comprising a flexible and elastic blade modified to receive positioning and clamping means, a guard member adapted to support the blade adjacent to a cutting edge of the latter, a blade clamping cap provided with an outer clamping edge and with reinforcing lugs at its corners, means for positioning the blade between the cap and guard members, and means to clamp said members together and simultaneously causing an outer edge of the cap to flex the blade transversely on the guard member as a fulcrum, the blade being cut away at each of its corners at a cutting edge thereof to such an extent as to span the corresponding reinforcing lug and provide a clearance space of sufficient area to receive said reinforcing cap lug, each lug being located within the area of the cut away clearance space in the blade and also within the area of the guard and opposite the corners thereof whereby a cap corner is prevented from exerting pressure on the blade while the latter is being flexed or when clamped and thereby breaking the blade or distorting its cutting edge.

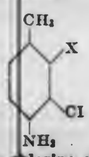
1,815,746. PENCIL HOLDER. DANIEL L. TROYER, Cleveland, Ohio. Filed Apr. 19, 1930. Serial No. 445,730. 4 Claims. (Cl. 24—11.)



4. A pencil holder comprising a piece of wire coiled intermediate its ends to form a pencil receiving sleeve said wire being extended in opposite directions from said sleeve and wound to form coils having their axes extending in planes at right angles to the axis of said sleeve with the terminals of the wire extended to form arms converging towards their free ends and secured to form a clamping finger.

1,815,747. 2 - HALOGEN - 3 - CHLORO - 4 - AMINO - 1 - METHYLBENZENE - 6 - SULPHONIC ACIDS AND PROCESS OF PREPARING THEM. HERMANN WAGNER, Bad-Soden-Am-Taunus, ALBERT KISSLING, Frankfort-on-the-Main-Hochst, ERNST HOTZ, Hattersheim, near Frankfort-on-the-Main, and WILHELM FITZKY, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 8, 1929, Serial No. 384,492, and in Germany Sept. 7, 1928. 5 Claims. (Cl. 260—129.)

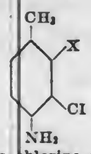
1. The process which comprises heating a compound of the following general formula:



wherein X stands for a chlorine or a bromine atom, with concentrated sulfuric acid to a temperature of about 170° C. to about 200° C.

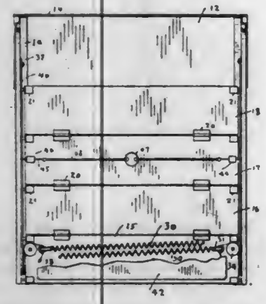
1,815,748. 2 - HALOGEN - 3 - CHLORO - 4 - AMINO - 1 - METHYLBENZENE - 6 - SULPHONIC ACIDS AND PROCESS OF PREPARING THEM. HERMANN WAGNER, Bad-Soden-Am-Taunus, ALBERT KISSLING, Frankfort-on-the-Main-Hochst, ERNST HOTZ, Hattersheim, near Frankfort-on-the-Main, and WILHELM FITZKY, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 8, 1929, Serial No. 384,493, and in Germany Sept. 7, 1928. 5 Claims. (Cl. 260—129.)

1. The process which comprises heating a compound of the following general formula:



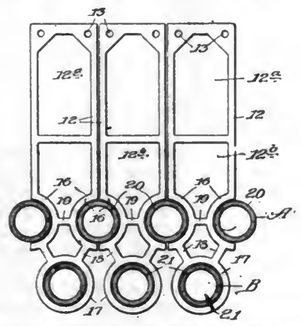
wherein X stands for a chlorine or a bromine atom, dissolved in a sulfuric acid monohydrate with a large excess of fuming sulfuric acid containing about 65 per cent of sulfuric anhydride rapidly to a temperature up to 120° C.

1,815,749. GARAGE DOOR. JOHN FRAZER WARNER, Muncie, Ind. Filed Aug. 5, 1929. Serial No. 383,479. 4 Claims. (Cl. 20—20.)



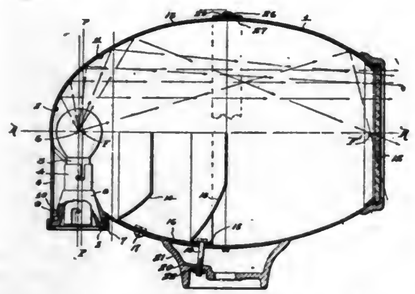
1. A doorway structure of the kind described, comprising spaced housing units having curved hip portions and being of formation in cross section to provide frontal cheeks and offset runways, door panels hingedly connected together and whose ends are in registration with the rear of the cheeks of said housings, rollers on the door panels and which are operable in said runways, complementary coil springs carried on the lowermost door panel one end of each spring being secured to said panel, and the other end of each spring being provided with a sheave, a pulley at each end of the rear face of said panel, a pulley on each end and near the lower edge of said panel, and cables trained through said sheaves and over said pulleys, each cable having one of its ends connected to said panel at a location adjacent to the first named pulley, and the other of its ends being connected to the hip portion of the adjacent housing.

1,815,750. TUBE HANGER. GEORGE W. WATTS, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Feb. 4, 1928. Serial No. 251,931. 6 Claims. (Cl. 122—510.)



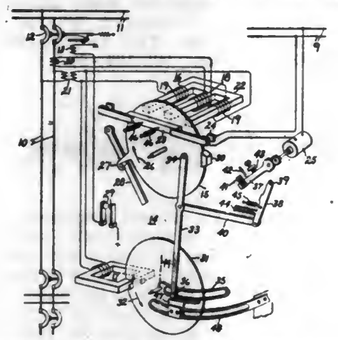
1. A furnace structure, including a plurality of rows of horizontal tubes; a support; and a plurality of tube holders depending from said support, each holder carrying one tube of a horizontal row of tubes in one plane, and having parts co-operating with parts of adjacent holders arranged to carry the tubes of another horizontal row of tubes in another plane.

1,815,751. HEADLAMP CONSTRUCTION. EDWARD J. WHALEN, Syracuse, N. Y., assignor to Redirected Light Corporation of America, Syracuse, N. Y., a Corporation of New York. Filed Feb. 23, 1929. Serial No. 342,139. 2 Claims. (Cl. 240—41.35.)



1. A headlamp construction comprising a reflector body which is ellipsoidal in general form, a source of light located near the rear focus of the body and a redirecting reflector located in the body below the horizontal plane of the axis of revolution and arranged to reflect the light rays rearwardly to the rear portion of the reflector, said redirecting reflector having a forwardly extending base flange lying on and conforming to the inner face of the body, a saddle on which the body is mounted and means for securing the redirecting reflector to the body including a fastening member extending through said flange and into the saddle.

1,815,752. PROTECTIVE APPARATUS. ROLF WIDERÖE and OTTO MAYR, Karlshorst, Germany, assignors to General Electric Company, a Corporation of New York. Filed Mar. 22, 1930, Serial No. 438,198, and in Germany Mar. 28, 1929. 8 Claims. (Cl. 175—294.)

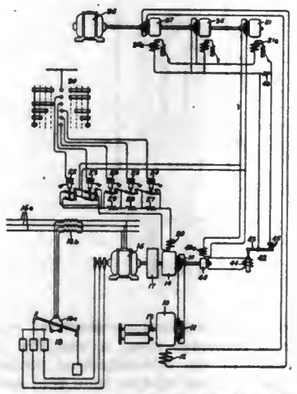


1. A relay including a movable member, cooperating means for exerting opposing effects on said member to prevent the movement thereof until a predetermined relation exists between said effects, means for varying the effect of one of said cooperating means to produce the predetermined relation between said effects whereby to cause movement of the member and means for delaying the variation in the effect of said one of said means.

1,815,753. ANTIKNOCK COMPOUNDS. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Nov. 8, 1924. Serial No. 748,721. 6 Claims. (Cl. 44—9.)

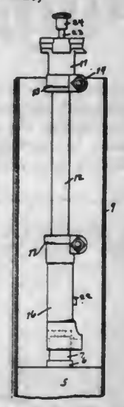
1. A concentrated anti-knock composition for addition in relatively small proportions to gasoline and like motor fuels comprising as its principal constituents tetraethyl lead, an ethylene compound containing halogen atoms at least one of which is a bromine atom, and an additional miscible diluent liquid having an internal pressure between 0.90 and 1.08.

1,815,754. SYSTEM OF ELECTRIC CONTROL. HARRY A. WINNE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 27, 1928. Serial No. 315,508. 15 Claims. (Cl. 172—239.)



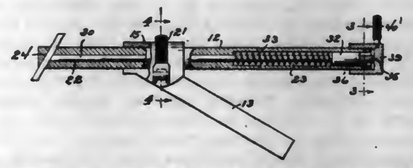
1. The combination with an electrical generator, of an exciter driven at a constant speed for energizing the field winding of said generator, a pilot generator operably associated with said generator and means dependent upon a condition of operation of said pilot generator for regulating said exciter so as to maintain a substantially constant generator voltage.

1,815,755. WRENCH. MCKINLEY ARMSTRONG, San Pedro, Calif. Filed Dec. 29, 1926. Serial No. 157,847. 1 Claim. (Cl. 7—1.)



In a wrench of the character described having a foot piece, said foot piece having a recess formed therein, said recess being in axial alignment with the vertical axis of said tool, means for rotating said tool about the vertical axis, a second recess formed in said foot piece, said second mentioned recess being offset with respect to the vertical axis of said tool, and a pin positioned in said second mentioned recess, said pin being horizontally disposed with relation to the vertical axis of said tool.

1,815,756. BORING TOOL. JAMES ROY AULENBACK, Worcester, Mass. Filed May 18, 1928. Serial No. 278,821. 1 Claim. (Cl. 29—99.)

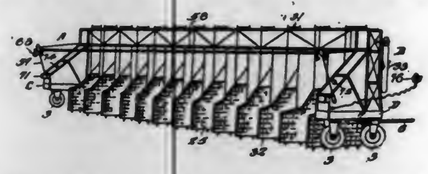


A boring tool comprising a bar adjustably secured to a holder and having a tool receiving slot at one end and a bore extending from the slot to the other end thereof and having a portion of the bore enlarged, a tool holding rod in said bore and engaging the tool in said slot, a notched head on the rod within the enlarged portion of the bore, a spring on the rod between one end of the enlarged bore and the head to normally urge the rod away from the tool, an adjustable cap threaded to the bar and closing one end of the bore, said bar having the last named end provided with slots, a block engaged by the cap and engaging in the notched head and slots of the bar, a set bolt carried by the bar and engaging the block to allow limited movement of the latter and covered by the cap, and a handle for said cap.

1,815,757. STARTING MACHINE. AUGUST T. J. BAHR, Kansas City, Mo., assignor to Bahr Starting Gate Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 13, 1930. Serial No. 420,593. 5 Claims. (Cl. 119—15.5.)

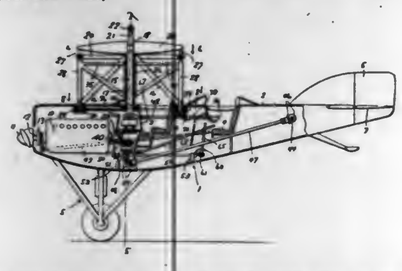
1. In a portable starting machine, the combination of a vertically movable stall-structure including separable par-

titions, operating means for bodily moving the stall-structure relatively to the machine whereby the weight of the machine is borne by the partitions, and detachable means co-acting with the operating means for retaining the parti-



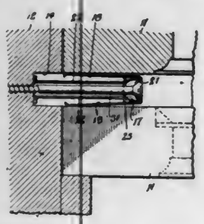
tions against movement relatively to each other in the stall-structure, whereby when said detachable means are released from the operating means the separable partitions may be relatively adjusted in vertical planes to conform to the contour of the surface of a track.

1,815,758. AIRCRAFT. FRANCIS A. BOWLING, Gettysburg, Pa. Filed Oct. 17, 1930. Serial No. 489,449. 2 Claims. (Cl. 244—15.)



1. An aircraft of the character described including a fuselage having an engine mounted therein, a vertical rotary shaft extending outwardly from the fuselage, horizontally disposed wing sections supported for rocking movement on the vertical shaft, means for operatively coupling the vertical shaft to the engine for actuation by said engine, and manually operable means for simultaneously rocking the wing sections in opposite directions, said means comprising an annulus mounted for vertical movement on the fuselage, yokes depending from the forward and rearward sides of the inner ends of the wing sections and slidably connected to the annulus for traveling therearound, internally threaded sprocket wheels rotatably mounted on the fuselage, an endless sprocket chain operatively connecting the sprocket wheels together for rotation in unison, screw shafts depending from the annulus and threaded through the sprocket wheels, and a drive shaft operatively connecting with one of the sprocket wheels for actuating said one sprocket wheel.

1,815,759. EXPANSIBLE PARTING STRIP. PHILIP J. BUEHLER, Hokah, Minn. Filed May 14, 1930. Serial No. 452,472. 11 Claims. (Cl. 20—69.)



1. The combination with a window frame and sashes arranged for movement in said frame, of a parting strip secured to the frame between the sashes, said strip having flexible portions, flexible strips suitably united adjacent said flexible portions, and means to exert pressure on said strips to cause them to exert pressure on said flexible portions to maintain said flexible portions under tension to frictionally engage the sides of said sashes.

1,815,760. FLEXIBLE CLUTCH PLATE. JOHN L. BURNS, Syracuse, N. Y., assignor, by mesne assignments, to Franklin Development Corporation, Syracuse, N. Y., a Corporation of New York. Filed Jan. 24, 1929. Serial No. 334,830. 8 Claims. (Cl. 192—68.)

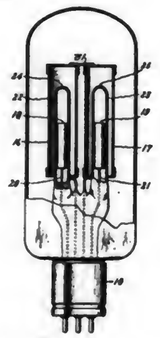


1. A friction plate for clutches comprising a hub, an outer annular friction plate formed with a series of openings around its inner edge, an inner annular flexible plate secured at its inner edge to the hub and having its outer margin lapping the inner margin of the outer plate, bushings of yielding material mounted in the openings of the outer plate and means for securing the plates together comprising fastening members extending through the outer margin of the inner plate and axially through the bushings, whereby the torque is transmitted from one plate to the other through the yielding bushings.

1,815,761. TREATMENT OF VEGETABLE FIBERS OF OSMOTIC DIAPHRAGMS. LEONARDO CERINI, Castellanza, Italy. Filed Aug. 23, 1929, Serial No. 388,039, and in Germany Oct. 31, 1928. 4 Claims. (Cl. 23—252.)

1. A process for the treatment of cotton or other vegetable fabrics which are used in the purification by dialysis of caustic soda and like solutions as osmotic diaphragms, which comprises subjecting the fabric in its natural state to the action of magnesium salt solution in order to transform the fibers into corresponding hydrates of cellulose of the desired grade.

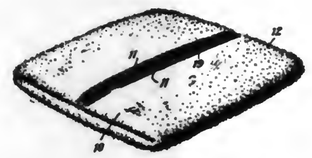
1,815,762. ELECTRIC DISCHARGE DEVICE. ERNEST E. CHARLTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 17, 1924. Serial No. 726,638. 8 Claims. (Cl. 250—27.5.)



1. An electric discharge device comprising a container terminating in a reentrant stem, a plurality of anodes therein, a cathode of the self-sustaining discharge type having a materially larger surface than said anodes, said cathode constituting a shield between said anodes and being closely adjacent thereto, all of said electrodes being

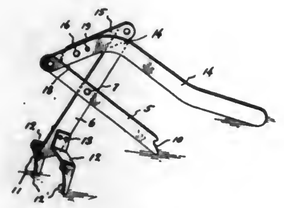
supported solely from said stem and an ionizable gas in said container having at the operating temperature of said device a pressure sufficiently high to conduct an ionization current between said electrodes.

1,815,763. POWDER PUFF AND METHOD OF MANUFACTURING THE SAME. JOSEPH J. COSIN, Newark, N. J. Filed July 23, 1928. Serial No. 294,736. 12 Claims. (Cl. 132—785.)



12. A powder puff including a body formed of a single length of material having the opposite end portions thereof directed inwardly disposed in the same plane with each other and lying parallel to the medial remaining portion, with the side edges of said portions folded laterally inward to a superimposed relation and means joining said inwardly folded superimposed side edges to provide walls of said body, one of which is provided with a transverse slit defined by the unconnected end edges of said end portions; a filler; and a lining within said body, the latter being interposed between the filler and the slitted wall of the body, said lining being of greater length than the finished puff body, providing reversely directed ends of said lining for embracing the ends of the filler.

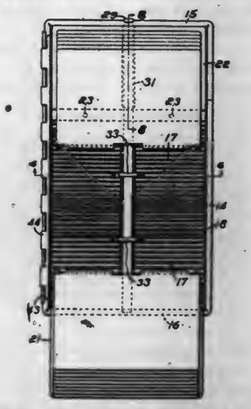
1,815,764. TIRE SPREADER. JOSEPH A. EDELMANN, Union, N. J. Filed Dec. 20, 1930. Serial No. 503,811. 1 Claim. (Cl. 152—27.)



In a tire spreader, the combination of a pair of arms centrally pivoted together and having jaws at one end thereof for engaging the inner circumferential edges of a tire, an operating lever pivotally secured to the opposite end of one of said arms and a link pivotally secured to the opposite end of the other arm and also pivotally secured to said operating lever, and an extension portion integral with one end of said link and adapted to engage the side of one of said arms when the tire engaging ends of said arms are spread apart.

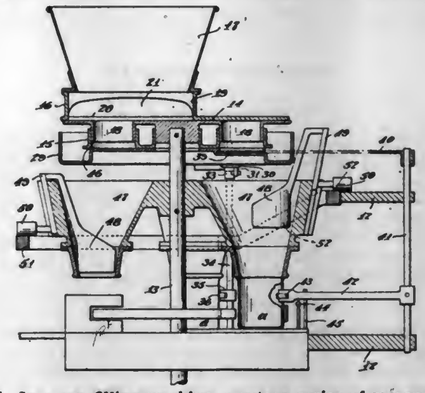
1,815,765. PAPER FILE. RAYMOND C. FINCH, Jamestown, N. Y., assignor to Postindex Company, Inc., Jamestown, N. Y., a Corporation of Massachusetts. Filed Jan. 9, 1930. Serial No. 419,572. 14 Claims. (Cl. 129—16.)

8. In a paper file, the combination of a support having lateral guides, a series of sheets, a series of sheet-carriers received by said guides, each sheet being interlocked with its associated sheet-carrier and incapable of being removed



therefrom while such sheet carrier remains received by said guides, and sheet carrier-locking means between said guides and normally locking said sheet-carriers to said support.

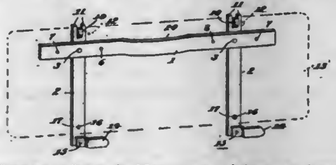
1,815,766. CAN FILLING MACHINE. CAROL FLOYD, Orlando, Fla., assignor to Dr. P. Phillips Company, Orlando, Fla., a Corporation of Florida. Filed June 18, 1930. Serial No. 461,900. 5 Claims. (Cl. 226—100.)



1. In a can filling machine, a rotary series of measuring chambers, a shaker above the chambers, said shaker having an opening, and a knife traversing said opening.

4. In a can filling machine, a rotary series of measuring chambers, a stationary juice receiver below said chambers and having its entire marginal portion lower than the central portion, said lower marginal portion providing an annular trough, crevices being provided to permit the passage of juice from the said chambers into the said annular trough.

1,815,767. AUTOMOBILE PLATE HOLDER. LEON H. FUSMER, Canajoharie, N. Y. Filed Nov. 26, 1929. Serial No. 409,905. 5 Claims. (Cl. 40—125.)



1. A license plate holder comprising a longitudinal member, transverse members secured to said longitudinal

member adjacent the ends thereof, fixed lugs extending upwardly and outwardly from the said transverse members adjacent the upper ends thereof for engaging corresponding slots in said license plates, and clamps pivotally mounted on the said transverse members adjacent the lower ends thereof, for releasably but securely clamping the plate in place after the engagement of its slots with the said fixed lugs.

1,815,768. ELECTROLYTE. ALEXANDER GEORGIEV, Brooklyn, N. Y., assignor to Aerovox Wireless Corporation, a Corporation of New York. Filed Dec. 9, 1930. Serial No. 501,057. 18 Claims. (Cl. 175—315.)

5. As an electrolyte for an electrolytic cell, a liquid including a substantial proportion of an alkali salt of glyceryl borate having admixed therewith sufficient neutral thinning liquid for viscosity when at a temperature of 200 degrees F. of between 3 and 7 as compared with the viscosity of water at 60 degrees F.

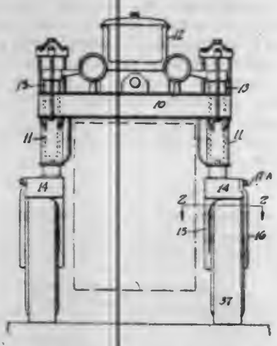
8. The method of preparing an electrolyte for electrolytic cells, which comprises admixing alkali metal salt having a boron acid radical with a polyhydroxy alcohol and boiling until the free water and some of the water split off by the reaction is vaporized, with a resultant mixture of glyceryl borate with an alkali metal salt of glyceryl borate.

1,815,769. SHADE APPARATUS. IRVING GOLDBURG, Suffern, N. Y. Filed May 21, 1930. Serial No. 454,359. 3 Claims. (Cl. 156—25.)



1. The combination, with a shade roller, of a fastener permanently anchored to the roller for detachably attaching a shade, such fastener comprising a body outstanding from the roller, a prong extending from the body into the material of the roller and anchored therein and having means of resisting withdrawal therefrom, and a prong exposed beyond the roller and located to removably overhang a shade engaging the outstanding body.

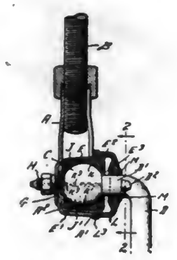
1,815,770. FORK FOR MOTOR VEHICLES. GUSTAV A. GRAS, Portland, Oreg., assignor to Willamette-Ersted Company, Portland, Oreg. Filed Dec. 26, 1929. Serial No. 416,400. 7 Claims. (Cl. 280—96.1.)



1. The combination of a straddle type of hoist with a forked steering spindle, a pneumatic tired wheel mounted in said fork, and means for removing one side of said fork without releasing said wheel.

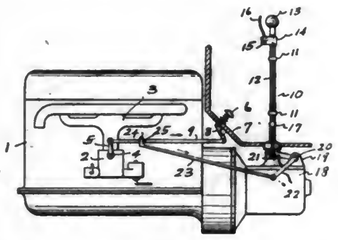
6. A fork for steering spindles constituting an upright spindle member, a mud guard mounted at the bottom of said steering spindle, an inner forked arm forming a part of said mud guard, an outer forked arm removably attached to said mud guard, the lower ends of said forked arms constituting supports for a vehicle axle, and a vehicle axle permanently secured to the inner forked arm and secured to the outer forked arm by means of a tapered connection.

1,815,771. BALL AND SOCKET CONNECTION. FRANK L. GRANT, Cleveland, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 31, 1928. Serial No. 329,384. 5 Claims. (Cl. 287—90.)



1. A dust cap for a ball-and-socket joint having a housing provided with an opening, a mounting on said housing, and an arm extending through said opening and having a ball in said mounting, the said cap comprising a body of deformable material having one end provided with a bore and its other end adapted to enclose said opening, and a bushing in said bore adapted to surround the portion of said arm adjacent to said housing.

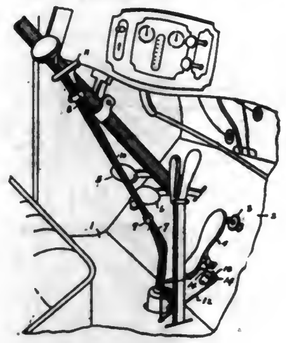
1,815,772. MOTOR VEHICLE ATTACHMENT. JOSEPH H. GRAY, Houston, Tex., assignor of one-fourth to E. Eichenberg, Houston, Tex. Filed Dec. 15, 1927. Serial No. 240,210. 5 Claims. (Cl. 74—107.)



3. The combination with a motor vehicle having a motor, a carbureter, a freely movable gear shifting rod and a pedal controlled device operatively connected with the carbureter controlling valve, of a manually operable rod mounted on said gear shifting rod, and means including a universal joint for operably connecting said rod with said carbureter valve, whereby the carbureter valve may be opened by the hand operating the gear shifting rod.

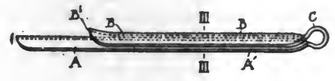
1,815,773. MOTOR VEHICLE ATTACHMENT. JOSEPH H. GRAY, Houston, Tex., assignor of one-half to Joseph C. Hurley. Filed May 4, 1929. Serial No. 360,414. 4 Claims. (Cl. 74—107.)

4. In a motor vehicle having a fuel feed controlling device and a gear shifting lever, a pivoted foot lever associated with and overlying said controlling device and through which the same may be operated, a manually operable rod on said shifting lever and operative connec-



tions between said rod and foot lever, whereby the latter may be operated from the rod to operate said feed controlling device.

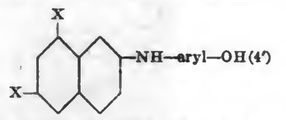
1,815,774. CLIP FOR HOLDING PAPERS TOGETHER. WILLIAM HENRY HEARD, Bideford, England. Filed Mar. 18, 1930, Serial No. 436,840, and in Great Britain Apr. 3, 1929. 1 Claim. (Cl. 24—259.)



A clip of the character described, comprising a strip of resilient material folded upon itself between its ends into a pair of leg portions, each of said leg portions being bent into V-shape on a line extending longitudinally thereof with the parts of one leg portion on opposite sides of said line closely overlying the corresponding parts of the other leg portion to grip a plurality of sheets of folded material therebetween, the V-shape bend of one of said leg portions being sharper than the V-shape bend of the other leg portion to the extent that a two-point contact with said material on opposite sides of its fold line is accomplished.

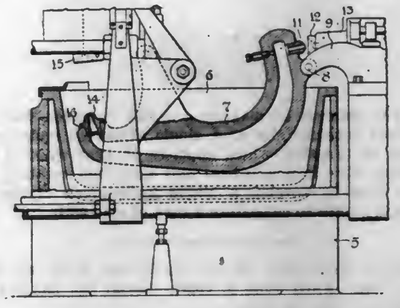
1,815,775. 2-(4'-HYDROXY-ARYL-AMINO)-ARYL-AMINO-NAPHTHALENES. RICHARD HERZ, Frankfort-on-the-Main, and WILHELM HECHTENBERG, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 16, 1929, Serial No. 386,481, and in Germany Sept. 13, 1928. 3 Claims. (Cl. 260—128.)

1. As new compounds 2-(4'-hydroxy-aryl-amino)-aryl-amino-naphthalenes of the general formula:



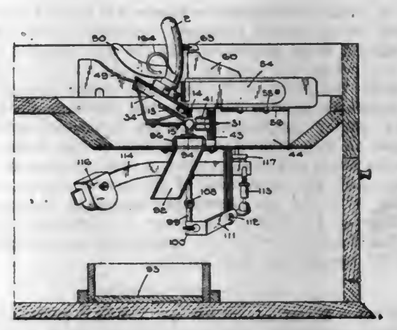
wherein one X means hydrogen, the other X an arylamino-group and wherein both aryl-residues are of the benzene series and may contain further substituents, which compounds are crystalline substances, having a definite melting point, being soluble in hot alcohol and capable of being transformed into blue compounds by means of oxidizing agents.

1,815,776. DIE CASTING MACHINE. ALVIN SIMEON KIDD, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed May 27, 1929. Serial No. 366,447. 14 Claims. (Cl. 22—69.)



1. A metal-delivering pressure chamber for die casting machines, said pressure chamber having a bore leading to a metal discharge port and a constriction in said bore formed to effect an abrupt contraction and an abrupt expansion of the flow path of the metal.

1,815,777. GRAMOPHONE. GEORGE BASIL KING, Edgbaston, Birmingham, England. Filed Apr. 8, 1929, Serial No. 353,542, and in Great Britain Apr. 17, 1928. 17 Claims. (Cl. 274—45.)



1. In a gramophone the combination of an arm having a reproducer, a stylus bar, and a quick release needle gripper, the reproducer being mounted for swinging movement to the side of the turntable, and means whereby such swinging movement of the reproducer produces in succession a series of operations including the release of the needle gripper, the actuation of a supporting table beneath the gripper and the feeding of a fresh needle into the gripper, and means actuated by the return movement of the reproducer for producing a different sequence of operations.

1,815,778. ART OF COMPOUNDING RUBBER. ANSEL M. KINNEY, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed May 6, 1926. Serial No. 107,286. 7 Claims. (Cl. 106—23.)

2. A rubber compound comprising rubber, vulcanizing constituents, and preferentially oil soluble naphthenic acids derived from mineral oils.

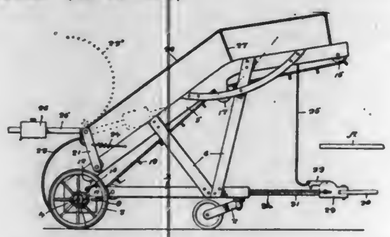
3. A rubber compound comprising rubber, vulcanizing constituents, and preferentially oil soluble naphthenic acid in the proportion of 0.5 to 5 parts per 100 parts of rubber in the compound.

1,815,779. COILED FILAMENT AND PROCESS OF MAKING IT. FRITZ KOREF and KURT MOERS, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed June 1, 1922, Serial No. 565,231, and in Germany July 13, 1921. Renewed Mar. 23, 1929. 7 Claims. (Cl. 176—132.)



1. The process of making a coiled tungsten filament composed substantially of a single elongated undistorted crystal of tungsten which consists in first winding the tungsten wire into a helical coil and then treating the coiled wire to develop a single undistorted crystal of sufficient length to constitute a turn of said coil.

1,815,780. LOADER. FRANK H. KRAUS, Wisconsin Rapids, Wis. Filed June 8, 1928. Serial No. 283,904. 2 Claims. (Cl. 56—359.)



1. A loader comprising a frame, an axle at the rear of the frame, wheels rotatably mounted on the ends of the axle, a drum connected with the axle, ratchet means for connecting the ends of the drums with the wheels, sprockets connected with the drum, chains passing over the sprockets, guiding means for the chains on the frame, strips having projections thereon connected with the chains, an arm pivoted to each side of the frame adjacent the lower end of the loader, a rake bar pivotally connected with the upper ends of the arms, rake teeth connected with the bar, forwardly extending springs connecting the arms with the frame, a rearwardly extending bar connected with the rake bar and a weight adjustably mounted on said bar.

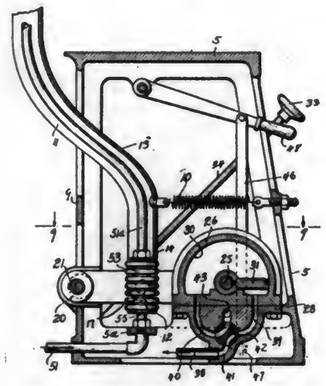
1,815,781. MANUFACTURE OF FINELY DIVIDED ACTIVE CARBON. GERHARD KRÖNER, Cologne-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 22, 1929, Serial No. 334,371, and in Germany Jan. 26, 1928. 6 Claims. (Cl. 252—3.)

1. In the process of preparing finely divided active carbon, the step which comprises decomposing carbon monoxide by means of a catalyst, composed of at least one metal of the eighth group of the periodic system in a finely divided and carefully reduced form and at least one difficultly reducible metal oxide of the group consisting of magnesium oxide, aluminum oxide and calcium oxide, at a temperature between about 250° and 450° C.

1,815,782. NEW AZO DYESTUFFS AND METAL COMPOUNDS THEREOF. HANS KRZIKALLA and HANS KAEMMERER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 14, 1929, Serial No. 385,962, and in Germany Aug. 27, 1928. 8 Claims. (Cl. 260—12.)

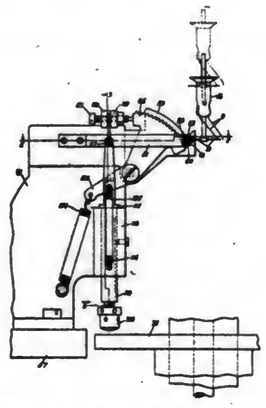
1. As new articles of manufacture, the azo dyestuffs obtainable by coupling a diazotized aminosulphosalicylic acid with a phenol substituted in the para-position to the hydroxyl group.

1,815,783. GARMENT OR IRONING PRESS. JAMES CAMROD LEDBETTER, New York, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 8, 1928. Serial No. 304,752. 21 Claims. (Cl. 68—9.)



5. In a press, cooperating press jaws and a frame to support the jaws, operating means to open and close the press and produce jaw compression, swingable jaw carrying means in the form of an arm included in the operating means, one end of the arm being attached to the jaw and the other end being pivoted in the frame, a corrugated flexible tubular bellows-like fluid conduit having one end thereof fixed to the arm and the other end thereof fixed to the frame so that the fluid conduit passes through the axis of the arm pivot whereby the corrugated conduit flexes between its fixed ends during motion of the arm, and a fluid connection extending from that end of the corrugated conduit which is fixed on the arm to that jaw which is attached to the arm.

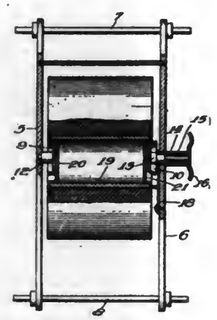
1,815,784. WINDING HEAD FOR FILAMENT MOUNTING MACHINES. WILLY LEDIG, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 11, 1928, Serial No. 269,199, and in Germany May 3, 1927. 12 Claims. (Cl. 140—104.)



1. In a machine of the character described, an anchor wire bending head comprising a tubular spindle having a longitudinal slot, a loop bender rotatable on said spindle and having a corresponding longitudinal slot, said bender having a driving pinion for rotating it and a radial ratchet tooth groove on its end face, a leaf spring fixed at one end with its free end overlapping the end face of said bender,

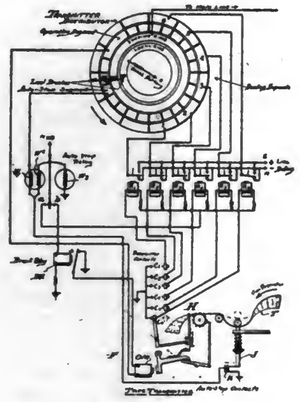
an actuating slide mounted to reciprocate vertically and transversely of said spring, a cam on the upper end of said slide to engage said spring and press its free end against the end face of said loop bender, a pivoted gear in mesh with the pinion on said loop bender, and a lost motion connection between said slide and said gear to actuate said gear from said slide after said cam has engaged said spring.

1,815,785. ROLL STATIONERY SUPPORT. ROBERT C. LEIMBERGER, Cincinnati, Ohio, assignor, by mesne assignments, to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed June 8, 1928. Serial No. 283,867. 3 Claims. (Cl. 242—55.2.)



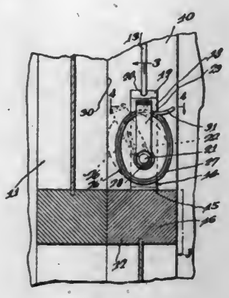
1. In a device of the character set forth, a frame, a pair of opposed bearings, one of said bearings being of relatively small diameter, and a roll having at its ends relatively large diameter bearings suspended on said first mentioned bearings and being axially shiftable thereon, one of said frame bearings being provided with an inclined bearing surface serving to hold said roll in alinement.

1,815,786. PRINTING TELEGRAPH CONTROL CIRCUIT. JAMES W. LONG, North Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1928. Serial No. 329,639. 10 Claims. (Cl. 178—17.)



1. In a printing telegraph system, means for storing signal combinations, a transmitter including a distributor, means for feeding said storage means to said transmitter, limit contacts operated by said transmitter when the transmitting speed exceeds the feeding speed, and a relay for stopping the transmitter controlled jointly by said limit contacts and said distributor.

1,815,787. WINDOW LATCH. HENRY LORENZEN, Crete, Ill. Filed June 23, 1928. Serial No. 287,707. 2 Claims. (Cl. 292—242.)



1. In a device of the character stated, a plate including an upwardly extending portion, a pin mounted in said upwardly extending portion, a cam eccentrically mounted for floating movement on said pin, a spring disposed around said pin, said spring having one end thereof connected to said upwardly extending portion and the opposite end thereof connected to said cam, said cam having a slot formed in one face thereof providing a shoulder, and a handle carried by said pin including a portion adapted to travel in said slot whereby said handle may be moved to engage said shoulder to rotate said cam against the action of said spring.

1,815,788. FOLDING BOX. MELLE E. LOWMAN, Syracuse, N. Y., assignor to Lowman Folding Box Corporation, Syracuse, N. Y., a Corporation of New York. Filed Feb. 3, 1930. Serial No. 425,601. 2 Claims. (Cl 229—34.)

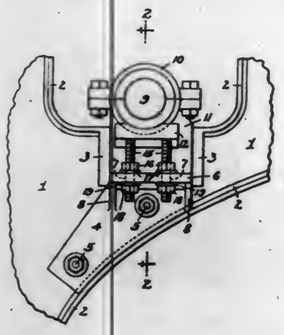


1. A paper box consisting of a unitary blank including bottom, side and end sections, supplemental side and end sections to fold down and over the inner faces of the side and end sections, a bottom covering section formed as an extension of one supplemental side section and having beveled sided notches extending across its ends, and tongues on the ends of the supplemental end sections complemental to and adapted to fill and fit said notches and lie in the same plane with the bottom covering section.

1,815,789. LOOM CAM SHAFT BEARING LIFTER AND SUPPORTER. HOPSON P. LOVETT, Columbia, S. C. Filed Jan. 29, 1930. Serial No. 424,888. 1 Claim. (Cl. 308—59.)

A device of the character set forth including a loom frame and bearings for the cam shaft of a loom, spaced guides on the frame, a base secured to the frame below the guides and extending between the latter and laterally offset to provide attaching portions, bearing supporting heads having recesses and snugly fitting portions of the

bearings, threaded stems on the heads and extending through the attaching portions of the bases, and nuts

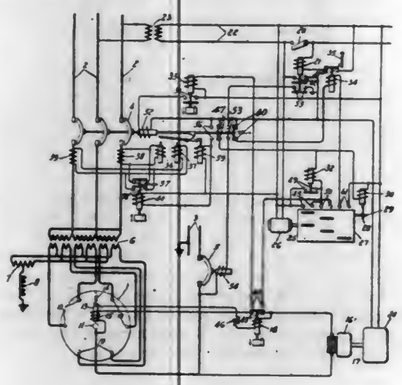


threaded on the stems and engaging opposite faces of the attaching portions of the bases to permit adjustment of the bearings relative to the bases.

1,815,790. MANUFACTURE OF FINELY SUBDIVIDED METALS. KARL MARX, HERMANN BEHNCKE, and HANS ZOBEL, Dessau in Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 14, 1928, Serial No. 270,149, and in Germany July 11, 1927. 7 Claims. (Cl. 23—233.)

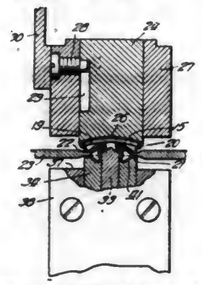
1. A process of preparing metals suitable to act as catalysts, which process comprises reducing with hydrogen a reducible compound of such metals in the presence of a finely divided metal of the group consisting of nickel and copper as a catalyst at a temperature not considerably exceeding 100° C.

1,815,791. AUTOMATIC CONTROL EQUIPMENT. PAUL MATHEWS, Jr., Bedford, England, assignor to General Electric Company, a Corporation of New York. Filed Sept. 17, 1929. Serial No. 393,297. 8 Claims. (Cl. 175—363.)



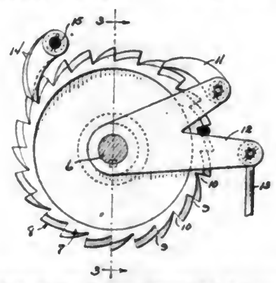
1. In combination, an electric circuit, a mercury arc rectifier, arc establishing means for said rectifier, a switch for connecting said rectifier to said circuit, a timing device, a control device for initiating the operation of said arc establishing means and said timing device, means for effecting the operation of said control device, means controlled by said timing device and said arc establishing means for effecting the closing of said switch if there is an arc in said rectifier at the expiration of a predetermined time interval after the operation of said control device is effected, and means controlled by said timing device for rendering said control device unresponsive to the operation of the means for effecting the operation thereof if said arc establishing means fails to establish an arc within a predetermined time after the operation of said control device is effected.

1,815,792. ATTACHMENT OF FASTENERS. CHARLES T. MCCUE, Detroit, Mich., assignor to Universal Button Fastening & Button Company, Detroit, Mich., a Corporation of Michigan. Filed July 20, 1928. Serial No. 294,084. 5 Claims. (Cl. 218—6.)



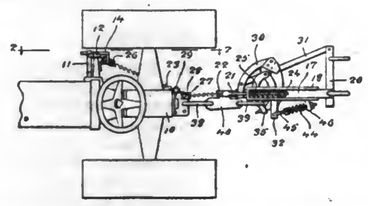
1. In a machine for attaching snap fastener socket elements the combination comprising a lower die having a central upsetting tool and a sleeve surrounding said tool and movable relative thereto, said tool being of a diameter substantially equal to the internal diameter of the mouth of the socket element, said sleeve having its upper end shaped to conform to the face of a socket element, means for limiting the relative movement of said tool and sleeve so that during the upsetting operation the tool projects beyond the sleeve a distance corresponding with the depth of the socket and cooperates with the sleeve to hold the socket element against distortion during the attaching operation, a holder for carrying said tool and sleeve, and means for moving said tool and sleeve to a position substantially flush with the upper end of said support to receive a socket element.

1,815,793. FABRIC TAKE-UP FOR LOOMS. EDWARD MCKNIGHT, Amsterdam, N. Y. Filed Oct. 14, 1929. Serial No. 399,603. 1 Claim. (Cl. 139—309.)



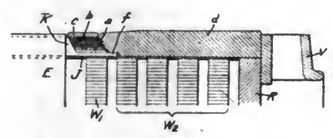
A fabric take-up for looms including a loom frame carrying a roll shaft and a power ratchet wheel therefor and having teeth engaged by a power pawl, an extension on the hub of the ratchet wheel, an idle ratchet wheel journalled on the extension and of a diameter larger than the diameter of the power ratchet wheel, deep and shallow teeth on the idle ratchet wheel with the pawl in engagement therewith and the deep teeth thereof being of the same depth as the depth of the teeth of the pawl ratchet wheel to permit said pawl to rotate said power ratchet wheel during certain movements thereof and to be disengaged therefrom by engaging the shallow teeth for imparting an intermittent movement to the roll shaft, and pawls pivoted to the frame and engaging the ratchet wheels to prevent reverse rotation thereof.

1,815,794. PLOW HITCH. CONDA MILLER, Woodbury, Pa. Filed Nov. 4, 1929. Serial No. 404,807. 3 Claims. (Cl. 180—14.5.)



1. A draft connection of the character described including a draft member, a tractor control element, a housing connected with the draft member, a frame like member projecting laterally from the housing, a lever pivoted on the frame and formed with a notch, a second lever pivoted adjacent one end and also having pivotal connection with the first mentioned lever, a dog pivotally supported by the second mentioned lever, a slide mounted on the housing, a clevis carried by the slide and connected with the tractor, and adapted to be engaged by said dog, said dog normally engaging the notch in the first mentioned lever for holding the tractor and draft member against relative movement, and automatically released therefrom when the draft load becomes excessive to effect a separation of the tractor from said housing, means providing a connection between the housing and said control element of the tractor to operate the latter upon continued movement of the tractor with relation to said draft member, and means for holding said control element against retrograde movement in its given position.

1,815,795. TURBO-GENERATOR. ROBERT POHL, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Aug. 22, 1929, Serial No. 387,736, and in Germany Aug. 29, 1928. 5 Claims. (Cl. 171—252.)



1. A rotor for dynamo-electric machines including a slotted core structure having windings thereon, wedges in the slots for retaining said windings therein, a conductor secured about the ends of said wedges and cooperating therewith to form a squirrel cage winding, reinforcing bands secured about said conductor for retaining the same in place, and a supporting ring arranged about the end turns of said winding.

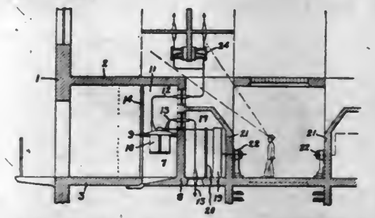
1,815,796. DESK AND WALL CLOCK CASE. STEBETT R. PREVOST, Elizabeth, N. J., assignor to Henry Klein and Company, Inc., Elmhurst, N. Y., a Corporation of New York. Filed Nov. 2, 1929. Serial No. 404,418. 5 Claims. (Cl. 58—56.)

1. A decorative upstanding desk or wall article including a fixed bottom base portion, and at its rear adapted to rest in vertical position against a wall; a separable main base to support said article in upstanding vertical position against easy tilting, with said bottom base portion seated down on the intermediate surface of the main base top, said main base having greater top and bottom areas than the bottom area of said bottom base portion and projecting horizontally forwardly and rearwardly beyond said bottom base portion; and detachable approximately concealed detachable coupling means between said base portion and said main base for separably locking said



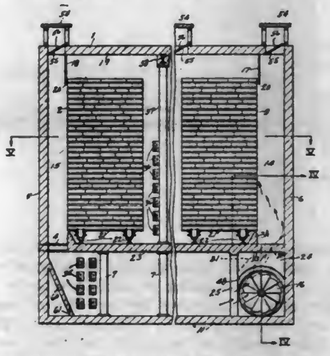
main base to said base portion, whereby said main base can be manually detached from said article when the article is to be supported vertically against a wall.

1,815,797. SWITCHING STATION. HEINRICH PROBST, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 8, 1927, Serial No. 204,888, and in Germany Sept. 16, 1926. 3 Claims. (Cl. 175—298.)



1. A switching station comprising a building structure having walls forming a plurality of switch cells closed at their front sides, switches mounted in said cells, said structure having walls forming separate enclosures in front of the switch cells, switch-operating mechanism in said enclosure, and control apparatus therefor mounted on the front faces of said enclosures.

1,815,798. DRY KILN. JOSEPH A. RANKIN, Samoa, Calif., assignor to Moore Dry Kiln Company of Oregon, a Corporation of Oregon. Filed July 28, 1927. Serial No. 208,946. 22 Claims. (Cl. 34—46.)



1. In a dry kiln, the combination therewith of heating means therefor, and an internal-fan system therein, with

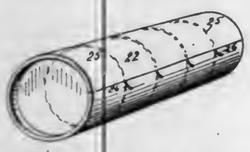
fan duct extensions beyond the end walls of the kiln at the opposite ends of said fan system, respectively, and in communication with said fan system.

1,815,799. PISTON. ARTHUR B. RAYMOND, Montclair, N. J. Filed Oct. 17, 1928. Serial No. 313,064. 2 Claims. (Cl. 123—73.)



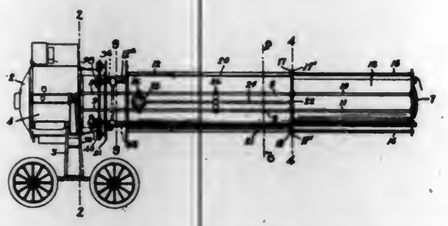
1. A piston, a dome-shaped head therefor, and a V-shaped recess in said head having its apex coincident with the apex of the head and terminating in a deflecting face at the apex of the recess for turning the fuel charge along the axial line of the piston, whereby a fresh fuel charge is baffled and its velocity increased.

1,815,800. CONTAINER. WILLIAM R. RESPESS, St. George, N. Y., assignor to Mariner & Hoskins, Inc., Chicago, Ill., a Corporation of Illinois. Filed Sept. 25, 1928. Serial No. 308,268. 1 Claim. (Cl. 229—15.)



In a container the combination of a plurality of sections, the adjacent edges of said sections overlapping and connected to each other, the sections forming a tube, the edges of one section breaking joints with the edges of the section adjacent thereto, partitions inserted in said tube and at its ends to form compartments therein and severing strings connected to the inner faces of said sections and extending to the outer face of said tube.

1,815,801. LIGHT PROJECTOR. WALTER D'A. RYAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 17, 1928. Serial No. 247,431. 6 Claims. (Cl. 88—24.)

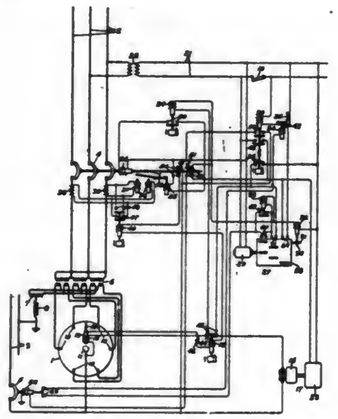


4. In a projector, the combination of a light source and a reflector, said source being located in proximity to and in advance of the focal point of said reflector whereby a beam of light may be projected by the reflector converging to a neck and diverging again, a lantern slide, a support for said slide located in proximity of the neck region of said beam, means for adjusting said support along the axis of the beam whereby the slide may be adjusted into position in the neck of said beam, a lens beyond said slide, a frame for supporting said lens, and means for adjusting the frame of said lens along the axis of the projector whereby the lens may be adjusted in turn along said axis with respect to a screen located at varying distances from the said slide.

1,815,802. PROCESS FOR DEHYDRATING VAPOR MIXTURES CONTAINING ACETIC ANHYDRIDE AND WATER. FRANZ SCHLEICHER, Wiesdorf-on-the-Rhine, GEORG SCHWAEBEL, Leverkusen-on-the-Rhine, and KURT BRIESEWITZ, Cologne-Deutz, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 26, 1928, Serial No. 249,762, and in Germany Feb. 11, 1927. 5 Claims. (Cl. 202—41.)

1. In the process for the dehydration of a vapor mixture containing acetic anhydride, acetic acid and water, the steps which comprise adding to the vapor mixture at least one organic solvent indifferent to acetic anhydride and having a boiling point of about that of water and removing the water together with said solvent by subjecting the vapor mixture to fractional distillation.

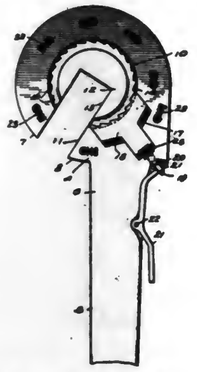
1,815,803. AUTOMATIC CONTROL EQUIPMENT. HAROLD T. SEELEY, Yeadon, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 19, 1929. Serial No. 387,019. 9 Claims. (Cl. 175—363.)



1. In combination, an electric circuit, a mercury arc rectifier, a switch for connecting said rectifier to said circuit, means for establishing an exciting arc in said rectifier, and means for effecting the closing of said switch immediately after the exciting arc is established in said rectifier and for effecting any subsequent reclosure of said switch while said exciting arc is established only after a relatively long time interval has elapsed after the opening of the switch.

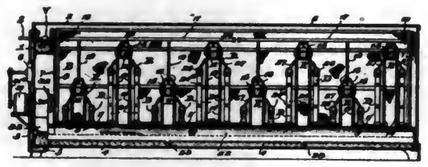
1,815,804. RATCHET WRENCH. ROBERT E. SIESS and DUCLISE J. LA BAUVE, Lake Charles, La. Filed June 14, 1930. Serial No. 461,169. 2 Claims. (Cl. 81—60.)

1. An open end ratchet wrench of the character described comprising a handle, a shank formed therewith, a hook-shaped jaw head formed with said shank and offset therefrom, said head having a mouth angularly disposed with relation to said handle and in close proximity thereto, said jaw head having a circular opening therein, a rotatable jaw mounted within said circular opening and having a work receiving notch normally registering with the mouth of said jaw head, ratchet teeth formed upon the periphery of said rotatable jaw, said head having a recess formed therein opening into the circular opening thereof, a relatively wide ratchet dog slidably mounted within the recess and held against lateral movement therein by



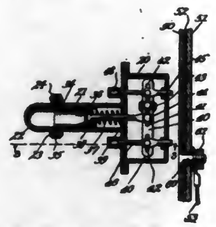
means of the walls of the recess, teeth formed with said ratchet dog and adapted to normally mesh with the ratchet teeth of said rotatable jaw, and manually operable means mounted on said shank and connected to said ratchet dog substantially as and for the purpose specified.

1,815,805. APPARATUS FOR CASING CURED LEAF TOBACCO. JAMES W. SMALL, Brooklyn, N. Y., and RAMON FERLES, Passaic, N. J. Filed Dec. 20, 1927. Serial No. 241,420. 10 Claims. (Cl. 131—55.)



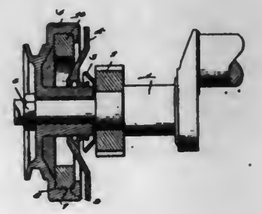
1. An apparatus for casing cured leaf tobacco including a closed receptacle, foraminous racks for supporting the hands of tobacco arranged within the receptacle, a water reservoir in the bottom of the receptacle, a member forming a manifold trunk line located at the bottom of the receptacle and underlying the said racks, said member cooperating with the water level in the reservoir to provide a passage whose bottom is formed by said water, a plurality of vertically disposed air distributing members arranged at the location of the racks and communicating with said conduit, and impelling means associated with said conduit.

1,815,806. PRESSURE SWITCH. ARTHUR C. SMITH, Alleyton, Tex., assignor of one-half to L. T. Everett, Alleyton, Tex. Filed Apr. 30, 1930. Serial No. 448,631. 7 Claims. (Cl. 200—58.)



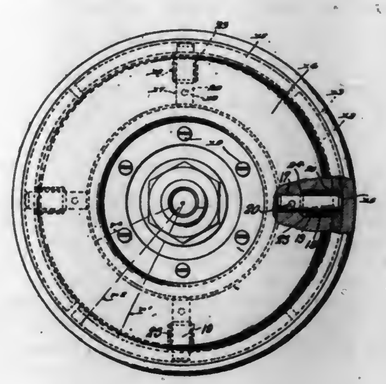
7. A fluid pressure switch for pneumatic tires comprising a housing directly communicating with the valve stem of the tire, a reciprocating rod mounted in said housing, a horizontally disposed flexible member responsive to the pressure in the tire for actuating said rod, yieldable means for normally maintaining said rod stationary, a horizontal lever transversely disposed relative to said rod, and provided with a series of longitudinally disposed slots, means loosely connecting said rod to one of the slots, means pivotally connecting said lever to the housing at a point between its connection to the rod and one end thereof, contact fingers normally extending parallel to said rod and on opposite sides thereof, means loosely connecting said contact fingers to complementary slots in said lever, and a fixed contact electrically connected to a signal device.

1,815,807. TORSIONAL VIBRATION DAMPER. ALEXANDER F. STAMM, Detroit, Mich., and FRIEDRICH K. KNOHL, Fort Wayne, Ind., assignors to Dee Stamm. Filed Nov. 21, 1929. Serial No. 408,900. 2 Claims. (Cl. 74—6.)



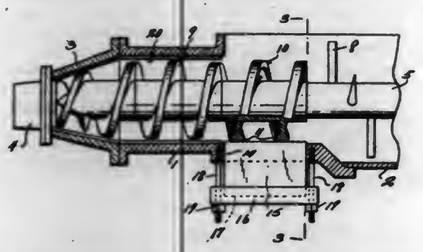
1. A torsional vibration damper for use on rotatable shafts comprising a body member integral with said shaft and having an annular track, a plurality of segmental weights freely movable within said track and resiliently interconnected, whereby to increase or decrease the pressure between the contacting surfaces of said weights and track in proportion to the velocity of rotation of said shaft.

1,815,808. VIBRATION DAMPER. ALEXANDER F. STAMM, Detroit, Mich. Filed Jan. 16, 1930. Serial No. 421,229. 3 Claims. (Cl. 74—6.)



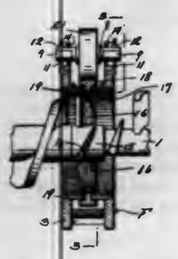
1. In a damper for use on shafts subjected to torsional vibrations, an annular frictional surface rotatable with said shaft and adapted to transmit torsional vibrations from said shaft, friction shoes engageable with said frictional surface, an annular ring for mounting said friction shoes, and means for coupling said shoes to said annular ring comprising radially extending pins engaging said shoes and said ring.

1,815,809. BRICK AND TILE MACHINE. ALEXIS PRESTON STEELE, Statesville, N. C. Filed July 3, 1928. Serial No. 290,222. 9 Claims. (Cl. 25—14.)



1. In combination with the shaft of a straight line combined brick and tile machine common to both the tub and barrel, a driving means, a flexible connection between said driving means and an end portion of the shaft, and supporting means engageable from below with the shaft between the pugging portion and the expressing portion of the shaft.

1,815,810. BRICK AND TILE MACHINE. ALEXIS PRESTON STEELE, Statesville, N. C. Filed Sept. 11, 1930. Serial No. 481,264. 8 Claims. (Cl. 259—3.)



1. In combination with a shaft of a brick and tile machine, a rim surrounding said shaft and disposed intermediate the ends thereof, spokes operatively connecting the rim and the shaft, said spokes constituting knives, and supporting means rotatably engaging the rim.

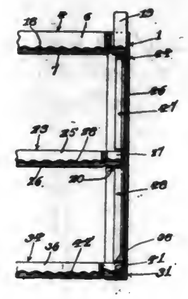
1,815,811. PROCESS FOR GAINING PURE TARFREE SULPHUR FROM USED GAS-PURIFYING MASS. KÁLMÁN SZOMBATHY, Kakospalota, Hungary, assignor of one-third to Paul Schmitz and one-third to Doktor Kornell Kell, Dortmund, Germany. Filed Jan. 21, 1928, Serial No. 248,575, and in Germany Jan. 22, 1927. 9 Claims. (Cl. 23—224.)

1. The process for recovering pure sulphur from spent gas-purifying material consisting in boiling the spent material with water and an excess of earth-alkali oxides to bring the sulphur into solution as an alkali polysulphide; filtering off the solution; treating the solution with acid gas for a sufficient time to decompose the polysulphide without formation of thiosulphates; and removing the sulphur by filtration.

1,815,812. GLASS. WILLIAM CHITTENDEN TAYLOR, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed May 11, 1926. Serial No. 108,415. 4 Claims. (Cl. 173—28.)

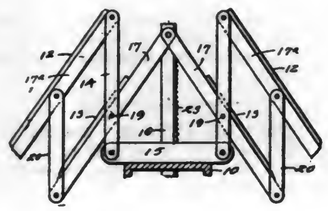
3. In a system carrying radio frequency currents, the combination with a part charged with such currents, of an insulator therefor composed of a glass containing approximately 80% of silica, 4% of alkalies and 13% of boric oxide, the alkalies being lithia, soda and potash.

1,815,813. METALLIC TRUCK BODY. SIMEON E. TRAVIS, Jr., Hattiesburg, Miss., assignor to The Weldmech Steel Products Co., a Corporation of Mississippi. Filed Feb. 21, 1930. Serial No. 430,383. 5 Claims. (Cl. 296—3.)



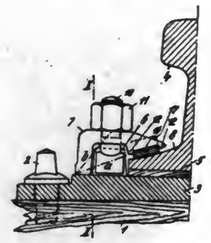
1. A truck body having spaced superposed decks, a set of corner rails, each of angle-shaped cross section to provide a side and an end leg disposed at right angles to each other and common to said decks, each deck including a pair of side and a pair of end rails, each of said side and end rails of angle-shaped cross section to provide a vertical leg and a horizontal leg extending inwardly from the lower end of the vertical leg, each of said side rails having each end terminal portion thereof offset to provide a vertical shoulder, said vertical shoulders opposing the edges of the side legs of the corner rails, the vertical legs of said offset portions opposing the inner faces of the side legs of the corner rails, the lower faces of the horizontal legs of said offset portions being positioned above the upper faces of the horizontal legs of the end rails, the said end rails being secured to said corner rails, said vertical shoulders being secured to the edges of the side legs of the corner rails, and the vertical legs of said offset portions being secured to the side legs of said corner rails.

1,815,814. AUXILIARY EXTENSIBLE WING FOR AIRPLANES. ELDON A. TURNER, Graniteville, Mass. Filed June 10, 1930. Serial No. 460,224. 2 Claims. (Cl. 244—12.)



1. In an airplane having a fuselage, auxiliary wings, each wing including two sections, the inner section of each wing being mounted on the fuselage for vertical movement, links pivotally connected to the inner ends of the outer sections and pivotally connected to the fuselage, said links being pivoted to the inner section intermediate its ends, links pivotally connected to the outer ends of the inner section and to the outer section, and manually controllable means whereby the inner ends of the inner sections may be vertically shifted to thereby contract or extend said wings.

1,815,815. RAIL FASTENING DEVICE. KARL VOSSLOH, Werdohl, Germany. Filed Aug. 1, 1930, Serial No. 472,427, and in Germany July 7, 1928. 4 Claims. (Cl. 238—349.)

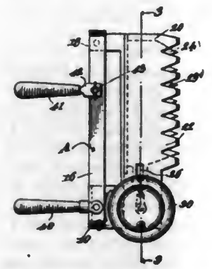


1. A rail fastening device comprising in combination a base plate supported by the tie, a clip fastened to the said base plate by means of a screw and resting upon a spring interposed between the free end of the clip and the base flange of the rail, said spring being provided outward of the clip with prolongations bent to form additional springs.

1,815,816. INSECTICIDE. HANS WESCHE and KARL BRODERSEN, Dessau in Anhalt, and WERNER EXT, Kiel-Kronshagen, Germany, assignors to Wintbrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed May 31, 1928, Serial No. 282,038, and in Germany Aug. 9, 1926. 6 Claims. (Cl. 167—22.)

1. As an insecticide a preparation containing as an active constituent an organic polythiocyanate.

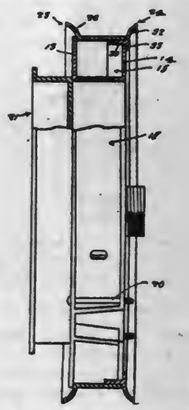
1,815,817. GRASS TRIMMER. LUTHER D. ALBERTSON, Corydon, Ind., assignor of one-fourth to John W. Davidson, one-fourth to Emmett Beanblossom, one-fourth to Albert Stover, one-sixteenth to George C. Simler, three thirty-seconds to Oliver W. Hottel, and three thirty-seconds to Cecil W. Miles, Corydon, Ind. Filed July 17, 1929. Serial No. 378,987. 3 Claims. (Cl. 30—11.)



1. A lawn and hedge trimmer comprising a rear wall and a side wall having a notch therein, a cutter guard carried by the lower edge of the rear wall, a brace bar carried by the upper edge of the rear and side walls and extending over in spaced relation to the cutter guard, means connecting the outer end of the brace bar to the cutter guard adjacent to the rear outer corner thereof, a cutter bar reciprocably mounted in said cutter guard, an electric motor fitted in said notch, a bracket connecting the motor to the side wall, means operatively connecting the motor with the cutter bar, a manipulating handle connected with the brace bar.

1,815,818. DEMOUNTABLE TIRE RIM. WILLIAM O. ALEXANDER, Pawhuska, Okla. Filed May 10, 1930. Serial No. 451,884. 2 Claims. (Cl. 301—11.)

1. In a structure of the class described, a wheel felly of general channel-shaped cross sectional configuration including an endless web portion and inboard and outboard flanges, the inboard flange being of a diameter greater than the outboard flange, pairs of circumferentially spaced



transversely extending ribs between the flanges defining transversely extending wedge-shaped receptacles, said receptacles opening at their outer ends through the outer flange.

1,815,819. DIPPER TOOTH. OSCAR W. ANDERSEN, Oak Park, Ill., assignor to Pettibone Mulliken Company, Chicago, Ill., a Corporation of New York. Filed June 14, 1928. Serial No. 285,894. 13 Claims. (Cl. 37—152.)

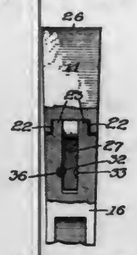


5. A dipper having a front portion, a tooth thereon, and means for securing said tooth to said front portion comprising a pin interlocked with said front portion and tooth and so disposed that the shearing stresses exerted against the pin, in digging, are in a direction lengthwise of the pin, the longitudinal axis of the pin inclining relative to a plane bisecting the tooth downwardly toward the front face of the tooth and substantially parallel with the plane in which the terminal face of the tooth extends following wear thereof.

1,815,820. DIPPER TOOTH. OSCAR W. ANDERSEN, Oak Park, Ill., assignor to Pettibone Mulliken Company, Chicago, Ill., a Corporation of New York. Filed Nov. 30, 1928. Serial No. 322,776. 1 Claim. (Cl. 37—142.)

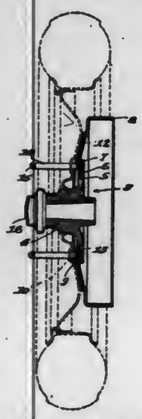
A dipper having a front portion containing a groove open at its opposite ends and having laterally spaced tongues at opposite sides of said groove, a tooth on said front portion having a web which extends into said groove,

a surface of said web and an opposing surface of one of said tongues having registering grooves extending cross-



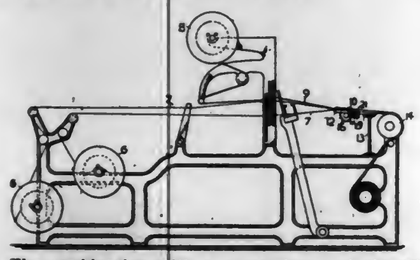
wise of said tooth and located substantially midway between the ends of said last-referred-to tongues and a pin extending lengthwise in said registering grooves.

1,815,821. WHEEL MOUNTING MEANS. EBLE K. BAKER, Chicago, Ill., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed May 5, 1927. Serial No. 188,922. 3 Claims. (Cl. 29—84.)



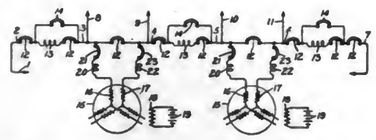
1. A device of the kind described comprising a rigid cylindrical body of a length greater than the axial depth of the body portion of the wheel to be mounted and approximating that of a wheel hub, one end of said body being exteriorly threaded and the other end of the said body being headless and devoid of sharp corners.

1,815,822. INDICATOR FOR CARPET LOOMS. CHARLES EDWARD BARRETT, Yonkers, N. Y., assignor to Alexander Smith & Sons Carpet Company, Yonkers, N. Y., a Corporation of New York. Filed Sept. 29, 1930. Serial No. 484,990. 2 Claims. (Cl. 139—39.)



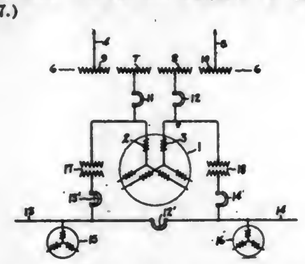
1. The combination with a carpet loom, of pile wires carried by the woven carpet, a toothed wheel in engagement with the projecting ends of the pile wires, and an indicator supported from the framework of the loom and driven from the toothed wheel.

1,815,823. SYSTEM OF ELECTRICAL DISTRIBUTION. THEOPHILUS F. BARTON, Upper Montclair, N. J., assignor to General Electric Company, a Corporation of New York. Filed May 9, 1928. Serial No. 276,469. 13 Claims. (Cl. 171—97.)



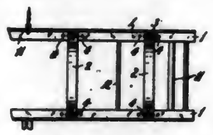
1. In combination, a plurality of distribution circuits, and a dynamo-electric machine having a plurality of separately insulated windings connected to different distribution circuits and arranged normally to supply electrical energy to the distribution circuit connected thereto, said separately insulated windings being so arranged as to permit an interchange of power between said distribution circuits.

1,815,824. ELECTRIC POWER SYSTEM. THEOPHILUS F. BARTON, Upper Montclair, N. J., assignor to General Electric Company, a Corporation of New York. Filed May 22, 1929. Serial No. 365,198. 5 Claims. (Cl. 171—97.)



5. In an electric power system, a main bus comprising a plurality of sections, an alternating current generator having two separately insulated windings connected respectively to different sections of said main bus, an auxiliary bus, auxiliary power consuming devices connected to said auxiliary bus, a second alternating current generator directly connected to said auxiliary bus, and a transformer for interconnecting said alternating current generators and having a winding connected to said second alternating current generator and two windings connected respectively to different windings of said first mentioned generator and arranged in inductive relation to said first mentioned transformer winding so that for a uniform distribution of load on said two separately insulated transformer windings the impedance thereof is low with respect to said first mentioned transformer winding and comparatively great to an abnormal current flowing in one of said separately insulated transformer windings.

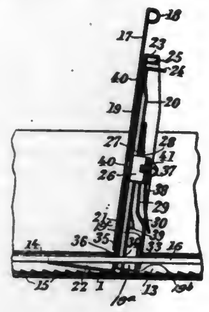
1,815,825. HAND OPERATED LOAD LIFTING DEVICE. JOHN BATES, Beaumaris, Victoria, Australia. Filed Nov. 28, 1928, Serial No. 322,430, and in Australia Sept. 25, 1928. 2 Claims. (Cl. 248—56.)



1. A hand operated load lifting device for elevating cylindrical containers such as oil drums or the like having an exterior circumferential rib therearound, comprising a rectangular frame including spaced, longitudinally disposed side bars, curved members secured to the under side

of said frame at and disposed rearwardly from the forward end of said frame and having rolling contact with the ground, the forward end of said frame forwardly and upwardly unobstructed, and a transverse bar adjustably mounted across and between said frame side bars spaced inwardly a distance from the frame forward end, said transverse bar shaped to fit over and around a cylindrical container and engage beneath the exterior rib of such a container in order to support the container when being elevated by the load lifting device to a horizontal and elevated position on and with said frame.

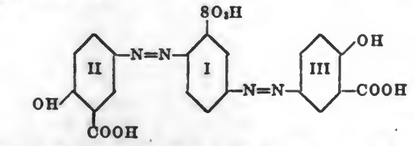
1,815,826. POSTING TRAY. PHILIP BEROMANN, Philadelphia, Pa., assignor to Columbia Steel Equipment Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 17, 1927. Serial No. 220,171. 10 Claims. (Cl. 129—28.)



10. In a posting tray, a bottom, a back slidable over the bottom, serrations on the bottom, a latch coacting with said serrations to hold the back in adjusted positions, a member associated with the back and having engagement therewith and with said bottom normally preventing tilting of the back, and means upon the latch cooperating with said member to release said engagement when the latch is shifted to disengage it from said serrations.

1,815,827. PREPARATION OF MORDANT DISAZO-DYESTUFFS. ERNST BODMER, Basel, Switzerland, assignor to Durand & Huguenin S. A., Basel, Switzerland, a Firm. Filed July 2, 1926, Serial No. 120,251, and in Germany July 13, 1925. 7 Claims. (Cl. 260—81.)

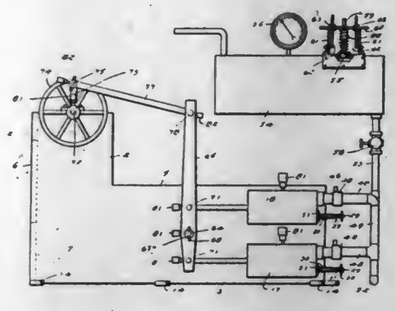
7. As new articles of manufacture the herein described mordant disazo-dyestuffs which correspond to the following general formula:



wherein the nuclei I, II and III besides the substituents indicated in the formula may bear further substituents, said mordant disazo-dyestuffs constituting brown to reddish-brown powders easily soluble in water, giving with concentrated sulphuric acid violet to bluish solutions and dyeing the fibre with chrome mordant fast orange to brown shades.

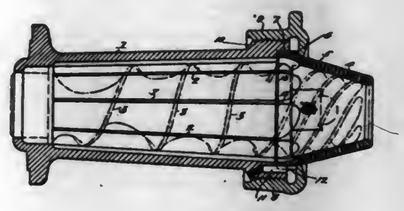
1,815,828. AIR COMPRESSING MACHINE. WALTER J. BRIGHTWELL, Kilgore, Tex. Filed Aug. 16, 1930. Serial No. 475,749. 1 Claim. (Cl. 230—184.)

An air compressor comprising a hollow base including sides and standards arranged at one end thereof and formed integrally with the sides, upper and lower compressing units arranged within the base at the other end thereof and secured to one of said sides, upper and lower compressing units located outwardly of the base at said last named end thereof and secured to the other of said sides, a vertical lever pivoted near its lower end to and within the base, rods connected to the lever above and below its pivot and connected to said first compressing



units, a second vertical lever pivoted near its lower end outwardly of and to the base, rods connected to said second lever above and below the pivot thereof and to said second compressing units, a horizontal shaft journaled upon the standards and provided with angularly related cranks, and rods connected to the cranks and to the upper ends of the levers.

1,815,829. MEAT CHOPPER. JOHN WILSON BROWN, Jr., Philadelphia, Pa., assignor to The Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 28, 1929. Serial No. 343,459. 3 Claims. (Cl. 146—185.)

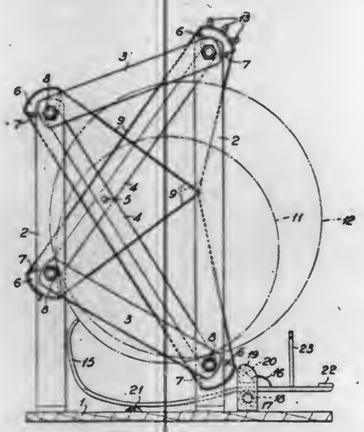


1. The combination in a cutter for meat and like substances, of a barrel; a feed screw mounted in the barrel; a conical perforated cutting head secured to the barrel; a conical cutter adapted to the perforated conical head; a ball-and-socket joint between the cutter and the feed screw located substantially midway between the two ends of the cutter; and a loose driving connection between the screw and the cutter, the ball-and-socket being on the longitudinal line of the feed screw and acting to retain the outer end of the screw in alignment.

1,815,830. CONTAINER FOR STORING GRAMOPHONE RECORDS. HARRY JOHN CARLISLE, Kenya Colony, East Africa. Filed July 20, 1929, Serial No. 379,766, and in Great Britain July 27, 1928. 5 Claims. (Cl. 312—19.)

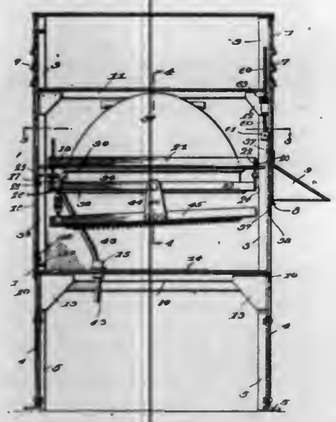
3. A plural compartment container for disk records comprising a pair of end frames, front and rear pairs of spacing bars connecting said end frames, and wire partitions mounted on said spacing bars, each partition con-

sisting of a strand of wire extending in spans between different of said spacing bars, one of said spans being looped through another of said spans.



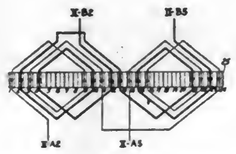
4. A container for disk records comprising a base, a structure mounted on the base forming a plurality of record compartments, a rod mounted on said base, a record ejector slidably and rotatably mounted on said rod, and a record catching fork carried by said record ejector.

1,815,831. LIGHT PROJECTOR. WILLIAM M. CASSETTY, Jr., FRANK L. ROSS, and WILLIAM C. ALFORD, Nashville, Tenn., assignors to Dearlite Corporation, Nashville, Tenn., a Corporation of Tennessee. Filed Sept. 20, 1929. Serial No. 394,000. 9 Claims. (Cl. 240—1.2.)



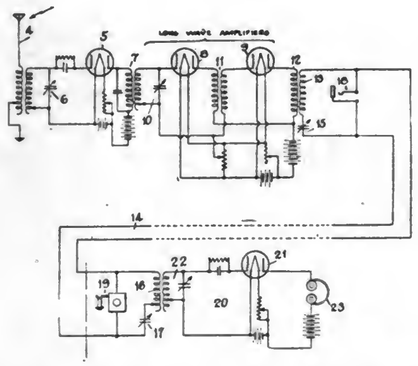
1. A light projector comprising a casing, a frame mounted therein and tiltable about a horizontal axis, an inverted concave reflector carried by said frame with its axis in a plane approximating the vertical and with its lower open end in a substantially horizontal plane, a radiant light emitting bulb supported within said inverted reflector, a second frame tiltably supported by and below said first mentioned frame, a light diverting means carried by said second frame and underlying the lower end of said reflector and extending in an approximately horizontal plane, said diverting means being formed to divert forwardly therefrom light rays emitted by said bulb and reflected downwardly thereto by said reflector, means for effecting a tilting adjustment of said second frame about its axis and relative to said first frame, and means for effecting a unitary complementary tilting adjustment of said first and second mentioned frames about the axis of said first mentioned frame.

1,815,832. DYNAMO-ELECTRIC MACHINE WINDING. DELMAR D. CHASE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 9, 1928, Serial No. 276,467. Renewed May 7, 1931. 10 Claims. (Cl. 171—206.)



3. In a dynamo-electric machine having a slotted magnetic member, a winding for said magnetic member having a plurality of independent similar phase circuits under every pole with all coils of equal pitch and coil sides of different circuits of similar phase arranged in alternate slots about the periphery of said magnetic member.

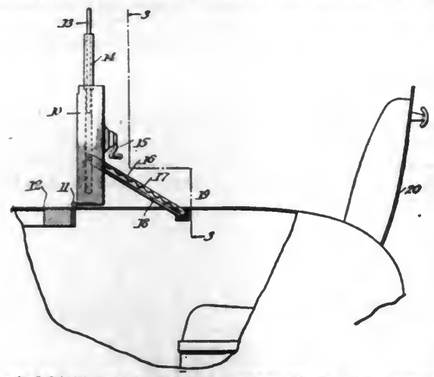
1,815,833. SUBDIVIDED SERVICE SYSTEM OF RADIO BROADCAST DISTRIBUTION. EDWARD E. CLEMENT, Washington, D. C., assignor to Edward F. Colladay, Washington, D. C.. Filed June 28, 1924. Serial No. 722,993. 9 Claims. (Cl. 179—2.5.)



1. In a wired system of radio broadcast distribution, a primary transmitting station, a secondary distributing station, subscribers' stations connected to said secondary station by wire lines, and means whereby modulations imposed on a short carrier wave at the primary station are resolved into modulations on a longer carrier wave at the secondary station, means to distribute said long waves over said wires to the subscribers' stations, and a common receiving means for both the radio and wire transmitted waves at each subscriber's station.

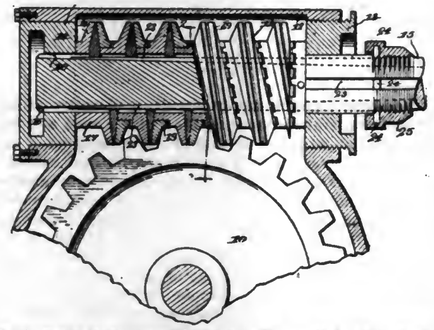
1,815,834. WINDSHIELD. PEYTON S. COLES, Atlanta, Ga. Filed Oct. 30, 1928. Serial No. 315,994. 3 Claims. (Cl. 296—85.)

1. A windshield attachment for automobile tonneaus having rumble seats, comprising, in combination, a housing movably connected to a stationary portion of the tonneau at the forward portion of the tonneau opening;



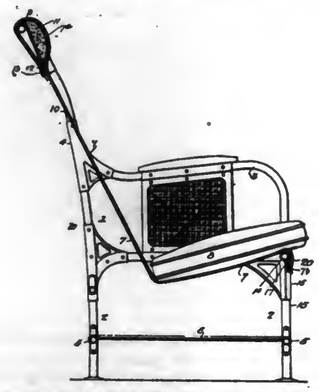
a windshield panel slidably connected in the housing; means for sliding the windshield panel and braces for holding the housing in adjusted positions.

1,815,835. WORM GEAR. JOHN P. DAMONTE, New Orleans, La. Filed Aug. 16, 1929. Serial No. 386,268. 7 Claims. (Cl. 74—41.)



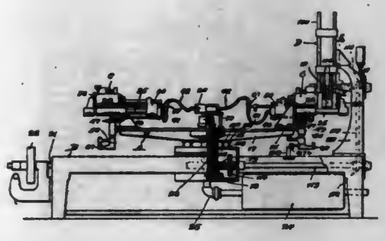
1. A worm gear comprising a split thread, and radially movable means for axially expanding said thread.

1,815,836. CHAIR. EDWIN T. DEAL, Aldan, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1929. Serial No. 396,573. 2 Claims. (Cl. 155—119.)



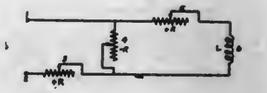
2. The combination in a chair, of a frame having upper and lower cross-bars; brackets supporting the lower cross-bar, each bracket having a web; a flexible section extending from the upper to the lower cross-bar and secured to the webs of the brackets; a cushion section resting upon the flexible section and having a depending flap at its forward end; and means for securing the flap to the forward end of the flexible section.

1,815,837. CAN TESTING MACHINE. BERT A. DEISCH, Chicago, Ill., assignor to McDonald Machine Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1928. Serial No. 308,009. 19 Claims. (Cl. 73—51.)



1. In a can testing machine, the combination of a can testing cylinder having an air chamber adapted to receive a can therein, means for closing and sealing the chamber and can from the outer atmosphere, there being a restricted air space on one side of the can and a relatively large air space on the other side thereof separated from the restricted air space by the wall of the can, means for changing the pressure in said relatively large air space whereby a change in the air pressure of said restricted space caused by the leakage in a can is utilized to eject an imperfect can, electrically controlled can selecting mechanism including an electric circuit for the electric control element thereof, a pressure operated electric switch in said circuit having a shiftable liquid body exposed at atmospheric pressure on one side, and an air duct leading from said liquid body to the restricted air space at the can.

1,815,838. NEGATIVE CAPACITY DEVICE. MIHRAN M. DOLMAGE, Washington, D. C. Filed June 27, 1929. Serial No. 374,084. 6 Claims. (Cl. 178—44.)

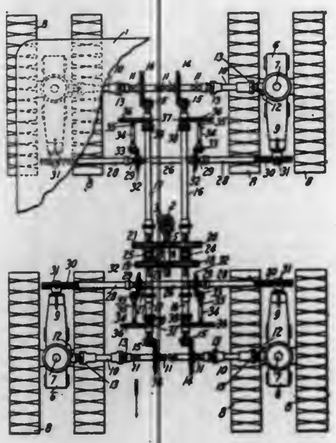


1. An automatic device having reactance characteristics of opposite sign to that of a capacity, such reactance varying inversely with frequency.

1,815,839. PROPELLING MECHANISM FOR TRACTION OPERATED MACHINES. BERLIN S. FERGUSON, Marion, Ohio, assignor to The Marion Steam Shovel Company, Marion, Ohio, a Corporation of Ohio. Filed Oct. 1, 1927. Serial No. 223,415. 12 Claims. (Cl. 180—9.2.)

2. In a mechanism of the character described, a pair of trucks each mounted for movement about a vertical axis, separate driving mechanisms for propelling the respective trucks, each driving mechanism comprising a variable speed device, and means for connecting the same

with a common source of power, steering mechanism common to both trucks to move the same simultaneously



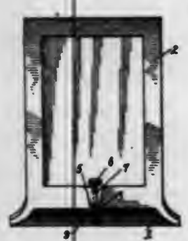
about their vertical axes, and means for connecting said steering mechanism with either of said driving mechanisms.

1,815,840. WIRING TROUGH FLANGE. HARRISON J. L. FRANK, Detroit, Mich., assignor to Bull Dog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Filed Nov. 25, 1929. Serial No. 409,525. 5 Claims. (Cl. 247—37.)



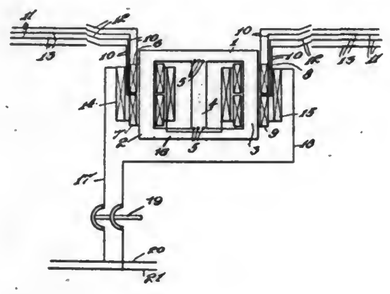
3. An end connection for sections of wiring trough comprising a sheet metal blank formed to provide an angularly extending wall to be secured within the end of a trough section and the remaining portion of said blank being formed to provide an outwardly extending flange for securing adjacent ends of trough sections together.

1,815,841. PICTURE FRAME. OTTO TORSTEN GASTOIVAR, Gardner, Mass. Filed July 12, 1930. Serial No. 467,549. 3 Claims. (Cl. 40—148.)



1. A picture frame including a hollow base having a foot portion at the rear thereof and a frame arising from the base, said frame having a continuous groove and the base having a transverse opening which communicates with the groove and a spring influenced latch comprising an angle member having a vertical arm movable through the rear of the base and a horizontal arm designed to bridge the opening in the base.

1,815,842. ELECTRIC TRANSFORMER AND SYSTEM OF DISTRIBUTION. FRAZER W. GAY, Newark, N. J., assignor to General Electric Company, a Corporation of New York. Filed Nov. 1, 1927. Serial No. 230,227. 15 Claims. (Cl. 171—97.)



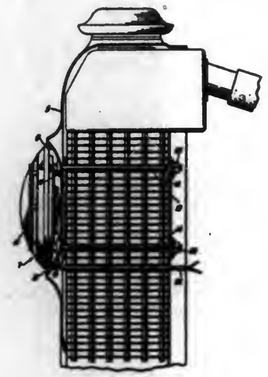
2. In combination, a supply circuit, a plurality of load circuits, and a transformer provided with a core and having a primary winding uniformly distributed over said core and connected to said supply circuit and having a plurality of separately insulated and mechanically grouped secondary windings on said core, each of said secondary windings being connected to a different load circuit and in close inductive relation with certain turns of said primary winding and in loose inductive relation to each other and to the remaining turns of said primary winding which latter turns are so disposed with respect to said core as to promote flux leakage around said remaining turns for currents flowing therein when some of said secondary windings are supplying an abnormal current to load circuits connected thereto so that for a uniform distribution of load on said separately insulated secondary windings the impedance thereof is low with respect to said primary winding and comparatively great to an abnormal current flowing in a restricted number of said separately insulated secondary windings.

1,815,843. INNER SOLE FOR SHOES. HERMAN HIGDEM, Seattle, Wash. Filed Dec. 12, 1929. Serial No. 413,616. 3 Claims. (Cl. 36—44.)



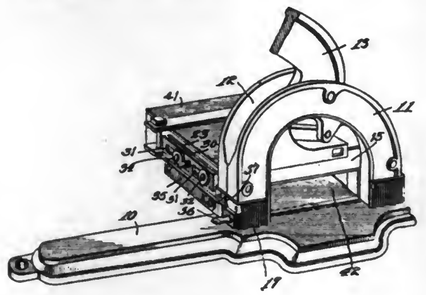
2. An inner sole comprising a lower layer of cotton fabric, an upper layer of wool fabric, and an intermediate layer of wire gauze, the margin of the layer of wire gauze being coated with metal to form a metallic binding embedding the ends of the strands of the wire gauze therein.

1,815,844. MOUNTING FOR TRAFFIC WARNING DEVICES. ROY T. HURLEY, Dobbs Ferry, N. Y., assignor to Moto Meter Gauge & Equipment Corporation, a Corporation of Delaware. Filed Mar. 14, 1930. Serial No. 435,710. 3 Claims. (Cl. 177—7.)



2. In a motor vehicle, the combination of a drum-shaped traffic warning device, having a perforate front plate and a radiator shell having a portion thereof shaped to form a housing for said device, the front plate of the traffic warning device forming the front wall of said housing.

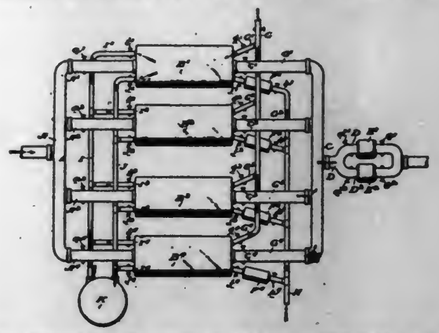
1,815,845. TOBACCO CUTTER. SIMON P. JACKSON, Kinston, N. C. Filed Aug. 15, 1929. Serial No. 386,065. 8 Claims. (Cl. 146—159.)



1. An attachment for a plug tobacco cutter comprising a receptacle and having a cutter blade, means for securing the receptacle to extend laterally from the cutter and in register with the cutter blade, means for limiting to different degrees the insertion of a plug of tobacco into said receptacle, and means for ejecting a severed section of a plug of tobacco from the receptacle upon raising the cutter blade.

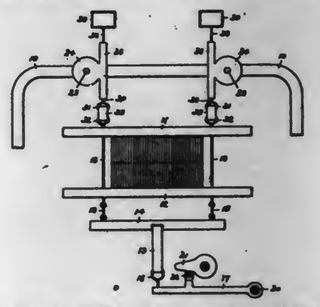
1,815,846. PROCESS AND APPARATUS FOR THE PURIFICATION OF CONTINUOUSLY FLOWING GASES IN THE MANUFACTURE OF LIQUID FUELS. ALFRED JOSEPH, Enghien, France, assignor to Compagnie Internationale pour la Fabrication des Essences et Petroles, Paris, France, a Limited Joint-Stock Company of France. Filed May 14, 1928, Serial No. 277,735, and in France Aug. 8, 1927. 7 Claims. (Cl. 23—3.)

1. A process for treating gases which consists in removing sulphur compounds therefrom by means of purifying material with formation of hydrogen sulphide, then removing the greater part of the remaining sulphur by means of a purifying material adapted to form sulphur compounds partially unstable at the reaction temperature,



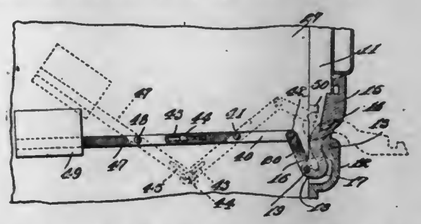
and then removing traces of sulphur remaining in the gases by means of a purifying agent forming a sulphur compound which is stable at the reaction temperature.

1,815,847. HARNESS RETRACTOR FOR LOOMS. MATTHEW C. KIRKPATRICK, Rock Hill, S. C. Filed June 23, 1930. Serial No. 463,231. 4 Claims. (Cl. 139—89.)



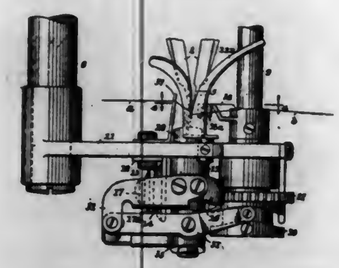
1. In a harness lifter for looms, spaced tubular members, means to secure said members to the arch of the loom, a rod movable longitudinally within each tubular member, means to attach the rods to the harness frame, and springs located within the tubular members around the rods to yieldingly resist downward movement of said frame and return the latter to raised position.

1,815,848. COUNTERBALANCE FOR STOVE DOORS. CARL E. KLEIN, Willow Grove, Pa. Filed Feb. 6, 1930. Serial No. 426,382. 3 Claims. (Cl. 126—191.)



1. In a stove, a door frame, a bar carried by the frame, a door having a seat to receive the bar for pivotally supporting the door, the door having a curved arm extending inwardly from the door, a lever pivotally mounted intermediate the ends and normally lying in a horizontal plane, a link connecting the free end of the arm to one end of the lever, and means connected with the other end of the lever and resisting movement of the lever, the lever and link co-operating to retain the seat of the door on the bar.

1,815,849. MECHANISM FOR KNOTTING TOGETHER STRANDS. FREDERICK KLEIN, College Point, N. Y., assignor to Warp Twisting-in Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed May 29, 1930. Serial No. 457,431. 31 Claims. (Cl. 289—11.)



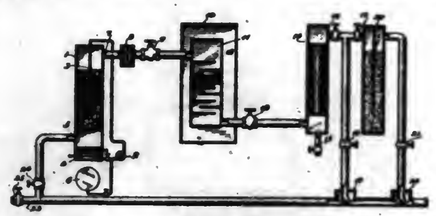
21. In combination, supporting means, and tying means comprising a structure rotative in said supporting means and having a projection extending angularly of its axis of rotation, a member revoluble with said structure and rectilineally movable lengthwise of said axis and having a projection extending angularly of the latter and coactive with the first projection to receive and grip a strand, and means to reciprocate said member.

1,815,850. GRIDDLE CAKE TURNER. JAMES H. KLIPSTEIN, Marshall, Va. Filed May 31, 1930. Serial No. 458,687. 2 Claims. (Cl. 294—8.)



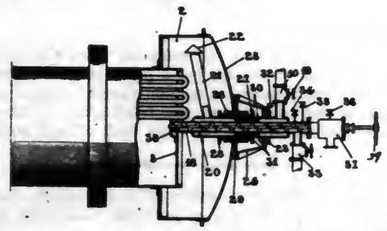
1. A griddle cake turner comprising a plate, a rod secured to one corner of the plate, a handle journalled on the rod, a stop carried by the end of the handle located the closest to the plate, a coiled spring mounted on the rod with one end secured to the latter and the other end secured to the stop, and an operating member extending through the rod between the spring and said last mentioned end of the handle and having one end thereof in engagement with the stop under the influence of the spring and having the other end curved to provide a finger piece disposed laterally of the handle.

1,815,851. PROCESS FOR PRODUCING CARBON BLACK. EMERIC KROCH, New York, N. Y. Filed May 3, 1927. Serial No. 188,563. 8 Claims. (Cl. 134—60.)



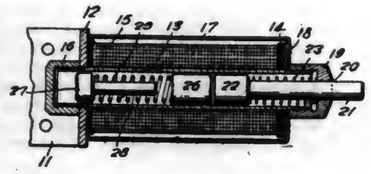
1. The process of producing carbon black which comprises cracking a hydrocarbon in the presence of methane and thereafter mixing said cracked mixture with a combustible gas.

1,815,852. CRYSTALLIZER COOKER. FERNAND LAFEUILLE, Paris, France. Filed Sept. 12, 1928, Serial No. 305,571, and in France Nov. 30, 1927. 1 Claim. (Cl. 127—16.)



A crystallizer cooker comprising a rotatable closed cylindrical casing, a plurality of tube-like elements arranged in groups and interconnected and forming concentric spirals extending from the longitudinal axis of the casing to its periphery, an inlet for each group adjacent the periphery of the casing, an outlet for each group adjacent the axis of the casing, means for feeding the cooked mass into the casing axially thereof, a vacuum intake axially of the casing for feeding material to the casing during its rotation, a feed-inlet pipe arranged interially of and coaxially with the vacuum intake, sockets depending from the casing for supporting the said pipe and intake, a gland positioned inside said casing and a gland located outside said casing for preventing the cooked mass from penetrating between the internal rotating socket and said concentric intake and pipe, the inner socket having apertures therein located in the annular zone of the vacuum intake, and means connected with the said apertures whereby the inner socket may be cooled by the continuous circulation of a cooling fluid through the said apertures.

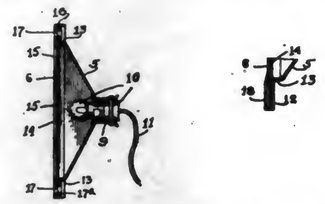
1,815,853. ALTERNATING CURRENT BELL. ALLAN F. LAKE, Oakland, Calif., assignor to Lake Manufacturing Co., Inc., a Corporation. Filed Sept. 28, 1925. Serial No. 59,115. 3 Claims. (Cl. 177—7.)



2. In an alternating current solenoid operated signal, a solenoid, a sectional core therein, and resilient means movably associated with the core sections and forming a part thereof for reducing the oscillation frequency of the solenoid core to less than the current frequency.

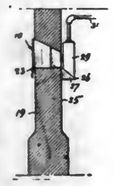
CARNEGIE LIBRARY OF ATLANTA

1,815,854. ILLUMINATED LICENSE PLATE CONSTRUCTION. GEORGE J. LAPIERRE, Pawtucket, R. I., assignor of one-half to George V. Morin, Pawtucket, R. I. Filed Feb. 17, 1930. Serial No. 429,131. 1 Claim. (Cl. 40—133.)



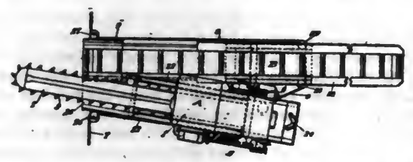
In an illuminated license plate construction, front and rear walls disposed adjacent each other at their edges and spaced from each other inwardly of the edges, the rear wall being fashioned to receive a lamp, cut-out license indicia embodied in the front plate, an imperforate color screen of pyrolin interposed between the walls and adjacent edges thereof, a permanent connection between the edges of the walls, and offset portions at the lower edge of the front wall to permit drainage of water from the space between the front wall and screen, the rear wall having a portion adjacent the edge directed at right angles from the front wall insuring illumination of the entire expanse of license indicia.

1,815,855. METER INSTALLATION. HENRY LAURITANO, Springfield Gardens, N. Y. Filed Sept. 25, 1929. Serial No. 395,191. 6 Claims. (Cl. 72—0.5.)



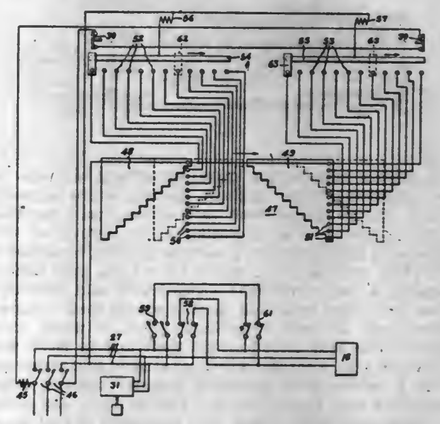
1. In a meter installation equipment comprising in combination with a building wall, a hollow receptacle having an exterior and an interior opening, a hinged cover for said exterior opening, said cover and receptacle including cooperative locking means, and a shelf on said receptacle adapted to support a meter or the like whereby the dials thereof are presented at said interior opening in position to be visible from the exterior of the building when said cover is open.

1,815,856. METHOD AND APPARATUS FOR MINING COAL. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 26, 1920, Serial No. 552,187. Renewed Apr. 13, 1922. 30 Claims. (Cl. 262—1.)



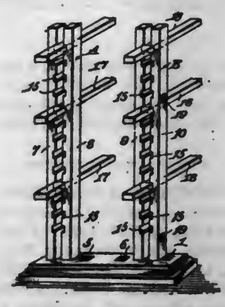
17. The new and improved method of taking material from a mine face, which consists in forming a kerf by a cutting action in the mine face, said action being the resultant of two relatively angularly acting components of movement, one of said components determining the direction of progress and acting in a rectilinear path substantially parallel to the face, and the other of said components acting in an outward path relative to the face; breaking the kerfed material; and repeating the described action to drag out the broken material.

1,815,857. SYSTEM OF ELECTRIC CONTROL. HUGH W. C. LIDDIARD, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Aug. 31, 1927, Serial No. 216,721, and in Great Britain Sept. 10, 1926. 6 Claims. (Cl. 172—239.)



6. In a system of electrical control, an electric motor, a member operated thereby, a pair of switches each having a normal position and a second position to which it may be operated, connections for said switches whereby said switches control the starting and stopping of said motor for forward and reverse operation, including connections arranged so that the concurrent operation of both of said switches to their second positions deenergizes said motor, means for selectively operating one of said switches to its second position whereby the motor is operated in one direction or the other to drive said member and means controlled by said member for operating the remaining switch to deenergize said motor.

1,815,858. DISPLAY RACK. LOUIS S. LIPSCHULTZ, Mitchell, S. Dak. Filed July 15, 1930. Serial No. 468,089. 3 Claims. (Cl. 211—182.)



2. A display rack comprising a pair of opposed, spaced end base members, two spaced pairs of vertical supports carried by each base member, each base member provided with means whereby each pair of supports can be adjusted

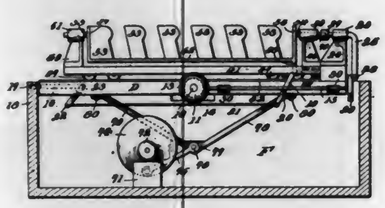
relatively to each other and the supports of each of said pair of supports adjustable relatively to each other, two sets of slats, each pair of supports provided with means for selectively positioning the slats of the set of slats therein, and means for clamping the supports of each pair to the slats when positioned in a pair of supports.

1,815,859. SLACK ADJUSTER. WILLIAM O. MARTIN, Paris, Ark., assignor of one-half to Iser H. Nakdimen and one-half to Harold P. Galbreath, Fort Smith, Ark. Filed Aug. 26, 1929. Serial No. 388,518. 5 Claims. (Cl. 188—202.)



1. A slack adjuster for brakes of railway cars and the like comprising brake riggings, floating levers connected thereto and connected with each other, brake operating means including a reciprocating piston associated with one of said floating levers, a movable fulcrum connected to said other floating lever, means for moving said fulcrum including a shaft threadedly engaged with said fulcrum, a worm gear keyed upon said shaft, a second shaft arranged transversely of said first-named shaft, a worm screw splined upon said second-named shaft and in mesh with said worm gear, a ratchet wheel keyed upon said transverse shaft, a hollow shaft swingably mounted thereon, means connecting said piston and said hollow shaft, and means to rotate said ratchet wheel upon movement of said piston beyond a predetermined distance.

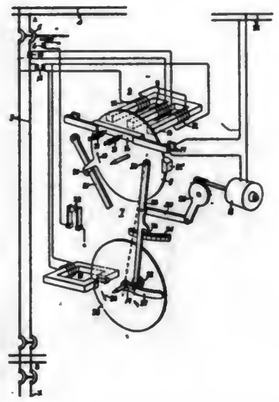
1,815,860. AMUSEMENT RIDE. FRED L. MAYBERRY, New Castle, Pa., assignor to Bertha M. Mayberry, New Castle, Pa. Filed Feb. 19, 1930. Serial No. 429,685. 10 Claims. (Cl. 104—85.)



1. An amusement device comprising, a movably mounted platform, passenger carrying means movable onto and off of said platform, and means to simultaneously and independently rock the platform and the passenger carrying means.

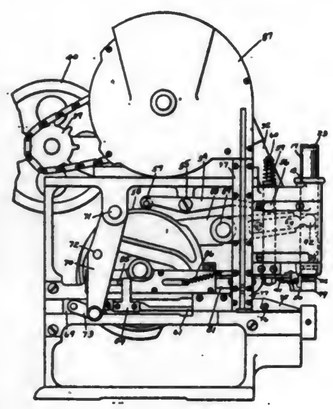
1,815,861. PROTECTIVE APPARATUS. OTTO MAYR, Karlshorst, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 11, 1929, Serial No. 339,048, and in Germany Mar. 13, 1928. Renewed May 4, 1931. 8 Claims. (Cl. 175—294.)

8. In combination with an electric circuit, a distance relay for controlling said circuit including a movable member, actuating means tending to move said member in one direction in accordance with the product $E\ I\ f\ (\phi)$, E and I being respectively a voltage and a current of the circuit and $f\ (\phi)$ a function of the phase angle between them, opposing means tending to move said member in the opposite direction in accordance with E^2, E being the said circuit voltage, means independent of said actuating and opposing



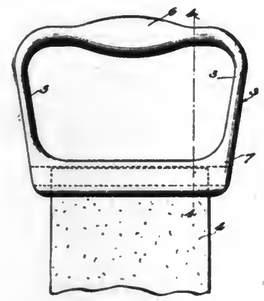
means for preventing movement of said member in said one direction until the ratio between E and $If\ (\phi)$ exceeds a predetermined value.

1,815,862. ATTACHING MACHINE. CHARLES T. MCCUE, Detroit, Mich., assignor to Universal Button Fastening & Button Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 19, 1928. Serial No. 262,691. 20 Claims. (Cl. 218—6.)



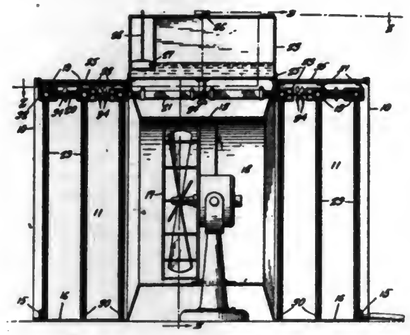
4. A snap fastener attaching machine comprising in combination attaching mechanism including a die having a recess for receiving a fastener part, supply mechanism for supplying individual fastener parts, a placing device having a head constructed and arranged to enter the interior of a fastener part, mechanism for oscillating said placing device from a position in alinement with said supply mechanism to a position in alinement with said die and vice versa, and means for reciprocating said placing device to raise said head into a fastener part and to raise the fastener part thereon into the recess in said die.

1,815,863. EXERCISER. ROY H. NOE, Memphis, Tenn. Filed Jan. 9, 1929. Serial No. 331,295. 3 Claims. (Cl. 272—79.)



1. An exerciser comprising a hand grip member having a head with a slot and a chamber defining shoulders, and an elastic element having an enlargement to occupy the chamber and rest upon the shoulders when inserted in a seating position.

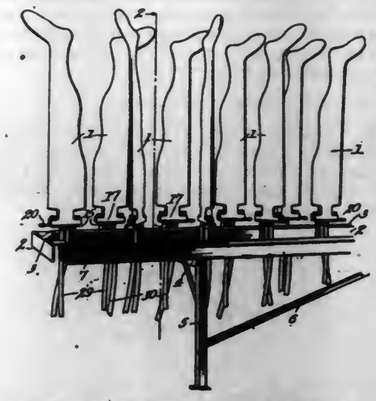
1,815,864. COOLING DEVICE. ELLA PATRICK, Olathe, Colo. Filed Feb. 5, 1930. Serial No. 426,089. 5 Claims. (Cl. 261—106.)



1. In combination, a housing, an electric fan located therein, a perforated water distributing pipe located within the housing and spaced from the fan, a fabric screen suspended from said pipe, a strip of flexible material extending from said pipe and engaging the top of the housing and covering the perforations of the pipe, and means to adjust the strip with respect to the perforations to control the passage of water through said perforations.

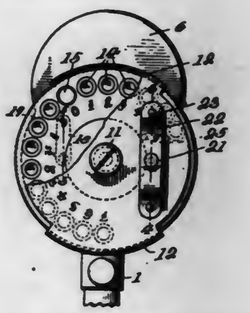
1,815,865. HOSIERY FINISHING APPARATUS. THOMAS W. PROSSER and JOHN H. WAHLBECK, Kankakee, Ill., assignors to Paramount Textile Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed July 11, 1928. Serial No. 291,962. 7 Claims. (Cl. 223—17.)

1. A hosiery-finishing structure including, in combinative association, an elongated support, a series of bearing members thereon, and occupying a position slightly angular to the vertical, a swivel-post rotatable in the bearing-member, a form-attaching element on each post, the member and post being angular to each other, and a series of finishing forms on the attaching elements, the rotative movement of the forms resulting in these being moved from a normal position substantially vertical to an off-



normal position angular to the vertical, whereby proximate forms are, at their upper extremities, spaced from each other.

1,815,866. OPHTHALMOSCOPE. ALGERNON B. REESE, New York, N. Y. Filed Mar. 11, 1930. Serial No. 434,887. 3 Claims. (Cl. 88—22.)



1. An ophthalmoscope comprising stationary discs having vision apertures therethrough, a rotatable disc provided with a series of apertures adapted to be moved into alignment with the vision apertures in the stationary discs, yielding means for centering the apertures in the rotatable disc selectively in alignment with the vision apertures in the stationary discs, and a yieldingly mounted pin carried by one of said stationary discs, said pin being normally out of engagement with the movable disc and manually operated for setting the rotatable disc in a predetermined position relative to the stationary disc.

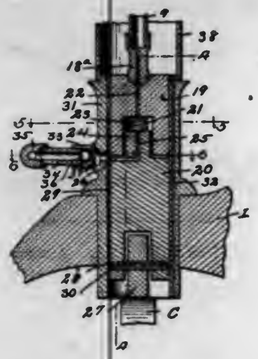
1,815,867. ROLLING MILL AND PROCESS FOR ROLLING TUBES. JULIUS ROEDER and WILHELM WELLMANN, Witten, Germany. Filed June 1, 1928, Serial No. 282,201, and in Germany Aug. 20, 1927. 4 Claims. (Cl. 80—11.)



1. A tube rolling mill for producing small diameter tubes from tubes of predetermined wall thickness coming hot from a Swedish rolling mill, comprising a plurality

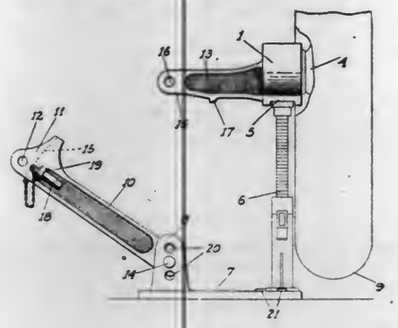
of reducing trains arranged in series one behind the other, conveyors between the reducing trains and cooling benches adapted to receive the tube from a conveyor after passing any one of the reducing trains, fixed rolls in said reducing trains preceding the final train to provide a fixed size of pass, and adjustable rolls in said final train to provide a pass of adjustable sizes.

1,815,868. LUBRICATION SYSTEM FOR INTERNAL COMBUSTION ENGINES. MARTIN J. SCHENK, Hialeah, Fla., assignor of forty-nine one-hundredths to Rubie G. Levin, Chicago, Ill. Filed Oct. 17, 1929. Serial No. 400,383. 16 Claims. (Cl. 184—6.)



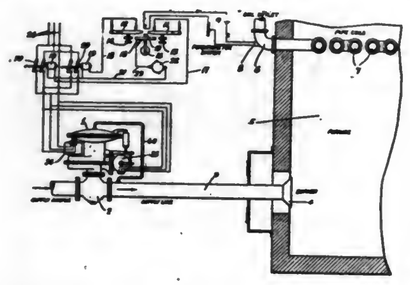
1. A lubricating system for internal combustion engines, having valves, a rocker arm for each valve, a push rod for each rocker arm, means for actuating the push rod, a lubricant supply, means for delivering lubricant under pressure to the joints between the rocker arm and push rod and the valve and rocker arm and back to the supply, and other means for increasing the pressure of the lubricant delivered to the joints when the push rod is moved in one direction, without affecting the pressure in the supply.

1,815,869. AUTOMOBILE JACK. ROBERT H. DART, Sacramento, Calif. Filed July 11, 1928. Serial No. 291,852. 3 Claims. (Cl. 254—134.)



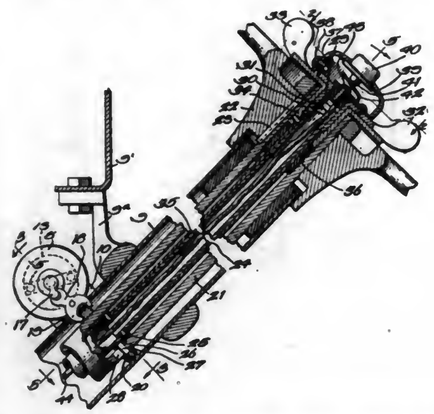
1. A wheel raising structure comprising a socket member to engage the hub of a wheel, detachable means applied directly under said member for raising the wheel, a plate to rest on the ground outwardly of the wheel, an arm pivoted on and upstanding from the plate, an extension projecting horizontally from the socket member, and disengageable connection means between the upper end of the arm and the outer end of the extension arranged to prevent downward movement of the latter when the wheel raising means is removed.

1,815,870. REGULATING SYSTEM FOR FLUID SUPPLIES. LUIS DE FLOREZ, Pomfret, Conn., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Continuation of application Serial No. 82,865, filed Jan. 21, 1926. This application filed June 12, 1930. Serial No. 460,621. 16 Claims. (Cl. 236—15.)



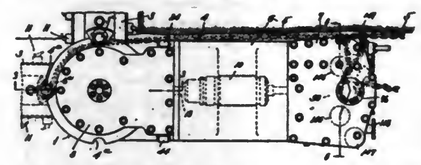
1. In a fluid system, a source of fluid supply, a point of fluid use, a supply line connecting the source of supply with the point of use, means between the source of supply and the supply line for maintaining a substantially uniform head in the supply line, current operated means adapted to cooperate with said first means to effect continuing changes in the supply line head, a second current operated means adapted to cooperate with said first means to effect temporary changes in the supply line head, and means responsive to changes in the value of a condition from a predetermined value for controlling the operation of both said current operated means.

1,815,871. COMBINED STEERING AND LIGHTING MECHANISM FOR VEHICLES. HARRY A. DOUGLAS, Bronson, Mich. Filed Feb. 9, 1927. Serial No. 166,930. 1 Claim. (Cl. 74—89.)



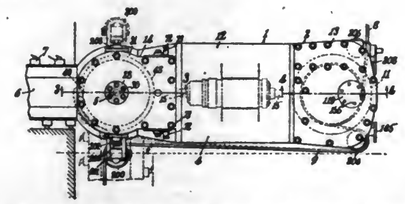
The combination with a rotatable hollow vehicle steering shaft having a steering wheel on one end thereof and a stationary tubular column housing said shaft; of a longitudinally movable rod within the shaft, a lever located adjacent to said steering wheel and mounted to rotate on the axis of said shaft, a cam connection between said lever and rod whereby oscillation of the lever will reciprocate the rod, an operating arm pivotally mounted adjacent said rod and having a recess in one end, a ring slidably mounted on said shaft and extending into said recess, and means connecting the ring to said rod.

1,815,872. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Sept. 20, 1926. Serial No. 136,446. 73 Claims. (Cl. 262—30.)



1. In a mining machine, a motor, and feeding means driven thereby including a feed operating member adapted to cooperate with flexible feeding means, and driving connections between said motor and feed operating member comprising worms rotatable on transversely extending horizontal axes, worm gears meshing respectively therewith, and separate friction controlling clutches arranged coaxially with said worm gears for alternatively connecting the latter in operative driving relation with said feed operating member.

1,815,873. MINING MACHINE.. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 29, 1927. Serial No. 179,357. 138 Claims. (Cl. 262—30.)



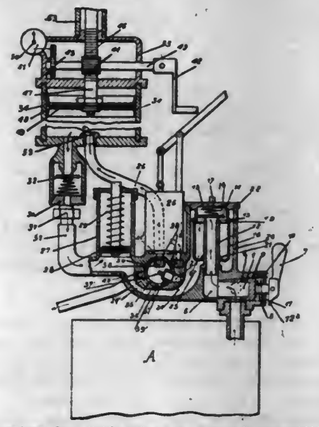
2. In a mining machine, a horizontal motor having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor, and feeding mechanism driven from the opposite end of said motor including coaxially arranged relatively rotatable feed operating members disposed on a vertical axis and each adapted to cooperate with flexible feeding means.

1,815,874. COLOR LIGHTING DEVICE. EDWARD M. JENSEN, Seattle, Wash. Filed Nov. 7, 1928. Serial No. 317,854. 6 Claims. (Cl. 240—8.1.)



5. In a device of the character described, a colored glass holding frame; and actuating means for said frame embodying a guide frame having channel members, said frame being movably mounted transversely of the longitudinal axis of the said glass holding frame, and a rack frame, longitudinally slidably mounted in said guide frame, said rack frame having geared members on each side.

1,815,875. APPARATUS FOR DELIVERING MEASURED QUANTITIES OF LIQUID. JACQUES MULLER, La Garenne Colombes, France. Filed July 20, 1927, Serial No. 207,277, and in France July 20, 1926. 4 Claims. (Cl. 221—100.)

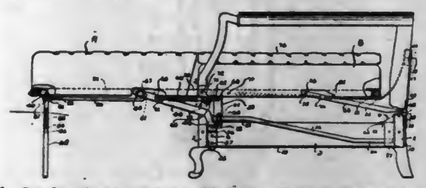


1. Apparatus for delivering measured quantities of liquid comprising a pump having suction and delivery valves and which draws the liquid from a supply pipe, a rotatable member through which the liquid is delivered to a measuring cylinder by the pump, and an auxiliary cylinder, said auxiliary cylinder being adapted to receive excess of liquid delivered by the pump and to return the excess to the rotatable member after the said member has been turned to allow liquid to be discharged from the measuring cylinder and is reset to allow the measuring cylinder to be refilled by the pump, said suction and delivery valves being provided on the rotatable member which is exterior of the pump.

1,815,876. PROCESS OF CHEMICALLY SOLIDIFYING EARTH. MICHAEL MÜLLER, Berlin-Charlottenburg, Germany, assignor to Siemens Bauunion G. m. b. H., Kommanditgesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Dec. 2, 1929, Serial No. 411,199, and in Germany Jan. 25, 1929. 1 Claim. (Cl. 61—36.)

The process of chemically solidifying earth, which consists in saturating the earth with silicic acid containing substances and then applying chlorine to it.

1,815,877. FURNITURE. MARTIN THUM, Rochester, N. Y. Filed Apr. 13, 1927. Serial No. 183,325. 13 Claims. (Cl. 5—47.)



1. In furniture, the combination with a frame, a movable bottom member having an upholstered portion and an extension in the rear of the upholstered portion, of

means for supporting said bottom member to permit the latter to move with its extension from an inner to an outer position and vice versa, a back member having a pivotal lost motion connection with the extension permitting the back member to rest at its lower end on the extension when the bottom member is in its inner position and to move forwardly on the extension to lie horizontally in the plane with the bottom member when the bottom member is in its outer position with the lower end of such back member in close proximity to the rear end of the upholstered portion of the bottom member, and a link pivotally connected to the frame and to the back member to guide the latter in its movement from its upright to its horizontal position, the link having its pivotal connection with the frame adjacent the rear of the latter and its pivotal connection with the back member intermediate with the upper and lower end of said back member so that as the bottom member is drawn outwardly the weight of the back member will advance the back member toward the rear end of the bottom member, and a spring connecting with said swinging link between its two pivotal connections and with the back member in advance with the pivotal connection with the link of such back member so that as the bottom member moves inwardly the spring will shift the lower end of the back member away from the rear end of the upholstered portion to permit the lower end of the back member to rest on the extension.

1,815,878. ESTERS OF SECONDARY ALCOHOLS. ROBERT H. VAN SCHAACK, Jr., Evanston, Ill., assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill., a Corporation of Illinois. Filed Sept. 29, 1928. Serial No. 309,365. 18 Claims. (Cl. 260—106.)

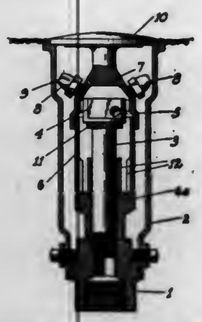
1. A composition of matter comprising an ester of a polybasic organic acid with a secondary, aliphatic alcohol that contains more than six carbon atoms to the molecule.

1,815,879. FABRIC BELTING. FREDERICK WILFRID ALEXANDER, Cardiff, Wales, assignor of a half share to Lewis & Tylor Limited, Cardiff, Wales. Filed Feb. 16, 1927, Serial No. 168,711, and in Great Britain Mar. 25, 1926. 1 Claim. (Cl. 74—62.)



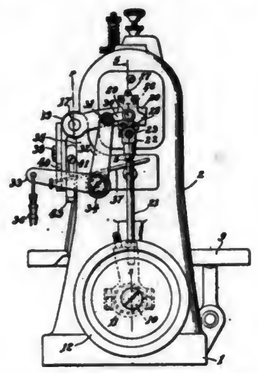
A belt of plain fabric provided on one face with a covering of rubber of relatively large and uniform thickness, which is provided on the surface next to the fabric with projections impressed into the surface of the fabric and forming on the external surface corresponding recesses.

1,815,880. SLOW MOTION ROTARY SPRINKLER. WILLIAM A. BUCKNER, Fresno, Calif. Filed Apr. 4, 1929. Serial No. 352,380. 2 Claims. (Cl. 299—61.)



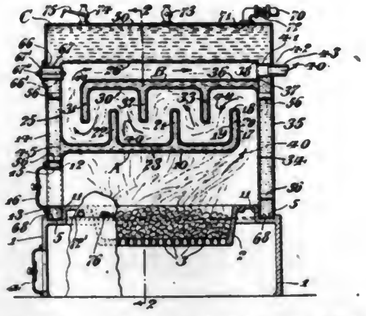
1. A rotary sprinkler comprising a vertical water passage spindle, a sprinkler head turnably and slidably mounted thereon and enclosing the upper portion of the spindle, a discharge outlet from the head of restricted area relative to the spindle passage whereby water entering the head from the spindle will cause the head to be lifted, and means between the spindle and head for causing the latter to be rotated by the flow of water into the head only when the latter is in its raised position.

1,815,881. RUFFLING MECHANISM FOR SEWING MACHINES. ANDREW B. CLAYTON, Union, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 18, 1929. Serial No. 407,837. 3 Claims. (Cl. 112—132.)



1. A sewing machine having a bed and gooseneck, a cloth-plate raised above said bed, a main-shaft journaled between said bed and cloth-plate, a ruffler-blade, a ruffler rock-shaft connected to reciprocate said blade and journaled on said gooseneck, said rock-shaft being disposed in a vertical plane parallel to and offset from the vertical plane of the main-shaft, a crank-arm fixed to said ruffler rock-shaft and extending transversely of the space between said planes, an eccentric on said main-shaft, an upstanding pitman the lower end of which embraces said eccentric and the upper end of which is connected to said crank-arm, and a treadle-controlled bell-crank lever connected to shift the upper end of said pitman lengthwise of said crank arm.

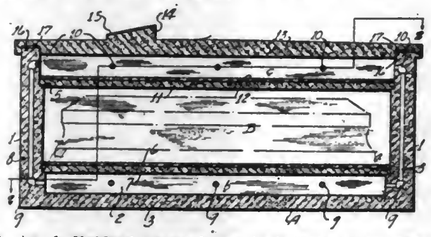
1,815,882. BOILER. LOUIS DAVIDSON, Philadelphia, Pa. Filed May 16, 1929. Serial No. 363,464. 9 Claims. (Cl. 122—135.)



1. A boiler of the character described, comprising sheet metal plates secured together in edge-to-edge relation to each other to form a chamber, sheet metal members located within and supported upon the said sheet metal plates, said members consisting of plates bent transversely at an intermediate portion thereof, and the opposite sides of the said bent portions occupying positions in parallel

spaced relation to each other and one of the sides of each of the said members being provided with hollow portions which project laterally therefrom, the spaces thus produced being adapted to hold a liquid and each of the said members terminating at one end in a depending flange and one of the said members having a horizontally extending portion located above and in parallel relation to the top side of the other of said members, the projections from the said members extending in opposite directions and in alternate spaced relation with respect to each other thereby forming a tortuous passageway through which the flames and the gases of combustion travel.

1,815,883. INDIVIDUAL MAUSOLEUM. WILLIAM I. DAVIS, Campbell, Mo., assignor, by mesne assignments, to Esco D. Grace, Poplar Bluff, Mo. Filed Oct. 26, 1928. Serial No. 315,186. 5 Claims. (Cl. 72—7.)



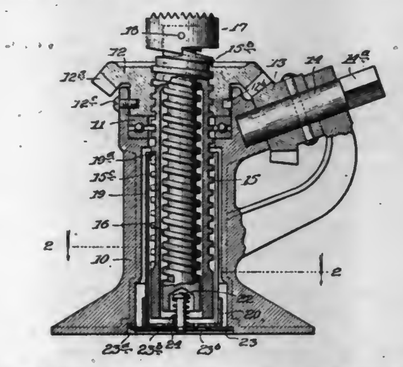
2. An individual mausoleum including a box-shaped shell constructed as a unit of cementitious material and unitarily comprising a bottom wall and upstanding side and end walls, a cementitious partition permanently fixed horizontally within the shell intermediate said bottom wall and the upper margins of said side and end walls, said partition forming the bottom wall of a casket-chamber and the upper wall of an air chamber underlying the casket-chamber, a second partition adapted to be fixed within, and to the side and end walls of, the shell in spaced relation both from the upper margins of said walls and from the first partition and providing the upper wall of the casket-chamber, and a lid adapted to be sealed to the upper margins of the side and end walls of the shell and providing with the second partition an air-chamber within the shell over the casket-chamber.

1,815,884. LAMINATED GLASS. FRANK FRASER, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 19, 1928. Serial No. 320,305. 5 Claims. (Cl. 49—81.)



4. As a new article of manufacture, a sheet of laminated glass consisting of two or more sheets of glass with an interposed non-brittle material and a solvent for inducing a bond between the glass and interposed non-brittle material, said bond inducing solvent having a high boiling point and low vapor pressure and being stable within the sheet, whereby in normal use the bond inducing solvent will not materially accelerate the natural decomposition of the non-brittle material and will not materially increase the normal tendency toward bubbling in the sheet.

1,815,885. SCREW JACK. JOHN W. BATE, Racine, Wis., assignor to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 3, 1927. Serial No. 158,660. 9 Claims. (Cl. 254—102.)



1. In a jack, a housing, inner and outer telescoping screw lifting members, a nut carried by said housing for lifting the outer screw, means for rotating said nut, an element adapted to engage said outer screw to prevent its rotation except at the top of its vertical movement, said element being connected to said housing to prevent the element from turning in one direction but permitting it to turn in the other direction, and means for disconnecting said element from said housing when the outer screw member is raised a predetermined amount to permit the outer screw member to turn with the nut.

1,815,886. CONDENSATION PRODUCT AND METHOD OF PREPARING. HERMAN ALEXANDER BRUSON, Germantown, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa. Filed Oct. 22, 1930. Serial No. 490,553. 22 Claims. (Cl. 260—2.)

1. A new composition of matter comprising a reaction product of an organic polybasic acid and an aliphatic, polyhydroxylated monobasic acid of the general formula

$$C_nH_{2n-y}(OH)_{y+1}\text{-}COOH$$

wherein "*n*" is equal to 17 or 21 and "*y*" is a whole number between 1 and 5 inclusive.

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Trade-Marks	205—No.	285,336 to No.	285,630, inclusive.
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Prints	4—No.	13,314 to No.	13,317, inclusive.
Reissues	6—No.	18,136 to No.	18,141, inclusive.
Designs	50—No.	84,724 to No.	84,773, inclusive.
Patents	925—No.	1,815,887 to No.	1,816,811, inclusive.
Total	1,396		

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,708,167, Wm. J. Andres, Brake mechanism, decided May 14, 1931, claim 1.

Pat. 1,770,771, C. R. Garrett, Radio apparatus, decided July 8, 1931, claims 2 and 4.

Trade-Marks Canceled

32,212. Artificial dung. Farbwerke, Vormals Meister, Lucius & Brüning, Hoechst-on-the-Main, Germany. Registered December 6, 1898. Canceled June 27, 1931.

39,824. Cooking fats and lard. Sherman Oil & Cotton Company, Sherman, Tex. Registered February 17, 1903. Canceled July 10, 1931.

40,697. Boiler composition for preventing incrustation and corrosion. James Samuel Lang, Glasgow, Scotland. Registered June 30, 1903. Canceled July 3, 1931.

48,989. Dried and evaporated fruits. Griffin & Skelley Co., San Francisco, Calif. Registered January 16, 1906. Canceled July 10, 1931.

55,658. Plasters and salves. P. Beiersdorf & Co., Hamburg-Eimsbuttel, Germany. Registered August 21, 1906. Canceled July 3, 1931.

61,845. Raisins. Griffin & Skelley Co., San Francisco, Calif. Registered April 9, 1907. Canceled July 10, 1931.

86,661. Seeded raisins and hermetically-sealed fruits. Griffin & Skelley Co., San Francisco, Calif. Registered May 21, 1912. Canceled July 10, 1931.

98,673. Outer suits for boys. Loth-Hoffman Clothing Co., St. Louis, Mo. Registered July 28, 1914. Canceled June 18, 1931.

103,363. Cigars, Salomon Bros., New York, N. Y. Registered March 30, 1915. Canceled July 2, 1931.

103,470. Confectionery—namely, toffees. Fransiscus Josephus Maria Rademaker, doing business as Frank Rademaker, Rotterdam, Netherlands. Registered January 16, 1923. Canceled June 27, 1931.

181,360. Raw bone for poultry. Sacramento Feed and Fertilizer Company, North Sacramento, Calif. Registered March 18, 1924. Canceled June 27, 1931.

197,197. Garter brassières. Model Brassiere Co. Inc., New York, N. Y. Registered April 14, 1925. Canceled June 18, 1931.

204,688. Rheumatism salve. Bader- u. Verkehrs-A.-G., Berlin, Germany. Registered October 20, 1925. Canceled June 27, 1931.

220,514. Pneumatic tires. Semitire Company Inc., Seattle, Wash. Registered November 9, 1926. Canceled July 10, 1931.

251,331. Artificial-camel-hair cloth in the piece. Peck & Peck, New York, N. Y. Registered January 1, 1929. Canceled June 27, 1931.

263,937. Bottled and canned tomato juice used as a food. Kemp Brothers Packing Co., Frankfort, Ind. Registered February 11, 1930. Canceled June 18, 1931.

Applicant's Address

The requirement of Rule 38, that the post-office address of the applicant must be stated in the petition, means that the applicant must give the post-office address at which he customarily receives his mail.

The rule was made in order that the Office in necessary cases might correspond directly with the applicant and not through his attorney. The address of the attorney with instructions to send communications to the applicant in his care will not be accepted as a compliance with this rule.

Condition of Applications Under Examination at Close of Business July 11, 1931 •

(Total number of applications awaiting action, excluding Trade-Mark Division, 91,743; Trade-Mark Division, 1,188. Oldest new case, Nov. 11, 1930; oldest amended, Nov. 11, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	†Feb. 18	†Mar. 10	779
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	†Jan. 14	†Jan. 16	1,476
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Feb. 13	†Apr. 6	835
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Feb. 6	†Feb. 9	781
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	†Jan. 22	†Jan. 24	737
318	6. LEWERS, A. M., Carbon Chemistry	Dec. 18	Dec. 19	2,057
106	7. JARBOE, C. G., Optics; Photography	Dec. 15	Dec. 15	2,015
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 17	Dec. 17	1,624
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 15	†Jan. 15	1,376
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	†Feb. 12	†Feb. 25	1,030
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Feb. 16	†Feb. 24	778
380	12. HENRY, C. C., Machine Elements	Nov. 14	†Jan. 16	1,273
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working: Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 20	†Jan. 28	1,183
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Jan. 19	†Feb. 3	1,158
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 18	Dec. 19	2,515
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Apr. 7	†Apr. 3	798
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Dec. 11	Dec. 12	1,463
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 14	†Jan. 16	1,109
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Nov. 24	Dec. 2	1,944
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	†Feb. 13	†Feb. 11	911
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	†Jan. 12	†Mar. 19	997
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Feb. 19	†Mar. 11	798
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Nov. 12	Nov. 15	1,046
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Jan. 13	†Jan. 15	953
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	†Jan. 12	†Jan. 13	1,538
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	†Jan. 20	†Jan. 28	966
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	†Jan. 20	†Jan. 24	1,115
225	28. BENSON, A. R., Internal-Combustion Engines	†Jan. 12	†Jan. 12	1,702
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	†Mar. 9	†Mar. 31	556
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Feb. 13	†Apr. 4	900
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Nov. 11	Nov. 11	2,630
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Feb. 13	†Feb. 12	1,320
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	†Jan. 17	†Jan. 15	2,398
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Mar. 12	†Mar. 13	831
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Apr. 24	†Apr. 11	913
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Nov. 24	Nov. 24	2,281
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	†Jan. 7	†Jan. 8	1,473
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Apr. 11	†Apr. 2	538
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	†Jan. 17	†Jan. 23	1,579
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Dec. 10	†Jan. 15	2,948
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	†Feb. 16	†Feb. 19	746
223*	42. CUTTING, H. O., Electric Signaling	†Jan. 15	†Jan. 12	1,384
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	†Jan. 12	†Jan. 17	1,601
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Nov. 12	Nov. 20	2,217
379	45. HILL, H. D., Palleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Dec. 11	Dec. 11	2,067
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	†Jan. 23	†Feb. 4	1,131
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	†Jan. 15	†Jan. 13	2,150
212*	48. ROEPKE, O. B., Electricity, General Applications	†Jan. 12	†Jan. 12	1,121
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Feb. 14	†Feb. 14	1,383
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Dec. 10	Dec. 11	2,458
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Nov. 24	Nov. 24	2,155
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Feb. 5	†Feb. 5	1,507
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Mar. 7	†Mar. 10	762
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Nov. 20	Nov. 20	2,767
102	55. BOWEN, S. T., Bread, Pastry, and Confection Making; Cutlery	†June 1	†June 1	178
	Designs	†June 22	†July 1	237
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 12	Dec. 15	1,753
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	†Jan. 16	†Feb. 24	784
270*	58. DOWELL, E. F., Abrading; Typewriting	Dec. 13	Dec. 15	1,500
315	59. RICHARD, V. L., Chemistry, Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	†Jan. 26	†Feb. 6	1,673
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Dec. 11	Dec. 12	1,902
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Nov. 22	Nov. 26	2,098
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers.	Nov. 26	Nov. 26	2,564
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Nov. 28	Nov. 28	2,311
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Trade-Marks	†June 12	†June 29	1,012
	Labels and Prints	†June 13	†July 1	176

• Refers to room numbers in the annex.

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DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

BRAREN *v.* HORNER

No. 2600. Decided February 25, 1931; rehearing denied May 27, 1931

1. INTERFERENCE—ISSUE—CONSTRUCTION.

The counts of an interference ought to be read broadly and not narrowly and with limitations not justified by the nature of the invention disclosed.

2. SAME—SAME—SAME.

The words "An engraving machine and the like", comprising the introductory clause of a combination claim relating to a drive mechanism, *Held* to be merely introductory and not to impose any limitation upon the claim.

3. SAME—PRIORITY—FOREIGN PATENTS.

Priority of invention as to certain counts of the interference which include the introductory phrase "An engraving machine and the like" should be awarded to B., in view of his German application, which discloses the same invention as that covered by the counts of the issue, although it does not disclose an engraving machine.

On petition for rehearing

4. APPEAL—WHAT MAY BE URGED.

On an appeal by B. from award of priority to H., *Held* that H. may urge, without a cross appeal, that he is entitled to an earlier date of conception than that accorded to him by the Patent Office tribunals, since the whole field of priority of conception, on the record, is before the Court on B.'s appeal.

5. SAME—SUGGESTION OF DIMINUTION—COSTS.

Where, on a suggestion by appellee of a diminution of the record, appellant was required to file a supplemental record and only a portion thereof was found fairly essential to a consideration of the case, one-half of the costs relative thereto taxed against the appellee.

APPEAL from the Patent Office. Reversed.

Mr. Edward H. Cumpston for Braren.

Mr. Allen E. Peck and *Messrs. Peck & Peck* for Horner.

GRAHAM, *P. J.*:

The appellant, Lorenz Konrad Braren, filed his application in the Patent Office on December 4, 1923, for improvements in belt-gearings. On June 23, 1924, the appellee, George Horner, filed his application for a patent on improvements in and relating to engraving machines. The Horner application went to patent on November 17, 1925, as No. 1,562,237. On June 12, 1926, an interference was declared by the Patent Office between Horner's patent and the aforesaid application of Braren, the counts of the interference being eight in number, and having been taken from the Horner patent. The counts of the interference, for the purposes of this case, may be divided into two classes, of which counts 1 and 4 may be said to be typical. These counts are as follows:

1. An engraving machine and the like, comprising a cutter head movable laterally over the work and carrying a rotary cutter spindle, a belt transmission for driving such spindle, and means for constantly maintaining said transmission under approximately uniform driving tension with respect to said spindle whatever the operative lateral position of the head over the work, said means embodying a fulcrumed counter-balanced member carrying transmission belt pulleys, said member being supported independently of said head and being connected therewith to constantly maintain the relative positions of the head and member during the lateral movements of the head over the work.

4. In an engraving machine and the like, in combination, a cutter head providing with a rotary cutting tool spindle having a driven pulley for driving said spindle, pantograph mechanism for moving said head over the work, an endless friction belt transmission for driving said pulley, and supporting means for said transmission constructed and arranged to maintain said transmission under uniform tension, said supporting means embodying a counter balanced upright vertically swingable lever having universal lateral push and pull connection with said head.

On December 15, 1926, the appellant Braren made a motion in the Patent Office that his aforesaid application be given the same force and effect as if actually filed in this country on December 11, 1922, which was alleged by him to be the filing date of an application for Patent No. D–42851, for the same invention filed by his assignee in Germany less than twelve months prior to the actual date of filing of the interfering application, which motion was allowed to the extent that Braren was entitled to the benefit of the application for whatever it might disclose. In support of this motion, appellant filed a certified copy of the said application, dated as alleged by him, and which appears with the accompanying drawings and specification in the record. An examination of this application discloses that it is an addition to a former application filed in Germany on July 6, 1922, numbered D–42050. The application of December 11, 1922, makes this reference to said No. D–42050:

The belt guide for spindles which are movable radially as desired, described in the main application D. 42050 XII/47h, • • •.

During the taking of Braren's testimony in the interference matter, the party Horner demanded production of the German application No. D–42050. The attorney for Braren, by letter which appears in the record, declined to furnish this copy. Subsequently, and after the time for taking testimony had expired, Braren attempted to file a copy of said application No. D–42050, which was denied admission in evidence by the Examiner of Interferences and by the Commissioner of Patents, on appeal by Braren.

On the 22nd of September, 1927, the Examiner of Interferences awarded priority to the party Horner, holding, in so doing, that the application of December 11, 1922, did not disclose the subject matter of the counts of the interference, and that, therefore, Braren, being relegated to the date of his application in the United States, in view of the finding as to conception and reduction to practice by Horner, as hereinafter set forth, must be deemed the junior party. In so holding, the Examiner of Interferences also called attention to the fact that the earlier German application No. D–42050, not being in evidence, could not supplement the proof of appellant and make his application as specific and applicable to an engraving machine as was required

by the counts of the interference. Thereupon Braren made a motion to reopen the hearing and introduce such earlier German application. This was refused on the ground that it did not disclose newly discovered evidence. The Examiner of Interferences was sustained on the merits by the Board of Appeals.

Both the Examiner of Interferences and the Board of Appeals found, on the record, that Horner was entitled to a date of conception of February, 1923, and reduction to practice in March, 1923. These findings have apparently been accepted by Horner, as no cross appeal was prayed by him from the same. It is true that in this court Horner has argued for an earlier date of conception and reduction to practice than that found by the tribunals of the Patent Office. However, having failed to appeal and assign errors in this respect, we are of opinion that this matter is not now before us for consideration. We said in *In re Schneider*, 17 C. C. P. A. (Patents) 952, 39 F.(2d) 278, 396 O. G. 348:

> Those appealing to this court should give to the court by specific assignments and with particularity all grounds of alleged error upon which they rely.

Certainly, if the appellee was intending to question this finding of the Patent Office tribunals, he should have, in some proper way, preserved his rights in this respect. Furthermore, the issue being one of fact and both tribunals having concurred in their conclusions, we are not disposed to disturb such finding. *Beidler* v. *Capa*, 17 C. C. P. A. (Patents) 703, 36 F.(2d) 122, 392, O. G. 241; *Clancy* v. *De Jahn*, 17 C. C. P. A. (Patents) 714, 36 F.(2d) 131, 392 O. G. 241; *Pengilly* v. *Copeland*, 17 C. C. P. A. (Patents) 1143, 40 F.(2d) 995, 399 O. G. 3; *In re Moulton*, 17 C. C. P. A. (Patents) 891, 38 F.(2d) 359, 396 O. G. 7.

No error is assigned by Braren on the findings of fact by the Patent Office tribunals that Horner is entitled to priority, if the respective German applications of Braren be disregarded. The issue, therefore, is one of law and presents this question: Is Braren entitled to the date of his German application of addition, No. D–42851, namely, December 11, 1922, as the date of his conception and reduction to practice, for the purposes of this interference? The tribunals below held, and appellee argues here, that Braren is not entitled to the date of the German additional application because the interference counts here do not read upon the disclosure thereof, and that the counts of the interference are limited to an engraving machine or a similar machine, and that Braren's additional application was not so limited.

No point is made by appellee that the German application No. D–42851, of December 11, 1922, is not the first application for a patent upon the device described therein which was filed in Germany, as required by section 4887, Revised Statutes, and, therefore, in what we shall say, we shall assume, without deciding, that if the disclosure of the German application No. D–42851, read upon the counts in the interference here, the date of said application will comply with the statutory requirements of said section 4887.

Some description of the nature of the Horner device, and the device described in Braren's application in this interference and his German application, is essential. Horner shows a cutter head, fitted with a centrally revolving spindle, attached to the lower end of which is a chuck to hold "any suitable rotary milling or other cutter 4*a* required to perform the desired engraving or cutting functions." The cutter head is mounted upon the end of an arm of pantograph arrangement, permitting any vertical or horizontal movement of the tool required to conform with the surface of the metal worked upon. The said spindle is rotated by a pulley attached horizontally thereto, and an endless belt which passes around said pulley, runs over idler pulleys and then around a pulley fixed upon the upper end of a vertically swingable upright arm, counterbalanced below its axis or fulcrum, by an adjustable counterweight. The said pulley upon the top of said upright arm is mounted upon one end of a countershaft extending horizontally through the upper end of said upright arm and which countershaft bears a conical pulley on the other end thereof. These pulleys and the countershaft are so mounted as to freely revolve upon the end of the upright arm. Power is applied by means of an endless belt, extending over said conical pulley at one end and another conical pulley at the axis of said upright arm, which latter pulley is caused to revolve by an electric motor or other source of power, separately mounted. This whole device permits the operator to move the cutter head and its tool over the work below it, retaining at all times a fixed tension upon the driving belts.

Braren's United States application in interference here discloses a device for "transmitting power with a single driving means from a stationary shaft to a movable shaft," and is illustrated by an adaptation to an engraving machine. The drawings disclose a cutter head, supported by a pantograph arm, with a rotating central spindle and a chuck. The spindle is caused to rotate by a horizontal pulley attached thereto. An endless belt is carried around this pulley, over idler pulleys, then down to a driving pulley mounted on the axis of an upright vertically swingable arm, which bears a counterweight at its lower end, below its axis. The cutter head is attached to the said upright by an adjustable connecting rod. By various flexible connections, the cutter head can be moved over the work, in any direction, maintaining a uniform tension upon the driving belt at all times. The claims are introduced by the words: "In an engraving machine and the like."

Braren's German application No. D–42851, bears the title: "Single belt drive for radially movable spindles." It recites that the object of the invention is to remove the defects in transmitting power by a belt which does not change in length, from a source of power to a radially movable spindle, and that it is proposed to do this by certain mechanical arrangements which are briefly described as follows: The working spindle is attached to a horizontally rotating pulley, which pulley is suspended from the end of a horizontally extending connecting arm. This arm, in turn, is supported upon the upper end of a vertically movable upright, counterweighted at its lower end, below its axis. An endless belt extends from a pulley mounted on a countershaft extending through the axis of the upright, over idlers at the top thereof, and then horizontally around the spindle pulley. By a proper arrangement of hinges and joints, the radially movable spindle may be moved over any surface, in any direction, without disturbing the tension of the driving belt. There is no pantograph arrangement in this disclosure. The claims are as follows:

> 1. Single belt drive for radially movable spindles, characterized by the fact that the spindles, the movements of which in the plane at right angles to the spindle axis cause no variation in the length of the belt, can also be moved in the direction of the spindle axis without varying the length of the belt.
>
> 2. Single belt drive according to claim 1, characterized by the fact that the belt is conducted from the rigid driving disc (3) over two idle rollers (7 and 8) to the driven movable disc (1), and that the idle rollers are maintained in proper position through articulated connecting rods (12 and 16) between the fixed point or between the driven spindle and said idle rollers.
>
> 3. Single belt drive according to claim 2, characterized by the fact that the two idle discs (7 and 8) are mounted in a carrying arm (9) which is carried swingably at right angles to this bearing by a carrying rod (12) arranged rotatably about the driving axis (4), and that the rod (16) rotatably and articulately connected with the spindle is at its other end rotatably arranged in the carrying arm (9) in such manner that the axis of rotation passes through the point at which the belt coming from the spindle is normally tangent to the idle discs.
>
> 4. Single belt drive according to claim 2, characterized by the fact that a counterweight is provided for balancing the disc-placed parts upon angular inclination.
>
> 5. Single belt drive according to claim 2, characterized by the fact that the connecting rod 16 between the driven spindle and the idle rollers is arranged to be axially fixed but radially rotatable.
>
> 6. Embodiment of the single belt drive according to claim 2, characterized by the fact that the two idle discs (26, Fig. 5) are mounted on a carrier (32) which is carried swingably at right angles to this mounting by an axis (31) arranged at a distance from the center (25) of the driving disc (24) equal to the radius of the idle rollers, and that the rod (27) which is rotatably and articulately (as at 29) connected with the spindle (21) at a distance from the driven disc (22) equal to the radius of the idle rollers, is at its other end rotatably arranged about the axis (28) of the idle rollers (26).

There are two preliminary questions raised by appellee. It is, first, contended by him that Braren does not disclose the subject matter of the counts here in his German application D–42851, because his device there was driven by one belt, while in Horner's device, two belts are used. The Board of Appeals held:

> There is no question that Braren can make the claims in issue, so far as his United States application is concerned, but his case depends upon the data of this German application which contains no reference to an engraving machine, a cutter head or a pantograph.

As we have already seen, Braren uses a single belt drive in both his United States application and said application No. D–42851. The interference was framed with this in mind. No motion was made by Horner in the Patent Office to dissolve the interference on the grounds that Braren's application did not read on the counts. No such point having been made, and Horner having failed to question the finding of the Board of Appeals in this matter, he can not now be heard to make this contention. If he is, therefore, precluded from now raising this point on Braren's United States application, he should likewise be precluded in this interference, from questioning the sufficiency of Braren's said German application on the same point.

It is next argued by Horner that Braren, having failed to appeal from the decision of the Board of Appeals on counts 4, 6 and 7, here involved, must be held to be estopped from questioning the decision of the said Board in awarding priority to Horner on counts 1, 2, 3, 5 and 8, which, it is claimed, cover the same subject matter. In support of this position, *Brenzinger* v. *Thomburgh*, 52 App. D. C. 298, 813 O. G. 664, is cited. In that case the court held that the same elements were included in all the claims and, hence, held that all should be appealed to preserve the appellant's rights. Here, however, it is manifest that the same elements are not involved. Claims 4, 6 and 7, of which claim 4, hereinbefore quoted, is typical, all recite, as an element, a pantograph structure. While it is true Braren's United States application discloses a pantograph arm, his German application D–42851, which he desires the advantage of, shows no such structure. As the Patent Office framed certain of the counts to include the pantograph element, and certain as not including it, Braren had a right to abandon his claim under the former. The counts of the interference did not all include the same elements, and, in this respect, the Brenzinger case cited, is not in point.

The question arises whether the German application, No. D–42851, of Braren, is a constructive reduction to practice of the invention in issue. The Board of Appeals held that the counts in issue are limited to an engraving machine, including a cutter head, and, in some counts, a pantograph. This contention is reiterated by the appellee here. The appellant, on the other hand, argues that the words of the appealed counts: "An engraving machine and the like", are introductory only; that if the words "engraving machine" are words of limitation, the words "and the like" are broad and inclusive, and comprehend appellant's disclosure; that the real invention is a belt drive where the tension of the belt is kept uniform, and does not lie in an engraving machine, a cutter head or a pantograph.

In order to determine the exact questions involved, it is necessary to consider somewhat the state of the art at the time the Horner and Braren applications were filed, so that some understanding may be had of the real merits of the invention attempted to be outlined in the interference counts. A number of reference patents are included in the record, cited, as we are advised, on the original and unamended Braren application. These disclose, as in Moore, No. 834,995, of June 26, 1888, in a carving machine, a revolving cutter head, mounted upon a swingable arm, with lateral and vertical motion. Behee, No. 799,825, of September 19, 1905, shows the same with, in addition, a jointed or pantograph

arm. Robertson and Frazier, No. 1,257,388, of August 21, 1917, discloses a combination of a pantograph, a revolving cutter and belt drive for the cutter in a machine adapted to milling and other like work. Other references show similar disclosures. There was, therefore, nothing new at that time in a revolving cutter, a belt drive therefor, a swingable arm or a pantograph to support the same, or in a combination to utilize the same in connection with a cutting, milling, or similar tool, which would include an engraving tool.

The invention here is thus described by the Examiner:

> * * * the invention consists of the combination in an engraving machine of belt driven mechanism for the cutter head, so mounted that when the cutter head is moved about there will be a minimum of variation in tension on the driving belt or belts. This is effected by pivotally mounting the moving parts concentric with the belt pulleys so that the distances from center to center are maintained constant.

Throughout the record testimony it appears that both the parties to this interference had in mind that the essence of the invention was a "new drive" for machines of the type of engraving machines. Horner, in his testimony, repeatedly refers to his invention in this way. For instance, in the book which was kept by him, and in which he made notes of his first 1—S engraving machine, he refers to the date, February 7, 1923, the purchaser of the machine, and makes a notation covering the whole item, "New drive." He states, also, that after certain machines corresponding to Exhibits 3, 4 and 5, were shipped out, there was found to be trouble with the operation of the drive, because of the fact that the pantograph dragged the weight of the motor around with it, which made it clumsy, and because the device was not counterbalanced. The invention which was afterward disclosed, and which resulted in Horner's patent, was to correct these defects, and is thus described by the witness Gustafson:

> The first machine that was built was driven by motor mounted on a motor base at the outer end of the swinging arm, this arm being mounted at the top of the column or frame. On this first design the swinging arm was mounted on a pivot placed in a recess in the column. Later this was altered and the swinging arm was mounted between two lugs or projections on the column. Later the design was changed and the motor mounted on a plate at the bottom of the column. I don't know whether it requires any more description than that. I guess that gives in a general way the important changes made.

Again Gustafson said, in referring to these changes, "we changed the drive and intended to change the pantograph, making it a better machine naturally." Gustafson, at that time, was in charge of the engineering work for the Gorton Machine Co., where Horner was employed, and in which the new device of Horner was being perfected.

From this examination of the state of the art, and from the record testimony, it is quite apparent that the only novelty in the device described in the counts of the issue, is the arrangement of the drive for a cutter head which consists in a counterbalanced upright and an arm holding the cutter head, with a belt drive so arranged as to remain in a fixed tension wherever the tool being used by the operator may be placed. Whatever may be said as to the elements which make up the combination, the result attained is an improved drive.

We come then to the inquiry whether the expression in the counts in issue "an engraving machine and the like" are to be construed as a limitation upon the counts or as introductory words only; whether they shall be considered as confining any device to be included within their scope to one which is expressly an engraving machine. We understand the tribunals of the Patent Office have so held, and having so held have concluded that Braren's second German application, not being expressly confined to an engraving machine, cannot be held to be within the scope of the counts at issue.

[1] We are unable to concur with the tribunals of the Patent Office in this respect. As we have seen, there is nothing about the scope of the invention in issue which depends upon its use in connection with an engraving machine. The drive being the important matter, the device might equally well be used for an engraving machine, a milling machine, a carving machine, or any other machine which may use a cutting tool held in a chuck and operated by a revolving spindle. The counts of the interference ought to be read broadly and not narrowly and with limitations not justified by the nature of the invention disclosed. *Stern and Huether* v. *Schroeder et al.*, 17 C. C. P. A. (Patents) 690, 36 F.(2d) 518, 393 O. G. 4; *Slattery* v. *Larner*, 17 C. C. P. A. (Patents) 725, 36 F.(2d) 298, 393 O. G. 249.

[2] We are of opinion, also, that the introductory phrase, "in an engraving machine and the like" is not a part of the subject matter of the counts in issue, but, under the facts in this case and the authorities, is introductory merely.

In *Stearns* v. *Russell*, 85 Fed. 218, a patent for a device used in the process of pill-dipping was involved. The claims in issue opened with the words, "In pill-dipping mechanism." Taft, circuit judge, in writing the opinion of the court, said:

> But it is said that the claims of the patent in question here do contain a suggestion of such a combination in the opening words, "In pill-dipping mechanism." We think these words are only used to define the useful purpose to which the patentee intended his device to be devoted, and cannot bear the construction by which all the other substances and parts used in dipping pills may be considered as making up the combination claimed.

In *Sly Mfg. Co.* v. *Russell*, 189 Fed. 61, the Circuit Court of the United States for the Northern District of Ohio, was considering a patent claim which began as follows: "1. In a rotary crusher." The court said:

> The changes by which it is contended that applicant limited the claim in question to the crusher feature merely are, generally speaking, eliminating therefrom the words "and separator" following the word "crusher" in the reference to the device, and in omitting in the redrafted claim, the words descriptive of the detailed construction of one of the chambered heads— "The chamber in one of the heads divided into compartments by radial partitions; holes in the lining plate over incline in the said compartment." In our opinion the applicant did not thereby abandon the separating feature and limit his patent to the crushing element. The mere use of the word "crusher" in the amended claim is by no means conclusive of an intent to limit the protection of the patent to the crushing feature. The introductory phrase is not an element of the combination, and does not necessarily limit the claim.

In *Nye Tool & Machine Wks.* v. *Crown Die & Tool Co.*, 292 Fed. 851, claims were involved, the introductory language of which was, "In a machine for serrating the thread-forming cutters of screw-threading dies." Evans, circuit judge, delivering the opinion of the court, said:

> Some effort has been made by counsel for appellee to distinguish the two patents because of their difference in name. It is claimed that one covers a "cut-back die thread machine," while the other is for a "machine for serrating the thread-forming cutters of screw-threading dies." It is not the title that interests us, but rather the elements in the combination that go to make up the claim. Courts cannot place premiums upon tongue-twisting combinations of words that merely evidence the ingenuity and acuteness of a linguistic gymnast. All the patents under consideration cover combination claims, and the most that the preliminary words can accomplish is to clarify or give significance to the language used in describing the individual elements. *Schran Glass Mfg. Co.* v. *H. Brooke Glass Co.*, 249 Fed. 228, 161 C. C. A. 264.

In *Langmuir* v. *DeForest*, 18 F.(2d) 345, certain of the counts in issue were introduced by the words, "In a radio signaling system." In that case the court, in its opinion, discusses the subject matter of the interference, and the results to be obtained by the use of the device, the subject of the interference counts, and then makes the following statement:

> Nor is the introductory clause, "in a radio signaling system," an element of the combination set out in the claims. Moreover, it does not convert the claims into applications of the feed-back circuit to a radio signaling system. Claims so limited constituted the subject-matter of interference No. 41223 between Langmuir and Armstrong, in which the latter prevailed. It does not limit the invention defined by the actual combination claimed.

The decree was affirmed in *Westinghouse Elec. & Elec. Mfg. Co.* v. *DeForest*, 21 F.(2d) 918.

In *Ford Motor Co.* v. *Parks & Bohne*, 21 F.(2d) 943, the Circuit Court of Appeals of the Eighth Circuit had before it claims with the introductory words, "An automobile transmission band." The court said:

> This phrase we think imports nothing by way of structural elements into any of these claims, nor does it make them other than claims to a strap brake with a detachable ear. These words merely state the environment in which the device is to be used; and, in the language of then Circuit Judge Taft, in *Stearns* v. *Russel* (C. C. A.), 85 F. 218, "define the useful purpose to which the patentee intended his device to be devoted."

These cases, we are of opinion, are in point here and are sufficient authority, in view of the facts disclosed by this record, to justify the conclusion that the words, "in an engraving machine and the like," as used in the counts in issue here, are introductory only, and should not be considered as limitations of the subject matter of the issue. It is true, as stated by the Examiner of Interferences, that in some cases courts have held that similar introductory words should be considered as limitations. However, we think it may be safely said that in all such cases an examination of the facts disclosed by the record will show that the words thus considered as limitations, were an essential element in the novelty of the device and of the invention in issue there. No such contention is properly made here, as it is obvious that if there be invention, it is not in the construction of an engraving or similar machine, but in the drive by which such machine is operated.

Even if it were conceded that the words "in an engraving machine" might be treated as a limitation in this case, the following words, "and the like" must be construed as justifying a broad construction of such limitation. The word "like" is thus defined in Bouvier's Law Dictionary, Volume II, page 241:

> Like. Equal in quantity, quality, or degree, exactly corresponding. 79 N. C. 387. Like does not necessarily mean the same in all parts; 2 Cush. 145. *Like offense.* Sameness in all the essential parts. 147 Mass. 452.

In *Diamond State Iron Co.* v. *Giles*, 7 Houst. 557, 11 Atl. 189, an ordinance of a city was up for construction, and the question arose as to whether the ordinance was sufficiently broad in its language to include a building only one story in height with a trussed roof. In a suit for damages caused by the collapse of a wall of said building, the same being intended to be used for a rolling mill, the question arose whether the language of the ordinance providing that all buildings have trussed roofs, "such as churches, public halls, and the like", being of certain dimensions, should be of certain thicknesses, included the structures in which the plaintiff in error was injured. The court said:

> The words "and the like," occurring after the particular buildings or structures mentioned, cannot properly be interpreted as limiting the buildings having trussed roofs to uses similar to the uses to which churches, public halls, theaters, and restaurants are particularly appropriated, but are meant to give extension to the uses to which buildings having trussed roofs may be properly applied, and protection to persons properly and lawfully in any such buildings having trussed roofs, whatever their lawful uses may be, was as much intended by this provision of the ordinance as it was to the persons who might be in churches, public halls, theaters, or restaurants.

In the same way the words "and the like" in these counts, must be broadly construed, and as so construed, in our opinion, are broad enough to cover any machine which performs functions similar to an engraving machine, such as milling, cutting, and other like operations. In fact, Horner so understood it, for we find in his specification in interference here, the following language:

> An object of the invention is to provide improvements in the mounting and control of the cutter heads of *milling machines and the like, such as so-called engraving machines*, wherein the cutter head is moved over the work by a so-called tracer, in following a pattern, through the medium of any suitable pantograph arrangement or the like, with the ends in view, among others, of enabling the milling tool or cutter to reproduce the pattern on work having a curved or spherical surface: * * *. (Italics ours.)

Braren was entitled to any use of his machine which was disclosed upon the face of his German application No. D–42851. *In re Crowell*, 17 C. C. P. A. (Patents) 1009, 39 F.(2d) 681, 397 O. G. 3; *In re Smith*, 17 C. C. P. A. (Patents) 644, 36 F.(2d) 302, 391 O. G. 247; *In re Downs*, 18 C. C. P. A. (Patents) —, 45 F.(2d) 251, 403 O. G. 791; *Kissovitz* v. *Rosenberg*, 50 App. D. C. 214, 284 O. G. 961; *Deitel* v. *Trading Co.*, 37 F.(2d) 41.

[3] Braren's said German application No. D–42851 plainly disclosed a device which will perform all the functions which are disclosed by the interference counts, 1, 2, 3, 5 and 8. This being true, under the authorities, there is no reason why he should not have the benefit of his said disclosure. In view of our conclusion as to said German application No. D–42851, it will not be necessary for use to discuss the various questions presented as to the applicability of the German application No. D–42050.

The decision of the Board of Appeals is reversed as to said counts 1, 2, 3, 5 and 8 and priority is awarded to the party Braren as to said counts.

Reversed.

ON PETITION FOR REHEARING.

A petition for rehearing has been filed herein, and the same is hereby denied. There seems to be no reason for a change in the views expressed by us in our opinion filed in this case on February 25, 1931.

It is argued that the court failed to pass upon this question: The Board of Appeals held that Braren was estopped from claiming that the invention in issue was a new and improved drive, because he did not seek, under rule 109 of the Patent Office, to add counts covering such broader claim. What we said in our original opinion, on the general merits of the claims, we believe disposed of this question. Certainly, Braren did nothing in this particular which ought to close his mouth from seeking a proper legal construction of the counts in the interference. Estoppels, not ordinarily favored, do not arise in this way.

The court was advised, on the argument of this case, that the reference patents contained in the record, were cited on the original Braren application. It now appears, by the agreed statements of counsel, that they were cited upon the Horner application.

[4] Our attention is called by the petitioner to our holding that Horner should have appealed and assigned error if he intended to ask for a finding of an earlier date of conception than that awarded him by the Patent Office tribunals. As to this, it is contended that, the decision below being favorable to Horner on all the counts, he had no right of appeal. On more mature consideration, we are of the opinion the point is well taken and that the whole field of priority of conception, on this record, is now before us. Therefore our former opinion is hereby modified in this respect. In this connection, the following authorities are thought to be in point. *Guarantee Company, Etc.*, v. *Phenix Ins. Co.*, 124 Fed. 170; *Rogers* v. *Penobscot Mining Co.*, 154 Fed. 606; *Smart* v. *Wright*, 227 Fed. 84; *Millward* v. *Vulcan Furnace, Etc.*, 26 F.(2d) 78.

In view of this holding, we have reexamined the record and are convinced that the tribunals of the Patent Office did not err in holding Horner to be entitled to no earlier date than February, 1923, for a reduction to practice. We agree with the Examiner of Interferences in his statement that the testimony of Horner's witnesses "Gustafson, Henkes, and Falkenrath is too slight and indefinite to amount to proof of conception." The shipment of the completed machine to the Schoder and Lombard Company is the first definite proof the record contains as to reduction to practice.

[5] A petition for writ of certiorari, suggesting a diminution of the record, was filed by appellee in this cause. The writ was issued and a supplemental record, consisting of twenty-one printed pages, was filed herein. Part of the matter contained in this supplemental record is fairly essential to a consideration of the case, and a portion of it is not. Accordingly the costs occasioned thereby will be taxed, one-half to the appellant and one-half to the appellee.

Petition denied.

U. S. Court of Customs and Patent Appeals

IN RE FORREST

No. 2,578. Decided March 2, 1931

PATENTABILITY—DOUBLE PATENTING.

Claims for a method of pasteurizing dried raisins *Held* unpatentable since not inventively different from the claims of applicant's prior patent.

APPEAL from the Patent Office. Affirmed.

Messrs. Miller & Boyken and *Mr. Charles S. Grindle* for Forrest.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.*:

This appeal involves the consideration of claims for a process or method of pasteurizing dried fruits, particularly raisins. From a decision of the Board of Appeals, affirming that of the Examiner rejecting the claims, appellant has appealed to this court. Claims 1 and 2 of the application are drawn to the pasteurizing step per se. Claims 3 and 4 add to the pasteurizing, the step of cooling after the pasteurization. Claims 2 and 3 are regarded as illustrative and follow:

2. The method of pasteurizing dried raisins which consists of subjecting said dried raisins for a period not in excess of thirty seconds to moist heat in excess of 212° Fahrenheit.

3. The method of pasteurizing dried raisins which consists of subjecting said dried raisins for a period not in excess of thirty seconds to moist heat in excess of 212° F. while passing through a closed compartment, then passing said raisins through a connecting second compartment during which they are subjected to exhaustion and then discharging them into the atmosphere.

The claims were rejected by reference to the patent of the applicant herein, Forrest, No. 1,607,886, November 23, 1926. In the Forrest patent, supra, the same method is disclosed as in the instant application with the addition of the fact that it claims the step of cooling the raisins, after the seeding operation, by the use of cool, dry air.

The Board of Appeals said:

While all the claims in the patent are limited to the use of cold dry air in the cooling step, we do not consider this to be patentable distinction over the claims on appeal.

The novelty in each case appears to reside in the pasteurizing step. We believe the claims on appeal define the same patentable invention as the claims in the patent and particularly as claims 1 and 2 of the patent, which omit the seeding step.

Since we agree with the conclusion reached by the Patent Office tribunals, it would serve no useful purpose to review the arguments made and the decisions cited, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE O'DOWD

No. 2,625. Decided February 25, 1931

PATENTABILITY—GAS BURNER.

Claims for a structure for supplying additional air to the jets of a gas burner *Held* unpatentable to applicant since they are not readable upon his disclosure.

APPEAL from the Patent Office. Affirmed.

Mr. Luther E. Morrison for O'Dowd.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals affirming the decision of the Primary Examiner rejecting claims 25, 26, 27, 28, and 29 in appellant's application for an alleged invention relating to a structure for supplying additional air to the jets of a gas burner "disposed beneath a closed cooking-top plate."

Claim 25 is illustrative. It reads:

25. In combination with a gas burner disposed beneath a closed cooking-top plate and providing gas-jet nozzles, a conduit member substantially enclosing said burner and arranged to direct air flowing upwardly therethrough obliquely into the combustion portions of the jets directed from said nozzles.

It appears from the record that the appealed claims were copied by appellant from the patent to Huetteman et al., No 1,650,359 issued November 22, 1927, for the purpose of securing a declaration of interference between the patent and appellant's application.

The tribunals of the Patent Office held that appellant's application disclosed a plurality of gas burners within a chamber; that the chamber was not arranged "to direct air flowing upwardly through the burner obliquely into the combustion portion of the jets;" that appellant's structure had nothing which could be described as a conduit member substantially inclosing the burner, whereas, the patent from which the appealed claims were copied disclosed a structure in the form of a conduit substantially surrounding each burner and arranged to direct the air into the combustion portions of the jets as stated in the claims; and that, as the involved claims are expressly limited to a "conduit member substantially inclosing said burner and arranged to direct air flowing upwardly therethrough obliquely into the combustion portions of the jets directed from said nozzles", appellant was not entitled to make them.

After describing appellant's disclosure, the Board of Appeals, among other things, said:

The same general arrangement is shown in the patent to Huetteman et al., and the claims on appeal were copied from this patent. In Huetteman's construction, however, the member which corresponds to appellant's structure just described extends down below the top of the burner and nearly to the bottom of the same. In the patent this structure is referred to as a conduit, and the claims appealed all include a statement that the conduit substantially encloses the burner. It is clear that the plate 18 of appellant's structure does not enclose the burner but lies in and projects from a plane substantially at the top of the burner. Appellant contends, however, that since the burner is mounted in a chamber in the gas stove that the plate 18 merely shows the top of a chamber which may be regarded as a conduit. Technically this may be true but we do not consider the chamber of the stove as material to the direction of the air up past the burner and to the jets. Doubtless the conduit of Huetteman is placed in a similar chamber, or, if it is not, that it could be so placed without disturbing the control of the air. In our opinion, therefore, the structure referred to by Huetteman as a conduit should be construed as the surrounding annular member close to the burner and should not in any way be considered as referring to a chamber in which the structure may, or may not, be positioned. Appellant contends that his structure will function in the same manner as that of the patentee, but in view of the specific limitation in the claims of the patent involved in this appeal, we find it unnecessary to enter into a consideration of this point.

Whether the conduit, disclosed as substantially surrounding a burner and specifically claimed in the patent to Huetteman et al., should be considered as limited to an annular shape, as stated by the Board of Appeals, is unnecessary for us to determine. It seems clear to us, however, that appellant does not disclose in his application a structure in any way similar to the conduit disclosed and claimed by Huetteman et al. We are of opinion, therefore, that the appealed claims do not read on appellant's disclosure.

The decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

BROADMEYER *v.* LINDBLADH

No. 2,627. Decided February 25, 1931

1. INTERFERENCE—APPEAL—WHAT MAY BE CONSIDERED.

On appeal from a decision awarding priority the Court of Customs and Patent Appeals will not consider the question of the patentability of the issue.

2. SAME—PRIORITY.

Record reviewed and *Held* insufficient to establish that B. conceived the invention prior to the filing date of L. and that priority was properly awarded to the latter.

APPEAL from the Patent Office. Affirmed.

Mr. B. G. Foster for Broadmeyer.

Mr. Harrison F. Lyman for Lindbladh.

HATFIELD, *J.*:

This is an appeal in an interference proceeding from the decision of the Board of Appeals affirming the decision of the Examiner of Interferences awarding priority of invention to appellee, Harmon E. Lindbladh.

The invention relates to a duplex ruling machine—a machine for ruling lines on paper. It consists, generally speaking, of a combination of two single ruling machines so constructed that sheets of paper are caused to pass through both sections of the duplex machine, the first section ruling lines in one direction and the other section ruling lines at angles, usually right angles, to the lines ruled by the first section. The counts in issue describe the invention. They read:

1. In a duplex ruling machine, a plurality of sets of ruling devices, means for delivering sheets to the sets of devices successively so that the lines produced by one set will extend in a different direction on said sheets from those produced by another set, and means for moving particular ruling devices of a set into and out of contact with the sheets so that the lines produced thereby will terminate in predetermined relation to their points of intersection with the lines produced by another set.

2. In a duplex ruling machine, a plurality of ruling devices arranged to produce intersecting lines, means for moving a ruling device into and out of contact with the work at points definitely located with respect to an intersecting line produced by a previously-acting ruling device, means for presenting the work to the ruling devices, and means arranged to vary the rate at which the work is acted upon by the ruling devices.

3. In a ruling machine, a plurality of sets of ruling devices successively acting upon the sheets to be ruled, means for feeding the sheets to one set of ruling devices, means by which the ruled sheets are received and are fed to another set of ruling devices, sheet-controlling means associated with each feeding means and corresponding set of ruling devices, means arranged to vary the rate of one feeding means, and means arranged to vary the rate at which a sheet-controlling means acts.

4. In a duplex ruling machine, a plurality of pens arranged to consecutively produce intersecting lines, lifting means for the pens, means arranged to actuate the lifting means of a pen to cause it to strike in definite relation to the line produced by the previously-acting pen, and means arranged to change the rate at which the sheets are acted upon by the pens.

5. In apparatus of the character set forth, the combination with two ruling machines, each having sheet-controlling means, a pen beam, pen beam operating means, and a sheet conveyor, of means for driving the pen beam operating mechanisms in synchronism and the conveyor at different relative speeds, and means for delivering the ruled sheets from one machine to the other.

Appellant's application was filed on January 18, 1923.

Appellee's application was filed September 17, 1921.

Appellee submitted no testimony, and, accordingly, is restricted to his filing date for conception and reduction to practice.

Appellant, the junior party, submitted testimony for the purpose of establishing conception and reduction to practice prior to appellee's filing date.

Appellant testified that he was supervising engineer of the Hickok Manufacturing Company, his assignee; that he conceived the involved invention in November, 1916; that, at that time, he disclosed the invention to the foreman of a customer of the Hickok Manufacturing Company, whose name he could not recall; that, sometime in 1917, he mentioned the matter to Mr. Ross A. Hickok, secretary of the Hickok Manufacturing Company; that, in October, 1917, he prepared a drawing marked "driving plan for Hickok quadruple 'L' ruling machine," at the bottom of which is written in lead pencil the following: "drive through pin cylinder shafts for striking;" that he offered this drawing—Exhibit 4—and particularly the pencil notation thereon, as proof that he had the invention in mind as early as October, 1917; that nothing more was done about the matter until November, 1921, at which time appellant's assignee received an order for a machine from a dealer in St. Louis, Mo.; and that in January, 1922, this order was filled by the construction and delivery of a machine embodying the involved invention. He also testified that the allegations in his preliminary statement to the effect that he had completed a machine embodying the invention in 1918 were incorrect, and that the did not know that he had misstated the facts until sometime during the year 1927. When asked why he did not file an application for a patent in 1917 or 1918, he replied:

I did not consider it a patent striking on both halves of the machine as this had been done on double deck machines for years.

Thereupon, he was requested to explain why, if he deemed the machine he claims to have conceived in 1916 unpatentable, he filed, in 1923, the application involved in the interference. To this question, he replied:

It is quite an improvement of driving from the pen cylinder shaft, that is having a source of power on a corner of an "L" machine driving the pen cylinder shafts as more accuracy is obtained to this drive then if the drive were as formerly from the cloth roller to the pen cylinder shaft.

The witness, Ross A. Hickok, testified that appellant disclosed the involved invention to him in 1917; that, as his company did not receive an order for a machine of the type involved prior to November 1, 1921, the invention was not reduced to practice until that order was filled by the construction and shipment—February 14, 1922—of a machine embodying the invention. The witness further testified that he saw appellee's machine embodying the invention in July, 1921, at the Graphic Arts Exposition, Chicago, Ill.

The witness, William O. Hickok, III, testified that appellant disclosed the invention to him on or about July 6, 1918; that his brother, the witness, Ross A. Hickok, shortly after his return from the Graphic Arts Exposition in Chicago, told him of having seen appellee's machine; and that, pursuant to an order received November 1, 1921, his company constructed a machine embodying the invention and, on February 14, 1922, shipped it to a dealer in St. Louis, Mo.

Upon this record the Examiner of Interferences held that the testimony of appellant, both as to conception and reduction to practice of the invention, was "very scanty." However, he held that appellant had conceived the invention set out in counts 1 and 5 prior to appellee's filing date, but that, as he was not diligent in reducing the invention to practice until long after September 17, 1921, appellee's filing date, he was not entitled to an award of priority, as to these counts; that appellant had failed to establish conception of the invention as set out in counts 2, 3, and 4 prior to appellee's filing date; and that appellee was entitled to an award of priority as to those counts.

The Board of Appeals held that appellant had failed to establish conception of the invention set out in the involved counts prior to appellee's filing date, and, in this connection, said:

On Broadmeyer's sketch Exhibit No. 4 dated October, 1917, is found a pencil note "drive through pen cyl. shaft for striking." This is not believed to establish any definite disclosure or proof of conception since the machine of that sketch might still have included the belt drive shown but merely connected to the pen cylinder instead of the apron roller and the belts were the source of trouble in striking on the second section. We are unable to find that Broadmeyer has proven either conception or reduction to practice before Lindbladh's filing dated.

[1] Counsel for appellant has argued in this court the question of the patentability of the counts in issue. This question will not be considered by the court in an interference proceeding. *Gowen* v. *Hendry et al.*, 17 C. C. P. A. (Patents) 789, 37 F.(2d) 426; 393 O. G. 1024; *Brogden* v. *Slater*, 17 C. C. P. A. (Patents) 1240, 40 F.(2d) 988, 399 O. G. 630.

[2] The evidence submitted by appellant to establish that he conceived the invention prior to appellee's filing date—September 17, 1921—is not very satisfactory. Appellant filed an amended preliminary statement alleging that he reduced the invention to practice in 1918 by the construction of a machine embodying the invention for the High Art Ruling Co., of St. Louis, Mo. On his direct examination he testified that this statement was incorrect and that the machine referred to did not embody the invention. Furthermore, he testified that he did not file an application for a patent in 1917 or 1918 because he did not consider patentable the machine he now claims he then conceived and disclosed. This statement, considered in connection with his testimony explaining why, in 1923, he filed the application involved in this interference, tend to support the contentions of counsel for appellee that appellant did not conceive the involved invention until after appellee's filing date. Another circumstance of some significance is that the officers of appellant's assignee, the only witnesses who attempted to corroborate appellant's testimony, were aware of the construction of appellee's machine in July, 1921. Nevertheless, nothing was done by appellant until after November 1, 1921, and his application was not filed until January, 1923. In view of these facts, how can it be seriously contended that appellant is entitled to an award of priority?

We are of opinion that the Board of Appeals was right in holding that appellant did not conceive the invention prior to appellee's filing date; and that, therefore, appellee was entitled to an award of priority.

The decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FISCHER

No. 2,628. Decided February 25, 1931

PATENTABILITY—ROOFING MATERIALS.

Claims for a roofing material *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Albert F. Robinson for Fischer.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

This appeal relates to alleged patentable improvements in roofing material.

Eight figures of drawings accompany the specification. These disclose a sheet of roofing material with adhesive strips of various forms secured to the edges thereof. In some the figures show the adhesive strip folded in order to protect the surface of the strip. In one there is a strip of lap cement which is covered with a strip of fabric. When this fabric strip is unfolded the cement strip is exposed.

The appealed claims are five in number, 1, 5, 6, 7, and 8.

Numbers 1 and 8 may be taken as typical.

1. As a new article of manufacture a self-adhering surfacing material comprising a sheet provided with a continuous strip of fibrous material within overlapping areas of adjoining sheets, and mastic having inherent adhesive qualities impregnated in said strip which serves as a vehicle therefor to render adjoining sheets self-adhering.

8. Prepared sheet roofing or surfacing material carrying upon seaming, or jointing, or adhering areas thereof a flexible strip saturated with an adhesive, said strip providing a vehicle for carrying said adhesive as a self-contained element in the production of said sheet roofing or surfacing material.

It is noted that none of the claims is limited to any particular kind of sheet roofing and while it is stated that appellant, in fact, uses fibrous roofing, the claims read upon sheet metal roofing as well.

All claims were rejected as showing nothing inventive over a patent to Scarff, 1,335,758 of April 6, 1920. There was also cited a publication by Abraham, entitled "Asphalt and Allied Substances."

It seems obvious that the claims as drawn read squarely on the Scarff patent which shows an adhesive strip attached to the roofing sheet before same is laid. It is true that Scarff's roofing sheet is metal, but, as has been stated, appellant's claims are not confined to any material.

It is insisted by appellant that his cement material is inherently adhesive in its normal condition, while that of Scarff requires heating by a hot iron, when being placed on the roof. The publication by Abraham, supra, discloses inherently adhesive cement materials.

In a supplemental brief filed by permission of the court, appellant directs attention to claims allowed him October 28, 1930, in another application, on building material of a described kind. Those claims were allowed after the filing of his original brief in this case. It is insisted that the claims so allowed were generic and that those of the instant application are specific and we are cited to our decision in the case of *In re McConnell*, 17 C. C. P. A. (Patents) 1139; 399 O. G. 419; 40 F.(2d) 567.

We have examined the authority cited but fail to discover the analogy between that case and the one at bar.

The question of whether the claims of October 28, 1930, were properly allowed is, of course, not before us and our concern is confined to the instant application.

Appellant's claims here involved are sufficiently broad to read directly upon Scarff, who obviously, as the Examiner stated, "uses an adhesive substance to cause overlapping roofing sheets to adhere together." The mere possible omission by appellant of nails used as one fastening element by Scarff is not inventive.

The claims set forth different arrangements of the plastic strips in order that their adhesive qualities may be preserved. This may involve a degree of skill but it is not invention.

The decision of the Board of Appeals being, in our opinion, without error is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,107,193, 1,159,740, 1,179,068, 1,143,542, J. R. Bray, Process of and articles for producing moving pictures, D. C., S. D. N. Y., Doc. E 52/326, *Bray-Hurd Process Co., Inc.*, v. *P. Sullivan et al.* Consent decree for plaintiff May 19, 1931.

1,143,542. (See 1,107,193.) 1,145,405. (See 1,363,200.)

1,159,740. (See 1,107,193.) 1,179,068. (See 1,107,193.)

1,222,452, J. A. O'Neill, Tuyère block; 1,702,891, L. D. Burwell, Underfeed stoker, D. C., N. D. Ohio, E. Div., Doc. E. 416, *Westinghouse Electric & Mfg. Co.* v. *Bowler Foundry Co.* Patents held valid and infringed May 21, 1931.

1,224,152, 1,625,640, J. J. Dillon, Pulley, filed May 29, 1931, D. C., N. D. Ohio, E. Div., Doc. 3831, *Dillon Pulley Co.* v. *National Lock Co. et al.*

1,307,733, A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, D. C., S. D. N. Y., Doc. E 48/17, *Alemite Mfg. Corp.* v. *J. Staff.* Consent decree for plaintiff (notice received May 27, 1931).

1,307,734. (See 1,307,733.)

1,363,200, Wells & Hunter, Automatic feed and delivery for platen presses; 1,145,405, E. Cheshire, Paper feeding and handling device; 1,472,656, Kluge & Kluge, Pneumatic feeding device for printing presses; 1,621,546, 1,621,547, same, Sheet delivery mechanism; 1,693,986, same, Feeding magazine for printing presses, D. C., N. D. Ohio, E. Div., Doc. 3018, *Brandtjen & Kluge, Inc.*, v. *Chandler & Price Co.* Dismissed without prejudice May 20, 1931.

1,404,369, F. C. Chapman, Dehydrator; 1,464,338, R. L. Puccinelli; same, D. C., N. D. Calif. (Sacramento), Doc. E 300, *Chapman Dehydrator Co.* v. *F. F. Kimpschild.* Dismissed for want of equity (notice May 25, 1931).

1,457,153, W. S. Elliott, Water heating and degasifying apparatus; 1,497,491, same, Method of treating liquids and apparatus therefor; Re. 15,866, 1,776,019, same, Treatment of liquids; 1,742,998, J. R. McDermet, Method and apparatus for treating liquids, filed May 22, 1931, D. C., S. D. Ohio, W. Div., Doc. E 298, *Elliott Co.* v. *The Hoppes Mfg. Co.*

1,461,966. (See 1,528,753.) 1,461,967. (See 1,528,753.)

1,464,338. (See 1,404,369.) 1,472,656. (See 1,363,200.)

1,475,980. (See 1,307,733.) 1,497,491. (See 1,457,153.)

1,528,753, S. Bergstein, Paper box making machine; 1,461,966, C. Butterfield, same; 1,461,967, same, Process for making paper folding boxes, D. C., N. D. Ind. (South Bend), Doc. 261, *The Interstate Folding Box Co.* v. *The Empire Box Corp.* Dismissed as to 1,528,753 and 1,461,966 Apr. 3, 1931.

1,559,234, Des. 68,903, R. G. Fleming, Smoker's stand, D. C., S. D. N. Y., Doc. E 42/122, *Smokador Mfg. Co., Inc.*, v. *Pullman Metal Specialty Co., Inc.* Consent decree for plaintiff May 26, 1931.

1,564,378, H. Stein et al., Bleached and dyed fur; 1,573,200, same, Process of bleaching and dyeing furs, D. C., S. D. N. Y., Doc. E 55/77, *Steinfur Patents Corp.* v. *Brickner & Bernfeld, Inc., et al.* Consent decree for plaintiff May 18, 1931.

1,573,200. (See 1,564,378.) 1,575,631. (See 1,728,859.)

1,621,546. (See 1,363,200.) 1,621,547. (See 1,363,200.)

1,625,640. (See 1,224,152.)

1,638,396, Hall & Lloyd, Fuel stoking device; Re. 17,925, M. J. Wightman, Mechanical stoker; Re. 18,006, C. H. Hall, Ash removing device, filed May 18, 1931, D. C. N. Y., W. Div., Doc. 599, *Domestic Stoker Co.* v. *Vitadise Co., Inc., et al.*

1,661,572. (See 1,694,796.) 1,693,986. (See 1,363,200.)

1,694,796, A. R. Ridderstrom, Folding method and article produced thereby; 1,710,410, same, Folding machine; 1,661,572, C. K. MacDonald, Art of folding, filed May 25, 1931, D. C., S. D. Ohio, W. Div., Doc. E 743, *United Shoe Machinery Corp.* v. *The O'Donnell Rubber Products Co.*

1,698,668, Ballantine & Hull, Demodulator and method of demodulation; 1,760,871, S. Ballantine, Method of and means for preventing radiation and extra reradiation in radio receivers; 1,760,872, L. M. Hull, Apparatus for amplifying electric oscillations, D. C., S. D. N. Y., Doc. E 56/256, *Radio Frequency Laboratories, Inc.*, v. *Danega, Inc.* Dismissed without prejudice May 15, 1931.

1,702,891. (See 1,222,452.)

1,710,504, 1,710,507, C. North, Process for making mixtures of cocoa or chocolate and milk and product thereof, filed May 15, 1931, D. C., S. D. N. Y., Doc. E 59/394, *W. V. Kelley et al.* v. *Heyman Process Corp.*

1,710,507. (See 1,710,504.)

1,721,416, K. Schroter, Hard metal composition; Re. 17,624, same, Hard metal alloy and process of making, filed May 22, 1931, D. C., N. D. Ohio, E. Div., Doc. 3820, *General Electric Co. et al.* v. *The Marvel Rare Metals Co. et al.*

1,728,859, W. Frame, Garter; 1,575,631, Larimore & Frame, same, filed May 19, 1931, D. C., N. D. Ohio, E. Div., Doc. 3818, *Comfee Roll Garter Corp.* v. *Vaughn, Inc.*

1,740,410. (See 1,694,796.) 1,742,998. (See 1,457,153.)

1,760,871. (See 1,698,668.) 1,760,872. (See 1,698,668.)

1,776,019. (See 1,457,153.) Re. 15,866. (See 1,457,153.)

Re. 17,624. (See 1,721,416.) Re. 17,925. (See 1,638,396.)

Re. 18,006. (See 1,638,396.) Des. 68,903. (See 1,559,234.)

Des. 75,565, A. R. Kanne, Lamp; Des. 75,566, Des. 75,567, same, Lamp body, D. C., S. D. N. Y., Doc. E 46/132, *Kanne & Bessant, Inc.*, v. *E. Laudell et al.* Consent decree for plaintiff May 18, 1931.

Des. 75,566. (See Des. 75,565.) Des. 75,567. (See Des. 75,565.)

Des. 77,007, A. R. Kanne, Supporting pedestal for lamps; Des. 78,933, same, Element for a lamp supporting pedestal, D. C., S. D. N. Y., Doc. E 50/147, *Kanne & Bessant, Inc.*, v. *E. Laudell et al.* Consent decree for plaintiff May 18, 1931.

Des. 78,929, C. W. Jones, Settee frame; Des. 78,930, same, Chair frame; Des. 78,931, same, Chair, D. C., S. D. N. Y., Doc. E 51/57, *Sons-Cunningham Reed & Rattan Co., Inc.*, v. *Grand Central Wicker Shop, Inc.* Consent decree for plaintiff, dismissed as to Des. 78,931 May 20, 1931.

Des. 78,930. (See Des. 78,929.) Des. 78,931. (See Des. 78,929.)

Des. 78,933. (See Des. 77,007.)

Des. 79,564, W. L. Myers, Buckle; Des. 79,582, E. B. Barker, same, D. C., S. D. N. Y., Doc. E 53/182, *L. A. Myers, jr., Inc.*, v. *Deaville Import Corp.* Consent decree for plaintiff May 26, 1931.

Des. 79,582. (See Des. 79,564.)

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, July 15, 1931.*

James D. Waterman, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of George M. Wolff, of 835 Crescent Place, Chicago, Ill., to effect the cancellation of the trade-mark registration of James D. Waterman, of 2624 San Pablo Ave., Oakland, Calif., No. 90,491, dated February 25, 1913, and the notice of such proceeding sent by registered mail to the said James D. Waterman at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said James D. Waterman, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 28, 1931

[VOL. 408. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 314,624. ARTHUR MARROS, New York, N. Y. Filed May 15, 1931.

PUBLIX SINGING CANARIES

No claim is made to the words "Singing Canaries" and to the representation of the canary bird apart from the mark shown on the drawing.

For Canary Birds.

Claims use since 1923.

Ser. No. 314,944. BOWDITCH MILLS, INC., Pascoag, R. I. Filed May 23, 1931.

GLOETTE

For Animal, Vegetable, and Synthetic Fibers for Decorating Cloth and Other Materials.

Claims use since Nov. 3, 1930.

Ser. No. 315,254. EBERLE TANNING COMPANY, Westfield, Pa. Filed June 1, 1931.

BUFFLEX

For Leather.

Claims use since Feb. 2, 1931.

Ser. No. 315,255. EBERLE TANNING COMPANY, Westfield, Pa. Filed June 1, 1931.

GRAINFLEX

For Leather.

Claims use since Mar. 26, 1931.

CLASS 2

Receptacles

Ser. No. 313,070. ASSOCIATED SILVER COMPANY, Chicago, Ill. Filed Apr. 8, 1931.

TPC SILVERSEAL

For Boxes and Chests of Wood, Paper, Cardboard, Fabric, Composition Material, and Base Metal, for Silverware.

Claims use since Mar. 15, 1929.

Ser. No. 315,217. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed May 29, 1931.



The words "Patina Brand" are disclaimed apart from the mark as shown.

For Containers Made of Iron—Namely, Coops, Pails, Buckets, Ice Cells, Casks, Carbide Drums, and Gravel Boxes.

Claims use since Dec. 16, 1929.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 302,128. JULIUS MICHAEL, Brooklyn, N. Y. Filed May 23, 1930.

MICHONE-IT

The portrait shown in the drawing is a portrait of the applicant, the proprietor of this trade-mark.
For Flexible Safety Razor Sharpening Device.
Claims use since Oct. 8, 1929.

Ser. No. 306,070. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio. Filed Sept. 25, 1930.

GOOD LUCK

For Soap.
Claims use since Feb. 21, 1878.

Ser. No. 306,547. J. A. TUMBLER LABORATORIES, Baltimore, Md. Filed Oct. 8, 1930.

ROAD HAZE REMOVER

No claim being made to the word "Remover" apart from the mark as shown.
For Cleaning Compound in the Nature of a Wash for Automobiles.
Claims use since Apr. 8, 1929.

Ser. No. 311,592. THE ARGOL CHEMICALS, INC., Baltimore, Md. Filed Mar. 2, 1931.

ARGOL

For Cleansing Compound to be Dissolved in Water for Use in Households, Laundries, Dairies, Restaurants, and Garages for General Cleansing Purposes and for Cleansing Drains.
Claims use since July 15, 1930.

Ser. No. 312,253. LOUIS ANGELUS, doing business as Nuzone Products Co., New York, N. Y. Filed Mar. 18, 1931.

nuzone

For Cleansing Compounds for Hats.
Claims use since Mar. 1, 1931.

Ser. No. 313,833. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Apr. 27, 1931.



No exclusive claim is made to the representation of the cake of soap "per se", or to the wording "Pure Soap Containing Palm and Olive Oils" except in association with the other features of the mark shown in the drawing; likewise, no claim is made to the expression "U. S. A." apart from the mark shown in the drawing.
While the color of the cake of soap which forms the background and upon which the marking appears is normally green, the lining in the drawing is for the purpose of shading only.
For Soap.
Claims use since June, 1890.

Ser. No. 314,369. JACOB KAHN, doing business as Lily White Mfg. Co., Brooklyn, N. Y. Filed May 9, 1931.



The word "White" is disclaimed herein apart from the mark shown in the drawing.
For Shoe Whitener and Cleaner.
Claims use since Sept. 15, 1930.

Ser. No. 314,572. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed May 14, 1931.

RADIANT

For Shoe Polish.
Claims use since Apr. 28, 1931.

Ser. No. 315,393. GOLD DUST CORPORATION, New York, N. Y. Filed June 4, 1931.



No claim is made to any of the wording shown in the drawing except the words "Gold Dust's, Silver Dust, Gold Dust" and the name of the applicant corporation. No claim is made to the representation of the outline of the carton per se.
For Common Soap and Laundry Soap in Spray Form.
Claims use since May 29, 1931.

Ser. No. 315,395. GUERIN & LORIMER, New York, N. Y. Filed June 4, 1931.



No rights are asserted to the exclusive use of the words "Matchless, Harmless, Quickest, Brightest" apart from the trade-mark as shown in the drawing.
For Metal Polish.
Claims use since May 27, 1931.

Ser. No. 315,539. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J. Filed June 8, 1931.

Merlay

For Soap.
Claims use since Sept. 1, 1930.

Ser. No. 315,595. GORDON-ALLEN LTD., Oakland, Calif. Filed June 9, 1931.

ALGOR

For Soap.
Claims use since February, 1930.

Ser. No. 315,662. VIVINY PERFUMERS, INC., West Haven, Conn. Filed June 10, 1931.

Lord Chesterfield

For Shaving Cream.
Claims use since May 19, 1931.

Ser. No. 315,730. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed June 12, 1931.



Applicant makes no claim herein to the words "Shave Cream" appearing on the drawing or to the representation of the carton. The shading in the drawing is to indicate colors. The solid black denotes the color black, the oblique lining denotes the color green, and the cross-hatching denotes the color yellow.
For Shaving Cream.
Claims use since May 15, 1931.

Ser. No. 315,731. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed June 12, 1931.



Applicant makes no claim herein to the words "Shave Cream" appearing on the drawing or to the representation

of the tube. The shading in the drawing is to indicate colors. The solid black denotes the color black, the oblique lining denotes the color green, and the cross-hatching denotes the color yellow.

For Shaving Cream.

Claims use since May 15, 1931.

Ser. No. 315,989. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed June 18, 1931.



Applicant makes no claim herein to the words "Rasier-Creme" appearing on the drawing or to the representation of the carton. The shading in the drawing is to indicate colors. The solid black denotes the color black, the oblique lining denotes the color green, and the cross-hatching denotes the color yellow.

For Shaving Cream.

Claims use since January, 1928.

CLASS 5

Adhesives

Ser. No. 313,390. SCHEIBERT BROS., INC., New York, N. Y. Filed Apr. 15, 1931.



The word "Elastic" is disclaimed apart from the mark as shown in the drawing.

For Show Case Adhesive Cement.

Claims use since Apr. 1, 1931.

Ser. No. 316,122. THE DOOLY MANUFACTURING CO., INC., Philmont, N. Y. Filed June 22, 1931.

ACE-HI

For Glues.

Claims use since Jan. 16, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 291,616. HELLER-DELTAH COMPANY, INC., New York, N. Y. Filed Oct. 26, 1929.

L'Heure de Minuit

For Perfumes, Toilet Waters, Face Powders, Face Rouge, and Lipsticks.

Claims use since Aug. 17, 1928.

Ser. No. 291,617. HELLER-DELTAH COMPANY, INC., New York, N. Y. Filed Oct. 26, 1929.

Ecstacy

For Perfumes, Toilet Waters, Face Powders, Face Rouge, and Lipsticks.

Claims use since Aug. 16, 1928.

Ser. No. 294,716. EN-VÉ INCORPORATED, Detroit, Mich. Filed Jan. 13, 1930.

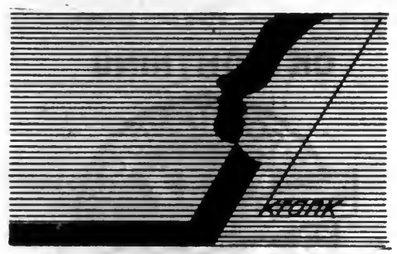


For Cleansing Cream and Toilet Powder.

Claims use since Nov. 22, 1929.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 301,114. A. J. KRANK COMPANY, St. Paul, Minn. Filed May 23, 1930.



The lining on the drawing illustrates a silver background or any background color which has the property of reflecting other colors.

For Face Creams, Cleansing Cream, Vanishing Cream, Cold Cream, Facial Pack Paste, Massage Cream; Liquid Muscle Massage, an Oil for Massaging and Treating the Muscles; Face Powder, Rouge, Shampoos, Hair and Scalp Tonic, Liquid Hair Fixitives for Fixing and Dressing the Hair and Cleansing the Scalp; Preparations for the Eyelashes and Eyebrows, Face and Hand Lotions for Preventing Chapping and Roughness, Skin-Tonic Lotions and Astringent Lotions, and Manicuring Preparations—Namely, Cuticle Oil and Remover.

Claims use since Apr. 21, 1930.

Ser. No. 306,632. J. W. BECKER, doing business as Hormona Co., San Francisco, Calif. Filed Oct. 10, 1930.

TESTOVAN

For General Gland Tonic for Strengthening the Resistance of the Nervous System, Especially Useful for Bodily Exhaustion, Fatigue, Lassitude, Depression, and Lack of Energy.

Claims use since Aug. 1, 1930.

Ser. No. 313,108. COMMERCIAL CHEMICAL COMPANY OF TENNESSEE, Memphis, Tenn. Filed Apr. 6, 1931.



Applicant disclaims the words "Brand" and "Calcium Arsenate."

For Calcium Arsenate, a Preparation for the Dusting of Cotton Plants, Tomato, Potato, Cabbage, Strawberry Plants, and Like Truck Forming Products.

Claims use since July, 1926.

Ser. No. 313,782. MARTHA MATILDA HARPER, INC., Rochester, N. Y. Filed Apr. 25, 1931.

HARPER METHOD



The drawing is lined for the color blue. The words "Harper Method" shown on the drawing are disclaimed apart from the mark as shown.

For Acne or Pimple Lotion, Bluing, Cleansing Cream, Lemon Rinse, Liquid Cleansing Cream, Liquid Foundation Cream, Muscle Oil, Pore Paste, Skin Lotion, Sta-Wave (a Mucilaginous Paste for the Hair), Massage Cream, Hair Tonic.

Claims use since Mar. 1, 1931.

Ser. No. 314,783. ANTHONY K. ZALLY, doing business as Cascadon Laboratories, Jersey City, N. J. Filed May 19, 1931.

Cascadon

For Preparation for the Treatment of Dyspepsia, Indigestion, Rheumatism, and Stomach Disorders.

Claims use since Mar. 21, 1922.

Ser. No. 314,890. BRE-CARBO MFG. CO., New York, N. Y. Filed May 22, 1931.

BRE-CARBO

For Preparation for the Treatment of Constipation.

Claims use since July 17, 1930.

Ser. No. 314,938. Y-AGE-COSMETICS, INC., New York, N. Y. Filed May 22, 1931.

Y- AGE

For Face Creams—Namely, Cleansing Cream, Tissue Cream, Pore Cream, No Wrinkle Cream, Acne Cream,

Foundation Cream, Bleaching Cream, Eczema Cream, Manicure Preparations—Namely, Cuticle Cream, Cuticle Liquid Preparation, Nail Polish; Hair Preparations—Namely, Follicle Lotion, Hair Tonic, Finger Wave Lotion, Waving Fluid Compound, Brilliantine, Rose Oil, Antiseptic Hair Cream, Egyptian Hair Powder, Crystallized Brilliantine, Eyelash and Eyebrow Pomade; Liquid Astringent, Acne Lotion, Cream Used to Keep the Skin Soft and Supple, Muscle Oil, Liquid Bath Preparation; Face Powders; Toilet Water, Sachets, Perfumes, Antiseptic Mouth Wash and Antiseptic Skin Wash.
Claims use since 1928.

Ser. No. 315,289. WORCESTER SALT COMPANY, New York, N. Y. Filed June 1, 1931.

UNIVERSAL

For Salt.
Claims use since June 15, 1915.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 315,582. FRANK J. BOYLE, New York, N. Y. Filed June 8, 1931.

BAROMIDOR

For Humidors for Cigars, Cigarettes, and Tobacco.
Claims use since Apr. 21, 1931.

CLASS 10

Fertilizers

Ser. No. 314,756. THE GREINER CHEMICAL CORPORATION, Fort Wayne, Ind. Filed May 19, 1931.

PRIMEGRO

For Plant Food and Fertilizing Preparation.
Claims use since Jan. 1, 1931.

Ser. No. 315,887. THE RHODEY CORPORATION, Baltimore, Md. Filed June 15, 1931.



The picture of the girl is fanciful and no claim is made to the words "Plant Tablets."
For Plant Stimulant Tablets in the Nature of a Fertilizer.
Claims use since Sept. 28, 1930.

CLASS 12

Construction Materials

Ser. No. 308,501. OKLAHOMA PORTLAND CEMENT COMPANY, Oklahoma City, Okla. Filed Dec. 1, 1930.

OK LIGHTNING



OIL-WELL CEMENT

The words "Portland Cement," "Oil-Well Cement" and "Ada, Okla." appearing upon the drawing are disclaimed apart from the mark shown.
For Quick Hardening Oil Well Cement.
Claims use since Sept. 1, 1929.

Ser. No. 309,824. BENJAMIN J. LONG, doing busines as Forest City Bronze Company, Cleveland, Ohio. Filed Jan. 10, 1931.

FLEX-TITE

The word "Tite" is disclaimed apart from the mark shown.
For Weather Strip.
Claims use since February, 1927.

Ser. No. 313,751. OAKLAND LUMBER COMPANY, Orgas, W. Va. Filed Apr. 24, 1931.

AHL

For Rough Lumber.
Claims use since Nov. 10, 1927.

Ser. No. 315,705. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed June 11, 1931.



For Asphalt and Asphalt Pipe Coating.
Claims use since May 12, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 302,373. THE D. A. ERINGER SANITARY MANUFACTURING COMPANY, Columbus, Ohio. Filed June 13, 1930.



No claim is made to the word "Acid" apart from the mark as shown.
For Enameled Ware—Namely, Bathtubs, Shower Receptors, Closet Bowls, Drinking Fountains, Sinks, Lavatories, Urinals, and Flushing Tanks.
Claims use since Jan. 1, 1930.

Ser. No. 314,898. CRANE CO., Chicago, Ill. Filed May 22, 1931.



For Globe and Check Valves.
Claims use since Apr. 1, 1931.

Ser. No. 315,228. WOLVERINE BRASS WORKS, Grand Rapids, Mich. Filed May 29, 1931.

WOLVO

For Moulded Rubber Valve Ball-Which is Used in Water Closet Tanks.
Claims use since Oct. 20, 1930.

Ser. No. 315,549. THE MURDOCK MFG. & SUPPLY COMPANY, Cincinnati, Ohio. Filed June 8, 1931.

C.C.A.

For Shut Off Valves and Steam Valves.
Claims use since May 1, 1931.

Ser. No. 316,132. PITTSBURGH STEEL COMPANY, Pittsburgh, Pa. Filed June 22, 1931.

Patrician

For Wire Fencing.
Claims use since May 13, 1931.

CLASS 15

Oils and Greases

Ser. No. 313,060. THE STANDARD OIL COMPANY, Cleveland, Ohio. Filed Apr. 7, 1931.



For Gasoline.
Claims use since Apr. 3, 1931.

Ser. No. 315,174. ACHESON OILDAG COMPANY, Port Huron, Mich. Filed May 29, 1931.

Castordag

For Lubricants Comprising Mixtures or Compounds Consisting of or Containing Castor-oil and Colloidal Graphite.
Claims use since May 20, 1931.

Ser. No. 315,312. KELLY AND MOUNT, Baldwinsville, N. Y. Filed June 2, 1931.

KEMO

For Specially Blended Gasoline and Motor Fuel Oils and Motor Lubricating Oils.
Claims use since Jan. 1, 1931.

Ser. No. 315,507. TIDE WATER OIL COMPANY, Bayonne, N. J., and New York, N. Y. Filed June 6, 1931.

TIDEX

For Lubricating Oils and Greases.
Claims use since May 20, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 301,537. JESS M. WAYNICK, doing business as J. M. Waynick Paint Mfg. Co., Los Angeles, Calif. Filed May 28, 1930.



The drawing is lined to indicate the colors red and purple. Applicant disclaims the words "Paints, Varnishes, Lacquers" apart from the trade-mark shown.

For Ready-Mixed Paints, Dry Paint Colors, Paint Thinners, White Lead, Zinc Oxide Paint Pigments, Lacquers, Lacquer Thinners, Prepared Shellac Ready for Use, Floor Wax, Putty, Varnish, Paint Enamels, Linseed Oil, Turpentine, Calsomine, Oil and Japan Colors.

Claims use since Feb. 7, 1930.

Ser. No. 312,207. FRED'K A. STRESEN-REUTER INC., Chicago, Ill. Filed Mar. 16, 1931.

TRANSOCOLOR

For Paint Colors for Screen Process Work.
Claims use since Feb. 20, 1931.

Ser. No. 314,941. JOHN G. TEICHMAN, Durand, Mich. Filed May 21, 1931.

HYDREX

For Plastic Compound in the Nature of So-Called Putty.
Claims use since Mar. 26, 1931.

CLASS 17

Tobacco Products

Ser. No. 313,081. UNITED STATES CIGAR CO. INC., York, Pa. Filed Apr. 29, 1931.



For Cigars.
Claims use since Feb. 9, 1931.

Ser. No. 313,982. UNITED STATES CIGAR CO. INC., York, Pa. Filed Apr. 29, 1931.

FLYING HABIT



For Cigars.
Claims use since Feb. 9, 1931.

Ser. No. 315,036. CONDOSSIS TOBACCO CORPORATION, New York, N. Y. Filed May 26, 1931.

A. D. Condossis

The trade-mark is a facsimile of the signature of A. D. Condossis, president of the applicant corporation.

For Cigars, Cigarettes, and Smoking and Chewing Tobacco.

Claims use since May 20, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 314,954. THE GLOBE MACHINE & STAMPING COMPANY, Cleveland, Ohio. Filed May 23, 1931.



For Automobile Radiator Shutters.
Claims use since Jan. 2, 1927.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 314,721. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed May 18, 1931.

FLOOR-O-LEUM

For Felt Base Rugs and Floor Covering.
Claims use since Dec. 26, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 314,855. MOTOR MELODY CORPORATION, Chicago, Ill. Filed May 21, 1931.

MOTOR MELODY

For Radio Receiving Sets.
Claims use since Jan. 1, 1931.

Ser. No. 315,144. HYGRADE LAMP COMPANY, Boston, Mass. Filed May 28, 1931.



No claim is made to the word "Hygrade" apart from the mark shown in the drawing.

For Electron Radio Tubes.

Claims use since Mar. 15, 1929.

Ser. No. 315,554. PAGE STEEL AND WIRE COMPANY, Adrian, Mich., and Bridgeport, Conn. Filed June 8, 1931. Under 10-year proviso.

PAGE

For Steel and Iron Magnet Core Wire.
Claims use since July 1, 1883.

Ser. No. 315,652. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass. Filed June 10, 1931.

OLYMPIC

For Radio Receiving Sets.
Claims use since May 28, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 294,462. H. BOKER & CO., INC., New York, N. Y. Filed Jan. 7, 1930.

BOYCRAFT

For Toy Construction Wood Building Blocks.
Claims use since Oct. 1, 1929.

Ser. No. 304,435. R. TURNER & SONS LIMITED, Warwick, England. Filed Aug. 9, 1930.



The words "Brand" and "Dependon" are disclaimed apart from the mark as shown.

For Fish Hooks, Snelled Hooks, Gut Leaders, Artificial Trout Flies, Salmon Flies, Spoon Baits, Fishing Lines, and Artificial Baits.

Claims use since July 5, 1928.

Ser. No. 313,446. HERBERT ARNOLD RIMMER, Glasgow, Scotland. Filed Apr. 16, 1931.

NONETTE

For An Indoor and Outdoor Game Played with Shuttlecocks or Shuttlecock Catching Devices.

Claims use since Oct. 5, 1928.

Ser. No. 316,147. AMERICAN CHARACTER DOLL CO. INC., New York, N. Y. Filed June 23, 1931.



The representation is fanciful, and no claim is made to the exclusive use of the word "Doll" apart from the mark as shown in the drawing.

For Dolls.

Claims use since Jan. 10, 1931.

Ser. No. 316,196. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed June 24, 1931.

SCRAMBLE

For Artificial Bait.

Claims use since Apr. 25, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 314,167. NOVO ENGINE COMPANY, Lansing, Mich. Filed May 4, 1931.

NOVO
ROLLER-RING PUMP

Exclusive use of the words "Roller-Ring Pump" is disclaimed apart from the mark as shown.

For Pumps.

Claims use since Apr. 21, 1931.

Ser. No. 315,067. ISADOR SHOR, doing business as I. Shor, New York, N. Y. Filed May 26, 1931.

ATLAS SAWS



The applicant disclaims the right to the exclusive use of the descriptive word "Saws".

For Jewelry Saws.

Claims use since Apr. 28, 1931.

Ser. No. 315,135. COLUMBUS MCKINNON CHAIN CORPORATION, Tonawanda, N. Y. Filed May 28, 1931.

AL-LITE

For Chain Hoists.

Claims use since May 18, 1931.

Ser. No. 315,269. C. M. KING, doing business as K. and G. Manufacturing Company, Birmingham, Ala. Filed June 1, 1931.

K AND G

For Wheel Pullers and Ignition Cable Extractors.

Claims use since May, 1924.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 306,679. CARL ZEISS, Jena, Germany. Filed Oct. 11, 1930.

Ortho-Metar

For Optical Objectives.

Claims use since 1929.

Ser. No. 314,831. AGFA ANSCO CORPORATION, Binghamton, N. Y. Filed May 21, 1931.

OPALEX

For Sensitized Photographic Film

Claims use since Nov. 22, 1930.

Ser. No. 315,551. THE NEW YORK PATTERN COMPANY, INC., New York, N. Y. Filed June 8, 1931.

OWN NAME

For Paper Patterns.

Claims use since May 25, 1931.

CLASS 27

Horological Instruments

Ser. No. 305,348. ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill. Filed Sept. 5, 1930.

States

For Watches, Watch Movements, and Watch Cases.

Claims use since Aug. 21, 1930.

Ser. No. 315,822. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed June 15, 1931.

DOLLY
MADISON

For Watches.

Claims use since May 1, 1930.

Ser. No. 316,046. IRVING MILLER COMPANY, New York, N. Y. Filed June 19, 1931.

WAKEMASTER

For Clocks.

Claims use since June 12, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 314,059. JOSEPH H. LANCOR, doing business as Lancor Manufacturing Company, Providence, R. I. Filed May 1, 1931.

"LAN"

For Hair Clasps, Lingerie Clasps, Bow Holders, and Cuff Links, All Made of or Plated with Precious Metal, and Necklaces, Bracelets, Ear Ornaments, Brooches, Collar Buttons, and Finger Rings.

Claims use since Jan. 5, 1925.

Ser. No. 314,830. J. R. WOOD & SONS, INC., New York, N. Y. Filed May 20, 1931.

CASTLE

For Jewelry for Personal Wear, Not Including Watches.

Claims use since Apr. 1, 1931.

Ser. No. 315,226. THE WATSON CO., Attleboro, Mass. Filed May 29, 1931.

Lotus

For Sterling Silver Flatware and Sterling Silver Holloware.

Claims use since Sept. 1, 1930.

Ser. No. 315,634. BARNETT C. HELZBERG, doing business as Helzberg's Diamond Shop, Kansas City, Kans. Filed June 10, 1931.



The words "Certified Perfect Diamonds" are disclaimed apart from the mark shown in the drawing.

For Diamonds.

Claims use since May 5, 1931.

Ser. No. 315,663. WEIDLICH STERLING SPOON CO., Bridgeport, Conn. Filed June 10, 1931.

Bridal

For Table Silver-Ware—Namely, Hollow-Ware and Flat-Ware.

Claims use since May 26, 1931.

Ser. No. 315,679. BEN FELSENTHAL & CO., INC., New York, N. Y. Filed June 11, 1931.

BENTLEE

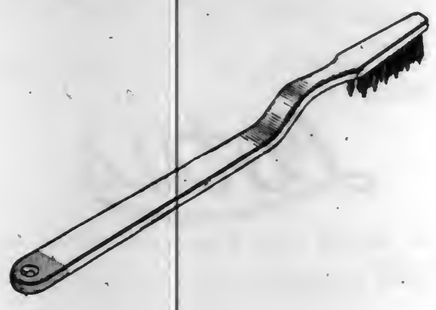
For Jewelry and Costume Jewelry—Namely, Novelty Beads, Pendants, Necklaces, Bracelets, Brooches, Pins, Earrings, Finger Rings, Made of Precious, Semi-Precious, and Artificial Stones, Glass, Metal, or Composition Material and/or Combinations of the Same.

Claims use since July 30, 1917.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 313,701. HARRY J. BOSWORTH COMPANY, Chicago, Ill. Filed Apr. 23, 1931.



The trade-mark consists of a red tipped end for tooth brush handles. The representation of the goods which appears on the drawing is disclaimed.

For Tooth Brushes.

Claims use since Sept. 1, 1930.

Ser. No. 313,702. HARRY J. BOSWORTH COMPANY, Chicago, Ill. Filed Apr. 23, 1931.

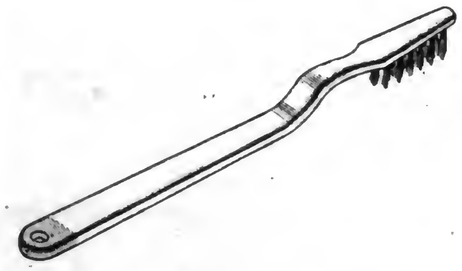


The trade-mark consists of a blue tipped end for tooth brush handles. The representation of the goods which appears on the drawing is disclaimed.

For Tooth Brushes.

Claims use since Sept. 1, 1930.

Ser. No. 313,703. HARRY J. BOSWORTH COMPANY, Chicago, Ill. Filed Apr. 23, 1931.

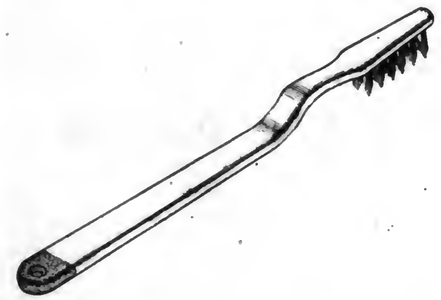


The trade-mark consists of a green tipped end for tooth brush handles. The representation of the goods which appears on the drawing is disclaimed.

For Tooth Brushes.

Claims use since Sept. 1, 1930.

Ser. No. 313,704. HARRY J. BOSWORTH COMPANY, Chicago, Ill. Filed Apr. 23, 1931.



The trade-mark consists of an amber tipped end for tooth brush handles. The representation of the goods which appears on the drawing is disclaimed.

For Tooth Brushes.

Claims use since Sept. 1, 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 315,659. NICHOLAS DE GILIO, San Francisco, Calif. Filed June 10, 1931.

DEG-ALN

For Beverage Filters.

Claims use since Feb. 1, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 310,964. THE UNITED FURNITURE COMPANY, Lexington, N. C. Filed Feb. 11, 1931.

QUALITY MATERIALS UNITED SKILLED CRAFTSMEN

The words "Quality Materials, Skilled Craftsman" being disclaimed.

For Bedroom Furniture Consisting of Dressers, Vanity Dressers, Wardrobes, Chiffoniers, Tables, Beds, Chairs, and Benches.

Claims use since Oct. 1, 1929.

CLASS 33

Glassware

Ser. No. 313,969. H. PRAILSTEIN, Philadelphia, Pa. Filed Apr. 29, 1931.

ROYAL BRAND

The word "Brand" is disclaimed alone and apart from the mark as shown.

For Cut Glass, Ornamental Glass, Plate Glass, Window Glass, Sheet Glass, Automobile Glass, Laminated Glass, Colored Glass, Carved Glass, White Glass, Black Glass, Lead Glass, and Mirror Glass.

Claims use since 1906.

CLASS 36

Musical Instruments and Supplies.

Ser. No. 308,532. CZECHSLOVAK MUSICAL INSTRUMENTS COMPANY, New York, N. Y. Filed Dec. 3, 1930.

Kelgon

For Violins, Violas, Cellos, Double Basses, Mandolins, Banjo Mandolins, Ukuleles, Banjo Ukuleles, Tenor Ukuleles, Tiples, Banjos, Tenor Banjos, Guitars, Tenor Guitars, Accordions, Piano Accordions, Harmonicas, Megaphones, Zithers, Lutes, Lute-Mandolins, Flutes, Drums; Bows for Violins, Cellos, Basses, Violas; Chinrests for Violins, Cellos, Basses, Violas; Bridges for Violins, Cellos, Basses, Violas; Pegs for Violins, Cellos, Basses, Violas; Tuning Pipes for Violins, Cellos, Basses, Violas; Tailpieces for Violins, Cellos, Basses, Violas; Mutes for Violins, Cellos, Basses, Violas; Bow Hair for Violins, Cellos, Basses, Violas; and Strings for Violins, Cellos, Basses, Violas, Mandolins, Guitars, Tenor Banjos, Zithers, and Ukuleles; Music Stands, Trumpets, Cornets, Trumbones, Saxophones, Circular Altos, Upright Altos, Clarinets, Oboes, Sousaphones, Bassoons, Bugles, Fifes, French Horns, Ocarinas, Piccolos, Cymbals, Xylophones, Mouthpieces, Reeds, and Mutes.

Certain Named Stringed, Fretted, Brass, Reed, Wind, Woodwind, and Percussion Musical Instruments and Parts and Supplies Therefor.

Claims use since May 1, 1930.

CLASS 37

Paper and Stationery

Ser. No. 303,778. THE OHIO AND MICHIGAN PAPER COMPANY, Toledo, Ohio. Filed July 24, 1930.

VICO

For Wrapping Paper, Toilet Paper, Bond and Book Paper, and Correspondence and Mailing.

Claims use since August, 1924.

Ser. No. 308,036. REMINGTON RAND INC., Buffalo, N. Y. Filed Nov. 18, 1930.

REMINGTON RAND

For Bound Books for Accounts and Records; Loose Leaf Binders for Accounts and Records and Blank, Partially Printed, and/or Ruled Sheets and Guides and Other Index Devices therefor; Indexed Cards, Files, Guides, Sheets, and Folders; Cards, Sheets, Guides, and Folders for Indexed Files; Card Holders, Hangers, Clips and Signals; Blank, Partially Printed, and/or Ruled Cards; Paper, Cloth, or Metal Guides and Guide Cards, Folders, Tabs, and Labels; Transparent and Other Holders for Index Tabs and Labels, and Strips for Making Tabs, Labels, and Holders; Paper for Printing, Typewriting, and Writing Purposes; Paper and/or Fiber Envelopes, Document Files, and Containers for Carrying, Mailing, and Filing Purposes; Index Strips and Sheets; Copyholders for Typewriters, Parts Thereof, and Indexed Check Sorters.

Claims use since Oct. 14, 1930.

Ser. No. 314,713. THE A. N. PALMER COMPANY, New York, N. Y. Filed May 18, 1931.

PALMER METHOD CRITERION

The exclusive use of the word "Method" is disclaimed apart from the mark as shown.

For Penholders.

Claims use since Sept. 1, 1930.

Ser. No. 314,971. THE ULLMAN MANUFACTURING COMPANY, Brooklyn, N. Y. Filed May 23, 1931.



No claim being made to the word "Crayon" apart from the mark shown.
For Sets of Crayons.
Claims use since May 1, 1931.

Ser. No. 315,598. KINGSPORT PRESS, INC., Kingsport, Tenn. Filed June 9, 1931.



No request for registration of the word "Kraft" is made except in combination with the trade-mark shown.
For Airbrush Finished Book Covers.
Claims use since June 1, 1931.

Ser. No. 315,599. KINGSPORT PRESS, INC., Kingsport, Tenn. Filed June 9, 1931.



No request for registration of the word "Kraft" is made except in combination with the trade-mark shown.
For Airbrush Finished Book Covers.
Claims use since Jan. 1, 1931.

Ser. No. 315,875. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed June 15, 1931.

TRUPOINT

For Pencils and Fountain Pens.
Claims use since May 27, 1931.

Ser. No. 315,948. S. E. & M. VERNON, INC., New York, N. Y. Filed June 16, 1931.

COLLEGIAN

For Loose Leaf Binders and Blank Books.
Claims use since June 4, 1931.

Ser. No. 316,045. MCLAURIN-JONES CO., Brookfield, Mass. Filed June 19, 1931.

WARECAL

For Decalcomania Paper.
Claims use since June 4, 1931.

CLASS 38

Prints and Publications

Ser. No. 314,027. THE EDWARD VALVE AND MANUFACTURING CO., East Chicago, Ind. Filed Apr. 30, 1931.

valve values

For Periodical.
Claims use since Jan. 3, 1925.

Ser. No. 314,501. HAROLD HALSELL COMPANY, Oklahoma City, Okla. Filed May 13, 1931.

THE LITTLE THRIFTIES

For Cartoon Strips.
Claims use since Apr. 19, 1931.

CLASS 39

Clothing

Ser. No. 309,477. JOHN MARTIN HISS, Columbus, Ohio. Filed Dec. 30, 1930.

CLASSIFOOT

For Shoes Made of Leather or Fabric or Combination of These Materials.
Claims use since Dec. 19, 1930.

Ser. No. 311,388. THE FRANK H. LEE COMPANY, Danbury, Conn. Filed Feb. 24, 1931.

SOUDAN FELTS

The descriptive word "Felts" is disclaimed apart from its use with the mark as shown.
For Men's and Women's Felt Hats.
Claims use since Dec. 24, 1930.

Ser. No. 313,259. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Apr. 11, 1931.

Peak Of Fashion

Applicant disclaims the exclusive right to the word "Fashion" except in the precise relationship in which it appears in the drawing.
For Men's Rayon and Cotton Hosiery.
Claims use since Mar. 30, 1931.

Ser. No. 313,453. STURMAN DRESS CO., INC., New York, N. Y. Filed Apr. 16, 1931.



For Ladies' and Misses' Dresses, Gowns, Frocks, Coats, Skirts, Waists, and Negligees.
Claims use since Dec. 15, 1930.

Ser. No. 313,919. HOLLAND-HESSOL CO. INC., New York, N. Y. Filed Apr. 28, 1931.

TWINWEAVES

Applicant disclaims the right to the exclusive use of the word "Weaves" except in combination as shown in the mark.
For Petticoats, Pajamas, Step-Ins in the Nature of Under-Drawers, Chemises, Negligees, Bed Sacques, Kimonos, Boudoir or Lounging Robes, Costume Slips, Camisoles, Brassières, Panties, Pantalets, Teddies, Boudoir Caps, Bandeaux in the Nature of an Undergarment, Quilted Robes in the Nature of Garments; Bloomers, Knickers, Gowns, and Vests Intended for Underwear; and Miscellaneous Ladies' and Children's Underwear, All of the Foregoing Articles Being Made of Knitted, Netted, or Woven Fabrics of Cotton, Linen, Silk, Artificial Silk, and All Mixtures or Combinations of Said Materials.
Claims use since Mar. 10, 1930.

Ser. No. 314,056. CHARLES SALVATO, doing business as Charles Salvato & Company, Brooklyn, N. Y. Filed May 16, 1931.



No claim is made to the exclusive use of the word "Uniform" apart from the mark as shown in the drawing.
For Men's Naval Uniforms.
Claims use since May 4, 1931.

Ser. No. 314,782. THE YORKE SHIRT COMPANY, Glens Falls and New York, N. Y. Filed May 19, 1931.

Trimturn

The exclusive right to the word "Trim" is disclaimed apart from the mark shown.
For Collars.
Claims use since Apr. 1, 1931.

Ser. No. 314,795. GEORGE FROST COMPANY, Boston, Mass. Filed May 20, 1931. Under section 5b of the act of 1905 as amended in 1920.

FOR SOMETHING SMARTER THE BOSTON CARTER

Applicant sets up ownership to Reg. No. 79,118 (Renewed) effected under the ten-year proviso of the act of Feb. 20, 1905. No claim being made to the words "For Something Smarter" apart from the trade-mark shown.
For Men's Garters.
Claims use since Jan. 12, 1931.

Ser. No. 314,998. THE MAY DEPARTMENT STORES COMPANY, St. Louis, Mo. Filed May 25, 1931.

CLEARWATER

For Dress and Negligee Shirts.
Claims use since May 11, 1931.

Ser. No. 315,133. CABINET MFG. CO., Quincy, Ill. Filed May 28, 1931.

MASTERMADE

The word "Mastermade" as a descriptive term is disclaimed apart from the mark shown.
For Dress, Negligee, and Work Shirts.
Claims use since Nov. 8, 1930.

Ser. No. 315,236. THE ARTHUR STORES, INCORPORATED, Union, S. C. Filed June 1, 1931.

Fair Forest
HOSIERY

The word "Hosiery" is disclaimed except in the combination shown.
For Silk Hosiery.
Claims use since Apr. 19, 1931.

Ser. No. 315,261. HAHN DEPARTMENT STORES, INC., Wilmington, Del. Filed June 1, 1931.



STYLGAIT

For Shoes Made of Leather, Fabric, Rubber, or a Combination of Such Materials.
Claims use since May 1, 1931.

Ser. No. 315,536. THE HOOVER CO., San Francisco, Calif. Filed June 8, 1931.

"DRY-BABY"

For Baby Diaper Covers.
Claims use since Feb. 26, 1931.

Ser. No. 315,542. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J. Filed June 8, 1931.

Mold-Rite

For Shoes Made of Leather, Rubber, Fabric, and Combinations Thereof; Overshoes, Corsets, Hosiery, and Men's and Women's Suits.
Claims use since Mar. 1, 1930.

Ser. No. 315,577. WOODBURY SHOE MFG. CO., Derry, N. H. Filed June 8, 1931.

LUCKY
'THREE'

For Men's, Women's, and Children's Boots, Shoes, Sandals, and Slippers Made Wholly or in Part of Leather, Rubber, Canvas, or Textile Material.
Claims use since May 1, 1931.

Ser. No. 315,622. HARRY ADLER COAT CO. INC., New York, N. Y. Filed June 10, 1931.

Lane-Moor

For Ladies' Sport and Dress Coats, Coatees, Suits.
Claims use since Feb. 6, 1931.

Ser. No. 315,677. EBNER SHOE COMPANY, Milwaukee, Wis. Filed June 11, 1931.



The picture forming a feature of the mark is fanciful.
For Shoes, Oxfords, Slippers, and Pumps Made of Leather, Rubber, Fabric, and Combinations Thereof.
Claims use since Aug. 2, 1930.

Ser. No. 315,690. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed June 11, 1931.



Exclusive use of the words "Fine Shoes" is not claimed except in association with the other features of the mark.
For Boots and Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since Apr. 20, 1931.

Ser. No. 315,912. JACKSON & JACKSON COMPANY, Salisbury, Md. Filed June 16, 1931.

Flying Clouds

For Dress, Negligee, and Work Shirts.
Claims use since Apr. 1, 1931.

Ser. No. 315,962. THE WILLIAM CARTER COMPANY, Needham Heights, Mass. Filed June 17, 1931.

FLEXMODE

For Women's and Girls' Corsets, Girdles, and Foundation Garments.
Claims use since Feb. 1, 1931.

Ser. No. 316,009. INTERNATIONAL SHOE COMPANY, St. Louis, Mo. Filed June 18, 1931.

Smart Set

For Boots and Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since Nov. 1, 1901.

Ser. No. 316,010. LEO'S SHOES, INC., Brooklyn, N. Y. Filed June 18, 1931.

Archmoor

For Leather and Fabric Shoes.
Claims use since June 8, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 313,423. DIGHTON MANUFACTURING COMPANY, North Dighton, Mass. Filed Apr. 16, 1931.



No registration rights are claimed for the pictorial representation of a blanket binding or a blanket apart from the mark shown in the drawing.
For Blanket and Other Textile Bindings.
Claims use since Apr. 8, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 296,220. CONE EXPORT AND COMMISSION COMPANY, New York, N. Y. Filed Feb. 19, 1930.



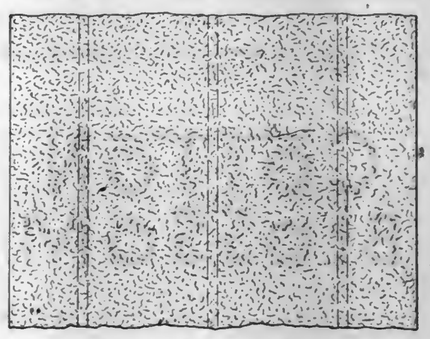
For Cotton Goods in the Piece—Namely, Brown and Bleached Printed Flannels.
Claims use since Nov. 4, 1900.

Ser. No. 310,017. THE KENDALL COMPANY, Walpole, Mass. Filed Jan. 16, 1931.

HANDIFOLD

For Cheese Cloth Both in the Piece and in Cut Lengths.
Claims use since Oct. 1, 1930.

Ser. No. 312,858. THOMAS OAKES & CO., Bloomfield, N. J. Filed Apr. 2, 1931.



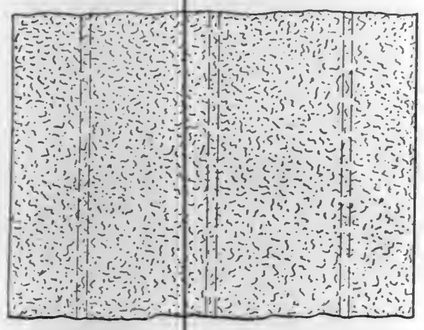
The trade-mark consists of a marker or label in the form of red threads separate from the structural parts of the

goods and constituting no part of the goods, but spaced apart and woven into the back of the goods and extending longitudinally thereof in parallel lines, said parallel lines forming no part of the pattern of the woven goods and being arranged in groups of two lines each, with the proportions of the spacings between the lines in each group to the spacings between two adjacent groups and to the selvage of the cloth substantially as shown in the annexed drawing. No claim is made herein for the representation of the woven goods, this being shown merely to illustrate the location of the mark and arrangement of the marking threads on the goods.

For Woolen and Worsted Cloths Made for Uniform Purposes in the Piece, Except Fabrics Colored an Olive Drab Shade.

Claims use since June 19, 1930.

Ser. No. 312,860. THOMAS OAKES & Co., Bloomfield, N. J. Filed Apr. 2, 1931.



The trade-mark consists of a marker or label in the form of blue threads separate from the structural parts of the goods and constituting no part of the goods, but spaced apart and woven into the back of the goods and extending longitudinally thereof in parallel lines, said parallel lines forming no part of the pattern of the woven goods and being arranged in groups of two lines each, with the proportions of the spacings between the lines in each group to the spacings between two adjacent groups and to the selvage of the cloth substantially as shown in the annexed drawing. No claim is made herein for the representation of the woven goods, this being shown merely to illustrate the location of the mark and arrangement of the marking threads on the goods.

For Woolen and Worsted Cloths Made for Uniform Purposes in the Piece, Except Fabrics Colored an Olive Drab Shade.

Claims use since July 16, 1930.

Ser. No. 313,809. SOUTHERN MILLS, INCORPORATED, Atlanta, Ga. Filed Apr. 25, 1931.

COTTON BLOSSOM

For Cotton Flannel and Knitted Cotton Padding, Both in the Piece.

Claims use since Feb. 11, 1931, on cotton flannel and since Apr. 17, 1931, on knitted cotton padding.

Ser. No. 314,636. JOSEPH BENN CORPORATION, Greystone, R. I., and New York, N. Y. Filed May 16, 1931.

WILLASTON SUITINGS

No claim being made to the exclusive use of the word "Suitings" apart from the mark as shown in the drawing.

For Mohair Suitings.

Claims use since July 22, 1927.

Ser. No. 315,048. HENRY GLASS & Co., New York, N. Y. Filed May 26, 1931.

Kalvado

For Piece Goods Made of Cotton, Silk, Rayon, and Artificial Silk and Combinations Thereof.

Claims use since Apr. 16, 1931.

Ser. No. 315,049. HENRY GLASS & Co., New York, N. Y. Filed May 26, 1931.

Vintage

For Piece Goods Made of Cotton, Silk, Rayon, and Artificial Silk and Mixtures Thereof.

Claims use since Apr. 16, 1931.

Ser. No. 315,280. THE SANFORD MILLS, Sanford, Me. Filed June 1, 1931.

Koongora

For Mixed Angora Hair and Cotton Fabric for Men's, Women's, and Children's Coats.

Claims use since Apr. 4, 1931.

Ser. No. 315,318. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed June 2, 1931.

Satin Tanqua

The term "Satin" is hereby disclaimed apart from the mark as shown.

For Silk Fabrics in the Piece.

Claims use since May 20, 1931.

Ser. No. 315,374. TIMELY FABRICS CORPORATION, New York, N. Y. Filed June 3, 1931.



No claim is made to the word "Fabrics."

For Silk, Cotton, and Rayon Piece Goods and Combinations Thereof.

Claims use since May 15, 1931.

Ser. No. 315,375. TIMELY FABRICS CORPORATION, New York, N. Y. Filed June 3, 1931.

TIMELY PRINTS

No claim is made to the words "Fabrics" and "Prints."

For Cotton, Silk, and Rayon Piece Goods and Combinations Thereof.

Claims use since May 15, 1931.

Ser. No. 315,394. CHARLES GOLDMAN, doing business as Atlas Mills, New York, N. Y. Filed June 4, 1931.

Fashion Queen

For Textile Fabrics—Namely, Silk Piece Goods.

Claims use since February, 1930.

Ser. No. 315,406. LESHER, WHITMAN & Co., INC., New York, N. Y. Filed June 4, 1931.

CORDELLE

For Piece Goods, Being a Fabric with a Warp of Cotton, or of Cotton and Mohair Mixed, or of Cotton and Silk Mixed, or of Cotton and Artificial Silk Mixed, and a Filling of Wool, or Cotton, or Mohair, or Alpaca, or Silk, or Artificial Silk, Singly or Combined.

Claims use since Feb. 19, 1931.

Ser. No. 315,414. PENNSYLVANIA TEXTILE MILLS, INC., New York, N. Y. Filed June 4, 1931.

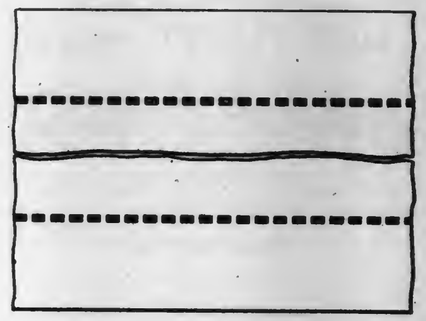
Sheepkin

Piletex

For Pile Fabrics in the Piece.

Claims use since May 28, 1931.

Ser. No. 315,623. THE ANSONIA O & C COMPANY, Ansonia, Conn. Filed June 10, 1931.



The trade-mark consists of a stripe adjacent each edge of the fabric of alternate orange and blue sections which in the form shown is interwoven with the fabric. The drawing is lined to represent the colors orange and blue.

No claim is made to the representation of the goods per se.

For Elastic Webbing.

Claims use since June 8, 1931.

Ser. No. 315,779. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed June 13, 1931.

Krumpeldine

For Pile Fabrics in the Piece.

Claims use since June 2, 1931.

Ser. No. 315,780. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed June 13, 1931.

Minktex

For Pile Fabrics in the Piece.

Claims use since June 2, 1931.

Ser. No. 315,782. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed June 13, 1931.

Vel-Dessin

For Pile Fabrics in the Piece.
Claims use since June 3, 1931.

Ser. No. 315,897. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 16, 1931.

PERTANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 12, 1931.

Ser. No. 316,022. ALBERT H. VANDAM CO. INC., New York, N. Y. Filed June 18, 1931.

MAIN STREET PRINTS

No claim is made to the exclusive use of the word "Prints" apart from the mark as shown in the drawing.
For Cotton Piece Goods.
Claims use since Mar. 12, 1931.

CLASS 43

Thread and Yarn

Ser. No. 315,308. FLEISHER YARNS, INC., New York, N. Y. Filed June 2, 1931. Under section 5b of the act of 1905 as amended in 1920.

FLEISHER'S

For Worsted Yarns, Wool Yarns, all Used for Knitting, Crocheting and Embroidery Purposes, and Rayon Yarns Used for Knitting and Crocheting Purposes, and Yarns Composed of Worsted and Rayon.
Claims use since 1875 on worsted yarns; since May, 1930, on wool yarns; since Spring of 1929 on rayon yarns; and since 1913 on yarns composed of worsted and rayon.

CLASS 44

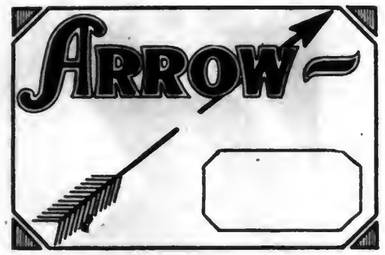
Dental, Medical, and Surgical Appliances

Ser. No. 312,150. STEPHEN B. HAZLE, doing business as The Berkeley Company, Richmond, Va. Filed Mar. 14, 1931.

BER-TEX

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Dec. 1, 1930.

Ser. No. 315,648. REGELSON AND ROSTOW, New Haven, Conn. Filed June 10, 1931.



For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Feb. 15, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 314,412. JACOB LEINENKUGEL BREWING CO., INC., Chippewa Falls, Wis. Filed May 11, 1931.



For Ginger Ale.
Claims use since May 1, 1929.

Ser. No. 315,321. PACIFIC PRODUCTS, INC., San Francisco, Calif. Filed June 2, 1931.



The descriptive words "Grape Fruit" and "Sparkling" are disclaimed apart from their use with the mark as shown.
For Non-Alcoholic, Non-Cereal, Maltless Beverages of Fruit Flavor, Sold as Soft Drinks.
Claims use since Nov. 8, 1929.

Ser. No. 315,322. PACIFIC PRODUCTS, INC., San Francisco, Calif. Filed June 2, 1931.



The descriptive words "Orange Dry" are disclaimed apart from their use with the mark as shown.
For Non-Alcoholic, Non-Cereal, Maltless Beverages of Fruit Flavor Sold as Soft Drinks.
Claims use since Nov. 8, 1929.

Ser. No. 315,322. PACIFIC PRODUCTS, INC., San Francisco, Calif. Filed June 2, 1931.



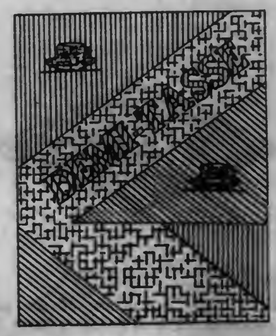
The descriptive words "Lime Rickey" are disclaimed apart from their use with the mark as shown.
For Non-Alcoholic, Non-Cereal, Maltless Beverages of Fruit Flavor, Sold as Soft Drinks.
Claims use since Nov. 8, 1929.

Ser. No. 315,502. GEO. RASMUSSEN CO., Chicago, Ill. Filed June 6, 1931.

GEO. RASMUSSEN CO.
QUALITY GROCERS

Applicant makes no claim to the words "Quality Grocers" apart from the mark as shown.
For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks.
Claims use since Dec. 16, 1930.

Ser. No. 315,529. DEMI-TASSE MANUFACTURING CO., Brooklyn, N. Y. Filed June 6, 1931.



The lining on the drawing represents the colors red, yellow, and green.
For Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since June 4, 1931.

Ser. No. 315,661. JOHN KAZIMER SZWAJKOS, doing business as Monroe Bottling Company, Rochester, N. Y. Filed June 10, 1931.

ROCK-LAND

For Non-Alcoholic, Maltless, Beverages Sold as Soft Drinks, and Flavors and Extracts Used in the Preparation of the Same.
Claims use since Apr. 1, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 274,041. SAMUEL S. FISHER, St. Paul, Minn. Filed Oct. 20, 1928.



No claim is made to a particular color. The pictorial representation of the goods and all the reading matter on the drawing except the surname "Fisher's" and "Oh Boy" is disclaimed apart from the mark as shown in the drawing.
For Salted Nuts.
Claims use since June 1, 1927.

Ser. No. 282,747. THE RIALTO CORPORATION, Long Beach, Calif. Filed Apr. 20, 1929.

RIALTO

The exclusive right to the use of the word "Brand" is hereby disclaimed. The drawing is lined for the colors red and green.

For Canned Fish, Canned Pimientos.

Claims use since 1917.

Ser. No. 301,054. THE NEWTON PRODUCTS COMPANY, Cincinnati, Ohio. Filed May 22, 1930.

Jolly Good

No claim is made to the word "Good" except in the connection shown.

For Candied and Salted Nuts, Peanut Butter, Prepared Mustard, Cane Syrup, Vinegar, Candy, Marshmallow Cream, Mayonnaise, and Food Flavoring Extracts.

Claims use since 1914.

Ser. No. 307,026. ALCO FEED MILLS, Atlanta, Ga. Filed Oct. 22, 1930.

SWASTIKA

Applicant is the owner of registration Number 223,849. For Horse and Mule, Dairy, Poultry, and Hog Feeds.

Claims use since August, 1930.

Ser. No. 308,570. AMTORG TRADING CORPORATION, New York, N. Y. Filed Dec. 4, 1930.

SOCRA

For Canned Fish.

Claims use since Oct. 11, 1930.

Ser. No. 311,039. MEADOWLAND CONFECTIONS LIMITED, London, England. Filed Feb. 13, 1931.



All of the printed matter appearing on the drawing, together with the pictorial representation of the goods, is hereby disclaimed except in the association shown. The lining on the drawing represents gradations of the color red from brown to orange.

For Confectionery—Namely, a Sweetmeat Composed of Wheat Interior with Chocolate Coating.

Claims use since April, 1930.

Ser. No. 312,247. PACIFIC EGG PRODUCERS COOPERATIVE, INC., New York, N. Y. Filed Mar. 17, 1931.



The picture of the boy was made from a photograph of John Boggs, of Bellingham, Wash.

For Eggs.

Claims use since December, 1930.

Ser. No. 312,315. SCLAFANI BROTHERS, Brooklyn, N. Y. Filed Mar. 19, 1931.

Sclafani

For the purpose of this registration only, exclusive use of the word "Sclafani", is claimed only in association with the other features of the mark as shown.

For Canned Vegetables and Canned Fish.

Claims use since October, 1926.

Ser. No. 313,215. MIAMI AVOCADO & CITRUS GROWERS INC., Avocado Park Groves, Miami, Fla. Filed Apr. 9, 1931.

Miamirene
TRADE MARK

No claim is made to the words "Trade Mark" apart from the mark as shown in the drawing.

For Fresh Citrus Fruit.

Claims use since Mar. 14, 1931.

Ser. No. 313,239. INTERNATIONAL FRUIT CORPORATION, Orlando, Fla. Filed Apr. 11, 1931.

JOY-DROP

For Fresh Citrus Fruits.

Claims use since 1920.

Ser. No. 313,926. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo. Filed Apr. 28, 1931.

"THE FEED BINS OF THE WEST"

For Baby Chick Starter Mash, Growing Mash, Laying Mash, Growing Grains, Crate Fattener Mash, House Fattener Mash, Pigeon Feed; Dairy Concentrate Consisting of Ground Corn and Barley, Bran, Cottonseed Meal, Gluten Meal, Linseed Meal, Soy Bean Meal, Calcium Carbonate, Salt, and Cane Molasses; Dairy Ration, Calf Meal, Pig Meal, Hog Fattener, Horse and Mule Feed, Laying Grains, Baby Chick Grains, Turkey Mash, Polished Cracked Corn, Clipped Rolled Barley, Sweetened Barley, Sweetened Corn, Alfalfa Molasses Feed, and Rabbit Rolled Mix Consisting of the Whole Grains of Wheat, Barley, Oats, and Corn all Steamed and Rolled with Cottonseed Meal, and Cane Molasses Added.

Claims use since Mar. 1, 1930.

Ser. No. 313,928. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo. Filed Apr. 28, 1931.

M.S.

For Baby Chick Starter Mash, Growing Mash, Laying Mash, Growing Grains, Crate Fattener Mash, House Fattener Mash, Pigeon Feed; Dairy Concentrate Consisting of Ground Corn and Barley, Bran, Cottonseed Meal, Gluten Meal, Linseed Meal, Soy Bean Meal, Calcium Carbonate, Salt, and Cane Molasses; Dairy Ration, Calf Meal, Pig Meal, Hog Fattener, Horse and Mule Feed, Laying Grains, Baby Chick Grains, Turkey Mash, Polished Cracked Corn, Clipped Rolled Barley, Sweetened Barley, Sweetened Corn, Alfalfa Molasses Feed, and Rabbit Rolled Mix Consisting of the Whole Grains of Wheat, Barley, Oats, and Corn, All Steamed and Rolled with Cottonseed Meal, and Cane Molasses Added.

Claims use since Mar. 1, 1930.

Ser. No. 313,929. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo. Filed Apr. 28, 1931.

M.S.
HY-KWALITY
FEEDS

The drawing is lined for red. The words "Hy-Kwalty Feeds" are disclaimed apart from the mark as shown.

For Baby Chick Starter Mash, Growing Mash, Laying Mash, Growing Grains, Crate Fattener Mash, House Fattener Mash, Pigeon Feed; Dairy Concentrate, Consisting of Ground Corn and Barley, Bran, Cottonseed Meal, Gluten Meal, Linseed Meal, Soy Bean Meal, Calcium Carbonate, Salt, and Cane Molasses; Dairy Ration, Calf Meal, Pig Meal, Hog Fattener, Horse and Mule Feed, Laying Grains, Baby Chick Grains, Turkey Mash, Polished Cracked Corn, Clipped Rolled Barley, Sweetened Barley, Sweetened Corn, Alfalfa Molasses Feed, and Rabbit Rolled Mix, Consisting of the Whole Grains of Wheat, Barley, Oats, and Corn, All Steamed and Rolled with Cottonseed Meal, and Cane Molasses Added.

Claims use since Mar. 1, 1930.

CARNEGIE LIBRARY OF ATLANTA

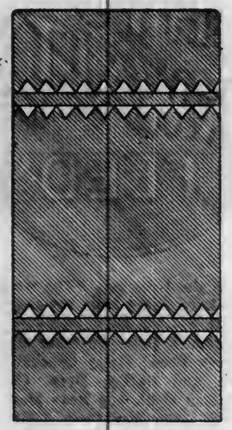
Ser. No. 313,931. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo. Filed Apr. 28, 1931.

MOUNTAIN STATES MIXED FEED CO.

For Baby Chick Starter Mash, Growing Mash, Laying Mash, Growing Grains, Crate Fattener Mash, House Fattener Mash, Pigeon Feed; Dairy Concentrate, Consisting of Ground Corn and Barley, Bran, Cottonseed Meal, Gluten Meal, Linseed Meal, Soy Bean Meal, Calcium Carbonate, Salt, and Cane Molasses; Dairy Ration, Calf Meal, Pig Meal, Hog Fattener, Horse and Mule Feed, Laying Grains, Baby Chick Grains, Turkey Mash, Polished Cracked Corn, Clipped Rolled Barley, Sweetened Barley, Sweetened Corn, Alfalfa Molasses Feed, and Rabbit Rolled Mix, Consisting of the Whole Grains of Wheat, Barley, Oats, and Corn, All Steamed and Rolled with Cottonseed Meal, and Cane Molasses Added.

Claims use since Apr. 1, 1924.

Ser. No. 314,113. INTERNATIONAL SUGAR FEED NO. TWO COMPANY, Memphis, Tenn. Filed May 2, 1931.



The lining shown on the drawing indicates the color green. Applicant disclaims without prejudice to any common-law rights, the exclusive right to the use of the representation of a flour bag.

For Stock Food.

Claims use since Mar. 1, 1931.

Ser. No. 314,114. INTERNATIONAL SUGAR FEED NO. TWO COMPANY, Memphis, Tenn. Filed May 2, 1931.

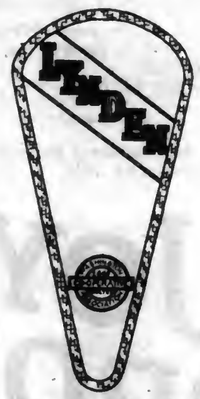


The lining shown on the drawing indicates the color red. Applicant disclaims, without prejudice to any common-law rights, the exclusive right to the use of the representation of a flour bag.

For Stock Food.

Claims use since Mar. 1, 1931.

Ser. No. 314,387. WASHINGTON CO-OPERATIVE EGG & POULTRY ASSOCIATION, Seattle, Wash. Filed May 9, 1931.



The drawing is lined to indicate the colors red and gold. The words "Lynden", "Eggs", and "Poultry" are disclaimed apart from the mark shown in the drawing.

For Cooked Chicken with Noodles.

Claims use since Jan. 1, 1931.

Ser. No. 314,536. SALINA PRODUCTS CORPORATION, Syracuse, N. Y. Filed May 13, 1931.

Par Ex

For Malt Syrup and Malt Extract.

Claims use since Apr. 1, 1929.

Ser. No. 314,687. AMBROSE M. DORTCH, Spokane, Wash. Filed May 18, 1931.

DORTCH'S

Kelpo

COOKIES

The descriptive word "Cookies" is hereby disclaimed apart from the other features of the mark as shown on the drawing.

For Cookies.

Claims use since Apr. 1, 1931.

Ser. No. 314,862. DAVID PLOTKE, doing business as Da-Lee Candy Co., Chicago, Ill. Filed May 21, 1931.

THE CANDY BAR WITH THE HUMP

HUMP

The words "Candy Bar" are disclaimed apart from the mark as shown.

For Candy Bars.

Claims use since Feb. 15, 1931.

Ser. No. 314,972. JAMES VAN DYK COMPANY, New York, N. Y. Filed May 23, 1931.

Jay-Van

For Coffee.

Claims use since May 18, 1931.

Ser. No. 314,973. SAMUEL ZIMETBAUM, doing business as Trees Candy Co., Newark, N. J. Filed May 23, 1931.

SHORT & SWEET

No rights to registration are claimed on the word "Sweet" except in the association shown on the drawing.

For Candy.

Claims use since October, 1929.

Ser. No. 314,991. JOSHUA J. GOROV, Los Angeles, Calif. Filed May 25, 1931.

KISSES from the HOLLYWOOD STARS

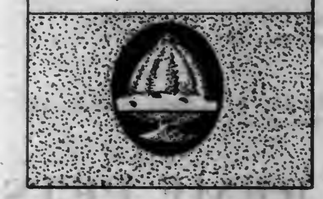
The words "Kisses" and "Hollywood" are hereby disclaimed apart from the mark as shown.

For Candy.

Claims use since Feb. 2, 1931.

Ser. No. 315,013. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed May 25, 1931.

ROYAL

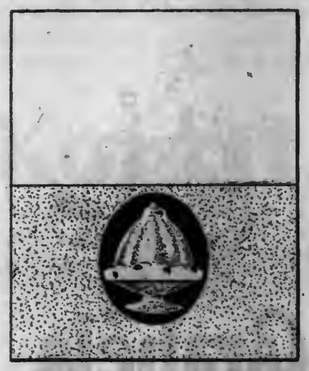


The stippling on the drawing is used merely to represent a contrasting background and is not intended to represent any particular color.

For Gelatin Desserts.

Claims use since Mar. 2, 1931.

Ser. No. 315,014. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed May 25, 1931.



The stippling on the drawing is used merely to represent a contrasting background and is not intended to represent any particular color.

For Gelatin Desserts.

Claims use since Mar. 2, 1931.

Ser. No. 315,073. WITHERS BROTHERS, Los Angeles, Calif. Filed May 26, 1931.

SUNTREAT

For Fresh Citrus Fruits, Fresh Deciduous Fruits, Fresh Vegetables.
Claims use since May 15, 1931.

Ser. No. 315,118. STANDARD FRUIT AND STEAMSHIP COMPANY, New Orleans, La. Filed May 27, 1931.

Yes! STANFRUCO

For Bananas in Their Natural State.
Claims use since May 14, 1931.

Ser. No. 315,243. H. C. BRILL COMPANY, INC., Newark, N. J. Filed June 1, 1931.

KREME PETS

No claim is made to the word "Kreme" apart from the mark shown in the drawing.
For Cake.
Claims use since Jan. 9, 1931.

Ser. No. 315,278. THE ROBINSON MILLING COMPANY, Salina, Kans. Filed June 1, 1931.



For Wheat Flour.
Claims use since June 10, 1927.

Ser. No. 315,298. AMERICAN MINT CORPORATION, New York, N. Y. Filed June 2, 1931.

KRAKS

For Candy and Candy Tablets.
Claims use since Feb. 10, 1929.

Ser. No. 315,464. CELESTE A. LIQUORI, New York, N. Y. Filed June 5, 1931.

HEALTH ATOMS

No claim is made to the descriptive word "Health" apart from the mark shown on the drawing and when used descriptively.
For Candy.
Claims use since Nov. 1, 1930.

Ser. No. 315,530. EARL FRUIT COMPANY, San Francisco, Calif. Filed June 8, 1931.

PLACER GOLD

For Fresh Deciduous Fruits, Fresh Grapes, Fresh Berries.
Claims use since May 1, 1931.

Ser. No. 315,615. S. GUMPERT CO. INC., Brooklyn, N. Y. Filed June 9, 1931.



The term "Co-co-nut" is disclaimed apart from the mark as shown on the drawing.
For Cup Cakes, Cookies, and Pastries.
Claims use since Apr. 1, 1931.

Ser. No. 315,616. HIMMAH & MOFFITT, Salinas, Calif. Filed June 9, 1931.

GREEN BOND

For Fresh Vegetables.
Claims use since Apr. 10, 1931.

Ser. No. 315,864. WARD MOORING, Bryan, Tex. Filed June 15, 1931.



No claim is made to the use of the words "Alfalfa", "Protein", "Vitamin" or "Products", or to the letter and numeral combination "A1" aside from their use in association with the mark as shown.
For Alfalfa Leaf Meal, Concentrated Alfalfa Meal, Straight Alfalfa Meal, and Alfalfa Stem Meal for Use as Live Stock and Poultry Feeds.
Claims use since May 20, 1931.

Ser. No. 315,936. SOCIETE ANONYME DES CAVES & DES PRODUCTEURS REUNIS DE ROQUEFORT, Roquefort, France. Filed June 16, 1931.



No exclusive claim to the wording shown herein is made apart from the mark shown.
For Cheese.
Claims use since January, 1912.

Ser. No. 315,988. CAPITAL CITY BAKING CO., Harrisburg, Pa. Filed June 18, 1931.

THE LOAF WITH THE BAKED-IN TASTE

CAPITAL BREAD

Exclusive use of the word "Bread" and the expression "The Loaf with the Baked-in Taste" is not claimed except in association with the other features of the mark.
For Bread.
Claims use since May 15, 1929.

CLASS 48

Malt Beverages and Liquors

Ser. No. 311,855. BROOKLYN BEVERAGE DEALERS ASSOCIATION, INC., Brooklyn and New York, N. Y. Filed Mar. 4, 1931.



No claim is made to the words "Trade Mark" appearing on the drawing.
For Malt Beverage Containing Less Than One-half of One Per Cent of Alcohol by Volume.
Claims use since Dec. 1, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 315,865. PADDOCK CORK COMPANY, INC., New York and Brooklyn, N. Y. Filed June 3, 1931.

Korkit

For Cork Stoppers.
Claims use since May 20, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JULY 28, 1931

285,336. SOAP. GOLDEN EAGLE SOAP COMPANY, San Francisco, Calif.
Filed November 15, 1930. Serial No. 307,948. PUBLISHED MAY 19, 1931. Class 4.

285,337. METAL CLEANING COMPOUNDS, METAL POLISHING COMPOUNDS, BUFFS, ETC. BRUCE PRODUCTS CORPORATION, Detroit, Mich.
Filed November 13, 1930. Serial No. 307,889. PUBLISHED MAY 12, 1931. Class 4.

285,338. BOOKLETS OF WORD PUZZLES. LAKE PUBLISHING COMPANY, Gary, Ind.
Filed November 11, 1930. Serial No. 307,780. PUBLISHED MAY 12, 1931. Class 38.

285,339. POWDER USED IN THE PREPARATION OF FOOD DRINKS. THORKILD NORDBY HANSEN, Chicago, Ill.
Filed November 11, 1930. Serial No. 307,774. PUBLISHED MAY 19, 1931. Class 46.

285,340. COFFEE, OLIVE OIL, COCOA, TEA, ETC. JOHN R. SILVA, doing business as John R. Silva & Co., Brooklyn, N. Y.
Filed November 10, 1930. Serial No. 307,743. PUBLISHED MAY 19, 1931. Class 46.

285,341. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGE SOLD AS A SOFT DRINK. ANTONIO DI BARTOLOMEO, Camden, N. J.
Filed November 8, 1930. Serial No. 307,657. PUBLISHED MAY 12, 1931. Class 45.

285,342. TANNING EXTRACTS. COMPAÑIA DE TIERRAS, MADERAS Y FERROCARRILES "LA FORESTAL" LDA., Buenos Aires, Argentina.
Filed November 6, 1930. Serial No. 307,584. PUBLISHED MARCH 24, 1931. Class 6.

285,343. BUTTER, EGGS, RAW CREAM, AND DRESSED POULTRY. BEATRICE CREAMERY COMPANY, Chicago, Ill.
Filed November 6, 1930. Serial No. 307,576. PUBLISHED MAY 12, 1931. Class 46.

285,344. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS FOR MAKING THE SAME. MAX KAIM, doing business as Krim Beverage Company, Lebanon, Pa.
Filed November 3, 1930. Serial No. 307,499. PUBLISHED MAY 12, 1931. Class 45.

285,345. COTTON PIECE GOODS. BRAND & OPPENHEIMER, INCORPORATED, New York, N. Y.
Filed October 24, 1930. Serial No. 307,147. PUBLISHED MAY 19, 1931. Class 42.

285,346. TOILET SOAP. THE SYDNEY ROSS CO., Newark, N. J.
Filed October 20, 1930. Serial No. 306,966. PUBLISHED MAY 12, 1931. Class 4.

285,347. FISHING REEL CASES. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed October 14, 1930. Serial No. 306,734. PUBLISHED MAY 19, 1931. Class 22.

285,348. HAIR NETS. HAIR NET PACKERS, INC., New York, N. Y.
Filed October 13, 1930. Serial No. 306,720. PUBLISHED MAY 12, 1931. Class 42.

285,349. BROOMS AND MOP ATTACHMENTS FOR BROOMS. STAMETCO BROOM & MFG. CO. INC., St. Paul, Minn.
Filed October 1, 1930. Serial No. 306,291. PUBLISHED MAY 19, 1931. Class 29.

285,350. WATER CLOSETS, BIDETS, LAVATORIES, ETC. FERRUCCIO GUIDETTI, New York, N. Y.
Filed October 1, 1930. Serial No. 306,297. PUBLISHED MAY 19, 1931. Class 13.

285,351. NONALCOHOLIC MALTLESS BEVERAGE SOLD AS A SOFT DRINK. SIDNEY W. BROWN, doing business as Old Gold Ginger Ale Co., Long Beach, Calif.
Filed September 29, 1930. Serial No. 306,166. PUBLISHED MAY 12, 1931. Class 45.

285,352. FUEL-HANDLING EQUIPMENT — NAMELY, FUEL STOKERS. COMBUSTIONEER, INC., Goshen, Ind.
Filed September 25, 1930. Serial No. 306,051. PUBLISHED MAY 12, 1931. Class 34.

285,353. FUEL-HANDLING EQUIPMENT — NAMELY, FUEL STOKERS. COMBUSTIONEER, INC., Goshen, Ind.
Filed September 25, 1930. Serial No. 306,050. PUBLISHED MAY 12, 1931. Class 34.

285,354. KNITTED, NETTED, AND TEXTILE FABRICS IN PIECE GOODS OF ARTIFICIAL VEGETABLE MATERIAL. MICHEL DASSONVILLE, Paris, France.
Filed September 24, 1930. Serial No. 306,001. PUBLISHED MAY 19, 1931. Class 42.

285,355. LADIES' AND MISSES' HATS. SIMON MILLINERY SUPPLY COMPANY, San Francisco, Calif.
Filed August 26, 1930. Serial No. 305,055. PUBLISHED MAY 12, 1931. Class 39.

285,356. MOTION-PICTURE FILMS FOR USE BY MOTION-PICTURE EXHIBITORS. THE VAN BEUREN CORPORATION, New York, N. Y.
Filed November 18, 1930. Serial No. 308,046. PUBLISHED MAY 19, 1931. Class 26.

285,357. SLIPS, BLOOMERS, PETTICOATS, NIGHTGOWNS, PAJAMAS, CHEMISES, STEP-INS, PANTIES FOR WOMEN AND CHILDREN. ARONSON-CAPLIN COMPANY, INC., New York, N. Y.
Filed November 11, 1930. Serial No. 307,760. PUBLISHED MAY 12, 1931. Class 39.

285,358. FRUIT JUICE EXTRACTORS OF THE MECHANICAL TYPE. HANDY ANDY SPECIALTY CO., INC., Long Island City, New York, N. Y.
Filed October 25, 1930. Serial No. 307,162. PUBLISHED MAY 12, 1931. Class 23.

285,359. WOMEN'S FELT HATS, UNTRIMMED. HENRY POLLAK, INC., New York, N. Y.
Filed October 23, 1930. Serial No. 307,110. PUBLISHED MAY 12, 1931. Class 39.

285,360. TABLETS OF ANY KIND WITH PEPPERMINT AND FRUIT TASTE, SUGAR WARES, TOFFEE, ETC. AFRO-WERK ADOLF FROST & CO., Taucha, near Leipzig, Germany.
Filed November 18, 1930. Serial No. 308,001. PUBLISHED MAY 12, 1931. Class 46.

285,361. WRITING PAPER. THE NATIONAL CARBON COATED PAPER COMPANY, Sturgis, Mich.
Filed April 6, 1931. Serial No. 312,998. PUBLISHED MAY 12, 1931. Class 37.

285,362. FRESH VEGETABLES. LAMBERT MARKETING COMPANY, Sacramento, Calif.
Filed April 3, 1931. Serial No. 312,920. PUBLISHED MAY 12, 1931. Class 46.

285,363. NONALCOHOLIC, MALTLESS, NONCEREAL BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS, EXTRACTS, AND CONCENTRATES FOR PREPARING THE SAME. HOLLYWOOD PRODUCTS COMPANY, LTD., Glendale, Hollywood, and Los Angeles, Calif.
Filed April 3, 1931. Serial No. 312,914. PUBLISHED MAY 12, 1931. Class 45.

285,364. WRITING PAPER. HOPPER PAPER COMPANY, Taylorville, Ill.
Filed April 1, 1931. Serial No. 312,881. PUBLISHED MAY 12, 1931. Class 37.

285,365. COLLAPSIBLE TUBES. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed April 2, 1931. Serial No. 312,830. PUBLISHED MAY 19, 1931. Class 2.

285,366. COLLAPSIBLE TUBES. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed April 2, 1931. Serial No. 312,829. PUBLISHED MAY 12, 1931. Class 2.

285,367. TEA. MING, INC., New York, N. Y.
Filed March 31, 1931. Serial No. 312,764. PUBLISHED MAY 12, 1931. Class 46.

285,368. GAMES EMPLOYING BOARDS OR CHARTS, AND BOARDS AND CHARTS FOR PLAYING GAMES. CLAUDE E. HOOPER, New York, N. Y.
Filed March 31, 1931. Serial No. 312,759. PUBLISHED MAY 19, 1931. Class 22.

285,369. GAMES EMPLOYING BOARDS OR CHARTS, AND BOARDS OR CHARTS FOR PLAYING GAMES. CLAUDE E. HOOPER, New York, N. Y.
Filed March 31, 1931. Serial No. 312,758. PUBLISHED MAY 19, 1931. Class 22.

285,370. COFFEE. ARABAN COFFEE CO., INC., Boston, Mass.
Filed March 31, 1931. Serial No. 312,745. PUBLISHED MAY 12, 1931. Class 46.

285,371. KITCHEN UTENSILS—NAMELY, POTS AND PANS OF SHEET METAL OR STEEL. ERNST KOEPPEN, Carlstadt, N. J.
Filed March 30, 1931. Serial No. 312,711. PUBLISHED MAY 12, 1931. Class 18.

285,372. FISH LINES. CORTLAND LINE COMPANY, Cortland, N. Y.
Filed March 30, 1931. Serial No. 312,698. PUBLISHED MAY 12, 1931. Class 22.

285,373. TOY ANIMALS AND OTHER TOY FIGURES MADE OF RUBBER. MAXWELL M. KAHN, doing business as Maxwell Rubber Products, Belleville, N. J.
Filed March 28, 1931. Serial No. 312,653. PUBLISHED MAY 19, 1931. Class 22.

285,374. REVOLVERS. COLT'S PATENT FIRE ARMS MANUFACTURING CO., Hartford, Conn.
Filed March 26, 1931. Serial No. 312,549. PUBLISHED MAY 12, 1931. Class 9.

285,375. PAPER PLATES. BEACH & ARTHUR, INC., Indianapolis, Ind.
Filed March 26, 1931. Serial No. 312,541. PUBLISHED MAY 12, 1931. Class 2.

285,376. INFLATABLE RUBBER PLAY BALLS AND SWIMMING TUBES. ESSEX RUBBER COMPANY INC., Trenton, N. J.
Filed March 25, 1931. Serial No. 312,513. PUBLISHED MAY 19, 1931. Class 22.

285,377. PAPER—NAMELY, BOOK PAPER, COVER PAPER, DOCUMENT PAPER, BRISTOL, CARDBOARD, BOND PAPER, WRITING PAPER, LEDGER PAPER, AND PAPER FOR THE MAKING OF ENVELOPES. BUTLER PAPER CORPORATIONS, Chicago, Ill.
Filed March 25, 1931. Serial No. 312,510. PUBLISHED MAY 12, 1931. Class 37.

285,378. CONTAINERS. BLOOMER BROS. COMPANY, Newark, N. Y.
Filed March 24, 1931. Serial No. 312,472. PUBLISHED MAY 12, 1931. Class 2.

285,379. PREPARED FISH BAIT. DELLAS J. SPENCE, doing business as Taneycomo Fish Bait Company, Branson, Mo.
Filed March 21, 1931. Serial No. 312,393. PUBLISHED MAY 19, 1931. Class 22.

285,380. WINES. HENRI SAVIGNON, BOUSSARD FRERES ET DIEUX, SOCIETE EN NOM COLLECTIF, Paris, France.
Filed March 21, 1931. Serial No. 312,375. PUBLISHED MAY 12, 1931. Class 47.

285,381. UNFERMENTED GRAPE JUICE. HENRI SAVIGNON, BOUSSARD FRERES ET DIEUX, SOCIETE EN NOM COLLECTIF, Paris, France.
Filed March 21, 1931. Serial No. 312,374. PUBLISHED MAY 12, 1931. Class 45.

285,382. ACETYLENE GAS GENERATORS. ECHOLS BROS. RADIATOR WORKS, Fort Worth, Tex.
Filed March 21, 1931. Serial No. 312,367. PUBLISHED MAY 19, 1931. Class 34.

285,383. BATH ROOM FIXTURES—NAMELY, SOAP DISHES, TOWEL RACKS. WITHDRAWN. ...RODE-HAMMERSTEIN CORPORATION, New York, N. Y.
Filed March 21, 1931. Serial No. 312,361. PUBLISHED MAY 12, 1931. Class 13.

285,384. FENCES OF IRON, STEEL, AND LIKE METAL SUBSTANCE AND PARTS THEREOF. WILLIAM F. WITTEL, Irvington, N. J.
Filed March 18, 1931. Serial No. 312,278. PUBLISHED MAY 12, 1931. Class 13.

285,385. HOOKS FOR DOORS SUCH AS SCREEN DOORS. ARTHUR BROPHY, Santa Cruz, Calif.
Filed March 18, 1931. Serial No. 312,254. PUBLISHED MAY 12, 1931. Class 13.

285,386. HOSIERY. MELVILLE SHOE CORPORATION, New York, N. Y.
Filed March 10, 1931. Serial No. 311,968. PUBLISHED MAY 5, 1931. Class 39.

285,387. HOSIERY. PROPPER-MCCALLUM HOSIERY CO., INC., New York, N. Y.
Filed March 9, 1931. Serial No. 311,927. PUBLISHED MAY 5, 1931. Class 39.

285,388. HOSIERY. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed March 9, 1931. Serial No. 311,915. PUBLISHED MAY 19, 1931. Class 39.

285,389. MEN'S AND BOYS' CLOTHING. BAILEY COMPANY, Cleveland, Ohio.
Filed March 9, 1931. Serial No. 311,911. PUBLISHED MAY 19, 1931. Class 39.

285,390. BOOTS AND SHOES MADE WHOLLY OR IN PART OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. BONA ALLEN, INCORPORATED, Buford, Ga.
Filed March 6, 1931. Serial No. 311,816. PUBLISHED MAY 12, 1931. Class 39.

285,391. RAZORS AND RAZOR BLADES. CHUM RAZOR BLADE CORP., Detroit, Mich.
Filed March 20, 1931. Serial No. 312,331. PUBLISHED MAY 12, 1931. Class 23.

285,392. RAZORS, PEN KNIVES, SCISSORS, RAZOR BLADE HOLDERS. MARATHON RAZOR BLADE CO., INC., Irvington, N. J.
Filed March 18, 1931. Serial No. 312,263. PUBLISHED MAY 19, 1931. Class 23.

285,393. MIXTURE CONTROL VALVES FOR CARBURETERS. ALBERT A. FISH, doing business as Richards Manufacturing Company, Philadelphia, Pa.
Filed March 16, 1931. Serial No. 312,179. PUBLISHED MAY 19, 1931. Class 28.

285,394. HAND POWER SHARPENING GRINDERS. LUTHER GRINDER & TOOL COMPANY, Milwaukee, Wis.
Filed February 24, 1931. Serial No. 311,889. PUBLISHED MAY 19, 1931. Class 23.

285,395. AUTOMOTIVE TOOLS. DURO METAL PRODUCTS COMPANY, Chicago, Ill.
Filed January 24, 1931. Serial No. 310,330. PUBLISHED MAY 19, 1931. Class 23.

285,396. BELTING MADE OF RUBBER FOR POWER TRANSMISSION, ELEVATING AND CONVEYING PURPOSES. THE RUSSELL MANUFACTURING COMPANY, Middletown, Conn.
Filed March 26, 1931. Serial No. 312,573. PUBLISHED MAY 19, 1931. Class 35.

285,397. FILING DEVICE CONSISTING OF A HORIZONTAL SUPPORTING ARM WITH FASTENING MEANS FOR HOLDING DRAWINGS AND THE LIKE SUSPENDED THEREFROM, AND FILING CABINETS THEREFOR. ACCO PRODUCTS, INC., Long Island City, N. Y.
Filed February 2, 1931. Serial No. 310,629. PUBLISHED MAY 12, 1931. Class 32.

285,398. CLOTHES COSTUMERS. HELAN HAILLS-KARLEBACH, New York, N. Y.
Filed February 21, 1931. Serial No. 311,333. PUBLISHED MAY 19, 1931. Class 32.

285,399. HATS FOR MEN AND WOMEN. DOBBS & CO., New York, N. Y.
Filed February 11, 1931. Serial No. 310,935. PUBLISHED MAY 12, 1931. Class 39.

285,400. BRAID MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed February 5, 1931. Serial No. 310,751. PUBLISHED MAY 19, 1931. Class 40.

285,401. LADIES', MISSES', AND CHILDREN'S READY-TO-WEAR HATS. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y.
Filed January 29, 1931. Serial No. 310,528. PUBLISHED MAY 12, 1931. Class 39.

285,402. UNION SUIT UNDERGARMENTS FOR USE OF MEN AND MADE OF RAYON FABRIC. MCCREERY MANUFACTURING COMPANY, Portland, Oreg.
Filed January 27, 1931. Serial No. 310,434. PUBLISHED MAY 5, 1931. Class 39.

285,403. ARTICLES MADE OF KNITTED FABRIC—TO-WIT, HOSIERY AND SWEATERS MADE OF WOOLEN YARN. J. HILBORN & W. E. REED, INC., New York, N. Y.
Filed January 3, 1931. Serial No. 309,600. PUBLISHED MAY 19, 1931. Class 39.

285,404. HOSIERY. UNIVERSAL FULL FASHION HOSIERY CO., INC., Paterson, N. J.
Filed February 25, 1931. Serial No. 311,453. PUBLISHED MAY 12, 1931. Class 39.

285,405. BRAID MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed February 25, 1931. Serial No. 311,419. PUBLISHED MAY 19, 1931. Class 40.

285,406. OVERCOATS FOR MEN AND MEN'S SUITS; INCLUDING COATS, VESTS, AND KNICKERBOCKERS. ALFRED DECKER & COHN, INC., Chicago, Ill.
Filed February 21, 1931. Serial No. 311,325. PUBLISHED MAY 5, 1931. Class 39.

285,407. SWIMMING SUITS. WEST COAST KNITTING MILLS, Los Angeles, Calif.
Filed February 20, 1931. Serial No. 311,294. PUBLISHED MAY 19, 1931. Class 39.

285,408. BOOTS AND SHOES OF LEATHER, INCLUDING MOCCASINS. THE JUVENILE SHOE CORPORATION OF AMERICA, Aurora, Mo.
Filed March 13, 1931. Serial No. 312,102. PUBLISHED MAY 19, 1931. Class 39.

285,409. MEN'S CLOTHING—VIZ., SUITS, OVERCOATS, TOPCOATS, AND JACKETS. THE FINTEX CORPORATION, Cleveland, Ohio.
Filed March 7, 1931. Serial No. 311,869. PUBLISHED MAY 12, 1931. Class 39.

285,410. CARTOON STRIP. KING FEATURES SYNDICATE, INC., New York, N. Y.
Filed March 3, 1931. Serial No. 311,686. PUBLISHED MAY 12, 1931. Class 38.

285,411. CANNED FRUITS AND VEGETABLES, CANNED FISH; PEANUT BUTTER, ETC. CHAS. W. BAUERMEISTER CO., Terre Haute, Ind.
Filed March 3, 1931. Serial No. 311,643. PUBLISHED MAY 19, 1931. Class 46.

285,412. OPHTHALMIC MOUNTINGS AND PARTS THEREOF. THE BISHOP COMPANY, North Attleboro, Mass.
Filed April 9, 1931. Serial No. 313,119. PUBLISHED MAY 19, 1931. Class 26.

285,413. DEVICE OR APPARATUS FOR DETERMINING BASIC TYPES OF THE HUMAN FIGURE TO ASSIST IN THE DESIGNING OF FOUNDATION GARMENTS. I. NEWMAN & SONS, INC., New York, N. Y.
Filed April 8, 1931. Serial No. 313,090. PUBLISHED MAY 19, 1931. Class 26.

285,414. WEIGHING SCALES. DAVID C. ROCKOLA, Chicago, Ill.
Filed March 21, 1931. Serial No. 312,890. PUBLISHED MAY 19, 1931. Class 26.

285,415. HATS FOR MEN AND WOMEN. DOBBS & CO., New York, N. Y.
Filed March 20, 1931. Serial No. 312,833. PUBLISHED MAY 12, 1931. Class 39.

285,416. FRUIT AND NUT CLIPPERS AND SHEARS. LEO M. HARVEY, doing business as Harvey Machine Company, Los Angeles, Calif.
Filed March 30, 1931. Serial No. 312,709. PUBLISHED MAY 19, 1931. Class 28.

285,417. KITCHEN APPLIANCES FOR BEATING, MIXING, STIRRING, AND THE LIKE. CAMMANN MANUFACTURING COMPANY, INC., Waltham, Mass.
Filed March 24, 1931. Serial No. 312,475. PUBLISHED MAY 12, 1931. Class 28.

285,418. APPARATUS FOR THE TREATMENT OF SOLIDS SUSPENDED IN LIQUIDS, CLARIFIERS FOR SEWAGE, PUMPS, ETC. THE DORR COMPANY, New York, N. Y.
Filed March 20, 1931. Serial No. 312,834. PUBLISHED MAY 12, 1931. Class 28.

285,419. NEGLIGEE AND WORK SHIRTS, OVERALLS, AND PANTS. THE STANDARD OVERALL COMPANY, Baltimore, Md.
Filed March 10, 1931. Serial No. 311,983. PUBLISHED MAY 12, 1931. Class 39.

285,420. WOMEN'S BLOOMERS MADE OF SILK, RAYON, COTTON, WOOL, AND MIXED SILK AND RAYON, AND EITHER SILK OR RAYON MIXED WITH EITHER COTTON OR WOOL. BETHLEHEM TEXTILES COMPANY, Bethlehem, Pa.
Filed March 11, 1931. Serial No. 311,994. PUBLISHED MAY 5, 1931. Class 39.

285,421. HATS FOR MEN, WOMEN, AND CHILDREN. EDWARD P. CUNNINGHAM, INCORPORATED, New York, N. Y.
Filed March 6, 1931. Serial No. 311,827. PUBLISHED MAY 12, 1931. Class 39.

285,422. SHOES OF LEATHER, REPTILIAN LEATHER, AND FABRIC, AND COMBINATIONS THEREOF. M. K. DUN INC., New York, N. Y.
Filed March 6, 1931. Serial No. 311,829. PUBLISHED MAY 12, 1931. Class 39.

285,423. SET OF NATURAL OR ARTIFICIAL HAIRS, ADHESIVES AND ADHESIVE REMOVERS ADAPTED FOR THE ATTACHMENT AND REMOVAL OF SAID HAIRS FROM EYELASHES, SOLD AS A UNIT. MARJORIE A. BIRK, New York, N. Y.
Filed April 2, 1931. Serial No. 312,834. PUBLISHED MAY 12, 1931. Class 40.

285,424. HOSIERY. PROPPER-MCCALLUM HOSIERY CO., INC., New York, N. Y.
Filed April 1, 1931. Serial No. 312,814. PUBLISHED MAY 19, 1931. Class 39.

285,425. DRESSES, SHIRTS, SHORTS, BLOUSES, ETC. STRAUS, ROYER & STRASS, INC., Baltimore, Md.
Filed March 24, 1931. Serial No. 312,500. PUBLISHED MAY 19, 1931. Class 39.

285,426. LADIES', MISSES', AND CHILDREN'S WOVEN AND KNITTED UNDERWEAR OF SILK, RAYON, COTTON, WOOL, OR COMBINATIONS THEREOF. ELY & WALKER DRY GOODS COMPANY, St. Louis, Mo.
Filed March 12, 1931. Serial No. 312,045. PUBLISHED MAY 5, 1931. Class 39.

285,427. MEN'S, WOMEN'S, AND CHILDREN'S BOOTS AND SHOES MADE WHOLLY OR IN PART OF LEATHER, RUBBER, CANVAS, OR TEXTILE MATERIAL. NEW BALANCE ARCH COMPANY, INC., North Cambridge, Mass.
Filed March 18, 1931. Serial No. 312,115. PUBLISHED MAY 19, 1931. Class 39.

285,428. WOMEN'S AND MISSES' UNDERWEAR. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn.
Filed March 13, 1931. Serial No. 312,113. PUBLISHED MAY 5, 1931. Class 39.

285,429. LEATHER AND COMPOSITION SHOE SOLES. J. H. HEMMERDINGER & SON, INC., Brooklyn, N. Y.
Filed March 3, 1931. Serial No. 311,684. PUBLISHED MAY 12, 1931. Class 39.

285,430. BOOTS AND SHOES MADE WHOLLY OR IN PART OF RUBBER AND FOR RUBBER SOLES. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed March 2, 1931. Serial No. 311,631. PUBLISHED MAY 19, 1931. Class 39.

285,431. WOMEN'S AND CHILDREN'S WEARING APPAREL—NAMELY, SWEATERS AND BLOUSES. CORBETT & NORTH, INC., New York, N. Y.
Filed February 28, 1931. Serial No. 311,561. PUBLISHED MAY 12, 1931. Class 39.

285,432. LADIES' FUR COATS. JACOB L. ORENT, Brooklyn, N. Y.
Filed February 26, 1931. Serial No. 311,484. PUBLISHED MAY 19, 1931. Class 39.

285,433. CERTAIN NAMED WEARING APPAREL FOR MEN. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed February 26, 1931. Serial No. 311,481. PUBLISHED MAY 12, 1931. Class 39.

285,434. SOAP. FISCHER'S SURFA-SAVER, INC., Cincinnati, Ohio.
Filed March 2, 1931. Serial No. 311,603. PUBLISHED MAY 12, 1931. Class 4.

285,435. CERTAIN NAMED BEDSPREADS, WINDOW DRAPERIES, AND FABRICS. LESHER, WHITMAN & CO., INC., New York, N. Y.
Filed February 27, 1931. Serial No. 311,529. PUBLISHED MAY 19, 1931. Class 42.

285,436. NON-ALCOHOLIC, MALTLESS, CONCENTRATED HERB DRINK OR TONIC FOR FOUNTAIN AND HOME USE. PETTIT & WHITACRE, INC., doing business as Drink-Apep Company, North Merchantville, N. J.
Filed February 26, 1931. Serial No. 311,485. PUBLISHED MAY 12, 1931. Class 45.

285,437. CONSTRUCTIONAL TOYS. WILLIAM BAMBER, Banstead, Surrey, England.
Filed February 26, 1931. Serial No. 311,465. PUBLISHED MAY 19, 1931. Class 22.

285,438. SPORTING AND ATHLETIC GOODS. WHOLESALE RADIO SERVICE CO., INC., Wilmington, Del., and New York, N. Y.
Filed February 25, 1931. Serial No. 311,455. PUBLISHED MAY 19, 1931. Class 22.

285,439. HORSE RADISH, HORSE RADISH AND MUSTARD, MEXICAN STYLE HORSE RADISH. GEORGE M. MEYER, doing business as Meyer Food Products Co., Cincinnati, Ohio.
Filed February 25, 1931. Serial No. 311,439. PUBLISHED MAY 19, 1931. Class 46.

285,440. POOL TABLES. THE HOME BILLIARDETTE TABLE COMPANY, INC., Chicago, Ill.
Filed March 5, 1931. Serial No. 311,781. PUBLISHED MAY 19, 1931. Class 22.

285,441. MISSES' DRESSES. JOSEPH H. SCHARF, doing business as Essanay Dress Company, New York, N. Y.
Filed December 22, 1930. Serial No. 309,286. PUBLISHED MAY 5, 1931. Class 39.

285,442. THREADS. SUMMIT THREAD COMPANY, East Hampton, Conn., and Boston, Mass.
Filed March 10, 1931. Serial No. 311,984. PUBLISHED MAY 5, 1931. Class 43.

285,443. CLARIFIER FOR BEER CONSISTING OF FISH ISINGLASS. CAPE ANN ISINGLASS COMPANY, Marblehead, Mass.
Filed March 10, 1931. Serial No. 311,953. PUBLISHED MAY 12, 1931. Class 48.

285,444. CANDY. E. J. BRACH & SONS, Chicago, Ill.
Filed March 10, 1931. Serial No. 311,949. PUBLISHED MAY 19, 1931. Class 46.

285,445. TOILET AND LAUNDRY SOAPS. FRANK M. RINEHARDT, Badin, N. C.
Filed March 9, 1931. Serial No. 311,932. PUBLISHED MAY 12, 1931. Class 4.

285,446. CABLE CLAMPS. EUREKA METAL PRODUCTS CORPORATION, Buffalo, N. Y.
Filed March 9, 1931. Serial No. 311,914. PUBLISHED MAY 12, 1931. Class 13.

285,447. CABLE AND WIRE ROPE END CLAMPS AND TURNBUCKLE ASSEMBLIES. THE FIEGE COMPANY, Green Bay, Wis.
Filed March 7, 1931. Serial No. 311,868. PUBLISHED MAY 12, 1931. Class 13.

285,448. ABRASIVE COATED CLOTH OR PAPER. DUREX ABRASIVES CORPORATION, Jersey City, N. J.
Filed March 7, 1931. Serial No. 311,866. PUBLISHED MAY 12, 1931. Class 4.

285,449. METAL BOXES FOR USED RAZOR BLADES. HOWARD E. LOVETT, Pittsburgh, Pa.
Filed March 6, 1931. Serial No. 311,842. PUBLISHED MAY 19, 1931. Class 2.

285,450. FURNITURE. THE HOOSIER MANUFACTURING COMPANY, New Castle, Ind.
Filed February 26, 1931. Serial No. 311,477. PUBLISHED MAY 19, 1931. Class 32.

285,451. VISIBLE CARD INDEX CABINET. WILSON-JONES COMPANY, Chicago, Ill.
Filed March 12, 1931. Serial No. 312,077. PUBLISHED MAY 19, 1931. Class 32.

285,452. PORTABLE LIQUID DISPENSING APPARATUS INCLUDING A LIQUID MEASURING PUMP. BENNETT PUMPS CORPORATION, Muskegon Heights, Mich.
Filed March 12, 1931. Serial No. 312,088. PUBLISHED MAY 19, 1931. Class 26.

285,453. SEASONING FOR SAUSAGES, MEATS, OR OTHER FOODS. A. C. LEGG PACKING CO. INC., Birmingham, Ala.
Filed March 6, 1931. Serial No. 311,840. PUBLISHED MAY 12, 1931. Class 46.

285,454. SCHOOL PAPERS OF ALL KINDS. A. L. KRAEMER CO., Chicago, Ill.
Filed March 6, 1931. Serial No. 311,839. PUBLISHED MAY 5, 1931. Class 37.

285,455. CONSERVES, MARMALADES, PICKLES, JELLIES, CANNED FRUITS, CHUTNEY, CANDIES, CANDIED FRUITS, AND FRUIT PEELS. EDITH K. BAKER, Fort Myers, Fla.
Filed March 6, 1931. Serial No. 311,814. PUBLISHED MAY 19, 1931. Class 46.

285,456. CANNED FRUITS, CANNED VEGETABLES, FOOD FLAVORING EXTRACTS, ETC. WEST COAST GROCERY COMPANY, Tacoma, Wash.
Filed March 5, 1931. Serial No. 311,809. PUBLISHED MAY 12, 1931. Class 46.

285,457. CANNED PEELED TOMATOES AND CANNED TOMATO SAUCE. VITELLI & COMPANY, New York, N. Y.
Filed March 5, 1931. Serial No. 311,807. PUBLISHED MAY 12, 1931. Class 46.

285,458. CARD GAMES. JOHN TRAIN, Pipestone, Minn.
Filed March 5, 1931. Serial No. 311,803. PUBLISHED MAY 19, 1931. Class 22.

285,459. CHEESE. ROETHLISBERGER & CO. INC., New York, N. Y.
Filed March 5, 1931. Serial No. 311,789. PUBLISHED MAY 19, 1931. Class 46.

285,460. APPARATUS FOR TABLE GOLF—NAMELY, GAME PIECES FOR ARRANGEMENT ON BILLIARD TABLES, POOL TABLES, AND THE LIKE. GEORGE K. MANTAS, Brooklyn, N. Y.
Filed March 5, 1931. Serial No. 311,787. PUBLISHED MAY 19, 1931. Class 22.

285,461. TABLE SYRUP. WALTER WHEELER BOWEN, doing business as Waffelteen Syrup Co., Miami, Fla.
Filed December 22, 1930. Serial No. 309,224. PUBLISHED MAY 19, 1931. Class 46.

285,462. UNIONS FOR WELDED AND THREADED CONNECTIONS. BONNEY FORGE & TOOL WORKS, Allentown, Pa.
Filed March 24, 1931. Serial No. 312,473. PUBLISHED MAY 12, 1931. Class 14.

285,463. MONTHLY MAGAZINE. THE MAGAZINE ANTIQUES, INC., New York, N. Y.
Filed March 23, 1931. Serial No. 312,442. PUBLISHED MAY 12, 1931. Class 38.

285,464. CELLULOSE-ACETATE YARNS, THREADS, AND FILAMENTS. DU PONT RAYON COMPANY, Buffalo, N. Y.
Filed March 20, 1931. Serial No. 312,336. PUBLISHED MAY 19, 1931. Class 43.

285,465. HANDKERCHIEFS. MARSHALL FIELD & COMPANY, Chicago, Ill.
Filed March 18, 1931. Serial No. 312,258. PUBLISHED MAY 12, 1931. Class 42.

285,466. COOKED ICING. BENJAMIN B. GEORGE, Cincinnati, Ohio.
Filed March 17, 1931. Serial No. 312,246. PUBLISHED MAY 12, 1931. Class 46.

285,467. THREAD AND YARN. THE THREAD MILLS COMPANY, Monticello, Ind.
Filed March 14, 1931. Serial No. 312,165. PUBLISHED MAY 12, 1931. Class 43.

285,468. MARSHMALLOW WHIP CONTAINING NUTS AND FRUIT. ARTHUR W. FEY, Hazleton, Pa.
Filed March 14, 1931. Serial No. 312,143. PUBLISHED MAY 19, 1931. Class 46.

285,469. EDIBLE FATS MORE PARTICULARLY FOR FRYING PURPOSES. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed March 12, 1931. Serial No. 312,054. PUBLISHED MAY 19, 1931. Class 46.

285,470. CORN SALAD OIL. AMERICAN MAIZE-PRODUCTS COMPANY, New York, N. Y.
Filed March 12, 1931. Serial No. 312,036. PUBLISHED MAY 19, 1931. Class 46.

285,471. CORN AND CANE SYRUPS, CANE AND MAPLE SYRUPS, CORN SYRUPS, CORN OILS, AND CORNSTARCH. AMERICAN MAIZE-PRODUCTS COMPANY, New York, N. Y.
Filed March 12, 1931. Serial No. 312,034. PUBLISHED MAY 19, 1931. Class 46.

285,472. COTTON PIECE GOODS. AMERICAN BLEACHED GOODS COMPANY, INC., New York, N. Y.
Filed March 12, 1931. Serial No. 312,033. PUBLISHED MAY 19, 1931. Class 42.

285,473. INFANTS' TEXTILE NAPKINS. THE WEDLER-STUFORD CO., St. Louis, Mo.
Filed March 11, 1931. Serial No. 312,022. PUBLISHED MAY 19, 1931. Class 42.

285,474. STEEL CASTINGS. OMAHA STEEL WORKS, Omaha, Nebr.
Filed January 15, 1931. Serial No. 309,986. PUBLISHED MAY 19, 1931. Class 14.

285,475. CIGARS, CIGARILLOS, CIGARETTES, AND SMOKING TOBACCO, CHEWING TOBACCO, AND SNUFF TOBACCO. VERELLEN LIMITED, Antwerp, Belgium.
Filed January 13, 1931. Serial No. 309,910. PUBLISHED MAY 12, 1931. Class 17.

285,476. MALT EXTRACT. PIONEER SALES CO., Philadelphia, Pa.
Filed January 12, 1931. Serial No. 309,867. PUBLISHED MAY 19, 1931. Class 46.

285,477. SHOT GUNS AND RIFLES. BELKNAP HARDWARE & MANUFACTURING COMPANY, Louisville, Ky.
Filed January 9, 1931. Serial No. 309,767. PUBLISHED MAY 12, 1931. Class 9.

285,478. GUMMED PAPER. HARRY M. ELISH, doing business as Harry Elish Paper Company, New York, N. Y.
Filed January 7, 1931. Serial No. 309,680. PUBLISHED MAY 12, 1931. Class 37.

285,479. GUMMED PAPER AND FABRIC TAPES. THE GUMMED PRODUCTS COMPANY, Troy, Ohio.
Filed January 3, 1931. Serial No. 309,587. PUBLISHED MAY 12, 1931. Class 37.

285,480. SILK WARP BELTING RIBBON IN THE PIECE OR BOLT. CARLISLE RIBBON MILLS, INC., Paterson, N. J.
Filed December 30, 1930. Serial No. 309,459. PUBLISHED MAY 5, 1931. Class 42.

285,481. COAL. HUME-SINCLAIR COAL MINING COMPANY, Kansas City, Mo.
Filed March 24, 1931. Serial No. 312,482. PUBLISHED MAY 19, 1931. Class 1.

285,482. LAUNDRY SOAP. DAVID P. LAVIETES, doing business as Pequot Soap Works, Inc., Brooklyn, N. Y.
Filed March 24, 1931. Serial No. 312,483. PUBLISHED MAY 19, 1931. Class 4.

285,483. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed March 25, 1931. Serial No. 312,509. PUBLISHED MAY 12, 1931. Class 42.

285,484. PILE FABRICS IN THE PIECE. E. F. TIMME & SON, New York, N. Y.
Filed March 26, 1931. Serial No. 312,581. PUBLISHED MAY 19, 1931. Class 42.

285,485. WOOLEN, SILK, RAYON, ARTIFICIAL SILK, HAIR, AND COTTON PIECE GOODS AND PIECE GOODS CONTAINING A MIXTURE OF SAME. HYDROPEL PROCESS COMPANY, Boston, Mass.
Filed March 26, 1931. Serial No. 312,586. PUBLISHED MAY 19, 1931. Class 42.

285,486. CIGARETTE PAPER AND CIGARETTE PAPER BOOKLETS. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky.
Filed March 27, 1931. Serial No. 312,597. PUBLISHED MAY 12, 1931. Class 8.

285,487. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 27, 1931. Serial No. 312,599. PUBLISHED MAY 19, 1931. Class 42.

285,488. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 27, 1931. Serial No. 312,600. PUBLISHED MAY 19, 1931. Class 42.

285,489. BROODERS. GLOBE AMERICAN CORPORATION, Kokomo, Ind.
Filed March 28, 1931. Serial No. 312,642. PUBLISHED MAY 12, 1931. Class 50.

285,490. BUFFING COMPOUNDS. HANSON-VAN WINKLE-MUNNING COMPANY, Matawan, N. J.
Filed March 28, 1931. Serial No. 312,647. PUBLISHED MAY 19, 1931. Class 4.

285,491. PEPPER SAUCE. MCILHENNY COMPANY, New Iberia, La.
Filed March 28, 1931. Serial No. 312,658. PUBLISHED MAY 12, 1931. Class 46.

285,492. GOLF CLUBS AND GOLF BALLS. ROYAL MANUFACTURING COMPANY, Toledo, Ohio.
Filed March 28, 1931. Serial No. 312,666. PUBLISHED MAY 12, 1931. Class 22.

285,493. ELASTIC WEBBING FOR USE IN MAKING GARMENTS. ASSOCIATED APPAREL INDUSTRIES, INC., Chicago, Ill.
Filed March 30, 1931. Serial No. 312,686. PUBLISHED MAY 19, 1931. Class 42.

285,494. LEAD PENCILS, COPYING PENCILS, COLORED PENCILS, CRAYONS, SLATE PENCILS, PEN HOLDERS, AND CHALK. H. C. KURZ, A. G., Nuremberg, Germany.
Filed April 1, 1931. Serial No. 312,808. PUBLISHED MAY 12, 1931. Class 37.

285,495. MALT SYRUP. PABST CORPORATION, doing business as Europa Malt Syrup Co., Milwaukee, Wis.
Filed April 1, 1931. Serial No. 312,812. PUBLISHED MAY 19, 1931. Class 46.

285,496. CHEESE. WILLIAM FAEHNDRICH, INC., New York, N. Y.
Filed April 2, 1931. Serial No. 312,844. PUBLISHED MAY 12, 1931. Class 46.

285,497. WATERPROOFED FABRICS. HYDROPEL PROCESS COMPANY, Boston, Mass.
Filed April 1, 1931. Serial No. 312,884. PUBLISHED MAY 12, 1931. Class 50.

285,498. ANIMAL WATERING TROUGHS. ERICH BEYER, Chicago, Ill.
Filed April 2, 1931. Serial No. 312,885. PUBLISHED MAY 19, 1931. Class 50.

285,499. SULPHATE OF AMMONIA FOR FERTILIZER. HUDSON VALLEY FUEL CORPORATION, Troy, N. Y.
Filed April 3, 1931. Serial No. 312,918. PUBLISHED MAY 19, 1931. Class 10.

285,500. PAPER FOR WRAPPING MEATS. BEECHER PECK & LEWIS, Detroit, Mich.
Filed April 4, 1931. Serial No. 312,941. PUBLISHED MAY 12, 1931. Class 37.

285,501. REFRIGERATOR CABINETS. GRAND RAPIDS CABINET COMPANY, Grand Rapids, Mich.
Filed April 8, 1931. Serial No. 313,082. PUBLISHED MAY 12, 1931. Class 31.

285,502. SMOKING PIPES. RUBEN E. WALL, doing business as Whoopee Pipes, Buffalo, N. Y.
Filed April 7, 1931. Serial No. 313,064. PUBLISHED MAY 19, 1931. Class 8.

285,503. RAZOR STROPPERS. HARTFORD PRODUCTS CORPORATION, Hartford, Conn.
Filed April 7, 1931. Serial No. 313,037. PUBLISHED MAY 19, 1931. Class 4.

285,504. WHISKEY. JOHN ROESING, Chicago, Ill.
Filed April 6, 1931. Serial No. 313,005. PUBLISHED MAY 12, 1931. Class 49.

285,505. SUGAR AND PREPARED FLOUR. HARRY RICE GORDON, doing business as The Harry R. Gordon Co., Inc., New York, N. Y.
Filed December 12, 1930. Serial No. 308,887. PUBLISHED MAY 12, 1931. Class 46.

285,506. FOOD PREPARATION IN LIQUID FORM. VALERIA RUTECKI, Philadelphia, Pa.
Filed December 1, 1930. Serial No. 308,493. PUBLISHED MAY 19, 1931. Class 46.

285,507. YEAST PREPARATIONS. FRIEDRICH SAUER G. M. B. H., Gotha, Germany.
Filed November 28, 1930. Serial No. 308,392. PUBLISHED MAY 12, 1931. Class 46.

285,508. CANNED GOODS. THE DANNEMILLER GROCERY COMPANY, Canton, Ohio.
Filed November 28, 1930. Serial No. 308,360. PUBLISHED MAY 12, 1931. Class 46.

285,509. CURED MEATS, NAMELY HAMS. P. D. GWALTNEY JR. & CO., INC., Smithfield, Va.
Filed November 22, 1930. Serial No. 308,202. PUBLISHED MAY 12, 1931. Class 46.

285,510. BAGS, MADE OF REINFORCED WATERPROOFED PAPER, ETC. ELMER ABRAMSON, St. Louis, Mo.
Filed November 21, 1930. Serial No. 308,150. PUBLISHED MAY 12, 1931. Class 2.

285,511. UNFINISHED WORSTED WOOLEN CLOTH IN THE PIECE FOR MEN'S SUITINGS. WATERHOUSE WOOLEN COMPANY, Chicago, Ill.
Filed November 20, 1930. Serial No. 308,149. PUBLISHED MAY 5, 1931. Class 42.

285,512. IMITATION STRAW AND IMITATION HORSEHAIR MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed February 25, 1931. Serial No. 311,418. PUBLISHED MAY 12, 1931. Class 1.

285,513. GOLF TEE HOLDER. HERFF-JONES CO., Indianapolis, Ind.
Filed February 24, 1931. Serial No. 311,407. PUBLISHED MAY 12, 1931. Class 22.

285,514. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed February 24, 1931. Serial No. 311,360. PUBLISHED MAY 19, 1931. Class 42.

285,515. THREADS AND YARNS OF ARTIFICIAL SILK. ACETA G. M. B. H., Berlin-Lichtenberg, Germany.
Filed February 24, 1931. Serial No. 311,352. PUBLISHED MAY 19, 1931. Class 43.

285,516. CHOCOLATE FLAVORED FOOD PREPARATIONS DESIGNED FOR MAKING MILK BEVERAGES OR OTHER FOOD BEVERAGES. THE HARSHAW CHEMICAL COMPANY, Cleveland, Ohio.
Filed February 21, 1931. Serial No. 311,334. PUBLISHED MAY 12, 1931. Class 46.

285,517. WOOLEN PIECE GOODS. C. M. DE LAND, New York, N. Y.
Filed February 18, 1931. Serial No. 311,215. PUBLISHED MAY 19, 1931. Class 42.

285,518. WOOLEN PIECE GOODS. BOTANY WORSTED MILLS, Passaic, N. J.
Filed February 18, 1931. Serial No. 311,176. PUBLISHED MAY 12, 1931. Class 42.

285,519. WOOLEN PIECE GOODS. BOTANY WORSTED MILLS, Passaic, N. J.
Filed February 18, 1931. Serial No. 311,175. PUBLISHED MAY 12, 1931. Class 42.

285,520. WOOLEN PIECE GOODS. BOTANY WORSTED MILLS, Passaic, N. J.
Filed February 18, 1931. Serial No. 311,178. PUBLISHED MAY 12, 1931. Class 42.

285,521. EGGS. BEER & DAVIES, New York, N. Y.
Filed April 6, 1931. Serial No. 312,972. PUBLISHED MAY 12, 1931. Class 46.

285,522. MALT EXTRACT. STERLING PRODUCTS CO., Evansville, Ind.
Filed April 4, 1931. Serial No. 312,964. PUBLISHED MAY 19, 1931. Class 46.

285,523. CHEESE. WILLIAM FAEHNDRICH, INC., New York, N. Y.
Filed April 2, 1931. Serial No. 312,843. PUBLISHED MAY 12, 1931. Class 46.

285,524. ELECTRICAL FUSES. KIRKMAN ENGINEERING CORPORATION, New York, N. Y.
Filed February 11, 1931. Serial No. 310,941. PUBLISHED MAY 12, 1931. Class 21.

285,525. RAYON, SILK, COTTON, LINEN, AND PILE FABRICS AND/OR COMBINATIONS THEREOF. S. SLATER & SONS, INC., New York, N. Y.
Filed February 11, 1931. Serial No. 310,957. PUBLISHED MAY 19, 1931. Class 42.

285,526. BATHTUBS, LAVATORY BASINS, TOILET TANKS, ETC. BARR & CREELMAN CO., Rochester, N. Y.
Filed February 10, 1931. Serial No. 310,907. PUBLISHED MAY 19, 1931. Class 13.

285,527. CANDY BARS. M. J. HOLLOWAY & COMPANY, Chicago, Ill.
Filed February 9, 1931. Serial No. 310,865. PUBLISHED MAY 12, 1931. Class 46.

285,528. VITREOUS ENAMEL POTS, PANS, AND KETTLES. POLAR WARE COMPANY, Sheboygan, Wis.
Filed February 7, 1931. Serial No. 310,836. PUBLISHED MAY 19, 1931. Class 13.

285,529. STOVES AND RANGES INCLUDING BOTH HEATING AND COOKING STOVES ADAPTED TO USE GASEOUS, LIQUID, OR SOLID FUEL. THE WEHRLE COMPANY, Newark, Ohio.
Filed February 6, 1931. Serial No. 310,815. PUBLISHED MAY 19, 1931. Class 34.

285,530. PARACHUTES, PARACHUTE CASINGS, AND HARNESSES FOR PARACHUTES. CARL HERMANN LUNDHOLM, Stockholm, Sweden.
Filed February 5, 1931. Serial No. 310,771. PUBLISHED MAY 12, 1931. Class 19.

285,531. SILK PIECE GOODS. C. K. EAGLE & CO., INC., New York, N. Y.
Filed January 31, 1931. Serial No. 310,599. PUBLISHED MAY 5, 1931. Class 42.

285,532. FRESH CITRUS FRUITS. STUART BROS. CORPORATION, Bartow, Fla.
Filed January 28, 1931. Serial No. 310,496. PUBLISHED MAY 19, 1931. Class 46.

285,533. CANNED, COMPRESSED COOKED MEAT AND CHICKEN LOAF TO BE SERVED IN SLICES FROM THE LOAF. A. J. CHURCHILL, Los Angeles, Calif.
Filed January 27, 1931. Serial No. 310,441. PUBLISHED APRIL 21, 1931. Class 46.

285,534. CHEWING GUM. MAYAM LIMITED, London, England.
Filed January 24, 1931. Serial No. 310,344. PUBLISHED MAY 12, 1931. Class 46.

285,535. CANNED FRUITS, CANNED VEGETABLES, RICE, ETC. THE CINCINNATI WHOLESALE GROCERY COMPANY, Cincinnati, Ohio.
Filed January 22, 1931. Serial No. 310,251. PUBLISHED MAY 12, 1931. Class 46.

285,536. PROCESSED FABRIC BACKING MATERIAL USED IN THE MANUFACTURE OF LAMINATED FABRICS. ACME BACKING CORPORATION, Brooklyn, N. Y.
Filed January 21, 1931. Serial No. 310,200. PUBLISHED MAY 12, 1931. Class 50.

285,537. CANDIES. ANNA MASKEY, doing business as Maskey's, San Francisco, Calif.
Filed January 19, 1931. Serial No. 310,132. PUBLISHED MAY 5, 1931. Class 46.

285,538. WHEAT FLOUR. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed January 17, 1931. Serial No. 310,069. PUBLISHED MAY 12, 1931. Class 46.

285,539. FRENCH DRESSING, THOUSAND ISLAND DRESSING, MAYONNAISE, AND SANDWICH RELISH OR SPREAD. KRAFT-PHENIX CHEESE CORPORATION, Chicago, Ill.
Filed April 4, 1930. Serial No. 298,402. PUBLISHED MAY 12, 1931. Class 46.

285,540. COOKIES, CAKES, AND CRACKERS. J. S. IVINS' SON, INC., Philadelphia, Pa.
Filed March 26, 1930. Serial No. 297,916. PUBLISHED MAY 19, 1931. Class 46.

285,541. COTTON PIECE GOODS. CARSON PIRIE SCOTT & Co., Chicago, Ill.
Filed March 25, 1930. Serial No. 297,848. PUBLISHED MAY 19, 1931. Class 42.

285,542. SMOKERS' ARTICLES SUCH AS CIGAR AND CIGARETTE CONTAINERS, ASH TRAYS, AND SNUFFERS. LARKIN SPECIALTY MANUFACTURING CO., San Francisco, Calif.
Filed March 24, 1930. Serial No. 297,810. PUBLISHED MAY 12, 1931. Class 8.

285,543. SMOKERS' ARTICLES SUCH AS CIGAR AND CIGARETTE CONTAINERS, ASH TRAYS, AND SNUFFERS. LARKIN SPECIALTY MANUFACTURING CO., San Francisco, Calif.
Filed March 24, 1930. Serial No. 297,809. PUBLISHED MAY 12, 1931. Class 8.

285,544. PAINT BRUSHES. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed March 22, 1930. Serial No. 297,760. PUBLISHED MAY 19, 1931. Class 29.

285,545. LEATHER DRESSINGS, SOAPS, METAL POLISH, ETC. CHEMISCHE FABRIK EISENDRATH GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Mettmann, Rhld., Germany.
Filed February 25, 1930. Serial No. 296,481. PUBLISHED MAY 12, 1931. Class 4.

285,546. A DETERGENT PREPARATION, ETC. CHARLOTTE CHEMICAL LABORATORIES, INC., Charlotte, N. C.
Filed February 25, 1930. Serial No. 296,480. PUBLISHED MAY 12, 1931. Class 4.

285,547. DAIRY FEEDS. PURITAN MILLS, Atlanta, Ga.
Filed February 17, 1930. Serial No. 296,147. PUBLISHED MAY 13, 1930. Class 46.

285,548. CANNED FRUITS AND VEGETABLES, JELLIES, PICKLES, ETC. CONSOLIDATED COMPANIES, INC., Plaquemine, La.
Filed January 20, 1930. Serial No. 294,959. PUBLISHED MAY 12, 1931. Class 46.

285,549. DAMASK FABRICS. CLARK & GLENDON INC., New York, N. Y.
Filed December 13, 1929. Serial No. 293,616. PUBLISHED MAY 19, 1931. Class 42.

285,550. CHEMICAL STILLS, SPRAY WATER COOLING TOWERS, PNEUMATIC DUST CONVEYORS, PNEUMATIC DUST CONVEYOR SYSTEMS, AND AIR-DUCTS THEREFOR. ALPHA TANK & SHEET METAL MFG. CO., St. Louis, Mo.
Filed May 1, 1930. Serial No. 299,819. PUBLISHED MAY 12, 1931. Class 23.

285,551. STOCKINGS AND SOCKS. A. E. ALLEN & CO., LTD., Nottingham, England.
Filed April 9, 1930. Serial No. 298,560. PUBLISHED MAY 12, 1931. Class 39.

285,552. SHEARS AND PRUNERS. THE ALLIANCE MANUFACTURING COMPANY, Alliance, Ohio.
Filed April 2, 1930. Serial No. 298,263. PUBLISHED MAY 12, 1931. Class 23.

285,553. LEATHER SHOES AND BOOTS. RAND SHOE COMPANY, New Orleans, La.
Filed February 18, 1930. Serial No. 296,198. PUBLISHED MAY 19, 1931. Class 39.

285,554. BIAS FOLD TAPES AND TRIMMINGS OF FABRIC, CONSISTING OF RAYON, SILK, COTTON, AND COMBINATIONS THEREOF. WM. E. WRIGHT & SONS COMPANY, Orange, N. J.
Filed February 4, 1930. Serial No. 295,591. PUBLISHED MAY 12, 1931. Class 40.

285,555. MINERAL WATER. PACIFIC PRODUCTS, INC., San Francisco, Calif.
Filed November 26, 1929. Serial No. 292,951. PUBLISHED MAY 19, 1931. Class 45.

285,556. HORSE-RADISH, PICKLED BEETS, PICKLED TOMATOES, CHOW-CHOW, ETC. HENRY TREFFINGER, New York, N. Y.
Filed November 12, 1929. Serial No. 292,340. PUBLISHED DECEMBER 16, 1930. Class 46.

285,557. AUTOMOTIVE VEHICLES, PARTS AND ACCESSORIES, TRIMMING, ETC. DAIMLER-BENZ AKTIENGESELLSCHAFT, Berlin, Germany.
Filed August 16, 1929. Serial No. 288,586. PUBLISHED MAY 12, 1931. Class 19.

285,558. FISH AND SEAFOODS. NEW ENGLAND FISH COMPANY, Seattle, Wash.
Filed May 21, 1929. Serial No. 284,413. PUBLISHED MAY 19, 1931. Class 46.

285,559. THREAD AND YARN OF ARTIFICIAL VEGETABLE MATERIAL AND FOR MIXTURES OF THE SAME WITH COTTON, SILK, OR WOOL. MICHEL DASSONVILLE, Paris, France.
Filed September 24, 1930. Serial No. 305,998. PUBLISHED MAY 19, 1931. Class 43.

285,560. PAPER NAPKINS. THE MENASHA PRODUCTS COMPANY, Chicago, Ill.
Filed September 2, 1930. Serial No. 305,232. PUBLISHED MAY 12, 1931. Class 37.

285,561. METALS AND/OR ALLOYS. KEMET LABORATORIES COMPANY, INC., New York, N. Y.
Filed August 22, 1930. Serial No. 304,919. PUBLISHED MAY 12, 1931. Class 14.

285,562. LACE REPRODUCTIONS ON TRANSPARENT PAPER OR PAPER SUBSTITUTES AND USED AS TABLE COVERINGS. PACKAGE PAPER COMPANY, Holyoke, Mass.
Filed August 14, 1930. Serial No. 304,628. PUBLISHED MAY 12, 1931. Class 37.

285,563. HANDKERCHIEFS. MAURICE SMOOKE, doing business as Standard Handkerchief Mfg. Co., New York, N. Y.
Filed August 13, 1930. Serial No. 304,588. PUBLISHED OCTOBER 7, 1930. Class 42.

285,564. PAPER COVERS FOR CLOSET SEATS. HOMAN & BIEHL, Chicago, Ill.
Filed August 4, 1930. Serial No. 304,200. PUBLISHED MAY 12, 1931. Class 37.

285,565. WHEAT FLOUR. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed January 17, 1931. Serial No. 310,068. PUBLISHED MAY 12, 1931. Class 46.

285,566. GOLF BALLS FOR MINIATURE GOLF COURSES. A. M. FELTUS, JR., Vicksburg, Miss.
Filed March 13, 1931. Serial No. 312,127. PUBLISHED MAY 12, 1931. Class 22.

285,567. FRUIT BOWLS, BREAD TRAYS, CANDY DISHES, NUT BOWLS, ETC. CROMWELL SILVER MFG. CORP., New York, N. Y.
Filed March 13, 1931. Serial No. 312,095. PUBLISHED MAY 19, 1931. Class 13.

285,568. INDOOR MINIATURE GOLF GAME. WILLIAM C. MAYER, Jefferson, Wis.
Filed March 12, 1931. Serial No. 312,056. PUBLISHED MAY 12, 1931. Class 22.

285,569. WRITING PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J.
Filed April 6, 1931. Serial No. 312,984. PUBLISHED MAY 12, 1931. Class 37.

285,570. FOUNTAIN PENS. PARAMOUNT PEN CO., INC., Weehawken, N. J.
Filed March 17, 1931. Serial No. 312,236. PUBLISHED MAY 12, 1931. Class 37.

285,571. CANDIES. MEYER H. ABELSON, Wilkes-Barre, Pa.
Filed March 17, 1931. Serial No. 312,227. PUBLISHED MAY 12, 1931. Class 46.

285,572. AIRPLANES. GREAT LAKES AIRCRAFT CORPORATION, Cleveland, Ohio.
Filed March 14, 1931. Serial No. 312,213. PUBLISHED MAY 12, 1931. Class 19.

285,573. HAIR NETS. PRINCESS PAT PRODUCTS LIMITED, Toronto, Ontario, Canada.
Filed March 14, 1931. Serial No. 312,161. PUBLISHED MAY 19, 1931. Class 42.

285,574. PIECE GOODS ALL MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed July 29, 1930. Serial No. 303,947. PUBLISHED MAY 19, 1931. Class 42.

285,575. PIECE GOODS MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed July 29, 1930. Serial No. 303,946. PUBLISHED MAY 5, 1931. Class 42.

285,576. ICE CREAM AND CANDY CONFECTION. ESKIMO PIE CORPORATION, doing business through its subsidiary, New York Eskimo Pie Corporation, Louisville, Ky.
Filed July 18, 1930. Serial No. 303,600. PUBLISHED MAY 12, 1931. Class 46.

285,577. CLEANING FLUID FOR USE ON FABRICS AND LEATHER GOODS. CLARKSON, INC., Suffern, N. Y.
Filed July 9, 1930. Serial No. 303,216. PUBLISHED MAY 12, 1931. Class 4.

285,578. BURNERS—NAMELY, GAS BURNERS, OIL CONVERSION BURNERS, AND PARTS THEREOF. STEAM AND COMBUSTION COMPANY, Chicago, Ill.
Filed July 7, 1930. Serial No. 303,220. PUBLISHED MAY 12, 1931. Class 34.

285,579. FROZEN CONFECTIONS. KOLD KUB COMPANY, Dallas, Tex.
Filed June 27, 1930. Serial No. 302,903. PUBLISHED MAY 12, 1931. Class 46.

285,580. PRODUCTS MADE FROM STEEL AND/OR IRON AND/OR METAL ALLOYS, ETC. GULF STATES STEEL COMPANY, Birmingham, Ala.
Filed June 16, 1930. Serial No. 302,465. PUBLISHED JULY 29, 1930. Class 14.

285,581. VANITIES, ETC. ELGIN AMERICAN MANUFACTURING CO., Elgin, Ill.
Filed June 16, 1930. Serial No. 302,460. PUBLISHED FEBRUARY 10, 1931. Class 2.

285,582. WATER-PROOFED CANVAS. THE HETTRICK MANUFACTURING COMPANY, Toledo, Ohio.
Filed June 13, 1930. Serial No. 302,391. PUBLISHED SEPTEMBER 2, 1930. Class 50.

285,583. ART AND MODELING CLAY. CALIFORNIA ART SUPPLY CO., Palo Alto, Calif.
Filed May 14, 1930. Serial No. 300,464. PUBLISHED MAY 12, 1931. Class 1.

285,584. COLUMN OR SECTION OF A NEWSPAPER. PULITZER PUBLISHING COMPANY, St. Louis, Mo.
Filed May 10, 1930. Serial No. 300,298. PUBLISHED MAY 12, 1931. Class 38.

285,585. MATTRESS TICKING IN THE PIECE. INTERNATIONAL MERCHANDISING SYNDICATE, INC., New York, N. Y.
Filed May 10, 1930. Serial No. 300,281. PUBLISHED MAY 19, 1931. Class 42.

285,586. NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, SYRUPS AND EXTRACTS FOR MAKING SAME, AND GINGER ALE. MAYFLOWER BEVERAGE CO., INC., Jamaica Plain, Mass.
Filed May 9, 1930. Serial No. 300,214. PUBLISHED MAY 19, 1931. Class 45.

285,587. CHEESE. CHARLES R. ZUERCHER, Jr., doing business as Home-Wood Cheese Co., Chicago, Ill.
Filed April 17, 1930. Serial No. 299,027. PUBLISHED OCTOBER 7, 1930. Class 46.

285,588. WOMEN'S FELT HATS, UNTRIMMED. HENRY POLLAK, INC., New York, N. Y.
Filed October 23, 1930. Serial No. 307,108. PUBLISHED MAY 12, 1931. Class 39.

285,589. KNICKERS FOR MEN, WOMEN, AND CHILDREN. THEODORE KOTZIN, Los Angeles, Calif.
Filed October 11, 1930. Serial No. 306,651. PUBLISHED MAY 5, 1931. Class 39.

285,590. LADIES' AND CHILDREN'S READY TO WEAR APPAREL—NAMELY, DRESSES, COATS, HATS, HOSE, AND BATHROBES. STACY P. BAILEY, New York, N. Y.
Filed September 27, 1930. Serial No. 306,124. PUBLISHED MAY 12, 1931. Class 39.

285,591. WEARING APPAREL—NAMELY, MEN'S AND BOYS' SUITS, OVERCOATS, TOPCOATS, PANTS, AND TROUSERS. WEIL CLOTHING CO., St. Louis, Mo.
Filed September 2, 1930. Serial No. 305,257. PUBLISHED MAY 5, 1931. Class 39.

285,592. LADIES' AND MISSES' HATS. SIMON MILLINERY SUPPLY COMPANY, San Francisco, Calif.
Filed August 26, 1930. Serial No. 305,056. PUBLISHED MAY 12, 1931. Class 39.

285,593. MANILA ROPE. THE EDWIN H. FITLER CO., Philadelphia, Pa.
Filed April 14, 1931. Serial No. 313,340. PUBLISHED MAY 19, 1931. Class 7.

285,594. BUNDLING TWINE. THE EDWIN H. FITLER CO., Philadelphia, Pa.
Filed April 14, 1931. Serial No. 313,339. PUBLISHED MAY 19, 1931. Class 7.

285,595. TOY SETS COMPRISING GARDENING TOOLS, GARDENING IMPLEMENTS, FLOWER POTS AND SEEDS. WOLVERINE SUPPLY & MANUFACTURING COMPANY, Pittsburgh, Pa.
Filed April 11, 1931. Serial No. 313,263. PUBLISHED MAY 19, 1931. Class 22.

285,596. DOLL EYES AND EYELASHES, DOLLS, FACE MASKS, AND ANIMAL TOYS. VICTOR KENEY, Woodside, Long Island, N. Y.
Filed April 11, 1931. Serial No. 313,245. PUBLISHED MAY 19, 1931. Class 22.

285,597. FISHING REELS. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed April 11, 1931. Serial No. 313,287. PUBLISHED MAY 19, 1931. Class 22.

285,598. FISHING FLOATS. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed April 11, 1931. Serial No. 313,286. PUBLISHED MAY 19, 1931. Class 22.

285,599. GOLF CLUBS. EDWIN J. KLIN, Chicago, Ill.
Filed April 10, 1931. Serial No. 313,194. PUBLISHED MAY 19, 1931. Class 22.

285,600. MALTLESS BEVERAGE AND SIRUPS AND EXTRACTS FOR MAKING THE SAME. KLEE & COLEMAN, Indianapolis, Ind.
Filed April 10, 1931. Serial No. 313,193. PUBLISHED MAY 19, 1931. Class 45.

285,601. PAPER BOX FILE, RUBBER STAMPS, HAND BLOTTERS, ETC. THE CHAD VALLEY CO. LTD., Harborne, England.
Filed March 14, 1929. Serial No. 280,693. PUBLISHED MAY 12, 1931. Class 37.

285,602. STEAM, WATER, AND GAS-HEATED AIR AND LIQUID HEATERS, HEAT EXCHANGE DEVICES, ETC. HUGO JUNKERS, Dessau, Germany.
Filed February 26, 1929. Serial No. 279,932. PUBLISHED MAY 19, 1931. Class 34.

285,603. CANNED FRUITS AND FRUIT PRESERVES, CANNED VEGETABLES, ETC. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio.
Filed February 16, 1929. Serial No. 279,480. PUBLISHED MAY 12, 1931. Class 46.

285,604. FRESH CITRUS FRUITS. RIVERSIDE HEIGHTS ORANGE GROWERS ASSOCIATION, Riverside, Calif.
Filed February 12, 1929. Serial No. 279,238. PUBLISHED MAY 12, 1931. Class 46.

285,605. MEN'S AND BOYS' CAPS. OMAHA CAP MANUFACTURING COMPANY, Omaha, Nebr.
Filed January 5, 1929. Serial No. 277,637. PUBLISHED MAY 19, 1931. Class 39.

285,606. CLEANING COMPOSITIONS AS DESCRIBED. THE DOW CHEMICAL COMPANY, Midland, Mich.
Filed July 30, 1928. Serial No. 270,310. PUBLISHED MAY 19, 1931. Class 4.

285,607. APPARATUS FOR DRYING WOOD PULP. TECHNICAL ECONOMIST CORPORATION, New York, N. Y.
Filed February 23, 1928. Serial No. 262,134. PUBLISHED JUNE 12, 1928. Class 28.

285,608. CIGARS. SALVATORE ALFE, doing business as S. Alfe Cigar Company, Philadelphia, Pa.
Filed February 12, 1931. Serial No. 310,966. PUBLISHED MAY 19, 1931. Class 17.

285,609. STICKY FLY PAPER. THE O. & W. THUM COMPANY, Grand Rapids, Mich.
Filed February 11, 1931. Serial No. 310,959. PUBLISHED MAY 19, 1931. Class 50.

285,610. COTTON FABRICS IN THE PIECE. PRINCE LAUTEN CORP., New York, N. Y.
Filed February 17, 1931. Serial No. 311,157. PUBLISHED MAY 12, 1931. Class 42.

285,611. DOLLS. AUGUSTA WASSON, Whitestone, Long Island, N. Y.
Filed February 12, 1931. Serial No. 311,012. PUBLISHED MAY 19, 1931. Class 22.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

285,612. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio. Filed Apr. 22, 1931. Serial No. 313,669.

"FIRST LINE"

For Pneumatic Rubber Tires for Vehicles and Rubber Inner Tubes for Pneumatic Tires.
Claims use since April, 1929.

285,613. (CLASS 39. CLOTHING.) THE ASBURY MILLS, New York, N. Y. Filed Apr. 30, 1931. Serial No. 313,992.

Asbury

For Bathing Suits for Men and Women and Women's Frocks.
Claim use since May, 1916.

285,614. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THEODORE N. SIMMONS, doing business as T. N. Simmons & Company, Stamford, Conn. Filed Mar. 3, 1931. Serial No. 311,701.

SIMMONS ARROWROOT DESSERT

For a Preparation for Making Desserts and Sauces.
Claims use since Mar. 10, 1927.

285,615. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) ART AND NOVELTY SUPPLY COMPANY, Minneapolis, Minn. Filed Mar. 27, 1931. Serial No. 312,592.

NU-STONE

For Plaques and Miniature Statuary Formed of Plastic Composition.
Claims use since May 22, 1930.

285,616. (CLASS 37. PAPER AND STATIONERY.) RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931. Serial No. 313,630.

IRVINGTON

For Black Lead and Copying Pencils.
Claims use since 1909.

285,617. (CLASS 17. TOBACCO PRODUCTS.) JOHN F. BOLON, doing business as John F. Bolon Cigar Company, Bethesda, Ohio. Filed June 8, 1931. Serial No. 315,522.

Chicago CROOKS

For Cigars and Stogies.
Claims use since May 1, 1930.

285,618. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE BAUER TYPE FOUNDRY, INC., New York, N. Y. Filed May 22, 1930. Serial No. 301,008.

BAUER
"The Types of Today and Tomorrow"

For Printing Type.
Claims use since May 12, 1930.

285,619. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) PUREX CORPORATION, LTD., Los Angeles, Calif. Filed May 31, 1930. Serial No. 302,019.

QuickWhite

For Liquid Cleaning Preparation for General Use Having Incidental Bleaching and Water Softening Properties.
Claims use since May 24, 1930.

285,620. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LOUIS I. WEINER, doing business as Lujo Pharmacal Co., New York, N. Y. Filed July 28, 1930. Serial No. 303,936.

QUINA CONES

For Suppositories.
Claim use since Sept. 1, 1927.

285,621. (CLASS 37. PAPER AND STATIONERY.) LEE PAPER COMPANY, Vicksburg, Mich. Filed Sept. 6, 1930. Serial No. 305,409.

Corsican

For Book, Cover, and Writing Papers.
Claims use since June 5, 1930.

285,622. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed Oct. 13, 1930. Serial No. 306,709.

Metlbrite

For Metal Polish.
Claims use since Jan. 15, 1927.

285,623. (CLASS 45. BEVERAGES, NONALCOHOLIC.) HARRY A. MUNDORFF & HARRY A. MUNDORFF, Jr., Wilmington, Del. Filed Oct. 16, 1930. Serial No. 306,825.

TEN CENTER

For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts for Making Same.
Claims use since May 1, 1930.

285,624. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) PALMER LIME & CEMENT COMPANY, New York, N. Y. Filed May 1, 1930. Serial No. 299,792.

YORK WHITING

For Whiting.
Claims use since Apr. 15, 1926.

285,625. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STEWART CURTIS PACKERS, INC., Los Angeles, Calif. Filed May 13, 1930. Serial No. 300,447.

BORDELAISE

For Canned and Bottled Olives.
Claims use since Mar. 17, 1930.

285,626. (CLASS 39. CLOTHING.) LICHTEN BROS., New York, N. Y. Filed May 1, 1930. Serial No. 299,783.

Mode Wear

For Ladies' and Men's Hosiery.
Claims use since Mar. 20, 1930.

285,627. (CLASS 39. CLOTHING.) HARRY ROSENBERG, doing business as Rosenberg's Department Store, Detroit, Mich. Filed Mar. 26, 1930. Serial No. 297,936.

Rosehill

For Hosiery.
Claims use since Sept. 23, 1929.

285,628. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MARIE POIRIER, doing business as M. N. Poirier Co., New York, N. Y. Filed June 12, 1929. Serial No. 285,469.

FRENCH DISCOVERY SILVER POLISH

For Silver Polish.
Claims use since June 5, 1929.

285,629. (CLASS 2. RECEPTACLES.) SAFETY FILLER CORPORATION, Chicago, Ill. Filed May 29, 1931. Serial No. 315,210.

SAFETY FILLER

For Egg Fillers.
Claims use since May 28, 1930.

285,630. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PETERSBURG MILL COMPANY, Petersburg, Tenn. Filed Feb. 21, 1931. Serial No. 311,339.

Eakin's Best

For Wheat Flour.
Claims use since June 1, 1930.

TRADE-MARK REGISTRATIONS RENEWED

8,674. ILLUMINATING OILS. Registered September 27, 1881. SONE & FLEMING MANUFACTURING CO. (LIMITED). Re-renewed September 27, 1931, to Standard Oil Company of New York, New York, N. Y., a Corporation of New York, assignee.

36,337. CERTAIN NAMED GROCERY SPECIALTIES. Registered April 30, 1901. THE R. I. SHERMAN MFG. CO., Boston, Mass. Renewed April 30, 1931, to Roger I. Sherman, Plymouth, Mass., successor.

36,588. CERTAIN NAMED IRON, STEEL, AND MANUFACTURES. Registered June 11, 1901. I. A. HENCKELS, a Firm. Renewed June 11, 1931, to J. A. Henckels, a Firm, Solingen, Germany, assignee by mesne assignments.

36,615. WHEAT FLOUR. Registered June 18, 1901. ACME MILLING COMPANY. Renewed June 18, 1931, to Acme-Evans Company, Indianapolis, Ind., a Corporation of Indiana, assignee.

36,828. ROOFING FELT. Registered July 30, 1901. J. A. & W. BIRD & CO. Renewed July 30, 1931, to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

36,892. WHITE LEAD, SALTPETRE, BRIMSTONE ROLL, AND FLOWER OF SULFUR. Registered August 13, 1901. BRANDRAM BROTHERS & CO. LTD., London, England, a Corporation of Great Britain. Renewed August 13, 1931.

37,119. CERTAIN NAMED MACHINES. Registered September 24, 1901. ADDRESSOGRAPH CO., Chicago, Ill. Renewed September 24, 1931, to Addressograph Company, Chicago, Ill., and Cleveland, Ohio, a Corporation of Delaware, assignee.

37,162. INCANDESCENT ELECTRIC LAMPS. Registered October 1, 1901. WILLIAM J. PHELPS, Detroit, Mich. Renewed October 1, 1931, to General Electric Company, Schenectady, N. Y., a Corporation of New York, assignee by mesne assignments.

37,225. PLAITED CREAM MINT AND OTHER CANDY. Registered October 22, 1901. ARTEMUS P. RICHARDSON. Renewed October 22, 1931, to Thos. D. Richardson Company, Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

37,261. COLD WATER PAINTS OR WALL FINISHES. Registered October 29, 1901. THE MURALO CO. Renewed October 29, 1931, to The Muralo Company, Inc., New Brighton, N. Y., a Corporation of New York, assignee.

37,267. GRINDING AND POLISHING MACHINERY. Registered October 29, 1901. DIAMOND MACHINE CO., Providence, R. I., a Corporation of Rhode Island. Renewed October 29, 1931.

37,271. EAU DE COLOGNES, SOAPS, WATERS, AND LOTIONS FOR TOILET PURPOSES. Registered November 5, 1901. NAAMLOOZE VENNOOTSCHAP EAU DE COLOGNE FABRIEK VOORHEEN J. C. BOLDOOT. Renewed November 5, 1931, to Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands, a Corporation of the Netherlands, by change of name.

37,272. EAU DE COLOGNES, SOAPS, WATERS, AND LOTIONS FOR TOILET PURPOSES. Registered November 5, 1901. NAAMLOOZE VENNOOTSCHAP EAU DE COLOGNE FABRIEK VOORHEEN J. C. BOLDOOT. Renewed November 5, 1931, to Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands, a Corporation of the Netherlands, by change of name.

37,332. ROD AND JOINT PACKING. Registered November 19, 1901. THE GARLOCK PACKING CO. Renewed November 19, 1931, to The Garlock Packing Company, Palmyra, N. Y., a Corporation of New York, assignee.

37,359. TOILET AND LAUNDRY SOAPS. Registered November 26, 1901. SWIFT AND COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed November 26, 1931.

37,362. INSULATING VARNISHES. Registered November 26, 1901. STANDARD VARNISH WORKS, New York, N. Y., a Corporation of New York. Renewed November 26, 1931.

37,370. BALMS. Registered November 26, 1901. BROWN MFG. CO., Greeneville, Tenn. Renewed November 26, 1931, to Brown Mfg. Co., Le Roy, N. Y., a Corporation of Tennessee.

37,375. MEDICINE FOR CERTAIN NAMED DISEASES. Registered November 26, 1901. ASHTON & PARSONS LTD. Renewed November 26, 1931, to Phosferine (Ashton & Parsons) Limited, London, England, a Corporation of Great Britain, assignee.

37,451. EAU DE COLOGNES, SOAPS, WATERS, AND LOTIONS FOR TOILET PURPOSES. Registered December 10, 1901. NAAMLOOZE VENNOOTSCHAP EAU DE COLOGNE FABRIEK VOORHEEN J. C. BOLDOOT. Renewed December 10, 1931, to Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands, a Corporation of the Netherlands by change of name.

37,452. HAIR AND BEARD PREPARATIONS, EXCEPT SOAP. Registered December 10, 1901. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn., a Corporation of Connecticut. Renewed December 10, 1931.

37,469. EAU DE COLOGNES, SOAPS, WATERS, AND LOTIONS FOR TOILET PURPOSES. Registered December 17, 1901. NAAMLOOZE VENNOOTSCHAP EAU DE COLOGNE FABRIEK VOORHEEN J. C. BOLDOOT. Renewed December 17, 1931, to Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands, a Corporation of the Netherlands, by change of name.

79,890. COTTON GOODS IN THE PIECE. Registered October 18, 1910. WM. H. BROWN SON & CO. Renewed October 18, 1930, to Matthew W. Ryan Sons & Co. Inc., New York, N. Y., a Corporation of New York, successor.

81,790. LAUNDRY WASHING-MACHINES. Registered May 9, 1911. DE VASHER MANUFACTURING AND SUPPLY COMPANY, Kansas City, Mo. Renewed May 9, 1931.

81,968. LEATHER SHOES, HOSIERY, AND OUTERSHIRTS. Registered May 23, 1911. DREYFUS EXPORT CO. Renewed May 23, 1931, to The Deco Export Co., Inc., New York, N. Y., a Corporation of New York, successor.

82,112. ROUGE. Registered May 30, 1911. JULIUS SCHMID, INC., Astoria, N. Y. Renewed May 30, 1931, to Julius Schmid, Inc., New York, N. Y., a Corporation of New York.

82,330. RUBBER BOOTS AND SHOES, RUBBER OVERSHOES, AND RUBBER-SOLED SHOES. Registered June 20, 1911. HOOD RUBBER CO., East Watertown and Boston, Mass. Renewed June 20, 1931, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware, assignee.

82,472. MEDICATED SALT FOR STOCK. Registered June 27, 1911. JOHN E. ROBBINS. Renewed June 27, 1931, to Elizabeth Robbins, Greensburg, Ind., assignee by mesne assignments.

82,487. CANNED HOMINY. Registered June 27, 1911. WESTERN GROCERY COMPANY, Marshalltown, Iowa, a Corporation of Iowa. Renewed June 27, 1931.

82,504. RUBBER-COVERED INSULATED WIRES AND CABLES. Registered July 4, 1911. THE ELECTRIC CABLE CO., Bridgeport, Conn. Renewed July 4, 1931, to Habirshaw Cable & Wire Corporation, New York, N. Y., a Corporation of New York, assignee.

82,521. CANNED SALMON. Registered July 4, 1911. KELLEY-CLARKE COMPANY, Seattle, Wash., a Corporation of Washington. Renewed July 4, 1931.

82,545. COLD-WATER PAINT. Registered July 4, 1911. C. A. WOOLSEY PAINT & COLOR COMPANY, Jersey City, N. J., a Corporation of New Jersey. Renewed July 4, 1931.

82,546. INTERIOR PAINT. Registered July 4, 1911. C. A. WOOLSEY PAINT & COLOR COMPANY, Jersey City, N. J., a Corporation of New Jersey. Renewed July 4, 1931.

82,745. JUTE BAGGING FOR BALING COTTON. Registered July 25, 1911. THE AMERICAN MANUFACTURING COMPANY, Charleston, W. Va., and New York, N. Y. Renewed July 25, 1931, to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts, assignee.

82,747. A REMEDY FOR GALL-STONES. Registered July 25, 1911. MARIA VON BARBY, Weimar, Germany. Renewed July 25, 1931.

82,816. FROZEN, FRESH, AND SALT FISH. Registered July 25, 1911. NEW ENGLAND FISH COMPANY, Portland, Me., and Boston, Mass. Renewed July 25, 1931, to New England Fish Company, Boston, Mass., a Corporation of Maine.

82,838. PREPARATIONS FOR FEEDING PHEASANTS AND OTHER GAME-BIRDS AND POULTRY. Registered July 25, 1911. SPRATT'S PATENT LIMITED, London, England, a Corporation of Great Britain. Renewed July 25, 1931.

82,847. VACUUM-CLEANERS. Registered July 25, 1911. THE UNITED ELECTRIC COMPANY, Canton, Ohio, a Corporation of Ohio. Renewed July 25, 1931.

82,907. SPOONS. Registered Aug. 1, 1911. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y., a Corporation of New York. Renewed Aug. 1, 1931.

82,908. PACKING COMPOSED OF FIBROUS MATERIAL AND FIBROUS MATERIAL COMBINED WITH METAL. Registered August 1, 1911. PEERLESS RUBBER MANUFACTURING COMPANY, New Durham, N. J., and New York, N. Y. Renewed August 1, 1931, to United States Rubber Company, New York, N. Y., a Corporation of New Jersey, assignee.

82,962. COMPOSITION PAVING MATERIAL AND PAVEMENTS CONTAINING BITUMINOUS MATTER. Registered August 8, 1911. E. M. CHADBOURNE COMPANY, San Francisco, Calif. Renewed August 8, 1931, to Edward M. Chadbourne, Pensacola, Fla., successor.

83,016. A PERIODICAL. Registered August 8, 1911. LEE S. SMITH & SON CO. Renewed August 8, 1931, to Oral Hygiene, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania, successor.

83,049. MEDICINAL PLASTERS. Registered August 15, 1911. JESSIE B. CONWAY, Los Angeles, Calif. Renewed August 15, 1931.

83,100. NAPHTHA AND GASOLENE. Registered August 15, 1911. STANDARD OIL COMPANY OF NEW YORK, New York, N. Y., a Corporation of New York. Renewed August 15, 1931.

83,135. LINIMENTS FOR EXTERNAL USE. Registered August 22, 1911. EMMA BRUNNER, Wittenberg, Wis. Renewed August 22, 1931, to Anna M. Meyer, Marathon, Wis., assignee.

83,171. MECHANICAL TOYS. Registered August 22, 1911. MECCANO LIMITED, Liverpool, England. Renewed August 22, 1931, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland, assignee.

83,204. BAGGING FOR BALING COTTON. Registered August 29, 1911. THE AMERICAN MANUFACTURING COMPANY, Charleston, W. Va., and New York, N. Y. Renewed August 29, 1931, to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts, assignee.

83,317. BOOTS, SHOES, AND SLIPPERS OF LEATHER, RUBBER, OR CANVAS. Registered September 5, 1911. THE BEACON FALLS RUBBER SHOE COMPANY, Beacon Falls, Conn. Renewed September 5, 1931, to The Goodyear's India Rubber Glove Mfg. Company, Nangatuck, Conn., a Corporation of Connecticut, assignee.

83,391. SMOKING AND CHEWING TOBACCO, CIGARS, CIGARETTES, AND SNUFF. Registered September 12, 1911. CARRERAS LIMITED, London, England, a Corporation of Great Britain. Renewed September 12, 1931.

83,433. SOLE-LEATHER. Registered September 12, 1911. THE PENKETH TANNING COMPANY LIMITED, Penketh, near Warrington, England, a Corporation of Great Britain. Renewed September 12, 1931.

83,435. SMOKELESS POWDER. Registered September 12, 1911. E. I. DU PONT DE NEMOURS POWDER CO., Hoboken, N. J., and Wilmington, Del. Renewed September 12, 1931, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware, assignee by mesne assignments.

83,522. FOOD FOR DOGS AND CATS. Registered September 19, 1911. SPRATT'S PATENT LIMITED, London, England, a Corporation of Great Britain. Renewed September 19, 1931.

83,629. SOAP. Registered October 3, 1911. BARCLAY & BARCLAY. Renewed October 3, 1931, to Lanman & Kemp-Barclay & Co. Incorporated, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

83,630. SOAP. Registered October 3, 1911. BARCLAY & BARCLAY. Renewed October 3, 1931, to Lanman & Kemp-Barclay & Co. Incorporated, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

83,635. ROLLED OATS. Registered October 3, 1911. F. B. CHAMBERLAIN CO., St. Louis, Mo. Renewed October 3, 1931, to F. B. Chamberlain Company, East St. Louis, Ill., and St. Louis, Mo., a Corporation of Illinois.

83,697. READY-MIXED PAINTS. Registered October 3, 1911. L. SONNEBORN SONS, INC., New York, N. Y., a Corporation of Delaware. Renewed October 3, 1931.

83,800. GAS AND GASOLENE OVENS, STOVES, RANGES, AND BURNERS. Registered October 17, 1911. A-B STOVE COMPANY, Battle Creek, Mich., a Corporation of Michigan. Renewed October 17, 1931.

83,822. WRITING AND DRAWING PENCILS OF ALL KINDS, STEEL PENS, AND PENHOLDERS OF ALL KINDS. Registered October 17, 1911. EAGLE PENCIL COMPANY. Renewed October 17, 1931, to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware, assignee.

83,874. CAPSULES, PILLS, AND MEDICATED JUJUBES. Registered October 17, 1911. FREDERIC WALMSLEY WARRICK. Renewed October 17, 1931, to The Iron Jelloid Co., Limited, London, England, a Corporation of Great Britain, assignee.

83,958. CANDLES. Registered October 24, 1911. THE WILL & BAUMER COMPANY. Renewed October 24, 1931, to The Will & Baumer Candle Co., Inc., Syracuse, N. Y., a Corporation of New York, by change of name.

84,049. TOMATO EXTRACT. Registered October 31, 1911. SOCIETÀ GENERALE DELLE CONSERVE ALIMENTARI CIRIO, San Giovanni a Teduccio, near Naples, Italy, a Corporation of Italy. Renewed October 31, 1931.

84,050. ASPHALT COMPOSITIONS AND PAINTS. Registered October 31, 1911. L. SONNEBORN SONS, INC., New York, N. Y., a Corporation of Delaware. Renewed October 31, 1931.

84,129. ANTISEPTIC LIQUID FOR PREVENTING PERSPIRATION UNDER THE ARMS. Registered November 7, 1911: THE R. L. COMPANY, Kansas City, Mo. Renewed November 7, 1931, to The Nonspi Company, St. Louis, Mo., a Corporation of Missouri, assignee.

84,148. STEAM-HEATING AND VENTILATING APPARATUS. Registered November 7, 1911. WARREN WEBSTER & COMPANY, Camden, N. J., a Corporation of New Jersey. Renewed November 7, 1931.

84,157. ENVELOPS AND LINEN PAPER. Registered November 14, 1911. THE AMERICAN PAPER GOODS COMPANY, Montclair, N. J., and Kensington, Conn. Renewed November 14, 1931, to The American Paper Goods Company, Kensington, Conn., a Corporation of New Jersey.

84,180. WRITING PAPER, PADS, AND TABLETS. Registered November 14, 1911. HAMPTON ROADS PAPER COMPANY, INC., Norfolk, Va., a Corporation of Virginia. Renewed November 14, 1931.

84,199. TALKING MACHINES AND PARTS THEREOF. Registered November 14, 1911. VICTOR TALKING MACHINE COMPANY. Renewed November 14, 1931, to R C A Victor Company, Inc., Camden, N. J., a Corporation of Maryland, assignee.

84,223. HIGH-SPEED CUTTING-STEEL. Registered November 21, 1911. FIRTH-STERLING STEEL COMPANY, McKeesport, Pa., a Corporation of Pennsylvania. Renewed November 21, 1931.

84,273. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,274. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,275. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,276. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,277. LUBRICATING OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,278. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,279. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,280. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,284. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,286. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,290. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,291. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,292. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,298. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,294. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,295. LUBRICATING-OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,300. FURS AND SKINS. Registered November 28, 1911. ALASKA CHEMICAL COMPANY, New York, N. Y. Renewed November 28, 1931, to Alaska Chemical Company, North Bergen, N. J., a Corporation of New York.

84,344. CERTAIN MACHINERY. Registered November 28, 1911. "SELAS" GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Berlin, Germany. Renewed November 28, 1931, to The Selas Company, Philadelphia, Pa., a Corporation of New York, assignee.

84,347. LUBRICATING-OILS. Registered November 28, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 28, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,349. LUBRICATING-OILS. Registered November 28, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 28, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,366. RUBBER BANDS. Registered December 5, 1911. EBERHARD FABER, New York, N. Y. Renewed December 5, 1931, to Eberhard Faber Pencil Company, Brooklyn, N. Y., a Corporation of New York, assignee.

84,403. CANNED SARDINES. Registered December 12, 1911. J. HOWARD MERCIAN. Renewed December 12, 1931, to Meyer & Lange, Inc., New York, N. Y., a Corporation of New York, assignee.

84,416. PETROLEUM-PITCH. Registered December 12, 1911. STANDARD OIL COMPANY, Whiting, Ind., a Corporation of Indiana. Renewed December 12, 1931.

84,440. LUBRICATING-OILS FOR VARIOUS KINDS OF MACHINERY AND VEHICLES. Registered December 12, 1911. TIONA OIL COMPANY, Binghamton, N. Y. Renewed December 12, 1931, to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio, assignee.

84,441. CONDENSED MILK. Registered December 12, 1911. UTAH CONDENSED MILK CO., Richmond, Utah. Renewed December 12, 1931, to Sego Milk Products Company, Salt Lake City, Utah, a Corporation of Utah, by change of name.

84,478. A WASHING POWDER. Registered December 19, 1911. FISCHBECK SOAP COMPANY, San Francisco, Calif., a Corporation of California. Renewed December 19, 1931.

84,494. WATCHES, WATCH-CASES AND WATCH-MOVEMENTS. Registered December 19, 1911. THE KEYSTONE WATCH CASE CO., Philadelphia, Pa. Renewed December 19, 1931, to Keystone Watch Case Corporation, Riverside, N. J., a Corporation of Pennsylvania, assignee.

84,518. POULTRY FOOD. Registered December 19, 1911. PEERLESS OYSTER COMPANY, Baltimore, Md. Renewed December 19, 1931.

84,522. WALL-BOARDS. Registered December 19, 1911. PLASTERGON WALL BOARD CO., Tonawanda, N. Y. Renewed December 19, 1931, to The Plastergon Wall Board Co., Buffalo, N. Y., a Corporation of New York.

84,545. CORSETS. Registered December 19, 1911. CHAS. A. STEVENS & BROS., Chicago, Ill., a Corporation of Illinois. Renewed December 19, 1931.

84,552. TEXTILE COLLARS. Registered December 19, 1911. TIM & Co., New York and Troy, N. Y. Renewed December 19, 1931, to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York, assignee.

84,560. SOAP. Registered December 19, 1911. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn., a Corporation of Connecticut. Renewed December 19, 1931.

84,612. BABBITT METAL. Registered December 26, 1911. THE EAGLE WHITE LEAD COMPANY. Renewed December 26, 1931, to The Eagle-Picher Lead Company, Cincinnati, Ohio, a Corporation of Ohio, by change of name.

84,613. BABBITT METAL. Registered December 26, 1911. THE EAGLE WHITE LEAD COMPANY. Renewed December 26, 1931, to The Eagle-Picher Lead Company, Cincinnati, Ohio, a Corporation of Ohio, by change of name.

84,618. FRESH CRACKED PECANS. Registered December 26, 1911. R. E. FUNSTEN DRIED FRUIT & NUT CO. Renewed December 26, 1931, to R. E. Funsten Company, St. Louis, Mo., a Corporation of Missouri, by change of name.

84,709. TOILET POWDERS. Registered December 26, 1911. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn., a Corporation of Connecticut. Renewed December 26, 1931.

LABELS

REGISTERED JULY 28, 1931

39,454.—*Title:* AUTOGIRO. For Chewing-Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published June 16, 1931.

39,455.—*Title:* FORTNUM & MASON'S, GRAPEFRUIT, RENOWNED FOR QUALITY. For Canned Grapefruit. FORTNUM & MASON INC., New York, N. Y. Published March 25, 1931.

39,456.—*Title:* FORTNUM & MASON'S, INC., SALTED CASHEWS, 697 MADISON AVE., NEW YORK. For Salted Cashews. FORTNUM & MASON INC., New York, N. Y. Published March 25, 1931.

39,457.—*Title:* FORTNUM & MASON'S, FANCY CRAB MEAT, RENOWNED FOR QUALITY. For Canned Crab Meat. FORTNUM & MASON INC., New York, N. Y. Published March 25, 1931.

39,458.—*Title:* TUS. For Medicinal Preparation for Coughs. HARBOURTS DRUG COMPANY, Trenton, N. J. Published June 23, 1931.

39,459.—*Title:* LILY WHITE. For Shoe Whitener and Cleaner. JACOB KAHN, doing business as Lily White Mfg. Co., Brooklyn, N. Y. Published September 15, 1931.

39,460.—*Title:* KING MACARONI. For Macaroni. KURTZ BROS. CORPORATION, Philadelphia, Pa. Published January 21, 1931.

39,461.—*Title:* OCTAGON RAYON RIBBON-CORD. For Cord. THE LEES MANUFACTURING CO., Westport, Conn. Published April 3, 1931.

39,462.—*Title:* OCTAGON TINSEL RIBBON-CORD. For Cord. THE LEES MANUFACTURING CO., Westport, Conn. Published April 3, 1931.

39,463.—*Title:* LION HEAT. For Sheets and Pillow Cases. PHILIP LEON, New York, N. Y. Published May 1, 1918.

39,464.—*Title:* ZERO. For Candy Bars. F. A. MARTOCCIO COMPANY, doing business as Hollywood Candy Co., Minneapolis, Minn. Published March 17, 1931.

39,465.—*Title:* PABCO GUARANTY 5 RUG. For Rugs. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Published May 12, 1931.

PRINTS

REGISTERED JULY 28, 1931

13,314.—*Title:* 'JOHNNY' WEISSMULLER—THE ACE SWIMMER OF ALL TIME. For Bathing Suits. The B. V. D. COMPANY, INC., New York, N. Y. Published June 11, 1931.

13,315.—*Title:* FIRE-BRITE ANTHRACITE. For Anthracite Coal. WARREN BETTERLY, Waterbury, Conn. Published Oct. 1, 1930.

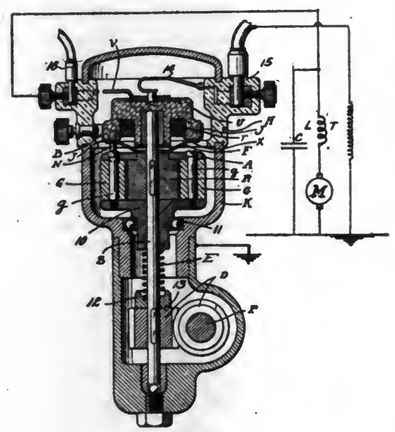
13,316.—*Title:* NOVO, THE UNBREAKABLE LAWN MOWER. For Lawn Mowers. THE F. & N. LAWN MOWER COMPANY, Richmond, Ind. Published June 15, 1931.

13,317.—*Title:* MOBILOIL MASTER SERVICE. For Automobile Lubricants. VACUUM OIL COMPANY, New York, N. Y. Published May 19, 1931.

REISSUES

JULY 28, 1931

18,136. ELECTRICAL IGNITION DEVICE. JACQUES FISCHER-HINNEN, deceased, Oerlikon, Switzerland, by Landis & Gyr, A.-G., Zug, Switzerland, assignee. Original No. 1,611,826, dated Dec. 21, 1926, Serial No. 368,734, filed Mar. 25, 1920, and in Switzerland Mar. 25, 1919. Application for reissue filed May 8, 1928. Serial No. 274,944. 8 Claims. (Cl. 123—148.)

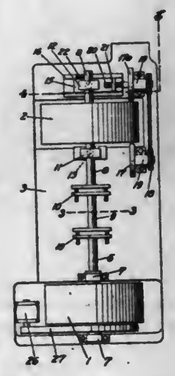


1. An electric ignition device having primary and secondary windings comprising in combination means for automatically timing the ignition and means for attaining constant ignition voltage by varying the electrical resistance in the primary oscillatory circuit and comprising a spindle, a carrier fixed to said spindle, a centrifugally acting breaker, a distributor and a series resistance on said carrier and means to vary the position of said carrier on said spindle.

18,137. PRIMING MIXTURE. JOSEPH D. MCNUTT, New Haven, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company, New Haven, Conn., a Corporation of Delaware. Original No. 1,800,223, dated Apr. 14, 1931, Serial No. 307,555, filed Sept. 21, 1928. Application for reissue filed May 29, 1931. Serial No. 541,105. 7 Claims. (Cl. 52—8.)

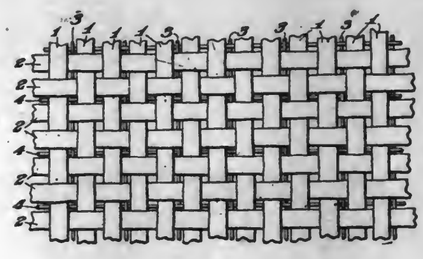
7. A priming mixture comprising substantially 40 percent mercury fulminate, substantially 12 percent basic lead nitrate, substantially 16 percent barium nitrate, substantially 10 percent lead sulphocyanate and substantially 21 percent ground glass.

18,138. WHEEL TESTING MACHINE. GEORGE W. PRATHER, Santa Cruz, Calif. Original No. 1,598,009, dated Aug. 31, 1926, Serial No. 80,946, filed Jan. 13, 1926. Application for reissue filed July 23, 1928. Serial No. 294,859. 18 Claims. (Cl. 33—203.)



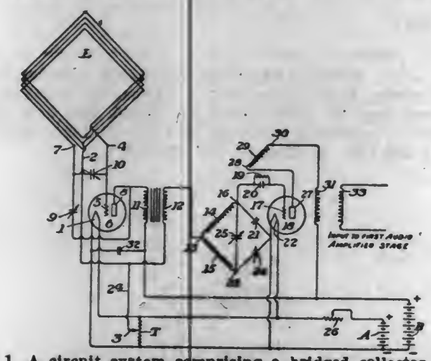
12. In a wheel testing machine, a rotatable drum against which the wheel to be tested may contact, and means for mounting the drum to permit angular movement of the rotational axis thereof, whereby upon rotation of the contacting drum and wheel the rotational axis of the drum may shift.

18,139. TEXTILE FABRIC. CLARENCE LIPPER, Philadelphia, Pa., assignor to Lipper Manufacturing Co., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Original No. 1,698,639, dated Jan. 8, 1929, Serial No. 310,873, filed Oct. 6, 1928. Application for reissue filed Feb. 19, 1929. Serial No. 341,154. 14 Claims. (Cl. 139—413.)



3. A textile hat fabric comprising a body formed of multi-strand warp and weft threads interlaced with each other and a stiffening mesh on one side of said body composed of artificial cellulose threads of suitable resiliency interwoven between constituent elements of the individual strands of the multi-strand body threads at suitable intervals.

18,140. WIRELESS RECEIVING CIRCUIT. MAURICE M. PHILLIPS, Pittsburgh, Pa. Original No. 1,674,448, dated June 19, 1828, Serial No. 96,186, filed Mar. 20, 1926. Application for reissue filed Apr. 22, 1930. Serial No. 446,393. 16 Claims. (Cl. 250—20.)



1. A circuit system comprising a bridged collector circuit which includes two inductive arms, a three-element vacuum tube and a capacity for balancing the inherent grid plate capacity of said tube, a second bridged circuit which includes two inductive and two capacity arms and a three-element vacuum tube and two inductances magnetically coupled together and conductively coupled to said circuits.

18,141. CHAIN. EDWIN F. M. SPEIDEL, Cranston, R. I. Original No. 1,788,552, dated Jan. 13, 1931, Serial No. 483,783, filed Mar. 6, 1930. Application for reissue filed Mar. 26, 1931. Serial No. 525,519. 11 Claims. (Cl. 59—80.)



1. A bracelet chain or the like comprising a series of links, each link generally U-shaped and of a single piece of wire, the cross piece between the arms of the U being flattened to be generally in the plane of the chain and having notches cut laterally inwardly from its edge to leave studs, the opposite arms of the U having recesses to receive said studs and hingedly connect the links together.

DESIGNS

JULY 28, 1931

84,724. PRINTED TEXTILE FABRIC. WILLIAM H. ADAMS, Kenyon, R. I., assignor to Eastern Finishing Works, Kenyon, R. I., a Corporation of Rhode Island. Filed Aug. 31, 1929. Serial No. 32,641. Term of patent 7 years.



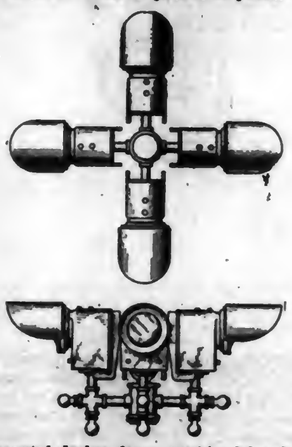
The ornamental design for a printed textile fabric as shown.

84,725. TRAFFIC SIGNAL CASING. CHARLES ADLER, Jr., Baltimore, Md., assignor to The Adler Safety Control Company, Baltimore, Md., a Corporation of Maryland. Filed May 19, 1931. Serial No. 39,897. Term of patent 14 years.



The ornamental design for a traffic signal casing, as shown.

84,726. COMBINED HEAD AND CASING FOR TRAFFIC SIGNALS. CHARLES ADLER, Jr., Baltimore, Md., assignor to The Adler Safety Control Company, Baltimore, Md., a Corporation of Maryland. Filed May 19, 1931. Serial No. 39,898. Term of patent 14 years.



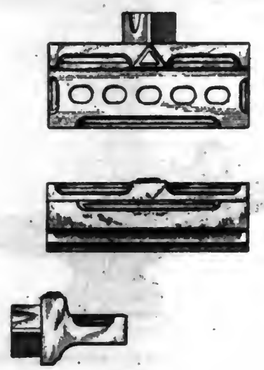
The ornamental design for a combined head and casing for traffic signals, as shown.

84,727. COMBINED SUPPORT AND CASING FOR TRAFFIC SIGNALS. CHARLES ADLER, Jr., Baltimore, Md., assignor to The Adler Safety Control Company, Baltimore, Md., a Corporation of Maryland. Filed May 19, 1931. Serial No. 39,899. Term of patent 14 years.



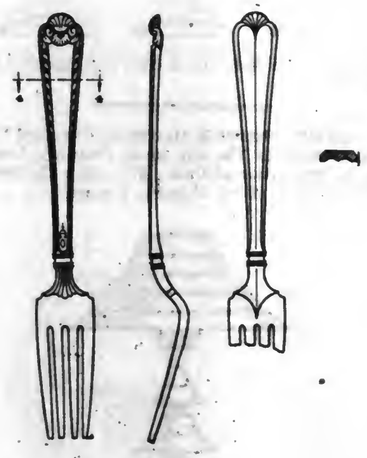
The ornamental design for a combined support and casing for traffic signals, as shown.

84,728. BATHROOM TOOTHBRUSH HOLDER. STEPHEN D. BAKER, New York, N. Y. Filed May 13, 1931. Serial No. 39,836. Term of patent 14 years.



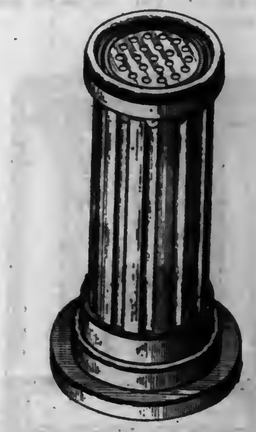
The ornamental design for a bathroom toothbrush holder as shown.

84,729. FORK OR SIMILAR ARTICLE. PERCY B. BALL, Attleboro, Mass., assignor to The Watson Company, Attleboro, Mass. Filed Apr. 30, 1931. Serial No. 39,661. Term of patent 7 years.



The ornamental design for a fork or similar article as shown.

84,730. IGNITER. FRED R. BELT, Chicago, Ill. Filed May 14, 1931. Serial No. 39,856. Term of patent 3½ years.



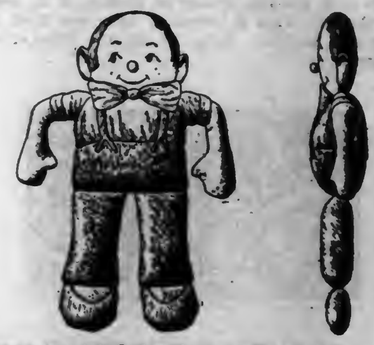
The ornamental design for an igniter as shown.

84,731. DOLL OR SIMILAR ARTICLE. CLEO BENNETT, North Tonawanda, N. Y. Filed June 4, 1931. Serial No. 40,079. Term of patent 7 years.



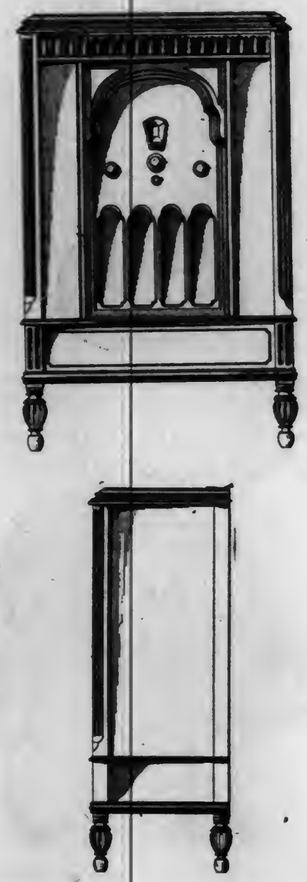
The ornamental design for a doll or similar article, substantially as shown.

84,732. DOLL OR SIMILAR ARTICLE. CLEO BENNETT, North Tonawanda, N. Y. Filed June 4, 1931. Serial No. 40,080. Term of patent 7 years.



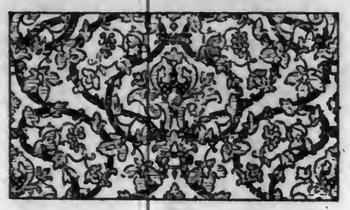
The ornamental design for a doll or similar article, substantially as shown.

84,733. RADIOCABINET. EDWARD L. COMBS, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 17, 1930. Serial No. 35,299. Term of patent 7 years.



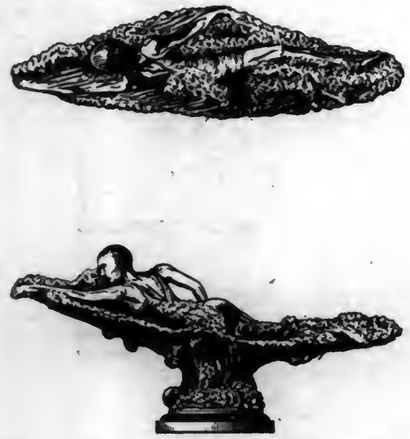
The ornamental design for a radio cabinet, as shown.

84,734. TEXTILE FABRIC OR SIMILAR ARTICLE. GUSTAVE M. FAUSER, Ardsley on Hudson, N. Y., assignor to Atkinson, Wade & Company, Inc., New York, N. Y. Filed Mar. 31, 1931. Serial No. 39,310. Term of patent 3½ years.



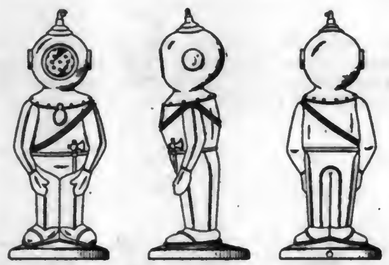
The ornamental design for a textile fabric or similar article, substantially as shown and described.

84,735. ATHLETIC TROPHY. ALFRED J. FLAUDER, Trumbull, Conn. Filed May 23, 1931. Serial No. 39,942. Term of patent 7 years.



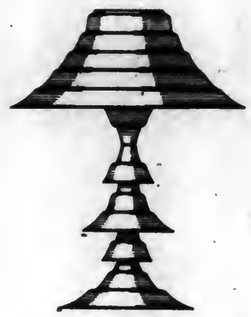
The ornamental design for an athletic trophy substantially as shown and described.

84,736. CIGAR AND CIGARETTE LIGHTER. IRVING FLORMAN, New York, N. Y. Filed May 21, 1931. Serial No. 39,921. Term of patent 14 years.



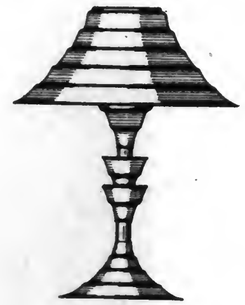
The ornamental design for a cigar and cigarette lighter, as shown.

84,737. LAMP. GEORGE E. GLATTHAR, Cleveland Heights, Ohio, assignor to The Art Metal Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 22, 1931. Serial No. 39,927. Term of patent 7 years.



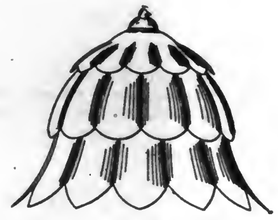
The ornamental design for a lamp, as shown and described.

84,738. LAMP. GEORGE E. GLATTHAR, Cleveland Heights, Ohio, assignor to The Art Metal Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 22, 1931. Serial No. 39,928. Term of patent 7 years.



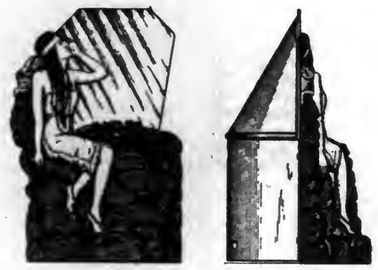
The ornamental design for a lamp, as shown and described.

84,739. LAMP SHADE. HUBERT M. GREIST and HARRY F. THURBER, New Haven, Conn., assignors to Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Feb. 27, 1931. Serial No. 38,856. Term of patent 14 years.



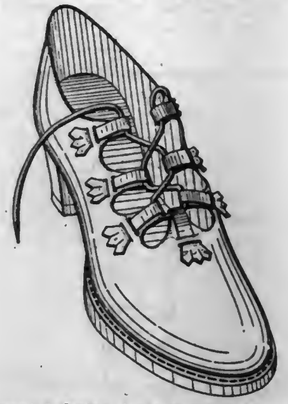
The ornamental design for a lamp shade substantially as shown and described.

84,740. LAMP. FRANK A. GRITT, Indianapolis, Ind., assignor to Gritt, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed May 8, 1931. Serial No. 39,762. Term of patent 8½ years.



The ornamental design for a lamp, as shown.

84,741. SPORT SHOE OR SIMILAR ARTICLE. FRANK GROSSMAN, Brooklyn, N. Y. Filed May 28, 1931. Serial No. 40,017. Term of patent 3½ years.



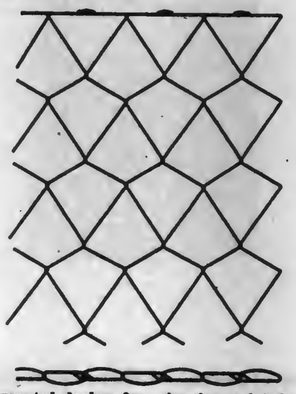
The ornamental design for a sport shoe or similar article substantially as shown.

84,742. SPORT SHOE OR SIMILAR ARTICLE. FRANK GROSSMAN, Brooklyn, N. Y. Filed May 28, 1931. Serial No. 40,018. Term of patent 3½ years.



The ornamental design for a sport shoe or similar article substantially as shown.

84,743. WIRE FENCE FABRIC. NOAH S. HARTER, Waukegan, Ill. Filed June 4, 1929. Serial No. 31,542. Term of patent 14 years.



The ornamental design for wire fence fabric, as shown.

84,744. ADVERTISING PEDESTAL FOR WEIGHING MACHINE. JOHN B. HOLTZ, Los Angeles, Calif., assignor to Invention Development Corporation, Carson City, Nev. Filed July 29, 1929. Serial No. 32,238. Term of patent 3½ years.



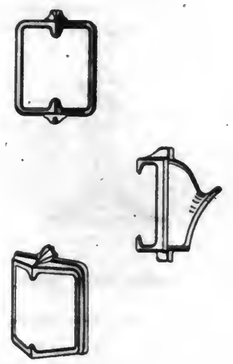
The ornamental design for an advertising pedestal for weighing machine, substantially as shown and described.

84,745. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed May 25, 1931. Serial No. 39,966. Term of patent 3½ years.



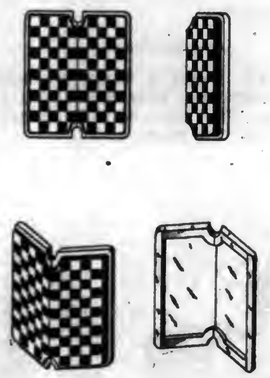
The ornamental design for lace, substantially as shown and described.

84,746. PILLAR ROOF LAMP. ROY W. JOHNSON, Columbus, Ohio, assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich., a Corporation of New Jersey. Filed Nov. 3, 1930. Serial No. 37,515. Term of patent 3½ years.



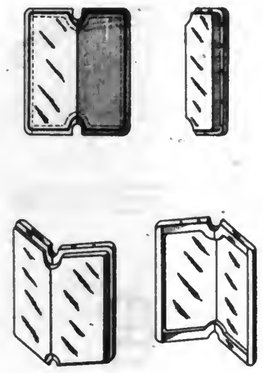
The ornamental design for a pillar roof lamp, as shown.

84,747. LENS FOR VEHICLE LAMPS. ROY W. JOHNSON, Columbus, Ohio, assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich., a Corporation of New Jersey. Filed Nov. 3, 1930. Serial No. 37,517. Term of patent 3½ years.



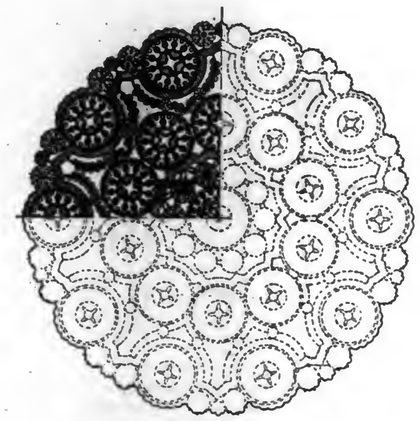
The ornamental design for a lens for vehicle lamps, as shown.

84,748. LENS FOR VEHICLE LAMPS. ROY W. JOHNSON, Columbus, Ohio, assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich., a Corporation of New Jersey. Filed Nov. 3, 1930. Serial No. 37,518. Term of patent 3½ years.



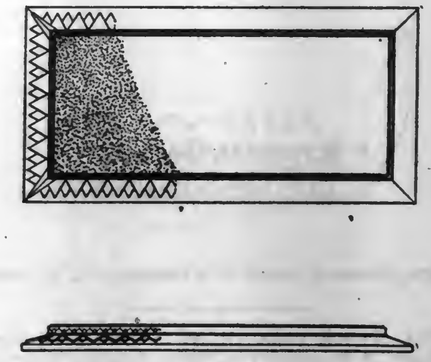
The ornamental design for a lens for vehicle lamps, as shown.

84,749. DOILY. EDWARD KARFIOL, Brooklyn, N. Y. Filed May 7, 1931. Serial No. 39,749. Term of patent 14 years.



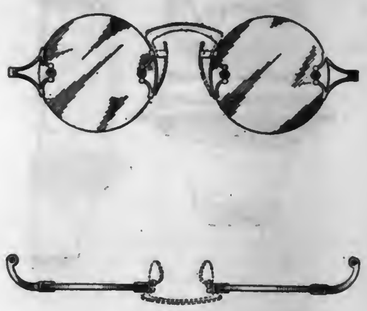
The ornamental design for a doily as shown and described.

84,750. TABLET. JOSEPH M. MAJEWSKI, Jr., Kansas City, Mo. Filed Oct. 18, 1930. Serial No. 37,255. Term of patent 3½ years.



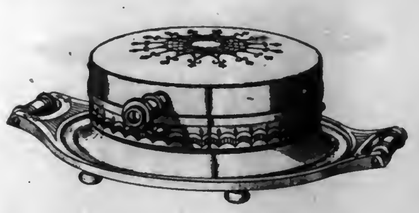
The ornamental design for a tablet or similar article as shown and described.

84,751. OPHTHALMIC MOUNTING. GEORGE E. NEANEY, Attleboro, Mass., assignor to Bay State Optical Company, Attleboro, Mass., a Corporation of Maine. Filed Oct. 10, 1930. Serial No. 37,212. Term of patent 7 years.



The ornamental design for an ophthalmic mounting as shown.

84,752. WAFFLE IRON. RAYMOND E. PATTEN, Oak Park, Ill., assignor to Edison General Electric Appliance Company, a Corporation of New York. Filed June 9, 1931. Serial No. 40,137. Term of patent 14 years.



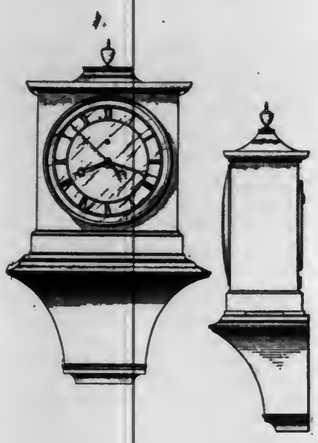
The ornamental design for a waffle iron substantially as shown.

84,753. BUILDING BRICK. SAMUEL D. PEARSON, New Castle, Pa. Filed May 15, 1931. Serial No. 39,864. Term of patent 3½ years.



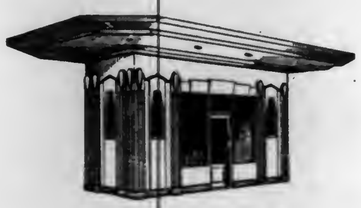
The ornamental design for a building brick, as shown.

84,754. CLOCK CASE. HARRY C. RICHARDSON, North Salem, N. Y., assignor to Warren Telechron Company, a Corporation of Maine. Filed Oct. 10, 1930. Serial No. 37,209. Term of patent 14 years.



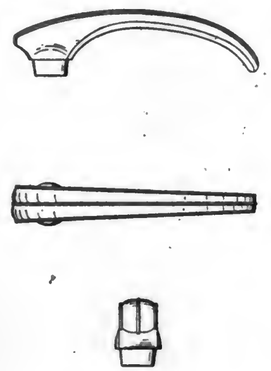
The ornamental design for a clock case as shown.

84,755. SERVICE STATION. GUY L. ROSEBROOK, Roselle Park, N. J. Filed Mar. 3, 1931. Serial No. 38,911. Term of patent 14 years.



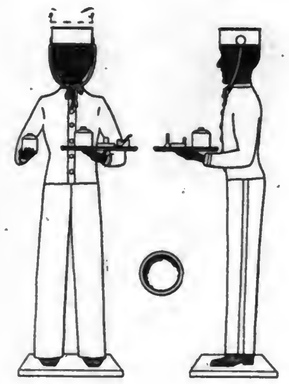
The ornamental design for a service station, as shown and described.

84,756. HANDLE FOR LATCHES, CONTROL DEVICES, AND THE LIKE. FREDERICK C. RUPPEL, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed May 4, 1931. Serial No. 39,708. Term of patent 7 years.



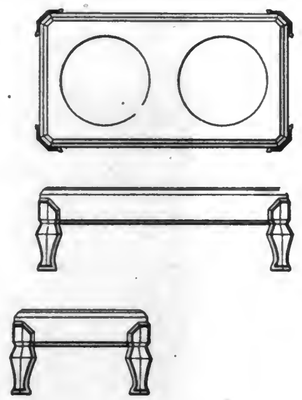
The ornamental design for a handle for latches, control devices and the like as shown.

84,757. SMOKER'S STAND. CLARA SAFFOLD, Los Angeles, Calif. Filed May 1, 1931. Serial No. 39,678. Term of patent 7 years.



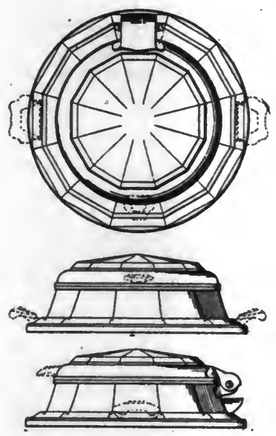
The ornamental design for a smoker's stand substantially as shown.

84,758. ELECTRIC HOT PLATE. ABE O. SAMUELS, Rochester, N. Y., assignor to Samson-United Corporation, Rochester, N. Y. Filed Feb. 6, 1931. Serial No. 38,565. Term of patent 7 years.



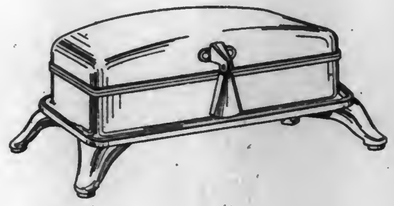
The ornamental design for an electric hot plate, as shown.

84,759. ELECTRIC WAFFLE IRON. ABE O. SAMUELS, Rochester, N. Y., assignor to Samson-United Corporation, Rochester, N. Y. Filed Feb. 6, 1931. Serial No. 38,567. Term of patent 7 years.



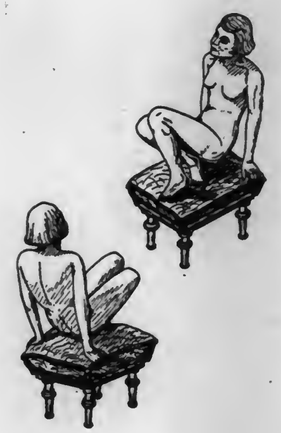
The ornamental design for an electric waffle iron, as shown.

84,760. COMBINED COOKER AND TOASTER OR LIKE ARTICLE. CHARLES A. SCHALLIS, Ernestville, Lincoln Park, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Jan. 16, 1931. Serial No. 38,334. Term of patent 7 years.



The ornamental design for a combined cooker and toaster or like article, substantially as shown and described.

84,761. STATUETTE OR ARTICLE OF SIMILAR NATURE. CHARLES SHULMAN, New York, N. Y., assignor to Apt Novelty Company Inc., New York, N. Y. Filed May 20, 1931. Serial No. 39,915. Term of patent 3½ years.



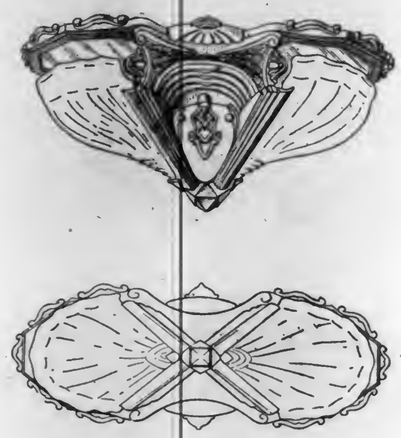
The ornamental design for a statuette or article of similar nature, as shown.

84,762. LIGHTING FIXTURE WALL BRACKET OR ARTICLE OF ANALOGOUS NATURE. BRUNO STANGE, West New York, N. J., assignor to Frank Rosen, trading as Victory Lamp Company, Philadelphia, Pa. Filed June 10. 1931. Serial No. 40,147. Term of patent 3½ years.



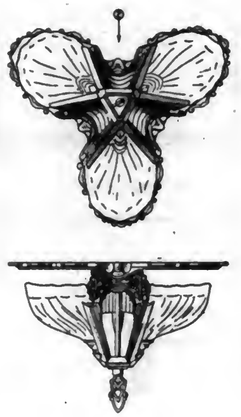
The ornamental design for a lighting fixture wall bracket or article of analogous nature substantially as shown and described.

84,763. CEILING LIGHTING FIXTURE. BRUNO STANGE, West New York, N. J., assignor to Frank Rosen, trading as Victory Lamp Company, Philadelphia, Pa. Filed June 10, 1931. Serial No. 40,148. Term of patent 3½ years.



The ornamental design for a ceiling lighting fixture substantially as shown.

84,764. CEILING LIGHTING FIXTURE. BRUNO STANGE, West New York, N. J., assignor to Frank Rosen, trading as Victory Lamp Company, Philadelphia, Pa. Filed June 10, 1931. Serial No. 40,149. Term of patent 3½ years.



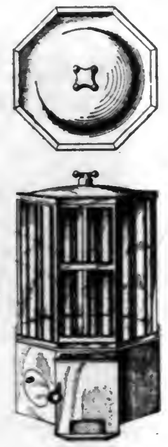
The ornamental design for a ceiling lighting fixture substantially as shown.

84,765. LIGHTING FIXTURE. BRUNO STANGE, West New York, N. J., assignor to Frank Rosen, trading as Victory Lamp Company, Philadelphia, Pa. Filed June 10, 1931. Serial No. 40,150. Term of patent 3½ years.



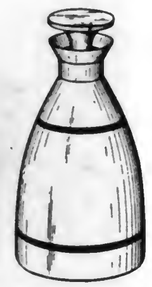
The ornamental design for a lighting fixture substantially as shown and described.

84,766. VENDING MACHINE CASING. LOUIS STEINER and ANDREW GAMBINO, Brooklyn, N. Y. Filed June 4, 1931. Serial No. 40,087. Term of patent 3½ years.



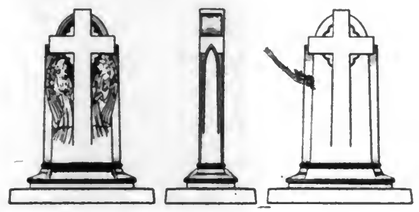
The ornamental design for a vending machine casing, substantially as shown.

84,767. WATER BOTTLE OR SIMILAR ARTICLE. BENJAMIN M. TASSIE, Meriden, Conn., assignor to Manning, Bowman & Co., Meriden, Conn., a Corporation of Delaware. Filed Mar. 26, 1931. Serial No. 39,249. Term of patent 14 years.



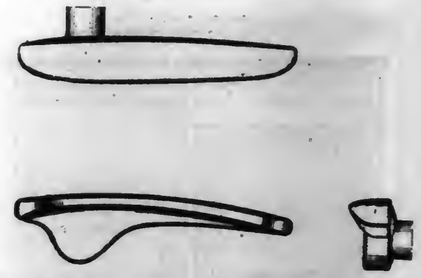
The ornamental design for a water bottle or similar article, as shown.

84,768. MONUMENT. CHESTER A. THOMPSON, Barre, Vt., assignor to Vermont Marble Company, Proctor, Vt., a Corporation of Vermont. Filed Apr. 20, 1931. Serial No. 39,576. Term of patent 14 years.



The ornamental design for a monument, as shown.

84,769. HANDLE FOR A DOOR OF AN AUTOMOBILE OR THE LIKE. OTTO E. UHLMANN, Grand Rapids, Mich., assignor to Keeler Brass Company, Grand Rapids, Mich. Filed Jan. 12, 1931. Serial No. 38,284. Term of patent 3½ years.



The ornamental design for a handle for a door of an automobile or the like, as shown.

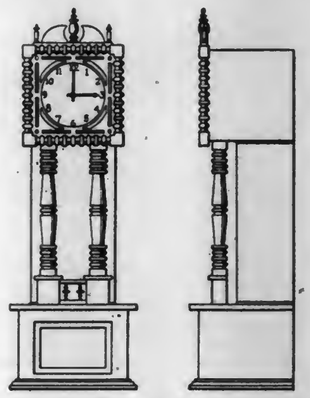
84,770. HANDLE FOR A DOOR OF AN AUTOMOBILE OR THE LIKE. OTTO E. UHLMANN, Grand Rapids, Mich., assignor to Keeler Brass Company, Grand Rapids, Mich. Filed Jan. 12, 1931. Serial No. 38,285. Term of patent 3½ years.





The ornamental design for a handle for a door of an automobile or the like, as shown.

84,771. CLOCK CASE. JOHN B. WESTOVER, Houston, Tex. Filed June 12, 1931. Serial No. 40,169. Term of patent 14 years.



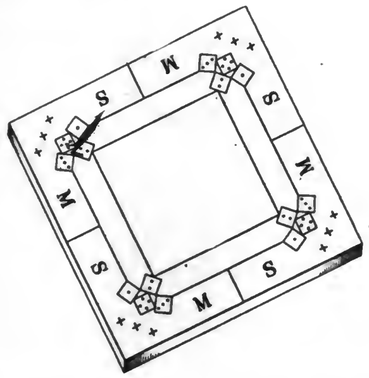
The ornamental design for a clock case as shown.

84,772. RANGE. GEORGE D. WILKINSON, Oak Park, and ELMER D. PELLEGRIN, Des Plaines, Ill., assignors to Cribben & Sexton Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1931. Serial No. 39,892. Term of patent 7 years.



The ornamental design for a range as shown.

84,773. GAME BOARD. JOHN B. YEOMAN, Spokane, Wash. Filed June 2, 1931. Serial No. 40,056. Term of patent 3½ years.

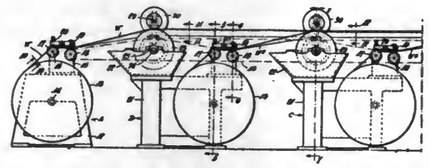


The ornamental design for a game board, as shown.

PATENTS

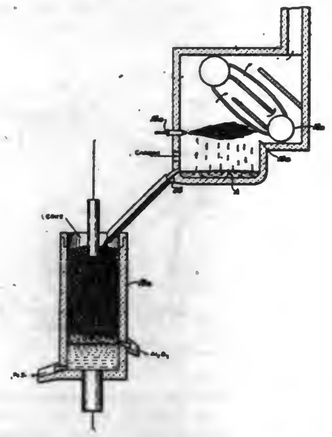
GRANTED JULY 28, 1931

1,815,887. PROCESS AND MACHINE FOR MAKING SPACING MEMBERS FOR SHIPPING CONTAINERS. CALVIN A. AGAR, West Orange, N. J. Filed Nov. 23, 1929. Serial No. 409,232. 16 Claims. (Cl. 93—1.)



1. The method of forming a stiff multi-ply angular article which includes the steps of applying adhesive to the corrugated surfaces of a plurality of single faced corrugated paper webs, bending each web to angular form, and pressing the facing sheet of each web against the corrugated face of the adjacent web with the bends in registry to effect gluing of all of the webs together in bent position.

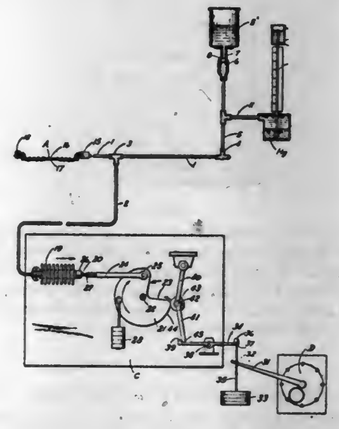
1,815,888. METHOD OF RECOVERING METALS AND OXIDES FROM BOILER ASH. THADDEUS F. BAILY, Alliance, Ohio. Filed Apr. 2, 1929. Serial No. 351,928. 2 Claims. (Cl. 75—14.)



1. The method of treating carbonaceous fuel residue containing carbon in a powdered coal fired boiler furnace having a chamber for holding molten ash maintained in a fluid condition by the flame in the boiler furnace, which consists in adding a reducing agent to the molten ash to partially reduce the metals and oxides contained therein, transferring the partially reduced product in molten condition to an electric furnace and finally reducing and refining the same in the electric furnace.

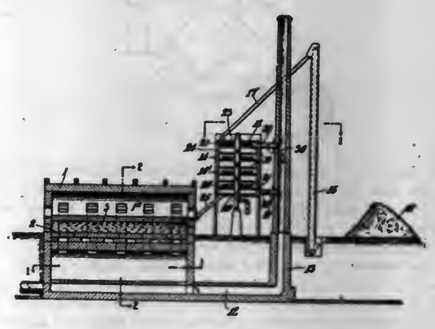
1,815,889. FIRE CONTROL MECHANISM. EDWIN S. BISSONETTE, Cleveland, Ohio; The Guardian Trust Company and Pearl M. Bissonette, executors of said Edwin S. Bissonette, deceased, assignors to The Guardian Equipment Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 28, 1928. Serial No. 295,910. 4 Claims. (Cl. 137—161.)

3. A heat control device comprising a closed fluid system including a heat accumulator and an expansion member, operative mechanism, cam means adapted to be actuated by the expansion member upon the application of heat to the accumulator, a roller carried by links associated with the



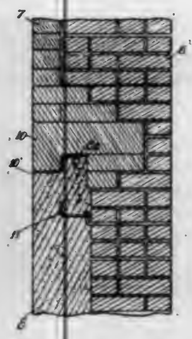
cam means, said links normally holding said operative mechanism inoperative, said roller bearing against the cam means and adapted to be operated thereby to actuate the operative mechanism.

1,815,890. GLASS MELTING-PREHEATER AND MIXER. GEORGE GLEN BROCKWAY, Warren, Pa., assignor to Nichols Copper Company, New York, N. Y., a Corporation of New York. Filed Jan. 4, 1929. Serial No. 330,328. 6 Claims. (Cl. 49—63.)



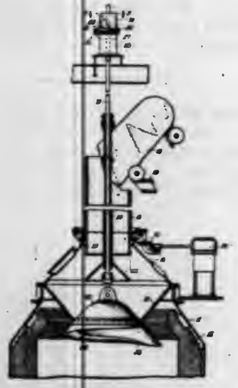
1. In glass manufacture, the combination of a glass melting furnace, a preheater for the glass forming mixture, said preheater including a plurality of superposed hearths, means for causing said mixture to travel through said preheater in one direction, means for causing hot waste gases from said furnace to travel through said preheater and over said hearths in the opposite direction, to preheat the mixture, and means for delivering such preheated mixture from said preheater to said furnace.

1,815,891. FURNACE CONSTRUCTION. JOHN E. ANDERSON, Chicago, Ill., assignor to Pilbrico Jointless Firebrick Company, Chicago, Ill., a Corporation of Illinois. Filed June 12, 1930. Serial No. 460,599. 17 Claims. (Cl. 72—102.)



1. In a furnace, a retaining wall, a polylithic lining, a monolithic lining, means for transmitting a major portion of the weight of said polylithic lining to said retaining wall, and means for holding said monolithic lining against movement away from the wall while permitting independent expansion and contraction thereof.

1,815,892. CHARGING BELL CONSTRUCTION. CHARLES W. ANDREWS, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 20, 1928. Serial No. 248,149. 2 Claims. (Cl. 214—36.)



1. In a blast furnace, a charging bell located interiorly of the top of the furnace, a hopper ring in the furnace having a circular opening, the bell having a downwardly curved upper portion having a similar contour on all diameters, said upper portion engaging the circular opening in the hopper, an extended downwardly sloping portion on the bell extending beyond the line of contact with the hopper, said extended portion varying in width throughout its circumference and having a helical lower edge, and counterbalance means on the inner face of the extended portion whereby the bell is balanced about its central upper portion.

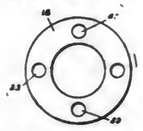
1,815,893. GASKET. CLAUDE B. BAILEY, Wyandotte, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed July 18, 1929. Serial No. 379,093. 6 Claims. (Cl. 288—1.)

1. A gasket having a single body layer of sheet material with an opening therein, said layer being depressed to provide a recess about said opening, a ring of refractory material in said recess, and a tubular guide made separate from



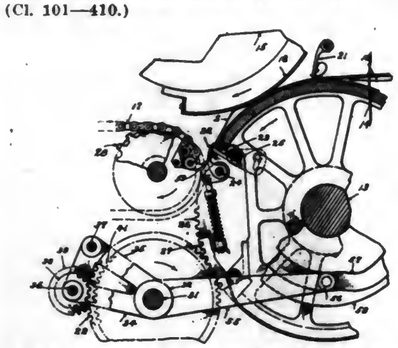
the body layer and inserted in said opening, said guide being slidably mounted in the opening and having flanges overlapping the body layer and the ring respectively.

1,815,894. TIMING GEAR. ARTHUR J. BAKER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 17, 1923. Serial No. 681,168. 9 Claims. (Cl. 74—29.)



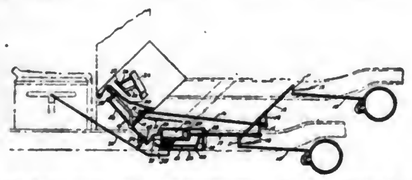
1. In combination, a power shaft, a gear upon the shaft including a relatively rigid non-metallic ring and two oppositely positioned members, each of which is independently connected with the ring and one of which is provided with teeth, and a clamping member serving to hold the parts of the gear together and adapted to prevent longitudinal displacement of said parts upon the shaft.

1,815,895. PLATE PRINTING MACHINE. WILLIAM EDWARD BENNISON, Wandsworth, London, England, assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 11, 1929, Serial No. 331,788, and in Great Britain Jan. 16, 1928. 11 Claims. (Cl. 101—410.)



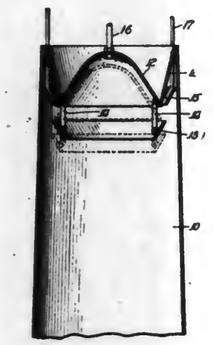
1. In a printing machine, a rotating impression cylinder, sheet gripping mechanism rotating with the cylinder, and means for retarding the motion of the gripping mechanism with respect to the cylinder during a portion of the time while a sheet is being printed.

1,815,896. BRAKE CONTROL APPARATUS. SOLON J. BOUGHTON, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed July 8, 1926. Serial No. 121,154. 2 Claims. (Cl. 188—152.)



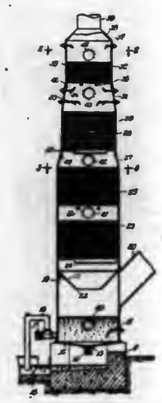
2. In a control for a servo-motor, a longitudinally movable link mounted to swing about an axis intermediate its ends, valve operating means for said servo-motor, and a connection between said link and said means effective during the longitudinal movement of the link but not affected by the swinging movement thereof.

1,815,897. APPARATUS FOR CHARGING BLAST FURNACES. ARTHUR J. BOYNTON, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 1, 1928. Serial No. 303,421. 2 Claims. (Cl. 218—18.)



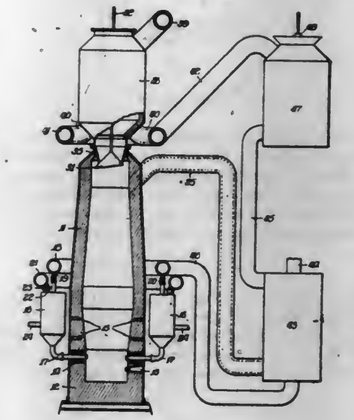
1. In a blast furnace, a charging bell, an inwardly inclined deflecting device located within the furnace below the bell and out of the path of material discharged from the bell, and means adapted to receive material from the bell and discharge it upon the deflecting device.

1,815,898. APPARATUS FOR CLEANING GASES. HERMAN A. BRASSERT and FREDERICK W. BARRETT, Chicago, Ill., assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 27, 1928. Serial No. 249,874. 4 Claims. (Cl. 261—111.)



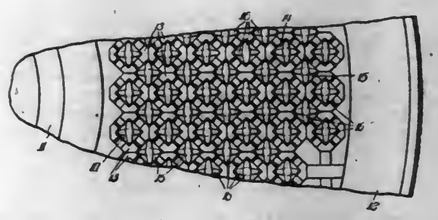
1. Apparatus for cleaning and cooling gases comprising a unitary vertical structure having alternate cylindrical and frusto-conical superposed contact sections, each of the upper cylindrical sections being of less diameter than the next lower cylindrical section, means for introducing cleaning and cooling water into the upper portion of the structure, means for bringing the water in contact with the gases, and means for removing the water and accumulated solid matter from the bottom of the structure.

1,815,899. METHOD FOR THE TREATMENT OF IRON ORE. HERMAN A. BRASSERT, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 14, 1929. Serial No. 332,570. 1 Claim. (Cl. 75—14.)



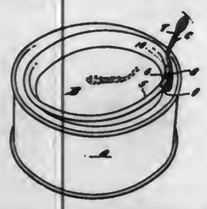
The method of treating iron ore which comprises reducing the ore in one chamber by passing heated reducing gases through the chamber, transferring the reduced ore to a second chamber, melting the reduced ore in said second chamber by means of heated gases which are the product of combustion carried on mainly externally of the chamber, and increasing the carbon monoxide content of the gaseous products of the melting treatment and utilizing said gaseous products in carrying out the reduction.

1,815,900. CONSTRUCTION OF HOT BLAST STOVES. HERMAN A. BRASSERT, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed June 19, 1930. Serial No. 462,219. 3 Claims. (Cl. 263—51.)



1. In a hot blast stove for the heating of air, said stove being heated by the combustion of a gas having a dust content, a regenerative checkerwork construction having progressively reduced effective passage areas in the lower portions thereof, said construction comprising standard fire brick in the lower portion of the stove and higher temperature resistant refractory brick in the upper portion of the stove, said refractory brick conforming in character to the dust content of the gas used for combustion.

1,815,901. RECEPTACLE OPENER. NICHOLAS P. COURTNEY, Passaic, N. J. Filed July 16, 1930. Serial No. 468,381. 2 Claims. (Cl. 220—43.)



1. In combination, a receptacle member, a lid member, one of said members having a bead a portion of which has an opening thereby forming a pair of opposed spaced ends, and an opening device extending between said spaced ends and having trunnions projecting away from each other and journaled in said spaced ends of the bead.

1,815,902. DEVICE FOR ADMINISTERING MEDICAMENTS. ESCO F. ELLZEY, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed July 16, 1927. Serial No. 206,182. 3 Claims. (Cl. 167—83.)

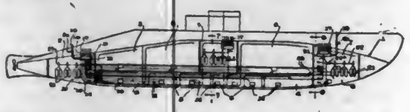


1. An improved composite pellet for oral administration of organic medicaments for intestinal treatment which are alterable by the fluids of the stomach which comprises an inner shell of a material soluble in the intestinal fluid containing the intestinal organic medicament and an innocuous alkaline material surrounding the shell of sufficient thickness to protect the capsule during its passage through the stomach.

1,815,903. PROCESS OF ELIMINATING EXCESS DIAZO COMPOUNDS. LEON W. GELLER, Hamburg, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 23, 1925. Serial No. 77,371. 8 Claims. (Cl. 260—74.)

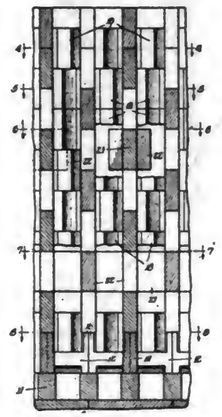
1. In the production of an azo dyestuff, the improvement which comprises treating with phenylhydrazine-p-sulfonic acid and alkaline reaction mixture containing diazo-benzene and diazo benzidine-azo-1.8-amino-naphthol-3.6-disulfonic acid-azo-benzene and resulting from the coupling of diazobenzidine-azo-1.8-aminonaphthol-3.6-disulfonic acid with an excess of diazobenzene in an alkaline medium, whereby the diazobenzene is decomposed.

1,815,904. SUBMARINE BOAT. HUGO E. GRIESHABER, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Apr. 11, 1928. Serial No. 269,049. 9 Claims. (Cl. 114—16.8.)



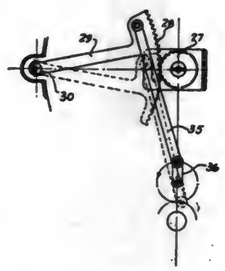
1. In a submarine boat comprising a hull provided with compartments and tanks having drain valves, certain of said compartments being refuge compartments, air manifolds in the refuge compartments, air pipes extending from the respective manifolds and opening into the compartments and tanks, the pipes from the manifolds being independent of each other and there being a separate pipe for each compartment and each tank, means for supplying air under pressure to the manifolds, and means for indicating in each of the refuge compartments the condition of each of the other compartments and tanks.

1,815,905. CHECKERWORK. JOHN PHILLIP GRILLI and HARRY L. WETHERBEE, Chicago, Ill., assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1929. Serial No. 378,279. 4 Claims. (Cl. 263—51.)



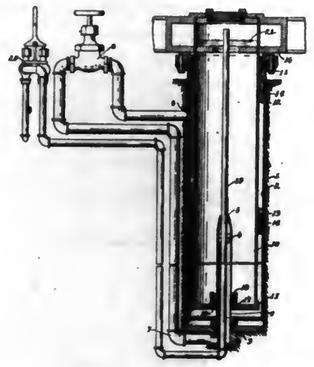
1. A checkerwork construction, comprising a plurality of rectangular brick built up to form vertical flues, certain of the brick being shorter than others in horizontal length and having their ends spaced from adjacent brick whereby cross passages are formed between certain of the vertical flues.

1,815,906. GEARING FOR WASHING MACHINE AGITATORS. ALBERT R. HAAG, Peoria, Ill. Filed July 29, 1925; Serial No. 46,718. Renewed July 19, 1930. 9 Claims. (Cl. 74—14.)



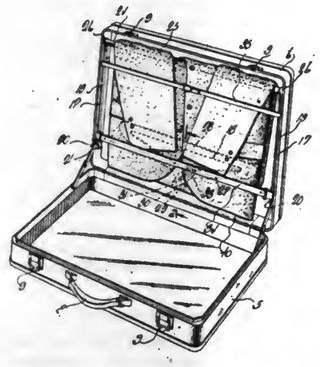
1. In a washing machine, a tub, a vertical agitator shaft having its lower end extending below said tub, a gear fixed to the lower end of said shaft, a rack member adapted to engage and actuate said gear, a movable eccentric member associated with said rack member in fixed pivotal relation, a lever for oscillating said rack, and means positioned adjacent the upper portion of said tub for rotating said eccentric member to thereby move said rack into and out of engagement with said gear.

1,815,907. ELEVATOR. STANLEY M. HALSTEAD, ANTON I. WICKLAND, and WAYNE C. TUSTIN, San Jose, Calif., assignors, by direct and mesne assignments, to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Mar. 24, 1928. Serial No. 264,345. 9 Claims. (Cl. 254—93.)



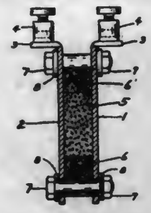
1. An elevator comprising a hollow cylinder, a second hollow cylinder mounted for vertical movement therein and forming a pressure chamber therewith, a valve controlled conduit communicating with said cylinders and extending into and connected to said second cylinder and having an opening therein, a non-compressible fluid filling said conduit and pressure chamber and a portion of said second cylinder to a point above said opening, means mounted on the second cylinder adapted to close said opening toward the close of its upward movement, means for introducing a compressible fluid into the second cylinder and for exhausting the same therefrom.

1,815,908. HAND LUGGAGE. BENJAMIN M. HAMLIN, Racine, Wis., assignor to Wheary Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 11, 1929. Serial No. 406,395. 8 Claims. (Cl. 190—41.)



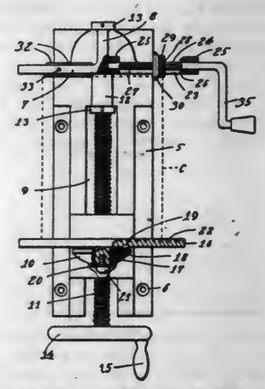
1. Hand luggage of the character described, including a main section and a cover therefor, a garment supporting frame having garment engaging means and spaced members, means pivotally mounting the garment supporting frame, a garment hanger, means mounting the garment hanger whereby the hanger is normally disposed between the spaced members of the supporting frame remote from its garment engaging means and whereby a suit draped around the hanger may be extended over the garment engaging means of the supporting frame and folded thereover between the spaced members, and means for maintaining the suit in position over the frame.

1,815,909. ELECTRONIC RECTIFIER. ROBERT HAMMOND HARDOEN, Xenia, Ohio, assignor to The Electro Chemical Company, Dayton, Ohio, a Corporation of Ohio. Filed June 21, 1927. Serial No. 200,340. 1 Claim. (Cl. 175—366.)



An electronic rectifier comprising a piece of ferrous sulphide fused with sodium sulphide in contact with a metal having an atomic number between 11 and 14 inclusive.

1,815,910. CAN OPENER. JOHN F. HART, Rockford, Ill. Filed Jan. 22, 1930. Serial No. 422,532. 2 Claims. (Cl. 30—3.)

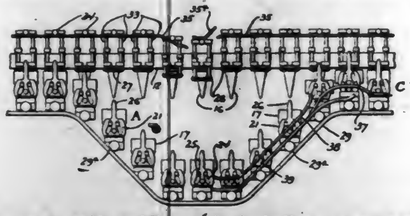


1. A can opener comprising a frame, two brackets projecting horizontally in parallel relation from said frame, a vertical advancing screw acting between said brackets to raise and lower the bracket to accommodate cans of different height therebetween and bring about initial piercing of the can, a turntable on the lower bracket adapted to support a can, a shaft on the upper bracket extending radially relative to the can received on the lower bracket, said shaft having a crank on the outer end thereof for turning the same, a circular cutting blade turning with but slidable on the shaft to be adjustable in and out to operate on a radius according to the size of the can to be opened, a feed roll turning with the blade and adjusted therewith on the shaft, said roll being of a smaller diameter than the blade so as to run on the rim of the can to turn the same while the blade pierces the top of the can alongside the rim and cuts the same in the turning of the can, and an idler roll mounted on the upper bracket in a plane parallel with the operating shaft but on the diametrically opposite side of the bracket therefrom, said roll being disposed radially relative to the can received on the lower bracket and operating on the top of the can for the purpose described.

1,815,911. PASTRY CONE BAKING MACHINE. OSCAR HAUGE, San Mateo, Calif., assignor to National Biscuit Company, a Corporation of New Jersey. Filed Aug. 26, 1929. Serial No. 388,555. 11 Claims. (Cl. 107—58.)

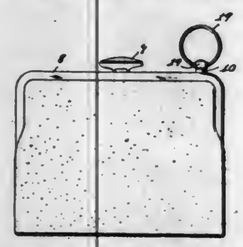
9. A machine of the character described comprising a horizontally arranged table mounted for rotation about its

central axis, a set of cores positioned radially on said table and rigidly fixed thereto and depending from the under surface thereof, a guide bar secured at its upper end to the table and projecting downwardly from the under surface thereof, a molding unit guided for vertical reciprocation on said guide bar in absolute alignment with



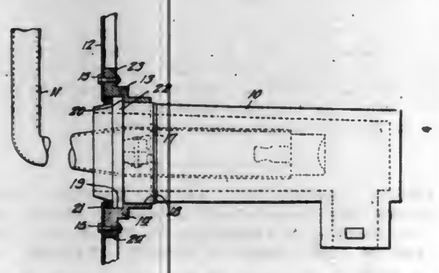
said cores, said molding unit including an expansible mold, cam means for vertically moving the molding unit into cooperative relation to the cores, and removing the molding unit from its cooperative position relative to the cores, and stripper means operative subsequent to the expanding of the mold to strip the cones from the cores.

1,815,912. HAND BAG. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Oct. 6, 1928. Serial No. 310,718. 2 Claims. (Cl. 224—28.)



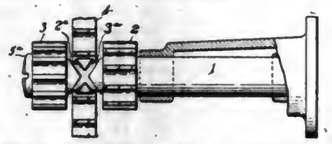
1. In combination with a frameless handbag made of flexible material, a protecting plate at the inner side of the handbag material, a shield on the outer side of said material, means for rigidly connecting said plate and shield, a head swivelly secured to said shield, said head being provided with recesses, and a ring pivoted in the recesses in the head, said ring being adapted to receive the thumb of a hand and to be pivoted and swivelled to accommodate the movement of the thumb and enable the other fingers of the hand to freely grasp the material of the bag.

1,815,913. SPLIT CLAMP FOR MOUNTING INSULATOR TO FACE OF SIGN OR OTHER OBJECT. EDWARD F. HOGAN, Chicago, Ill., assignor to Q. R. S. De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1928. Serial No. 312,291. 2 Claims. (Cl. 173—339.)



1. An insulator and support for gaseous conduction tubes and the like comprising a tubular insulator having adjacent one end thereof an external annular rib, a pair of complementary supporting pieces having offset shoulders on the interior thereof forming a plurality of bearing surfaces of different diameters encircling said insulator one of said surfaces engaging said annular rib and the other engaging the body of the insulator adjacent said rib, means for clamping said pieces together about said insulator, and means for mounting said support.

1,815,914. ENGINE STARTER. MAUNSELL B. JACKSON and KENNETH M. CLIPSHAM, Toronto, Ontario, Canada, assignors to Leaside Engineering Co. Limited, Leaside, Ontario, Canada. Filed Oct. 24, 1929. Serial No. 402,236. 4 Claims. (Cl. 74—7.)



1. In an engine starter drive the combination of a rotatable shaft; two starter pinions mounted thereon for rotary movement therewith and for longitudinal movement thereof to mesh with a gear of the engine to be started, and means for moving the pinions towards the gear, the pinions being disposed on opposite sides of the gear and having their teeth arranged so that the teeth of one pinion are out of alinement with the teeth of the other pinion when the pinions arrive at their positions for meshing with the gear.

1,815,915. GAUGING THICKNESS OF SURFACE COATING. ERNEST L. KALLANDER, Framingham, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a Corporation of Massachusetts. Filed Aug. 24, 1929. Serial No. 388,130. 4 Claims. (Cl. 91—68.)

1. Method of applying a substantially uniform thickness of coating on sheet material such as paper which comprises applying a thickness of coating material to the sheet material, subjecting the coated sheet to constant drying conditions, passing a current of electricity through the coating material and sheet material at a point where the coating material is set and through a current resistance indicating device, and controlling the amount of coating applied so as to maintain the reading of the indicating device substantially constant.

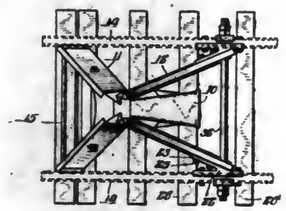
1,815,916. ROTATION INDICATING WRINGER ROLL. GEORGE R. KELTIE, Woonsocket, R. I., assignor to American Wringer Co., Inc., Woonsocket, R. I., a Corporation of Rhode Island. Filed Dec. 24, 1928. Serial No. 328,223. 7 Claims. (Cl. 68—33.)



1. A rotation indicating roll constructed of a plurality of rubber layers vulcanized together, the outer rubber

layer having a coloring medium irregularly incorporated therein to provide a mottled rotation indicating peripheral face.

1,815,917. BUMPING POST. ELMER KEEBLER, Chicago, Ill., assignor to Mechanical Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1929. Serial No. 398,241. 7 Claims. (Cl. 104—254.)

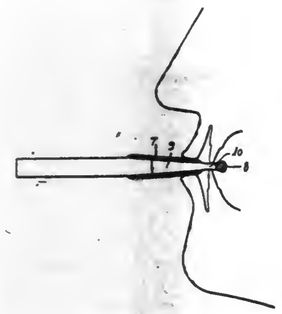


1. A bumping post, comprising in combination a bumping block, compression members secured to said bumping block and to track rails, and tension members comprising a pair of bars straight throughout their entire length attached to said bumping block and extending downwardly and outwardly between the track rails, and means for attaching said bars to the track rails.

1,815,918. METHOD OF COKING PETROLEUM RESIDUES. ALEXANDER S. KNOWLES, Chicago, Ill., assignor to Tar and Petroleum Process Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 12, 1927. Serial No. 167,864. 4 Claims. (Cl. 202—33.)

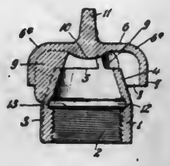
1. The method of producing fuel which comprises mixing a minor portion of coking coal and a major portion of petroleum coke and heating a thin horizontal layer of said mixture to a coking temperature in a closed chamber by heat applied from below.

1,815,919. CIGAR AND CIGARETTE HOLDER. GOLLADAY LAKE, Grenada, Miss. Filed Mar. 13, 1928, Serial No. 261,383. Renewed Feb. 7, 1931. 1 Claim. (Cl. 131—10.)



A cigar or cigarette mouthpiece having a socket and a flat biting portion closed at the rear end and provided with a large vertical opening of uniform size through its biting portion beyond and in communication with the rear end of said socket, said opening being of larger area than the rear end of said socket and extending forwardly and rearwardly beyond the point of said biting portion which the teeth are intended to engage.

1,815,920. VENT PROTECTOR. HARRY E. LAKE, New York, N. Y., assignor to Preferred Utilities Manufacturing Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 19, 1931. Serial No. 517,028. 4 Claims. (Cl. 220—44.)



1. A vent protector comprising a tubular body provided with means for securing it to the terminal portion of a vent pipe, an inverted cup-shaped hollow hood covering the upper end of the tubular body, the lateral wall portions of said hood being of greater diameter than the covered portions of the tubular body to form a substantially annular passage communicating with the interior of the tubular body, the lateral wall portions of the hood forming a seal to prevent water and foreign matter from passing into the tubular body and vent pipe while maintaining the vent pipe in constant and free communication with the atmosphere, and radially disposed webs cast with said tubular body and holding said body and hood in permanent spaced relation, said cast webs being connected with the top edge of the tubular body and with the interior of the dome of the hood and extending substantially in the longitudinal direction of the tubular body.

1,815,921. PARTITION BLOCK. SAMUEL LAPOF, Brooklyn, N. Y., assignor to Bar-Ray Products, Inc., New York, N. Y., a Corporation. Filed Oct. 13, 1930. Serial No. 488,248. 3 Claims. (Cl. 72—0.5.)

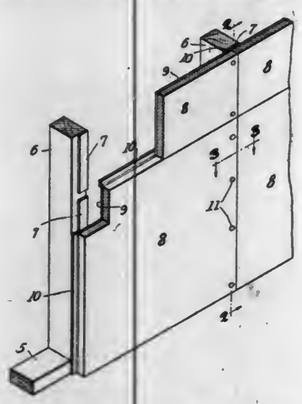


1. A block for use in constructing a wall impervious to X-rays, comprising a pair of slabs of gypsum or concrete, each slab having a central recess in which is positioned a fibrous material, and a lead sheet secured to the fibrous material by adhesive and separating the slabs, the edges of the lead sheet projecting beyond the edges of the block.

1,815,922. LATH FOR USE IN CONSTRUCTING SURFACES IMPERVIOUS TO X-RAYS. SAMUEL LAPOF, Brooklyn, N. Y., assignor to Bar-Ray Products, Inc., New York, N. Y., a Corporation. Filed Oct. 13, 1930. Serial No. 488,249. 1 Claim. (Cl. 72—0.5.)

A device for constructing a surface impervious to X-rays, comprising a support, a rectangular board having a

lead sheet secured thereto, the edges of the lead sheet extending beyond a pair of adjacent edges of the board and being flush with the opposite adjacent edges, and a thin



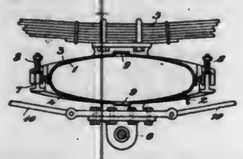
strip attached to the support and being of the same height as the board so that extended portions of the lead sheet may be bent thereover.

1,815,923. WINDOW POLE. SIMEON C. LAWLOR, Chicago, Ill. Filed Jan. 6, 1930. Serial No. 418,806. 5 Claims. (Cl. 268—134.)



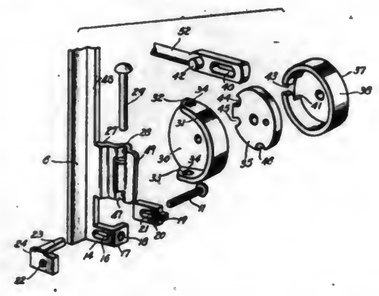
1. A window pole comprising a handle, a metal head on one end thereof, a metal hook pivoted on said metal head, and a spring normally maintaining said hook in forward position.

1,815,924. SUSPENSION OF VEHICLES. EMILIO LENHARDTSON, Buenos Aires, Argentina. Filed Oct. 14, 1927. Serial No. 226,075. 1 Claim. (Cl. 267—31.)



In a shock absorber for vehicles, the combination with a substantially elliptical upper cup member having an internally indented block at its upper intermediate part, of a lower similar cup member having an internally indented block at its lower intermediate part, an inflatable chamber enclosed by said cups and having diametrically opposite projections extending into the indentations in said cup members, said cup members having laterally arranged interengaging sliding surfaces to allow for relative movement of said cup members, spring means for yieldingly limiting the extent of relative movement of the cups, a vehicle spring secured to the upper block and a part of the chassis secured to the lower block.

1,815,925. AWNING BRACKET. ROBERT M. MAXWELL, Kansas City, Mo. Filed Jan. 20, 1930. Serial No. 421,950. 14 Claims. (Cl. 156—44.)



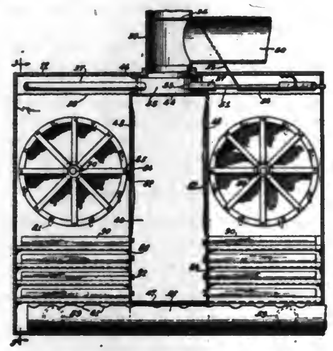
8. In an awning bracket, a casing plate, means for clamping the plate to the casing of a window, an ear on the plate having parallel transverse slits, the portion between the slits being outpressed to form a pin retainer, portions adjacent the slits being depressed to form pin seats, and bail-supporting means including a member provided with pin-receiving openings and a pin extending through the openings and retained between the seats and the retainer portion.

1,815,926. LIQUID DISPENSING APPARATUS. LYON MCCANDLESS and JACK D. SARTAKOFF, Rochester, Pa., assignors, by mesne assignments, to The Wayne Pump Company, Baltimore, Md., a Corporation of Maryland. Filed Apr. 2, 1928. Serial No. 266,570. 12 Claims. (Cl. 221—100.)



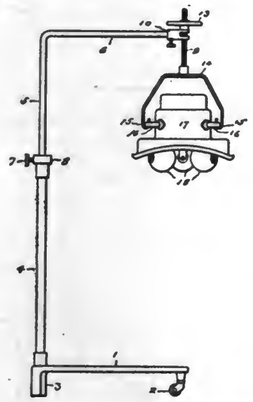
1. In a liquid dispensing apparatus, the combination of a measuring chamber, means for controlling the flow of liquid to and from said chamber through the bottom thereof, reciprocating means for controlling said first named means, and liquid pressure operated means for preventing operation of said first named means until a predetermined condition prevails.

1,815,927. INCUBATOR. CHARLES D. MCLEAN, Fenton, Mich. Original application filed Feb. 23, 1924, Serial No. 694,482. Divided and this application filed Mar. 14, 1924. Serial No. 699,163. 3 Claims. (Cl. 119—44.)



1. In an incubator, an incubation chamber having a working corridor and a space along one side of said corridor within which are mounted a plurality of axially spaced-apart individually rotatable egg-carrying drums having open sides and each of a width to carry a single layer of eggs.

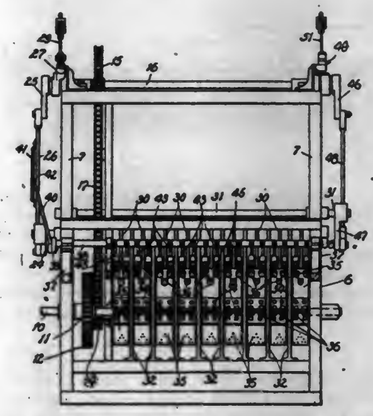
1,815,928. PORTABLE SUPPORT FOR MASSAGE APPARATUS. DANIEL HAYES MURPHY, West Hartford, Conn. Filed Jan. 7, 1931. Serial No. 507,105. 1 Claim. (Cl. 248—41.)



A portable support for a massaging apparatus, comprising a base, a tubular post extending upward from one edge of the base, an angular arm having a vertical limb and a horizontal limb, the vertical limb telescoping within the tubular post and adjustable vertically and angularly with relation thereto, a spindle threaded through the outer end of the horizontal limb of said arm, means for preventing the rotation of said spindle, a wheel threaded on said spindle for effecting a vertical adjustment of the spindle, and a bail fastened to and depending from the spindle, said bail having open loops at its lower ends for detachably engaging and supporting the handles of the massaging apparatus.

1,815,929. DEHAIRING MACHINE. FRED R. NEWMAN, St. Louis, Mo. Filed Nov. 29, 1929. Serial No. 410,397. 1 Claim. (Cl. 17—16.)

In combination with a dehairing machine, throw in hooks movably mounted at one side of said machine, a drive rod operatively connected with said hooks to move them to discharge an animal supported thereon into the machine, auxiliary scraper paddles, scraper elements secured to said paddles, a shaft, said paddles secured to said

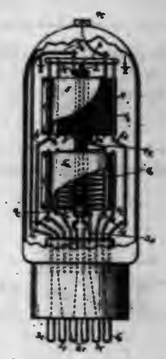


shaft, a link secured to said shaft at one end, a second rod, said link secured at its other end to said second rod, said second rod so connected to said drive rod that said paddles will be moved out of the path of movement of an animal being charged into the machine.

1,815,930. CONDENSATION PRODUCT OF PHENOLS AND STARCHES. EMIL E. NOVOTNY, Logan, Philadelphia, and CHARLES J. ROMIEUX, West Philadelphia, Pa., assignors to John Stogdell Stokes, Huntingdon Valley Post Office, Pa. Filed Oct. 19, 1923. Serial No. 669,617. 8 Claims. (Cl. 260—2.)

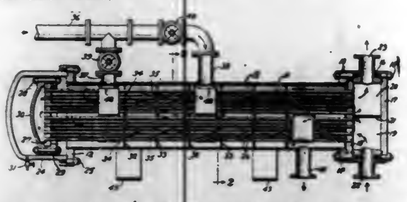
2. The herein described method, which consists in heating a mixture of a phenol and a starch in the absence of a catalyst at a temperature in the range of 400° F. to 500° F. to produce a resinous reaction product, and then adding a hardening agent thereto.

1,815,931. VACUUM TUBE. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Tube Company, Englewood, N. J., a Corporation of Delaware. Filed Feb. 8, 1930. Serial No. 426,828. 3 Claims. (Cl. 250—27.5.)



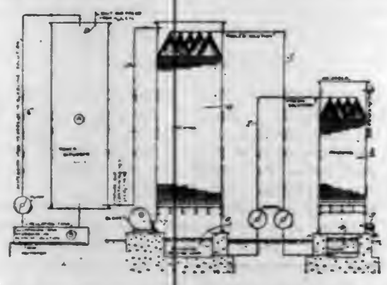
1. A vacuum tube comprising an envelope containing a cathode, a grid and a plate element, another cathode, grid and plate element, a heater element for indirectly heating said cathodes, said second mentioned grid being directly connected with the first mentioned cathode.

1,815,932. OIL COOLING. EVERETT NORMAN SIEDER, Elizabeth, N. J., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 28, 1931. Serial No. 511,706. 14 Claims. (Cl. 257—239.)



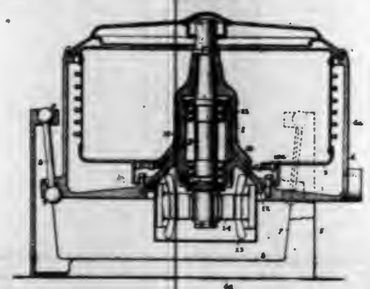
1. Heat exchange apparatus comprising an extended shell, a plurality of tubes within said shell, means for passing cooling water through said tubes, means for introducing a fluid to be cooled into said shell near one end thereof, means for removing fluid from near the other end of said shell and means for introducing fluid to be cooled into said shell at an intermediate point.

1,815,933. PROCESS FOR THE ELIMINATION OF HYDROGEN SULPHIDE IN FUEL GAS. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 12, 1921. Serial No. 521,913. 2 Claims. (Cl. 23—3.)



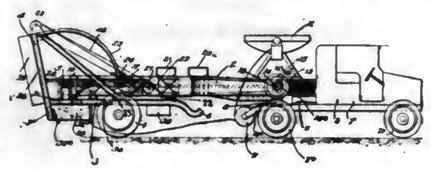
1. In a process for removing hydrogen sulphide from coal or water gases by treating the gases with an alkali carbonate solution to absorb the hydrogen sulphide, then activating the solution containing the hydrogen sulphide by passing the foul solution counter to a flow of air, the improvement which consists in removing the hydrogen sulphide from the air by passing the air through a body of iron oxide moving in the opposite direction.

1,815,934. CENTRIFUGAL MACHINE. HARRY H. STEPHENS and JACOB L. HARING, Glen Rock, N. J. Filed Feb. 27, 1930. Serial No. 431,702. 1 Claim. (Cl. 210—72.)



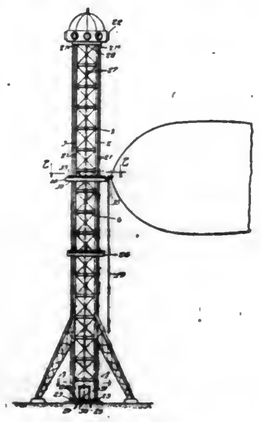
In a centrifugal machine, the combination with a base and stand, a container mounted on the stand and having a bottom with a central opening, a central column in the container having a base covering the opening and detachably secured to the bottom of the container, a rotary basket in the container, a shaft carrying the basket journaled in the column, an electric motor for rotating the shaft hung from the underside of the base of the column and located above the floor level on which the base of the stand rests, said shaft and motor having their bearings located wholly above the motor and in the column and means for securing the motor to the column base, said means being independent of the means that secures the column base to the container bottom, the motor being removable in assembled relation with the column base through the opening in the bottom of the container.

1,815,935. RECONNOITERING DEVICE. JOSEPH B. STRAUSS, Chicago, Ill. Filed July 24, 1922. Serial No. 577,058. 5 Claims. (Cl. 189—15.)



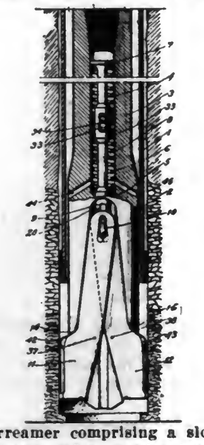
1. A reconnoitering device comprising a pair of wheels, a frame mounted on said wheels, a tower pivotally connected with said frame, front wheels forming a part of a power unit for transporting said tower with which said tower is removably connected, said frame having a projecting part which projects forwardly, means for connecting said projecting part with the tower, said projecting part adapted to engage the ground when disconnected from the tower so as to act as a partial support for the tower.

1,815,936. MOORING MAST FOR AIRSHIPS. JOSEPH B. STRAUSS, Chicago, Ill. Filed Aug. 6, 1925. Serial No. 48,684. 5 Claims. (Cl. 244—2.)



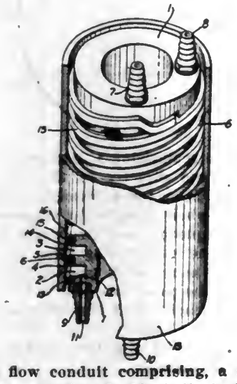
1. A self supporting mooring mast for airships comprising a tower, a non-rotating elevating passenger platform surrounding said tower and adapted to be moved longitudinally therealong, said tower having four separated upright members which act as guides for said passenger platform, engaging devices on said platform for engaging said upright members and means for fastening the airship to said elevating platform comprising a movable ring rotatably mounted on said passenger platform.

1,815,937. UNDERREAMER. FRED SWAN, Wichita, Kans., assignor to The Bridgeport Machine Company, Wichita, Kans., a Corporation of Delaware. Filed Jan. 8, 1929. Serial No. 331,140. 12 Claims. (Cl. 255—75.)



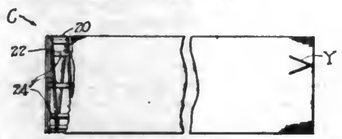
1. An underreamer comprising a slotted head, cutters having slotted reins and a cross-bar insertable through the slot in the head and through the slotted reins, the cross-bar having side and edge grooves to receive the edges of the slots in the reins.

1,815,938. FLUID FLOW CONDUIT. ARTHUR M. TROGNER, Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 20, 1930. Serial No. 454,168. 7 Claims. (Cl. 257—248.)



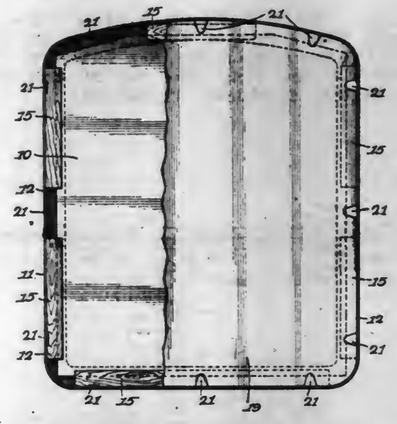
1. A fluid flow conduit comprising, a cylindrical member having an exterior double helical channel, a casing adapted to enclose said cylindrical member, and a resilient material interposed between said member and said casing and helically formed in a manner adapted to maintain two independent lines of flow through said double helical channel.

1,815,939. DANDY ROLL. WALTER G. TROTMAN, South Hadley Falls, Mass. Filed May 27, 1929. Serial No. 366,319. 4 Claims. (Cl. 92—48.)



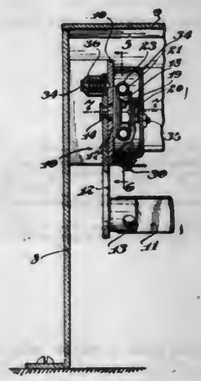
1. Paper-making apparatus of the class described comprising in combination, a cylindrical dandy roll body including longitudinal spaced rods relatively narrow rings thereon spaced longitudinally of the rods provided with spaced grooves about the peripheries thereof, a cover member in the form of a cylinder having longitudinally extending bars spaced around the inner periphery thereof which are receivable in the grooves of the rings.

1,815,940. MIRROR FRAME CONSTRUCTION. HUGO P. ZOERNER, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 11, 1926. Serial No. 147,631. 5 Claims. (Cl. 40—18.)



1. In a mirror, the combination of a sheet metal border element which has an outer flange transverse to the mirror plane and an inwardly extending front masking flange, a glass mirror element having its edge concealed by the masking flange, a filler element of L-shaped cross section having one leg interposed between the outer flange and the edge of the mirror and having its other leg located behind the mirror element and overlapping a relatively narrow marginal portion of the latter disposed wholly behind said masking flange, and means for securing said mirror element against rearward movement.

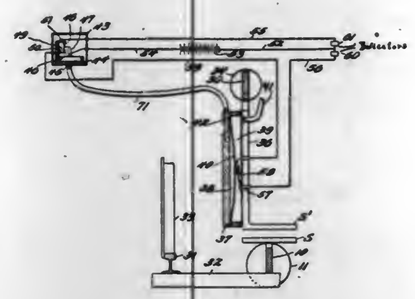
1,815,941. ALARM ACTUATING DEVICE. ROLLIN B. BLAIR and ARTHUR M. ROACH, Minneapolis, Minn., assignors to O. B. McClintock Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 21, 1928. Serial No. 320,930. 1 Claim. (Cl. 200—52.)



An alarm device comprising a pivoted arm having a limited oscillatory movement, an annular tube of a material

that is a non-conductor of electricity applied around the pivot of said arm and movable with said arm, a fluid electric conductor gravity suspended in the lower portion of said annular tube leaving an air space in the upper portion of said tube, electrodes projected through and into said tube, and means for oscillating said arm far enough in one direction to carry one of said electrodes into said fluid conductor to thereby close the alarm circuit and far enough in the other direction to open the alarm circuit, the said opening and closing actions due to oscillating of said arm and tube serving to alternate the opening and closing of the alarm circuit.

1,815,942. TRAIN CONTROL SYSTEM. THEODORE BODDE, Niagara Falls, N. Y., assignor to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed July 29, 1926. Serial No. 125,652. 29 Claims. (Cl. 246—63.)



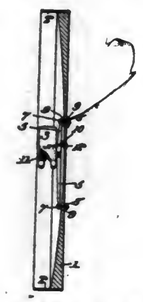
1. In a train control system, in combination with a vehicle carried inductor, a roadside three position apparatus comprising an element of magnetic material for giving a danger indication when in its inert state, a winding on said element and circuit means for said winding for imparting to said element an inductively reflective state to give a clear indication and for imparting to said element an inductively repulsive state to give a caution indication.

1,815,943. AUTOMOBILE LUGGAGE CARRIER. COULTER E. GLENN, Evans City, Pa. Filed Aug. 21, 1929. Serial No. 387,492. 6 Claims. (Cl. 293—55.)



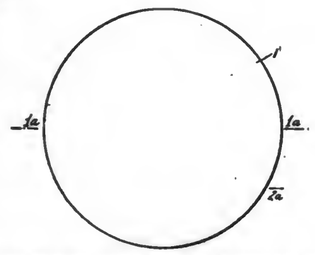
4. The combination with a motor vehicle having a plurality of longitudinal frame members, of a plurality of side bars, means for horizontally mounting said bars at the rear of said frame and a luggage carrier mounted slidably on said bars.

1,815,944. LOUD SPEAKER. PERCY W. GUMAER, West Englewood, N. J., assignor to Hopkins Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Sept. 19, 1925. Serial No. 57,425. 12 Claims. (Cl. 181—32.)



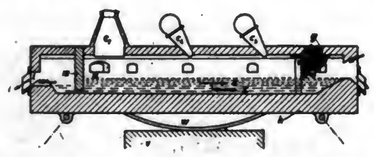
1. A loud speaker comprising, a substantially flat disk, said disk being thicker at its periphery than at its axis, and a baffle located near the periphery of the disk and projecting laterally therefrom at an angle to the plane of the disk.

1,815,945. LOUD SPEAKER. MARCUS C. HOPKINS, Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Dec. 22, 1925. Serial No. 77,032. 3 Claims. (Cl. 181—31.)



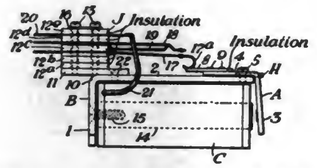
1. A loud speaker comprising a diaphragm having sufficient area to produce directly in the surrounding air clearly audible sounds or tones throughout the gamut of audible frequencies when actuated by impressed vibratory energy of audible frequency, said diaphragm having a polar zone and at least one surrounding zone, the mass of the surrounding zone or zones being greater than that of the polar zone whereby the polar zone will be freely responsive to the higher frequencies and the surrounding zone or zones will be freely responsive to the lower frequencies, and means for impressing vibratory energy on said diaphragm at the polar zone.

1,815,946. EXTRACTING OF IRON. ARTHUR LANGER, Vienna, Austria. Filed Apr. 6, 1929, Serial No. 353,000, and in Austria Apr. 19, 1928. 4 Claims. (Cl. 75—14.)



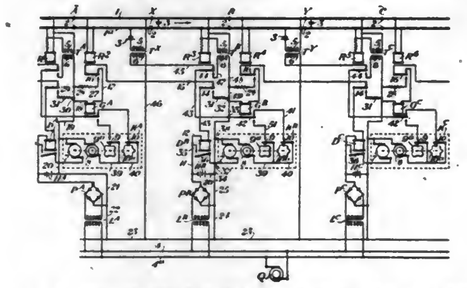
1. A process for the direct extraction of iron from its ores by the action of reducing agents on a flowing bath of iron, comprising the passing of the ore reduction mixture and the iron bath in an accelerated counter current over the whole length of the hearth both before and during the formation of iron.

1,815,947. ELECTRICAL RELAY. LLOYD V. LEWIS, Edgewood Borough, Pa., assignor to The Union Swith & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 14, 1929. Serial No. 363,047. 2 Claims. (Cl. 200—104.)



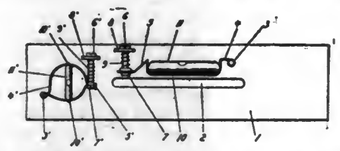
1. A relay comprising an L-shaped backstrap having a long leg and short leg, a core attached to said short leg and extending parallel to said long leg, a coil on said core, an L-shaped armature pivotally attached to the free end of said long leg so that the first armature leg coacts with the free end of said core and the second armature leg lies substantially parallel with and outside of the long leg of the backstrap, said second armature leg being short so that it has minimum inertia and minimum magnetic coaction with said backstrap, a contact supporting plate attached to the log leg of said backstrap and extending rearwardly beyond the bend in the backstrap, contact fingers mounted on said plate adjacent the projecting end thereof, and a plate of light weight insulating material attached to the second leg of said armature and extending rearwardly therefrom to coact with said contact fingers, whereby a relatively small movement of the armature causes relatively great movement of the contact fingers and so provides for transverse slide of the contact fingers and high contact pressure.

1,815,948. RAILWAY TRAFFIC CONTROLLING APPARATUS. EUGENE A. LOWMAN, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 21, 1929. Serial No. 333,867. 6 Claims. (Cl. 246—34.)



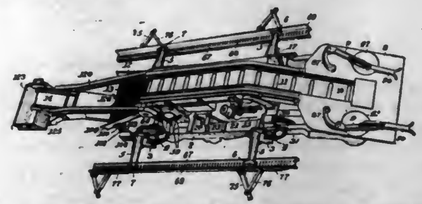
1. In combination, a stretch of railway track, a transformer having its secondary connected with the rails of said stretch, a source of direct current, and means receiving energy from said source for supplying periodically interrupted alternating current to the primary of said transformer.

1,815,949. ADJUSTABLE LEVEL. OMER MARISCHAL, St. Die, France. Filed Apr. 13, 1928, Serial No. 269,788, and in France Apr. 22, 1927. 2 Claims. (Cl. 33—214.)



1. In a level having a plurality of levelling tubes, a base member, a frame for each of the levelling tubes, one of said frames being formed of a single piece of metal bent in the form of a ring at one end and an apertured arm at the other end, and including means for holding a levelling tube in a position intermediate the two said ends, a levelling tube carried by the said frame, a stud engaging the ring at one end of the said frame and fixed to the said base, a screw extending through the arm at the end of the frame, a nut on the said screw abutting the said arm, a bracket fixed on said base having an aperture through which the screw passes to support the screw, a spring mounted around said screw between the said bracket and the said arm, a second frame for carrying a levelling tube, said second frame being formed from a single piece of metal in the shape of a split ring having free ends, a stud engaging ring formed on said last mentioned split ring, a stud fixed to the base and engaging in said ring, the free ends of the split ring being bent to form overlapping arms, a screw extending through said overlapping arms, a nut on said screw abutting said overlapping arms, a bracket fixed to the base having an aperture through which the screw passes to support the screw, a spring for said screw mounted between the bracket and the said overlapping arms, there being means for carrying a levelling tube in said split ring frame, and a levelling tube carried by said frame.

1,815,950. RAILWAY BALLAST HANDLING MACHINE. JAMES B. MCWILLIAMS, Pittsburgh, Pa., assignor to Railway Maintenance Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 30, 1927. Serial No. 202,693. 10 Claims. (Cl. 37—104.)

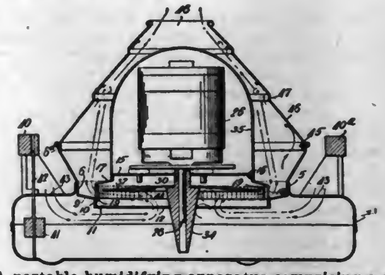


1. A railway ballast treating machine comprising a frame adapted to lie between the ends of the ties of adjacent railroad tracks and to travel along the track-way, supporting rails adapted to lie on the ties, and means adjustably connected to said rails for engaging said ties.

5. A railway ballast treating machine comprising a frame adapted to lie alongside a railroad track, a supporting rail for the frame adapted to lie on the ties, and adjustable means engaging the track rail for spacing the supporting rail therefrom.

8. A digging machine comprising a frame, a crank mounted thereon, a link pivotally mounted on the frame, and a digging arm secured to the link and to the crank, the link being curved so as to provide a relatively wide space between the link and the arm.

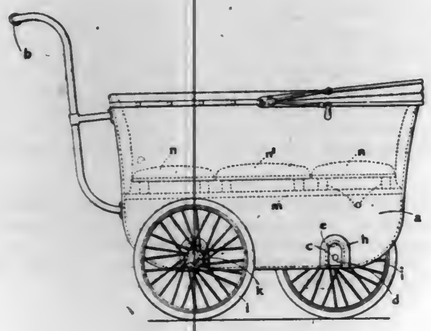
1,815,951. AIR MOISTENER. BERTRAM M. MILLS, Pawtucket, R. I. Filed Sept. 6, 1929. Serial No. 390,711. 11 Claims. (Cl. 261—91.)



1. A portable humidifying apparatus comprising a water receptacle, a motor supported by the receptacle, an atomiz-

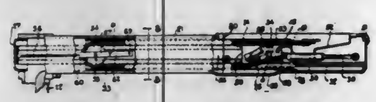
ing disc driven by the motor, a series of vanes concentric with the disc, and handles secured to the receptacle, the receptacle having air inlet openings between the motor and the handles and so arranged as to be concealed partially at least by the handles and to permit inspection of the water level from a point above the handles.

1,815,952. PERAMBULATOR AND THE LIKE. EDWARD THOMPSON MORRISS, Letchworth, England. Filed Feb. 26, 1925, Serial No. 11,843, and in Great Britain Aug. 20, 1924. 3 Claims. (Cl. 280—106.5.)



1. In perambulators and similar vehicles in combination, a body in whose side walls apertures are provided in opposite position in pairs, massive elastic bearing blocks within the said body adapted to absorb road shock, means for mounting said bearing blocks in positions adjacent to the said apertures, wheel axles passing through said bearing blocks, the said wheel axles being independently movable under road shock; and means for preventing the rotation of the said axles comprising a rod passing in the middle position transversely through the respective axles, substantially as described.

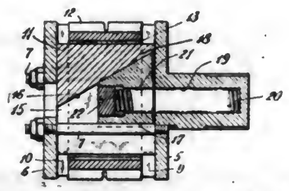
1,815,953. DENTAL UNIT. CLARENCE W. MOORE, Roslyn, Pa., assignor to Oscar H. Pieper and Alphonse F. Pieper, Rochester, N. Y. Filed Nov. 6, 1928. Serial No. 317,540. 20 Claims. (Cl. 32—5.)



1. In a dental unit, an energy conducting cord, means imparting tension to the cord, an element movable in a single fixed predetermined path in response to movement of said cord, stop means disposed in the path of said element arranged to be abutted by said element to positively limit the movement of said cord, and means arranged to absorb the tension on said cord subsequent to the stopping abutment.

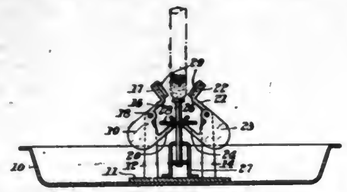
7. In a dental unit including cords and instruments, means for housing the cords and instruments, means for holding the instruments in a substantially horizontal common plane in their housed position, means movable to expose the instruments, and means responsive to the last named movement to actuate the instrument holder and simultaneously extend all of the instruments at an angle to the horizontal to facilitate grasping the instruments.

1,815,954. AUTOMATIC CHAIN OR BELT TIGHTENER. ERNEST JOHN OPIE, Menands, N. Y., assignor to Ramsey Chain Co., Inc., Albany, N. Y., a Corporation of New York. Filed Feb. 27, 1928. Serial No. 257,849. 15 Claims. (Cl. 64—5.)



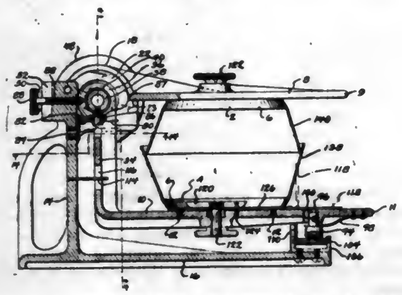
1. In an automatic device for tightening belts and chains, the combination of a frame, a hub slidable therein and forming a bearing, a rotatable member mounted thereon and resiliently tensioned wedging means for sliding the hub in the frame.

1,815,955. CIGARETTE SNUFFER. CLOYD C. POLING, Dormont, Pittsburgh, Pa. Filed Dec. 12, 1930. Serial No. 501,760. 8 Claims. (Cl. 131—51.)



1. A cigarette extinguisher comprising a pair of pivoted jaws, a plunger slidable therebetween effective, when actuated, for closing said jaws.

1,815,956. METHOD OF AND APPARATUS FOR CONSTRUCTING ARTIFICIAL DENTURES. EDWARD D. RALPH, Jamaica, N. Y. Filed May 5, 1927. Serial No. 189,135. 21 Claims. (Cl. 32—1.)

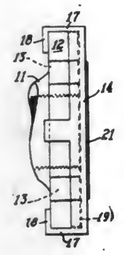


1. An articulator having, in combination, a mandible holder, a maxillary holder, means for retaining the maxillary holder in fixed horizontal position adapted to be released to permit said holder to be swung upwardly, means for supporting the mandible holder, said holder being adapted to be moved to move the mandibular denture about an axis corresponding to the condyle axis of the patient and adapted to be bodily moved laterally, and condyle path guides for guiding the mandible holder during said lateral movements.

5. An articulator having, in combination, a maxillary holder, a mandible holder, means on which the rear part of one of said holders is mounted, said holder being adapted to move about an axis corresponding to the condyle axis of the patient and to move laterally, yielding devices supporting said means tending to maintain said

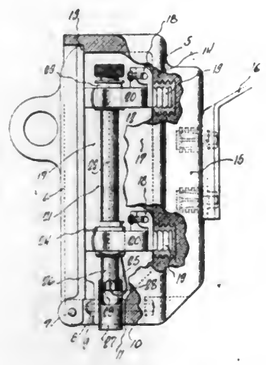
axis in a definite position, said movable holder being adapted to be laterally moved pivotally and bodily, and condyle path guides for guiding the mandible holder during said lateral movements having provision for adjustment to vary the paths of said lateral movement.

1,815,957. FLANGE PROTECTOR. PETER J. SHRUM, Monaca Heights, Pa., assignor to Pittsburgh Screw and Bolt Corporation, a Corporation of Pennsylvania. Filed Mar. 14, 1928. Serial No. 261,504. 2 Claims. (Cl. 137—91.)



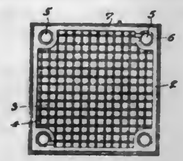
1. A flange protector formed from a piece of sheet metal comprising a flat circular body portion, ribs projecting from said body portion, a unitary annular flange disposed at the edge of the body portion in a plane at substantially right angles thereto for forming a concavity for receiving the front face of a flange to be protected, a lubricating pad in said concavity and spaced bendable projections on said annular flange adapted to be bent over the rear face of said flange for securing the protector in rigid fixed relation thereto.

1,815,958. EXPULSION FUSE. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed July 22, 1929. Serial No. 379,929. 8 Claims. (Cl. 200—127.)



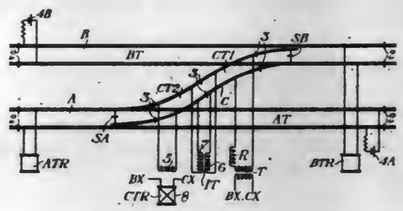
1. A fuse member, comprising a tube, contact members mounted on the tube, a fuse element having one end electrically connected with the upper contact member and its other end passed through the tube outwardly of its lower end and directed upwardly to be electrically connected with the lower contact member exteriorly of the tube, and an open ended extension member secured to the lower end of the tube and providing a continuation thereof, said extension member having an opening therein juxtapose the lower end of the tube through which the fuse element passes.

1,815,959. PROCESS OF MAKING POROUS FILTERS, DIAPHRAGMS, AND THE LIKE. MEYER WILDERMAN, Hampstead, London, England, assignor, by mesne assignments, to The American Wilderman Porous Ebonite Company, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 23, 1929, Serial No. 334,448, and in Great Britain Dec. 20, 1928. 8 Claims. (Cl. 18—53.)



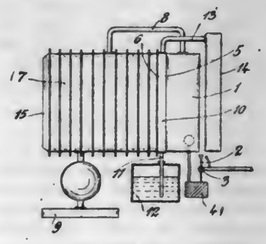
1. The process of making porous filters, diaphragms, and the like from powdered, partially vulcanized rubber mixtures, which comprises introducing the powder into a mold while maintaining the powder at a temperature such that it remains in a state of fine subdivision, compressing the powder to form the article, and completing vulcanization.

1,815,960. RAILWAY TRACK CIRCUIT APPARATUS. HENRY S. YOUNG, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 15, 1931. Serial No. 544,486. 1 Claim. (Cl. 246—34.)



In combination, two parallel railway tracks each provided with an insulated track section, a track circuit including a source of current and a track relay for each of said sections, a crossover connecting said track sections and divided by insulated joints to form two sections, and a track circuit for said crossover comprising a source of alternating current connected with the rails of one section and a track relay connected with the rails of the other section as well as a transformer the primary of which is connected with the rails of the first section and the secondary of which is connected with the rails of the second section.

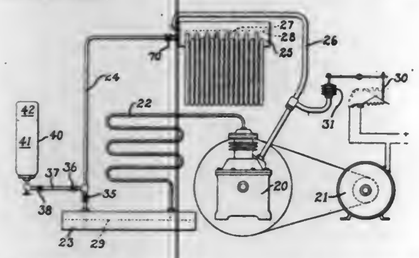
1,815,961. REFRIGERATOR OF THE ADSORPTION TYPE. IVAR AMUNDSEN, Oslo, Norway. Filed Mar. 10, 1930, Serial No. 434,739. Renewed June 16, 1931. 20 Claims. (Cl. 62—118.)



1. In a refrigerator of the adsorption type an adsorption vessel, means for intermittently heating the same, a heat

accumulating body, said adsorption vessel and said heat accumulating body having adjacent substantially parallel surfaces and means for establishing heat exchanging relations between said adjacent surfaces.

1,815,962. REFRIGERATING APPARATUS. FRANK W. ANDREWS, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Apr. 28, 1927. Serial No. 187,355. 3 Claims. (Cl. 62—115.)

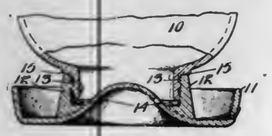


1. Refrigerating apparatus comprising an evaporator, a compressor, a condenser, conduits connecting said evaporator, compressor and condenser in a closed circuit in the order named, means for closing the conduit between the condenser and evaporator, means for closing the entrance to the evaporator in response to the quantity of liquid refrigerant in the evaporator, and means between said two closing means for admitting a supply of liquid refrigerant.

1,815,963. FIRE EXTINGUISHER. RALPH W. AUSTIN, Weymouth, Mass. Filed Apr. 29, 1927. Serial No. 187,533. 3 Claims. (Cl. 23—11.)

2. In a foam generating fire extinguisher, two normally separated fluids capable of being admixed to generate the foam, one of said fluids comprising a phosphoric acid solution.

1,815,964. CHICK FEEDER. EDWIN W. BOYER, Thorntown, Ind. Filed Mar. 27, 1928. Serial No. 265,004. 1 Claim. (Cl. 119—77.)

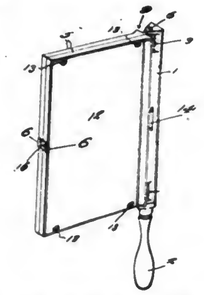


The combination of a container and a receptacle, the receptacle having an upturned rim for receiving foodstuffs from a food supply in the container, said receptacle having a convex central portion extending upwardly into the container and upstanding lugs integral with the receptacle on opposite sides of and between said convex portion and the upturned rim for engaging the container, fastening means on the inner faces of the upstanding lugs, the container having cooperating means to engage the fastening means on the lugs for holding the parts together and providing an unobstructed passage from the container to the receptacle on two sides of the container, substantially as set forth.

1,815,965. METHOD OF PRODUCING OR DEVELOPING AZO DYES. HANS THEODOR BUCHERER, Charlottenburg, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1926, Serial No. 94,057, and in Germany Mar. 17, 1925. 6 Claims. (Cl. 260—69.)

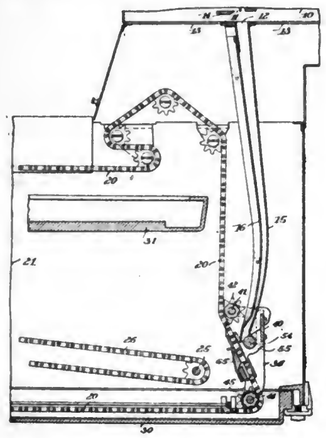
2. A process of making azo dyes which comprises causing an alkali metal compound of a nitrosamine derived from a primary aromatic amino compound to react with a coupling component at about 90 to 100° C. in the presence of an inorganic salt capable of reducing the alkalinity of the caustic alkali set free by the reaction.

1,815,966. MIRROR. FRANK X. CAMPBELL, Bronx, N. Y. Filed Jan. 28, 1930. Serial No. 424,000. 5 Claims. (Cl. 45—98.)



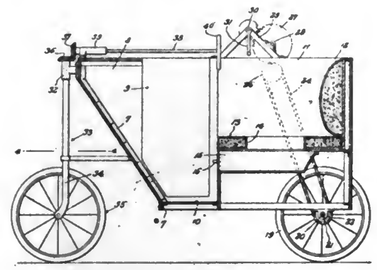
1. A mirror of the character described comprising a supporting bar, a pair of substantially rectangular metallic, skeleton frames hingedly mounted on one side of the supporting bar for swinging movement toward and from each other, said frames adapted to be disposed in opposed abutting relation to each other, a mirror rigidly mounted in each frame and a resilient substantially U-shaped spring mounted on the supporting bar and having its opposite end portions associated with the frames in a manner to normally urge same apart, and a spring latch mounted on the free end portion of one of the frames for engagement with the other of said frames for detachably securing said frames in abutting relation to each other.

1,815,967. PHOTOGRAPHIC APPARATUS. ARTHUR W. CAPS, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 16, 1929. Serial No. 347,649. 14 Claims. (Cl. 198—178.)



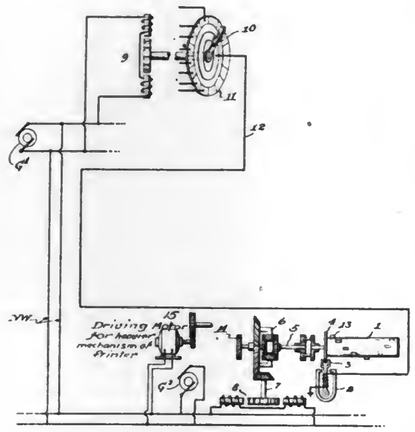
1. In a photographic apparatus, the combination with print conveying mechanism, of devices for holding a print in a generally transverse direction relative to the path of travel of said conveying mechanism, said devices including means for supporting said print at a plurality of spaced points on one side of the path of travel of the conveying mechanism, so that said print may curve transversely between the spaced supporting points.

1,815,968. INVALID CAR. JOHN CHUCHTA, Olyphant Borough, Pa. Filed Sept. 23, 1930. Serial No. 483,892. 2 Claims. (Cl. 208—113.)



1. In a portable invalid car of the class described, a wheel supported frame and body structure, an elevated seat support therein, a removable cushion on said support, horizontal guides carried by said support, a slidable bedpan in said guides, said cushion having a commode hole in registry with said pan and said pan underlying said hole.

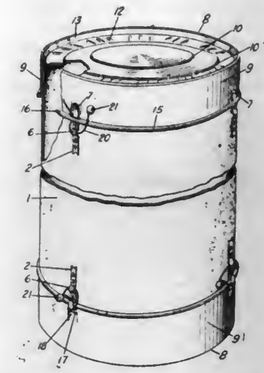
1,815,969. SYNCHRONOUS COMMUNICATION SYSTEM. ROBERT F. DIBKES, Jamaica, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Jan. 30, 1929. Serial No. 336,272. 4 Claims. (Cl. 178—53.)



1. In a start-stop system, the combination of a transmitter, a receiver, and a line for transmitting signals between said elements, an alternating current circuit separate from said line, synchronous motors operated from said circuit for driving the pin barrels of said transmitters and receivers, and independent motors for driving the other movable elements of said printers.

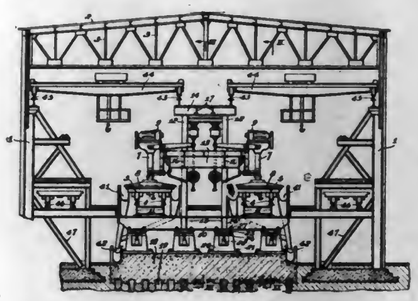
1,815,970. CONTAINER STRUCTURE. HANS A. EGGERSS, Van Wert, Ohio. Filed July 11, 1930. Serial No. 467,205. 4 Claims. (Cl. 229—5.7.)

1. A container structure comprising a body portion, a closure having a disk-like portion and a substantially vertical annular flange designed to embrace said body portion and lie in contact with and in substantial parallelism thereto, said annular flange having an opening formed therein with its upper edge closely adjacent the outer surface of said body portion and its lower edge spaced from said body portion, and a securing means carried by said



body portion and having an upstanding leg which is bent outwardly to such an extent that it will ride over said first-named edge and under said second named edge when said cover is applied.

1,815,971. GLASS SURFACING APPARATUS. JOHN H. FOX, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed May 27, 1930. Serial No. 456,234. 5 Claims. (Cl. 51—110.)

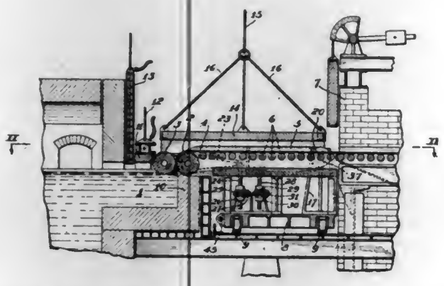


1. In combination in continuous sheet surfacing apparatus, a track, a series of sheet supporting cars mounted on the track for movement therealong, a series of surfacing machines arranged along the track provided with driven runners positioned above the sheets on the cars, a supporting framework carrying the track and said machines, a rigid foundation beneath the framework, and adjustable supporting devices intermediate the foundation and said framework arranged in series longitudinally and laterally thereof whereby any part of the framework may be adjusted vertically to bring the parts carried thereby into alignment.

1,815,972. APPARATUS FOR MAKING PLATE GLASS. FREDERICK GELSTHARP, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Jan. 17, 1928. Serial No. 247,332. 2 Claims. (Cl. 49—33.)

2. In combination, a glass tank containing a body of molten glass and open above the bath adjacent the end wall of the tank a pair of horizontal, driven sizing rolls arranged side by side with their center lines above the level of the glass, one of such rolls being located in the opening above the bath, and having its periphery contacting with the bath and the other of said rolls lying above

said end wall of the tank, means for cooling the rolls so as to prevent the glass from sticking thereto a glass receiving bed or runway extending laterally at one side of the roll located above the end wall, means whereby the



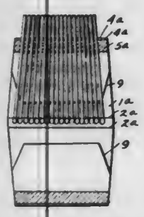
runway and rolls may be moved vertically as a unit and means whereby the roll engaging the glass bath may be swung vertically around the axis of rotation of the other roll to regulate its degree of immersion in the bath.

1,815,973. MATCH PACKAGE. EDWIN L. GRAUEL, Cincinnati, Ohio. Filed Sept. 19, 1930. Serial No. 483,049. 9 Claims. (Cl. 206—34.)



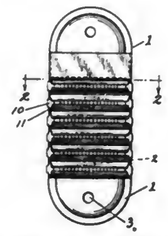
1. A match package comprising a tapered folder within which matches are arranged with their ends projecting, a tapered jacket embracing the folder and holding it closed, said tapered folder being insertable through the larger end opening of said jacket, and striking substance for the heads of the matches located at the lips of the folder.

1,815,974. MATCH PACKAGE. EDWIN L. GRAUEL, Cincinnati, Ohio. Filed Oct. 31, 1930. Serial No. 492,551. 10 Claims. (Cl. 206—34.)



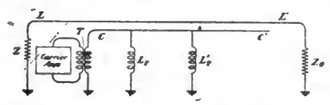
1. A match package comprising in combination with a row of matches having their heads retained within the package and their ends extending therefrom, an inner blank of flexible material having a folded flap extending within the package and bearing against the sides of the matches, said package having a withdrawal orifice with striking substance arranged adjacent said orifice to ignite the heads of the matches with the withdrawal thereof from the package, said flap having cut away portions to permit an easy start in the withdrawal of matches from the package.

1,815,975. MATCH PACKAGE HOLDER. EDWIN L. GRAUEL, Cincinnati, Ohio. Filed Oct. 31, 1930. Serial No. 492,552. 4 Claims. (Cl. 206—30.)



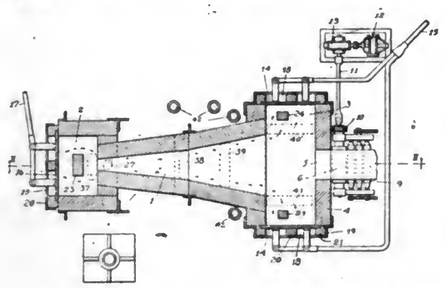
1. An article of manufacture comprising a support, said support having united thereto a refuse compartment, and a holder rigidly held on said support to detachably receive, and to hold in a position of ready access, a packet of matches arranged to be ignited by withdrawal from said packet, said matches after ignition being depositable in said compartment, said holder comprising opposed spring leaves arranged for sidewise insertion of said packet whereby said leaves are spread apart while said holder is in place on said support, and having an opening at the top through which the said matches may project, and means on said holder for preventing the endwise withdrawal of said packet.

1,815,976. COUPLING BETWEEN CARRIER AND TRANSMISSION LINES. ESTILL I. GREEN, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 2, 1926. Serial No. 145,899. 2 Claims. (Cl. 177—352.)



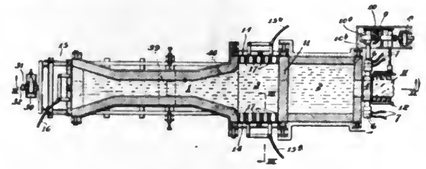
1. A transmission line, carrier apparatus, a coupling device associated with said carrier apparatus and said line whereby carrier currents may be superimposed on said line from said carrier apparatus, means for raising the impedance to ground of said coupling device at substantially the carrier frequencies utilized, and means in said coupling device for so adjusting the impedance of the carrier source that it shall be equal in magnitude and of an equal but opposite angle to the impedance looking from the coupling device into the transmission line.

1,815,977. APPARATUS FOR MAKING GLASS. HARRY F. HITNER, Oakmont, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed May 23, 1927. Serial No. 193,404. 9 Claims. (Cl. 13—6.)



1. In combination in apparatus for melting glass, a tank, a metal plate electrode constituting one of the walls thereof and exposed to the atmosphere on its rear face, a second electrode for transmitting current to the glass in the tank at a point remote from said plate, and means for supplying a current of electricity to said electrodes, said plate having its area of contact with the glass relatively large in proportion to its thickness.

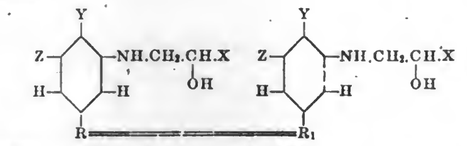
1,815,978. APPARATUS FOR MAKING GLASS. HARRY F. HITNER, Oakmont, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed May 26, 1928, Serial No. 280,762. Renewed Dec. 15, 1930. 8 Claims. (Cl. 13—6.)



1. In combination in apparatus for melting glass, a tank for melting the glass, metal electrodes extending into the tank, a foraminous, refractory, protecting means extending over the face of one of such electrodes and permitting contact of the molten glass in the tank with the electrode, and means for supplying current to the electrodes to secure a flow of current through the glass in the tank.

1,815,979. WATER SOLUBLE ORGANIC ARSENIC AND ANTIMONY COMPOUNDS AND PROCESS OF MAKING THE SAME. WILHELM KOLLE, Frankfort-on-the-Main, JULIUS HALLENSLEBEN, Hochst-on-the-Main, and KARL STREITWOLF and HUGO BAUER, Frankfort-on-the-Main, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, New York, N. Y., a Corporation of New York. Filed Dec. 27, 1923, Serial No. 683,074, and in Germany Dec. 27, 1922. 4 Claims. (Cl. 260—15.)

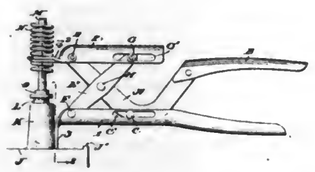
1. As new products the compounds of the general formula:



and

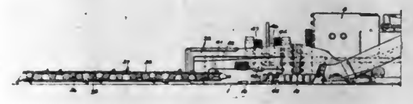
wherein R and R_1 represents As or Sb, X represents H, CH_3 or CH_2OH, Y represents hydrogen, hydroxy, alkoxy, amino or substituted amino and Z represents hydrogen amino or substituted amino.

1,815,980. VALVE-SPRING LIFTER. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed Dec. 12, 1928. Serial No. 325,462. 7 Claims. (Cl. 29—86.3.)



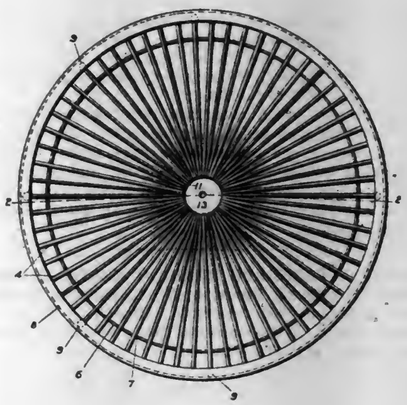
1. A valve-spring lifting tool comprising a pair of relatively movable members, means for moving said members with relation to each other, and means for maintaining said members substantially parallel to each other in all relative positions throughout their range of relative movement, in combination with a tongue rigid with and depending from one of said members and adapted to engage a supporting surface and move in contact therewith and tilt about its point of engagement with said surface in one plane while the tool is operatively engaged with and under the load of the spring, whereby the members may be moved relatively to each other and the tool as a whole may be tilted into a number of different positions with one hand and while operatively engaged with, and under the load of, the valve-spring.

1,815,981. COAL MINING MACHINE. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 8, 1924. Serial No. 697,790. 31 Claims. (Cl. 262—28.)



15. A mining machine comprising an elongated cutter arm, a cutter chain adapted to travel in guideways on said arm, a motor, and drive means between said motor and said cutter chain, said drive means including speed change gearing whereby the cutter chain may be driven at a plurality of predetermined speeds.

1,815,982. METHOD OF ASSEMBLING CAGE TOPS. EARL W. LITTLE, Indianapolis, Ind. Filed Dec. 7, 1929. Serial No. 412,302. 4 Claims. (Cl. 140—71.)

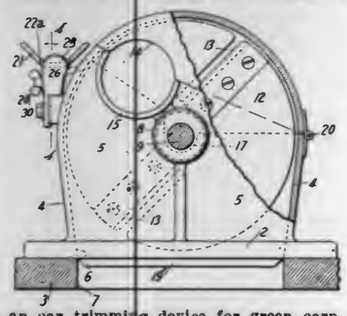


1. A method of assembling the top portion of a cage structure consisting in anchoring the upper ends of a plurality of top forming wires, entering the lower ends of said wires in a substantially channel shaped band, and welding an additional band to said wires at a point above said first band.

1,815,983. SILVER HALID EMULSION AND PROCESS OF MAKING THE SAME. EMIL MAUERHOFF, Dessau, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Dec. 28, 1926, Serial No. 157,606, and in Germany Oct. 10, 1925. Renewed June 4, 1930. 12 Claims. (Cl. 95—7.)

1. In the manufacture of photographic silver halid emulsions, the addition to the emulsion of a sensitivity increasing material prepared by acid hydrolysis and simultaneous partial oxidation of proteins.

1,815,984. EAR TRIMMING DEVICE. EARL W. MORTER, Washington Courthouse, Ohio. Filed June 29, 1928. Serial No. 289,286. 9 Claims. (Cl. 146—4.)

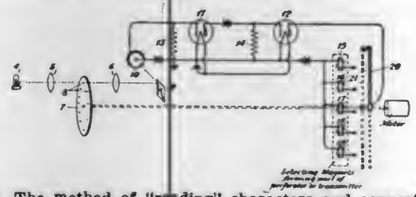


1. In an ear trimming device for green corn, a housing comprising a peripheral wall and an end wall and having an outlet in the lower portion thereof, said peripheral wall having an opening leading to said outlet, said end wall having a bearing, and an ear receiving opening, a shaft journaled in said bearing, a cutter mounted on said shaft to rotate adjacent to said ear receiving opening, and a device mounted on said housing, having means to remove selected rows of grains from an ear of corn and having a discharge passageway for the removed grains communicating with the opening in the peripheral wall of said housing.

1,815,985. PROCESS FOR THE MANUFACTURE OF OXYGENATED ORGANIC COMPOUNDS. ERNST PANSEGRAU, Krefeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 18, 1929, Serial No. 371,959, and in Germany June 19, 1928. 9 Claims. (Cl. 260—108.)

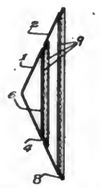
1. A process which comprises reacting upon an alkyl substituted benzene which may be further substituted by halogen with a gas containing oxygen under conditions of elevated temperature above 150° C. and superatmospheric pressure in the presence of a liquid aqueous phase and an oxidation catalyst comprising an oxide compound of a heavy metal.

1,815,986. TELEGRAPH READING MACHINE. RALZEMOND D. PARKER, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 29, 1929. Serial No. 374,911. 3 Claims. (Cl. 178—4.)



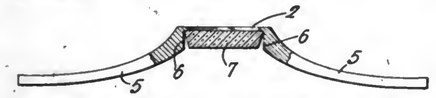
1. The method of "reading" characters and converting them into a telegraph code, which consists in scanning the area of a character, causing the characteristics of the area scanned to control the operation of a single light-sensitive device, and operating selecting means in accordance with the operation of the light-sensitive device.

1,815,987. CONICAL DIAPHRAGM FOR LOUD SPEAKERS. CHARLES W. PETERSON, Cincinnati, Ohio. Filed Feb. 13, 1929. Serial No. 339,557. 2 Claims. (Cl. 181—31.)



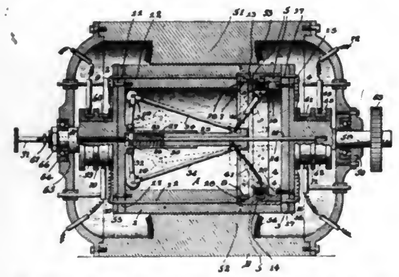
1. A diaphragm made up of a central rigid zone, a larger rigid zone and connection between the zones made of less rigid material than that of the zones.

1,815,988. METHOD OF MAKING FINGER RINGS AND THE LIKE. HENRY W. PETERS, Boston, Mass. Filed June 25, 1929. Serial No. 373,657. 5 Claims. (Cl. 29—160.6.)



5. The herein described method of making a finger ring or the like which consists in forming an elongated strip of metal having a recess for the reception of a stone or the like, and subsequently fastening the stone in the recess by bending the strip into ring form.

1,815,989. AUTOMATIC SWITCH. ROBERT EMERY RUESS, Philadelphia, Pa. Filed Aug. 20, 1928. Serial No. 300,656. 10 Claims. (Cl. 200—80.)

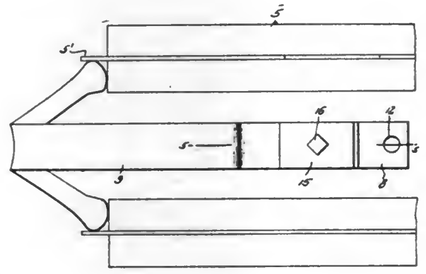


1. An automatic switch device comprising a rotatable casing, an axially disposed guide cylinder in said casing, an axial guide rod slidably mounted in said casing and having a head slidably engaging within said cylinder, a sleeve slidable on said rod and extending into said cylinder, a coil spring in said cylinder between said head and said sleeve, an adjusting screw extending through said casing and engaging said head to vary the tension of said spring against said sleeve, toggle arms pivotally connected to said casing and to said sleeve, centrifugal governor members supported on said toggle arms, a link formed of telescopic sections pivotally connecting said sleeve and said slidable contact, a coil spring interposed between said sections and tending to hold said link in extended condition, and means for adjusting the tension of said last-mentioned spring.

1,815,990. DYEING AND PRINTING NATURAL FIBER WITH SULPHUR AND VAT DYESTUFFS. CONRAD SCHOELLER, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1928, Serial No. 316,341, and in Germany Dec. 13, 1926. 3 Claims. (Cl. 8—5.)

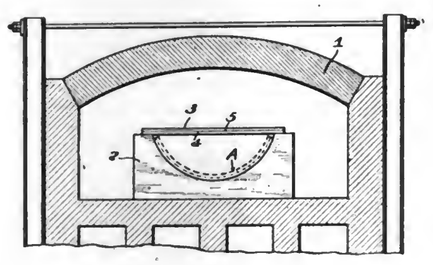
1. In the dyeing and printing of natural fibers as well as mixed textures thereof with vat and sulphur dyestuffs, the step which comprises solubilizing the said dyestuffs, instead of by alkalies, by an organic base together with a reducing agent.

1,815,991. WHEEL SCRAPER. FRED E. SEALEY, Vermilion, S. Dak. Filed Nov. 22, 1930. Serial No. 497,480. 2 Claims. (Cl. 280—158.)



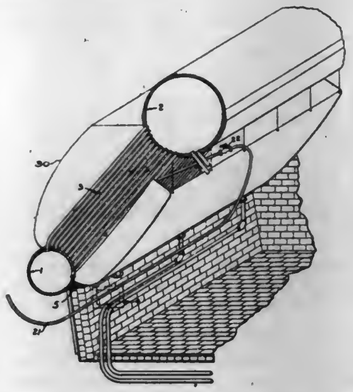
1. A scraper of the class described formed from a single sheet of elongated resilient material to provide a relatively straight end portion merging into an upwardly and forwardly inclined arm which in turn merges into a bight curved forwardly and downwardly and terminating in blades which incline rearwardly and diverge downwardly from each other.

1,815,992. PROCESS OF MAKING CURVED COMPOSITE GLASS PLATES. JAMES H. SHERTS, Brackenridge, and JOHN WILLITS, Ford City, Pa., assignors to Duplate Corporation, a Corporation of Delaware. Filed Apr. 24, 1930. Serial No. 446,862. 2 Claims. (Cl. 49—81.)



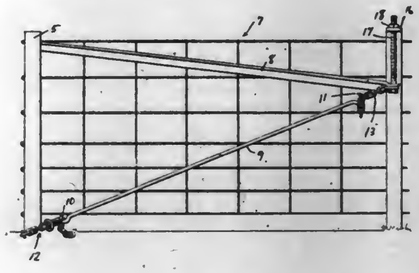
1. A process of making curved composite glass plates which consists in supporting two glass sheets which are to form the plate one upon the other above a concave mold, applying heat sufficient to make the sheets plastic and causing them to sink into and fit the mold, but not sufficient to cause them to stick together, assembling the sheets as thus bent with an interposed sheet of flexible reinforcing material and securing the sheets as thus assembled together.

1,815,993. APPARATUS FOR CLEANING BOILERS. BERIAH M. THOMPSON, Cheyenne, Wyo. Filed June 24, 1927. Serial No. 201,267. 24 Claims. (Cl. 122—379.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a boiler cleaning apparatus, the combination of a boiler having tubes subject to accumulation of combustion deposit, a metallic member, a flexible shield secured to said member and means for mounting the shield and said member below the tubes of a boiler, and means for passing within the boiler and applying to said deposit a fluid.

1,815,994. ADJUSTABLE POST BRACE. GEORGE KING THOMPSON, Randolph, Ill. Continuation of application Serial No. 366,651, filed May 28, 1929. This application filed Nov. 17, 1930. Serial No. 496,365. 5 Claims. (Cl. 256—35.)

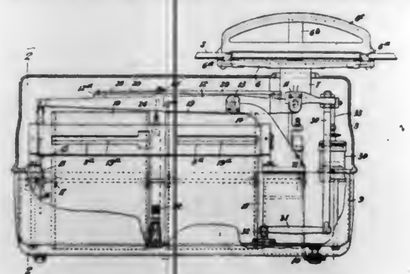


1. In a structure of the class described, in combination, a primary post, a secondary post disposed in longitudinally spaced relation from said first named post, a substantially triangular brace structure cooperable with said posts, and including a stay bearing at one end against the primary post at the upper end portion of the latter, and a guy rod fastened at the corresponding end to the lower end portion of said primary post, the vertex of said triangle being located in close proximity to the upper end portion of the secondary post and means adjustably connecting and suspending said vertex from the upper end of said secondary post.

1,815,995. WEIGHING APPARATUS. WILLIAM TIMSON, Birmingham, England, assignor to W. & T. Avery Limited, Birmingham, England. Filed Dec. 11, 1928, Serial No. 325,272, and in Great Britain Mar. 30, 1928. 5 Claims. (Cl. 265—69.)

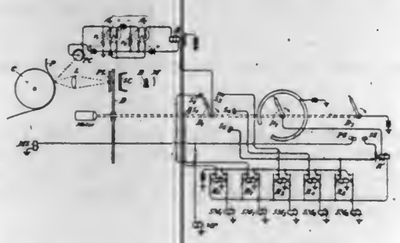
1. An automatic weighing apparatus comprising a weighbeam, a scale pan supported from said weighbeam,

an automatic weighing resistant, a rotary weight indicator disposed below and at the side of the said scale pan, said indicator having its longitudinal axis disposed in the



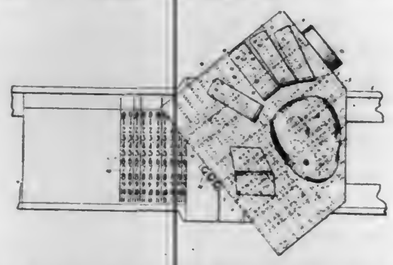
vertical plane containing the longitudinal axis of the weighbeam and means connected to the weighbeam and adapted to effect the rotation of the aforesaid indicator.

1,815,996. TELEGRAPH READING MACHINE. ALLAN WEAVER, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 29, 1929. Serial No. 374,909. 6 Claims. (Cl. 178—4.)



1. The method of "reading" characters and converting them into a telegraph code, which consists in examining a plurality of fixed sub-areas of the area covered by a character, controlling the operation of a single light-sensitive device in accordance with the characteristics of the sub-areas examined, and operating selecting means in accordance with the operation of the light-sensitive device.

1,815,997. KEYBOARD FOR PERFORATING, ADDING, AND CALCULATING MACHINES. CLYDE DOWNS WILLIAMS, Woodside, Md. Filed Sept. 1, 1927. Serial No. 216,874. 3 Claims. (Cl. 235—60.)

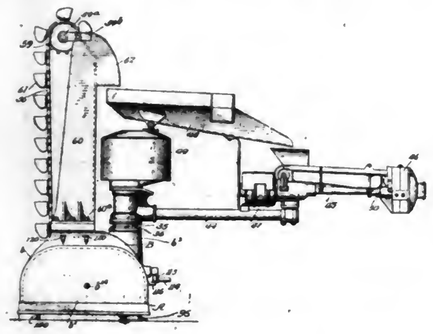


1. A device of the character described comprising a plurality of separate operable mechanisms, a manually shiftable keyboard having a series of depressible keys arranged in spaced relation transversely of said keyboard, means for supporting said keyboard for reciprocating backward and forward longitudinal movement, and connections between said keys and said operable mechanisms controlled by the longitudinal position of the keyboard.

1,815,998. WEATHER-PROOF COATING FOR RUBBER. SAMUEL C. WITHERSPOON, Edgewood, Md., and ARTHUR F. BEAL, Washington, D. C. Filed Dec. 16, 1929. Serial No. 414,613. 5 Claims. (Cl. 134—17.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

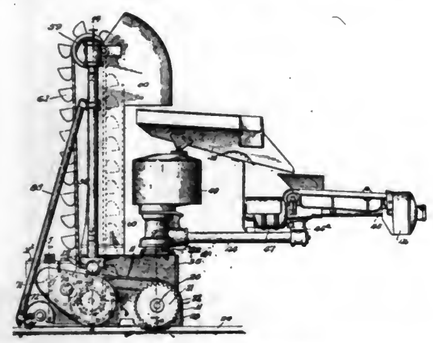
5. A protective coating composition for rubber comprising a quantity of nitro-cellulose, a larger quantity of paraffin, a still larger quantity of raw rubber, and a small amount of a dye and an anti-oxidant, said materials being dissolved in a solvent formed of amyl acetate and benzine.

1,815,999. PORTABLE MOLDING MACHINE. ELMER O. BEARDSLEY and WALTER F. PIPER, Chicago, Ill., assignors to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 15, 1926. Serial No. 88,180. 10 Claims. (Cl. 22—36.)



1. The combination with a molding machine, of a portable base for said machine, adapted to retain itself and the machine thereon stationary on a floor, and a housing over and fixed to the base, the molding machine being mounted on the housing, and levelling mechanism mounted inside of the housing.

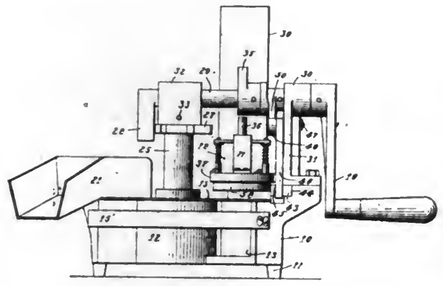
1,816,000. PORTABLE MOLDING MACHINE. ELMER O. BEARDSLEY and WALTER F. PIPER, Chicago, Ill., assignors to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 15, 1926. Serial No. 88,181. 9 Claims. (Cl. 22—36.)



1. The combination of a truck adapted to travel along a row of flasks on a foundry floor, said truck comprising side frames and a cross-member, a mast secured to the outer end of said cross-member, an arm pivotally mounted on the mast and operative to swing the flasks into and

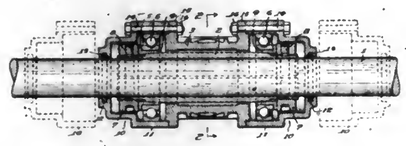
out of position adjacent the truck, a molding machine for filling the flasks mounted on the truck, and means for delivering sand to the molding machine.

1,816,001. CAPPING MACHINE. FRED L. BORCHERT, Rockford, Ill. Filed Oct. 22, 1926. Serial No. 143,341. 13 Claims. (Cl. 226—92.)



7. A machine of the character described comprising a base having a center post rising therefrom, a flat rotary carrier plate mounted on the base to turn relative to the post, said plate having a series of circumferentially arranged openings for the reception of cups or other containers to be capped, a cross-shaft supported from the base over the carrier, said shaft being arranged to be turned by means of a hand crank at the outer end thereof, a ratchet turning on the post secured to the carrier, and a tooth on the inner end of said cross-shaft arranged to engage the ratchet whereby to advance the carrier step by step in the turning of the cross-shaft, means for locking the carrier in position at each step by step advance thereof, a cap container, a reciprocating slide for feeding caps from said container, means operated in the turning of said shaft to reciprocate the slide in a predetermined timed relation with the advancement of the carrier by said ratchet, means whereby the locking means is unlocked in the turning of said shaft in a predetermined timed relation with the operation of said ratchet, and a cap applying plunger operated in the turning of said shaft in timed relation with the operation of said slide.

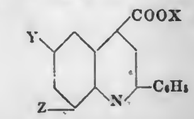
1,816,002. ANTIFRICTION BEARING FOR LINE SHAFTS AND THE LIKE. JAMES BOWEN, Manheim, Pa., assignor to Bond Foundry & Machine Company, Manheim, Pa., a Corporation of Pennsylvania. Filed Oct. 28, 1929. Serial No. 402,865. 5 Claims. (Cl. 308—189.)



1. In a bearing of the class described, a housing comprising a separate central portion, end pieces adapted to be supported thereon, and antifriction bearings comprising outer races, inner races and rolling elements disposed therebetween, adapted to be supported within said end pieces and axially outwardly of said central portion and to support a shaft maintained in non-rotatable relation to said inner races.

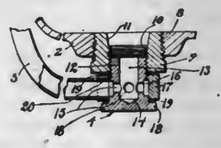
1,816,003. MANUFACTURE OF ESTERS OF 2-PHENYL-QUINOLINE-4-CARBOXYLIC ACID. ALBERT BUSCH, Brunswick, Germany, assignor to Johann A. Wülfing, Berlin, Germany. Filed Mar. 9, 1928. Serial No. 260,550. 2 Claims. (Cl. 260—39.)

1. The process of manufacturing a compound represented by the following structural formula:



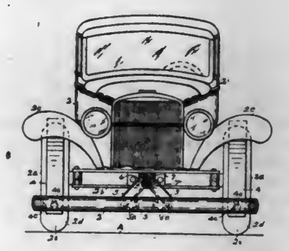
in which X represents the n-propyl-, n-butyl- and iso-butyl-radical, Y and Z a hydrogen atom, or the methyl radical, which process comprises causing the mono-X-H sulfate, in which X represents the n-propyl-, n-butyl- and iso-butyl-radical to react on carboxylic-acids of the above formula at a suitable temperature, substantially as described.

1,816,004. FITTING FOR FLUID CONTAINERS. HENRY DEWARD COLLIER, San Francisco, Calif., assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 27, 1925. Serial No. 5,168. 10 Claims. (Cl. 184—1.5.)



1. In combination with a lubricant-containing case of a motor vehicle, said case having a drainage outlet, a hollow plug fitting in the outlet and provided with a port, an annular member surrounding the ported portion of the plug spaced therefrom, means for holding said annular member in position and a tube communicating through the annular member and extending to a point above the normal oil level in the said case.

1,816,005. VEHICLE FENDER AND BRAKE. JOHN COLOMBO, Auburn, N. Y., assignor of three-fourths to Giuseppi Siciliano, Samuel Piro, and Frank Lo Brancko, York, Pa. Filed Jan. 29, 1931. Serial No. 512,023. 4 Claims. (Cl. 180—83.)



1. A low-swung fender for automobiles comprising a horizontal bar having a length greater than the gauge of the front wheels, flexible hangers carried by the mudguards of the automobile to normally support the ends of the said bar in spaced relation to the treads of the wheels adapted when said bar encounters objects in the path of the automobile to frictionally engage the treads of the wheels by the force of the impact, and hinged braces to reinforce the medial portion of said bar.

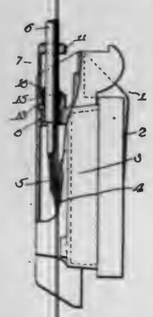
1,816,006. MANUFACTURE OF ZIRCONIUM COMPOUND REFRACTORIES. GEORGE J. EASTER, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed May 6, 1929. Serial No. 361,007. 8 Claims. (Cl. 75—22.5.)

1. The process of manufacturing refractories which consists in fusing a compound of zirconium, crushing the fused material, roasting it in an oxidizing atmosphere, forming a refractory body of the material thus treated, and firing the body.

1,816,007. REFINING MOLTEN METALS. GEORGE S. EVANS, Bronxville, N. Y., assignor to The Mathieson Alkali Works, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 18, 1929. Serial No. 400,743. 5 Claims. (Cl. 75—17.)

1. In refining molten metals with refining agents fusible at the temperature of the molten metal and of density less than that of the molten metal, the improvement which comprises running a primary charge of the molten metal into a refining receptacle and permitting it to cool therein in admixture with a charge of the refining agent to a temperature at which the refining agent is mechanically retained by the metal, and thereafter running a secondary charge of the molten metal into the refining receptacle onto the thus formed matte, and holding the resulting metal mixture in the refining receptacle until the matte has been heated by the addition of molten metal to a temperature at which the refining agent has been released.

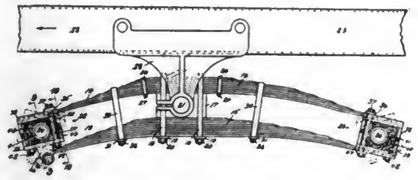
1,816,008. CABLE TERMINAL. GEORGE R. FOLDS, Evanston, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 24, 1930. Serial No. 430,784. 5 Claims. (Cl. 247—27.)



1. A cable stub adaptor permitting the attachment of a cable stub to a cable terminal comprising a body portion having a pocket provided therein to receive the end of said cable stub, solder in said pocket, and a fitting on said body portion adapted for attachment to said cable terminal, said fitting having an opening therein coextensive with said pocket and through which said cable stub extends whereby the said solder will surround the periphery of said cable stub and embed the same in said pocket.

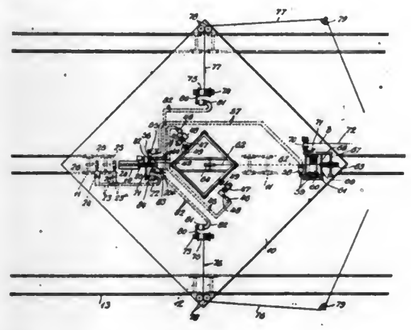
1,816,009. VEHICLE SPRING. ORLANDER W. FRY, Los Angeles, Calif., assignor to O. R. Fuller Co., Los Angeles, Calif., a Corporation of California. Filed Oct. 27, 1928. Serial No. 315,482. 5 Claims. (Cl. 267—38.)

1. A spring support for a vehicle having a frame, and a pair of substantially parallel axles, including a main semi-elliptical spring, an auxiliary semi-elliptical spring substantially parallel with and above said main spring, means for mounting said springs between their ends to said frame, and rocking bearings on said axles for supporting the ends of said springs, the ends of the main spring being connected with said bearings so as to rock the same as the load increases or diminishes, and the auxiliary spring



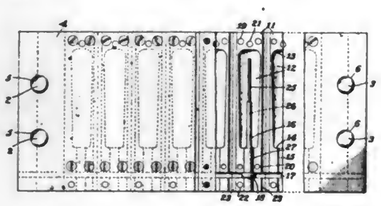
mounting with said bearings so that the point of support of said springs changes as the bearings are rocked, substantially as set forth.

1,816,010. MOORING APPARATUS FOR AIRCRAFT. HENRY G. GROS, Oakville, Conn., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 2, 1930. Serial No. 465,345. 8 Claims. (Cl. 244—2.)



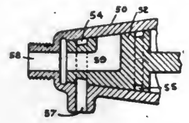
1. In a mooring apparatus for airships, the combination of a track, a platform arranged to travel on said track, an upwardly extensible mooring mast carried by said platform, a plurality of hydraulic variable speed gears for raising and lowering said mast at will, and for moving said platform along said track, and a single engine whereby all of said hydraulic gears are operated.

1,816,011. MOLD. ISAAC Q. GURNEE, Butler, N. J. Filed Sept. 28, 1929. Serial No. 395,841. 10 Claims. (Cl. 18—42.)



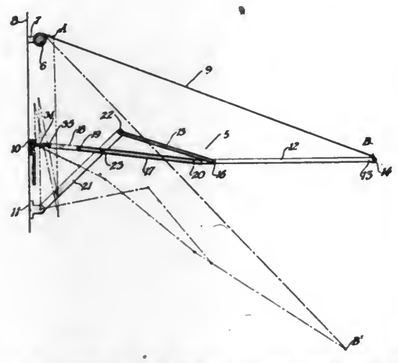
3. A mold comprising an upper and lower plate and a plurality of like dies with each plate, means for aligning the plates, each of said dies comprising a relatively hard flat metal member having a recess therein and a channel registering with said recess to support a core, a transverse passageway crossing said channel, all of said passageways forming one continuous passageway when said dies are in position and said dies being coated with chromium.

1,816,012. WATER STERILIZING FILLING DEVICE. HARRY J. HEINS, Jersey City, N. J., assignor to Kny-Scheerer Corporation, New York, N. Y., a Corporation of New York. Filed June 17, 1930. Serial No. 461,677. 5 Claims. (Cl. 251—94.)



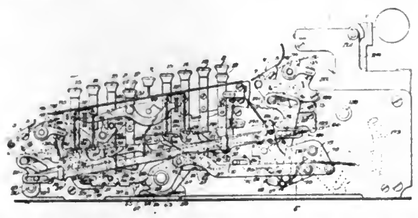
1. In a valve means for directing liquid passing therethrough in either of two directions and a shut off means and indicating means to show the operative position of said valve and separate means for draining said valve in case it leaks comprising annular horizontal head and foot channels connected by a third channel and a drain pipe connected to said head channel.

1,816,013. ADJUSTABLE AWNING ARM. HENRY C. HEISER, Fairview Village, Ohio, assignor to The Astrup Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 5, 1931. Serial No. 513,543. 9 Claims. (Cl. 156—44.)



4. In an irregular lazy tong awning arm, a link, a link chain connected to one end of said link, a wall bracket, each of the link chain links being provided with a recessed portion, and means on the bracket for selective engagement with the recessed portions of the links of said link chain.

1,816,014. CALCULATING MACHINE. OLIVER D. JOHANTGEN, Chicago, Ill., assignor to Victor Adding Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 27, 1925. Serial No. 26,270. 8 Claims. (Cl. 235—60.)



1. In a calculating machine, a driving shaft oscillatable back and forth, an oscillatable driven shaft which controls the movement of the accumulator actuators, a flexible transmission between said shafts whereby the driven shaft may lag behind and later catch up with the driving shaft, and means for preventing the return movement of the driving member before the completion of the advance movement of the driven member, said preventing means comprising a toggle mechanism, means movable independently of said driven member tending to break said toggle, and said means being controlled by said driven member whereby said toggle-breaking means are held against action until completion of the advance movement of the driven member and are thereafter released to break the toggle.

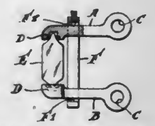
6. In a calculating machine, an actuator shiftable back and forth, an accumulator movable into and out of co-operative relation with respect to said actuator, and means for controlling the movement of said accumulator, comprising a slidable member, slidable in one direction before the beginning of the advance movement of the actuator and slidable in the reverse direction after the advance and before the return movement of the actuator, sub-total key mechanism for placing the accumulator in driven relation with respect to said slidable member on the advance movement of said member, and total key mechanism for placing the accumulator in driven relationship with respect to said slide member on both the advance and return movement of said member.

1,816,015. WRENCH. JAMES R. KERLIN, Los Angeles, Calif. Filed July 16, 1929. Serial No. 378,603. 8 Claims. (Cl. 81—154.)



1. A wrench comprising a hollow handle tapered externally and internally from end to end, said handle having a cut-away portion on one edge, and a pair of movable jaws having wedge-shaped shanks positioned within said handle, said shanks having their ends positioned in said cut-away portion so that either may be engaged by the thumb to shift the same.

1,816,016. FRANGIBLE LINK. IRA W. KNIGHT, Providence, R. I., assignor to General Fire Extinguisher Company, Providence, R. I., a Corporation of Delaware. Filed Feb. 1, 1929. Serial No. 336,864. 5 Claims. (Cl. 169—42.)



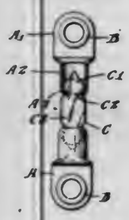
1. A frangible link comprising, in combination, members adapted to be connected to ties and separably connected to each other, and a frangible vessel arranged to resist compressively the tendency of said members to separate; said vessel containing expansible fluid adapted upon being heated to a predetermined degree to destroy said vessel and thereby permit said members to separate.

2. A frangible link comprising, in combination, a member adapted to be connected to a tie; a second member adapted to be connected to a tie; and means holding said members from separating comprising an element under compression; and means for adjusting the compression on said element.

1,816,017. LINK. ALBERT J. LOEPSINGER, Providence, R. I., assignor to General Fire Extinguisher Company, Providence, R. I., a Corporation of Delaware. Filed Jan. 2, 1929. Serial No. 329,817. 3 Claims. (Cl. 169—42.)

1. A thermally responsive link comprising, in combination, separable means adapted to be connected to ties and

a frangible vessel holding said separable means from separating and containing an expansible fluid adapted upon rise of temperature to a predetermined degree to destroy

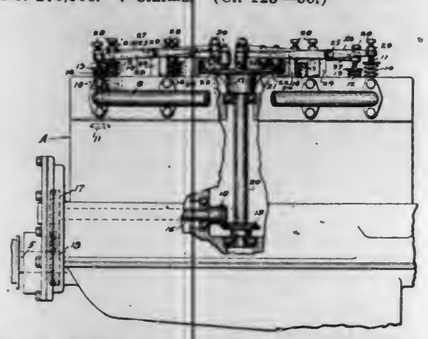


said vessel and thereby free said separable means; the said means being connected to the ends of said frangible vessel to permit limited relative movement between them.

1,816,018. CONCENTRATION OF LATEX BY CENTRIFUGAL ACTION. CHAUNCEY C. LOOMIS, Yonkers, and HORACE E. STUMP, Brooklyn, N. Y., assignors, by mesne assignments, to United States Rubber Company, a Corporation of New Jersey. Filed Mar. 10, 1923. Serial No. 624,273. 9 Claims. (Cl. 18—50.)

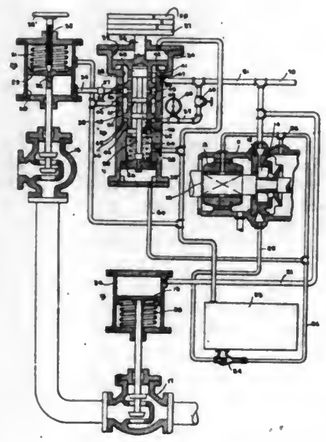
5. The process of treating latex which comprises adding thereto an alkali and an organic protective colloid, centrifuging the treated latex, and separating a concentrated thick creamy uncoagulated water-dispersible product.

1,816,019. VALVE LIFTING AND TIMING DEVICE FOR INTERNAL COMBUSTION ENGINES. FRED W. MARXEN, Robbinsdale, Minn., assignor of one-sixth to Olof Orville Mattson and one-sixth to Audley B. Wallace, Minneapolis, Minn. Filed May 11, 1928. Serial No. 276,906. 7 Claims. (Cl. 123—90.)



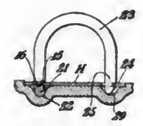
2. A valve lifting and timing device for internal combustion engines having a plurality of cylinders and an intake and an exhaust valve for each cylinder, comprising a rotary disk, a plurality of intake cams mounted on said disk in symmetrical arrangement relative to the center of the disk, a plurality of exhaust cams mounted on said disk in symmetrical arrangement relative to the center of the disk, said exhaust cams being placed at different radial distances from the center of said disk than said intake cams, an intake valve rocker arm for each cylinder having one end so disposed relative to said disk that said intake cams will strike the same during rotation of the disk to rock the arm, an exhaust rocker arm for each cylinder having one end so disposed relative to the disk that said exhaust cam will strike the same to rock the arm as the disk is rotated, the intake and exhaust rocker arms for each cylinder being so disposed relative to each other that the intake cams will strike the intake rocker arms when the piston of the particular cylinder is three strokes ahead of the point where the exhaust cams will strike the exhaust rocker arm for the particular cylinder.

1,816,020. AUTOMATIC STOP GOVERNOR. FRANK A. MEYER, Norwood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 1, 1928. Serial No. 296,832. 5 Claims. (Cl. 137—140.)



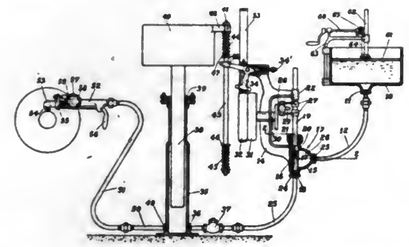
1. The combination with a prime mover and a throttle valve therefor, of mechanism for operating said throttle valve, means providing a fluid pressure varying as a function of the speed of the prime mover, an automatic stop governor including an element having an area of surface subjected to said fluid pressure and adapted to control said valve operating mechanism to close the throttle valve upon a predetermined pressure, means for applying fluid pressure to an additional area of surface of said element to effect movement thereof at a pressure on the first-mentioned area of less than the predetermined pressure, and means for indicating the pressure on said additional area.

1,816,021. TEMPORARY BINDER. MAX MEYERSON, New York, N. Y. Filed Jan. 25, 1929. Serial No. 334,897. 10 Claims. (Cl. 129—24.)



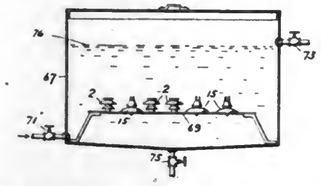
5. A temporary binder comprising a back having a seat therein, a sheet retainer comprising a member having a stem portion and a ring shaped portion, the stem portion being arranged within said seat intended to rotate therein about the longitudinal axis of said stem portion, a spring plate attached to the back exerting a continuous spring pressure against said stem portion and having an opening through which the ring shaped portion extends, and said spring plate and said stem portion each having a projection thereon, said projections being cooperative with each other to provide snap acting movement of the sheet retainer.

1,816,022. GREASE FEEDER. WILLIAM L. MORRIS, Chicago, Ill., assignor to Bendix Aviation Corporation, Chicago, Ill., a Corporation of Delaware. Original application filed Aug. 7, 1916, Serial No. 113,653. Divided and this application filed Jan. 31, 1930. Serial No. 424,999. 30 Claims. (Cl. 221—47.1.)



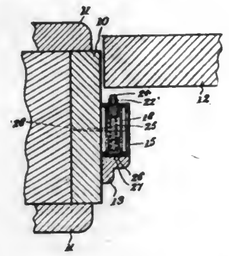
1. In a lubricant feeder, a lubricant reservoir, a gravity operated weight for maintaining a supply of lubricant under pressure therein, a portable injecting device adapted to be attached to an element to be lubricated, and a flexible conduit connecting said device with the lubricant reservoir.

1,816,023. METHOD OF MANUFACTURING INSULATORS. DAVID HENRY OSBORNE, Jeffersonville, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Mar. 17, 1927, Serial No. 176,268. Divided and this application filed Dec. 20, 1928. Serial No. 327,312. 9 Claims. (Cl. 18—59.)



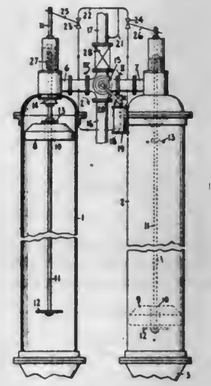
1. The method of manufacturing insulators comprising assembling insulator components with wet cement, maintaining an ambient humidified atmosphere about the assembled components and simultaneously cooling them.

1,816,024. DOOR SILENCER DEVICE. VICTOR PETERSEN, Omaha, Nebr. Filed Feb. 18, 1930. Serial No. 429,356. 4 Claims. (Cl. 16—85.)



1. A door silencer comprising a casing composed of a plate and flanges on the plate, one of the flanges being perforated and having a pressed-in part around the perforation, a tube between the flanges registering with the perforation and confined by said pressed-in part, and a yieldably-pressed plunger in and projecting from said tube and perforated flange.

1,816,025. LIQUID FEEDING APPARATUS. IGNAZ SABLIK, Stramberg, Czechoslovakia. Filed Jan. 4, 1930, Serial No. 418,457, and in Czechoslovakia Jan. 19, 1929. 3 Claims. (Cl. 103—246.)



1. In a liquid feeding apparatus, the combination with two tanks each having intake and discharge openings at the bottom, suction and pressure pipes, ducts leading from said suction and pressure pipes to said tanks, a valve adapted to alternately connect said pressure and suction pipes with each of said tanks, one of said tanks being connected with the suction pipe when the other tank is connected with the pressure pipe, a pressure cylinder having a piston operatively related to said valve, valves for controlling the admission of pressure to said pressure cylinder, a valve in each of said tanks controlling the communication of the tank with said ducts and floats in said tanks controlling the last mentioned valves and valves controlling the admission of pressure to said pressure cylinder.

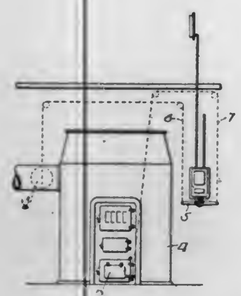
1,816,026. PROCESS FOR PREPARING ANTIGENS. JACOB M. SCHAFFER, Washington, D. C., assignor to Arthur M. Hyde, as Secretary of Agriculture of the United States of America. Filed Nov. 25, 1930. Serial No. 498,106. 4 Claims. (Cl. 167—78.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 870 O. G. 757.)

1. A diagnostic product comprising a heavy suspension of bacteria belonging to a disease producing class, an organic dye, such as is employed in staining bacteria, contrasting in color with the material to be tested, in amount sufficient to heavily stain the bacteria, an organic preservative which does not interfere with the diagnostic test, said product possessing the property when mixed with blood or serum, of rapidly agglutinating in the case of positive reactions into deeply stained clumps of bacteria which stand out in sharp contrast to the material to be tested, especially when viewed against a white background.

1,816,027. DRAFT CONTROLLER. ROY M. SCHULTZ, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1928, Serial No. 327,930. Renewed Sept. 22, 1930. 26 Claims. (Cl. 236—16.)

1. An electric control for operating the air inlet damper and the check damper of a heater comprising, in combination, an electric circuit including an electrically operated controller for actuating the air inlet damper and

the check damper, a thermostat in said circuit for controlling said electrically operated controller, and means



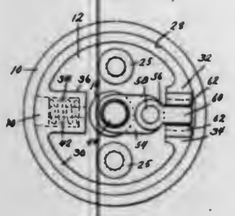
at said controller for disconnecting said dampers from said controller for independent operation and for simultaneously opening or closing said circuit.

1,816,028. RUNNING BOARD AND HOSE CARRIER. FREDERICK G. THWAITS, Wauwatosa, Wis., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 24, 1929. Serial No. 402,261. 2 Claims. (Cl. 280—5.)



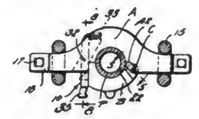
1. A vehicle transportable housing comprising, an elongated tank, an elongated compartment secured to and forming a running board extending along each of the opposite sides of said tank, said elongated compartments being accessible only from the rear of said tank, and other compartments suspended from said elongated compartments and extending downwardly into the space between the front and rear wheels of the vehicle, said other compartments being accessible only from the sides of said tank.

1,816,029. SHOCK ABSORBER. HENRY A. TUTTLE, Upton, Mass.; Jennie L. Tuttle executrix of said Henry A. Tuttle, deceased. Filed Oct. 5, 1928. Serial No. 310,611. 12 Claims. (Cl. 188—130.)



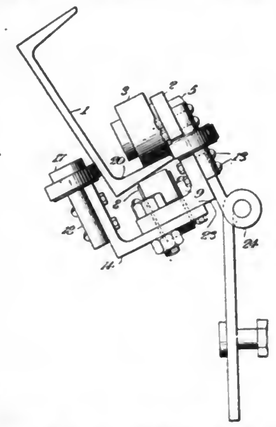
1. A shock absorber having a stationary brake drum, an internally-expanding brake shoe having confronting ends and located internally of and cooperating with said drum, and a reciprocable operating member, the movements of which are to be controlled, having an operative connection with said shoe between said confronting ends and which is arranged by its movement to expand said shoe into frictional engagement with said drum and also to rotate said shoe.

1,816,030. ELEVATOR. CHARLES E. WILCOX, Long Beach, Calif. Filed May 31, 1930. Serial No. 458,406. 12 Claims. (Cl. 294—90.)



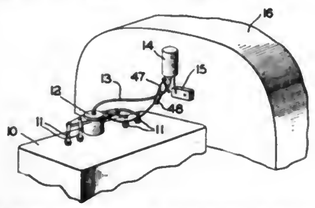
1. An elevator including, two sections adapted to be arranged around an object, and means pivotally connecting the sections and operable by a projecting part on the object to operate the sections together around the object.

1,816,031. TROLLEY. MARTIN WILLIS, New Orleans, La., assignor to R. J. Dorn Co., Inc., New Orleans, La., a Corporation of Louisiana. Filed Nov. 19, 1929. Serial No. 408,196. 12 Claims. (Cl. 104—93.)



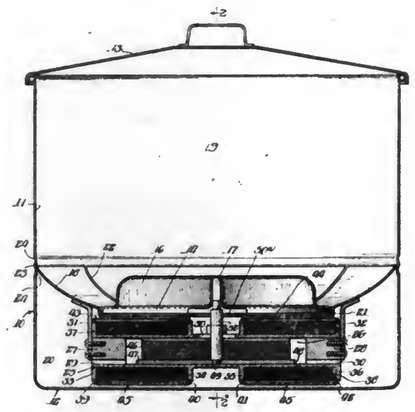
8. In combination, an overhead rail having a downwardly directed web and an upwardly sloping flange extending from one side thereof, a trolley having a roller riding on the upper surface of said flange and a member on said trolley riding on the opposite side of the web from the flange.

1,816,032. ENGINE STARTING DEVICE. FLOYD R. WOOD, Grand Rapids, Mich. Filed Dec. 10, 1930. Serial No. 501,230. 8 Claims. (Cl. 123—146.5.)



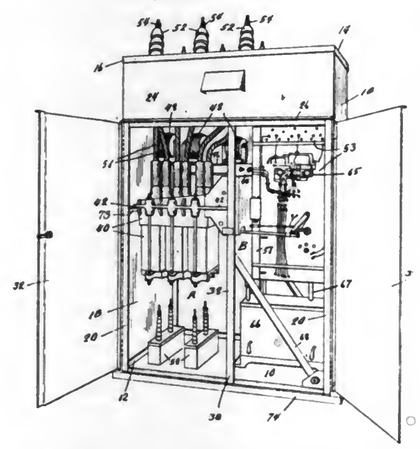
1. In an electrical timing arrangement having a grounded breaker arm, a contact point adapted to be operatively associated therewith and means to adjustably support the contact point in operative or inoperative position, the combination of a support, means adapted to mount the support upon the aforesaid means which supports the contact point, a metal arm extending from the support and adapted to lie in front of the contact point when the same is in inoperative position, said metal arm being insulated from the supporting means, an auxiliary contact point affixed to the metal arm and electrical conducting means fastened to the metal arm.

1,816,033. LAUNDRY MACHINE. IRVEN H. WILSEY, Chicago, Ill. Filed June 17, 1929. Serial No. 371,632. 27 Claims. (Cl. 259—101.)



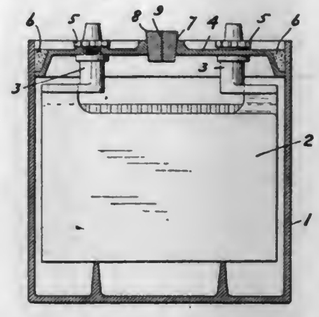
1. A laundry machine comprising, in combination, a container adapted to contain water and fabrics, an agitator in said container, and an electric driving mechanism operatively connected to said agitator, said driving mechanism being mounted in said container below the normal water level.

1,816,034. OUTDOOR SWITCH HOUSE. MORRIS B. WOOD, Somerville, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1927. Serial No. 209,744. 9 Claims. (Cl. 247—9.)



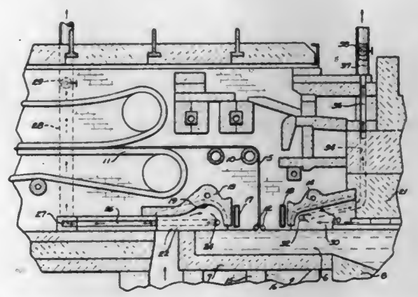
1. An outdoor electric switch house having means providing therein a high tension compartment and isolated therefrom a low tension compartment, high voltage equipment contained in said first compartment including an electric switch, and a control panel contained in said second compartment having switch operating mechanism extended into said high tension compartment to operate said electric switch, each of said high and low tension compartments having separate openings both at the front and back of the house on opposite sides of and facing said switch and panel respectively, and doors for said openings.

1,816,035. STORAGE BATTERY. JOSEPH LESTER WOODBRIDGE, Philadelphia, Pa. Filed Apr. 28, 1928. Serial No. 273,449. 3 Claims. (Cl. 136—177.)



1. The combination of a battery in a charged and dumped condition containing a residue of electrolyte and a permanently open vent of such minute cross-section compared to its length that the gases produced by local action between the residual electrolyte and the active material of the plates are caused to escape at a velocity which substantially offsets the diffusion of air into the cell, the proportion of length to cross-section of the ducts being adapted to retard the admission of air into the battery and at the same time to permit gas generated to escape.

1,816,036. SHEET GLASS DRAWING APPARATUS. JAMES T. ZELLERS, Shreveport, La., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 11, 1928. Serial No. 284,303. 8 Claims. (Cl. 49—17.)

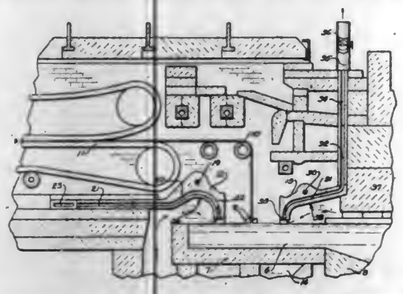


8. In sheet glass apparatus, a receptacle containing a mass of molten glass, means for forming a sheet therefrom, a tile arranged above the molten glass in spaced relation thereto, and members arranged at opposite ends of the tile and forming end closures for the space between the tile and the molten glass, said members having flues therein for conducting heat from beneath said tile.

1,816,037. SHEET GLASS DRAWING APPARATUS. JAMES T. ZELLERS, Shreveport, La., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 11, 1928. Serial No. 284,304. 2 Claims. (Cl. 49—17.)

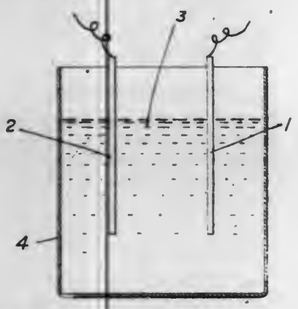
2. In sheet glass drawing apparatus, a receptacle containing a mass of molten glass, means for drawing a sheet therefrom, a lip tile arranged above the molten glass at one side of said sheet, said lip tile being composed of a plurality of sections positioned side by side with their adjacent edges abutting one another, each of said sections having a flue extending substantially horizontally therethrough, the for-

ward ends of said flues being directed downwardly toward and terminating adjacent the surface of the molten glass,



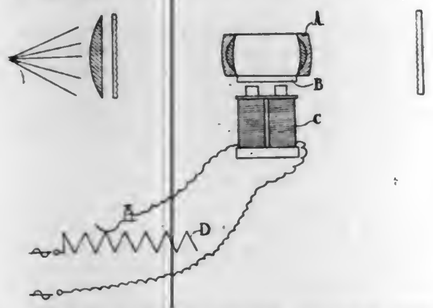
a common flue chamber with which the opposite ends of said flues communicate, a stack, and means placing the flue chamber in communication with said stack.

1,816,038. ELECTROLYTIC RECTIFIER. FRANK G. BEETEM, Philadelphia, Pa. Filed Mar. 1, 1926. Serial No. 91,653. 2 Claims. (Cl. 175—318.)



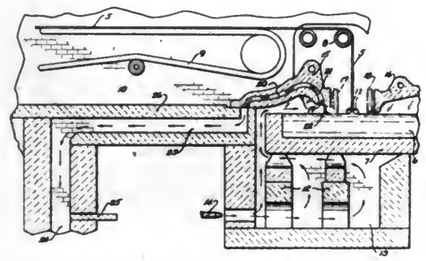
1. An electrolyte for an electrolytic rectifier comprising a fluid admixture of water, mono-ammonium phosphate, dibasic potassium phosphate and citric acid.

1,816,039. PRINTING DEVICE FOR COLORED FILMS. RODOLPHE BERTHON, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 28, 1929, Serial No. 350,623, and in France Apr. 12, 1928. 2 Claims. (Cl. 88—24.)



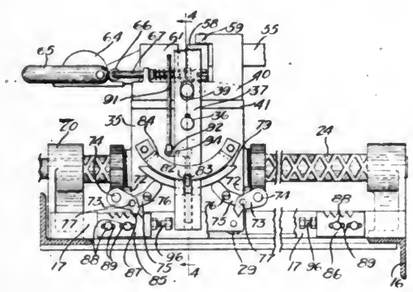
1. In an apparatus for printing reticulated films, a projecting lens interposed between a linearly reticulated film to be copied and a blank copying film; an iron armature secured to said lens; an electromagnet associated with said armature to vibrate the same and thereby displace the optical center of the lens with relation to the network of the film to be copied, so that each striation of said network will be spread out, as projected, over a surface equal to an interval of the network; and means for imparting a very large number of vibrations per image to said armature and lens.

1,816,040. SHEET GLASS DRAWING APPARATUS. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 31, 1928. Serial No. 281,741. 20 Claims. (Cl. 49—17.)



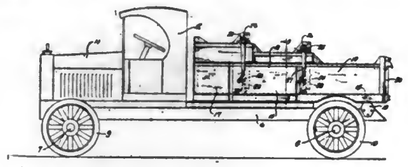
12. In sheet glass apparatus, a receptacle containing a mass of molten glass, means for drawing a sheet therefrom, a lip-tile positioned above the molten glass at one side of the sheet and shaped to provide a recess therebeneath, the end of said tile nearest the base of the sheet terminating in a downwardly extending lip spaced from the end of the receptacle containing the molten glass, means for creating a current of heated gases beneath the receptacle and for directing said gases upwardly of the end of the receptacle and into the recess formed between the tile and the glass thereunder, a flue formed through the tile and communicating with the recess at the end thereof nearest the sheet being formed for withdrawing the heated gases from said recess, and means for controlling the withdrawal of said gases.

1,816,041. REMOVABLE BODY MECHANISM FOR TRUCKS. WILLIAM AUSTIN DENEHIE, Los Angeles, Calif. Filed Apr. 12, 1929. Serial No. 354,682. 9 Claims. (Cl. 214—38.)



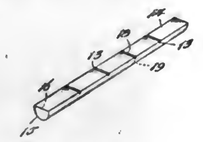
1. In apparatus of the class described: a truck having a longitudinally movable head and being adapted to receive a body; means for moving said head; an attachment between said head and said body for moving said body on and off of said truck; and locking means operative between said head and said truck engaging at the extremity of the travel of said head for preventing longitudinal movement thereof.

1,816,042. LOAD EQUALIZING TRUCK BODY. CHARLES G. EISENBERG, Jr., Milwaukee, Wis., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 8, 1928. Serial No. 323,348. 7 Claims. (Cl. 298—1.)



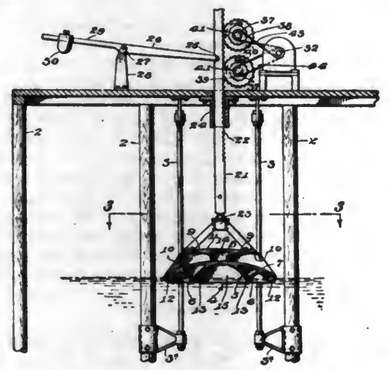
1. The combination with a truck frame mounted on front and rear supporting wheels, of a load equalizing body mounted on said truck frame, said body having side walls forwardly stepped as to height, the stepped walls decreasing as to length toward the forward end portion of the body, whereby the greater proportion of a load within said body is distributed toward the front of the body and is materially borne by the front supporting wheels.

1,816,043. CAUSTIC ALKALI STICK. HAROLD A. FALES, Leonia, N. J., assignor to The Fales Chemical Company, Inc., Cornwall Landing, N. Y., a Corporation of New York. Filed Nov. 30, 1928. Serial No. 322,951. 1 Claim. (Cl. 23—184.)



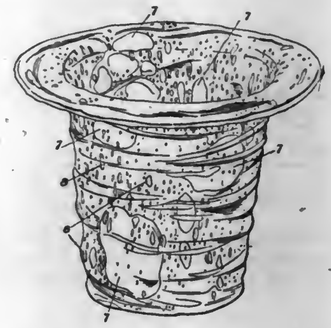
A flat sided elongated stick of a caustic alkali of uniform cross sectional area throughout its length, said stick being substantially semicircular in cross section, said flat side provided with longitudinally spaced apart grooves forming score lines thereby providing weakened lines at the portion of greatest structural strength of the stick to facilitate a rapid and clean separating of the stick into separate units of substantially equal weight.

1,816,044. WAVE MOTOR. JOHN GALLAGHER, Philadelphia, Pa. Filed Apr. 4, 1930. Serial No. 441,449. 4 Claims. (Cl. 253—10.)



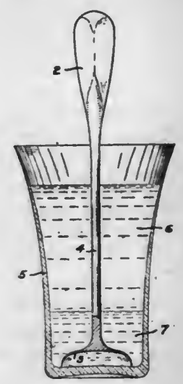
1. A wave motor, comprising a float having a concave under surface, a convex upper surface, and an upward extension from said upper surface containing an air-tight chamber and provided with laterally extending flanges having concave under surfaces.

1,816,045. BUBBLED COLORED GLASS ARTICLES. REUBEN HALEY, Beaver, Pa. Filed Oct. 7, 1927. Serial No. 224,660. 2 Claims. (Cl. 49—79.)



2. The method of making a glass article, which consists in gathering a core of molten glass, in causing finely divided bubble forming material and finely divided colored glass to adhere thereto, then in gathering an additional amount of molten glass over said core and then blowing the combined gather to form the article whereby the gases forming the bubbles will be generated at the same time that the pieces of colored glass are fusing into the mass, for the purpose set forth.

1,816,046. MIXING DEVICE. HUBERT G. JOHANNES, Milwaukee, Wis., assignor to Albert Pickbarth Company, Inc., Chicago, Ill., a Corporation of New York. Filed Oct. 29, 1928. Serial No. 315,641. 3 Claims. (Cl. 259—144.)

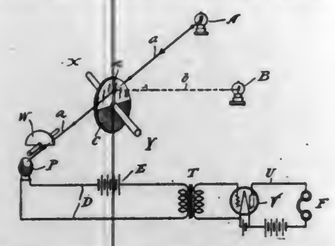


1. In combination, a tumbler having a substantially flat bottom and a substantially cylindrical internal surface adjacent to said bottom, and a mixer comprising a slightly dished flat circular plate of diameter but slightly less than and cooperable with said bottom, and a handle of greater length than the height of said tumbler rigidly attached to the upper central portion of said plate and extending upwardly therefrom, said handle having a flat upper gripping portion.

1,816,047. PHOTOMETER. CARL W. KEUFFEL, Weehawken, N. J., assignor to Keuffel & Esser Company, Hoboken, N. J., a Corporation of New Jersey. Filed June 16, 1927. Serial No. 199,162. 4 Claims. (Cl. 88—23.)

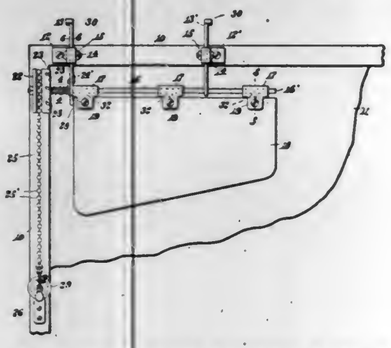
1. A photometer comprising an electrical circuit including a photo-electric cell, means for directing two beams of light in alternation into said cell at an audio

frequency rate, and an electrically energized sound reproducing instrument associated with said circuit, and caused to be operated by fluctuations in said circuit resulting



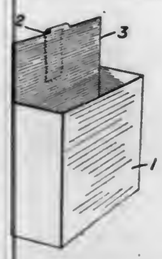
from the differences of intensity in the said beams of light, and means interposed before said photo-electric cell to interrupt said beams at relatively longer intervals.

1,816,048. ANTICLARE DEVICE FOR MOTOR CARS. JUSTUS R. KINNEY, Jamaica Plain, Mass. Filed Jan. 24, 1929. Serial No. 334,661. 6 Claims. (Cl. 296—97.)



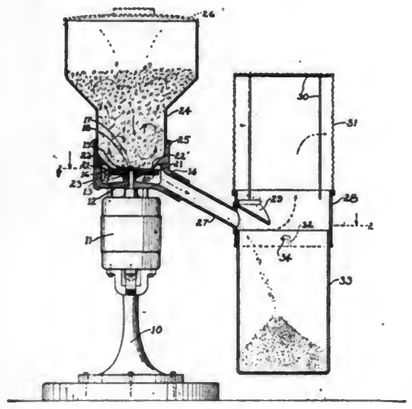
1. The combination with a windshield, a pair of supporting arms having bearings therein; a shaft adapted to oscillate in said bearings; a colored window; clips secured to the upper edge of said window at opposite ends and midway thereof; means for clamping said clips to said shaft; a spring coacting with said shaft to retain the window in its upper position under normal conditions; means for varying the tension of said spring; and a pulling member for oscillating said shaft and moving said window into vertical position.

1,816,049. ARTICLE OF PERSONAL EQUIPMENT. CHESTER W. LARNER, Philadelphia, Pa. Filed Feb. 2, 1929. Serial No. 337,082. 2 Claims. (Cl. 206—37.)



1. An article of personal equipment comprising an open top ash receiver, a flexible guard integral with said receiver and adapted by bending to closed position to cooperate with said receiver to form a holder for smoker supplies and by bending to open position to form a guard for clothing to which the article is applied, and a flexible fastening means integral with said guard adapted by bending to closed position to form a fastener for said holder and by bending to open position to form a support for attaching said article to the clothing of the user thereof.

1,816,050. ATTRITION MILL. ROYAL LEE, Milwaukee, Wis., assignor to Lee Engineering Research Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 8, 1927. Serial No. 182,055. 7 Claims. (Cl. 83—7.)



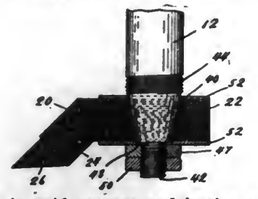
1. An attrition mill comprising a rotary flour-producing abrasive member, and a receptacle forming with said rotary abrasive member a chamber receiving grains of material to be ground, there being a continuous constricted slit-like orifice between said rotary abrasive member and the adjacent receptacle for discharge of floured material, said orifice being of substantially uniform width throughout its length.

1,816,051. METHOD FOR TREATING PHOSPHATE MATERIAL. STEWART J. LLOYD and ABSALOM MASON KENNEDY, University, Ala., assignors to Chemical Products Company, a Corporation of Florida. Filed May 21, 1928. Serial No. 279,616. 3 Claims. (Cl. 23—107.)

1. A cyclic process for the production of ammonium phosphate from tricalcium phosphate which consists in treating the phosphate material with at least six parts of ammonium bisulphate for each equivalent of P_2O_5 in the phosphate material and separating the resulting calcium sulphate as precipitate from the solution, treating the solution with at least six parts of ammonia to each equivalent of P_2O_5 in the solution to form triammonium phosphate and to separate the phosphates from the sulphates contained in solution, and treating the sulphates to form ammonium bisulphate for reuse in the cycle.

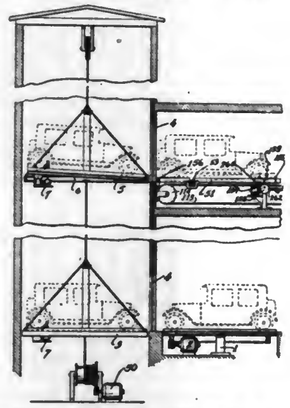
1,816,052. ELECTRIC SWITCH AND CONTACT STRUCTURE THEREFOR. WILLIAM R. MANN, Sharon, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Nov. 30, 1928. Serial No. 322,686. 5 Claims. (Cl. 200—166.)

1. In an electric switch, the combination of a brush holder, a laminated brush member having a passage therethrough which is so formed that the laminæ have tapered faces in said passage, and means connected with said



holder located in said passage and having a surface corresponding with and in independent engagement with the tapered faces of the laminæ.

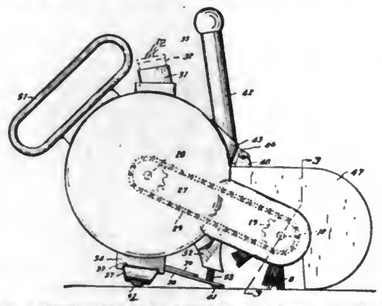
1,816,053. METHOD AND APPARATUS FOR HANDLING AND STORING VEHICLES. CHARLES T. MCGAVIN, Los Angeles, Calif. Filed Sept. 10, 1928. Serial No. 304,851. 21 Claims. (Cl. 214—16.1.)



1. A vehicle storing system comprising, an aisle, vehicle guides extending longitudinally down said aisle, a plurality of vehicle receiving means adjoining the aisle, means for selectively moving said last named means into and out of said aisle and transversely to said vehicle guides, means for tilting said vehicle receiving means, and means for moving vehicles along said aisle.

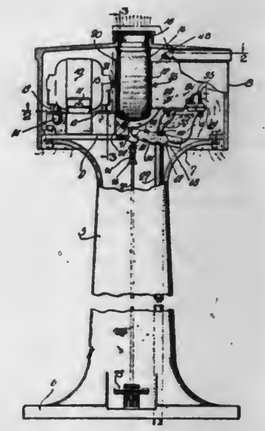
21. A method of handling and storing vehicles comprising, moving a vehicle in a vertical plane, tilting said vehicle toward an aisle, moving the vehicle longitudinally down said aisle, then tilting the vehicle in an opposed direction and moving the tilted vehicle laterally out of said aisle.

1,816,054. BLOCK CLEANING MACHINE. LOUIS N. PELKEY, Howell, Mich. Filed Sept. 22, 1927. Serial No. 221,251. 2 Claims. (Cl. 15—23.)



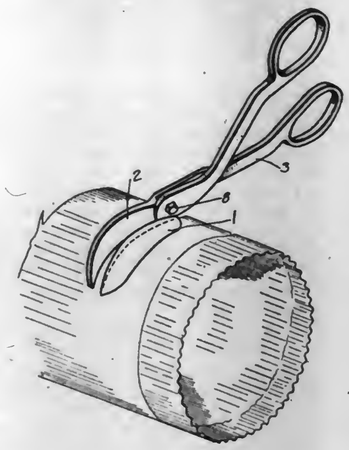
1. In a block cleaning machine, a casing, a rotary brush journaled thereto, means for driving said brush, a three-point support of T-formation for said casing, said support consisting of a bowed strip of spring metal secured to said casing transversely thereof and of a strip of metal extending from the first named strip forwardly and longitudinally of said casing.

1,816,055. DRIER. WALTER S. PFEIFER, Milwaukee, Wis. Filed Oct. 26, 1927. Serial No. 228,783. 5 Claims. (Cl. 219—39.)



1. In an appliance of the character described, a supporting base, drying mechanism mounted on the base and including a blower having an air inlet and outlet, a housing entirely enclosing the drying mechanism, the housing having an opening with which the air outlet registers, and an air inlet passage between the adjacent edges of the housing and base and through which air enters the interior of the housing to the blower.

1,816,056. CYLINDRICAL CUTTING SHEARS. EDWARD J. RICHARD, Aberdeen, Wash. Filed July 5, 1928. Serial No. 290,490. 1 Claim. (Cl. 30—13.)



In a pair of shears, pivotally connected handles, blades integral with the handles offset with respect to the line of the handles on the opposite side of the pivotal connection,

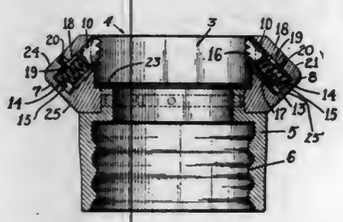
the blades being wider than they are thick, one blade having its greater width in a plane substantially parallel with the pivot, and the other having its greater width perpendicular thereto, the parallel blade being curved transversely and longitudinally away from the pivotal connection and the perpendicular blade being curved longitudinally in the direction of the longitudinal curvature of the parallel blade.

1,816,057. COMBINATION INK BOTTLE. SOLOMON M. SAGER, Chicago, Ill. Filed May 23, 1929. Serial No. 365,390. 1 Claim. (Cl. 120—4.)



An ink container having an integrally formed holder angularly projecting into the ink containing space thereof and closed at one end whereby a pen may be removably engaged in and supported by said container, said holder being arranged extending into the container to a point below the horizontal median line thereof.

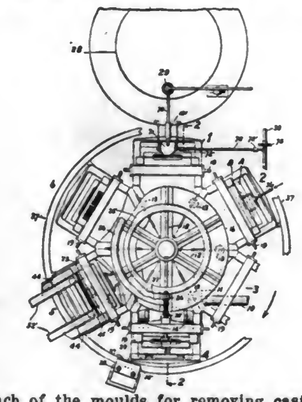
1,816,058. HOSE COUPLING. THEODORE SLOVINSKI, Grand Rapids, Mich. Filed June 27, 1929. Serial No. 374,201. 2 Claims. (Cl. 285—150.)



1. In a hose coupling, a rotative member provided with spaced projecting lugs whereby said member may be rotated, said lugs being formed with cylindrical cavities upwardly and inwardly inclined with respect to the axis of said member, said cavities being open at the top and closed at the bottom, cylindrical dogs movably fitting the cavities in the lugs, each of the said dogs having a chamber open at its lower end, coil springs arranged in said chambers of the dogs and acting against the bottoms of the cavities in the lugs to press the dogs upwardly, and means removable from the exterior of the lugs to limit the upward movement of the dogs.

1,816,059. ROTARY CASTING MACHINE. EDWARD W. SMITH, Philadelphia, Pa. Filed Dec. 24, 1928. Serial No. 328,100. 36 Claims. (Cl. 22—77.)

5. In a casting machine adapted for making parts for storage batteries, a melting pot, a pump for transferring molten metal from said pot to a ladle, a ladle adapted to feed each of a plurality of moulds in succession, a plurality of moulds mounted to rotate about a vertical axis, one part of each of the moulds being radially movable with respect to the remainder of the mould, a cam to actuate mould parts, a fork mounted above and adja-



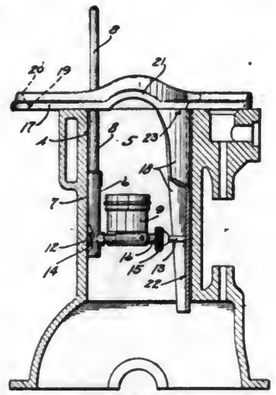
cent to each of the moulds for removing castings therefrom, said forks being radially movable and a cam to move said forks.

1,816,060. PARTITION CLIP. JOHN STACK, Chicago, Ill., assignor to Duluth Show Case Company, Duluth, Minn., a Corporation of Minnesota. Filed Mar. 2, 1928. Serial No. 258,540. 6 Claims. (Cl. 312—140.)



1. A clip comprising a pair of wings, a strip connecting said wings at their inner ends, a pair of clamp members, a base strip connecting said clamp members and connected to the lower end of the connecting strip, one of said clamp members comprising a margin strip connected to the ends of the base strip and to the upper end of the connecting strip.

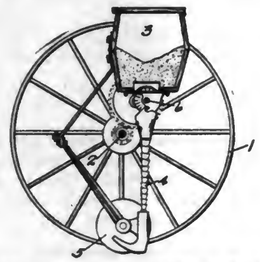
1,816,061. TESTING DEVICE FOR CYLINDERS. ADOLPH STORM, Minneapolis, Minn., assignor to Storm Manufacturing Co., Inc., Minneapolis, Minn., a Corporation of Minnesota. Filed Apr. 7, 1928. Serial No. 268,179. 3 Claims. (Cl. 33—178.)



1. A device of the class described including a head having a positioning face arranged to engage a cylinder block at the top thereof and loosely support the device thereon, said head being provided with a long fixed flat way perpendicular to said face and arranged to extend into one of

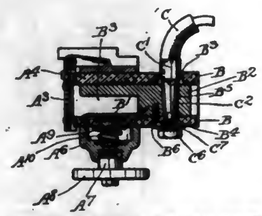
the cylinders of said block, said device also having a pair of positioning contacts arranged to engage the wall of the cylinder at circumferentially spaced points and position the device with the plane which is perpendicular to and bisects its way, including the axis of said cylinder.

1,816,062. GRAIN DRILL. JOHN J. TATE, Albion, Wash. Filed Jan. 27, 1930. Serial No. 423,635. 4 Claims. (Cl. 221—137.)



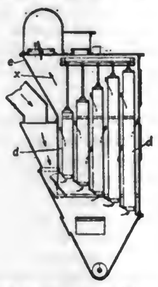
1. In a grain drill, the combination with a grain box having a slotted, open ring in its bottom portion, of a reversible feed cup, bolts and nuts for clamping the cup to said slotted ring, a seed wheel in the cup and a feed shaft passing through the cup and wheel as described.

1,816,063. ELECTRIC CONNECTER. PHILIP S. WESTCOTT, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 25, 1930. Serial No. 423,299. 6 Claims. (Cl. 173—332.)



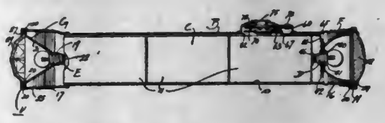
1. In combination, an insulating housing, a block socketed to removably engage a connecter, means for holding the block in position in the housing, a conductor, a tapered terminal spool on the end thereof, socketed in the block, threaded at its end, a nut on the threaded end engaging the exterior of the housing to simultaneously make a firm electric contact between the spool and the block and hold the block in position in the housing.

1,816,064. FILTERING APPARATUS. EDUARD WILHELM VON WALDENBURG-STRAUS-SCHARINA, Lubeck, Germany. Filed June 12, 1930, Serial No. 460,701, and in Germany June 12, 1929. 2 Claims. (Cl. 183—5.)



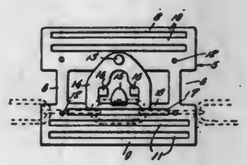
1. A filtering apparatus, comprising a casing having an intake passage and a delivery passage, and a plurality of tubular filtering elements having their upper ends progressively higher as their distance from the delivery passage increases.

1,816,065. FLASH LIGHT. FRANK A. WEIDMAN, Esperance, N. Y. Filed May 29, 1928. Serial No. 281,470. 1 Claim. (Cl. 240—10.68.)



In a flashlight the combination of a flashlight casing of conductive material and of cylindrical elongated formation of a diameter that will enable a person to place the same bodily in his or her hand and carry it in the palm between the ends of the casing, a dry cell battery arrangement in the casing having directly opposed positive and negative terminals facing the ends of said casing, an electric bulb in one end of the casing having a terminal thereof in direct engagement with the adjacent terminal of the battery and the other terminal of said bulb being insulated from said casing, switch means for operatively grounding the said last mentioned terminal of the said bulb direct upon the conductor casing, a lens on the flashlight casing for said bulb, a second bulb, means supporting the second bulb in the casing at the opposite end from the first mentioned bulb in direct contact with the terminal of the battery adjacent said end of the casing, the second mentioned bulb having its other terminal grounded directly on the flashlight casing at all times, and a lens over the end of the casing for the second bulb, of a contrasting color with respect to the lens first mentioned.

1,816,066. BACKBAND BUCKLE. GABRIEL CLARK WILLIAMS, Alligator, Miss. Filed July 18, 1930. Serial No. 468,831. 3 Claims. (Cl. 54—24.)

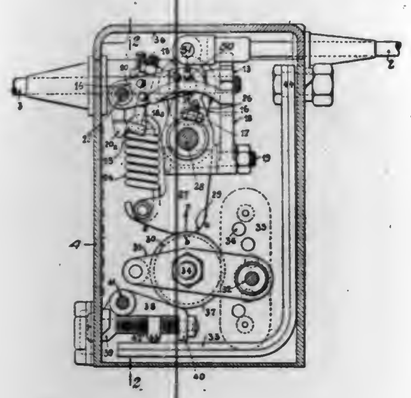


1. A back band buckle comprising a rectangular plate, parallel longitudinal slots near each longitudinal edge of said plate, a large cut-out portion centrally disposed in said plate, a trace carrying hook of roughly triangular form pivoted at its apex to one side of the plate adjacent one longitudinal edge of said cut-out portion, and a bar struck out from the opposite longitudinal edge portion of said plate adjacent said cut-out portion adapted to engage the lower end of said trace carrying hook assembly and to prevent the complete rotation of the same.

1,816,067. SERVO-BRAKE. FRANCIS ATHIMON, Paris, France. Original application filed Sept. 30, 1927, Serial No. 223,168, and in France Oct. 6, 1926. Divided and this application filed Oct. 29, 1928. Serial No. 315,801. 4 Claims. (Cl. 188—167.)

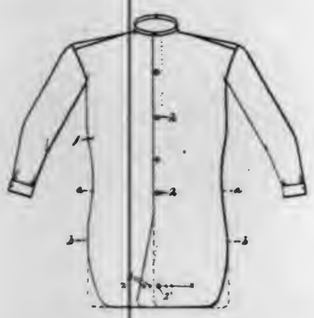
1. In a brake control mechanism, the combination of a control member adapted to be moved by an operator, a reacting member, a stationary pivot, a connecting member pivoted to said control member, to said reacting member and to said stationary pivot, a cam surface on said connecting member, a pivoting axle, a rocking arm pivoted

on said pivoting axle and adapted to bear on said cam surface, a spring adapted to urge said rocking arm against said cam surface and means adapted to hold said pivoting



axle in different positions, whereby said rocking arm is adapted to bear on variable portions of said cam for a given position of said control member.

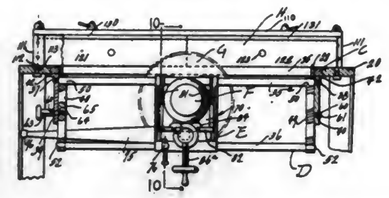
1,816,068. ADJUSTABLE SKIRT FOR SHIRTS. FRANK B. BEGGS, Sherrill, N. Y. Filed Oct. 31, 1927. Serial No. 229,950. 1 Claim. (Cl. 2—115.)



A coat shirt having a skirt portion extending from the waist to below the hip line and divided at the front the entire length thereof, said skirt being continuous circumferentially except for the said front division, the lower edge of the front portion of the skirt being provided with a button near one side of the division and a plurality of button holes at the other side of the division arranged in spaced relation in a row substantially parallel with the lower edge of the skirt and each adapted to receive the button for adjustably securing the divided portions of the skirt together below the hip line.

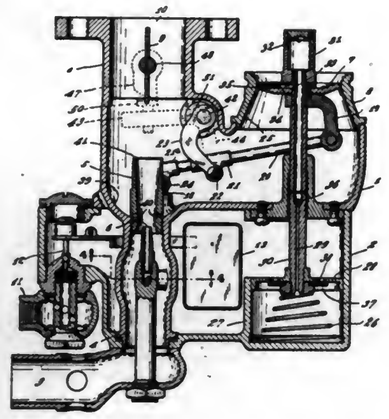
1,816,069. WOODWORKING MACHINE. ERNEST W. BENNETT, Ottumwa, Iowa. Filed Nov. 2, 1928. Serial No. 316,745. 4 Claims. (Cl. 143—6.)

1. In a sawing machine, a table, a disc countersunk in the table and adapted to turn therein, a track mounted for axially angular adjustment on the underside of said disc, a saw unit including a motor and a saw connected thereto, a carriage for said saw unit mounted on said track and having an adjustable section for raising and



lowering the saw unit on the carriage, said disc having a diametrically extending slot through which said saw may project, and means located wholly beneath said table for shifting said carriage on the track irrespective of the adjustment of the track and saw unit.

1,816,070. CARBURETOR. OTTO CARTER BERRY, Indianapolis, Ind., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind., a Corporation of Indiana. Filed Apr. 27, 1923. Serial No. 635,013. 12 Claims. (Cl. 261—49.)

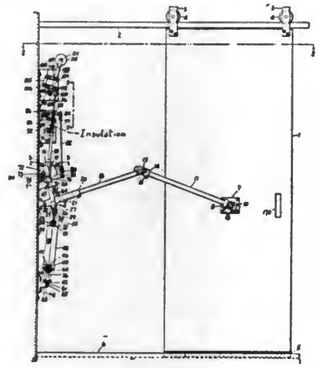


1. In a carburetor, the combination with a casing having a mixing chamber, a throttle valve, and a throttle shaft, of a fuel nozzle discharging fuel which is delivered into said mixing chamber, a metering-pin for controlling the quantity of fuel delivered by said nozzle, an air-valve, lever-means for transmitting motion from said air-valve to said metering-pin, a fulcrum for said lever-means, said mixing chamber having an air-inlet opening with which said air-valve cooperates, and means operated from said throttle-shaft for changing the position of said fulcrum to enrich the mixture when said throttle-valve approaches wide-open position.

1,816,071. PROCESS FOR SULPHONATION OF OILS OR FATTY MATTERS. HEINRICH BERTSCH, Chemnitz, Germany, assignor to H. Th. Böhme Aktiengesellschaft, Chemnitz, Saxony, Germany, a Company of Germany. Filed Jan. 25, 1928, Serial No. 249,503, and in Germany Jan. 27, 1927. 5 Claims. (Cl. 87—12.)

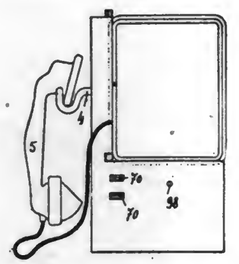
1. A process for sulphonation of fatty matters comprising the treatment of the fatty matters with an excess of sulphuric acid at a temperature substantially below zero centigrade, as for example —10° C.

1,816,072. ELECTROMECHANICAL INTERLOCK. THOMAS BRADY, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 18, 1927. Serial No. 169,232. 11 Claims. (Cl. 187—31.)



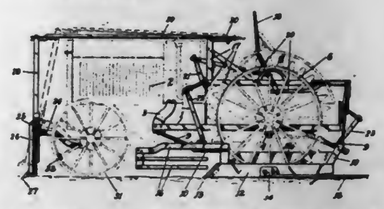
1. In an elevator system, a hatchway door, linkage connected to said door for effecting the operation of the door, a stationary pin, a bar connected to said linkage and arranged to engage said pin, with the door in closed position, to hold the linkage in fixed position thus locking the door.

1,816,073. AUTOMATIC COIN CONTROLLED TELEPHONE APPARATUS. CHARLES AMÉDÉE CAMBAY, Paris, France. Original application filed Oct. 27, 1927, Serial No. 229,071, and in France Oct. 6, 1927. Divided and this application filed Jan. 3, 1929. Serial No. 330,002. 12 Claims. (Cl. 194—45.)



1. An automatic telephone apparatus for single and double tariff which comprises two openings for the introduction of the coins, two chutes, a rocking lever on which the coins fall, a rocking lever for the suspension arm of the receiver, a balanced rocking device, two pins upon same to temporarily receive the coins, pins designed to operate the rocking device, an obturating shutter for closing the first opening when the first coin has been introduced and for uncovering the second opening when the receiver is taken off the hook, a mechanism for closing the second opening and opening the first when the receiver has been put back; an upper movable plate for carrying the locking lever, a pivoted abutment in the coin chutes to prevent the coins from falling down in order to prevent the operation of the unlocking mechanism when the suspension of the receiver has not been completely effected, a spring pawl carried by the upper movable plate designed to act upon one of the pins of the rocking device when the receiver is put back in order to allow of recovering the coin or coins, a polarized electromagnet locking a lower movable plate when in the inoperative position and actuated by a current reversal when the desired connection has been obtained, a driving spring for said movable plate, an inclined surface and a groove on said plate to actuate the second pin of the rocking device which then comes in a pre-cashing position, means to push down the coin or coins temporarily retained, a secondary microphone which is only put in circuit by the insertion of a second coin, a bell upon which the coin falls, upper contacts for the secondary microphone, lower contacts for the polarized electromagnet, and means to retain the polarized electromagnet in suspended position.

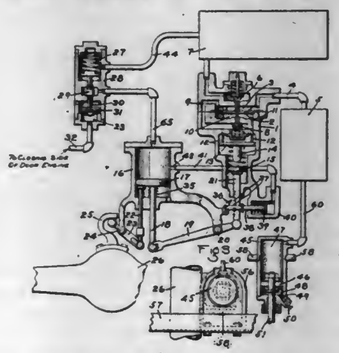
1,816,074. TRACTOR CUTTER. JAMES HOMER CLARK, Modesto, Calif. Filed Aug. 19, 1929. Serial No. 387,025. 10 Claims. (Cl. 55—60.)



2. In a vine cutter, an element to separate the vines of adjacent rows prior to the cutting of the vines, a ground engaging wheel disposed rearwardly of and substantially in line with the separating element, and a bar secured to and projecting laterally from the rim of the wheel so as to lie in the path of one of the rows of separated vines.

8. In combination with a tractor having driving wheels, a vine cutter mounted in direct connection therewith and including pairs of side runners between which the wheels are disposed, and deflecting and guard units secured to the forward ends of the runners and extending thence forwardly in converging relation to each other.

1,816,075. AIR SPRING FOR MOTOR VEHICLES. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 26, 1926. Serial No. 97,662. 6 Claims. (Cl. 267—31.)

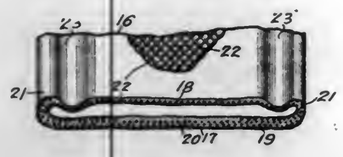


1. The combination with means on a vehicle for automatically regulating the pressure of fluid in proportion to any change in the load on the vehicle, of a fluid cushion device subject to the pressure of fluid so regulated.

1,816,076. BRAKE EXPANSION TUBE. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1929. Serial No. 331,581. 2 Claims. (Cl. 188—152.)

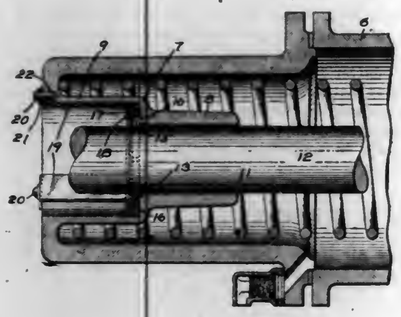
1. An expansible tube of the character specified, comprising a flattened annular body formed from a rubber

composition and having opposed inner and outer circumferential walls, the inner wall being thicker than the outer wall, plies of fabric embedded in the opposed walls and



extending partially transversely around the body of the tube and overlapping in the edge portions of the tube adjoining the opposed walls, and a groove formed circumferentially of the outer wall adjacent each edge thereof.

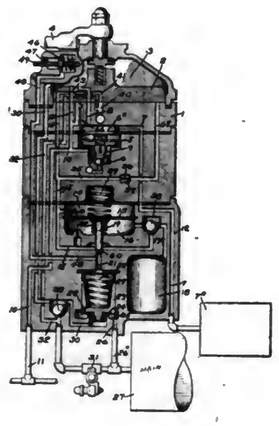
1,816,077. BRAKE CYLINDER DEVICE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1929. Serial No. 344,121. 2 Claims. (Cl. 286—24.)



1. In a brake cylinder having a non-pressure head and a piston rod extending through an opening in said head, a ring disposed in said head and formed of a plurality of segments, means for yieldingly pressing the segments of said ring into engagement with said rod, means formed in the head for preventing longitudinal movement of said segment ring in one direction, a floating ring for preventing longitudinal movement of said segment ring in the other direction, a member for retaining said floating ring in position, said member having a plurality of arms projecting outwardly through the opening of the head, the extremities of said arms being bent to engage the end face of the head, and means for detachably securing the arms of the retaining member to the head.

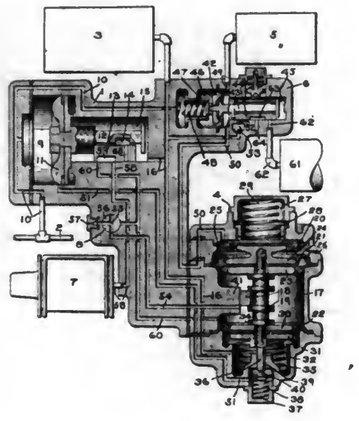
1,816,078. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,297. 9 Claims. (Cl. 303—67.)

1. In a fluid pressure brake, the combination with a brake pipe, a main reservoir, a feed valve device for supplying fluid at a reduced pressure to the brake pipe, and a brake valve device having a service application position in which fluid under pressure is vented from the brake pipe and a release position in which fluid under pressure is supplied from the main reservoir to the brake pipe, of a timing reservoir, means for charging said reservoir through the operation of said feed valve device while the brake valve device is in service position, and means controlled by the



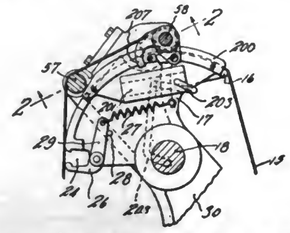
pressure in the timing reservoir for controlling communication through which fluid under pressure is supplied from the main reservoir to the brake pipe.

1,816,079. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1929. Serial No. 417,661. 20 Claims. (Cl. 303—77.)



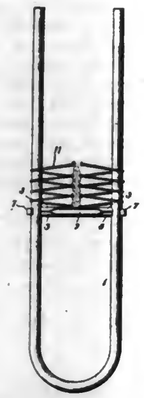
1. In a fluid pressure brake, the combination with a brake pipe and a brake cylinder, of a normally charged reservoir, valve means subject to the pressure of fluid from said reservoir for controlling the pressure of fluid in the brake cylinder, and means operated upon a reduction in brake pipe pressure a predetermined amount below normal for reducing the pressure of fluid in said reservoir without increasing the pressure of fluid in the brake cylinder.

1,816,080. TWISTING MECHANISM FOR WRAPPING MACHINES. MILFORD B. FERGUSON, Brooklyn, N. Y., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 9, 1929. Serial No. 406,140. 4 Claims. (Cl. 93—5.)



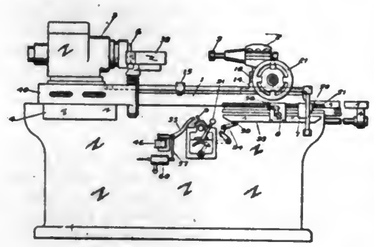
1. In a wrapping machine of the type in which an article and an encircling wrapper are caused to roll along a support, a heated strip extending above the support at the end of the article, and a device movable with the article and positioned so as to straddle the strip and press the wrapper thereagainst.

1,816,081. CROCHET RACK. DOTTIE D. FOWLER, Seattle, Wash. Filed Mar. 6, 1930. Serial No. 433,672. 3 Claims. (Cl. 66—1.)



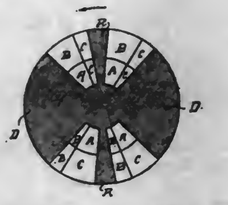
1. A brace for crochet racks comprising a body adapted to fit between and engage the sides of the crochet rack and provided at its ends with resilient tongues fitting partly around and overhanging the sides of the rack.

1,816,082. GRINDING MACHINE. ROGER N. HEALD and WALDO J. GUILD, Worcester, Mass., assignors to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 29, 1927. Serial No. 179,352. 7 Claims. (Cl. 51—50.)



1. In a grinding machine, a cross feed screw, means to turn said screw to produce the normal cutting feed of the machine, screw threaded means surrounding said cross feed screw, and means to turn said last named means upon completion of a grinding operation, whereby to move said cross feed screw axially to cause the grinding operation to cease.

1,816,083. NATURAL COLOR CINEMATOGRAPHY. ADOLF HNATEK, Vienna, Austria. Filed Aug. 23, 1926, Serial No. 131,048, and in Austria July 22, 1926. 4 Claims. (Cl. 88—16.4.)

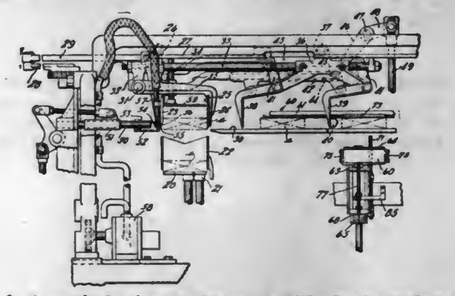


1. A two-part rotatable red, green, blue screen for three-color cinematography, in which only two of the three color-record images are taken at each exposure, said screen comprising filtering sectors separated by opaque sectors and divided into two concentric annular parts, one annular part having only one of the said three colors in all its sectors, the other annular part comprising the two other colors, which occur separated from one another and in opposite sectors of the annular part.

1,816,084. PRODUCTION OF PURE SULPHUR. PAUL KOPPE, Neuroessen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 8, 1929, Serial No. 384,485, and in Germany Sept. 22, 1928. 8 Claims. (Cl. 23—229.)

1. In the production of sulphur by decomposition of a polysulphide solution at a temperature above the melting point of sulphur, the step of effecting the separation of sulphur in stages.

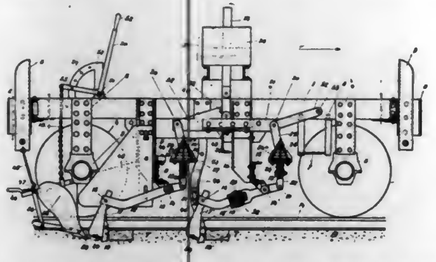
1,816,085. WRAPPING MACHINE AND PROCESS. PAUL LANGHAMMER, Springfield, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 25, 1930. Serial No. 438,843. 10 Claims. (Cl. 93—2.)



1. A method of wrapping an article having substantially fixed dimensions which comprises bending the wrapper around the article and overlapping its edges to form a tube while holding the wrapper at least partially out of engagement with the article, whereby the article will be enclosed loosely in the wrapper and subsequent shrinkage of the wrapper will be permitted without injury.

3. A wrapping machine comprising a pocket into which an article and a wrapper are introduced to fold the wrapper about three sides of the article, means for folding the wrapper about the fourth side of the article, and means for holding the wrapper away from the article during the folding of the fourth side of the wrapper.

1,816,086. RAILROAD TRACK WEEDING CAR. XAVIER LATTY, Paris, France. Filed Aug. 4, 1930, Serial No. 473,055, and in France July 24, 1930. 2 Claims. (Cl. 104—279.)

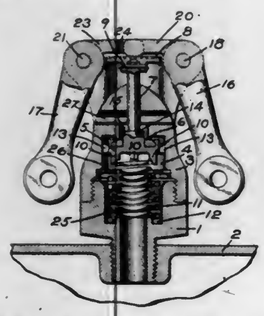


1. A railroad track weeding car comprising, in combination, a girder frame, two pairs of parallelogrammic links pivoted on both sides of the frame and connected by a transverse joist, a rack mechanism having a hand wheel located above the platform of the car for raising and lowering said transverse joist, a plurality of cross beams pivotally connected to the lower ends of said links, levers articulated upon said cross beams, compression springs between said cross beams and said levers, shares connected to the ends of said levers remote from their articulations upon the cross beams and having transverse weeding knives, removable guards on the forward edges of the shares, a roller revolubly mounted on the free end of certain share-carrying levers, an outwardly convexed cam bar depending from each girder of the frame and co-operating with the adjacent roller, a swivel joint intermediate the ends of the share-carrying lever fitted with a roller, a pair of plow-like delvers located on both sides of the rear portion of the car frame, and vertically and laterally adjustable suspension means for said delvers.

1,816,087. PRODUCTION OF CARBAMIDES INCLUDING UREA. FELIX LIEDNER and FRIEDRICH LINK, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 25, 1929, Serial No. 381,064, and in Germany Aug. 22, 1928. 5 Claims. (Cl. 260—125.)

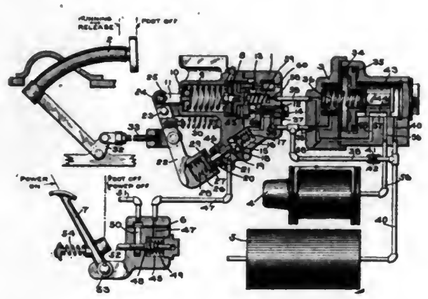
1. The process of producing carbamides which comprises passing a compound containing the NH_2 group in the vapour phase with an oxide of carbon over a catalyst comprising a carbide.

1,816,088. RESERVOIR RELEASE VALVE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1929. Serial No. 331,478. 11 Claims. (Cl. 303—80.)



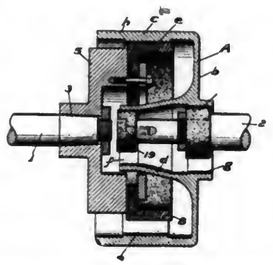
1. In a fluid pressure release valve device, the combination with a release valve having an open position in which the release of fluid is restricted and another open position in which the release of fluid is at a more rapid rate, of a yielding stop for opposing movement of said valve from its first to its second mentioned position and means for actuating said valve.

1,816,089. FLUID PRESSURE BRAKE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 26, 1930. Serial No. 455,699. 7 Claims. (Cl. 303—19.)



1. In a fluid pressure brake, the combination with a valve device operated upon a reduction in fluid pressure for effecting an emergency application of the brakes, of a brake controlling pedal lever, means operated upon the release of said brake controlling pedal lever for establishing communication through which fluid is adapted to flow from said valve device, a controller pedal lever, and means operated upon the release of said controller pedal lever for establishing communication through which fluid flowing through the first mentioned communication is vented.

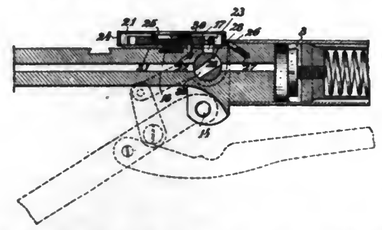
1,816,090. APPARATUS FOR GRINDING. DWIGHT C. PAGE, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 21, 1929. Serial No. 348,857. 4 Claims. (Cl. 51—3.)



1. In a grinding machine, the combination with a pair of grinding spindles facing in opposite directions, of a cup shaped internal grinding wheel on one spindle, and a small internal grinding wheel on the other spindle adapted to fit inside the said cup shaped wheel.

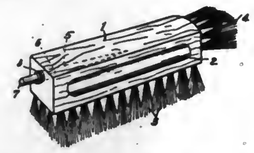
1,816,091. REPEATING AIR GUN. HUGO SCHMEISSER, Suhl, Germany. Filed Dec. 11, 1928, Serial No. 325,179, and in Germany Dec. 13, 1927. 3 Claims. (Cl. 124—11.)

2. A repeating air-gun, comprising a barrel, a magazine mounted on the barrel and having pockets therein for the projectiles, a rotatable cap concentrically mounted on the magazine and projecting over the sides thereof to cover and laterally close the magazine, said cap having openings therein corresponding with the pockets in the magazine, and means for limiting the rotatable movement



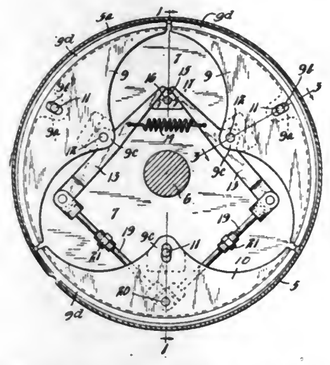
of the cap to an extent that in one end position the pockets and openings coincide for loading purposes and in the other end position being out of alignment.

1,816,092. BRUSH FOR CLEANING ARTIFICIAL TEETH. LOUIS SCHMITTER, Fontaines, Switzerland. Filed Nov. 18, 1929. Serial No. 408,069. 2 Claims. (Cl. 132—84.)



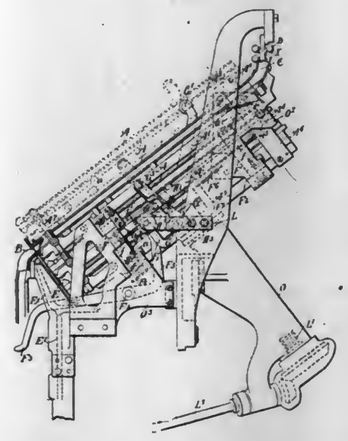
1. A brush for cleaning artificial teeth especially during their manufacture in the laboratory, comprising in combination a brush body, consisting of a piece of wood about the width of a hand and having a bore extending from one end surface, a main brush on the underside of said body directly under said bore, a second brush extending transversely to said main brush from the opposite end surface of said body to that carrying the bore, and a pin in said bore adapted to be moved in and out of said body.

1,816,093. BRAKE FOR AUTOMOBILES. LYLE BURNELL SCOTT, Estelline, S. Dak. Filed Nov. 19, 1928. Serial No. 320,342. 6 Claims. (Cl. 188—78.)



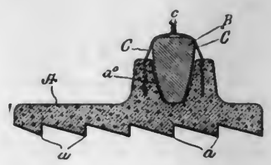
1. A brake structure comprising, a brake drum, three brake shoes within said drum and engaging the interior periphery of said drum throughout substantially its entire circumferential surface, said shoes being movable in substantially radial directions, levers respectively pivoted intermediate their ends to a pair of said shoes, links respectively pivotally connecting the ends of said levers to the other of said shoes, and means engaging and moving the ends of said levers whereby said shoes are moved outwardly and pressed against said drum with equal force.

1,816,094. TYPOGRAPHICAL COMPOSING MACHINE. HUGH A. SOUTHERN, incompetent, Los Angeles, Calif., by Gladys R. Southern, guardian, Inglewood, Calif., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Oct. 16, 1929. Serial No. 399,956. 12 Claims. (Cl. 199—45.)



1. In a typographical machine, the combination of a plurality of magazines, separate base frames whereon the magazines are removably mounted, and mechanism for separating all the base frames from each other at one operation to permit the removal of the magazines, said mechanism including means for limiting its operation to one base frame alone whereby that particular base frame may be moved independently of the other base frames to shift the corresponding magazine to and from its removing position.

1,816,095. APPARATUS FOR THE CONSERVATION OF SHORE LINE AND THE DEFLECTION OF CURRENTS OF WATER. HOMER REED STANFORD, Washington, D. C. Filed Jan. 2, 1930. Serial No. 418,093. 6 Claims. (Cl. 61—3.)

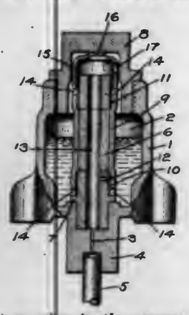


2. A break water arrangement comprising a series of anchor blocks having broad longitudinally dentated bases adapted to rest on the bottom of the beach or shore, and grooved longitudinal fins projecting upwardly from the tops of said blocks, with longitudinally disposed stop bars fitting in said grooves in said fins and secured to said blocks.

1,816,096. OILING DEVICE. CARLTON D. STEWART, Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1928. Serial No. 313,296. 5 Claims. (Cl. 184—64.)

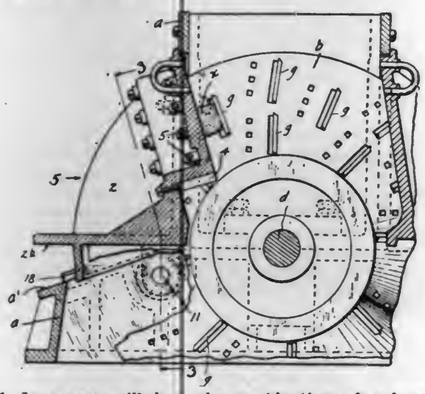
1. A lubricator comprising a body having a chamber containing a lubricant, a member having a lubricant discharge passage, a second member removably mounted on the first member and adapted in one position to provide

a restricted passage for the supply of lubricant from said chamber to said discharge passage and adapted when



applied to the first member in the reversed position to provide a restricted passage of greater flow capacity than the first restricted passage for the supply of lubricant.

1,816,097. SAWMILL HOG. THOMAS B. SUMNER, Everett, Wash. Filed Jan. 27, 1930. Serial No. 423,736. 6 Claims. (Cl. 83—75.)



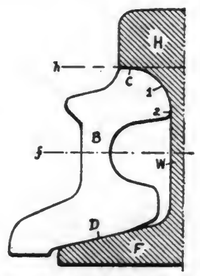
1. In a saw mill hog, the combination of a housing having a rotary cutter head journaled therein, a movable section carrying an anvil knife hingedly mounted in said housing on eccentric journal bearings, means for rotating said journal bearings whereby the anvil knife will be shifted relatively to said rotary cutter head and aligned with the latter, means for holding said anvil knife in operative relation with said cutter head and adapted to release said anvil knive under undue strain imposed on said knife elements.

1,816,098. STEAM DRIVEN FLUID COMPRESSOR. BENJAMIN H. THOMPSON, Ardara, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 24, 1930. Serial No. 430,509. 4 Claims. (Cl. 121—157.)



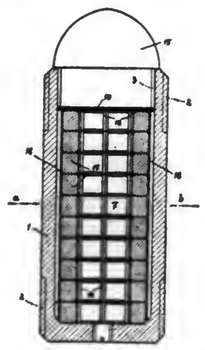
3. A reversing valve construction for a steam engine comprising a casing, a reversing valve having two piston heads, and a bushing in which each piston head reciprocates, one bushing having screw-threaded engagement in said casing and having an annular extended portion with an annular portion of larger diameter intermediate the threaded portion and the extended portion, the casing having a bore slightly larger than the annular extended portion, with which said extended portion engages before the intermediate portion engages in the threaded portion of the casing, in assembling the bushing in the casing.

1,816,099. RAILWAY RAIL AND RAIL-JOINT. SAMUEL G. THOMSON, Flushing, New York, N. Y. Filed May 22, 1930. Serial No. 454,575. 15 Claims. (Cl. 238—243.)



1. A T-rail having a portion of the under surface of its head lying in a substantially horizontal position, and a splice bar contacting with said head and with the top of the rail foot outside of the outer edge of said head contact.

1,816,100. METHOD OF AND EXPLOSIVE MEMBER FOR THE BLASTING OF BLAST-HOLES. HANS GEORG ULRIK, Bustenari, Rumania. Filed Aug. 15, 1929. Serial No. 386,069. 2 Claims. (Cl. 102—5.)



1. Explosive member for blasting blast-holes in soft, oil-bearing rocks, sand and the like, comprising a thick-walled casing for the explosive charge, and grooves in the casing sub-dividing the same into sections, where by the explosion the casing is torn into individual pieces according to the grooves to form channels in the soft ground through which oil flows into the blast-hole.

1,816,101. OPENING CASE FOR WATCHES OR LIKE ARTICLES. GEORGES A. VERGER, Paris, France, assignor, by mesne assignments, to Schwob Freres & Cie. S. A., La Chaux-De-Fonds, Switzerland, a Company of Switzerland. Filed Aug. 27, 1928, Serial No. 302,340, and in Switzerland June 18, 1928. 4 Claims. (Cl. 206—37.)

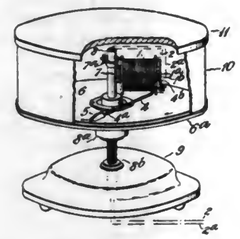
3. A case of the type described comprising an open ended body also having an opening in the side thereof, a slidably

mounted end in said body, resilient means causing said end to project outwardly from said body, hinged covering means for the side opening and means interconnecting said end and said covering means for causing said covering means to swing open when pressure is exerted on said



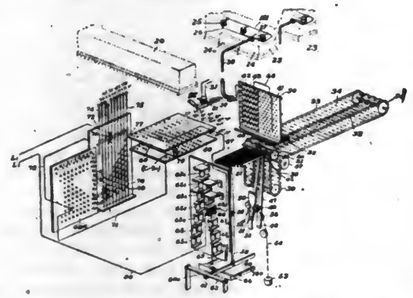
end against the action of said resilient means, and an article hinged on the interior of said body adapted to be concealed therein when said cover is in closed position and held in an inclined position by the pressure of said covering means thereon when said covering means are in an open position.

1,816,102. ELECTRICALLY MOVED DISPLAY APPARATUS. ALBERT WATERS, Glen Iris, and SYLVESTER JOSEPH WATERS, Toorak, Victoria, Australia. Filed July 30, 1929, Serial No. 382,243, and in Australia June 26, 1929. 3 Claims. (Cl. 172—126.)



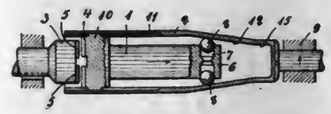
3. A propelling mechanism including in combination, a stationary spindle, a support rotatably mounted on the spindle, an electromagnet fixed to the spindle and including a vibrating element, an arm attached to the vibrating element and extending at an angle therefrom towards the support and adapted to impart intermittent movement to the support during operation of the vibrating element, means for varying the pressure of the arm with respect to the support including a bowed portion at the inner end of the arm, and an adjustable clamping device operably connected with the bowed portion.

1,816,103. PRINTING OF FLOOR COVERINGS AND THE LIKE. HARRY A. WEBSTER, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Aug. 26, 1929. Serial No. 388,584. 71 Claims. (Cl. 101—199.)



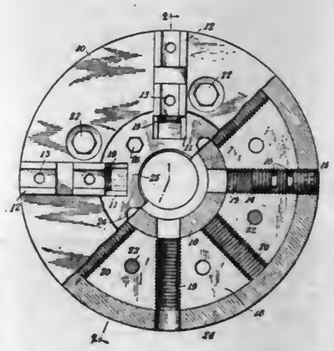
1. In the method of printing with a block printing machine having a head with sectional printing blocks, the steps consisting in printing with the blocks on a web of material to produce a desired pattern, operating the blocks on the head in a given sequence, and changing the sequence.

1,816,104. HAMMERING TOOL. ERNST HJALMAR WALODDI WEIBULL, Saltsjobaden, Sweden, assignor to Aktiebolaget Nordiska Armaturfabrikerna, Stockholm, Sweden, a Limited Company. Filed Jan. 14, 1928, Serial No. 246,902, and in Sweden Nov. 28, 1927. 2 Claims. (Cl. 125—33.)



1. In a striking or hammering tool, a striking member, an anvil engageable by the striking member, said striking member being mounted for rotary and reciprocating movement, means acting on the striking member in response to centrifugal force developed incident to rotation thereof to effect striking movement of the striking member, and means acting in response to the impact of the striking member upon the anvil to effect a recoil movement of the striking member.

1,816,105. CHUCK. LUCIUS E. WHITON, New London, Conn. Filed Sept. 21, 1927. Serial No. 220,981. 9 Claims. (Cl. 279—112.)

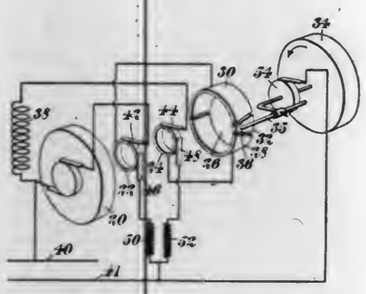


1. A chuck comprising in combination a cup-shaped body portion provided with guide grooves, work-holding jaws adjustable along said grooves, actuating screws for the jaws, a removable ring member having threaded engagement with all of said screws within said body portion, and means also within said body portion and secured thereto for supporting the same on a spindle.

1,816,106. MEANS FOR DRIVING TELEVISION OR OTHER APPARATUS AT A PREDETERMINED SPEED. JOHN LOGIE BAIRD, London, England, assignor to Television Limited, London, W. C. 2., England, a British Company. Filed May 14, 1928, Serial No. 277,750, and in Great Britain June 7, 1927. 3 Claims. (Cl. 172—293.)

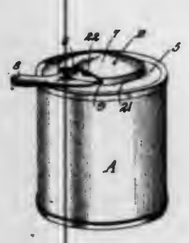
3. In apparatus of the class described, the combination with a commutator-like member having a pair of annular

segments provided with inclined ends converging toward one side thereof and a wedge shaped insulating portion therebetween, of a coaxially mounted cooperating contact engaging said member and adjustable axially thereof, said contact normally resting on said insulating portion, sepa-



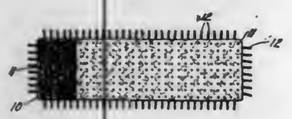
rate means for driving said member and said contact at substantially the same speed, and means responsive to engagement of said contact with either of said segments to vary the relative rates of speed of said first mentioned means.

1,816,107. LIQUID DISPENSING SPOUT. THOMAS EDWARD BARNES, Utica, N. Y. Filed Apr. 12, 1929. Serial No. 354,632. 6 Claims. (Cl. 221—23.)



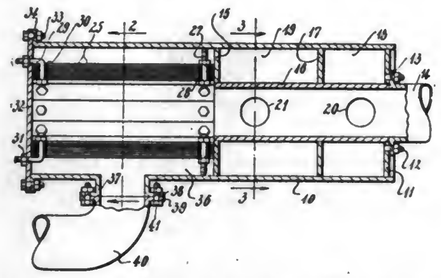
1. A liquid dispensing spout comprising two parts only, namely a base having an opening and also a radially extending pouring spout, and a piercing barb extending downwardly from the base and registering with the opening thereof, and a frictionally retained detachable relatively flat cover mounted directly on the base and cooperating therewith to provide a space in open communication with the spout.

1,816,108. RUBBER SPONGE. MOSE E. BLUMENFELD, Savannah, Ga. Filed July 17, 1930. Serial No. 468,539. 2 Claims. (Cl. 15—244.)



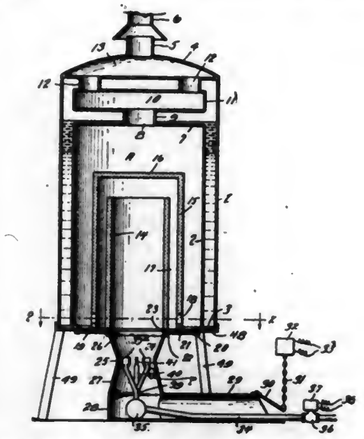
2. A cleaning implement comprising a rubber-sponge body, and spun fibers embedded therein projecting beyond the surface of said body.

1,816,109. SILENCER. ROLAND B. BOURNE, Hartford, Conn., assignor, by mesne assignments, to The Maxim Silencer Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 6, 1928. Serial No. 317,618. 6 Claims. (Cl. 137—160.)



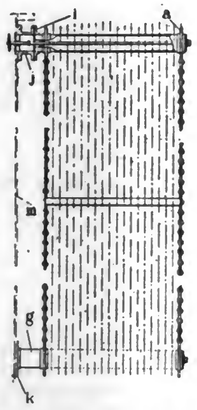
1. A silencing device having a plurality of coaxial chambers connected by spiral passageways, an axial opening into the inner of said chambers, and a single lateral opening in the wall of the outer of said chambers, said lateral opening being restricted in its area to a zone surrounding a nodal point for sound vibrations in the outer chamber and leaving a substantial amount of unbroken wall space on both sides thereof in said wall in a direction parallel to the axis of the chamber.

1,816,110. HEATER FOR BOILERS OF THE VERTICAL TYPE. JOHN W. CANNON, Plainfield, N. J. Filed Nov. 22, 1928. Serial No. 321,254. 20 Claims. (Cl. 158—7.)



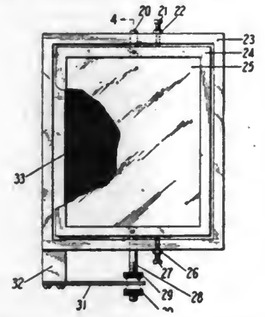
10. In a heating device, a combustion chamber having an inner wall of continuous non-metallic refractory material capable of being heated to incandescence, said inner wall surrounding the hottest portion of said combustion chamber, an outer wall of continuous non-metallic refractory material of thermal conductivity in excess of 0.006 calorie/cm³/°C./sec., said outer wall surrounding the inner one to form an annular passage for the products of combustion, a container for material to be heated substantially surrounding the combustion chamber and adapted to be heated by radiation therefrom and by contact with the products of combustion, means for introducing a combustible mixture into the combustion chamber, a fuel inlet so disposed in relation thereto as to cause air for combustion to be drawn in and mixed with the fuel, means for igniting said mixture, a thermostatically operated slow-opening valve controlling the supply of fuel, and a draft-breaking opening in an offtake for the products of combustion.

1,816,111. RADIATOR OR COOLER. SEBASTIAN ZIANI DE FERRANTI and JOHN TURNER, Hollinwood, England, assignors to Ferranti Inc., New York, N. Y. Filed May 2, 1929, Serial No. 359,910, and in Great Britain July 3, 1928. 3 Claims. (Cl. 257—140.)



1. A heat exchanger comprising a plurality of tube elements constructed of welded sheet metal mounted upon a separate hollow rigid supporting member, a distance piece separating each pair of elements, a surface on each element welded to an abutting parallel surface on the adjoining distance piece.

1,816,112. SIGNALING OR INDICATING DEVICE. NOEL DEISCH, Washington, D. C., assignor of one-half to Thos. E. Stone, Jr., Scarsdale, N. Y. Filed Mar. 5, 1928. Serial No. 259,329. 20 Claims. (Cl. 116—114.)



3. A signaling or indicating device comprising a composite color signal resolvable into components individually of homogeneous but severally of heterogeneous hue, and means, responsive to a quantity, relation, or condition to be indicated, whereby certain sets of components may be differentially exposed or occulted.

1,816,113. ELECTRICALLY HEATED TOOL. HERMAN FELD, Middle Village, N. Y. Filed Jan. 10, 1930. Serial No. 419,865. 1 Claim. (Cl. 219—21.)



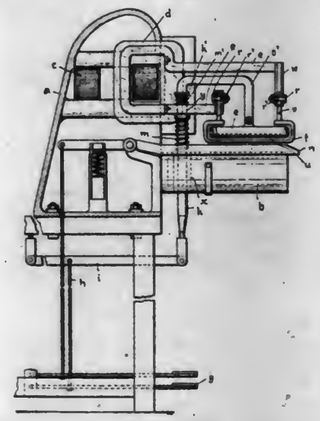
A tool of the character described comprising a socketed head having a handle connected thereto and a heating element in the socket, said head further having a flat work-engaging lower face and upwardly and forwardly converging side faces, the head still further having an upper face disposed substantially parallel to the lower face for a portion of its length and then converging toward and merging with the lower face in a manner to provide a point at the free end of the head.

1,816,114. PRIZE TROPHY. FRIEDRICH HAEGERMANN, Peine, Germany. Filed Nov. 12, 1928, Serial No. 318,863, and in Germany Jan. 26, 1928. 1 Claim. (Cl. 41—12.)



A prize trophy comprising the combination with a metal branch having sockets thereon, of separate metal leaves, attaching means on each of said leaves for attachment to the person so that they may be worn separately as awards for individual successes, said attaching means being also detachably engaged in said sockets on the branch in order to form a collective award, as and for the purpose set forth.

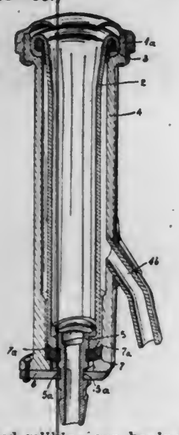
1,816,115. SOLDERING APPARATUS. CARL HELLE, Brunswick, Germany, assignor to Elektrische Lot- und Schweisz-Gesellschaft mit beschrankter Haftung, Brunswick, Germany. Filed Dec. 1, 1930, Serial No. 499,369, and in Germany Nov. 4, 1930. 3 Claims. (Cl. 219—12.)



1. The herein described soldering apparatus, comprising a mandrel adapted to support a blank to be soldered,

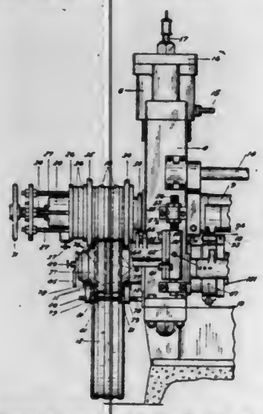
a yielding soldering iron cooperating with said mandrel, heating means for said soldering iron, means for moving said soldering iron and mandrel towards each other and into soldering position, a solid pressing member adapted bodily to engage said soldering iron for pressing the same into true soldering position, and means for operating said pressing member.

1,816,116. MILKING APPARATUS. FERNAND HENRARD, Brussels, Belgium, assignor to Ecrémeuses Mélotte, Société Anonyme, Remicourt, Belgium. Filed Oct. 4, 1929, Serial No. 397,287, and in Belgium Mar. 1, 1929. 2 Claims. (Cl. 31—85.)



2. A double walled milking cup having one of its walls elastic and the other rigid, means positioned at the base of the said elastic wall and in axial alignment with the cup formed by said wall for draining the milk, said milk draining means having an annular groove and a movable plate engaged in said groove for maintaining said elastic wall under tension when engaged therewith and for releasing said wall to relieve the same from tension, said milk draining means having a second annular groove disposed adjacent the elastic wall and a removable packing disposed in this second groove for forcible engagement with the lower end thereof.

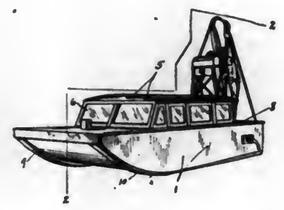
1,816,117. RIM-FORMING MACHINE AND METHOD OF FORMING RIMS. GEORGE P. KLINE, Moline, Ill., assignor to Williams, White & Co., Moline, Ill., a Corporation of Illinois. Filed Mar. 18, 1929. Serial No. 347,800. 30 Claims. (Cl. 153—29.)



1. A rim forming machine including a pair of adjacent shafts in substantially parallel arrangement, said shafts carrying cooperating rolls for forming corrugations in the rim blank and turning flanges along the edges thereof, in combination with means for turning the flanges inwardly beyond a plane perpendicular to the tread surface of the rim at its lateral edges.

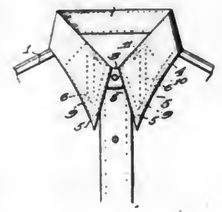
28. The method of forming a one-piece wheel rim or the like which consists in providing a continuous annular metallic blank, locking said blank against axial movement while subjecting the marginal edges thereof to a bending force to displace said marginal edges radially inward to produce inturned flanges and then displacing the region centrally of and spaced from the flanges radially to produce a corrugated surface.

1,816,118. ICE AND WATER BOAT. MORRIS C. KNIGHT, Alexandria Bay, N. Y. Filed May 21, 1928, Serial No. 279,484. Renewed May 29, 1931. 5 Claims. (Cl. 114—43.)



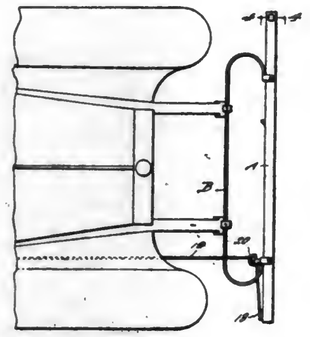
2. In a combined ice and water vehicle, a body having an upwardly curving square front end and a narrower rear end, an air propeller mounted on the rear of the body, means for rotating the air propeller, an air rudder mounted on the rear of the body, means for pivoting the rudder in its support, opposed shoes extending approximately the full length of the under side of the body, a crank arm pivotally mounted in one side of the body adjacent the rear end thereof for movement below and above the under surface of the body, means for pivoting the crank arm, a second crank arm pivotally mounted on the other side of the body for movement below and above the under surface of the body, and means for pivoting the last mentioned crank arm.

1,816,119. SHIRT COLLAR. WILLIAM S. KURTZ, Ephrata, Pa., assignor to Noggle Shirt Company, Inc., Manheim, Pa. Filed Jan. 12, 1931. Serial No. 508,221. 3 Claims. (Cl. 2—132.)



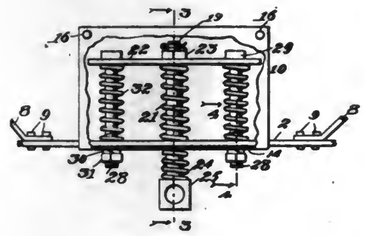
1. A shirt collar having a pocket or envelope enclosed in the ends of the outer flap between the outer and inner layers of material, said pocket having an opening at its upper edge and said pocket being shaped to fit and occupy the entire space in the ends and points of said collar and having its inner edge disposed in the forward portion of the collar.

1,816,120. BUMPER. JESSE W. LEA, Jackson, La. Filed Feb. 21, 1931. Serial No. 517,571. 8 Claims. (Cl. 293—55.)



1. A bumper of the class described comprising a stationary part, a movable part hinged at one end to one end of the stationary part and means for moving the movable part outwardly to a diagonal position when desired.

1,816,121. AUTOMOBILE TRAILER HITCH. ROBERT R. MCLAMARRAH, Woonsocket, S. Dak. Filed Aug. 29, 1930. Serial No. 478,741. 5 Claims. (Cl. 280—33.44.)



1. In a device of the class described, the combination of a primary bar, a casing having a portion of its body overlapping said primary bar, a cover on said casing and having a portion overlapping that portion of the body overlapping the primary bar, and a spring carrying sliding bolt mounted upon said primary bar and partly within said casing and adapted to have a trailer tongue attached thereto.

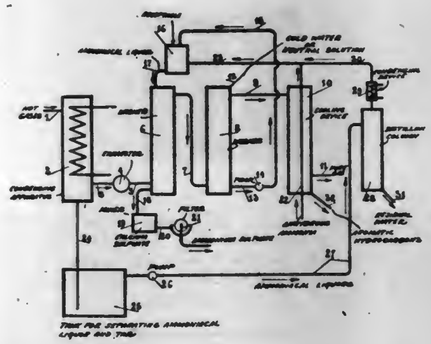
1,816,122. MANUFACTURE OF IRON CARBONYL. ALWIN MITTASCH, Ludwigshafen-on-the-Rhine, and CARL MÜLLER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 6, 1926, Serial No. 86,650, and in Germany Feb. 9, 1925. 2 Claims. (Cl. 23—203.)

1. The process of producing iron carbonyl which comprises reacting iron and carbon monoxide in a closed vessel at an elevated temperature, and permitting the iron carbonyl formed to diffuse into a contiguous cooled zone in communication with said vessel, while supplying



additional carbon monoxide under pressure sufficient to maintain a substantially constant elevated pressure in the vessel and the cooled zone.

1,816,123. PRODUCTION OF AMMONIUM SULPHATE. FAITS ADOLPHE FRANÇOIS PALLEMAERTS and ALPHONSE IVAN LEBRUN, Brussels, Belgium, assignors to Union Chimique Belge, Societe Anonyme, Brussels, Belgium. Filed Feb. 28, 1929, Serial No. 343,487, and in Belgium July 24, 1928. 3 Claims. (Cl. 23—196.)

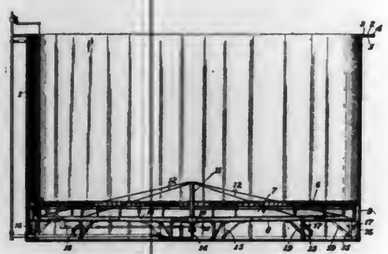


1. A process for the treatment of coke oven gases consisting in cooling the coke oven gases, distilling the liquid condensate thus obtained and cooling the volatile compounds obtained by said distillation, treating them with anhydrous ammonia and sending them together with an alkaline liquor to a washer for the purpose of washing the coke oven gases which have been cooled, treating the liquid portion obtained therefrom with gypsum, as set forth.

1,816,124. STORAGE TANK OF THE FLOATING DECK TYPE. JOHN F. PATTERSON, Warren, Ohio, assignor to The Warren City Tank & Boiler Company, Warren, Ohio, a Corporation of Ohio. Filed Oct. 21, 1927. Serial No. 227,832. 7 Claims. (Cl. 220—26.)

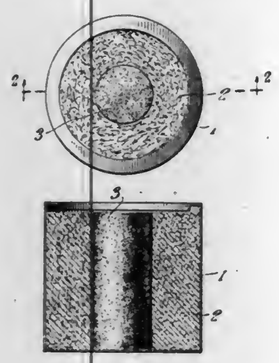
1. A storage tank comprising an outer casing, a floating deck comprising a casing, overlapping seal plates cooper-

ating therewith, some of said plates being vertical and some being inclined, the latter being movably connected



to the casing and all the overlapping plates being capable of a peripheral expansion and contraction to thereby seal the deck within the outer casing.

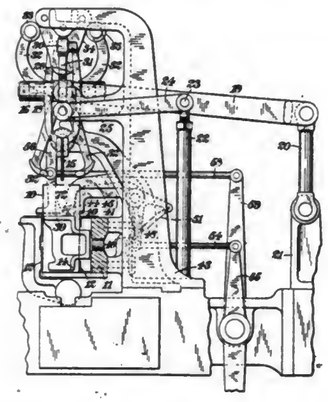
1,816,125. SOLIDIFIED FUEL AND PROCESS OF MAKING THE SAME. ARTHUR B. RAY, Bayside, N. Y. Filed Nov. 29, 1927. Serial No. 236,392. 10 Claims. (Cl. 44—7.)



1. A solidified fuel unit comprising a mass of solidified fuel having an absorbent filler uniformly distributed throughout certain portions thereof, and localized portions in which the fuel is unmixed with filler, said portions defining centralized areas of combustion.

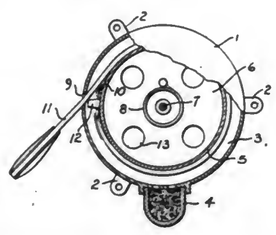
1,816,126. APPARATUS FOR FOLDING AND CLOSING THE ENDS OF BAGS OR THE LIKE. ALFRED GERMAN ROSE, Gainsborough, England, assignor of one-half to Rose Brothers (Gainsborough) Limited, Gainsborough, England, a British Company. Filed Oct. 24, 1929, Serial No. 402,269, and in Great Britain Oct. 26, 1928. 10 Claims. (Cl. 93—7.)

1. Folding apparatus comprising the combination of oscillating fingers and means to insert them centrally into the open mouth of a bag and subsequently to move them apart to elongate or distend the mouth longitudinally, and then close and withdraw them, pressure members operable at the base of the distended mouth to flatten portions of the walls of the mouth at the base thereof onto the contents of the bag and to form extended tabs which are substantially triangular in plan and lie in the plane of the said flattened portions upon the sides of the bag engaged by the fingers and also an upstanding double wall extending between the fingers in a plane at right angles to the plane occupied by the tabs and the aforesaid flattened portions, of folding members and means to operate them after the withdrawal



of the fingers to turn the double wall and also the tabs over to lie flat upon the surface of the previously flattened portions aforesaid.

1,816,127. RAZOR STROP STERILIZER. JACK SAVOY, Glenmora, La. Filed Sept. 22, 1930. Serial No. 483,475. 1 Claim. (Cl. 167—3.)

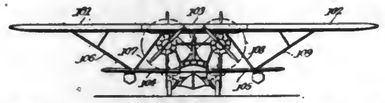


In a razor strop sterilizer, the combination of a sterilizing case, means to secure the said case to a supporting element, a sterilizing medium container detachably secured to said case and in communication with the inside of said case, an opening in the said case through which to admit a razor strop into the said case, a revolubly mounted drum inside of said case, said drum being adapted to wind upon it a razor strop, a spring for rotating said drum to wind up the razor strop, a stop mounted on the said drum and adapted to contact the razor strop and to stop the rotating of said drum at such a point to prevent the winding of the entire length of the razor strop and so as to leave the portion of the razor strop having the hand hold protruding through the opening in the said case.

1,816,128. HARDENABLE OIL VARNISH AND METHOD OF PREPARING SAME. FRITZ SEEBACH, Erkner, near Berlin, Germany, assignor to Bakelite Gesellschaft mit beschrankter Haftung, Berlin-Charlottenburg, Germany. Filed June 8, 1928, Serial No. 284,011, and in Germany June 28, 1927. 4 Claims. (Cl. 134—26.)

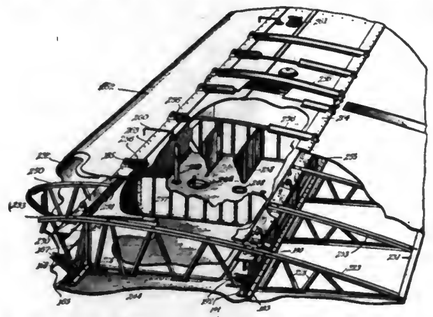
1. In a method of preparing hardenable oil varnishes, the step comprising grinding an air-drying fatty oil with a reactive phenol-methylene resin until no particles are perceptible between the fingers.

1,816,129. AIRCRAFT ESPECIALLY OF THE AMPHIBIAN TYPE INCLUDING MEANS FOR MOUNTING ENGINES THEREON. IGOR I. SIKORSKY, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed June 7, 1929, Serial No. 369,113. Divided and this application filed Aug. 12, 1929. Serial No. 385,218. 9 Claims. (Cl. 244—31.)



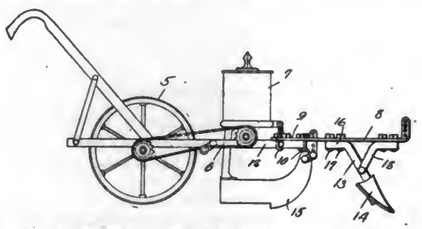
1. In an amphibian, a plane including front and rear spars, an elongated motor supporting frame carrying a circular member beneath said plane with its longitudinal axis parallel to the longitudinal axis of the aircraft, suspension members in the form of a V connecting one end of said frame with both of said spars, and a suspension member connecting the other end of said frame with one of said spars.

1,816,130. AIRCRAFT INCLUDING WING PANEL AND FUEL TANK ASSEMBLY FOR SAME. IGOR I. SIKORSKY, Lordship, Conn., assignor to Sikorsky Aviation Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed June 7, 1929, Serial No. 369,113. Divided and this application filed Aug. 12, 1929. Serial No. 385,220. 5 Claims. (Cl. 244—31.)



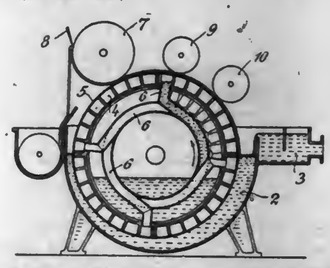
1. In an amphibian, a body boat member, retractable landing mechanism fastened to said body boat, a main plane section above said body member in symmetrical relation to the longitudinal axis of said body member and fastened thereto, said plane including front and rear spar members, compression members extending between said spar members at intervals, means connecting the lower portions of said spar members, and tanks supported on said means between the compression members directly above said retractable landing gear mechanism fastened to said body boat member.

1,816,131. PLANTER ATTACHMENT. FRANK E. SPENCER, Lynchburg, Mo. Filed Jan. 26, 1931. Serial No. 511,411. 3 Claims. (Cl. 97—225.)



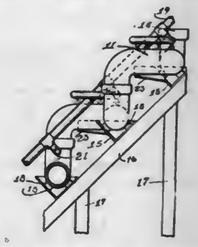
1. An attachment for planters, comprising a beam having lateral extensions adapted to rest on the front and side bars of a planter frame, U bolts passing through the beam and embracing the front and side bars of the planter frame, and a shovel plow mounted on the beam.

1,816,132. ROTARY DEWATERING SIEVE. JOHN STRINDLUND, Hurum, Norway. Filed Jan. 3, 1930, Serial No. 418,316, and in Norway June 11, 1929. 3 Claims. (Cl. 92—36.)



1. A rotary straining device for dewatering fibrous pulp material by a difference in pressure caused by the level of the pulp mixture outside the device being higher than the level of the outflowing water on the inside of the device, comprising means for maintaining the difference in pressure until the layer of pulp adhering to the outside of the device has risen above the level of the pulp mixture outside the device, as and for the purpose set forth.

1,816,133. CONDENSING APPARATUS. OTTO C. TRAUTMANN, New York, N. Y. Filed Jan. 3, 1927. Serial No. 158,460. 1 Claim. (Cl. 257—35.)

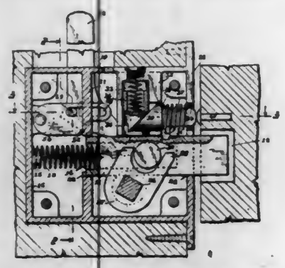


In a condensing apparatus the combination of an inclined support, a main water supply pipe, V-shaped troughs arranged on said inclined support, a gutter below one end of said troughs, a plurality of condensing chambers each consisting of a horizontally disposed tubular body with an annex at one of its ends extending slightly ascendingly in a lateral direction and communicating with the aforesaid body, a downturned spigot at the end of the annex, the other end of the body being provided with an upturned neck terminating in a bell, the condensing chambers being arranged like a stairway on the inclined support with the horizontally disposed bodies in the aforesaid troughs, and being serially joined by having the spigot of one condensing chamber telescoped into the bell shaped neck of the next following condensing chamber, and an individual cooling water supply pipe over the horizontally disposed body and the annex of each condensing chamber, the V-shaped trough collecting and discharging into the gutter any excess of cooling water.

1,816,134. DOOR LATCH. DAVID WILSON WOOD, Brazil, Ind. Filed Aug. 9, 1928. Serial No. 298,537. 2 Claims. (Cl. 292—333.)

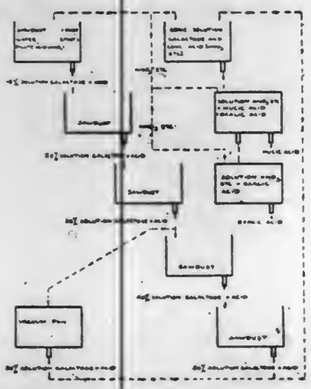
1. A device of the character described, comprising a casing, a spring urged bolt movable within said casing, a projection on one side of said bolt, means associated with said projection for moving said bolt rectilinearly, a pro-

jection on the opposite side of said bolt, a pivoted arm adapted to engage said last mentioned projection to move said bolt within said casing, a pivoted latch movable by said arm to prevent inward movement of said bolt, said bolt further including a recess in its upper surface, a



spring urged plunger to engage said recess to prevent outward movement of said bolt from said casing, and a second plunger movable at substantially right angles with respect to said first mentioned plunger to cam said plunger away from said bolt.

1,816,135. METHOD OF CONVERTING WOOD INTO SUGAR AND OTHER PRODUCTS. SOLOMON F. ACREE, Madison, Wis., assignor of one-tenth to Arthur B. Foster, Washington, D. C. Filed Apr. 10, 1917, Serial No. 458,133. Renewed Apr. 2, 1921. 43 Claims. (Cl. 127—37.)



2. The method of treating wood from western larch which comprises subjecting the wood to the action of a hydrolytic agent containing weak acid solution at a temperature below the boiling point of water.

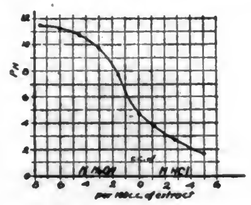
1,816,136. METHOD OF CONVERTING WOOD INTO SUGAR AND OTHER PRODUCTS. SOLOMON FARLEY ACREE, Syracuse, N. Y., assignor of one-tenth to Arthur B. Foster, Washington, D. C. Filed Mar. 25, 1920. Serial No. 368,640½. 13 Claims. (Cl. 127—37.)

1. The method of converting western larch into sugar, which consists in treating the same with water and sulphuric acid below 140° C.

1,816,137. METHOD OF CONVERTING WOOD INTO MUCIC ACID. SOLOMON FARLEY ACREE, Syracuse, N. Y., assignor of one-tenth to Arthur B. Foster, Washington, D. C. Filed Mar. 25, 1920. Serial No. 368,641½. 67 Claims. (Cl. 260—119.)

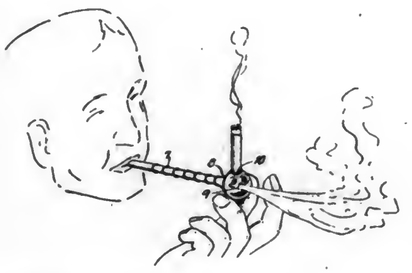
39. Granular mucic acid.

1,816,138. TAN EXTRACT AND MODE OF MAKING SAME. SOLOMON F. ACREE, Eureka, Mont. Filed Nov. 8, 1922. Serial No. 599,708. 16 Claims. (Cl. 149—4.)



1. A tanning extract obtained from western larch bark and wood containing tannins in such proportion as to constitute a tanning agent, and containing soluble fermentable carbohydrates.

1,816,139. CIGAR AND CIGARETTE HOLDER, AND SIMILAR ARTICLE. JOHANNA ELSIE ASTER, New York, N. Y. Filed Mar. 12, 1927. Serial No. 174,758. 5 Claims. (Cl. 131—10.)



1. An article of manufacture comprising a tube, a terminal having formed therein a socket for receiving a charge of smokable material, said socket being in communication with the tube, the terminal member being provided with a smoke discharge passage opening into the tube, the exterior of the terminal member being provided with a representation of a face having facial orifices, the outer end of the smoke discharge coinciding with a facial orifice.

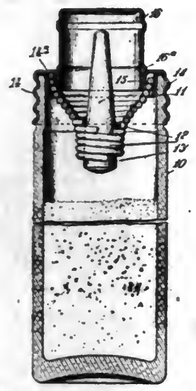
1,816,140. PROCESS FOR COLORING PARAFFIN WAX AND THE LIKE. WALTER M. BAIN, Camas, Wash. Filed Oct. 22, 1929. Serial No. 401,629. 7 Claims. (Cl. 87—19.)

1. The process of coloring paraffin wax which consists in melting the wax, dissolving a selected dye in an ethanolamine to impart to the latter the desired shade of color, dissolving the ethanolamine in a fatty acid to form a soap soluble in melted paraffin wax and dissolving the soap in the melted paraffin wax.

1,816,141. CONTAINER. PHILIP C. P. BOOTY, Chicago, Ill., assignor of one-half to Michael T. Daley, Chicago, Ill. Filed Apr. 12, 1928. Serial No. 269,403. 7 Claims. (Cl. 221—61.)

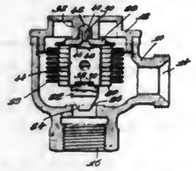
1. In a container, the combination of a casing member having an opening thereinto and comprising a liner in the form of a ring fitted in said opening, a coil serving as a closure member and having a tapered upper end portion

fitted loosely in said ring, and a ferrule extending about said coil and having an inwardly extending flange portion



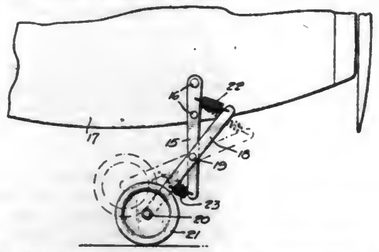
pressing downwardly on the upper end of the coil and ring adapted by such downward pressure to hold the coil and the ring in effective closing position.

1,816,142. STEAM TRAP. WALTER B. CLIFFORD, Boston, Mass., assignor to Clifford Manufacturing Co., Boston, Mass., a Corporation of Delaware. Filed May 11, 1929. Serial No. 362,410. 7 Claims. (Cl. 236—56.)



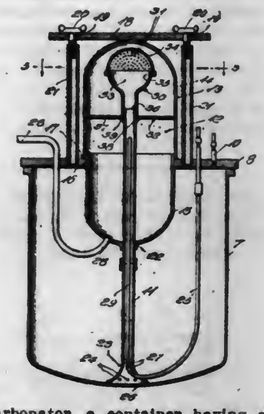
1. A thermostatically controlled unit for steam lines comprising a casing having an outlet port, a hermetically sealed bellows containing water under a vacuum, means for limiting the contracted position of the bellows under the influence of the vacuum, means for anchoring the bellows at one end in a predetermined position within the casing, a valve connected with the opposite free end of the bellows and normally seating to close the port upon an expansion of the bellows to a length less than the normal free length of the bellows and cause the tension of the bellows wall to exert a seating pressure on the valve in closed position.

1,816,143. LANDING GEAR FOR AEROPLANES. HARRY CORDY, Los Angeles, Calif. Filed Dec. 17, 1929. Serial No. 414,742. 4 Claims. (Cl. 244—21.)



1. A landing gear for aeroplanes comprising a fixed support, a pair of arms pivoted on the support to swing about horizontal axes, wheels carried by the arms, and springs connected to the arms and to the support at opposite sides of the axes of the arms so as to yieldably urge the arms in one direction about their axes.

1,816,144. LIQUID CARBONATOR. SAMUEL M. DICK, Pasadena, Calif. Filed Aug. 1, 1929. Serial No. 382,810. 6 Claims. (Cl. 261—19.)



1. In a carbonator, a container having a carbonated liquid outlet and a removable portion spaced therefrom, a rigid liquid and gas conducting pipe terminating in said container and having a shoulder near its terminal, a hollow gas and liquid mixer detachably mounted upon said pipe terminal to receive the liquid and gas therefrom, and a perforated gas and liquid mixing partition extending across said container between said mixer and said outlet, said partition removably being clamped between said mixer and said shoulder and having an opening through which said pipe passes, said mixer and said partition being accessible upon removal of said removable container portion.

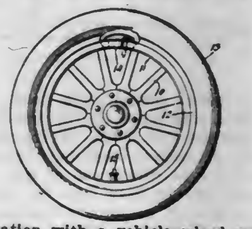
1,816,145. PROCESS OF CONCENTRATING ORES AND MINERALS BY FLOTATION. WILLIAM A. DOUGLASS, Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 9, 1928. Serial No. 291,494. 18 Claims. (Cl. 209—166.)

1. In the process of concentrating ores by flotation, the step which comprises subjecting the ore in the form of a pulp to a froth flotation operation in the presence of the product resulting from the reaction between a compound of the group consisting of metal xanthates and analogues thereof and a cyanogen halide.

1,816,146. SOLUBILIZED NITROCELLULOSE. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Dec. 24, 1923, Serial No. 682,553. Renewed Oct. 1, 1929. 16 Claims. (Cl. 260—148.)

9. As a new product celluloid solubilized by brief exposure to a temperature of 160° C.

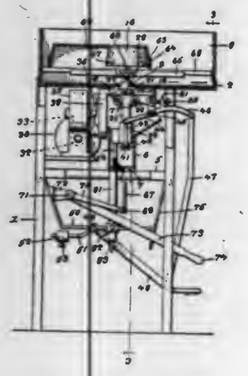
1,816,147. WHEEL, RIM, AND TIRE LOCK. ALBERT M. FURTOW, Mount Clemens, Mich. Filed Mar. 21, 1929. Serial No. 348,844. 5 Claims. (Cl. 70—90.)



1. In combination with a vehicle wheel and a removable tire carrying rim mounted thereon, means for locking

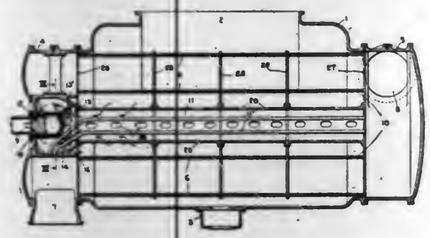
said rim and tire to said wheel comprising a slotted pin slidably extending through the felloe of said wheel and provided with means interiorly to engage said rim, a locking device including a bolt and enclosed within said felloe, said bolt being adapted, by entrance in said slot, to secure said pin in position of engagement with said rim, said locking device being operable by movable means serving slidably to manipulate said bolt and thereby to release said pin so that it may be withdrawn from engagement with said rim or secured in position of engagement therewith.

1,816,148. PAN GREASING MACHINE. WILLIAM J. GRAYBILL, York, Pa., assignor to Harrison B. Waltman, Springettsburg, Pa. Filed Sept. 6, 1929. Serial No. 390,763. 6 Claims. (Cl. 91—39.)



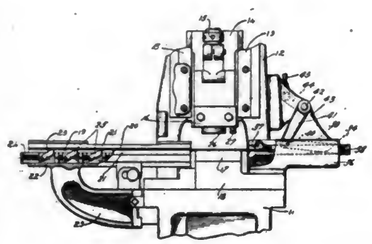
1. In a baking pan greasing apparatus, a greasing chamber, a brush rotatably mounted therein, means for supplying a greasing medium to the brush, means for rotating the brush, means within the chamber for supporting a pan, to be greased, in inverted position over the brush, and means operably to adjust the supporting means vertically with respect to the brush in accordance with the depth of the pan to be greased.

1,816,149. VAPOR CONDENSER. HENRY LEWIS GUY, Hale, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 18, 1926, Serial No. 155,697, and in Great Britain Dec. 23, 1925. Renewed Apr. 29, 1930. 22 Claims. (Cl. 257—43.)



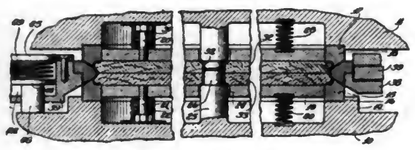
1. In a condenser comprising a shell, a nest of tubes within the shell, tube sheets for the tubes and water boxes associated with the tube sheets, the combination of an air offtake within the nest of tubes and through a water box, together with means within one of the water boxes for directing gases therein away from the center of said offtake, whereby air and non-condensable gases are directed in proximity with cooling media in a water box before removal from condenser.

1,816,150. APPARATUS FOR PUNCHING SHAPES FROM SHEET METAL. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 27, 1926. Serial No. 157,204. 4 Claims. (Cl. 164—21.)



1. In an apparatus for cutting objects from strip material, the combination of, a reciprocating primary cutter for cutting full size objects from said strip, a strip feeding device successively presenting portions of the strip to said cutter, a secondary or recovery cutter mounted adjacent and conjointly movable with the primary cutter and of a size adapting it to pass through the openings formed previously by the primary cutter, and means presenting to said secondary cutter a portion of the strip inadequate in area to receive a full cut of the primary cutter.

1,816,151. REENFORCEMENT APPLYING APPARATUS. HILYARD C. HOWSAM and ANTHONY HLAVAC, Chicago, Ill., assignors to Eber J. Hubbard, Berwyn, Ill. Filed Dec. 16, 1929. Serial No. 414,611. 11 Claims. (Cl. 153—1.)

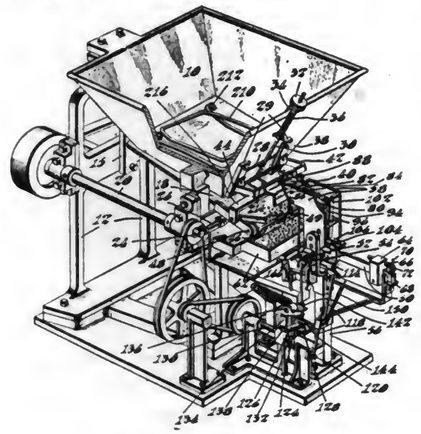


1. In apparatus of the class described, the combination of upper and lower relatively movable supporting members, opposed annular die members on said supporting members, opposed spring-pressed supporting and clamping plates movable within said die members and adapted to receive between them the work to be treated, and an aligning annulus concentric with said die members and plates, said annulus being adapted to be opened to permit application of the work between the plates and to be closed to clamp the work around its periphery, and yielding means normally holding said annulus in clamping alignment with the work.

1,816,152. COMPOSITION FOR CADMIUM PLATING BATHS. CHAD H. HUMPHRIES, Indianapolis, Ind., assignor to James C. Patten, Indianapolis, Ind. Filed Sept. 23, 1927. Serial No. 221,619. 7 Claims. (Cl. 204—1.)

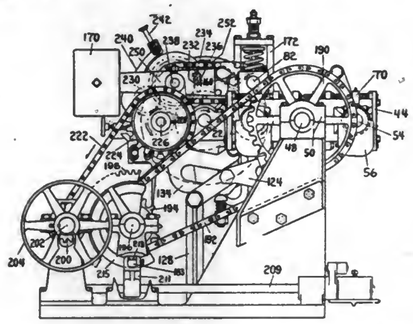
1. A composition of matter adapted for use in forming an acid solution for the electrodeposition of cadmium, consisting of a dry mixture, comprising a salt having a sulphuric acid radical, a cadmium salt soluble in water in the presence of such radical salt to form cadmium sulphate, ammonium sulphate and a brightening agent.

1,816,153. MEASURING MACHINE. RALPH F. KNIGHT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 25, 1923. Serial No. 641,394. 38 Claims. (Cl. 249—2.)



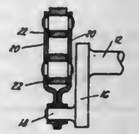
1. A machine of the class described having, in combination, a source of supply of fluent material, a receptacle, a pair of gates controlling the passage of material from the source of supply to the receptacle, the first gate being arranged when closed to reduce the flow of material and the second gate being arranged when closed to cut off the flow of material completely, irrespective of the position of the first, controlling means for the gates arranged to close the first gate to reduce the flow of material when the major portion of a charge has been measured out and to close the second gate to cut off the flow of material completely when a charge has been completely measured out, and power-operated means to open the gates for the measuring out of another charge of material.

1,816,154. MACHINE FOR OPERATING UPON HIDES, SKINS, AND LEATHER. GEORGE E. MCLAUGHLIN, Peabody, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed June 28, 1928. Serial No. 288,918. 47 Claims. (Cl. 149—16.)



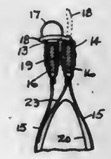
40. In a machine for operating upon hides, skins, leather, and other similar pieces of work, an instrumentality for operating on the work, a bed roll for presenting a piece of work to the operating instrumentality, a feed roll for cooperation with the bed roll in feeding the work past the operating instrumentality, and means under the control of the operator for changing the speed of the feed roll without affecting the speed of the operating instrumentality.

1,816,155. BRAKE-APPLYING MEANS. HENRI PERROT, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. a Corporation of Delaware. Filed Aug. 12, 1927, Serial No. 212,601, and in France Nov. 10, 1926. 4 Claims. (Cl. 188—78.)



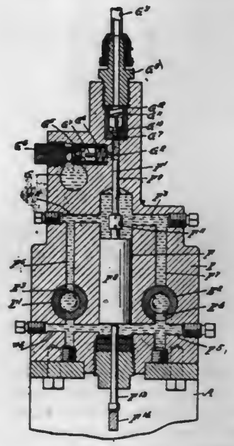
1. Applying means engageable with the friction means of a brake, comprising, in combination, a shaft, a pair of spaced members engaged by the shaft and forming a brake-applying lever operated by the shaft, and a pair of thrust rollers pivotally mounted between said members.

1,816,156. VACUUM CLEANER. FREDERICK RIEBEL, Jr., Toledo, Ohio, assignor to Air Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Oct. 9, 1929. Serial No. 398,391. 3 Claims. (Cl. 183—51.)



3. In an air filtering and dust collecting unit for use in connection with a vacuum cleaner, associated inner and outer bags, said outer bag having a mouth for receiving said inner bag, the edges of the bag forming the lips of said mouth folded over and enclosing a metal strip to provide stiff lips for said bag receiving mouth, one edge of said mouth extending inwardly beyond said stiff lip to provide a flap bar closing said bag receiving mouth.

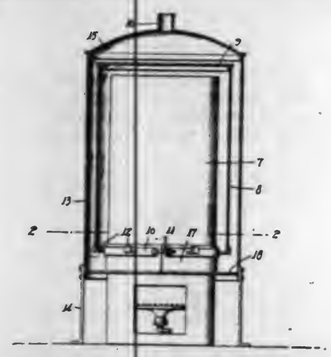
1,816,157. INJECTOR. PHILIP LANE SCOTT, Chicago, Ill., assignor to Super-Diesel Tractor Corporation, Laporte, Ind., a Corporation of New York. Filed June 16, 1926. Serial No. 116,272. 6 Claims. (Cl. 123—139.)



1. In an injecting system for internal combustion engines and the like the combination of a main pumping

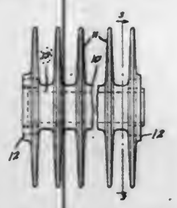
unit, a plurality of fuel injecting pump units, ported hollow rotor valves, one connected with the high pressure side of the main pump and the other with the low pressure side thereof, a series of ducts between each injector pump and the two hollow rotor valves respectively, one duct of each set communicating with the injector pump on one side of the operating piston thereof and the other on the opposite side thereof, the said ducts being arranged to communicate with the rotor valves through the ports thereof as the valve is rotated, and means for operating the valves in proper timed relationship.

1,816,158. HEAT CONSERVING ATTACHMENT FOR UPRIGHT BOILERS. FRANCIS M. SIMPSON and ROBERT TERRY, Stroud, Okla.; said Terry assignor to said Simpson. Filed Mar. 20, 1929. Serial No. 348,547. 4 Claims. (Cl. 122—19.)



3. A device of the character described comprising inner and outer hoods adapted to be removably disposed over an upright boiler, the outer hood extending lower down than the inner hood, and means adapted to removably embrace the boiler and having brackets for supporting the inner hood and having an outstanding flange to close the lower end of the outer hood.

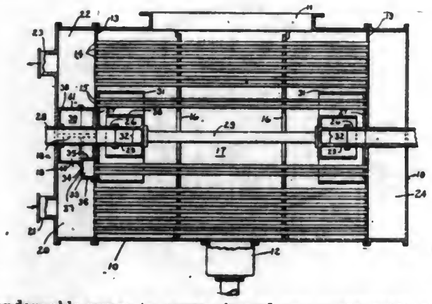
1,816,159. EVAPORATOR SECTION. JAMES W. SMITH, Cleveland, Ohio, assignor to Ralph Perkins, trustee, Cleveland, Ohio. Filed Sept. 26, 1928. Serial No. 308,557. 7 Claims. (Cl. 257—262.)



1. A device of the character described, comprising a body provided with external fins and a longitudinal bore, and means for breaking up stratification in fluid currents therein, said means including a core presenting sweeping curved surfaces to guide such fluid.

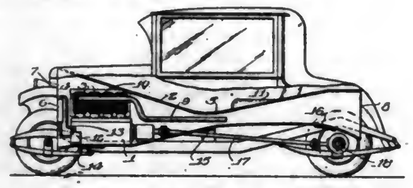
1,816,160. CONDENSER. JOHN H. SMITH, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1926. Serial No. 145,200. Renewed Nov. 4, 1930. 13 Claims. (Cl. 257—43.)

1. In a condenser of the radial-flow type, the combination of a shell having a steam inlet and a condensate outlet, tube plates connected to the shell, a tube nest consisting of tubes surrounding an air and non-condensable gas space and supported by the tube plates, an off-take having openings to receive air and non-condensable gases from said space, means arranged within the air and non-



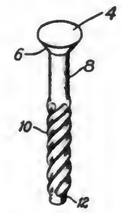
condensable space to cause air and non-condensable gases to pass about a portion of the inner tubes of said nest before entering the off-take openings, and means providing for the circulation of cooling medium through said tubes.

1,816,161. INTERNAL COMBUSTION ENGINE. JOSEPH B. STRAUSS, Chicago, Ill. Filed July 20, 1927. Serial No. 207,095. 3 Claims. (Cl. 123—171.)



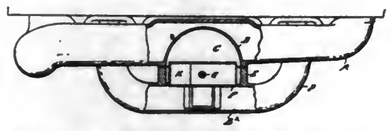
1. An internal combustion engine, comprising a plurality of cylinders, a tube having a central contracted portion and enlarged front and rear ends, said enlarged ends being enlarged both vertically and horizontally, said cylinders being located in the enlarged front end of said tube, and means for moving air through said tube past said cylinders so as to cool the same.

1,816,162. METALLIC FASTENING. GEORGE S. TOLMAN, Jr., Braintree, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 21, 1925. Serial No. 76,700. 1 Claim. (Cl. 85—44.)



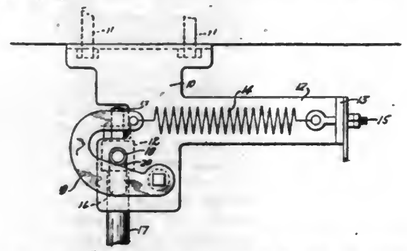
A drive screw comprising a flat head having a conical under surface, a cylindrical shank extending from the conical under surface of the head, a multiple thread formed on the lower portion of the cylindrical shank, said thread having a maximum diameter greater than the diameter of the cylindrical shank and a minimum diameter less than the diameter of the cylindrical shank, and a reduced substantially cylindrical pilot portion formed on the shank beyond the thread, terminating in a blunt entering end.

1,816,163. INTAKE MANIFOLD FOR INTERNAL COMBUSTION ENGINES. GEORGE R. WELCH, Detroit, Mich. Filed July 22, 1929. Serial No. 380,131. 3 Claims. (Cl. 123—122.)



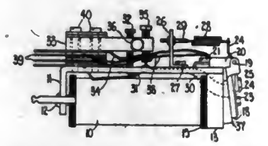
1. The combination with an exhaust manifold of an internal, combustion engine, of an outwardly opening chamber within said manifold having its walls heated by the exhaust gases, an intake manifold having apertured laterally extending branch portions registering with the opening in said chamber, and a vertical portion connecting said branch portions and a hollow member rotatively mounted within said inlet manifold and in one position of adjustment cutting off communication between the same and said chamber, said member in another position of adjustment cutting off direct communication between said vertical portion and branch portions of said inlet and directing the incoming mixture first into said chamber and then outward into said branch portions.

1,816,164. SUPPORT. JOSEPH KAYE WOOD, Mount Vernon, N. Y., assignor to General Spring Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 29, 1930. Serial No. 478,768. 8 Claims. (Cl. 248—31.)



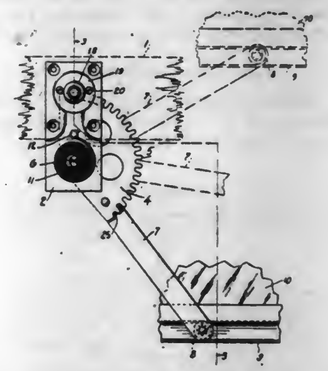
1. A yieldable support comprising a load carrying rod having guide rollers mounted on opposite sides thereof, a fixed support having slots adapted to receive said rollers and guide and limit their motion along a line parallel to the pull of the load, levers pivotally mounted upon opposite sides of the fixed support and having bearing surfaces engaging said rollers to support the load carrying member, said bearing surfaces being near the perpendicular from the pivot to the direction of pull of the load, and springs adjustably connected at one end to the fixed support and connected at the other end to a part of each lever which moves in an arc the cord of which is approximately 45° to the direction of pull of the spring in its median position.

1,816,165. ELECTROMAGNETIC RELAY. HARRY STANLEY WOODHEAD, Liverpool, England, assignor to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 9, 1929, Serial No. 391,149, and in Great Britain Oct. 16, 1928. 2 Claims. (Cl. 175—336.)



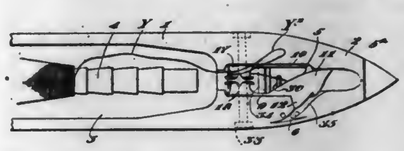
1. In an electromagnetic relay, a magnetizable core, a magnetizing winding on said core, a yoke member lying parallel to said core and on only one side thereof, a D-shaped pole piece secured to one end of said yoke member and surrounding one end of said core to form an air gap around the end of the core, an armature pivoted on said yoke member, a movable coil secured to said armature and projecting into said air gap, the energization of said movable coil while said magnetizing winding is energized, moving said armature on its pivot.

1,816,166. WINDOW REGULATOR MECHANISM. ANDREW CHRISTIAN ANDERSEN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed May 14, 1928. Serial No. 277,491. 2 Claims. (Cl. 268—126.)



1. A window regulator mechanism comprising, an adjustable member provided with rack teeth, means connecting the adjustable member with a window, a rotatable driving element having a pair of eccentrically disposed pins for engaging the teeth in the rack so that the rack is moved and the window adjusted upon actuation of the driving member, the depth of the teeth being sufficient to permit the eccentric pins to move in between any two given teeth, said rack being provided with a recess beyond the end tooth, which recess is of a depth less than the depth of the teeth so that when the rack approaches the end of its movement an eccentric pin may engage in such recess whereby further actuation of the parts is prevented.

1,816,167. SHUTTLE EYE AND PROCESS OF MAKING THE SAME. LUTHER C. BALDWIN, Providence, R. I., assignor, by mesne assignments, to U S Bobbin & Shuttle Company, 1929, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 15, 1928. Serial No. 254,434. 8 Claims. (Cl. 139—223.)



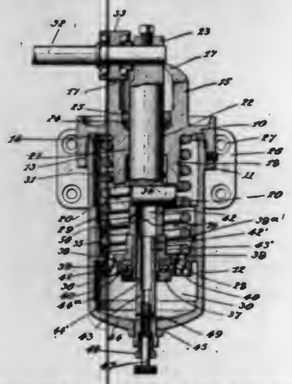
A shuttle eye having spaced side walls providing a yarn passage between them and a yarn-retaining element projecting inwardly from each wall, each of said elements having forwardly and rearwardly directed horns arranged to prevent the yarn from throwing itself out of said passage by movement in either a rearward or forward direction, respectively.

1,816,168. GAS DISCHARGE TUBE SWITCH. RUDOLF G. BERTHOLD, Berlin-Siemensstadt, Germany, assignor to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Oct. 15, 1926, Serial No. 141,761, and in Germany Oct. 16, 1925. 3 Claims. (Cl. 200—144.)



1. A switch for interrupting large electric currents comprising a gas discharge tube having two electrodes connected in circuit with the current, an insulating body, and means for introducing said body into the discharge space of said tube intermediate of said electrodes, for reducing the cross-sectional area of said space to interrupt the current.

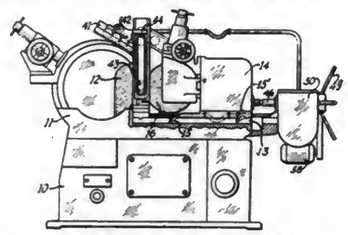
1,816,169. DOOR CLOSER AND CHECK. EMIL BOMMER, Brooklyn, N. Y. Filed Aug. 16, 1929. Serial No. 386,365. 6 Claims. (Cl. 16—52.)



1. In a door closer and check of the kind set forth, consisting of a stem and a liquid containing casing having a packing box in one end in which the stem is mounted for turning and sliding movement, a piston carried by the stem within the casing and forming chambers for the fluid within the casing, one chamber being formed adjacent the packing box end and the other being formed remote therefrom, said stem having therein a fluid passage which is in communication with said remote chamber, means for moving the piston against the resistance of the fluid in the remote chamber to force a discharging stream of liquid through said passage, a flange member projecting from the piston in the chamber adjacent the packing box end, said stem having therein a transverse opening forming an outlet from the passage into the chamber adjacent the packing box, said outlet opening being obliquely inclined and pointing toward said flange member and in a direction away from the packing box end so as to direct fluid received under pressure from the passage to said flange in a direction opposite to the packing box end, whereby to prevent leakage through said packing box end resulting owing to the turning and sliding movement of said stem.

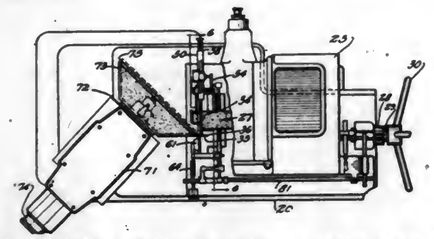
1,816,170. GRINDING MACHINERY. CLEMENT BOOTH, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 1, 1929. Serial No. 336,800. 21 Claims. (Cl. 51—103.)

1. A grinding machine of the centerless type including a grinding wheel operable at a high grinding rate of speed, an opposed regulating wheel operable at a slow work controlling rate of speed, a column member projecting adjacent the throat between said wheels, means carried by the column for restraining axial movement of a work



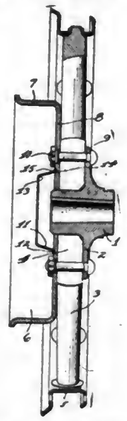
piece in the grinding throat and an additional means carried by the column for radially shifting a work piece relative to said grinding throat.

1,816,171. VALVE GRINDER. CLEMENT BOOTH, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 12, 1929. Serial No. 354,631. 18 Claims. (Cl. 51—103.)



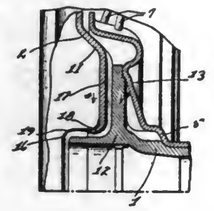
1. A grinding machine, including a grinding wheel and a regulating wheel, means holding the work laterally against the regulating wheel, ejector stop mechanism for holding the work axially toward the regulating wheel, a rock arm to successively engage, actuate and disengage the ejector mechanism on movement in a work ejecting direction, means for returning the ejector to work stop position on such disengagement, and adjustable means for variably limiting the stop position of said ejector.

1,816,172. LUBRICANT PROTECTING STRUCTURE FOR INTERNAL BRAKES OF VEHICLE WHEELS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Mar. 7, 1927. Serial No. 173,534. 14 Claims. (Cl. 184—106.)



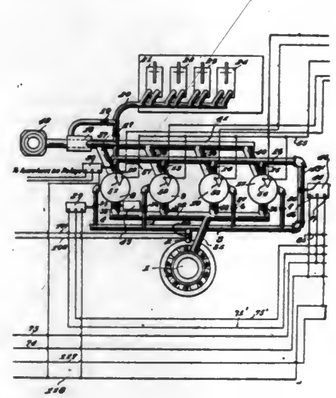
1. In a vehicle wheel, the combination with a hub, a brake drum having a web, and a brake flange for use with an internal brake, and securing means for said brake drum extending through said web, said web having in its rear face an annular groove located between said hub and brake flange, of a lubricant collecting ring having a transverse outwardly extending annular flange rigidly secured in said annular groove, said ring extending rearwardly beyond the rear end of said hub, and means for conducting lubricant collected by said ring to a point outside said brake drum, said means including apertures in said web opening into the space inclosed by said ring.

1,816,173. LUBRICANT PROTECTING STRUCTURE FOR INTERNAL BRAKES OF VEHICLE WHEELS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Mar. 21, 1927. Serial No. 177,148. 16 Claims. (Cl. 184—106.)



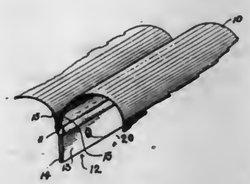
1. In a vehicle wheel, the combination with a hub and hub flange, of a brake drum secured to said hub flange and formed with a passage extending outwardly toward the outer periphery of the wheel, and means upon said brake drum for collecting lubricant discharged from said hub and conducting the lubricant to the passage.

1,816,174. BLAST FURNACE CONTROL SYSTEM. RICHARD P. BROWN, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1928. Serial No. 270,528. 20 Claims. (Cl. 263—19.)



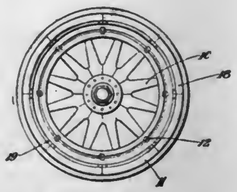
1. In a control system, a blast furnace, a plurality of sources of heated blasts for said furnace, a common conductor for said heated blasts, automatic means responsive to the temperature of one of said sources for automatically switching said common conductor from said source to the succeeding source, a source of air supply for said source of heated blasts and means responsive to said automatic means for connecting said supply thereto.

1,816,175. STICKER FOR FILING PRINTS IN BINDERS. HUGH G. BUCHAN, Philadelphia, Pa., assignor to Buchan Telephone Records Co., Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 20, 1929. Serial No. 356,689. 3 Claims. (Cl. 129—19.)



3. The method of mounting folded sheets, such as blue prints, in a binder so that the sheet may be opened out flat while in the binder, the said method consisting of fastening a folded strip of flexible material to the sides of the folded sheet near its folded edge so that the folded edge of the sheet is reciprocable between the folded sides of the strip when the folded edge of the strip is held against movement in a binder.

1,816,176. VEHICLE TIRE. VINCENZO CASTORINA, West New York, N. J. Filed Nov. 10, 1928. Serial No. 318,430. 1 Claim. (Cl. 152—10.)

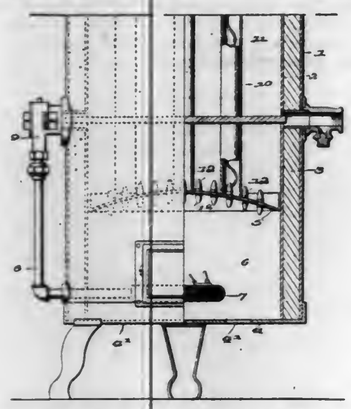


A device of the character described, comprising a hollow rim having a concave peripheral wall, a solid rubber strip lying in the groove thus formed and having beads overlying the edges of the peripheral wall, a second solid rubber strip defining an annular chamber with said first strip and having beads along its edges, a pneumatic tube arranged in said chamber, a tread member separate from said second strip overlying said strip and having beads along its edges, arcuate clamping members detachably mounted on said rim, said clamping members having sockets to receive the beads on the edges of said strips and tread member, and a circular metallic shield overlying said pneumatic tube and having its edges slidably held between the edges of the two rubber strips.

1,816,177. WATER HEATER. FREDERICK G. CORBUS, Philadelphia, Pa., assignor to David M. Newbold, Philadelphia, Pa. Filed Aug. 16, 1928. Serial No. 300,050. 2 Claims. (Cl. 122—14.)

1. A heater of the class described, comprising a tank closed at its top and bottom, a combustion chamber below the tank including an imperforate dome forming a closure

for the bottom of the tank, said dome being provided with numerous studs spot-welded on the upper and lower sur-



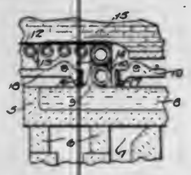
faces thereof, and in vertical line with each other, and forming heat augmenting means, and means for supplying heat to said combustion chamber.

1,816,178. TESTING APPARATUS. WILLIAM M. DARNALL, Lakewood, Ohio. Filed Feb. 8, 1929. Serial No. 338,498. 1 Claim. (Cl. 175—183.)



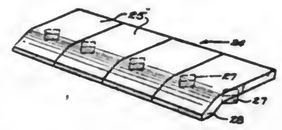
A tester comprising a rod screw threaded at one end and containing an air chamber at the opposite end, a stationary terminal in the chamber, an adjustable terminal pin projecting into the chamber opposite the stationary terminal to form a spark gap, a dial and knob on the outer end of said adjustable terminal pin, a sight glass closing the chamber, and means to admit air under pressure into the chamber.

1,816,179. PROCESS FOR DRAWING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 2, 1926. Serial No. 126,603. 7 Claims. (Cl. 49—87.)



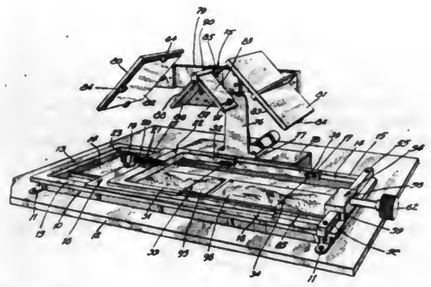
1. The method of forming sheet glass, consisting in drawing a sheet of glass from a mass of molten glass, deflecting the sheet in one direction and reducing it to a substantially predetermined thickness and then subsequently deflecting the said sheet in the opposite direction.

1,816,180. APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, and LUKE C. MAMBOURG, Lancaster, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Original application filed Aug. 20, 1927, Serial No. 214,278. Divided and this application filed May 2, 1930. Serial No. 449,807. 9 Claims. (Cl. 49—17.)



1. In sheet glass apparatus, a receptacle containing a mass of molten glass, means for forming a sheet therefrom, means for heating the receptacle, a tile, and means for supporting said tile on the receptacle, said supporting means being of such character as to provide spaced openings through which heated gases may pass under the tile.

1,816,181. METHOD OF AND APPARATUS FOR MAKING MAPS. LEON T. ELIEL, Pasadena, Calif., assignor to Elizabeth S. Eliel. Filed May 4, 1925. Serial No. 27,712. 10 Claims. (Cl. 33—1.)

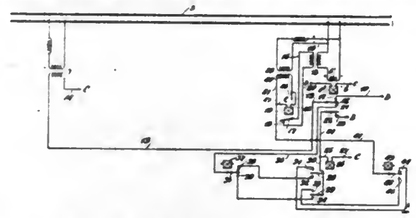


1. An apparatus to be used in map making comprising, in conjunction with a pair of photographs of territory to be mapped having a common overlap area: a stereoscope arranged for viewing said photographs; a pair of hair lines; means for interposing said pair of hair lines between said stereoscope and said photographs, and means whereby said hair lines may be moved laterally of their longitudinal extension at the same time being retained at a constant distance of separation.

4. A method of indicating contours, said method comprising: examining stereoscopic photographs of a surface under a stereoscope so that an image of said surface in relief appears to the observer; interposing hair lines between the photographs and the observer so that an image of a single line appears to the observer which cuts the image of said surface in relief at a point; and moving said hair lines to cause said line image to cut said surface image on a line.

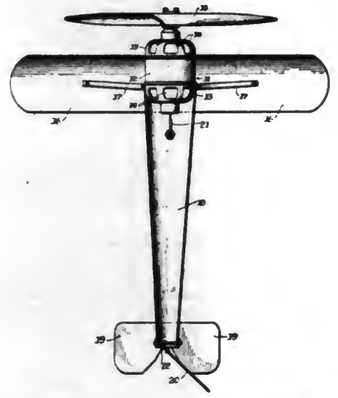
1,816,182. RAILWAY TRAFFIC CONTROLLING APPARATUS. CHARLES W. FAILOR, Forest Hills, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1929. Serial No. 395,488. 18 Claims. (Cl. 246—34.)

2. In combination, a section of railway track, a track relay provided with a circuit including the rails of said track section, means controlled by said relay for applying train control energy to the rails of said section, and means



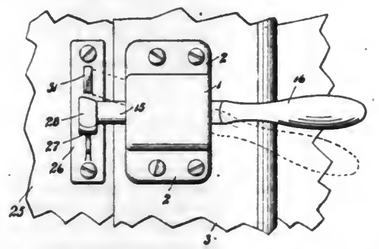
responsive to the application of train control energy to said section for increasing the impedance of the track relay circuit.

1,816,183. MEANS FOR AND METHOD OF COOLING AND VENTILATING AIRPLANE FANS. FRANK H. GALLAGHER, Chicago, Ill., assignor to Nicholas G. Canellis, Chicago, Ill. Filed Nov. 16, 1928. Serial No. 319,830. 6 Claims. (Cl. 172—36.)



1. The combination of an elongated tubular housing, a rotatable fan mounted at one end of the housing in position to cause a draft of air to pass along the sides of the housing, said housing having an aperture formed in its end adjacent the fan and having an opening at an end remote from said fan whereby upon the operation of the fan to create a draft of air as aforesaid, the interior of the housing may be ventilated by suction created at the remote end.

1,816,184. REFRIGERATOR LATCH. CARL GESKE, Grand Rapids, Mich., assignor to Winters & Crampton Manufacturing Company, Grandeville, Mich., a Corporation of Michigan. Filed Apr. 11, 1927. Serial No. 182,974. 4 Claims. (Cl. 292—245.)



1. A latch construction comprising a housing, a bar secured in the housing at the outer part thereof, a pin

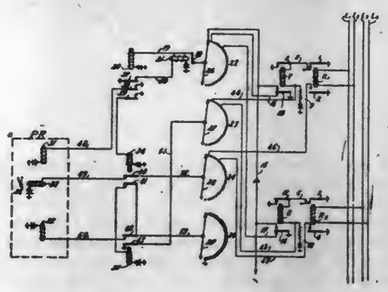
extending inwardly from said bar, two spaced apart stop lugs on said bar located a short distance from the pin, a spring coiled around the pin and having two ends extending lengthwise of the bar to form spring arms, one bearing against the outer side of each lug, and a lever pivotally mounted on the pin, one of said arms bearing against each side of the lever to hold it in normal middle position, said lever being capable of rocking movement in either direction away from its normal middle position.

1,816,185. POURING DEVICE. MAX W. GOLDBERG, Port Washington, Wis., assignor, by mesne assignments, to Modern Equipment Company, Port Washington, Wis., a Corporation of Wisconsin. Filed Sept. 3, 1929. Serial No. 390,057. 13 Claims. (Cl. 22—82.)



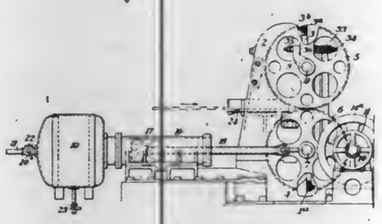
1. A metal pouring device comprising a portable frame, a vertically movable member carried thereby and having means for holding a container, and a single means for raising and lowering said vertically movable member.

1,816,186. SUPERVISORY SYSTEM. HARRY E. HERSHEY, Oak Park, Ill., assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 19, 1927. Serial No. 214,060. 10 Claims. (Cl. 234—1.5.)



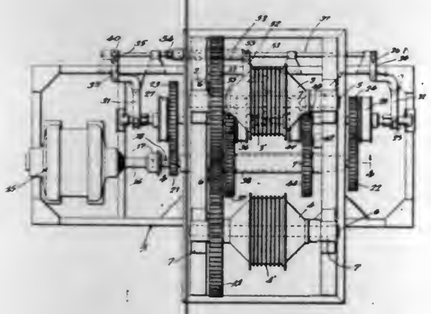
1. In a supervisory system, a plurality of devices having different positions, a recorder having device and position indicating means, a selecting mechanism for the recording device, means responsive to a change in position of any one of said devices to operate the selecting mechanism to find the device, to set said device indicating means in accordance with the finding and connect that device to the recorder, and means responsive to the connection for controlling said position indicating means and operating the recorder to record the device changed, and the position to which the device moved.

1,816,187. FLYING SHEARS. LANE JOHNSON, Ingram, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 22, 1926. Serial No. 103,788. 19 Claims. (Cl. 164—68.)



1. The combination with shearing mechanism having shear blades for cutting moving material, of driving means whereby the blades are moved into cutting relationship, auxiliary means accelerating the blades prior to a cutting operation to substantially the velocity of the moving material and decelerating the blades after the cutting operation, and braking means holding the blades inoperative between cutting operations.

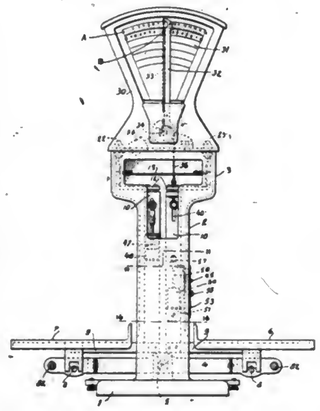
1,816,188. CAR PULLER. FRED T. KERN, Milwaukee, Wis. Filed Aug. 30, 1929. Serial No. 389,373. 4 Claims. (Cl. 254—185.)



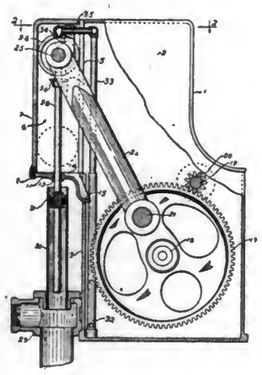
1. A car puller of the character described comprising a pair of drums adapted to drive a cable, twin gears constraining the drums to rotate in opposite directions, a motor driven shaft, a counter-shaft, clutch controlled gearing for driving the counter-shaft at variable speed and power ratios from the motor driven shaft, a clutch controlled gear set for driving one of the twin gears of the drum forwardly from the counter-shaft and including a sleeve shaft having a pinion fixed thereto and meshing with one of the twin gears, and clutch controlled gearing for reversely rotating the sleeve shaft from the counter-shaft.

1,816,189. SCALE. BERT W. KING, Detroit, Mich., assignor to Barnes Scale Company, Detroit, Mich., a Corporation of Michigan. Filed June 13, 1929. Serial No. 370,507. 14 Claims. (Cl. 265—36.)

1. In a scale, a vertically positioned hollow post, lever means near the bottom of the post, a platform associated with the lever means, a pull rod connected to the platform and extending upwardly through the vertical post, a check link near the upper portion of the post, stationary fulcrum means for one end thereof, means connected to the pull rod providing a fulcrum for the other end of the check link, and means adjustably connecting the last mentioned means to said pull rod.

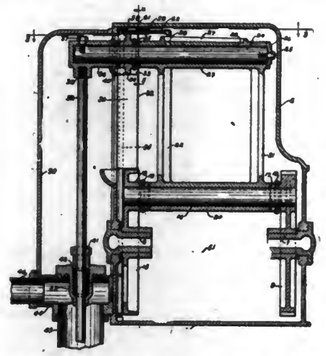


1,816,190. POWER HEAD FOR PUMPS. PHILIP A. MYERS, Ashland, Ohio, assignor to The F. E. Myers and Bro. Company, Ashland, Ohio, a Corporation of Ohio. Filed July 24, 1929. Serial No. 380,547. 10 Claims. (Cl. 74—14.)



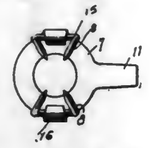
1. In a power head for pumps, a gear case forming a lubricant chamber, a guide case removably attached to said gear case, the bottom of said guide case forming a splash plate with a drain extending into said gear case, and means for conveying lubricant from said lubricant chamber to said guide case.

1,816,191. POWER HEAD. PHILIP A. MYERS, Ashland, Ohio, assignor to The F. E. Myers & Bro. Company, Ashland, Ohio, a Corporation of Ohio. Filed Aug. 19, 1929. Serial No. 387,040. 27 Claims. (Cl. 74—14.)



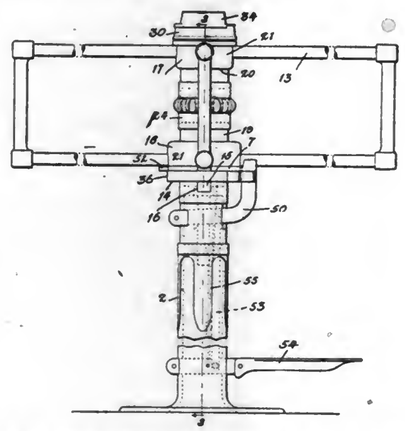
1. In a power head, power driving means, a rectangular frame-shaped pitman driven thereby, means for guiding one end of said pitman, and a piston rod connected to said end of the pitman.

1,816,192. NUT LOCK. YASUHIKO NAGANO, Los Angeles, Calif. Filed Feb. 17, 1930. Serial No. 429,103. 3 Claims. (Cl. 151—3.)



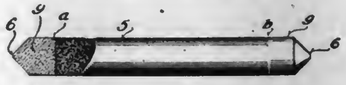
3. A nut lock, comprising a washer positioned beneath a nut, knuckle members integral with and on the periphery of the washer, sharp-pointed pawls operatively mounted in the knuckle members, and adapted to engage with the bolt threads on opposed sides of the bolt, and a lug integral with the washer to engage with the periphery of the nut.

1,816,193. TURNSTILE. HERBERT BARCROFT ODELL, Toronto, Ontario, Canada. Filed Dec. 21, 1928. Serial No. 327,551. 6 Claims. (Cl. 39—3.)



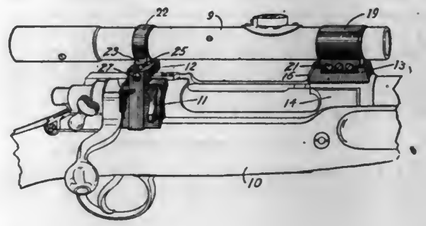
1. A turnstile comprising a stationary vertical support; a vertical head revolvably carried thereby; two opposing pairs of horizontal arms; vertical means lying substantially parallel to said support and carried by said head and on which the inner ends of said arms are pivoted, said pairs of arms being mounted so as to be given a common rotary movement with said head around said support; means to lock said head and arms against said rotary movement, and means interiorly carried by said head and fuunctioning directly in conjunction with said stationary support to release one pair only of said arms in opposing position so that they may be swung horizontally on their vertical pivotal means while said head is locked against rotation to place them substantially parallel to the direction of movement of traffic through the passageway in which said turnstile may be located.

1,816,194. METHOD OF FORMING RESISTOR UNITS. LAURENCE E. POWER, Milwaukee, Wis., assignor, by mesne assignments, of one-half to Lynde Bradley and one-half to Harry L. Bradley, Milwaukee, Wis. Filed June 10, 1927. Serial No. 197,881. 3 Claims. (Cl. 201—76.)



1. The hereindescribed method of forming a molded resistance unit having terminal portions of relatively high conductivity, which consists in providing a material of relatively high resistance value, in placing a material of lower resistance value at the ends of the material of higher resistance value, and in molding the material in a single operation into an integral unit.

1,816,195. TELESCOPE MOUNTING FOR GUNS. JOHN H. REDFIELD, Denver, Colo. Filed May 7, 1928. Serial No. 275,621. 5 Claims. (Cl. 33—50.)

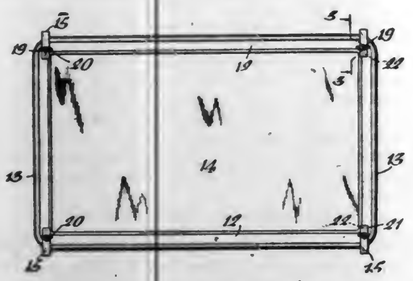


1. Means for supporting a telescope upon a rifle having a laterally extending rear sight support provided with clamping screws comprising: a pivoted telescope support secured to said rifle adjacent the forward extremity of said telescope; a split clamping ring adapted to surround said telescope rearwardly of said support; and a base on said clamping ring arranged to extend within a groove in said rear sight support, and be clamped in place by said clamping screws.

1,816,196. SCREEN FOR AUTOMOBILES. DONALD D. ROWLEY and DAVID M. MCLELLAN, Buffalo, N. Y. Filed July 5, 1929. Serial No. 375,920. 2 Claims. (Cl. 292—258.)

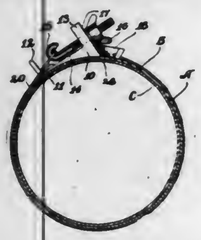
1. A clamping device for detachably securing a screen in a window panel, comprising a pair of oppositely disposed side clamping members having telescopically joined shanks about which said members are adapted to swing

into and out of clamping position, one of said members having an opposing extension, and a brace rod carried



by said member-extension in substantially parallel relation to said shank for abutting engagement with the screen in the clamped position of the parts.

1,816,197. CLAMP. RICHARD RUEMELIN, Milwaukee, Wis. Filed Mar. 17, 1930. Serial No. 436,319. 7 Claims. (Cl. 24—19.)



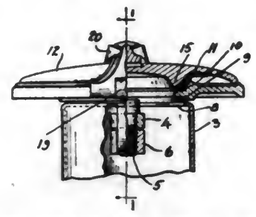
2. A clamp for flexible air cleaner tubes including, a clamping body, an adjustable bolt member, a nut for adjusting said bolt, a flat working surface on said body for said nut for adjusting said bolt, a flexible clamping member adapted to extend about the tube, means for connecting one end of said flexible member to said bolt cooperating with a flat surface over which said bolt operates to prevent rotation of the bolt, means for connecting the other end of said flexible member to said body whereby when said nut is adjusted said flexible member will be drawn tightly about the tube.

1,816,198. TRESTLE. CLARENCE J. SAMPLE, St. Louis, Mo. Filed Mar. 28, 1930. Serial No. 439,825. 5 Claims. (Cl. 304—5.)



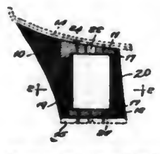
1. In a trestle structure of a pair of like trestle sections, each section comprising a girth, a pair of sockets carried by each girth, detachable legs extending upwardly into said sockets, a pair of detachable braces directed from each pair of legs to a point under each girth, means for supporting the inner ends of said braces, means for detachably connecting the outer ends of said braces for locking them in position, wedge means adapted for engagement with each pair of legs and means for loosening the wedge connection when the legs are to be removed from their respective sockets.

1,816,199. RADIATOR CAP. WILLIAM SCHNELL and JOHN B. FLYNN, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 15, 1929. Serial No. 340,103. 12 Claims. (Cl. 220—24.)



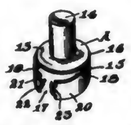
1. A cap for radiator filler tube or the like, consisting in combination of an adapter arranged to cooperate with the open end of the filler tube, a hinged cover for the adapter, said cover having a seat, and locking means for the cover having a camouflaged engagement with the cover in the said seat so that the cover and locking means appear integral.

1,816,200. MOLDED ARTICLE. ISIDORE SIMON, Chicago, Ill. Filed Sept. 3, 1926. Serial No. 133,424. 4 Claims. (Cl. 86—34.)



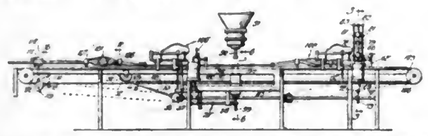
1. A heel of the character described comprising a body portion formed of a plastic material moldable under pressure, a nailing insert at the top and bottom of said body portion, and a relatively large metallic tubular member interposed between and in contact with said inserts.

1,816,201. SPOKE-TENON AND FELLY-CLIP. MATHIAS J. ADAMS, Turkey River, Iowa. Filed Nov. 23, 1928. Serial No. 321,487. 1 Claim. (Cl. 301—67.)



A spoke holding felly-clip comprising a disk member, means securing said member to the felly, a flange projecting from the other side of said member, said flange structurally integral with the disk for a fraction of its circumference, the remaining portion of the flange divided to form flexible fingers, and means on each of the fingers adapted to be attached to the spoke.

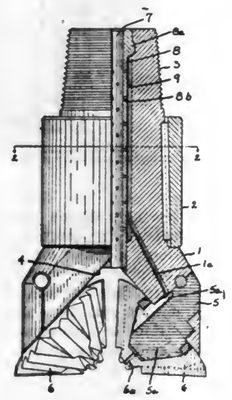
1,816,202. PACKAGING METHOD AND APPARATUS. ARTHUR W. BELL, Chicago, and ELMER E. ELDREDGE, Wilmette, Ill., assignors, by mesne assignments, to Kraft-Phenix Cheese Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,849. 13 Claims. (Cl. 93—6.)



1. The method of packaging material which consists in flowing the material into a rigid open-topped walled recep-

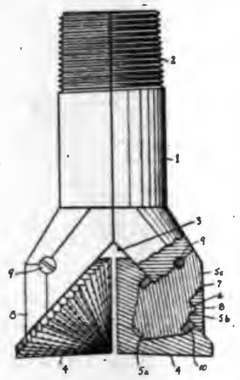
tacle having its bottom and its side wall lined with sheet wrapping material, then disposing over the open top of the receptacle another sheet of wrapping material, forming on said latter sheet a peripheral flange extending towards the bottom of the receptacle but outside of the latter, and then effecting removal of the receptacle.

1,816,203. ROLLER BIT. GUY E. BEHNKE, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed June 10, 1929. Serial No. 369,571. 4 Claims. (Cl. 255—71.)



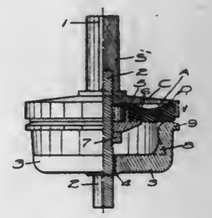
1. A roller bit having a head, a spindle carried by said head, a roller cutter mounted on said spindle, said spindle having a groove leading to the bearing surfaces of said cutter, said head having a slush passageway and a duct leading from said passageway and communicating with said groove, and a screen in said passageway over said duct.

1,816,204. DRILL CUTTER MOUNTING. GUY E. BEHNKE, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed June 17, 1929. Serial No. 371,535. 4 Claims. (Cl. 255—71.)



1. In a drill: a bit head having a cutter recess, a spindle recess in the wall of said cutter recess, and an eccentric bore leading from said spindle recess, said bore being more remote than said spindle recess from the bottom of said bit head; a spindle having a bearing portion in said cutter recess, another portion in said spindle recess, and an eccentric extension in said bore; and a cutter on said bearing portion.

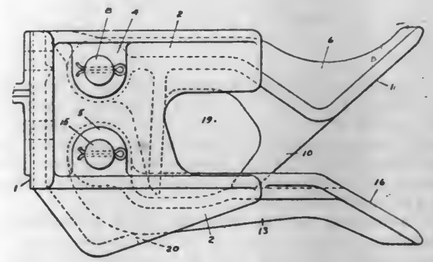
1,816,205. VALVE AND SEAT THEREFOR. PAUL ROBERT GEORGE BIEDERMANN, Los Angeles, Calif. Filed May 11, 1925. Serial No. 29,435. 8 Claims. (Cl. 251—127.)



1. A valve construction comprising a valve seat, a valve stem adapted to be moved through a perforation in said seat, a valve cap detachably associated with said stem, and a flat-hollowed-out open resilient insert securely held in said cap, said hollowed-out portion functioning to provide an air cushion between said cap and said insert, said valve seat being so constructed that when said valve is closed, a substantially linear contact merely will be maintained between said insert and said seat.

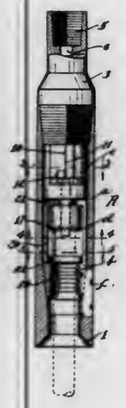
2. In a valve, a hollow cylindrical body through which a fluid is adapted to pass, said body having an inwardly directed double arcuate throat forming a fluid checking outlet from said body, and provided with an outwardly flowing curviform seat which is contiguous and in curved alignment with said arcuate throat.

1,816,206. COUPLER. AUGUSTUS D. BOOTH, Columbus, Ohio, assignor to The Chase Foundry and Mfg. Company, Columbus, Ohio, a Corporation of Ohio. Filed June 11, 1930. Serial No. 460,383. 8 Claims. (Cl. 280—33.15.)



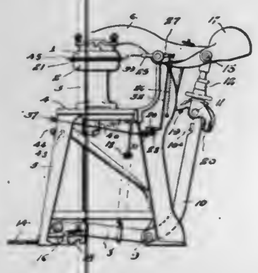
1. In a coupler, a head member, a coupler jaw having a coupler hook thereon supported by the head for vertical movement, and a second jaw supported by the head for vertical movement, said second jaw having a recess therein adapted to receive and partly support the coupler hook.

1,816,207. WELL DEVICE. MICHAEL P. BORGO, Long Beach, and LEE S. SORENSEN, Lynwood, Calif. Filed Oct. 26, 1928. Serial No. 315,308. 1 Claim. (Cl. 294—102.)



In a fishing tool, a hollow body, a slip carrier mounted within the body for limited rotational and longitudinal movement relative to the body, said carrier having teeth for engagement with an article to be recovered whereby a turning of the body will allow the carrier to move longitudinally, and slips suspended from the carrier.

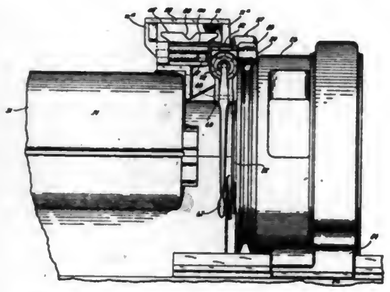
1,816,208. DRYING ATTACHMENT FOR PRESSING MACHINES. PHILIP N. BRAUN, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 20, 1928. Serial No. 248,254. 15 Claims. (Cl. 68—9.)



1. A pressing machine comprising a buck, a head movable toward and from the buck, a foraminous ventilating and presser platen element overlying the pressing face of the head, and means for blowing air through the buck, the work thereon and the ventilating and presser platen element, said element being formed to provide outlets for air and vapor at its edges.

9. A pressing machine including a buck, a head movable toward and from the buck, a ventilating and presser element movable with the head and separable therefrom, a carrier for said element for supporting the element independently of the head and the buck, means tending to cause said element to follow the head, a lock including two coacting members, and connections between one member and the carrier to move the same during the movement of the carrier, the other lock member coacting with the former to normally hold it and the carrier, and operator-operated means connected to said other member to release the same.

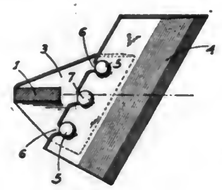
1,816,209. CHUCK OPERATING MECHANISM FOR MACHINE TOOLS. EDWARD P. BURRELL and FRED H. BOGART, Cleveland Heights, Ohio, assignors to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 10, 1928. Serial No. 268,911. 36 Claims. (Cl. 82—28.)



1. A machine tool having a driven member for rotating the work, a driving member for rotating the driven member in opposite directions, a brake for checking the rotation of said driven member and engaging the same, a control member for controlling the rotation of the driving member in both directions and movable in either direction from neutral position, and a connection between the control member and said brake arranged to cause the brake to be released when the control member is moved from neutral position to operative position in either direction and to be applied when the control member is moved back to neutral position.

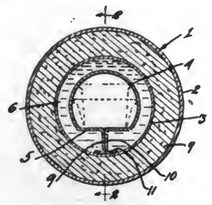
36. A machine tool having a driven member including a chuck, a driving member for rotating said driven member in opposite directions, a brake for checking the rotation of said driven member and chuck and adapted to engage said chuck, a control member for controlling the rotation of the driving member in opposite directions and movable in either direction from neutral position, and a connection between the control member and said brake arranged to cause the brake to be released when the control member is moved from neutral position to operative position in either direction and to be applied when the control member is moved back to neutral position.

1,816,210. CUTTING TOOL UNIT FOR GROUND WORKING IMPLEMENTS. JUE L. CHONG, SAM L. CHONG, and LOOK L. CHONG, Isleton, Calif. Filed Sept. 29, 1930. Serial No. 484,976. 4 Claims. (Cl. 97—212.)



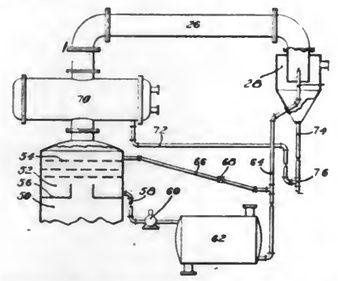
1. A tool unit for a rotary earth working implement comprising a standard adapted to be secured to a rotating member, a pad at the outer end of the standard, transversely spaced members projecting from the inner face of the pad, a blade to rest on the inner face of the pad and having slots cut in from its back edge to engage said members whereby to locate the blade on the pad, and additional means to detachably engage the blade and clamp the same against the pad.

1,816,211. SHARP FREEZING UNIT. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Apr. 24, 1930. Serial No. 446,909. 7 Claims. (Cl. 62—95.)



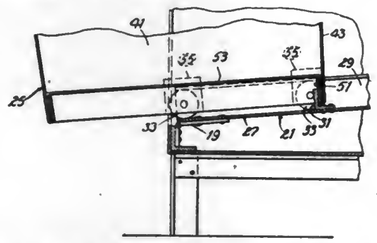
7. A cooling unit for refrigerating systems comprising a pair of spaced shells adapted to receive a refrigerant, said inner shell having a portion of the surface thereof flattened and reinforced against collapsing, said reinforcing portion being connected to said outer shell, and a mass of material surrounding the outer shell, said material having relatively good heat conducting and "hold-over" properties.

1,816,212. METHOD AND APPARATUS FOR LIQUEFYING VAPOR MIXTURES. GEORGE B. COURROUGH, Long Beach, Calif., assignor to Walter E. Lummus, Lynn, Mass. Filed July 3, 1929. Serial No. 375,712. 2 Claims. (Cl. 257—51.)



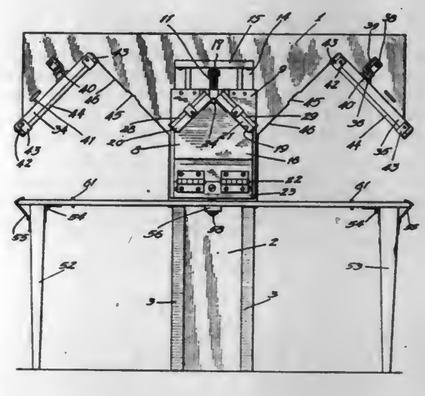
2. A method of condensing vapors which consists in passing the vapors upwardly through a condensing zone, withdrawing an initial condensate from the condensing zone, cooling the condensate thus withdrawn and continuously pumping a portion thereof into the condensing zone for contact with the vapors, passing the uncondensed vapors from the condensing zone into a condenser to obtain a second condensate, and subjecting the final remnant of light vapors to intimate direct contact with the remaining portion of the initial condensate.

1,816,213. BIN. MARSH P. DUKE, University City, Mo., assignor to Duke Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed Jan. 22, 1930. Serial No. 422,650. 5 Claims. (Cl. 312—154.)



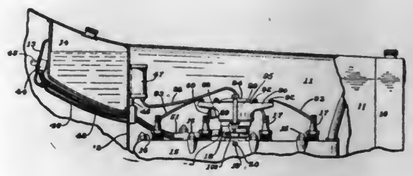
2. In a device of the class described, a support having an opening, a fixed hinge behind said opening, a platen swingably supported at its forward end by said hinge and resting with a slope normally directed downwardly and rearwardly from the opening, a bin, means for slidably supporting the bin on said platen, said bin being adapted to be withdrawn from the opening over said hinge, said platen being then automatically tilted to slope downwardly toward the opening for permitting descent of the bin thereover.

1,816,214. FOLDING MIRROR STEREOSCOPE. LEON T. ELIEL, Pasadena, Calif., assignor to Elizabeth S. Eliel. Filed May 6, 1925. Serial No. 28,353. 26 Claims. (Cl. 88—29.)



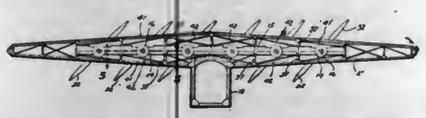
1. A folding mirror stereoscope comprising: a supporting member, said member consisting of a vertical portion and an upper transverse portion; wings pivotally extending from said vertical portion adapted to provide a base; a pair of small mirror plates pivotally secured relative to the upper transverse portion and hingedly related one to the other; and a pair of large mirror plates pivotally mounted at the outer ends of said transverse portion, the parts being so arranged that the stereoscope may be folded into a compact package.

1,816,215. IGNITION SYSTEM. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Oct. 10, 1928. Serial No. 311,494. 12 Claims. (Cl. 123—143.)



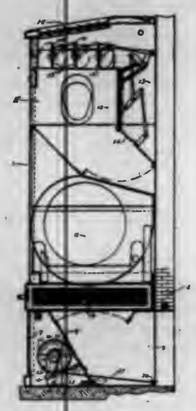
1. In a device of the character described, a distributor having a housing, a head secured thereto having integral arms extending therefrom, a distributor arm mounted to rotate within said head, a lead wire inserted in the arms and head in such position that the inner end of said wire may receive current from the distributor arm and the outer end of said wire may form a connector for a spark plug, and a detachable cap for said head having means therein adapted to conduct current to the distributor arm.

1,816,216. AIRPLANE. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed May 21, 1930. Serial No. 454,453. 4 Claims. (Cl. 244—14.)



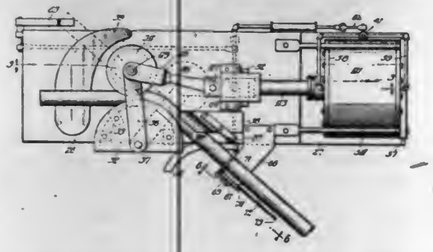
1. In an airplane construction, the combination of a wing having a plurality of engine units secured therein, said units being secured together to form an elongated engine assembly which acts as one of the spars of said wing.

1,816,217. COMBUSTIBLE DAMPER CONTROL FOR UNIT HEATERS. LEWIS D. HARNETT, Columbus, Ohio, assignor, by mesne assignments, to Buckeye Blower Company, a Corporation of Delaware. Filed Aug. 29, 1929. Serial No. 389,185. 11 Claims. (Cl. 257—137.)



7. In combination in a unit heater and ventilator of an air inlet passageway communicating with the outside of the building, a damper for controlling said passageway, yielding means for maintaining said damper in either open or closed position, and supplementary emergency means adapted to close said damper in case of excessive heat adjacent the air inlet opening, said means comprising yielding means powerful enough to close said damper, and means retaining said yielding means in inoperative condition adapted to be destroyed by excessive heat adjacent the inlet opening.

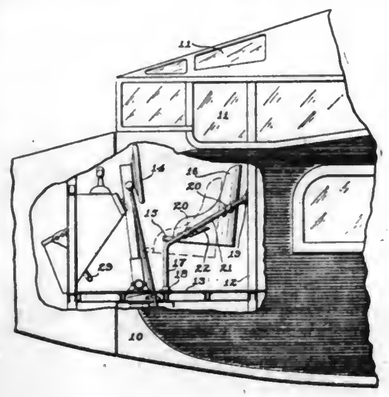
1,816,218. METHOD AND APPARATUS FOR FORMING ARCH TUBES. CHARLES A. HENRY, West Burlington, and CARL A. OPPFELT, Burlington, Iowa. Filed Apr. 29, 1929. Serial No. 359,143. 12 Claims. (Cl. 153—45.)



1. The method of forming arch tubes having short end bends and relatively long intermediate bends which comprises marking off the beginning of the long bend and forming a series of successive marks along the region of the bend definite equal distances apart, bending the tube a number of times equal to the number of marks by placing the mark at a predetermined definite position on a forming die, the radius of the bend being controlled by limiting the movement in the forming stroke, and finally making the end bends and controlling the angularity thereof by limiting the movement during the forming stroke.

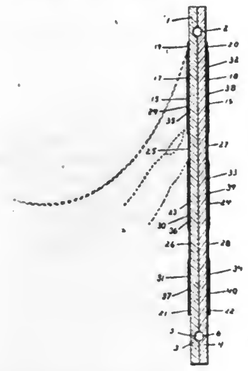
2. A forming machine for producing long intermediate bends and short end bends for locomotive arch tubes, said machine including a table, a semicircular forming die on the table having its edge concaved to correspond with the shape of the curvature of the tube, a holding member having its end surface also curved to grip the tube and disposed at an angle so as to grip the tube between said die and holding member, an arm pivoted at the center of curvature of said forming die, a sheave-like roller secured on the free end of the arm, an actuating piston and piston rod, a cross head on the end of the rod, and a connection between the cross head and sheave-like roller whereby said sheave-like roller may be advanced to bend the tube around said forming die.

1,816,219. AIRPLANE. HAROLD A. HICKS, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed June 25, 1930. Serial No. 463,674. 1 Claim. (Cl. 244—30.)



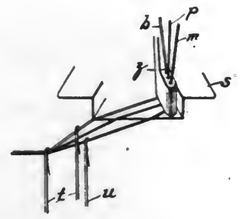
In an airplane construction, a partition disposed across the airplane fuselage forming a pilot's compartment, said compartment having foot operated controls therein spaced forwardly from said partition, a pair of laterally spaced tubular supports extending upwardly in a vertical direction from the floor of the fuselage, the upper ends of said supports being bent rearwardly and upwardly in a diagonal direction and fastened to said partition, a bucket-type seat inserted between the diagonal portions of said supports, said seat having a pair of brackets secured to each side thereof in which the supporting tubes are reciprocally mounted, said brackets and the incline of the supports being so proportioned that when the seat is reciprocated on the tubes the forward edge thereof will move in a line which intersects said controls, a series of openings in one of said tubes, an opening in one of said brackets associated in the last mentioned tube, and a hand operable lever pivotally mounted on said last mentioned bracket having a plunger formed integrally therewith adapted to enter the opening in said bracket and any one of the openings in said tube, whereby gripping the lever will release said plunger from the opening in which it is inserted so that the seat may be secured in any one of several positions along said tube and still the forward edge thereof will be in uniform angular relation to said controls.

1,816,220. CHANGEABLE LUMINOUS DISPLAY. FRED HOTCHNER, Los Angeles, Calif. Filed Apr. 6, 1931. Serial No. 528,032. 15 Claims. (Cl. 40—130.)



1. In a changeable display sign, a body of light transmitting material, means to pass radiation therethru at an angle such that a material percentage thereof is reflected back into said body from a surface and a sheet of translucent material having a surface thereof adhesive to said surface of said body positioned close to said surface of said body and so disposed that upon pressing portions of said sheet down onto said surface of said body a portion of the radiation incident upon said surface is dispersed and caused to leave said body thru said portions thus rendering the same luminous to the eye.

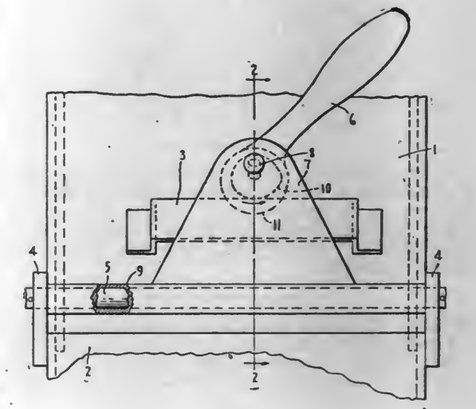
1,816,221. PLATED KNITTED FABRIC. HAROLD E. HOUSEMAN, Edge Moor, Del., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Original application filed Mar. 15, 1928. Serial No. 261,733. Divided and this application filed Feb. 12, 1929. Serial No. 339,326. 13 Claims. (Cl. 66—201.)



1. A plated knitted fabric including at least three threads all extending continuously along successive courses of the fabric and comprising normally plated wales of stitched loops in which one thread appears on the face, another on the back, and another in the middle, of the fabric, and other wales whose stitched loops are formed by the third mentioned thread while the remaining threads float.

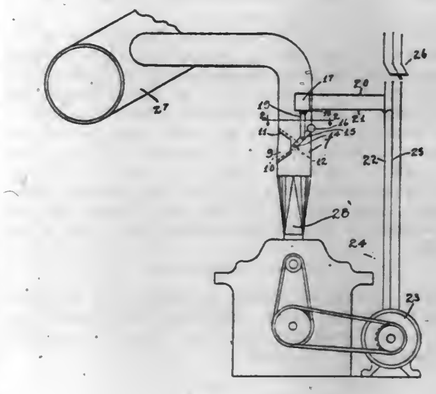
1,816,222. LOCKING DEVICE. RICHARD S. IOLEHART, Springfield, Ohio, assignor to The Bauer Brothers Company, Springfield, Ohio, a Corporation of Ohio. Filed Oct. 24, 1929. Serial No. 402,253. 5 Claims. (Cl. 292—241.)

1. A locking device for a pair of members consisting of a plate hinged to one member, a cam lever pivotally connected with said plate, a cam on said lever near its pivoted point, a rib carried by said cam lever adjacent the inner side of said plate, said rib and said plate forming a recess when said lever is in locking position, a strap-like element



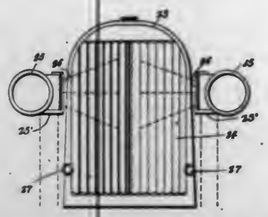
carried by the other member adapted to be received in said recess when said cam lever is turned to locking position, said rib being adapted to clear said strap-like element when said cam lever is turned to unlocking position.

1,816,223. AUTOMATIC CUT-OFF. GEORGE L. JACKSON, Louisville, Ky., assignor to The Kirk & Blum Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 28, 1927. Serial No. 236,307. 7 Claims. (Cl. 302—17.)



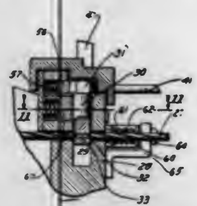
1. In combination with a dust collecting system comprising an individual suction pipe, an electric motor driven machine associated with the pipe, an orificed sleeve in the pipe, a crank actuated valve adapted for movement to alternately close the orifice and the passage through the pipe, an electromagnet adapted to move the crank to close the orifice with the valve and an electric circuit embracing the motor and electromagnet.

1,816,224. LIGHTING ARRANGEMENT FOR AUTOMOBILES. JOHN W. JACKSON, North Augusta, S. C. Filed Mar. 7, 1930. Serial No. 434,136. 4 Claims. (Cl. 240—71.)



1. The combination with the radiator of an automobile, of a plurality of parallel reflector elements mounted on the front of the radiator, and a lighting means for directing light rays toward the ground in advance of the automobile, and for directing light rays against said reflector elements.

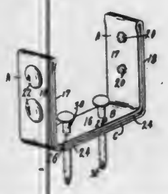
1,816,225. BURRING MACHINE. CARL C. KAMPHAUSEN, Ferndale, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed May 12, 1930. Serial No. 451,591. 5 Claims. (Cl. 10—162.)



1. In a device for aligning the transverse openings in circular work, means for moving the work in a path substantially perpendicular to its axis, means for rotating the work during said movement, and means adapted to be resiliently urged into said openings when the work is rotated so as to be aligned therewith, which means will prevent further rotation of the work during the remainder of its travel along said path.

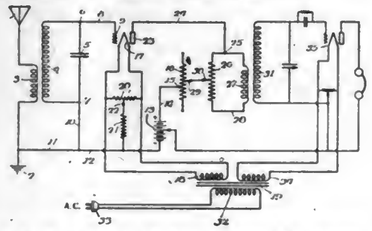
5. In a device for burring cotter pin openings in machine bolts, a work holder, a plunger reciprocally mounted in said holder, means for successively inserting said bolts in front of the plunger so as to be moved through the work holder, a resiliently mounted ratchet arranged to co-act with the bolt heads to rotate same during said movement, a pin mounted to reciprocate with the plunger which pin is resiliently urged into contact with the cotter pin opening when it is rotated into position aligned therewith, and a pair of burring tools aligned with said pin adapted to subsequently machine both ends of the openings.

1,816,226. FURRING STRIP ANCHOR AND PROCESS FOR USING THE SAME. WILLIAM C. KRABIEL, Winterset, Iowa. Filed Aug. 18, 1927. Serial No. 213,833. 2 Claims. (Cl. 72—101.)



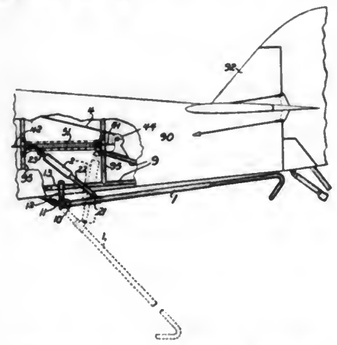
1. In a furring anchor, an anchoring element having a pair of stiff legs and a member for connecting them and holding them in spaced relation, a pair of anchoring ears connected at spaced points with said element and adapted to normally lie in superposed relation to said member and each other and to be moved to spaced position extending away from said member, said member and ears having holes which register when such member and ears are in superposed position and a headed removable securing device projected through said holes for supporting the anchor relative to a form.

1,816,227. RADIO RECEIVING APPARATUS. BYRON B. MINNIUM, Chicago, Ill., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill., a Corporation of Delaware. Filed Nov. 25, 1927. Serial No. 235,521. 8 Claims. (Cl. 179—171.)



2. In a radio receiving set, an amplifier output induction coil primary having a resistance in shunt thereof, and having the source of plate potential connected to a variable point between the ends of said resistance, including a variable resistance between said source and said first mentioned resistance, there being a variable point for engaging said variable resistance between the ends thereof, and said variable points being adjustable in unison.

1,816,228. SLIDING OLEO LANDING HOOK. ROBERT J. MINSHALL, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a Corporation of Washington. Filed Mar. 16, 1931. Serial No. 523,006. 8 Claims. (Cl. 244—2.)

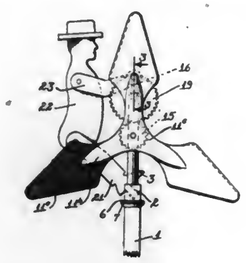


1. In combination with an aircraft fuselage, an arresting hook supported thereon for movement from an upwardly withdrawn inoperative position into a downwardly depending operative position, a compressible brace member connecting the shank of the hook with the fuselage, and means controllable by the pilot to shift said brace member relative to the fuselage, thereby to move said hook from or into operative position.

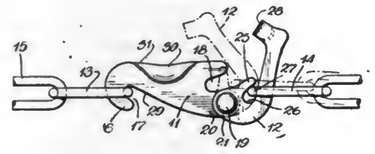
1,816,229. TOY WINDMILL. MORTIMER MORTON, Los Angeles, Calif. Filed Mar. 31, 1930. Serial No. 440,318. 7 Claims. (Cl. 46—40.)

1. In an apparatus of the class described, a rotatably mounted horizontal support, a pair of uprights rigidly

secured at and to the opposite ends of said support and provided at their upper ends with horizontally disposed journals, a crank member rotatably mounted in each of said journals with the crank portions of each in alignment with each other, means for holding said crank portions in alignment, a vane-wheel operatively connected to one of the crank members, a rudder secured intermediate the ends of the upright in which the other crank member is mounted, and a pivotally jointed figure supported on said rotatably mounted horizontal support and pivotally connected with the aligned ends of said crank members.



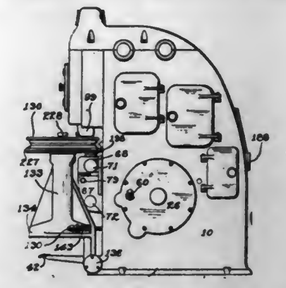
1,816,230. CONNECTING DEVICE FOR CHAINS. JOHN R. REYBURN, Fairfield, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed Sept. 21, 1929. Serial No. 394,266. 7 Claims. (Cl. 24—68.)



1. A connecting and tightening device for chain, said device being characterized by a tension member, and by a locking lever connected pivotally and tiltingly thereto near one end and provided with a hook adapted to engage said tension member when the parts are in locked position, said device having resilient means for normally maintaining said lever and said tension member in parallel planes, and said device being further characterized by having said members arranged in overlapping relation to each other at the region of said members adjacent to said pivotal connection, and one only of said members having a portion adapted to enter and be connected with a chain link having an opening of sufficient width to receive only one of said members and permit relative swinging and tilting movement between said locking lever and tension member to effect locking and unlocking of said members.

1,816,231. WELDING MACHINE. ERNEST RIEMENSCHNEIDER, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed May 25, 1929. Serial No. 366,038. 18 Claims. (Cl. 219—4.)

1. In a welding machine, a pair of electrodes arranged to reciprocate at substantially right angles to each other, a clamping device, a driven shaft, means secured to said driven shaft for reciprocating said electrodes and clamping device, a work holder arranged for intermittent rotation, a bearing for said work holder pivotally mounted on the body of said welding machine, a gear arranged



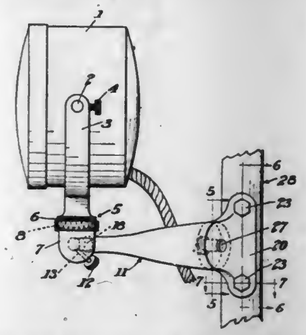
for axial rotation in line with said pivot, a gear train for driving said gear from said driven shaft, and a second gear train for driving said work holder from said gear.

1,816,232. WRIST ATTACHABLE BLOTTER. VOLNEY E. ROBISON, Bellingham, Wash. Filed Mar. 5, 1930. Serial No. 433,299. 2 Claims. (Cl. 120—25.)



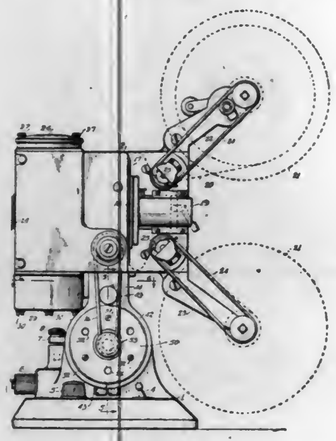
1. A wrist-attachable blotter, comprising a flat body member, supports for sheets of blotting paper operative from the underside of said member, a wrist clip extending from one end of and surmounting said member, said instrumentalities being made from a single piece of flat metallic spring material, and a cushioning element made of a single piece of sponge rubber secured to the upper periphery of said member and the inner periphery of the wrist clip.

1,816,233. LAMP BRACKET. JOHN K. RUSSELL, Los Angeles, Calif., assignor to National Accessories Corporation, Los Angeles, Calif., a Corporation of California. Filed Dec. 19, 1927. Serial No. 241,055. 5 Claims. (Cl. 240—61.12.)



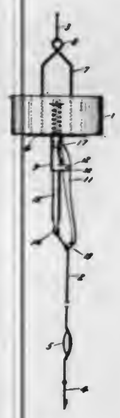
5. A lamp bracket comprising in combination, a base fixture having an arm extending at an obtuse angle from said base; an extension arm; means forming a separable pivotal connection between said arms; an axially aligned journal at the free end of the extension arm; and a lamp supporting fixture having a bearing to receive the journal of the extension arm.

1,816,234. PROJECTING MACHINE. ABRAHAM SAPIER, Chicago, Ill., assignor to Universal Stamping & Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed June 29, 1929. Serial No. 374,630. 7 Claims. (Cl. 88—17.)



1. A projecting machine comprising a hollow base, an annular bearing on said base, a casing having a hollow cylindrical journal rotatably supported in said bearing to permit said casing to be adjusted angularly relative to said base, a source of illumination in said casing for projecting light from said casing, means for feeding a film across the path of light, a motor supported within said journal and having a shaft coincident with the axis of rotation of said casing, a pulley on said shaft, and an endless belt connected to said pulley for actuating said film feeding means.

1,816,235. FISHING APPLIANCE. WALTER SCHROEDER, Davenport, Iowa. Filed Sept. 20, 1930. Serial No. 483,168. 3 Claims. (Cl. 43—15.)



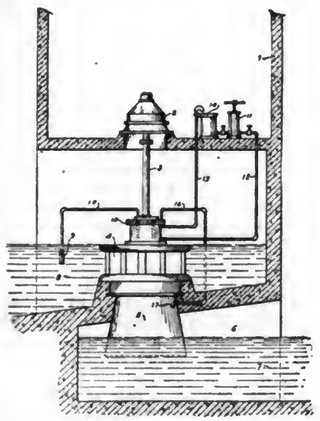
1. In a fishing appliance, a float to suspend a fish hook in the water, said float having an opening therein for reception of a reciprocable plunger, supporting means secured to the float and having a reciprocable plunger extending therethrough and into the float, resilient means actuating the plunger with relation to the supporting means and float, said plunger having a depression around its body to receive a trigger, a trigger pivotally mounted upon the supporting means and having a nose to engage the depression in the plunger, said trigger having an eye for reception of a flexible fish hook suspending means, and a flexible fish hook suspending means extending through the eye and attached to the plunger.

1,816,236. APPARATUS FOR COOLING AND CONDITIONING GRAIN. REYNOLD SHUYLER, Bethel, Kans. Filed Jan. 28, 1929. Serial No. 335,419. 4 Claims. (Cl. 34—34.)



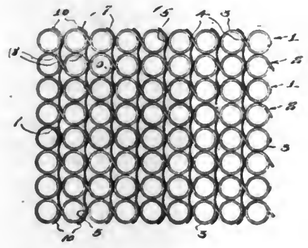
1. In an apparatus for conditioning grain, a vertically disposed elongated conduit having a grain inlet and a grain outlet, a series of inclined baffle plates positioned in said conduit to form a zig-zag passageway therein, a spreader apron positioned adjacent and spaced apart rfom the upper surface of one of said baffle plates and spaced apart from the next baffle thereabove, and means for simultaneously varying the angle of inclination of all of said baffle plates.

1,816,237. HYDRAULIC TURBINE BEARING: COOLING MECHANISM. ALBERT F. SPARKS, Springfield, Ohio, assignor to The James Leffel & Company, Springfield, Ohio, a Corporation of Ohio. Filed Mar. 14, 1929, Serial No. 347,056. 8 Claims. (Cl. 308—76.)



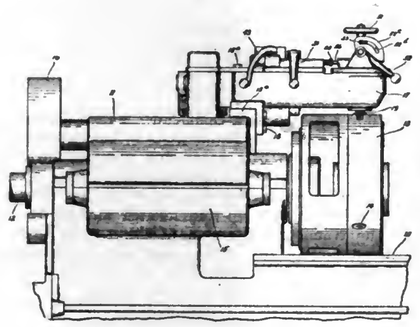
1. In combination in a hydraulic turbine of a rotating shaft, bearings therefor, a casing around said bearings and shaft containing lubricant, a distribution manifold cover on said casing, an inlet water pipe connected thereto, an outlet water pipe connected thereto and depending well members extending through the lubricant in said casing in communication with the outlet members and spaced depending inlet pipes in said well members connected to the inlet member, whereby water is circulated through the lubricant.

1,816,238. SPRING PAD CONSTRUCTION. HARRY ALBERT STEELE, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 3, 1928, Serial No. 297,192. Renewed Dec. 12, 1930. 6 Claims. (Cl. 68—9.)



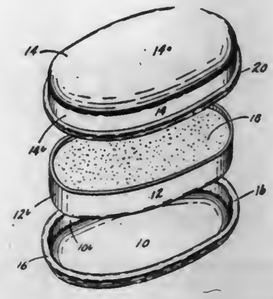
5. A spring pad comprising rows of coiled springs, means connecting the coils of the springs of each row together whereby each row is a unit in itself, and means extending transversely of the rows and between the springs of the rows and engaging the coils of the springs for holding the rows from displacement relatively to each other.

1,816,239. CHUCK CLOSING AND OPENING MECHANISM. JOHN J. N. VAN HAMERSVELD, Cleveland Heights, and EDWARD P. BURRELL, Shaker Heights, Ohio, assignors to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 5, 1927. Serial No. 237,703. 24 Claims. (Cl. 279—1.)



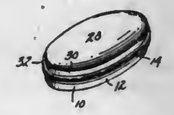
1. In a machine tool, a work holding chuck, a member for closing and opening the chuck, power means for rotating the chuck and means for operating said member from a power driven element of said means including a part which slips relative to a companion part when a predetermined load is transmitted to said member, and adjustable means whereby said predetermined load may be varied.

1,816,240. HOLDER FOR NONFLUID COSMETICS. CARL WEEKS, Des Moines, Iowa. Filed May 7, 1929. Serial No. 361,197. 1 Claim. (Cl. 132—82.)



In a device of the class described, a lower casing member having a bottom and an upstanding peripheral wall provided with an out-turned flange, a removable refill container frictionally held therein, comprising a bottom portion having an upstanding peripheral wall extending above the first wall, and an upper casing member having a down-turned peripheral wall provided with an out-turned flange, said down-turned wall being adapted to fit over and frictionally engage the portion of the wall of the refill container projecting above the peripheral wall of the lower casing with said out-turned flanges adjacent each other.

1,816,241. POWDER HOLDER. CARL WEEKS, Des Moines, Iowa. Filed May 7, 1929. Serial No. 361,196. 4 Claims. (Cl. 132—82.)

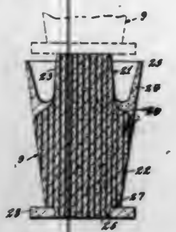


1. In a powder holder, a bottom member having an upstanding peripheral wall terminating in a peripheral, outstanding flange, an interior top having a peripheral downwardly extending wall frictionally engaged within said first wall and projecting upwardly therefrom, said interior top having a discharge opening and a neck extending upwardly therefrom provided with an adjustable closure means, and a top casing member having a downwardly inclined peripheral wall also terminating in a peripheral, outstanding flange for frictionally engaging around the wall of said interior top.

1,816,242. RUBBER EMULSION AND PROCESS OF MAKING THE SAME. WILLIAM BURTON WESCOTT, Boston, Mass., assignor to Rubber Latex Research Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 18, 1922. Serial No. 601,909. 13 Claims. (Cl. 18—50.)

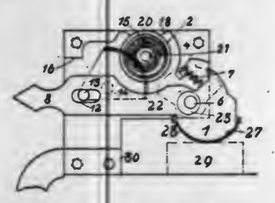
12. The process of purifying latex emulsions which comprises subjecting a continuously moving stream of latex to a progressively increasing centrifugal force without violent agitation of the latex, separating an inner liquid layer enriched in emulsiform caoutchouc forming particles, replacing the natural serum of the layer with water and a protective ingredient, removing the enriched and washed layer from the influence of centrifugal force without violent agitation thereof and as an effluent with a progressively decreasing velocity thereby preserving the natural condition of the caoutchouc forming particle.

1,816,243. WELL CEMENTING PLUG. NEWTON WILMOT WICKERSHAM, Los Angeles, Calif., assignor to Perkins Cementing, Inc., Los Angeles, Calif., a Corporation of California. Filed Apr. 20, 1929. Serial No. 356,819. 3 Claims. (Cl. 166—1.)



1. A well cementing plug comprising a body of flexible fibrous material of sufficient stiffness to hold it against collapsing when under pressure of the drilling fluid, said body provided with an approximately cylindrical upper portion and a tapered lower portion, the junction of the upper and lower portions defining an annular shoulder, a cup surrounding said upper portion and seated on said shoulder and vulcanized to said body, said cup being formed of flexible tenacious rubber substance and being externally tapered and flush with the tapered lower portion, and a collar secured to said lower portion.

1,816,244. GAUGE. FRANZ WINNY, Stuttgart-Botnang, Germany, assignor to the Firm: Julius Geiger G. m. b. H., Stuttgart, Germany. Filed Jan. 6, 1930, Serial No. 418,902, and in Germany Nov. 27, 1928. 7 Claims. (Cl. 33—148.)



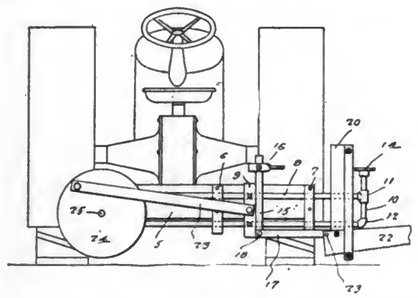
1. An instrument of the kind described, comprising a housing; a tensioned gauge lever in the housing and having a rounded outer end protruding from the housing and adapted to contact with the work; a trunnion mounted in the housing and having an adjustable eccentric pivotally supporting the lever; and indicator mechanism operatively connected with the lever.

1,816,245. EXHAUST SILENCER. LESTER J. WOLFORD, Lansing, Mich. Filed Apr. 6, 1929. Serial No. 353,190. 2 Claims. (Cl. 137—160.)



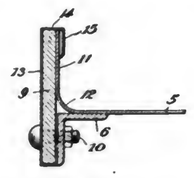
1. An exhaust silencer comprising a plurality of integral sections progressively increasing in length and mean diameter from one end to the other of the silencer, each of said sections being relatively wide adjacent one end thereof and tapering towards its opposite end, a baffle arranged in each of said sections and being of a shape corresponding approximately to the shape of its section, said baffles respectively provided with diametrically opposed fins contacting at their free edges with the walls of the casing, said fins extending longitudinally of the respective baffles, and each of said fins being twisted.

1,816,246. SAW OPERATING ATTACHMENT FOR TRACTORS. HERMAN BITTNER, Greenfield, Iowa. Filed Feb. 24, 1931. Serial No. 518,015. 2 Claims. (Cl. 143—68.)



2. An attachment for tractors comprising a plate having means for securing it, transversely across the rear of the tractor, a wheel rotatable on the plate, means for operatively connecting the wheel with the tractor to be driven thereby, a pair of cleats, a pair of rods in the cleats, a slide block on the rods, a pitman rod connecting the slide block and the wheel to translate the rotary motion of the wheel into reciprocatory motion of the block, a guide, means for supporting the guide either in a vertical or horizontal position, a saw in the guide, a pitman connected with the saw and means for attaching the pitman to the block, said means for supporting the guide in a horizontal position being in the form of a standard supported on the ends of the rod and having a seat swiveled on the upper end thereof.

1,816,247. TABLE CONSTRUCTION. SAUL BLICKMAN and MANUEL BLICKMAN, New York, N. Y., assignors to S. Blickman, Inc., Weehawken, N. J., a Corporation of New York. Filed Oct. 27, 1930. Serial No. 491,603. 5 Claims. (Cl. 45—31.)

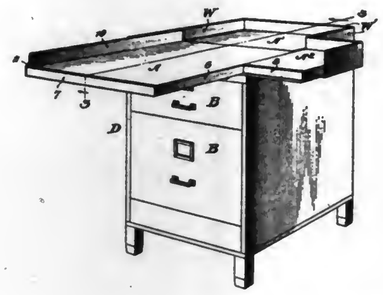


1. A table top structure comprising a rear longitudinal frame bar, a longitudinal frame plate of substantial thickness secured thereto and projecting upward, forming a body part of a rear stop flange structure, a table top plate having a portion resting on said frame bar and having its forward margin turned up and located against the rear face of the frame plate, and a finishing sheet overlying the forward face of the frame plate and upper edges of the frame plate and top plate and also having a portion overlying the upward margin of the latter.

1,816,248. MANUFACTURE OF AROMATIC HYDROXY ALDEHYDES. FRIEDRICH BOEDECKER, Berlin-Dahlem, Germany, assignor to the Firm J. D. Riedel-E. de Haen Aktiengesellschaft, Berlin-Britz, Germany. Filed Nov. 28, 1927, Serial No. 236,357, and in Germany Feb. 17, 1927. 12 Claims. (Cl. 260—137.)

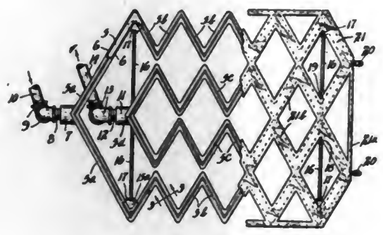
1. The process of producing aromatic ortho- and para-hydroxy-aldehydes which comprises oxidizing the alkali metal compounds of the corresponding propenyl derivatives with an excess of an aromatic nitro compound.

1,816,249. BOOKKEEPER'S DESK. GEORGE C. BRAINARD and GLENN T. GOURLEY, Youngstown, Ohio, assignors to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed July 23, 1928. Serial No. 294,665. 9 Claims. (Cl. 45—6.)



1. A desk top construction including a main top section, a wall forming part of a guide for the sides and a stop for the back of said main top section and including a horizontal offset portion constituting an abutment, a sub-top section normally mounted beneath and concealed by the main top section, springs arranged beneath said sub-top section for normally exerting an upward thrust on the said sub-top section, whereby when the main top section is moved to clearing relation thereto, the springs will move the sub-top section upwardly into engagement with said abutment.

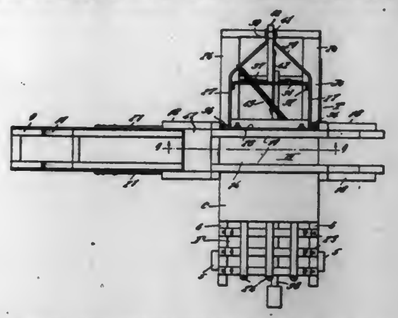
1,816,250. RADIATOR FOR HEATING. CECIL G. CARLSON, Willmar, Minn. Filed Dec. 22, 1930. Serial No. 504,185. 4 Claims. (Cl. 257—139.)



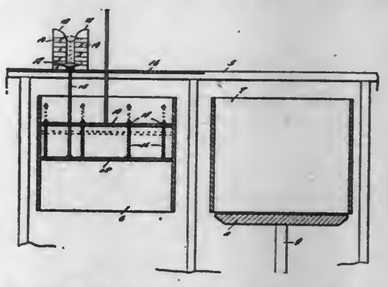
1. A radiator comprising narrow vertical chambers diverging from a common end portion and then formed into substantially V-shaped zigzag folds and extending in spaced parallel relation to form the outer sides of said radiator, said sections then extending toward each other and reversely in V-shaped zigzag folds substantially parallel to each other and parallel to said first mentioned folds to form inner sides of said radiator, said inner sides being joined at their ends, an inlet conduit at said first mentioned common end portion and an outlet conduit at said last mentioned end portion.

1,816,251. PACKING MACHINE. MAX CHAMBERS and ALBERT F. SISK, Preston, Md. Filed Nov. 6, 1929. Serial No. 405,148. 8 Claims. (Cl. 226—15.)

5. A packing machine including in combination, a housing, a trackway extending through said housing, said housing laterally of said trackway provided with an integral container supporting form, certain of the rails of said trackway being passed inwardly for directing cans on said trackway laterally of the latter toward said supporting form, and means engageable with the cans for transferring the cans from said trackway into the container supported on said form.

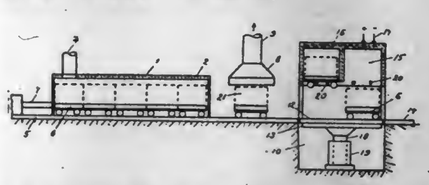


1,816,252. INDICATOR FOR COTTON PRESSES. WILLIAM JEFFERSON FOUSE, Austwell, Tex. Filed Feb. 21, 1931. Serial No. 517,578. 1 Claim. (Cl. 116—114.)



In a cotton press including the box in which the cotton is baled, a stationary plate in the upper part of said box, a follower plate located below the first plate, rods having their lower ends connected with the follower plate passing through holes in the first plate, springs on the rods arranged between the plates, a long rod connected with the follower plate and passing through a hole in the first plate and having a pointer at its upper end and a scale-carrying member over the scale of which the pointer moves as the follower plate is pressed upwardly by the cotton being baled.

1,816,253. ANNEALING FURNACE. NAUM G. GIRSHOWITCH, New York, N. Y. Filed Oct. 3, 1930. Serial No. 486,184. 2 Claims. (Cl. 266—2.)



1. In an annealing furnace, the combination with a tunnel kiln, cars for work adapted to pass through said tunnel kiln, said kiln containing preheating and high temperature zones and terminating at the end of said high temperature zone, and a separate furnace adapted to maintain a constant temperature and containing several cells for said cars, the number of said cells being proportioned according to the time required for final heat treatment and to the time interval between successive arrivals of said cars from said tunnel kiln.

1,816,254. AUTOMOBILE TAG SECURING AND IDENTIFICATION MEANS. WILLIAM S. G. HEATH, Edgefield, S. C. Filed Apr. 2, 1931. Serial No. 527,285. 4 Claims. (Cl. 40—125.)

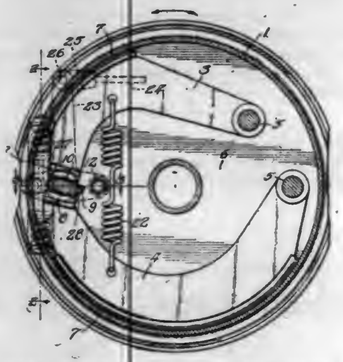


1. Securing and identification means for mounting a tag on a support, said support and the tag having registering openings therein, comprising a tubular rivet extending through the registering openings, outturned flanges on the ends of the rivet, a core of comparatively soft metal extending through the rivet, heads on the ends of the core extending over the rivet flanges, and inturned flanges on the marginal portions of the heads encircling the peripheries of the rivet flanges.

1,816,255. MANUFACTURE OF CONDENSATION PRODUCTS FROM PHENOL AND FORMALDEHYDE. RICHARD HESSEN, Bautzen, Germany. Filed Nov. 3, 1928, Serial No. 317,107, and in Germany Sept. 2, 1926. 2 Claims. (Cl. 260—4.)

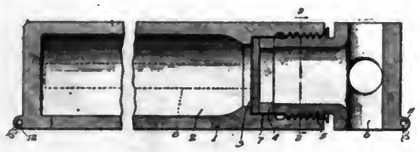
1. The process of producing condensation products from a phenol and formaldehyde, which comprises mixing the phenol and the aldehyde in equimolecular proportions, adding a basic contact substance, condensing until the mass separates into layers, mechanically separating the aqueous layer, adding formaldehyde to the resinous layer and condensing, repeating the steps of separation of the aqueous layer, adding formaldehyde and condensing until no free phenol is present in the resinous layer, and then evaporating to the desired consistency.

1,816,256. BRAKE. LOUIS C. HUCK, Pleasant Ridge, Mich. Filed Feb. 20, 1928. Serial No. 255,607. 33 Claims. (Cl. 188—78.)



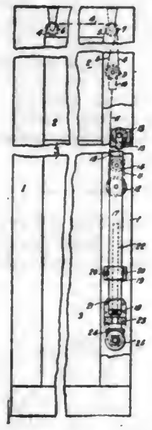
1. In brake mechanism, a rotating member, a fixed anchor, an element mounted for movement into and out of frictional contact with said rotating member, floating means to move said element into frictional contact with said rotating member, a support adapted to adjustably position said element and said means with respect to said rotating member, said support including a resilient element, said holding means to hold said resilient element in initial distortion in such manner as to exert its influence on said first mentioned means in all positions away from its initially adjusted position.

1,816,257. BLASTING CARTRIDGE. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Oct. 26, 1929. Serial No. 402,619. 4 Claims. (Cl. 102—6.)



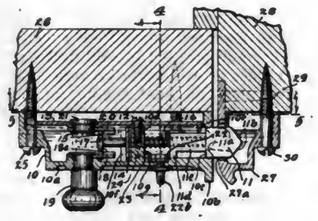
1. A blasting cartridge comprising a metallic body having a discharge opening, a discharge assembly associated therewith and insulated from said body, and an electrically energizable heater unit having contacts engaging said body and discharge assembly respectively.

1,816,258. MEANS FOR OPENING AND CLOSING WINDOWS. WILLIAM BEARD LAKE, Braintree, England. Filed Mar. 24, 1931, Serial No. 524,948, and in Great Britain Feb. 21, 1930. 10 Claims. (Cl. 268—130.)



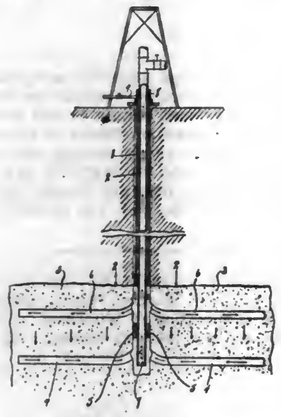
1. In mechanism for opening and closing windows, pulley-tackle, sash lines passing over the pulleys of the tackle and adapted for operative mounting with respect to the window and reduction gearing through which the pulley tackle is operated.

1,816,259. LOCK. HJALMAR LANDE, Minneapolis, Minn. Filed Apr. 24, 1920. Serial No. 357,701. 1 Claim. (Cl. 70—14.)



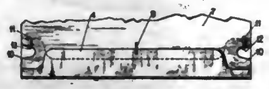
A night latch lock having in combination, a casing provided with a rectangular bolt passage on the front end thereof, a bolt comprising an integral member substantially rectangular in cross section and having parallel unrecessed sides, said sides converging at the outer end of the bolt to provide a pair of symmetrical camming surfaces, a keeper having a rectangular recess into which said bolt is received, the parallel surfaces of said sides extending into said keeper for some distance from its outer edge, resilient means forcing said bolt to its outer position, means for moving said bolt inwardly, means for limiting the outer position of said bolt, said bolt having a diminished rearward projection provided with a single laterally disposed lug, a locking element slidable in said casing and adapted to be moved to engage said lug both when said bolt is disposed outwardly and when said bolt is moved to rearward position, said device being adapted for use in reverse position without removal or reversal of said bolt.

1,816,260. METHOD OF REPRESSURING AND FLOWING OF WELLS. ROBERT EDWARD LEE, Fort Worth, Tex. Filed Apr. 5, 1930. Serial No. 441,916. 4 Claims. (Cl. 166—21.)



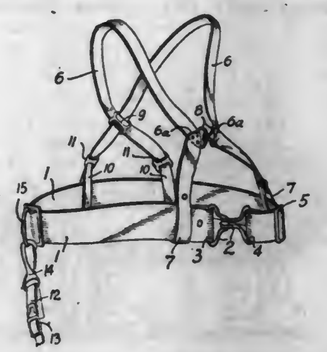
1. The herein described method of repressuring and flowing liquids from the drainage of wells which comprises providing a vertical channel and outwardly directed angular or lateral channels from the vertical opening in the drainage area of the well and providing inwardly directed channels at a lower level and forcing a repressuring medium down between the well casing and the discharge pipe and through said angular or lateral channels and forcing liquids out of the drainage area through said inwardly directed channel to said vertical channel and out of the well.

1,816,261. WING POCKET FOR VISIBLE INDEX CARD HOLDERS. LUIGI LOMBARDINI, Turin, Italy. Filed Apr. 24, 1930, Serial No. 446,835, and in Italy Apr. 25, 1929. 8 Claims. (Cl. 129—16.7.)



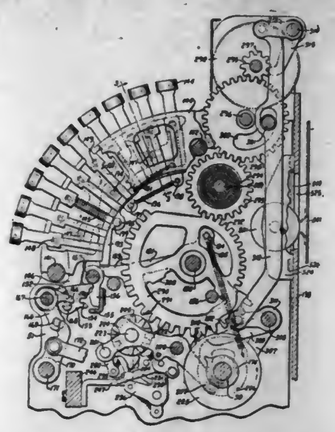
3. A card pocket adapted for attachment to a visible index card holder, comprising a blank folded to form a front and a rear flap, one of said flaps having its edge cut along a line comprising a central portion parallel to the folding line, and two end portions upwardly and outwardly extending from said central portion, forming end wings upwardly extending from the central portion of said flap and the other flap having its edge cut along a line comprising a similar central portion, and two downwardly and outwardly directed end portions forming end notches the outline of which is complementary to the outline of said wings.

1,816,262. SAFETY CHILD HARNESS. NATHAN RITTER, Brooklyn, N. Y. Filed Nov. 11, 1929. Serial No. 406,340. 2 Claims. (Cl. 155—189.)



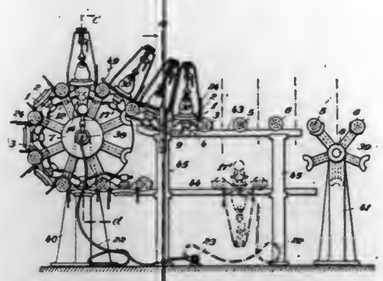
1. In a safety baby harness, the combination with a body strap provided with fastening means connecting the ends of the body strap at the front of said harness, and a pair of shoulder straps having their front ends respectively engaged with the ends of the body strap on opposite sides of said fastening means, means for adjusting the length of said shoulder straps, said shoulder straps being crossed and connected together at the rear of the harness and being V-shaped and buckled at the chest portion of the harness to simulate a crossing of the straps, the entire harness thereby opening up on one side like a coat.

1,816,263. CASH REGISTER. WILLIAM H. ROBERTSON, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 3, 1926. Serial No. 106,454. 22 Claims. (Cl. 235—7.)



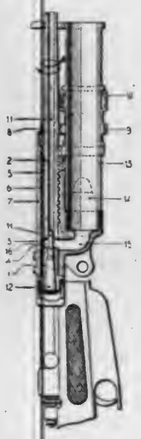
8. In a machine of the class described, the combination with a totalizer pinion, a plurality of manipulative devices, an actuator spring-operated in one direction and adjustable under control of said manipulative devices, differentially adjustable device; means controlled by said device; means for engaging said pinion with said actuator and with said differentially adjustable device after said actuator has been adjusted under control of said manipulative devices, and means to restore said actuator to its home position to add an amount into said totalizer pinion and through said pinion, to adjust said differentially adjustable device.

1,816,264. SOLE LAYING PRESS. RICHARD RUHR, Offenbach-on-the-Main, Germany, assignor to the Firm Maschinenfabrik Moenus A.-G., Frankfort-on-the-Main, Germany. Filed Oct. 23, 1929, Serial No. 401,848, and in Germany June 7, 1927. 1 Claim. (Cl. 12—36.)



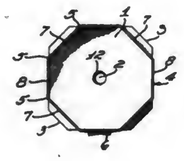
In a sole laying press, an endless carrier, a plurality of air-pads on the carrier, two separable revoluble members supporting the endless carrier, separate shafts carrying the revoluble members, an air duct interconnecting the air pads and movable with the endless carrier, stationary air supplying means, a single air duct affording communication between the stationary air supplying means and the said interconnecting duct and comprising a part movable within the endless carrier, and means associated with every pad for controlling the passage from the interconnecting duct into the pad.

1,816,265. PORTABLE FIREARM FOR CASTING BOMBS AND GRENADES BY MEANS OF ORDINARY BULLET CARTRIDGES. LUIGI SAVANI, Milan, Italy, assignor to Societa Italiana Ernesto Breda per Costruzioni Meccaniche, Milan, Italy. Filed Apr. 25, 1930, Serial No. 447,339, and in Germany Aug. 12, 1929. 3 Claims. (Cl. 42—1.)



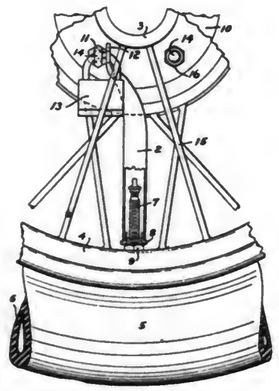
1. A portable firearm for casting bombs and grenades by means of the explosion gases of ordinary cartridges with bullet, suitably deviated from the barrel of the rifle towards the casting barrel with which the weapon is provided, characterized by the feature that the rifle barrel is mounted on the weapon so that its rear mouth can be gradually moved away from the forward mouth of the cartridge chamber, fixed to the weapon, the passage guiding said gases towards the casting barrel being so arranged as to originate in the gap between the shiftable barrel and the fixed cartridge chamber during said shift.

1,816,266. ARTIFICIAL FLOWER MAKING DEVICE. LEONARD SHOGRAN, Chicago, Ill. Filed Nov. 15, 1930. Serial No. 495,991. 3 Claims. (Cl. 41—2.)



1. A device of the type described comprising a wall formed from a single piece of material and bent to provide a plurality of surfaces, certain of said surfaces being provided with slots, a partition having an opening therein and arranged to project partly through said slots when the wall is wrapped around the partition, and a plurality of disc members having openings therein and arranged to be positioned within the wall and in parallelism with the partition.

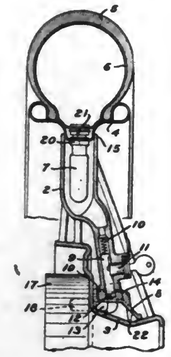
1,816,267. PROTECTIVE DEVICE. JOEL R. THORP, West Allis, Wis., assignor to The Fulton Company, West Allis, Wis., a Corporation of Wisconsin. Filed Mar. 2, 1928. Serial No. 258,492. 11 Claims. (Cl. 70—122.)



1. An article of manufacture comprising, a locking device having a tubular end portion movable outwardly over a wheel tire valve and having another portion cooperable directly with the hub fastening of the tire supporting wheel to prevent deflation of the tire when the wheel is fastened to its support.

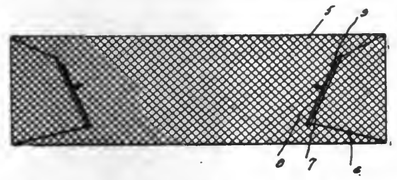
1,816,268. LOCKING DEVICE. JOEL R. THORP, West Allis, Wis., ass'gnor to The Fulton Company, West Allis, Wis., a Corporation of Wisconsin. Filed June 16, 1928. Serial No. 285,793. 10 Claims. (Cl. 70—90.)

1. A device of the class described comprising, a tubular element formed to conceal the valve of a tire carried by a wheel rim and having projections coacting with inner and outer side portions of said rim, another element formed to have three point contact with the hub and clamping



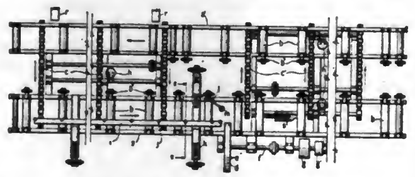
structure of the wheel, and means for rigidly uniting and locking said elements after assemblage thereof between the rim and hub of the wheel.

1,816,269. MUSKRAT TRAP. CHARLES L. TOPP, Center Township, Rock County, Wis. Filed Apr. 25, 1930. Serial No. 447,285. 1 Claim. (Cl. 43—66.)



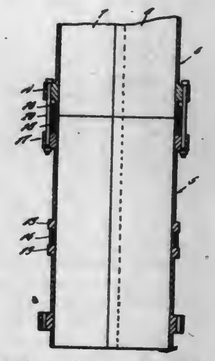
A trap of the type described comprising a reticulated cylinder having an inwardly directed funnel formation in each end, a door frame of rectangular form provided with integral laterally formed loops near the upper ends of the sides of the frame, a shaft carried across the frame in said loops, and a door supported on said shaft, said door consisting of a plurality of vertical transversely spaced bars, and a waved cross bar securing and spacing said bars with respect to each other, the upper ends of the bars terminating below the top of the frame and the lower ends of the bars positioned to abut the inside of the bottom member of the frame when the door is in closed position.

1,816,270. GO-AROUND SAWMILL. FREDERICK C. WALTERS, Eugene, Oreg. Filed Aug. 8, 1927. Serial No. 211,557. 1 Claim. (Cl. 143—26.)



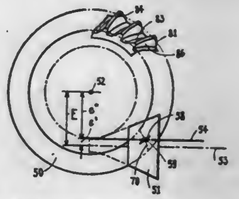
The combination in a saw mill of the character described, including a saw, a conveyor adapted to move material to be sawed along a path extending past such saw, a removable log-carrying element provided with bodily immovable log rotation preventing devices and having one plane edge surface, adapted to ride such conveyor, guiding elements arranged alongside such conveyor adjacent such saw and extending vertically upwardly from the plane of the path of said conveyor and positioned interchangeable to engage the plane edge surface of such log-carrying element as it is moved along by such conveyor and to engage and restrain a log mounted directly on the conveyor, and setting means for such guiding elements, adjustable transversely of such path to determine the thickness of the slab to be cut by the saw.

1,816,271. SECTIONAL SMOKE FLUE. JOHN A. WATCHER, Jackson, Minn. Filed Mar. 11, 1930. Serial No. 434,978. 1 Claim. (Cl. 126—307.)



In a smoke-stack construction of the class described, a male pipe section comprising a pair of separable half sections having their longitudinal edges joined together in overlapping relationship, a pair of diametrically opposite apertured lugs carried by said male section, a female section composed of a pair of half sections also having their meeting edges joined together in overlapping relationship, the upper end of the female section being formed with an offset annular rim telescopically receiving the adjacent companion end of the first-named section, said female section being provided at a point below said rim with outstanding apertured lugs, a split clamping band surrounding said female section and resting on the second named lugs and confined beneath the shoulder defined by said rim, and connecting bolts passing through the apertures in the co-related lugs of the respective sections.

1,816,272. GEARING. ERNEST WILDHABER, Brooklyn, N. Y. Filed June 18, 1928. Serial No. 286,285. 22 Claims. (Cl. 74—41.)

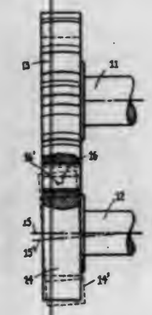


1. A pair of gears suited to contact along a constant line movable about an axis, said line being differently positioned relatively to said axis as compared, with the contact line between the pitch surfaces of said pair of gears, and the surface described by said line in its motion about said axis differing from a plane.

1,816,273. GEARING. ERNEST WILDHABER, Brooklyn, N. Y. Filed June 18, 1928. Serial No. 286,286. 14 Claims. (Cl. 74—41.)

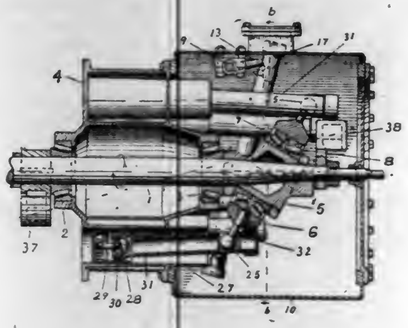
1. A pair of gears bodily movable relatively to each other, the relative displacement of the gear bodies con-

sisting of a translation along a straight line and of a rotation on an axis angularly disposed to the direction of the axes of both gears of said pair, a tooth surface of one of said gears containing tooth normals which coincide with the tooth normal of a mean point of a mating tooth surface in two different bodily positions of said



gears, coincidence of said tooth normals corresponding to turning positions in which a constant load directed along said coinciding tooth normals exerts the same turning moment on said one gear in said different bodily positions, so that said gears are insensitive to said bodily displacement and suited to transmit uniform motion irrespective of the relative positions of the gear bodies.

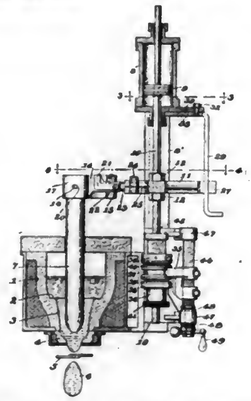
1,816,274. WABBLER HOLDING MECHANISM. MELVIN ALBERT YEAKLEY, Canton, Ohio. Filed Oct. 3, 1929, Serial No. 397,138. Renewed June 17, 1931. 9 Claims. (Cl. 74—14.)



1. In mechanism for flexibly holding a wabbler to the frame, the combination of a frame, a wabbler mounted operatively in said frame, wabbler holding means flexibly connecting said frame and wabbler at two different points 90 degrees apart on the wabbler.

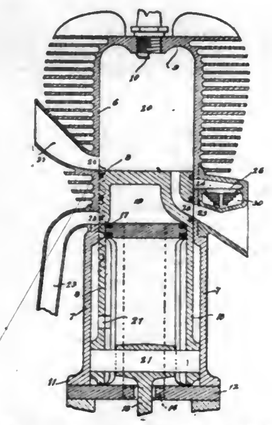
1,816,275. CONTROL MECHANISM FOR GLASS FEEDERS. ALBERT M. ALGEO and JAMES W. ROSS, Washington, Pa., assignors to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Feb. 13, 1926. Serial No. 88,066. 20 Claims. (Cl. 49—55.)

6. A glass feeder, including a reciprocable feeder plug, a cylinder and piston rod for reciprocating said plug, a controller member receiving one end of the piston rod, oppositely threaded nuts mounted in said controller for limiting the extent of movement of the piston rod, said nuts being simultaneously moved in opposite directions by rotation of the controller member, and said nuts being simultaneously moved in the same direction by raising or lowering the said controller member.



19. A glass feeder, including a flow spout having a flow orifice, a feeder plug adapted to reciprocate in the flow spout in alignment with the flow orifice, an arm carrying the feeder plug, means for adjusting the plug longitudinally of the arm, and means for rotatably adjusting the arm.

1,816,276. TWO CYCLE INTERNAL COMBUSTION ENGINE. HANS ANDRESEN, Vancouver, British Columbia, Canada. Filed Oct. 16, 1929. Serial No. 400,017. 3 Claims. (Cl. 123—74.)



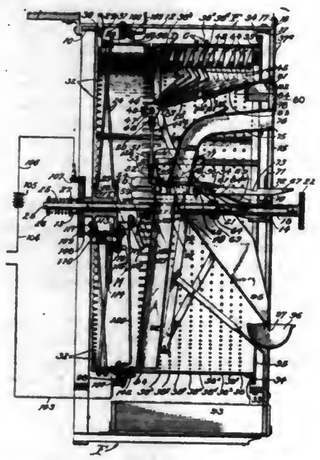
3. In a two-cycle internal combustion engine, a main cylinder having a closed head and a working chamber, a piston-cylinder working within said main cylinder, a fixed piston within said piston-cylinder, said main cylinder having a piston controlled inlet port and a piston controlled exhaust port for the working chamber, said fixed piston and said main cylinder having a duct communicating at its receiving end with the space between the heads of said fixed piston and said piston-cylinder and communicating at its outlet end with said inlet port of the working chamber, a back check valve in said duct, said main cylinder having a charging port located out of direct communication with the working chamber, said piston-cylinder having a port controlling the passage of a charge from said charging port to the space between the heads of said fixed piston and said piston-cylinder and having a duct for passing a charge from said inlet port into the working chamber, said ports and said ducts being so positioned with respect to each other that said piston-cylinder will, on its inward stroke, effect an opening of said exhaust port while maintaining said inlet port closed and then on its outward stroke cover said exhaust port and open said inlet port to the working chamber and subsequently close said inlet port and open communication between said charging port and the space between the heads of said fixed piston and said piston-cylinder, said main cylinder having a scavenging air admitting port located below said inlet port and said second mentioned piston-cylinder duct serving to effect communication between said scavenging air admitting port and the work chamber when said piston-cylinder is at the limit of its inward stroke for the purposes specified.

1,816,277. HANDLE CONSTRUCTION. DAVID S. ANTHONY, Sioux City, Iowa. Filed July 5, 1929. Serial No. 376,191. 1 Claim. (Cl. 190—58.)



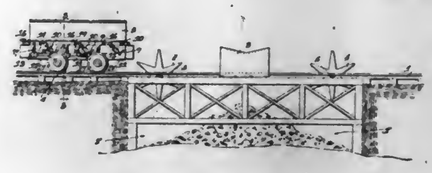
A luggage handle comprising a pair of arcuate sections of malleable material having substantially flat radially disposed shoulders at each end thereof and eye-forming hook portions extending outwardly from adjacent the lower edges of the said shoulder, said shoulders being respectively recessed to seat the ends of the adjacent hook portions and said hook portions having their ends shaped to conform with the shape of the recesses and being bendable to dispose the said ends within the recesses.

1,816,278. COIN CONTROLLED SELECTING MECHANISM. CHARLES W. COONES, San Diego, Calif. Filed Aug. 26, 1929. Serial No. 388,507. 22 Claims. (Cl. 194—57.)



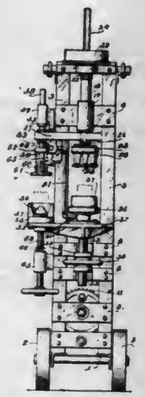
20. A selecting mechanism of the character described comprising a carriage, a plurality of latching mechanisms for the carriage, means for selectively actuating any of the latching mechanism to latch the carriage against movement to a predetermined position, the carriage having openings correlated with the latching mechanisms and adapted to receive coins for releasing the latching mechanisms from the carriage, and means for affecting a predetermined one of a plurality of instrumentalities upon movement of the carriage to said position.

1,816,279. DUMP CAR. JOHN S. CURZON, Salt Lake City, Utah, assignor to Joseph Kastlic, Helper, Utah. Filed July 10, 1930. Serial No. 467,089. 6 Claims. (Cl. 214—63.)



1. In dump cars, a body having a skirt, wheels and axles over which said body is mounted, drop bottom pivoted doors mounted in the skirt above the level of the axles, latches mounted on the outside of said skirt for holding said doors closed, said skirt having slots through which portions of said latches project, means to release said latches at a given place along the right of way, means continuously tending to return said latches to the latching position, and means located between the rails at another place along the right of way for closing said doors.

1,816,280. FITTER OR SHAPER FOR GLASS ARTICLES. HALLER H. DAWSON and IRA H. FREESE, Clarksburg, W. Va.; Lula P. Dawson executrix of said Haller H. Dawson, deceased, assignors to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Apr. 8, 1926. Serial No. 100,562. 16 Claims. (Cl. 49—22.)

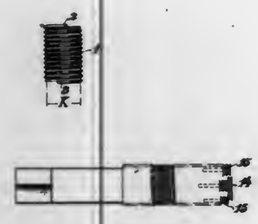


1. An apparatus of the character described, including a holder for the article, a reciprocable member, a shaping head carried by said member, a plurality of pins each having one end mounted in the head, a ring in which the opposite ends of said pins are mounted, shaping rollers mounted on the pins, and means for rotating the shaping head.

1,816,281. PRODUCTION OF DIBENZANTHRONE. HANS JOSEF EMMER, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 23, 1928, Serial No. 280,122, and in Germany June 23, 1927. 4 Claims. (Cl. 260—61.)

1. A process for the production of dibenzanthrone which consists in treating benzanthrone with fused caustic alkali in the presence of a compound selected from the group consisting of aldehydes, their polymerization products and substances yielding aldehydes, under the conditions of working.

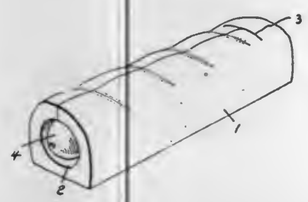
1,816,282. METHOD AND TOOL FOR SECURING WIRE SCREW-THREADS TO WOODEN MEMBERS. WILLI HEYNER, Berlin, and HERMANN HENKEL, Neukolln, near Berlin, Germany. Filed Nov. 23, 1927, Serial No. 235,234, and in Germany Nov. 26, 1926. 8 Claims. (Cl. 10—1.)



2. A method for securing screwthreads of metallic wire helically wound side by side and having tapered ends to wooden members or the like, which comprises in securing one end of the wire into the wooden member; applying pressure on the threads in a direction approximately radial to the axis of the wire helix by rolling to embed the wire into the wood; and securing the other tapered end of the wire in to the wood.

5. A tool for securing a metallic wire helix to a wooden member or the like, comprising a member having in its end face a plurality of pressure rollers arranged on a helix of a pitch equal to that of the wire helix, said rollers being rotatably mounted and grooved to contact with the wire helix to imbed it by rolling into the wood and force the end thereof securely into the wood.

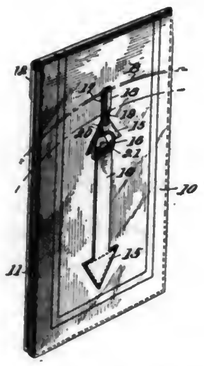
1,816,283. FOOD ARTICLE. DELBERT G. HOLIBAUGH, Indianapolis, Ind. Filed Nov. 12, 1928. Serial No. 318,726. 1 Claim. (Cl. 99—10.)



An article of food comprising, a tubular roll split longitudinally from one end, and for the major portion of its length, said roll being formed with a transverse slit intersecting the longitudinal slit to permit the edge portions of the roll at the longitudinal slit to be separated.

1,816,284. WALLET. BENJAMIN ISBELL HUGHES, Knoxville, Tenn., assignor to R. Gordon Chandler. Filed Sept. 27, 1927. Serial No. 222,290. 1 Claim. (Cl. 224—26.)

In a wallet, receptacle of flexible material having closing means, a strap attached at each end to the wallet receptacle at spaced points one adjacent the top and the other adjacent the bottom thereof so as to extend longitudinally of the receptacle and lie substantially flat against the receptacle, and a supporting member slidable longitudinally upon said strap and adapted to detachably engage a



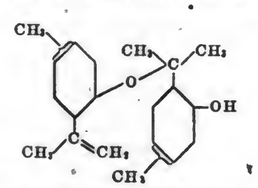
supporting means carried by the wearer, said slidable member operating when at the upper end of the strap for supporting the receptacle and permitting the receptacle to slide upward and downward on said supporting member to accommodate itself to the posture of the wearer.

1,816,285. PROCESS OF CONVERTING PHOSPHATE ROCK INTO SOLUBLE COMPOUNDS AND OF SEPARATING ITS CONTENT OF LIME AND PHOSPHORIC ACID. ERLING JOHNSON, Odda, Norway, assignor to the Firm Odda Smelteverk A/S, Odda, Norway. Filed Sept. 9, 1929, Serial No. 391,506, and in Norway Oct. 27, 1928. 4 Claims. (Cl. 71—7.)

2. The process of converting phosphate rock and similar phosphate material into soluble compounds and of separating the lime and phosphoric acid of the prosphate material, comprising treating the phosphate material with nitric acid of 45–65 per cent to form a solution containing calcium nitrate and free phosphoric acid, cooling said solution, crystallizing from the solution calcium nitrate of the formula $Ca(NO_3))_2.4H_2O$, and separating the crystals from the mother liquor.

1,816,286. ALKYL-ISOPROPYLENE-PHENOLS AND PROCESS OF MAKING SAME. HANS JORDAN, Berlin-Steglitz, Germany, assignor to the firm: Schering-Kahlbaum Aktiengesellschaft, Berlin, Germany. Filed June 20, 1927, Serial No. 200,290, and in Germany June 29, 1926. 4 Claims. (Cl. 260—154.)

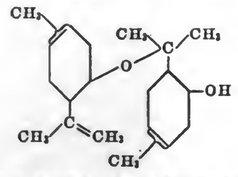
1. The process of producing methylisopropylenephenols comprising heating to about 300° C. compounds resulting from the condensation, occurring at a temperature slightly above room temperature in the presence of gaseous hydrochloric acid, of a cresol and acetone and which have the formula



to effect decomposition, subjecting the products of decomposition to fractional distillation and collecting the fraction containing the methyl-isopropylenephenols.

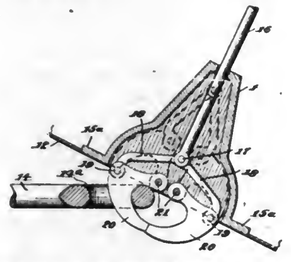
1,816,287. PRODUCING ALKYL-ISOPROPYLENE PHENOLS. HANS JORDAN, Berlin-Steglitz, Germany, assignor to Schering-Kahlbaum Aktiengesellschaft, Berlin, Germany. Filed Aug. 8, 1927, Serial No. 211,637, and in Germany Aug. 11, 1926. 7 Claims. (Cl. 260—154.)

1. The process of producing methylisopropylene phenols comprising heating a compound of the formula



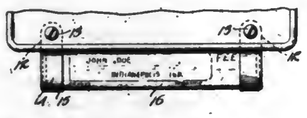
in the presence of a metal of the second and third group of the periodic system.

1,816,288. CATAPULTING DEVICE. CLARENCE W. KING, Shreveport, La. Filed Apr. 14, 1930. Serial No. 444,256. 1 Claim. (Cl. 244—2.)



A launching device for aeroplanes or hydroplanes comprising a casing fixed in the plane to be launched, a power driven reel mounted on a stationary support, a cable connected with said reel and on which it may be rapidly wound, and releasable means for connecting said cable with an aeroplane or hydroplane, said means comprising an eye at the end of said cable, hooks pivoted to said casing and adapted to be closed together to engage said eye, a lengthwise movable rod, and links housed within said casing and connecting said rod with said hooks.

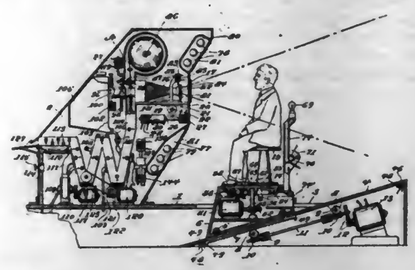
1,816,289. AUTOMOBILE LICENSE TAG HOLDER. FREDERICK KLEINSMITH, Indianapolis, Ind. Filed Nov. 22, 1929. Serial No. 409,133. 3 Claims. (Cl. 40—131.)



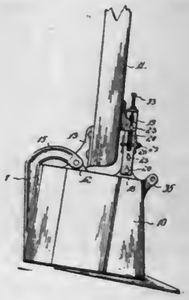
1. In a display device for registration cards or certificate of titles for motor vehicles, a pair of opposed unconnected supports having inwardly projecting flanges, a transparent cylinder rotatably secured between said support, a core enclosed by said cylinder and sealing elements enclosed within the ends of said cylinder for maintaining smooth bearing surfaces against said supports and to further provide a tight container, substantially as set forth.

1,816,290. AUTOMATIC PHOTOGRAPHIC APPARATUS. APOSTOLOS KLIMIS, Baltimore, Md., assignor to The Klimis Auto-Photographic Machine Company, Incorporated, a Corporation of Maryland. Filed Apr. 27, 1928. Serial No. 273,320. 11 Claims. (Cl. 95—14.)

1. In combination with a photographic apparatus including a camera, means for operating the shutter thereof, means for feeding a sensitized strip through the camera and means for treating the strip to fix the photographs thereon and dry the strip, a platform for the sitter, means for rotating the platform, and means controlled by the movement of the platform for actuating the before mentioned means of the photographic apparatus.

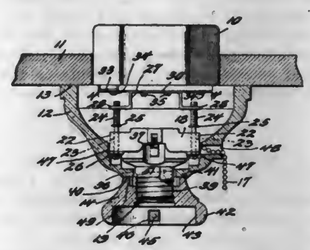


1,816,291. BUCKET ATTACHMENT FOR EXCAVATING MACHINES. GEORGE L. MARTIN, Madawaska, Me. Filed May 19, 1930. Serial No. 453,794. 6 Claims. (Cl. 214—145.)



1. In an excavating machine operating a bucket carried by a crowding stick, the combination of the bucket pivoted at one end to the crowding stick, of plates pivotally connected to the other end of the bucket and having slots through the same, a pintle on the crowding stick passing through the slots for slidably connecting the plates to said crowding stick, a connection extending between the plates and spaced from the pintle, and a spring bearing at one end against the pintle and at the other end against said connection to permit the bucket to yield in the operation of the same.

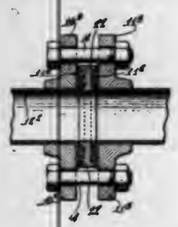
1,816,292. ELECTRIC LAMP RECEPTACLE. HARRY J. MOREY and COLEMAN LINDZEY NICHOLSON, Syracuse, N. Y., assignors to Pass & Seymour, Inc., Solvay, N. Y., a Corporation of New York. Filed Nov. 30, 1925. Serial No. 72,241. 6 Claims. (Cl. 240—78.)



1. In an electric fixture, in combination, a socket structure, an insulating base therefor, a screw shell mounted on said base, a mounting strap, screws passing thru said

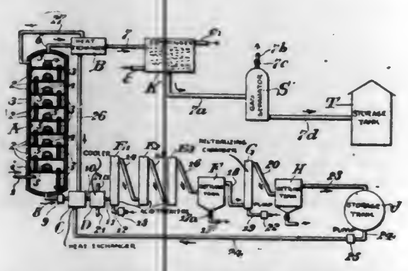
insulating base and loosely and adjustably securing said mounting strap thereto, said mounting strap being adapted to be secured to any type of conduit box mounted on a wall, a canopy adapted to fit over said socket base and against the mounting of said conduit box, said screw shell passing thru said canopy, and an insulating shade ring having threaded engagement with said screw shell to press said canopy against said mounting.

1,816,293. METHOD OF MAKING HIGH PRESSURE STEAM JOINTS. WILLIAM F. OBERHUBER, Drexel Hill, Pa. Filed Sept. 30, 1925. Serial No. 59,462. 1 Claim. (Cl. 29—148.)



The method of giving resilience to a solid metallic gasket which consists in providing narrow spaced annular surfaces engaging with facing flanges on opposite sides of it, in placing the annular contacts at different distances from the axis on one side of the gasket as compared with those on the opposite side thereof to spring the gasket and undercutting the surfaces.

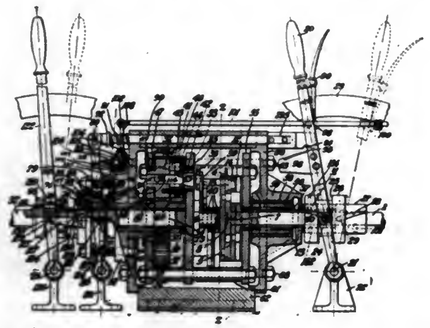
1,816,294. OIL PURIFYING SYSTEM. DAVID E. PIERCE, Wilmington, Del., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 5, 1926. Serial No. 127,467. 5 Claims. (Cl. 196—93.)



1. In a process for the removal of gum-forming and color-imparting bodies from hydrocarbon oils, the step which consists in scrubbing the oil in vapor phase with liquid hydrocarbon oil substantially free from such bodies and of such character that it is in itself sufficient substantially completely to remove said bodies from the vapors without causing polymerization of the bodies and without itself otherwise undergoing substantial change in composition or causing substantial change in the composition of the vapors.

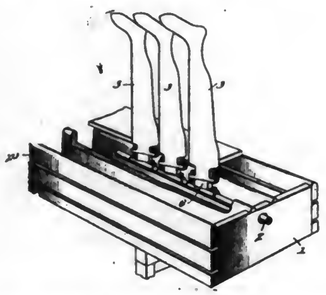
1,816,295. SPEED CHANGING GEAR AND CLUTCH THEREFOR. WALTER CHARLES PITTER, Eltham, England, assignor of Pitter Trust, a Common-Law Trust. Filed Sept. 20, 1924. Serial No. 738,829. 15 Claims. (Cl. 74—53.)

1. A variable speed transmission gearing, comprising in combination a driving crank shaft, a driven shaft alined therewith, a second crank shaft, a link between the two crank shafts, a gear loose on the second crank shaft, a one-way clutch between the second crank shaft and the gear, a carrier for said gear fixed to the driven shaft, a



second gear in mesh with the first named gear and loosely mounted on the driven shaft, and means for locking said second gear on the driven shaft against rotation.

1,816,296. HOSIERY DRYING AND SHAPING STRUCTURE. THOMAS W. PROSSER, Kankakee, Ill., assignor to Paramount Textile Machinery Co., Kankakee, Ill., a Corporation of Illinois. Filed Apr. 29, 1926. Serial No. 105,503. 5 Claims. (Cl. 223—17.)



1. A form coupling-device including a form-attaching portion and a conduit-attaching portion, one portion being turned relative to the other about an axis passing through both portions.

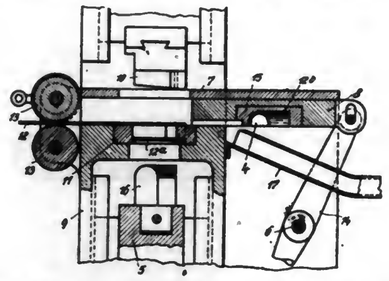
1,816,297. MANUFACTURE OF DISINFECTANTS. FRIEDRICH RASCHIG, Ludwigshafen-on-the-Rhine, Germany, assignor to the Firm Dr. F. Raschig, Ludwigshafen-on-the-Rhine, Germany. Filed Feb. 17, 1927. Serial No. 169,139. 3 Claims. (Cl. 167—22.)

2. A disinfectant composition of high concentration forming stable emulsions with water, comprising chlorothymol and a resinous soap.

1,816,298. MANUFACTURE OF HOLLOW SHEET METAL SHAPES. OTTO REIFURTH, Immigrath, Germany. Filed May 9, 1929, Serial No. 361,686, and in Germany Nov. 20, 1928. 1 Claim. (Cl. 113—42.)

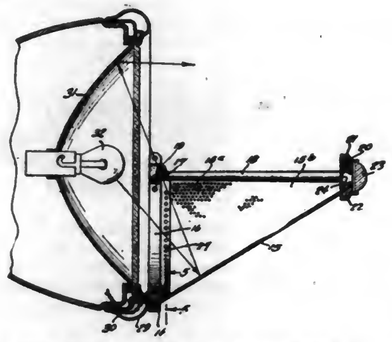
A shaping machine for making hollow metal shapes two of which are subsequently to be welded into a finished article, comprising a fixed blanking die and a reciprocating punch for cutting from sheet metal a blank corresponding to the spread-out shape of the finished half of said article, means on said blanking die for retaining the blank therein, a male die arranged below said blanking

die in line with said punch and adapted to penetrate through said blanking die, a female die, means for advancing said female die into aligned relation with respect to said punch, said blanking die and said male die trans-



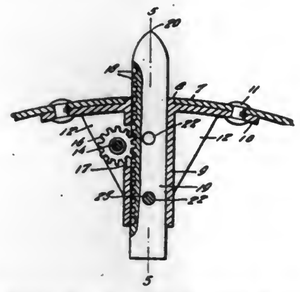
versely to said punch and to said male die, and for retracting it after the forging operation has been completed, and a chute for receiving the finished article from said retracted female die.

1,816,299. GLARE SHIELD ATTACHMENT FOR HEADLIGHTS. LUTHER E. RYNEARSON, Los Angeles, Calif. Filed Aug. 13, 1928. Serial No. 299,320. 8 Claims. (Cl. 240—48.4.)



2. A glare shield attachment for headlights comprising an element of semi-conical form having its concaved side provided with a reflecting surface, and a signal member at the apex of the element adapted to reflect light rays projected from a source in advance of the element.

1,816,300. WHEEL. CLETUS P. STOKES and JOSEPH TAMSETT, Muncie, Ind. Filed Mar. 20, 1931. Serial No. 524,158. 1 Claim. (Cl. 301—50.)



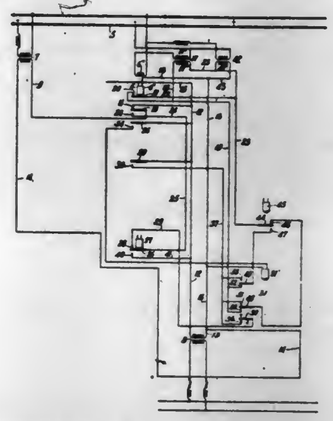
In combination with a wheel including a rim having a plurality of openings therein, a plurality of lug structures associated with the rim, one adjacent each opening therein, each lug structure comprising a sleeve fitted in the rim to radiate inwardly therefrom in alinement with one of the openings, a lug slidable through the sleeve, and means for extending the lug outwardly of the sleeve or retracting the same inwardly of the sleeve, a pin projectable through openings in the lug and openings in the sleeve to hold the lug either in an extended or retracted position, said means for adjusting the lug comprising rack teeth on the lug, webs extending from the sleeve, a shaft journalled through the webs, and a rack gear on the shaft extending through a slot in the sleeve in mesh with the rack teeth.

1,816,801. HOSE CLAMP. CARL J. SUNDELL, Chicago, Ill. Filed July 7, 1930. Serial No. 466,279. 2 Claims. (Cl. 24—81.)



2. The combination of a looped hose clamp having extending portions, a secondary hose clamp formed for providing arcuate-shaped receiving portions and retaining portions, said secondary hose clamp being formed for providing a projecting portion receivable between the extending portions of the looped clamping member, and means for connecting said projecting portion with the extending portions of the looped clamping member.

1,816,302. RAILWAY TRAFFIC CONTROLLING APPARATUS. HOWARD A. THOMPSON, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 10, 1929. Serial No. 398,660. 19 Claims. (Cl. 246—34.)



1. In combination, a section of railway track, means for applying uninterrupted current to the rails adjacent one end of said section, and means effective upon the entry of a train into the track section for applying coded train control energy to the rails adjacent both ends of the track section.

1,816,303. PROCESS FOR THE PRODUCTION OF POTASSIUM NITRATE. CARL THEODOR THORSELL and AUGUST KRISTENSSON, Cassel, Germany. Filed Feb. 29, 1928, Serial No. 258,150, and in Germany Mar. 16, 1927. 10 Claims. (Cl. 23—102.)

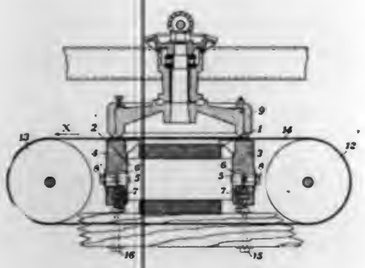
4. The method of preparing potassium nitrate which comprises treating potassium chloride with an excess of

nitric acid, cooling the resulting reaction product to crystallize out the potassium nitrate formed, adding potassium chloride to the mother liquor to precipitate further quantities of potassium nitrate, separating off the potassium nitrate, adding a reducing agent to the mother liquor, said agent having the property of reducing nitric acid to nitric oxide, removing the nitric oxide from the solution, and then converting the so-formed nitric oxide into nitric acid for reuse in the process.

1,816,304. ELECTROLYTIC REFINING OF METALLIC ALUMINUM. WILLIAM D. TREADWELL, Zurich, Switzerland, assignor to Aluminum Industrie Aktiengesellschaft, Neuhausen, Switzerland, a Joint-Stock Company of Switzerland. Filed Nov. 30, 1929, Serial No. 410,878, and in Germany Nov. 30, 1928. 5 Claims. (Cl. 204—20.)

1. The process of producing refined metallic aluminum, comprising removing aluminum electrolytically from a solid metallic anode containing impure metallic aluminum, on to a solid cathode, through a molten electrolytic bath capable of acting selectively to dissolve aluminum from the anode, which bath contains aluminum halide, and halides of one or more metals the hydroxides of which have alkaline properties, and characterized in that the electrolyte absorbed by or adhering to the electrodes after their removal from the electrolytic bath is separated from them and recovered by treating the electrodes with anhydrous sulfur dioxide, the anhydrous sulfur dioxide being afterwards distilled off from the resulting solution, leaving the salt mixture available for further use.

1,816,305. MAGNETIC SEPARATING MACHINE. GEORG ULRICH, Magdeburg, Germany, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg, Germany. Filed Aug. 17, 1929, Serial No. 386,690, and in Germany Aug. 23, 1928. 1 Claim. (Cl. 209—222.)



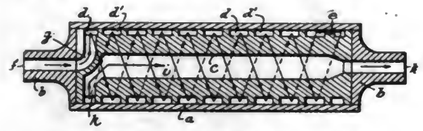
In a magnetic separating machine for dressing ores and metallurgical waste products the combination with a stationary field magnet having two pole shoes, the upper faces of which being bounded by curved inner edges, of a rotary cylindrical shell suspended above and spaced from said field magnet, an endless conveyor belt passing through the gaps between the said shell and said magnet poles, and of means for individually supporting the core and each pole of the field magnet in such manner as to render adjustable the effective distance of the upper face of each of the poles from the rotary shell independently of each other retaining at the same time the faces, of the said pole-shoes in equidistant position relatively to the cylindrical shell, said means comprising a plurality of set screws adapted to adjustably support the pole-shoes of the field magnet independently of each other, another set of screws adapted to adjustably support the core of the field magnet by the pole-shoes, the core and the pole-shoes of the field magnet being made in three separate pieces and being detachably assembled by clamping means, said clamping means comprising recesses provided at the inner side of the pole-shoes, stays projecting from the core of the magnet into said recesses and having ample play therein in upward and downward direction, set screws adapted to support the said stays within the said recesses and clamping bolts adapted to retain the core of the magnet in re-adjusted position relatively to the pole-shoes.

1,816,306. CHECK BOOK. ALOYSIUS J. UNIACK, Los Angeles, Calif. Filed Feb. 27, 1928. Serial No. 257,376. 3 Claims. (Cl. 281—19.)



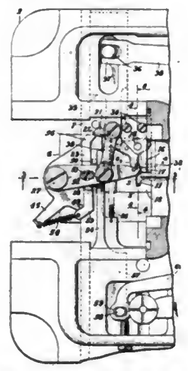
1. A check book having a check pad including stubs, a cover therefor, one end of which is inturned to form a flap beneath which the stub end of the check pad is received, and a separable fastener having one part secured to the stub end of the check pad and the other part secured to said flap to be engaged by the first part and retain the check pad on the flap so that in the normal position of the flap the check pad is held within the cover but when unfolded or extended the check pad may be extended from the cover so as to occupy an end-to-end position thereto.

1,816,307. ROLL FOR ROLLING GLASS PLATES FROM MOLTEN GLASS. LAMBERT VON REIS, Herzogenrath, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed Oct. 10, 1927, Serial No. 225,244, and in Germany Nov. 6, 1926. 3 Claims. (Cl. 257—95.)



1. In a glass-forming roll comprising an inner core, a thin-walled outer shell tightly mounted on said core, and a single channel between the shell and core for the passage therethrough of a temperature-equalizing medium, said channel having the form of a double thread, adjacent ends of which are connected.

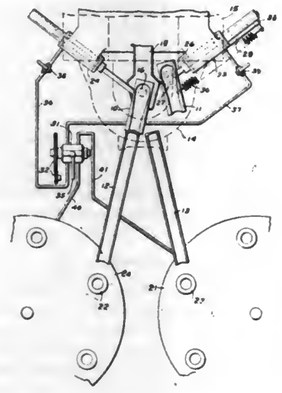
1,816,308. THREAD-CUTTING MECHANISM FOR SEWING MACHINES. EDWARD B. ALLEN, Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 19, 1929. Serial No. 400,768. 12 Claims. (Cl. 112—252.)



1. In a two-thread sewing machine, the combination with a throat-plate having a needle-hole, of a thread-cutter and

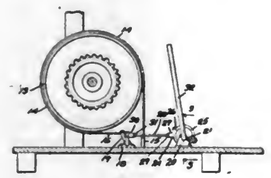
-nipper mounted below the throat-plate in thread-cutting and -nipping position spaced laterally of the needle-hole, and means for carrying the under-thread laterally to the thread-cutter and -nipper.

1,816,309. DELIVERY APPARATUS FOR MOLTEN GLASS. WILLIAM T. BARKER, Jr., Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Apr. 13, 1926. Serial No. 101,663. 12 Claims. (Cl. 49—5.)



5. Apparatus for delivering mold charges of molten glass from a glass feeder to a plurality of inclined troughs positioned adjacent to the feeder, comprising a plurality of movably supported scoop blocks disposed adjacent to the feeder outlet and means for causing translatory movements of the respective scoop blocks in succession into and out of alignment with the feeder outlet and with the respective troughs.

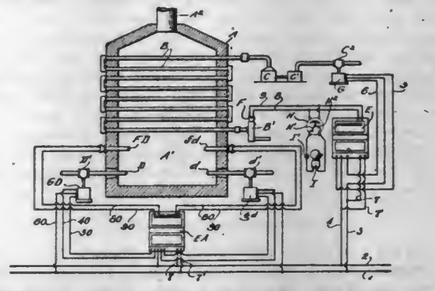
1,816,310. BRAKE CONSTRUCTION FOR DRAW WORKS. BRYAN W. BREWSTER, Fullerton, Calif. Filed Mar. 20, 1929. Serial No. 348,627. 2 Claims. (Cl. 188—77.)



2. A device for tightening and loosening brake bands on the brake drums of draw works and the like comprising an eccentric rotatably mounted, a strap for the eccentric, means for rotating the eccentric, and means operably connecting the strap to the brake band, there being an annular rib formed on the strap receivable in a groove on the eccentric preventing lateral movement of the strap with respect to the eccentric.

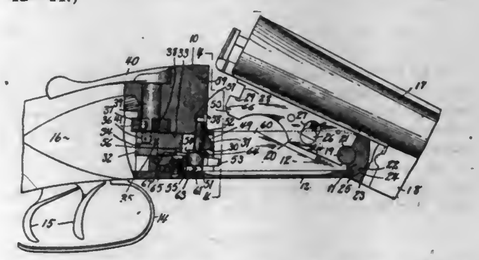
1,816,311. COMBUSTION CONTROL. RICHARD P. BROWN, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Jan. 27, 1926, Serial No. 84,077. Divided and this application filed Oct. 9, 1926. Serial No. 140,539. 6 Claims. (Cl. 236—15.)

1. The method of regulating combustion in a combustion chamber having a plurality of burners which consists in regulating the distribution of fuel among the different burners in automatic response to the temperatures of the



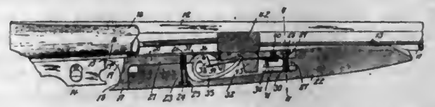
combustion chamber portions adjacent the different burners as required to maintain a predetermined relation between said temperatures.

1,816,312. LOCKING-BOLT LATCH FOR BREAK-DOWN FIREARMS. FRANK F. BURTON, Mount Carmel, Conn., assignor to Winchester Repeating Arms Company, New Haven, Cann., a Corporation of Delaware. Filed Dec. 3, 1929. Serial No. 411,236. 6 Claims. (Cl. 42—44.)



1. In a breakdown firearm, the combination with the relatively-pivoted frame-unit and barrel-unit thereof; of a barrel-locking bolt carried by the said frame-unit in position to engage a portion of the said barrel-unit to lock the same in place and formed with a transverse passage; and an automatically-releasable spring-pressed locking-bolt latch co-acting with the said barrel-locking bolt to hold the same in its retracted position and having a portion extending through the passage in the said bolt and exposed through a portion of the said frame-unit for manual release.

1,816,313. BREAKDOWN FIREARM. FRANK F. BURTON, Mount Carmel, Conn., assignor to Winchester Repeating Arms Company, New Haven, Conn., a Corporation of Delaware. Filed Jan. 22, 1930. Serial No. 422,558. 6 Claims. (Cl. 42—40.)

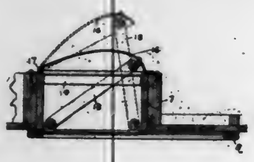


1. In a shoulder fire-arm the combination with a barrel-unit provided in a plane below the median line of the barrel thereof, with an upwardly-facing fore end-retaining shoulder; of a removable fore end-unit applied to the under face of the said barrel-unit and provided at its rear end with a retaining-lip engaging and fulcruming upon the fore end-retaining shoulder in the said barrel-unit; and means for holding the front end of the said fore end-unit to the said barrel-unit when the said units have been assembled together.

6. In a shoulder firearm, the combination with the barrel-unit and the fore end thereof; the said fore end being

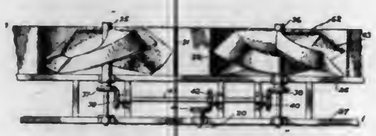
formed in its upper face with a chamber extending but part way down therefrom; of a fore end-shoe secured to the said fore end and formed with a forwardly-extending tang overlying and forming the upper wall of the aforesaid chamber in the said fore end; a fastening-screw extending downward through the said tang and into the chamber in the said fore end; a nut mounted upon the lower end of the said screw and located entirely within the chamber in the said fore end by which latter it is concealed; and an anchoring-rib laterally offsetting from a side-wall of the chamber in the said fore end and overlying the said nut to prevent the upward displacement thereof.

1,816,314. CABIN VENTILATOR. FRANK R. CANNEY, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed Jan. 6, 1930. Serial No. 418,964. 7 Claims. (Cl. 98—13.)



1. In a ventilator of the class described, the combination of a frame member, a door swingably mounted by one edge at one side of said frame member, another door mounted on the opposite side of said frame member in sliding movement in opening away from the hinged edge of the other door, and, means interconnecting both of said doors for imparting swinging motion to one door upon sliding the other of said doors.

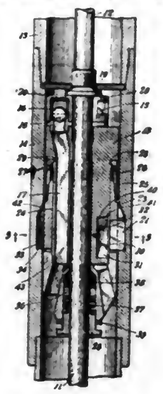
1,816,315. HELICOPTER. WILLIAM A. CLARK, Oakland, Calif. Filed Oct. 5, 1927. Serial No. 224,152. 8 Claims. (Cl. 170—170.)



1. A lifting propeller for a helicopter comprising four blades extending radially about the axis of the propeller and with their contiguous edges overlapping, the radial axis of said blades extending at right angles to the axis of the propeller, and the outer portions of said blades being inturned at an obtuse angle to the axis of the blades to intercept the centrifugal fluid blast created when the propeller is in operation.

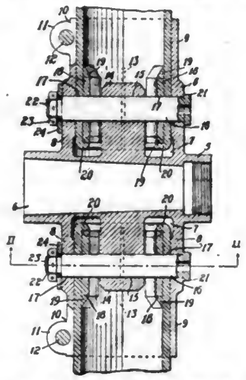
1,816,316. PUMP. JAMES W. DES CHAMPS, Sumter, S. C. Filed Feb. 18, 1929. Serial No. 340,795. 11 Claims. (Cl. 103—229.)

1. An attachment for oil well pumps, comprising a collar attachable in a line of well tubing above the working barrel of a pump, said collar having an enlargement and a seat therein, a plug adapted to be lowered through the tubing into said collar, a normally retracted support for said plug, said support being shiftable into said enlargement and into engagement with the seat in the collar, packing on the plug, an expander for said packing operable



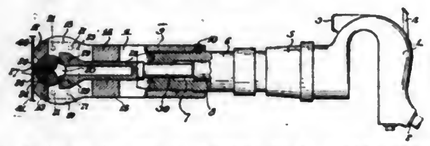
by said support upon engagement of the latter with the seat in the collar and upwardly opening valve means carried by said plug.

1,816,317. PROPELLER. THOMAS A. DICKS, Pittsburgh, Pa., assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Refile for abandoned application Serial No. 285,087, filed June 13, 1928. This application filed Aug. 28, 1929. Serial No. 387,899. 16 Claims. (Cl. 170—173.)



1. In a propeller, a hub having a series of sockets radiating therefrom, a hollow detachable blade having a cylindrical shank adapted to fit within each socket, each socket and the end of the blade inserted therein being provided with suitable openings for the reception of a cross bolt and means on said hub received within the shank of said blade to medially embrace the cross bolt.

1,816,318. PORTABLE CLINCHING TOOL. CAROLUS L. EKSERGIAN, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 22, 1927. Serial No. 228,009. 5 Claims. (Cl. 113—57.)

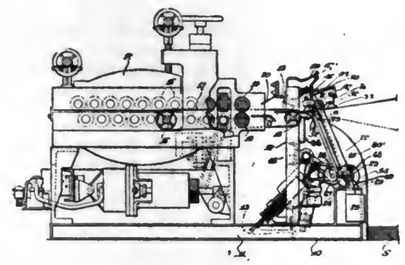


1. A device for use in clinching metal flanges together, comprising a member having one end adapted for secure-

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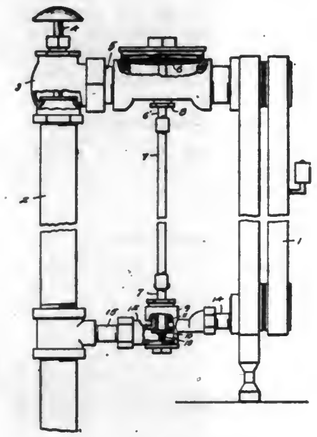
ment to a pneumatic hammer, and its other end formed with an enlargement, opposed clinching jaws pivotally mounted in said enlargement, and a jaw actuating member slidably mounted in said first-named member having an enlarged jaw engaging end and a reduced end adapted to extend into the hammer and be engaged by the reciprocating plunger thereof.

1,816,319. AUTOMATIC FEEDING APPARATUS FOR SHEET METAL WORKING MACHINES. CAROLUS LEVON EKSERGIAN, Detroit, Mich., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 3, 1929. Serial No. 352,801. 22 Claims. (Cl. 271—27.)



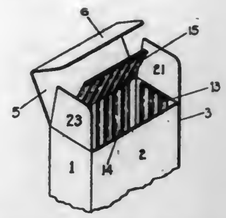
1. A sheet feeding device, comprising means for transferring a sheet from a stack into a position where it is taken hold of by the machine itself, means for actuating said transfer means, and means controlled by contact of the transfer means with the sheet being fed for rendering said actuating means operative.

1,816,320. RADIATOR. EDWARD FLYNN, Tiffin, Ohio. Filed Mar. 23, 1929. Serial No. 349,463. 1 Claim. (Cl. 237—1.)



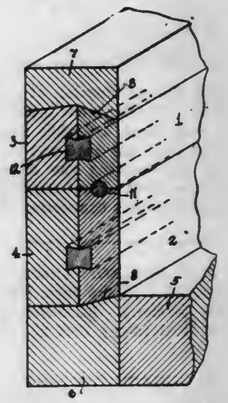
In a device of the character specified, a radiator, a steam supply pipe for the radiator, a return pipe therefor, a steam valve in the supply pipe, a spring closed drip valve in the return pipe, a thermostatic element acting to expand and open said drip valve against the action of its spring when the steam valve is opened and contracting to permit the drip valve to close again when the steam supply is shut off and a vertical rod or plunger between the thermostatic element and drip valve.

1,816,321. COLLAPSIBLE PADDED BOX. ORLANDO W. FOSS, Melrose, Mass. Filed May 9, 1929. Serial No. 361,795. 3 Claims. (Cl. 229—14.)



1. The combination in a collapsible box, of an outer layer which is formed from a blank of light bendable cardboard cut, creased and bent to form four connected rectangular outer walls, one free edge being fastened to an overlapping extension of the opposite free edge, said carton having at each end of each opposite side wall, a foldable lap and between said laps, a foldable flap in extension of another wall, said flap having a tongue; with interior pads of corrugated paper stuck to the inside of the side walls, each of said pads being narrower than the wall to which it is attached, the two pads which are fastened to the front and back walls having foldable pad flaps each of which extends beyond the opposite end of an outer wall, each pad being creased at the junction between the outer wall and its flap so that beyond such crease line, the outer wall flap and the pad flap are each free to move alone, the pad on each opposite wall being unattached near its end a sufficient distance to permit a flap tongue to lie flat against the inside of the outer layer behind the end of a pad.

1,816,322. METHOD OF RETAINING AND SEALING FURNACE STRUCTURE. ROBERT L. FRINK, Lancaster, Ohio. Filed Dec. 16, 1926. Serial No. 155,329 12 Claims. (Cl. 72—0.5.)

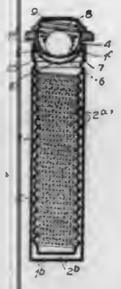


1. In construction of the character described, the combination of heat-resistant members having apposed surfaces provided with recesses, and a locking member fused in such recesses the locking member being glass like in character.

1,816,323. SAFETY DEVICE FOR CONTAINERS HOLDING LIQUIDS WHICH DEVELOP EXPLOSIVE GASES. LUDOVIC GLÜCK, Arad, Rumania. Filed June 1, 1928, Serial No. 282,157, and in Hungary June 4, 1927. 2 Claims. (Cl. 220—86.)

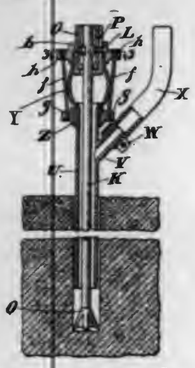
1. A safety closure for pressure storage containers, comprising a pair of perforated members, one nested with-

in the other, one of the members having its side walls formed in spiral grooves and ridges with incisions driven



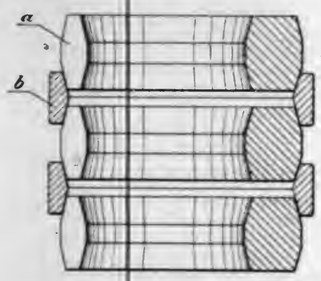
inwardly, and a yieldably mounted valve for the closure to relieve pressure above a certain amount from the container.

1,816,324. CLEANSING DEVICE FOR ROCK DRILLS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 24, 1930. Serial No. 463,429. 4 Claims. (Cl. 255—50.)



4. In a rock drill, the combination of a front head and a drill steel extending into the front head, a tubular member encircling the drill steel, a flexible member encircling the adjacent ends of the front head and the tubular member, spaced means for securing the flexible member to the said adjacent ends of the front head and the tubular member, and flexible members connecting said means.

1,816,325. FRICTION SPRING. THEODOR HELD, Uerdingen, Germany, assignor to the Firm "Ringfeder" G. m. b. H., Uerdingen, Germany. Filed Feb. 20, 1930, Serial No. 429,976, and in Germany Feb. 25, 1929. 2 Claims. (Cl. 267—1.)

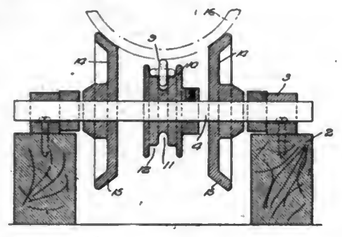


1. A friction spring composed of continuous outer rings and split inner rings subjected to bending stresses by said outer rings under axial load of the spring, said split inner rings diminishing in their cross-sections from a point diametrically opposite the split of the inner ring towards said split in such a way that under axial load of the spring the inner rings remain substantially circular under the action of radial forces uniformly distributed over the circumference of the ring.

1,816,326. PROCESS FOR THE PRODUCTION OF ACETALDEHYDE. WILLY O. HERRMANN and HANS DEUTSCH, Munich, Germany, assignors to Consortium fuer Elektrochemische Industrie, Munich, Germany. Filed Oct. 9, 1926, Serial No. 140,673, and in Germany Oct. 26, 1925. 14 Claims. (Cl. 260—139.)

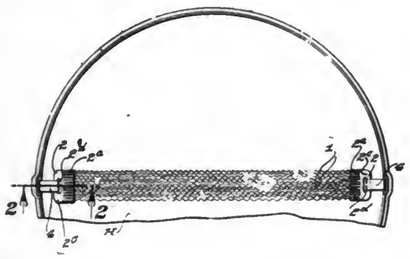
12. Process of producing acetaldehyde by causing acetylene to react upon water in the presence of a mercury compound of an inorganic acid, adding a compound containing a hydroxylic group and continuously removing the acetaldehyde thus formed from the reaction mixture, continuously removing part of the reaction liquid and continuously substituting it by a regenerated catalytic emulsion.

1,816,327. CONVEYER. GEORGE L. HISE, Ambridge, Pa. Filed Apr. 19, 1929. Serial No. 356,328. 7 Claims. (Cl. 198—200.)



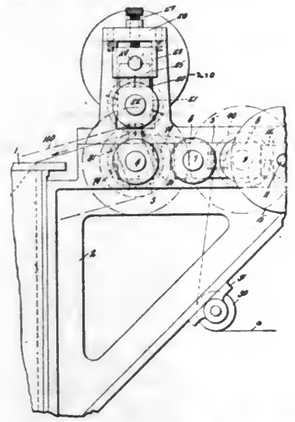
3. A conveyer for elongated articles, comprising an endless flexible chain, driving means therefor, guiding means therefor connected with the conveyer and having portions bearing laterally against the chain at points throughout its length to hold the same against lateral displacement in a generally horizontal plane, and means for maintaining articles being conveyed in contact with the chain itself so that they are carried along by frictional engagement therewith.

1,816,328. DRUM SNARE. ENOS P. JAMES, San Diego, Calif. Filed May 14, 1929. Serial No. 363,014. 3 Claims. (Cl. 84—415.)



1. In a drum snare, a plurality of snare strands, end members therefor, each of said end members having alternate ridges and channels formed in its one surface, the corresponding ends of said snare strands lying in said channels and held in spaced relation to each other by said ridges, and securing means for securing the ends of said snare strands in said snare receiving channels.

1,816,329. MECHANISM FOR MAKING ROOFING. ROBERT T. JOHNSTON, New Brunswick, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 20, 1923. Serial No. 626,440. 7 Claims. (Cl. 164—61.)

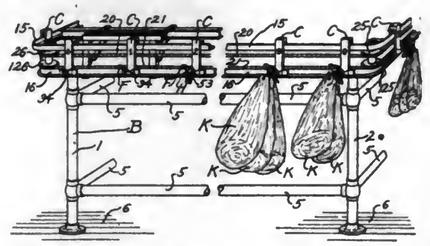


1. A mechanism of the class described comprising two pairs of adjacently disposed feed rollers, one of said two pairs having segmental cutters for cutting sheet material fed therethrough at intervals with spaced pairs of slits and for trimming the side edges thereof, the other pair of rollers having axial cutters positioned to cut slits joining the ends of said pairs of slits and for cutting the edge trimmings into lengths, means to drive said pairs of rollers in timed relation, ejector fingers carried by one of said other pair of rollers, and means acting in time with the rotation of said rollers for projecting said fingers through the cutouts defined by said slits to remove the pieces of material cut thereby from the sheet.

1,816,330. ENAMEL. JOHN L. KEATS, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 4, 1927. Serial No. 210,723. 12 Claims. (Cl. 134—79.)

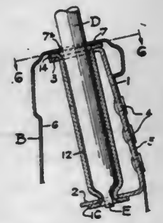
2. A non-graining coating composition, comprising a cellulose derivative, a solvent therefor containing a component which tends to induce graining in the presence of a basic component, and a pigment stabilized against graining, which contains no more than .1% of acetic acid soluble zinc reckoned as zinc oxide, and has a reaction of substantially 6.0 pH, but which, without stabilization, has a normal tendency to induce graining in such a composition.

1,816,331. LAUNDRY SORTING AND ASSEMBLING DEVICE. WILLIAM FREDRICK KRUSCHWITZ, Methuen, Mass. Filed July 20, 1929. Serial No. 379,768. 3 Claims. (Cl. 209—125.)



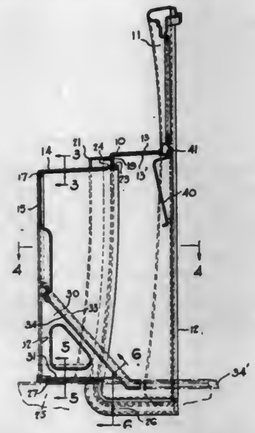
1. The combination in a laundry sorting and assembling system of an endless carrier including a fixed frame; with a plurality of key bar supports each attached to and movable around the outside of the carrier, each support having a conspicuous number on its outer side and also a key bar socket on its outer side; a plurality of key bars each having a fixed stop near one end, an elastic stop near the other end, and an identifying number part of which number corresponds with the support number, each bar being so formed as to receive a plurality of suitably cut key tags and each bar being so detachably fitted into a socket at its fixed stop end as to project up and out; and a set of key tags all numbered to correspond with the particular key bar which they fit and on which they are removably assembled, each tag including an attaching member; together with a plurality of net bags each carried by a key tag.

1,816,332. VEHICLE CURTAIN ROD SOCKET. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1926. Serial No. 94,224. 5 Claims. (Cl. 296—139.)



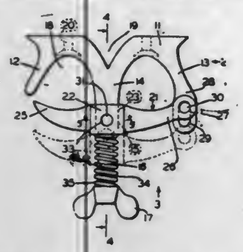
1. A curtain rod socket comprising a sheet metal supporting fixture having a relatively unyielding seat of fixed dimension, and a socket proper slit throughout its main body and supported in said seat under radial tension, whereby the resiliency of the socket is made use of to prevent lost motion in said fixture.

1,816,333. COWL CONSTRUCTION FOR VEHICLE BODIES. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1927. Serial No. 241,692. 7 Claims. (Cl. 296—28.)



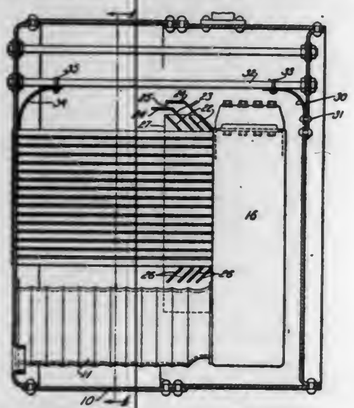
1. In a vehicle body construction, a rear cowl portion comprising inner and outer panels secured together adjacent their forward edges, and a sub-cowl section of reduced section extending forwardly of said rear cowl portion and secured to both the inner and outer panels of said rear portion.

1,816,334. OAR AND PADDLE HOLDER AND LOCK. FRANK L. MATTHEWS, Balboa, Calif. Filed Jan. 15, 1930. Serial No. 421,052. 9 Claims. (Cl. 211—8.)



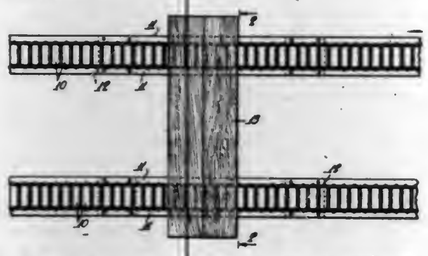
1. A holder having a base with a post and a lateral arm, there being a recess between the arm and the post, a yoke slidably mounted on the post, a spring on the post engaging the said yoke, the post and the yoke having a non-circular portion to retain the yoke extending towards the arm or at a position at right angles thereto.

1,816,335. BOILER CIRCULATOR. ALEXANDER MCNAB, Bridgeport, Conn. Filed Aug. 13, 1930. Serial No. 474,923. 9 Claims. (Cl. 122—410.)



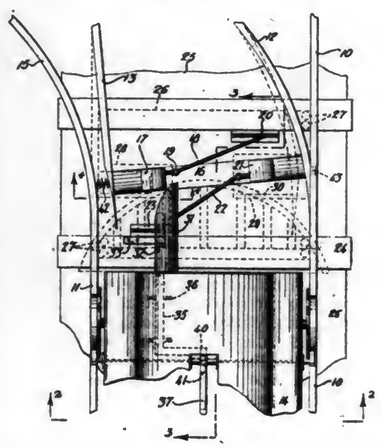
1. In a boiler circulator, a pair of spaced side plates extending above the fire tubes of the boiler, and blades extending between and rigidly connected at their ends to the extending portions of the side plates above the fire tubes, said blades inclining forwardly of the boiler.

1,816,336. MOLD CARRYING CONVEYER. EUGENE F. MILTENBERGER, Red Bank, N. J., assignor to Eastern Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 1, 1930. Serial No. 425,156. 4 Claims. (Cl. 193—35.)



2. A mold carrying conveyer for use in foundries, including a pair of stationary substantially parallel roller supports, each having a series of conveying rollers, said supports being spaced apart to form a passageway therebetween along which a workman may walk, and a resilient platform bridging across and supported by both series of rollers, the rollers and platform being at such height above the floor that the workmen walking between the two series of rollers may push said platform over the rollers without unduly bending over, and the length of the rollers and the height thereof being such that the workmen may conveniently step over the rollers to the open space between the two series.

1,816,337. RAILROAD LOCK SWITCH. ANDERS N. F. MOHR, Stewart, Minn. Filed Jan. 31, 1931. Serial No. 512,637. 3 Claims. (Cl. 246—317.)



1. The combination with a vehicle track having a switch, means disposed below the switch and movable with said switch, of a post carried by the said means, and a switch actuator adapted to be carried on a vehicle for contacting with the post to move the switch for changing the course of a vehicle during its travel.

1,816,338. FOOD PRODUCT. SIDNEY MUSHER, Washington, D. C. Filed Oct. 29, 1927. Serial No. 229,800. 4 Claims. (Cl. 99—11.)

4. The method of inhibiting rancidity in peanut butter comprising mixing approximately 75% peanut butter with approximately 25% crushed sesame seed.

1,816,339. FOOD PRODUCT. SIDNEY MUSHER, Baltimore, Md. Filed Feb. 16, 1929. Serial No. 340,656. 2 Claims. (Cl. 99—11.)

1. A food product comprising an emulsion of skimmed milk and a virgin olive oil containing a normal percentage of lipolytic enzymes, such olive oil being present in an amount not in excess of 3.59%, said product having the same relative percentages of the glycerides of fatty acids as human breast milk.

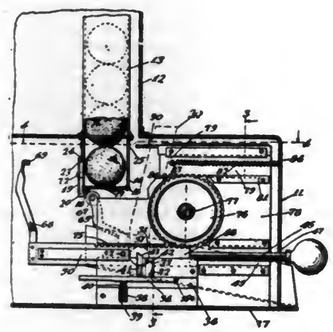
1,816,340. RESERVE MUSIC-HOLDING ATTACHMENT FOR MUSIC RACKS. ERNEST H. NYSTROM, Quincy, Mass. Filed Mar. 7, 1928. Serial No. 259,662. 2 Claims. (Cl. 45—58.)

1. A reserve music-holding attachment comprising a clamp having means for separable engagement with a music rack standard, and provided with a projecting ear having notches in its opposite sides, a shank having in one end portion a slot formed to receive said ear, a shelf composed of two relatively movable sections pivoted at their inner ends to the opposite end portion of the shank, and inclined braces extending from the outer ends of the shelf sections to the slotted end portion of the shank, and composed of lower sections pivoted to the inner edges of the shelf sections adjacent the outer ends thereof, and



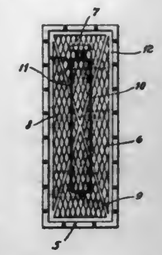
upper sections pivoted to the lower sections and to the shank, and provided with extensions arranged to enter the grooves in the clamp ear, and thereby lock the shank to said ear, the shank and braces being arranged to laterally support reserve music deposited on the shelf, the structure including the shelf, the shank and the braces being foldable, to disengage the brace extensions from the clamp ear, and reduce the structure to compact form.

1,816,341. FRUIT VENDING MACHINE. NELS P. PETERSEN, Los Angeles, Calif., assignor to Antonettie M. E. Petersen, Los Angeles, Calif. Filed Aug. 31, 1927. Serial No. 216,567. 11 Claims. (Cl. 312—48.)



1. A vending machine having a magazine, means to support a stack of articles, one above the other, therein, a movable barrier in the form of a plate having a pair of prongs to engage a spherical article, an inner block connected to said plate, a rod slidable through said block, an outer block connected to the rod, a spring between said rods, and means to reciprocate the outer block, said reciprocating motion thrusting a barrier between a lowermost article in the magazine and the article next above.

1,816,342. CONTAINER FOR FIRE EXTINGUISHING APPARATUS. EDWARD D. PHINNEY, Mount Vernon, N. Y. Filed Dec. 19, 1929. Serial No. 415,229. 4 Claims. (Cl. 220—82.)

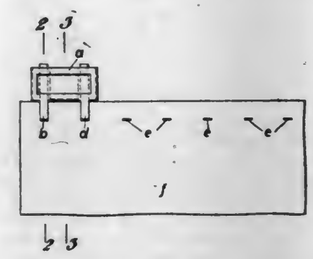


1. A container for fire extinguishers wherein one side is formed of a glass panel having reinforcing material in areas which together form an area similar in shape and slightly smaller than the said panel and which are divided one from the other by areas containing no reinforcing material.

1,816,343. PROCESS OF REFINING RAW CELLULOSE PULP. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 15, 1929. Serial No. 363,158. 11 Claims. (Cl. 92—9.)

1. A process which comprises treating raw cellulose pulp with a lignin-reactive reagent, washing the pulp, digesting the pulp in a weakly alkaline liquor to dissolve certain ligneous reaction products therefrom, and then digesting the pulp in a strongly alkaline liquor to dissolve other non-alpha cellulose components therefrom.

1,816,344. TAB FOR REGISTRATION CARDS OR THE LIKE. WILHELM SCHLEIFER, Vienna, Austria. Filed May 31, 1930, Serial No. 458,831, and in Austria June 3, 1929. 4 Claims. (Cl. 129—168.)

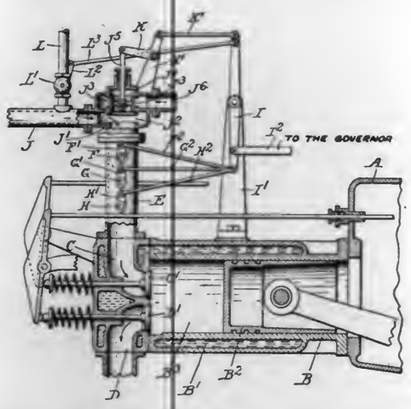


1. Tab for use in connection with registration cards or the like, comprising in combination, a frame, and a number of ears at one edge of said frame, said ears adapted to be bent to lie in planes substantially parallel to the plane of said frame, the outside ears being adapted to be threaded through slots of the registration card, while the ear disposed between the outside ears forms the back-wall of the window in said frame.

1,816,345. METHOD OF PREPARING FUEL CHARGE FOR INTERNAL COMBUSTION ENGINES. JOHN A. SECOR, La Porte, Ind., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 16, 1923. Serial No. 675,025. 18 Claims. (Cl. 123—25.)

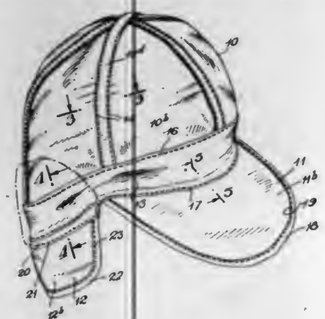
1. The process of burning fuel in an internal combustion engine which consists in varying in co-ordination the rela-

tive proportion of the fuel and the other ingredients of the charge and the temperature of the mixture in the cylinder, by adding heated air at low compressions and by



adding water at higher compressions, the proportion of air and water varying in response to variations in the engine load.

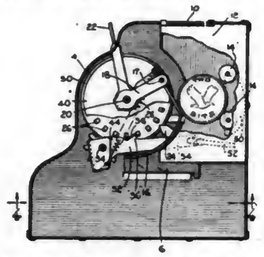
1,816,346. REVERSIBLE CAP. WILLIAM I. SILVERSTEIN, Brooklyn, N. Y. Filed May 31, 1929. Serial No. 367,246. 1 Claim. (Cl. 2—195.)



A reversible peak cap of the class described, the crown portion of which is constructed of independent and contrasting inner and outer facings, each of said facings being adapted to be arranged externally of the cap, a relatively wide, flexible head encircling band exposed in both uses of the cap and having facings corresponding to that of the crown portion, said band extending entirely around and being attached to the lower edge of the crown portion, and a peak having facings corresponding to that of the crown portion and attached to the free edge of said band at the front and side portions thereof, whereby said peak is flexibly coupled with the crown permitting the free reversal of said cap, an ear and neck flap coupled with the lower edge of said band at the rear and side edges thereof and movably disposed with reference thereto and means disposed between the facings of the separate parts of the cap for rendering said cap moisture-proof in both uses thereof.

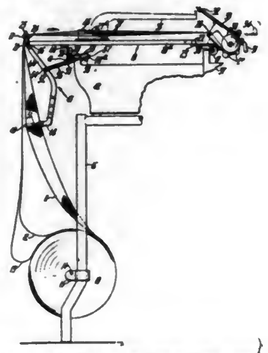
1,816,347. REGISTERING BANK. ANTHONY N. SMITH, Girard, Pa., assignor to The Girard Model Works Inc., Girard, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1929. Serial No. 344,291. 9 Claims. (Cl. 194—72.)

7. A coin registering savings bank comprising a casing, registering mechanism in said casing, and a coin chute in said casing, said mechanism including a ratchet wheel, an operating pawl operable upon deposit of a coin in said chute for operating said ratchet wheel, a locking pawl.



and a single spring arranged to normally urge the operating and locking pawls respectively out of and into engagement with the ratchet wheel.

1,816,348. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 13, 1927, Serial No. 205,313. Renewed July 26, 1928. 9 Claims. (Cl. 197—133.)



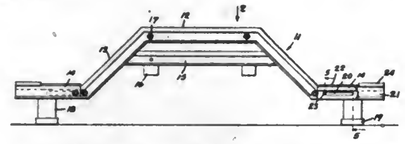
1. In a continuous billing machine, the combination with a web-feeding platen, a carriage therefor, a multiple-ply web supplied at the rear of the machine from a suitable source adjacent to the machine, and a frame rigidly attached to the rear of the carriage for web-intake and conducting the web to the platen, of a web-lifting device to facilitate feeding of the web, including an equalizer-bar extending across said web and located between the source of web-supply and the web-intake, said equalizer-bar centrally swiveled so as to fit itself to uniformly engage the web, and means to support said bar and which are reciprocatively actuable to engage the same for web lifting and slackening operation.

1,816,349. UNIVERSAL NECKTIE PRESS. VICTOR SYREN, Brooklyn, N. Y. Filed May 1, 1930. Serial No. 448,823. 7 Claims. (Cl. 223—19.)



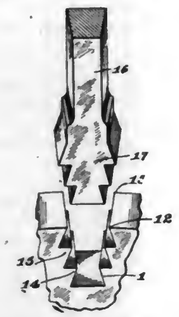
1. A device of the character described, including a plurality of elongated bars, a lever extending along the bars, said lever lying approximately in the direction of the bars, said lever having spaced pivots connecting the same to the individual bars, said pivots being remote from the ends of the bars, said lever extending to one end of the bars, the extending end of the lever constituting an arm for angularly moving the lever with respect to the bars, and means to lock the lever to one of the bars against pivotal movement of the lever.

1,816,350. RACK FOR HANDLING LOCOMOTIVE CABS. CLAIR H. THOMPSON, Los Angeles, Calif. Filed Apr. 2, 1930. Serial No. 440,981. 12 Claims. (Cl. 248—41.)



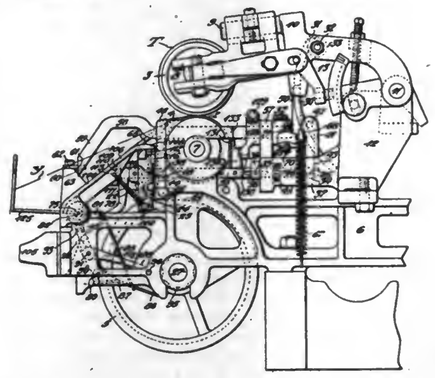
9. A rack having a frame with a central elevated portion, downwardly extending side portions with horizontally and laterally extending portions, the said laterally extending portions being adapted to support a load, and the central portion being adapted to be supported upon and carried by an elevating truck inserted underneath such central portion.

1,816,351. VEHICLE WHEEL. PETER PAUL ADAMS, Turkey River, Iowa. Filed Nov. 23, 1928. Serial No. 321,436. 2 Claims. (Cl. 301—80.)



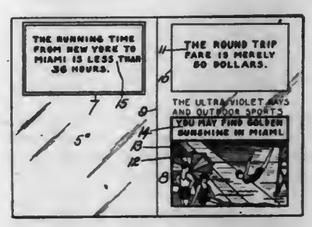
1. A wheel comprising a hub having a series of sockets arranged about the periphery thereof, each of said sockets wedged shaped axially and stepped wedged shaped radially, adjacent sockets arranged with their respective axial tapers in opposite directions and spokes insertable in the sockets from opposite ends of and axially with respect to the hub.

1,816,352. WINDING MACHINE. JOHAN A. ANDERSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 21, 1927. Serial No. 221,072. 16 Claims. (Cl. 242—86.)



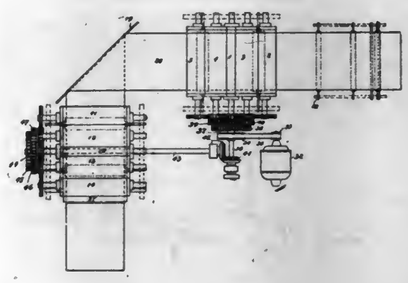
1. In a winding machine, the combination of a rotating winding-mandrel and means for winding strand material thereon, a drive-roll for rotating the cop wound on the mandrel, means adapting the mandrel and drive-roll to separate as the cop increases in diameter, an element slidable by the separation of the mandrel and drive-roll during the growth of the cop, a rockable dog bearing against the slidable element and released therefrom when said element is moved to a predetermined extent, and means operative upon the release of said dog to arrest the operation of the winding machine.

1,816,353. ADVERTISING, EDUCATIONAL OR AMUSEMENT DEVICE OR THE LIKE. MERRILL ANDERSON, New York, N. Y. Filed Jan. 2, 1931. Serial No. 506,283. 18 Claims. (Cl. 40—135.)



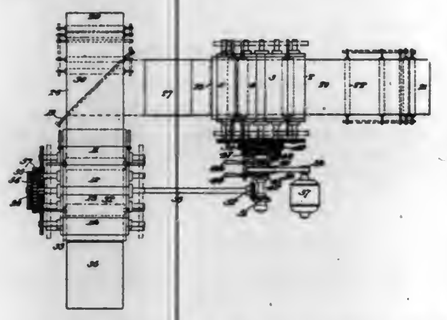
1. In an advertising, amusement or educational device of the character described, a top sheet having symbols thereon, the top sheet being provided with a transparent material forming a window, a following sheet having symbols thereon, some of which register with said window, the remainder being out of registry, and cooperating symbols on both sheets, whereby when the two sheets are superposed, certain symbols on the following sheet are rendered substantially invisible, whereas other symbols on both sheets are concurrently visible, to give a first effect, whereas when the symbols on the second sheet are viewed alone, a second effect is obtained, which is a development of the first effect.

1,816,354. DOUBLE MULTICOLOR WEB PERFECTING ROTARY PRINTING PRESS. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Apr. 16, 1930. Serial No. 444,747. 4 Claims. (Cl. 101—179.)



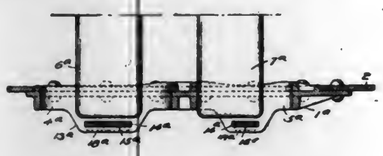
1. In a double multicolor web perfecting rotary printing press, first and second multicolor printing units located at substantially right angles to each other, and a web turning device located between the printing units, each printing unit comprising an impression cylinder and a plurality of plate cylinders arranged around the impression cylinder at one side of its horizontal central plane.

1,816,355. ROTARY PRINTING PRESS. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed May 5, 1930. Serial No. 449,833. 18 Claims. (Cl. 101—178.)



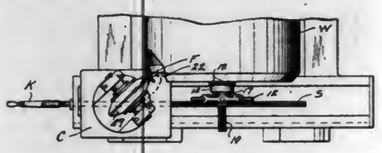
1. In a rotary printing press, two printing units arranged at right angles to each other, and means for leading a separate web through each printing unit or a single web through both printing units.

1,816,356. DRAFT KEY RETAINER. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Sept. 22, 1925. Serial No. 57,913. 16 Claims. (Cl. 213—54.)



13. In a car construction having slotted draft sills for the reception of a transversely extending connecting key such as in a draft rigging, an attachment for preventing withdrawal of such key in one direction, said attachment comprising a slotted member adapted to be supported from the corresponding adjacent draft sill and support the key, and a second member removably secured with respect to the first member and disposed opposite the end of such key.

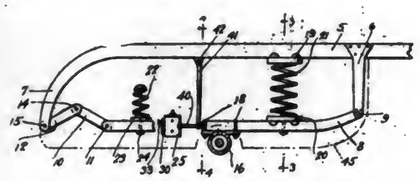
1,816,357. METHOD AND MEANS FOR FORMING INTERNAL FLANGES ON TUBULAR BODIES. CHARLES BOYE, Warren, Ohio, assignor to The Stevens Metal Products Company, Niles, Ohio, a Corporation of Ohio. Filed Dec. 26, 1928. Serial No. 328,456. 15 Claims. (Cl. 153—29.)



1. The method of forming an internal flange on a tubular body, which consists in rotating the body on a support and simultaneously spinning a portion of the body near one of its peripheral edges against an anvil, and then retracting the anvil to remove the tubular body from the support.

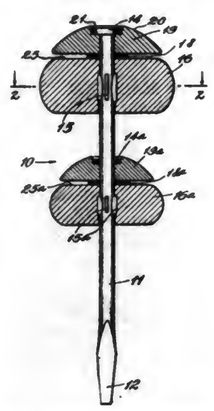
4. An apparatus for forming internal flanges on tubular bodies, including a rotatable support for the tubular body, radially movable jaws for gripping the body, anvils carried by the jaws and having a portion of the tubular body overlying the said anvils, and a blunt-nosed flanging roller engageable with the said overlying portion of the tubular body to spin the same progressively toward and against the anvils.

1,816,358. SPRING DEVICE. RUSSELL D. BURFORD, Chicago, Ill. Filed Feb. 5, 1929. Serial No. 337,619. 1 Claim. (Cl. 267—20.)



In combination with a vehicle chassis side rail having a downturned end portion, a bracket fixed to the side rail and depending from said side rail in spaced relation to the down turned end portion, a lever bar pivotally connected, at one end, to the free end of the bracket and extending therefrom toward the down turned end portion and terminating in spaced relation to said down turned end portion, the lever bar normally disposed substantially parallel with the side rail and substantially in the horizontal plane of the down turned end of the side rail, a coiled spring mounted between the side rail and the lever bar for yieldingly maintaining said lever bar substantially parallel to the side rail, and a pair of pivotally connected links, one of the links having one end pivotally connected to the free end of the lever bar, the other of the links having one end pivotally connected to the down turned end of the side rail, the pivotal connection of the links being normally above the horizontal planes of the pivotal connections of the links to the lever bar and the side rail.

1,816,359. SCREW-DRIVER. JULIUS E. CARLIN, Freehold, N. J. Filed May 18, 1929. Serial No. 364,118. 2 Claims. (Cl. 145—50.)



1. A screw-driver comprising a single rod having a beveled edge portion, a disc-shaped member of relatively large diameter fixedly mounted thereon, a second member of relatively small diameter rotatably mounted on said rod in proximity to said first mentioned member, a disc-shaped member of relatively large diameter fixedly mounted on said rod at a point spaced from said first named fixed member, and a member of relatively small diameter rotatably mounted on said rod in proximity to said last named fixed member.

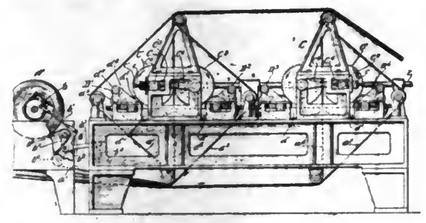
1,816,360. ELECTRICAL SOUND REPRODUCING PROCESS. ALOYSIUS J. CAWLEY, New York, N. Y., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1921. Serial No. 435,983. 10 Claims. (Cl. 274—43.)

3. An electrically conducting strip carrying a photographic sound record capable of varying an electric current.



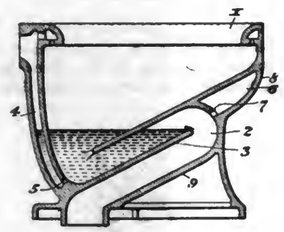
8. A sound recording process consisting in printing a sensitive film moving at a slower rate than that at which a master record moves to produce a developable sound image which is longitudinally reduced while its width remains constant.

1,816,361. TUBER FOR MULTIWALL BAGS. THOMAS EARL COTY and ALFRED CLEMENT COTY, Watertown, N. Y. Filed Nov. 30, 1920. Serial No. 410,804. 12 Claims. (Cl. 93—20.).



1. In an apparatus for preparing blanks for multiwall bags, means for applying paste to the inner layers of material at desired points; means for assembling the inner and outer layers in a web; means for drawing the web through the apparatus, and means for relieving the pressure upon the material when the pasted points pass through the drawing means.

1,816,362. CLOSET BOWL. ALVA W. DALLAS, Trenton, N. J. Filed Feb. 25, 1930. Serial No. 431,171. 1 Claim. (Cl. 4—73.)



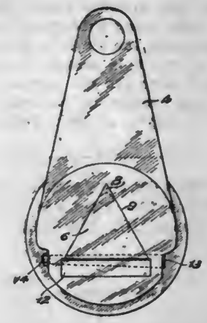
A closet bowl having a trap with its siphon discharge at the front thereof, the said bowl having a cushioning chamber with a communicating aperture in the path of travel of water passing from the bowl to the trap and in spaced relation to that part of the bowl containing water when flushing is inactive, whereby when flushing occurs the water overflowing the normal water holding capacity of the bowl forcefully contacts the wall of the chamber and exerts force on air in the chamber and its aperture.

1,816,363. MEANS FOR SCOURING AND POLISHING ASPHALTIC PLATES. FRANSISCUS C. J. DE BOTH, deceased, by Jacobus J. D. de Both, administrator, Nymegen, Netherlands; Johannes Petrus Matheus de Both now administrator of said Franciscus C. J. de Both, deceased. Original application filed June 16, 1927, Serial No. 199,314. Divided and this application filed Apr. 9, 1928. Serial No. 268,697. 3 Claims. (Cl. 51—26.)



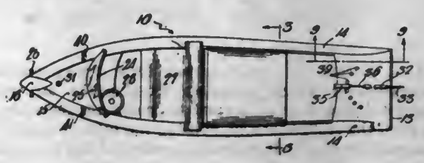
1. In an apparatus for scouring plates, a ballasting member for the plates comprising angle iron frame members, and plurality of ballasting plates each connected to the frame members, and attaching means engaging the frame members for lifting the ballasting assembly.

1,816,364. CONNECTING MEANS FOR ECCENTRIC ARMS. CHARLES W. DESTENBAUGH, Cumberland, Md. Filed June 18, 1928. Serial No. 286,822. 3 Claims. (Cl. 287—53.)



1. In a device of the class described, a pin having a substantially triangular end portion, a shoulder formed on said end portion, a crank arm provided with an opening and fitted on the triangular portion of the pin but providing a space between one of the sides of the triangular portion and the opposed wall of the opening in the crank arm, a wedge block positioned in said space, and a tapered key substantially paralleling anad cooperating with said block and said pin to lock said arm in position behind said shoulder.

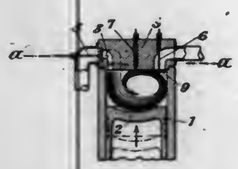
1,816,365. BOAT. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Nov. 20, 1930. Serial No. 496,947. 11 Claims. (Cl. 9—6.)



1. A boat having a hull consisting of an integral sheet forming the bottom side walls and bow of the hull and a

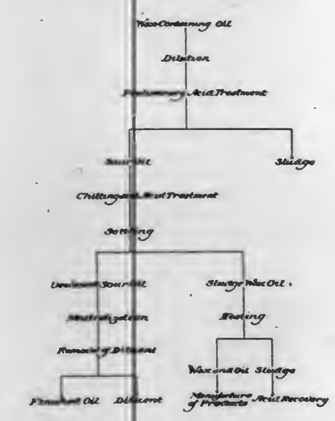
second sheet forming the stern of the hull, the top and rear edges of the first sheet being flanged and in engagement with the edges of the second sheet, said second sheet being bent substantially at right angles, the top and rear edges of the first sheet being flanged and in engagement with the horizontal and vertical parts respectively of the second sheet.

1,816,366. FOUR-STROKE INTERNAL COMBUSTION ENGINE WITH AIRLESS INJECTION OF THE FUEL. HEINRICH DINNER, Ennenda, Switzerland, assignor to the Firm: Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed Mar. 18, 1929, Serial No. 347,778, and in Switzerland Mar. 21, 1928. 4 Claims. (Cl. 123—32.)



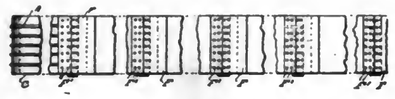
1. In a four-stroke internal combustion engine with airless fuel injection in combination a cylinder, a piston reciprocating in said cylinder, a cover closing one end of said cylinder, a fuel inlet valve centrally arranged in said cover, an exhaust valve arranged in said cover near the periphery and an air inlet valve arranged opposite to said exhaust valve in said cylinder cover, the cross-sectional area of said air inlet being subdivided into several openings, thereby admitting the air in a strip-like stream the central portion of which is heated by passing over the closed hot exhaust valve and the heated area surrounding it, thus facilitating ignition of the fuel, the air further causing the fuel to eddy in an axial direction.

1,816,367. PROCESS OF DEWAXING OIL. SEYMOUR W. FERRIS, Lansdowne, Pa. Filed Mar. 9, 1928. Serial No. 260,322. 4 Claims. (Cl. 196—18.)



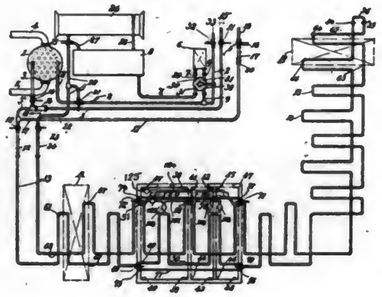
1. A process for removing wax from a wax-containing petroleum oil which comprises treating the oil with a sludge-forming acid at normal temperature, removing the oil from the sludge formed, chilling the oil so removed to a temperature at which at least a portion of the wax content thereof will form solid particles, and, while cold, treating the oil with a sludge-forming acid, and separating the wax and resulting acid sludge from the oil.

1,816,368. APPARATUS FOR BREEDING SILKWORMS. VITTORIO FIORUZZI, Piacenza, Italy. Filed June 22, 1926, Serial No. 117,820, and in Italy Sept. 16, 1925. 13 Claims. (Cl. 119—6.)



1. Apparatus for handling silkworms comprising silkworm conveying means, mechanism for feeding mulberry leaves to said conveying means, and mechanically actuated means for the reception of cocoons moving adjacent to and with said conveying means.

1,816,369. HEATING APPARATUS FOR RAILWAY CARS. ATTILIO FRANCO, Milan, Italy. Filed Feb. 10, 1925, Serial No. 8,218, and in Italy Feb. 11, 1924. 2 Claims. (Cl. 237—12.4.)



1. In a railway car, heating apparatus for said car, comprising, in combination, a main pipe comprising an outgoing branch and a return branch, a pair of 3-way cocks connected in said ontgoing branch, a heating pipe length in said car and a by-pass pipe connected in parallel between said cocks, a second pair of 3-way cocks connected in said return branch, a second heating pipe length in said car and a second by-pass pipe connected in parallel between said second pair of cocks, said first heating pipe length and said second heating pipe length having equal heating surfaces.

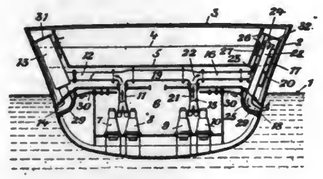
1,816,370. WINDOW CLEANING DEVICE. LOUIS HACHENBERG, Throgg's Neck, N. Y., assignor of one-half to William Brady, Ossining, N. Y. Filed Mar. 19, 1929. Serial No. 348,251. 4 Claims. (Cl. 15—251.)



4. A wiper for window cleaners comprising, a carrier, two longitudinally disposed flexible flat strips secured in

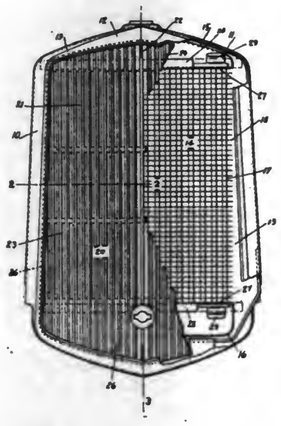
and projecting from said carrier with their outer edges spaced apart and a flexible tubular member interposed between the spaced outer edges of the strips.

1,816,371. SHIP PROPELLED BY INTERNAL COMBUSTION ENGINE. WILHELM HEFTI, Winterthur, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed June 13, 1930, Serial No. 460,944, and in Switzerland June 14, 1929. 5 Claims. (Cl. 115—34.)



1. An aircraft carrier or other ship propelled by internal combustion engines with the open end of the exhaust pipe submerged, characterized by the immersed end of the exhaust pipe being wholly or partly surrounded by a nozzle through which water under pressure is discharged so as to screen the open end of the exhaust pipe from the sea water.

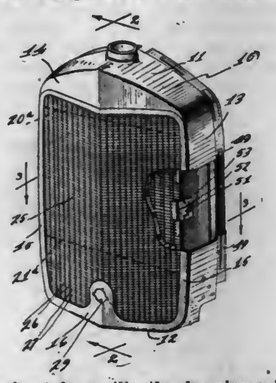
1,816,372. RADIATOR UNIT. FERDINAND B. HERZ, Detroit, Mich., assignor to Long Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 13, 1930. Serial No. 435,589. 14 Claims. (Cl. 293—54.)



1. The combination with a radiator unit having a shell and a core spaced rearwardly from the shell, of an auxiliary front within the shell simulating a shutter unit and substantially concealing said core.

1,816,373. RADIATOR. HARRY A. HIGGINS, Detroit, Mich., assignor to Long Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 2, 1928. Serial No. 266,772. 11 Claims. (Cl. 180—68.)

8. The combination in a radiator unit comprising a shell having a front opening and a radiator positioned within the shell and having upper and lower headers normally visible through the front opening in the shell, and having means providing fluid passages connecting said headers, of an auxiliary front disposed within the shell in advance of the radiator for concealing the same, and means including members engageable with said radiator and with



said auxiliary front for resiliently clamping said auxiliary front between the radiator and the surface of the front of the shell.

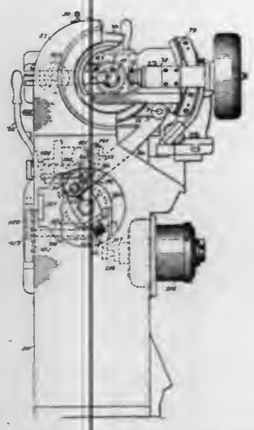
1,816,374. PROCESS AND MACHINE FOR ROLLING RAW PLATE GLASS. ERNST HILGERS, Dusseldorf-Oberkassel, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed June 7, 1930, Serial No. 459,786, and in Germany June 12, 1929. 9 Claims. (Cl. 49—33.)

6. In a plate glass rolling machine, in combination a pair of cooperative forming rolls, a hopper above these rolls for receiving a mass of liquid glass, a glass discharge slot in the hopper between the lower edges of the hopper side walls, cooperative preliminary forming rolls at the lower edges of the side walls delimiting the width of the discharge slot and regulating the thickness of the strip of glass discharged, plates for laterally closing the space between the preliminary forming rolls and the forming rolls, means for yieldingly pressing these plates with their upper and lower edges against the said rolls so as to cause them to act as strippers, means for swinging the hopper side walls towards and away from each other about their lower edges, and means for adjusting the side walls with their lower edges and with the preliminary forming rolls relatively to each other for varying the thickness of the glass strip discharged between them and fed to the forming rolls.

1,816,375. GEAR CUTTING MACHINE. MAXWELL H. HILL, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Sept. 19, 1929. Serial No. 393,820. 21 Claims. (Cl. 90—4.)

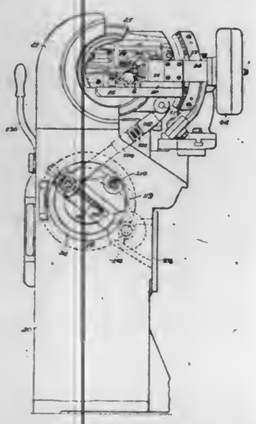
1. In a gear cutting machine, the combination with a work support and a tool mechanism, one movable toward

and from the other alternately for feeding and indexing, of a pivoted lever operatively connected to the movable part, means for oscillating said lever to effect said movement and means for changing the position of the pivot point of said lever to effect withdrawal of the movable part to inoperative position to permit removal of the completed gear.



20. In a gear generating machine, the combination with a work support and a tool mechanism, and a cradle upon which one of such parts is mounted, a work spindle journaled in said work support, a segment having a fixed relation to the tool mechanism, a segment connected to the work spindle and adapted to roll on the first segment, of a crank, a stud adjustable radially of the axis of the crank, an eccentric sleeve rotatably adjustable on said stud, a connecting rod mounted at one end on said sleeve and pivotally connected at its opposite end to the cradle and means on said connecting rod for securing said eccentric sleeve in any position of its adjustment.

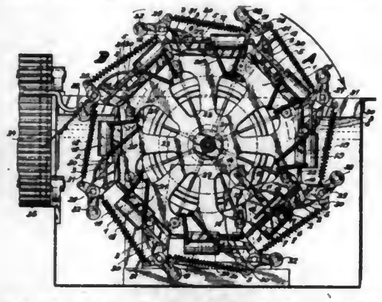
1,816,376. GEAR CUTTING MACHINE. MAXWELL H. HILL and LEONARD O. CARLSEN, Rochester, N. Y., assignors to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Sept. 21, 1929. Serial No. 394,350. 18 Claims. (Cl. 90—9.)



1. In a gear cutting machine, the combination with a work support and a tool mechanism, one of which is movable alternately toward and from the other for feeding and indexing, a work spindle journaled in said work support, indexing mechanism adapted to be actuated by a relative rolling movement between the work support and the tool mechanism, and means for effecting said relative rolling movement only during the periods of withdrawal.

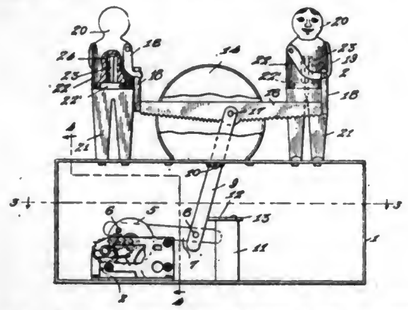
4. In a gear cutting machine, the combination with a work support and a tool mechanism comprising a pair of cutting tools adapted to operate simultaneously on opposite sides of a tooth, means for producing an alternate relative movement between said parts for feeding and indexing, an oscillatory cradle on which one of said parts is mounted, a work spindle journaled in the work support, a segment having a fixed relation to the tool mechanism, a segment connected to the work spindle and adapted to roll on the first segment when the cradle is oscillated, and indexing mechanism for the work spindle adapted to be operated by said rolling movement, of a rotary cam controlling the cradle oscillation constructed so as to cause a dwell during cutting and oscillate said cradle only during the periods of withdrawal.

1,816,377. MACHINE FOR BENDING AND TEMPERING LEAF-SPRINGS. PAUL HOBRACHT, Dusseldorf, Germany. Filed Dec. 12, 1928, Serial No. 325,452, and in Germany Dec. 14, 1927. 9 Claims. (Cl. 266—6.)



1. In a machine for bending and tempering leaf-springs, the combination, with a rotatable carrier shaft or drum, of relatively fixed and movable pressure jaws disposed parallel to said shaft or drum, pressure bars carried by said jaws and variably operable for bending a clamping a leaf-spring, means for engagement with an edge of the spring, centrally of the latter for supporting said spring against displacement while permitting it to have free flexing movements for adjustments to accommodate itself to the adjustments of the jaws, means for adjusting said supporting means relatively to the jaws, and means operative in the rotation of the shaft or drum for adjusting the jaws and clamping bars for a bending and clamping action and subsequently retracting the same.

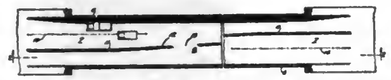
1,816,378. TOY. CONNIE B. JORDAN, Myrtlewood, Ala. Filed July 30, 1930. Serial No. 471,790. 1 Claim. (Cl. 46—40.)



A toy which includes a hollow base, a pair of spaced figures representing men on the base, each of said figures

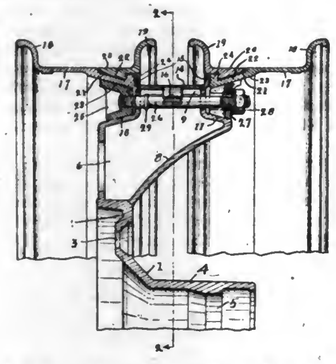
comprising an upper body section and a lower leg section and the leg sections being fixed to the base and having flat upper ends provided with annular projections and pivot elements extending centrally from the projections, the body portions having their lower ends flat to rest on the leg portions and having annular depressions to receive the annular projections of the leg therein and likewise having bores to receive the pivots therein, angle flexible elements pivoted to the shoulders of the body portions of the figures, depending elements secured to the ends of the said flexible members, a blade having its ends fixed to the depending elements, a slotted guide on the base for the blade, in combination with means for imparting a reciprocatory movement to the blade to cause the body portions of the figures to alternately turn on the leg portions thereof.

1,816,379. ROADWAY TRAFFIC GUIDE. LOCHIEL M. KINO, Alameda, Calif. Filed Dec. 8, 1928. Serial No. 324,664. 5 Claims. (Cl. 94—1.)



1. In a roadway for traffic moving in opposite directions and having a favorable grade followed by an adverse grade in each direction, means for defining paths for traffic in each direction and providing lanes in the portions of said paths having adverse grades in excess of the lanes in the portions having favorable grades.

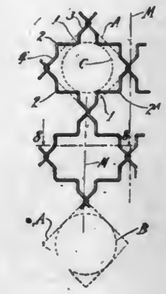
1,816,380. DUAL WHEEL. FRED R. KLAUS, Warren, and GEORGE W. SEIBERLING, Akron, Ohio, assignors, by direct and mesne assignments, to The American Welding & Manufacturing Company, Warren, Ohio, a Corporation of Ohio. Filed June 21, 1928. Serial No. 287,271. 5 Claims. (Cl. 301—12.)



1. In a dual wheel, the combination with a wheel body having circumferential slots in its periphery of a supporting band fitting on the peripheral portion of the wheel body and having lugs engaging in said slots and having a close fit therein to rigidly hold the band against lateral movements with respect to the wheel body, and means carried by the wheel body for clamping a pair of rims, one against each side of said band, said clamping means including members extending across the peripheral portion inwardly of the slots with which said lugs of the supporting band engage to position the band on the wheel body and limit circumferential movement of the band on the wheel body.

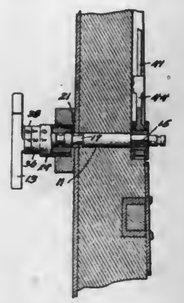
1,816,381. WIRE FENCE OR GRILLE FABRIC. ARTHUR A. G. LAND, Chicago, Ill. Filed Nov. 7, 1928. Serial No. 317,841. 8 Claims. (Cl. 245—8.)

4. A chain-link type of wire fabric comprising zigzagged strands each continuously spiraled in the same direction, each two consecutive strands being spirally intertwined to border a row of four-sided meshes in which meshes two consecutive mesh sides are formed by one strand, one of two consecutive strands being provided with bends bowed for a considerable distance toward the next strand to reduce the effective openings of meshes formed by the said two consecutive strands.



5. As a constituent for a fabric composed of consecutively intertwined strands, a zigzag strand continuously spiraled in one direction, and presenting consecutively diverging legs when viewed in front elevation, one of every two consecutive legs having a portion thereof formed to afford a bend bowed for a considerable distance toward the other leg.

1,816,382. COMBINATION LOCK. JOHN EDWARD LEARY, Fitchburg, Mass., assignor of one-half to Edward J. Crowson, Fitchburg, Mass. Filed June 21, 1927. Serial No. 200,440. 7 Claims. (Cl. 70—53.)



1. A locking structure comprising a stem, relatively movable tumblers associated therewith, one of said tumblers carrying an element adapted to lock the stem against sliding movement in one position of the element, a second loosely carried element associated with said tumblers and adapted to prevent sliding movement of the stem relative to said tumblers in one position of said second element, said elements being releasable for movement with relation to said stem whereby said stem may have sliding movement with respect to said tumblers.

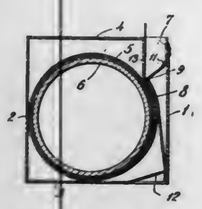
1,816,383. DISTRIBUTOR FOR PULVERULENT AND PASTY PRODUCTS. JOSEPH, EUGÈNE, BAPTISTE MAILLARD, Nogent-Le-Roi, France. Filed Aug. 19, 1930, Serial No. 476,371, and in France Sept. 2, 1929. 11 Claims. (Cl. 132—82.)



1. In a distributor for pulverulent or pasty products a capsule containing said product and having a bottom of

fluid-tight, supple and rough material and an upper part serving as a sieve, means to fix together the edges of said bottom and of said sieve, means for displacing said sieve relatively to the bottom, by distorting the latter, and means to maintain said capsule in said distributor.

1,816,384. BOX FOR DISPENSING ROLLED PAPER. NICHOLAS MARCALUS, Elizabeth, N. J., assignor to Automatic Paper Machinery Co. Inc., a Corporation of New Jersey. Filed June 10, 1929. Serial No. 369,573. 4 Claims. (Cl. 205—53.)



2. A box for dispensing roll paper comprising side walls and a cover, a depending flap on the cover, and a yieldable spacing element inserted between the front side wall and the roll, the flap and spacing element gripping between them the forward end of the paper to prevent its slipping back into the box.

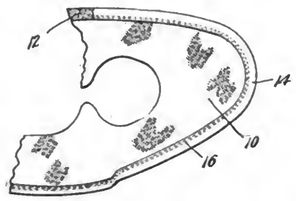
1,816,385. DEVICE FOR UNWINDING COILED WIRES, BAND IRON AND THE LIKE. CURT MATTHAEI, Offenbach, Germany. Filed Feb. 14, 1930, Serial No. 428,439, and in Germany Feb. 22, 1929. 1 Claim. (Cl. 242—105.)



A device for use in unwinding coils of wire, band-iron and the like, comprising the combination with a standard, a vertically arranged disk carried thereby, a series of rollers projecting from one face of said disk and annularly arranged thereon, adjustable means carried by and cooperating with said disk and rollers to define a shallow cylindrical compartment for receiving a coil of wire, of a supplemental roller between the uppermost of said series of rollers and the axis of said compartment, said supplemental roller constituting an eccentrically disposed support for a coil whose outer loosened turns may slide upon the lower rollers of said series of rollers.

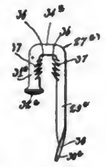
1,816,386. SHOE AND SHOEMAKING. JOHN WALTER MAY, Belmont, Mass. Filed Oct. 5, 1928. Serial No. 310,503. 9 Claims. (Cl. 12—142.)

9. The method of shoemaking characterized by the steps of stitching a welt strip to the margin of a spreadout upper by a line of stitching which is located at the margin of the welt strip in the shank portion of the upper, the strip being bent outwardly with respect to the edge of the spread-out upper at the ball line, lasting the upper with the attached welt strip, laying a sole on the shoe



bottom, and uniting the sole with the welt strip at the forepart and with the upper outside the welt strip in the shank portion of the lasted upper.

1,816,387. FURRING CONSTRUCTION. ELMORE WILLIAM MENNINGER, Los Angeles, Calif. Filed Dec. 10, 1925. Serial No. 74,469. 21 Claims. (Cl. 72—120.)

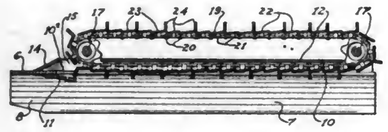


3. A spacer nail comprising a U-shape member having legs of unequal lengths, the longer leg pointed and the shorter leg having a blunt end, and one of the legs having a rigid shoulder upwardly extended and adapted to support a strand of wire netting.

1,816,388. METHOD OF PRODUCING FINELY DIVIDED METAL OXIDES. ALWIN MITTASCH, Ludwigshafen-on-the-Rhine, RICHARD LUCAS, Mannheim, and ROBERT GRIESSBACH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 20, 1925, Serial No. 31,691, and in Germany May 23, 1924. 3 Claims. (Cl. 23—200.)

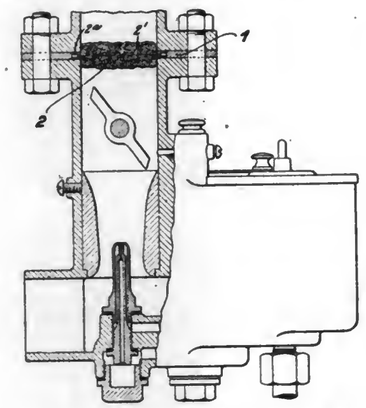
2. The process of producing a finely divided oxide of a metallic element which comprises thoroughly distributing a voltatile metal carbonyl in an excess of an oxidizing gas, and burning the resulting mixture to precipitate the metal oxide in finely divided form.

1,816,389. GRADER BLADE. CHARLES GUSTAF MOBERG, Brownlee, Saskatchewan, Canada. Filed July 1, 1929, Serial No. 375,282, and in Canada July 6, 1928. 2 Claims. (Cl. 37—143.)



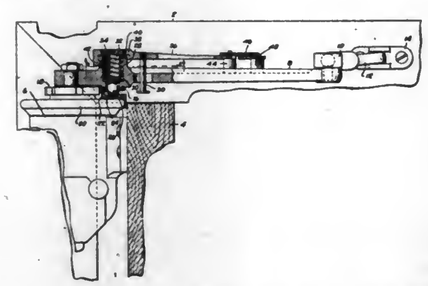
1. A grader blade including a blade proper having an elongated central slot extended through the greater portion thereof and opening on the rear end of the blade proper; a guard member secured on said blade proper and spaced from the rear face thereof opposite the slot of said blade proper with the forward end of the guard tapered and secured firmly to the rear face of said blade proper; said guard having openings through its main central portion opposite the opposite ends of said slot in the blade proper; a small second guard plate secured on the front face of said blade proper and extending at an angle over the forward end of the slot in said blade proper; shaft bearing members projecting in pairs from the opposite ends of said first mentioned guard member; vertical shafts rotatable in said shaft supporting bracket; pairs of sprocket wheels carried on said shafts; sprocket chains operating around said sprocket wheels; and vanes carried on said sprocket chains with the alternate vanes provided with angular extensions working through said slot in the blade proper.

1,816,390. NEBULIZING AND ANTIBACKFIRING DEVICE FOR INTERNAL COMBUSTION ENGINES. WILHELM MÖBUS, Dusseldorf, Germany. Filed Dec. 6, 1927, Serial No. 238,135, and in Germany Dec. 7, 1926. 1 Claim. (Cl. 48—180.)



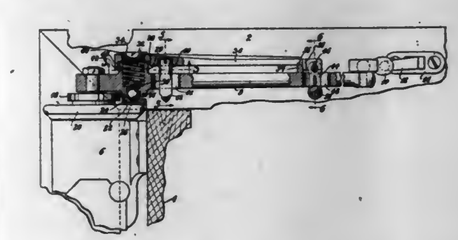
In a nebulizing and anti-back-firing device for internal combustion engines, a plate having an opening therein, a holding ring secured to said plate and disposed in said opening, a screen member filling the opening in the ring and projecting beyond both faces thereof, said screen member comprising a substantially flat, circular, uniformly thick mat-like mass of metal wire presenting irregularly shaped portions of wire arranged in planes perpendicular to each other and latticed haphazardly in each plane to provide passages meanderingly arranged in all directions throughout the mass, and tension wires extending diametrically across and secured to the ring and passing centrally through the meshes of the mat and holding said mat against displacement in the opening in the ring.

1,816,391. DOOR CLOSER. WALLACE F. MOORE, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 13, 1928. Serial No. 299,172. 7 Claims. (Cl. 189—49.)



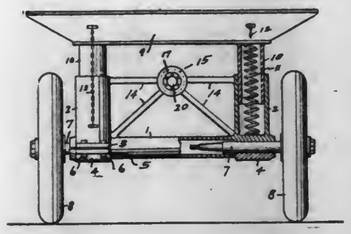
1. A hold-back device for door closers provided with a spring actuated door closing arm having, in combination, a stop member, a cooperating detent carried by said arm and adapted to engage said stop member when the door is open, a spring for maintaining said detent in holding engagement with said stop member to hold the door open when said spring is under tension, a lever having one end detachably fulcrumed on said arm adapted to be swung toward and from said arm about the axis of its fulcrum, thermally controlled means detachably connecting the other end of said lever with said arm, and an abutment on said arm for holding said spring under tension whereby upon breaking of said thermal connection the tension on said spring is relieved, said fulcrumed end of said lever becoming disconnected from said arm upon breaking of said thermal connection.

1,816,392. DOOR CLOSER. WALLACE F. MOORE, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Nov. 8, 1928. Serial No. 317,892. 6 Claims. (Cl. 189—49.)



1. A door closer having, in combination, a spring actuated door closing arm, a stop member, a cooperating detent carried by said arm and adapted to engage said stop member when the door is open, a spring for maintaining said detent in holding engagement with said stop member to hold the door open when said spring is under tension, a lever having one end fulcrumed on said arm adapted to be swung toward and from said arm about the axis of its fulcrum, a fusible link having one end detachably connected with the other end of said lever and its other end detachably secured to the under side of said arm, said arm having a clearance opening through which the link extends, and an abutment on said lever for holding said spring under tension whereby upon breaking of said fusible link the tension of said spring is relieved.

1,816,393. TRAILER. IRA A. MORRIS, Liberty, Tex. Filed May 26, 1930. Serial No. 455,678. 6 Claims. (Cl. 280—334.)

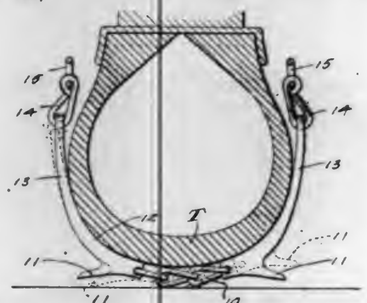


1. A trailer having a tubular bearing member attached thereto to receive a coupling pole, each end of said member having an outwardly flared seat, slips in said seats around said pole, nuts on the ends of said member to actuate the slips into, or out of, engaging relation with the coupling pole.

1,816,394. PROCESS FOR WORKING UP MATERIALS CONTAINING LIGNIN AND CELLULOSE. OSKAR ALBERT MÜLLER, Zurich, Switzerland. Filed Feb. 7, 1930, Serial No. 426,778, and in Germany Feb. 9, 1929. 8 Claims. (Cl. 92—9.)

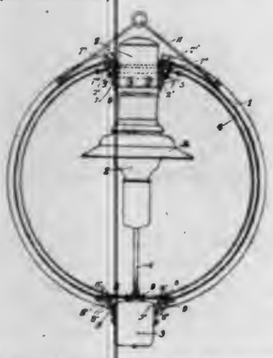
1. Process of working up materials containing lignin and cellulose which comprises chlorinating the material in moistened condition, treating the chlorinated material with an organic solvent miscible with water and containing a mineral acid, so as to eliminate the chloro-lignin and remove such parts as are soluble in the organic solvent from the cellulose, separating the chlorolignin from the extract thus obtained, distilling the organic solvent, extracting the tanning agents, and fermenting the aqueous residue.

1,816,395. ANTISLIPPING DEVICE FOR VEHICLE WHEELS. HENRY NISCHKE, South Milwaukee, Wis., assignor of one-half to Anton Hartman, Westcott, Wis. Filed July 17, 1928. Serial No. 293,329. 1 Claim. (Cl. 152—14.)



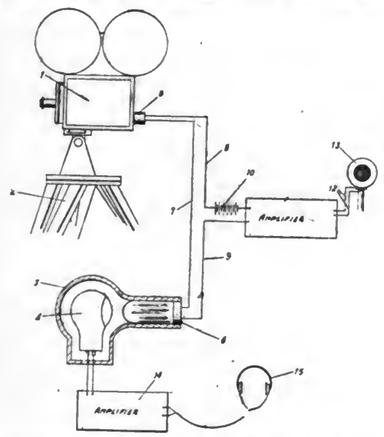
An anti-skid device comprising a pair of substantially V shaped members of longitudinally arcuate formation adapted to be positioned upon the opposite sides of the tire and to conform to the shape thereof, each of said members being adapted to lie flat against the outer face of the tire, a relatively short chain section disposed transversely of the tire tread and connecting the adjacent ends of said members, and a laterally directed divergent calk formed integrally with each of said members at the apex thereof, said calks being normally free from contact with the roadway, one of said calks engaging the roadway upon side slipping of the tire whereby to resist further side slipping of the tire.

1,816,396. COMBINED INSECT CATCHING LAMP AND KILLING DEVICE. EMIL OPPENLÄNDER, Waiblingen, near Stuttgart, Germany. Filed Nov. 19, 1928, Serial No. 320,499, and in the Netherlands Nov. 29, 1927. 7 Claims. (Cl. 43—113.)



1. In an insect destroying device, an annular frame, a luminous lure arranged so as to be surrounded by the frame, and a striker supported by the frame for rotation about the lure for destroying insects attracted by and flying toward the lure.

1,816,397. SOUND RECORDING AND REPRODUCING APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,384. 4 Claims. (Cl. 179—100.3.)

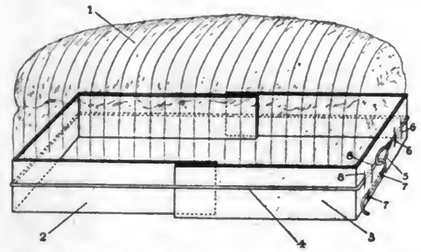


2. The combination of a sound recording apparatus, a sound reproducing apparatus, a recording lamp in said recording apparatus, a lamp in said reproducing apparatus, and a sound source and translating means connected in series with both of said lamps.

1,816,398. CIGARETTE TIP COIL. ERICH RICHTER, Wolfen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed June 18, 1926, Serial No. 116,984, and in Germany Mar. 18, 1925. 3 Claims. (Cl. 131—52.)

1. A cigarette tip coil of the type comprising a strip film of cellulosic material and metal powder, and a paper strip, characterized by the fact that both the film and the strip are formed of materials which do not contain electric charges.

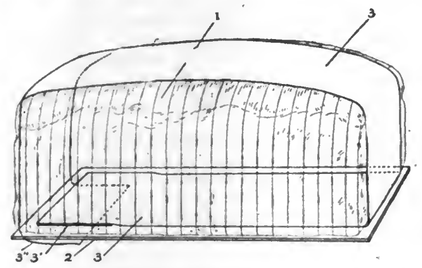
1,816,399. SLICED BREAD PACKAGE. OTTO F. ROHWEDDER, Davenport, Iowa, assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa, a Corporation of Delaware. Filed Nov. 14, 1928. Serial No. 319,235. 2 Claims. (Cl. 99—10.)



1. A bread loaf package comprising, in combination, a baked loaf of bread cut into a multiplicity of slices, a retainer member for holding the sliced loaf substantially in its pre-sliced form, said container member consisting of a pair of substantially U-shaped members surrounding the ends and sides of the loaf and having their adjacent ends

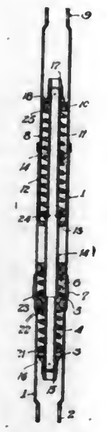
in overlapping relationship intermediate the ends of the loaf, adjustable means extending around said U-shaped members for regulating the pressure of said members against the ends of the contained sliced loaf to prevent drying out of the slices thereof, and an air and moisture-proof wrapper encasing said sliced loaf and retainer member.

1,816,400. SLICED BREAD PACKAGE. OTTO F. ROHWEDDER, Davenport, Iowa, assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa, a Corporation of Delaware. Filed Nov. 14, 1928. Serial No. 319,237. 1 Claim. (Cl. 99—10.)



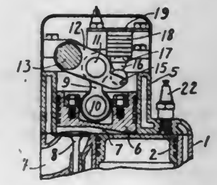
A bread loaf package comprising, in combination, a supporting tray consisting of a support and a flexible strip secured at one end to the upper surface of said support, and a baked loaf of bread divided into a plurality of uniform slices, said sliced loaf being positioned on said strip and support, said strip being extended over the top and ends of said sliced loaf and secured to the lower surface of said support at the same end to which the first mentioned end of said strip is secured to thereby hold said slices in contiguous pre-sliced form while said loaf is being and after it is wrapped.

1,816,401. SHOCK ABSORBING DEVICE. LOUIS ROLLAND, Paris, France, assignor to Société Metallurgique de l'Ariege, Paris, France. Filed Jan. 25, 1929, Serial No. 334,977, and in France Feb. 1, 1928. 4 Claims. (Cl. 267—9.)



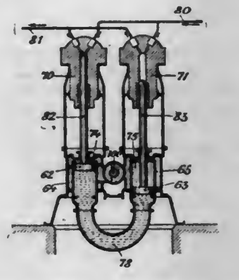
4. A shock absorber for airplanes and similar purposes, which comprises a pair of telescopic tubes slidable within one another, a member adapted to slide along the axis of the said tubes, each of the said tubes and the sliding member being provided with a pair of abutment shoulders, one shoulder of the sliding member being located between the outer and the inner shoulders of the inner telescopic tube while the other shoulder of the said sliding member is located between the outer and the inner shoulders of the outer telescopic tube, and three coil springs respectively arranged between the inner shoulders of both tubes, between the outer shoulder of the inner telescopic tube and the related shoulder of the said sliding member and between the outer shoulder of the outer telescopic tube and the related shoulder of the sliding member, braking means between the said sliding member and one of the telescopic tubes, comprising a first tapered ring adapted to bear against a shoulder on the said sliding member, an additional tapered ring between the first ring and the spring located between the said shoulder of the sliding member and the outer shoulder of the said telescopic tube, and wedge-like members between the said rings and the wall of the said telescopic tube, substantially as described and for the purpose set forth.

1,816,402. DEVICE FOR REGULATING THE SIZE OF THE COMBUSTION CHAMBER IN COMBUSTION MOTORS. OTTO SEVERIN RUUD, Oslo, Norway. Filed July 12, 1928, Serial No. 292,181, and in Germany Feb. 27, 1928. 6 Claims. (Cl. 123—48.)



1. In a multi-cylinder internal combustion engine, wherein the capacities of the compression chambers are variable by means of cylinder head pistons, the combination with means positively connecting together all the cylinder head pistons so as to cause them to move up and down as a whole, of a loading device constantly acting upon said means to tend to push all pistons inwards and adapted, under the influence of the total sum of pressures in all cylinders, to yield to a degree depending upon the value of the said sum.

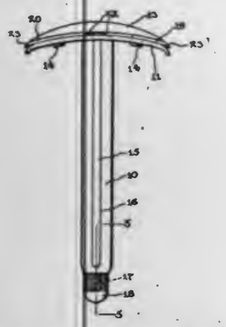
1,816,403. HIGH PRESSURE RECIPROCATING PISTON COMPRESSOR. CHARLES SCHAER, Langenthal, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Original application filed Feb. 3, 1928, Serial No. 251,714, and in Switzerland June 8, 1927. Divided and this application filed Jan. 30, 1930. Serial No. 424,555. 4 Claims. (Cl. 230—49.)



1. In a high pressure reciprocating compressor, the combination with a positively actuated primary piston, of a plurality of intermediate pistons, a plurality of compressor pistons arranged in parallel and each actuated by one of said intermediate pistons, an oscillating column of liquid between one side of said primary piston and

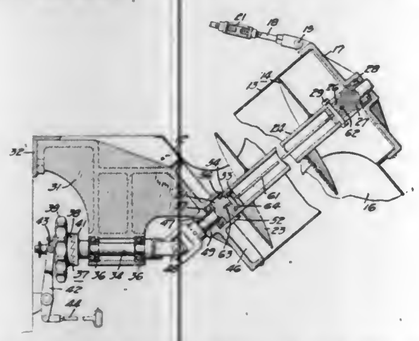
one of said intermediate pistons, an oscillating column of liquid between the other side of said primary piston and another of said intermediate pistons, and an oscillating column of liquid between said intermediate pistons, said last named column being disposed in a plane transverse to that in which are disposed said first named columns.

1,816,404. SAFETY RAZOR. ALFRED SCHWARZ, Upper Montclair, N. J. Filed Mar. 26, 1930. Serial No. 439,021. 8 Claims. (Cl. 30—12.)



1. A razor mounting comprising a bottom guard plate, a magnet disposed centrally of said plate, a top plate, and means for retaining a pair of razor blades between said plates with one blade on each side of and overlapping said magnet.

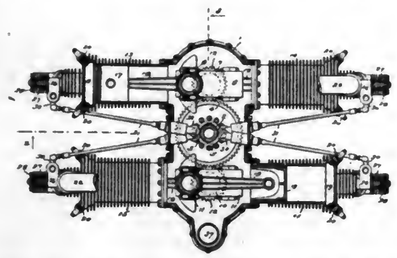
1,816,405. POWER-DRIVEN CONVEYER. HORATIO W. SMITH, Stockton, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed June 14, 1929. Serial No. 370,845. 1 Claim. (Cl. 198—213.)



In a threshing machine, a support, a drive shaft rotatably mounted in said support, a housing secured to said support, an auger enclosed in said housing, having a hollow shaft rotatably mounted at the outer end in said housing and at the inner end on said drive shaft, and a resilient driving connection from said drive shaft through said hollow shaft to the outer end thereof.

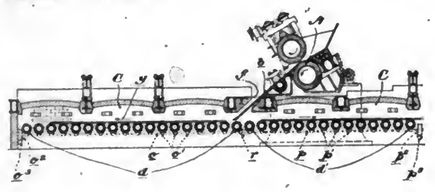
1,816,406. AEROPLANE ENGINE. LOUIS R. SPENCER, West Hartford, Conn., assignor to Spencer Aircraft Motors, Incorporated, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 20, 1927. Serial No. 214,269. 6 Claims. (Cl. 123—54.)

1. An internal combustion engine comprising a propeller shaft, a pair of crank shafts arranged at diametrically opposite sides of the propeller shaft and geared thereto, each of said crank shafts having a pair of oppositely extending crank arms, a pair of opposed cylinders having their axes lying in a common plane but laterally offset, pistons working in said cylinders and respectively connected to the arms of one crank shaft, a second pair of opposed cylinders having their axes lying in a common plane but laterally offset, and pistons working in said



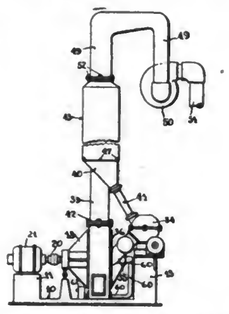
cylinders and respectively connected to the arms of the other crank shaft, the axes of the cylinders at diametrically opposite sides of the propeller shaft being located in a common plane perpendicular to the plane containing the axes of the first and second pairs of cylinders, respectively.

1,816,407. TAKE-OFF AND LEERING CONVEYER FOR SHEET GLASS FORMING MACHINES. WILHELM SPIEKERMANN, Herzogenrath, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed Mar. 30, 1929, Serial No. 351,381, and in Germany Apr. 7, 1928. 4 Claims. (Cl. 49—3.)



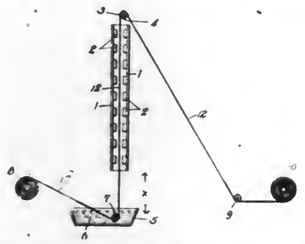
4. The combination with a leer conveyer, of an intermittent forming machine located above a portion thereof and a take-off mechanism receiving glass from the forming mechanism having reversible feed, and in operative alignment with the conveyer.

1,816,408. COAL PULVERIZER. WILL C. STATE, Akron, Ohio. Filed Nov. 8, 1929. Serial No. 405,628. 7 Claims. (Cl. 83—46.)



1. An apparatus for pulverizing frangible substances comprising an anvil having a frame support, opposed ledges on the anvil and the support for positioning the anvil, means positively maintaining the ledges in predetermined relation, a centrifugal impeller including a plurality of buckets, each bucket having two concave surfaces, means for feeding the substances to the impeller, means for actuating the impeller, means for separating the substances, and means for elevating the substances after pulverization.

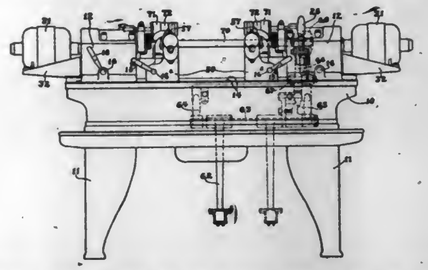
1,816,409. PROCESS OF AND APPARATUS FOR APPLYING A PROTECTIVE COATING TO MOTION PICTURE FILMS. LAWRENCE L. STEELE, Washington, D. C., assignor of one-half to Tom Moore, Washington, D. C. Filed Oct. 5, 1927. Serial No. 224,242. 1 Claim. (Cl. 91—10.)



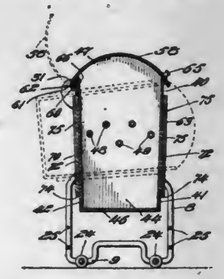
An apparatus for coating both sides of a developed moving picture film having sprocket holes therein with a protective coating, said apparatus comprising a receptacle for containing the coating material in liquid form, a drying chamber arranged lengthwise vertically above said receptacle, sprocket toothed guiding elements arranged respectively above the upper end and below the lower end of the drying chamber, the lower sprocket toothed guiding element being submerged in the liquid in the receptacle, means for passing a film from a supply roll downwardly at an angle into the receptacle, thence upwardly through the liquid around the lower toothed guiding element therein so as to coat both sides of the film with the liquid, thence in the form of a vertical stretch through the drying chamber and between the lower and upper sprocket toothed guiding elements with its sprocket holes engaging the teeth of said elements, and thence downwardly at an angle from the upper guiding element to winding means, whereby the film is coated and maintained taut and under tension on its passage through the drying chamber, and heating elements extending from top to bottom of the drying chamber equidistantly on opposite sides of the line of travel of the film, whereby the film is uniformly dried on its passage through the drying chamber, the lower end of the drying chamber being removed from the receptacle to provide a free intervening space leaving a portion of the vertical stretch of the coated film exposed directly to the atmosphere to keep such portion of the film cool and to permit surplus to drain over such portion of the film back to the receptacle prior to the entrance of the film into the drying chamber and exposure of the same to the direct heat of the heating elements therein.

1,816,410. TREADLE OPERATED CENTERING MACHINE. JOHN J. THACHER, Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y., a Corporation of New Jersey. Filed May 3, 1927. Serial No. 188,554. 1 Claim. (Cl. 77—21.)

A drill head for centering machines comprising in combination, a base, a spindle in said base, rotating means for said spindle, a sleeve forming a support for said spindle and splined to said base whereby it is axially movable therein but restrained from rotation, means to axially move said sleeve comprising rack teeth formed on one side thereof, a helical gear mounted within said head upon an axis parallel to said sleeve and engaging said rack teeth, said gear being resiliently forced axially in one direction within said head and permitted to move axially in the opposite direction to a predetermined position when the pressure upon the sleeve exceeds a predetermined amount, means to oscillate said gear in a plane normal to the axes of said sleeve, and means on said helical gear to actuate a sleeve and spindle disposed in another drill head.



1,816,411. RUBBISH OR GARBAGE RECEPTACLE. JULIUS TILLINGER, Providence, R. I. Filed Sept. 8, 1930. Serial No. 479,459. 3 Claims. (Cl. 220—32.)



1. In a receptacle of the character described, two interspaced skeleton side frames, a substantially rectangular sheet metal container open at its top and including sides provided with arched upper edges, trunnions upon intermediate portions of the sides pivotally supported in intermediate portions of the side frames, said frames being provided with perforations below the container, spacing rods provided with reduced ends and with threads upon the ends passing through the perforations, nuts engaging the threads, said frames being provided also with perforations in their upper ends in the rear of the container, a cross rod provided with reduced threaded end portions extending through the last mentioned perforations, a rectangular arched cover resting upon the top of the container and completely covering the open top thereof, a sleeve integral with the cover loosely surrounding the cross rod, and a stop member in the frame in the rear of the cross rod in the path of the cover.

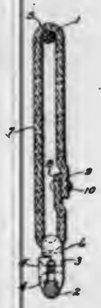
1,816,412. GAS MIXING DEVICE. JOHN A. TIPTON, Muskogee, Okla., assignor of one-third to Charles W. Tipton, Houston, Tex., and one-third to Albert P. Brucker, Muskogee, Okla. Filed May 15, 1929. Serial No. 363,378. 2 Claims. (Cl. 48—180.)



1. A device of the character described comprising a tubular body of an even diameter throughout the greater portion of its length and having its forward end portion tapered to form a nozzle terminating in an outlet, the

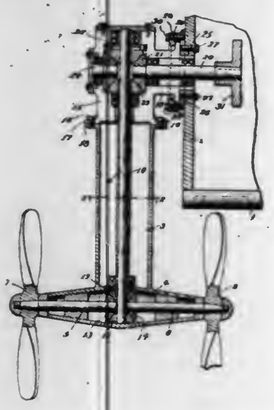
end of the nozzle being crimped inwardly to form the outlet with flat radial extensions, and a spiral deflector in said body between the nozzle and the rear end of the body adapted to impart whirling motion to gas passing through the same.

1,816,413. HANGER. CLARENCE J. WAY, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Dec. 17, 1930. Serial No. 502,952. 12 Claims. (Cl. 191—40.)



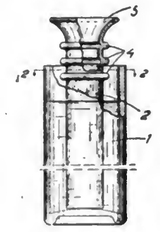
4. A hanger comprising a metallic clamping member to receive and grip a conductor and a loop shaped member of flexible insulating material to suspend the clamping member from a support.

1,816,414. PROPELLER. JOHN W. WHITLOCK, Rising Sun, Ind. Filed July 17, 1929. Serial No. 379,008. 2 Claims. (Cl. 115—34.)



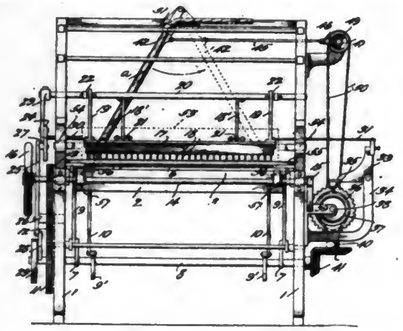
1. Propelling means for a boat comprising a casing, a housing at the upper end of said casing, a drive shaft extending into said housing, propeller shafts at the lower end of said casing having their ends projecting from opposite ends of the casing, propellers secured upon the outer ends of the propeller shafts, means extending through said casing for transmitting rotary motion from said drive shaft to said propeller shafts, said casing being releasably secured at its upper end to said housing to normally retain the propeller shafts substantially parallel to the drive shaft and adapted to be turned about its axis when released to dispose the propeller shafts transversely of the drive shaft, and means for securing said housing to a boat adapted to permit the housing to be turned about the drive shaft as an axis and swing the casing and propeller upwardly.

1,816,415. EVAPORATING RECEPTACLE FOR HEAT-RADIATORS. CARL GEORG WIDELL, Stockholm, Sweden. Filed Nov. 26, 1928, Serial No. 321,994, and in Sweden July 9, 1928.. 2 Claims. (Cl. 299—20.)



1. An evaporating device for heat radiators, comprising a receptacle for containing liquid, and a tubular diffusing element extending into the liquid, said element being formed of porous material and provided at its upper portion with a plurality of corrugations at least one of said corrugations being adapted to contact with the inside surface of the receptacle for laterally supporting said element and to maintain the element in spaced relation with the receptacle throughout its entire length.

1,816,416. KNITTING MACHINE. BAYNARD WILLINGHAM, College Park, Ga., assignor to Egan Cotton Mills, Atlanta, Ga., a Corporation of Georgia. Filed Apr. 14, 1930. Serial No. 444,205. 8 Claims. (Cl. 66—85.)

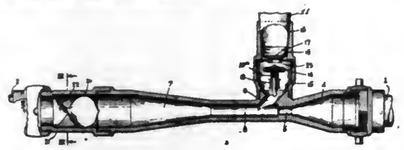


4. In a knitting machine, the combination of a set of latch needles carried by a horizontal bar reciprocative in a vertical direction, lugs on the opposite ends of the bar, a rotatable shaft, and cams carried by the shaft to strike the lugs when the bar is in a lower position, the blow imparted to the lugs operating to jar the needles to free their latches.

5. In a knitting machine, the combination of an elongated support for guiding a web of woven fabric, with a carrier reciprocative along the support for laying successive plies of roving across the web of fabric carried by the support, and knitting mechanism operative to knit simultaneously each ply as it is laid to the previously laid ply and to the adjacent part of the fabric carried by the support to form a cushioning pad with the plies providing the filling for the pad and the fabric forming a reinforcing backing for the pad.

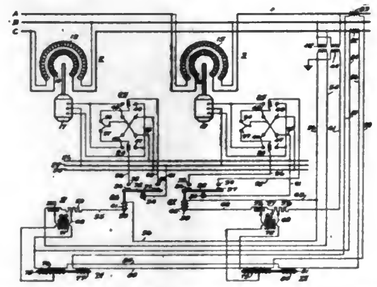
1,816,417. FIRE EXTINGUISHER. WILLIS D. WITTER, Utica, N. Y., assignor, by mesne assignments, to American La France and Foamite Corporation, a Corporation of New York. Filed Mar. 4, 1926. Serial No. 92,140. 7 Claims. (Cl. 169—15.)

1. In apparatus for mixing solid chemicals with water, a Venturi tube having a two-diameter throat and a chemical entrance hole at the junction of the two diameters through which chemicals are drawn into the water by water-produced suction, a hopper to supply said entrance hole, a transverse wall between said hopper and the hole, said wall having a restricted opening of less cross area than the entrance hole and less than the wide throat part and being quickly removable.



5. In apparatus for continuously mixing solid chemicals with a water stream, the combination with a suction-producing water passage, a valve chamber connected therewith, a chemical hopper arranged to discharge into said chamber, a transverse partition extending across the entrance to said chamber, said partition apertured to permit the passage of the chemicals therethrough and having a ridge upstanding around said aperture on the under side of the partition, and a valve in said chamber having a yielding surface adapted to cooperate with said ridge to close the diaphragm aperture.

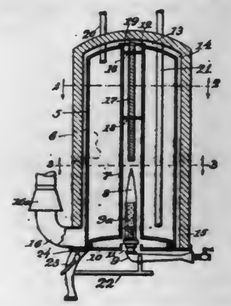
1,816,418. VOLTAGE COMPENSATING MEANS. EDWARD R. WOLFERT, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 1, 1930. Serial No. 448,883. 7 Claims. (Cl. 171—119.)



1. In combination, a main three-phase electric circuit, a plurality of electro-responsive means, auxiliary circuits for connecting each electro-responsive means to be energized in accordance with the voltage of one of two different phases of the main circuit, compensating means for introducing into each auxiliary circuit a voltage that is proportional to the voltage drop in the associated phase of the main circuit, comprising a resistor and a reactor connected in series-circuit relation in each auxiliary circuit, two current transformers, each transformer being energized in accordance with the current flowing in one of the conductors of the two phases of the main circuit, and means energized from said current transformers for energizing the compensators and for so altering the phase relation of the energizing currents of each compensator with respect to the currents in the main circuit that they shall have the same phase relation with the voltages impressed on the auxiliary circuits as the phase relation between the current and the voltage of the associated phases of the main circuit.

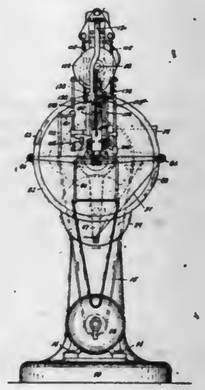
1,816,419. GAS FIRED WATER HEATER. HIRAM J. CARSON, Cedar Rapids, Iowa. Filed May 11, 1929. Serial No. 362,308. 3 Claims. (Cl. 122—156.)

3. In a water heater of the storage type having communicating passages for the upward and downward flow of the products of combustion, the area of the heat transfer surface for direct heating by the products of combustion in said uptake passage being materially less than the area of the heat transfer surface for direct heating by the products of combustion in said downtake passage, said downtake passage having an outlet in the lower portion thereof; said uptake passage having a gas burner at the bottom thereof, and a heat radiating element disposed within the lower portion thereof, the heat received by said element from the burner being radiated directly to the



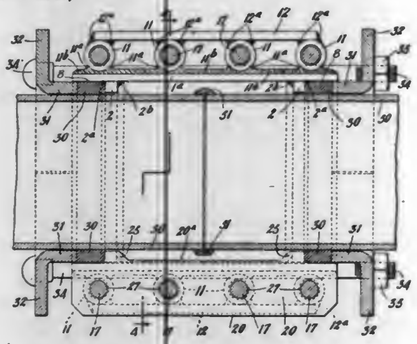
lower portions of the said uptake passage and the products of combustion passing upwardly through the uptake passage and thence downwardly through the downtake passage to said outlet, whereby the water is heated to a relatively uniform temperature throughout the tank and the products of combustion are caused to enter said downtake passage at a temperature above the condensation point of the water vapor therein.

1,816,420. SKEIN WINDING MACHINE. SECONDO LUIGI CASELLA, New York, N. Y., assignor to Bernard Ulmann Co., Inc., New York, N. Y., a Corporation of New York. Filed May 13, 1924. Serial No. 712,949. 10 Claims. (Cl. 28—21.)



1. The method which consists in continuously winding a thread to form successively a plurality of interconnected spaced skeins, intermittently and successively advancing the skeins so formed while maintaining them in spaced relationship, and, simultaneously with the winding of the skeins and during the dwell periods of the intermittent advance of the skeins, securing a fastening device about the turns of each successive skein, while serving the connecting thread between an adjacent pair of skeins after they have been secured by such fastening devices.

1,816,421. WROUGHT METAL REPAIR DEVICE FOR PIPE LINES. JAMES CLARK and JOSEPH E. WALBORN, Bradford, Pa., assignors to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Apr. 24, 1928. Serial No. 272,547. 5 Claims. (Cl. 285—100.)



1. As a new article of manufacture a split sleeve for repairing pipe lines, comprising among its members a plurality of sleeve segments formed of wrought metal, and provided at each end with packing engaging portions, each segment being provided adjacent to each longitudinal edge thereof with a longitudinal series of separately formed clamping members welded thereto, and each provided with a single bolt aperture having its axis disposed transversely of the longitudinal edges of said sleeve segments.

1,816,422. KNIFE. JACQUES G. COLEMAN, Woodmere, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed July 23, 1929. Serial No. 380,866. 1 Claim. (Cl. 30—10.)

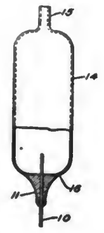


A knife comprising a handle having spaced sides, a blade carrier pivotally attached thereto to fold between said sides, said carrier having a portion along one edge extended over the carrier providing a space for the rear edge of the blade, a retainer for the blade pivotally attached at one end to the carrier to swing toward and from the same, said retainer being slidably supported by the carrier and having an edge slidable along said extended part of the carrier, the carrier having projections to enter openings in the blade and the retainer having openings for and larger than said projections, and means to detachably connect the outer end of the retainer with the carrier to keep the retainer over the blade, said edge portion of the carrier extending in position to engage the handle when the carrier is folded therein to keep the edge of the blade from engaging the handle.

1,816,423. METHOD OF TREATING WOOD PULP FIBERS AND PAPER PRODUCT MADE THEREFROM. JUDSON A. DE CEW, Mount Vernon, N. Y., assignor to Process Engineers, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 19, 1929, Serial No. 393,845, and in Canada Feb. 14, 1929. 15 Claims. (Cl. 92—21.)

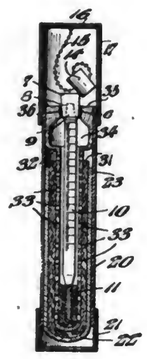
1. A method of making standard newsprint paper which consists in covering the natural resins in the pulp with an emulsion of waxy material.

1,816,424. GLASS SEAL. HOWARD M. ELSEY, Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 20, 1930. Serial No. 437,374. 3 Claims. (Cl. 250—27.5.)



1. The method of sealing a molybdenum electrode in a tube which comprises forming a bead on the shank of said electrode, cleaning the surface of said electrode, plating the surface of said electrode with a protective coating and sealing said beaded electrode into said tube.

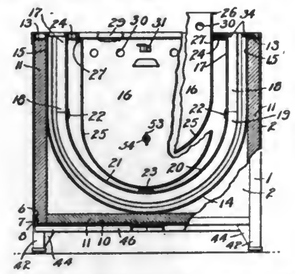
1,816,425. STERILE CONTAINER FOR CLINICAL THERMOMETERS. ZELMA R. EVERETT and KARL F. V. NYGAARD, Philadelphia, Pa. Filed Mar. 1, 1929. Serial No. 343,750. 5 Claims. (Cl. 167—3.)



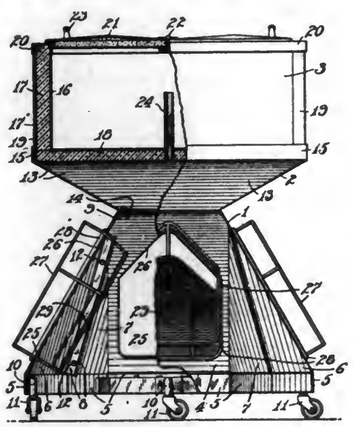
3. In a device of the character stated, a thermometer having an upper head forming a stopper, a perforated container adapted to receive said thermometer and having an upper mouth adapted to be closed by said stopper, and outer casing enclosing said container and thermometer, a cap for said outer casing, an auxiliary stopper permanently carried by said cap in the interior thereof for closing said mouth when said thermometer is withdrawn from said container, and an absorbent pad saturated with a germicide positioned between said perforated container and said outer casing.

1,816,426. BOTTLE COOLING BOX. CHESTER A. FRICK, Muncie, Ind., assignor to Glascock Brothers Mfg. Company, Muncie, Ind., a Corporation of Indiana. Filed Jan. 23, 1928. Serial No. 248,699. 8 Claims. (Cl. 312—36.)

1. In a device of the character described the combination with a U-shaped transversely corrugated tub, of substantially arcuate guides co-operating with said corrugations adjacent the edges of said tub to form tubular passageways at the exit and entering ends of said tub and fins cooperating edgewise with the ridges of said corrugations to increase the depth thereof.



1,816,427. BOTTLE DISPENSING REFRIGERATOR. CHESTER A. FRICK, Muncie, Ind., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed June 21, 1929. Serial No. 372,776. 4 Claims. (Cl. 211—74.)



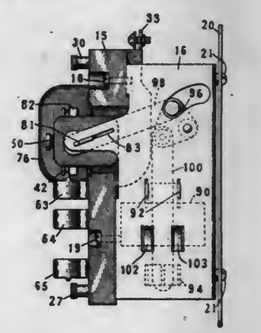
1. A supporting stand for bottle cooling receptacles, comprising a pyramidal base, comprising substantially triangular panels having inturned flanges at their edges, the flanges of the adjacent panels abutting and being detachably connected, and an inverted pyramidal support removably mounted on said base and constructed to receive a bottle dispensing refrigerator.

1,816,428. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed June 29, 1928. Serial No. 289,116. 6 Claims. (Cl. 30—12.)



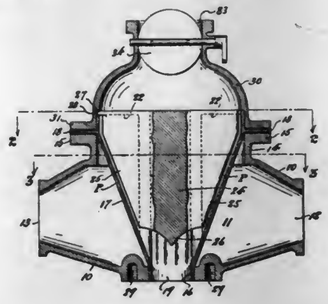
1. A safety razor comprising detachable guard and backing members, the backing member having pins to pass through openings in a blade, means movably carried by and normally projecting from one of said members to enter openings in the blade between said members to retain the blade in shaving position respecting the guard member irrespective of said pins, and means to detachably retain the members clamped against the blade, said movable means being in position to engage the opposite member to be pushed back by the latter when said members are clamped against the blade.

1,816,429. ELECTRIC SWITCH. BENJAMIN E. GETCHELL, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Sept. 22, 1927. Serial No. 221,215. 5 Claims. (Cl. 200—104.)



1. Apparatus of the character described comprising an insulating base, line terminals arranged in one plane along one edge, load terminals arranged in substantially the same plane along another edge, control circuit terminals arranged along the latter edge in another plane, pairs of oppositely disposed switch contacts connected between the respective line and load terminals, a carrier bar having movable switch members adapted to bridge the contacts of the respective pairs of switch contacts and means for moving said carrier bar connected between the line and the load terminals.

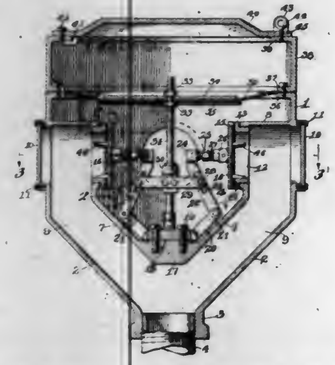
1,816,430. VAPORIZER. ERNEST ROBERT GODWARD, New York, N. Y., assignor to The Eclipse Petrol Economiser System Company, Limited, Christchurch, New Zealand. Filed July 30, 1930. Serial No. 471,852. 5 Claims. (Cl. 261—12.)



1. A vaporizing apparatus, comprising a casing the interior of which is adapted to receive a heating medium, a jacket extending downwardly through said casing, said jacket having longitudinal extending and radially projecting hollow members the outer sides of which provide a large surface area for contact with the heating medium contained in said casing, a core conforming in shape to the interior cross sectional shape of said jacket and its radial members and adapted to nest therein in spaced relation to the internal surfaces thereof to thereby provide

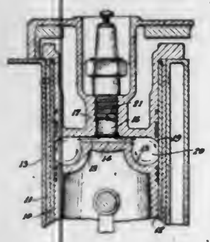
ascending intermediate fuel mixture passages of narrow cross section contiguous to the jacket walls, a fuel mixture receiving throat at the lower end of said jacket with which said passages communicate, and a vaporized fuel discharge means with which the upper ends of said passages communicate.

1,816,431. GAS REGULATOR. GEORGE HELF, Milwaukee, Wis. Filed Aug. 15, 1929. Serial No. 386,177. 2 Claims. (Cl. 50—24.)



1. A gas regulator including a housing, chambers within the housing communicating with the interior thereof, movable closure plates for closing the inner ends of the chambers, pivotally mounted arms having one of their ends connected to the closure plates, a movable diaphragm, a rod attached thereto, cross bars carried by the rod and having operative connection with the movable arms for opening and closing said closure plates relative to the movement of the diaphragm.

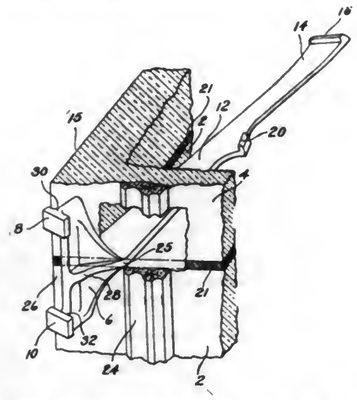
1,816,432. INTERNAL COMBUSTION ENGINE. WILLIAM H. HILL, Canton, Ohio. Filed Feb. 7, 1929. Serial No. 338,233. 7 Claims. (Cl. 123—191.)



1. An internal combustion engine including a cylinder provided with a head having an initial combustion chamber formed therein, a piston reciprocating in the cylinder, the cylinder, head and piston forming a peripheral secondary combustion chamber terminating in tapered end portions, the head and piston when at the upper limit of its stroke forming a flat passage communicating radially with the initial chamber and communicating tangentially with the secondary chamber.

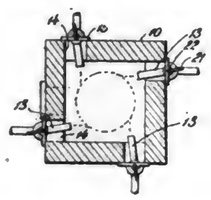
1,816,433. ANCHOR. ALBERT JONES HUTCHINGS, Allston, Mass., assignor to C. A. Cunningham Co., Boston, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1929. Serial No. 342,926. 3 Claims. (Cl. 72—108.)

1. An anchor comprising a bolt arm adapted to be secured to a building wall, two necks carried by the bolt arm and projecting out from the bolt arm and vertically disposed one above the other when the anchor is secured to the building wall, a bolt head carrier at the outer end of each neck, and a strengthening rib projecting out from the bolt arm and longitudinally connecting the necks and



merging into the inner ends of the necks, the strengthening rib being adapted to resist strains set up in the bolt arm by pulling forces exerted upon the bolts in a direction of the bolt arm.

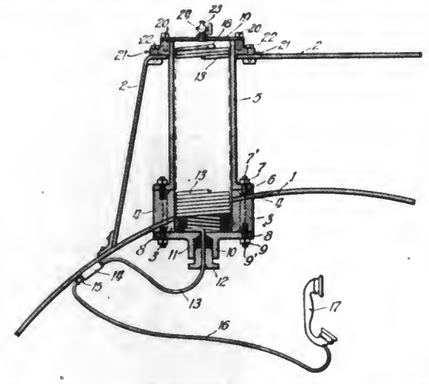
1,816,434. APPARATUS FOR BURNING FUEL. GUSTAV HENRY KAEMMERLING, Allentown, Pa., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Nov. 6, 1923. Serial No. 673,076. 2 Claims. (Cl. 110—28.)



1. In combination, a rectangular combustion chamber and a plurality of fuel burners, each disposed in a wall of the chamber adjacent a corner thereof, and adapted to project fuel into said chamber and against a stream of fuel coming from another burner, the burners being so disposed with relation to each other and to the chamber that the resultant of the intersecting streams will form a rotating mass substantially out of contact with the walls of the chamber, and means for adjusting said burners to vary the directions of said streams with relation to each other and to the chamber.

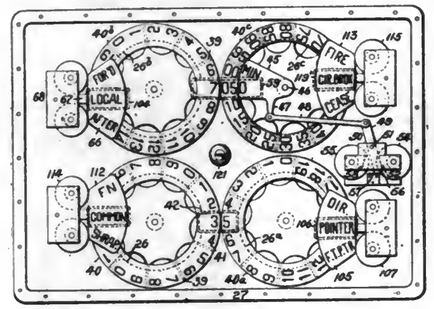
1,816,435. ELECTRICAL CONNECTION FOR SUBMARINES. FREDERICK V. KOLB, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Apr. 11, 1928. Serial No. 269,125. 1 Claim. (Cl. 114—16.4.)

In combination in a submarine boat having a hull of rounded section and a superstructure above the hull, said hull having an opening therethrough, an outer block having its lower face seating upon and conforming to the curvature of the outer face of the hull, an inner block having its outer face seating against and conforming to the curvature of the inner face of the hull, said blocks having openings aligned with the opening through the hull, a tubular member seating upon the upper face of the outer block and secured thereto, means securing the tubular member to the top of the superstructure, a removable closure member for the upper end of the tubular member, said tubular member being adapted for reception of a cable, and a closure member secured to the inner face of the inner



block and provided with means for passage of the cable therethrough and for effecting a water tight closure about the cable.

1,816,436. BATTLE ORDER INSTRUMENT. RALPH E. KORPTEPETER, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 29, 1921. Serial No. 525,594. 2 Claims. (Cl. 177—377.)

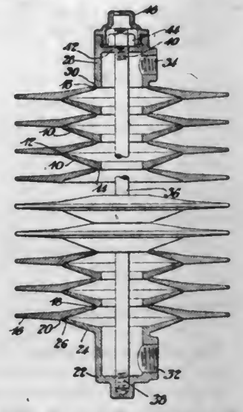


1. In an indicating instrument, a pair of circular indicating cards positioned in a common plane substantially tangential to each other externally so that contiguous indications together indicate a single quantity, one of said cards comprising a ring, a third card positioned within said ring so as to read conjointly with said first mentioned cards, and means for actuating each of said cards.

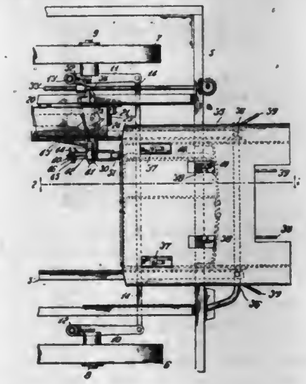
2. In an indicating apparatus, a casing having a window therein, a plurality of rotatable indicating disks movable adjacent said window for reading therethrough, said discs being so positioned that contiguous indications on adjacent discs form a single quantity, one of said disks having a depressed central portion, and an indicating card positioned within said central portion also readable through said window conjointly with said disks.

1,816,437. RADIATOR. WILBUR G. LAIRD, New York, and GEORGE T. JACOCKS, Larchmont, N. Y. Filed May 24, 1929. Serial No. 365,637. 4 Claims. (Cl. 257—152.)

2. A radiator comprising inner and outer annular disks arranged to be assembled together and meet one another at an angle to form a hollow structure, the inner disks having finished outer edges and finished seats near the inner edges, the outer disks having finished inner edges and a finished seat in an intermediate portion of the disks, the finished edges of each of said disks having substantially the same diameter as the finished seats of the adjacent disks, end closures for the disks, one closure having a finished edge and the other closure having a finished seat, means to bind the disks and closures together, and means to provide for a circulation of the heating fluid through the interior of the structure.



1,816,438. GRAIN SHOCKER. ROBERT C. LIVESAY, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 9, 1929. Serial No. 345,787. 16 Claims. (Cl. 56—407.)

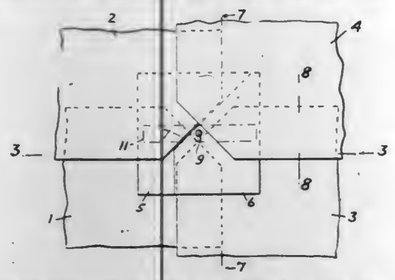


16. In a grain shocker of the type identified in claim 1, the combination with a suitable frame, and a bundle receiving deck pivotally mounted thereon and normally supported in a downwardly and rearwardly inclined position, of mechanism for tilting said deck comprising an actuating element adapted to rotate at substantially constant speed, and variable speed mechanism interposed between said actuating element and the deck for effecting the tilting of the deck by an initially slow movement with subsequent acceleration of the speed thereof, followed, after the shock has been discharged, by deceleration of the movement of the deck as it nears its normal position.

1,816,439. INSTALLATION OF CORRUGATED GLASS. PAUL G. MASTERS, Philadelphia, Pa., assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 1, 1930. Serial No. 472,439. 2 Claims. (Cl. 108—16.)

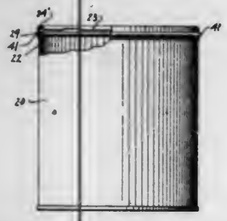
1. In building construction the combination of sheets of corrugated glass vertically aligned in pairs of which the

lower sheet underlaps the upper sheet, and the sheets of one of the pairs overlapping the corresponding sheets of the other of said pairs at their side edges, the corners of said sheets being mitered to provide space between the sheets, a flashing covering said space and having interconnected corrugated portions of which one is in



one plane and lies between the sheets of one pair and of which the other is in another plane and lies between the sheets of the other pair, a support, a stud extending from the support through said space, and means secured to the stud and overlying the sheets of glass and the flashing.

1,816,440. EXTERNALLY SOLDERED CAN CLOSURE AND PROCESS OF MAKING SAME. ARLINGTON MOORE, Worcester, Mass., assignor to Moore Inventions Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 20, 1923. Serial No. 620,133. 4 Claims. (Cl. 220—81.)



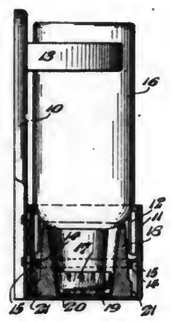
1. A container comprising a hollow body portion open at the end thereof and having the edge thereof about said opening turned to form a bead, a closure over the open end of said body portion having a recess therein receiving said bead; and a portion extending from said closure and disposed about and engaging the exterior of the upper end of said body portion; said last-named portion and the contiguous body portion forming a recess therebetween, and a sealing material disposed within said recess.

1,816,441. INSECTICIDE, FUNGICIDE AND DISINFECTANT. CHARLES H. FEET, Bristol, Pa., assignor to Rohm and Haas Company, a Corporation of Delaware. Filed Aug. 8, 1927. Serial No. 211,631. 4 Claims. (Cl. 167—22.)

4. An insecticide, fungicide and disinfectant adapted for use in the presence of human beings, comprising a minor proportion of a monochloroacetyl compound having a vapor tension ranging between substantially zero and that of amylmonochloroacetate and a major proportion of a distending liquid.

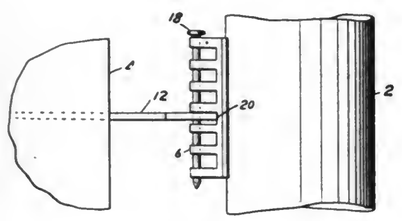
1,816,442. DEODORIZING DEVICE. EUGENE J. REEFER, New York, N. Y., assignor to Reefer's No-Moth, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 5, 1930. Serial No. 426,016. 1 Claim. (Cl. 299—23.)

A deodorizing device comprising a holder having a cup-shaped member at its bottom, the wall of which is vertically disposed and slotted throughout the major portion of its height, a ring of inverted L-shape projected from said side wall of said cup-shaped member into said member in close proximity to its bottom in a plane below said slotted portion, a truncated, cone-shaped, porous annulus the walls of which are relatively thin and of inverted V-shape seated within said cup-shaped member upon the bottom



thereof, said annulus having a flange at its bottom of a diameter less than the outside but greater than the inside ring diameter, a bottle containing a deodorizing liquid supported by said holder with the neck of the bottle wedged within said annulus, the said ring and flange combining to form a well in said cup-shaped member in a plane below said slotted portions.

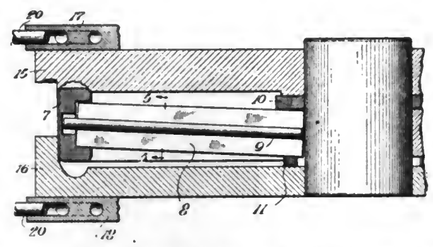
1,816,443. PIPE FASTENER. HERBERT SHAW, Philadelphia, Pa., assignor to Berger Bros. Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 19, 1928. Serial No. 306,914. 2 Claims. (Cl. 248—36.)



1. A pipe fastener comprising a U-shaped member of sheet metal the sides of which are arranged to be secured to a pipe, said member being slotted inwardly from the junction of the sides, a second member adapted to be secured to a wall or the like and arranged to engage within a slot, and a retaining pin adapted to extend between the sides of the U-shaped member and through the second member to retain the same within a slot.

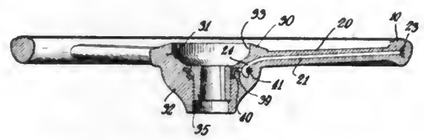
1,816,444. METHOD OF MAKING STEERING WHEELS. GRANT E. SMITH, Poughkeepsie, N. Y., assignor to Pouvailsmith Corporation, Poughkeepsie, N. Y., a Corporation of New York. Filed Oct. 6, 1927. Serial No. 224,334. 2 Claims. (Cl. 18—59.)

1. The method of making a wheel which includes assembling in a mold spoke blanks comprising paper arranged on edge, a hub blank comprising an annular paper roll and a rim blank comprising an annular paper roll,



and compressing the whole under heat and pressure to approximately one-half its original volume and molding the same to form the wheel.

1,816,445. STEERING WHEEL AND METHOD OF MAKING THE SAME. GRANT E. SMITH, Poughkeepsie, N. Y., assignor to Pouvailsmith Corporation, Poughkeepsie, N. Y., a Corporation of New York. Filed May 12, 1928. Serial No. 277,185. 16 Claims. (Cl. 74—33.)



10. A wheel comprising integrally molded spokes and hub each composed essentially of moldable material, and metallic members embedded in the moldable material of said spokes and hub to reinforce the same, said reinforcing members being connected together but loosely jointed and having little or no initial rigidity as a unit, this being imparted by the molding of the moldable material.

1,816,446. GRAPPLE. ROBERT J. STAPP, Northfield, Minn. Filed May 19, 1930. Serial No. 453,834. 10 Claims. (Cl. 294—100.)



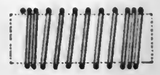
1. A device of the class described comprising two pairs of resilient jaws, the pairs of jaws being normally spread apart, the jaws of each pair being adapted to hold an object, and a slidable member engaging the outer jaws of each pair for forcing the pairs of jaws toward each other.

1,816,447. SHELLAC COMPOSITION. RICHARD E. SUMNER, Plainfield, N. J., assignor to The Calco Chemical Company, Inc., Bound Brook, N. J., a Corporation of Delaware. Filed Apr. 9, 1930. Serial No. 443,000. 3 Claims. (Cl. 106—1.5.)

1. A composition of matter for use in making phonograph records and for other purposes, comprising a filler, a shellac agglomerant by which the filler is bound together, and an induline base dye.

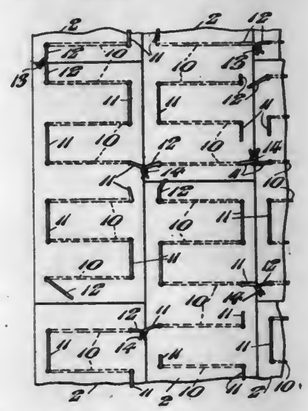
1,816,448. COIL CONSTRUCTION. FREDERICK E. TERMAN, Stanford University, Calif. Filed Nov. 12, 1929. Serial No. 406,585. 2 Claims. (Cl. 175—359.)

1. An inductance coil comprising a plurality of turns of conductor separated by a dielectric in which the separation between turns is a maximum at the center of each layer of winding and progressively decreases toward the



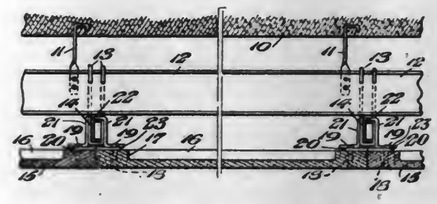
ends thereof, the separation per turn being a maximum in the outer layers of the coil and progressively decreasing toward the axis of the coil.

1,816,449. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa., Filed Feb. 1, 1930. Serial No. 425,150. 5 Claims. (Cl. 72—46.)



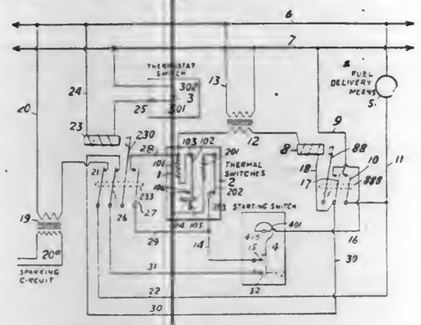
1. In a building structure, wall and ceiling sections of plaster board, vertical and horizontal beams for supporting said plaster boards, each of said plaster boards comprising a plaster like body which is relatively thick and covered by a thin sheet of paper, a tie wire embedded in said body and extended at intervals both longitudinally and laterally through said paper covered body whereby adjacent or companion plaster boards may be tied together by the extended ends of said tie wire to form a unitary structure, and means including clips for securing said plaster boards to said beams independently of said tie wire.

1,816,450. CEILING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed May 17, 1930. Serial No. 453,141. 5 Claims. (Cl. 72—118.)



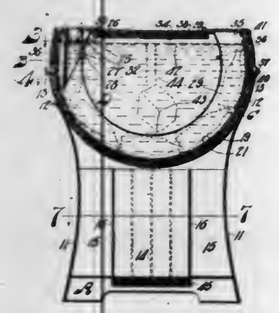
1. In a ceiling construction a pair of suitably supported channel irons, a pre-cast ceiling unit of cementitious material arranged thereheneath and spanning the channel irons, said unit having arranged upon its upper face opposed, substantially hook-like members movable about their vertical axes for engagement with said channel irons to removably suspend said units, said units and members being apertured in vertical alignment to accommodate a removable tool to secure shifting of said hook-like members.

1,816,451. SYSTEM OF ELECTRICAL DISTRIBUTION FOR CONTROLLING BURNERS. FRANK R. WALLACE, Philadelphia, Pa., assignor to The Tabor Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 9, 1927. Serial No. 197,561. 3 Claims. (Cl. 158—28.)



1. A system of electrical control for burners comprising two electrically heated thermal switches arranged in series relation and of which one is adapted on the passage of current therethrough to open after a comparatively long interval of time and to remain open and of which the other is adapted on the passage of current therethrough to repeatedly open and close at comparatively short intervals of time until the first permanently opens an igniter, an electrically operated burner having a control switch therefor, a stopping and starting circuit including said thermal switches for closing said burner control switch, and, a switch responsive to combustion to close for operatively cutting out said thermal switches when the combustion responsive switch is closed.

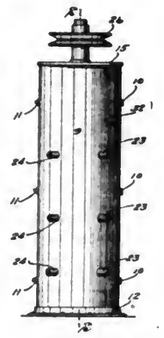
1,816,452. DISPENSING APPARATUS. ALBERT R. WHITE, Cleveland, Ohio, assignor to Glascock Brothers Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed Apr. 1, 1927. Serial No. 180,164. 8 Claims. (Cl. 312—36.)



1. An apparatus of the character described including a feeder having a shell with a notch extending part way through the same, the bottom wall of said notch being inclined, and a rod normally resting in the lower end of said notch and laterally movable therein.

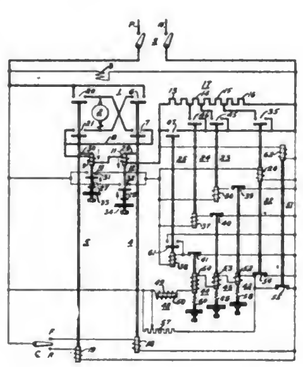
1,816,453. BINDER SPRAYER. ROBERT E. WILLARD, Minneapolis, Minn., assignor, by mesne assignments, to Briquet Engineering Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 447,925. 7 Claims. (Cl. 259—9.)

1. A sprayer of the kind described comprising an upright casing provided within with a conical baffle having beveled upper and lower surfaces, a rotary shaft extending axially through said casing and provided with an impeller head located below the upper inclined portion of said baffle and arranged to throw the briquette material



against the inclined under surface of said baffle, and means for the delivery of steam or hot air into the upper portion of said casing in a direction to cause the briquette material to take up a whirling motion above and against said baffle.

1,816,454. CONTROL SYSTEM. HAROLD W. WILLIAMS, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1928. Serial No. 264,435. 15 Claims. (Cl. 172—288.)

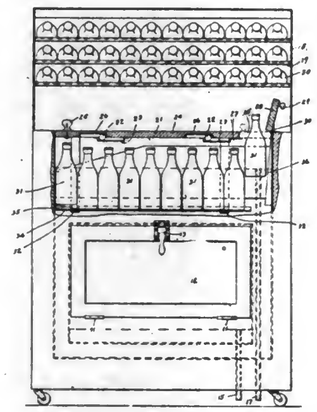


1. In a control system, in combination, a plurality of switches, a separate relay for controlling the operation of each switch, a coil winding for each relay, an inductor connected to said coil windings, a circuit for energizing said inductor and said coil windings, means disposed in shunt to said inductor and coil windings to provide a discharge circuit for said inductor, and means for disconnecting the inductor and said coil windings from said energizing circuit, thereby permitting the energy stored in the inductor to be dissipated through the relay actuating coils.

1,816,455. BOTTLE COOLER. CLAYTON BRUCE WINGATE, Albany, Ind., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed Dec. 27, 1926, Serial No. 157,189. Renewed Feb. 4, 1929. 8 Claims. (Cl. 312—36.)

5. In a cooler for bottles, the combination with a liquid tight container for a refrigerating liquid having an inlet opening through its top and at one end and an outlet

opening at its top at the opposite end, a guide horizontally mounted within said container in a position to be submerged in the refrigerant and constructed to support



the bottles side by side in an upright position, said guide being reciprocably mounted in the container to move horizontally and having a movement relatively to the container a distance equal to the width of a bottle.

1,816,456. METHOD OF MAKING STRAW PULP FOR STRAW BOARD. MAX ZIMMERMAN, Lockport, N. Y. Filed Apr. 7, 1930. Serial No. 442,463. 3 Claims. (Cl. 92—9.)

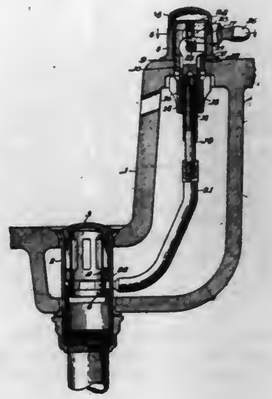
1. A cooking process for disintegrating straw, consisting in first partially disintegrating an initial quantity of straw by the application of lime and steam, adding additional quantities of straw and similarly disintegrating the same until a total batch of straw is obtained, adding to this batch of straw, soda ash and sulphur, and then finally cooking the batch by the use of steam under pressure and while agitating the batch.

1,816,457. METHOD OF MAKING STRAW PULP FOR STRAW BOARD. MAX ZIMMERMAN, Lockport, N. Y. Filed Nov. 10, 1930. Serial No. 494,697. 3 Claims. (Cl. 92—9.)

1. A process of disintegrating straw which consists in first treating a minor quantity of straw with slaked lime and steam while agitating in a rotary, adding additional quantities of straw at intervals until a full batch is loaded into the rotary, and then adding salt cake to the batch and then cooking the batch.

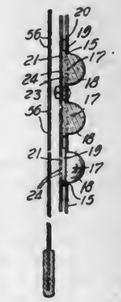
1,816,458. LEVER ACTION WASTE. ROY H. ZINKIL and OTTO C. OSTERHAGE, Chicago, Ill., assignors to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed July 14, 1930. Serial No. 467,710. 7 Claims. (Cl. 4—199.)

6. In a waste operating mechanism, a body, means for securing said body to a fixture, a guide removably secured to said body, a hooked rod slidingly mounted in said guide, a crank pin journalled in said body and engaging said hooked rod to move the same substantially vertically



and a handle for actuating said crank pin, said body securing means also being arranged to secure said guide within said body.

1,816,459. ILLUMINATING SIGN. HANS ADELMANN, New Rochelle, N. Y. Filed Sept. 28, 1929. Serial No. 395,797. 3 Claims. (Cl. 40—133.)

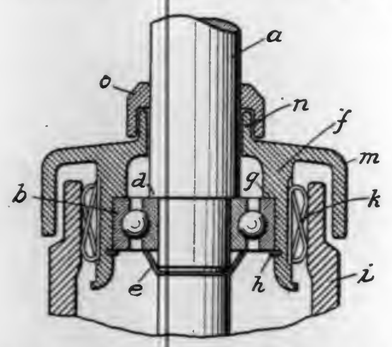


1. An illuminated sign comprising a substantially opaque wall having relatively small openings therein arranged in predetermined groups to define desired indicia, a source of light behind said wall, a transparent member in each of said openings having a bulbous portion projecting outwardly through said opening and a substantially flat roughened rear surface adapted to diffuse the light passing through said member, a reciprocable mask between said light source and said wall, and means for reciprocating said mask.

1,816,460. CENTRIFUGAL SEPARATOR BEARING. CONRAD FERDINAND ÅLLER, Stockholm, Sweden, assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 30, 1928, Serial No. 302,952, and in Sweden Nov. 3, 1927. 4 Claims. (Cl. 308—14.)

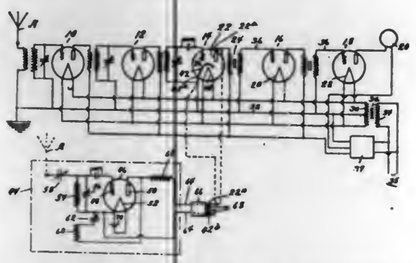
1. A bearing for a separator bowl spindle comprising, in combination with the bowl spindle, a spindle bearing, a surrounding frame, a bearing housing, an elastic support

for the bearing housing between the same and the frame, a hood extending outward from the bearing housing over



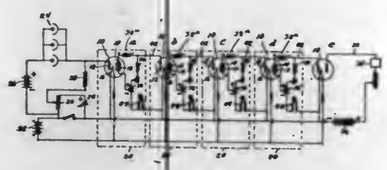
and down around and spaced from the frame, and means to exclude penetration of moisture into the space over the bearing between the bearing housing and the spindle.

1,816,461. SHORT WAVE RECEPTION. HOLLIS S. BAIRD, Boston, Mass., assignor to Shortwave & Television Corporation, Boston, Mass., a Corporation of Delaware. Filed Apr. 30, 1929. Serial No. 359,268. 5 Claims. (Cl. 250—20.)



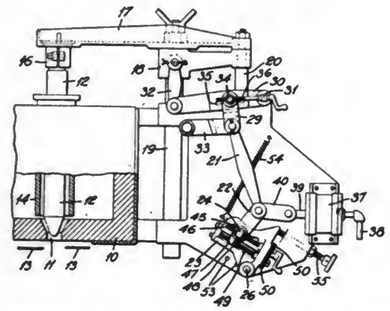
1. The combination of a long wave multi-stage radio receiver having a plurality of tubes and a source of alternating current power for heating the cathodes of said tubes, and a short wave adapter for said long wave receiver having a detector tube, an input circuit tuneable to the short waves, an output circuit having a detachable connection with an intermediate stage of said long wave receiver and having a direct current source of power for heating the cathode of said detector tube independently of the source of alternating current power.

1,816,462. SIGNAL AMPLIFYING SYSTEM AND METHOD. HOLLIS S. BAIRD, Boston, Mass., assignor to Shortwave & Television Corporation, Boston, Mass., a Corporation of Delaware. Filed Apr. 30, 1929. Serial No. 359,348. 10 Claims. (Cl. 179—171.)



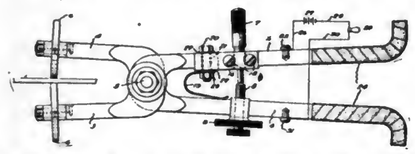
1. A signal amplifying system comprising successive amplifying stages each having a thermionic amplifying tube with a grid and an anode and an input and an output circuit, with the output circuit of one stage having a portion which is common to the input circuit of the next succeeding stage, the common portions of said circuits including a source of anode power and a resistor therein which is variable at least in part, the potential drop of which affects said input circuit, and said output circuit having a second source of power in a portion thereof between said anode and said resistor which is independent of said input circuit.

1,816,463. APPARATUS FOR FEEDING MOLTEN GLASS. WILLIAM T. BARKER, Jr., Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 14, 1925. Serial No. 43,446. 33 Claims. (Cl. 49—55.)



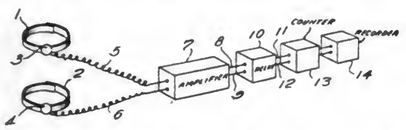
2. Apparatus for feeding molten glass from a submerged outlet in a container and under the control of a reciprocating plunger, comprising a plurality of devices operating successively to move the plunger at different speeds during different portions of a single stroke, and means to permit independent adjustment of one of said devices relative to the other to vary the speed of the plunger movement produced by said device.

1,816,464. MEANS FOR GAUGING MATERIAL. FLORENCE C. BIGGERT, Jr., Crafton, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 28, 1927. Serial No. 229,406. 7 Claims. (Cl. 33—149.)



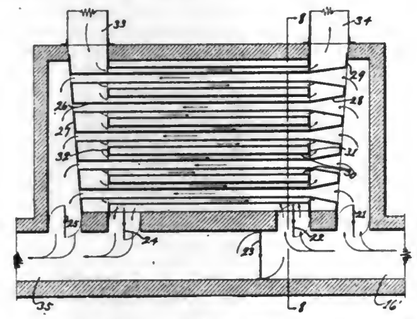
1. In a gauge, a pair of pivoted members insulated from each other and provided with means for engaging a material to be gauged, and means providing with the material an electric circuit adapted to be closed upon contact of the engaging means with the material to indicate that the gauge is in gauging contact with the material.

1,816,465. CARDIOTACHOMETER. ERNST P. BOAS and BENJAMIN LIEBOWITZ, New York, N. Y. Filed Aug. 16, 1928. Serial No. 299,952. 1 Claim. (Cl. 234—1.5.)



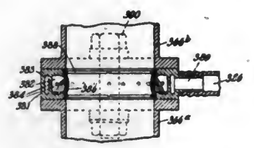
In a device for registering heart beats, electrodes to be applied to different portions of the body, an amplifying unit adapted to amplify the maximum wave of the heart action current incident to the ventricular action occurring during each contraction of the heart, and a register operable by said maximum amplified current.

1,816,466. AIR HEATER. JACOBUS BOERSTRA, Haarlem, Netherlands, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 13, 1927, Serial No. 160,816, and in Great Britain May 10, 1926. 4 Claims. (Cl. 257—237.)



2. In an air heater, coaxial inner and outer tubes and means whereby hot gases may be passed through the inner tubes, or around the outer tubes, or through the inner tubes and around the outer tubes, at will.

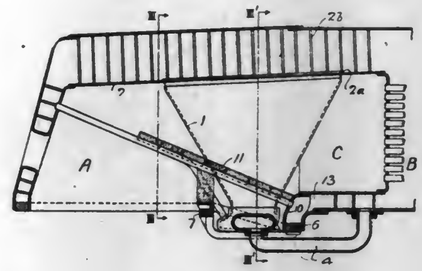
1,816,467. MEANS FOR OPERATING SUCCTION ACTUATED DEVICES OF AUTOMOTIVE VEHICLES. CALED S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Original application filed June 16, 1925, Serial No. 37,407, now Patent No. 1,753,167, dated Apr. 1, 1930. Divided and this application filed Sept. 18, 1926. Serial No. 136,226. 3 Claims. (Cl. 123—198.)



1. Means for fuelizing air withdrawn from a suction actuated device deriving its suction from the suction passage of an internal combustion engine, comprising a ring inserted between and joining the sections of said suction passage and forming a part of said suction passage, said ring provided with an annular chamber communicating at all times with said suction passage, said ring being provided with a liqu'd reservoir in the bottom of the chamber, a capillary medium exposed to contact with motor fuel passing through said suction passage and having portions extending into said reservoir, and a suction connection between said device and said chamber whereby all air withdrawn from said device will contact with the capillary medium and be fuelized.

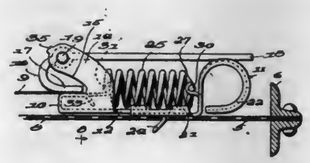
1,816,468. LOCOMOTIVE BOILER. ALFRED W. BRUCE, New York, N. Y. Filed Feb. 3, 1928. Serial No. 251,508. 8 Claims. (Cl. 142—68.)

1. In a steam boiler of the locomotive type, the combination of a crown sheet; a plurality of spaced substantially vertical water walls, having open upper ends secured to upwardly projecting flanges on said crown sheet; a transversely extending header, rigidly connected to, and communicating with the lower ends of the water



walls; arch tubes having their lower ends secured in said header; and a pipe leading from the waist of the boiler to the header.

1,816,469. CLIP. CLAUDE A. BULKELEY, Kenmore, N. Y., assignor to Niagara Blower Company, Buffalo, N. Y., a Corporation of New York. Filed Dec. 16, 1930. Serial No. 502,821. 6 Claims. (Cl. 24—84.)

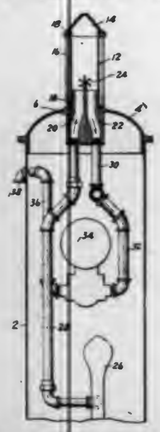


6. In a fastener for holding hides or the like in a stretched condition on a frame having a plurality of apertures therein, a sheet metal frame-engaging part comprising a plate provided with a handle and a spring-attaching hook and having a rounded finger on its under side adapted to be engaged in one of said apertures, and oppositely disposed flanged guide lips upon its upper side, a sheet metal hide-engaging part comprising a tongue slidably engaging said plate between said guide lips and having thereon a reversely formed lower jaw and upstanding side wings, said lower jaw being extended inwardly to form a spring-attaching hook, and formed with depending feet adapted to engage and brace against said tongue, a sheet metal movable jaw pivoted between said wings and comprising a handle portion, a bearing portion, and a reversely-extending cam jaw portion movable toward said lower jaw to grip the edge of a hide therebetween, said bearing portion being slitted and struck up to form reversely disposed curved bearing straps, and a pivot pin extending through said straps and supported on said wings, and a helical spring having its ends bent directly across its helix and respectively connected to said spring-attached hooks.

1,816,470. VENDING MACHINE. WILLIAM A. COURTENAY, Jr., Chester, Pa., assignor to Sun Oil Company, Philadelph'a, Pa., a Corporation of New Jersey. Filed Sept. 17, 1928. Serial No. 306,425. 2 Claims. (Cl. 221—95.)

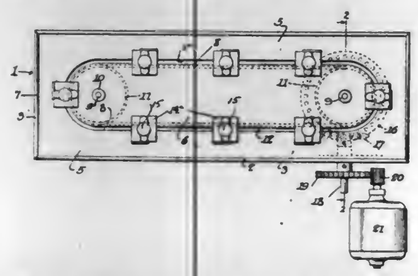
1. A vending machine comprising a casing, a head for the casing, a transparent chamber on the head, a plurality

of conduits in the head providing an inlet and an exit for liquid in the chamber, said head having openings



therein, lenses in said openings, and sources of light within the head arranged to illuminate the chamber through the lenses.

1,816,471. ENDLESS CIRCUIT TOY GAME. CARL A. DIEDERICHS, Pittsburgh, Pa. Filed July 10, 1930. Serial No. 467,085. 2 Claims. (Cl. 46—40.)



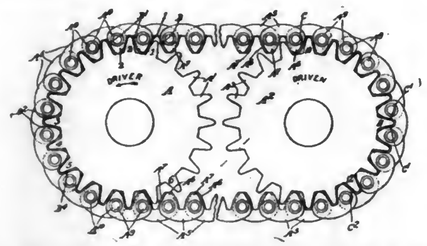
1. In an endless circuit toy game, the combination of a box of suitable size for use as a toy by children, a removable top on the box, a central strip, the upper surface of the central strip and of the top being on the same plane, the box having a slot or channel between the central strip and the encircling portion of the top, vertical shafts to which the central strip is affixed, drums mounted on said shafts, an endless belt mounted on said drums, toys having base members, depending shafts upon said base members, socket strips affixed to spaced portions of the endless belt to releasably receive the depending shafts, means for actuating one of the rollers whereby to operate the endless belt and thereby propel the toys.

1,816,472. HOLLOW INFLATABLE SHEET RUBBER BODIES AND PROCESS OF PRODUCING THE SAME. LAJOS DOROGI and ISTVAN DOROGI, Budapest, Hungary. Original application filed Aug. 22, 1925, Serial No. 51,822, and in Hungary Sept. 11, 1924. Divided and this application filed Nov. 22, 1928. Serial No. 321,223. 20 Claims. (Cl. 154—42.)



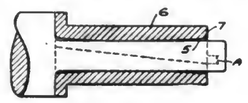
1. The process of producing from unvulcanized rubber sheet material hollow inflatable bodies comprising stamping out from two superposed layers of the material and discarding as waste a central portion with the line of stamping along a closed curvilinear line and uniting said layers together along said line of stamping, applying said united layers to like sheet material and stamping out through all said layers and sheet material a body outline completely surrounding the line of stamping in said first mentioned layers and uniting the material along said last mentioned outline to form a closed body.

1,816,473. SILENT CHAIN DRIVE. RAYMOND W. DULL, Chicago, Ill., and ERIC GEERTZ, Indianapolis, Ind., assignors to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 21, 1929. Serial No. 387,537. 4 Claims. (Cl. 74—32.)



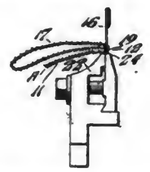
1. In combination, a toothed sprocket and a chain comprising a plurality of inside contact toothed chain links, all of the links forming the chain being identical, and means for positively preventing engagement of any sprocket tooth with more than one of the teeth on each link at one time, said means comprising the face of the sprocket between adjacent sprocket teeth.

1,816,474. HOUR GLASS BEARING. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 19, 1927. Serial No. 162,082. 3 Claims. (Cl. 308—72.)



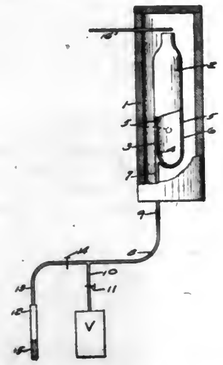
1. An oil-film-wick-lubricated bearing for a cylindrical journal comprising a bearing brass having a bearing surface generated as a hyperboloid of revolution with the axis of the bearing normal to the axis of the generating hyperbola.

1,816,475. STOCKING. FRANK EMERY, Summerdale, Pa. Filed Apr. 29, 1930. Serial No. 448,216. 1 Claim. (Cl. 66—173.)



The method of manufacturing full-fashioned stockings with integral garter flaps which consists in knitting a stocking welt on a spring beard needle machine, applying the loose course of an independently prepared garter flap to a row of transfer points on a transfer bar, unravelling the end of said garter flap projecting out from said transfer points, then engaging the transfer points of said transfer bar with said spring beard needle machine to transfer the garter flap on to the shanks of said spring beard needles, then knitting a stocking welt on the garter flap while the said garter flap is on the spring beard needles, and finally actuating the spring beard needle machine to knit a full fashioned stocking body portion as a continuation and an integral part of the stocking flap and stocking welt.

1,816,476. MANUFACTURE OF DOUBLE-WALLED RECEPTACLES. COLIN G. FINK and WALTER G. KINO, Jr., New York, N. Y., assignors to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed Sept. 7, 1926. Serial No. 133,862. 7 Claims. (Cl. 91—70.1.)



1. In the manufacture of vacuum receptacles in which an inner and outer container of glass are spaced by a vacuum chamber, the process of coating the walls of said chamber with a mirror-like metal surface, which comprises heating the glass walls of the vacuum chamber to a temperature below 400° centigrade, and then introducing a metal compound into the vacuum chamber under such conditions that the compound is broken up and the metal is deposited on the pre-heated surrounding glass walls to cover the same with a substantially uniform mirror-like surface.

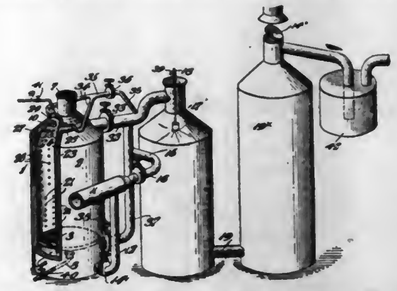
1,816,477. BLADE HOLDER. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 321,794. 19 Claims. (Cl. 206—16.)



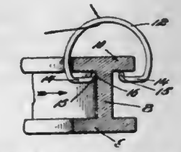
1. A blade package comprising a container for blades provided with an opening for the passage of blades, and devices carried by the container to retain the blades therein, said devices being in position to be operated by studs from a razor member to release a blade.

1,816,478. CARBURETED WATER GAS APPARATUS. HOWARD D. GA NUNG, Llanerch, Pa., EARL SMITH, Atlantic City, N. J., and DILLON B. WILSON, Philadelphia, Pa. Filed July 24, 1926. Serial No. 124,581. 2 Claims. (Cl. 48—80.)

1. A carbureted water gas apparatus comprising in combination, a water gas generating chamber, an ash pit, a series of flues extending upwardly from said ash pit to the top of said generating chamber, and discharging through ports near the mid-height thereof, an annular outer horizontal flue in which said upwardly extending flues terminate, an inner annular, horizontal flue, a steam pipe leading to the latter flue, said inner annular flue having ports leading to the top of said generating chamber, flues extending downwardly from said inner annular flue to a point near the mid-height of said generating chamber, a carbureter, a valved connection from the top of said generating chamber to the top of said carbureter, a valved connection from the lower portion of said generating chamber to the top of said carbureter, a steam pipe in the ash pit of said generating chamber, and an air blast pipe having a valved branch discharging into said ash pit and another valve branch discharging into the top of the carbureter.



1,816,479. RING TRAVELER. GEORGE H. GILLIGAN, Providence, R. I., assignor to U. S. Ring Traveler Company, Providence, R. I., a Corporation of Rhode Island. Filed Dec. 10, 1930. Serial No. 501,208. 4 Claims. (Cl. 118—61.)



1. A ring traveler comprising a bow, inwardly directed horns upon the bow lying in the same horizontal plane, and terminal bearing members upon the horns disposed at substantially right angles to the horns and directed toward the bow providing a flat bearing surface for the traveler.

1,816,480. HAIR WAVER. JACOB GOODMAN, Brooklyn, N. Y. Filed Aug. 11, 1930. Serial No. 474,515. 11 Claims. (Cl. 132—41.)

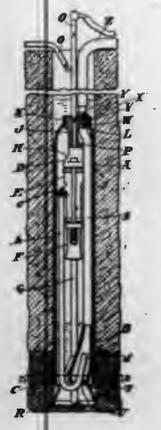


1. An article of the class described comprising a pair of U-shaped members, central members traversing each of said U-members, each of said U-members and its respective traversing member acting to form and position the crest of a hair wave, and a central comb mounted between said U-members and adapted shift the position of the hair of the trough portion of said wave relatively to said crests.

1,816,481. DRILLING APPARATUS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 28, 1928. Serial No. 328,869. 5 Claims. (Cl. 255—4.)

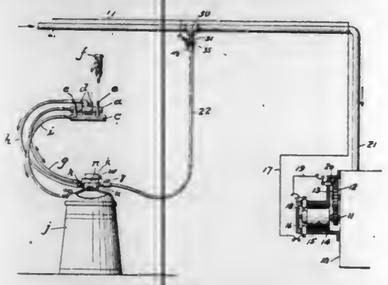
4. In combination with a fluid actuated rock drill having a cylinder and front and back heads, of a casing fixedly

attached to the rock drill coaxially therewith, said casing being adapted to extend into a hole being drilled to form a chamber for pressure fluid around and forwardly of the rock drill and thus prevent the admission of liquid into



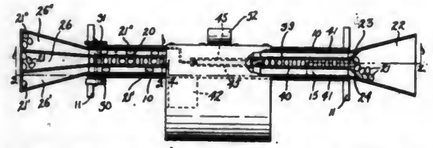
the rock drill, a pipe disposed between the rock drill and the casing and being fixedly connected to the rock drill, and a conduit for introducing pressure fluid into the pipe to carry cuttings and liquid therethrough from the drill hole.

1,816,482. MILKING MACHINE. CYRUS HOWARD HAPGOOD, Nutley, N. J., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 24, 1927. Serial No. 242,329. 9 Claims. (Cl. 31—58.)



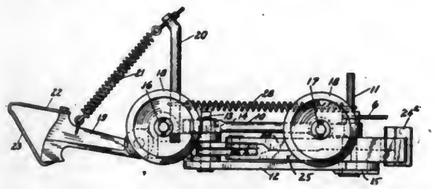
1. In a milking machine, the combination with a milking machine unit comprising a pulsation pipe, means forming a vacuum chamber, and an electromagnet adapted, when intermittently actuated, to connect said pulsation pipe alternately with said vacuum chamber and a source of higher pressure; of a vacuum pipe line and means to create suction therein, a separate hose adapted to connect the vacuum chamber of the milking machine unit with said vacuum pipe, an electric generator, an electric circuit, and means to create electric pulsations therein; said electric circuit comprising terminals connected with opposite poles of the magnet, terminals connected with opposite poles of the generator, and two wires carried by and extending along the hose; and means adapted, when the opposite ends of said hose are connected respectively with said vacuum chamber and vacuum pipe, to electrically connect the ends of said wires at one end of the hose to the respective magnet terminals and the other ends of said wires at the other end of the hose to the terminals connected with the generator.

1,816,483. EGG CANDLING AND GRADING MACHINE. ELZA G. HEATON, Des Moines, Iowa. Filed Oct. 1, 1928. Serial No. 309,457. 3 Claims. (Cl. 99—6.)



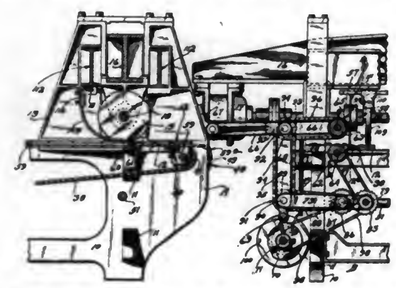
1. An egg candling and grading machine comprising a frame, an illuminated candling chamber open at its top, a conveyor having a part arranged to travel over said chamber, said conveyor being formed with a row of spaced egg-receiving apertures, and a pair of spaced strips extending longitudinally of said candling chamber below said conveyor for frictionally engaging the downwardly projecting portions of the eggs passing over said chamber, and means for reciprocating said strips to impart a reverse rotation to the eggs.

1,816,484. DRAWBENCH TONGS. EARL K. HOLMES, Cleveland, Ohio, assignor, by mesne assignments, to Steel and Tubes, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed May 24, 1926. Serial No. 111,274. 6 Claims. (Cl. 205—24.)



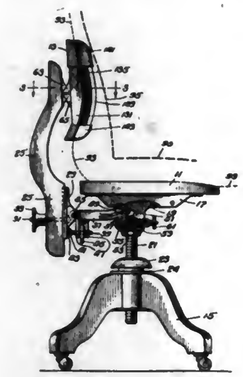
1. A draw bench carriage comprising two relatively movable sections each provided with a pair of wheels, means connecting the sections for relative movement including rigid members carried respectively by the sections and each member having a lost motion connection with the other section, a pair of gripping jaws pivoted on one of said sections, a pair of links pivoted on the other of said sections and to said jaws, and resilient means connecting said sections.

1,816,485. SAWING AND RESAWING MACHINE. ARTHUR B. JOHNSON, Minneapolis, Minn. Filed July 20, 1929. Serial No. 379,676. 3 Claims. (Cl. 143—49.)



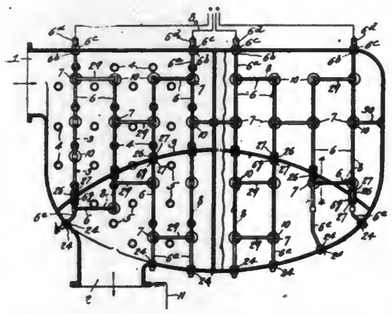
1. The combination with a sawing machine having feeding means and a plurality of saws, a re-sawing machine having feeding means and a plurality of saws, the re-sawing machine being arranged to receive from the sawing machine and to feed the material transversely of the line of feed of said sawing machine, of transfer mechanism including opposed normally separated feed rollers, one of said rollers being movable in respect to the other thereof, means operative to drive and close said rollers onto the material properly timed to move the material from said sawing machine onto the feed mechanism of said re-sawing machine, the feed mechanism of said sawing machine including endless conveyors with driving lugs and the transfer rollers being arranged to be started into action on the material just before said material is released from the lugs of said feed means and at a speed that accelerates the movement of material being transferred and thereby carry said material out of engagement with the lugs of said feed chains as said lugs make their downward initial return movement.

1,816,486. CHAIR. ARTHUR L. JOHNSON, Oak Park, Ill., assignor to Johnson Chair Co., Chicago, Ill., a Corporation of Illinois. Refiled for application Serial No. 344,995, filed Mar. 7, 1929. This application filed Oct. 13, 1930. Serial No. 488,206. 1 Claim. (Cl. 155—157.)



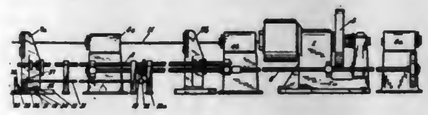
The combination of a chair having a seat, a single narrow upright pivotally connected to the seat, below the top of the seat and near the center thereof, said upright being tiltable rearwardly, resilient means for urging the upright forwardly, a lumber back rest pivoted to the upright on a horizontal axis, and resilient means for holding the rest in a predetermined position but permitting the rest to move on its pivot when pressure is applied thereto.

1,816,487. ELECTROLYTIC SYSTEM FOR THE PROTECTION OF CONDENSERS. ALEXANDER KIRKALDY, Yorktown Heights, N. Y., assignor to Electro Anti-Corrosion Corporation, New York, N. Y., a Corporation of New York. Filed May 3, 1930. Serial No. 449,392. 3 Claims. (Cl. 204—25.)



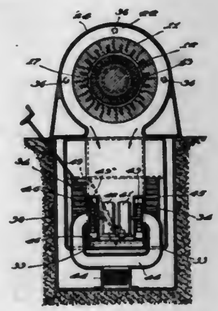
1. The combination with a condenser having a water box, of a tubular cathodic grid mounted in said water box, an insulated electrical current conveying wire extended into and enclosed by said tubular grid, anodes extended and insulated from said grid, and means for communicating current from said wire to said anodes.

1,816,488. SWAGING APPARATUS. JAMES A. LEWIS and EARL K. HOLMES, Cleveland, Ohio, assignors, by mesne assignments, to Steel and Tubes, Inc., Cleveland, Ohio, a Corporation of Ohio. Original application filed Mar. 12, 1926, Serial No. 94,133. Divided and this application filed Feb. 5, 1927. Serial No. 166,062. 5 Claims. (Cl. 78—14.)



1. In tube swaging apparatus, the combination, with a holding device for a mandrel rod, said holding device including jaws for gripping the mandrel rod, of means for operating the jaws, said means comprising a jack shaft, levers operatively connected to the jaws, a connecting rod operatively associated with the levers, and a shaft driven by the jack shaft for operating the connecting rod.

1,816,489. TURBO-GENERATOR VENTILATION. JAN ARTHUR KUYSER, Sale, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 5, 1929, Serial No. 411,818, and in Great Britain Dec. 6, 1928. 2 Claims. (Cl. 171—252.)

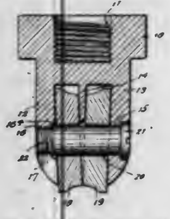


1. A ventilation system for a dynamo-electric machine having a plurality of ventilating ducts, said system comprising at least two external fans each normally supplying ventilating fluid to its own special group of ducts, and means for putting either fan into or out of operation independently during the operation of the machine, characterized by means whereby, when one or more of said fans is or are rendered inactive, the remainder which remain operative may be caused to circulate air through the ventilating ducts appertaining to such inactive fan or fans.

1,816,490. ROLL-HOLDER FOR RIVET SPINNING MACHINES. GEORGE A. LINLEY, Trumbull, Conn. Filed June 26, 1929. Serial No. 373,822. 1 Claim. (Cl. 78—53.)

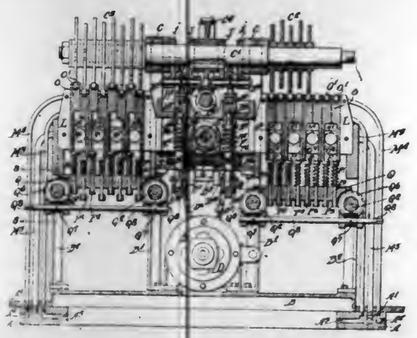
In a roll holder for rivet spinning machines, a holder body having a pair of spaced arms having upwardly diverging opposed walls and capable of being drawn one toward the other, said arms having aligned pin receiving passages, one of which is threaded, the arm having said threaded passage being tempered and having a split extending outwardly from said threaded passage and rendering said passage a compressible and expansible binding

surface, a pair of apertured rolls disposed between said walls and having bearing contact therewith, and having bearing contact with each other at the rivet spinning point outwardly of said arms, separating means disposed between said rolls adapted to maintain them in diverging relation parallel to said diverging walls, a pin having a head at one end and a threaded portion at the other end, said pin being engaged in said passages of the arms and the apertures of said rolls with the headed end abutting said arm having the unthreaded passage and the threaded



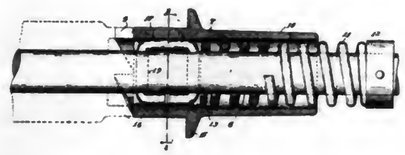
end engaging said threaded passage of the other arm, the threads of said threaded end extending inwardly from said threaded passage in the normal engaged relation and adapted to be further screwed into said threaded passage to draw said arms one toward the other to maintain the bearing contact of said rolls with each other as they become worn, and said binding surface of the threaded passage adapted to frictionally retain said pin against turning to maintain the adjusted relation of said arms and rolls.

1,816,491. CONTROL MECHANISM. ALBERT WOOD MORRIS, Drexel Hill, and SAMUEL PRICE WETHERILL, Jr., Haverford, Pa., assignors to Wetherill-Morris Engineering Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,364. 9 Claims. (Cl. 303—6.)



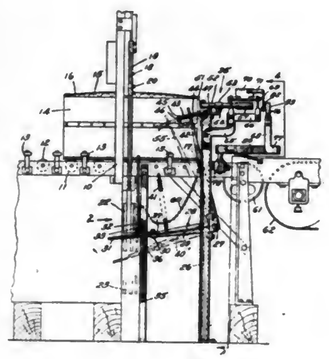
1. Control mechanism comprising a rotatable cam shaft supporting a series of readily removable, and changeable spaced cams, means for operating the shaft including a detachable element by shifting which the actuating means is made inoperative, means for shifting the detachable element having a contact element disposed in the path of a revolving element secured to the cam shaft, resilient means acting to hold the shifting mechanism in operative position, a revolving element secured to the cam shaft laterally movable from a position in which it will contact with the contact element of the shifting mechanism to a position in which it will clear said element, a latch element laterally movable between positions in which it will engage and hold the contact element of the shifting mechanism in non-operative position and a non-engaging position and a manually operatable device normally holding the laterally movable rotating element and the latch element out of contact with the contact element but shiftable to a position in which it permits said elements to engage the contact element.

1,816,492. COUPLING KEY. LOUIS A. PARADISE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 17, 1926. Serial No. 95,177. 9 Claims. (Cl. 287—52.05.)



9. The combination of two rotatable elements having longitudinal movement relative to each other and a coupling key for holding said elements against relative rotation, said coupling key comprising a substantially U-shaped member having side portions extending through transverse openings in one of said elements, and an intermediate portion engaging in a keyway extending longitudinally of the other element, the projecting ends of said side portions extending into a second longitudinal keyway in said last named element.

1,816,493. BOX STAMPING MACHINE. JOHN S. PHELPS, Whittier, Calif. Filed July 9, 1928. Serial No. 291,219. 21 Claims. (Cl. 101—35.)

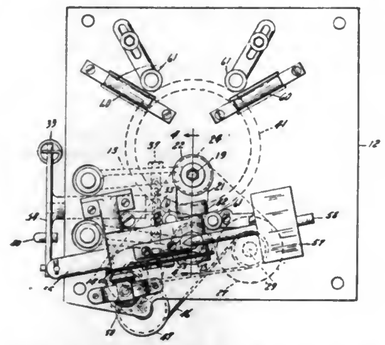


1. In a box stamping machine, the combination of: a frame providing a path of travel for said box; a stamping means disposed outside of the path of travel of said box and being movable into said path of travel to engage a face of said box disposed normal to the path of travel of said box; actuating means for moving said stamping means into and from said path of travel; and re-inking means for said stamping means having an inking member and a part engaged by said box whereby to cause movement of said inking member into inking engagement with said stamping means.

1,816,494. MACHINE FOR GRINDING OR BUFFING ANNULAR ARTICLES. EDWARD D. PUTT, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 8, 1927. Serial No. 211,343. 4 Claims. (Cl. 51—87.)

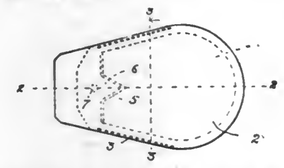
3. A machine for grinding or buffing annular articles, said machine comprising a pair of rotatable abrasive wheels, means for pivotally mounting said wheels for motion toward and from each other, means for normally

holding said wheels apart, a rotatable friction drive roller, said roller being adapted to engage one of the articles



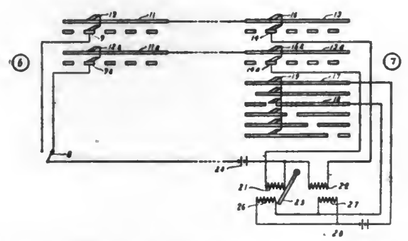
for rotating the same circumferentially past said wheels, and means for simultaneously drawing said wheels and said roller together about said article.

1,816,495. HEEL PAD. GEORGE A. RICHARD, Hill City, Minn. Filed Jan. 27, 1930. Serial No. 423,698. 2 Claims. (Cl. 36—37.)



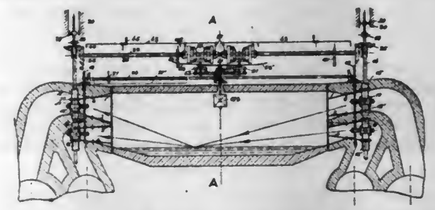
2. A heel pad for shoes of a shape similar to that of the interior of the heel of the shoe though materially narrower throughout the forward portion thereof, said narrower portion having straight converging sides, said pad comprising two similarly shaped flexible members being stitched together only longitudinally of said straight sides, resulting in both ends being open, a resilient pad insertable intermediate of the two converging members, said pad being provided with heel-centering means for the purpose described.

1,816,496. REMOTE SUPERVISORY CONTROL SYSTEM. ADOLF RITTER, Vienna, and OTTO PLECHL, Pfaffstatten, Austria. Filed Aug. 17, 1929, Serial No. 386,513, and in Germany July 26, 1928. 3 Claims. (Cl. 177—357.)



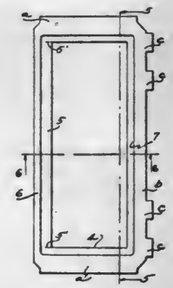
3. In a system for transmitting signals from a transmitting station to a remote receiving station, a transmitting selector at the transmitting station, a receiving selector at the receiving station operating in synchronism with said transmitting selector, a relay at the receiving station having an armature biased to a given position and a plurality of holding windings and a plurality of actuating windings for selectively moving the armature to a plurality of positions from the one said position, the holding windings retaining the armature of said relay in the selected position to which it is moved by the actuating windings, means including said selectors for selectively energizing the actuating windings when said selectors reach positions allotted to the windings of said relay, an auxiliary selector operating in synchronism with said receiving selector, and means controlled by said auxiliary selector for energizing the holding windings during operation of the other selectors and de-energizing the holding windings for an interval while the actuating windings are selectively energized by said other selectors.

1,816,497. REGENERATIVE GAS-FIRED OPEN-HEARTH FURNACE. WALTHER SCHUCANY, Dortmund, Germany. Filed Aug. 24, 1926, Serial No. 131,246, and in Germany Sept. 1, 1925. 8 Claims. (Cl. 263—15.)



1. The method of working industrial gas furnaces having air and gas heating checker chambers, a bath receiving hearth and burners at opposite ends of the hearth, said method comprising preheating the streams of gas and air for combustion to an equal or predetermined different temperature for each thermal value of the gas, said preheating being done according to the principle that the greater the calorific value of the gas the smaller the amount of waste gas necessary for the preheating of the gas in relation to the amount of waste gas necessary for the preheating of air and vice versa, and adjusting the cross-section of the burner openings at the outlet end of the furnace so that the greater the calorific value of the gas the smaller the proportion, according to which the waste gases are distributed to the gas and air chambers.

1,816,498. METHOD OF MAKING METAL WINDOW STRUCTURES. ANTHONY G. SIEBENLIST, Milwaukee, Wis., assignor, by mesne assignments, to Milcor Steel Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 274,122. 3 Claims. (Cl. 113—116.)



1. The hereindescribed method of making a one-piece window frame which consists in drawing a metal blank to form continuous frame members, trimming the outside edges of the blank to delineate edge portions of the frame and to outline stock for a stiffening member and hinge ears and bending and rolling the stock so outlined to

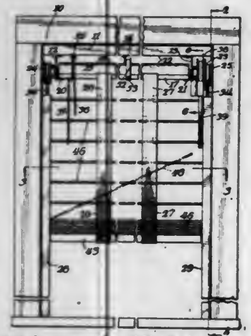
double the stiffening member back upon the frame member with which it is formed and to form the hinge ears on said stiffening member.

1,816,499. CLOSURE CAP. AUGUST C. SPAHN, Evansville, Ind., assignor to Bernardin Bottle Cap Company, Evansville, Ind., a Corporation of Indiana. Filed Feb. 10, 1928. Serial No. 253,307. 3 Claims. (Cl. 215—38.)



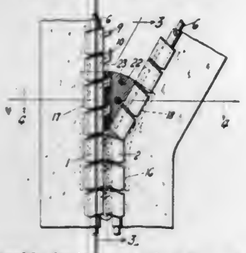
3. A closure cap for a container having a substantially straight cylindrical side wall adjacent to its upper end, said cap comprising a top and a depending integral skirt of resilient metal, the skirt having annular corrugations the outer and inner crowns of which are rounded and of similar conformation, the inner crowns forming three substantially continuous annular frictional container-gripping surfaces which are spaced apart vertically and are adapted to grip directly and frictionally the side wall of the container, the skirt extending outwardly from the lowermost gripping surface so its lower edge will be spaced from the outer periphery of the container side wall.

1,816,500. VENETIAN BLIND. LE ROY J. STEFFEN, Evanston, Ill., assignor to Hough Shade Corporation, a Corporation of Connecticut. Filed Sept. 24, 1930. Serial No. 484,135. 9 Claims. (Cl. 156—17.)



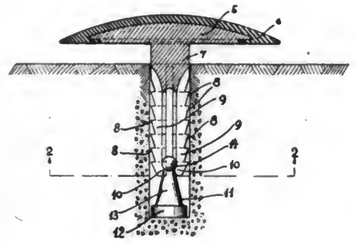
4. A raceway for venetian blinds having a re-entrant lip for engaging blind members between the lip and the opposite wall, and a channel between the lip and the near wall wherein operating means for the blind may be located.

1,816,501. SEPARABLE FASTENER. WILLIAM C. STEVENS, Akron, Ohio, assignor, by mesne assignments, to Firestone Footwear Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 2, 1925. Serial No. 60,033. 19 Claims. (Cl. 24—205.)



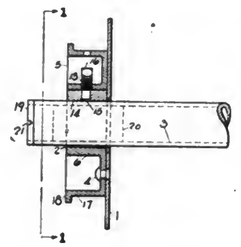
8. In a separable fastener, a plurality of hook members and a plurality of socket members arranged in rows on opposite sides of a closure, and a slide for bringing said members into interlocking engagement, said slide having a straight channel for one of said rows and a diverging channel for the other row, the hooks extending from the hook members in the general direction of the divergence of the channels in the slide the said channels being adapted to nest the hook and socket members.

1,816,502. TRAFFIC MARKER. WILLIAM H. THEEL, Chicago, Ill. Filed Nov. 24, 1930. Serial No. 497,767. 1 Claim. (Cl. 94—1.5.)



In a device of the class described a stem having upwardly and radially extending shoulders and consisting of a plurality of longitudinal portions, each portion having on its lower end an inwardly extending shoulder, and an expansion member having a conical body and a globular upper end adapted to be forced between said longitudinal stem portions and to be engaged and held by the end shoulders on said portions.

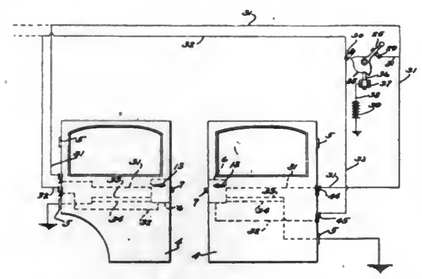
1,816,503. LOOM BEAM STRUCTURE. ERNEST UFF, Chester, Pa. Filed Apr. 18, 1928. Serial No. 269,754. 1 Claim. (Cl. 242—118.)



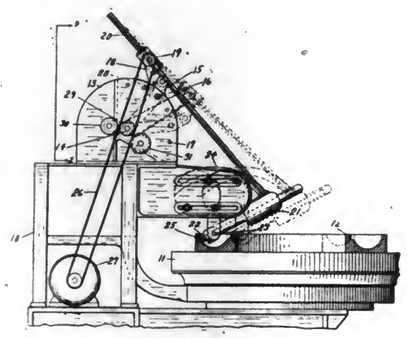
In combination with a hollow shaft or beam barrel of frangible material and a separable flange or head tightly clamped thereto, a cylindrical block tightly clamped within said shaft or barrel and serving to prevent the collapse and rupture of said barrel at the juncture of said barrel and said flange, said cylindrical block being of less diameter than the internal diameter of the barrel so that the block is loosely receivable within the barrel when the flange or head is not clamped thereto.

1,816,504. DOORLOCK ACTUATING MECHANISM. CARL J. ULRICH, Minneapolis, Minn., assignor of one-half to Philip E. Carlson, Minneapolis, Minn. Filed Jan. 7, 1929. Serial No. 330,810. 4 Claims. (Cl. 70—50.)

1. The combination with a plurality of doors equipped with locks having retractable lock bolts and outside and inside bolt-retracting handles of lock dogs for securing said outside handles in non-turnable positions, and a common controller having connections for a simultaneously releasing said lock dogs and for simultaneously setting the same so that the door lock bolts cannot be manipulated by means of the outside handles.



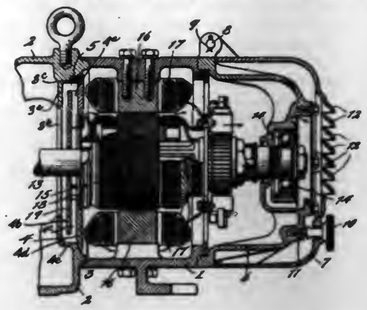
1,816,505. ENGRAVING MACHINE. CURT USCHMANN, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 23, 1926. Serial No. 156,626. 4 Claims. (Cl. 90—15.)



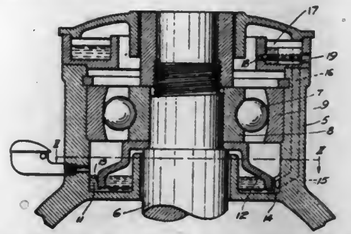
1. In an engraving machine, an engraving tool driving mechanism comprising a pivoted lever for carrying the engraving tool, a drive shaft operatively connected at one end thereof to the lever for rotating the tool, a head slidably connected to the shaft adjacent the other end thereof, a driven pulley attached to the head for rotating the shaft, a pivoted arm for carrying the head, a bracket on which said arm is mounted, said bracket having a plurality of apertures therein, whereby the arm and head may be swung through an arc and fixed in adjustable angular relation to the bracket by a pin passing through the arm and one of said apertures, an idler pulley rotatably mounted on the same axis as the pivoted arm, a driving belt trained over said driven pulley and passing on both sides of said idler pulley, an additional idler pulley mounted beside the first-mentioned idler pulley for engaging the outside of said belt, and means for driving said belt.

1,816,506. DYNAMO COOLING SYSTEM. HENRY H. WAIT, Chesterton, Ind. Filed Mar. 3, 1927. Serial No. 172,261. 14 Claims. (Cl. 171—252.)

2. In a dynamo, the combination of a casing for said dynamo provided with an air opening for delivering air to said dynamo, with forced draft means within said casing for drawing air through said opening and cooling said dynamo, said casing being provided with an air passage connecting said opening and means, said passage having a relatively low velocity portion for precipitating solid particles drawn in through said opening and a drain in said low velocity portion.

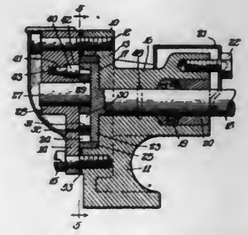


1,816,507. OIL BEARING LUBRICATION. OSKAR WILDE, Vienna, Austria, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1928, Serial No. 325,959, and in Austria Dec. 15, 1927. 7 Claims. (Cl. 308—127.)



1. A bearing having a lubricant-circulating device comprising a collector chamber at each end of the bearing and, when the bearing is disposed with one end higher than the other, the collector chamber at the higher end lying higher than the bearing and means at each end of the bearing to pump lubricant to the collector chamber at the other, the lubricant being supplied to the bearing surfaces by gravity.

1,816,508. ROTARY PUMP. IRVEN H. WILSEY, Chicago, Ill., assignor to James B. Tuthill, Chicago, Ill. Filed July 9, 1927. Serial No. 204,467. 11 Claims. (Cl. 103—126.)

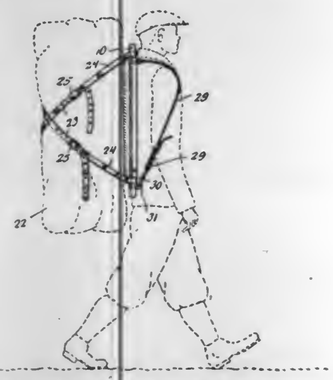


1. A rotary machine having, in combination, a rotor having internal vanes, the outer ends of the interdental spaces of which are closed to the passage of fluid peripherally thereto or therefrom, a pinion eccentrically related to said rotor and meshing therewith, a partition located between said rotor and said pinion, spaced inlet and outlet passages opening at opposite sides of said partition to one end of said rotor, and a movable end land yieldingly engaging said end of said rotor between said passages and diametrically opposite to said partition.

1,816,509. METHOD OF TREATMENT OF NONFERROUS ALLOYS. EDMUND MERRIMAN WISE, Cincinnati, Ohio, assignor, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 8, 1927. Serial No. 217,541. 15 Claims. (Cl. 148—11.5.)

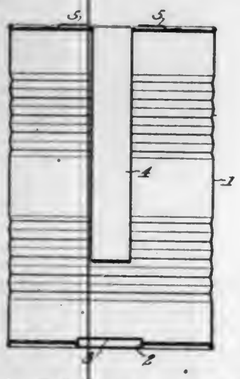
1. The process of treating a Cu-Ni-Sn alloy comprising approximately 2½% to 20% Sn; 3½% to 50% Ni; the remainder Cu—based on an aggregate of 100% of the three metals mentioned—which comprises subjecting said alloy to homogenizing treatment at a temperature below the melting point of the alloy and not substantially below 600° C., and then quickly cooling said alloy.

1,816,510. PACK FRAME. MYRON E. ANDERSON, Coeur D'Alene, Idaho. Filed Oct. 9, 1930. Serial No. 487,597. 4 Claims. (Cl. 224—25.)



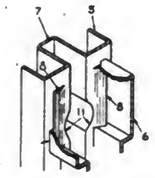
1. A pack frame comprising spaced side members, bowed transversely arranged members spacing the side members, reinforcing rods connecting the side members and arranged behind said transverse members, each rod having its extremities passed through said side members, a sheet of flexible material constituting a cover for the frame, the upper and lower ends of the side members projecting beyond the cover, load carrying straps secured to the side members and arranged at the rear of the frame, and shoulder straps carried by the frame and arranged at the front thereof.

1,816,511. METHOD OF TREATING ICE. HOWARD TURNER BARNES, Montreal, Quebec, Canada, assignor to Union Carbide Company, a Corporation of Virginia. Filed July 24, 1928. Serial No. 295,042. 2 Claims. (Cl. 61—1.)



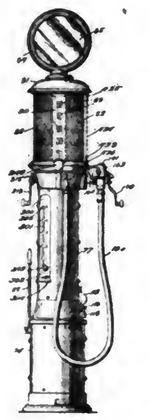
1. Method of combating ice which comprises placing therein a container charged with calcium carbide, and widely disseminating and distributing said calcium carbide charge throughout the ice to be combated by exploding said container by means of a separate explosive agent placed therein.

1,816,512. PANEL UNIT. JOHN A. BOHNSACK, Cleveland Heights, Ohio, assignor to The E. F. Hauserman Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 17, 1927. Serial No. 220,119. 5 Claims. (Cl. 189—34.)



2. In a metallic partition; units comprising panel plates, sheet metal channel frame verticals each having a groove, hollow horizontals extending between the verticals on opposite sides of the panel plates and clamped between the verticals by tie rods; and holes extending through such verticals into such hollow horizontals said holes being formed by re-forming the side walls of the groove to a greater width than the groove.

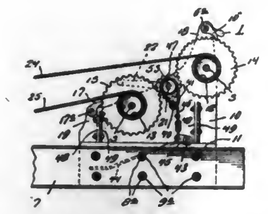
1,816,513. DISPENSING APPARATUS OF THE VISIBLE TYPE. RAYMOND W. BOND, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Mar. 18, 1929. Serial No. 347,939. 12 Claims. (Cl. 221—100.)



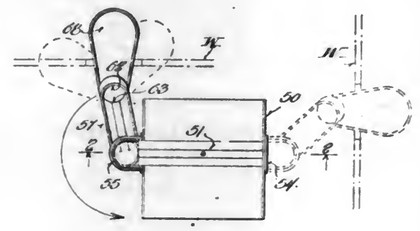
1. Dispensing apparatus comprising a container, a discharge valve therefor, a shaft operating said valve, a stop cam on said shaft, an upright rod engaging said cam, a float located in position to be acted on by the liquid before it passes through said valve, and connections between said rod and said float to release said rod from said stop cam only after the liquid has been drained from said container.

1,816,514. SCAFFOLD. PASCHAL L. BOTTOMS, Amarillo, Tex. Filed Dec. 12, 1928. Serial No. 325,522. 5 Claims. (Cl. 254—184.)

1. In a scaffold, a support embodying an outrigger frame, a pair of upright supporting plates attached to and projecting upwardly from the inboard end of said frame and having means to facilitate journalling of winding drums thereon, said supporting plates also having pairs of opposed inwardly projecting vertical flanges on the upper portions thereof, and a transverse plate rigidly secured to and connecting each pair of vertical flanges to prevent relative spreading of said supporting plates.



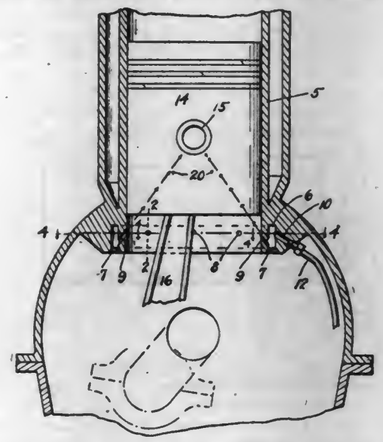
1,816,515. ADJUSTABLE SPOUT. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Automatic Cashier Co., Watertown, Wis. Filed Apr. 9, 1926. Serial No. 100,903. 5 Claims. (Cl. 133—1.)



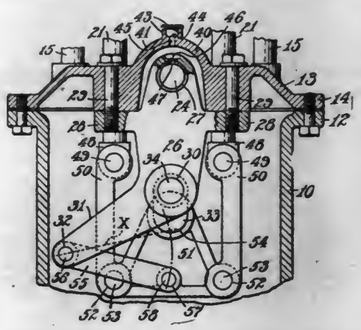
5. The combination of a coin machine, a coin delivery spout comprising a bracket for attachment to one wall of the machine, said bracket having an opening in communication with the machine, an opening in the bottom of the bracket, a downwardly inclined trough provided with an opening in its lower end and having its upper end adjustably connected to said bracket and alined with its bottom opening, and a receiving cup adjustably carried by the lower end of said trough and alined with the opening therein.

1,816,516. PISTON AND CYLINDER OILING SYSTEM FOR INTERNAL COMBUSTION ENGINES. JOHN CLEMENT, Albany, Tex. Filed June 24, 1929. Serial No. 373,292. 1 Claim. (Cl. 184—18.)

An oiling device for an internal combustion engine comprising, in combination, a piston, a cylinder in which said piston is operable, said cylinder having its lower edge formed with an annular passage, said passage having circumferentially spaced oil ports extending through its internal walls of the cylinder for lubricating the contacting walls of the cylinder and piston, the ports being uncovered by the piston when the piston is above its lowest limit of movement, certain of said ports radiating inwardly at right angles to the axis of the cylinder and certain other ports slanting upwardly and inwardly for directing cross streams of oil in the path of the piston and intersecting in the line of and at right angles to the vertical travel of the wrist pin of the piston for feeding oil to the said pin, and a closure ring threadedly engaged in the open bottom of the said passage.



1,816,517. PUMP MECHANISM. STUART DEAN, Indianapolis, Ind., assignor to Dean Brothers Company, Indianapolis, Ind., a Corporation. Filed Sept. 16, 1927. Serial No. 219,868. 1 Claim. (Cl. 74—14.)

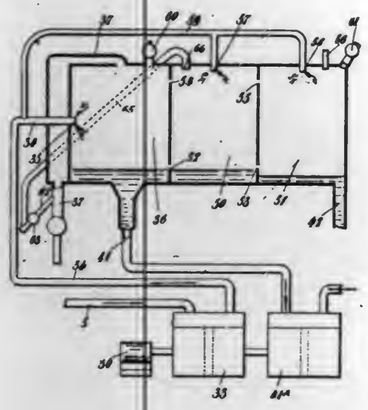


In a pump mechanism, a pair of vertically disposed piston rods mounted for parallel reciprocating movement, a pair of links each pivoted at one end to a piston rod, a crank shaft disposed midway between said rods, a triangular actuator pivotally connected at its upper vertex to said crank shaft, the lower vertices of said actuator being in true vertical alinement with said rods when the upper vertex is disposed midway between the same, the said links pivoted one to each of said lower vertices, an anchoring link pivoted at one end to said actuator midway between said lower vertices and at its opposite end to a stationary support laterally beyond one of said links, and means for rotating said crank shaft.

1,816,518. FEED WATER HEATER. PAUL DUGELAY, Le Bourget, France, assignor to Societe Francaise des Pompes et Machines Worthington, Paris, France, a Joint-Stock Company of France. Filed Jan. 31, 1930, Serial No. 425,017, and in France Feb. 22, 1929. 3 Claims. (Cl. 261—115.)

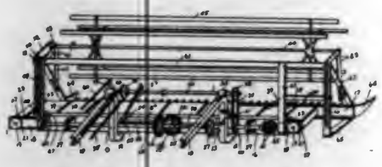
1. In a device for heating feed water, the combination with a principal heater-condenser including a cold water

inlet, a steam inlet and a warm water outlet, of means for delivering cold water to said condenser, a plurality of intercommunicating auxiliary condensers, the first of which communicates with the principal condenser from which it receives the excess water and the non-condensed steam while the last returns the excess water to said



cold water delivery means, each of said auxiliary condensers having a cold water inlet whereby the steam flowing from one condenser to another is progressively condensed so that the last condenser is practically at atmospheric pressure without any loss of steam to the outside air.

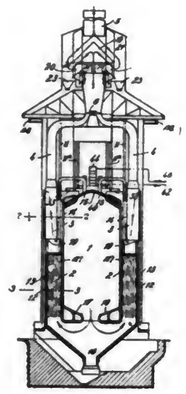
1,816,519. HARVESTING MACHINE. LON R. EWING, Kokomo, and THOMAS J. MECHLING, Burlington, Ind. Filed June 28, 1929. Serial No. 374,553. 2 Claims. (Cl. 56—23.)



1. In a harvesting machine having grain-cutting elements, the combination of a framework movable respectively of said cutting elements, a conveyor carried upon said framework adapted to receive cut grain from said cutting elements and to discharge the same in a windrow at the side of the machine, means for reversing the travel of said conveyor, a trackway for said framework comprising a pair of oppositely-positioned channel-shaped members, and means for moving said framework upon said trackway whereby the windrow may be selectively placed at either side of the machine.

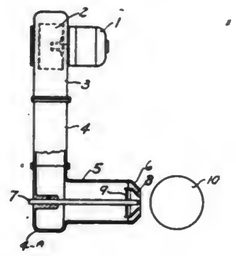
1,816,520. HIGH PRESSURE TUBULAR BOILER. MARTIN ECLE, Berlin-Spandau, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Nov. 14, 1927, Serial No. 233,164, and in Germany Nov. 18, 1926. 14 Claims. (Cl. 122—235.)

1. A tubular steam generator for generating steam at high pressure and temperature, having a combustion chamber of symmetrical cross-sectional contour with respect to its axis and having its walls composed of a closely spaced row of steam generating tubes, and a plurality of substantially radial walls forming combustion gas chambers spaced around said combustion chamber and containing further



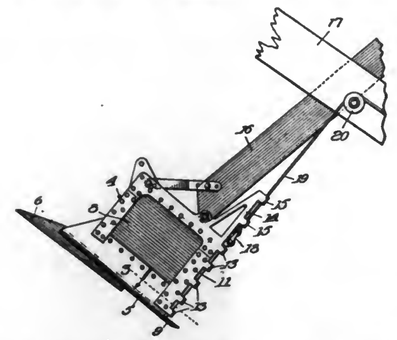
heat absorbing tubes, so that said chambers directly receive the combustion gases from said combustion chamber, the total of the liquid being converted into vapor in the tubes which form the combustion chamber, the heat absorbing tubes in alternate gas chambers acting as steam superheaters and steam re-superheaters.

1,816,521. MECHANICAL ADVERTISING DEVICE. JOSEPH P. FEELEY, New York, N. Y., assignor to Electrol Incorporated, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 9, 1930. Serial No. 487,528. 2 Claims. (Cl. 40—127.)



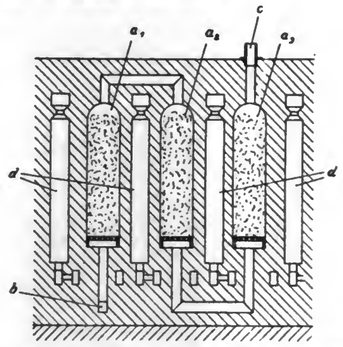
1. In an advertising device, an air nozzle, an air filled balloon arranged to cooperate with said nozzle, means for producing and rapidly rotating a body of air and ejecting said air from the nozzle orifice in a substantially horizontal direction, a cone-shaped member arranged within the air nozzle near the nozzle orifice so that when a rotating body of air is ejected, substantially horizontally, from the nozzle orifice, the air filled balloon will be supported and rotated by said air stream.

1,816,522. DIPPER BUCKET. EARL H. FUNDOM, Lima, Ohio, assignor to Pettibone Mulliken Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 4, 1929. Serial No. 404,776. 4 Claims. (Cl. 37—141.)



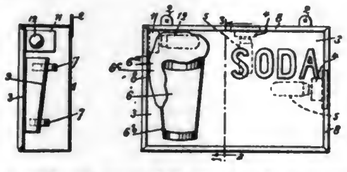
1. A dipper bucket having a digging portion at its upper edge and provided at its lower portion with a scraper element extending below the bottom of the bucket, for the purpose set forth.

1,816,523. PRODUCTION OF HYDROGEN. WILHELM GLUUD, KONRAD KELLER, ROBERT SCHÖNFELDER, and WALTER KLEMPT, Dortmund-Eving, Germany, assignors to the Firm: Bergwerksverband zur Verwertung von Schutzrechten der Kohlentechnik, Gesellschaft mit beschränkter Haftung, Dortmund-Eving, Germany. Filed July 20, 1927, Serial No. 207,211, and in Germany July 30, 1926. 4 Claims. (Cl. 23—213.)



1. In the production of hydrogen, a process which comprises passing gases containing carbon monoxid mixed with steam in volume substantially equal to that of the carbon monoxid over bodies of burnt lime containing magnesium oxid.

1,816,524. ILLUMINATED SHOW CASE. FIRMIN GOSSART, Paris, France. Filed Dec. 6, 1929, Serial No. 412,192, and in Great Britain Sept. 27, 1929. 6 Claims. (Cl. 40—132.)



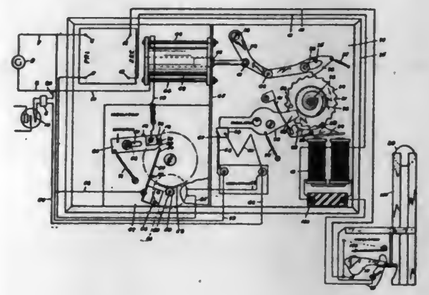
1. An illuminated show case comprising, in combination, an opaque box having a translucent side a portion of which is transparent, the outline of this transparent portion delineating a partial representation of a transparent commodity-containing vessel, an opaque arched background member supported inside the box opposite the vessel representation so as to inwardly bulge therefrom and having a reflecting concave surface so patterned and tinted as to stimulate the commodity, and a source of light located in the box in alignment with the gap between the background member and the vessel representation.

1,816,525. PROCESS OF WASHING GASES AND VAPORS. RICHARD GUTENSOHN, Frankfort-Hochst-on-the-Main, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 13, 1928, Serial No. 285,212, and in Germany June 29, 1927. 7 Claims. (Cl. 183—121.)

1. In a process for removing solid impurities from gases and vapors by treating them with a washing liquid, the improvement which comprises adding to the washing liquid an organic sulfonic acid.

5. In a process for removing solid impurities from gases and vapors by treating them with a washing liquid, the improvement which comprises adding to the washing liquid a wetting agent in combination with an organic solvent.

1,816,526. TIME CONTROLLED COIN DEVICE FOR RADIOCIRCUITS. LOUIS M. HALL, Fort Thomas, Ky., assignor to The Monarch Tool & Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 26, 1929. Serial No. 395,359. 3 Claims. (Cl. 161—1.)

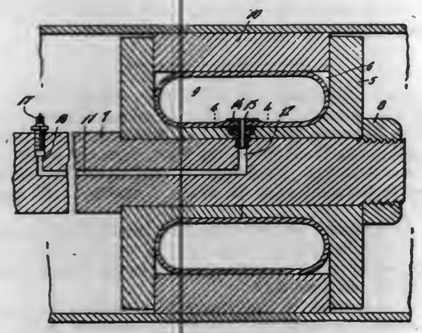


1. In combination an electrical circuit including an energizable element and a pair of electrical contacts, one of the contacts being substantially stationary, a contact supporting arm arranged for linear and rotatory movement and having the other contact fixed thereon, an electrically driven motor, a gear driven by the motor, means on the gear for cooperating with the arm and imparting thereto linear and rotatory movement for placing the contact of the arm in an operative position with respect to the stationary contact, and means for sliding one contact across the other upon predetermined movement of the gear, for closing the electrical circuit through the energizable element.

1,816,527. PUMP PISTON. ODIE L. HASTINGS, Shreveport, La. Filed Nov. 14, 1929. Serial No. 407,091. 1 Claim. (Cl. 74—109.)

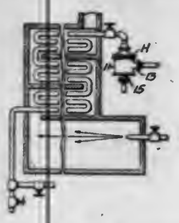
A pump piston of the character described comprising a rod having a reduced end portion providing a shoulder, said reduced portion having a threaded free end portion, the rod further having a longitudinal duct therein extending from the unreduced portion into the reduced portion thereof and terminating in angular, threaded end portions communicating with the periphery of the rod, a piston having

a circumferential channel therein and comprising a pair of complementary half sections mounted on the reduced portion, a nut threaded on the threaded portion and in conjunction with the shoulder, constituting means for clamping the sections together in position on the reduced portion, a hollow flanged plug extending through the abut-



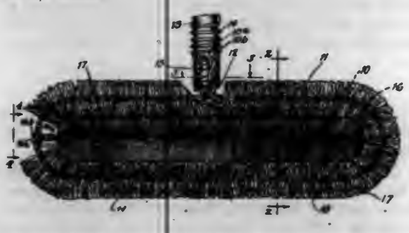
ting sides of the sections and threaded into the adjacent end portions of the duct, an angular inflatable tube disposed in the channel, a nipple anchored in the tube and extending therefrom into the plug for establishing communication between the tube and the duct, and a check valve threaded into the other end portion of the duct.

1,816,528. MIXER HEAD. ARTHUR R. HAYSEL, Los Angeles, Calif., assignor of forty-nine one-hundredths to Charles Thompson and George K. Thompson, copartners in trade, doing business under the firm name and style of Chas. & Geo. K. Thompson, Los Angeles, Calif. Filed Sept. 28, 1927. Serial No. 222,622. 10 Claims. (Cl. 261—79.)



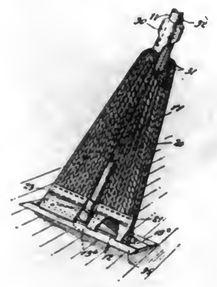
1. A mixer head comprising a turbulence chamber; a plurality of spaced telescoped intake nozzles in communication with said chamber, one of which is rifled; an apertured channeled baffle plate in alinement with said nozzles; and a funnel shaped exit head.

1,816,529. DRY MOP. HARRY HERTZBERG, Brooklyn, N. Y. Filed Feb. 27, 1929. Serial No. 343,073. 4 Claims. (Cl. 15—228.)



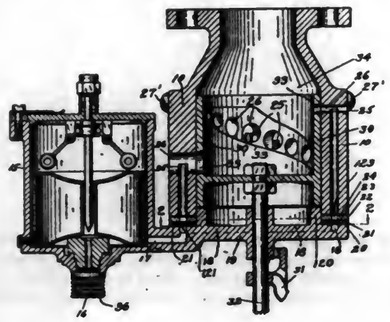
1. A mop head comprising a handle engaging part, a mop handle, a looped frame held by the handle engaging part, soft, absorbent mop material on said frame, a shaft traversing said loop having its ends fastened thereto perpendicularly to said mop handle and bristles adapted for sharp cleaning action on said shaft within the hollow portion of said loop.

1,816,530. SQUEEGEE MOP WITH WRINGER. HARRY HERTZBERG, Brooklyn, N. Y. Filed Nov. 14, 1929. Serial No. 407,108. 6 Claims. (Cl. 15—120.)



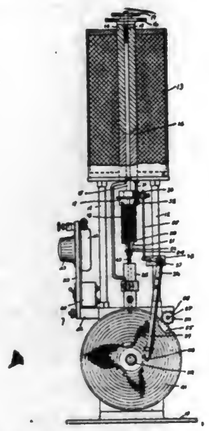
3. In a device of the kind described, a handle bar, a pair of parallel metallic plates held at one end of said handle bar each of said plates having two arms extending perpendicular to the mop handle axis in opposite directions therefrom, means to hold said plates in fixed relation to each other, a bolt extending axially from said handle bar passing through apertures in said plates, mop fabric interposed between said plates forming a separate loop around each arm of one of said plates and mop cords sewed to said mop fabric.

1,816,531. CARBURETOR. JOHN H. HOLLOWAY, La Fayette, Ind. Filed June 21, 1926. Serial No. 117,514. 1 Claim. (Cl. 261—41.)



A carburetor including a hollow cylindrical throttle having a substantially polygonal opening therein, a casing including a plurality of air passageways therethrough arranged in linear relation and with increasing area and adapted for progressive registration with the throttle opening, a fuel supplying jet in each of said passageways, an air vent passage and a fuel storage reservoir communicating with each jet, said casing including a fuel supply channel common to all jets, a plate having ports therein communicating with the channel and jets and forming a cover for said channel, and another plate having elongated slots therein, each slot communicating with a port of said first mentioned plate and a jet and an air vent passage, said slots connecting each jet and an air vent passage and the fuel supply channel and forming a fuel reservoir.

1,816,532. INDICATING AND RECORDING INSTRUMENT FOR TESTING PISTON RINGS AND THE LIKE. JOHN H. HOLLOWAY, Lafayette, Ind. Filed Aug. 5, 1927. Serial No. 210,853. 17 Claims. (Cl. 265—2.)

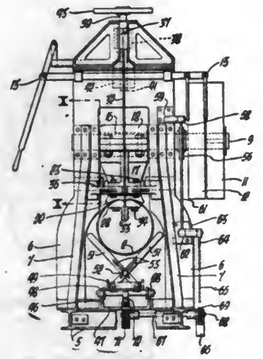


1. In a testing instrument, the combination of a support for an article to be tested, means for engaging said article, means intermittently exerting a pressure sufficient to overcome the resisting force of said article, and an electric circuit controlling said intermittent pressure means and controlled by the movement of the article engaging means.

1,816,533. PROCESS OF PURIFYING GASES. WILBERT J. HUFF and CHARLES GORDON MILBOURNE, Baltimore, Md., said Milbourne assignor to said Huff. Filed July 17, 1929. Serial No. 379,063. 4 Claims. (Cl. 23—3.)

1. The process of removing hydrogen sulfide from gases by reaction with solid material containing iron oxide which consists in passing the gases over said solid material while the humidity of the gases is controlled at constant fixed points between 45 and 95 per cent.

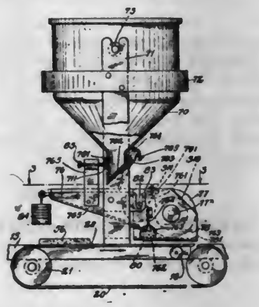
1,816,534. SHAPING THE MEETING EDGES OF CURVED BLANKS IN THE MANUFACTURE OF SHEET METAL PIPES AND THE LIKE. WALTER REGINALD HUME, Melbourne, Victoria, Australia. Filed June 6, 1928, Serial No. 283,356, and in Australia June 27, 1927. 13 Claims. (Cl. 113—33.)



1. A method of treating the meeting edge portions of curved sheet metal blanks in the manufacture of pipes and like hollow bodies, consisting in pressing or bending said edge portions of a curved blank slightly inwards prior to uniting said edge portions so that they may spring outwardly to assume the desired curvature upon release of such pressure, and subseqently pressing said edge portions against a stop face or abutment whereby they are held in coinciding arcuate formation with the meeting edges abutting against each other preparatory to being welded along the line of said edges.

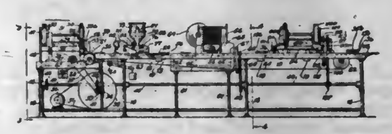
4. Apparatus for treating curved sheet metal blanks in the manufacture of pipes and other hollow bodies, comprising co-operating upper or outer and lower or inner die members, said outer die member having a concave working face provided with a central longitudinally extending ridge or projection approximately in shape to an obtuse angled V, adapted to contact with the outer surfaces of the longitudinal meeting edge portions of a blank, said inner die member having a convex working face provided with a groove or recess which conforms approximately in disposition and contour to said ridge and is adapted to contact with the inner surfaces of said meeting edge portions, and means for forcing said die members towards one another whereby said meeting edge portions of the blank are bent slightly inwards.

1,816,535. DEVICE FOR SPREADING BUTTER. MARTIN JOACHIMSON, New York, N. Y. Filed June 16, 1927. Serial No. 199,268. 12 Claims. (Cl. 91—49.)



1. In a device of the kind described, a container for holding spreadable material, a roller mounted to rotate within the material held in said container, a support for bread slices arranged to hold the slices against said roller and means for operating said roller and said support continuously, said container being mounted to bring said roller to bear upon the slices on said support by the gravity of said container and roller.

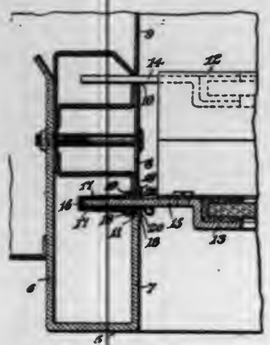
1,816,536. MACHINE FOR MAKING SANDWICHES. MARTIN JOACHIMSON, New York, N. Y. Filed June 16, 1927. Serial No. 199,269. 15 Claims. (Cl. 107—1.)



1. In a machine of the kind described the combination of a support adapted to hold a plurality of bread slices, means to move said support and the slices thereon, yieldingly mounted above said support rotatable means for applying butter upon the bread slices and for preserving the position of each bread slice on said support, means for placing meat on each bread slice, means delivering a second bread slice upon said meat slice, said meat placing means and said bread delivery means being each provided with continuously operating means to deliver slices at

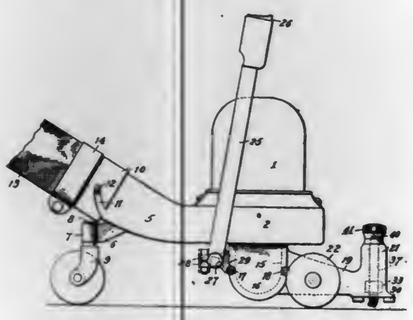
equal intervals, common means for operating said support and said delivery means in timed relation and connecting means adapted for varying the time between deliveries of said meat placing device and said bread delivery means.

1,816,537. WINDOW STRUCTURE. JULIUS KAHN, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Feb. 4, 1930. Serial No. 425,861. 9 Claims. (Cl. 189—65.)



1. In combination with a hollow window frame having a wall provided with a guide slot and a sash having a guide slidably engaged in the slot, of a trough-shaped weather shield forming a closed channel behind the slot and embracing the portion of the guide engaged therein, and having its opposite sides engaged in the slot on opposite sides of the guide therein.

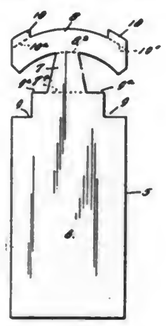
1,816,538. CARPET AND FLOOR CLEANER. BERNARD KERN, Syracuse, N. Y. Filed Jan. 26, 1927. Serial No. 163,730. 5 Claims. (Cl. 15—157.)



1. A machine of the character described including a nozzle having an elongated air passage therein, and a depending longitudinally extending lip on each side of the passage, the ends of said lips terminating inwardly of the ends of the passage on both sides thereof.

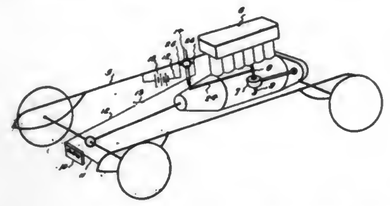
1,816,539. SHIRT FORM. BENJAMIN LERMAN, Chicago, Ill. Filed Aug. 8, 1930. Serial No. 474,039. 1 Claim. (Cl. 223—18.6.)

In a one piece laundry form of the class described, a rectangular body portion, an arcuate collar supporting portion and a portion connecting said body portion and said collar supporting portion, said body portion and collar portion being adapted to be folded in the same direction at the junctures of said collar portion and said



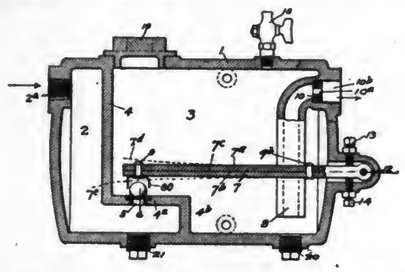
body portion with the connecting portion, tabs on the collar engaging portion adapted to engage with the body portion when the device is in folded position.

1,816,540. SPEED REDUCTION SIGNAL. CHARLES T. MAGILL, Clarkdale, Ariz. Filed July 14, 1927. Serial No. 205,675. 2 Claims. (Cl. 177—311.5.)



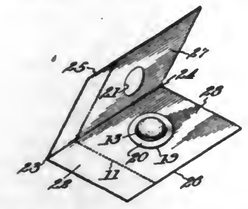
1. In an automobile, a motor, lubricating means for said motor having a pump driven by said motor, and a speed reduction warning signal for the drivers of following machines, and means controlled by the oil pressure out-put of said pump for operating said signal upon any decrease of motor speed, whereby any decrease of motor speed will operate said signal to give warning to the drivers of following machines.

1,816,541. STEAM TRAP. GEORGE F. MCDOUGALL, Portland, Oreg. Filed Aug. 4, 1930. Serial No. 472,918. 5 Claims. (Cl. 236—59.)



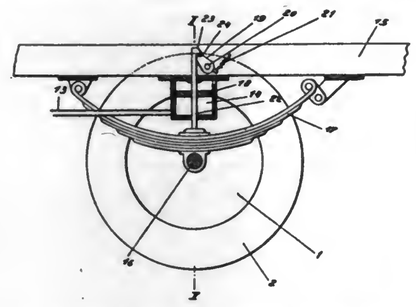
1. In a steam trap, a receiving compartment and a discharge compartment and a voluntary valve between the two said compartments, and a thermostatic bar control for said valve, said valve being located in the discharge compartment, in combination with a discharge outlet for said discharge compartment having less capacity than said valve.

1,816,542. DISPENSING DEVICE FOR SMALL COMMODITIES. MAX MELLIN, Wiesdorf-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 8, 1929, Serial No. 338,553, and in Germany Feb. 17, 1928. 3 Claims. (Cl. 206—56.)



1. A dispensing device for small commodities comprising a strip composed of superposed sheets of paper secured together face to face, a plurality of receptacles for the commodity in the strip, each of said receptacles consisting of two complementary parts one of which is carried by each of said sheets in an aperture therein, said parts being held in cooperating receptacle-closing relation by the uniting of said sheets of paper, and means between successive receptacles to facilitate severing of the strip.

1,816,543. AUTOMATIC DEVICE FOR RAISING THE WHEELS AT THE DESIRED LEVEL IN CASE OF PUNCTURE OF THE PNEUMATIC TIRE. ANDRÉ JULES MICHELIN, Paris, France, assignor to Michelin et Cie., Clermont-Ferrand, France, a Corporation of France. Filed Nov. 10, 1930, Serial No. 494,770, and in France Dec. 2, 1929. 5 Claims. (Cl. 105—218.)



5. An automatic device for raising the wheels of railway vehicles fitted with pneumatic tires in the event of one of these tires becoming deflated while in use, which comprises a compressed air reservoir, a vertical cylinder fixed to the vehicle frame, a piston adapted to slide within said cylinder, a piston rod extending on both sides of the cylinder and the lower end of which is secured to the wheel axle, a slide valve for admitting compressed air from the reservoir into the lower chamber of the cylinder, a deflation indicator connected with the pneumatic tire for operating said valve, a tooth at the upper end of the piston rod, and a pawl on the vehicle frame adapted to cooperate with said tooth for keeping the wheel in its raised position.

1,816,544. COWLING FOR AIR-COOLED INTERNAL COMBUSTION ENGINES. JOHN DUDLEY NORTH, Norwich, England, assignor to Boulton & Paul Limited, Norwich, England. Filed Jan. 21, 1931, Serial No. 510,313, and in Great Britain Apr. 10, 1930. 8 Claims. (Cl. 244—31.)

1. A cowling for air-cooled internal combustion engines formed with an annular outer portion shaped to provide a streamline flow for air over its upper surface, an annular inner portion shaped to provide a streamline flow for air over its inner surface, said annular inner portion



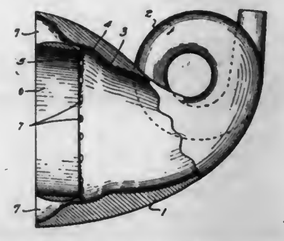
terminating between the ends of said annular outer portion, and an outwardly extending annular part located at an angle to the annular inner portion and connected to the inner surface of the annular outer portion.

1,816,545. CRAYON HOLDER. WAYLAND R. PORTER, Hanover, N. H. Filed Oct. 10, 1928. Serial No. 311,595. 5 Claims. (Cl. 120—13.)



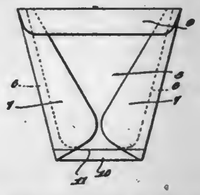
1. A crayon holder of the character described, comprising a hollow crayon carrying member, a hollow handle in which said member is telescopically mounted and which is adapted to carry a reserve piece of crayon loosely positioned therewithin and readily removed therefrom, and adapted to contact with the active crayon and feed the active crayon from the holder when the crayon carrying member is pushed into the handle.

1,816,546. HORN OR AMPLIFIER. SVERRE RASMUSSEN, New York, N. Y. Filed Apr. 5, 1930. Serial No. 441,920. 6 Claims. (Cl. 181—27.)



1. In an amplifier, a main amplifying chamber having an annular wall, and a plurality of auxiliary amplifying chambers distributed within the wall of the main chamber.

1,816,547. DRINKING CUP. WILLIAM A. RINGLER, Philadelphia, Pa., assignor to Individual Drinking Cup Company, Inc., Easton, Pa., a Corporation of Pennsylvania. Original application filed Apr. 18, 1924, Serial No. 707,355. Divided and this application filed July 13, 1928. Serial No. 292,470. 8 Claims. (Cl. 229—53.)



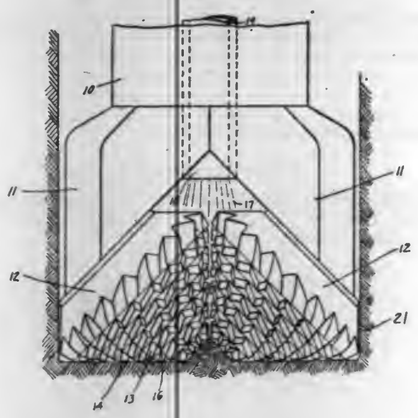
1. A paper cup adapted to be nested with similar cups, and said cup having a lower marginal portion thereof folded laterally to extend to one side of the body of the cup and constituting a handle portion, and said handle portion lying flat against the adjoining side wall of the cup when the cup is nested within another cup.

1,816,548. SIMPLIFIED RULE. LOUIS ROBIDOUX, Flint, Mich., assignor to Theresa Robidoux, Providence County, R. I. Filed May 31, 1928. Serial No. 281,883. 5 Claims. (Cl. 33—111.)



5. In a rule, a graduation spaced from the end of the rule and a series of succeeding graduations each adjacent two being spaced apart twice the distance between the first graduation and the end of the rule.

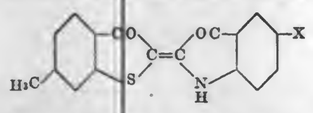
1,816,549. DRILL FOR WELLS. WILLIAM CARLETON STARKEY, Indianapolis, Ind. Filed Aug. 30, 1928. Serial No. 302,894. 1 Claim. (Cl. 255—71.)



A rotary drill having a pair of conical cutters each mounted thereon to rotate on axes at right angles to each other, each of said cutters being provided with a plurality of cutting teeth arranged in concentric rows thereon, said concentric rows being interrupted by spiral channels extending from the apex to the base of their respective cutters, the spiral channels on the said cutters being right and left handed respectively, the teeth thus formed on each cutter having short chisel-like cutting edges lying entirely within the same conical surface of its respective cutter.

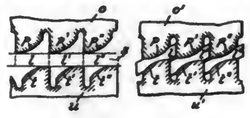
1,816,550. INDIGOID VAT DYESTUFFS. NORBERT STEIGER, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 11, 1930, Serial No. 443,621, and in Germany Apr. 22, 1929. 2 Claims. (Cl. 260—49.)

1. As new compounds the asymmetrical indigoid vat dyestuffs corresponding to the general formula:



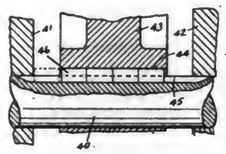
(wherein X means chlorine or bromine), which compounds are violettish black powders dyeing and printing wool and cotton grey shades of a very good fastness, especially to light and exposure.

1,816,551. NUT LOCK. WILHELM STEINHORST, Leipzig, Germany. Filed Dec. 7, 1929, Serial No. 413,557, and in Germany Dec. 8, 1928. 1 Claim. (Cl. 10—73.)



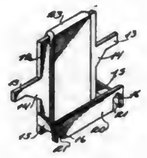
In a tool for producing a nut lock washer of the type set forth including in combination a pair of crown shaped dies having working faces of identical form and being cooperatively associated in opposed position to each other, so as to be capable of being axially movable relatively to each other and at the same time to be displaceable through an angle relatively to each other, the said working faces having convex shaped teeth, which are spaced from each other, their angular displacement being commensurate to the spaces between the said teeth.

1,816,552. GEAR TIMING SYSTEM. EDMUND B. TRUSLER, Connersville, Ind. Filed Mar. 11, 1929. Serial No. 345,907. 1 Claim. (Cl. 74—41.)



In combination with a shaft, a pair of spaced bearings, said shaft having an elongated keyway therein extending substantially from bearing to bearing, a rotatable member having a complementary keyway and mounted upon said shaft between said bearings with predetermined longitudinal clearance, and a plurality of identical unit length keys each receivable by both keyways for keying the rotatable member to the shaft and each of a length less than said clearance permitting unit key reception and removal from the keyways.

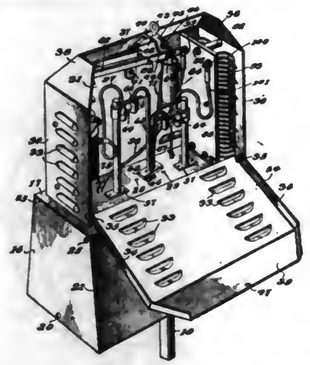
1,816,553. COUNTER BALANCE MOISTENER. WILLIAM A. UTTZ, Sr., Cleveland, Ohio. Original application filed Mar. 4, 1927, Serial No. 172,712. Divided and this application filed Sept. 11, 1929. Serial No. 391,841. 2 Claims. (Cl. 91—14.5.)



1. In a moistener for gummed tape machines, a flat body having its upper and lower edges notched to provide pairs of spaced web positioning lugs, weight arms extending rearwardly from the body and provided with notches in their upper edges adjacent their free ends, a weight spanning said arms and having notches in its under surface cooperating with the first notches, and trunnions extending laterally from said body above said weight arms.

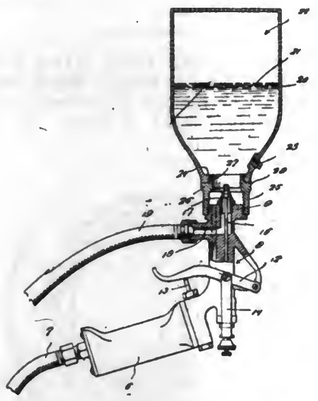
1,816,554. ARC LAMP. JAMES H. WAGENHORST, Detroit, Mich. Filed June 1, 1929. Serial No. 367,730. 27 Claims. (Cl. 176—58.)

1. In an arc lamp, the combination of a pair of stationary electrodes, a pair of movable electrodes having rod-like portions constituting extensions thereof, a single clutch coacting with said rod-like extensions and means for actuating said clutch.



25. In an arc lamp, the combination of a reflector having rigid top and bottom walls, and a support for the reflector comprising a central staff extending snugly through the bottom wall and secured to and supporting the reflector from its top wall.

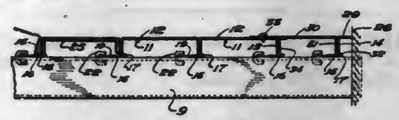
1,816,555. SPRAY GUN, AND CLEANING MEANS THEREFOR. ERNEST A. WARD, Higginsville, Mo. Filed Feb. 11, 1929. Serial No. 339,156. 4 Claims. (Cl. 91—45.)



1. In a spray gun having a distributing head and air and liquid passages opening through said head, successively operable valve means for controlling said passages, air and liquid lines connected with the intake ends of said passages, means for cleaning the spray gun consisting of a closed container detachably connected with said head and adapted to contain a solution, whereby when said passages are opened, the air will pass through the liquid in the container and force the liquid from the container back through the liquid passage and liquid line connected therewith.

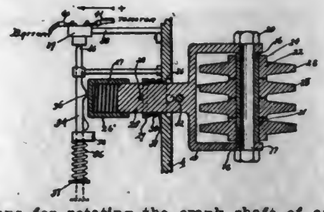
4. A process for cleaning spray guns having a distributing head and air and liquid passages opening through said head, consisting of attaching a receptacle for cleaning fluid to said distributing head, and providing means to utilize the compressed air supplied to the gun for forcing the cleaning fluid from said receptacle through the liquid passages of the spray gun in a direction reverse to that in which material is normally forced through the gun for spraying.

1,816,556. METALLIC DECK STRUCTURE. HERBERT E. WHITE, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Oct. 26, 1928. Serial No. 315,311. 10 Claims. (Cl. 108—13.)



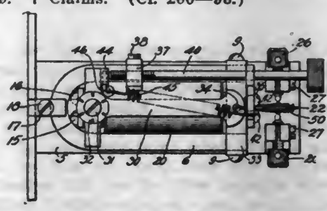
10. A deck structure of the character set forth, comprising flanged carrying beams, metallic deck strips laid across the beams and having outstanding flanges, clip plates that lie on the beams and extend over the flanges of the deck strips, said clip plates having downturned stop portions that abut the edges of the beam flanges and stop short of the portions of the plates that overlie the beam flanges, and separate retaining yokes extending over the portions of the clip plates that lie on the beam flanges and extending under the flanges to grip the clip plates and clamp them on the beam flanges.

1,816,557. INTERNAL COMBUSTION ENGINE STARTING MECHANISM. VICTOR F. ZAHODIAKIN, Cincinnati, Ohio. Filed Sept. 11, 1929. Serial No. 391,797. 2 Claims. (Cl. 74—7.)



1. Means for rotating the crank shaft of an internal combustion engine comprising a rotatable power input member having a tapered groove therein, a rotatable power output member having a taper groove therein and operatively connected with said crank shaft, rotatable means intermediate said input and output members and having tapered means, means to rotate said input member and manually operative means to move said means having tapered means in contact with said input member and said output member with said tapered means in said grooves, whereby power is transmitted from said input member to said output member, said manual operative means comprising a rod slidably mounted in the casing of said engine and having a projection thereon, an arm connecting with said means having tapered means, said arm being slidably mounted adjacent said engine, a cap on the end of said arm, resilient means intermediate said cap and said arm whereby movement of said rod with said projection and contact with said cap forces said last mentioned tapered means in said grooves.

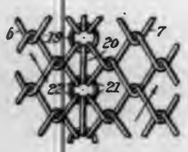
1,816,558. ELECTROMAGNETIC DEVICE. FRANK A. ZUPA, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 6, 1928. Serial No. 290,809. 7 Claims. (Cl. 200—93.)



1. A polarized relay having a permanent magnet, an armature, said armature being under the influence of the

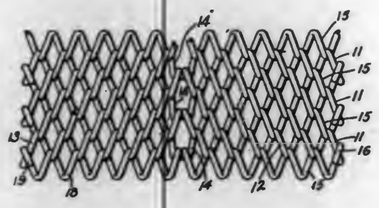
magnetic field of said permanent magnet, contacts for said armature, and means independent of said armature and said contacts for varying the field strength of said magnet to effect a bias on said armature.

1,816,559. CONVEYER BELT. JOHN C. ANDERSON, Keyport, N. J. Filed July 23, 1927. Serial No. 207,844. 15 Claims. (Cl. 198—193.)



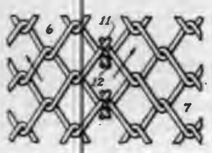
1. Conveyer belt structure comprising a pair of longitudinally-extending sections each composed of helically wound wires extending transversely of the belt and having a surface diagonally ribbed along lines at angles to the ribs on the other, and link connections independent of said helically wound wires between adjacent edges of said sections.

1,816,560. CONVEYER BELT. JOHN C. ANDERSON, Keyport, N. J. Filed Jan. 2, 1929. Serial No. 329,922. 4 Claims. (Cl. 198—193.)



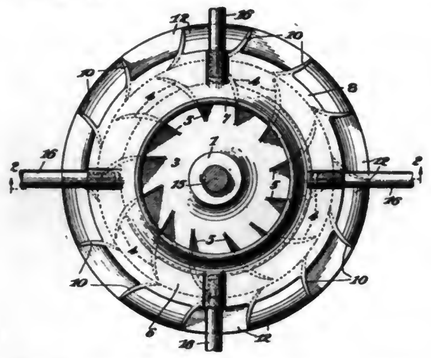
2. In conveyer belt structure, wires extending transversely of a conveyer, said wires being formed of spirals, and each having one portion thereof with a spiral reversed as to another portion, and additional wires connected to the first-named wires.

1,816,561. CONVEYER BELT. JOHN C. ANDERSON, Keyport, N. J. Original application filed July 23, 1927, Serial No. 207,844. Divided and this application filed Apr. 2, 1929. Serial No. 351,857. 3 Claims. (Cl. 198—193.)



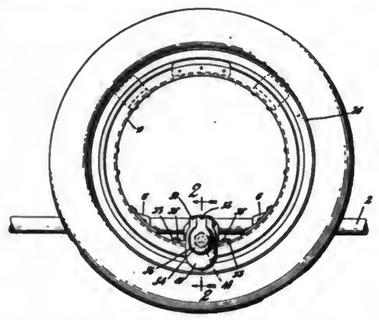
1. A woven wire conveyer composed of two longitudinal sections joined together substantially at a longitudinal center line of the conveyer, each section being composed of a plurality of interwoven helically wound wires extending transversely of the section, the wires of one section having a right hand twist and those of the other section having a left hand twist, the said belt being assembled with adajcent wires of the two sections in line transversely of the belt, the inner ends of each pair of adjacent wires being directly connected together independently of the connection between other wires.

1,816,562. MIXING APPARATUS. HENRY S. BEEBS, Westport, Conn., assignor to The Turbo-Mixer Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 10, 1930. Serial No. 419,799. 4 Claims. (Cl. 259—96.)



1. Mixing apparatus comprising a rotary bladed impeller including vertical blades of duplex type; and a stationary deflector forming in co-operation with the impeller bladea an annular flow nozzle, said deflector comprising vertical deflector blades intermediate and supported by said plates, and additional flow directing blades substantially perpendicular to the deflecting blades and supported by said deflecting blades, said additional blades being inclined alternately at upward and downward angles to cause the discharged material to flow in corresponding directions in radial planes.

1,816,563. TIRE CARRIER LOCK. LLOYD BLACKMORE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,777. 8 Claims. (Cl. 70—122.)

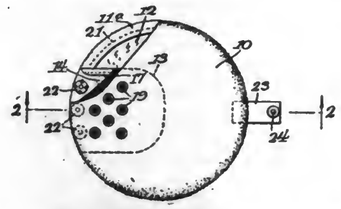


1. In a tire carrier lock, a frame for receiving the tire rim, means for rigidly securing said rim to said frame, a hinged covering over said means, a lock in the hinged connection controlling a pin adapted to move from one part of the hinged connection into the other to lock or unlock the connection.

1,816,564. MANUFACTURE OF CELLULOSE ACETATE. LLOYD M. BURGHART, Baltimore, Md., assignor to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed Feb. 24, 1928. Serial No. 256,817. 8 Claims. (Cl. 260—101.)

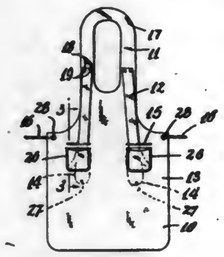
1. The process of making cellulose acetate which comprises treating the material to be acetylated with an acetylating bath containing liquid sulfur dioxid.

1,816,565. POWDER PUFF. NORMA MCDONALD BURMEISTER, Chicago, Ill. Filed Nov. 28, 1928. Serial No. 322,316. 4 Claims. (Cl. 132—785.)



4. In a powder puff, an outside cover, an inner body forming material having a small area of less thickness than the major portion thereof, a powder magazine in the form of a pocket comprising an imperforate cloth on one side and screen material on the other and disposed inside the cover in said small area, said magazine having an opening for inserting powder, means for normally retaining said opening closed, having openings through the outer cover, and means for keeping said puff in a folded position to cover the openings in said outside cover when the puff is not in use.

1,816,566. COMBINATION APRON AND MITTEN. CHARLES S. BURSTEIN and NATHAN SATTLER, New York, N. Y. Filed July 2, 1930. Serial No. 465,289. 4 Claims. (Cl. 2—48.)



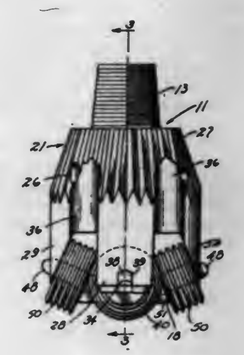
4. An apron having shoulder straps, mitten support straps detachably mounted on said shoulder straps and extending to the lap portion of the apron, mittens on the free ends of said mitten straps, said apron being formed with slots so that said mittens may be engaged therethrough and be behind said apron and out of sight, and means for simultaneously clamping the mittens in their positions to the rear of said apron upon lateral movements away from each other and releasing said mittens upon further lateral simultaneous movements, comprising flat rigid members attached on the rear of the apron and spaced from each other and located in the vicinity of the free ends of the mittens when inserted through the slots, and springs attached at their bottom ends on said flat members and extending upwards and having bulged intermediate portions, and pointed rods attached upon the free ends of the mittens for engagement behind the bulged portions of the springs upon lateral movement of the mittens away from each other.

1,816,567. GREASE GUN COUPLING. CLYDE G. BUTLER, Cincinnati, Ohio, assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 26, 1928. Serial No. 264,734. 6 Claims. (Cl. 284—19.)

1. A quick detachable coupling for lubricating apparatus comprising a nozzle body, an inwardly opening check valve normally preventing flow of lubricant from said nozzle, axially slidable means for opening said valve, means carried by said axially slidable means non-rotatable with respect to said body for making a mechanical connection with a lubricant-receiving fitting, a sleeve rotatable and axially slidable with respect to said body, and cooperative means on said sleeve, said nozzle body, and said axially slidable means for compelling actuation of said coupling means prior to the actuation of said valve opening means, said cooperative means including a longitudinal slot in said nozzle body, a pair of oblique slots in said sleeve, a pin secured in said body and projecting into one of said oblique slots, and a second pin secured in said axially slidable means and projecting through said longitudinal slot and into the other of said oblique slots.



1,816,568. DRILL BIT. ANTHONY E. CARLSON, Los Angeles, Calif., assignor, by direct and mesne assignments, to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed June 5, 1929. Serial No. 368,483. 10 Claims. (Cl. 255—71.)



1. In a drill bit, the combination of: a drill body having an upper end for connection to a drill stem; a removable protective member extending downwardly to the lowermost portion of and surrounding said drill body; means for preventing relative movement between said drill body and said protective member; and a cutter secured to said drill body.

1,816,569. FLUID DISPENSING APPARATUS. LEO DEUTSCH, Beaver, and GEORGE J. GENUNG, Rochester, Pa., assignors, by mesne assignments, to The Wayne Pump Company, Baltimore, Md., a Corporation of Maryland. Filed July 18, 1927. Serial No. 206,573. 13 Claims. (Cl. 221—100.)

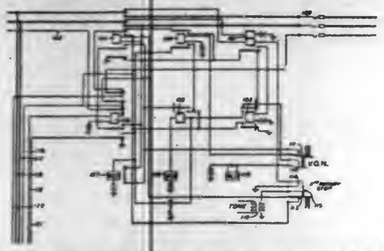
1. In a device of the character described, the combination of a discharge valve for a container, said valve having a locking member cooperating therewith, means for regulating the leveling of fluid in said container, and pivoted means co-operating with said first named means

and locking member and having a portion disposed in a predetermined position whereby said second named



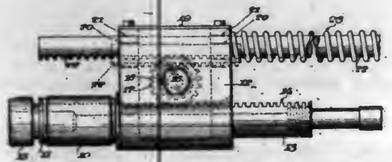
means disengages said locking member only in said predetermined position to allow operation of said discharge valve.

1,816,570. TESTING SYSTEM. JOHN B. DRAPER, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 13, 1930. Serial No. 474,897. 10 Claims. (Cl. 179—175.)



1. In a switching system, a selector, an impulse switch for variably positioning said selector, a control switch for designating the number of impulses to be transmitted by said impulsing switch, means to cause said selector to be restored to normal and means operated by the restoration of said selector to alter the position of said control switch.

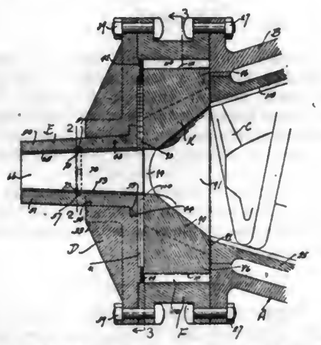
1,816,571. TOOL SLIDE OR REAMING ATTACHMENT. ALFRED E. DRISSNER, Cleveland, Ohio, assignor to The National Acme Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 4, 1928. Serial No. 310,317. 19 Claims. (Cl. 29—57.)



1. In a metal working machine, the combination of an indexible work spindle carrier, a horizontally-shiftable main tool slide, a supplemental tool slide carried thereby, and means for feeding the supplemental tool slide at a plurality of different speeds relatively to the main tool slide and comprising a plurality of differently formed means and means adapted to co-operate in different positions with any of said means.

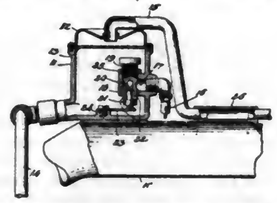
16. The combination of supporting means, a pair of shiftable parallel racks carried thereby, a gear co-operating with said racks, a tool connected to one of said racks, the other being detachable, means for controlling the detachable rack to permit shiftable movement of the tool carrying rack relatively thereto at an increased speed, and a superposed gear carried by said first gear for operation by said detachable rack when withdrawn from engagement with said first gear whereby the tools may be shifted at different speeds.

1,816,572. BRICK MAKING MACHINE. TWOLIK R. LARGURA, Michigan City, Ind. Filed Nov. 7, 1928. Serial No. 317,707. 14 Claims. (Cl. 25—17.)



1. In a brick making machine a die, a die holding block upon which the die is axially supported, a concentrator member for cooperation with the die in guiding the plastic brick making material thereinto, and means to support the outer marginal portions of said member against the outer marginal portions of the die holding block for distributing forces in the latter remote from the die.

1,816,573. OIL-RECLAIMING MECHANISM. LOCKWOOD BYRON ELLIS and FENN M. HOLDEN, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 24, 1921. Serial No. 439,686. 4 Claims. (Cl. 123—196.)



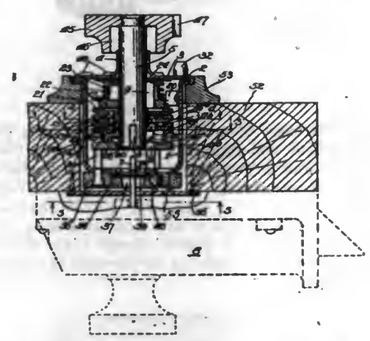
1. The combination of an engine, a distilling vessel, a filter, means for causing oil to flow from the engine through said filter, means for permitting a portion of the filtered oil to pass to the distilling vessel, and means for returning the remainder of the filtered oil to the engine.

1,816,574. PILE OR TUFTED SHEET FIBROUS MATERIAL. BOUTWELL H. FOSTER, Maplewood, N. J., and KENNETH B. COOK, Winnsboro, S. C., assignors to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Mar. 7, 1929. Serial No. 345,040. 11 Claims. (Cl. 91—68.)



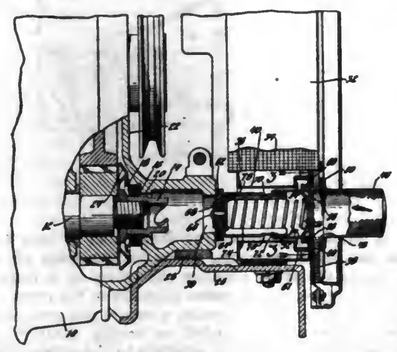
1. As a new article of manufacture, a sheet of material comprising a base of fibrous material, a multiplicity of strands of fibrous material extending from one side of said base and also passing through said base to its opposite side, and anchoring means for said strands on said opposite side of the base, comprising a deposit in situ from a thickened water dispersion of rubber, said deposit being relatively thin and superficial, whereby flexibility of the base is unimpaired.

1,816,575. PERMUTATION LOCK FOR DOOR LATCHES. GEORGE D. FULL, Winnetka, Ill., assignor to Dudley Lock Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 23, 1928. Serial No. 248,617. 14 Claims. (Cl. 70—53.)



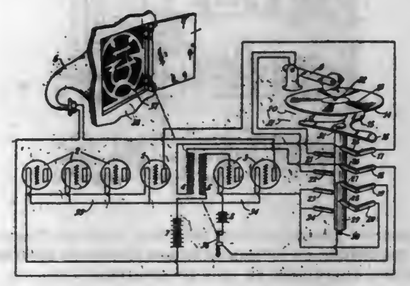
1. In a permutation lock for a door latch, a combination of a transversely extending operating bar operably connected to said latch, a casing, a shaft journaled therein provided with a longitudinal extending guide rib, a plurality of tumblers on the shaft normally holding said shaft against longitudinal movement, co-operating means for driving said tumblers by each other, said tumblers being provided with ways, and lost motion driving connections between said shaft and one of said tumblers for moving the latter to predetermined positions of adjustment for aligning the ways with the rib to permit said shaft to be moved axially for engaging said operating bar to actuate the latch.

1,816,576. STARTING CRANK HOLE CLOSURE. HARRY S. GOLDEN, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 17, 1928. Serial No. 306,471. 12 Claims. (Cl. 220—40.)



1. A closure construction comprising, in combination, a member having an aperture therein, a closure composed of two sections movable with respect to each other, and a second member located behind said first named member and having an aperture therein, one of said sections closing the aperture in the first named member and spring means abutting against the first section and tending to force the second section away from the first section and against said second member for the purpose of closing the aperture therein.

1,816,577. AUTOMATIC SWITCHING DEVICE FOR ELECTRIC PHONOGRAPHS. ALFRED N. GOLDSMITH, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 26, 1925. Serial No. 52,498. 4 Claims. (Cl. 179—100.4.)



1. The combination of a radio receiving set having a vacuum tube radio frequency amplifier, a vacuum tube detector, and a vacuum tube audio frequency amplifier, with an electrical phonograph pick-up device, a rotatable table, a current source for heating the filaments of said vacuum tubes, a brake to control the rotation of said table, and means operable by said brake to connect said pick-up device to said audio frequency amplifier and simultaneously to disconnect the current source for heating the cathodes of said radio frequency amplifier and detector, or alternatively to connect said radio frequency amplifier and detector to said audio frequency amplifier and simultaneously to connect the current sources for heating the cathodes of the radio frequency amplifier and detector.

1,816,578. WIND MUSICAL INSTRUMENT PAD. FREDERICK B. HAMMANN, Baltimore, Md., assignor to William W. Varney, Baltimore, Md. Filed July 12, 1924. Serial No. 725,587. 7 Claims. (Cl. 84—385.)

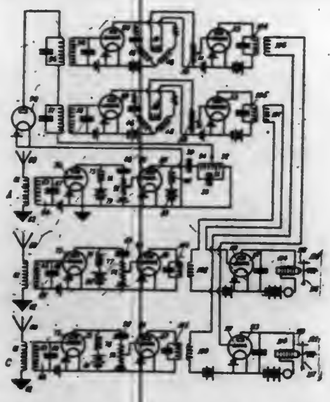


1. A pad for a key of a wind-instrument consisting of a face of relatively smooth, moisture-proof material in combination with a relatively spongy backing of substantially the same material.

1,816,579. RADIO COMMUNICATION SYSTEM. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Feb. 12, 1929. Serial No. 339,329. 14 Claims. (Cl. 250—10.)

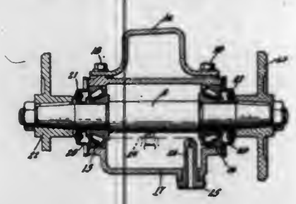
1. The method of secret radio communication which comprises generating a plurality of related frequencies, radiating each of said frequencies, sending a message by altering the relationship of certain of said frequencies as to phase and amplitude, receiving said transmitted fre-

quencies, reproducing several of the transmitted frequencies at said receiver from one of said received frequencies, comparing the other of said received frequencies with the



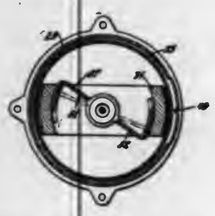
frequencies generated from said first received frequency, and controlling an indicating means thereby in accordance with the alterations at said transmitter.

1,816,580. BREATHER AND OVERFLOW DEVICE. ARTHUR A. HEINZ, Pontiac, Mich., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich., a Corporation of Maine. Filed Dec. 10, 1928. Serial No. 325,109. 8 Claims. (Cl. 184—106.)



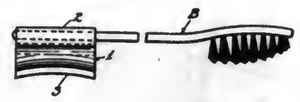
8. In a device of the character described, a housing adapted to contain lubricant, a shaft having a bearing in said housing, sealing means in wiping engagement with said shaft to hold the lubricant in said housing, and a combined overflow for superfluous lubricant and pressure relief means associated with the housing, whereby the effectiveness of the seal is not impaired by pressures inside the housing.

1,816,581. SPEEDOMETER TEMPERATURE COMPENSATOR. RALPH OLAF HELGEBY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 21, 1928. Serial No. 327,655. 4 Claims. (Cl. 264—13.)



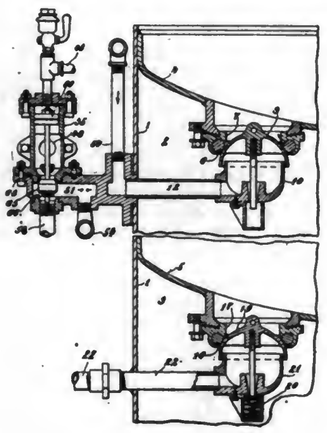
1. In combination, a rotor shaft, a bar magnet carried thereby, said magnet having its ends bent up, a rotary speed cup, a fixed field cup, said speed cup and field cup having walls in parallelism with each other and with said magnet arms, a temperature compensating member secured to the extreme end of said rotor shaft within said magnet arms.

1,816,582. TOOTH EXERCISER. DONALD D. HERON, Pittsburgh, Pa. Filed Apr. 13, 1929. Serial No. 354,775. 1 Claim. (Cl. 128—62.)



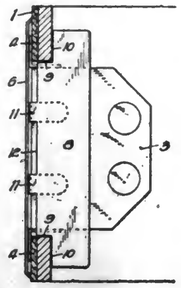
A tooth exerciser comprising a prismatic body portion made of resilient non-absorbent material having two concave, smooth and substantially parallel sides adapted to be engaged simultaneously by the teeth, and an inwardly arcuate bottom portion; said body portion having two longitudinal apertures, one of said apertures being adapted to resiliently secure and closely engage a handle therein and the other aperture serving to increase the resiliency of said exerciser.

1,816,583. SAND BLAST PRESSURE TANK. FOSTER J. HULL, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed July 8, 1928. Serial No. 290,147. 5 Claims. (Cl. 51—12.)



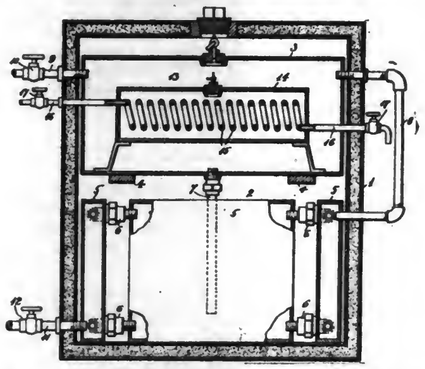
1. A sand blast apparatus comprising a tank having upper and lower chambers, means for supplying air under pressure to the upper chamber and releasing it therefrom, means for supplying air under pressure to the lower chamber, means for mixing air under pressure and abrasive connected to the lower chamber to receive abrasive therefrom, means for admitting abrasive to the upper chamber and a plurality of valves for transferring the abrasive from the upper chamber to the lower chamber by gravity, some of said valves being spaced outwardly from the center and spaced apart to equalize the distribution of abrasive as admitted to the lower chamber.

1,816,584. SWITCH BOX SUPPORT. WILLIAM B. HUSSAR, St. Louis, Mo. Filed Jan. 6, 1930. Serial No. 418,868. 3 Claims. (Cl. 247—21.)



1. A switch box support comprising a rectangular flat metallic strap member having its upper and lower front corners provided with a right angular cutaway portion to form opposed shoulders and a flexible finger directed from the front edge of the strap member intermediate the corner shoulders thereof.

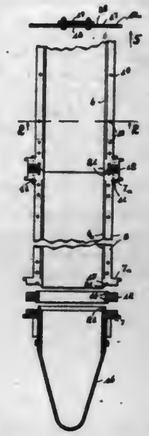
1,816,585. REFRIGERATING APPARATUS. HENRY G. JANCSY, Everett, Mass. Filed Apr. 2, 1929. Serial No. 352,006. 2 Claims. (Cl. 62—101.)



1. A cooling apparatus comprising an insulated casing having within it a cooling compartment, a cooling fixture arranged inside the casing in cooling relation to said compartment, a main tank for containing a body of refrigerant located within the casing above said fixture, pipe connections between the main tank and the cooling fixture whereby a thermosiphonic circulation will be established between the tank and fixture for refrigerant contained therein, an auxiliary tank located within the main tank, a liquid in the auxiliary tank freezable by a refrigerant circulated through the main tank, and valve-controlled connections leading from the main tank and cooling fixtures respectively with extension through the insulated casing whereby a refrigerant may be circulated through said main tank and cooling fixture from a point outside said casing to freeze the liquid in the auxiliary tank and afterward be left in the main tank and cooling fixture to circulate therein by thermosiphonic action as aforesaid.

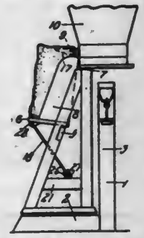
1,816,586. SECTIONAL FORM FOR MAKING REENFORCED PILES. HOWARD H. JENKINS, Los Angeles, Calif., assignor to American Concrete Pipe Company, Los Angeles, Calif. Filed Nov. 3, 1928. Serial No. 316,978. 2 Claims. (Cl. 25—118.)

1. A longitudinally and transversely sectioned pile form embodying flanges with cylindrical periphery portions whereby the sectioned form when connected and supported on a suitable machinery can be rotated, the flanges having shoulder portions for holding the form against



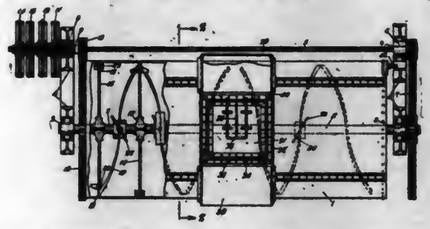
endwise movements while rolling on the machinery, and an end-flange having an opening whereby surplus pile material and surplus water can be discharged through such opening while the form is being rotated.

1,816,587. BAG FILLING AND WEIGHING MACHINE. HENRY STINSON JOHNS, Hamilton, Ontario, Canada, assignor to Bancroft Holdings Limited, Hamilton, Ontario, Canada, a Corporation of Ontario. Filed Oct. 5, 1929. Serial No. 397,609. 5 Claims. (Cl. 226—48.)



1. In a bag filling device, a hopper, a nozzle member projecting therefrom, a fulcrumed bag supporting member positioned underneath the nozzle, its rearward end being adapted to swing upwardly towards the nozzle as the bag contained thereon is being filled.

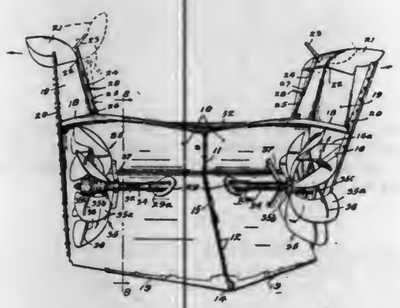
1,816,588. PLASTER MIXING MACHINE. HENRY STINSON JOHNS, Hamilton, Ontario, Canada, assignor to Bancroft Holdings Limited, Hamilton, Ontario, Canada, a Corporation of Ontario. Filed May 28, 1930. Serial No. 456,653. 2 Claims. (Cl. 83—73.)



1. In a material mixing machine, a horizontally rotatable drum, driving means for rotating the drum in one

direction, a central shaft within the drum independently rotated in the opposite direction, a trap door positioned substantially centrally of the drum, a pair of spiral members extending interiorly of the drum and convolving in opposite directions to the vicinity of the trap door, and a plurality of spade members also carried by the shaft and extending through the spiral members, said spade members being oppositely inclined to the convolutions of the spiral members through which they extend, and a shield surrounding the portion of the drum containing the trap door and formed with a material inlet orifice in its top and a material discharge orifice in its bottom.

1,816,589. SNOWPLOW WITH SIDE CHUTE. JOHN O. JOHNSON, White Bear, Minn., assignor to Enterprise Holding Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 19, 1928. Serial No. 320,352. 8 Claims. (Cl. 37—43.)



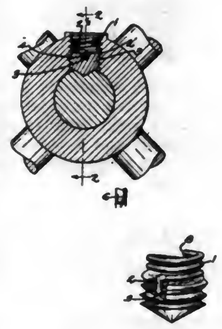
1. A snow plow having in combination, mold boards being forwardly and inwardly inclined and meeting in a central line, each of said mold boards forming a continuous surface of concave form, one of said mold boards having a cut away portion at its outer top edge, a conduit extending upwardly from said mold board, having an open outer side and having its lower end secured to said mold board to enclose the cut away portion and a rotor disposed adjacent the outer edge of said mold board adapted to propel the snow upwardly and outwardly into said conduit along a tangential line.

1,816,590. AUTOMOBILE STORAGE. WALTER M. KEENAN, New York, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Company, a Corporation of New York. Filed Apr. 23, 1928. Serial No. 272,014. 5 Claims. (Cl. 214—16.)



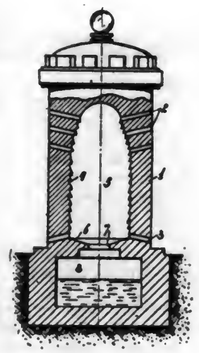
1. A building having a flexible member sustaining a multiplicity of carriers, means for guiding said flexible member, said building having an automobile entrance at the street level and a plurality of rows of automobile storage compartments located one over the other below the street level with a space between said rows, said flexible member arranged to travel in said space and said multiplicity of carriers supported by said flexible member being adapted to lower automobiles from said street level entrance and transfer them laterally to compartments below the street level.

1,816,591. SCREW RETAINER. JAMES B. KIBBY, West Richfield, Ohio. Filed Nov. 16, 1929. Serial No. 407,634. 8 Claims. (Cl. 151—14.)



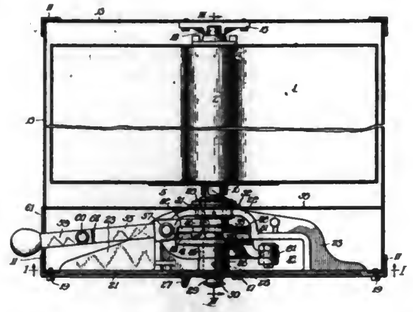
8. The combination of a screw having a slot of an expansive friction member having a part adapted to enter said slot and a spiral portion adapted to be turned into the same threads as the screw.

1,816,592. MEANS TO RECUPERATE THE ATMOSPHERIC MOISTURE. ACHILLE KNAPEN, Brussels, Belgium. Filed Nov. 23, 1927, Serial No. 235,391, and in Belgium Nov. 24, 1926. 5 Claims. (Cl. 257—24.)



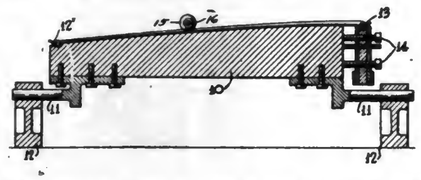
1. An atmospheric air condenser comprising a building having a condensation chamber in the upper portion thereof and a moisture chamber below the condensation chamber in which the moisture deposited on the walls of the condensation chamber is collected, the walls of said building having air inlet and outlet openings through that portion thereof constituting the walls of the condensation chamber, the inlet openings being inclined downwardly from the outer to the inner surface of the walls, and the outlet openings being inclined downwardly from the inner to the outer surface of the walls.

1,816,593. WASHING MACHINE. LELAND G. KNAPP, Chicago, Ill., assignor to Montgomery Ward & Co., Inc., Chicago, Ill., a Corporation of Illinois. Filed July 16, 1927. Serial No. 206,213. 2 Claims. (Cl. 68—21.)



1. In a power-driven washing machine comprising a supporting frame and washing member arranged within said frame for rotary movement around a horizontal axis, a clutch housing detachably secured as a unit to the exterior of said frame and constituting a part of the outer wall thereof, a gear element within said clutch housing and removable herewith as a unit, a drive element carried by said frame driving said gear element, a pair of cooperating clutch members in said housing for establishing and breaking driving connection between said gear element and said washing member, and a shaft extending through said housing and supporting said clutch members, said shaft constituting one trunnion support for said washing member and having limited longitudinal movement along the axis thereof to a position of disengagement from said washing member, and means for locking said shaft in position of engagement with said member.

1,816,594. METHOD OF AND APPARATUS FOR MAKING SHEETS AND IRREGULAR SURFACE CONTOURS. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 29, 1930. Serial No. 456,996. 7 Claims. (Cl. 153—77.)

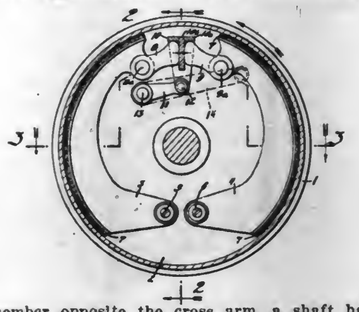


1. A method of manufacturing sheets having irregular surface configuration, which consists in stretching the flat sheet stock over a form, and in rolling the sheet to the shape of the form by a roller yieldable to conform itself to the irregularities of the form.

7. In an apparatus for manufacturing corrugated sheets from flat sheet stock, the combination of a corrugated form and a roller of yieldable material for cooperating with the form to press corrugations in a sheet.

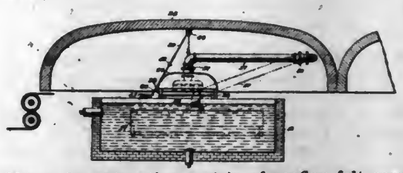
1,816,595. BRAKE EXPANDING MECHANISM. WILLIAM S. LEE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 5, 1927. Serial No. 210,889. 14 Claims. (Cl. 188—78.)

1. In a brake, a drum, a backing plate, two shoes, each pivoted at one extremity to the backing plate and adapted to frictionally engage the drum on opposite sides thereof, a toggle link, having a cam surface on its free end, pivoted to the other extremity of each of the shoes, a member having a central leg and a cross arm against the opposite sides and ends of which, respectively, the cam surfaces of the two toggle links abut, an arm pivoted to the end of



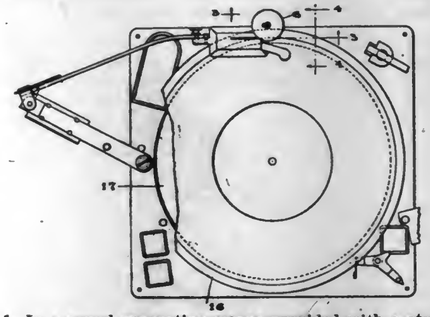
said member opposite the cross arm, a shaft having a bearing in the backing plate rigidly connected to the arm, and means for rocking the shaft and thus applying the brake.

1,816,596. METHOD AND MEANS FOR SATURATING FIBROUS MATERIALS IN THE PRODUCTION OF PREPARED ROOFING MATERIALS. ROBERT MACLEAN, Chicago, Ill., assignor to Amalgamated Roofing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1926. Serial No. 100,636. 4 Claims. (Cl. 91—44.)



3. Means for saturating a strip of roofing felt comprising means for advancing said strip, nozzle means for spraying saturant onto said strip, a tank for receiving excess saturant from said nozzle means, said nozzle means being movable relatively to said tank, and means by which said nozzle means can be lowered into or withdrawn from said tank.

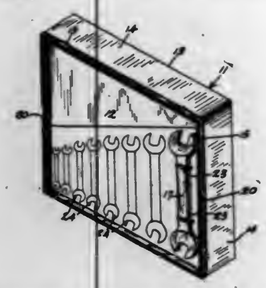
1,816,597. SOUND GENERATING MEANS. CHARLES P. MADSEN, New York, N. Y., assignor, by mesne assignments, to William W. Varney, Baltimore, Md. Filed Dec. 30, 1925. Serial No. 78,493. 5 Claims. (Cl. 274—16.)



1. In a sound generating means provided with a stylus-carrying member and a support therefor, a diaphragm wholly carried by said stylus-carrying member and an intermediate means between said stylus-carrying member and said support wholly supporting said stylus-carrying member consisting of a spring secured to each of said two members.

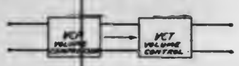
CARNEGIE LIBRARY OF ATLANTA

1,816,598. MERCHANDISE DISPLAY BOX. ALBERT L. MARTIN, Shaker Heights, Ohio, assignor to The Vichek Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 5, 1929. Serial No. 344,251. 5 Claims. (Cl. 206—44.)



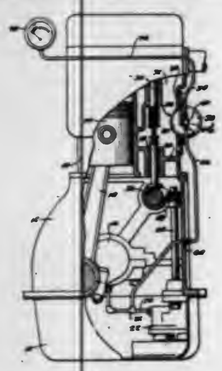
1. A display box, as for containing and exhibiting articles of merchandise such as tools and the like, comprising: a box for containing a supply of said articles and having connected bottom and side walls; a cover readily adaptable to be inserted and held within the side walls of said box with either surface of said cover outwardly disposed and substantially parallel with reference to said bottom wall, to provide a shipping top for said box when said cover is positioned therein with one side out and a display top when it is positioned therein with its other side out; and means for supporting on said other side of said cover a sample of said articles contained in said box.

1,816,599. SIGNAL TRANSMISSION SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1929. Serial No. 350,971. 9 Claims. (Cl. 178—44.)



2. In a transmission system, an input circuit supplied with signals having substantially the same volume range and different average volume levels, and means for maintaining a constant maximum peak level for said signals and for reducing the volume range of said signals.

1,816,600. OIL FILTER MOUNTING. CHARLES W. MCKINLEY, Flint, and GEORGE H. WILLITS, Pleasant Ridge, Mich., assignors to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Apr. 30, 1928. Serial No. 274,028. 8 Claims. (Cl. 184—6.)



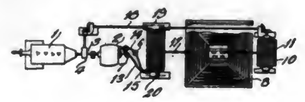
3. In combination with an internal combustion engine having a lubricating system and an opening exposing some of its working parts, a plate for closing said opening, a recess in said plate, and an oil filter in said lubricating system and mounted in said recess on the inside of said plate.

1,816,601. ELECTRON DISCHARGE DEVICE. GEORGE A. MCNEILL, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1926. Serial No. 97,652. 8 Claims. (Cl. 250—27.5.)



1. In an electron discharge device, an enclosing vessel having a stem of insulating material, a metallic L-shaped angular member having a longitudinal edge embedded in said stem, and a tubular member surrounding said stem and metallic member, said metallic member spacing and supporting said tubular member from said stem.

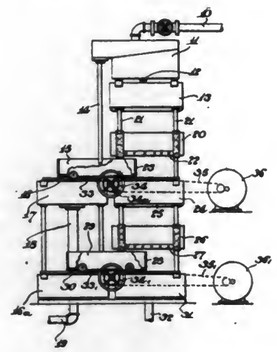
1,816,602. FISHING RIG FOR DEEP WELLS. ALFRED F. MEYER, Yale, Okla. Filed May 21, 1927. Serial No. 193,264. 4 Claims. (Cl. 294—65.5.)



1. In a fishing rig for deep wells, the combination with a source of power, direct connected to an electric generator unit, of an electro magnet connected by electric cables to the generator, a reel upon which the cables are wound, insulated rings on the spool of the reel, brushes contacting the insulated rings and connected to the cables, and separate means for raising and lowering the magnet in the well.

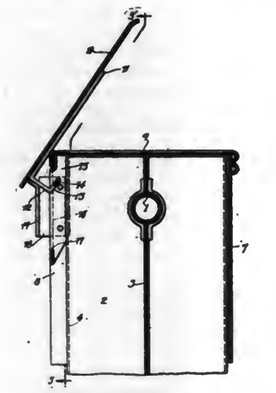
1,816,603. CONTROL SYSTEM. FRANK N. MOERK and CHARLES B. IRMER, Philadelphia, Pa. Filed Aug. 13, 1928. Serial No. 299,439. 6 Claims. (Cl. 23—230.)

1. The method of applying an agent to a liquid stream to effect a desired condition thereof which comprises producing flow of the agent in excess, producing an effect proportional to the ion concentration of a unit quantity of the stream, dividing said flow proportionally to the magnitude of said effect, producing an effect proportional to the rate of flow of the stream, and effecting further



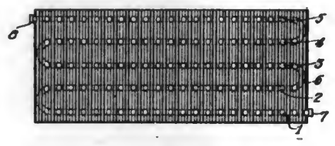
division of said divided flow before application to said stream proportionally to the magnitude of said second effect.

1,816,604. CASING OR COVER FOR RADIATORS. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor to Murray Radiator Corporation, a Corporation of New York. Filed Sept. 5, 1928. Serial No. 304,131. 5 Claims. (Cl. 257—136.)



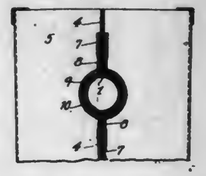
3. A radiator casing including a cover at its upper end adapted to occupy any one of at least three positions, first horizontally over the top, second inclined from its rear edge upward, and third, vertical at the back of the radiator with only a portion of its width extending above the radiator.

1,816,605. RADIATOR. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor to Murray Radiator Corporation, a Corporation of New York. Filed May 12, 1926. Serial No. 108,488. 12 Claims. (Cl. 257—149.)



3. A radiator for heating the air of a room by steam or other high temperature heating medium comprising in combination a continuous tube in a plurality of sections one above another extending horizontally lengthwise of the radiator and a radiating structure applied to the sides thereof and corrugated in horizontal section, the inner portions of the corrugations substantially contacting with each other to form separate adjacent vertical flues for the passage of air about the tube and for inducing a rapid circulation of the heated air, the radiating structure being united to the tube by heat and pressure so as to conduct heat away therefrom rapidly.

1,816,606. RADIATOR AND OTHER WELDED STRUCTURE. THOMAS E. MURRAY, Jr., and IRVING T. BENNETT, Brooklyn, N. Y., assignors, by direct and mesne assignments, to Murray Radiator Corporation, a Corporation of New York. Filed July 5, 1927. Serial No. 203,437. 15 Claims. (Cl. 257—149.)



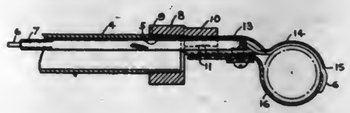
3. A radiator including in combination a heating element, a radiating structure in two parts applied to opposite sides of the heating element and means for holding the two parts of the radiating structure together comprising pieces applied to the outer faces thereof and welded to each other through said parts.

1,816,607. RADIATOR. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor to Murray Radiator Corporation, a Corporation of New York. Filed July 16, 1929. Serial No. 378,653. 12 Claims. (Cl. 257—149.)



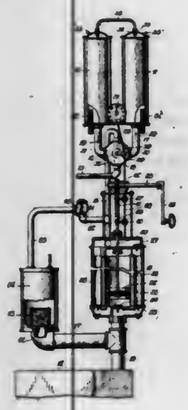
2. A radiator including in combination a heating element and an extended area structure united thereto consisting of thin sheet metal corrugated in horizontal section, each outward corrugation having an outer portion which is wider than the central portion so as to permit an easy flow of air in contact therewith in the enclosed space.

1,816,608. RIGID CONDUIT GROUND CONNECTER. EDWARD J. NOBLE, New London, Conn., assignor to Gilliette-Vibber Company, Incorporated, New London, Conn., a Corporation of Connecticut. Filed Mar. 9, 1929. Serial No. 345,665. 5 Claims. (Cl. 247—1.)



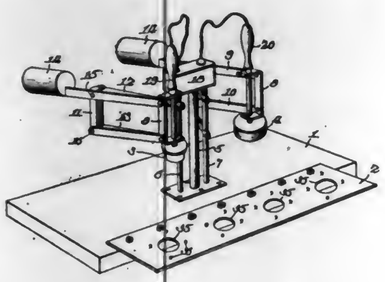
1. A ground connecter comprising the combination of a rigid threaded coupling having an extension member, a ground pipe flexible clamp rigidly secured to said extension member and consisting of a portion having a large wire pocket tapering into a smaller pocket and a further extended end portion, bent back and covering the large pocket portion, and fastening means for securing the end in position.

1,816,609. LIQUID DISPENSING APPARATUS. WALTER H. PARKER and FREDERICK W. DELANOY, Rochester, Pa., assignors, by mesne assignments, to The Wayne Pump Company, Baltimore, Md., a Corporation of Maryland. Filed Feb. 17, 1926. Serial No. 88,770. 8 Claims. (Cl. 221—100.)



1. In liquid dispensing apparatus, the combination of an elevated measuring chamber, a source of liquid supply, a supply pipe associated with said chamber and source of supply and through which liquid is supplied to said measuring chamber, discharge means, a valve for alternately connecting said measuring chamber to said supply pipe and to said discharge means whereby said chamber may be filled and emptied, an excess flow receptacle connected to said supply pipe below said measuring chamber and said valve whereby when said measuring chamber has received a predetermined amount of liquid and when said valve is connecting said chamber and said discharge means, any excess amount of liquid will be diverted to said excess flow receptacle, and means in said receptacle for closing communication between said receptacle and a connection to said source of supply whereby liquid will not be by-passed around said chamber before said chamber is filled.

1,816,610. METHOD OF AND MEANS FOR FORMING BELLOWS. LAWRENCE M. PERSONS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Original application filed May 10, 1924, Serial No. 712,177. Divided and this application filed Oct. 8, 1926. Serial No. 140,398. 15 Claims. (Cl. 113—59.)



1. The process of forming flexible metal walls for expansible and contractible vessels formed of a plurality of individual disks which comprises forming flanges about the inner and outer peripheries of said disks and alternately turning over at least one of these flanges to form a gutter to receive the flange of an adjoining disk, then assembling said disks, first, by applying heat circumferentially to the gutter of the first disk with the flange of the adjoining disks cooperating therewith, second, by rotating the heating element, and finally, by applying the solder during said rotation to cause a substantially uniform flow throughout the gutter.

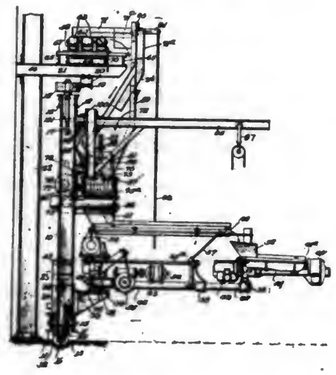
4. In a device of the class described, the combination with a plurality of soldering irons, each to perform a series of different soldering operations, a base presenting a definite work area for said irons, and extensible frames for supporting said irons upon said base for universal movement in various directions over and down upon said work area while in a vertical position whereby said irons may be alternately used, each to perform its particular soldering operation at any or all of a plurality of points.

1,816,611. WOVEN FABRIC FOR COLLARS AND CUFFS. ABRAHAM S. PHILLIPS, New York, N. Y., and OSCAR S. LAWTON, New Bedford, Mass., assignors to John Manning Van Heusen, New York, N. Y. Filed Apr. 28, 1928. Serial No. 273,454. 6 Claims. (Cl. 139—385.5.)



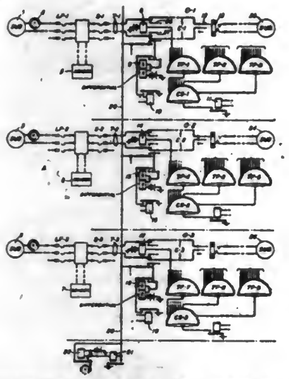
2. A single ply fabric for collars and cuffs reinforced by a separate, non-interlaced layer of warp threads and a separate non-interlaced layer of weft threads, and by binder threads which hold said layers and said single ply fabric in close and permanent union.

1,816,612. MACHINE FOR FILLING FLASKS FOR FOUNDING. WALTER F. PIPER, Chicago, Ill., assignor to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1929. Serial No. 369,082. 18 Claims. (Cl. 22—36.)



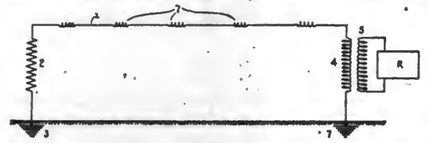
1. In foundry equipment, the combination of a truck, a rail on which the truck is adapted to travel across a moulding room, overhead guide-means for holding the truck against lateral displacement, a moulding machine mounted on and projecting from the truck and adapted to fill the flasks on the floor of the room, an overhead sand supply supported independently of the truck and extending through the traverse of said truck, and mechanism mounted on the truck for delivering sand from the overhead supply to the moulding machine.

1,816,613. TELEPHONE SYSTEM. ALBERT C. POWELL, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 26, 1930. Serial No. 484,476. 12 Claims. (Cl. 179—9.)



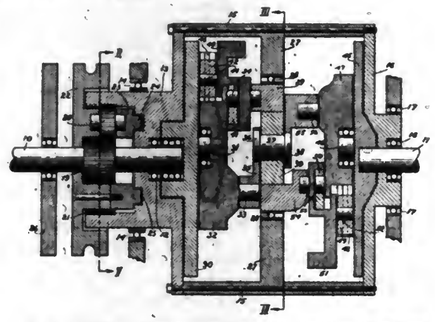
2. In combination, a register, an operating circuit for said register comprising a main path and a plurality of branch paths, means for closing a first one of said branch paths to cause the operation of the register, a relay in the main path responsive to such closure, means responsive to said relay for opening said first branch, and means controlled by said relay for causing the immediate release of said register to place the same under control of a second one of said branch paths.

1,816,614. WAVE ANTENNA. RICHARD HOWLAND RANGER, Brooklyn, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 9, 1923. Serial No. 617,928. 7 Claims. (Cl. 250—33.)



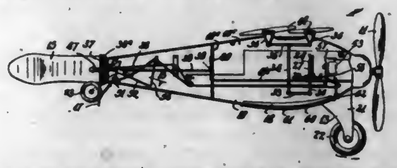
2. The combination with an antenna grounded at each end of means for proportioning the natural constants of such antenna with respect to the length thereof to such values as to give zero back end reception for any antenna length.

1,816,615. POWER TRANSMISSION DEVICE. THOMAS H. RYAN, San Francisco, Calif., assignor of one-sixth to Paul J. Boyens and one-sixth to Charles J. McCarthy, San Francisco, Calif. Filed Aug. 18, 1930. Serial No. 475,894. 8 Claims. (Cl. 74—14.)



1. In a power transmission device, the combination of a driving shaft, a driven shaft, a support rotatably mounted in alignment with said driving and driven shafts, means for connecting said support to said driving shaft whereby it will rotate therewith, oppositely disposed weights mounted upon shafts eccentric to said driving and driven shafts, one of said weights being connected with the driven shaft, and a floating connection between said weights journaled upon said support and normally eccentric with said driving and driven shafts adapted to transmit the torque exerted by the driving shaft to said driven shaft as said oppositely disposed weights rotate with respect to each other to vary the eccentricity of said floating connection.

1,816,616. FLYING MACHINE. JUAN DE JESUS SANTO, New York, N. Y. Filed Aug. 13, 1930. Serial No. 474,891. 10 Claims. (Cl. 244—14.)



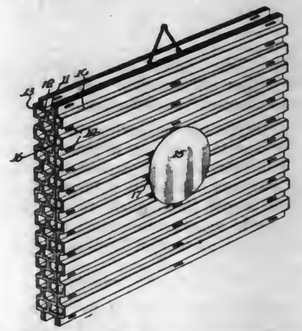
1. A flying machine, comprising a body with a motor driven propeller and a landing gear, a plurality of main wings pivotally mounted on said body, means for simultaneously adjusting said main wings to various tilts, a rudder of two sections, means for simultaneously turning said rudder sections in various directions, means for selectively moving said rudder sections, a pivoted strip urged downwards to scrape along the ground and act as a brake, means for releasably holding said brake in an inoperative condition, an automatic expandible parachute for use in emergency, and means for holding the parachute collapsed.

1,816,617. METHOD OF GALVANIZING. JULIAN L. SCHUELER, Kokomo, Ind. Filed Sept. 29, 1927. Serial No. 222,760. 9 Claims. (Cl. 91—68.2.)



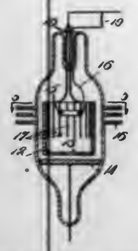
1. The method of applying an adherent zinc coating to a metallic base, which consists in first subjecting such metallic base to an electrolytic zinc coating bath; second, subjecting the same to an acid etching bath and finally subjecting the same to a molten zinc bath.

1,816,618. ACOUSTIC ELEMENT. SAMUEL B. SKLAR, Minneapolis, Minn., assignor of one-half to Thomas S. Hammond, Chicago, Ill. Filed June 26, 1928. Serial No. 288,495. 10 Claims. (Cl. 181—32.)



1. In an acoustic element, an exposed panel comprising a member which is treated with a compound to render it highly absorbent of sound, and a non-resonate member secured together.

1,816,619. GASEOUS CONDUCTION DEVICE. CHARLES G. SMITH, Medford, Mass., assignor to Raytheon Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 21, 1925. Serial No. 76,794. 3 Claims. (Cl. 250—27.5.)

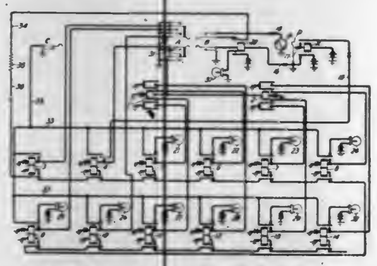


1. A gaseous discharge device comprising a sealed container, a hollow cathode having a restricted discharge opening and adapted to emit electrons from its interior surface, an anode in spaced relation to said cathode, an auxiliary cathode within said hollow cathode and connected to said hollow cathode, means for inducing eddy currents in said auxiliary cathode, and means for preventing eddy currents in said hollow cathode.

1,816,620. PROCESS FOR REFINING BISMUTH. WALTER C. SMITH, Moylan, Pa., and PETER MACK, Jr., La Fundicion, Peru, assignors, by direct and mesne assignments, of one-half to The Cerro De Pasco Copper Corporation, New York, N. Y., a Corporation of New York, and one-half to Anaconda Copper Mining Company, Anaconda, Mont., a Corporation of Montana. Filed Feb. 6, 1929. Serial No. 337,880½. 2 Claims. (Cl. 75—17.)

1. A process for removing lead and/or zinc from a bismuth alloy which comprises heating said alloy to about 400° C. passing chlorine gas into said molten alloy, and separating the resultant metallic chlorides from the purified bismuth.

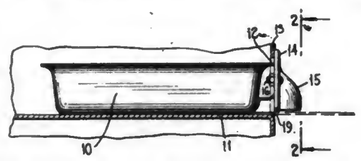
1,816,621. TESTING SYSTEM. LELAND J. STACY, Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 4, 1927. Serial No. 210,536. 6 Claims. (Cl. 175—183.)



4. In an apparatus for measuring an interval of time, a source of alternating current, a train of relays, alternate ones of said relays being positively polarized and the remaining relays being negatively polarized, and means for connecting said source successively to the relays of said train whereby said relays are successively operated by successive half waves of current from said source.

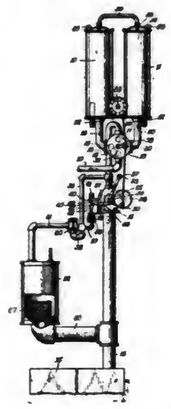
1,816,622. TRAY FRONT. ROBERT S. TAYLOR, Evansville, Ind., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 19, 1930. Serial No. 496,598. 6 Claims. (Cl. 62—108.5.)

1. In combination, a substantially rectangular tray having a bracket formed integrally with one end thereof, a plate having a portion struck out to form a handle and secured to said bracket in such relation to said tray that



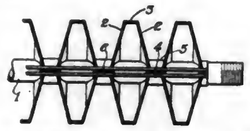
said plate extends beyond the top and side edges thereof, and the bottom edge of said plate is spaced vertically above the bottom of said tray.

1,816,623. LIQUID DISPENSING APPARATUS. WILLIAM S. TOWNSEND, Rochester, Pa., assignor, by mesne assignments, to The Wayne Pump Company, Baltimore, Md., a Corporation of Maryland. Filed Jan. 22, 1926. Serial No. 82,920. 12 Claims. (Cl. 221—99.)



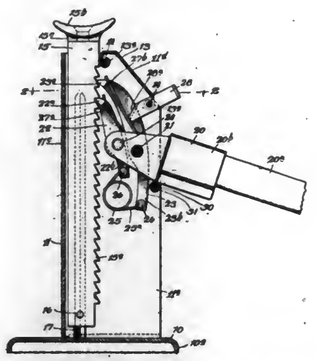
1. In liquid dispensing apparatus, the combination of a measuring container, means for supplying liquid thereto, means for controlling the supply of liquid to said container, a by-pass around the means for supplying liquid to said container, means associated with said by-pass responsive to liquid pressure developed in the supply means and by-pass for timing the operation of said controlling means, and means whereby excess pressure in said supply pipe and by-pass is relieved, said last named means comprising a valve limiting the pressure maintained on the supply side of said second named means.

1,816,624. RADIATOR. DOMINGO ANTHONY USINA, Nutley, N. J., assignor, by mesne assignments, to Murray Radiator Corporation, a Corporation of New York. Filed July 20, 1928. Serial No. 294,191. 5 Claims. (Cl. 257—149.)



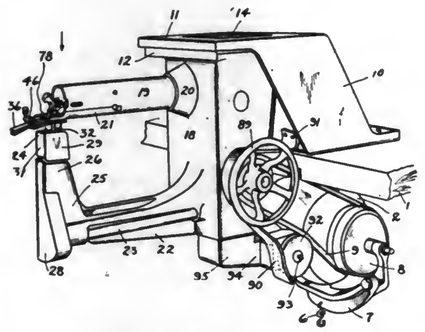
2. A radiator including in combination a heating element, an extended heat radiating surface structure in two parts applied to opposite sides of the heating element and means for holding the two parts together comprising longitudinally extending rods adapted to be held in place by openings in said structure and applied to the outer faces thereof and welded to each other through said parts.

1,816,625. LIFTING JACK. ELON J. VAN FLEET, Joliet, Ill., assignor to William E. Pratt, Chicago, Ill. Filed Apr. 21, 1924. Serial No. 707,815. 7 Claims. (Cl. 254—111.)



1. A lifting jack comprising a rack, a pivotally mounted lever, an actuating pawl mounted to be actuated by said lever to move said rack bar, a holding detent pivotally mounted on said lever and adapted to engage said rack bar, a spring connecting said pawl and said detent to force them out of engagement with said rack to permit the lowering of said rack, and a second spring adapted to engage directly both said pawl and said detent to force them into engagement with said rack against the action of said first-named spring to permit the upward movement of said rack.

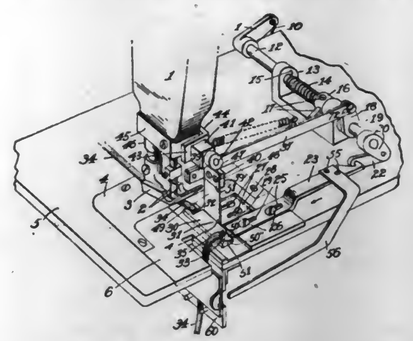
1,816,626. UPSIDE DOWN SEWING MACHINE. JOHN P. WEIS, Nyack, N. Y., assignor to Metropolitan Sewing Machine Corp., Nyack, N. Y., a Corporation of Delaware. Filed July 15, 1927. Serial No. 205,869. 14 Claims. (Cl. 112—2.)



1. A sewing machine having a trunk, a needle carrying arm located adjacent to the base of the trunk, a presser bar and foot carried thereby, an overhanging cylinder carried adjacent to the top of the trunk, feed and cooperating stitch mechanism carried by the cylinder, a work attachment carried at the end of the cylinder and above the needle for forming a hem for the insertion of an elastic, and means for diverting a part of the hem thereby to expose the elastic and permit its ready removal.

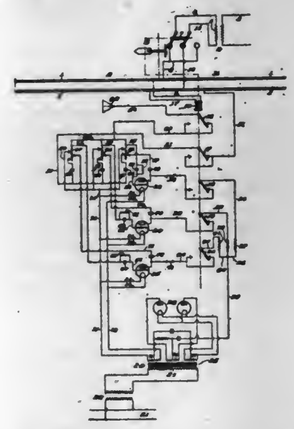
1,816,627. ELASTIC STRIP ATTACHMENT FOR SEWING MACHINES. ALBERT H. WEIS, Nyack, N. Y. Filed Jan. 4, 1927. Serial No. 158,859. 23 Claims. (Cl. 112—152.)

1. In an elastic strip attachment for sewing machines, the combination of means for folding the work for the reception of an elastic strip and comprising a pair of cooperating guide members one pivoted for swinging movement only toward and from the other, means connected with the swinging guide member and means con-



nected with said last means for shifting it and thereby swinging the guide member and freely shiftable at the will of the operator while leaving the hands of the operator free to control the work.

1,816,628. TRAIN STOPPING AND SPEED CONTROLLING MECHANISM. FRANK C. WILLIAMS, Philadelphia, and GEORGE H. WILLIAMS, Harrisburg, Pa. Filed Apr. 3, 1925. Serial No. 20,331. 25 Claims. (Cl. 246—30.)

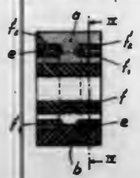


1. In an automatic train speed controlling system, the combination of a track divided into insulated blocks, an automatic block system, a field radio transmitting station for each block, connected to the rails at the departure end of its block and operative to normally continuously simultaneously transmit radio waves of three different lengths, and means controlled by said block system to interrupt the transmission of certain of said radio waves.

1,816,629. PRESSED COLLECTOR. ANTON WÖRNER, Vaihingen-on-the-Fildern, Germany. Filed Mar. 16, 1929, Serial No. 347,714, and in Germany Dec. 7, 1928. 4 Claims. (Cl. 171—321.)

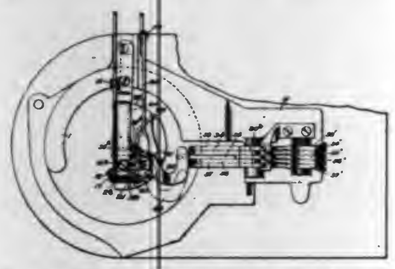
1. A commutator consisting of electrically conductive segments of rectangular shape and provided with notches extending from the narrow sides inwardly along the middle line, insulator segments, of rectangular shape and of

smaller width than aforesaid conductive segments, having part of their inner edge spread outwardly, both being alternately arranged in annular form so as to form a cylinder having an annular groove in each of its front and rear sides, a metal ring in each of aforesaid grooves being in



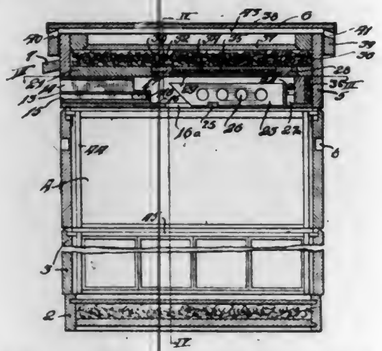
contact with the outwardly spread inner edge of aforesaid insulator segments and being substantially equidistantly disposed from the walls of the notches of said conductive segments, and an electrically non-conductive filler provided with an opening for the shaft.

1,816,630. YARN CONTROLLING MECHANISM FOR KNITTING MACHINES. GEORGE P. BOSWORTH, Central Falls, R. I., assignor to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Apr. 19, 1922. Serial No. 555,537. 11 Claims. (Cl. 66—145.)



2. In a knitting machine having needles and three or more yarn guides, movable into and out of action, yarn engaging means adapted to be positioned between the delivery ends of a plurality of inactive yarn guides and the end of the yarns leading therefrom, only during the periods of inactivity of said yarn guides and means automatically to move said yarn-engaging means into its yarn-engaging position, the construction and relation of parts being such that said inactive yarn-engaging means is maintained out of engagement with the active yarn or yarns.

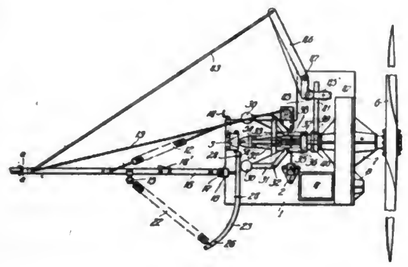
1,816,631. TOP-ENTRANCE BEEHIVE. EARL WRIGHT BROWN, Willow Springs, Ill. Filed Mar. 21, 1927. Serial No. 176,897. 24 Claims. (Cl. 6—1.)



4. A beehive comprising a closed bottom, supers removably stacked thereon, a hive body removably mounted on said supers, an upper section having a transversely divided entrance therein removably mounted on said body, and a roof on said upper section.

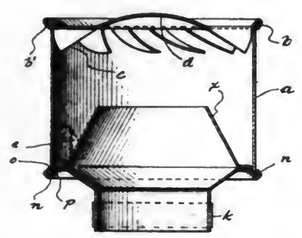
9. In a beehive, a hive body, a top section on said body, said top section having an adjustable entrance thereto, a cluster rack formed of a plurality of slats in said top section, said slots having numerous apertures therethrough.

1,816,632. ELECTRIC WINDMILL. HERBERT E. BUCKLEN, Elkhart, Ind., assignor to Herbert E. Bucklen Corporation, a Corporation of Indiana. Filed Dec. 4, 1928. Serial No. 323,681. 7 Claims. (Cl. 290—44.)



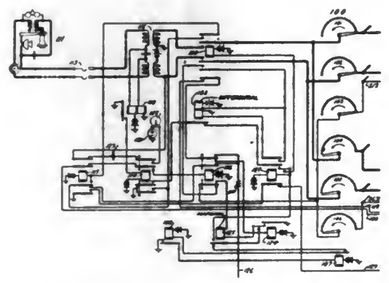
1. A wind driven power plant comprising means for absorbing power from the wind, power translating means driven thereby, the opposing torque of the power translating means increasing with increasing speed up to its rated speed and decreasing upon an increase in speed beyond its rated speed, whereby there is a tendency to accelerate once the rated speed is exceeded, and governing means controlled by the wind pressure and the speed of operation of the power absorbing means for controlling the position of the power absorbing means in the wind stream to prevent such acceleration.

1,816,633. AIR CLEANER. ARTHUR A. BULL, Detroit, Mich., assignor to Handy Cleaner Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 9, 1927. Serial No. 232,010. 8 Claims. (Cl. 183—92.)



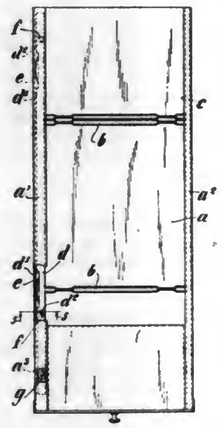
1. In an air cleaner, the combination of a shell provided near one end with a relatively small discharge port leading directly to the atmosphere, means at the opposite end for giving the air a whirling and helical direction toward the discharge end to thereby build up a relatively small pressure or energy to discharge the solids out of the relatively small port, and a stand pipe at the discharge end of the cleaner having a substantial enlargement between its end, said enlargement forming a baffle at the discharge end of the cleaner adjacent said discharge port and also cutting down the path of the swirling current bearing the solids for the purpose of increasing the velocity at the point of discharge.

1,816,634. TELEPHONE EXCHANGE SYSTEM. WARREN W. CARPENTER, Queens Village, N. Y., JACK F. DAHL, Newark, N. J., RICHARD C. DAVIS, New York, and LINUS E. KITTREDGE, Brooklyn, N. Y.; said Carpenter, Dahl, and Davis, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York, and said Kittredge assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 27, 1929. Serial No. 388,705. 45 Claims. (Cl. 179—27.)



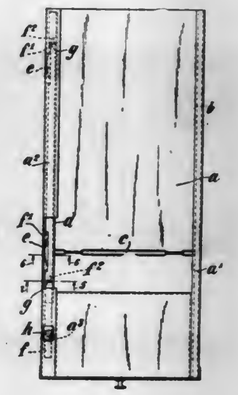
1. In a telephone system, a plurality of trunk circuits, a plurality of operators' positions, means to extend calls to said trunk circuits, means responsive to the extension of calls to said trunk circuits for storing said calls and means to extend said calls to idle operators' positions in the order in which they are stored.

1,816,635. YIELDING RETAINER FOR VISIBLE INDEX CARD HOLDERS. JAMES R. CLARK, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 26, 1930. Serial No. 463,917. 9 Claims. (Cl. 129—16.)



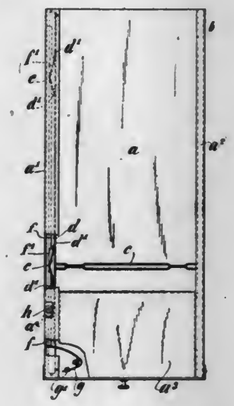
1. In a tray having channels along its edges and rigid members mounted transversely of the tray with the ends disposed in said channels, means to hold said members yieldingly against lateral displacement comprising a retaining bar disposed in one of said channels and engaging the ends of said members, means to press the bar against said members yieldingly, and means to retract said retaining bar positively from the ends of said members against the action of said last-named means.

1,816,636. YIELDING RETAINER FOR VISIBLE INDEX CARD HOLDERS. JAMES R. CLARK, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, New York, N. Y., a Corporation of New York. Filed June 26, 1930. Serial No. 463,918. 7 Claims. (Cl. 129—16.)



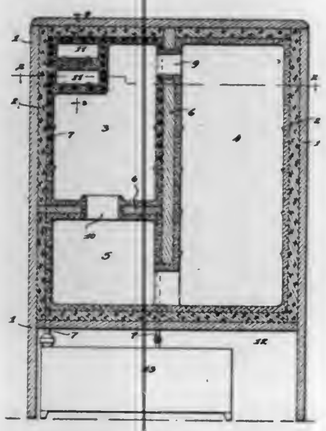
1. In combination with a tray having channels along its edges, rigid members mounted transversely of the tray within the channels, a retaining bar engaging the ends of the members to hold them against lateral displacement, resilient means for normally urging the bar yieldingly against said members, and means operatively interposed between said resilient means and said bar to transmit the pressure of said resilient means to the bar and operable to relieve the bar of the pressure of said resilient means.

1,816,637. YIELDING RETAINER FOR VISIBLE INDEX CARD HOLDERS. JAMES R. CLARK, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, New York, N. Y., a Corporation of New York. Filed June 26, 1930. Serial No. 463,919. 8 Claims. (Cl. 129—16.)



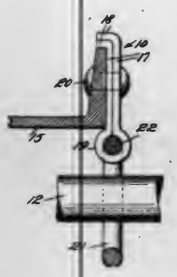
1. In combination with a tray having channels along its side edges, transversely disposed rigid members engaged with the channels, a retaining bar engaging the ends of said members, springs to urge the retaining bar yieldingly against said members, and means to remove the stress of said springs.

1,816,638. REFRIGERATING UNIT. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed June 16, 1926. Serial No. 116,321. 11 Claims. (Cl. 62—95.)



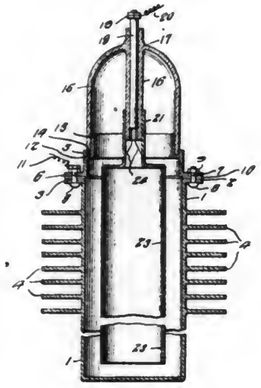
1. A refrigerating unit comprising in combination, a cabinet, a lining therefor defining a plurality of chambers including a refrigerating chamber and a food chamber, and a mechanical cooling unit embedded in said lining of the refrigerating chamber.

1,816,639. SAFETY SUPPORT FOR BRAKE RODS. SETH A. CRONE, East Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,228. 13 Claims. (Cl. 188—205.)



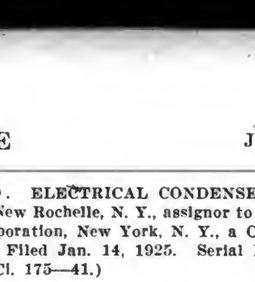
1. In a safety support for brake rods, the combination of a main support, a supporting bracket thereon, extending on the outside thereof, and having a bearing at its lower end, and a swingable rod supporting member mounted on and suspended from the bearing for movement below the main support.

1,816,640. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 14, 1925. Serial No. 2,384. 6 Claims. (Cl. 175—41.)



1. A condenser having a conductive casing, an insulating hood attached thereto, a vertical tubular core integral with the hood, a terminal mounted in the core, an electrode mounted on the core, and means for connecting the terminal and electrode.

1,816,641. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 28, 1925. Serial No. 12,275. 6 Claims. (Cl. 175—41.)



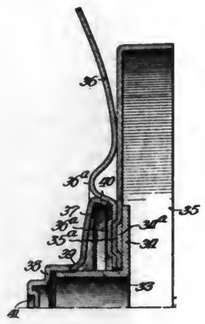
4. In a condenser, a condenser section and a spacing unit comprising two spaced apart plates of conductive material connected together, and comprising a circulatory path for a cooling medium for the condenser.

1,816,642. IDENTIFICATION SYSTEM FOR KEYS. HARRY H. FETTER, Washington, D. C. Filed Feb. 20, 1931. Serial No. 517,357. 4 Claims. (Cl. 40—2.)



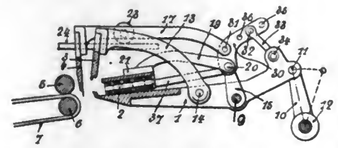
1. A device of the class described comprising a key blank having a depression therein, said depression being undercut at its base and a mass of plastic material anchored in said depression, said material being molded in a predetermined identifying shape.

1,816,643. DISK WHEEL. GEORGE H. FORSYTH, Chicago, Ill., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed May 18, 1922. Serial No. 561,804. 4 Claims. (Cl. 301—63.)



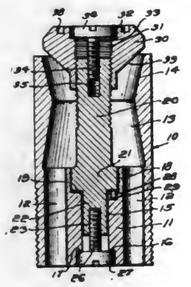
1. In combination, an axle, a hub fitted thereon, a brake drum on said hub, said drum provided on the outer axial face thereof with a circumferentially extending series of indentations, a wheel body comprising a disk coaxially arranged on said hub, said body being indented to provide lugs adapted to seat in the indentations in said drum, a disk fitted on said hub and a cap secured on the hub to clamp the wheel body against said drum.

1,816,644. COMBING MACHINE. CHARLES GÉGAUFF, Mulhouse, France. Filed Nov. 14, 1929, Serial No. 407,112, and in France Nov. 21, 1928. 10 Claims. (Cl. 19—120.)



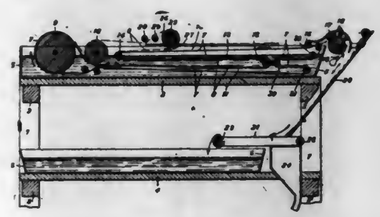
1. In a combing machine, lap retaining means, lap nipping means, tuft detaching means, a top comb, and means operatively connecting said lap retaining means with said top comb for progressively reducing their mutual distance only in the drawing off motion of said detaching means with respect to said lap retaining means, whereby the lap is upset between said lap retaining means and said top comb.

1,816,645. SPRAY NOZZLE. JOSEPH GIORDANO, West Nyack, N. Y. Filed Feb. 6, 1931. Serial No. 513,996. 3 Claims. (Cl. 299—130.)



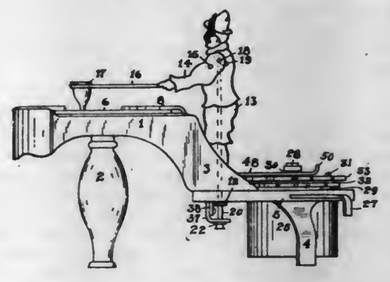
2. A nozzle for spraying relatively heavy liquids comprising a body portion having a solid portion, said solid portion having an annular set of longitudinal ports which are circumferentially inclined, said body portion including a chamber arranged at the forward ends of said ports, a spreader stem extendng through the chamber and attached to the solid portion, and a forwardly flaring spreader carried by the spreader stem and arranged near the forward outlet end of the chamber.

1,816,646. AUTOMATIC DEVELOPER FOR PHOTOGRAPHIC PAPER IN SHEETS. HENRI GODEFROY, Paris, France, assignor to Société Godefroy Freres, Paris, France. Filed Dec. 27, 1929, Serial No. 416,851, and in France Feb. 1, 1929. 2 Claims. (Cl. 95—94.)



1. In an automatic developing device for photographic paper in sheets, comprising two endless superimposed bands, adapted to carry the proof between them through the developing bath, the combination with one of said bands; of a guiding device for said band, comprising a pair of parallel rollers, reaching across the width of said band and adapted to guide it with a slight friction between them, a support, on which said rollers are journalled in fixed mutual relation, said support being adapted to swing around a vertical fulcrum point on one end of the rollers with a limited radial movement on the other, two loosely mounted separate friction rolls, adapted to be rotated by the rim of the band when it eventually exceeds its normal course on either side of the machine, a spindle, journalled parallel to the above said rollers, transmission means, operatively connected with said friction rolls and adapted to impart to the spindle clock-wise and counterclockwise rotation respectively, as the band may exceed its normal course on one side or the other, and means, operatively connected with the spindle and the aforesaid roller support, and adapted to impart a swinging movement to the same, as specified above, thus bringing the course of the band, guided by the rollers, back to its normal course.

1,816,647. MUSICAL TOY. FRANK J. GORIUP, Pittsburgh, Pa., assignor to Wolverine Supply & Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 10, 1930. Serial No. 443,065. 11 Claims. (Cl. 84—102.)



1. In a musical toy provided with a plurality of elements which when vibrated produce different musical notes, the

combination with means for causing the vibration of individual elements of a tune-record arranged to be interchangeably applied to the toy and consisting of a unitary structure which comprises the combination of means for controlling the sequence of notes sounded by said vibrating means and means in addition to the sequence control means for selectively regulating the rests between individual notes whereby a given tune may be played.

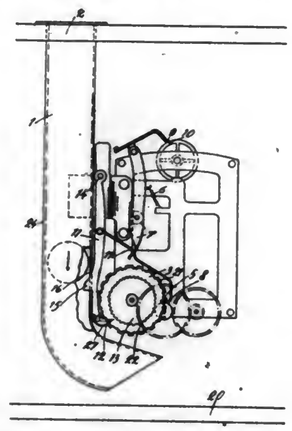
1,816,648. PUNCH CONNECTING MECHANISM. CHARLES B. GRAY, Millbourne, Pa. Filed Nov. 9, 1928. Serial No. 318,282. 8 Claims (Cl. 279—56.)



1. In holder mechanism for a reciprocatory tool, a body member construction having an axial bore, a tool disposed in the bore, means for transmitting compressive stress from the body member construction to the tool on working strokes including an adjustable abutment engaging the upper end of the tool and providing for longitudinal adjustment of the tool relatively to the body member construction, and means for exerting tension stress on the tool on back strokes and for maintaining the tool centered on working and back strokes including a cylindrical bearing portion at the lower end of the body member construction and a body member construction threaded portion of larger diameter than the bearing portion and arranged above the latter, a segmental collet abutting against the lower end of the body member construction and having interior cylindrical and exterior upwardly flaring conical surfaces coaxial with the bore and the body member construction bearing portion, and a collar having coaxial interior conical, cylindrical bearing, and threaded portions engaging the collet conical surface, the body member construction bearing portion, and the body member construction threaded portion, the collet being rendered effective to establish the gripping and centering relation by screwing up the collar and the connection being constructed and arranged to provide said gripping and centering relation before the limit of screwing-up range of the collar is reached.

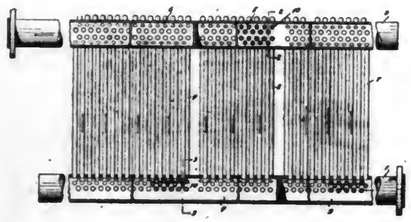
1,816,649. COIN CONTROLLED SAVINGS CLOCK. ANDERS TORSTEN HAMMARSTRAND, Djursholm, and NILS MAGNUS LAGERKRANS, Enskede, Stockholm, Sweden. Filed Nov. 14, 1929, Serial No. 407,134, and in Sweden Feb. 3, 1928. 5 Claims. (Cl. 194—19.)

1. In coin controlled savings clocks including a casing containing a clockwork and a coin chute, the combination of a driving wheel forming part of the clockwork, a disk frictionally coupled to said driving wheel, means engageable with said disk and a part of said clockwork for locking said disk and said clockwork against movement, a pivotally mounted lever having a portion projecting into the chute and engageable by a coin descending in said



chute to rock said lever, and means carried by said lever to actuate the first named means to release the clockwork and free said driving wheel for rotation.

1,816,650. BOILER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Sept. 12, 1927. Serial No. 218,921. 5 Claims. (Cl. 122—476.)



1. In combination, a header having a steam inlet, a plurality of outlet tubes disposed at varying distances from said inlet, and ferrules in said tubes projecting into said header, each of said ferrules having means to divert steam into the corresponding tubes, the ferrules nearest the inlet being constructed and arranged to divert a greater amount of steam than those more remote from the inlet.

1,816,651. REEL. FRANK MOSSBERG, Attleboro, Mass., assignor to Mossberg Pressed Steel Corporation, Attleboro, Mass., a Corporation of Massachusetts. Filed Apr. 27, 1928. Serial No. 273,217. 8 Claims. (Cl. 242—123.)



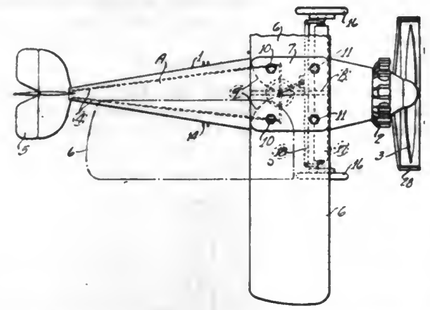
2. A reel comprising a tubular barrel, a head member at each end of the barrel, ears cut from the stock of the head members and folded to extend into and engage the inner surface of the barrel, each of said ears being provided with an opening through it into which welding material is deposited for securing the heads to the barrel.

1,816,652. RUBBER BINDING FOR UNIFORM SUITS AND THE LIKE. KARNIK NAKASHIAN, Brooklyn, N. Y. Filed Mar. 5, 1930. Serial No. 433,252. 2 Claims. (Cl. 2—232.)



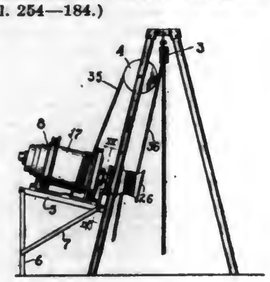
1. A rubber binding for uniform suits and the like, comprising a cylindrical member of rubber for engaging flush within a cuff, sleeve and the like, and formed with an outer enlarged end for extending around over the outer end of said cuff, sleeve and the like, its inner end being reduced for forming a continuous surface with the inner surface of the cuff, sleeve and the like, and means for holding a transverse crease in said cylindrical member so as not to deform the conventional crease pressed into cuffs, sleeves and the like, said means including a sharp edge form having inturned rear edges, and means in said cylindrical member for receiving said inturned edges.

1,816,653. AIRPLANE CONSTRUCTION. WILLIAM H. NELSCH, St. Louis, Mo. Filed Mar. 24, 1930. Serial No. 438,604. 1 Claim. (Cl. 244—29.)



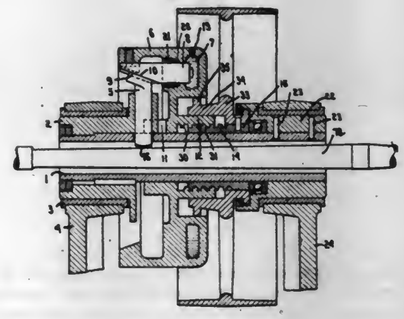
In an airplane, the combination with a fuselage, of a supporting plane therefor adapted to be fixed in either its plane-supporting position or folded with its outer ends rearwardly toward the rear of the airplane, a pair of steerable supporting wheels mounted to and below said fuselage, control mechanism for steering said airplane while aloft, and a single steering wheel within said fuselage and selectively movable into co-operative engagement with either said first control mechanism or said steerable supporting wheels.

1,816,654. HOISTING MAST. HARRY J. POWERS, Chicago, Ill. Filed Apr. 20, 1929. Serial No. 356,787. 1 Claim. (Cl. 254—184.)



In a hoisting machine, a drum, a supporting member secured to one end of said drum and having a shaft, a bearing surrounding said shaft, a second shaft coaxial with said first mentioned shaft, a second drum secured to the outer end of said second shaft, a hub mounted on the inner end of said second shaft, an internal gear having a hub mounted on said bearing concentric with said first shaft and connected to said first mentioned hub for cojoint rotation, a pinion carried by said support and meshing with said internal gear, means for braking said first mentioned drum and leasing said internal gear for operating said second drum, and means for latching said second shaft against rotation, in one direction.

1,816,655. CHUCKING MECHANISM. FREDERICK H. RAGAN, Cleveland, Ohio, assignor to The Columbia Axle Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 1, 1926. Serial No. 91,368. 21 Claims. (Cl. 279—4.)



1. In apparatus of the character described, the combination with a rotatable chuck of radially movable engaging jaws carried thereby, an actuating element for said jaws, a rotatable driving member for said chuck, and means operable upon rotation of said rotatable member for effecting operation of said actuating elements.

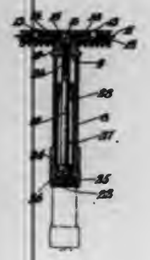
1,816,656. GARMENT SUPPORTER. LILLY SCHWEIZER, New York, N. Y. Filed Sept. 6, 1930. Serial No. 480,089. 5 Claims. (Cl. 241—1.)



1. A hose support comprising a supporting strip having juxtaposed ends, one end having a hasp thereon, and

the other end having a collar to engage with said hasp for securing the ends together, said collar having prongs for frictionally engaging with a part of the hasp for retaining the collar in assembled relation with the hasp.

1,816,657. SAFETY RAZOR. HYMAN R. SEGAL, New York, N. Y., assignor to Segal Safety Razor Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1929. Serial No. 335,031. 18 Claims. (Cl. 30—12.)



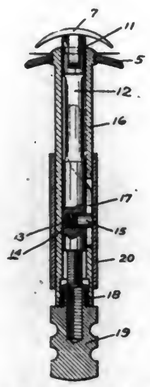
16. In a safety razor, a shank, a guard attached thereto, a supporting stem slidably arranged with respect to said shank, a blade engaging plate pivotally attached to said stem and means for rotating said stem about its own axis as said stem moves outwardly of said shank.

1,816,658. AUTOMATIC SAFETY RAZOR. HYMAN R. SEGAL, New York, N. Y., assignor to Segal Safety Razor Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1929. Serial No. 335,032. 23 Claims. (Cl. 30—12.)



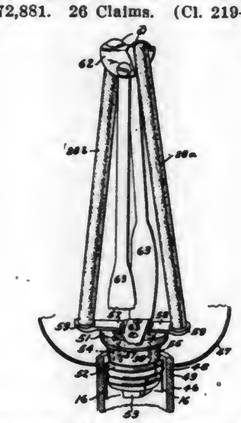
1. In a safety razor, a rigid frame, a supporting stem slidably arranged with respect to said frame, a blade engaging plate pivotally attached to said stem, and means for rotating said stem about its own axis as said stem moves outwardly of said frame, said plate having an end portion thereof inclined outwardly and upwardly.

1,816,659. RAZOR. HYMAN R. SEGAL, New York, N. Y., assignor to Segal Safety Razor Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1929, Serial No. 392,011. Renewed May 14, 1931. 4 Claims. (Cl. 30—12.)



1. A razor including, in combination, a clamping plate, a guard, a rod pivotally mounting said plate and movable with respect to said guard and said plate having its center of gravity to one side of its point of pivotal connection with said rod, whereby one end of said plate will tend to rock downwardly.

1,816,660. ELECTRICAL HEATING APPLIANCE. HAROLD N. SHAW, Milwaukee, Wis., assignor, by mesne assignments, to Globar Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Dec. 3, 1925. Serial No. 72,881. 26 Claims. (Cl. 219—34.)



1. In an electrical heating appliance, in combination with an insulating support, a plurality of spaced terminal contacts carried by said support, a resilient compressible looped member whose base is clamped between said insulating support and one of said contacts with the aid of a block which insulates said contact from said resilient member, the opposite free end of said loop carrying another contact, and a self-sustaining resistance heating element mounted between said contacts by means of said looped member.

1,816,661. TRANSMISSION HOUSING. NEWTON SKILLMAN, Highland Park, Mich., assignor to O. & S. Bearing Co., Detroit, Mich., a Corporation of Michigan. Filed May 12, 1928. Serial No. 277,238. 7 Claims. (Cl. 74—39.)

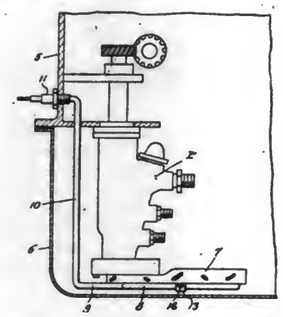
1. In a transmission housing of the type having a shifter arm extending through the upper end thereof, and

a member on the lever having a spherical bearing surface, an outer cylindrical bearing sleeve having an inturned upper edge positioned within the housing, and a bushing of lubricant impregnated fibrous material, pre-



formed to provide a spherical bearing surface, positioned within the upper end of said bearing member and contacting directly with said spherical bearing surface of said member on the shifter arm.

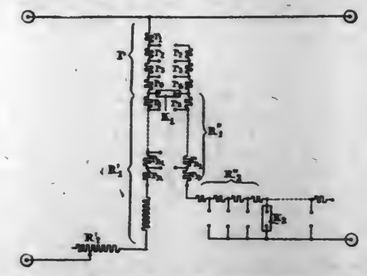
1,816,662. CRANK CASE AND OIL PUMP HEATER. EDWARD L. SOBOLIK, David City, Nebr. Filed Mar. 28, 1930. Serial No. 439,711. 2 Claims. (Cl. 219—38.)



1. In an electrical heater of the class described, a tubular casing having a circular part adapted for disposition in the crank case of an internal combustion engine between the bottom of the crank case and the screen of the oil pump within the crank case, angularly disposed branches extending from the ends of the circular part upwardly through the cylinder block of the internal combustion engine, an electrical heating wire arranged within the circular part of said tubular casing, said heating wire being arranged in an electrical circuit, the wires of which extend through said branches, said circuit wires and said electrical heating wire being suitably insulated from the branches and casing respectively, and a switch arranged in said circuit for controlling the heating unit.

1,816,663. DIAPHONOMETRIC MEANS. GEORGES VIARD, Paris, France. Filed Nov. 21, 1927, Serial No. 234,636, and in France Nov. 25, 1926. 11 Claims. (Cl. 179—175.)

1. An electrical attenuator comprising a network formed of series and shunt elements interposed between a pair of input and a pair of output terminals, and means for simultaneously varying said shunt and certain of said series elements in equal and opposite amounts for adjust-



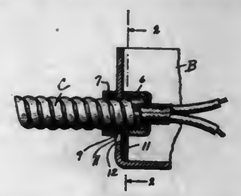
ing the attenuation over a wide range of values while maintaining substantially constant the terminal impedances of said attenuator.

1,816,664. CABLE CONNECTER. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Sept. 11, 1925. Serial No. 55,664. 22 Claims. (Cl. 247—25.)



1. Cable connecting means comprising in combination, a box having round cable receiving holes, an adapting connecter disposed in the box hole and including means to secure either flat or round cable to the box, connecter anchorage means carried on the connecter by which it is fixed in the box hole, cable clamp means carried on the connecter by which a cable is secured to the box and connecter, adapter means carried by the connecter by which a flat cable is secured to the connecting means, said adapter being independent of the curved inner wall of the connecter, and said adapter including means cooperating with the clamp means to apply pressure to said flat cable.

1,816,665. CABLE CONNECTER. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Original application filed Jan. 22, 1924, Serial No. 687,787. Divided and this application filed July 23, 1926. Serial No. 124,332. 10 Claims. (Cl. 247—25.)



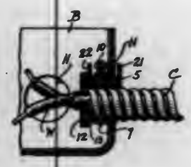
1. Cable and box connecting means comprising, a box provided with a cable and connecter receiving hole, a connecter member of suitable size to fit into the hole and formed to expose a part of the box hole edge directly to a cable, and including spaced means in between which the box hole edge is received to guide and retain movably the connecter during movement of the parts to final fixed position, and operating means on the outside and on the inside of the box including means operable outside the box and including a separate member operable inside the box, by which the connecter is forcibly moved laterally with respect to the axis of the box hole to grip the cable between the exposed box hole edge and connecter.

1,816,666. CABLE CONNECTER. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed July 26, 1926. Serial No. 124,817. 2 Claims. (Cl. 247—25.)



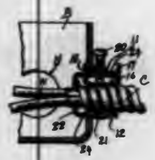
1. A connecter comprising two main plate parts and operating means, and embodying a connecter plate provided with box hole edge anchorage notches, including an inside box wall abutment plate to one side of the notches, a screw operating means as aforesaid mounted in the connecter plate on the other side of the notches and adjacent the notches; and a cable clamp including a bearing plate under the screw, including arms which embrace the edge of the connecter plate and fingers bent over the connecter plate to hold the two parts in movable relation.

1,816,667. CABLE CONNECTER. LEWIS H. CHURCH, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 12, 1926. Serial No. 148,071. 21 Claims. (Cl. 247—25.)



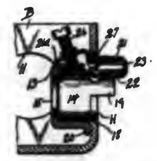
1. A connector comprising, a member including box hole edge anchorage means, operating means carried with the connecter to clamp against a cable and render effective the box anchorage means; and a separate bushing including means to detachably mount it on the connecter.

1,816,668. CABLE CONNECTER. LEWIS H. CHURCH, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 27, 1926. Serial No. 157,013. 1 Claim. (Cl. 247—25.)



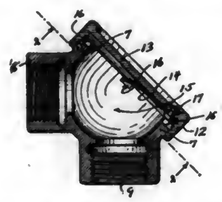
A connecter comprising a longitudinally split expansible connecter sleeve having box hole edge anchorage grooves and a notch, a cable clamp plate carried movably within the sleeve including a shutter at one end to close the sleeve and a guide tongue at the other end slidable in the notch, a screw threaded thru the sleeve to operate the clamp plate, and a separable bushing including an expansible slotted sleeve formed with grooves engaging the connecter sleeve from end to end, and the aforesaid screw and tongue movably operating thru one of the slots in the bushing sleeve.

1,816,669. CABLE CONNECTER. LEWIS H. CHURCH, Roselle, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 31, 1927. Serial No. 179,750. 6 Claims. (Cl. 247—25.)



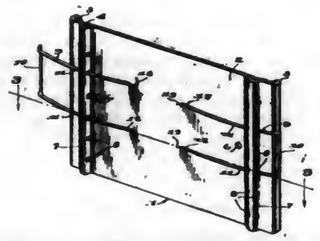
1. A connecter comprising; a combination cable and box clamp including, a box clamp arm with box hole edge anchorage means formed proximate the end of the arm and with its free end adapted to project through a box hole and be disposed within a box, and a cable clamp plate carried with the box clamp arm; a connecter member, a passageway through said member and operating means extending freely through the passageway and carried on the free end of the clamp inside a box to simultaneously move both ends of said clamp to force the anchorage means against a box edge and bear the clamp plate against a cable.

1,816,670. CAPPED ELBOW. LEWIS H. CHURCH, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 27, 1926. Serial No. 157,011. 13 Claims. (Cl. 247—31.)



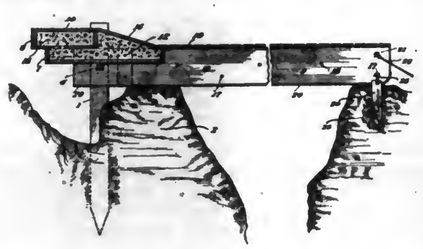
1. A capped elbow comprising, an elbow part including a head and hollow neck, a removable cap part which is adapted to be screw threaded onto the head, a leaf spring concealed between the cap and head parts, including means to anchor the spring to one part, a portion of the spring being in line with the neck to permit disengagement of the leaf spring by reaching through the neck, and a shoulder carried with the other part for engagement by the leaf spring.

1,816,671. LICENSE HOLDER. JOHN C. DAVIDSON, Hay Springs, Nebr. Filed June 6, 1929. Serial No. 368,949. 6 Claims. (Cl. 40—16.)



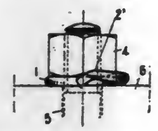
1. A card case holder comprising a backing plate, ribs thereon adjacent the opposite ends thereof, each rib having a plurality of aligned apertures, and the legs of a U-shaped pin member slidably engaged within a pair of said apertures of each rib and in opposed relation to one another.

1,816,672. PORTABLE BRIDGE. PERRY B. DILLMAN, Great Falls, Mont. Filed Mar. 14, 1930. Serial No. 435,933. 3 Claims. (Cl. 14—1.)



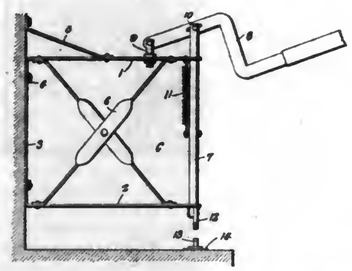
1. A bridge for spanning spaces, including spaced supporting standards, beams, an axle having trunnions journaled on the beams, a weight receiving box supported on the axle between the beams, a removable closure for the box, a platform arranged on the beams and the weight in said box designed to counter balance the beams to swing the bridge to normally upright position.

1,816,673. SPRING WASHER. BRUNO FOCO, Turin, Italy. Filed Jan. 11, 1929, Serial No. 331,832, and in Italy Jan. 24, 1928. 13 Claims. (Cl. 15—36.)



6. A spring washer having a spiro-helicoidal shape upwardly directed from its inner towards its outer end, the inner radius of its outer end being about equal to the maximum radius of a nut in connection with which the washer is to be used, said outer end being deflected towards a plane at right angles to the axis of said washer, passing through the lower edge of the other end thereof, at a point the inner radius of which is somewhat smaller than the maximum radius of said nut, the edges of both of its ends being cut in a substantially radial direction and being adapted to bite into the surface against which the washer is being pressed when inserted between a nut and said surface, the inner edge of its inner end being adapted to bite into the surface of the bolt stem about which the washer is inserted.

1,816,674. BASKET REED CONNECTING MACHINE. FRED FORTNER, Gladwin, Mich. Filed Dec. 27, 1929. Serial No. 416,898. 1 Claim. (Cl. 153—1.)



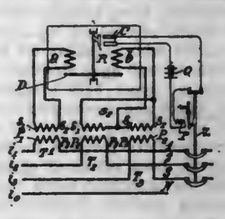
A device for bending a connecting strip about parallel reeds comprising a stationary jaw having spaced recesses to receive a pair of reeds and a connecting strip, a non-movable frame located above the jaw and including upper and lower parallel portions connected by a support attaching portion, means securing said support attaching portion to a support, a rod slidable in the upper and lower portions and in vertical alignment with the jaw, a second jaw having spaced recesses secured to the lower end of the rod for cooperating with the first jaw in bending the strip about the reeds by the downward movement of the rod, tension means between the rod and the upper portion to normally urge the rod upwardly, and a handle pivoted to the upper portion and having a pin and slot connection with the upper end of the rod for moving the latter downwardly against the action of the spring.

1,816,675. SELECTIVE RELAY RESPONSIVE TO UNBALANCED ELECTRIC QUANTITIES. EMILE GRASSOT, Meudon, France, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Aug. 13, 1926, Serial No. 129,031, and in France Sept. 19, 1925. 33 Claims. (Cl. 175—294.)



1. Polyphase circuit protecting and timing apparatus including two relatively movable equipments, means enabling one equipment to act on the other and means for causing torques dependent on different predetermined functions of the phase sequence components of the circuit to be protected to act on said equipments.

1,816,676. DEVICE RESPONSIVE TO UNBALANCED ELECTRIC CURRENTS OR VOLTAGES. EMILE GRASSOT, Meudon, France, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Aug. 13, 1926, Serial No. 129,032, and in France Dec. 23, 1925. 15 Claims. (Cl. 175—294.)

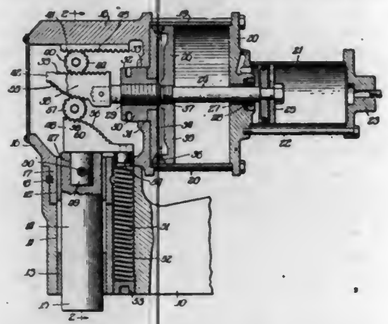


1. Electroresponsive apparatus for a three-phase circuit including in combination two electro-magnets, three current transformers and a movable member on which said electro-magnets act, the primaries of said transformers being respectively connected to the phases of said three-phase circuit, one electro-magnet having a winding connected across the secondary of one of said transformers, and the secondaries of the remaining transformers being connected in opposition across a winding of the other electro-magnet.

1,816,677. GEARED ROLLER WEDGE RIVETER. JOHN C. HANNA, Chicago, Ill., assignor to Hanna Engineering Works, Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1929. Serial No. 351,007. 3 Claims. (Cl. 74—14.)

1. In a machine for performing a riveting or like operation, a movable working member, a slidable pressure ac-

tuated member, means for transmitting the movement and pressure of said pressure actuated member to said working member, said means comprising a wedge carried by said actuated member, said wedge having a cam surface and gear teeth having a pitch line corresponding to said cam surface, a cooperating block carried by said working



member, said block having a cam surface and gear teeth formed adjacent to said cam surface having a pitch line corresponding to said cam surface, a roller in rolling contact with both of said cam surfaces and a gear rotating with said roller in meshing relation with said gear teeth, and means for allowing a slight flexible movement between said roller and roller gear.

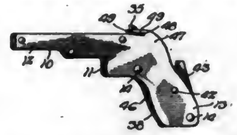
1,816,678. WING SPAR FOR AEROPLANES. RALPH W. HILTON, Wichita, Kans., assignor of one-half to Harvey W. Brown, Wichita, Kans. Filed Jan. 2, 1930. Serial No. 418,081. 1 Claim. (Cl. 244—31.)



In an aeroplane, the combination with a fuselage and a mid-wing extending from opposite sides thereof, of a spar structure wholly erected, at its oppositely extending side portions in the wing, and, at its intermediate portion, in the fuselage, said spar structure comprising substantially horizontal upper bars arranged in the upper portions of the wings and converging toward each other toward the tip ends of the wing, the said upper bars having their intermediate portions inclined downwardly, within the fuselage, from points at opposite sides of the fuselage, a lower bar arranged below the first mentioned bars and including portions inclined upwardly toward the meeting ends of the converging upper bar portions, the said lower bar including intermediate portions inclined downwardly, within the fuselage, from points at opposite sides of the fuselage, and parallel to the inclined intermediate portions of the upper bars, a plurality of braces extending vertically between the intermediate portions of the upper and lower bars and also between the converging portions of the upper bars, and the upwardly inclined portions of the lower bars, other braces extending diagonally between the points of connection of each two relatively adjacent ones of the first mentioned braces, and braces extending between the said upper bars.

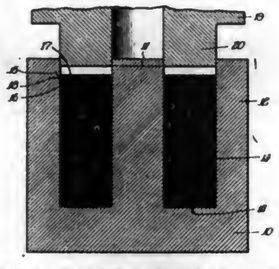
1,816,679. MISSILE PROJECTING DEVICE. PAUL F. KAHLER and STANLEY S. WICKER, Chicago, Ill. Filed Oct. 21, 1929. Serial No. 401,213. 8 Claims. (Cl. 124—12.)

5. A missile projecting toy comprising a body having an open slot formed therein, a projector member pivotally supported by the body and having a projector head movable through the slot and extending outwardly therefrom, a trigger pivotally supported by the body, a keeper provided by the trigger, a latch provided by the projector



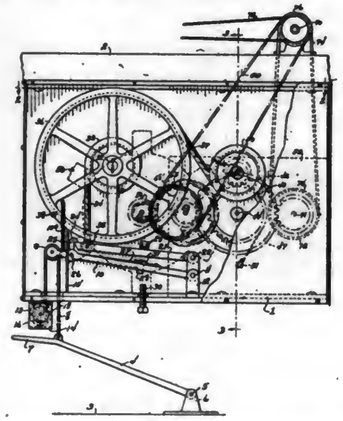
member and engageable by the keeper when in a retracted position, and means providing a slidable connection between the trigger and the body for limiting pivotal movement of the trigger in opposite corresponding directions.

1,816,680. ELECTRICAL COIL AND METHOD OF MANUFACTURING SAME. FRANZ KURATH, Chicago, Ill., assignor to Economy Fuse and Manufacturing Company, Chicago, Ill., a Corporation of New York. Filed Sept. 3, 1929. Serial No. 389,965. 8 Claims. (Cl. 175—21.)



1. The method of making electrical coils which consists in forming a coil having closely spaced windings, impregnating the coil by a fluid thermo-setting resin, subjecting the impregnated coil to heat and a molding pressure to react the resin and to materially compress the coil windings in order to substantially reduce the space between the inner windings.

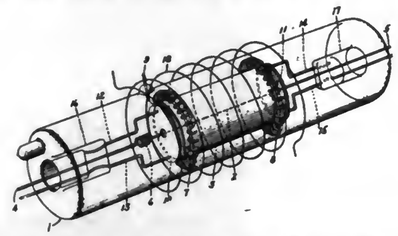
1,816,681. FOOT LEVER MOTOR. SAMUEL LAMER, Pittsburgh, Pa., assignor of one-third to Joseph Skrak, Pittsburgh, Pa. Filed Oct. 28, 1929. Serial No. 402,982. 4 Claims. (Cl. 185—40.)



1. In a foot operated motor, a shaft from which the power of the motor is to be taken, a shaft geared with

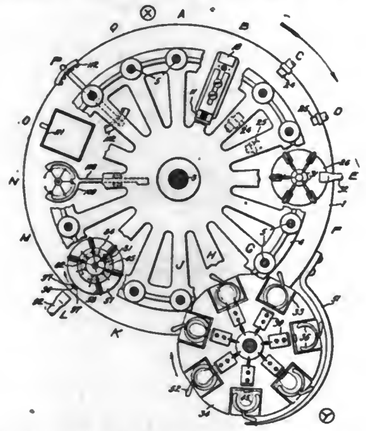
the first mentioned shaft, a fly wheel upon the last mentioned shaft, a shaft geared with the fly wheel shaft, a coiled spring connected with the last mentioned shaft and adapted to be wound by the rotation of said shaft in one direction and to constitute a means for driving when the spring is permitted to unwind, and a foot lever operable, in a single depression thereof, to rotate the fly wheel shaft to impart impetus thereto sufficient to fully wind the said spring.

1,816,682. ELECTRON DISCHARGE DEVICE. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 10, 1926. Serial No. 93,727. 5 Claims. (Cl. 250—27.5.)



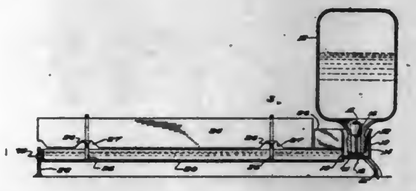
1. The combination of means for generating an electron discharge accompanied by an amount of positive ionization which is insufficient to materially neutralize space charge, means for trapping positive ions in the discharge space and magnetic means for varying the effectiveness of said trapping means.

1,816,683. FILAMENT MOUNTING MACHINE. WILLY LEDIG and WALTHER-WINFRIED LOEBE, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed Dec. 30, 1927, Serial No. 243,698, and in Germany Jan. 19, 1927. 20 Claims. (Cl. 176—4.)



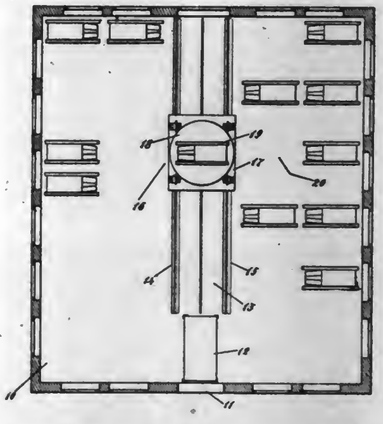
1. A filament mounting machine comprising a plurality of bending heads disposed about a common center at points on substantially a horizontal circle and each comprising a tubular bending pin set horizontal and tangential to the circle and having a longitudinal slot in its side, a loop bender rotatably mounted on said pin and having a longitudinal slot in its side and a bending face transverse to said pin and through which the end of said pin projects to form a mandrel, said bending face being shaped to engage a straight wire lying against it and by rotation of said loop bender to bend said wire around said mandrel into an eye concentric with and larger than the bore of said pin, actuating means for normally holding said pin and said loop bender with their slots in registry and open on the same side of said circle and for rotating said loop bender on said pin, and a stem holder for holding a stem with radially projecting straight anchor wires at said common center with the outer ends of said anchors across said mandrels and in engagement with the bending faces of said loop benders.

1,816,684. POULTRY DRINKING FOUNTAIN. BRIGHAM J. LIECHTY, Springville, Utah. Filed June 26, 1929. Serial No. 373,864. 1 Claim. (Cl. 119—77.)



A drinking fountain comprising an elongated trough having connection at one end with a cup, a receptacle designed to seat the neck therefor within the bottom of the cup, a valve mechanism included within the neck of the receptacle and engageable with the bottom of the cup to release the contents of the receptacle when the latter has the discharge neck therefor wholly disposed within the cup, and dividers carried by each the trough and cup to prevent live stock from entering the trough and contaminating the contents thereof.

1,816,685. TRAVELING TURNTABLE. GOTHARD LOWENSTEIN, Brooklyn, N. Y. Filed Oct. 17, 1927. Serial No. 226,756. 2 Claims. (Cl. 104—48.)

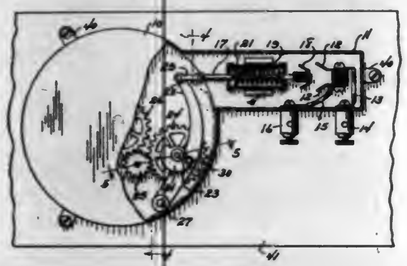


1. In a device of the class described, a carrier comprising a platform adapted to travel along a floor, wheels supporting said platform having their undersides projecting but slightly beyond the lower surface of said platform, so as to allow a small clearance between said platform and the surface over which it travels, and a turn table mounted on said platform.

1,816,686. TIME LIGHT SYSTEM. THOMAS H. MAPEL, Bloomington, Ill. Filed Sept. 30, 1927. Serial No. 223,210. 1 Claim. (Cl. 200—38.)

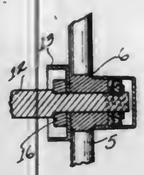
A time control circuit closing device comprising a casing having an extension, clock mechanism housed within the casing, spaced contacts arranged within the extension,

conductor wires leading from the contacts for connection with an electrical unit to be supplied with current, a plunger mounted in the extension, a contact mounted at one end of the plunger and adapted for bridging engagement with the first mentioned contacts in one position of sliding movement of the plunger, an abutment upon the plunger, a spring bearing against the abutment and yieldably urging the plunger to a retracted position, a shaft mounted in the casing, a gear upon the shaft, a pinion meshing with



the gear and with a gear of the clock mechanism whereby to provide for rotation of the shaft in timed relation to the operation of the clock mechanism, a lever arm pivotally mounted within the housing, operative connection between the outer end of the arm and the said plunger, an abutment element upon the arm, and a cam fixed upon the said shaft and rotatable therewith and coacting with the said abutment element.

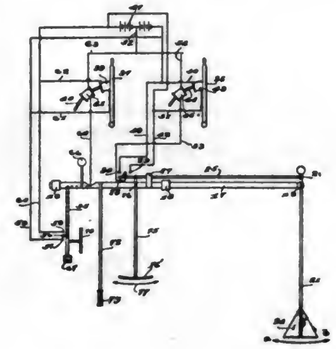
1,816,687. WHEEL SECURING MEANS. RICHARD F. MARRON, Los Angeles, Calif., assignor of one-third to L. O. Cline, Los Angeles, Calif. Filed Nov. 5, 1929. Serial No. 405,013. 1 Claim. (Cl. 287—53.)



In a device of the character described, an axle having its end portion provided with flat surfaces for the purpose of retaining a hub thereon, said hub being provided with flat surfaces adapted to cooperate with the flat surfaces of said axle for the purpose of preventing rotation of either part with relation to the other, a nut having an opening therethrough of the same cross sectional shape as the cross sectional shape of said axle at the point where the flat sides are provided, threads formed on said axle and threads formed on said nut, and means for preventing rotation of said nut with respect to said axle, said means comprising segmental wedges positioned between said nut and the flat portion of said axle and U-shaped clips adapted to engage said nut and said wedges for the purpose of preventing said wedges from being displaced, said clips having two legs, one of which extends through said nut and one of said wedges, the other of said legs engaging the outer surface of said nut and one of the wedges.

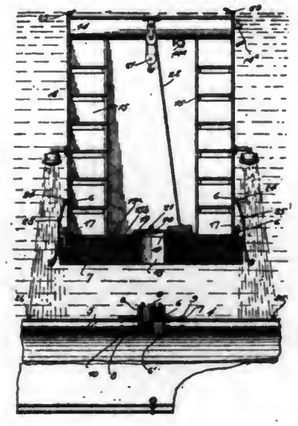
1,816,688. AEROPLANE CONTROL. CHARLES MCCARROLL, Kingsport, Tenn. Filed Aug. 22, 1929. Serial No. 387,715. 6 Claims. (Cl. 244—29.)

1. In combination with an aeroplane, a rotatable shaft extending laterally therefrom, a rod supported by said shaft, fins carried by the rod adapted to cause rotation of the shaft in maintaining the rod in parallel to the ap-



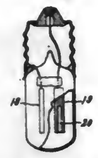
proaching sweep of the air, an arm extending from the shaft, and a sighting member carried by said arm whereby the path of travel of the aeroplane may be determined.

1,816,689. ATTACHMENT FOR SUBMARINES AND SHIPS. JAMES MIRLINK, Bradley, Ohio. Filed Apr. 12, 1928. Serial No. 269,681. 2 Claims. (Cl. 61—69.)



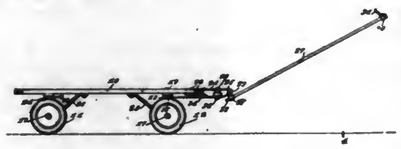
1. In combination with a vessel having a tubular mounting passing through its wall and having a detachable closure within the mounting, life saving apparatus comprising a chamber member provided with an opening of the same diameter as the exterior diameter of the tubular mounting, a block of soft elastic material carried by the chamber member and having an opening registering with the opening of the chamber member, said block being of greater transverse thickness than the height of the edge of the tubular mounting above the outer surface of the wall of the vessel, the opening in the block snugly and slidably receiving the tubular mounting, means for connecting the side walls of the chamber with the wall of the vessel and a closure for the opening in the wall of the chamber and removable therefrom interiorly of the chamber.

1,816,690. GASEOUS CONDUCTION LAMP. DANIEL MCFARLAN MOORE, East Orange, N. J., assignor to General Electric Company, a Corporation of New York. Filed Nov. 7, 1924. Serial No. 748,346. 7 Claims. (Cl. 176—122.)



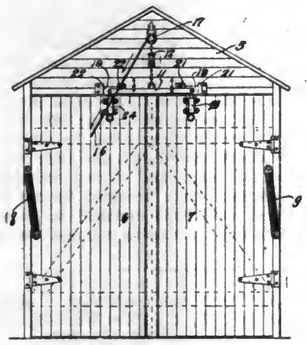
1. A gaseous conduction lamp comprising a sealed vessel containing an atmosphere of good conductivity and a pair of parallel electrodes therein, one having in the end a hole deeper than its diameter, the pressure of said atmosphere being so chosen that at the operating potential substantially all the glow discharge appears in said hole.

1,816,691. COASTER. WALTER HERMAN NOTZKE, Pekin, Ill. Filed Oct. 14, 1929. Serial No. 399,564. 3 Claims. (Cl. 280—87.5.)



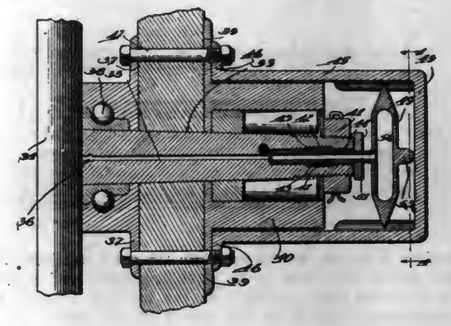
1. In a toy, a wheel supported platform including pivotally mounted front steering wheels, an elongated substantially U-shaped member extending forwardly from the platform, a pivot pin extending transversely through the arms of said member, a steering bar having spaced sockets therein mounted for pivotal movement between said arms upon said pin, means operatively connecting the steering wheels and bar, oppositely extending spring arms mounted upon the pivot pin between the arms of the U-shaped member and bar, and means extending from the spring arms to yieldingly engage within the sockets and yieldingly hold the steering bar against accidental movement.

1,816,692. FASTENING DEVICE. THOMAS PHILLIPS, San Francisco, Calif. Filed May 31, 1929. Serial No. 367,454. 3 Claims. (Cl. 292—254.)



1. In a garage door fastener, the combination with a garage door, of a bar slidably carried above said door, a sliding block pivoted to said bar, a latch carried by said door and adapted to pass beneath said bar and means for elevating said bar from a remote point.

1,816,693. AUTOMATIC TIRE INFLATION MECHANISM. JOHN W. PIPPIN, Hebbronville, Tex. Filed Sept. 15, 1928. Serial No. 306,201. 1 Claim. (Cl. 152—11.)



In a device for inflating the pneumatic tires of wheeled vehicles, a spindle mounting a pneumatic-tired wheel and having a longitudinal air passage therethrough to its outer end enlarged in diameter at said outer end, a wheel hub having a housing portion capping and enclosing the outer end of said spindle and having a plurality of grooves therein extending in a direction longitudinally of the spindle, a chambered disk-like member having projections fitting in said grooves for rotation of said member with the wheel and for relative longitudinal sliding movement of wheel and member, the latter having a tubular extension journaled in the enlarged outer end of said spindle air passage, a packing gland between said tubular extension and the walls of the enlarged air passage providing an air-tight joint, and an air conduit extending from the chamber of said disk-like member to the inflation valve of said tire having means thereon to engage and open said valve.

1,816,694. REMOVABLE SHELF SUPPORT FOR REFRIGERATORS. HAROLD L. POPE, Grand Rapids, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 31, 1927. Serial No. 216,590. 2 Claims. (Cl. 248—18.)

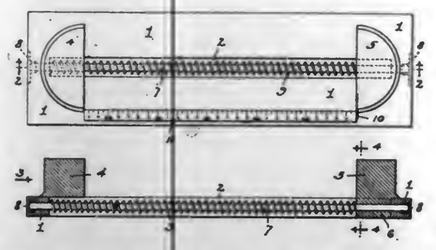


1. A shelf supporting structure comprising a wall having an aperture formed therein, said aperture having intercommunicating portions of larger and smaller cross-sectional dimensions, a stud bolt having a head smaller than the larger portion of the aforesaid aperture but larger than the smaller portion thereof, a resilient spacing member adapted to engage the wall on the side thereof opposite the head of the stud bolt, said spacing member having an aperture formed therein through which the stud bolt projects, an internally threaded peg operatively associated with the end of the stud bolt and abutting the spacing member, and a shelf supported by said peg.

1,816,695. GAUGE FOR MEASURING ENDLESS BELTS. REYMOND HOLMES POPE, Baton Rouge, La. Filed Dec. 27, 1929. Serial No. 416,909. 1 Claim. (Cl. 33—125.)

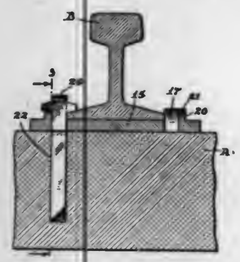
A device of the class described comprising a base having a longitudinal slot in its center, a rod passing through the slot and having its ends connected with the base, a movable semi-circular member having a reduced base part fitting in the slot, with a hole in the reduced part through

which the rod passes, a spring on the rod for holding the movable member at one end of the slot, a stationary semicircular member at the other end of the base, whereby an



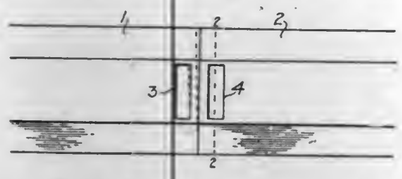
endless belt can be placed over the two members, and the spring will hold it in stretched condition, a scale on the base and a marker on the movable member for indicating on the scale the length of the belt.

1,816,696. RAIL FASTENING MEANS. ALFRED DAVIES PRESTON, Camberwell, Victoria, Australia. Filed Nov. 10, 1930. Serial No. 494,721. 6 Claims. (Cl. 238—304.)



1. A rail fastening including a tie plate having a transversely spaced pair of apertured shouldered portions between which the rail base flange is fitted with spikes driven through the apertures of said shouldered portions and anchored in the tie, said shouldered portions each having a notched upper end.

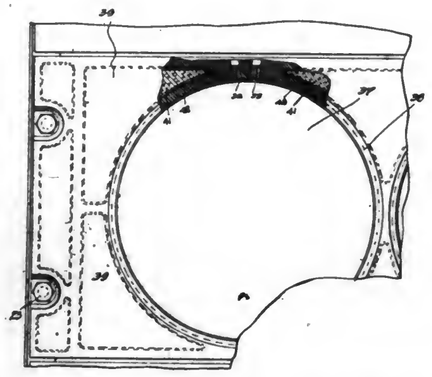
1,816,697. RAILWAY TRACK STRINGER CONNECTION. EDWIN B. RAYNER, Piqua, Ohio. Filed Aug. 27, 1930. Serial No. 478,257. 4 Claims. (Cl. 238—26.)



1. A railway stringer connection, comprising in combination stringers arranged end to end and provided with slots near the meeting ends thereof, and a unitary connector adapted to engage the slots to hold the stringers together.

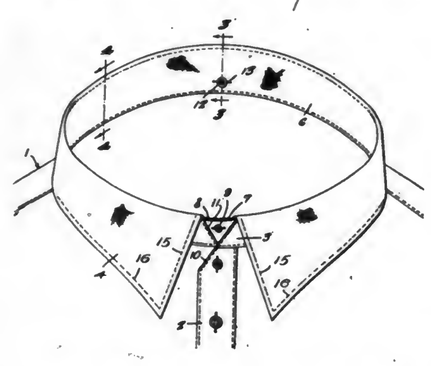
1,816,698. REFRIGERATED CABINET. JOHN R. REPLOGLE, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 8, 1927. Serial No. 218,173. 5 Claims. (Cl. 220—9.)

2. In a refrigerated food storage cabinet, a frame, walls enclosing said frame defining a chamber, said chamber having a food storage compartment therein, the top wall of said cabinet being formed of molded material having an aperture therethrough, the interior portion of said



molded wall being formed with recesses adjacent said aperture, and heat insulating material secured in said recesses.

1,816,699. COLLAR. MAURICE ROBBINS, Boston, Mass. Filed May 10, 1930. Serial No. 451,370. 2 Claims. (Cl. 2—116.)



1. A shirt having its front lapping and the upper end of the outer pleat of the said lapping portion cut angularly, a turn-over collar whose folded edge is connected to the neckband of the shirt and whose outer fold has its lower edge stitched to the front of the shirt and its confronting ends stitched to the front of the shirt and to the neckband, said neckband having opposite angle extensions, one of which alines with the angle end of the pleat, a fabric shield having its upper ends stitched to the upper edge of the collar and having extending ends to bridge the V-shaped space provided by the angle edges of the neckband, said ends designed to be arranged in lapping relation and a fastening element for said ends.

1,816,700. AUTOMOBILE MIRROR. ABRAHAM W. ROSEN, New York, N. Y. Filed Mar. 12, 1929. Serial No. 346,409. 5 Claims. (Cl. 45—97.)

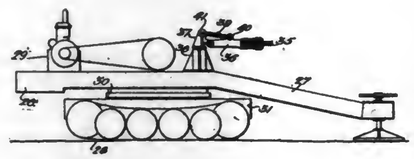
1. A mounting for vehicle mirrors, including a standard member, ball and socket means connecting said mirror with said standard, said means including an arm extending from said mirror and terminating in a ball, adjustable socket means for co-operation with said ball carried by said arm, said last-mentioned means including a cap member

adjustable with respect to said standard, co-operating faces on said cap member and said standard member, and threaded engagement between said standard member and



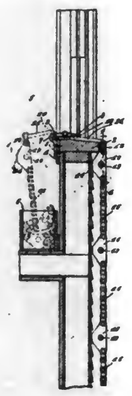
said cap, said engagement being provided by a bushing carried by one of said members and split washer carried by the other of said members.

1,816,701. TRAVELING BACK POST FOR POWER HOES. WILLIAM W. SAYERS, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 18, 1927. Serial No. 234,161. 5 Claims. (Cl. 254—190.)



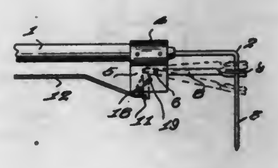
1. A traveling back post for power hoes consisting of a main frame, a sheave adjustably mounted on said frame, a crawler tread supporting said frame, and a motor carried by the frame and operatively associated with said tread.

1,816,702. FIRE ESCAPE LADDER. JOSEPH L. SMALL, Winnisquam, N. H. Filed June 16, 1928. Serial No. 285,919. 2 Claims. (Cl. 228—44.)



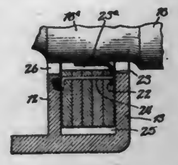
1. A fire escape ladder comprising a plurality of chain sections forming the sides of a ladder, substantially triangular shaped plates pivotally connecting the chain sections and having the apexes thereof flattened to rest evenly against the wall of a building to steady the ladder when in use, and rungs detachably connecting the plates in pairs and disposed in a plane with the chain sections and spaced from the wall of a building by the apexes of the plates to permit a person to obtain a firm foot and hand hold on the rungs.

1,816,703. COMBINED RAKE CLEANER AND DEPTH GAUGE. WILLIAM SPRAGUE, Monticello, Ill. Filed July 30, 1929. Serial No. 382,185. 1 Claim. (Cl. 55—146.)



A combined rake cleaner and depth gauge comprising a sleeve mounted on the handle of the rake and having spaced parallel portions, an arm having one end pivoted between said portions of the sleeve, a cleaning and gauge plate carried by the arm and slidable on the teeth of the rake, an extension formed on the pivoted end of the arm and disposed at right angles thereto and located between said parallel portions of the sleeve, an operating means connected to said extension, said parallel portions of the sleeve having a plurality of arcuately arranged openings and the openings in one portion aligning with the openings in the other portion, and a pin to be positioned in any one pair of aligned openings and engaging the extension to hold the plate at any desired position on the teeth of the rake.

1,816,704. DUST GUARD FOR JOURNAL BOXES. WILLIAM N. THORNBURGH, Chicago, Ill. Filed Jan. 30, 1922. Serial No. 532,562. 2 Claims. (Cl. 286—6.)

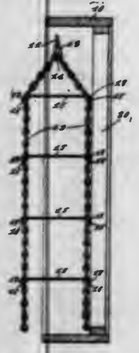


1. A dust guard for journal boxes comprising a rigid unitary structure formed of a plurality of similar wooden laminations having an aperture therethrough to receive the car axle, an annular resilient leather washer having a portion thereof seated against one side of said laminated structure and having an annular flange turned inwardly within said opening and adapted to maintain contact on its lateral side with the peripheral surface of the axle, and securing devices extending through said annular washer and through the laminations of said structure for securing all of said parts in assembled relation.

1,816,705. DISPLAY RACK. WILLIAM TRAYLOR and VAN D. ARTHUR, Fortville, Ind. Filed Dec. 9, 1929. Serial No. 412,825. 1 Claim. (Cl. 211—114.)

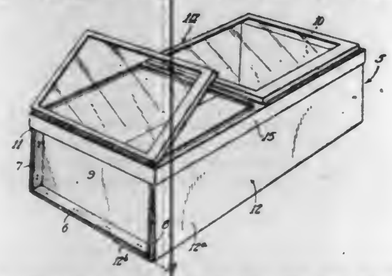
A display rack for use within cabinets comprising supports of chain link formation suspended in pairs within a

cabinet, shelves having portions removed to accommodate the links of said supports, and flanges depending from



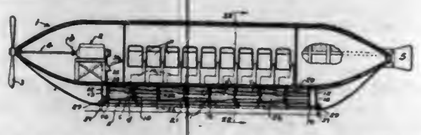
the shelves adjacent the portions removed therein to prevent accidental displacement of the chain link connections therewith.

1,816,706. CONTAINER. HARRISON B. WALTER, Chicago, Ill., assignor to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed Apr. 29, 1931. Serial No. 533,757. 3 Claims. (Cl. 206—44.)



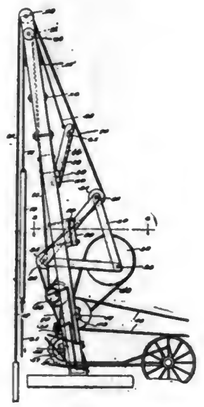
1. A container having a bottom and four side walls, an integral hinged portion on one side wall adapted to form a top closure, the dimension of the container at right angles to the side wall to which the closure is hinged being substantially greater than the height of said wall, and the corresponding dimension of the closure being no greater than the said dimension of the container, the free edge of the closure terminating adjacent the upper edge of the container opposite the hinge, said hinged portion being suitably scored along a line substantially parallel to the hinge to provide two sections, the inner section adjacent said side wall being substantially congruent therewith, whereby the hinged closure portion, when swung upward to open the container, may be folded around the outside thereof to lie substantially flat along said side wall and the bottom.

1,816,707. MEANS FOR VERTICALLY RAISING AND LOWERING AEROPLANES. WILLIAM WARDELL, Los Angeles, Calif., assignor, by mesne assignments, to Dragon Fly Aero Corporation, Ltd., a Corporation of Nevada. Filed Aug. 22, 1927. Serial No. 214,673. 6 Claims. (Cl. 244—15.)



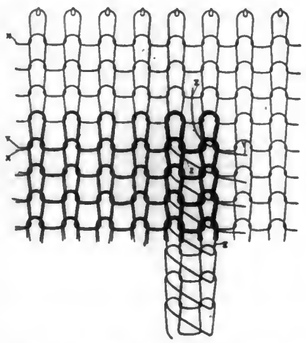
1. An aeroplane comprising a passenger carrying body; tubes closed at one end and open at the other end and secured to the underside of said body, said tubes being positioned relative to said body so that the tubes open away from said body; a shaft mounted in each of said tubes; propellers secured to the shafts; and means for operating said propellers.

1,816,708. DRILL MACHINE. CARTER A. WILLIS, GORDON J. WILLIS, and REUBEN M. WILLIS, Chanute, Kans., assignors to The Willis Drilling Machine and Manufacturing Company, Chanute, Kans., a Corporation of Kansas. Filed June 28, 1930. Serial No. 464,616. 5 Claims. (Cl. 255—11.)



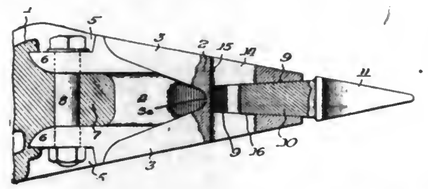
5. A drill rig including a mast, a spudding line jack pivotally mounted for vertical movements on the said mast, power means for actuating said jack, a lock member also pivotally mounted for vertical movements on the mast and above said jack, and means normally disposed to sustain said lock member in inoperative position, said lock member being adapted to gravitate to engaged relation with said jack when said means is released, said jack being depressed when in locked positon whereby the said power means will be rendered inoperative.

1,816,709. KNITTED FABRIC. JOSEPH HARVEY WILSON, Lookout Mountain, Tenn., assignor to Scott and Williams, Inc., New York, N. Y., a Corporation of Massachusetts. Filed Jan. 7, 1930. Serial No. 419,103. 3 Claims. (Cl. 66—182.)



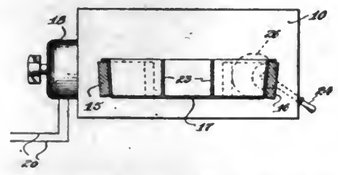
1. A knitted stocking having a portion spliced with a reinforcing yarn having free ends, in combination with an additional yarn knit in the wale or wales at the edge of the spliced portion to bind the free ends of the splicing yarn.

1,816,710. REVERSIBLE EXCAVATOR TOOTH WITH SOCKETED TIP. DONALD H. YOUNG, Berkeley, Calif., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Aug. 24, 1927. Serial No. 215,064. 4 Claims. (Cl. 37—142.)



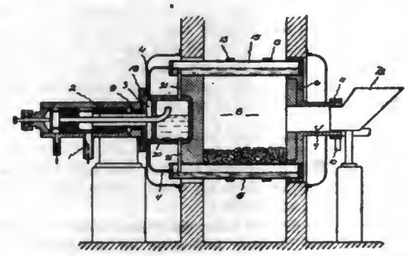
2. A replaceable three part excavating tooth comprising a replaceable base member adapted to be secured to a digging lip and including upper and lower inclined surfaces, a replaceable and reversible sub-base member secured to said base member and including upper and lower inclined surfaces forming extensions of the inclined surfaces of said base member, a replaceable and reversible tip portion secured to said subbase member and including tapered upper and lower surfaces forming extensions of the inclined surfaces of said sub-base and said base member, said base, sub-base and tip portion constituting an approximately uninterrupted wedge.

1,816,711. FREEZING TRAY HEATING DEVICE. ARTHUR W. BERRESFORD, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 18, 1927. Serial No. 213,784. 6 Claims. (Cl. 219—47.)



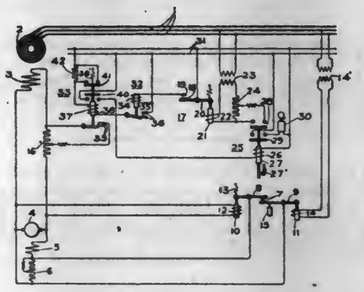
1. In a freezing tray heating device adapted to removably support a freezing tray, means for clampingly engaging a metallic freezing tray and means for simultaneously inducing an electrical current therein.

1,816,712. ROTATING STEAM BOILER. JOHAN VIKTOR BLOMQUIST, Stockholm, Sweden, assignor to Aktiebolaget Atmos, Stockholm, Sweden, a Corporation of Sweden, and Societe Alsacienne de Constructions Mecaniques, Mulhouse, France, a Corporation of France. Filed Nov. 24, 1930, Serial No. 497,866, and in Germany Dec. 18, 1929. 3 Claims. (Cl. 122—11.)



1. In a slowly rotating steam boiler, a rotor construction consisting of a plurality of interspaced steam generating tubes mounted around and communicating with a central container positioned substantially at one end of the boiler, means adapted for preventing a complete return of the water from the generating tubes to the central container through the communication means positioned therebetween, an end plate positioned at the opposite end of the boiler and forming a support for the steam generating tubes at that end, and a central opening in said end plate adapted for introduction of fuel into the interior of the squirrel-cake shaped rotor structure formed by the steam generating tubes and the end members of the boiler.

1,816,713. ELECTRICAL REGULATING SYSTEM. ELMER J. BURNHAM, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 1, 1929. Serial No. 404,119. 9 Claims. (Cl. 171—229.)



1. In combination, a dynamo-electric machine, a field winding therefor, means for exciting said field winding, means responsive to a predetermined abnormal electrical condition of said dynamo-electric machine for substantially changing the excitation of said dynamo-electric machine, and means controlled by said last mentioned means for modifying the action of said last mentioned means after the initial operation thereof in responding to said predetermined abnormal electrical condition.

1,816,714. LINGERIE PAD. ALEXANDER ADLER, Yonkers, N. Y. Filed May 1, 1930. Serial No. 448,963. 7 Claims. (Cl. 24—6.)

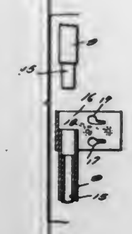


1. In a device of the kind described, a pad having one side formed of waterproof material and the other side formed of relatively soft material, means on the soft side for securing the pad in position on a wearer, and flexible means secured between the sides of the pad and arranged to overlie the waterproof side of the pad for the support of a bouquet.

1,816,715. TOWER. HENRY T. BARNHART, Hollidays Cove, W. Va., assignor, by direct and mesne assignments, to Cove Tower Company, Hollidays Cove, W. Va., a Corporation. Filed Dec. 26, 1929. Serial No. 416,653. 1 Claim. (Cl. 189—19.)

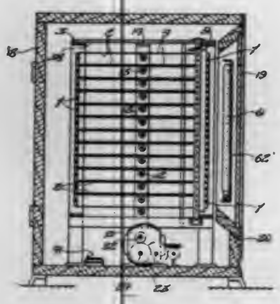
A tower sector comprising a pair of double legs, each member of each double leg comprising a number of sections, each section comprising inner and outer tubular members with the lower end of the inner member projecting beyond the lower end of the outer member, and

the upper end of the outer member projecting beyond the upper end of the inner member, with a lower end of the inner member telescoping into the upper end of an outer member, of a lower section, angle brackets secured



to the outer members and projecting beyond the upper ends thereof to engage the lower ends of the outer members of adjacent sections, to which said brackets are secured and cross bars having their ends connected with the brackets.

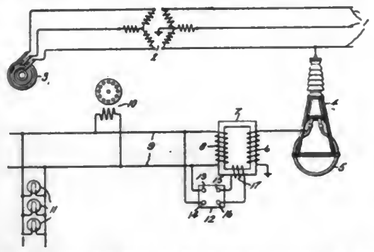
1,816,716. AUTOMATICALLY CHANGING SIGN OR ADVERTISING DEVICE. FRANCIS LOVELL BEDDISON, East St. Kilda, Victoria, Australia. Filed June 9, 1930, Serial No. 460,028, and in Australia Oct. 28, 1929. 14 Claims. (Cl. 40—32.)



1. An automatically changing sign or advertising device comprising a series of endless carriers arranged in superposed or side by side formation, rotary operating members extending transversely between the opposite stretches of each carrier at the front of the device, a series of rigid or semi-rigid slats attached to and extending transversely of each carrier and bearing sections of different signs or advertisements, and means for intermittently and simultaneously reversing said rotary operating members whereby the slats of each series will be successively moved into and out of display positions to form complete signs or advertisements the slats being maintained substantially flush and with their transverse edges in contact with each other in their display positions by said operating members.

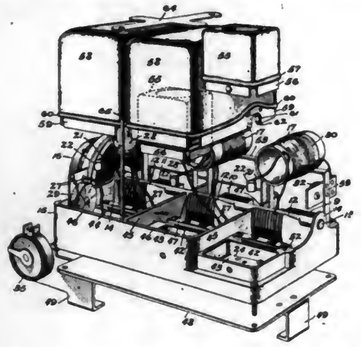
1,816,717. ELECTRICAL DISTRIBUTION SYSTEM. THOMAS A. E. BELT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1930. Serial No. 439,487. 5 Claims. (Cl. 171—119.)

1. In combination, a high voltage alternating current power transmission circuit, a condenser, a step down transformer, means connecting said condenser and the primary winding of said transformer in series between different potential points of said line, a low voltage load circuit connected to the secondary winding of said transformer, load devices connected thereto, and means connected to be



responsive to the voltage of said load circuit for regulating its voltage by varying the relative impedance of said condenser and said transformer.

1,816,718. SHIELDED RADIO RECEIVING APPARATUS AND THE LIKE. WILLIAM L. BOND, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 19, 1930. Serial No. 429,757. 15 Claims. (Cl. 250—16.)

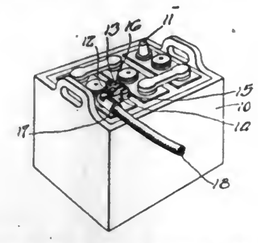


1. A shield for radio receiving apparatus and the like including in combination, an open metallic frame having integral transverse and longitudinal partitions dividing it into section, a well in one of said sections communicating with an adjacent section of said frame, a removable shield mounted in said well, a second removable shield mounted on said frame and providing a closure means for said adjacent section, and an enclosing means for one of said shields.

10. The combination with a tuning capacitor having a plurality of sections and a common control shaft, a plurality of inductances associated therewith, and tube sockets for a plurality of amplifier tubes, of a common support and shielding means including a metallic frame for said tuning capacitor providing bearings for said shaft and a support for said tube sockets, transverse and longitudinal metallic partitions in said frame arranged to separate and shield said tube sockets and tuning capacitor sections from each other, a shield can adapted to surround and with the base to enclose an inductance, a tuning capacitor section and a tube socket, and means for holding said can in a seated position on said frame.

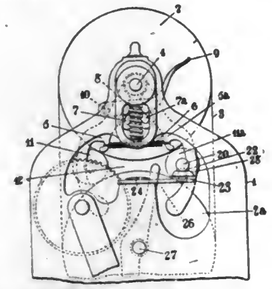
1,816,719. BATTERY TERMINAL. EDWARD BUSCHMAN, Chicago, Ill. Filed July 12, 1930. Serial No. 467,556. 4 Claims. (Cl. 173—259.)

1. In a device of the class described, means providing a stationary jaw member including an arcuated portion having a concave recess provided in the inner side thereof, said jaw member including an inwardly extending shoulder provided at the outer end of said recess, said means including a neck portion extending angularly from said jaw member at the end thereof opposite said shoulder, and including means providing a contact element disposed inwardly of said neck portion, a second jaw member including a bifurcated end portion providing arms movably mounted on said neck portion, said last named jaw



member including an arcuated portion having a concave recess provided therein at the inner side thereof and including a shoulder adapted to be aligned with said first named shoulder, and means for moving said jaw member whereby to bring said shoulders into abutting engagement to clamp a member disposed in said recesses.

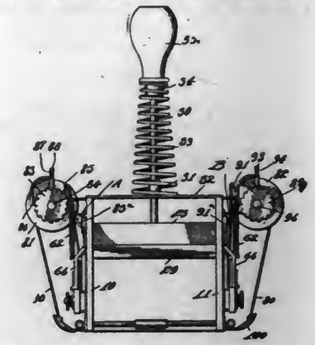
1,816,720. DUPLICATING MACHINE. GEORGE ERNEST CREED, London, England, assignor to D. Gestetner, Limited, London, England. Filed Mar. 31, 1930, Serial No. 440,518, and in Great Britain June 18, 1929. 13 Claims. (Cl. 101—121.)



1. A stencil duplicating machine comprising a frame, a plurality of impermeable inking cylinders rotatably mounted in said frame adapted to force the ink through openings in the stencil, waver rollers associated with said inking cylinders for assisting in distributing the ink thereover, openings in the frame through which the waver rollers may be inserted and means associated with the frame adapted on the insertion of the waver rollers to bring the same into the operative position with respect to the inking cylinders.

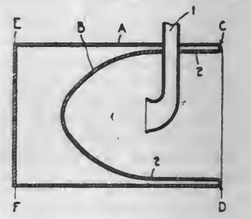
1,816,721. PRINTING MACHINE. JULIO RICARDO CUROTTO, Habana, Cuba. Filed Aug. 4, 1930. Serial No. 472,954. 5 Claims. (Cl. 101—57.)

1. A device of the character described comprising a frame, a hammer slidably mounted in the frame, a hopper for printing frames, means for supporting a printing frame below the hammer and in horizontal alinement with a printing frame in the hopper, a storage space for the used printing frames, means for manually moving the hammer into operative relation with a printing frame located beneath the hammer, means for automatically returning the hammer, means operatively connected with the hammer for moving a printing frame in the hopper into engagement with the printing frame under the hammer and for forcing the last mentioned frame into the storage space while placing the moving frame from the hopper into an operative printing position under the hammer, a fixed means in the storage space for supporting the printing frame shifted to said space and a movable means in said space adapted to engage beneath the



frames and for supporting the frames above the fixed support and spring means for elevating the movable means and likewise the frames above the initial position on the fixed support.

1,816,722. SOUND AMPLIFYING HORN. GABRIEL GONZALEZ DE ANDIA YRARRÁZAVAL, Barcelona, Spain. Filed Dec. 9, 1925, Serial No. 74,365, and in Great Britain Jan. 20, 1925. 8 Claims. (Cl. 181—27.)



1. A sound amplifier comprising a sound tube, a sound reflecting bell surrounding the said sound tube, and a casing surrounding the said bell to provide an air space around and at the back of the said bell, said casing being connected with the front end or lip of the bell to provide a continuation of the bell.

1,816,723. SECURING MEANS FOR LABORATORY OR WORKSHOP APPARATUS. LOUIS DOMINIQUE JOSEPH ARMAND DUNOYER, Neuilly-sur-Seine, France. Filed Nov. 14, 1929, Serial No. 407,303, and in France Nov. 20, 1928. 6 Claims. (Cl. 81—18.)



1. A precision securing device for ensuring a precise position, and always the same position, relative to the

part which is secured, comprising a V-shaped member forming a geometrical dihedron, adapted to receive the part that is secured, and a flexible fastening strap adapted to pass over the part to be gripped, one end of the said strap being fixed in an easily removable manner to one of the sides of the V-shaped member, and the other end being connected to a suitable tensioning means.

1,816,724. TROUSERS PRESS. ROBERT HUGH FORSYTHE FINLAY, Belfast, Ireland. Filed July 8, 1930, Serial No. 466,542, and in Great Britain June 5, 1929. 2 Claims. (Cl. 100—57.)



1. A trousers press comprising a frame, pressing elements associated with the frame for holding and pressing the major portion of a garment, a cuff presser associated with the frame below the pressing elements, a link pivotally connected to the cuff presser and the frame, and an expansion spring between the link and frame acting to force the cuff presser against the frame when the link is in one position, said spring acting to expansively hold the cuff presser away from the frame when the link is moved in another position.

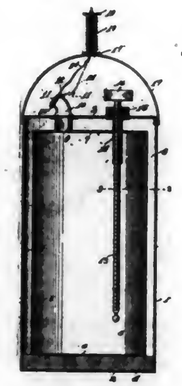
1,816,725. FISHING LURE. EDISON S. FREEMAN, Miami, Fla. Filed Nov. 22, 1930. Serial No. 497,496. 6 Claims. (Cl. 43—46.)



1. A fishing lure of the class described comprising a hollow reticular flexible body shaped to resemble a fish, said body being provided with imitation fins and a tail, and containing natural bait, and a head of imitation character on the lined end of said body, said head being provided with a longitudinal bore, a line lead extending through said bore and into the interior of the body, and additional leaders connected therewith and provided with hooks projecting through the body to the exterior thereof.

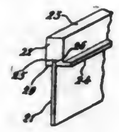
1,816,726. OIL SAMPLER. EMERY G. FRIEDMAN, Brownsville, Tex. Filed June 11, 1930. Serial No. 460,534. 4 Claims. (Cl. 137—18.)

4. An oil sampling device comprising a container, a handle for said container, a spring member secured to the handle, a cable secured to said spring member, a nozzle communicating with the interior of the container, a clo-



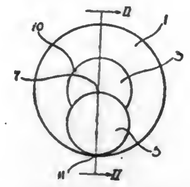
sure for the nozzle, and a cord connected to said closure and adapted to open the closure under abnormal extension of the spring.

1,816,727. SECTIONAL DIVIDING STRIP FOR FLOORS. PASQUALE GALASSI, New York, N. Y. Filed Mar. 15, 1930. Serial No. 436,140. 5 Claims. (Cl. 94—17.)



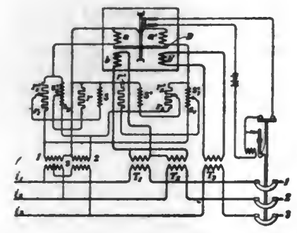
1. In a dividing strip for terrazzo and like floors the combination, with a relatively thin lower section, of a relatively thick upper section connected thereto, said upper section having an uninterrupted upper edge, and being formed integral with a flat continuous flange laterally extending from its lower portion.

1,816,728. OPHTHALMIC LENS. ANNA E. GLANCY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Mar. 25, 1929. Serial No. 349,629. 3 Claims. (Cl. 88—54.)



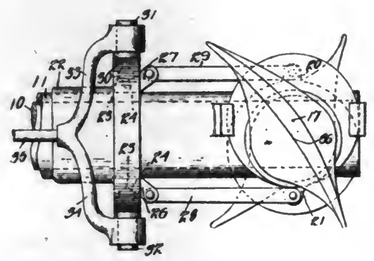
1. A blank for a multifocal lens comprising a focal field of one power partially surrounding a second field of a different power, the center of curvature of both fields lying on the same axial line, a third field contained in both the other fields, the center of curvature of said third field lying on the same axial line as the centers of curvature of the other two fields and having its upper line of joinder passing through the common center of said other two fields.

1,816,729. DEVICE RESPONSIVE TO UNBALANCE IN POLYPHASE CIRCUIT VOLTAGES AND CURRENTS. EMILE GRASSOT, Meudon, France, assignor to General Electric Company, a Corporation of New York. Original application filed Aug. 13, 1926, Serial No. 129,032, and in France Dec. 23, 1925. Divided and this application filed Oct. 25, 1930. Serial No. 491,232. 7 Claims. (Cl. 175—294.)



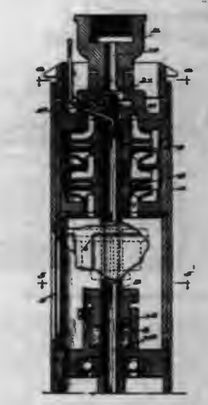
1. In combination with a three-phase circuit, a relay having two current windings respectively connected to be energized in accordance with the current in one phase conductor and the difference between the currents in the remaining two phase conductors and voltage windings arranged to cooperate with said current windings and connected to be energized in accordance with the negative phase sequence components of the voltages of a two-phase system having effective values dependent on the components of the voltages of the three-phase circuit.

1,816,730. AIRPLANE PROPELLER. HARVEY H. HARDIN, Maitland, Mo., assignor of one-half to Ernest G. Hilsabeck, Graham, Mo. Filed June 10, 1930. Serial No. 460,251. 2 Claims. (Cl. 170—163.)



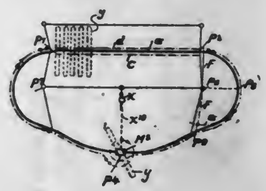
1. A reversible propeller comprising the combination with a propeller shaft of a sleeve mounted thereon and rotatable therewith, the forward end of the sleeve being provided with opposite integral flanges, propeller blades pivotally attached to said flanges, said blades being pivoted at points eccentric of their axes, a collar slidable on said sleeve, a ring within said collar and secured to move axially therewith but to rotate in the collar, and links connecting said ring and ears on said propeller blades, substantially as set forth.

1,816,731. OIL WELL PUMP. JOHN B. HAWLEY, Jr., Minneapolis, Minn. Filed Feb. 10, 1930. Serial No. 427,364. 4 Claims. (Cl. 103—87.)



1. A cylindrical casing having a pump therein, an electric motor in said casing below the pump and adapted to actuate the latter, a non-rotative tube concentrically mounted within the casing and extending through the motor and pump, and electric wires operatively connected to said motor and extended upwardly through said tube.

1,816,732. APPARATUS FOR THE AUTOMATIC PRESENTATION OF OBJECTS FOR SALE. ROBERT KOLLER, Baden, Switzerland. Filed May 22, 1930, Serial No. 454,804, and in Germany Apr. 24, 1929. 10 Claims. (Cl. 211—1.5.)

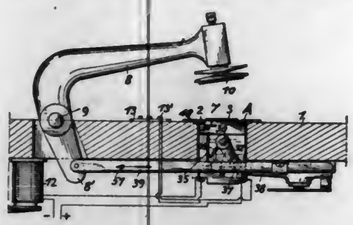


1. An apparatus for the automatic presentation of objects for sale comprising an endless track having a straight portion, a movable carrier extending parallel to the straight portion and formed to support a plurality of article hangers, a trolley running upon the track in one direction and having a motor, means for transferring the article hanger from the movable carrier to said trolley, means for transferring the article hanger again to the endless carrier when the trolley has reached a point adjacent the beginning of said straight portion of the track, and means actuated by the trolley for giving a step by step motion to the endless carrier for each complete travel of the trolley.

1,816,733. PRINTING MACHINE. JOSEPH KRELL, Berlin-Zehlendorf, Germany. Filed May 8, 1928, Serial No. 276,144, and in Germany June 14, 1927. 9 Claims. (Cl. 101—58.)

1. In a printing machine having printing mechanism, means for feeding printing plates equipped with lugs past said mechanism, a principal switch under the control of said mechanism and said means, and selective switches also under the control of said mechanism and said means, circuits connected with said principal and said selective

switches, and a control in the circuit of each selective switch, each selective switch including contact members,

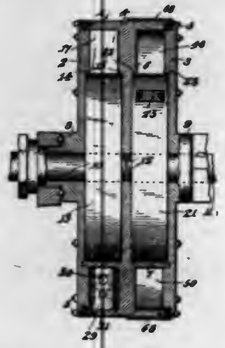


and a locking detent under the control of said lugs for holding said members engaged independently of their control by said mechanism and said means.

1,816,734. ELECTRODE FOR ELECTRIC BATTERIES, ELECTROLYTIC CELLS, AND THE LIKE. LEONARD ANGELO LEVY, London, England, assignor to Mieres, Limited, London, England. Filed Aug. 26, 1929, Serial No. 388,625, and in Great Britain Sept. 21, 1928. 1 Claim. (Cl. 136—25.)

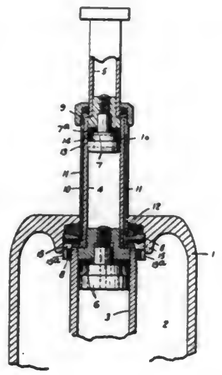
An electrode for galvanic cells composed of a silicon iron alloy containing about 14 to 15 per cent. of silicon and having a micrographic structure which at 500 degrees of magnification indicates a condition of silicon iron solid solution containing considerable proportions of graphite in the form of curved plates and small masses.

1,816,735. VARIABLE SPEED TRANSMISSION UNIT. GROVER C. MAGNESS and CLIFFORD W. DRAKE, Mitchell, La. Filed Mar. 23, 1929. Serial No. 349,491. 2 Claims. (Cl. 60—53.)



1. A variable speed transmission unit comprising, a housing having circular front and rear walls and an annular peripheral wall, a circular partition parallel to the front and rear walls to divide the interior of the housing into a driving compartment and a driven compartment, an annular partition integral with the circular partition and eccentrically disposed with respect to the peripheral wall to divide each compartment into a disk chamber and a fluid passage chamber, a driving disk within the disk chamber of the driving compartment and having a peripheral portion in contact with said annular partition, fluid impelling blades projecting from the periphery of the driving disk into contact with said annular partition, a driven disk within the disk chamber of the driven compartment and having a peripheral portion in contact with said annular partition, fluid impelled blades projecting from the periphery of the driven disk into contact with said annular partition, said annular partition having sets of spaced openings to establish communication between the chambers of each compartment on opposite sides of the contacting peripheral portions of said disks with respect to the annular partition, said circular partition having spaced openings to establish communication between said fluid passage chambers, and means for controlling the passage of fluid through said chambers to prevent the fluid from actuating the fluid impelled blades and to provide for the rotation of the disks and housing as a unit, said means including a normally closed valve for preventing the passage of fluid from the driven disk chamber.

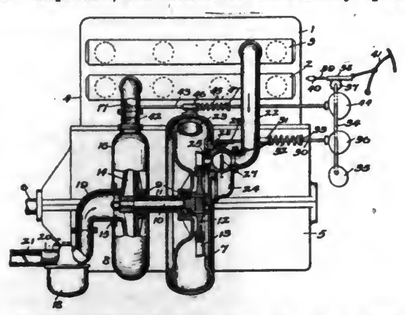
1,816,736. HYDRAULIC JACK. HENRY CHIPMAN MILLER, London, and GEORGE PERCY SUMNER, deceased, London, England, by May Sumner, Acton, England, executrix; said executrix assignor to said Henry Chipman Miller. Filed May 18, 1928, Serial No. 278,826, and in Great Britain May 18, 1927. 2 Claims. (Cl. 138—9.)



1. A hydraulic jack having a ram that comprises a plurality of sections which telescope one into the other, wherein the bottom and each of the intermediate sections of the telescopic ram is fitted with an internally grooved sleeve to form passages externally of each of said ram sections, the passages of each section being provided at the ends with inlet and outlet apertures arranged so that when said telescopic ram sections are fully extended said passages continuously intercommunicate and terminate at one end in an overflow while the opposite end of said interconnecting passages are connected to the interior of the ram through perforations formed in the upper end of the ram section immediately following the top section, said perforations being uncovered by said top section when the latter is at the extremity of its lift, so that excess of motive fluid can escape from the interior of the extended ram to the overflow by way of said perforations and intercommunicating passages.

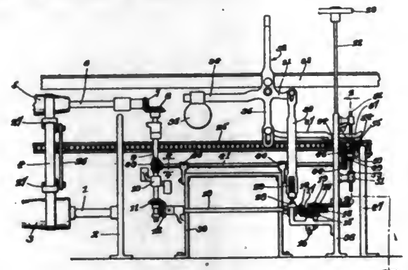
1,816,737. SUPERCHARGER FOR INTERNAL COMBUSTION ENGINES. SANFORD A. MOSS, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 27, 1925, Serial No. 46,252. Renewed Aug. 11, 1930. 2 Claims. (Cl. 60—13.)

2. The combination with an internal combustion engine, of a supercharager comprising a turbine and a compressor driven thereby, nozzles for the turbine, a conduit for conveying exhaust gases from the engine to the nozzles, said nozzles having a total area such that when the exhaust gases flow through all of them but little energy will be expended on the turbine rotor, valve means for diminishing the passage area available for gas flow to thereby increase the amount of energy expended on the turbine rotor, a conduit connecting the discharge side of the compressor to the engine, a throttle valve in said last named conduit, a carburetor connected to the suction side of the compressor, and means for successively operating



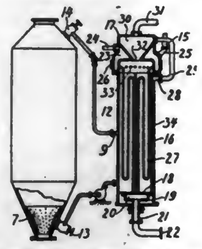
said throttle valve and said valve means whereby the throttle valve is first opened after which said valve means is moved toward closed position.

1,816,738. STOP MOTION MECHANISM. EDWARD W. NETHERLAND and JOHN R. WALKER, Columbus, Ga. Filed Feb. 14, 1930. Serial No. 428,399. 5 Claims. (Cl. 118—3.)



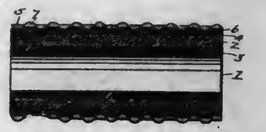
1. In a roving frame for winding roving on a bobbin, a contact shaft, a cone rack, gearing mechanism whereby the cone rack is driven by the contact shaft, a trip arm operatively connected with the gearing mechanism for breaking the latter, and a stop motion mechanism for operating said trip arm when a predetermined number of layers of roving have been wound on the bobbin, said stop motion mechanism operating independently of the cone rack and being driven directly from the contact shaft.

1,816,739. PROCESS FOR THE MANUFACTURE OF CELLULOSE. ALBERT ELIAS NIELSEN, Oslo, Norway. Filed May 14, 1928, Serial No. 277,712, and in Norway Nov. 23, 1927. 17 Claims. (Cl. 92—7.)



1. A process of digesting cellulose from wood and other materials by indirect steam under circulation of the digesting liquid outside the digester, characterized by this that simultaneously with the dissociation a concentration of the liquor is effected by a gradual vaporizing of the same in the circulating device, the waste vapour from each concentrating apparatus being used for heating the digesters which are connected in series, the first concentrating device being connected to the digester in which the temperature is the highest one and the last digester being connected to the digester in which the temperature is the lowest one.

1,816,740. FLEXIBLE ARMORED HOSE. CARL F. OGREN, Trenton, N. J., assignor to Thermoid Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed Oct. 29, 1929. Serial No. 403,234. 4 Claims. (Cl. 137—90.)



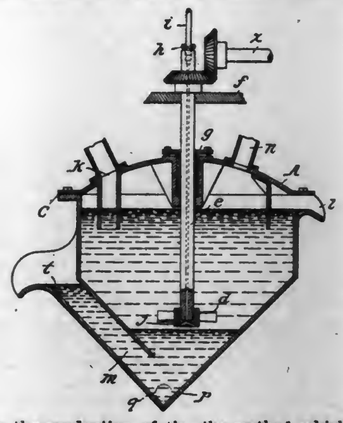
1. A conduit of relatively soft abradable material, having a surface projection in the form of an open helix and means for shielding the outer surface of said conduit, comprising helical metallic wires wound respectively upon and between successive convolutions of said projection.

1,816,741. TAG OR SIGN HOLDER. JACOB ORESTER and WILLIAM J. GEE, Syracuse, N. Y. Filed Oct. 1, 1930. Serial No. 485,743. 7 Claims. (Cl. 40—130.)



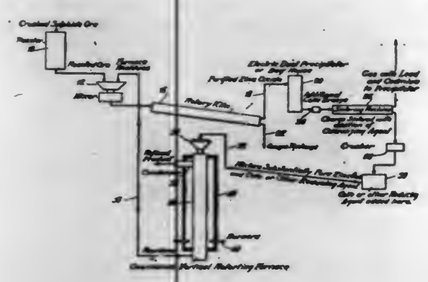
7. A tag holder adapted to be readily assembled or disassembled comprising a supporting means, lamp housings removably mounted on the supporting means, means for simultaneously locking the housings and a tag on the plate against unauthorized removal.

1,816,742. METHOD OF PRODUCING TIN. AUGUSTIN LEON JEAN QUENEAU, New York, N. Y. Filed Jan. 6, 1928. Serial No. 244,969. 8 Claims. (Cl. 75—17.)



1. In the production of tin, the method which includes subjecting tin oxide to the action of a fluid reducing agent while the oxide is held in a non-metallic molten bath.

1,816,743. RECOVERY OF METALS FROM ORES. AUGUSTIN LEON JEAN QUENEAU, New York, N. Y. Filed July 26, 1928. Serial No. 295,517. 8 Claims. (Cl. 75—28.)

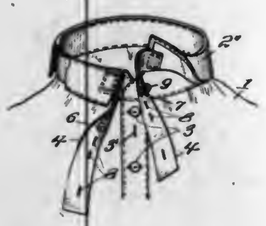


1. In the recovery of zinc from its ores, the method which consists in roasting a charge of ore to drive off sulphur, lead and cadmium products, mixing retort residues with the charge, subjecting the mixture to heat in an oxidizing atmosphere and separating the desired oxide from the gangue, subjecting the oxide to a chloridizing treatment for purification, mixing a reducing agent with the purified oxide and passing said mixture of reducing agent and purified oxide vertically downward through a heated retort to condense the desired refined product.

1,816,744. PERMANENT MOLD. NELSON J. QUINN, Toledo, Ohio, assignor to The Metal Castings Holding Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed Nov. 23, 1927. Serial No. 235,398. 4 Claims. (Cl. 22—136.)

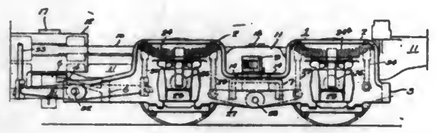
4. A permanent porous mold of unitary structure comprising united metal particles.

1,816,745. SHIRT. JOHN WALLACE REED, Greensburg, Pa. Filed Feb. 12, 1930. Serial No. 427,861. 1 Claim. (Cl. 2—130.)



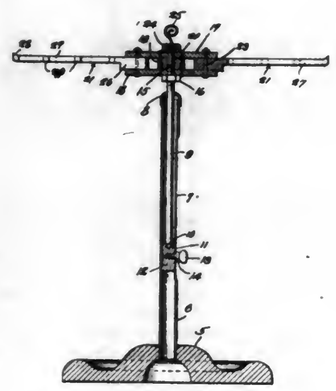
A garment comprising a shirt and a collar, a sectional necktie having one end of each section connected with the front end of the collar whereby the sections can be tied together to form a bow tie, a four-in-hand tie or the sections can be tied together with a single knot and one section placed over the other, snap fastener parts for connecting the sections together and said sections having buttonholes therein for receiving buttons on the shirt.

1,816,746. FOUR-WHEEL RADIAL TRUCK. MENAHEM RIVKIN, Philadelphia, Pa. Filed June 20, 1930. Serial No. 462,609. 6 Claims. (Cl. 105—174.)



1. The combination in a four-wheel radial truck for a locomotive, of an integral main frame consisting of two side frames; and a rear end frame and a forward frame having a bearing for a pivot pin by which it is connected to the main frame of the locomotive, the truck having a central projection arranged to be connected to a draw bar pivoted to the main frame and extending to the rear of the locomotive.

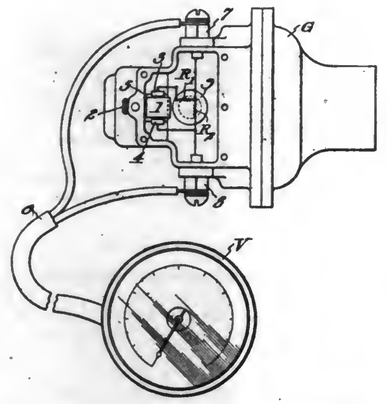
1,816,747. DISPLAY RACK. MIKE W. ROGERS, Sr., Lexington, Ky. Filed Feb. 21, 1930. Serial No. 430,361. 2 Claims. (Cl. 211—165.)



1. A display rack comprising a base, a hollow post extending from the base, a bearing adjustably mounted within the post, a rod extending into the post, the lower end of the rod resting on the bearing, an upper section secured to the upper end of the rod, said upper section comprising spaced disks, arms pivotally supported between the disks, said arms including heads, the inner corners of the heads being cut away to permit the arms to swing appreciable distances laterally.

1,816,748. SPEED INDICATOR. BURCHARD P. ROMAIN, South Orange, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a Corporation of New Jersey. Filed Dec. 11, 1929. Serial No. 413,386. 5 Claims. (Cl. 171—229.)

1. In a speed indicator of the type including a generator and a voltmeter, a generator comprising a permanent magnet, an armature revoluble in the field established by said magnet, a winding on said armature, a pair of terminals for said generator, circuit elements including brushes for connecting said winding between said terminals, and a resistor shunted across said terminals,



the resistance-temperature coefficient of said resistor being higher than the resistance-temperature coefficient of the generator series circuit between said terminals.

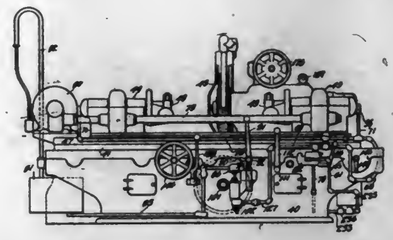
1,816,749. SNAP SWITCH. PERCY G. SHAW, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Sept. 3, 1930. Serial No. 479,442. 3 Claims. (Cl. 200—67.)



1. In a snap switch, the combination of an insulating base having a supporting surface, a U-shaped metal frame mounted thereon, said frame having overhanging arms at its upper end and seats below the arms, a contact carrying member having a large central opening within which the lower portion of the frame is located, said member having internal shoulders which form a pivot and engage the seats, flexible contacts secured to the lower edge of the member and extending substantially at right angles thereto, stationary contacts carried by the base which are engaged by the moving contacts as they move upwardly, a swinging actuator pivotally supported by said arms which has a single downwardly projecting element, and a spring connecting the upper end of the member with the lower end of the element, said spring causing the member and its contacts to move with a snap action and permitting the member to rise from its bearing seats to permit of a wiping action of the moving and stationary contacts when the circuit is closed.

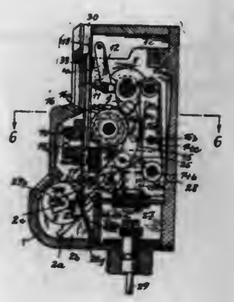
1,816,750. CRANK GRINDING MACHINE. AMOS P. STEINER, PAUL STONER, and CHARLES P. HARRISON, Waynesboro, Pa., assignors to Landis Tool Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1926. Serial No. 126,583. 24 Claims. (Cl. 51—95.)

1. A crank grinding machine comprising a grinding wheel, a work carriage, fluid-operated crankshaft clamping means thereon, fluid-operated means for causing relative axial movement of said wheel and said work carriage to bring successive cranks in the same plane into operative relation to said wheel a manually operable lever



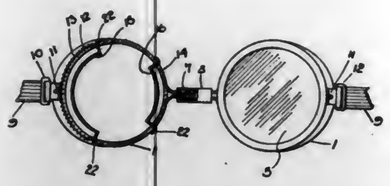
for controlling said fluid operated means, the same lever being biased to return to inoperative position when released by the operator, substantially as set forth.

1,816,751. APPARATUS FOR RECORDING THE DISTANCES TRAVELED BY CONVEYANCES. FRITZ TOEWE, Villingen, Germany, assignor to Kienzle Uhrenfabriken Aktiengesellschaft, Schwenningen, Germany, a Corporation of Germany, Karl Wilhelm Lange, Berlin-Wilmersdorf, Germany, and Deutscher Versicherungs-Verkehr A.-G., Berlin-Dahlem, Germany, a Corporation of Germany. Filed Apr. 1, 1930, Serial No. 440,697, and in Germany Nov. 20, 1928. 6 Claims. (Cl. 235—30.)



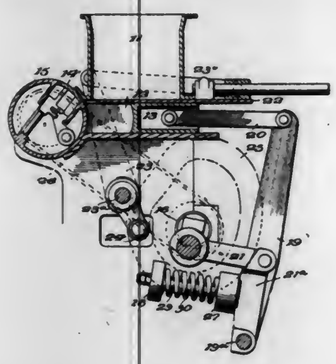
1. A registering mechanism for recording upon a card or series of cards the distance traversed by a vehicle covered by impost or insurance taxes or the like, comprising a casing, an odometer mechanism in said casing adapted to be driven from the vehicle, printing mechanism associated with said odometer mechanism and adapted to print the initial and final odometer readings upon a card inserted into the registering mechanism, a controlling member outside said casing operable at the beginning and at the end of the tax-paid distance to actuate said printing mechanism, said printing mechanism being so disposed within said casing that the card is held completely within the casing during the interval between the initial and final printing, means for retaining said card within said registering mechanism, said means comprising a card holder provided with fixed means to limit downward movement of the card within the card holder, and an element movable against one face of the card to engage the same for preventing the removal of the card from said holder, and means operable after the final odometer reading has been printed on said card to render said engaging element inoperative.

1,816,752. GOGGLES. GEORGE L. TULLY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed June 25, 1928. Serial No. 288,040. 3 Claims. (Cl. 2—14.)



1. A device of the character described comprising a pair of connected eye cups having ventilation openings on the nasal and temporal sides and additional openings beyond the ventilation openings, and baffle plates over the ventilation openings and spaced from the interior walls of the cup and having tongues extending into the additional openings to hold the baffle plates in related position to the ventilation opening.

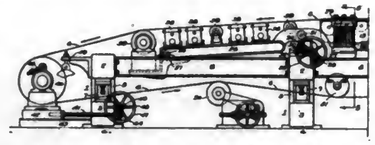
1,816,753. AUTOMATIC DOUGH DIVIDER. FRANK H. VAN HOUTEN, Beacon, N. Y., assignor to Dutchess Tool Company, Beacon, N. Y., a Corporation of New York. Filed Feb. 17, 1931. Serial No. 516,404. 5 Claims. (Cl. 107—15.)



2. The method of forming accurately measured lumps of dough comprising feeding dough from a storage space into a compression space, partially severing the dough in the compression space with a dough severing element from that remaining in the storage space, positioning an unyielding surface against one end of the compression space, compressing the dough in the compression space against said unyielding surface and returning the excess dough therefrom to the storage space, completing the severing of the dough in the compression space from that in the storage space with said severing element, and delivering the dough from the compression space into a lump receiving chamber.

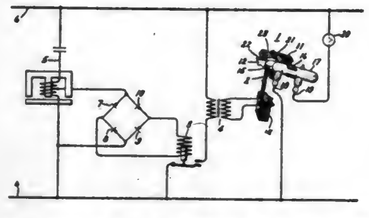
1,816,754. FOURDRINIER MACHINE. JOSEPH ATWOOD WHITE, Melrose Park, Pa., assignor to The Moore & White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1930. Serial No. 497,039. 17 Claims. (Cl. 92—45.)

1. The combination in a paper-making machine of the Fourdrinier type, of supporting beams extending from one side of the machine to the other, each supporting beam having upper and lower members, connected at one end only, to form an elongated throat for the return run of the making wire; longitudinal side members connecting the



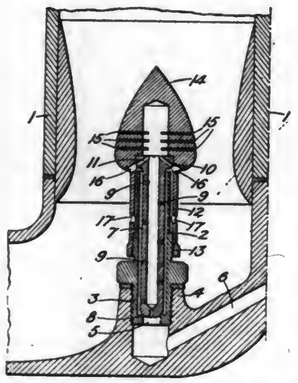
several supporting beams; and a making frame mounted above the base frame formed by the beams and longitudinal side members.

1,816,755. SELECTIVE CONTROL SYSTEM. JOHN L. WOODWORTH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,909. 8 Claims. (Cl. 200—116.)



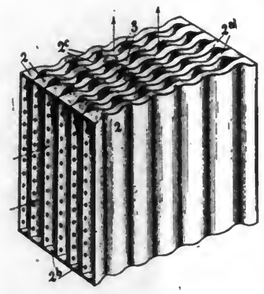
1. The combination, in a relay, of an electroresponsive element biased to a normal position, said element being adapted upon energization thereof to be actuated from said normal position by an amount dependent upon the duration of energization and upon deenergization to be actuated under its bias toward its normal position, a member adapted for reciprocal operation between two positions and a mechanical interconnection between said member and said element whereby said member is selectively operated from either position to the other position dependently upon the distance said element is actuated from said normal position when deenergized.

1,816,756. SPRAY CARBURETOR. WILFRED AMBROSE WHATMOUGH, New Barnet, and HENRY WESLAKE, Kensington, England. Filed Mar. 29, 1929, Serial No. 351,046, and in Great Britain Apr. 2, 1928. 16 Claims. (Cl. 261—78.)



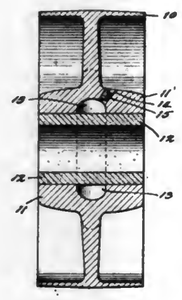
1. A spray carburetor comprising a diffuser jet tube, an enlargement at the upper end of the diffuser tube constituted by an elongated box-like member extending across the main air intake tube having outlet passages for the atomized fuel directed out of the axis of the jet tube and an air port therethrough directed into the fuel air stream, an air supply from the exterior of the main air intake tube to the jet tube towards its upper end, and a second air supply from the exterior of the main air intake tube at a lower point.

1,816,757. HEAT TRANSFERRER. WILLIAM ALBERT WHITE, Hebburn, England. Filed Mar. 18, 1929, Serial No. 348,000, and in Great Britain Mar. 21, 1928. 7 Claims. (Cl. 257—245.)



1. As an article of manufacture, a self-contained open-ended heat-transferrer cell having corrugated sides, and a top and a bottom member of sinusoidal contour secured thereto, to define the position of said corrugated sides.

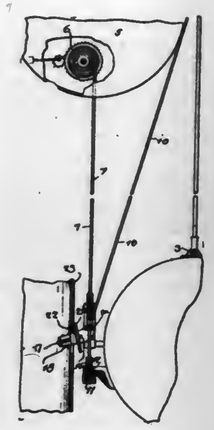
1,816,758. BEARING. CHARLES W. ADAMS, Saginaw, Mich., assignor to United States Graphite Company, Saginaw, Mich., a Corporation of Michigan. Filed Nov. 25, 1927. Serial No. 235,664. 3 Claims. (Cl. 308—111.)



1. A bearing having a porous graphite bushing, and an oil chamber back of the bushing, the centre of said bushing being more porous than the portions nearer the ends.

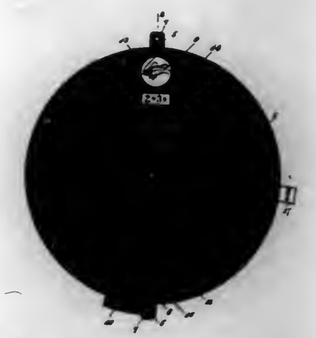
1,816,759. SHIP-RAISING APPARATUS. WILLIAM E. BAHR, Indianhead, Md. Filed Jan. 17, 1929. Serial No. 333,045. 3 Claims. (Cl. 61—69.)

1. In apparatus of the character described, a grapple comprising a cable suspended block, an arm carried by the block, a latch head pivoted intermediate its ends on the outer end of the arm, a spring for projecting the head at right angles to the arm, a collar slidable on the arm for retaining the latch head inoperatively positioned and parallel with the arm and a rotatable and longitudinally shiftable member adapted to be engaged with the block for moving the same into operative position, a percus-



sive element carried by said member, the member being of tubular form and the percussive element being slidable therein.

1,816,760. EDUCATIONAL GAME APPARATUS. HARRY BARNOWITZ, Brooklyn, N. Y. Filed Oct. 30, 1929. Serial No. 403,577. 1 Claim. (Cl. 35—9.)



An educational game apparatus including a pair of outer disks, diametrically opposed tabs at the edges of said disks secured together and holding the disks in fixed relation, a movable disk located between the two outer disks and having a central rotary mounting, said movable disk having indicia thereon arranged in a circle, one-half of the circle having consecutively arranged problems and the rest correspondingly arranged answers thereto, one of said outer disks having openings therein exposing problems and answers, each answer being diametrically opposite the corresponding problems, a tab on the movable disk constituting a finger hold to move the disk, and being limited in its movement by the tabs of the outer disks, a shutter member located between the movable disk and one of the outer disks and normally covering the answer to the problem, and a finger hold on the shutter projecting beyond the disk and limited in its movement in one direction by contact with a pair of the first mentioned tabs.

1,816,761. SOOT BRUSH. SVEN GUSTAF BLADH, Malmo, and GUSTAF EMANUEL BROFELTH, Halmstad, Sweden, assignors to Aktiebolaget Malcus Holmquist, Halmstad, Sweden. Filed Apr. 15, 1929, Serial No. 355,432, and in Sweden Mar. 2, 1928. 6 Claims. (Cl. 15—104.4.)

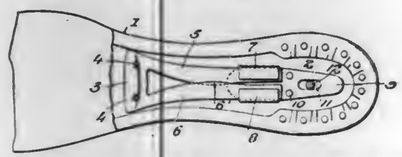


1. A soot brush comprising a strip, wire bristles secured in a layer upon one side of said strip and having a holder having a groove therein in which said strip with bristles attached may be removably secured.

1,816,762. DIELECTRIC MATERIAL. SYLVESTER BOYER, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 16, 1927. Serial No. 175,868. 2 Claims. (Cl. 252—1.)

1. A dielectric mixture consisting of nitro-benzene and nitro-toluene.

1,816,763. ARCH SUPPORT FOR SHOES. WINSLOW P. BRADFORD, Buffalo, N. Y. Filed July 1, 1929. Serial No. 375,208. 4 Claims. (Cl. 36—76.)

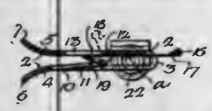


3. An arch support comprising two members one of which is provided with wings so constructed and arranged that they lap each other and the other of which is provided with a body portion having an elongated slot therein, and means formed integral thereon for engaging the wings to permit flexible movement of the wings substantially as and for the purpose specified.

1,816,764. ARTIFICIAL SPONGE AND PROCESS OF MANUFACTURE THEREOF. YVES CORNIC, Asnieres, France. Filed June 26, 1929, Serial No. 373,937, and in Belgium June 29, 1928. 6 Claims. (Cl. 18—53.)

6. A process of manufacturing artificial sponges of rubber comprising first mixing 100 parts of latex with 1 part of an organic base of the guanidine series, 5 parts of sulphur, 4 parts of zinc oxide and water, then adding to the mass 12 parts of ammonium carbonate in the powdered state and finally heating the whole to a temperature of about 140° C. for a period of one to three hours.

1,816,765. THREAD GUIDE FOR STOP MOTIONS. ALFRED CRAWFORD, New Brunswick, N. J., assignor to Crawford Manufacturing Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Dec. 10, 1929. Serial No. 413,084. 6 Claims. (Cl. 66—158.)

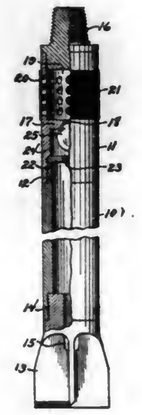


1. In a thread guide for stop motions, the combination of a stationary element, a trip element movable laterally with respect to said stationary element, means for limiting the trip element in one direction relative to said stationary element to provide a thread receiving space therebetween, and a spring barb carried by the trip element and extending across the said thread receiving space and adapted for relative movement with respect to and independent of said trip element to provide for the passage of a thread into said thread-receiving space.

1,816,766. PROCESS OF DYEING AND PRINTING CELLULOSE ESTERS. GEORGES DE NIEDERHÄUSERN, Basel, Switzerland, assignor to the Firm: Durand & Huguenin S. A., Basel, Switzerland. Filed June 29, 1927, Serial No. 202,473, and in Germany July 10, 1926. 4 Claims. (Cl. 8—5.)

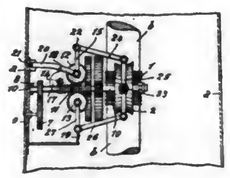
1. A process for dyeing and printing cellulose esters with vat dyestuffs, consisting in applying to said fibre a solution of an ester salt of a leuco vat dyestuff, drying and steaming in order to fix said ester salt as such on the fibre and then developing the dyeing by acid oxidation.

1,816,767. DRILL STEM. PAUL DOBRINSKI, Makoti, N. Dak. Filed Nov. 23, 1928. Serial No. 321,372. 1 Claim. (Cl. 255—61.)



In a drill, a hollow sectional stem, means threadedly connecting the sections, a bit threadedly engaging and closing the outer end of one section, said bit having an opening therethrough communicating with the interior of said section, a drill rod coupling closing the outer end of the other section of the stem, a partition extending transversely of and spaced from the end of said other section and defining a chamber within the stem, said partition having an opening therethrough and the side walls of the chamber also having openings therethrough, a screen covering the side wall openings, a second partition clamped between the drill stem sections and having an opening therethrough, the second partition being spaced from the first mentioned partition to provide a valve chamber, and a ball valve within the valve chamber.

1,816,768. TORPEDO. GIOVANNI EMANUELE ELIA, Rome, Italy. Filed Jan. 28, 1929, Serial No. 335,683, and in France July 10, 1928. 3 Claims. (Cl. 114—23.)



1. Steering device suitable for self-propelling apparatus fitted with a rudder, said device comprising a gear train actuated by the propeller of the apparatus by means comprising oppositely directed arms on the rudder, a worm, a pair of worm wheels normally disengaged from said worm,

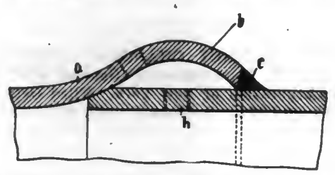
and other means for connecting and disconnecting the above said means with the gear train, consisting in individual link connections between each worm gear and the corresponding arm on the rudder, and cam action actuated by said worm adapted alternately to mesh one of the said worm wheels with the said worm.

1,816,769. SOUND SUPPRESSING VENTILATOR FITMENT FOR WALL APERTURES. ERNEST THOMAS FISK, Sydney, New South Wales, Australia. Filed June 27, 1928, Serial No. 288,764, and in Australia July 27, 1927. 1 Claim. (Cl. 98—37.)



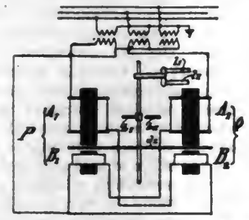
A sound damping ventilating screen having perforated sides including sound dampening material forming the walls of the perforations, said screen having an air chamber between the perforated sides, and a perforate septum in said chamber.

1,816,770. WELDED SPIGOT AND SOCKET JOINT. JOSEF GRADL, Huckingen-on-the-Rhine, Germany, assignor to the Firm Mannesmannrohren-Werke, Dusseldorf, Germany. Filed May 24, 1926, Serial No. 111,451, and in Germany May 27, 1925. 1 Claim. (Cl. 285—111.)



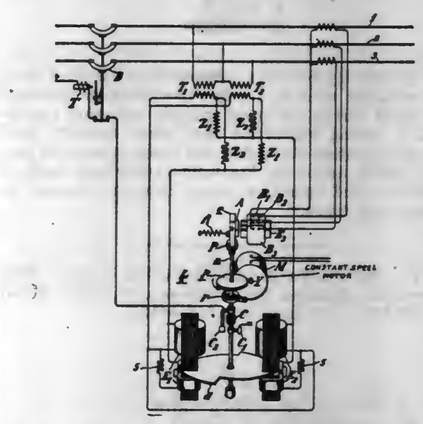
A pipe joint comprising a socket, a spigot adapted to be introduced into said socket, said spigot contacting the wall of the socket at the outer end of the socket and at a point remote from the end of said socket, and a weld uniting said socket end and said spigot, the socket being corrugated between the points of contact to form a hollow space between said socket and spigot, said corrugation being adapted to act as an equalizing means for taking up the strain caused by the welding operation.

1,816,771. SELECTIVE RELAY RESPONSIVE TO UNBALANCE ON ELECTRIC SYSTEMS. EMILE GRASSOT, Paris, France, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Nov. 14, 1927, Serial No. 233,275, and in France Jan. 29, 1927. 13 Claims. (Cl. 175—294.)



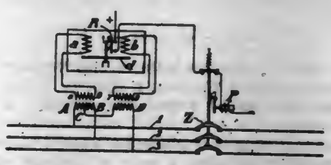
3. Means for protecting a three-phase electric circuit against faults, including in combination a rotatable element, two electro-magnets each having two windings of non-identical impedance, the respective impedances of the windings of one electro-magnet being substantially the same as the impedances of the windings of the other electro-magnet and each winding of one electro-magnet being connected in series with the non-identical impedance winding of the other electro-magnet and the pairs of thus connected windings being respectively connected to be energized in accordance with two of the voltages between phases and earth whereby said electro-magnets exert on said rotatable element a torque proportional to twice the continued product of said voltage and the sine of the phase angle between them, means for subjecting said element to an opposing torque increasing proportionately to the time lapse after the occurrence of a fault, and means arranged to be controlled by said element for interrupting said circuit when said opposing torque predominates.

1,816,772. RELAY. EMILE GRASSOT, Meudon, France, assignor to General Electric Company, a Corporation of New York. Original application filed Aug. 13, 1926, Serial No. 129,031, and in France Sept. 19, 1925. Divided and this application filed July 1, 1929. Serial No. 375,299. 10 Claims. (Cl. 175—294.)



1. An electric circuit protective relay including two relatively movable cooperating members, means for positioning one of said members in accordance with a predetermined function of at least two of the phase sequence components of an electric quantity of a circuit to be protected and means for moving the other of said members at a substantially constant speed.

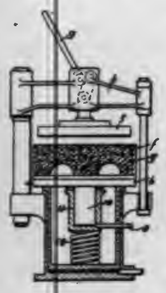
1,816,773. DEVICE RESPONSIVE TO UNBALANCE IN POLYPHASE CIRCUIT VOLTAGES. EMILE GRASSOT, Meudon, France, assignor to General Electric Company, a Corporation of New York. Original application filed Aug. 13, 1926, Serial No. 129,032, and in France Dec. 23, 1925. Divided and this application filed July 1, 1929. Serial No. 375,300. 7 Claims. (Cl. 175—294.)



1. In electroresponsive apparatus for a three-phase circuit, a movable member, electromagnetic means including

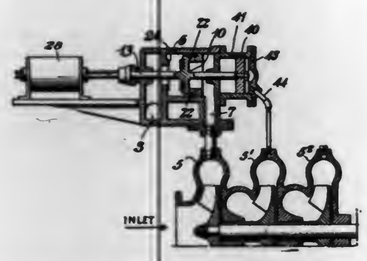
windings connected to be energized from said circuit for exerting on said member a force dependent on the sum of the squares of the phase sequence components of a two-phase system of voltages derived from and unbalanced to the same extent as the voltages of the three-phase circuit.

1,816,774. MEANS FOR PACKING SAND IN FOUNDRY MOLDS AND CORES. MORTEN GRINDAL, Motala Verkstad, Sweden. Filed Sept. 10, 1929, Serial No. 391,658, and in Germany Oct. 5, 1928. 4 Claims. (Cl. 22—30.)



1. In a molding machine, a supporting frame, a mold carrier adjacent thereto, a piston-like extension mounted on the mold carrier, an inner cylinder enclosing the extension, a spring supporting said inner cylinder, fluid means for operating the spring and inner cylinder to produce a jolting action on the mold carrier and mold, a squeeze-plate and operating means therefor mounted on the supporting frame.

1,816,775. MULTISTAGE CENTRIFUGAL PUMP. OTTO HAENTJENS, Hazleton, Pa. Filed Jan. 17, 1929. Serial No. 333,179. 2 Claims. (Cl. 103—113.)



1. A series multi-stage centrifugal pump in combination with a priming pump connected to the discharge side of the first stage of said centrifugal pump, a priming check valve between the two pumps and subjected to the discharge pressure of said first stage in a direction to close said check valve and means controlled by one of the centrifugal stages other than the first to aid in closing said priming check valve when the centrifugal has been primed and started.

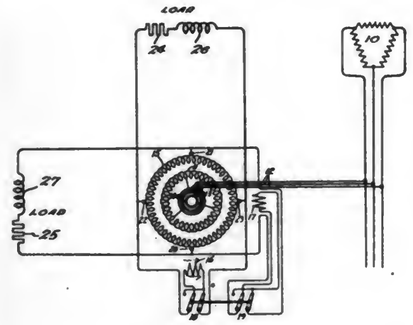
1,816,776. SIGN. JOSEPH HASLUN and NORMAN E. HASLUN, New York, and WILLIAM I. HASLUN, Yonkers, N. Y. Filed Oct. 22, 1929. Serial No. 401,505. 3 Claims. (Cl. 40—148.)

1. A sign including in combination a stand frame, a mat or mask member including a pair of hingedly connected windowed leaves each bearing advertising matter on the opposite surfaces thereof and adapted to be reversibly arranged in parallel relation within the stand frame to selectively display the advertising matter on the opposite surface of said window leaves and a filler card bearing advertising matter on its opposite sides insertable between said leaves to render said advertising matter visible



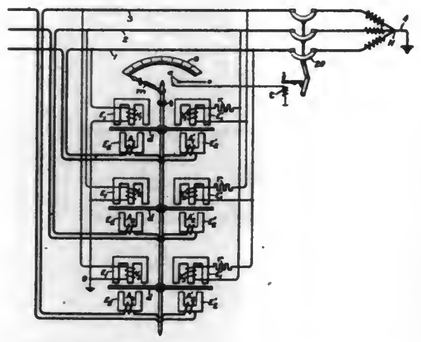
through the leaf window, said filler card being constructed of a cheaper grade of material than the mat or mask frame and an extension on said filler card bearing advertising matter on its opposite sides and designed to protrude above the upper edges of said member in the frame.

1,816,777. FREQUENCY CHANGER. JOHN I. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 3, 1928. Serial No. 310,021. 3 Claims. (Cl. 172—281.)



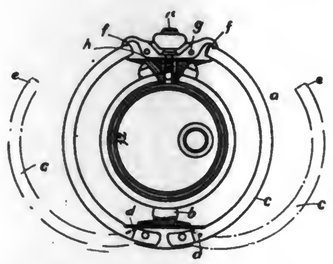
1. In combination, a source of alternating current, apparatus to be operated by an alternating current having a frequency different from that of said source and a commutator type frequency changer connected between said source and said apparatus, the said frequency changer comprising relatively rotatable members, one of said members having a primary winding energized by said source and a commutated winding supplying the alternating current to said apparatus through commutator brushes, secondary windings on the other of said members, and switching means between the secondary windings and the commutator brushes for reversing the relative voltage polarities between the voltage induced in each secondary winding and the voltage injected by the commutated winding into each secondary winding.

1,816,778. ELECTRIC MEASURING AND PROTECTING DEVICE. AVRAM DAVID ILIOVICI, Paris, France, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Dec. 21, 1927, Serial No. 241,622, and in France Jan. 7, 1927. 20 Claims. (Cl. 172—245.)



1. In an electroresponsive device for an electric circuit, a movable member and means for controlling the movement thereof in accordance with a resultant of a plurality of different predetermined functions of at least two of the phase sequence components of the power of said circuit.

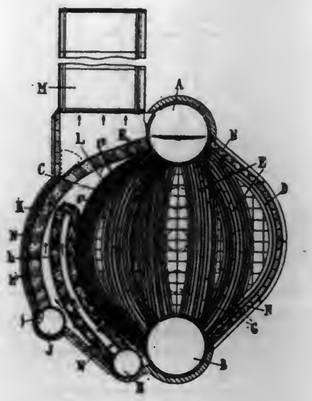
1,816,779. LIGHTING DEVICE FOR KEY RINGS. ABRAM LOUIS JEANNERET, La Chaux-de-Fonds, Switzerland, assignor to Comptoir General de Vente de la Montre Roskopf Societe Anonyme Vve. Chs. Leon Schmid & Cie., La Chaux-de-Fonds, Switzerland. Filed Nov. 26, 1928, Serial No. 321,984, and in Switzerland Apr. 25, 1928. 2 Claims. (Cl. 59—96.)



2. The combination of a key ring and a lighting device for the same, said combination comprising a watch having a luminous surface, a ring concentric to said watch, means for attaching said ring to the bezel in spaced relation to the watch case, said means consisting of a hinged part and a detachable part for said ring.

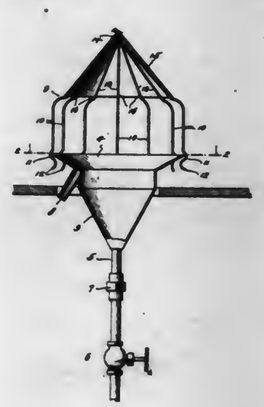
1,816,780. WATER TUBE BOILER. JOHN JOHNSON, Wimbledon, London, England. Filed Aug. 6, 1928, Serial No. 297,692, and in Great Britain Aug. 15, 1927. 5 Claims. (Cl. 122—236.)

1. A water-tube boiler comprising in combination, an upper and a lower longitudinal drum; outwardly-curved oppositely-disposed banks of water tubes connecting said upper and lower drums along their length in wall formation to enclose a combustion chamber laterally; and



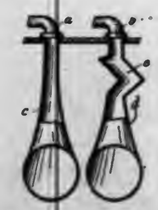
disposed within said combustion chamber other water tubes in wall formation also connecting said upper and lower drums along their length.

1,816,781. POULTRY FOUNTAIN. JOHN A. JOHNSTON, Provo, Utah. Filed Aug. 11, 1927. Serial No. 212,261. 2 Claims. (Cl. 119—61.)



1. A container guard having a plurality of vertical resilient arms between which the poultry may pass only their heads, said arms being relatively fixed at their upper ends but free to spring radially at their lower ends, said arms being formed with U-shaped outwardly bowed container-engaging seats near their lower ends to receive the rim of a container and support said arms with their fixed upper ends spaced above said container, said lower ends being provided with outwardly declined terminals directly below said seats, said terminals serving to effect outward movement of the arms upon downward forcing of the guard upon a container rim, the lower portions of said seats being declined inwardly to effect outward movement of the arms upon upward pulling of the guard from the container; said arms and their seats constituting the sole attaching means for the guard, the resiliency of said arms being the sole means for holding their seats in engagement with the container rim.

1,816,782. SOUND REPRODUCING DEVICE. HEINRICH KÜCHENMEISTER, Berlin, Germany. Filed Nov. 17, 1926, Serial No. 148,922, and in Germany Dec. 1, 1925. 5 Claims. (Cl. 181—27.)



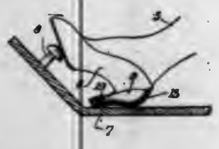
1. A talking machine for reproducing sound from a record, comprising a plurality of sound-reproducing diaphragms so mounted as to be operated simultaneously by successive points on one and the same record, and a plurality of sound passages entirely independent of one another, one connected with each diaphragm, the walls of one of the sound passages differing constructionally from the walls of another in such a way as to affect the quality of the sound.

1,816,783. VISOR. WILLIAM C. MASON, Albany, N. Y. Filed Nov. 1, 1926. Serial No. 145,540. 12 Claims. (Cl. 296—44.)



1. A visor of the character described having a comparatively rigid central portion adapted to extend substantially across the side window of an automobile, and comparatively resilient end portions adapted to be easily flexed to extend between the body of said automobile and said first mentioned portion.

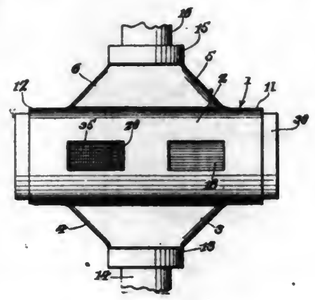
1,816,784. HEEL PROTECTOR. JOHN W. MCDERMOTT, San Francisco, Calif. Filed Sept. 21, 1929. Serial No. 394,268. 1 Claim. (Cl. 36—72.)



A heel protector comprising a pair of side portions stitched one to the other, a reinforcing strip secured to said side portions along its margin in such a manner as to form a pocket between said reinforcing strip and said side portions, a flexible reinforcing stay positioned within said pocket, and a resilient web secured to said side portions at a point adjacent one end thereof.

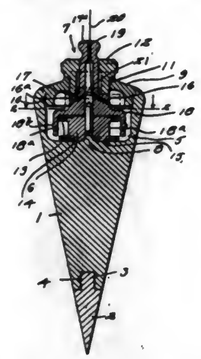
1,816,785. FILTERING DEVICE. JOHN P. MCGLAUGHLIN, Crugers, N. Y. Filed Feb. 3, 1930. Serial No. 425,555. 3 Claims. (Cl. 210—168.)

1. In a filtering device for interposition between a pair of sections of a fluid conducting line, a cylindrical housing disposed transversely with respect to said section and having its body formed with a pair of diametrically opposed oppositely extending outwardly projecting hollow tapered portions for connection centrally thereof to the pipe sections, a ring within, integral with and aligning with the vertical medians of said tapered portions and providing in connection with the inner ends of the latter two spaced pairs of spaced aligning openings, said housing formed with an opening at each end aligning with said ring, a pair of oppositely disposed rotatable valves, each interposed between the openings of a pair of openings and consisting of a pair of spaced disks having oppositely disposed flanges seating in an end opening and the ring and oppositely disposed arcuate spaced plates con-



necting said disks together and in connection with the latter providing a passage through the valve, and a filter member in the form of a cylinder open at one side and having the longitudinal marginal portions angularly disposed, said cylinder arranged between, disposed eccentrically with respect to and having its ends seated in said disks, the said marginal portions of said member opposing and secured to opposed lengthwise end edges at one side of said plates.

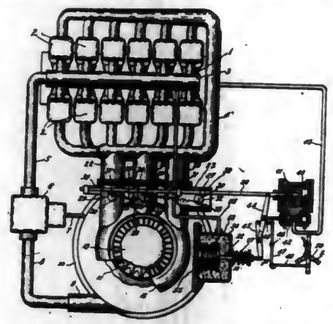
1,816,786. PLUMMET. EARL H. MORRIS, Brookport, Ill. Filed May 14, 1929. Serial No. 362,927. 11 Claims. (Cl. 33—217.)



10. A plummet comprising a body, a bobbin carried by the body, a plumb line wound on the bobbin, means for winding and guiding the plumb line, a member carried by the body in spaced relation to the bobbin, and a clamping member carried by said first member for movement into and out of contact with said winding and guiding means.

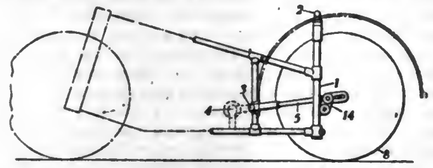
1,816,787. CONTROL MECHANISM FOR SUPERCHARGERS. SANFORD A. MOSS, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 31, 1927. Serial No. 164,956. 9 Claims. (Cl. 60—13.)

8. The combination with an internal combustion engine, of a supercharger comprising a turbine, nozzles for the turbine, conduit means for conveying exhaust gases from the engine to the nozzles, conduit means for conveying exhaust gases directly to atmosphere, said nozzles having a total area such that when both said exhaust conduit means are open but little energy will be expended on the turbine rotor, automatic means actuated by the supercharger pressure for successively shutting



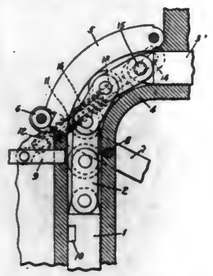
off the second named conduit means and then diminishing the nozzle area available for gas flow to thereby increase the amount of energy expended on the turbine rotor, and manually-operated means for effecting adjustments of the supercharger pressure.

1,816,788. FRAME FOR VEHICLES. FREDERICK JOHN OSBORN and NORMAN FREDERICK WOOD, Gosport, England. Filed May 20, 1929, Serial No. 364,499, and in Great Britain May 25, 1928. 4 Claims. (Cl. 208—101.)



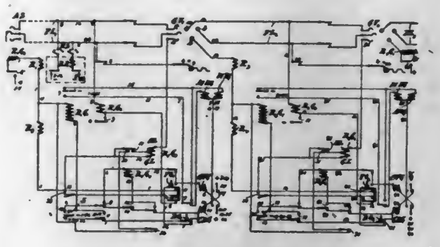
1. In a vehicle frame employing a radius rod to transmit thrust in the direction of its length between a road wheel and frame, a shackle link connection between the radius rod and a plunger sliding within a tubular frame member against a load-carrying spring for the wheel associated with the radius rod.

1,816,789. SWITCH OPERATING MECHANISM. GEORGE PAILIN, Manchester, England, assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1929, Serial No. 396,567, and in Great Britain Oct. 11, 1928. 9 Claims. (Cl. 200—89.)



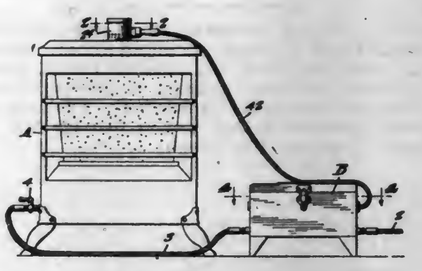
1. In circuit controlling apparatus including an operating member and a switch actuating member, means interconnecting said members comprising a flexible sliding chain linkage restrained in a force-transmitting position for transmitting motion from the operating member to the switch actuating member to effect circuit closing movement of the last named member.

1,816,790. SELECTOR TESTING CIRCUIT. NILS GUNNAR PALMGREN, Stockholm, Sweden, assignor to Telefon Aktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Mar. 29, 1929, Serial No. 351,052, and in Sweden Mar. 24, 1928. 4 Claims. (Cl. 179—18.7.)



1. In a telephone exchange system, a test circuit arrangement for selectors comprising a number of selectors, a number of junction lines, accessible to said selectors, a test circuit for each of said selectors extending over a movable contact of the selector, a test relay included in the selector section of said circuit, means under the control of said relay for reducing the resistance of said part of the test circuit upon seizure of an idle junction so as to provide a busy test potential for said junction, a test guard resistance, and means associated with the junction line and arranged to operate upon the seizure of the junction by a selector to connect said test guard resistance into the junction section of the test circuit to increase the resistance of the junction section of the test circuit so as to guard the junction after removal of said busy test potential.

1,816,791. AUTOMATIC CUT-OFF FOR GAS STOVES. TONYS PANTELAKIS, Logan, W. Va. Filed Oct. 23, 1929. Serial No. 401,850. 3 Claims. (Cl. 158—117.1.)



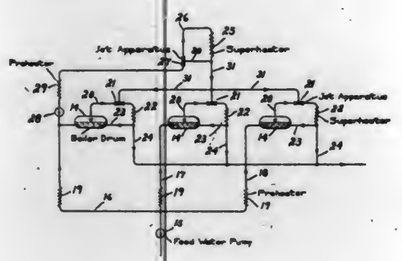
1. In combination with a gas stove and its supply line, a valve in said line, a motor, an arm connected with the motor shaft, means for connecting the arm with the valve whereby operation of the arm by the motor will close the valve, a circuit for the motor, a chamber, a thermostatic device therein including a finger, said thermostatic device being acted on by the heat from the stove, a pivoted finger in the chamber arranged in the path of the first finger, a contact in the chamber engaged by the pivoted finger when the same is moved by the retrograde movement of the thermostatic finger, means for connecting the pivoted finger and the contact to the circuit whereby the circuit of the motor will be closed when the pivoted finger is in engagement with the contact, a gravity switch in the circuit and means for normally holding the same in closed position by the arm on the motor shaft when the arm is in a position with the valve open, said arm permitting the switch to drop to open position when the arm is moved by the motor to close the valve.

1,816,792. HAND OILER. SAMUEL O. PAULL, Wellsburg, W. Va., assignor to Eagle Manufacturing Company, Wellsburg, W. Va., a Corporation of West Virginia. Filed Jan. 18, 1930. Serial No. 421,749. 6 Claims. (Cl. 221—51.)



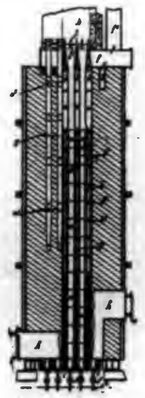
1. In a hand oiler with pump delivery, a container, a cap removably secured thereto, a spout rising from the cap, a pumping assembly arranged within the container, said pumping assembly including a cylinder and a plunger mounted for relative movement and machined for a substantially non-leaking sliding interfit, a pipe section of materially reduced diameter with respect to the plunger of the pump assembly, said pipe being carried by the cap and removably connected to the plunger and providing intermediate the pump assembly and spout a means for increasing the pressure of delivery, and means carried by the cap for operating the pump assembly.

1,816,793. STEAM GENERATING PLANT FOR THE GENERATION OF HIGH PRESSURE STEAM. WALDEMAR PETERSEN, Berlin, and RICHARD TRÖGER, Berlin-Zehlendorf, Germany, assignors to General Electric Company, a Corporation of New York. Filed Apr. 26, 1929, Serial No. 358,119, and in Germany May 10, 1928. 2 Claims. (Cl. 122—1.)



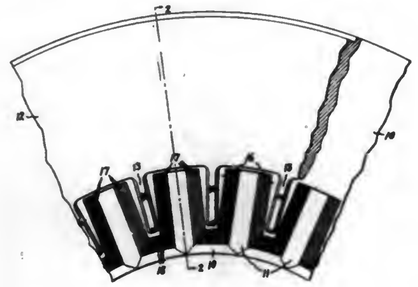
1. In a vapor generating plant, the combination of a boiler drum, a pump for supplying liquid thereto, a superheater, conduit means for conveying vapor from the drum to the superheater and from the superheater to the drum, a jet apparatus in said conduit means, and an auxiliary vapor supply of higher pressure for supplying vapor to said jet apparatus.

1,816,794. VERTICAL DISTILLATION RETORT. JULIEN PIETERS, Paris, France. Filed Mar. 20, 1928, Serial No. 263,168, and in France Mar. 30, 1927. 3 Claims. (Cl. 202—126.)



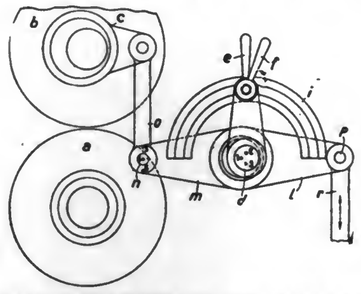
1. In a vertical continuous distillation apparatus, a distillation chamber, the longitudinal walls of which are constituted by tubular elements of refractory material and of prismatic shape, and each of said elements having a single oblong cavity, said elements being superimposed and fitted together in such a manner that the continuous vertical gas tight flues formed by the cavities of the superimposed elements are completely separate each from another and have no communication with the distillation chamber, said vertical flues being adapted to the passage of the gases serving for the heating of the distillation chamber, the provision, along the major axis of the oblong cavity of each of said tubular elements, in the heating zone proper of the apparatus, of a separate brick extending for a small part of the height of the tubular element, and forming a partition parallel to the longitudinal walls of the said oblong cavity, an offtake for the distilled volatile products and of means for carrying said separate brick, for the purpose described.

1,816,795. DYNAMO ELECTRIC MACHINE. ROBERT POHL, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Mar. 22, 1929, Serial No. 349,199, and in Germany Aug. 3, 1928. 5 Claims. (Cl. 171—252.)



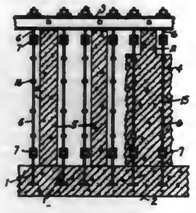
1. A dynamo electric machine having a slotted, laminated stator adapted to substantially conform to a rotor, and a group of laminations adjacent the end of the stator having teeth between said slots with the edges presented thereto arranged in inclined steps so as to expose the edges of said teeth to the end stray field flux and thereby reduce eddy current losses in said stator.

1,816,796. ROTARY OFFSET PRINTING MACHINE. WALTER RÖSSGER, Heidenau-Sud, Germany, assignor to the Firm Rockstroh-Werke Aktiengesellschaft, Heidenau, Germany. Filed Oct. 13, 1930, Serial No. 488,447, and in Germany Jan. 16, 1930. 3 Claims. (Cl. 101—218.)



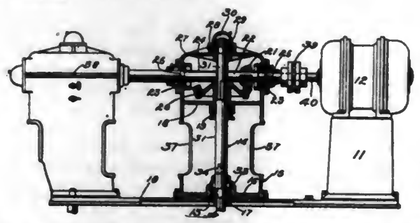
1. Apparatus for adjusting the impression pressure in rotary offset printing machines, comprising the combination with a machine frame, an offset cylinder, an impression cylinder, eccentric bearings for one of said cylinders rotatable in said machine frame and bearings for the other cylinder in the said frame, of oscillatable levers operatively connected to said eccentric bearings and displaceable supporting means for said oscillatable levers mounted in the frame, said levers being rotatable on said supporting means, as and for the purposes set forth.

1,816,797. REENFORCED CONCRETE DAM. HENRY SORENSEN, San Francisco, Calif. Filed May 13, 1929. Serial No. 362,704. 3 Claims. (Cl. 61—30.)



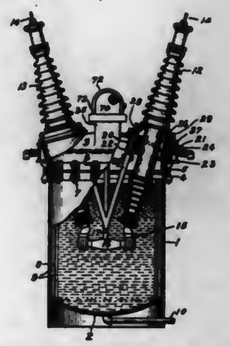
1. In the construction of a reenforced concrete dam, the combination of the one end of a reenforcement anchored to the base of a unit of said dam, said reenforcement initially tensioned by a tensioning device attached to the other end of said reenforcement, a strut member intermediate said base and said device, concrete embedding said reenforcement and means whereby the strut action of said member may be transferred from said member to said concrete, after said concrete has set into cohesion with said initially tensioned reenforcement.

1,816,798. DYEING MACHINE HEAD. JOSEPH T. TWEEDALE, Yardville, N. J., assignor to Hussong Dyeing Machine Company, Groveville, N. J., a Corporation of New Jersey. Filed Dec. 9, 1929. Serial No. 412,778. 4 Claims. (Cl. 74—7.)



1. In a dyeing machine head, a base having an opening, a casting seated upon the base in surrounding relation to the opening, upper and lower partitions in the casting, each having a packing gland aligned with the base opening, a propeller shaft formed in two coupled sections, each section extending through one of said glands, the coupling being disposed between the sections, the casting having openings between the partitions permitting access to the coupling.

1,816,799. ELECTRIC SWITCH. JOHN W. UPP and WILLIAM K. RANKIN, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Aug. 4, 1927. Serial No. 210,653. 12 Claims. (Cl. 200—150.)



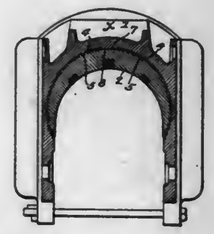
1. An electric switch comprising a sheet metal vessel having openings in the top thereof, insulator bushings extending through the openings, a bushing support mounted in each of said openings and secured to said top, said bushing supports each having an outwardly extending flange by which the switch is adapted to be supported.

1,816,800. PROCESS OF MANUFACTURING AROMATIC AND DURABLE BUTTER. CORNELIS BERNARDUS VAN NIEL, Delft, Netherlands, assignor, by mesne assignments, to Naamlooze Vennootschap: Internationale Octrooi Maatschappij "Octropa", Rotterdam, Netherlands. Filed Nov. 15, 1928, Serial No. 319,737, and in the Netherlands Nov. 19, 1927. 8 Claims. (Cl. 99—11.)

1. A process of manufacturing of highly aromatic and durable butter with natural flavor, consisting in washing the butter in order to remove therefrom the substances which affect the durability of the butter and subsequently reintroducing diacetyl into the butter.

7. A durable butter possessing natural aroma, consisting of thoroughly washed and cleaned butter with the addition of material selected from the group containing diacetyl and acetylmethylcarbinol and substances homologous thereto.

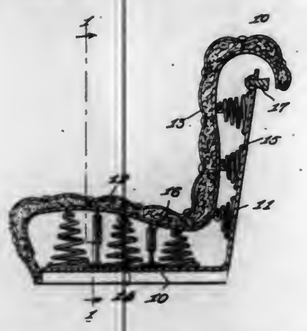
1,816,801. AXLE BOX BEARING. CHARLES PARRY VAUCLAIN, Drexel Hill, Pa. Filed Apr. 24, 1929. Serial No. 357,750. 1 Claim. (Cl. 308—56.)



The combination in an axle box having an opening for an axle and having a series of undercut circumferential

ribs, and having a longitudinal undercut rib at the centre, said box having an undercut rib at one end and a rib at the other end; and a bearing cast in the box and held in the central position by the central rib but free to shrink at either side of the centre of the box.

1,816,802. VEHICLE SEAT. SYDENHAM C. VERTS, Beach Haven, N. J. Filed Aug. 23, 1929. Serial No. 387,938. 1 Claim. (Cl. 155—179.)



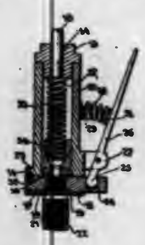
In combination, a seat support, a one-piece seat and back rest, means interposed between the seat and back rest and said support for yieldably supporting the seat and back rest for full floating movements, links connecting the seat with its support to limit the vertical movements of the seat, the upper end of the back rest being curved rearwardly and downwardly beneath and in spaced relation to its support, stops projecting from the support and disposed in the path of movement of the downwardly curved portion of the back rest to limit the forward movement thereof.

1,816,803. SWITCH PLATE. SIDNEY V. FLAGLER, Chicago, Ill., assignor, by mesne assignments, to George Lipschutz, Chicago, Ill. Filed May 16, 1924. Serial No. 713,748. 4 Claims. (Cl. 247—23.)



1. A wall plate comprising a backing of fibrous insulating material and a sheet of plastic pyroxylin material super-imposed upon and united to said backing to constitute a facing therefor, said backing and facing being provided with apertures counter-sunk below the surface of the facing.

1,816,804. VALVE COUPLING. RETUS W. SETHMAN, Akron, Ohio, assignor to Akron Rubber Mold & Machine Co., Akron, Ohio, a Corporation of Ohio. Filed Dec. 24, 1928. Serial No. 328,214. 2 Claims. (Cl. 285—150.)

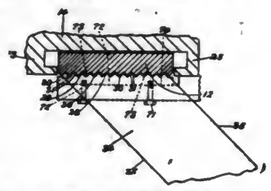


1. A valve coupling comprising a hollow body having a transverse guide-way extending therethrough, a threaded jaw removably secured in the guide-way, a second threaded jaw movable in the guide-way, a lever pivoted intermediate its ends on the body and having an end in operative connection with the movable jaw, means engaging the lever and body for normally maintaining the movable jaw in one position, a spring-pressed piston in the body and a gasket disposed in the body between the piston and the jaws.

1,816,805. PREPARED INGOT MATERIAL FOR USE IN DRAIN OPENING COMPOUNDS AND PROCESS FOR MAKING IT. WILMER CHARLES GANGLOFF, Cincinnati, Ohio, assignor to The Drackett Chemical Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 21, 1928. Serial No. 287,357. 6 Claims. (Cl. 252—1.)

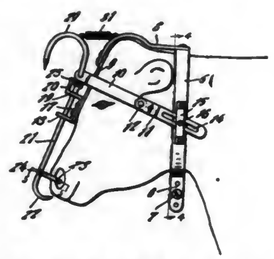
1. The process of preparing aluminum for use in drain opening compounds, comprising employing granular ingot aluminum, then spraying molten zinc on the aluminum to provide a surface deposit for each particle, then rolling the ingots to provide increased surface area therefor.

1,816,806. MACHINE FOR DEVELOPING ALUMINUM INTO PARTICLES. WILMER CHARLES GANGLOFF, Cincinnati, and MILTON A. CONNER, Mariemont, Ohio, assignors to The Drackett Chemical Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 8, 1929. Serial No. 345,559. 4 Claims. (Cl. 164—49.)



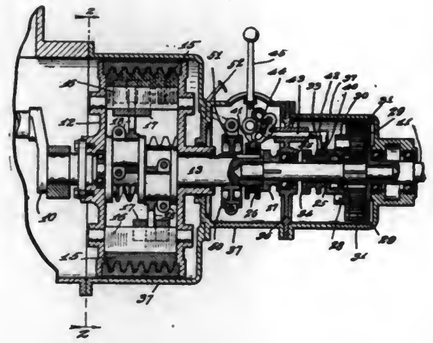
1. In a device of the class described the combination of a pair of cooperative relatively movable cutter members each provided with grooves having faces disposed at an angle to the plane of the cutter member, and a feeding mechanism operating in synchronism with the relatively movable cutter members for step by step advancement of a strip of material toward the cutter members at substantially right angles to one of the faces of each of said grooves, for a distance not in excess of the width of said faces of the grooves.

1,816,807. CATTLE GUARD. ALFRED LEE JONES, Green City, Mo. Filed Oct. 23, 1929. Serial No. 401,682. 3 Claims. (Cl. 119—142.)



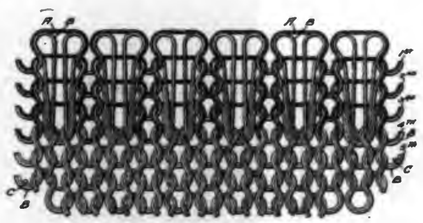
1. In an anti-goring device for bulls of the class described, a head frame comprising a neck yoke, a head bar projecting forwardly from the top of the yoke and terminating in a downwardly disposed terminal, a forehead plate fixed to the terminal, side bars fixed to the plate and extending rearwardly and sidewardly, links pivotally engaged with the rear ends of the side bars having longitudinally extending slots, guide brackets on the sides of the yoke through which the links slidably extend, and pins in the side brackets and through the said slots for limiting the sliding movement of the links, and a nose-engaging piercing element, and means for actuating said element mounted on said forehead plate.

1,816,808. CLUTCH. ROBERT C. BERRY, Indianapolis, Ind., assignor of one-fourth to Andrew J. Klaisler, Indianapolis, Ind. Filed June 4, 1930. Serial No. 459,188. 12 Claims. (Cl. 74—14.)



1. In combination, two relatively rotatable coaxial members, one or more cranks carried by one of said members, one or more friction elements pivotally mounted in the other of said rotatable members and having frictional engagement therewith, and means operatively interconnecting said friction elements and said cranks to produce oscillation of said friction elements about their respective axes when said two rotatable members rotate relatively to each other.

1,816,809. METHOD OF AND ATTACHMENT FOR RUNNING-ON KNITTED FABRICS. ROBERT H. LAWSON, Pawtucket, and ARTHUR N. CLOUTIER, Lonsdale, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed May 14, 1930. Serial No. 452,303. 7 Claims. (Cl. 66—41.)



1. That method of commencing knitting upon bare needles which includes feeding two yarns; causing all of the needles to take one of said yarns; causing certain of said needles, recurrent throughout the series, to take the other also of said yarns; causing said needles that take both said yarns to cast off the old loops in each course of a desired plurality of courses; causing those needles which take one yarn only to hold said taken yarn in each of a plurality of courses without casting off, and then to cast off the said yarn; and thereupon commencing regular knitting.

1,816,810. CHAIN BRACELET. FREDERICK W. NITTEL, Attleboro Falls, Mass., assignor to M S Co., Attleboro, Mass. Filed May 13, 1931. Serial No. 536,087. 4 Claims. (Cl. 24—84.)



1. A bracelet fastener composed of a hollow body formed to receive one end of a bracelet therein, and having its bottom split to form a pair of opposed flexible parts and each of said parts being formed with an opening, a catch pivoted to the body and having a pair of fingers formed to engage through an end of the bracelet to hold the latter in the body, said fingers having their inner sides tapered to form cams and having shoulders formed to engage over the said parts of the bottom of the body, whereby upon movement of the fingers into the body the cam sides thereof will engage the outer sides of the said parts of the body bottom to force the latter toward one another until the shoulders snap past the said parts whereupon the latter will spring outwardly and engage the shoulders to latch same in position, and a finger engaging part carried by the said catch and disposed between the fingers thereof and catch and disposed between the fingers thereof and projecting outwardly therefrom.

1,816,811. LIQUID FUEL FOR USE IN INTERNAL COMBUSTION ENGINES AND PROCESS FOR THE PRODUCTION THEREOF. WILFRED HERMANN HOFFERT, London, England, assignor to National Benzole Association, London, England, a British Company. Original application filed Oct. 19, 1927, Serial No. 227,360, and in Great Britain Oct. 27, 1926. Divided and this application filed Dec. 12, 1930. Serial No. 502,013. 12 Claims. (Cl. 44—9.)

1. The method of treating crude benzol containing resin forming constituents which comprises adding a minute proportion of an aromatic phenolic compound thereto.

3. The method of treating crude benzol containing resin forming constituents which comprises adding a minute proportion of an aromatic amino phenolic compound thereto.

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ERRATA

Reissue Patent No. 18,142, page 59, 409 O. G. 1, thirteenth claim, line 5, for "pocket" read *product*, and line 6, for "talk-up" read *take-up*.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

A. P. W. Paper Company, Inc. (See Albany Perforated Wrapping Paper Company, Inc.)

Abbojoid Novelty Company, Chicago, Ill. Oramental belt buckles. 285,712; Aug. 4; Serial No. 310,364; published May 12. Class 28.

Akin-Erskine Milling Company, assignor to Sterling Products Company, Evansville, Ind. Self rising flour. 82,852; renewed Aug. 1, 1931.

Albany Perforated Wrapping Paper Co., by change of name to A. P. W. Paper Company, Inc., Albany, N. Y. Wrapping and toilet paper. 37,467; renewed Dec. 17, 1931.

Aluminum Company of America, Pittsburgh, Pa. Welding flux. 285,778–9; Aug. 4; Serial Nos. 312,831–2; published May 19. Class 6.

Always Signal Co. (See Yarnell, Oran.)

Ambler Asbestos Shingle & Sheathing Company, Ambler, Pa. Asbestos composition board. 285,660; Aug. 4; Serial No. 312,469; published May 12. Class 12.

American Fork & Hoe Company, The. (See Withington and Cooley Mfg. Co.)

American Institute of Banking, New York, N. Y. Booklets. 285,767; Aug. 4; Serial No. 312,733; published May 19. Class 38.

American Maize-Products Company, New York, N. Y. Gloss starch. 285,640; Aug. 4; Serial No. 312,035; published May 19. Class 6.

American Optical Company, assignor to American Optical Company, Southbridge, Mass. Magnifying glasses and lenses. 83,125; renewed Aug. 22, 1931.

Apex Oil Co., St. Louis, Mo. Gasoline. 285,726; Aug. 4; Serial No. 312,170; published May 19. Class 15.

Aquabar Waterproofing Products. (See Conrey, R. E.)

Armand Company, The, Des Moines, Iowa. Toilet powder. 285,636; Aug. 4; Serial No. 312,280; published May 19. Class 6.

Arthur, Russell, Chicago, Ill. Prophylactic rubber articles. 285,795; Aug. 4; Serial No. 300,099; published July 1. Class 44.

Artzt, Bernard S., doing business as B. S. Artzt Laboratories, Philadelphia, Pa. Medicinal treatment for hair, scalp, and tissues of the face and body. 285,648; Aug. 4; Serial No. 310,704; published May 12. Class 6.

Atlas Ball Company, Merchantville, N. J., to Atlas Ball Company, Philadelphia, Pa. Balls used in bearings. 82,196; renewed June 13, 1931.

Atlas Ball Company, Merchantville, N. J., to Atlas Ball Company, Philadelphia, Pa. Balls used in bearings. 82,952; renewed Aug. 8, 1931.

Atlas Portland Cement Co., assignor, by mesne assignments, to Universal Atlas Cement Company, Chicago, Ill. Portland cement. 36,987; renewed Aug. 27, 1931.

B. S. Laboratories. (See Artzt, Bernard S.)

Babcock, A. P., Co., New York, N. Y. Astringents, bleach creams, dry rouges, hand lotions, etc. 285 685; Aug. 4; Serial No. 310,850; published May 5. Class 6.

Barksdale, Irving S., doing business as Table Rock Laboratories, Inc., Greenville, S. C. Capsules of copper and iron used in the dietary treatment of the nnæmias. 285,671; Aug. 4; Serial No. 312,083; published May 12. Class 6.

Barrett Company, The, New York, N. Y. Creosote oil. 285,699; Aug. 4; Serial No. 295,417; published May 19. Class 6.

Benureau, H., New York, N. Y. Building stone. 285,758; Aug. 4; Serial No. 311,318; published May 5. Class 12.

Binney & Smith Company, New York, N. Y. Preparations and compounds for use as accelerators, antioxidants, etc. 285,788; Aug. 4; Serial No. 312,508; published May 12. Class 6.

Blake Manufacturing Company, Springfield, Mass. Dry batteries. 285,715; Aug. 4; Serial No. 312,638; published May 19. Class 21.

Bond Chemical Company. (See Harford, Earl R.)

Borgloss, Incorporated. (See Fournet, Sidney C.)

Bruce, E. L., Company, Memphis, Tenn. Oak flooring. 285,659; Aug. 4; Serial No. 312,474; published May 12. Class 12.

Buffalo Dental Manufacturing Company, Buffalo, N. Y. Dental appliances. 285,765; Aug. 4; Serial No. 309,458; published May 12, 1931. Class 44.

Burndy Engineering Company, Inc., New York, N. Y. Electrical connectors. 285,719; Aug. 4; Serial No. 312,545; published May 19, 1931. Class 21.

Cambridge Pliable Brick Company, Cambridge, Ohio. Plastic refractory material. 285,742; Aug. 4; Serial No. 308,425; published May 5, 1931. Class 12.

Cardinal Radio Mfg. Co. (See Long, Miles A.)

Casteen Co., Inc., Union City, N. J. Foot cream. 285,780; Aug. 4; Serial No. 312,793; published May 19, 1931. Class 6.

Chambers, B. F., doing business as Chambers Laboratories, Blountsville, Ala. Medicinal preparation. 285,649; Aug. 4; Serial No. 310,637; published May 12, 1931. Class 6.

Chillington Tool Company, Limited, The, Wolverhampton, England. Hoes and shovels of metal. 84,379; renewed Dec. 12, 1931.

Colgate & Co., New York, N. Y., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill. Soaps and perfumery. 37,499; renewed Dec. 24, 1931.

Colgate-Palmolive-Peet Company, Chicago, Ill. Dental cream. 285,650; Aug. 4; Serial No. 310,367; published May 12, 1931. Class 6.

Compagnie Centrale Fromagère Société Anonyme, La Roche S/Foron, France. Cheese. 285,691; Aug. 4; Serial No. 301,406; published May 5, 1931. Class 46.

Conrey, R. E., doing business as Aquabar Waterproofing Products, Philadelphia, Pa. Moisture resistant compounds. 285,657; Aug. 4; Seral No. 312,512; published May 19, 1931. Class 12.

Covert, Martin B., doing business as Covite Manufacturing Company, Holland, Mich. Liquid for use in conditioning valves, etc. 285,677; Aug. 4; Serial No. 311,765; published May 5, 1931. Class 6.

Covite Manufacturing Company. (See Covert, Martin B.)

Cresca Company, as assgnee of Reiss & Brady, to Cresca Company, Incorporated, New York, N. Y. Foods. 84,043; renewed Oct. 31, 1931.

Crompton, James R., & Brothers, Limited, London and near Bury, to James R. Crompton & Brothers, Limited, Bury, England. India paper. 84,169; renewed Nov. 14, 1931.

Crouse-Hinds Company, Syracuse, N. Y. Electrical conduit fittings. 285,774; Aug. 4; Serial No. 312,699; published May 12, 1931. Class 21.

Current, James A., doing business as Current Medicine Co., Lorain, Ohio. Medicine. 285,769; Aug. 4; Serial No. 312,551; published May 19, 1931. Class 6.

Curtis Companies, Incorporated, Clinton, Iowa. Fabricated doors. 285,653; Aug. 4; Serial No. 312,700; published May 19, 1931. Class 12.

Czechoslovak Musical Instruments Company, New York, N. Y. Violins, violas, cellos, etc. 285,740; Aug. 4; Serial No. 308,534; published May 19, 1931. Class 36.

Desmond-Stephen Mfg. Company, The. (See McConnell, George.)

Deutsch Amphibolin-Werke von Robert Murjahn. (See Murjahn, Robert.)

Dextone Company, The, New Haven, Conn. Base course blocks, plinths, plaster bases and shafts, etc. 285,654; Aug. 4; Serial No. 312,554; published May 19, 1931. Class 12.

Dorfman, Samuel, Philadelphia, Pa. Ladies' combination step-in and slip. 285,806; Aug. 4. Class 39.

Durox Products Inc., New York, N. Y. Pressarics. 285,642; Aug. 4; Serial No. 311,997; published May 19, 1931. Class 6.

Eddystone Cement Corp., New, York, N. Y. Cement. 285,761; Aug. 4; Serial No. 310,977; published May 12, 1931. Class 12.

Edwards & Deutsch Lithographing Company, Chicago, Ill. Correspondence forms and partially printed forms. 285,689; Aug. 4; Serial No. 309,771; published May 19, 1931. Class 37.

Edwards, Omer H., doing business as Royal Digesto Co., Stamford, N. Y. Liquid medical preparation. 285,635; Aug. 4; Serial No. 312,294; published May 19, 1931. Class 6.

Elco Paint Products Inc., doing business as Elco Paint Sales Co., New York, N. Y. Paints, primers, wood-fillers, etc. 285,749; Aug. 4; Serial No. 306,673; published May 19, 1931. Class 16.

Elder Mfg. Co., St. Louis, Mo. Fabrics of cotton, wool, etc. 285,802; Aug. 4. Class 42.

Elder Mfg. Co., St. Louis, Mo. Wearing apparel. 285,812; Aug. 4. Class 39.

Elder Mfg. Co., St. Louis, Mo. Fabrics of cotton, wool, etc. 285,813; Aug. 4. Class 42.

Elder Mfg. Co., St. Louis, Mo. Wearing apparel. 285,814; Aug. 4. Class 39.

Elite Perfume Shop, doing business as Niktarf Cie., Brooklyn, N. Y. Powders, rouges, cold cream, etc. 285,673; Aug. 4; Serial No. 311,957; published May 12, 1931. Class 6.

Ely, Harry, Hampton, Va. Bunion and corn preparations. 285,815; Aug. 4. Class 6.

Eton Products, Inc., Newark, N. J. Pharmaceutical mouth wash. 285,773; Aug. 4; Serial No. 312,126; published May 12, 1931. Class 6.

F & M Chemical Co., The. (See Meyers, Frank.)

Favreau & Collette, Spencer, Mass. Powders for simple headache or neuralgia. 285,799; Aug. 4. Class 6.

Fay, Edward J., New York, N. Y. Hair and toilet brushes. 285,772; Aug. 4; Serial No. 312,368; published May 19, 1931. Class 29.

Fay, Edward J., New York, N. Y. Perfumes, face, talcum and bath powders, toilet water, etc. 285,792; Aug. 4; Serial No. 312,369; published May 19, 1931. Class 6.

Fifth Avenue Platinum Shops, Inc., New York, N. Y. Finger rings and other articles of jewelry. 285,775; Aug. 4; Serial No. 312,514; published May 19, 1931. Class 28.

Fingles, W. A., Inc., Baltimore, Md. Flashing and skylights. 285,669; Aug. 4; Serial No. 311,832; published May 5, 1931. Class 12.

Firestone Battery Company, Akron, Ohio. Spark plugs. 285,733; Aug. 4; Serial No. 311,133; published May 12, 1931. Class 21.
Forsbacka Jernverks Aktiebolag. (See Milne, A., & Co., assignor.)
Fournet, Sidney C., assignor to Borgloss, Incorporated, New Orleans, La. Wall board and tile. 285,652; Aug. 4; Serial No. 312,754; published May 19, 1931. Class 12.
France, J. H., Refractories Co., Snow Shoe, Pa. Refractory cement. 285,655; Aug. 4; Serial No. 312,515; published May 19, 1931. Class 12.
France, J. H., Refractories Co., Snow Shoe, Pa. Refractory concrete. 285,656; Aug. 4; Serial No. 312,516; published May 19, 1931. Class 12.
France Manufacturing Company, The, Cleveland, Ohio. Ozone generators. 285,741; Aug. 4; Serial No. 308,499; published May 12, 1931. Class 21.
Fratelli Branca, Milan, Italy. Stomach bitters. 285,705–7; Aug. 4; Serial Nos. 272,395–7; published May 19, 1931. Class 6.
Freiburger, S., & Bro., assignor to S. Freiburger & Bro. Co., Fort Wayne, Ind. Children's shoes. 83,974; renewed Oct. 24, 1931.
General Dry Batteries, Inc., Cleveland, Ohio. Electric batteries. 285,717; Aug. 4; Serial No. 312,558; published May 12, 1931. Class 21.
General Dry Batteries, Inc., Cleveland, Ohio. Electric batteries. 285,731; Aug. 4; Serial No. 311,570; published May 12, 1931. Class 21.
General Dyestuff Corporation, New York, N. Y. Dyes and dyestuffs. 285,787; Aug. 4; Serial No. 312,559; published May 12, 1931. Class 6.
General Insulating & Mfg. Co., Alexandria, Ind. Heat and cold insulation material. 285,764; Aug. 4; Serial No. 309,428; published May 19, 1931. Class 12.
General Insulating & Mfg. Co., Alexandria, Ind. Heat and cold insulation material. 285,766; Aug. 4; Serial No. 309,427; published May 19, 1931. Class 12.
Gento Laboratories. (See Steigrod, Samuel.)
Germania Tea Company, Minneapolis, Minn. Medicines. 285,647; Aug. 4; Serial No. 311,095; published May 12, 1931. Class 6.
Giannikos, Emanuel, Cleveland, Ohio. Medicine. 285,745; Aug. 4; Serial No. 307,647; published May 19, 1931. Class 6.
Glatzer, Gustave, New York, N. Y. Rose disinfectant, insecticides, perfumes, rouge, etc. 285,753; Aug. 4; Serial No. 303,281; published May 19, 1931. Class 6.
Good Story Magazine Company, Inc., New York, N. Y. Magazine. 285,737; Aug. 4; Serial No. 301,900; published May 19, 1931. Class 38.
Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Filled compacts, face powder, rouge, and lip stick. 285,633; Aug. 4; Serial No. 309,471; published May 12, 1931. Class 6.
Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Filled compacts, face powder, rouge, and lip-stick. 285,634; Aug. 4; Serial No. 309,468; published May 12, 1931. Class 6.
Griffith Laboratories, Inc., The, Chicago, Ill. Curing salt. 285,637; Aug. 4; Serial No. 312,219; published May 19, 1931. Class 6.
Hachmeister-Lind Company, McKees Rocks, Pa. Incandescent electric lamp bulbs. 285,130; Aug. 4; Serial No. 311,726; published May 12, 1931. Class 21.
Hagan Corporation, Pittsburgh, Pa. Chemical for treating steam boiler water. 285,744; Aug. 4; Serial No. 307,716; published May 12, 1931. Class 6.
Hahne & Company, Newark, N. J. Rouge, lipsticks, face powder, etc. 285,810; Aug. 4. Class 6.
Hale and Shook, Long Beach, Calif. Pile ointment and salve. 285,641; Aug. 4; Serial No. 312,050; published May 12, 1931. Class 6.
Haiman, J. L., Los Angeles, Calif. Prepared pancake flour. 285,804; Aug. 4. Class 46.
Halsted Oil Company, Inc., New York, N. Y. Preparation for use as a rust solvent and lubricant, and lubricating oils and greases. 285,703; Aug. 4; Serial No. 288,378; published May 19, 1931. Class 15.
Hamlen, J. H., and Son, Portland, Me. Cooperage. 36,687; renewed July 2, 1931.
Hardsocg Manufacturing Co., Ottumwa, Iowa. Electric drills and mining bits and bit teeth. 285,727; Aug. 4; Serial No. 312,003; published May 12, 1931. Class 21.
Hardwick & Magee Company, Philadelphia, Pa. Textile carpets. 285,816; Aug. 4. Class 42.
Harford, Earl R., doing business as Bond Chemical Company, Middletown, N. Y. Cleaning and bleaching disinfectant. 285,776; Aug. 4; Serial No. 312,951; published May 19, 1931. Class 6.
Haywood Company, The. (See Wood, Karl.)
Higgins, John, & Company, Ltd., Waterford, N. Y. Medicinal sprays and inhalants. 285,781; Aug. 4; Serial No. 312,782; published May 19, 1931. Class 6.
Highfill, Ernest E., doing business as The Safe Way Auto Light Co., Los Angeles, Calif. Electric lamps. 285,714; Aug. 4; Serial No. 309,588; published May 19, 1931. Class 21.
Hill, Hattie V., doing business as Van Esther Beauty Shoppe, Cleveland, Ohio. Face creams, hair oils and growers, etc. 285,693; Aug. 4; Serial No. 300,197; published May 12, 1931. Class 6.
Hillyard Chemical Company, St. Joseph, Mo. Deodorizing cakes. 285,684; Aug. 4; Serial No. 310,908; published May 5, 1931. Class 6.
Home Oil Burner Company, Inc., The, Stratford, Conn. Oil burners. 285,803; Aug. 4. Class 34.
Houston Salt Co., Houston, Tex. Salt. 285,643; Aug. 4; Serial No. 311,901; published May 19, 1931. Class 6.
Hubbard Milling Company, Mankato, Minn. Wheat flour. 83,650; renewed Oct. 3, 1931.
Hurlbut Paper Company, South Lee, Mass. Writing and printing paper. 285,681; Aug. 4; Serial No. 311,733; published May 19, 1931. Class 37.
Jamieson, C. E., Detroit, Mich. Cod liver oil preparation. 285,686; Aug. 4; Serial No. 310,381; published May 5, 1931. Class 6.
Junkers, Hugo, Dessau, Germany. Electrically heated boilers, electrical stoves and radiators, etc. 285,704; Aug. 4; Serial No. 279,925; published May 19, 1931. Class 21.
Kattermann and Mitchell Company, New York, N. Y. Silk piece goods. 285,801; Aug. 4. Class 42.
Keith Corporation, Chicago, Ill. Magazines. 285,694; Aug. 4; Serial No. 298,574; published May 19, 1931. Class 38.
Keller, Charles F., doing business as The Keller Company, Mechanicsburg, Ohio. Diuretic in tablet form. 285,638; Aug. 4; Serial No. 312,153; published May 12, 1931. Class 6.
Kellogg, M. W., Company, The, New York, N. Y. Plastic monolithic refractories. 285,667; Aug. 4; Serial No. 311,963; published May 5, 1931. Class 12.
Keystone Portland Cement Company, Philadelphia, Pa. Portland cement. 285,760; Aug. 4; Serial No. 311,063; published May 5, 1931. Class 12.
Kurtain Krisp Co. (See McDonald, O. G.)
Lady Peggy, Inc. (See Scott & Gilbert Co.)
La Vay Products Company, New York, N. Y., and Hackensack, N. J. Shampoo. 285,701; Aug. 4; Serial No. 290,786; published Apr. 29, 1930. Class 6.
Lawrence Products Company, Inc., Kelso and Seattle, Wash., and Los Angeles, Calif. Antiseptic germicide. 285,646; Aug. 4; Serial No. 311,615; published May 12, 1931. Class 6.
Lockstrip Manufacturing Corporation, Long Island City, N. Y. Dividing strips. 285,662; Aug. 4; Serial No. 312,346; published May 12, 1931. Class 12.
Logan-Long Company, The, Chicago, Ill. Outside coverings for attachment to the outer walls of buildings. 285,750; Aug. 4; Serial No. 305,137; published Nov. 4, 1930. Class 12.
Long, Miles A., doing business as Cardinal Radio Mfg. Co., Los Angeles, Calif. Radio receiving sets. 285,713; Aug. 4; Serial No. 309,738; published May 19, 1931. Class 21.
Lotito, Frank, doing business as West Coast Wine Jelly Co., Los Angeles, Calif. General medicinal tonic. 285,777; Aug. 4; Serial No. 312,923; published May 19, 1931. Class 6.
Malleable Iron Range Company, Beaver Dam, Wis. Electric ranges, ovens, hot plates, etc. 285,700; Aug. 4; Serial No. 295,075; published Apr. 15, 1930. Class 21.
Martin Bros., Inc., Yardville, N. J. Concrete building blocks. 285,670; Aug. 4; Serial No. 311,639; published May 12, 1931. Class 12.
Mar-Vel Products Co. (See Vinje, Hulda A.)
Marvex Inc., Canton, Ohio. Composition material. 285,747; Aug. 4; Serial No. 306,822; published May 19, 1931. Class 12.
Maul Company, The, Detroit, Mich. Concrete units. 285,666; Aug. 4; Serial No. 312,057; published May 5, 1931. Class 12.
May Company, J. L., The, New York, N. Y. Pintickets, labels, and tags. 285,680; Aug. 4; Serial No. 311,584; published May 19, 1931. Class 37.
McConnell, George, doing business as The Desmond-Stephan Mfg. Company, Urbana, Ohio. Emery wheel dressers and cutters. 285,807; Aug. 4. Class 23.
McDonald, O. G., doing business as Kurtain Krisp Co., Detroit, Mich. Canned fluids, composed of oxidized bituminous materials, to make fibers of curtains firmer and stronger. 285,690; Aug. 4; Serial No. 309,544; published May 12, 1931. Class 6.
Meyers, Frank, doing business as The F & M Chemical Co., Los Angeles, Calif. Liquid preparation for the removal of scratches, grease, and dirt from leather and for polishing same. 285,796; Aug. 4; Serial No. 300,080; published June 24, 1930. Class 4.
Milne, A., & Co., New York, N. Y., assignor to Forsbacka Jernverks Aktiebolag, Forsbacka, Sweden. Steel in bars, blocks, etc. 82,454; renewed June 27, 1931.
Milton-Byron Company, Dayton, Ohio. Salve for the treatment of colds. 285,791; Aug. 4; Serial No. 312,444; published May 12, 1931. Class 6.
Mountain States Mixed Feed Company, Denver, Colo. Baby chick starter mash, growing grains, pigeon feed, etc. 285,800; Aug. 4. Class 46.
Munsch Laboratories, Inc., New York, N. Y. Compound of plantago psyllium. 285,783; Aug. 4; Serial No. 312,619; published May 19, 1931. Class 6.
Murjahn, Robert, doing business as Deutsch Amphibolin-Werke von Robert Murjahn, Ober Ramstedt, Germany. Paints and painter's size. 285,763; Aug. 4; Serial No. 309,619; published May 12, 1931. Class 16.

National Fireproofing Corporation, Pittsburgh, Pa. Ceramic structural units. 285,668; Aug. 4; Serial No. 311,843; published May 5, 1931. Class 12.
National Malleable and Steel Castings Company, Cleveland, Ohio. Radio loud speakers, choke coils and electromagnets. 285,696; Aug. 4; Serial No. 296,491; published May 12, 1931. Class 21.
National Union Radio Corporation, Newark, N. J. Radio electron tubes. 285,708; Aug. 4; Serial No. 310,943; published May 12, 1931. Class 21.
Niktarf Cie. (See Elite Perfume Shop.)
Norfolk Paint & Varnish Company, Quincy and Atlantic, Mass. Paints. 285,735; Aug. 4; Serial No. 302,871; published May 12, 1931. Class 16.
Norris, Perry E., doing business as Norris Products, Chicago, Ill. Finish and color restorer. 285,678; Aug. 4; Serial No. 311,620; published May 12, 1931. Class 6.
North American Refractories Company, Cleveland, Ohio. Dry fire brick material. 285,762; Aug. 4; Serial No. 309,650; published May 5, 1931. Class 12.
Norwich Pharmacal Company, The, Norwich, N. Y. Liquid demulcent preparation. 285,672; Aug. 4; Serial No. 312,059; published May 19, 1931. Class 6.
Ohio State Automobile Association, Columbus, Ohio. Publications. 285,770; Aug. 4; Serial No. 312,526; published May 19, 1931. Class 38.
Ozark Smelting & Mining Company, The, Cleveland, Ohio. Paint pigments. 285,658; Aug. 4; Serial No. 312,490; published May 12, 1931. Class 16.
Pacific Remedy Corporation, New York and Brooklyn, N. Y. Medicinal preparation. 285,785; Aug. 4; Serial No. 312,570; published May 19, 1931. Class 6.
Palmer Lime & Cement Company, New York, N. Y. Lime. 285,811; Aug. 4. Class 12.
Paraffine Companies, Inc., The, San Francisco, Calif. Paint. 285,695; Aug. 4; Serial No. 297,764; published May 12, 1931. Class 16.
Paris Hair Tonic Company, The Sociedad Anonima, Mexico City, Mexico. Hair-curling tonic. 285,751; Aug. 4; Serial No. 304,342; published May 5, 1931. Class 6.
Pelletier, Michael D., New York, N. Y. Cartoons, advertising circulating letters, and a periodical publication. 285,687; Aug. 4; Serial No. 310,586; published May 19, 1931. Class 38.
Pfeffer, S., Mfg. Co., St. Louis, Mo. Preparation for the relief of chapped lips, etc. 285,805; Aug. 4. Class 6.
Phi Lambda Upsilon, Tucson, Ariz. Keys and badges of precious metal. 285,724; Aug. 4; Serial No. 312,492; published May 12, 1931. Class 28.
Phillips Packing Company, Inc., Cambridge, Md. Canned vegetables, soups, etc. 285,809; Aug. 4. Class 46.
Plant Rubber & Asbestos Works, San Francisco, Calif. Thermal insulating materials and pipe coverings. 285,668; Aug. 4; Serial No. 312,239; published May 12, 1931. Class 12.
Plough, Inc., doing business as The St. Joseph's Laboratories, Memphis, Tenn. Laxative medicinal preparation. 285,698; Aug. 4; Serial No. 296,079; published Apr. 29, 1930. Class 6.
Powell, Richard C., Princeton, N. J. Processed material. 285,664; Aug. 4; Serial No. 312,220; published May 12, 1931. Class 12.
Premier Jewelry Company, New York, N. Y. Unbreakable necklace cables. 285,721-2; Aug. 4; Serial No. 312,493 4; published May 19, 1931. Class 28.
Prescott, Frank D., Franklin, N. H. Lubricating oils, illuminating oils and lubricating greases. 285,808; Aug. 4. Class 15.
Pulitzer Publishing Company, St. Louis, Mo. Section department, or column of newspapers. 285,768; Aug. 4; Serial No. 312,025; published May 19, 1931. Class 38.
Purity Oats Company, Keokuk, Iowa. Printed mailing card. 285,679; Aug. 4; Serial No. 311,928; published May 19, 1931. Class 38.
Reiss & Brady. (See Cresea Company, assignor.)
Renotrat Corporation of America, New York, N. Y. Preparation for kidney diseases. 285,784; Aug. 4; Serial No. 312,571; published May 19, 1931. Class 6.
Republic Carbon Company, Niagara Falls, N. Y. Electrodes. 285,710; Aug. 4; Serial No. 310,883; published May 12, 1931. Class 21.
Research Products Corporation, New York, N. Y. Dental alloy. 285,651; Aug. 4; Serial No. 312,816; published May 19, 1931. Class 44.
Richards Laboratories, Duluth and Grand Rapids, Minn. Preparation for the treatment of cold in the head, throat, and chest. 285,674; Aug. 4; Serial No. 311,931; published May 19, 1931. Class 6.
Ronuk, Limited, doing business as Ronuk Sanitary Polish Works, Portslade, near Brighton, England. Floor polish, furniture cream, floor dressing, and motor car polish. 285,759; Aug. 4; Serial No. 311,203; published May 19, 1931. Class 16.
Roset Phar. Co., not inc., Chicago, Ill. Pharmaceutical preparation. 285,790; Aug. 4; Serial No. 312,454; published May 12, 1931. Class 6.
Royal D'gesto Co. (See Edwards, Omer H.)
Royal Lace Paper Works, Inc., The, Brooklyn, N. Y. Paper products. 285,771; Aug. 4; Serial No. 312,497; published May 19, 1931. Class 37.

Rurup, Ernest G., doing business as Scientific Laboratories of America, San Francisco, Calif. Dental creams. 285,639; Aug. 4; Serial No. 312,065; published May 19, 1931. Class 6.
Safe Way Auto Light Co., The. (See Highfill, Ernest E.)
St. Joseph's Laboratories, The. (See Plough, Inc.)
Sanimetal Tile Corporation, New York, N. Y. Enamel tiles. 285,755; Aug. 4; Serial No. 311,551; published May 19, 1931. Class 12.
Sapolin Co. Inc., New York, N. Y. Enamel paints. 285,757; Aug. 4; Serial No. 311,625; published Apr. 28, 1931. Class 16.
Schellenberg, Hermann, Berlin, Germany. Compound and liquid for the hair, hair restorer, etc. 285,736; Aug. 4; Serial No. 302,647; published May 19, 1931. Class 6.
Schroeder, Arthur F., doing business as A. F. Schroeder Oil Co., Milwaukee, Wis. Lubricating oils and greases. 285,723; Aug. 4; Serial No. 312,458; published May 12, 1931. Class 15.
Scientific Laboratories of America. (See Rurup, Ernest G.)
Scott & Gilbert Co., doing business as Lady Peggy, Inc., San Francisco, Calif. Lip sticks, rouge compacts, cold creams, etc. 285,702; Aug. 4; Serial No. 290,478; published May 5, 1931. Class 6.
Scott, Mrs. F. Andrew, Los Angeles, Calif. Creams for the finger-nails. 285,743; Aug. 4; Serial No. 308,223; published May 19, 1931. Class 6.
Scull, William S., Company, Camden, N. J. Coffee. 84,086; renewed Dec. 26, 1931.
Seltzer, Jenny. (See Thomas, Jenny S.)
Sheetpaint Products Corporation, New York, N. Y. Wall coverings of coated paper. 285,698; Aug. 4; Serial No. 311,004; published May 19, 1931. Class 37.
Singer Manufacturing Company, The, Elizabeth, N. J., and New York, N. Y. Electric vacuum cleaners and dust bags therefor. 285,716; Aug. 4; Serial No. 312,535; published May 19, 1931. Class 21.
Soapless Foam, Limited, London, England. Aerating equipment. 285,711; Aug. 4; Serial No. 310,493; published May 19, 1931. Class 21.
Société Anonyme Jean Patou, Paris, France. Perfumes, face lotions, face powder, talcum powder, etc. 285,754; Aug. 4; Serial No. 312,316; published May 19, 1931. Class 6.
Societe Cadolle Freres, Paris, France. Perfumery and toilet preparations. 285,734; Aug. 4; Serial No. 307,744; published May 12, 1931. Class 6.
Sonoco Products Company, Hartsville, S. C. Paper cones or tubes. 285,754; Aug. 4; Serial No. 312,536; published June 2, 1931. Class 2.
Southern Oak Flooring Industries, Little Rock, Ark. Flooring. 285,665; Aug. 4; Serial No. 312,205; published May 12, 1931. Class 12.
Spencer Thermostat Company, Cambridge, Mass. Electric switches. 285,709; Aug. 4; Serial No. 310,888; published May 19, 1931. Class 21.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Insecticides, deodorants, and disinfectants. 285,676; Aug. 4; Serial No. 311,796; published May 5, 1931. Class 6.
Stanley Works, The, New Britain, Conn. Electric tools. 285,728; Aug. 4; Serial No. 311,936; published May 19, 1931. Class 21.
Steigrod, Samuel, doing business as Gento Laboratories, Paulsboro, N. J., assignor to L. Weinberg Company, Philadelphia, Pa. Medicine. 285,631; Aug. 4; Serial No. 310,976; published May 19, 1931. Class 6.
Steinway & Sons, New York, N. Y. Pianos. 285,732; Aug. 4; Serial No. 311,847; published May 12, 1931. Class 30.
Sterling Products Company. (See Akin-Erskine Milling Company, assignor.)
Stewart, Mary E., doing business as Stewart & Cobb Chemical Co., Covington, Ky. Compound for deodorizing the breath. 285,645; Aug. 4; Serial No. 311,630; published May 19, 1931. Class 6.
Stoddard, G. S., & Co., Inc., New York, N. Y. Medicinal tablets. 285,782; Aug. 4; Serial No. 312,779; published May 19, 1931. Class 6.
Stoddard, G. S., & Co., Inc., New York, N. Y. Analgesic and hypnotic. 285,786; Aug. 4; Serial No. 312,777; published May 12, 1931. Class 6.
Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radio receiving sets and parts, supplies, etc., for talking machines, etc. 285,738; Aug. 4; Serial No. 308,911; published May 12, 1931. Class 21.
Sullivan Machinery Company, Boston, Mass., and Chicago, Ill. Moisture proof cables or conductors. 285,716; Aug. 4; Serial No. 312,500; published May 12, 1931. Class 21.
Sullivan Machinery Company, Boston, Mass., and Chicago, Ill. Portable electric plants. 285,720; Aug. 4; Serial No. 312,506; published May 12, 1931. Class 21.
Table Rock Laboratories, Inc. (See Barksdale, Irving S.)
Tar Products Corporation, Providence, R. I. Insecticides. 285,748; Aug. 4; Serial No. 306,761; published May 5, 1931. Class 6.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 64,282; renewed Nov. 21, 1931.

Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,285; renewed Nov. 21, 1931.
Thomas, Jenny S., doing business as Jenny Seltzer, Philadelphia, Pa. Tissue and cleansing cream, rouge, muscle oil, etc. 285,789; Aug. 4; Serial No. 312,501; published May 12, 1931. Class 6.
Twin Cities Distributing Company, The, Covington, Ky. Oils and greases. 285,725; Aug. 4; Serial No. 312,208; published May 19, 1931. Class 15.
Union Oil Company of California, Los Angeles, Calif. Lubricating oils. 285,797; Aug. 4; Serial No. 299,551; published May 19, 1931. Class 15.
United Drug Company, Boston, Mass. Medicinal preparation. 285,798; Aug. 4; Serial No. 298,730; published June 17, 1930. Class 6.
United Plywood Corporation, New Albany, Ind. Pre-finished flooring and plywood. 285,756; Aug. 4; Serial No. 311,544; published May 12, 1931. Class 12.
United States Coast Artillery Association, Washington, D. C. Periodical. 285,682; Aug. 4; Serial No. 311,211; published May 19, 1931. Class 38.
Universal Atlas Cement Company. (See Atlas Portland Cement Co., assignor.)
Universal Bottled Gas Corporation, Rochester, N. Y. Liquid gas. 285,739; Aug. 4; Serial No. 308,870; published May 19, 1931. Class 6.
Van Esther Beauty Shoppe. (See Hill, Hattie V. E.)
Veldown Company, Inc., New York, N. Y. Tissues, Cleansing. 285,688; Aug. 4; Serial No. 310,000; published May 19, 1931. Class 37.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Refractory stones and bricks, silica stones and bricks, etc. 285,607; Aug. 4; Serial No. 296,157; published May 19, 1931. Class 12.
Vinje, Hulda A., doing business as Mar-Vel Products Co., Chicago, Ill. Soothing lotions, salve or ointment for mouth gum irritations. 285,793; Aug. 4; Serial No. 312,324; published May 19, 1931. Class 6.
Visco-Ment Corporation, Chicago, Ill. Asphalt. 285,661; Aug. 4; Serial No. 312,395; published May 12, 1931. Class 12.
Warde, Mattie D., Philadelphia, Pa. Hair tonic, face lotion, face cream, foot lotion, etc. 285,746; Aug. 4; Serial No. 307,025; published May 5, 1931. Class 6.
Watson, Thomas A., doing business as Watson Chemical Laboratories, Chicago, Ill. Medical compound. 285,632; Aug. 4; Serial No. 309,837; published May 19, 1931. Class 6.
Weidlich Bros. Mfg., Co., Bridgeport, Conn. Trophies. 285,729; Aug. 4; Serial No. 311,857; published May 19, 1931. Class 28.
Weinberg, L., Company. (See Steigrod, Samuel, assignor.)
West Coast Wine Jelly Co. (See Lotito, Frank.)
Western Felt Works, The, assignor, by mesne assignments, to Western Felt Works, Chicago, Ill. Felt goods. 37,409; renewed Dec. 3, 1931.
White Star Refining Company, Detroit, Mich. Storage batteries. 285,752; Aug. 4; Serial No. 303,931; published May 12, 1931. Class 21.
Withington and Cooley Mfg. Co., Jackson, Mich. to The American Fork & Hoe Company, Cleveland, Ohio, successor. Farm and garden forks. 36,308; renewed Apr. 23, 1931.
Wood, Karl, doing business as The Haywood Company, Memphis, Tenn. Nasal oils. 285,675; Aug. 4; Serial No. 311,897; published May 19, 1931. Class 6.
Yarnell, Oran, doing business as Always Signal Co., Marion, Ind. Electric direction signals. 285,692; Aug. 4; Serial No. 300,903; published Aug. 12, 1930. Class 21.
Yordonoff, Nicholas D., doing business as Yordonoff Medicine Company, Waterloo, Iowa. Preparation for the treatment of asthma, bronchitis, etc. 285,644; Aug. 4; Serial No. 311,858; published May 12, 1931. Class 6.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Agneau Laboratories. (See Lamb, H. W.)
Allegra, Peter, doing business as Allegra Cigar Company, New York, N. Y. Sigari Allegra. For Cigars. 39,466; Aug. 4.
Allegra, Peter, doing business as Allegra Cigar Company, New York, N. Y. Sigari Avanti. For Cigars. 39,467; Aug. 4.
Angelus-Campfire Company, Chicago, Ill. Campfire Coconut Toasted Marshmallows. For Marshmallows. 39,468; Aug. 4.
Bartlett Products, Inc., Chicago, Ill. Zip! Zowie It Polishes. For Cleaners and Polishers used for Nickel, Chromium, Monel, Etc. 39,469; Aug. 4.
Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Brand Chewing Gum, Spearmint. For Chewing Gum. 39,470; Aug. 4.
Benos, Olga, doing business as Onaida Turkish Beauty Preparations, New York, N. Y. Onaida Turkish Beauty Preparations. For Beauty Preparations. 39,471; Aug. 4.
Berlin Malt Co. New York. (See Frey, Maurice B.)
Bloomington Packing Company, Bloomington, Ind. Winterlein. For Bacon. 39,472; Aug. 4.
Bonded Tobacco Company, Inc., The, New York, N. Y. Sackett De-Nicotined. For Cigars, Cigarettes and Tobaccos. 39,473; Aug. 4.
Bunte Brothers, Chicago, Ill. Bunte. For Candy. 39,474; Aug. 4.
Drislane, W. E., Company, Albany, N. Y. Drislane's Selected Fresh Eggs. For Eggs. 39,475; Aug. 4.
Eagle Paint & Varnish Works, Inc., Brooklyn, N. Y. Brite-Kote Floor Paint. For Floor Paints. 39,476; Aug. 4.
Frenly Products, Inc., New York, N. Y. Frenly Enema Cream. For Enema Cream. 39,477; Aug. 4.
Frey, Maurice B., doing business as Berlin Malt Co. New York, Scranton, Pa. Berlin Club Malt Syrup. For Malt Syrup. 39,478; Aug. 4.
General Baking Company, New York, N. Y. Bond Bakers Whole Wheat Bread Sliced. For Bread. 39,479; Aug. 4.
Glickman, Irwin A., doing business as Irwin A. Glickman Company, Los Angeles, Calif. Olympic. For Suspenders. 39,480; Aug. 4.
Heilbronner, Adolph H., Butte, Mont. Taste Holder. For Cigar Holders. 39,482; Aug. 4.
Herz-Oakes Candy Co., St. Louis, Mo. Milk Nut Mallow. For Candy Bars Made of Marshmallow Containing Nuts, Coated with Milk Chocolate. 39,483; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. Brav Shoe Co. For Boxes. 39,484; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. Queen Quality. For Boxes. 37,485; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. American Lassie Shoes. For Boxes. 39,486; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. Sportster. For Boxes. 39,487; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. Dr. Greene's. For Boxes. 39,488; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. United. For Boxes. 39,489; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. Sperling Shoe Co. For Boxes. 39,490; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. Camilla. For Boxes. 39,491; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. Steinberg's. For Boxes. 39,492; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. Genuine Reptile. For Boxes. 39,493; Aug. 4.
Hoague-Sprague Corporation, Lynn, Mass. Ace-Hi Shoes. For Boxes. 39,494; Aug. 4.
Kalamazoo Vegetable Parchment Company, Parchment, Mich. Fancy Waxed Paper. For Waxed Paper. 39,495; Aug. 4.
Kisky Milling Company, Portland, Org. Kisky Ready Mixed Biscuit Flour. For Prepared Flour. 39,496; Aug. 4.
Knox, Charles B., Gelatine Company Incorporated, Johnstown, N. Y. Knox Jell. For Gelatine Dessert. 39,497; Aug. 4.
Lamb, H. W., doing business as Agneau Laboratories, Vineland, N. J. Liquid Solder. For Liquid Soldering Preparation. 39,498; Aug. 4.
Long, W. E., Co. The, Chicago, Ill. Snowhite. For Bread Loaves. 39,499; Aug. 4.
Loose, E. H., Los Angeles, Calif. E. H. Loose's California Selected Sun Dried Fruits. For Sun Dried Fruits. 39,500; Aug. 4.
Los Angeles Brewing Co., Los Angeles, Calif. Eastside Lime Rickey Makes The Party. For a Carbonated Beverage. 39,501; Aug. 4.
McGavin's Bread, Inc., Denver, Colo. Mondsy's. For Bread. 39,502; Aug. 4.
McKesson & Robbins, Incorporated, Fairfield, Conn. McKesson's Yodora. For Delicate Deodorant Cream. 39,503; Aug. 4.
Morgan-Fairfield Manufacturing Co. Inc., Fairfield, Ill. Sleepytown, "Nightwear". For Nightwear. 39,504; Aug. 4.
Onaida Turkish Beauty Preparations. (See Benos, Olga.)
Paraffine Companies, Inc., The, San Francisco, Calif. Pabcotite. For Waterproof Layer or Sheet for Building Construction. 39,505; Aug. 4.
Piper, H., Company, The, Chicago, Ill. Bamby Bun Juniors. For Buns. 39,506; Aug. 4.
Reece, S. Earl, Baltimore, Md. Knoxage. For Skin Cream. 39,507; Aug. 4.
S. W. Glue Co., Portland, Oreg. Simply Wonderful Glue. For Glue. 39,481; Aug. 4.
Schafer-Hilliard Chemical Co., Raleigh, N. C. Dentol. For Antiseptic. 39,508; Aug. 4.
Scott Paper Company, Chester, Pa. Waldorf. For Paper Towels. 39,509; Aug. 4.
Scott Paper Company, Chester, Pa. Scot Towels. For Paper Towels in Roll Form. 39,510; Aug. 4.
Standard Brands Incorporated, New York, N. Y. Royal. For Chocolate Flavor Pudding. 39,511; Aug. 4.

Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Seal Brand Green Tea. For Tea. 39,512; Aug. 4.
Standard Brands Incorporated, New York, N. Y. Royal Raspberry Flavor Gelatin Dessert. For Gelatin Dessert. 39,513; Aug. 4.
Standard Brands Incorporated, New York, N. Y. Royal Cherry Flavor Gelatin Dessert. For Gelatin Dessert. 39,514; Aug. 4.
Standard Brands Incorporated, New York, N. Y. Royal Lemon Flavor Gelatin Dessert. For Gelatin Dessert. 39,515; Aug. 4.
Standard Brands Incorporated, New York, N. Y. Royal Strawberry Flavor Gelatin Dessert. For Gelatin Dessert. 39,516; Aug. 4.
Standard Brands Incorporated, New York, N. Y. Royal Orange Flavor Gelatin Dessert. For Gelatin Dessert. 39,517; Aug. 4.
Standard Brands Incorporated, New York, N. Y. Royal Lime Flavor Gelatin Dessert. For Gelatin Dessert. 39,518; Aug. 4.
Standard Brands Incorporated, New York, N. Y. Fleischmann's Phos-Fo-Lac. For Phosphate and Lactate Mixture Suitable for Use with Sodium Bicarbonate for the Same Purpose as Baking Powder. 39,519; Aug. 4.
SunAire Company, Los Angeles, Calif. SunAire Vitalized Scalp Tonic. For Scalp Tonic. 39,520; Aug. 4.
Tissue Paper Manufacturers Association, New York, N. Y. Tissue Paper Manufacturers Association. For Paper. 39,521; Aug. 4.
Vago-Klenz Company. (See Winn, Charles E.)
Winn, Charles E., doing business as Vago-Klenz Company, Utica, N. Y. Vago-Klenz. For Antiseptic Toilet Powders. 39,522; Aug. 4.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Abco, The, New York, N. Y. The Abco. For Golf Handicap Boards, Bulletin Boards, Building Directories and Statistical Boards, Etc. 13,318; Aug. 4.
Arden, Elizabeth, Inc., New York, N. Y. Happy Days Are Here Again. For Anti-Brown Spot Ointment and Ardena Skin Tonic. 13,319; Aug. 4.
Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. All Simplicity Is Great. For Amoretta Cream, Creme De France, Lilie Lotion, Etc. 13,320; Aug. 4.
Dyer, Pauline L., New York, N. Y. Zarifa. For Preparation For Treating Dandruff and Falling Hair. 13,321; Aug. 4.
Farley & Loetscher Mfg. Co., Dubuque, Iowa. It's The Core That Makes The Door. For Veneered Doors. 13,322; Aug. 4.
Frenly Products, Inc., New York, N. Y. Enemas. For Nozzle or Pipe for Attachment to Fountain Syringe and One Bottle of Enema Cream for Mixture in Fountain Syringe. 13,323; Aug. 4.
Heinz, H. J. Company, Pittsburgh, Pa. The Thrill in Every Picnic—Etc. For Peanut Butter, Apple Butter, Sandwich Relish, Etc. 13,324; Aug. 4.
Kellogg Company, Battle Creek, Mich. Deskitis. For Bran Food. 13,325; Aug. 4.
Mission Dry Corporation, Ltd., Los Angeles, Calif. Mission Model "C" Duplex Dispenser Automatic Mixing & Icing With Spectacular Lighting M2. For Beverage Dispensers. 13,326; Aug. 4.
National Dairy & Food Bureau, Chicago, Ill. Chocolate Soda. For Ice Cream Sodas. 13,327; Aug. 4.
Parker, I. C., Fort Worth, Tex. Frozen Drumstick. For Ice Cream Product Consisting of an Ice Cream Cone Dipped in Candy Coating, Etc. 13,328; Aug. 4.
Patent Cereals Co., The, Geneva, N. Y. Dic-A-Doo. For Paint Cleaners. 13,328; Aug. 4.
Putnam Spinners, Inc., Putnam, Conn. Radiarn. For Spun Rayon. 13,330; Aug. 4.
Wanamaker, John, New York, New York, N. Y. Low Point Sale. For Misses' Dinner-Dance Ensemble, Junior Misses' Sport Frocks, Women's Silk Crepe Coats, Etc. 13,331; Aug. 4.
Wanamaker, John, New York, New York, N. Y. Low Point Now. For "Farmington" Universal Silver Plate, Hand Bags, Real Stone Jewelry, Cool Linen Frocks, Etc. 13,332; Aug. 4.
Wanamaker, John, New York, New York, N. Y. Low Point Now. For Silk Crepe. 13,333; Aug. 4.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & J. Manufacturing Co., The, Binghamton, N. Y. Spoons, cake turners, forks, etc. 303,088; Aug. 4. Class 23.
A. & J. Manufacturing Co., The, Binghamton, N. Y. Spoons, cake turners, forks, etc. 314,351; Aug. 4. Class 23.
A. & J. Manufacturing Co., The, Binghamton, N. Y. Spoons, cake turners, forks, etc. 314,353; Aug. 4. Class 23.
Abelson, Meyer H., Wilkes-Barre, Pa. Chocolate candy. 315,296; Aug. 4. Class 46.
Adam Hat Stores, Inc., New York, N. Y. Men's hats. 314,975; Aug. 4. Class 39.
Adjusto Chair Corporation, New York, N. Y. Household chairs. 303,758; Aug. 4. Class 32.
Advertising and Selling Publishing Company, New York, N. Y. Bi-monthly magazine. 310,034; Aug. 4. Class 38.
Alberts, Max M., doing business as The Altreit Co., Brooklyn, N. Y. Preparation for repelling moths. 310,151; Aug. 4. Class 6.
Algemeene Knustzijde Unie N. V., Arnhem, Netherlands. Artificial horsehair and straw made of cellulose. 314,889; Aug. 4. Class 1.
Allbestos Corporation, Philadelphia, Pa. Brake linings. 316,241; Aug. 4. Class 35.
Allis, Amber, Milwaukee, Wis. Electrical headlights. 302,313; Aug. 4. Class 21.
Altreit Co., The. (See Alberts, Max M.)
American Brake Shoe and Foundry Company, Wilmington, Del., and New York, N. Y. Brake shoes. 309,794; Aug. 4. Class 19.
American Cable Company, Inc., New York, N. Y., and Bridgeport, Conn. Devices for transmitting power for operating brakes. 315,658; Aug. 4. Class 19.
American Cast Iron Pipe Company, Birmingham, Ala. Hollow cast metal bodies. 315,666; Aug. 4. Class 13.
American Colloid Corporation, New York, N. Y. Chemicals for clarifying water of rust, etc. 315,175; Aug. 4. Class 6.
American Hat Co. Inc., The, Norwalk, Conn. Men's hats. 296,566; Aug. 4. Class 39.
American Paper Goods Company, The, Montclair, N. J., and Kensington, Conn. Merchandising envelopes and bags. 309,298; Aug. 4. Class 2.
Amoskeag Manufacturing Company, Manchester, N. H. Textile diapers. 316,026; Aug. 4. Class 42.
Angelite Soap Manufacturing Co. (See Johnston, Katie M.)
Associated Parts, Inc., doing business as The Lucas Manufacturing Co., Toledo, Ohio. Vehicle heaters and parts thereof. 315,816. Class 19.
Atlanta Knitting Mills, Brooklyn, N. Y. Fabrics. 303,043; Aug. 4. Class 42.
Atlantic & Gulf Fertilizer Co., Jacksonville, Fla. Fertilizer. 316,076; Aug. 4. Class 10.
Bailey, Elpha E., Denver, Colo. Metal alloy. 315,240; Aug. 4. Class 44.
Ballif Distributing Company, The, Portland, Oreg. Malt syrup. 315,588; Aug. 4. Class 46.
Bangor Packing Company. (See Bugge, F. A.)
Becker, Henry, & Son, Inc., Roseland, N. J. Milk, cream, butter, etc. 314,746; Aug. 4. Class 46.
Becker, Henry, & Son, Inc., Roseland, N. J. Milk. 315,888; Aug. 4. Class 46.
Becker, Henry, & Son, Inc., Roseland, N. J. Heavy cream. 315,889; Aug. 4. Class 46.
Becker, Henry, & Son, Inc., Roseland, N. J. Light cream. 315,890; Aug. 4. Class 46.
Bejean, Etienne, doing business as The Bejean Laboratories, New York, N. Y. Salve. 314,837; Aug. 4. Class 6.
Bendlage, Theodore J., doing business as Tenex Laboratories, Cedar Rapids, Iowa. Medicine. 314,680; Aug. 4. Class 6.
Bessing, Clarence, Los Angeles, Calif. Fresh citrus fruits. 315,893; Aug. 4. Class 46.
Bewkes, Lambert, Co., Paterson, N. J. Ladies' undergarments, blouses, etc. 316,041; Aug. 4. Class 39.
Bi-Bi Products Company, Tulsa, Okla. Insecticide. 315,299; Aug. 4. Class 6.
Binney & Smith Company, New York, N. Y. Chemicals and compositions. 316,117; Aug. 4. Class 6.
Bluekamel Manufacturing Company. (See Graff, May.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 315,183–4; Aug. 4. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 315,186–7; Aug. 4. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 315,189; Aug. 4. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 315,191; Aug. 4. Class 42.
Boeker, Bernard, New York, N. Y. Medicinal preparation. 315,383; Aug. 4. Class 6.
Boston Woven Hose & Rubber Company, Cambridge, Mass. Belts and belting. 316,315; Aug. 4. Class 35.
Bourjois, Inc., New York, N. Y. Perfume, toilet water, bath crystals, etc. 315,784–6. Aug. 4. Class 6.
Breslauer, A., Inc., New York, N. Y. Skin freshener, tissue creams, cleansing cream, etc. 308,720; Aug. 4. Class 6.
British Enka Artificial Silk Company Limited, London, England. Piece goods. 316,251; Aug. 4. Class 42.
British Enka Artificial Silk Company Limited, London, England. Imitation straw and horsehair made of cellulose. 316,253; Aug. 4. Class 1.
Brody, F., & Sons Company, Des Moines, Iowa. Play suits, jackets, and mackinaws. 314,552; Aug. 4. Class 39.
Brooklyn Daily Times, Brooklyn, N. Y. Newspaper feature articles. 315,167; Aug. 4. Class 38.
Brooks-Scanlon Corporation, Foley, Fla. Lumber. 315,820; Aug. 4. Class 12.
Brown, Rose A., doing business as Brown Mfg. Co. Foot lotion. 310,508; Aug. 4. Class 6.
Brown, Walter M., doing business as The Mapo Company, Yakima, Wash. Medicinal preparation. 315,669; Aug. 4. Class 6.
Buffalo Electro-Chemical Co., Inc., Tonawanda, N. Y. Hydrogen peroxide, ammonium persulphate, and potassium persulphate. 315,624; Aug. 4. Class 6.
Bugge, F. A., doing business as Bangor Packing Company, Bangor, Wash. Canned clams and clam nectar. 315,894; Aug. 4. Class 46.
Bulova Watch Company, Inc., New York, N. Y. Bracelets and wrist bands and straps. 302,671; Aug. 4. Class 28.
Burton-Dixie Corporation, Chicago, Ill. Mattresses, bed springs, and pillows. 314,229; Aug. 4. Class 32.
California Crushed Fruit Corporation, now by change of name Mission Dry Corporation, Ltd., Los Angeles, Calif. Nonalcoholic maltless beverages. 309,723; Aug. 4. Class 45.
Celanese Corporation of America, New York, N. Y. Cellulose derivative fabrics. 316,187; Aug. 4. Class 42.
Celanese Corporation of America, New York, N. Y. Cellulose derivative fabrics. 316,280–1; Aug. 4. Class 42.
Celanese Corporation of America, New York, N. Y. Cellulose derivative fabrics. 316,283–4; Aug. 4. Class 42.
Celanese Corporation of America, New York, N. Y. Cellulose derivative fabrics. 316,286–7; Aug. 4. Class 42.
Chicago Cream Fried Cake Company, Chicago, Ill. Bakery products. 300,334; Aug. 4. Class 46.
Chicago Macaroni Co., Chicago, Ill. Macaroni. 309,064; Aug. 4. Class 46.
Church of the Heavenly Rest, New York, N. Y. Magazines. 299 682; Aug. 4. Class 38.
Cinamette Corporation, New York, N. Y. Cameras, motion picture cameras, picture projectors, etc. 315,671–3; Aug. 4. Class 26.
Cine-A-Graph Corporation, New York, N. Y. Electrical display signs. 315 674; Aug. 4. Class 21.
Cleveland Tractor Company, The, Cleveland, Ohio. Periodical. 316,141; Aug. 4. Class 38.
Coast Fishing Co., Wilmington, Calif. Dog and cat food. 315,900; Aug. 4. Class 46.
Codman, F. L. & J. C. Company, Boston and South Boston, Mass. Buffing wheels. 284,840; Aug. 4. Class 4.
Cohen, Jos. S., & Sons Co. Inc., New York, N. Y. Frocks, dresses, and smocks. 315,248; Aug. 4. Class 39.
Colgate-Palmolive-Peet Company, Chicago, Ill. Dental cream. 315,729; Aug. 4. Class 6.
Conde Nast Publications, Inc., The, New York, N. Y. Publication. 315,592; Aug. 4. Class 38.
Consolidated Automatic Merchandising Corporation, New York, N. Y. Scale tickets. 315,344; Aug. 4. Class 38.
Convent Avenue Drug Co., Bennington, Vt. Medicinal preparation. 312,825; Aug. 4. Class 6.
Crown Card and Paper Company, New York, N. Y. Bond paper. 313,535; Aug. 4. Class 37.
Crystal Refrigerator Co., Fremont, Nebr. Syrup filters and refrigerator cabinets. 315,733; Aug. 4. Class 31.
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Silver alloys for dental use. 305,780–1; Aug. 4. Class 44.
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Noble metals, alloys, and amalgams for dental use. 305,806; Aug. 4. Class 44.
Dewey, A. G., Company, Quechee, Vt. Woolen cloth. 315,397; Aug. 4. Class 42.
Di Salvo, Leon, Philadelphia, Pa. Hair waving preparation. 315,594; Aug. 4. Class 6.
Distillata Company, The, Cleveland, Ohio. Bottled mineral water. 315,489; Aug. 4. Class 45.
Dold, Jacob, Packing Co., Buffalo, N. Y. Dressed carcasses and cuts of fresh beef, pork, mutton, and veal. 315,138; Aug. 4. Class 46.
Drug Products Co., Inc., The, Long Island City, N. Y. Preparation used as an alkaline gargle. 315,253; Aug. 4. Class 6.
Dwarf Radio Manufacturing Co. Ltd., Los Angeles, Calif. Radio receiving sets and parts thereof and accessories thereto. 313,538; Aug. 4. Class 21.
Elder Manufacturing Company, St. Louis, Mo. Shirts, waists and bloomers. 315,997; Aug. 4. Class 39.
Elder Manufacturing Company, St. Louis, Mo. Shirts, waists and blouses. 316,002; Aug. 4. Class 39.
Electrad, Inc., New York, N. Y. Impedance units. 303,531; Aug. 4. Class 21.
Electric Indicator Corporation, Stamford, Conn. Electrical regulators of the level of liquids in tanks and containers, electrical control apparatus, etc. 272,474; Aug. 4. Class 21.
Elliott, B. K., Company, Pittsburgh, Pa. Sensitized printing paper. 315,256; Aug. 4. Class 26.
Enid Poultry & Egg Co., Inc., Enid, Okla. Dressed poultry. 315,678; Aug. 4. Class 46.
Feinberg, Meyer A., New York, N. Y. Antipyretic and analgesic preparation. 314,406; Aug. 4. Class 6.
Fishel, R. G., Inc., Chicago, Ill. Gaseous content glow lamps. 312,047; Aug. 4. Class 21.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 315,739; Aug. 4. Class 42.
Forstmann & Huffman Company, Passaic, N. J. Woolen piece goods. 315,741; Aug. 4. Class 42.
French Mfg. Company, The, Chicago, Ill. Hair pomade. 309,927; Aug. 4. Class 6.
Frictionless Metal Company, St. Louis, Mo. Bearing metal. 316,199; Aug. 4. Class 14.
Friez, Julien P., & Sons, Inc., Baltimore, Md. Weather direction transmitter. thermometer, hygrometer, etc. 316,323; Aug. 4. Class 26.
Frostilla Company, The. (See Shoemaker, Flora H.)
General Dyestuff Corporation, New York, N. Y. Dyes and dyestuffs. 315,681; Aug. 4. Class 6.
Gestetner, D., Limited, London, England. Stencil duplicating apparatus, stencils, etc. 303,962; Aug. 4. Class 37.
Gilbert, E. Warren, doing business as W. H. Ryan & Co., Allentown, Pa. Toy. 301,757; Aug. 4. Class 22.
Gilmore Oil Company Ltd., Los Angeles, Calif. Motor lubricating oil. 308,727; Aug. 4. Class 15.
Glo-Brite Laboratories, Des Moines, Iowa. Preparations for cleaning and polishing glass and metal surfaces. 314,688; Aug. 4. Class 4.
Gly-Tex Co., Brookville, Ind. Preparation for treating piles. 315,402; Aug. 4. Class 6.
Godward Gas Generator, Inc., New York, N. Y. Fuel vaporizer. 315,660; Aug. 4. Class 23.
Goldenberg, D., Inc., Philadelphia, Pa. Candy. 315,966; Aug. 4. Class 46.
Goodwear Knitting Mills, Philadelphia, Pa. Bathing suits. 309,271; Aug. 4. Class 39.
Graff, May, doing business as Bluekamel Manufacturing Company, Detroit, Mich. Cleansing cream. 315,258; Aug. 4. Class 6.
Graff, May, doing business as Bluekamel Manufacturing Company, Detroit, Mich. Nose creams. 315,260; Aug. 4. Class 6.
Grafree Products Company, Long Beach, Calif. Hair color restorer and tonic. 313,710; Aug. 4. Class 6.
Great Lakes Aircraft Corporation, Cleveland, Ohio. Device simulating an airplane. 311,571; Aug. 4. Class 22.
Great Lakes Industrial Laboratories. (See Rex, Clarence R.)
Greenwald, Abraham A., doing business as Jacob Stahl Jr. & Co., New York, N. Y. Cigars. 313,915; Aug. 4. Class 17.
Grigsby-Grunow Company, Chicago, Ill. Publication. 316 202; Aug. 4. Class 38.
Gulf States Steel Company, Birmingham, Ala. Black sheets, annealed sheets, plain sheets, etc. 316,144; Aug. 4. Class 14.
Halbert & Fryxell, Inc., New York, N. Y. Ophthalmic mountings. 316,006; Aug. 4. Class 26.
Hanan, Herbert W., doing business as Hanan & Son, Brooklyn, N. Y. Boots, shoes, and slippers. 314,002; Aug. 4. Class 39.
Harding, William A., doing business as Harding Company, New York, N. Y. Brake linings. 316,203; Aug. 4. Class 35.
Harrington & King Perforating Company, Chicago, Ill. Metal molding, fittings, and reticulated sheet material. 311,794; Aug. 4. Class 12.
Harris Drug Co. Inc., New York, N. Y. Capsules for reducing congestion of the mucous membranes, etc. 315 746; Aug. 4. Class 6.
Hartsuch, Earl R., doing business as Hartsuch, Chicago, Ill. Salad dressing. 315,198; Aug. 4. Class 46.
Hercules Motors Corporation, Canton, Ohio. Internal combustion engines, power units. 314,694; Aug. 4. Class 23.
Hollidge, C. Crawford, East Milton, Mass. Clothing. 313,521; Aug. 4. Class 39.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Houghton, E. F., & Co., Philadelphia, Pa. Compounds used in softening textile fabrics. 315,456; Aug. 4. Class 6
Hutter & Maxwell, East Palestine, Ohio. Newspaper cartoons. 315,911; Aug. 4. Class 38.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Salt substitute. 315,098; Aug. 4. Class 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Calcium compound. 315,099; Aug. 4. Class 6.
Jergens, Andrew, Company, The, Cincinnati, Ohio. Perfume. 315,639; Aug. 4. Class 6.
Johnston, Katie M., doing business as Angelite Soap Manufacturing Co., Los Angeles, Calif. Soap. 313,549; Aug. 4. Class 4.
Kauffman, Le Roy, San Francisco, Calif. Aluminum alloy and aluminum solder 316 205; Aug. 4. Class 14.
Kedrovich, Vladimir K., doing business as Old Dutch Mustard Company, New York, N. Y. Mustard. 300,527; Aug. 4. Class 46.
Keuffel and Esser Company, Hoboken, N. J. Surveyors' leveling rods. 315,149; Aug. 4. Class 26.
Keuffel and Esser Company, Hoboken, N. J. Brownprint papers and cloths. 316,200; Aug. 4. Class 26.
Kindel Furniture Company, Grand Rapids, Mich. Bedroom furniture. 315,268; Aug. 4. Class 32.
Kinetic Chemicals, Inc., Wilmington, Del. Fluorinated hydrocarbons and fire extinguishing preparations. 314 913; Aug. 4. Class 6.
Knight, Raymond, New York, N. Y. Candy. 315,721; Aug. 4. Class 46.
Knight, Raymond, New York, N. Y. Candy. 315,842; Aug. 4. Class 46.
Kny-Scheerer Corporation, New York, N. Y. Surgical, chirurgical, and medical instruments. 315,461; Aug. 4. Class 44.
Koenig, Harry D., doing business as Harry D. Koenig & Co., New York, N. Y. Face powder, lip stick, cream, etc. 314,996; Aug. 4. Class 6.
Kohn, Samuel S., doing business as Thrift Rubber Company, Newark, N. J. Prophylactic rubber and membraneous articles. 314,205; Aug. 4. Class 44.
Kom-Fut Arch Support Co., Inc., New York, N. Y. Arch supports. 312,105; Aug. 4. Class 44.
Koppers Company, The, Pittsburgh, Pa. Coke. 316,039; Aug. 4. Class 1.
Lancaster Co. Ltd., Los Angeles, Calif. Unguent. 315,054; Aug. 4. Class 6.
Lancaster Co. Ltd., Los Angeles, Calif. Unguent for the treatment of burns. 315,055; Aug. 4. Class 6.
Latz, Harry, Service, Inc., New York, N. Y. Advertising devices. 302,781–2; Aug. 4. Class 38.
Lazaros, Joseph, Detroit, Mich. Medicine. 315,543; Aug. 4. Class 6.
Le Brunn, Anthony R., San Francisco, Calif. Finger rings. 313,164; Aug. 4. Class 28.
Leggett, Francis H., & Company, New York, N. Y. Mint confections. 315,600; Aug. 4. Class 46.
Lilly, Eli, and Company, Indianapolis, Ind. Jelly miscible with water containing tannic acid and merthiolate. 314,812; Aug. 4. Class 6.
Lilly, Eli, and Company, Indianapolis, Ind. P-carbaminophenyl arsonic acid. 316,013; Aug. 4. Class 6.
Loeb and Welch, Inc., Memphis, Tenn. Mantels. 315,407; Aug. 4. Class 12.
Los Angeles Brewing Co., Los Angeles, Calif. Grain alcohol. 311,742; Aug. 4. Class 49.
Lucas Manufacturing Co., The. (See Associated Parts, Inc.)
Lufkin Rule Co., Saginaw, Mich. Measuring tapes. 316 094; Aug. 4. Class 26.
M D Laboratories, The. (See Weinstein, Joseph A.)
Madison-Kipp Corporation, Madison, Wis. Tools, parts, replacements, and accessories. 298,000; Aug. 4. Class 23.
Malley, Edw., Co., The, New Haven, Conn. Coats, blouses, sweaters, etc. 315,105; Aug. 4. Class 39.
Mapo Company, The. (See Brown, Walter M.)
Mason Emma B., Santa Monica, Calif. Solid perfume. 315,694–5; Aug. 4. Class 6.
McKesson & Robbins, Incorporated, Bridgeport, Conn. Electric fans. 313,906; Aug. 4. Class 21.
Meyrowitz, E. B., Inc., New York, N. Y. Opera glasses, reading and magnifying glasses. 299,145; Aug. 4. Class 26.
Meyrowitz, E. B., Inc., New York, N. Y. Goggles, eyeglasses, and spectacles. 315,739; Aug. 4. Class 26.
Meyrowitz, E. B., Inc., New York, N. Y. Goggles, spectacles, and eye protectors. 316,160; Aug. 4. Class 26.
Miller, Robert P., doing business as Parlor Pride Mfg. Co. Inc., North Andover, Mass. Stove polish. 314,652; Aug. 4. Class 4.
Miller Wholesale Drug Company, Cleveland, Ohio. Liquid laxative preparations. 315,060; Aug. 4. Class 6.
Mission Dry Corporation, Ltd. (See California Crushed Fruit Corporation.)
Morrell, John, & Co., Ottumwa, Iowa. Meats and prepared food products. 315,208; Aug. 4. Class 46.
Morrell, John, & Company, Ottumwa, Iowa. Lard (Manteca pura De Cerdo). 315,602; Aug. 4. Class 46.
Moto-Vita Corporation, Wilmington, Del., and New York, N. Y. Apparatus for analyzing gaseous mixtures. 309,917; Aug. 4. Class 26.
Mountain States Mixed Feed Company, Denver, Colo. Laying mash, baby chick grains, etc. 313,930; Aug. 4. Class 46.
Munsingwear Corporation, The, Minneapolis, Minn. Swim suits. 313,932; Aug. 4. Class 39.
Musco, Nicolo, New York, N. Y. Cheese. 314,122; Aug. 4. Class 46.
National Social Science Honor Society, Pi Gamma Mu, Incorporated, The, Winfield, Kans. Jewelry not including watches. 314,815; Aug. 4. Class 28.
New England Confectionery Company, Cambridge, Mass. Candy. 315,868; Aug. 4. Class 46.
New Jersey Dairymen, Inc., Trenton, N. J. Raw milk. 308,846; Aug. 4. Class 46.
New Standard Baking Company, Philadelphia, Pa. Cakes. 314,858; Aug. 4. Class 46.
Nightingale Fireplace Cabinet Manufacturing Company, The, Philadelphia, Pa. Fireplace cabinet. 316,045; Aug. 4. Class 32.
Nolde & Horst Company, The, Reading Pa. Hosiery. 314,456; Aug. 4. Class 39.
Nomend Hosiery Mills M. B. Laubach Co. Inc., Philadelphia, Pa. Hosiery. 310,918; Aug. 4. Class 39.
Northern Feather Works, Inc., Newark, N. J. Pillows, cushions, and mattresses. 315,696; Aug. 4. Class 32.
Oakes, Thomas, & Co., Bloomfield, N. J. Woolen and worsted cloths. 312,859; Aug. 4. Class 42.
Okasa G. m. b. H., Berlin, Germany. Medicine. 313,148–9; Aug. 4. Class 6.
Old Dutch Mustard Company. (See Kedrovich, Vladimir K.)
Oligodyn A.-G., Zug, Switzerland. Metallic substance. 285,371; Aug. 4. Class 31.
Oligodyn A.-G., Zug, Switzerland. Metallic substance. 285,374; Aug. 4. Class 31.
Oppleman, I., doing business as L. Oppleman, New York, N. Y. Pistols. 315,920–1; Aug. 4. Class 9.
Paper Specialty Company, Wausau, Wis. Lining paper. 299,591; Aug. 4. Class 37.
Parlor Pride Mfg. Co. Inc. (See Miller, Robert P.)
Paine Drug Company, The, Rochester, N. Y. Preparation used in the treatment of heart affections. 315,159; Aug. 4. Class 6.
Permozone Inc., New York, N. Y. Preparation used as a disinfectant, insecticide, and deodorant. 314,072; Aug. 4. Class 6.
Phosphorone Corporation, Dover, Del., and San Antonio, Tex. Antiseptics and germicides. 315,416; Aug. 4. Class 6.
Pope, Charles L., doing business as The Tannol Company, Yonkers, N. Y. Tooth powder. 311,925; Aug. 4. Class 6.
Porter, Robert D., San Francisco, Calif. Accounting forms. 315,110; Aug. 4. Class 37.
Radial Oil Corporation, Oklahoma City, Okla. Gasoline, lubricating oil and grease. 314,126; Aug. 4. Class 15.
Ralston Purina Company, St. Louis, Mo. Disinfectant. 315,698–9; Aug. 4. Class 6.
Remington Rand Inc., Buffalo, N. Y. Cabinets, lockers, cupboards, etc. 308,037; Aug. 4. Class 32.
Revelation Water Purifier Company, Ltd., Glendale, Calif. Water filters. 315,327; Aug. 4. Class 31.
Rex, Clarence R., doing business as Great Lakes Industrial Laboratories, Toledo, Ohio. Plastic coating. 297,821; Aug. 4. Class 12.
Richardson, Lee, Richardson Springs, Chico, Calif. Bottled mineral waters. 315,585; Aug. 4. Class 45.
Ritsert, Eduard, doing business as Dr. Eduard Ritsert, Fabrik Pharmazeutischer Praparate, and F. A. Dr. E. Ritsert, Frankfurt A. M., Frankfort-on-the-Main, Germany. Sulphophenylic aminobenzoldiethylester (German designation: phenolsulphosaurer aminobenzoesaurediethylester). 313 799; Aug. 4. Class 6.
Robertson, Benjamin G., doing business as Suzanne Bags, Louisville, Ky. Hand purses or bags. 314,300; Aug. 4. Class 3.
Rockne Motors Corporation, Indianapolis, Ind. Automotive vehicles and their structural parts. 315,329–31; Aug. 4. Class 19.
Rogers Printing Company, Baltimore, Md. Cardboard easels. 314,210; Aug. 4. Class 37.
Rorer, William H., Inc., Philadelphia, Pa. Medicine. 315,927; Aug. 4. Class 6.
Rorer, William H., Inc., Philadelphia, Pa. Medicine. 315,929; Aug. 4. Class 6.
Royal Manufacturing Company, Toledo, Ohio. Golf clubs and balls. 312,669; Aug. 4. Class 22.
Ryan, W. H., & Co. (See Gilbert, E. Warren.)
St. Clair Rubber Company, Marysville and Detroit, Mich. Roofing deck. 315,019; Aug. 4. Class 50.
St. Martin Preserving Company Limited, London, England. Jams, marmalades, preserves, etc. 312,574; Aug. 4. Class 46.
St. Mungo Manufacturing Company of America, Newark, N. J. Golf balls. 310,190; Aug. 4. Class 22.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Salubra, S. A., Basel, Switzerland. Textile wall coverings. 315,760; Aug. 4. Class 42.

Salubra S. A., Basel, Switzerland. Textile wall coverings. 315,762; Aug. 4. Class 42.

San-O-Tabs Co. (See Somylo, Elmer M.)

Savage, W. J., Company, Incorporated, Knoxville, Tenn. Flour and feed mill equipment, stone working equipment, etc. 314,213; Aug. 4. Class 23.

Sayell Laboratories, New York, N. Y. Medicinal preparation. 313,307; Aug. 4. Class 6.

Schering-Kahlbaum, A. G., Berlin, Germany. Dental compounds. 316,220; Aug. 4. Class 44.

Schneierson, I., & Sons, Inc., New York, N. Y. Chemises, bloomers, pajamas, etc. 316,103; Aug. 4. Class 39.

Seneca Food Products Corporation, Utica, N. Y. Non-alcohol cereal malt beverage. 310,838; Aug. 4. Class 48.

Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Faucet seats, fuller balls, piston packing, etc. 314,254; Aug. 4. Class 35.

Shaler Company, The, Waupun, Wis. Tire and tube patching materials. 307,742; Aug. 4. Class 35.

Shawnee Stone Company, Bloomington, Ind. Indiana limestone. 313,612; Aug. 4. Class 1.

Shimizu, Toshio, Los Angeles, Calif. Medicine preparation. 311,120; Aug. 4. Class 6.

Shoemaker, Flora H., doing business as The Frostilla Company, Elmira, N. Y. Beard softening preparations. 307,431; Aug. 4. Class 4.

Siemens-Schukertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Sowing machines, threshing machines, and mowing machines, and parts thereof, sewing machines, etc. 255,935; Aug. 4. Class 23.

Siemens-Schukertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Sowing machines, threshing machines, and mowing machines, and parts thereof, sewing machines, etc. 255,555; Aug. 4. Class 23.

Signal Publishing Corporation, Huntington Park, Calif. Newspaper. 315,571; Aug. 4. Class 38.

Siren Mills Corporation, Chicago, Ill. Chocolate bars. 315,862; Aug. 4. Class 42.

Slagle, Willard J., Wellesley, Mass. Deodorants, disinfectants, nasal and mouth sprays. 315,933; Aug. 4. Class 6.

Slagle, Willard J., Wellesley, Mass. Skin salves. 315,934; Aug. 4. Class 6.

Slagle, Willard J., Wellesley, Mass. Lotions. 315,935; Aug. 4. Class 6.

Solvay Process Company, The, Syracuse, N. Y. Chemical preparation. 314,384; Aug. 4. Class 6.

Solvay Process Company, The, Syracuse, N. Y. Preparations used as cleansing agents. 314,965–6; Aug. 4. Class 4.

Solvay Process Company, The, Syracuse, N. Y. Cleansing compounds. 314,968; Aug. 4. Class 4.

Solvay Process Company, The, Syracuse, N. Y. Cleansing and scouring compound. 314,969; Aug. 4. Class 4.

Somylo, Elmer M., doing business as San-O-Tabs Co., Los Angeles, Calif. Antiseptic, germicidal, and therapeutic composition. 315,371; Aug. 4. Class 6.

Speede Products Co. (See Uhlig, Herman M.)

Spencer, Albert B., & F. J. Spernak, Monongahela, Pa. Maltiesa beverages, sirups and extracts. 315,726; Aug. 4. Class 45.

Spraley, Gregory A., Dayton, Ohio. Frozen confection. 314,628; Aug. 4. Class 46.

Stahl, Jacob, Jr., & Co. (See Greenwald, Abraham A.)

Standard Brands Incorporated, New York, N. Y. Coffee and tea. 315,117; Aug. 4. Class 46.

Standard Medicine Company, The, Lakeland, Fla. Medicine. 315,619; Aug. 4. Class 6.

Stearns, Frederick, & Company, Detroit, Mich. Preparation used for treating various forms of infection. 315,334; Aug. 4. Class 6.

Stephens, McKinley, doing business as The McK. Stephens Company, St. Louis, Mo. Dental powder and deodorant application. 314,588; Aug. 4. Class 6.

Sterling Products (Incorporated), Wheeling, W. Va. Analgesic. 314,776–7; Aug. 4. Class 6.

Stickstoffwerke Gesellschaft mit beschränkter Haftung, Berlin, Germany. Compounds for use in the calcium therapy. 312,577; Aug. 4. Class 6.

Stolberg, Gregory B., doing business as Stolberg Laboratories, New York, N. Y. Medicinal compounds. 314,133; Aug. 4. Class 6.

Stowall and Co., San Francisco, Calif. Prophylactic membranous articles. 309,322; Aug. 4. Class 44.

Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Talking machines, automatic record shifting devices, etc. 314,634; Aug. 4. Class 36.

Suntex Corporation, The, Brooklyn, N. Y. Painted and waterproof fabrics. 316,058; Aug. 4. Class 50.

Sussman, Wormser & Company, San Francisco, Calif. Canned fruits. 315,943; Aug. 4. Class 46.

Suzanne Bags. (See Robertson, Benjamin G.)

Takara Laboratories, Portland, Oreg. Hygienic powder. 313,812; Aug. 4. Class 6.

Tannol Company, The. (See Pope, Charles L.)

Tenex Laboratories. (See Bendiage, Theodore J.)

Thrift Rubber Company. (See Kohn, Samuel S.)

Travel Guild, Inc., The, Chicago, Ill. Publications. 315,882; Aug. 4. Class 38.

Troiani, Serafino, Newton, Mass. Medical preparation. 316,171; Aug. 4. Class 6.

Uhlig, Herman M., doing business as Speede Products Co., Cedarburg, Wis. Washing powder. 312,131; Aug. 4. Class 1.

United Biscuit Company of America, Chicago, Ill. Cookies. 314,779; Aug. 4. Class 46.

United Drug Company, Boston, Mass. Medicinal preparation. 315,883; Aug. 4. Class 6.

United States Rubber Company, New York, N. Y. Belting, hose, and packing. 314,630; Aug. 4. Class 35.

Universal Gear Corporation, Chicago, Ill. Clutches, speed reducers, etc. 315,575; Aug. 4. Class 23.

Upsher Smith, Frederick A., doing business as Upsher Smith Company, Minneapolis, Minn. Medicinal preparations. 311,114; Aug. 4. Class 6.

Washington Knitting Co., Inc., New York, N. Y. Bootees, sweaters, shawls, etc. 314,935; Aug. 4. Class 39.

Washington Veneer Company, Olympia, Wash. Wrapped trim lumber and plywood. 316,062; Aug. 4. Class 12.

Weinstein, Joseph A., doing business as The M D Laboratories, Cleveland, Ohio. Disinfectants, deodorants, and germicides. 314,088; Aug. 4. Class 6.

Western Clock Company, Peru, Ill. Electrical motors. 314,736; Aug. 4. Class 21.

Western Clock Company, Peru, Ill. Electrical motors. 314,740–1; Aug. 4. Class 21.

Wilcox-Rich Corporation, Detroit, Battle Creek, Marshall, and Saginaw, Mich. Valves. 315,576; Aug. 4. Class 23.

Williams, J. H., & Co., Buffalo, N. Y. Wrenches, wrench sets, wrench sockets, and tool handles. 316,352; Aug. 4. Class 23.

Wilson Brothers, Chicago, Ill. Shirts, pajamas, underwear, etc. 315,511–12; Aug. 4. Class 39.

Winthrop Chemical Company, Inc., New York, N. Y. Preparation for the treatment of malaria. 315,656; Aug. 4. Class 6.

Wolferman, Fred, Incorporated, Kansas City, Mo. Butter, eggs, jam, jellies, etc. 312,120; Aug. 4. Class 46.

Ybry, Inc., New York, N. Y. Lipsticks. 314,781; Aug. 4. Class 6.

Zapon Company, The, Wilmington, Del. Leather cloth. 316,234; Aug. 4. Class 50.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 2

Cones or tubes, Paper. Sonoco Products Company. 285,754; Aug. 4; Serial No. 312,536; published June 2, 1931.

Cooperage. J. H. Hamlen and Son. 36,687; renewed July 2, 1931.

CLASS 3

Felt goods. Western Felt Works. 37,409; renewed Dec. 3, 1931.

CLASS 4

Deodorizing cakes. Hillyard Chemical Company. 285,684; Aug. 4; Serial No. 310,998; published May 5, 1931.

Liquid preparation for the removal of scratches and dirt from leather and for polishing same. F. Meyers. 285,796; Aug. 4; Serial No. 300,080; published June 24, 1930.

Soaps and perfumery. Colgate & Co. 37,499; renewed Dec. 24, 1931.

CLASS 6

Analgesic and hypnotic. G. S. Stoddard & Co. 285,786; Aug. 4; Serial No. 312,777; published May 12, 1931.

Antiseptic germicide. Lawrence Products Company. 285,646; Aug. 4; Serial No. 311,615; published May 12, 1931.

Astringents, bleach creams, dry rouges, hand lotions, etc. A. F. Babcock Co. 285,685; Aug. 4; Serial No. 310,850; published May 5, 1931.

Bitters, Stomach. Fratelli Branca. 285,705–7; Aug. 4; Serial Nos. 272,395–7; published May 19, 1931.

Capsules of copper and iron. I. S. Barksdale. 285,671; Aug. 4; Serial No. 312,083; published May 12, 1931.

Chemical. Hagan Corporation. 285,744; Aug. 4; Serial No. 307,716; published May 12, 1931.

Cod liver oil preparation. C. E. Jamieson. 285,686; Aug. 4; Serial No. 310,881; published May 5, 1931.

Compacts, face powder, rouge, and lip-stick, Filled. D. Gray. 285,633; Aug. 4; Serial No. 309,471; published May 12, 1931.

Compacts, face powder, rouge, and lip-stick, Filled. D. Gray. 285,634; Aug. 4; Serial No. 309,468; published May 12, 1931.

Compound and liquid for the hair restorer, etc. H. Schellenberg. 285,736; Aug. 4; Serial No. 302,647; published May 19, 1931.

Compound for deodorizing the breath. M. E. Stewart. 285,645; Aug. 4; Serial No. 311,630; published May 19, 1931.

Compound of plantago psyllium. Munsch Laboratories, Inc. 285,783; Aug. 4; Serial No. 312,619; published May 19, 1931.

Cream, Dental, Colgate-Palmolive-Peet Company. 285,650; Aug. 4; Serial No. 310,367; published May 12, 1931.

Cream, Foot. Casteen Co. 285,780; Aug. 4; Serial No. 312,793; published May 19, 1931.

Cream, rouge, muscle oil, etc., Tissue and cleansing. J. S. Thomas. 285,790; Aug. 4; Serial No. 312,501; published May 12, 1931.

Creams, Dental. E. G. Rurup. 285,639; Aug. 4; Serial No. 312,065; published May 19, 1931.

Creams for the finger-nails. Mrs. F. A. Scott. 285,743; Aug. 4; Serial No. 308,223; published May 19, 1931.

Creams, hair oils and growers, etc., Face. H. V. E. Hill. 285,693; Aug. 4; Serial No. 300,197; published May 12, 1931.

Creosote oil. Barrett Company. 285,699; Aug. 4; Serial No. 295,417; published May 19, 1931.

Disinfectant, Cleaning and bleaching. E. R. Harford. 285,776; Aug. 4; Serial No. 312,951; published May 19, 1931.

Disinfectant, insecticides, perfumes, rouge, etc., Rose. G. Glatzer. 285,753; Aug. 4; Serial No. 303,281; published May 19, 1931.

Diuretic in tablet form. C. F. Keller. 285,638; Aug. 4; Serial No. 312,153; published May 12, 1931.

Dyes and dyestuffs. General Dyestuff Corporation. 285,787; Aug. 4; Serial No. 312,559; published May 12, 1931.

Finish and color restorer for leathers, kids, etc. P. E. Norris. 285,678; Aug. 4; Serial No. 311,620; published May 12, 1931.

Fluids composed of oxidized bituminous materials for impregnating fibers of curtains to make fibers firmer and stronger. O. G. McDonald. 285,690; Aug. 4; Serial No. 309,544; published May 12, 1931.

Flux, Welding. Aluminum Company of America. 285,778–9; Aug. 4; Serial Nos. 312,831–2; published May 19, 1931.

Insecticides. Tar Products Corporation. 285,748; Aug. 4; Serial No. 306,751; published May 5, 1931.

Insecticides, Deodorants, and disinfectants. Stanco Incorporated. 285,676; Aug. 4; Serial No. 311,796; published May 5, 1931.

Laxative medicinal preparations. Plough, Inc. 285,698; Aug. 4; Serial No. 296,079; published Apr. 29, 1930.

Lip sticks, rouge compacts, cold creams, etc. Scott & Gilbert Co. 285,702; Aug. 4; Serial No. 290,478; published May 5, 1931.

Liquid demulcent preparation. Norwich Pharmacal Company. 285,672; Aug. 4; Serial No. 312,059; published May 19, 1931.

Liquid for use in conditioning valves, etc. M. B. Covert. 285,677; Aug. 4; Serial No. 311,765; published May 5, 1931.

Liquid gas. Universal Bottled Gas Corporation. 285,739; Aug. 4; Serial No. 308,870; published May 19, 1931.

Lotions, salve or ointment for mouth gum irritations, Soothing. H. A. Vinje. 285,793; Aug. 4; Serial No. 312,324; published May 19, 1931.

Medical compound. T. A. Watson. 285,632; Aug. 4; Serial No. 309,837; published May 19, 1931.

Medical preparation, Liquid. O. H. Edwards. 285,635; Aug. 4; Serial No. 312,294; published May 19, 1931.

Medicinal preparation. B. F. Chambers. 285,649; Aug. 4; Serial No. 310,637; published May 12, 1931.

Medicinal preparation. Pacific Remedy Corporation. 285,785; Aug. 4; Serial No. 312,570; published May 19, 1931.

Medicinal preparation, United Drug Company. 285,798; Aug. 4; Serial No. 298,730; published June 17, 1930.

Medicinal sprays and inhalants. John Higgins & Company. 285,781; Aug. 4; Serial No. 312,782; published May 19, 1931.

Medicinal tablets. G. S. Stoddard & Co. 285,782; Aug. 4; Serial No. 312,779; published May 19, 1931.

Medicinal treatment for the hair, scalp and tissues of the face and body. B. S. Artzt. 285,648; Aug. 4; Serial No. 310,704; published May 12, 1931.

Medicine. J. A. Current. 285,769; Aug. 4; Serial No. 312,551; published May 19, 1931.

Medicine. E. Gianikos. 285,745; Aug. 4; Serial No. 307,647; published May 19, 1931.

Medicine. S. Steigrod. 285,631; Aug. 4; Serial No. 310,076; published May 19, 1931.

Medicines. Germania Tea Company. 285,647; Aug. 4; Serial No. 311,095; published May 12, 1931.

Oils, Nasal. K. Wood. 285,675; Aug. 4; Serial No. 311,897; published May 19, 1931.

Ointment and salve, Pile. Hale and Shook. 285,641; Aug. 4; Serial No. 312,050; published May 12, 1931.

Perfumes, face lotions, face powder, talcum powder, etc. Société Anonyme Jean Patou. 285,794; Aug. 4; Serial No. 312,316; published May 19, 1931.

Perfumes, face, talcum and bath powders, toilet water, etc. E. J. Fay. 285,792; Aug. 4; Serial No. 312,369; published May 19, 1931.

Perfumery and toilet preparations. Societe Cadolle Freres. 285,734; Aug. 4; Serial No. 307,744; published May 12, 1931.

Pessaries. Durex Products Inc. 285,642; Aug. 4; Serial No. 311,997; published May 19, 1931.

Pharmaceutical mouth wash. Eton Products, Inc. 285,773; Aug. 4; Serial No. 312,126; published May 12, 1931.

Pharmaceutical preparation. Roset Pharm. Co. 285,790; Aug. 4; Serial No. 312,454; published May 12, 1931.

Powder, Toilet. Armand Company. 285,636; Aug. 4; Serial No. 312,280; published May 19, 1931.

Powders for simple headache or neuralgia. Favreau & Collette. 285,799; Aug. 4.

Powders, rouges, cold cream, etc., Face. Elite Perfume Shop. 285,673; Aug. 4; Serial No. 311,957; published May 12, 1931.

Preparation for kidney diseases. Renotrat Corporation of America. 285,784; Aug. 4; Serial No. 312,571; published May 19, 1931.

Preparation for the relief of chapped lips, etc. S. Pfeiffer Mfg. Co. 285,805; Aug. 4.

Preparation for the treatment of asthma, bronchitis, etc. N. D. Yordonoff. 285,644; Aug. 4; Serial No. 311,858; published May 12, 1931.

Preparation for treatment of cold in the head, throat, and chest. Richards Laboratories. 285,674; Aug. 4; Serial No. 311,931; published May 19, 1931.

Preparations and compounds for use as accelerators, antioxidants, etc. Binney & Smith Company. 285,788; Aug. 4; Serial No. 312,508; published May 12, 1931.

Preparations, Bunion and corn. H. Ely. 285,815; Aug. 4.

Rouge, lipsticks, face powder, etc. Hahne & Company. 285,810; Aug. 4.

Salt, Houston Salt Co. 285,643; Aug. 4; Serial No. 311,901; published May 19, 1931.

Salt, Curing. Griffith Laboratories, Inc. 285,637; Aug. 4; Serial No. 312,219; published May 19, 1931.

Salve for the treatment of colds. Milton-Byron Company. 285,791; Aug. 4; Serial No. 312,444; published May 12, 1931.

Shampoo. La Vay Products Company. 285,701; Aug. 4; Serial No. 290,786; published Apr. 29, 1930.

Starch, Gloss. American Maize-Products Company. 285,640; Aug. 4; Serial No. 312,035; published May 19, 1931.

Tonic, face lotion, face cream, foot lotion, etc., Hair. M. D. Warde. 285,746; Aug. 4; Serial No. 307,025; published May 5, 1931.

Tonic, General medicinal. F. Lotito. 285,777; Aug. 4; Serial No. 312,923; published May 19, 1931.

Tonic, Hair-curling. Paris Hair Tonic Company, Sociedad Anonima. 285,751; Aug. 4; Serial No. 304,342; published May 5, 1931.

CLASS 12

Asbestos composition board. Ambler Asbestos Shingle Sheathing Company. 285,660; Aug. 4; Serial No. 312,469; published May 12, 1931.

Asphalt. Visco-Ment Corporation. 285,661; Aug. 4; Serial No. 312,395; published May 12, 1931.

Blocks, plinths, pilaster bases and shafts, etc., Base course. Dextone Company. 285,654; Aug. 4; Serial No. 312,554; published May 19, 1931.

Brick material, Dry fire. North American Refractories Company. 285,762; Aug. 4; Serial No. 309,650; published May 5, 1931.

Cement. Eddystone Cement Corp. 285,761; Aug. 4; Serial No. 310,977; published May 12, 1931.

Cement, Portland. Atlas Portland Cement Co. 36,987; renewed Aug. 27, 1931.

Cement, Portland. Keystone Portland Cement Company. 285,760; Aug. 4; Serial No. 311,063; published May 5, 1931.

Cement, Refractory. J. H. France Refractories Co. 285,655; Aug. 4; Serial No. 312,515; published May 19, 1931.

Ceramic structural units. National Fireproofing Corporation. 285,668; Aug. 4; Serial No. 311,848; published May 5, 1931.

Composition material. Marvex Inc. 285,747; Aug. 4; Serial No. 306,822; published May 19, 1931.

Compounds, Moisture resistant. R. E. Conrey. 285,657; Aug. 4; Serial No. 312,512; published May 19, 1931.

Concrete building blocks. Martin Bros., Inc. 285,670; Aug. 4; Serial No. 311,639; published May 12, 1931.

Concrete, Refractory. J. H. France Refractories Co. 285,656; Aug. 4; Serial No. 312,516; published May 19, 1931.

Concrete units. Maui Company. 285,666; Aug. 4; Serial No. 312,057; published May 5, 1931.

Coverings for attachment to the outer walls of buildings, Outside. Logan-Long Company. 285,750; Aug. 4; Serial No. 305,137; published Nov. 4, 1930.

Doors, Fabricated. Curtis Companies. 285,653; Aug. 4; Serial No. 312,700; published May 19, 1931.

Flashing and skylights. W. A. Fingles, Inc. 285,669; Aug. 4; Serial No. 311,832; published May 5, 1931.

Flooring. Southern Oak Flooring Industries. 285,665; Aug. 4; Serial No. 312,205; published May 12, 1931.

Flooring and plywood, Pre-finished. United Plywood Corporation. 285,756; Aug. 4; Serial No. 311,544; published May 12, 1931.
Flooring, Oak. E. L. Bruce Company. 285,669; Aug. 4; Serial No. 312,474; published May 12, 1931.
Insulating materials and pipe coverings, Thermal. Plant Rubber & Asbestos Works. 285,663; Aug. 4; Serial No. 312,239; published May 12, 1931.
Insulation material, Heat and cold. General Insulating & Mfg. Co. 285,764; Aug. 4; Serial No. 309,428; published May 19, 1931.
Insulation material, Heat and cold. General Insulating & Mfg. Co. 285,766; Aug. 4; Serial No. 309,427; published May 19, 1931.
Lime. Palmer Lime & Cement Company. 285,811; Aug. 4.
Processed material. R. C. Powell. 285,664; Aug. 4; Serial No. 312,220; published May 12, 1931.
Refractories, Plastic monolithic. M. W. Kellogg Company. 285,667; Aug. 4; Serial No. 311,963; published May 5, 1931.
Refractory material, Plastic. Cambridge Pliable Brick Company. 285,742; Aug. 4; Serial No. 308,425; published May 5, 1931.
Stone, Building. H. Bergreau. 285,758; Aug. 4; Serial No. 311,318; published May 5, 1931.
Stones and bricks, silica stones and bricks, etc., Refractory. Vereinigte Stahlwerke Aktiengesellschaft. 285,697; Aug. 4; Serial No. 296,157; published May 19, 1931.
Strips, Dividing. Lockstrip Manufacturing Corporation. 285,662; Aug. 4; Serial No. 312,346; published May 22, 1931.
Tiles, Enamel. Sanimetal Tile Corporation. 285,755; Aug. 4; Serial No. 311,551; published May 19, 1931.
Wall board and tile. S. C. Fournet. 285,652; Aug. 4; Serial No. 312,755; published May 19, 1931.

CLASS 14

Steel in bars, blocks, etc. A. Milne & Co. 82,454; renewed June 27, 1931.

CLASS 15

Gasoline. Apex Oil Co. 285,726; Aug. 4; Serial No. 312,170; published May 19, 1931.
Oils and greases. Twin Cities Distributing Company. 285,725; Aug. 4; Serial No. 312,208; published May 19, 1931.
Oils and greases, Lubricating. A. F. Schroeder. 285,723; Aug. 4; Serial No. 312,459; published May 12, 1931.
Oils, Illuminating oils and lubricating greases, Lubricating. F. D. Prescott. 285,808; Aug. 4.
Oils, Lubricating. Texas Company. 84,282; renewed Nov. 21, 1931.
Oils, Lubricating. Texas Company. 84,285; renewed Nov. 21, 1931.
Oils, Lubricating. Union Oil Company of California. 285,797; Aug. 4; Serial No. 209,531; published May 19, 1931.
Preparation for use as a rust solvent and lubricant, and lubricating oils and greases. Halstead Oil Company. 285,703; Aug. 4; Serial No. 288,378; published May 19, 1931.

CLASS 16

Enamel paints. Sapolin Co. Inc. 285,737; Aug. 4; Serial No. 311,625; published Apr. 28, 1931.
Paint, Paraffine Companies. 285,695; Aug. 4; Serial No. 297,764; published May 12, 1931.
Paint pigments. Ozark Smelting & Mining Company. 285,658; Aug. 4; Serial No. 312,490; published May 12, 1931.
Paints. Norfolk Paint & Varnish Company. 285,735; Aug. 4; Serial No. 302,871, published May 12, 1931.
Paints and painter's size. R. Murjahn. 285,763; Aug. 4; Serial No. 309,019; published May 12, 1931.
Paints, primers, wood fillers, etc. Elco Paint Products Inc. 285,749; Aug. 4; Serial No. 306,673; published May 19, 1931.
Polish, furniture cream, floor dressing, and motor car polish. Floor Ronuz, Limited. 285,759; Aug. 4; Serial No. 311,203; published May 19, 1931.

CLASS 21

Aerating equipment. Soapless Foam, Limited. 285,711; Aug. 4; Serial No. 310,493; published May 19, 1931.
Batteries, Dry. Blake Manufacturing Company. 285,716; Aug. 4; Serial No. 312,638; published May 19, 1931.
Batteries, Electric. General Dry Batteries, Inc. 285,717; Aug. 4; Serial No. 312,558; published May 12, 1931.
Batteries, Electric. General Dry Batteries, Inc. 285,731; Aug. 4; Serial No. 311,570; published May 12, 1931.
Batteries, Storage. White Star Refining Company. 285,752; Aug. 4; Serial No. 303,931; published May 12, 1931.
Cables or conductors, Moisture proof. Sullivan Machinery Company. 285,710; Aug. 4; Serial No. 312,569; published May 12, 1931.
Electric direction signals. O. Yarnell. 285,692; Aug. 4; Serial No. 300,903; published Aug. 12, 1930.
Electric drills and mining bits and bit teeth. Hardsocg Manufacturing Co. 285,727; Aug. 4; Serial No. 312,008; published May 12, 1931.
Electric lamp bulbs, Incandescent. Hachmeister-Lind Company. 285,730; Aug. 4; Serial No. 311,726; published May 12, 1931.
Electric lamps. E. E. Highfill. 285,714; Aug. 4; Serial No. 309,588; published May 19, 1931.
Electric plants, Portable. Sullivan Machinery Company. 285,720; Aug. 4; Serial No. 312,506; published May 12, 1931.
Electric switches. Spencer Thermostat Company. 285,709; Aug. 4; Serial No. 310,886; published May 19, 1931.
Electric tools. Stanley Works. 285,728; Aug. 4; Serial No. 311 936; published May 19, 1931.
Electric vacuum cleaners and dust bags therefor. Singer Manufacturing Company. 285,718; Aug. 4; Serial No. 312,535; published May 19, 1931.
Electrical conduit fittings. Crouse-Hinds Company. 285,774; Aug. 4; Serial No. 312,699; published May 12, 1931.
Electrical connectors. Burndy Engineering Company. 285,719; Aug. 4; Serial No. 312,846; published May 19, 1931.
Electrically heated boilers, electrical stoves and radiators, etc. H. Junkers. 285,704; Aug. 4; Serial No. 279,926; published May 19, 1931.
Electrodes. Republic Carbon Company. 285,710; Aug. 4; Serial No. 310 883; published May 12, 1931.
Generators, Ozone. France Manufacturing Company. 285,741; Aug. 4; Serial No. 308,499; published May 12, 1931.
Radio electron tubes. National Union Radio Corporation. 285,708; Aug. 4; Serial No. 310,943; published May 12, 1931.
Radio loud speakers, choke coils, and electromagnets. National Malleable and Steel Castings Company. 285,696; Aug. 4; Serial No. 296,491; published May 12, 1931.
Radio receiving sets. M. A. Long. 285,713; Aug. 4; Serial No. 309,738; published May 19, 1931.
Radio receiving sets, and supplies, accessories, etc., for talking machines. Stromberg-Carlson Telephone Manufacturing Company. 285,738; Aug. 4; Serial No. 308,911; published May 12, 1931.
Ranges, ovens, hot plates, etc., Electric. Malleable Iron Range Company. 285,700; Aug. 4; Serial No. 295,075; published Apr. 15, 1930.
Spark plugs. Firestone Battery Company. 285,733; Aug. 4; Serial No. 311,133; published May 12, 1931.

CLASS 23

Balls used in bearings. Atlas Ball Company. 82,196; renewed June 13, 1931.
Balls used in bearings. Atlas Ball Company. 82,952; renewed Aug. 8, 1931.
Emery wheel dressers and cutters. G. McConnell. 285,807; Aug. 4.
Forks, Farm and garden. Withington and Cooley Mfg. Co. 36,308; renewed Apr. 23, 1931.
Hoes and shovels of metal. Chillington Tool Company. 84,379; renewed Dec. 12, 1931.

CLASS 26

Glasses and lenses, Magnifying. American Optical Company. 83,125; renewed Aug. 22, 1931.

CLASS 28

Buckles, Belt. Abboloid Novelty Company. 285,712; Aug. 4; Serial No. 310,364; published May 12, 1931.
Keys and badges. Phi Lambda Upsilon. 285,724; Aug. 4; Serial No. 312,492; published May 12, 1931.
Necklace cables. Unbreakable. Premier Jewelry Company. 285,721-2; Aug. 4; Serial Nos. 312,493-4; published May 19, 1931.
Rings and other articles of jewelry, Finger. Fifth Avenue Platinum Shops, Inc. 285,775; Aug. 4; Serial No. 312,514; published May 19, 1931.
Trophies. Weidlich Bros. M'f'g. Co. 285,729; Aug. 4; Serial No. 311,857; published May 19, 1931.

CLASS 29

Brushes, Hair and toilet. E. J. Fay. 285,772; Aug. 4; Serial No. 312,308; published May 19, 1931.

CLASS 34

Burners, Oil. Home Oil Burner Company. 285,803; Aug. 4.

CLASS 36

Pianos. Steinway & Sons. 285,732; Aug. 4; Serial No. 311,347; published May 12, 1931.
Violins, violas, cellos, etc. Czechoslovakia Musical Instruments Company. 285,740; Aug. 4; Serial No. 308,534; published May 19, 1931.

CLASS 37

Coverings of coated paper, Wall. Sheetpaint Products Corporation. 285,683; Aug. 4; Serial No. 311,004; published May 19, 1931.
Forms and partially printed forms, Correspondence. Edwards & Deutsch Lithographing Company. 285,689; Aug. 4; Serial No. 309,771; published May 19, 1931.
Paper, India. James R. Crompton & Brothers, Limited. 84,169; renewed Nov. 14, 1931.

Paper products. Royal Lace Paper Works, Inc. 285,771; Aug. 4; Serial No. 312,497; published May 19, 1931.
Paper, Wrapping and toilet. Albany Perforated Wrapping Paper Co. 37,467; renewed Dec. 17, 1931.
Paper, Writing and printing. Hurlbut Paper Company. 285,681; Aug. 4; Serial No. 311,733; published May 19, 1931.
Pinfickets, labels, and tags. J. L. May Company. 285,680; Aug. 4; Serial No. 311,584; published May 19, 1931.
Tissues, Cleansing. Veldown Company, Inc. 285,688; Aug. 4; Serial No. 310,000; published May 19, 1931.

CLASS 38

Booklets. American Institute of Banking. 285,767; Aug. 4; Serial No. 312,733; published May 19, 1931.
Card, Printed mailing. Purity Oats Company. 285,679; Aug. 4; Serial No. 311,928; published May 19, 1931.
Cartoons, Advertising Circulating Letters and a Periodical Publication. M. D. Pelletier. 285,687; Aug. 4; Serial No. 310,586; published May 19, 1931.
Magazine. Good Story Magazine Company. 285,737; Aug. 4; Serial No. 301,900; published May 19, 1931.
Magazines. Keith Corporation. 285,694; Aug. 4; Serial No. 298,574; published May 19, 1931.
Newspapers, Section Department, or Column of. Pulitzer Publishing Company. 285,768; Aug. 4; Serial No. 312,625; published May 19, 1931.
Periodical. United States Coast Artillery Association. 285,682; Aug. 4; Serial No. 311,211; published May 19, 1931.
Publications. Ohio State Automobile Association. 285,770; Aug. 4; Serial No. 312,526; published May 19, 1931.

CLASS 39

Apparel, Wearing. Elder Mfg. Co 285,812; Aug. 4.
Apparel, Wearing. Elder Mfg. Co. 285,814; Aug. 4.
Shoes, Children's. S. Freiburger & Bro. 83,974; renewed Oct. 24, 1931.
Step-in and slip, Ladies' combination. S. Dorfman. 285,806; Aug. 4.

CLASS 42

Carpets, Textile. Hardwick & Magee Company. 285,816; Aug. 4.
Fabrics of cotton, wool, etc. Elder Mfg. Co. 285,802; Aug. 4.
Fabrics of cotton, wool, etc. Elder Mfg. Co. 285,813; Aug. 4.
Silk piece goods. Kattermann and Mitchell Company. 285,801; Aug. 4.

CLASS 44

Dental alloy. Research Products Corporation. 285,651; Aug. 4; Serial No. 312,816; published May 19, 1931.
Dental appliances. Buffalo Dental Manufacturing Company. 285,765; Aug. 4; Serial No. 309,458; published May 12, 1931.
Prophylactic rubber articles. R. Arthur. 285,795; Aug. 4; Serial No. 300,099; published July 1, 1930.

CLASS 46

Canned vegetables, soup, etc. Phillips Packing Company. 285,800; Aug. 4.
Cheese. Compagnie Centrale Fromagère Société Anonyme. 285,691; Aug. 4; Serial No. 301,406; published May 5, 1931.
Coffee. William S. Scull Company. 84,686; renewed Dec. 26, 1931.
Flour, Prepared pancake. J. L. Halman. 285,804; Aug. 4.
Flour, Self rising. Akin-Erskine Milling Company. 82,852; renewed Aug. 1, 1931.
Flour, Wheat. Hubbard Milling Company. 83,650; renewed Oct. 3, 1931.
Foods. Cresca Company. 84,043; renewed Oct. 31, 1931.
Mash, growing grains, pigeon feed, etc., Baby chick starter. Mountain States Mixed Feed Company. 285,800; Aug. 4.

ALPHABETICAL LIST OF LABELS

Ace-Hi Shoes. For Boxes. Hoague-Sprague Corporation. 39,494; Aug. 4.
American Lassie Shoes. For Boxes. Hoague-Sprague Corporation. 39,486; Aug. 4.
Bamby Bun Juniors. For Buns. The H. Piper Company. 39,506; Aug. 4.
Beech-Nut Brand Chewing Gum, Spearmint. For Chewing Gum. Beech-Nut Packing Company. 39,470; Aug. 4.
Berlin Club Malt Syrup. For Malt Syrup. M. B. Frey. 39,478; Aug. 4.
Bond Bakers Whole Wheat Bread Sliced. For Bread. General Baking Company. 39,479; Aug. 4.
Brav Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,484; Aug. 4.
Brite-Kote Floor Paint. For Floor Paints. Eagle Paint & Varnish Works, Inc. 39,476; Aug. 4.
Bunte. For Candy. Bunte Brothers. 39,474; Aug. 4.
Camilia. For Boxes. Hoague-Sprague Corporation. 39,491; Aug. 4.
Campfire Coconut Toasted Marshmallows. For Marshmallows. Angelus-Campfire Company. 39,468; Aug. 4.
Chase and Sanborn's Seal Brand Green Tea. For Tea. Standard Brands Incorporated. 39,512; Aug. 4.
Dentol. For Antiseptic. Schafer-Hilliard Chemical Co. 39,508; Aug. 4.
Dr. Greene's. For Boxes. Hoague-Sprague Corporation. 39,488; Aug. 4.
Drislane's Selected Fresh Eggs. For Eggs. W. E. Drislane Company. 39,475; Aug. 4.
E. H. Loose's California Selected Sun Dried Fruits. For Sun Dried Fruits. E. H. Loose. 39,500; Aug. 4.
Eastside Lime Rickey Makes The Party. For a Carbonated Beverage. Los Angeles Brewing Co. 39,501; Aug. 4.
Fancy Waxed Paper. For Waxed Paper. Kalamazoo Vegetable Parchment Company. 39,495; Aug. 4.
Fleischmann's Phos-Fo-Lac. For Phosphate and Lactate Mixture Suitable for Use with Sodium Bicarbonate for the Same Purpose as Baking Powder. Standard Brands Incorporated. 39,519; Aug. 4.
Frenly Enema Cream. For Enema Cream. Frenly Products, Inc. 39,477; Aug. 4.
Genuine Reptile. For Boxes. Hoague-Sprague Corporation. 39,493; Aug. 4.
Kisky Ready Mixed Biscuit Flour. For Prepared Flour. Kisky Milling Company. 39,496; Aug. 4.
Knox Jell. For Gelatine Dessert. Charles B. Knox Gelatine Company Incorporated. 39,497; Aug. 4.
Knoxage. For Skin Cream. S. E. Reece. 39,507; Aug. 4.
Liquid Solder. For Liquid Soldering Preparation. H. W. Lamb. 39,498; Aug. 4.
McKesson's Yodora. For Delicate Deodorant Cream. McKesson & Robbins, Incorporated. 39,503; Aug. 4.
Milk Nut Mallow. For Candy Bars Made of Marshmallow Containing Nuts, Coated with Milk Chocolate. Herz-Oakes Candy Co. 39,483; Aug. 4.
Monday's. For Bread. McGavin's Bread, Inc. 39,502; Aug. 4.
Olympic. For Suspenders. I. A. Glickman. 39,480; Aug. 4.
Onaida Turkish Beauty Preparations. For Beauty Preparations. O. Benos. 39,471; Aug. 4.
Pabcotite. For Waterproof Layer or Sheet. For Building Construction. The Paraffine Companies, Inc. 39,505; Aug. 4.
Queen Quality. For Boxes. Hoague-Sprague Corporation. 39,485; Aug. 4.
Royal. For Chocolate Flavor Pudding. Standard Brands Incorporated. 39,511; Aug. 4.
Royal Cherry Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,514; Aug. 4.
Royal Lemon Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,515; Aug. 4.
Royal Lime Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,518; Aug. 4.
Royal Orange Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,517; Aug. 4.
Royal Raspberry Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,513; Aug. 4.
Royal Strawberry Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,516; Aug. 4.
Sackett De-Nicotined. For Cigars, Cigarettes, and Tobaccos. The Bonded Tobacco Company, Inc. 39,473; Aug. 4.
Scot Towels. For Paper Towels in Roll Form. Scott Paper Company. 39,510; Aug. 4.
Sigari Allegra. For Cigars. P. Allegra. 39,466; Aug. 4.
Sigari Avanti. For Cigars. P. Allegra. 39,467; Aug. 4.
Simply Wonderful Glue. For Glue. S. W. Glue Co. 39,481; Aug. 4.
Sleepytown, "Nightwear". For Nightwear. Morgan-Fairfield Manufacturing Co. Inc. 39,504; Aug. 4.
Snowhite. For Bread Loaves. The W. E. Long Co. 39,499; Aug. 4.
Sperling Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,490; Aug. 4.
Sportster. For Boxes. Hoague-Sprague Corporation. 39,487; Aug. 4.
Steinberg's. For Boxes. Hoague-Sprague Corporation. 39,492; Aug. 4.
SunAire Vitalized Scalp Tonic. For Scalp Tonic. SunAire Company. 39,520; Aug. 4.
Taste-Holder. For Cigar Holders. A. H. Heilbronner. 39,482; Aug. 4.
Tissue Paper Manufacturers Association. For Paper. Tissue Paper Manufacturers Association. 39,521; Aug. 4.
United. For Boxes. Hoague-Sprague Corporation. 39,489; Aug. 4.
Vago-Klenz. For Antiseptic Toilet Powders. C. E. Winn. 39,522; Aug. 4.
Waldorf. For Paper Towels. Scott Paper Company. 39,509; Aug. 4.
Winterlein. For Bacon. Bloomington Packing Company. 39,472; Aug. 4.
Zip! Zowie It Polishes. For Cleaners and Polishers Used for Nickel, Chromium, Monel, Etc. Bartlett Products, Inc. 39,469; Aug. 4.

ALPHABETICAL LIST OF PRINTS

All Simplicity Is Great. For Amoretta Cream, Creme de France, Lilie Lotion, Etc. Elizabeth Arden Inc. 13,320; Aug. 4.

Chocolate Soda. For Ice Cream Sodas. National Dairy & Food Bureau. 13,327; Aug. 4.

Deskitis. For Bran Food. Kellogg Company. 13,325; Aug. 4.

Dic-A-Doo. For Paint Cleaners. Patent Cereals Co. 13,329; Aug. 4.

Enemas. For Nozzle or Pipe for Attachment to Fountain Syringe and One Bottle of Enema Cream for Mixture in Fountain Syringe. Frenly Products, Inc. 13,323; Aug. 4.

Frozen Drumstick. For Ice Cream Product Consisting of an Ice Cream Cone Dipped in Candy Coating, Etc. I C Parker. 13,328; Aug. 4.

Happy Days are Here Again. For Anti-Brown Spot Ointment and Ardena Skin Tonic. Elizabeth Arden Inc. 13,319; Aug. 4.

It's the Core that Makes the Door. For Veneered Doors. Farley & Loetscher Mfg. Co. 13,322; Aug. 4.

Low Point Now. For "Farmington" Universal Silver Plate, Hand Bags, Real Stone Jewelry, Cool Linen Frocks, Etc. John Wanamaker New York. 13,332; Aug. 4.

Low Point Now. For Silk Crepe. John Wanamaker New York. 13,333; Aug. 4.

Low Point Sale. For Misses' Dinner-Dance Ensemble, Junior Misses Sport Frocks, Women's Silk Crepe Coats, Etc. John Wanamaker New York. 13,331; Aug. 4.

Mission Model "C" Duplex Dispenser Automatic Mixing & Icing with Spectacular Lighting M2. For Beverage Dispensers. Mission Dry Corporation, Ltd. 13,326; Aug. 4.

Radiarn. For Spun Rayon. Putnam Spinners, Inc. 13,330; Aug. 4.

The Abco. For Golf Handicap Boards, Bulletin Boards, Building Directories, and Statistical Boards, Etc. The Abco. 13,318; Aug. 4.

The Thrill in Every Picnic-Etc. For Peanut Butter, Apple Butter, Sandwich Relish, Etc. H. J. Heinz Company. 13,324; Aug. 4.

Zarifa. For Preparation for Treating Dandruff and Falling Hair. P. L. Diver. 13,321; Aug. 4.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 4TH DAY OF AUGUST, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A. B. A. Specialties Company. (See Fridolph, Annette, assignor.)

A. P. W. Paper Co. (See Fairchild, William, assignor.)

Abrams, Norman H., Waco, Tex., assignor to Badger Meter Manufacturing Company, Milwaukee, Wis. Water meter cover. 1,816,818; Aug. 4.

Abramson, John H., and E. C. Swanson, assignors to Greenlee Bros. & Co., Rockford, Ill. Metal punch. 1,817,223; Aug. 4.

Acme Printing Appliance Co., The. (See Daane, Arthur J., assignor.)

Adami, Felix, Richmond, England. Appliance for grilling, toasting, and the like. 1,817,118; Aug. 4.

Adams, Edgar W., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic article selecting and distributing system. 1,816,887; Aug. 4.

Adams, Elmer W., Hammond, and F. W. Kittrell, assignors to Standard Oil Company, Whiting, Ind. Emulsifiable lubricant. 1,817,599; Aug. 4.

Adams, Henry, Plainfield, N. J. Fuel burning apparatus and method. 1,817,470; Aug. 4.

Adams, John F., and T. T. Allen, assignors to Sentry Safety Control Corporation, Philadelphia, Pa. Safety device for motion picture projecting machines. 1,817,661; Aug. 4.

Addler, Joseph H., Brooklyn, N. Y., assignor to Pulielean Manufacturing Corporation, Bridgeport, Conn. Towel cabinet. 1,817,471; Aug. 4.

Addressograph Company. (See Thompson, Herbert L., assignor.)

Aebi, Oscar, and R. Dinichert, Murten, Switzerland. Memorandum device. 1,817,793; Aug. 4.

Aetna Standard Engineering Company, The. (See Russell, George W., assignor.)

Agar, John C., assignor to Swift & Company, Chicago, Ill. Handling meat. 1,817,541; Aug. 4.

Ahlin, John G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop motion. 1,817,119; Aug. 4.

Ahn, Josef M., New York, N. Y. Hanger for elongated articles. 1,817,600; Aug. 4.

Ajouelo, Davis J., Atlanta, Ga. Hand nailing implement. 1,817,224; Aug. 4.

Aktiebolaget Karlstads Mekaniska Werkstad. (See Wagner, R. E., and Ullgren, assignors.)

Aktiengesellschaft Brown Boveri & Cie. (See Keller, Robert, assignor.)

Aktiengesellschaft Brown, Boveri & Cie. (See Noack, Walter G., assignor.)

Alkire, Albert H., Des Moines, Iowa. Actuating the electric starters of automobiles and concurrently retarding the ignition sparks in the engines thereof. 1,817,472; Aug. 4.

Allen, Thomas T. (See Adams, J. F., and Allen.)

Allison, Fletcher D., Columbus, Ohio. Combination tool. 1,816,812; Aug. 4.

Allison, James F., Providence, R. I., assignor to Freeman-Doughaday Company. Collar holder. 1,817,662; Aug. 4.

All-Metal Products Company. (See Forsman, V. H., Decker, and Edwards, assignors.)

All-Metal Products Co. (See Schmidt, William F., assignor.)

Alsaker, Alfred. (See Van Ryan, T., and Alsaker.)

Alvord, Clinton, assignor to Worcester Loom Works, Worcester, Mass. Tuft frame for weaving tufted fabrics. 1,817,601; Aug. 4.

Amalgamated Carburetters Limited. (See Brown, Clement, assignor.)

American Air Filter Company. (See Gagen, Charles H., assignor.)

American Air Filter Company. (See Jordahl, Anders, assignor.)

American Electric Company. (See Steerup, Godfrey, assignor.)

American Engineering Company. (See Koons, Charles V., assignor.)

American Face Brick Research Corporation. (See Slidell, K., and Wyatt, assignors.)

American Glanzstoff Corporation. (See Monkemeyer, Lonhard, assignor.)

Americaa Lace Mfg. Co., The. (See Hucknall, Hage W., assignor.)

American Neon Light Corporation. (See Zons, Frederick W., assignor.)

American Piano Corporation. (See Stoddard, Charles F., assignor.)

American Radiator Company. (See Davis, Vernon J., assignor.)

American Radiator Company. (See Mertzanoff, Andre M., assignor.)

American Telephone and Telegraph Company. (See Brown, Ralph, assignor.)

American Telephone and Telegraph Company. (See Clark, A. B., and Best, assignors.)

American Telephone and Telegraph Company. (See Green, Irving W., assignor.)

Andersen, Niels K., Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,817,431; Aug. 4.

Anderson, Arthur N., Crafton, Pa. Voltage control system. 1,817,334; Aug. 4.

Anderson, Dwight M., and A. W. McNeish, East Cleveland, Ohio. Fastening for hub caps, radiator caps, and gasoline tank caps. 1,817,794; Aug. 4.

Anderson, Fritz A., assignor to The Burdick Corporation, Milton, Wis. Therapeutic lamp unit. 1,817,027; Aug. 4.

Anderson, Robert J., Whitman, assignor to National Fireworks, Inc., West Hanover, Mass. Aerial flare. 1,817,503; Aug. 4.

Andrews, Paul D., Schenectady, N. Y., assignor to General Electric Company. Amplifying system. 1,817,795; Aug. 4.

Apduze, Lucien, Limoges, France, assignor to Herman C. Kupper, Inc., New York, N. Y. Teapot or similar article. Des. 84,774; Aug. 4.

Añez Añez, Germán A., Maracaibo, Venezuela. Lock. 1,816,951; Aug. 4.

Angelides, Angelos D., Santa Barbara, Calif. Traffic signal for motor vehicles. 1,816,813; Aug. 4.

Angell, Robert C., Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company. Mechanism and process for fabricating flexible shafting. Re18,142; Aug. 4.

Angus, Donald J., Indianapolis, Ind. Meter. 1,817,432; Aug. 4.

Apollo Holding Corporation. (See McCrery, Harold E., assignor.)

Armington, George E., Cleveland, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Dump wagon door operating gear. 1,817,602; Aug. 4.

Armitage, Joseph B. (See Kearney, E. J., and Armitage.)

Armitage, Percy C., assignor of one-half to P. W. Newcomer, Pomona, Calif. Film numbering machine. 1,817,728; Aug. 4.

Armstrong Appliance Corporation. (See Armstrong, Charles C., assignor.)

Armstrong, Charles C., Huntington, W. Va., assignor, by mesne assignments, to Armstrong Appliance Corporation. Automatic coffee percolator. 1,816,994; Aug. 4.

Armstrong, James R., Crafton, and L. H. Duncan, Ben Avon, assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Combined pressure recording and volume registering attachment for fluid meters. 1,816,995; Aug. 4.

Armstrong, Victor C., Hackensack, N. J., assignor to The Rail Joint Company, New York, N. Y. Welded rail joint construction. 1,817,225; Aug. 4.

Arnott, Ashley M., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Pipe closing device. 1,817,796; Aug. 4.

Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Lighter construction. 1,817,335; Aug. 4.

Art Concrete Works. (See Haase, L., and Brooks, assignors.)

Art Metal Works, Inc. (See Aronson, Louis V., assignor.)

Arter Grinding Machine Company. (See Arter, W., Arter, and Webster, assignors.)

Arter, Harry. (See Arter, W., Arter, and Webster.)

Arter, William and H., and S. T. Webster, assignors to Arter Grinding Machine Company, Worcester, Mass. Magnetic chuck and circuits therefor. 1,816,888; Aug. 4.

Ashcroft, Edgar A., Waye House, near Ashburton, England. Metallurgy of ores or materials containing tin. 1,817,865; Aug. 4.

Ashworth, Percy J., Cranston, R. I. Rotary internal combustion engine. 1,817,663; Aug. 4.

Asociacion De Productores De Yodo De Chile. (See Schlotter, Max., assignor.)

Associated Electrical Industries Limited. (See Robinson, Ernest Y., assignor.)

Ater, Milford, Chillicothe, Ohio. Kite parachute. 1,816,814; Aug. 4.

Atkinson, William R., assignor of one-third to J. A. Brown, Winfield, N. Y. Automobile bumper. 1,817,866; Aug. 4.

Auditorium Ventilating Corporation. (See Lewis, L. L., and Buensod, assignors.)

Austin, Herbert, Bromsgrove, England. Cylinder of internal combustion engines. 1,816,819; Aug. 4.
Automatic-Electric Inc. (See Schwartz, Michael, assignor.)
Automotive Engineering Corporation. (See Marcum, Arthur I., assignor.)
Auto-Ordnance Corporation. (See Payne, Oscar V., assignor.)
Autostrop Patents Corporation. (See Schumacher, Conrad, assignor.)
Awad, John E., Newark, N. J. Fur treating composition and making same. 1,817,120; Aug. 4.
Babcock & Wilcox Company, The. (See Kerr, H. J., and Savoye, assignors.)
Backmyer, Christopher F., assignor to Magill-Weinsheimer Company, Chicago, Ill. Double envelope. 1,816,815. Aug. 4.
Badanes, Bernard B., Woodside, N. Y. Dentifrice. 1,817,664; Aug. 4.
Badger Meter Manufacturing Company. (See Abrams, Norman H., assignor.)
Bahan, William H., Greenville, S. C. Loom temple. 1,817,336; Aug. 4.
Bailey, Henry H., and J. L. Thomas, assignors to Mechanical Royalties Corporation, Oklahoma City, Okla. Hose clamp. 1,817,473; Aug. 4.
Bailey, Martin C., Treece, Kans. Stuffing box and gland. 1,817,867; Aug. 4.
Bailey, Thomas L., Melrose, Mass. Beater and aerator. 1,817,665; Aug. 4.
Baker, Dexter C., Oakland, assignor to Baker-Hansen Manufacturing Co., Alameda, Calif. Vacuum cleaner. 1,817,337; Aug. 4.
Baker, Dexter C., Oakland, assignor to Baker-Hansen Manufacturing Co., Alameda, Calif. Separatbr. 1,817,338; Aug. 4.
Baker-Hansen Manufacturing Co. (See Baker, Dexter C., assignor.)
Baker, Isaac F., East Orange, N. J., assignor to General Electric Company. Motor control. 1,817,797; Aug. 4.
Baker Perkins Company. (See Harber, Laurence S., assignor.)
Barber-Greene Company. (See Barber, Harry H., assignor.)
Barber, Harry H., Aurora, Ill., assignor to Barber-Greene Company. Feeder for bucket loaders. 1,817,474; Aug. 4.
Barker, Robert W., assignor to Hess & Barker, Inc., Philadelphia, Pa. Automatic jacquard punching machine. 1,817,284; Aug. 4.
Barnes, Marie B., Los Angeles, Calif. Mold. 1,817,389; Aug. 4.
Barney, Freeman, assignor to Challenge Machinery Company, Grand Haven, Mich. Printing press bed movement. 1,816,816; Aug. 4.
Barr, L. L., Co. (See Barr, Louis L., assignor.)
Barr, Louis L., assignor to L. L. Barr Co., Greenville, S. C. Pipe support. 1,817,798; Aug. 4.
Barr, Thomas B., Hyde, Pa. Casting apparatus. 1,817,340; Aug. 4.
Barrett, Harvey N. Tiffin, assignor to Dolomite Incorporated, Maple Grove, Ohio. Separating and preparing lime and magnesia. 1,816,996; Aug. 4.
Barrows, Donald S., Rochester, N. Y. Carr door fastener. 1,817,729; Aug. 4.
Bartlett, Edward E., Sapulpa, Okla. Tumbler. Des. 84,775; Aug. 4.
Bartlett, Linton G., assignor to W. L. O'Connell, Chicago, Ill. Vehicle wheel. 1,816,820; Aug. 4.
Basher, John S. (See Ciraolo, Ferdinand A., assignor.)
Bassett, Robert S., Buffalo, N. Y. Liquid pump. 1,816,821; Aug. 4.
Bastian-Blessing Company, The. (See Buttner, William C., assignor.)
Baudry, René A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Large, high speed rotor. 1,817,054; Aug. 4.
Bauman, Gustave A., Burlingame, Calif. Open mouth bag. 1,817,868; Aug. 4.
Bayer, Matthew F., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Extensible bedstead. 1,817,666; Aug. 4.
Bayles, John H. G., Nottingham, England. Circular rib knitting machine. 1,817,285; Aug. 4.
Beaman, George B., Crafton, assignor to Superior Paper Products Company, Carnegie, Pa. Fabricated package. 1,817,286; Aug. 4.
Becker, Emil, Pforzheim, Germany. Closure for bracelets and the like. 1,817,745; Aug. 4.
Beckman, Robert C., Olean, N. Y. Boring machine. 1,817,730; Aug. 4.
Becq, André, Paris, France., assignor by mesne assignments, to General Electric Company. Rectifier and like device based upon the use of mercury vapor. 1,817,799; Aug. 4.
Beecher, Eldridge M., New Britain, Conn. Pole reenforcement. 1,817,341; Aug. 4.
Beecher, Eldridge M., New Britain, Conn. Pole reenforcement. 1,817,342; Aug. 4.
Begeman, Myron L., St. Louis, Mo., assignor to Mississippi Glass Company, New York, N. Y. Making sheet glass. 1,817,055; Aug. 4.
Behan, Thomas W., Binghamton, N. Y., assignor to Nineteen Hundred Corporation. Wringer. 1,817,603; Aug. 4.
Behan, Thomas W., Binghamton, N. Y., assignor to Nineteen Hundred Corporation. Clothes wringer. 1,817,604; Aug. 4.
Beldimano, Alexander, Rotterdam, Netherlands. Container for gases or liquids under high pressure. 1,817,226; Aug. 4.
Belgard, Wilferd L., Newton, Kans. Ice carrier. 1,817,056; Aug. 4.
Bell, Donald H., Beverly, Mass. Producing shoe soles of molded plastic composition. 1,817,287; Aug. 4.
Bell, Harry A., assignor to The Mechanical Rubber Company, Chicago, Ill. Making floor coverings. 1,816,822; Aug. 4.
Bell Telephone Laboratories, Incorporated. (See Adams, Edgar W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Harvey, William H., assignor.)
Bell Telephone Laboratories, Incorporated. (See Horton, Joseph W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Jones, Warren C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Miller, Robert A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Schelling, John C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Smythe, E. H., and Flanders, assignors.)
Bell Telephone Laboratories, Incorporated. (See Voos, Frederick A., assignor.)
Belle City Malleable Iron Company. (See Finn, Charles A., assignor.)
Bellinger, James F., assignor, by mesne assignments, to Rush Manufacturing Corporation, Lafayette, Ind. Extensible trunk. 1,817,504; Aug. 4.
Bellows, Warren S., East Orange, N. J. Table top. 1,817,433; Aug. 4.
Belt, Joseph S., Amarillo, and E. M. Ladd, Fort Worth, Tex. Refrigerating apparatus. 1,817,605; Aug. 4.
Bendix Brake Company. (See Hirvonen, E. J., and Tuttle, assignors.)
Benford, David M., New York, N. Y. Electric necktie restorer. 1,817,731; Aug. 4.
Benington, Charles H. (See Stein, I. L., and Benington.)
Benjamin, Charles A., West Bridgewater, Mass. Stub and ash receptacle for automobiles. 1,817,288; Aug. 4.
Benke, Joseph, et al. (See Schuler, Eugene, assignor.)
Bennett, Edwin O., Ponca City, Okla., assignor of one-half to Emsco Derrick & Equipment Company and one-half to The National Supply Company, Toledo, Ohio. Crown block. Re18,147; Aug. 4.
Bennett, Raymond B., assignor to Montague Rod & Reel Company, Montague City, Mass. Fishing reel. 1,816,889; Aug. 4.
Benton, James O., Guthrie, Iowa. Butcher's gambrel. 1,817,869; Aug. 4.
Benz, Carl, Biesdorf, near Berlin, assignor to Siemens-Schuckertwerke, Aktiengesellschaft, Berlin-Siemensstadt, Germany. Flanged coupling for conduits. 1,817,289; Aug. 4.
Bergman, Gertrude E., Fort Dodge, Iowa. Ligature holding and tying instrument. 1,816,952; Aug. 4.
Bergstrom, Carl P., Millbury, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread holder. 1,817,121; Aug. 4.
Bern, Frank, Cleveland, Ohio. Photographic printing device. 1,817,606; Aug. 4.
Berry, Leannah, Fairview, Mont. Vaporizer. 1,817,057; Aug. 4.
Berthold, George H. E., East Orange, assignor to The Raiah Company, Bloomfield, N. J. Spark plug. 1,817,505; Aug. 4.
Beryllium Corporation of America. (See Cooper, Hugh S., assignor.)
Best, Fred H. (See Clark, A. B., and Best.)
Bethenor, Joseph, and H. Gondet, Paris, France. Centrifugal clutch. 1,817,542; Aug. 4.
Betts, L. M. (See Stillman, John C., assignor.)
Binios, Stanley, San Francisco, Calif. Therapeutic composition. 1,816,817; Aug. 4.
Bierbaum, Christopher H., Buffalo, N. Y. Firearm. 1,817,058; Aug. 4.
Billé, Léon, Nogent-sur-Marne, France. Joint for pipes. 1,817,870; Aug. 4.
Bird, Robert M., University, assignor, by mesne assignments, to National Cold Steam Company, Charlottesville, Va. Spray material and method of application. 1,817,227; Aug. 4.
Birdseye, Clarence, Gloucester, Mass., assignor, by mesne assignments, to Frostee Foods Company, Dover, Del. Refrigerating apparatus and method of refrigerating food. 1,817,890; Aug. 4.
Bissell, Carl H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Automatic stop for start and stop motors. 1,817,172; Aug. 4.
Bissell, Don W. (See Burnett, L. B., and Bissell.)
Bitney, Dewey H., Albion, assignor to Union Steel Products Company, Albion, Mich. Reenforce chair or support. 1,817,059; Aug. 4.
Black, Harry G., Galveston, Tex. Apparatus for galvanizing wire and the like. 1,817,122; Aug. 4.
Blakely, William H., et al. (See Crockett, Thomas E., assignor.)

Bialock, James E., Pacific Palisades, Calif. Wrench. 1,817,060; Aug. 4.
Blau, Hermann, Munich, Germany. Separating mixtures of gases and of gases with vapors. 1,817,667; Aug. 4.
Bledsoe, Carl F., assignor to Ogle Construction Company, Chicago, Ill. Material handling plant. 1,817,343; Aug. 4.
Bleecker, Charles M. (See Wahnish, George, assignor.)
Bliss, Edwin C., Central Manati, Oriente, Cuba. Apparatus for preparing and burning bagasse and the like. 1,817,228; Aug. 4.
Blood, Louis H., Cincinnati, Ohio. Threading machine. 1,817,607; Aug. 4.
Bobrick, Arthur L., Los Angeles, Calif. Wrapping and packing bottles and the like. 1,817,061; Aug. 4.
Bogart, Fred H., assignor to The Warner & Swasey Company, Cleveland, Ohio. Coupling boring and threading machine. 1,817,608; Aug. 4.
Bogart, Fred H., Cleveland Heights, assignor to The Warner & Swasey Company, Cleveland, Ohio. Loading device for machine tools. 1,817,609; Aug. 4.
Bohmer, Clarence I. (See Mosel, J. H., and Bohmer.)
Bond, Samuel C., Holly Oak, Del., assignor to The Henry P. Scott Company. Bar sizing or shaving machine. 1,817,608; Aug. 4.
Boonzaier, Gregorio J., Harlesden, England. Cam device. 1,817,609; Aug. 4.
Booth, Herbert L., Beverly Hills, Calif. Weed cutter. 1,816,890; Aug. 4.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Vehicle wheel. 1,816,925; Aug. 4.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Wire wheel. 1,816,926; Aug. 4.
Bormann, Carl B., Westwood, N. J. Burglar-proof arrangement for the protection of bank clerks. 1,816,283; Aug. 4.
Borovicka, John, Hubbard Woods, Ill. Label retaining device. 1,817,229; Aug. 4.
Boruss, Stephen, Budapest, Hungary. Tube-container. 1,817,732; Aug. 4.
Bound Brook Oil-less Bearing Company. (See Claus, Carl, assignor.)
Bown, Ralph, Maplewood, N. J., assignor to American Telephone and Telegraph Company. Privacy signalling system. 1,816,953; Aug. 4.
Boyd, Ford E. (See Linley, F. H., and Boyd.)
Boyden, Reagh C., Atlantic, Mass. Universal joint. 1,816,891; Aug. 4.
Boyer, Frederick G. L., assignor to Dayton Scale Company, Dayton, Ohio. Totalizing device. 1,817,476; Aug. 4.
Bradfield, Fred E. (See Henry, R., and Bradfield.)
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignor to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake mechanism for automotive vehicles. 1,817,800; Aug. 4.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Brallier, Paul S., E. J. Dunlap, and G. D. Muggleton, assignors to Niagara Smelting Corporation, Niagara Falls, N. Y. Making carbon tetrachloride. 1,817,123; Aug. 4.
Brandt, Abram, assignor to Jas. Brandt & Bro., New York, N. Y. Decorative wreath. 1,817,173; Aug. 4.
Brandt, Edgar W., Paris, France. Device utilizable for camouflage and the like. 1,817,871; Aug. 4.
Brandt, Jas., & Bros. (See Brandt, Abram, assignor.)
Brandt, Max F. (See Greutman, W. J., Shook, and Brandt.)
Braren, Lorenz K., Munich, assignor to Friedrich Deckel, Präzisionsmechanik und maschinenbau, Munich Bavaria, Germany. Production of cycloidal curves. 1,817,405; Aug. 4.
Brasier, Oscar H., Tacoma, Wash. Talking machine. 1,817,230; Aug. 4.
Brann, Philip N., assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine (work holding means). 1,817,344; Aug. 4.
Braun, Philip N., assignor to The Prosperity Company Inc., Syracuse, N. Y. Mothproofing means for pressing machines. 1,817,406; Aug. 4.
Bray, Lawrence L., Fond du Lac, Wis. Testing device. 1,817,872; Aug. 4.
Bready, Owen J., Cleveland, Ohio. Power driven implement. 1,817,873; Aug. 4.
Breslauer, Joseph. (See Ullmann, F., Breslauer, and Lic.)
Briles, John C., Ottawa, Kans. Steel guard cage. 1,817,874; Aug. 4.
Brill, Harvey C., Cambridge, Mass. Local anesthetic. 1,817,670; Aug. 4.
Brisben, William W., New Philadelphia, Ohio. Sharpener for shears and scissors blades. 1,817,506; Aug. 4.
Broadbent, Robert J., Maroubra Junction, New South Wales, Australia. Ripening of bananas. 1,817,875; Aug. 4.
Brock, Clarence S., Youngstown, Ohio. Article and making the same. 1,817,174; Aug. 4.
Brockway, Murillo M., Burbank, Calif. Four-wheel rear drive chassis. 1,817,028; Aug. 4.
Bronander, Wilhelm B., Montclair, N. J. Fire extinguisher and support therefore. 1,816,892; Aug. 4.
Bronander, Wilhelm B., Montclair, N. J. Fire extinguisher support. 1,816,893; Aug. 4.
Bronander, Wilhelm B., Montclair, N. J. Fire extinguisher support. 1,817,231; Aug. 4.
Brooks, Frank M. (See Haase, L. G., and Brooks.)
Brower, Paul V., Kenmore, N. Y., assignor to Carbide & Carbon Chemicals Corporation. Case for carburizing and heat treating metals. 1,817,345; Aug. 4.
Brower, Paul V., Kenmore, N. Y., assignor to Carbide & Carbon Chemicals Corporation. Case carburizing and heat treating metals. 1,817,407; Aug. 4.
Brown, Clement, Witton, Birmingham, assignor to Amalgamated Carburetters Limited, Birmingham, England. Carburetor. 1,817,610; Aug. 4.
Brown, Clyde E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft replenishing loom. 1,817,124; Aug. 4.
Brown Company. (See Richter, George A., assignor.)
Brown, George, Oakland, Calif. Wrench. 1,816,997; Aug. 4.
Brown, James L., jr., Lancaster, Pa., assignor to Follmer, Clogg & Company. Parachute. 1,816,927; Aug. 4.
Brown, Joseph A. (See Atkinson, William R., assignor.)
Brownell, James L., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Vehicle body. 1,817,125; Aug. 4.
Brunner, John, Chicago, Ill. Rail joint. 1,817,733; Aug. 4.
Brunner, Matthew J., Buffalo, N. Y. Curtain fixture. 1,816,824; Aug. 4.
Bruns, August., Jamaica, N. Y. Awning. 1,817,126; Aug. 4.
Bruns, August., Jamaica, N. Y. Awning. 1,817,290; Aug. 4.
Brunstetter, Jesse R. (See Brunstetter, Walter and J. R.)
Brunstetter, Walter, and J. R. Brunstetter, Metuchen, N. J. Transit level. 1,817,671; Aug. 4.
Bryan, George A., Peru, Ind., assignor to Bryan Steam Corporation. Combustion chamber. 1,817,801; Aug. 4.
Bryan Steam Corporation. (See Bryan, George A., assignor.)
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,817,434; Aug. 4.
Buckle, Horace L. T., Iver Heath, England, assignor to Victor Talking Machine Company. Talking machine. 1,817,477; Aug. 4.
Budd Wheel Company. (See Eksergian, C. L., and Weightman, assignor.)
Budd Wheel Company. (See Hughes, James W., assignor.)
Budd Wheel Company. (See Hunt, J. Harold, assignor.)
Budd Wheel Company. (See Roberts, Albert O., assignor.)
Buehler, Leon. jr. (See Small, N. M., and Buehler.)
Buelow, John R., Winslow, Ill. Mirror for retinascopes. 1,817,734; Aug. 4.
Buensod, Alfred C. (See Lewis, L. L. and Buensod.)
Buffalo Fuse Corporation. (See Clemens, John G., assignor.)
Bührig, Henry F., Chicago, Ill., assignor, by mesne assignments, to Standard Brands Incorporated, Dover, Del. Apparatus for temperature regulation. 1,817,232; Aug. 4.
Bull Dog Electric Products Company. (See Messing, Joseph, assignor.)
Bumgardner, Allen R., Peabody, Kans., assignor to Phillips Petroleum Company, Bartlesville, Okla. Device for pulling or carrying sucker rods. 1,817,233; Aug. 4.
Bumstead, Charles W., trustee. (See Langley, Cortlandt, J., assignor.)
Burdick Corporation, The. (See Anderson, Fritz A., assignor.)
Burgess Battery Co. (See Schorger, Arlie W., assignor.)
Burnett, Lyle B., Chicago, and D. W. Bissell, Maywood, assignors to Wm. J. Stange Co., Chicago, Ill., Colored dusting powder. 1,816,928; Aug. 4.
Burnham, George A., Saugus, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Circuit interrupter and magnetic arc extinguishing device therefor. 1,816,894; Aug. 4.
Burton, Edward, assignor to National Lock Co., Rockford, Ill. Mirror ornament. Des. 84,776; Aug. 4.
Butler, Horace, West Chester, Pa., assignor to Research Process Company. Process and apparatus for producing light hydrocarbons. 1,817,672; Aug. 4.
Butler, Jacob G., Covington, Ky. Mop. 1,817,876; Aug. 4.
Buttler, William L., W. H. Fabrey, and J. Weber, assignors to Weber Electric Company, Schenectady, N. Y. Electrical switch. 1,817,234; Aug. 4.
Buttner, William C., assignor to The Bastian-Blessing Company, Chicago, Ill. Sirup pump. 1,817,673; Aug. 4.
Byerlein, Arthur A., Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio. Press. 1,817,885; Aug. 4.
Byerley, Marshall E., Big Spring, Tex. Tank car cleaning apparatus. 1,816,934; Aug. 4.
Byrnes, Richard A. (See Byrnes, W. J., Byrnes, and Saunders.)
Byrnes, William J., Hubbard Woods, R. A. Byrnes, Chicago, and C. J. Saunders, Elgin, Ill.; said Saunders assignor to said William J. Byrnes and said R. A. Byrnes. News stand structure. 1,817,062; Aug. 4.
C-S Engineering Company. (See Schellens, Christopher A., assignor.)

Calhoun, Tracy J., assignor to The Oil Conservation Engineering Company, Cleveland, Ohio. Tank nozzle for swing joint and pipe line connections. 1,817,029; Aug. 4.

California Sitton. (See Escobedo, Pablo, assignor.)

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Car door. 1,817,346; Aug. 4.

Campbell, Argyle, Chicago, and G. B. Willard, Western Springs, assignors to Enterprise Railway Equipment Company, Chicago, Ill. Car door. 1,817,347; Aug. 4.

Campbell, Fred W. (See Smiley, Harry D., assignor.)

Campo, James. (See Meyer, G. J., Dreher, and Campo.)

Capicotto, James V., Brooklyn, assignor to Dubilier Condenser Corporation, New York, N. Y. Vacuum tube. 1,817,674; Aug. 4.

Carbide & Carbon Chemicals Corporation. (See Brower, Paul V., assignor.)

Carbide and Carbon Chemicals Corporation. (See Curme, George O., jr., assignor.)

Carr, Moses F., Lexington, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Fastener forming and assembling machine. 1,817,886; Aug. 4.

Carrie, James, and G. E. Howard, Butler, Pa. Transmission mechanism. 1,817,063; Aug. 4.

Carson, William H., New Rockford, N. Dak. Road sign. 1,817,064; Aug. 4.

Case Research Laboratory Incorporated. (See Case, Theodore W., assignor.)

Case, Theodore W., assignor to Case Research Laboratory Incorporated, Auburn, N. Y. Aeo light. 1,816,825; Aug. 4.

Cawley, Edward D., Augusta, Ga. Spring conditioning device. 1,817,877; Aug. 4.

Celanese Corporation of America. (See Ellis, George H., assignor.)

Cement-Gun Construction Company et al. (See Schaefer, John V., assignor.)

Central Electric Tool Company. (See Weyandt, Carl S., assignor.)

Ceskomoravska-Kolben-Danek Company Limited. (See Kolář, Václav, assignor.)

Chadwick, Lee S., Shaker Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Condenser. 1,816,956; Aug. 4.

Chadwick, Lee S. Shaker Heights Village, and M. Resek, Cleveland Heights, assignors to Perfection Stove Company, Cleveland, Ohio. Refrigerator construction. 1,816,955; Aug. 4.

Challenge Machinery Company. (See Barney, Freeman, assignor.)

Challenge Machinery Company, The. (See Gylleck, Olaf T., assignor.)

Chalmers, John W. (See Molins, W. E., and Chalmers.)

Chambers, Bering, Quinlan, Co. (See Cooper, Earl E., assignor.)

Chandler, Homer P., assignor to The Ohio Brass Company, Mansfield, Ohio. Current collector. 1,817,175; Aug. 4.

Chapin, Charles H., Chicago, Ill. Shock absorbing device. 1,817,675; Aug. 4.

Chason, Danel H. (See Zabriskie, H. L., and Chason.)

Checker Cab Manufacturing Corporation. (See Brownell, James L., assignor.)

Chemische Fabrik Pott & Co. (See Popsiech, Friedrich, assignor.)

Chenery, Henry L., Portland, assignor to D. H. Edes, Guilford, and H. F. Sawyer, Freeport, Me. Envelope-feeding apparatus for typewriters. 1,817,235; Aug. 4.

Chicago Cardboard Company. (See Ziemmerman, Henry, assignor.)

Chicago Pneumatic Tool Company. (See Meunier, L. F., and Dresser, assignors.)

Chicago Pneumatic Tool Company. (See Stevens, Edward W., assignor.)

Chrisman, Horace, and J. T. Madison, assignors, by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Fluid meter. 1,816,697; Aug. 4.

Christie, Howard E., and K. W. Couse, Bronx, N. Y. Indicator for cooling systems of automobiles. 1,817,676; Aug. 4.

Ciraolo, Ferdinand A., assignor of one-half to J. S. Basher, Oakland, Calif. Electrode box. 1,817,543; Aug. 4.

Claghorn, Clarence R., Baltimore, Md. Conveyer. 1,817,348; Aug. 4.

Clark, Alva B., Wyoming, and F. H. Best, Westfield, N. J., assignors to American Telephone and Telegraph Company. Transmission measuring system. 1,816,958; Aug. 4.

Clark, Cyril B., Scarsdale, assignor to General Chemical Company, New York, N. Y. Evaporating and concentrating solutions. 1,817,349; Aug. 4.

Clark, Omar E., assignor to Gardner-Denver Company, Denver, Colo. Hoist. 1,817,736; Aug. 4.

Clark, Omar E., assignor to Gardner-Denver Company, Denver, Colo. Rotary compressor. 1,817,735; Aug. 4.

Claus, Carl, Plainfield, assignor to Bound Brook Oil-less Bearing Company, Bound Brook, N. J. Spring shackle. 1,817,891; Aug. 4.

Claus, Carl, Plainfield, assignor to Bound Brook Oil-less Bearing Company, Bound Brook, N. J. Spring shackle. 1,817,892; Aug. 4.

Clavel, Aené, Basel, Switzerland. Weighting natural silk. 1,816,959; Aug. 4.

Clay, Arundel S., London, assignor to Cooke, Troughton & Simms Limited, York, England. Orientator or architect's solar dial. 1,817,350; Aug. 4.

Clemens, John G., assignor to Buffalo Fuse Corporation, Buffalo, N. Y. Fuse. 1,817,291; Aug. 4.

Clements, Arthur L. (See Lindsay, H. B., and Clements.)

Clements, Joseph H., jr., assignor to Peckham, Wolf & Co., Schenectady, N. Y. Article of furniture. 1,817,878; Aug. 4.

Cleveland Heater Company, The. (See Evans, Vincent J., assignor.)

Cleveland Heater Company, The. (See Friedman, Arthur, assignor.)

Cobb, Frederick Gordon, Lancaster, S. C., assignor to Garland Manufacturing Company. Loom harness. 1,817,292; Aug. 4.

Cockburn, Francis B., assignor to The Lodge Shipley Machine Tool Company, Cincinnati, Ohio. Apron disc transmission mechanism. 1,816,960; Aug. 4.

Coffin, Joseph G., assignor to Mustomatik Specialties, Inc., New York, N. Y. Mustard dispensing device. 1,817,293; Aug. 4.

Cohen, Jacob, Worcester, Mass., assignor to Royal Worcester Corset Company. Self-adjusting garment. 1,817,236; Aug. 4.

Cohen-Venezian, Carlo, Turin, Italy. Vehicle with load lifting means. 1,817,850; Aug. 4.

Cole, James R., et al. (See Crockett, Thomas E., assignor.)

Commercial Solvents Corporation. (See Martin, J., and Krchma, assignors.)

Condit Electrical Manufacturing Corporation. (See Burnham, George A., assignor.)

Condit Electrical Manufacturing Corporation. (See Jansson, Gustav, assignor.)

Condon, Robert S. (See Kearney, E. J., and Condon.)

Conroy, Lemuel D., Whipple, Calif. Cigarette dispenser. Des. 84,777; Aug. 4.

Consortium fuer Elektrochemische Industrie. (See Meingast, R., and Mugdan, assignors.)

Continental Aircraft Engine Company. (See Snyder, Oscar L., assignor.)

Continental Motors Corporation. (See Kreis, Oscar C., assignor.)

Continental Motors Corporation. (See Meyer, Andre J., assignor.)

Cook, Giles H., Des Moines, Iowa. Vehicle. 1,817,478; Aug. 4.

Cook, L. D., Kansas City, Mo. Storage garage. 1,817,237; Aug. 4.

Cook Laboratories, Inc. (See Kulik, Irving, assignor.)

Cooke, Troughton & Simms Limited. (See Clay, Arundel S., assignor.)

Cookson, Clarence F., Lyndhurst, N. J., assignor to Counter Cooking Machine Corporation, New York, N. Y. Cooking device. 1,817,351; Aug. 4.

Cooper, Earl E., assignor to Chambers, Bering, Quinlan Co., Decatur, Ill. Faucet lock and cover. 1,817,802; Aug. 4.

Cooper, Ernest, and A. S. Piper, Riverside, Calif. Recording speedometer. 1,816,826; Aug. 4.

Cooper, George R., Upper Darby Township, Delaware County, Pa. Telephone-phonographic means of communication. 1,817,611; Aug. 4.

Cooper, Hugh S., Cleveland, Ohio, assignor to Beryllium Corporation of America, New York, N. Y. Alloy and preparing same. 1,816,961; Aug. 4.

Cooper, Simon, Brooklyn, N. Y. Sostenuto piano. 1,817,507; Aug. 4.

Copeland Products, Inc. (See Muffly, Glenn, assignor.)

Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Sharp freezing container. 1,817,544; Aug. 4.

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Sharp freezing container. 1,817,545; Aug. 4.

Copenhaver, Preston S. (See Demonet, E. A., and Copenhaver.)

Cordell, Joseph C., Glenshaw, Pa. Spanner wrench. 1,817,352; Aug. 4.

Cory, Horace, and Company. (See Price, William P., assignor.)

Counter Cooking Machine Corporation. (See Cookson, Clarence F., assignor.)

Couse, Kibbey W. (See Christie, H. E., and Couse.)

Crabbs, Herbert J., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Disconnecting switch. 1,817,065; Aug. 4.

Craddock, Frederick L., New York, assignor to Mixing Equipment Company, Inc., Rochester, N. Y. Safety mixer. 1,817,353; Aug. 4.

Craig, Edward, St. Joseph, assignor to Saranac Automatic Machine Corporation, Benton Harbor, Mich. Stapling machine. 1,817,803; Aug. 4.

Craig, Palmer H., Cincinnati, Ohio, assignor to Invex Corporation. Sound reproducting system. 1,817,612; Aug. 4.

Craig, Richard M., assignor, by mesne assignments, to T. W. Menefee, San Antonio, Tex. Display apparatus. 1,817,508; Aug. 4.

Cremean, William F., Toledo, Ohio. Dustguard. 1,817,238; Aug. 4.

Crockett, Thomas E., Tulsa County, assignor of one-half to W. H. Blakley and J. R. Cole, Tulsa, Okla. Unloading valve. 1,817,127; Aug. 4.

Crompton & Knowles Loom Works. (See Ahlin, John G., assignor.)

Crompton & Knowles Loom Works. (See Bergstrom, Carl P., assignor.)

Crompton & Knowles Loom Works. (See Brown, Clyde E., assignor.)

Crompton & Knowles Loom Works. (See Gordon, Albert A., assignor.)

Crompton & Knowles Loom Works. (See Hartman, James F., assignor.)

Crompton & Knowles Loom Works. (See Holmes, Elbridge R., assignor.)

Crompton & Knowles Loom Works. (See Kronoff, Clarence R., assignor.)

Crompton & Knowles Loom Works. (See Nelson, Samuel A., assignor.)

Crompton & Knowles Loom Works. (See Payne, Oscar V., assignor.)

Crompton & Knowles Loom Works. (See Regan, John, assignor.)

Crompton & Knowles Loom Works. (See Turner, Richard G., assignor.)

Crompton & Knowles Loom Works. (See Wakefield, Walter H., assignor.)

Cross Development Corporation. (See Cross, Roy, assignor.)

Cross, Roy, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del. Apparatus for treating hydrocarbons. 1,816,827; Aug. 4.

Crouse-Hinds Company. (See Bissell, Carl H., assignor.)

Crow, Benjamin F., Dallas, Tex. Gas burner. 1,817,066; Aug. 4.

Crow, Leonard R., Terre Haute, Ind. Supporting device for electrical apparatus. 1,817,239; Aug. 4.

Crowe, Patrick H. (See Poux, N. J., Hall, and Crowe.)

Crowell, Erd V., Los Angeles, Calif. Drill stem. 1,817,067; Aug. 4.

Crowson, Herbert W., New York, N. Y., assignor to Pullclean Manufacturing Corporation, Bridgeport, Conn. Towel cabinet. 1,817,479; Aug. 4.

Crozier, Elmer L., Birmingham, Ala. Aeroplane. Re18,143; Aug. 4.

Curme, George O. jr., White Plains, N. Y., assignor to Carbide and Carbon Chemicals Corporation. Noninflammable liquid. 1,817,893; Aug. 4.

Curtis, Edward E., Lakewood, assignor to The Osborn Manufacturing Company, Cleveland, Ohio. Rotary brush. 1,817,176; Aug. 4.

Cushman, Everett B., Hollywood, assignor of one-half to Food Machinery Corporation, San Jose, Calif. Curing alfalfa hay and other vegetative products. 1,816,998; Aug. 4.

Cuthbertson, Alexander R., New York, N. Y. Concrete blower. 1,817,240; Aug. 4.

Cutler, Samuel C., Murray Hill, N. J. Air washing apparatus. 1,816,828; Aug. 4.

Cutting, Fulton, and J. L. Taylor, New York, N. Y. Electrical coupling system. 1,817,294; Aug. 4.

Cyr, Howard M., and R. K. Waring, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y. Treatment of zinciferous materials containing cadmium. 1,817,068; Aug. 4.

Daane, Arthur J., assignor to The Acme Printing Appliance Co., Chicago, Ill. Ink distributing mechanism for printing presses. 1,817,677; Aug. 4.

Damm, Paul, Hindenburg, Germany, assignor to The Koppers Company. Purification of benzenoid hydrocarbon oils. 1,817,804; Aug. 4.

Danco, Leon A., Rockville Center, N. Y., assignor to McKesson & Robbins, Incorporated, Bridgeport, Conn. Container. 1,817,128; Aug. 4.

Dangelmajer, Charles, Niagara Falls, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company New York, N. Y. Stabilization of trichloroethylene. 1,816,895; Aug. 4.

Dardelet, Hugues L., Nantes, France, assignor, by mesne assignments, to Dardelet Threadlock Corporation, New York, N. Y. Screw thread coupled members. 1,817,295; Aug. 4.

Dardelet Threadlock Corporation. (See Dardelet, Hugues L., assignor.)

Davenport, Arthur E., Maywood, Ill. Metallic crate. 1,817,805; Aug. 4.

Davies, David B., Shelton, Wash. Circulating system for pulp digesters. 1,817,129; Aug. 4.

Davis, Clarence T., Worcester, Mass., assignor to Royal Worcester Corset Company. Maternity corset. 1,817,408; Aug. 4.

Davis, Elmer W., Newton, Mass., assignor, by mesne assignments, to Remington Rand Inc., Buffalo, N. Y. Record tray. 1,817,073; Aug. 4.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Beam hoist for looms. 1,817,894; Aug. 4.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Self-threading shuttle. 1,817,895; Aug. 4.

Davis, Kenneth, St. Benedict, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del. Method and mechanism for separating intermixed divided materials. 1,817,296; Aug. 4.

Davis, Kenneth, Ebensburg, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del. Process and mechanism for separating intermixed divided materials. 1,817,297; Aug. 4.

Davis, Kenneth, Ebensburg, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del. Process and mechanism for separating intermixed divided materials. 1,817,298; Aug. 4.

Davis, Vernon J., Buffalo, assignor to American Radiator Company, New York, N. Y. Shake-out apparatus. 1,817,613; Aug. 4.

Day, William H., East Haven, Conn., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Index or file. 1,817,031; Aug. 4.

Dayton Scale Company. (See Boyer, Frederick G. L., assignor.)

Dayton Scale Company. (See Rogers, Joseph E., assignor.)

De Andia-Yrarrázaval, Gabriel G., London, England. Wireless loud speaker and the like. 1,817,354; Aug. 4.

Decker, Arnold J. (See Forsman, V. H., Decker, and Edwards.)

Deinstein, Abraham, Chicago, Ill. Cigarette. 1,817,546; Aug. 4.

Delamere, Rudolf D., Toronto, Ontario, assignor to Delamere and Williams, Toronto, Canada. Time controlled electric switch. 1,817,806; Aug. 4.

Delamere and Williams. (See Delamere, Rudolf D., assignor.)

Delco-Light Company. (See Dickey, Ernest, assignor.)

Delco-Remy Corporation. (See Dyer, John B., assignor.)

Delco-Remy Corporation. (See Goad, L. C., and Walsmith, assignors.)

Delco-Remy Corporation. (See Perkins, Laurence M., assignor.)

Delco-Remy Corporation. (See Phelps, A. W., and Penn., assignors.)

De Leeuw, Adolph L., Plainfield, N. J. Hydraulic upright drill. 1,816,829; Aug. 4.

Delta-Star Electric Company, The. (See Van Ryan, T., and Alsaker, assignors.)

De Mask, Martin J., Pittsfield, Mass. Plug. 1,817,879; Aug. 4.

Demonet, Eugene A., Brooklyn, N. Y., and P. S. Copenhaver, Bayonne, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Potential distributing block. 1,817,737; Aug. 4.

Demonet, Eugene A., Brooklyn, N. Y., and P. S. Copenhaver, Bayonne, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Jack panel unit. 1,817,738; Aug. 4.

De Reamer, Frank C., Bridgeport, Conn., assignor to General Electric Company. Electric switch. 1,817,807; Aug. 4.

De Silva, Roberto, and M. E. Long, assignors to Carl D. Newton, San Antonio, Tex. Automatic cutting, stamping, and photo printing machine. 1,817,880; Aug. 4.

Detroit Steel Products Company. (See Robinson, C. A., and Frazier, assignors.)

Dewbery, George A., Oshawa, Ontario, Canada. Hood catch for motor vehicles. 1,817,241; Aug. 4.

De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,817,299; Aug. 4.

Diamond Power Specialty Corporation. (See Vennum, George C., assignor.)

Dickey, Alfred B., assignor to Gulf Production Company, Fort Worth, Tex. Blue printing apparatus. 1,817,242; Aug. 4.

Dickey, Ernest, assignor to Delco-Light Company, Dayton, Ohio. Engine. 1,817,069; Aug. 4.

Dietzgen, Eugene, Company. (See Langsner, Adolph, assignor.)

Dinichert, Roger. (See Aebi, O., and Dinichert.)

Dintilhac, Jean G., assignor to the Society "Yacco S. A. F.", Paris, France. Apparatus for determining the frictional qualities of a liquid. 1,817,739; Aug. 4.

Dodd, Roy L., Wauwatosa, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Duct terminal. 1,817,130; Aug. 4.

Doherty Research Company. (See Lowe, Russell E., assignor.)

Doll, Charles F., Aberdeen, Wash. Clutch. 1,816,929; Aug. 4.

Dollack, Charles, assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y. Poise. 1,817,131; Aug. 4.

Dolomite Incorporated. (See Barrett, Harvey N., assignor.)

Dondlinger, Eugene J., Chicago, Ill. Dumping gear. 1,817,132; Aug. 4.

Doolittle, Franklin M., New Haven, Conn., assignor to Radio Corporation of America. Sound-recording and sound-reproducing and locating apparatus. 1,817,177; Aug. 4.

Dorogi, Dr., es Tarsa Gummigyar R. T. (See Dorogi, István and L., assignors.)

Dorogi, István and L., Budapest, Hungary, assignors of one-half to Dr. Dorogi es Tarsa Gummigyar R. T., Budapest-Albertfalva, Hungary. Rubber footwear. 1,817,300; Aug. 4.

Dorogi, Lajos. (See Dorogi, István and L.)

Doughnut Machine Corporation. (See Hunter, Herbert T., assignor.)

Dow, Alexander, New York, N. Y., assignor to Dow Patents Holding Corporation. Starter mechanism for internal combustion engines. 1,817,178; Aug. 4.

Dow, Alexander, New York, N. Y., assignor to Dow Patents Holding Corporation. Starter mechanism for engines. 1,817,179; Aug. 4.

Dow Chemical Company, The. (See Putnam, S. W., and Poffenberger, assignors.)

Dow Patents Holding Corporation. (See Dow, Alexander, assignor.)

Dräger, Otto H., Lubeck, Germany. Oxygen breathing implement, particularly for aeronauts. 1,817,881; Aug. 4.

Drake, Alden M., assignor to Greenfield Tap and Die Corporation, Greenfield, Mass. Control mechanism for internal grinding machines. 1,817,180; Aug. 4.

Draper Corporation. (See Davis, Harry A., assignor.)

Dreher, Otto. (See Meyer, G. J., Dreher, and Campo.)

Dresser, Clarence J. (See Meunier, L. F., and Dresser.)

Dreyfus, Henry, London, England. Manufacture of anhydrides of aliphatic acids. 1,817,614; Aug. 4.

Driggs, Frank H., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Preparation of metal hydrides. 1,816,830; Aug. 4.

Dry-Zero Corporation. (See Lindsay, H. B., and Clements, assignor.)

Dubilier Condenser Corporation. (See Capicotto, James V., assignor.)

Dubilier Condenser Corporation. (See Vawter, Charles E., assignor.)

Duchesne, Ernest, Schnectady, N. Y., assignor to Greenfield Tap & Die Corporation, Greenfield, Mass. Stay bolt tap. 1,817,133; Aug. 4.

Dudley Research Corporation. (See Lewy, Dudley D., assignor.)

Duncan, Levi H. (See Armstrong, J. R., and Duncan.)

Dunlap, Edward J. (See Braillier, P. S., Dunlap, and Muggleton.)

Dunlop Rubber Company, et al. (See Willshaw, Harry, Graham, and Ramsbottom, assignors.)

Dunn, Milton, Aberdeen, Idaho. Vending machine. 1,817,740; Aug. 4.

Dunning, Orville M., Orange, assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Combined electrical recorder and reproducer for phonographs. 1,816,831; Aug. 4.

Dunseth, Clifford A., Kansas City, Mo. Meat cutting device. 1,817,678; Aug. 4.

Dunshenth, Percy, Sidcup, assignor to W. T. Henley's Telegraph Works Company Limited, London, England. Extrusion of metal pipes and the like. 1,817,301; Aug. 4.

Du Pont, E. I., de Nemours & Company. (See McGill, Russell, assignor.)

Durand, Nelson C., East Orange, and S. G. Langley, Maplewood, assignors to Thomas A. Edison, Incorporated, West Orange, N. J. Phonograph. 1,816,896; Aug. 4.

Dur-O-Lite Pencil Company. (See Lynn, John P., assignor.)

Dyer, John B., assignor to Delco-Remy Corporation, Anderson, Ind. Engine starting device. 1,817,480; Aug. 4.

E-K Medical Gas Laboratories, Incorporated. (See Horner, Aurelius P., assignor.)

Eames, William F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,817,509; Aug. 4.

Eaton, George M., assignor to Spang, Chalfant & Company, Inc., Pittsburgh, Pa. Making tight threaded joints. 1,817,808; Aug. 4.

Ebeling, Charles W., New York, N. Y., assignor to Harrison W. Rogers, Incorporated. Synchronized photography and sound recording and reproducing. 1,816,832; Aug. 4.

Eberhard, Heinrich, Berlin, Germany, assignor to Radio Corporation of America. Piezo-electric frequency meter. 1,817,030; Aug. 4.

Eberhard, Heinrich, Berlin-Friedenau, Germany, assignor to Radio Corporation of America. Determining electrical axes in crystals. 1,817,181; Aug. 4.

Eclipse Machine Company. (See Kirkham, Charles B., assignor.)

Economy Irrigation Company. (See McJannet, William J., assignor.)

Economy Irrigation Company. (See Todd, William C., assignor.)

Eddy, Roy E., Kansas City, Mo. Tire chain. 1,817,547; Aug. 4.

Edes, Dana H., et al. (See Chenery, Henry L., assignor.)

Edison, Thomas A., Incorporated. (See Dunning, Orville M., assignor.)

Edison, Thomas A., Incorporated. (See Durand, N. C., and Langley, assignors.)

Edison, Thomas A., Incorporated. (See Moore, Sherwood T., assignor.)

Edmands, William H. (See McFadyen, John C., assignor.)

Edwards, Arthur W. (See Forsman, V. H., Decker, and Edwards.)

Ehlers, Edward, Rockaway, N. J. Tie for reenforcing rods. 1,816,833; Aug. 4.

Eighmey, David T., Long Island City, assignor to Fairchild Aerial Camera Corporation, New York, N. Y. Film spool. 1,817,134; Aug. 4.

Ellersgaard, Asger, assignor to Link-Belt Company, Chicago, Ill. Excavating machine. 1,817,809; Aug. 4.

Elnbinder, Philip H., Denver, Colo. Combined coat and vest. 1,817,302; Aug. 4.

Eksergian, Carolus L., Detroit, Mich., and W. A. Weightman, Philadelphia, assignors to Budd Wheel Company, Philadelphia, Pa. Bar cutting mechanism. 1,817,070; Aug. 4.

Electrons, Inc. (See Meyer F., and Spanner, assignors.)

Elgin National Watch Company. (See Sloan, Edward C., assignor.)

Elko Chemical Company. (See Masters, Carl L., assignor.)

Elliott, Harold F., Palo Alto, Calif., assignor to Victor Talking Machine Company, Camden, N. J. Vacuum tube mounting. 1,817,355; Aug. 4.

Elliotte, Creed C., University of Richmond, Va. Toy. 1,817,882; Aug. 4.

Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Treatment of materials made with or containing cellulose derivatives. 1,817,741; Aug. 4.

Emerson, George H., Baltimore, Md. Feed-water heating system for locomotives. 1,817,811; Aug. 4.

Emerson, Roger F., Scotia, N. Y., assignor to General Electric Company. Motor control system. 1,817,810; Aug. 4.

Emsco Derrick & Equipment Company, et al. (See Bennett, Edwin O., assignor.)

Ensminger, Charles C., Jacksonville, Fla. Agricultural machine. 1,816,999; Aug. 4.

Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)

Enterprise Railway Equipment Company. (See Campbell, A., and Willard, assignors.)

Eppler, Andrew, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Pressing machine for use in the manufacture of boots and shoes. 1,816,962; Aug. 4.

Eppler, Andrew, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Pressing machine for use in the manufacture of boots and shoes. 1,816,963; Aug. 4.

Escobedo, Pablo, assignor of one-half to California Sitton, East St. Louis, Ill. Submarine. 1,817,742; Aug. 4.

Esses, Edward I. (See Esses, Sam I. and E. I.)

Esses, Sam I. and E. I., New York, N. Y. Service station. 1,817,679; Aug. 4.

Essig, Gottlieb F., Philadelphia, Pa. Slicing machine. 1,817,303; Aug. 4.

Estapé, José M., Habana, Cuba. Producing pulp. 1,817,548; Aug. 4.

Euclid Crane & Hoist Company, The. (See Armington, George E., assignor.)

Eva, José M., San Francisco, Calif. Door hinge and check. 1,816,834; Aug. 4.

Evans, Vincent J., Lakewood, assignor to The Cleveland Heater Company, Cleveland, Ohio. Storage automatic water heater. 1,817,549; Aug. 4.

Ewart, William E., Seattle Wash. Two cycle gas engine. 1,817,510; Aug. 4.

Ewertz, Eric H., Elizabeth, N. J. Vessel. 1,817,071; Aug. 4.

Ewertz, Eric H., Elizabeth, N. J. Vessel. 1,817,072; Aug. 4.

F. & N. Lawn Mower Company. (See Lontz, Harry R., assignor.)

Fabrey, William H. (See Butler, W. L., Fabrey, and Weber.)

Fafnir Bearing Company. (See Melcher, Lee W., assignor.)

Fairchild Aerial Camera Corporation. (See Eighmey, David T., assignor.)

Fairchild, Sherman M., New York, N. Y. Driving and controlling mechanism for automatic cameras. 1,817,182; Aug. 4.

Fairchild, William, assignor to A. P. W. Paper Co., Albany, N. Y. Guarded cutter. 1,817,481; Aug. 4.

Fairclough & Gold, Inc. (See Stam, Jesse, assignor.)

Farber, Clayton W., Bowmanstown, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Manufacture of lithopone. 1,817,183; Aug. 4.

Faries Manufacturing Company. (See Hansen, Jasper, assignor.)

Fedderman, George C., and G. W. Martin, Detroit, Mich.; said Martin assignor to said Fedderman. Load securing device. 1,816,807; Aug. 4.

Federal Glass Company, The. (See Nicholson, Albert H., assignor.)

Felt & Tarrant Manufacturing Company. (See Newman, N. E., and Niemann, assignors.)

Fenn, Margaret F. (See Fenn, William B., assignor.)

Fenn, William B., assignor to M. F. Fenn, Port Washington, N. Y. Preventing the collapse of containers during vacuumizing, sterilizing, and sealing. 1,817,550; Aug. 4.

Ferguson, Cary E., and C. R. Shockency, Lima, Ohio. Flue marker. 1,817,243; Aug. 4.

Few, Sonia F., Niagara Falls, N. Y. Airplane. 1,816,698; Aug. 4.

Fiberloid Corporation, The. (See Scott, Creston W., assignor.)

Firge, Carroll C., Chicago, Ill. Roof and shingle securing means. 1,817,743; Aug. 4.

Finn, Charles A., assignor to Belle City Malleable Iron Company, Racine, Wis. Annealing pot. 1,816,930; Aug. 4.

Finney, Alfred C., Schenectady, N. Y., assignor to General Electric Company. Indicating system. 1,817,744; Aug. 4.

Fischer, Paul E., Milwaukee, Wis. Carton and carton opener. 1,816,835; Aug. 4.

Fisher, George F., Quincy, Mass., assignor to Morgan & Wright, Detroit, Mich. Hollow cushion tire. 1,817,356; Aug. 4.

Fisher, James B., Waukesha, Wis. Humidifier. 1,817,357; Aug. 4.

Flanders, Paul B. (See Smythe, E. H., and Flanders.)

Fletcher, Harry R., Belmont, Mass., assignor to Markem Machine Company, Keene, N. H. Marking machine. 1,817,358; Aug. 4.

Flowers, Henry F., Findlay, Ohio. Dump vehicle. 1,817,681; Aug. 4.

Foley, Francis J., Norwood, Mass. Radiocabinet. Des. 84,778; Aug. 4.

Follmer, Clogg & Company. (See Brown, James L., jr., assignor.)

Food Machinery Corporation. (See Cushman, Everett B., assignor.)

Ford, Eugene A., Scarsdale, assignor to The Tabulating Machine Company, Endicott, N. Y. Card sorting machine. 1,817,511; Aug. 4.

Forsman, Victor H., Detroit, A. J. Decker and A. W. Edwards, assignors to All-Metal Products Company, Wyandotte, Mich. Repeating air gun. 1,817,745; Aug. 4.

Foster, Harold B., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Flaked phthalic anhydride. 1,817,304; Aug. 4.

Foth, Carl F., Berlin, Germany. Photographic shutter. 1,816,964; Aug. 4.

Fowler, Frank E., Athens, Ga. Printing machine. 1,817,812; Aug. 4.

Fox, Charles A., Deer Lodge, Mont. Electric switch. 1,817,244; Aug. 4.

Franke, Robert. (See Schmidt, M. P., Neugebauer, and Franke.)

Frazier, Kenneth S. (See Robinson, C. A., and Frazier.)

Freed, Meyer L., assignor to H. A. Golwynne, New York, N. Y. Coating for metal casting molds and cores. 1,817,245; Aug. 4.

Freeman, Benjamin W., Cincinnati, Ohio, W. S. Herschel, St. Louis, Mo., and H. E. Patterson, Columbus, assignors to The Louis G. Freeman Company, Cincinnati, Ohio. Machine for marking, ornamenting, and cementing shoes. 1,817,359; Aug. 4.

Freeman-Doughaday Company. (See Allison, James F., assignor.)

Freeman, Louis G., Company, The. (See Freeman, B. W., Herschel, and Patterson, assignors.)

French, Thomas J., Minneapolis, Minn. Window defroster. 1,817,205; Aug. 4.

Freuder, Leo., Coney Island, assignor to Hydrographic Products Company, Inc., New York, N. Y. Intaglio printing method. 1,817,435; Aug. 4.

Freyn Engineering Company. (See Willcox, F. H., and Hayes, assignors.)

Frick Company. (See Small, Norman M., assignor.)

Frick Company. (See Small, N. M., and Buehler, assignors.)

Fridolph, Annette, assignor to A. B. A. Specialties Company, Inc., New York, N. Y. Nether garment. 1,817,360; Aug. 4.

Friedman, Arthur, assignor to The Cleveland Heater Company, Cleveland, Ohio. Coupling member. 1,817,615; Aug. 4.

Friedrich Deckel, Prazisionsmechnik und Maschinenbau. (See Braren, Lorenz, K., assignor.)

Frostee Foods Company. (See Birdseye, Clarence, assignor.)

Fuchs, Edward L. and W. L., St. Louis, Mo. Embossing fabrics. 1,817,184; Aug. 4.

Fuchs, William L. (See Fuchs, Edward L. and W. L.)

Gabrieau, Joseph D., Richland, Wash. Ditch trimmer. 1,817,306; Aug. 4.

Gade, Einar K., Chiswick, assignor to Gnomist & British Novelties Limited, London, England. Combined calendar and money box, savings bank, or other collection box. 1,817,682; Aug. 4.

Gagen, Charles H., New York, N. Y., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Cleaning and coating air filters. 1,816,836; Aug. 4.

Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,817,512; Aug. 4.

Gallagher, Arthur D. (See Lindgren, A. C., and Gallagher.)

Galloway, General F., Fayette, Ala. Cultivator. 1,817,551; Aug. 4.

Galloway, Robert M., assignor to The National Automatic Tool Company, Richmond, Ind. Continuous automatic hydraulic machine. 1,817,552; Aug. 4.

Ganser, Carl A., Hartford, Conn. Finishing cadmium plated goods. 1,816,837; Aug. 4.

Gardine, Manuel C., St. Louis, Mo. Lockable key ring. 1,817,246; Aug. 4.

Gardner-Denver Company. (See Clark, Omar E., assignor.)

Garland Manufacturing Company. (See Cobb, Frederick G., assignor.)

Garretson, Davis R., Whittier, Calif. Brush rake. 1,817,361; Aug. 4.

Gay, Frazer W., Newark, N. J. Protective system. 1,816,838; Aug. 4.

Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Inductance system. 1,817,247; Aug. 4.

Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Adjustable inductance system. 1,817,248; Aug. 4.

Geiger, Adolph, Elizabeth, N. J. Stencil roller. 1,817,683; Aug. 4.

Gellner, Belle B., trustee. (See Graver, Edwin H., assignor.)

General American Tank Car Corporation. (See Pierce, Raymond C., assignor.)

General Aviation Corporation. (See Thaden, Herbert V., assignor.)

General Chemical Company. (See Clark, Cyril B., assignor.)

General Electric Company. (See Andrews, Paul D., assignor.)

General Electric Company. (See Baker, Isaac F., assignor.)

General Electric Company. (See Becq, André, assignor.)

General Electric Company. (See De Reamer, Frank C., assignor.)

General Electric Company. (See Emerson, Roger F., assignor.)

General Electric Company. (See Finney, Alfred C., assignor.)

General Electric Company. (See Gooskens, H., and van der Poel, assignors.)

General Electric Company. (See Lühr, Wilhelm, assignor.)

General Electric Company. (See McNairy, Jacob W., assignor.)

General Electric Company. (See McSheen, Edward W., assignor.)

General Electric Company. (See Prince, David C., assignor.)

General Electric Company. (See Purington, Ellison S., assignor.)

General Electric Company. (See Rex, Harold B., assignor.)

General Electric Company. (See Steiner, Oscar, assignor.)

General Electric Company. (See Taniguchi, Michiwo, assignor.)

General Electric Company. (See Tsuyuki, Keiji, assignor.)

General Electric Company. (See Valentine, Irving R., assignor.)

General Electric Company. (See Viennneau, Jacob J., assignor.)

General Machinery Corporation. (See Byerlein, Arthur A., assignor.)

General Motors Radio Corporation. (See Marvel, Orin E., assignor.)

Gentry, Douglas B., Crozet, Va. Demountable rim. 1,817,813; Aug. 4.

George, James S., assignor to Scovill Manufacturing Company, Waterbury, Conn. Floor marker. 1,816,839; Aug. 4.

Gerčich, Frederick A., assignor to Hammer-Bray Company, Oakland, Calif. Gas stove. 1,817,362; Aug. 4.

Gertler, Hyman, Montreal, Quebec, Canada. Infant's crib. 1,816,965; Aug. 4.

Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Rubber shackle. 1,817,436; Aug. 4.

Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Resilient mounting bracket. 1,817,482; Aug. 4.

Gibbons, Willis A., Great Neck, N. Y., assignor to Morgan & Wright, Detroit, Mich. Treating unvulcanized rubber surfaces. 1,817,363; Aug. 4.

Gilbert & Barker Manufacturing Company. (See Grisé, Alfred L., assignor.)

Gilbert, William L., Clock Company. (See Hodge, Albert P., assignor.)

Gill, George W., assignor to W. E. Knopp, Battle Creek, Mich. Valve-in-head double action bell ringer for locomotive engines. 1,817,032; Aug. 4.

Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)

Gilowitz, Benjamin, New York, assignor of one-eighth to J. Smith, and twenty per cent to B. S. Steinberg, Bronx, New York, N. Y. Composite shoe heel sheet. 1,817,249; Aug. 4.

Giustiniani, Salvatore, New York, N. Y. Crosshead. 1,817,684; Aug. 4.

Glasgow, John G., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Steam distillation. 1,817,250; Aug. 4.

Glass, Clemmie F. (See McCarley, W. D., assignor.)

Glemby Company, The. (See Seidner, Leo, assignor.)

Glessner, Charles E., Portland, Oreg. Aircraft control. 1,817,074; Aug. 4.

Globe Machine Manufacturing Company. (See Jayne, Ames R., assignor.)

Gnomist & British Novelties Limited. (See Gade, Einar K., assignor.)

Gond, Louis C., and F. D. Walsmith, assignors to Delco-Remy Corporation, Muncie, Ind. Casting machine. 1,817,483; Aug. 4.

Godel, Howard F., Portland, Oreg. Advertising device, 1,816,899; Aug. 4.
Goebel, Tadeusz, Lwow, Poland. Grate. 1,817,484; Aug. 4.
Goff, William F., Akron, Ohio. Jumping rope. 1,817,616; Aug. 4.
Going, George G., Middletown, Conn., assignor, by mesne assignments, to Remington Typewriter Company. Typewriting machine. 1,817,251; Aug. 4.
Going, George G., Middletown, Conn., assignor, by mesne assignments, to Remington Typewriter Company. Typewriting machine. 1,817,252; Aug. 4.
Going, George G., Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,817,253; Aug. 4.
Going, George G., Glenbrook, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,817,254; Aug. 4.
Goldsmith, Hugo, assignor to The P. Goldsmith Sons Company, Cincinnati, Ohio. Tackling and blocking dummy for football practice. 1,817,364; Aug. 4.
Goldsmith, P., Sons Company, The. (See Goldsmith, Hugo, assignor.)
Goldwyn, George I., Chicago, Ill. Treating used burlap bags. 1,816,840; Aug. 4.
Golwynne, Henry A. (See Freed, Meyer L., assignor.)
Goodrich, Norris E., assignor to Sanitarium Equipment Company, Battle Creek, Mich. Massaging machine. 1,817,553; Aug. 4.
Goodrum, Thomas J., Houston, Tex. Fish trap. 1,817,185; Aug. 4.
Goodyear, Charles H., Portland, Oreg. Collapsible box. 1,817,135; Aug. 4.
Gooskens, Henricus, and J. M. van der Poel, Eindhoven, Netherlands, assignors to General Electric Company. Basing apparatus. 1,817,746; Aug. 4.
Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread extractor for weft replenishing looms. 1,817,136; Aug. 4.
Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread holder for looms. 1,817,137; Aug. 4.
Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle changing pick and pick loom. 1,817,138; Aug. 4.
Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom dobby. 1,817,139; Aug. 4.
Gorham, Walter G. (See Willshaw, H., Gorham, and Ramshottom.)
Gosch, William H., assignor to The Nolde and Horst Company, Reading, Pa. Stretching machine for stockings. 1,817,617; Aug. 4.
Gosch, William H., assignor to The Nolde and Horst Company, Reading, Pa. Hank bundling mechanism. 1,817,618; Aug. 4.
Goss, Harry T., Rutherford, N. J., assignor to Universal Gear Shift Corporation, New York, N. Y. Pneumatic gear shift control. 1,817,365; Aug. 4.
Goudet, Hughes. (See Bethenod, J., and Goudet.)
Grace, John F., Kearny, N. J., assignor to Worthington Pump and Machinery Corporation. Feed water heater. 1,816,841; Aug. 4.
Grace, John F., Kearny, N. J., assignor to Worthington Pump and Machinery Corporation. Feed water heater. 1,817,075; Aug. 4.
Graf, Franz, Baden, Switzerland. Electric hot water distributor. 1,817,366; Aug. 4.
Graff, Philip E., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Hospital table. 1,817,186; Aug. 4.
Graham, William A., assignor to Peoples Finance & Thrift Co., Houston, Tex. Water heating tank. 1,817,685; Aug. 4.
Gran, Albert G., Storm Lake, Iowa. Coin-controlled mechanism. 1,817,076; Aug. 4.
Granville, Bernard, New York, N. Y., assignor to Granville Holding Corporation. Flexible shaft. 1,817,000; Aug. 4.
Granville Holding Corporation. (See Granville, Bernard., assignor.)
Graver, Edwin H., assignor to B. B. Gellner, trustee, Cleveland, Ohio. Incinerator. 1,817,033; Aug. 4.
Gray, Albert S., and Ults A. Simmons, Wenatchee, Wash. Long pole power pruning saw. 1,816,966; Aug. 4.
Gray, Bertram P., Birmingham, England. Horseshoe. 1,817,814; Aug. 4.
Greaves, Abilio M. De S., New York, N. Y. Book cover. Des. 84,779; Aug. 4.
Green, Charles W., Ilion, N. Y., assignor to Remington Arms Company, Inc. Cash register. 1,817,815; Aug. 4.
Green, Charles W., Ilion, N. Y., assignor to Remington Arms Company. Cash register. 1,817,816; Aug. 4.
Green, Charles W., Ilion, N. Y., assignor to Remington Arms Company, Inc. Cash register. 1,817,817; Aug. 4.
Green, Irving W., Cranford, N. J., assignor to American Telephone and Telegraph Company. Telephone system. 1,816,967; Aug. 4.
Greenfield Tap and Die Corporation. (See Drake, Alden M., assignor.)
Greenfield Tap & Die Corporation. (See Duchesne, Ernest, assignor.)
Greenlee Bros. & Co. (See Abramson, J. H., and Swanson, assignors.)
Greenwald, David, New York, N. Y. Roof. 1,817,619; Aug. 4.
Greig, James W., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Ventilator for automobiles. 1,817,140; Aug. 4.
Greiman, George H., Garner, Iowa. Trench tractor. 1,817,367; Aug. 4.
Greutman, William J., C. A. Shook, and M. F. Brandt, Miller, Nebr. Wrench. 1,816,968; Aug. 4.
Grill, Selma, administratrix. (See Schmidt, William F.)
Grinke, Wilhelm, Hemelinger, near Bremen, Germany. Machine for cleaning timbers especially boards, beams, or the like. 1,816,969; Aug. 4.
Grisé, Alfred L., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing apparatus. 1,816,900; Aug. 4.
Grisé, Alfred L., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing apparatus. 1,816,901; Aug. 4.
Griswold, Darwin G., assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Polishing machine for spoons. 1,817,554; Aug. 4.
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,817,187; Aug. 4.
Grohoski, Frank C., South Chicago, Ill. Gas saving device. 1,817,555; Aug. 4.
Groove Lock Co. (See Leberman, Harry, assignor.)
Groove Lock Co. Inc. (See Zachman, William H., assignor.)
Grubman, Leo J., Belle Harbor, L. I., assignor to Margon Corporation, New York, N. Y. Eye mounting for dolls. 1,817,001; Aug. 4.
Grunwaldt, Frank E., Seattle, Wash. Gas furnace. 1,817,368; Aug. 4.
Gubelmann, William S., Buffalo, N. Y. Calculating machine. 1,817,451; Aug. 4.
Gulf Production Company. (See Dickey, Alfred B., assignor.)
Gulf Refining Company. (See Glasgow, John G., assignor.)
Gusmus, Leo, Sheffield, Ala. Safety lock for liquid dispensing apparatus. 1,817,409; Aug. 4.
Gustaveson, David, Los Angeles, Calif. Roller massage machine. 1,817,077; Aug. 4.
Gylleck, Olaf T., assignor to The Challenge Machinery Company, Grand Haven, Mich. Adjustable playing card block. 1,817,078; Aug. 4.
Haase, Leo G., and F. M. Brooks, Pasadena, assignors to Art Concrete Works, Pasadena, Calif. Extensible meter box. 1,817,307; Aug. 4.
Hadaway, John B., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Operating upon shoes. 1,816,902; Aug. 4.
Hadden, Robert, Atlantic City, N. J. Adjustable garment hanger. 1,817,369; Aug. 4.
Hageman, Aaron M., Bloomfield, and A. F. Lindstrom, Nutley, N. J., assignors to Westinghouse Lamp Company. Coating the interior wall of hollow bodies. 1,816,903; Aug. 4.
Haglund, Ture R., Stockholm, Sweden, assignor to International Patent Corporation. Refining ores or products containing aluminum oxide. 1,816,842; Aug. 4.
Hagstrom, Joseph E., Kansas City, Mo. Door holder. 1,817,452; Aug. 4.
Haight, Harry V., Sherbrooke, Quebec, Canada, assignor to Ingersoll-Rand Company, Jersey City, N. J. Bolt and locking sleeve. 1,817,188; Aug. 4.
Halbig, Paul and F. Kanfer, assignors to Dr. Alexander Wacker Gesellschaft fur Elektrochemische Industrie G. m. b. H., Munich, Germany. Preparing alkali metal alcoholates. 1,816,843; Aug. 4.
Hall, Edwin S., Arlington, assignor to Sterling Engineering and Manufacturing Corporation, Hyde Park, Mass. Boiler feed apparatus. 1,817,189; Aug. 4.
Hall, Ernest, Fairfax, Ala. Jacquard type loom. 1,817,818; Aug. 4.
Hall, Harold G., Oneonta, N. Y. Telephone signaling. 1,817,079; Aug. 4.
Hall, Virgil H. (See Poux, N. J., Hall, and Crowe.)
Hall, William, Heaton, Bolton, England. Jacking device for road vehicles. 1,817,190; Aug. 4.
Halstead, Charles G., Kansas City, Mo. Safety deposit box. 1,817,002; Aug. 4.
Hamilton Beach Manufacturing Company. (See Robinson, Patrick H., assignor.)
Hamilton, Reginald H., St. Albans, New Zealand. Self adjusting tappet. 1,817,620; Aug. 4.
Hamilton Standard Propeller Corporation, The. (See Hamilton, Thomas F., assignor.)
Hamilton, Thomas F., Milwaukee, Wis., assignor to The Hamilton Standard Propeller Corporation, West Homestead, Pa. Propeller for aircraft. 1,817,556; Aug. 4.
Hammer-Bray Company. (See Gercich, Frederick A., assignor.)
Hammerstrom, Henry H., assignor of one-half to H. M. Middagh, Los Angeles, Calif. Rotary motor. 1,817,370; Aug. 4.
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel support for rock drills. 1,817,308; Aug. 4.
Hansen, Jasper, assignor to Faries Manufacturing Company, Decatur, Ill. Dental lighting fixture. Des. 84,780; Aug. 4.

Hansen, Peter N., Emerson, Nebr. Micrometer depth gauge. 1,817,622; Aug. 4.
Harber, Laurence S., Peterborough, England, assignor to Baker Perkins Company, Incorporated, Saginaw, Mich. Dough molding machine. 1,816,844; Aug. 4.
Hardie, Robert W., Fanwood, N. J. Dividing strip. 1,817,309; Aug. 4.
Harding, Earle A., La Salle, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Co., New York, N. Y. Manufacture of organic chlorides. 1,816,845; Aug. 4.
Harding, Martha L., Philadelphia, Pa. Garment hanger. 1,817,621; Aug. 4.
Hardy, Charles R., Mount Vernon, assignor to The Superheater Company, New York, N. Y. Feed-water heater. Des. 84,781; Aug. 4.
Harmony, Minnie M., Canton, Ohio. Mail box station. 1,817,191; Aug. 4.
Harnagel, H. C. (See Nickerson, Cassious W., assignor.)
Hart, Hans, Munich, Germany. Folding boat. 1,817,557; Aug. 4.
Harter, Evan C., Sturgis, Mich. Base for chairs, stands, and the like. 1,817,558; Aug. 4.
Harter, Evan C., Sturgis, Mich. Base for chairs, stands, and the like. 1,817,559; Aug. 4.
Harter, Evan C., Sturgis, Mich. Base for chairs, tables, and the like. 1,817,560; Aug. 4.
Hartley, Ellis, assignor to Whitin Machine Works, Whitinsville, Mass. Apparatus for spinning yarn. 1,817,192; Aug. 4.
Hartley, Ralph V. L., South Orange, N. J. Internal combustion engine. 1,817,747; Aug. 4.
Hartman, James F., West Hazleton, Pa., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Electrical side slip feeler. 1,817,141; Aug. 4.
Hartmann, Max, assignor to the firm Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of physiologically active substances from female internal secretory organs. 1,817,686; Aug. 4.
Harvey, William H., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrical connecter. 1,816,846; Aug. 4.
Hasinger, Louis. (See Tragesser, A. H., and Hassinger.)
Hauch, Wendell M., New York, N. Y. Vanity box or case. 1,817,310; Aug. 4.
Hauenstein, Paul A., assignor to Vimco Mfg. Company, Inc., Buffalo, N. Y. Article securing bracket. 1,817,371; Aug. 4.
Hausmann, Lemuel M., Highland Park, and J. A. Widmer, assignors to Square D Company, Detroit, Mich. Attachment plug receptacle. 1,816,847; Aug. 4.
Hawkinson, Emil E., South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Spacer. 1,817,437; Aug. 4.
Hawley, Jesse G., Painted Post, N. Y. Coupling. 1,817,255; Aug. 4.
Hayes, John C. jr. (See Willcox, F. H., and Hayes.)
Headley, Frederick H., Birmingham, England. Perambulator or the like. 1,817,513; Aug. 4.
Heald, Jay M., Greenfield, Mass. Method of and mechanism for adjusting mowing machines. 1,817,372; Aug. 4.
Healey, Francis J., London, England. Variable velocity ratio gearing. 1,817,819; Aug. 4.
Hedde, Marie C. R., assignor to firm: La Societe dite: Societe Nouvelle de Metallisation, Paris, France. Obtainment of decorative effects upon textile fabrics by brilliant metallic deposits. 1,817,311; Aug. 4.
Hehn, Walter, Chicago, Ill. Combined stamping chase and palette. 1,817,142; Aug. 4.
Heidbrink, Jay A., Minneapolis, Minn. Anæsthetizing apparatus. 1,817,485; Aug. 4.
Helermann, Hugo. Frankfort-on-the-Main, Germany. Wrist-pin construction. Re18,144; Aug. 4.
Helkens, Robert, Lake Forest, Ill. Dirigible headlight. 1,817,256; Aug. 4.
Helmroth, Randolph, Maplewood, N. J. Butter handling device. 1,816,904; Aug. 4.
Hein, George N., San Francisco, Calif. Hypodermic syringe. 1,817,003; Aug. 4.
Heinrich, Jean M., assignor to Societe Des Moteurs Salmson, Paris, France. Magneto electric machine. 1,817,410; Aug. 4.
Heltzel, Joseph W., assignor to The Heltzel Steel Form and Iron Company, Warren, Ohio. Belting device. 1,817,687; Aug. 4.
Heltzel Steel Form and Iron Company, The. (See Heltzel, Joseph W., assignor.)
Helwig, Edward L., Bristol Township, Bucks County, Pa. Production of thiocyano derivatives. 1,816,848; Aug. 4.
Henderson, James B., Blackheath, England. Golf club and home practicing device. 1,817,896; Aug. 4.
Henderson, William. (See McMann, Warren R., assignor.)
Hendrickson, Fred K., Worcester, assignor to Whitin Machine Works, Whitinsville, Mass. Yarn separator. 1,817,143; Aug. 4.
Hendrickson, Fred K., Worcester, assignors to Whitin Machine Works, Whitinsville, Mass. Spindle for spinning or twisting machines. 1,817,144; Aug. 4.
Henley's, W. T., Telegraph Works Company Limited. (See Dunsheath, Percy, assignor.)
Henry, Raymond, Rock Island, Ill., and F. E. Bradfield, assignors, by mesne assignments, to O.-N. Spring Shackle Company, Davenport, Iowa. Spring connection. 1,817,438; Aug. 4.
Hercules Powder Company. (See Humphrey, Irvin W., assignor.)
Herschel William S. (See Freeman, B. W., Herschel, and Patterson.)
Hervey, Paul S., Des Moines, Iowa. Collapsible house moccasin. 1,817,623; Aug. 4.
Hess & Barker, Inc. (See Barker, Robert W., assignor.)
Hess, Gottfried., Winznau, near Olten, Switzerland. Anchor socket. 1,816,970; Aug. 4.
Hester, Edgar A., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical protective device. 1,817,486; Aug. 4.
Heyworth, John, Blackpool, P. J. Packmen, Highbury, London, and J. L. Mold, Acton, London, assignors of one-fourth to W. Manning, London, England. Reed instrument and more especially a saxophone. 1,817,487; Aug. 4.
Hicks, Donald E., Lansing, Mich. Vacuum valve grinding tool. 1,817,688; Aug. 4.
Highland Body Manufacturing Company, The. (See Roby, Harry L., assignor.)
Highway Trailer Company. (See Williams, Leroy E., assignor.)
Higley, Frank R., Cleveland Heights, Ohio, Internal combustion engine. 1,817,624; Aug. 4.
Higley, Frank R., Cleveland Heights, Ohio. Power transmission means. 1,817,820; Aug. 4.
Hildreth, A. L., et al. (See McLendon, Alex M., assignor.)
Himberger, Earl W., assignor to Pacific Marine Supply Company, Seattle, Wash. Buoy light. 1,817,312; Aug. 4.
Hirsch, Henry, Jersey City, N. J. Laundry device. 1,817,821; Aug. 4.
Hirvonen, Erik J., Pontiac, Mich. and W. W. Tuttle, deceased, Putnam, Conn., H. A. Tuttle, administrator, Upton, Mass., assignors, by mesne assignments, to Bendix Brake Company, South Bend, Ind. Support for brake backing plates. 1,817,748; Aug. 4.
Hlavaty, Otto J., Chicago, Ill. Plaquette. Des. 84,782; Aug. 4.
Hobart, Walter P., Minneapolis, Minn. Respiration meter. 1,817,145; Aug. 4.
Hodge, Albert P., assignor to William L. Gilbert Clock Company, Winsted, Conn. Compartment box. 1,817,562; Aug. 4.
Hoeft, Adolph R., Evanston, assignor to Hoeft & Company, Inc., North Chicago, Ill. Drinking fountain for poultry. 1,816,849; Aug. 4.
Hoeft & Company. (See Hoeft, Adolph R., assignor.)
Hoff, Carlton L., and T. P. Long, York, Pa., said Long assignor to said Hoff. Turbine. 1,816,971; Aug. 4.
Hofmann, Alfred, Palisade, N. J. Knitting machine. 1,817,822; Aug. 4.
Hofmann, Johannes W., Kotzschenbroda, near Dresden, Germany. Suspending device for conducting cables. 1,817,313; Aug. 4.
Hohn, Max P. E., assignor to the Firm "Universelle" Cigarettenmaschinenfabrik J. C. Muller & Co., Dresden, Germany. Planetary gearing for driving the shaft of the rotary cutter in cigarette rod making machines. 1,817,314; Aug. 4.
Holmes, Charles I., Chicago, Ill. Headrest. 1,817,625; Aug. 4.
Holmes, Elbridge R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle actuating mechanism for narrow ware looms. 1,817,146; Aug. 4.
Holtz, Frederick C., Springfield, Ill., assignor to Sangamo Electric Co., Springfield, Ill. Motor. Re18,145; Aug. 4.
Hoodless, William H., Philadelphia, Pa. Pump. 1,816,931; Aug. 4.
Hopkins, Edmund C., London, England. Conveyer. 1,817,373; Aug. 4.
Hopkins, Ralph Z., and E. F. Seger, Detroit, assignors to Hudson Motor Car Company, Detroit, Mich. Spray stencil. 1,817,147; Aug. 4.
Hormes, William T., Catonsville, Md. Locking device for doors. 1,817,689; Aug. 4.
Hornor, Aurelius P., Caldwell, assignor to E-K. Medical Gas Laboratories, Incorporated, West Orange, N. J. Stopping the travel of exploding and burning fluids. 1,817,148; Aug. 4.
Horsting, Bernard F., and G. C. Leppla, Chicago, Ill. Clip. 1,817,149; Aug. 4.
Horton, Joseph W., Cambridge, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Communication system. 1,816,905; Aug. 4.
Hotchkin, Paul M., Chicago, Ill. Cove and other lighting system. 1,817,034; Aug. 4.
Howard, George E. (See Carrie, J., and Howard.)
Howard, George E., Butler, Pa. Transmission mechanism. 1,817,080; Aug. 4.
Howe, Oliver J., Brockton, Mass., assignor to D. C. Rebhun, Cincinnati, Ohio. Stocking tree. 1,817,411; Aug. 4.
Hubbell, Harvey, jr., Bridgeport, Conn. Angle cord grip cap. 1,817,004; Aug. 4.
Hubert, Maryan J., Easthampton, Mass. Baking pan. 1,817,690; Aug. 4.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace edging. Des. 84,783; Aug. 4.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace edging. Des. 84,784; Aug. 4.
Hudson Motor Car Company. (See Greig, James W., assignor.)

Hudson Motor Car Company. (See Hopkins, R. Z., and Seger, assignors.)
Hueber, Henry, and J. R. Oishei, assignors to Trico Products Corporation, Buffalo, N. Y. Automatic windshield cleaner. 1,817,563; Aug. 4.
Hughes, James W., assignor to Budd Wheel Company, Philadelphia, Pa. Method and machine for rolling wheel disks. 1,817,035; Aug. 4.
Hughes, James W., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Wheel welding machine. 1,817,193; Aug. 4.
Huguenin, Georges, Le Locle, Switzerland. Novelty watch. 1,817,374; Aug. 4.
Hummel, Robert C., Everett, Wash., assignor to Westinghouse Electric & Manufacturing Company. Supervisory control. 1,817,439; Aug. 4.
Humphrey, Irvin W., Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del. Lacquer. 1,817,561; Aug. 4.
Hunt, Albert P. (See Washburn, Robert M., assignor.)
Hunt, J. Harold, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Securing device for hub caps. 1,817,194; Aug. 4.
Hunter, David E., assignor to Shaw-Walker Company, Muskegon, Mich. Furniture top construction. 1,817,453; Aug. 4.
Hunter, Herbert T., Catonsville, Md., assignor to Doughnut Machine Corporation, New York, N. Y. Cooking apparatus. 1,817,887; Aug. 4.
Hurd, Norman L., Brooklyn, assignor to C. H. Leach Company, New York, N. Y. Heat exchange apparatus. 1,816,850; Aug. 4.
Hutchings, Le Roi E., Buffalo, assignor to Remington Rand Inc., Tonawanda, N. Y. Index and signal. 1,817,564; Aug. 4.
Hutchinson, Arthur C., et al. (See Norton, William H., assignor.)
Hutt, Arthur C., Shrewsbury, assignor to The "Sentinel" Waggon Works Limited, London, England. Motor road vehicle. 1,817,514; Aug. 4.
Hvoslef, Fredrik W., assignor to Kohler Company, Kohler, Wis. Return baffle for flue doors. 1,817,150; Aug. 4.
Hydrographic Products Company. (See Freuder, Leo, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Steimmig, G., and Ulrich, assignors.)
Iacovino, Paul, Utica, N. Y. Perambulator attachment. 1,817,412; Aug. 4.
Ilg Electric Ventilating Company. (See Sutcliffe, Arthur G., assignor.)
Imblum Aeronautical Company. (See Imblum, Leo, assignor.)
Imblum, Leo, assignor to Imblum Aeronautical Company, Pueblo, Colo. Internal combustion engine. 1,817,375; Aug. 4.
Ingersoll-Rand Company. (See Haight, Harry V., assignor.)
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
Ingraham, E., Company, The. (See Simpson, John O., assignor.)
Ingram, Joseph R., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Age resisting vulcanized rubber compound. 1,816,851; Aug. 4.
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
International Harvester Company. (See Lindgren, A. C., and Gallagher, assignors.)
International Patent Corporation. (See Haglund, Ture R., assignor.)
International Time Recording Company of New York. (See Larrabee, Clinton E., assignor.)
Invex Corporation. (See Craig, Palmer H., assignor.)
Irving, Clarence B., Kansas City, Mo., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill. Device for securing together the binding edges of loose leaf filler sheets. 1,817,488; Aug. 4.
Irving Iron Works Company. (See Price, Paul L., assignor.)
Ito, Kinitsu, Imaise, Japan. Medical moxa heater. 1,817,823; Aug. 4.
Izquierdo, Angel, New Orleans, La. Drain strainer. 1,817,376; Aug. 4.
Jackson, Harold E., Detroit, Mich. Shock absorber. 1,817,195; Aug. 4.
Jacobs Bros. Co., The. (See Dollack, Charles, assignor.)
Jacobsen, Jens N., Alameda, Calif., assignor to The Pflauder Company, Rochester, N. Y. Detachable pipe sections. 1,817,691; Aug. 4.
Jaeger Machine Company, The. (See Mosel, J. H., and Bohmer, assignors.)
Jahoda, Klara et al. Heiresses. (See Jahoda R., and Lilienfeld, assignors.)
Jahoda, Rudolf, deceased, and L. Lilienfeld; K. Jahoda and A. Rankl, heiresses, assignors to L. Lilienfeld, Vienna, Austria. Fluorescent screen for X-rays and material used in making same. 1,817,005; Aug. 4.
Jakopec, George and Josip Samu, Chicago, Ill. Magic cards and planetary calculator. 1,817,824; Aug. 4.
James, Charles H. (See Kessler, E., and James.)
James, Roy W., Covina, Calif. Projectile. 1,817,377; Aug. 4.
Janssen, Henry, assignor to Textile Machine Works, Wyomissing, Pa. Braiding carrier. 1,817,626; Aug. 4.
Jansson, Gustav, Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Insulator. 1,816,852; Aug. 4.
Jarvis, Charles H., assignor to United Steel & Wire Company, Battle Creek, Mich. Price tag holder. 1,817,151; Aug. 4.
Jayne, Ames R., Tacoma, Wash., assignor to Globe Machine Manufacturing Company. Wood patch making machine. 1,816,853; Aug. 4.
Jennings, Irving C., South Norwalk, Conn. Vent valve for sewage ejectors. 1,817,196; Aug. 4.
Jessup, Alfred, Paris, France. Manufacture and purification of magnesium. 1,816,972; Aug. 4.
Johansson, Axel G., Nalden, Sweden. Barking machine. 1,817,413; Aug. 4.
Johnson, Frank L., Akron, Ohio. Collapsible core. 1,817,515; Aug. 4.
Johnson, George T., Company, The. (See Johnson, George T., assignor.)
Johnson, George T., White Plains, N. Y., assignor to The George T. Johnson Company, Boston, Mass. Roll paper. 1,817,897; Aug. 4.
Johnson, Gustaf, Duluth, Minn. Chain hook. 1,817,825; Aug. 4.
Jonas, Emil J., Cincinnati, Ohio. Automatic slack adjuster for brake rigging. 1,817,081; Aug. 4.
Jones, Thomas H., Woodthorpe, England. Circular knitting machine. 1,817,565; Aug. 4.
Jones, Thomas H., Woodthorpe, England. Circular knitting machine. 1,817,566; Aug. 4.
Jones, W. Barlett, Chicago, Ill. Sound transmission. 1,817,489; Aug. 4.
Jones, Warren C., Flushing, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electromagnetic device. 1,816,906; Aug. 4.
Jordahl, Anders, New York, N. Y., assignor to American Air Filter Company, Inc., Louisville, Ky. Filter apparatus. 1,816,854; Aug. 4.
Jordahl, Anders, New York, N. Y., assignor to American Air Filter Company, Inc., Louisville, Ky. Filter apparatus. 1,816,855; Aug. 4.
Jordan, O. F., Company. (See Protzeller, Harry W., assignor.)
Joy, Charles H., sr. (See Sauer, Louis J., assignor.)
Judt, Joseph, Chicago, Ill. Saw filing machine. 1,817,082; Aug. 4.
Juergens, James S., Morgantown, W. Va. Generator regulator. 1,817,378; Aug. 4.
Kalle & Co., Aktiengesellschaft. (See Schmidt, M. P., Neugebauer, and Franke, assignors.)
Kallmeyer, Theophilus, Willowbrook, Calif. Boiler feed regulator. 1,817,379; Aug. 4.
Kantorowicz, Julius, Breslau, Germany. Increasing the strength and resistibility against moisture of high molecular carbohydrates. 1,816,973; Aug. 4.
Karelitz, George B., Wilkinsburg, Pa. Vibrometer. 1,817,567; Aug. 4.
Karl-Keen Manufacturing Company. (See Spery, Philmore F., assignor.)
Karl, Heinrich, Jersey City, N. J. Combined track gauge control device and train stopping device. 1,817,380; Aug. 4.
Karlsson, Oscar V., Detroit, Mich. Micrometer construction. 1,817,516; Aug. 4.
Karlner, Arthur T., Pittsburgh, Pa. Open annealing sheet metal. 1,817,152; Aug. 4.
Kauffman, Frank I. (See Van Amburgh, C. L., and Russell, assignor.)
Kaufler, Felix. (See Halbig, P., and Kaufler.)
Kavanagh, Michael J., Gloversville, N. Y., assignors of one-third to F. A. Moore, Gloversville, N. Y., and one-third to Ole Strand, New York, N. Y. Street lighting waste receptacle. 1,816,974; Aug. 4.
Kay, Edgar B., deceased, Washington, D. C.; F. M. Kay executrix. Furnace. 1,817,459; Aug. 4.
Kay, Florence M., executrix. (See Kay, Edgar B.)
Kearney, Edward J., and J. B. Armitage, Wauwatosa, assignors to Kearney & Trecker Corporation, West Allis, Wis. Machine tool. 1,817,083; Aug. 4.
Kearney, Edward J., Wauwatosa, and R. S. Condon, Milwaukee, assignors to Kearney & Trecker Corporation, West Allis, Wis. Rate change device. 1,817,036; Aug. 4.
Kearney & Trecker Corporation. (See Kearney, E. J., and Armitage, assignors.)
Kearney & Trecker Corporation. (See Kearney, E. J., and Condon, assignors.)
Kee, Wilson E., Philadelphia, Pa. Making goblets and similar articles. 1,817,826; Aug. 4.
Keim, Melville, assignor to Apex Products Corp., Chicago, Ill. Vaporizer. Des. 84,785; Aug. 4.
Keith, David F., assignor to Perfection Stove Company, Cleveland, Ohio. Refrigeration apparatus. 1,816,975; Aug. 4.
Keller, Robert, Ennetbaden, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Circuit for protecting electric rectifiers from reverse currents. 1,817,084; Aug. 4.
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kelsey-Hayes Wheel Corporation. (See Stoler, Edward W., assignor.)
Kelsey-Hayes Wheel Corporation. (See White, John W., assignor.)

Kerns, Adin U., Altoona, Pa. Rotary plane. 1,817,197; Aug. 4.
Kerr, Harold H. (See O'Connell, J., and Kerr.)
Kerr, Howard J., Westfield, and C. U. Savoye, Hackensack, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Feed device. 1,817,627; Aug. 4.
Kessler, Alexander M., Brooklyn, N. Y., assignor to Premier Shoe Company, Inc. Shoe. 1,816,907; Aug. 4.
Kessler, Emil, and C. H. James, Brooklyn, N. Y. Chain clamp. 1,817,628; Aug. 4.
Kideney, Robert J., Ontario, Calif. Bath cabinet. 1,817,381; Aug. 4.
Kimberling, Henry R., St. Louis, Mo. Smoking pipe. 1,817,257; Aug. 4.
Kindel Furniture Company. (See Kindel, Thomas G., assignor.)
Kindel, Thomas G., Grand Rapids, Mich., assignor to Kindel Furniture Company. Bed or similar article. Des. 84,786; Aug. 4.
Kinder, Cloyd L., Denver, Colo. Internal combustion engine. 1,817,153; Aug. 4.
King, C. C., & Co. (See Smith, Walter E., assignor.)
King, Clifford G., Providence, R. I. Buckle. 1,817,440; Aug. 4.
King, Horace W., Berkeley, Calif., assignor to King-Seeley Corporation, Ann Arbor, Mich. Liquid depth indicating device. 1,816,932; Aug. 4.
King-Seeley Corporation. (See King, Horace W., assignor.)
Kinsbach, Frank, Houston, and H. M. Wheeler, Humble, Tex. Whipstock. 1,816,856; Aug. 4.
Kirkham, Charles B., Garden City, assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y. Engine starting device for aeroplanes. 1,816,976; Aug. 4.
Kittrell, Francis W. (See Adams, E. W., and Kittrell.)
Klemm, Emil R., assignor, by mesne assignments, to Emil R. Klemm, jr., Chicago, Ill. Engine governor. 1,817,629; Aug. 4.
Klemm, Emil R., jr. (See Klemm, Emil R., assignor.)
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Klinger, Karl, Gumpoldskirchen, Austria. Stop-cock. 1,817,258; Aug. 4.
Kloss, Thomas, Chicago, Ill. Garage door appliance. 1,816,977; Aug. 4.
Kloss, Ulrich, A. Peters, and K. Krüger, Berlin, Germany. Electric tramway, railway, and like system. 1,817,692; Aug. 4.
Kmieske, Florence A. (See Robinson, G., Kmieske, and Kmieske.)
Kmieske, Lewis A. (See Robinson, G., Kmieske, and Kmieske.)
Knapp, Robert T., Riverside, assignor to Riverside Cement Company, Los Angeles, Calif. Transmission of force by liquid pressure. 1,817,315; Aug. 4.
Knight, George D., Redwood City, assignor to Emory Winship, San Francisco, Calif. Printing ink base. 1,816,978; Aug. 4.
Knoll, William V., assignor to Midwest-Fulton Machine Company, Dayton, Ohio. Beater engine. 1,817,749; Aug. 4.
Knopp, Walter E. (See Gill, George W., assignor.)
Knoth, Hilary G., Detroit, Mich. Clothes prop. 1,817,568; Aug. 4.
Koen, Lew, Wilkes-Barre, Pa. Detachable clamp-head railroad spike. 1,817,569; Aug. 4.
Koerber, John C., South Orange, N. J. Toy vehicle. 1,817,316; Aug. 4.
Kohler Company. (See Hvoslef, Fredrik W., assignor.)
Kohler, L. Frank. (See Roblfs, Roland, assignor.)
Kolář, Václav, Modrany, near Prague, assignor to the firm Ceskomoravska-Kolben-Danek Company Limited, Prague, Czechoslovakia. Lighting plant for air-port landing places. 1,817,827; Aug. 4.
Kolb, Louis J. (See Worrall, Arthur G., assignor.)
Koons, Charles V., assignor to American Engineering Company, Philadelphia, Pa. Safety guard for cable hooks and the like. 1,816,979; Aug. 4.
Koppers Company, The. (See Damm, Paul, assignor.)
Koppers Company, The. (See Sperr, Frederick W., jr., assignor.)
Korth, Herman, Eagle River, Wis. Canoe paddle. 1,817,414; Aug. 4.
Kratzer, Herbert J., St. Louis, Mo. Power transmission system. 1,817,006; Aug. 4.
Krchma, Ignace J. (See Martin, J., and Krchma.)
Kreider, Irvin K., Lancaster, Pa. Silo elevator. 1,817,693; Aug. 4.
Kreis, Oscar C., assignor to Continental Motors Corporation, Detroit, Mich. Manifold. 1,817,382; Aug. 4.
Kroesen, Jay C., Belleville, N. J. Picture screen. 1,817,630; Aug. 4.
Kronoff, Clarence R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Electrical warp stop motion. 1,817,154; Aug. 4.
Krotee, Walter E., Philadelphia, Pa. Insulated driving connection. 1,817,517; Aug. 4.
Krug, Robert E., Granite City, Ill. Aeroplane. 1,817,007; Aug. 4.
Krug, Robert E., Granite City, Ill. Aeroplane. 1,817,008; Aug. 4.
Krueger, Kurt. (See Kloss, U., Peters, and Kruger.)
Kuczorra, Wilhelm, Berlin, Germany. Advertising apparatus. 1,817,828; Aug. 4.
Kulik, Irving, Brooklyn, N. Y., assignor to Cook Laboratories, Inc., Chicago, Ill. Syringe cartridge. 1,816,857; Aug. 4.
Kuntz, Minnie L., Whitefish, Mont. Dough raiser. 1,816,908; Aug. 4.
Kupper, Herman C., Inc. (See Anduze, Lucien, assignor.)
L. & R. Manufacturing Company. (See Regero, Frank, assignor.)
Lacher, Samuel, New York, N. Y. Fastener device for luggage. 1,817,518; Aug. 4.
Ladd, Edward M. (See Belt, J. S., and Ladd.)
Lafky, Albert F. J., Salem, Oreg. Luminous fishing spoon. 1,817,694; Aug. 4.
Lake, Clair D., and R. E. Page, Binghamton, assignors to The Tabulating Machine Company, Endicott, N. Y. Duplicating gang punch. 1,817,631; Aug. 4.
Langley, Cortlandt J., New York, N. Y., assignor to C. W. Gumstead, trustee, Highland Park, N. J. Match book. 1,817,009; Aug. 4.
Langley, Sam G. (See Durand, N. C., and Langley.)
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,817,198; Aug. 4.
Lanning, William H., Tuckahoe, N. Y. Crutch attachment. 1,817,829; Aug. 4.
Larrabee, Clinton E., Binghamton, assignor to International Time Recording Company of New York, Endicott, N. Y. Synchronizing mechanism for secondary clocks. 1,817,490; Aug. 4.
Larsen, Einer W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Material handling apparatus. 1,816,909; Aug. 4.
Laskey, Rose D., executrix. (See Laskey, William B.)
Laskey, William B., deceased, Brooklyn, N. Y., by R. D. Laskey, executrix, assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Method of and machine for producing confections. 1,817,383; Aug. 4.
La Societe dite: Societe Nouvelle de Metallisation. (See Hedde, Marie C. R., assignor.)
Latimer, John W. Lakewood, Ohio. Brake shoe. 1,817,570; Aug. 4.
Lauenstein, Otto., Wernigerode, Germany. Gripping device for praline and like wrapping machines. 1,817,695; Aug. 4.
Leach, C. H., Company. (See Hurd, Norman L., assignor.)
Leberman, Harry, assignor to Groove Lock Co. Inc., New York, N. Y. Fastening device. 1,816,858; Aug. 4.
Leduc, Marcel, assignor to Lignes Telegraphiques & Telephoniques, Paris, France. Apparatus for measuring transmission levels on telecommunication circuits. 1,817,259; Aug. 4.
Leece, Bennett M., assignor to The Leece-Neville Company, Cleveland, Ohio. Electric switch. 1,817,155; Aug. 4.
Leece-Neville Company, The. (See Leece, Bennett M., assignor.)
Lentz, David H., Joliet, Ill. Portable factory. 1,817,632; Aug. 4.
Leppla, George C. (See Horsting, B. F., and Leppla.)
Levy, Dudley D., assignor to Dudley Research Corporation, New York, N. Y. Dental tool. 1,817,571; Aug. 4.
Lewis, Harvey, assignor to Nestor Johnson Manufacturing Company, Chicago, Ill. Ice skate. 1,817,156; Aug. 4.
Lewis, Leo L., Plainfield, N. J., and A. C. Buensod, New York, N. Y., assignors, by mesne assignments, to Auditorium Ventilating Corporation, Jersey City, N. J. Ventilating and air conditioning method and system for inclosures. 1,817,384; Aug. 4.
Lie, Egil. (See Ullmann, F., Breslauer, and Lie.)
Liginski, Jacob, Whippany, N. J. Animal releasing and frightening means. 1,817,415; Aug. 4.
Lignes Telegraphiques & Telephoniques. (See Leduc, Marcel, assignor.)
Lilienfeld, Leon. (See Jahoda, R., and Lilienfeld.)
Linders, Harry P., assignor to Wagner Electric Corporation, St. Louis, Mo. Dynamo electric machine. 1,816,859; Aug. 4.
Lindgren, Alexus C., Chicago, and A. D. Gallagher, Canton, Ill., assignors to International Harvester Company. Tractor plow. 1,817,085; Aug. 4.
Lindsay, Harvey B., Evanston, and A. L. Clements, Chicago, Ill., assignors to Dry-Zero Corporation, Wilmington, Del. Sound deadening and heat insulating material and making the same. 1,817,086; Aug. 4.
Lindstrom, Albert F. (See Hageman, A. M., and Lindstrom.)
Line Material Company. (See Dodd, Roy L., assignor.)
Link-Belt Company. (See Ellersgnard, Asger, assignor.)
Link-Belt Company. (See Waechter, F. F., and Snyder, assignors.)
Linley, Fred H., and F. E. Boyd, Duluth, Minn. Oil filter and skimmer. 1,817,572; Aug. 4.
Lion Fastener Inc. (See Poux, Noel J., assignor.)
Lion Fastener, Inc. (See Poux, N. J., Hall, and Crowe, assignors.)
Lippert, Henry E., Pittsburgh, Pa. Control system for motor vehicle. 1,817,416; Aug. 4.
Lipschutz, Louis and M. B., New York, N. Y. Pocketbook muff. 1,817,750; Aug. 4.
Lipschutz, Michael B. (See Lipschutz, Louis and M. B.)
Little, Arthur D., Industrial Corporation. (See Wahlforss, Eric, assignor.)
Littlefield, Arthur S., Winnetka, assignor to Littlefield Manufacturing Company, Chicago, Ill. Mechanical toy. 1,817,491; Aug. 4.

Littlefield Manufacturing Company. (See Littlefield, Arthur S., assignor.)
Lodge & Shipley Machine Tool Company, The. (See Cockburn, Francis B., assignor.)
Lofman, Charles, Los Angeles, Calif., assignor to Roberti Bros. Apparatus for connecting coiled spring members. 1,817,087; Aug. 4.
Lohmann Aktiengesellschaft. (See Lohmann, Johannes, assignor.)
Lohmann, Johannes, Fahr-on-the-Rhine, assignor to the Firm Lohmann Aktiengesellschaft, Fahr-Wollendorf, Germany. Plaster bandage with wound or healing pad. 1,817,696; Aug. 4.
Lombardi, Vincent, Brooklyn, N. Y. Knitted fabric. 1,817,199; Aug. 4.
Long, Millard E. (See de Silva, R., and Long.)
Long, Sidney L., Minneapolis, Minn. Toy. 1,817,751; Aug. 4.
Long, Thomas P. (See Hoff, C. L., and Long.)
Longan, John V., Archer City, Tex. Shopping wagon. 1,817,260; Aug. 4.
Lontz, Harry R., assignor to F. & N. Lawn Mower Company, Richmond, Ind. Mowing machine. 1,816,980; Aug. 4.
Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,817,454; Aug. 4.
Lornitzo, Franz, Union City, N. J. Bead threading machine. 1,817,010; Aug. 4.
Lovejoy, Ralph M., Boston, Mass. Vehicle frame construction. 1,817,633; Aug. 4.
Lowe, Russell E., assignor to Doherty Research Company, New York, N. Y. Protective coating (alborizing). 1,817,888; Aug. 4.
Loyte, William H., Swampscott, Mass. Electrically operated key container. 1,817,752; Aug. 4.
Luckow, Elmer R., assignor to A. B. Wrisley Co., Chicago, Ill. Soap frame. 1,817,157; Aug. 4.
Lucomlin, Morris, New York, N. Y. Costume jewelry clasp. Des. 84,787; Aug. 4.
Lühr, Wilhelm, Halle, Germany, assignor to General Electric Company. System for transmitting motion. 1,817,753; Aug. 4.
Lupton's, David Sons Company. (See Ward, Lawrence T., assignor.)
Luth & Rosens Elektriska Aktiebolag. (See Uggla, Wilhelm R., assignor.)
Lynn, John P., assignor to Dur-O-Lite Pencil Company, Chicago, Ill. Pencil. 1,817,011; Aug. 4.
Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)
Madigan, Thomas J., Brooklyn, N. Y. Electrical receptacle. 1,817,441; Aug. 4.
Madison, John T. (See Chrisman, H., and Madison.)
Magill-Weinsheimer Company. (See Backmyer, Christopher F., assignor.)
Magill-Weinsheimer Company. (See Skogh, Clifford W., assignor.)
Magoun, George L., and D. H. Tompkins, Nitro, W. Va., assignors to The Rubber Service Laboratories Company, Akron, Ohio. Metal pickling process. 1,816,860; Aug. 4.
Mahre, Frank, assignor of one-half to F. J. Mahre, Yakima, Wash. Power brush take. 1,817,697; Aug. 4.
Mahre, Fred J. (See Mahre, Frank, assignor.)
Mancuso, Peter N., Hollywood, Calif. Mop wringing apparatus. 17816,861; Aug. 4.
Mandalian, Sahariel G., North Attleboro, Mass. Mesh fabric. 1,817,519; Aug. 4.
Manning, William. (See Heyworth, J., Packman, and Mold, assignors.)
Marcum, Alfred, Louisville, Ky. Rotary engine. 1,817,492; Aug. 4.
Marcum, Arthur I., Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation. Driving and torquing arrangement for road vehicles. 1,816,981; Aug. 4.
Margon Corporation. (See Grubman, Leo J., assignor.)
Markem Machine Company. (See Fletcher, Harry R., assignor.)
Marks, Erminie I., Harrison, N. Y. Hand covering. 1,817,385; Aug. 4.
Marlin, George W. (See Fedderman, G. C., and Marlin.)
Martin, James W. jr., Tuckahoe, N. Y. Humidifier. 1,817,442; Aug. 4.
Martin, Jerome, and I. J. Krchma, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Preparation of esters. 1,817,898; Aug. 4.
Martin, Jerome, and I. J. Krchma, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Preparation of esters. 1,817,899; Aug. 4.
Martin, Thomas R., Tyseley, Birmingham, England. Terminal box mounting for electric switches. 1,817,573; Aug. 4.
Marvel, Orin E., assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio. Radio appliance. 1,817,443; Aug. 4.
Mason, Au & Magenheimer Confectionery Manufacturing Company. (See Laskey, William B., assignor.)
Mason Mox Company, The. (See Rhodes, Russell I., jr., assignor.)
Masqueller, Roger, Tirlemon, Belgium. Friction shock absorber for suspending suspending vehicles. 1,817,088; Aug. 4.
Massey, Alexander J., Los Angeles, Calif. Traffic signaling system. 1,817,754; Aug. 4.
Masters, Carl L., Nitro, assignor, by mesne assignments, to Elko Chemical Company. Recovering phenol from liquors containing the same. 1,817,444; Aug. 4.
Maszczyk, Alexander M., Chicago, Ill. Wire clamp. 1,817,386; Aug. 4.
Mattison, Carl L., assignor to Mattison Machine Works, Rockford, Ill. Conveyer pad. 1,817,037; Aug. 4.
Mattison, Carl L., assignor to Mattison Machine Works, Rockford, Ill. Turning machine. 1,817,493; Aug. 4.
Mattison Machine Works. (See Mattison, Carl L., assignor.)
Maulsby, John R. (See Maulsby, Zene R. and J. R.)
Maulsby, Zene R. and J. R., Everett, Wash. Fabric forming machine. Re18,146; Aug. 4.
May, Adam J., assignor to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y. Headrest. 1,817,755; Aug. 4.
McCabe, Ira E., Chicago, Ill. Pressure actuated switch operating device. 1,817,634; Aug. 4.
McCabe, Ira E., Chicago, Ill. Control for electrically operated liquid fuel burning devices. 1,817,635; Aug. 4.
McCarley, William, D., assignor of one-half to C. F. Glass, Loraine, Tex. Well casing jack. 1,817,261; Aug. 4.
McCarthy, John J., Malden, Mass. Combined dome light and speech transmission device. Des. 84,789; Aug. 4.
McCrery, Harold E., assignor to Apollo Holding Corporation, Apollo, Pa. Sheet bar unstacking device. 1,817,387; Aug. 4.
McDonnell, Aloysius S., Chicago, Ill. Railway rail anchor or anticreeper. 1,817,455; Aug. 4.
McFadden, Glenn E., assignor to Markel Electric Products, Buffalo, N. Y. Wall bracket electric lighting fixture. Des. 84,790; Aug. 4.
McFadyen, John C., Lakeport, Calif., assignor of one-third to W. H. Edmands and one-third to N. M. Sleeper. Aeroplane construction. 1,817,089; Aug. 4.
McGill, Russell, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Stabilization of organic nitrates. 1,817,456; Aug. 4.
McGinness, Joseph E., Pittsburgh, Pa. Golf ball marker. 1,817,317; Aug. 4.
McGirr, Theodore G., Brooklyn, N. Y. Holder. 1,817,262; Aug. 4.
McGowen, Francis J. (See McGowen, Ida R. and F. J.)
McGowen, Ida R. and F. J., San Pedro, Calif. Electrical water heating device. 1,817,090; Aug. 4.
McJannet, William J., assignor to Economy Irrigation Company, Inc., Seattle, Wash. Quick coupling valve device. 1,817,830; Aug. 4.
McKay, H. V., Proprietary Limited. (See Taylor, Headlie S., assignor.)
McKesson & Robbins, Incorporated. (See Danco, Leon A., assignor.)
McLendon, Alex M., assignor of one-third to A. P. Solomon, jr., and one-third to A. L. Hildreth, Savannah, Ga. Collar pressing machine. 1,817,574; Aug. 4.
McMann, Warren R., assignor of one-half to W. Henderson, New York, N. Y. Ventilating window pane. 1,817,494; Aug. 4.
McMillian, James O., Wichita, Kan. Unloading device. 1,817,698; Aug. 4.
McNairy, Jacob W., Erie, Pa., assignor to General Electric Company. Control system. 1,817,756; Aug. 4.
McNeil, James E., Raleigh, Tenn. Oil tank gauge. 1,817,457; Aug. 4.
McNeish, Arthur W. (See Anderson, D. M., and McNeish.)
McNish, Alexander F., assignor of one-half to J. Moncrieff Limited, Perth, Scotland. Glass furnace forehearth. 1,816,982; Aug. 4.
McSheen, Edward W., Schenectady, N. Y., assignor to General Electric Company. Phonograph apparatus. 1,817,758; Aug. 4.
Meath, Campbell A., Neodesha, Kans. Toilet seat. 1,817,520; Aug. 4.
Mechanical Royalties Corporation. (See Bailey, H. H., and Thomas, assignors.)
Mechanical Rubber Company, The. (See Bell, Harry A., assignor.)
Melgs, Basil, Washington, D. C. Wheel construction. 1,817,699; Aug. 4.
Meingast, Rudolf, and M. Mugdan, assignors to Consortium Fuer Elektrochemische Industrie, Munich, Germany. Manufacturing acetic anhydride. 1,817,318; Aug. 4.
Meitzler, Charles R., assignor of one-half to O. H. Pieper and one-half to A. F. Pieper, Rochester, N. Y. Surgical instrument. 1,817,417; Aug. 4.
Melcher, Lee W., De Pere, Wis., assignor to Fafnir Bearing Company, New Britain, Conn. Method and apparatus for casting journal boxes. 1,817,388; Aug. 4.
Menefee, Thomas W. (See Craig, Richard M., assignor.)
Merle Centrifugal Processes, Inc. (See Merle, Joseph, assignor.)
Merle, Joseph, Newark, N. J., assignor to Merle Centrifugal Processes, Inc., New York, N. Y. Process and machine for centrifugally extruding and casting substances. 1,817,012; Aug. 4.
Mershon, Ralph D., New York, and P. A. Ross, Yonkers, N. Y.; said Ross assignor to said Mershon. Electrolytic apparatus. 1,817,200; Aug. 4.
Mertzanoff, André M., assignor to American Radiator Company, New York, N. Y. Radiator section. Des. 84,788; Aug. 4.

Messing, Joseph, assignor to Bull Dog Electric Products Company, Detroit, Mich. Fuse block. 1,817,521; Aug. 4.
Metropolitan Engineering Company. (See Murray, Thomas E., jr., assignor.)
Metzner, Albert W. (See Sherman, J. Q., and Metzner.)
Meunier, Leon F., and C. J. Dresser, Cleveland, Ohio, assignors to Chicago Pneumatic Tool Company, New York, N. Y. Switch. 1,817,013; Aug. 4.
Meyer, Andre J., assignor to Continental Motors Corporation, Detroit, Mich. Engine crank shaft. 1,817,389; Aug. 4.
Meyer, Andre J., assignor to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,817,390; Aug. 4.
Meyer, Friedrich, and H.-J. Spanner, Berlin-Halensee, Germany, assignors, by mesne assignments, to Electrons, Inc. Electron emissive materials. 1,817,636; Aug. 4.
Meyer, Geo. J., Manufacturing Company. (See Meyer, G. J., Dreher, and Campo, assignors.)
Meyer, George J., O. Dreher, Milwaukee, Wis., and James Campo, Stafford Springs, Conn., assignors to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis. Swinging outside brush for bottle washing machines. 1,817,014; Aug. 4.
Michel, Gilbert, Bagneux, France, assignor to Societe "Le Magnesium Industriel," Paris, France. Forging magnesium alloys. 1,816,983; Aug. 4.
Middagh, Harry M. (See Hammerstrom, Henry H., assignor.)
Mid-West Chandelier Company, The. (See Williams, Victor, assignor.)
Midwest-Fulton Machine Company. (See Knoll, William V., assignor.)
Miller, George F., Jersey City, N. J. Locomotive headlight. 1,817,091; Aug. 4.
Miller, George E., Etna, Pa. Tap. 1,817,575; Aug. 4.
Miller, Harry L., Chester, Pa. Cooler. 1,816,984; Aug. 4.
Miller, John C., Chicago, Ill. Apparatus for cleaning out conduits and the like. 1,817,015; Aug. 4.
Miller, John C., Cantonment, Fla. Mold. 1,817,391; Aug. 4.
Miller, Paul V., assignor to The Taft-Peirce Manufacturing Company, Woonsocket, R. I. Snap thread gauge. 1,817,637; Aug. 4.
Miller, Philip M., Brooklyn, N. Y. Means locking pneumatic tires on wheels. 1,817,700; Aug. 4.
Miller, Robert A., Plainfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Amplifying system. 1,816,862; Aug. 4.
Millmine, Herbert W. (See Penick, K. T., Penick, and Millmine.)
Mills, J., & Co. et al. (See Willshaw, H., Gorham, and Ramsbottom, assignors.)
Mills, Oscar L., Los Angeles, Calif. Electric welding process. 1,817,092; Aug. 4.
Minneapolis-Honeywell Regulator Company. (See Warnke, Carl J., assignor.)
Minor, Burt S., San Pedro, Calif. Cement head for oil wells. 1,817,201; Aug. 4.
Mississippi Glass Company. (See Begeman, Myron L., assignor.)
Mitchell, Henry S., Portland, Oreg., and R. V. Schafer, Vancouver, Wash. Debarking machine. 1,817,158; Aug. 4.
Mitkoff, Herman. (See Stangler, Jack, assignor.)
Mxing Equipment Company. (See Craddock, Frederick L., assignor.)
Mold, Joseph L. (See Heyorth, J., Packman and Mold.)
Molins, Walter E., London, England. Mechanism for feeding and severing cardboard and like sheets. 1,817,701; Aug. 4.
Molins, Walter E., and J. W. Chalmers, Deptford, London, England. Machine for sealing containers. 1,817,831; Aug. 4.
Monckton, Sawyer Y., San Francisco, Calif. Aspirator device for flusher control. 1,817,016; Aug. 4.
Moncrieff, John, Limited. (See McNish, Alexander F., assignor.)
Monkemeyer, Leonhard, Oberbruch, Kreis Heinsberg, Germany, assignor, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y. Method for treating artificial silk obtained from centrifuges. 1,817,576; Aug. 4.
Montague Rod & Reel Company. (See Bennett, Raymond B., assignor.)
Moody, Stanley L., Des Moines, and W. M. Loucks, Valley Junction, Iowa. Combination tobacco ash receptacle and cigarette snuffer. Des. 84,791; Aug. 4.
Moore, Frederick A., et al. (See Kavanagh, Michael J., assignor.)
Moore, Robert H., New York, N. Y. Bookmark. 1,816,910; Aug. 4.
Moore, Sherwood T., Orange, assignor to T. A. Edison, Incorporated, West Orange, N. J. Production of phonograph styli. 1,817,094; Aug. 4.
Morgan, James E., Portland, Oreg. Flexible trolley. 1,817,093; Aug. 4.
Morgan, John J., Columbus, Ohio. Apparatus for forming concrete floors. 1,817,757; Aug. 4.
Morgan & Wright. (See Fisher, George F., assignor.)
Morgan & Wright. (See Gibbons, Willis A., assignor.)
Morgenstern, Ronald V., Irvington, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y. Combining alternating current channels with superposed telegraph circuits. 1,817,702; Aug. 4.
Morison, George S., assignor to Morison Incorporated, Pittsburgh, Pa. Transmission mechanism. 1,817,159; Aug. 4.
Morison, George S., assignor to Morison Incorporated, Pittsburgh, Pa. Self tightening bearing. 1,817,160; Aug. 4.
Morison Incorporated. (See Morison, George S., assignor.)
Morris, Howard I., Lakewood, assignor to The Yoder-Morris Company, Cleveland, Ohio. Power mechanism. 1,817,638; Aug. 4.
Morris, Warren A., Wyoming, assignor to The Richardson Company, Lockland, Ohio. Carton and pouring spout therefor. 1,816,985; Aug. 4.
Morse, Louis S., assignor to York Ice Machinery Corporation, York, Pa. Ice can. 1,817,263; Aug. 4.
Mosel, Joseph H., Lakewood, and C. I. Bohner, Bay Village, assignors, by mesne assignments, to The Jaeger Machine Company, Columbus, Ohio. Machine for spreading and surfacing construction material. 1,817,161; Aug. 4.
Moskow, Isadore, Clayton, Mo. Shoe last. 1,817,639; Aug. 4.
Muffly, Glenn, Detroit, Mich., assignor to Copeland Products, Inc. Refrigerator construction. 1,816,863; Aug. 4.
Muffly, Glenn, Detroit, Mich., assignor to Copeland Products, Inc. Expansion chamber for refrigerating mechanisms. 1,817,202; Aug. 4.
Mugdan, Martin. (See Meingast, R., and Mugdan.)
Muggleton, Gerald D. (See Brallier, P. S., Dunlap, and Muggleton.)
Müller, Carl W., assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Tobacco spreader for cigarette machines. 1,817,319; Aug. 4.
Muller, Johann C. (See Stelzer, Franz H. B., assignor.)
Mulligan, Leonard A., assignor to J. N. Smith Co., Detroit, Mich. Frame corner bead. 1,817,162; Aug. 4.
Münchow, Erich B., Planegg, Germany. Production of fire lighters for coal or other fuel. 1,817,458; Aug. 4.
Mundet, L., & Son, Inc. (See Willanyi, Charles M., assignor.)
Munns, Arthur T., Santa Monica, Calif. Elevator. 1,817,418; Aug. 4.
Murray, Thomas E., jr., Brooklyn, N. Y., assignor to Metropolitan Engineering Company. Welding method and apparatus. 1,816,864; Aug. 4.
Mustomatik Specialties, Inc. (See Coffin, Joseph G., assignor.)
N. T. Artificial Wool Company. (See Viallet, Joseph, assignor.)
Nash Engineering Company. (See Singleton, Arthur B., assignor.)
National Aniline & Chemical Co. (See Foster, Harold B., assignor.)
National Automatic Tool Company, The. (See Galloway, Robert M., assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Cold Steam Company. (See Bird, Robert M., assignor.)
National Fireworks, Inc. (See Anderson, Robert J., assignor.)
National Lock Co. (See Burton, Edward, assignor.)
National Supply Company, The, et al. (See Bennett, Edwin O., assignor.)
Naugatuck Chemical Company, The. (See Watkins, Parke H., assignor.)
Nehls, Charles H. (See Smith, F. A., and Nehls.)
Nelson, Nels T., Attleboro, Mass., assignor to J. F. Sturdy's Sons Company. Extension device. 1,817,103; Aug. 4.
Nelson, Samuel A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detector for drop box looms. 1,817,164; Aug. 4.
Nestor Johnson Manufacturing Company. (See Lewis, Harvey, assignor.)
Neugebauer, Wilhelm. (See Schmidt, M. P., Neugebauer, and Franke.)
Newcomer, Paul W. (See Armitage, Percy C., assignor.)
New Jersey Zinc Company, The. (See Cyr, H. M., and Waring., assignors.)
New Jersey Zinc Company, The. (See Farber, Clayton W., assignor.)
Newman, Neal E., St. Louis, Mo., and F. A. Niemann, assignors to Felt & Tarrant Manufacturing Company, Chicago, Ill. Record sheet holder for facilitating distribution of accounts. 1,817,640; Aug. 4.
Newport News Shipbuilding and Dry Dock Company. (See Terry, Roger V., assignor.)
Newton, Bertha M., Sapulpa, Okla. Music instruction board. 1,816,865; Aug. 4.
Newton, Carl D. (See de Silva, R., and Long, assignors.)
Niagara Smelting Corporation. (See Brallier, P. S., Dunlap, and Muggleton, assignors.)
Nicholson, Albert H., assignor to The Federal Glass Company, Columbus, Ohio. Glass tumbler or article of similar nature. Des. 84,792; Aug. 4.
Nickerson, Cassious W., Bandon, Oreg., assignor of one-twentieth to H. C. Harnagel. Lifting and transferring device. 1,817,264; Aug. 4.

Nielsen, Harry, Askov, Minn. Fence post. 1,817,832; Aug. 4.
Niemann, Frederick A. (See Newman, N. E., and Niemann.)
Nilson, Gustaf A., Chicago, Ill. Shower compartment. 1,817,641; Aug. 4.
Nineteen Hundred Corporation. (See Behan, Thomas W., assignor.)
Nisbet, Theodore B., Irvington, N. Y. Windshield and support therefor. 1,817,577; Aug. 4.
Noack, Walter G., assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. High pressure steam generator. 1,817,419; Aug. 4.
Nolde and Horst Company, The. (See Gosch, William H., assignor.)
Nordberg Manufacturing Company. (See Symons, Edgar B., assignor.)
Norton, William H., Chicago, Ill., assignor of nineteen-twenty-fifths to A. C. Hutchinson, Bangor, and six-twenty-fifths to E. S. Yule, Summer, Wis. Wrapping machinery. 1,817,017; Aug. 4.
Novelite, Inc. (See Saraian, Haig, assignor.)
O. & S. Bearing Co. (See Skillman, Newton, assignor.)
O-N. Spring Shackle Company. (See Henry R., and Bradfield, assignors.)
Oakes Products Corporation. (See Smith, F. A., and Nehls, assignors.)
O'Connell, Joseph, and H. H. Kerr, Kensington, Victoria, Australia. Churn. 1,817,833; Aug. 4.
O'Connell, William L. (See Bartlett, Linton G., assignor.)
O'Connor, Rebecca, Newark, Ohio. Diaper washer. 1,817,759; Aug. 4.
Ogle Construction Company. (See Bledsoe, Carl F., assignor.)
Ohio Brass Company, The. (See Chandler, Homer P., assignor.)
Ohliger, Ernest, Pelham, N. Y. Truck crane. 1,817,392; Aug. 4.
Ohmer Fare Register Company. (See Palmer, Brian C., assignor.)
Oil Conservation Engineering Company, The. (See Calhoun, Tracy J., assignor.)
Oishei, John R. (See Hueber, H., and Oishei.)
Oliver, John R., Medfield, assignor to Reece Shoe Machinery Company, Boston, Mass. Press operating mechanism. 1,817,703; Aug. 4.
Orme, Wilber L., Cambridge, Ohio. Candle holder. 1,817,834; Aug. 4.
Osborn Manufacturing Company, The. (See Curtis, Edward E., assignor.)
Osborne, Oliver M., Madison, Wis. Musical instrument. 1,817,704; Aug. 4.
Ott, Harvey N., assignor to Spencer Lens Company, Buffalo, N. Y. Objective mounting for microscopes. 1,817,642; Aug. 4.
Outterside, James W., Detroit, Mich. Attachment for auto fenders. 1,817,705; Aug. 4.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Motion picture printing apparatus. 1,817,320; Aug. 4.
Owsiak, Joseph, New Britain, Conn. Shade and curtain fixture. 1,817,460; Aug. 4.
P & M Company, The. (See Preston, Frederick A., assignor.)
Pacific Marine Supply Company. (See Himberger, Earl W., assignor.)
Packard, Francis H., Boardman, Oreg. Parachute. 1,816,986; Aug. 4.
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Packer, James M., Colorado Springs, Colo., assignor to F. O. Schoedinger, Columbus, Ohio. Radiant gas heater. 1,817,420; Aug. 4.
Packman, James. (See Heyworth, J., Packman, and Mold.)
Page, Ralph E. (See Lake, C. D., and Page.)
Page, Robert R., New York, N. Y. Tailpiece mute for stringed musical instruments. 1,817,461; Aug. 4.
Pais, Alexander, Bucharest, Rumania. Heating device with heat accumulators. 1,817,394; Aug. 4.
Palmer, Brian C., New York, N. Y., assignor, by mesne assignments, to Ohmer Fare Register Company, Dayton, Ohio. Checking excessive dead mileage. 1,817,395; Aug. 4.
Panchot, Frederick W., and Harry H., Los Angeles, Calif. Visible label holder. 1,817,396; Aug. 4.
Panchot, Harry H. (See Panchot, Frederick W. and H. H.)
Pando, Adolfo F., La Plata, Argentina. Air filter for internal combustion engines. 1,817,265; Aug. 4.
Parrish, James R., Nashville, Tenn. Attachment for draftmen's ink bottles. 1,817,835; Aug. 4.
Patterson, Herbert E. (See Freeman, B. W., Herschel, and Patterson.)
Patterson, Ralph J., assignor to Walker & Pratt Mfg. Co., Boston, Mass. Electric range. 1,816,866; Aug. 4.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Contact bar for electrical warp stop-motions. 1,817,165; Aug. 4.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Electric warp stop-motion. 1,817,166; Aug. 4.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp tension gauge for looms. 1,817,203; Aug. 4.
Payne, Oscar V., Worcester, Mass., assignor to Auto-Ordnance Corporation, New York, N. Y. Firearm. 1,817,321; Aug. 4.
Peale-Davis Company. (See Davis, Kenneth, assignor.)
Peavey, Joseph L., Meridian, Miss. Combined register and first aid kit. 1,817,706; Aug. 4.
Peckham, Wolf & Co. (See Clements, Joseph H., jr., assignor.)
Penick, Arthur J. (See Penick, K. T., Penick, and Millmine.)
Penick, Kirby T., A. J. Penick, and H. W. Millmine, Houston, Tex. Pump packing. 1,817,095; Aug. 4.
Penn, Norman L. (See Phelps, A. W., and Penn.)
Peoples Finance & Thrift Co. (See Graham, William A., assignor.)
Perfection Stove Company. (See Chadwick, Lee S., assignor.)
Perfection Stove Company. (See Chadwick, L. S., and Resek, assignors.)
Perfection Stove Company. (See Keith, David F., assignor.)
Perkins, Laurence M., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Generator. 1,817,495; Aug. 4.
Perry, Fred D., East Bakersfield, Calif. Lid fastening device for shipping cases. 1,817,578; Aug. 4.
Pétard, Daniel, Nice, France. Corn removing device. 1,817,579; Aug. 4.
Peters, Albert. See Kloss, U., Peters, and Krüger.)
Peters, Spencer M., and A. B. Rochester, Springfield, Ill.; said Rochester assignor to said Peters. Adjustable automatic folding platform for stepladders. 1,817,760; Aug. 4.
Petersen, Heinrich A. W., Gary, Ind. Safety device for multiple control mechanism. 1,817,204; Aug. 4.
Petrelli, Joseph V., New Rochelle, N. Y. Register. 1,817,836; Aug. 4.
Petri, Gunther H., Brookline, Mass. Forming machine for plastic material. 1,817,643; Aug. 4.
Pflauder Company, The. (See Jacobsen, Jens N., assignor.)
Pfleger, Johannes, Frankfort-on-the-Main, and E. Scheller, Lorsbach Taunus, Germany, assignors, by mesne assignments to The Roessler & Hasslacher Chemical Company. Preparation of alkali metal derivatives of organic compounds. 1,816,911; Aug. 4.
Phelps, Alva W., and N. L. Penn, assignors to Delco-Remy Corporation, Anderson, Ind. Assembling machine. 1,817,462; Aug. 4.
Phelps, Joseph, North Caldwell, N. J., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,817,038; Aug. 4.
Phillips Petroleum Company. (See Bumgardner, Allen R., assignor.)
Pieper, Alphonse F., et al. (See Meitzler, Charles R., assignor.)
Pieper, Oscar H., et al. (See Meitzler, Charles R., assignor.)
Pierce, Leland W., Stockton, Ill. Lubricant dispensing apparatus. 1,816,987; Aug. 4.
Pierce, Raymond C., Bronxville, N. Y., assignor to General American Tank Car Corporation, Chicago, Ill. Manufacturing tank cars. 1,817,580; Aug. 4.
Pierce, Raymond C., Bronxville, N. Y., assignor to General American Tank Car Corporation, Chicago, Ill. Tank car. 1,817,581; Aug. 4.
Pilcher, John A., Roanoke, Va. Support for locomotive air pumps, etc. 1,816,912; Aug. 4.
Pincus, Louis A. (See Simon, Samuel, assignor.)
Pintow, Paul, Brooklyn, N. Y. Combined chair and bed. 1,817,708; Aug. 4.
Piper, Alonzo S. (See Cooper, E., and Piper.)
Pittsburgh Equitable Meter Company. (See Armstrong, J. R., and Duncan, assignors.)
Pittsburgh Equitable Meter Company. (See Chrisman, H., and Madison, assignors.)
Poffenberger, Noland. (See Putnam, S. W., and Poffenberger.)
Pollock, Edward D., Westwood, N. J. Toothbrush. 1,817,096; Aug. 4.
Pope, Otis A., Ames, Iowa. Water powered rotating cleaning brush. 1,817,644; Aug. 4.
Pospiech, Friedrich, assignor to Chemische Fabrik Pott & Co., Dresden, Germany. Producing solvents and emulsifying agents. 1,817,205; Aug. 4.
Potter, Frederick T., Newton, assignor to Stark Tool Company, Waltham, Mass. Reduction gear change speed unit. 1,816,867; Aug. 4.
Potter, William, New York, N. Y. Scraper. 1,817,761; Aug. 4.
Potts, Harry H., Chicago, Ill. Structural material. 1,816,988; Aug. 4.
Poux, Noel J., assignor to Lion Fastener Inc., Meadville, Pa. Fastening device. 1,817,837; Aug. 4.
Poux, Noel J., assignor to Lion Fastener Inc., Meadville, Pa. Separable fastener. 1,817,838; Aug. 4.
Poux, Noel J., assignor to Lion Fastener Inc., Meadville, Pa. 1,817,839; Aug. 4.
Poux, Noel J., assignor to Lion Fastener Inc., Meadville, Pa. Separable fastener. 1,817,840; Aug. 4.
Poux, Noel J., assignor to Lion Fastener Inc., Meadville, Pa. Separable fastener. 1,817,841; Aug. 4.
Poux, Noel J., V. H. Hall, and P. H. Crowe, assignors to Lion Fastener Inc., Meadville, Pa. Separable fastener. 1,817,842; Aug. 4.

Poux, Noel J., assignor to Lion Fastener Inc., Meadville, Pa. Separable fastener. 1,817,843; Aug. 4.
Poyer, Guy R., Wichita, Kans. Timing gearing. 1,817,645; Aug. 4.
Pratt & Whitney Aircraft Company, The. (See Ryder, Earle A., assignor.)
Pratt, Harold I., et al., executors. (See Pratt John T.)
Pratt, John T., deceased, New York; H. I. Pratt and R. B. Pratt, executors. Die of the extrucing and wire drawing type and making the same. 1,817,680; Aug. 4.
Pratt, Ruth B., et al., executors. (See Pratt, John T.)
Premier Shoe Company. (See Kessler, Alexander M., assignor.)
Preston, Frederick A., Lake Forest, assignor to The P & M Company, Chicago, Ill. Rail anchor. 1,817,097; Aug. 4.
Preus, Paul A., St. Paul, Minn., assignor to Western Stamping & Manufacturing Company, Cleveland, Ohio. Highway sign. 1,817,646; Aug. 4.
Price, Paul L., Mount Vernon, N. Y., assignor to Irving Iron Works Company. Continuous grating structure. 1,817,463; Aug. 4.
Price, William P., assignor, by mesne assignments, to Horace Cory and Company, Limited, London, England. Manufacture of printing inks. 1,817,522; Aug. 4.
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Seal for mercury arc rectifiers. 1,817,762; Aug. 4.
Privat, Bernard, Stockton, Calif. Mower construction. 1,816,868; Aug. 4.
Procofieff-Seversky, Alexander, New York, N. Y., assignor, by mesne assignments, to Seversky Aircraft Corporation. Skid. 1,817,901; Aug. 4.
Prosperity Company Inc., The. (See Braun, Philip N., assignor.)
Protzeller, Harry W., East Chicago, assignor to O. F. Jordan Company, East Chicago, Ind. Railroad spreader. 1,816,869; Aug. 4.
Protzeller, Harry W., assignor to O. F. Jordan Company, East Chicago, Ind. Railroad way construction and maintenance car. 1,817,523; Aug. 4.
Protzeller, Harry W., assignor to O. F. Jordan Company, East Chicago, Ind. Railroad spreader. 1,817,524; Aug. 4.
Pullclean Manufacturing Corporation. (See Addler, Joseph H., assignor.)
Pullclean Manufacturing Corporation. (See Crowson, Herbert W., assignor.)
Purcell, Watson, Coleman, Tex. Brake operating mechanism. 1,817,844; Aug. 4.
Purington, Ellison S., Gloucester, Mass., assignor to General Electric Company. Mobile torque device. 1,817,763; Aug. 4.
Putnam, Sherman W., and N. Poffenberger, assignor to The Dow Chemical Company, Midland, Mich. Cleaning composition. 1,817,582; Aug. 4.
Quarnstrom, Folke, New York, N. Y. Combination can and bottle opener. 1,817,393; Aug. 4.
Quilliam, Samuel T., Manchester, England. Switching device. 1,817,206; Aug. 4.
Radio Corporation of America. (See Doolittle, Franklin M., assignor.)
Radio Corporation of America. (See Eberhard, Heinrich, assignor.)
Radio Corporation of America. (See Ranger, R. H., and Smith, assignors.)
Radio Corporation of America. (See Vermeulen, R., and van Urk, assignors.)
Rail Joint Company, The. (See Armstrong, Victor C., assignor.)
Rajah Company, The. (See Berthold, George H. E., assignor.)
Ramsay, George C., Kingswood, Australia. Tire rim. 1,817,764; Aug. 4.
Ramsbottom, Edwin. (See Willshaw, H., Gorham, and Ramsbottom.)
Ranger, Richard H., Newark, N. J., and S. B. Smith, Brooklyn, N. Y., assignors to Radio Corporation of America. Colored facsimile system. 1,817,098; Aug. 4.
Ranki, Adele, et al., heiresses. (See Jahoda, R., and Lilienfeld, assignors.)
Ray, Joshua A. (See Ray, Thomas and J. R.)
Ray, Thomas and J. R., Manistee, Mich. Separating apparatus. 1,817,207; Aug. 4.
Rebhun, Daniel C. (See Howe, Oliver J., assignor.)
Rector, Enoch, New York, N. Y., assignor to Wankesha Motor Company, Waukesha, Wis. Internal combustion engine. 1,817,208; Aug. 4.
Redler, Arnold, Flour Mills, Sharpness Docks, England. Conveyer. 1,817,647; Aug. 4.
Reece Shoe Machinery Company. (See Oliver, John R.)
Reed, William E., Pittsburgh, Pa. Feeding mechanism. 1,817,099; Aug. 4.
Reeder, Charles H., assignor to Reeder Manufacturing Co., St. Louis, Mo. Chaplet. 1,816,870; Aug. 4.
Reeder Manufacturing Co. (See Reeder, Charles H., assignor.)
Reel, Herbert W., Hinsdale, assignor to United States Gypsum Company, Chicago, Ill. Roof construction. 1,817,900; Aug. 4.
Rees, Thomas E., Canton, Ohio. Sheet rolling and finishing machine. 1,817,707; Aug. 4.
Regan, John, New Bedford, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop-motion. 1,817,167; Aug. 4.
Regero, Frank, Macon, Ga., assignor, by mesne assignments, to L. & R. Manufacturing Company. Watch cleaning machine. 1,817,266; Aug. 4.
Reichert, John, Racine, Wis. Cow hopple. 1,817,845; Aug. 4.
Reinhardt, Willard L., East Cleveland, assignor to Willard Storage Battery Company, Cleveland, Ohio. Storage battery. 1,817,846; Aug. 4.
Remington Arms Company. (See Green, Charles W., assignor.)
Remington Arms Company. (See Loomis, Crewford C., assignor.)
Remington, Joseph P., Philadelphia, Pa. Air cleaner. 1,816,871; Aug. 4.
Remington Rand Inc. (See Davis, Elmer W., assignor.)
Remington Rand Inc. (See Day, William H., assignor.)
Remington Rand Inc. (See Hutchings, Le Roi E., assignor.)
Remington Typewriter Company. (See Going, George G., assignor.)
Remington Typewriter Company. (See Phelps, Joseph, assignor.)
Renault, M. Louis. (See Saives, Léon, assignor.)
Research Process Company. (See Butler, Horace, assignor.)
Resek, Marc. (See Chadwick, L. S., and Resek.)
Rex, Harold B., Lynn, Mass., assignor to General Electric Company. Rectified current telemetering system. 1,817,765; Aug. 4.
Rhodes, Bert O., Kalamazoo, Mich. Dispensing can. 1,817,322; Aug. 4.
Rhodes, Russell I., jr., North Attleboro, assignor to The Mason Box Company, Attleboro Falls, Mass. Display box. 1,817,766; Aug. 4.
Rial, Wirt D., Watson, Calif. Refining lubricating oils. 1,816,872; Aug. 4.
Rice, Harold D., Bristol, R. I., assignor to Woonsocket Rubber Company, Millville, Mass. Making rubberized sheet materials and products. 1,817,323; Aug. 4.
Richardson Company, The. (See Morris, Warren A., assignor.)
Richardson, Francis J., New Orleans, La. Folding metallic awning. 1,817,847; Aug. 4.
Richter, George A., assignor to Brown Company, Berlin, N. H. Production of chemical wood pulp. 1,817,525; Aug. 4.
Ritter Dental Manufacturing Company. (See May, Adam J., assignor.)
Riverside Cement Company. (See Knapp, Robert T., assignor.)
Roberti Bros. (See Lofman, Charles, assignor.)
Roberts, Albert O., Dearborn, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Oven system. 1,817,209; Aug. 4.
Roberts, Edward A., Long Beach, Calif. Automatic taper thread cutting tool. 1,817,018; Aug. 4.
Robinson, Claude A., and K. S. Frazier, assignors to Detroit Steel Products Company, Detroit, Mich. Wall ground work strip. 1,816,933; Aug. 4.
Robinson, Ernest Y., Lymn, England, assignor to Associated Electrical Industries Limited. Vacuum tube and method of manufacture. 1,817,445; Aug. 4.
Robinson, George, F. A. Kmieske, and L. A. Kmieske, Littleton, Colo. Light projecting and dispersing device. 1,817,000; Aug. 4.
Robinson, Patrick H., Waterbury, Conn., assignor to Hamilton Beach Manufacturing Company, Racine, Wis. Vacuum cleaner. 1,816,873; Aug. 4.
Robinson, William D., Cherryville, N. C. Coating for cotton mill rolls. 1,817,267; Aug. 4.
Roby, Harry L., assignor of one-half to The Highland Body Manufacturing Company, Cincinnati, Ohio. Combination window latch. 1,817,101; Aug. 4.
Rochester, Arthur B. (See Peters, S. M., and Rochester.)
Rockwood Sprinkler Company of Massachusetts. (See Arnott, Ashley M., assignor.)
Roesen, Oscar C., Brooklyn, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Press stopping device. 1,816,934; Aug. 4.
Roesen, Oscar C., Brooklyn, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Antijumping device for form rollers. 1,816,935; Aug. 4.
Roessler & Hasslacher Chemical Company, The. (See Dangelmajer, Charles, assignor.)
Roessler & Hasslacher Chemical Company, The. (See Harding, Earle A., assignor.)
Roessler & Hasslacher Chemical Company, The. (See Pfleger, J., and Scheller, assignors.)
Rogers, Harrison W., Incorporated. (See Ebeling, Charles W., assignor.)
Rogers, Joseph E., Chicago, Ill., assignor to Dayton Scale Company, Dayton, Ohio. Scale and chart therefor. 1,817,446; Aug. 4.
Rogers, Walter G., Leavenworth, Kans. Motor vehicle. 1,817,848; Aug. 4.
Rohlfs, Roland, Forest Hills, assignor, by mesne assignments, to L. F. Kohler, Brooklyn, N. Y. Night aerial advertising sign or the like and fastening means therefor. 1,817,268; Aug. 4.

Rohlfs, Roland, Forest Hills, assignor, by mesne assignments, to L. F. Kohler, Brooklyn, N. Y. Night aerial advertising sign. 1,817,269; Aug. 4.
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Nonrefillable container. 1,817,709; Aug. 4.
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Attaching bail ears to pails. 1,817,710; Aug. 4.
Rollman, Michael A., Mount Joy, Pa. Sadiron handle. 1,817,583; Aug. 4.
Rosen, Abraham W., New York, N. Y. Device for supporting articles on tires or the like. 1,817,711; Aug. 4.
Rosenberg, Heyman, New York, N. Y. Anchorage device. 1,817,584; Aug. 4.
Rosenow, Edward C., Rochester, Minn. Humidifying device. 1,817,648; Aug. 4.
Ross, Percy A. (See Mershon, R. D., and Ross.)
Rowles, Walter M., Onawa, Iowa. Granary ventilator structure. 1,817,270; Aug. 4.
Royal Worcester Corset Company. (See Cohen, Jacob, assignor.)
Royal Worcester Corset Company. (See Davis, Clarence T., assignor.)
Rubber Service Laboratories Company, The. (See Ingram, Joseph R., assignor.)
Rubber Service Laboratories Company, The. (See Magoun, G. L., and Tompkins, assignors.)
Rubber Service Laboratories Company. (See Vignos, James C., assignor.)
Rüdenberg, Reinhold, Berlin-Grünewald, Germany, assignor to Westinghouse Electric & Manufacturing Company, Protective system. 1,817,526; Aug. 4.
Ruetschi, Arnold, Lakewood, Ohio. Gearing. 1,817,019; Aug. 4.
Rumsey, Horace S., St. Louis, Mo. Settling apparatus. 1,817,649; Aug. 4.
Rush Manufacturing Corporation. (See Bellinger, James F., assignor.)
Russell, George W., Warren, assignor to The Aetna Standard Engineering Company, Youngstown, Ohio. Shearing machine. 1,817,039; Aug. 4.
Russell, James R. (See Van Amburgh, C. L., anad Russell.)
Russell, Samuel G., assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,817,102; Aug. 4.
Ryder, Earle A., West Hartford, assignor to The Pratt & Witney Aircraft Company, Hartford, Conn. Variable speed supercharger drive. 1,817,650; Aug. 4.
Saal, Christian L., Paterson, N. J. Winding machine. 1,817,767; Aug. 4.
Sachse, Ernst. (See Seifert, K., and Sachse.)
Saftee Glass Company. (See Worrall, Arthur G., assignor.)
Saito, Hachiro, Tokyo-Fu, Japan. Lining brick for rotary cement kilns. 1,817,421; Aug. 4.
Saives, Leon, assignor to M. L. Renault, Billancourt, France. Lubrication of engines. 1,817,422; Aug. 4.
Salsbury, Ralph T., Oakland, Calif. Bottle capper. 1,817,210; Aug. 4.
Sams, Albert J., Chicago, Ill. Hydraulic adjustable hub plate. 1,817,020; Aug. 4.
Samu, Josip. (See Jakopec, G., and Samu.)
Samuel, John M. (See Stout, H. H., and Samuel, assignors.)
Samuel, Max, Rostock, Germany. Rubber brush. 1,817,585; Aug. 4.
Sangamo Electric Co. (See Holtz, Frederick C., assignor.)
Sanitarium Equipment Company. (See Goodrich, Norris E., assignor.)
Sarafian, Haig, New York, N. Y., assignor to Novelite, Inc. Illuminated display. 1,817,397; Aug. 4.
Saranac Automatic Machine Corporation. (See Craig, Edward, assignor.)
Sargent, Grafton F., Fitchburg, Mass. Rocking horse. 1,817,768; Aug. 4.
Sauer, Louis J., Oak Park, assignor to C. H. Joy, sr., Chicago, Ill. Automatic feeding device. 1,817,103; Aug. 4.
Sauer, Louis J., Oak Park, assignor to C. H. Joy, sr., Chicago, Ill. Margin bar. 1,817,168; Aug. 4.
Sauer, Louis J., Oak Park, assignor to C. H. Joy, sr., Chicago, Ill. Automatic feeding device. 1,817,211; Aug. 4.
Sauer, Louis J., Oak Park, assignor to C. H. Joy sr., Chicago, Ill. Feeding device for duplicating machine. 1,817,423; Aug. 4.
Saunders, Clyde J. (See Byrnes, W. J., Byrnes, and Saunders.)
Savoye, Charles U. (See Kerr, H. J., and Savoye.)
Sawyer, Howard F., et al. (See Chenery, Henry L., assignor.)
Scheer, Johan G., Lidingo, assignor to Svenska Aktiebolaget Gasaccumulator, Stockholm-Lidingo, Sweden. Cooking stove. 1,817,712; Aug. 4.
Schaefer, John V., Chicago, Ill., assignor of one-half to Cement-Gun Construction Company, Chicago, Ill., and one-half to Cement-Gun Company, Inc., Allentown, Pa. Stack. 1,817,104; Aug. 4.
Schaeffer, Earl Y., Kutztown, Pa. Antiskid chain. 1,817,586; Aug. 4.
Schafer, Ralph V. (See Mitchell, H. S., and Schafer.)
Scharf, Jacob S., New York, N. Y. Lamp and heater. 1,817,040; Aug. 4.
Schelleng, John C., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Protective circuit for vacuum tubes. 1,816,913; Aug. 4.
Schellens, Christopher A., Marblehead, Mass., assignor to C-S Engineering Company, Jersey City, N. J. Tender feed water heater. 1,816,874; Aug. 4.
Scheller, Emil. (See Pfleger, J., and Scheller.)
Schimpf, Walter H., Toledo, Ohio. Electric pick-up. 1,817,021; Aug. 4.
Schishka, Sidney, London, England. Tobacco pipe. 1,817,271; Aug. 4.
Schling, Max, Scarsdale, N. Y. Flowerpot. Des. 84,793; Aug. 4.
Schlotter, Max, Berlin, Germany, assignor to Asociacion De Productores De Yodo De Chile, Valparaiso, Chile. Electrolytic separation of copper. 1,817,527; Aug. 4.
Schmidt, Maximilian P., W. Neugebauer, and R. Franke, Wiesbaden-Biebrich, Germany, assignors to Kalle & Co., Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Light-sensitive layer. 1,816,989; Aug. 4.
Schmidt, William F., deceased; Selma Grill, administratrix, Detroit, assignor to All-Metal Products Co., Wyandotte, Mich. Liquid gun or pistol. 1,817,769; Aug. 4.
Schmutz, Julius, Louisville, Ky. Printing plate holding means. 1,817,587; Aug. 4.
Schneider, Philip, Chicago, Ill. Gas generator for internal combustion engines. 1,816,936; Aug. 4.
Schoedinger, F. O. (See Packer, James M., assignor.)
Schorger, Arlie W., assignor, by mesne assignments, to Burgess Battery Co., Madison, Wis. Sealing compound. 1,817,496; Aug. 4.
Schroeder, Frank V., Issaquah, Wash. Saw setting device. 1,817,272; Aug. 4.
Schroeder, Rudolph W., Glencoe, Ill. Airplane and method of control. 1,817,651; Aug. 4.
Schuette, Johann, Berlin-Lichterfelde-Ost, Germany. Airship. 1,817,274; Aug. 4.
Schuler, Eugene, assignor of one-half to the firm Josef Schuler A. G. Erste Ungaraische Stahlschreibfeder-, Fed-Schuler A. G. Erste Ungarische Stahlschreibfeder-, Fed-to J. Benke, Budapest, Hungary. Safety projectile for gun practice and gun barrels suitable for the same. 1,817,273; Aug. 4.
Schuler, Josef, A. G. Erste Ungarische Stahlschreibfeder-, Federhalter-und Indigocopierpapier-Fabrik, et al. (See Schuler, Eugene, assignor.)
Schulse, Herman E., Wilmington, Del., assignor to Uniclox Corporation. Terrestrial globe frame and clock casing. Des. 84,794; Aug. 4.
Schulse, Herman E., Wilmington, Del., assignor to Uniclox Corporation. Terrestrial globe frame. Des. 84,795; Aug. 4.
Schulse, Herman E., Wilmington, Del., assignor to Uniclox Corporation. Combined terrestrial globe frame and support therefor. Des. 84,796; Aug. 4.
Schumacher, Conrad, Lynbrook, N. Y., assignor to Autostrop Patents Corporation, Dover, Del. Metal treating apparatus. 1,817,902; Aug. 4.
Schupp, Alfred F., Joliet, Ill. Rail tie plate. 1,817,849; Aug. 4.
Schwalbach, Alfons P., Elderon, Wis. Heater. 1,817,850; Aug. 4.
Schwartz, Michael, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Traffic recorder for telephone systems. 1,817,324; Aug. 4.
Schwitzer-Cummins Company. (See Schwitzer, L., and Winkler, assignors.)
Schwitzer, Louis, and C. J. Winkler, assignors to Schwitzer-Cummins Company, Indianapolis, Ind. Water pump. 1,817,169; Aug. 4.
Schylander, John F., Chicago, Ill. Fastening device. 1,816,914; Aug. 4.
Scott, Creston W., Springfield, assignor to The Fiberloid Corporation, Indian Orchard, Mass. Forming inlays. 1,816,915; Aug. 4.
Scott, Henry P., Company, The. (See Bond, Samuel C., assignor.)
Scott, Julian C., Midland, Tex. Rumble seat and rest. 1,816,937; Aug. 4.
Scott & Williams, Incorporated. (See Williams, Louis N. D., assignor.)
Scovill Manufacturing Company. (See George, James S., assignor.)
Scovill Manufacturing Company. (See Tompkins, Emerson, assignor.)
Sears, Roebuck and Co. (See Shee, Parke B., assignor.)
See, Milton, Mount Vernon, N. Y. Thermostatically operated shutter for automobiles. 1,817,398; Aug. 4.
Seelig, Lester S., New Orleans, La. Lamp shade. Des. 84,797; Aug. 4.
Seger, Earl F. (See Hopkins, R. Z., and Seger.)
Seidner, Leo, Rockville Center, assignor to The Glemby Company, Inc., New York, N. Y. Hair net. 1,817,713; Aug. 4.
Seifert, Kurt, and E. Sachse, Magdeburg, Germany. Ticket file. 1,817,466; Aug. 4.
"Sentinel" Wagon Works Limited. (See Nutt, Arthur C., assignor.)
Sentrop, Johannes T., Grand Rapids, Mich. Building block. 1,816,916; Aug. 4.
Sentry Safety Control Corporation. (See Adams, J. F., and Allen, assignors.)
Seversky Aircraft Corporation. (See Procofieff-Seversky, Alexander, assignor.)

Shaffer, Larkin R., Garland, Utah. Hen's nest. 1,817,588; Aug. 4.
Shakespeare Company. (See Russell, Samuel G., assignor.)
Shand, Errol B., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Metal tank rectifier. 1,817,714; Aug. 4.
Shannon, Henry W., assignor to Worcester Loom Works, Worcester, Mass. Gripper for tuft weaving looms. 1,816,938; Aug. 4.
Shaw-Walker Company. (See Hunter, David E., assignor.)
Shee, Parke B., Oak Park, assignor to Sears, Roebuck and Co., Chicago, Ill. Separator. 1,817,464; Aug. 4.
Shee, Parke B., Oak Park, assignor to Sears, Roebuck and Co., Chicago, Ill. Separator. 1,817,465; Aug. 4.
Sheer, H. M., Company. (See Williams, Robert T., assignor.)
Shelton, William M., Orchid, Va. Spring tooth and spring disk harrow. 1,817,851; Aug. 4.
Sheaman, John Q., and A. W. Metzner, Dayton, Ohio; said Metzner assignor to said J. Q. Sherman. Manifolding process. 1,817,399; Aug. 4.
Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,817,770; Aug. 4.
Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,817,883; Aug. 4.
Shockency, Charles E. (See Ferguson, C. E., and Shockency.)
Shoe Form Co., Inc. (See De Witt, William J., assignor.)
Shook, Charles A. (See Greutman, W. J., Shook, and Brandt.)
Showers, Lewis M., jr., Juniata, Pa. Testing machine. 1,817,170; Aug. 4.
Siebrandt, John R., Kansas City, Mo. Surgical splint. 1,817,212; Aug. 4.
Siegmund, Humphreys O., West Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrolytic device. 1,816,875; Aug. 4.
Siemens-Schuckertwerke Aktiengesellschaft. (See Benz, Carl, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Weimers, Wilhelm, assignor.)
Simmons Company. (See Bayer, Matthew F., assignor.)
Simmons Company. (See Graff, Philip E., assignor.)
Simmons, Ulva A. (See Gray, A. S., and Simmons.)
Simmons, William I., Novi, Mich. Trap. 1,817,589; Aug. 4.
Simon, Samuel, Brooklyn, N. Y., assignor of one-half to L. A. Pincus, Washington, D. C. Garment steaming and stretching device. 1,817,590; Aug. 4.
Simpson, John O., assignor to The E. Ingraham Company, Bristol, Conn. Direction indicating turn-button for clocks, etc. 1,817,447; Aug. 4.
Singer Manufacturing Company, The. (See Zabriskie, H. L., and Chason, assignors.)
Singleton, Arthur B., Detroit, Mich., assignor to Nash Engineering Company, South Norwalk, Conn. Priming mechanism for centrifugal pump. 1,817,041; Aug. 4.
Sinkovich, Dezsö, Budapest, Hungary. Combination tie-plate or iron tie and anticreeper for rails. 1,817,325; Aug. 4.
Sipe, Harry E., New York, N. Y. Snubber. 1,817,771; Aug. 4.
Sipe, Harry E., New York, N. Y. Tube and pipe coupling. 1,817,772; Aug. 4.
Sipe, Harry E., New York, N. Y. Hinge. 1,817,773; Aug. 4.
Sipe, Harry E., New York, N. Y. Tubular coupling and constructing the same. 1,817,774; Aug. 4.
Sipe, Harry E., New York, N. Y. Metallic coupling device. 1,817,775; Aug. 4.
Sipe, Harry E., New York, N. Y. Coupling. 1,817,776; Aug. 4.
Skillman, Newton, Highland Park, assignor to O. & S. Bearing Co., Detroit, Mich. Self-lubricating self-aligning bearing and forming same. 1,817,528; Aug. 4.
Skillman, Newton, assignor to O. & S. Bearing Company, Detroit, Mich. Forming a permanent connecting link. 1,817,529; Aug. 4.
Skogh, Clifford W., assignor to Magill-Weinsheimer Company, Chicago, Ill. Price marker for goods. 1,817,105; Aug. 4.
Slatcher, Alfred G., Cleveland, Ohio. Tool retainer. 1,817,591; Aug. 4.
Sleeper, Ned M., et al. (See McFadyen, John C., assignor.)
Sildell, Kemper, and E. M. Wyatt, Madison, Wis., assignors, by mesne assignments, to American Face Brick Research Corporation. Building wall of cellular blocks. 1,817,022; Aug. 4.
Sloan, Edward C., Geneva, assignor to Elgin National Watch Company, Chicago, Ill. Display box for watches. 1,817,852; Aug. 4.
Small, Norman M., assignor to Frick Company, Waynesboro, Pa. Valved piston. 1,817,853; Aug. 4.
Small, Norman M., and L. Buehler, jr., assignors to Frick Company, Waynesboro, Pa. Can grid. 1,817,715; Aug. 4.
Smiley, Harry D., assignor of one-half to F. W. Campbell, Albia, Iowa. Newspaper clamp. 1,817,424; Aug. 4.
Smith, Allen, Millbury, assignor to Whitin Machine Works, Whitinsville, Mass. Bunch building mechanism. 1,817,106; Aug. 4.
Smith, Arthur E., Los Angeles, Calif. Hypodermic syringe. 1,817,652; Aug. 4.
Smith, Burgess W., assignor to The Todd Company, Inc., Rochester, N. Y. Safety paper. 1,817,171; Aug. 4.
Smith, Frederick A., and C. H. Nebis, Indianapolis, Ind., assignor, by mesne assignments, to Oakes Products Corporation. Band lock. 1,817,497; Aug. 4.
Smith, Joseph, et al. (See Gilowitz, Benjamin, assignor.)
Smith, Joseph N., Co. (See Mulligan, Leonard A., assignor.)
Smith, Samuel B. (See Ranger, R. H., and Smith.)
Smith, Walter E., Warwick Downs, assignor to C. C. King & Co., Inc., Providence, R. I. Shoe ornament. Des. 84,798; Aug. 4.
Smith, Walter H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,817,213; Aug. 4.
Smith, William G., Memphis, Tenn. Ice cream making unit. 1,817,498; Aug. 4.
Smith's John E., Sons Company. (See Van Hooydonk, Adrian C., assignor.)
Smythe, Edwin H., Evanston, Ill., and P. B. Flanders, East Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Apparatus for the measurement of acoustic impedance. 1,816,917; Aug. 4.
Sniegocki, Anthony F., Oakland, Calif. Razor blade holder. 1,817,023; Aug. 4.
Snyder, Louis F. (See Waechter, F. F., and Snyder.)
Snyder, Oscar L., Marysville, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company. Cylinder head machining fixture. 1,817,400; Aug. 4.
Societe Des Moteurs Salmson. (See Heinrich, Jean M., assignor.)
Societe "Le Magnesium Industriel". (See Michel, Gilbert, assignor.)
"Society of Chemical Industry in Basle". (See Hartmann, Max, assignor.)
Society "Yacco, S. A. F." (See Dintilhac, Jean G., assignor.)
Sokoloff, Boris N., Washington, D. C. Electromagnet. 1,817,592; Aug. 4.
Soldenhoff, Alexander, Zurich, Switzerland. Wing for aeroplanes. 1,817,275; Aug. 4.
Solomon, A. P., jr., et al. (See McLendon, Alex M., assignor.)
Sorensen, John, Ravenna, Ohio. Producing coupling flanges. 1,817,854; Aug. 4.
Soreny, Ernest, New York, N. Y. Manicuring appliance. 1,816,876; Aug. 4.
Spanel, Abraham N., Rochester, N. Y. Treating articles. 1,817,530; Aug. 4.
Spanel, Abraham N., Rochester, N. Y. Treating articles. 1,817,531; Aug. 4.
Spanel, Abraham N., Rochester, N. Y. Treating fabrics. 1,817,532; Aug. 4.
Spanel, Abraham N., Rochester, N. Y. Treating fabrics. 1,817,533; Aug. 4.
Spanel, Abraham N., Rochester, N. Y. Device for treating articles. 1,817,534; Aug. 4.
Spanel, Abraham N., Rochester, N. Y. Disinfecting and aerating device. 1,817,535; Aug. 4.
Spanel, Abraham N., Rochester, N. Y. Fumigating and disinfecting articles. 1,817,536; Aug. 4.
Spang, Chaffant & Company. (See Eaton, George M., assignor.)
Spanner, Hans-Joachim. (See Meyer, F., and Spanner.)
Spencer Lens Company. (See Ott, Harvey N., assignor.)
Sperr, Frederick W., jr., Pittsburgh, Pa., assignor to The Koppers Company. Gas manufacturing process and apparatus. 1,817,777; Aug. 4.
Sperr, Frederick W., jr., Pittsburgh, Pa., assignor to The Koppers Company. Purifying air containing hydrogen sulphide. 1,817,778; Aug. 4.
Sperti, George, Covington, Ky., assignor to Westinghouse Electric & Manufacturing Company. Electrical measuring instrument. 1,817,537; Aug. 4.
Spery, Philmore F., Chicago, Ill., assignor, by mesne assignments, to Karl-Keen Manufacturing Company, Sioux City, Iowa. Automobile luggage trunk. 1,817,107; Aug. 4.
Spradbrow, Norman H. G., Toronto, Ontario, Canada. Street sweeping machine. 1,817,042; Aug. 4.
Spuhr, Max, Werden-on-the-Ruhr, Germany. Method of and apparatus for shrinking cloth or cloth goods. 1,817,855; Aug. 4.
Square D Company. (See Hausmann, L. M., and Widmer, assignors.)
Stack, Emmet G., Marshfield, Oreg. Veneer slicer. 1,817,779; Aug. 4.
Stack, Henry K., Portland, Oreg. Construction in water craft. 1,817,780; Aug. 4.
Stam, Jesse, assignor to Fairclough & Gold, Inc., Boston, Mass. Curtain. 1,817,716; Aug. 4.
Standard Oil Company. (See Adams, E. W., and Kittrell, assignors.)
Standard Oil Company. (See Thiele, Ernest W., assignor.)
Standard Brands Incorporated. (See Buhrig, Henry F., assignor.)
Stange, Wm. J., Co. (See Burnett, L. B., and Bissell, assignors.)
Stangler, Jack, assignor of forty-nine one-hundredths to H. Mitkoff, Brooklyn, N. Y. Detector against hit and run drivers. 1,816,939; Aug. 4.

Stark Tool Company. (See Potter, Frederick T., assignor.)
Steeneck, Robert, assignor to The Western Union Telegraph Company, New York, N. Y. Rotary distributor. 1,817,717; Aug. 4.
Steerup, Godfrey, Maywood, assignor, by mesne assignments, to American Electric Company, Inc., Chicago, Ill. Electric condenser. 1,817,108; Aug. 4.
Steimmig, Gerhard, and H. Ulrich, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of esters. 1,817,425; Aug. 4.
Stein, Irving L., Brooklyn, and C. H. Benington, West Hempstead, N. Y. Harmonica. 1,817,109; Aug. 4.
Steinberg, Emanuel S., et al. (See Gilowitz, Benjamin, assignor.)
Steiner, Oscar, Philadelphia, Pa., assignor to General Electric Company. Sound reproducing apparatus. 1,817,781; Aug. 4.
Steizer, Franz H. B., assignor to the firm Johann Carl Muller, Dresden, Germany. Apparatus for forming cigar bunches. 1,817,326; Aug. 4.
Sterling Engineering and Manufacturing Corporation. (See Hall, Edwin S., assignor.)
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Squeeze riveter. 1,816,918; Aug. 4.
Stickle, Cole, Indianapolis, Ind. Automatic steam control and differential for paper machines. 1,817,110; Aug. 4.
Stillman, John C., Appleton, Wis., assignor of two-fifths L. M. Betts, Washington, D. C. Train heating system. 1,817,426; Aug. 4.
Stinson, Thomas J., Hartford, Conn. Cleaning composition. 1,817,276; Aug. 4.
Stoddard, Charles F., New York, assignor, by mesne assignments, to American Piano Corporation, East Rochester, N. Y. Automatic musical instrument. 1,817,499; Aug. 4.
Stoler, Edward W., Mansfield, Ohio, assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Self feeding swaging roll. 1,816,949; Aug. 4.
Stoneback, Samuel A., Philadelphia, Pa. Horn. 1,816,919; Aug. 4.
Stout, Harry H., Clifton, and J. M. Samuel, Douglas, Ariz. Converter smelting. 1,817,043; Aug. 4.
Strand, Ole, et al. (See Kavanagh, Michael J., assignor.)
Strayer, Arthur C., New Brighton, Pa. Storage file. 1,817,427; Aug. 4.
Stromberg-Carlson Telephone Manufacturing Company, The. (See Worthington, Everett, assignor.)
Stuckwisch, Henry R., Indianapolis, Ind., deceased; N. J. Stuckwisch, administratrix. Water heater. 1,817,214; Aug. 4.
Stuckwisch, Nellie J., administratrix. (See Stuckwisch, Henry R.)
Studdy's J. F., Sons Company. (See Nelson, Nels T., assignor.)
Superheater Company, The. (See Hardy, Charles R., assignor.)
Superior Paper Products Company. (See Beaman, George B., assignor.)
Sutcliffe, Arthur G., assignor to Ilg Electric Ventilating Company, Chicago, Ill. Self cooled electric motor. 1,846,920; Aug. 4.
Svenska Aktiebolaget Gasaccumulator. (See Scheer, Johan G., assignor.)
Swanlund, John S., Rockford, Ill. Rural mail box. 1,817,718; Aug. 4.
Swanson, Edwin C. (See Abramson, J. H., and Swanson.)
Swift & Company. (See Agar, John C., assignor.)
Symington, Company, The. (See Townsend, Donald L., assignor.)
Symons, Edgar B., Hollywood, Calif., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Crushing machine. 1,817,044; Aug. 4.
Tabulating Machine Company, The. (See Bryce, James W., assignor.)
Tabulating Machine Company, The. (See Ford, Eugene A., assignor.)
Tabulating Machine Company, The. (See Lake, C. D., and Page, assignors.)
Tabulating Machine Company, The. (See Weinlich, Hermann A., assignor.)
Taft-Peirce Manufacturing Company, The. (See Miller, Paul V., assignor.)
Takamatsu, Kiyomoto, Tokyo-Fu, Japan. Coupon cutter. 1,817,428; Aug. 4.
Taniguchi, Michiwo, Ebaragun, Tokyo-Fu, Japan, assignor to General Electric Company. Signaling system. 1,817,782; Aug. 4.
Tanner, Arnold J., North Haven, Conn. Packing and display container. 1,817,045; Aug. 4.
Tapper, Thomas P. (See Yarnall, D. R., and Tapper.)
Tartaglia, Louis, Albany, N. Y. Car truck. 1,817,719; Aug. 4.
Tatro, William N., West Springfield, Mass. Apparatus for installing superheater tubes in boiler flues. 1,817,327; Aug. 4.
Taurel, Paulin, Romainville, France. Machine for cutting threads on tubes. 1,817,111; Aug. 4.
Taylor, Jay L. (See Cutting, F., and Taylor.)
Taylor, James H., Oak Park, Ill. Pipe upsetting machine. 1,817,215; Aug. 4.
Taylor, Headlie S., assignor to H. V. McKay Proprietary Limited, Sunshine, Victoria, Australia. Apparatus for gathering and feeding in crop to stripper harvesting and reaper thrasher machines. 1,817,429; Aug. 4.
Telautograph Corporation. (See Van Nostrand, Arleigh N., assignor.)
Teller Corporation. (See Teller, Jacob, assignor.)
Teller, Jacob, Chicago, Ill., assignor to Teller Corporation, Chattanooga, Tenn. Cabinet gas stove and range. 1,817,856; Aug. 4.
Terry, Roger V., Hilton Village, Va., assignor to Newport News Shipbuilding and Dry Dock Company. Adjustable seal for hydraulic turbine gates and the like. 1,817,654; Aug. 4.
Textile Machine Works. (See Janssen, Henry, assignor.)
Thaden, Herbert V., Detroit, Mich., assignor to General Aviation Corporation, New York, N. Y. Aircraft sheet metal seam. 1,817,653; Aug. 4.
Thiele, Ernest W., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Centrifugal separator. 1,817,593; Aug. 4.
Thomas, Albin A., York, assignor to United States Chain & Forging Company, Pittsburgh, Pa. Chain fastener. 1,816,941; Aug. 4.
Thomas Elevator Company. (See Wilson, Alexander H., assignor.)
Thomas, Jack L. (See Bailey, H. H., and Thomas.)
Thompson, Herbert L., Elgin, Ill., assignor to Addressograph Company, Wilmington, Del. Printing machine. 1,817,655; Aug. 4.
Thompson, Walter N., Huntington Beach, Calif. Feed for well drilling tools. 1,817,467; Aug. 4.
Todd Company, The. (See Smith, Burgess W., assignor.)
Todd, William C., Victoria, British Columbia, Canada, assignor to Economy Irrigation Company, Inc., Seattle, Wash. Quick coupling valve device. 1,817,430; Aug. 4.
Tompkins, Deal H. (See Magoun, G. L., and Tompkins.)
Tompkins, Emerson, assignor to Scovill Manufacturing Company, Waterbury, Conn. Flash light switch. 1,816,877; Aug. 4.
Townsend, Donald L., Rochester, assignor to The Symington Company, New York, N. Y. Retaining device. 1,817,720; Aug. 4.
Trageser, Albert H., and L. Hassinger, New York, N. Y. Steel jacketed copper boiler. 1,817,857; Aug. 4.
Trent, Harold E., Lansdowne, Pa. Control system. 1,816,942; Aug. 4.
Trico Products Corporation. (See Hueber, H., and Oishei, assignor.)
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread cutting mechanism for double shuttle looms. 1,817,112; Aug. 4.
Tuttle, Henry A., administrator. (See Hirvonen, E. J., and Tuttle.)
Tuttle, Wallace W. (See Hirvonen, E. J., and Tuttle.)
Tsuyuki, Keiji, Tokyo, Japan, assignor to General Electric Company. Method and apparatus for inside coating bulbs. 1,817,783; Aug. 4.
Twyman, William G., Poteau, Okla. Mold for glass cylinders. 1,817,046; Aug. 4.
Uggla, Wilhelm R., Morby, Stocksund, assignor to Luth & Rosenq Elektriska Aktiebolag, Stockholm, Sweden. Geared electric motor unit. 1,817,216; Aug. 4.
Uhlig, Albert, Rorschach, Switzerland. Arrangement for cooling and heating beds. 1,817,277; Aug. 4.
Ullgren, Johan D. (See Wagner, R. E., and Ullgren.)
Ullmann, Fritz, J. Breslauer, Geneva, and Egil Lie, Chevres, near Geneva, Switzerland. Producing alkali metal phosphates by converting ferrophosphorus with alkali metal sulphates. 1,817,858; Aug. 4.
Ulrey, Dayton, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Space charge device. 1,817,448; Aug. 4.
Ulrich, Heinrich. (See Steimmig, G., and Ulrich.)
Uniclox Corporation. (See Schulse, Herman E., assignor.)
Union Special Machine Company. (See Wohlpart, August J., assignor.)
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
United-Carr Fastener Corporation. (See Carr, Moses F., assignor.)
United Shoe Machinery Corporation. (See Eppler, Andrew, assignor.)
United Shoe Machinery Corporation. (See Hadaway, John B., assignor.)
United States Chain & Forging Company. (See Thomas Albin A., assignor.)
United States Gypsum Company. (See Reel, Herbert W., assignor.)
United Steel & Wire company. (See Jarvis, Charles H., assignor.)
Universal Gear Shift Corporation. (See Goss, Harry T., assignor.)
"Universelle" Cigarettenmaschinenfabrik J. C. Muller & Co. (See Hohn, Max P. E., assignor.)
"Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co. (See Muller, Carl W., assignor.)
Upson, Charles A., Lockport, N. Y., and O. R. Winter, Cincinnati, Ohio, assignor to The Upson Company, Lockport, N. Y. Cutting and swatching mechanism. 1,817,113; Aug. 4.

Upson Company, The. (See Upson, C. A., and Winter, assignors.)
Urschel, William E., Valparaiso, Ind. Building form. 1,816,921; Aug. 4.
Valenta, Joseph, Glendale, Calif. Making confection shells. 1,817,114; Aug. 4.
Valentine, Irving R., Erie, Pa., assignor to General Electric Company. Apparatus for producing low carbon iron. 1,817,784; Aug. 4.
Valerius Corporation. (See Valerius, Theodore L., assignor.)
Valerius, Theodore L., Fort Atkinson, assignor to Valerius Corporation, Jefferson, Wis. Storing and dispensing apparatus. 1,817,656; Aug. 4.
Van Amburgh, Charles L., and J. R. Russell, said Van Amburgh, assignor to F. I. Kauffman, Long Beach, Calif. Fishing tool. 1,816,991; Aug. 4.
Van Antwerp, Edward, White Bear Lake, Minn. Target throwing device. 1,817,786; Aug. 4.
Vance, Walter N., Chicago Heights, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Locker. 1,817,785; Aug. 4.
Van Dall, John E., Covington, Okla. Washing apparatus. 1,816,990; Aug. 4.
Van der Poel, Johannes M. (See Gooskens, H., and van der Poel.)
Van Hamersveld, John J. N., Cleveland Heights, assignor to The Warner & Swasey Company, Cleveland, Ohio. Chuck. 1,817,721; Aug. 4.
Van Hamersveld, John J. N., Cleveland Heights, assignor to The Warner & Swasey Company, Cleveland, Ohio. Indicating device. 1,817,722; Aug. 4.
Van Hamersveld, John J. N., Cleveland Heights, assignor to The Warner & Swasey Company, Cleveland, Ohio. Indicator. 1,817,723; Aug. 4.
Van Hamersveld, John J. N., Cleveland Heights, assignor to The Warner & Swasey Company, Cleveland, Ohio. Indicating device. 1,817,724; Aug. 4.
Van Hooydonk, Adrian C., assignor to J. E. Smith's Sons Company, Buffalo, N. Y. Meat slicing machine. 1,817,658; Aug. 4.
Van Horn, John W., San Diego, Calif. Combined seat and cushion pack for parachutes. 1,817,725; Aug. 4.
Van Nostrand, Arleigh N., Flushing, assignor to Telautograph Corporation, New York, N. Y. Relay mechanism. 1,817,468; Aug. 4.
Van Ryan, Tony, and A. Alsaker, assignors to The Delta-Star Electric Company, Chicago, Ill. Combined choke coil and ground switch. 1,816,878; Aug. 4.
Van Sickle, Frank M., Trenton, assignor of one-third to M. A. Van Sickle, Branchville, N. J. Water gate and hose connection. 1,817,538; Aug. 4.
Van Sickle, Mary A. (See Van Sickle, Frank M., assignor.)
Van Urk, Arend T. (See Vermeulen, R., and van Urk.)
Vaughan, Harry N., Villa Park, Ill. Stock oiler. 1,817,449; Aug. 4.
Vawter, Charles E., Philadelphia, Pa., assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,817,657; Aug. 4.
Vennum, George C., Westfield, N. J., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler tube cleaning apparatus. 1,817,278; Aug. 4.
Vermeulen, Roelof, and A. T. van Urk, Eindhoven, Netherlands, assignors to Radio Corporation of America. Magnet system for converting electrical into mechanical energy or inversely. 1,817,787; Aug. 4.
Viallet, Joseph, Paris, France, assignor to N. T. Artificial Wool Company, Limited, London, England. Treatment of jute fiber. 1,817,279; Aug. 4.
Vickerman, Robert E., Philadelphia, Pa. Retaining bar for loom spools. 1,817,469; Aug. 4.
Victor, Alexander F., New York, N. Y. Film spool and mounting. 1,817,217; Aug. 4.
Victor Talking Machine Company. (See Buckle, Horace L. T., assignor.)
Victor Talking Machine Company. (See Elliott, Harold F., assignor.)
Vienneau, Jacob J., Pittsfield, Mass., assignor to General Electric Company. Coil winding apparatus. 1,817,884; Aug. 4.
Vierengel, Matthew, Brooklyn, N. Y. Envelope machine. 1,817,539; Aug. 4.
Vignos, James C., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Treating metals and compositions therefor. 1,817,500; Aug. 4.
Villanyi, Charles M., Bayside, assignor to L. Mundet & Son, Inc., New York, N. Y. Closure. 1,817,218; Aug. 4.
Vimco Mfg. Company. (See Hauenstein, Paul A., assignor.)
Vinther, Michael K., Newark, N. J. Producing hydrogen and apparatus therefor. 1,817,726; Aug. 4.
Vogt, Hans, Berlin, Germany. Sounding condenser. 1,816,992; Aug. 4.
Voos, Frederick A., Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Retractile device. 1,817,024; Aug. 4.
Vorbeck, Herman W., Grand Junction, Colo. Printing machine for golf balls and the like. 1,817,788; Aug. 4.
Vyse, Charles H., Portland, Oreg. Combustion chamber for motors. 1,817,280; Aug. 4.
Wacker, Dr. Alexander, Gesellschaft fur Elektrochemische Industrie G. m. b. H. (See Halbig, P., and Kaufler, assignors.)
Waechter, Ferdinand F., and L. F. Snyder, Philadelphia, Pa., assignors to Link-Belt Company, Chicago, Ill. Control mechanism for crawler loader booms. 1,817,789; Aug. 4.
Wagner Electric Corporation. (See Linders, Harry P., assignor.)
Wagner, Rudolf E., Karlstad, and J. D. Ullgren, Stocksund, assignors to Aktiebolaget Karlstads Mekaniska Werkstad, Karlstad, Sweden. Machine for separating liquids from solid bodies mixed or suspended therein. 1,817,594; Aug. 4.
Wahlforss, Eric, St. Cloud, Minn., assignor, by mesne assignments, to Arthur L. Little Industrial Corporation, New York, N. Y. Manufacture of paper pulp. 1,816,879; Aug. 4.
Wahnish, George, assignor of one-fourth to C. M. Bleecker, New York, N. Y. Carburetor. 1,817,860; Aug. 4.
Wahnish, George, assignor of one-fourth to C. M. Bleecker, New York, N. Y. Carburetor. 1,817,861; Aug. 4.
Wainright, Charles, Erie, Pa. Unloading system for air and gas compressors. 1,817,862; Aug. 4.
Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Machine for forming gear guards. 1,817,115; Aug. 4.
Walker, Green W., Hardin, Mo. Chair. 1,817,863; Aug. 4.
Walker & Pratt Mfg. Co. (See Patterson, Ralph J., assignor.)
Wallace, Lee S., Holt, Ala. Excavating bucket. 1,817,595; Aug. 4.
Wallace, R., & Sons Mfg. Co. (See Griswold, Darwin G., assignor.)
Wallraff, Walter H., St. Paul, Minn. Airplane pontoon. 1,817,047; Aug. 4.
Walsmith, Frank D. (See Goad, L. C., and Walsmith.)
Walton, Frank W., East Orange, N. J., assignor to Westinghouse Lamp Company. Mandrelless multiple die coil winging machine. 1,816,880; Aug. 4.
Ward, Lawrence T., assignor to David Lupton's Sons Company, Philadelphia, Pa. Radiator mounting. 1,817,889; Aug. 4.
Ward, Robert J., Elvaston, England. Mirror. 1,817,401; Aug. 4.
Waring, Robert K. (See Cyr, Howard M., and Waring.)
Warner & Swasey Company, The. (See Bogart, Fred H., assignor.)
Warner & Swasey Company, The. (See Van Hamersveld, John J. N., assignor.)
Warnke, Carl J., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Cleaning wire. 1,816,881; Aug. 4.
Washburn, Robert M., Evanston, assignor, by mesne assignments, to Albert P. Hunt. Dehydrating apparatus. 1,817,048; Aug. 4.
Watkins, John N., Iowa City, Iowa. Quack grass destroyer. 1,817,450; Aug. 4.
Watkins, Parke H., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Coating concrete with rubber and product. 1,816,922; Aug. 4.
Waukesha Motor Company. (See Rector, Enoch, assignor.)
Weaver, Ira A., Springfield, Ill. Pump. 1,817,659; Aug. 4.
Weber Electric Company. (See Butler, W. L., Fabrey, and Weber, assignors.)
Weber Electric Company. (See Weber, John, assignor.)
Weber, Hermann, Paterson, N. J. Cork sterilizer cage. 1,816,923; Aug. 4.
Weber, John. (See Butler, W. L., Fabrey, and Weber.)
Weber, John, assignor to Weber Electric Company, Schenectady, N. Y. Electric lamp socket casing. 1,817,025; Aug. 4.
Webster, Samuel T. (See Arter, W., Arter, and Webster.)
Weightman, William A. (See Eksergian, C. L., and Weightman.)
Weil, Louis A., Detroit, Mich. Stud driver. 1,817,049; Aug. 4.
Weimers, Wilhelm, Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Centrifugal liquid sprayer. 1,817,328; Aug. 4.
Weinlich, Herman A., Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Printing mechanism for accounting machines. 1,817,501; Aug. 4.
Welch, John B., New Orleans, La. Drying apparatus. 1,817,402; Aug. 4.
Werner, Oscar, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Suspension device. 1,817,540; Aug. 4.
Western Electric Company. (See Larsen, Einer W., assignor.)
Western Electric Company. (See Siegmund, Humphreys O., assignor.)
Western Stamping & Manufacturing Company. (See Preus, Paul A., assignor.)
Western Union Telegraph Company, The. (See Demonet, E. A., and Copenhaver, assignors.)
Western Union Telegraph Company, The. (See Morgenstern, Ronald V., assignor.)
Western Union Telegraph Company, The. (See Steeneck, Robert, assignor.)
Westinghouse Electric & Manufacturing Company. (See Andersen, Niels K., assignor.)
Westinghouse Electric & Manufacturing Company. (See Baudry, René A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Crabbs, Herbert J., assignor.)

Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hawkinson, Emil E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hester, Edgar A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hummel, Robert C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Rüdenberg, Reinhold, assignor.)
Westinghouse Electric & Manufacturing Company. (See Shand, Errol B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, Walter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sperti, George assignor.)
Westinghouse Electric & Manufacturing Company. (See Ulrey, Dayton, assignor.)
Westinghouse Electric & Manufacturing Company. (See Werner, Oscar, assignor.)
Westinghouse Electric & Manufacturing Company. (See Zworykin, Vladimir K., assignor.)
Westinghouse Lamp Company. (See Driggs, Frank H., assignor.)
Westinghouse Lamp Company. (See Hageman, A. M., and Lindstrom, assignors.)
Westinghouse Lamp Company. (See Walton, Frank W., assignor.)
Weyandt, Carl S., Pittsburgh, Pa., assignor to Central Electric Tool Company. Controlling vibratory motors. 1,817,403; Aug. 4.
Whalen, Thomas, New York, N. Y. Bathing table. 1,817,596; Aug. 4.
Whaley, John W., Richmond, Va. Slip cover for automobile seats. 1,817,404; Aug. 4.
Wheeler, Harve M. (See Kinzbach, F., and Wheeler.)
Wheeling Steel Corporation. (See Rollason, Charles H., assignor.)
Whiffen, Edwin J., Mount Vernon, N. Y. Anchoring plug. 1,817,790; Aug. 4.
White, John W., Buffalo, N. Y., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Wheel. 1,816,943; Aug. 4.
White, S. S. Dental Manufacturing Company, The. (See Angell, Robert C., assignor.)
Whitin Machine Works. (See Hartley, Ellis, assignor.)
Whitin Machine Works. (See Hendrickson, Fred K., assignor.)
Whitin Machine Works. (See Smith, Allen, assignor.)
Wichmann, John C., Los Angeles, Calif. Radium emanation jar. 1,817,329; Aug. 4.
Wickwire Spencer Steel Company. (See Woodman, Francis N., assignor.)
Widmer, Jules A. (See Hausmann, L. M., and Widmer.)
Wiegart, August J. W., St. Louis, Mo. Automobile brush. 1,817,050; Aug. 4.
Wilckens, Ernst, Berlin, Germany. Taking soundings at remote points. 1,817,814; Aug. 4.
Willard, George B. (See Campbell, A., and Willard.)
Willard Storage Battery Company. (See Reinhardt, Willard L., assignor.)
Willcox, Frederick H., and J. C. Hayes, jr., assignors to Freyn Engineering Company, Chicago, Ill. Control means for hot blast stoves. 1,817,219; Aug. 4.
Williams, George W., jr., deceased, Temple, Tex.; P. Williams, executrix. Auto vent wing for aeroplanes. 1,817,281; Aug. 4.
Williams, Leroy F., assignor to Highway Trailer Company, Edgerton, Wis. Lock for tilting bodies. 1,816,882; Aug. 4.
Williams, Louis N. D., Ogontz, Pa., assignor to Scott & Williams, Incorporated, New York, N. Y. Needle arresting means for knitting machines. 1,817,116; Aug. 4.
Williams Oil-O-Matic Heating Corporation. (See Williams, Walter W., assignor.)
Williams, Pauline., executrix. (See Williams, George W., jr.)
Williams, Robert T., assignor to H. M. Sheer Company, Quincy, Ill. Oil control. 1,817,282; Aug. 4.
Williams, Todd P., Houston, Tex. Tool joint tong. 1,817,791; Aug. 4.
Williams, Victor, assignor to The Mid-West Chandelier Company, Kansas City, Mo. Brace for lighting fixtures. Des. 84,799; Aug. 4.
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Electrically operated and controlled oil burning mechanism. 1,817,051; Aug. 4.
Willits, Leland R., Atlantic City, N. J. Battery water level indicator. 1,816,993; Aug. 4.
Willshaw, Harry, Wylde Green, near Birmingham, W. G. Gorham, Erdington, and E. Ramsbottom, Heywood, England, assignors of one-half to Dunlop Rubber Company, Limited, Erdington, Birmingham, England, and one-half to J. Mills & Co., Ltd. Sealing the ends of vessels against internal fluid pressure. 1,816,883; Aug. 4.
Wilson, Alexander H., Oak Park, assignor to Thomas Elevator Company, Chicago, Ill. Safety brake. 1,816,884; Aug. 4.
Wilson, Bingham T., Covina, Calif. Lawn mower sharpener. 1,817,331; Aug. 4.
Wilson, Jay F., jr., Jackson, Calif. Duplex sink partition. 1,817,330; Aug. 4.
Wilson-Jones Company. (See Irving, Clarence B., assignor.)
Winkler, Carl J. (See Sohwitzer, L., and Winkler.)
Winship, Emory. (See Knight, George D., assignor.)
Winter, Otto R. (See Upson, C. A., and Winter.)
Winther, Anthony, Kenosha, Wis., and M. P. Winther, Waukegan, Ill., assignors to The Winther Company, Wilmington, Del. Transmission. 1,817,660; Aug. 4.
Winther Company, The. (See Winther, Anthony, and M. P., assignor.)
Winther, Martin P. (See Winther, Anthony, and M. P.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wohlpart, August J., New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,817,727; Aug. 4.
Wolfermann, Carl E. E., New York, N. Y. Collapsible roof body for automobiles. 1,816,924; Aug. 4.
Wood, Andrew C., Chicago, Ill. Liquid elevating device. 1,817,052; Aug. 4.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Multiple stereotype plate casting and finishing machine. 1,816,944; Aug. 4.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Matrix setting mechanism. 1,816,945; Aug. 4.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Metal pump. 1,816,946; Aug. 4.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Impaling pins. 1,816,947; Aug. 4.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Lock-up for rolls. 1,816,948; Aug. 4.
Wood Newspaper Machinery Corporation. (See Roesen, Oscar C., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodman, Francis N., Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y. Flanged conveyer belt. 1,817,117; Aug. 4.
Woonsocket Rubber Company. (See Rice, Harold D., assignor.)
Worcester Loom Works. (See Alvord, Clinton, assignor.)
Worcester Loom Works. (See Shannon, Henry W., assignor.)
Worrall, Arthur G., assignor to L. J. Kolb, trading as Safetee Glass Company, Philadelphia, Pa. Glass washing machine. 1,817,332; Aug. 4.
Worswick, Ray C., Roswell, N. M. Drain filter. 1,817,283; Aug. 4.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or the like. Des. 84,800; Aug. 4.
Worthington Pump and Machinery Corporation. (See Grace, John F., assignor.)
Wright, Stanton M. (See Wright, W. L. and S. M.)
Wright, Walter L. and S. M., Los Angeles, Calif. Motion picture projector. 1,817,026; Aug. 4.
Wrisley, Allen B., Co. (See Luckow, Elmer R., assignor.)
Wyatt, Edwin M. (See Slidell, K., and Wyatt.)
Yares, Clement A, St. Paul, Minn. Cable layer. 1,817,792; Aug. 4.
Yarnall, David R., Germantown, Philadelphia, and T. P. Tapper, Roslyn, assignors to Yarnall-Waring Company, Philadelphia, Pa. Intermittent actuating mechanism and method. 1,816,886; Aug. 4.
Yarnall-Waring Company. (See Yarnall, D. R., and Tapper, assignors.)
Yoder-Morris Company, The. (See Morris, Howard I., assignor.)
York Ice Machinery Corporation. (See Morse, Louis S., assignor.)
Young, Archer E., Pittsburgh, Pa. Measuring apparatus. 1,816,949; Aug. 4.
Young, Archer E., Pittsburgh, Pa. Measuring apparatus. 1,816,950; Aug. 4.
Young, Chester A., St. Joseph, Mo. Combination lock adding bank. 1,817,221; Aug. 4.
Young, Elkins R., Cleveland Heights, Ohio. Vehicle. 1,817,220; Aug. 4.
Yule, Earl S., et al. (See Norton, William H., assignor.)
Zabriskie, Henry L., Westfield, and D. H. Chason, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Electric motor. 1,817,597; Aug. 4.
Zachman, William H., Woodhaven, assignor to Groove Lock Co., Inc., New York, N. Y. Fastening device for hand bags. 1,816,885; Aug. 4.
Zemke, Heinrich, Berlin, Germany. Washing apparatus. 1,817,222; Aug. 4.
Zerk, Oscar U., Chicago, Ill. Hosiery. 1,817,053; Aug. 4.
Ziemmerman, Henry, assignor to Chicago Cardboard Company, Chicago, Ill. Folding display. 1,817,598; Aug. 4.
Zons, Frederick W., assignor to American Neon Light Corporation, New York, N. Y. Preparing luminescent tubes. 1,817,333; Aug. 4.
Zworykin, Vladimir K., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Television apparatus. 1,817,502; Aug. 4.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 4TH DAY OF AUGUST, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acoustic impedance, Apparatus for the measurement of. E. H. Smythe and P. B. Flanders. 1,816,917; Aug. 4.
Advertising apparatus. W. Kuczorra. 1,817,828; Aug. 4.
Advertising device. H. F. Godel. 1,816,899; Aug. 4.
Aeo light. T. W. Case. 1,816,825; Aug. 4.
Aerial flare. R. J. Anderson. 1,817,503; Aug. 4.
Aeroplane. E. L. Crozier. Re18,143; Aug. 4.
Aeroplane. R. E. Krug. 1,817,007–8; Aug. 4.
Aeroplane construction. J. C. McFadyen. 1,817,089; Aug. 4.
Agricultural machine. C. C. Ensminger. 1,816,999; Aug. 4.
Air cleaner. J. P. Remington. 1,816,871; Aug. 4.
Aircraft sheet metal seam. H. V. Thaden. 1,817,653; Aug. 4.
Air gun, Repeating. V. H. Forsman, A. J. Decker, and A. W. Edwards. 1,817,745; Aug. 4.
Airplane. S. F. Few. 1,816,898; Aug. 4.
Airplane and method of control. R. W. Schroeder. 1,817,651; Aug. 4.
Airplane pontoon. W. H. Wallraff. 1,817,047; Aug. 4.
Airship. J. Schuette. 1,817,274; Aug. 4.
Air washing apparatus. S. C. Cutler. 1,816,828; Aug. 4.
Alfalfa hay and other vegative products, Curing. E. B. Cushman. 1,816,998; Aug. 4.
Alkali metal alcoholates, Preparing. P. Halbig and F. Kaufler. 1,816,843; Aug. 4.
Alkali metal derivatives of organic compounds, Preparation of. J. Pfleger and E. Scheller. 1,816,911; Aug. 4.
Alloy and preparing same. H. S. Cooper. 1,816,961; Aug. 4.
Alloys, Forging magnesium. G. Michel. 1,816,983; Aug. 4.
Amplifying system. P. D. Andrews. 1,817,795; Aug. 4.
Amplifying system. R. A. Miller. 1,816,862; Aug. 4.
Anæsthetic, Local. H. C. Brill. 1,817,670; Aug. 4.
Anæsthetizing apparatus. J. A. Heidbrink. 1,817,485; Aug. 4.
Anchor or anticreeper, Railway rail. A. S. McDonnell. 1,817,455; Aug. 4.
Anchor, Rail. F. A. Preston. 1,817,097; Aug. 4.
Anchorage device. H. Rosenberg. 1,817,584; Aug. 4.
Angle cord grip cap. H. Hubbell, jr. 1,817,004; Aug. 4.
Anhydride, Flaked phthalic. H. B. Foster. 1,817,304; Aug. 4.
Anhydride, Manufacturing acetic. R. Meingast and M. Mugdan. 1,817,318; Aug. 4.
Animal releasing and frightening means. J. Liginski. 1,817,415; Aug. 4.
Annealing pot. C. A. Finn. 1,816,930; Aug. 4.
Antijumping device for form rollers. O. C. Roesen. 1,816,935; Aug. 4.
Anyhydrides of aliphatic acids, Manufacture of. H. Dreyfus. 1,817,614; Aug. 4.
Article and making the same. C. S. Brock. 1,817,174; Aug. 4.
Article selecting and distributing system, Automatic. E. W. Adams. 1,816,887; Aug. 4.
Article securing bracket. P. A. Hauenstein. 1,817,371; Aug. 4.
Articles, Device for treating. A. N. Spanel. 1,817,534; Aug. 4.
Articles, Fumigating and disinfecting. A. N. Spanel. 1,817,536; Aug. 4.
Articles, Treating. A. N. Spanel. 1,817,530–1; Aug. 4.
Aspirator device for flusher control. S. Y. Monckton. 1,817,016; Aug. 4.
Assembling machine. A. W. Phelps and N. L. Penn. 1,817,462; Aug. 4.
Awning. A. Bruns. 1,817,126; Aug. 4.
Awning. A. Bruns. 1,817,290; Aug. 4.
Awning, Folding metallic. F. J. Richardson. 1,817,847; Aug. 4.
Baffle for flue doors, Return. F. W. Hvoslef. 1,817,150; Aug. 4.
Bagasse and the like, Apparatus for preparing and burning. E. C. Bliss. 1,817,228; Aug. 4.
Bag: *See*—
  Open mouth bag.
Bags, Treating used burlap. G. I. Goldwyn. 1,816,840; Aug. 4.
Bail ears to pails, Attaching. C. H. Rollason. 1,817,710; Aug. 4.
Baking pan. M. J. Hubert. 1,817,690; Aug. 4.
Bananas, Ripening of. R. J. Broadbent. 1,817,875; Aug. 4.
Band lock. F. A. Smith and C. H. Nehls. 1,817,497; Aug. 4.
Bank, Combination lock adding. C. A. Young. 1,817,221; Aug. 4.
Bar: *See*—
  Margin bar.
Bar cutting mechanism. C. L. Eksergian and W. A. Weightman. 1,817,070; Aug. 4.
Bar for loom spools, Retaining. R. E. Vickerman. 1,817,469; Aug. 4.
Bar sizing or shaving machine. S. C. Bond. 1,817,608; Aug. 4.
Barking machine. A. G. Johansson. 1,817,413; Aug. 4.
Base for chairs and the like. E. C. Harter. 1,817,558; Aug. 4.
Base for chairs, stands, and the like. E. C. Harter. 1,817,559; Aug. 4.
Base for chairs, tables and the like. E. C. Harter. 1,817,560; Aug. 4.
Basing apparatus. H. Gooskens and J. M. van der Poel. 1,817,746; Aug. 4.
Bathing table. T. Whalen. 1,817,596; Aug. 4.
Battery: *See*—
  Storage battery.
Bead threading machine. F. Lornitzo. 1,817,010; Aug. 4.
Bearing and forming same, Self-lubricating self-aligning. N. Skillman. 1,817,528; Aug. 4.
Bearing, Self tightening. G. S. Morison. 1,817,160; Aug. 4.
Beater and aerator. T. L. Bailey. 1,817,665; Aug. 4.
Beater engine. W. V. Knoll. 1,817,749; Aug. 4.
Bed or similar article. T. G. Kindel. Des. 84,786; Aug. 4.
Bedstead, Extensible. M. F. Bayer. 1,817,666; Aug. 4.
Belting device. J. W. Heltzel. 1,817,687; Aug. 4.
Block: *See*—
  Building block.
  Crown block.
  Distributing block.
  Fuse block.
  Playing card block.
Blue printing apparatus. A. B. Dickey. 1,817,242; Aug. 4.
Board: *See*—
  Music instruction board.
Boat, Folding. H. Hart. 1,817,557; Aug. 4.
Boiler: *See*—
  Copper boiler.
Boiler feed apparatus. E. S. Hall. 1,817,189; Aug. 4.
Boiler feed regulator. T. Kallmeyer. 1,817,379; Aug. 4.
Boiler tube cleaning apparatus. G. C. Vennum. 1,817,278; Aug. 4.
Bolt and locking sleeve. H. V. Haight. 1,817,188; Aug. 4.
Bookmark. R. H. Moore. 1,816,910; Aug. 4.
Boring machine. R. C. Beckman. 1,817,730; Aug. 4.
Bottle capper. R. T. Salsbury. 1,817,210; Aug. 4.
Bottles and the like, Wrapping and packing. A. L. Bobrick. 1,817,061; Aug. 4.
Bottles, Attachment for draftsmen's ink. J. R. Parrish. 1,817,835; Aug. 4.
Box: *See*—
  Collapsible box.
  Compartment box.
  Display box.
  Electrode box.
  Mail box.
  Meter box.
  Safety deposit box.
Box and gland, Stuffing. M. C. Bailey. 1,817,867; Aug. 4.
Box for watches, Display. E. C. Sloan. 1,817,852; Aug. 4.
Box or case, Vanity. W. M. Hauch. 1,817,310; Aug. 4.
Brace for lighting fixtures. V. Williams. Des. 84,799; Aug. 4.
Bracket: *See*—
  Article securing bracket.
  Resilient mounting bracket.
Braiding carrier. H. Janssen. 1,817,626; Aug. 4.
Brake: *See*—
  Safety brake.
Brake mechanism for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,817,800; Aug. 4.
Brake operating mechanism. W. Purcell. 1,817,844; Aug. 4.
Brake shoe. J. W. Latimer. 1,817,570; Aug. 4.
Brick for rotary cement kilns, Lining. H. Saito. 1,817,421; Aug. 4.
Brush, Automobile. A. J. W. Wiegart. 1,817,050; Aug. 4.
Brush for bottle washing machines, Swinging outside. G. J. Meyer, O. Dreher, and J. Campo. 1,817,014; Aug. 4.
Brush rake. D. R. Garretson. 1,817,361; Aug. 4.
Brush, Rotary. E. E. Curtis. 1,817,176; Aug. 4.
Brush, Rubber. M. Samuel. 1,817,585; Aug. 4.
Brush, Water powered rotating cleaning. O. A. Pope. 1,817,644; Aug. 4.
Bucket, Excavating. L. S. Wallace. 1,817,595; Aug. 4.
Buckle. C. G. King. 1,817,440; Aug. 4.
Building block. J. T. Sentrop. 1,816,916; Aug. 4.
Building form. W. E. Urschel. 1,816,921; Aug. 4.
Bulbs, Method and apparatus for inside coating. K. Tsuyuki. 1,817,783; Aug. 4.
Bumper, Automobile. W. R. Atkinson. 1,817,866; Aug. 4.
Bunch building mechanism. A. Smith. 1,817,106; Aug. 4.

Buoy light. E. W. Himberger. 1,817,312; Aug. 4.
Burglar-proof arrangement for the protection of night clerks. C. B. Bormann. 1,816,823; Aug. 4.
Burner: *See*—
Gas burner.
Butcher's gambrel. J. O. Benton. 1,817,869; Aug. 4.
Butter handling device. R. Helmroth. 1,816,904; Aug. 4.
Cabinet, Bath. R. J. Kaleney. 1,817,381; Aug. 4.
Cabinet, Towel. J. H. Addler. 1,817,471; Aug. 4.
Cabinet, Towel H. W. Crowson. 1,817,479; Aug. 4.
Cable layer. C. A. Yates. 1,817,792; Aug. 4.
Cadmium plated goods, Finishing. C. A. Ganser. 1,816,837; Aug. 4.
Cage, Steel guard. J. C. Briles. 1,817,874; Aug. 4.
Calculating machine. W. S. Gubelmann. 1,817,451; Aug. 4.
Calendar and money box, savings bank or other collection box, Combined. E. K. Gade. 1,817,682; Aug. 4.
Cam device. G. J. Boonzaier. 1,817,609; Aug. 4.
Cameras, Driving and controlling mechanism for automatic S. M. Fairchild. 1,817,182; Aug. 4.
Can: *See*—
Dispensing can. Ice can.
Can grid. N. M. Small and L. Buchler, jr. 1,817,715; Aug. 4.
Car cleaning apparatus, Tank. M. E. Byerley. 1,816,954; Aug. 4.
Car railroad way construction and maintenance. H. W. Protzeller. 1,817,523; Aug. 4.
Car, Tank. R. C. Pierce. 1,817,581; Aug. 4.
Cars, Manufacturing tank. R. C. Pierce. 1,817,580; Aug. 4.
Carbohydrates, Increasing the strength and resistibility against moisture of high molecular. J. Kantorowicz. 1,816,973; Aug. 4.
Carbon iron, Apparatus for producing low. I. R. Valentine. 1,817,784; Aug. 4.
Carbon tetrachloride, Making. P. S. Brallier, E. J. Dunlap, and G. D. Muggleton. 1,817,123; Aug. 4.
Carburetor. C. Brown. 1,817,610; Aug. 4.
Carburetor. G. Wabnish. 1,817,860; Aug. 4.
Cardboard and like sheets, Mechanism for feeding and severing. W. E. Mollos. 1,817,701; Aug. 4.
Card sorting machine. E. A. Ford. 1,817,511; Aug. 4.
Cards and planetary calculator, Magic. G. Jakopec and J. Samu. 1,817,824; Aug. 4.
Carrier: *See*—
Braiding carrier. Ice carrier.
Carton and carton opener. P. E. Fischer. 1,816,835; Aug. 4.
Carton and pouring spout therefor. W. A. Morris. 1,816,985; Aug. 4.
Cash register. C. W. Green. 1,817,815–17; Aug. 4.
Cash register. B. M. Shipley. 1,817,770; Aug. 4.
Cash register B. M. Shipley. 1,817,883; Aug. 4.
Casing, Electric lamp socket. J. Weber. 1,817,025; Aug. 4.
Casting apparatus. T. B. Barr. 1,817,340; Aug. 4.
Casting machine. L. C. Goad and F. D. Walsmith. 1,817,483; Aug. 4.
Catch for motor vehicles, Hood. G. A. Dewbery. 1,817,241; Aug. 4.
Cement head for oil wells. B. S. Minor. 1,817,201; Aug. 4.
Centrifugal separator. B. W. Thiele. 1,817,593; Aug. 4.
Chain, Antiskid. E. Y. Schaeffer. 1,817,586; Aug. 4.
Chain clamp. E. Kessler and C. H. James. 1,817,628; Aug. 4.
Chain hook. G. Johnson. 1,817,825; Aug. 4.
Chain, Tire. R. E. Eddy. 1,817,547; Aug. 4.
Chair. G. W. Walker. 1,817,863; Aug. 4.
Chair and bed, Combined. P. Pintow. 1,817,708; Aug. 4.
Chair or support, Reenforced. D. H. Bitney. 1,817,059; Aug. 4.
Chaplet. C. H. Reeder. 1,816,870; Aug. 4.
Chassis, Four wheel rear drive. M. M. Brockway. 1,817,028; Aug. 4.
Checking excessive dead mileage. B. C. Palmer. 1,817,395; Aug. 4.
Chloride, Manufacture of organic. E. A. Harding. 1,816,845; Aug. 4.
Choke coil and ground switch, Combined. T. Van Ryan and A. Alsaker. 1,816,878; Aug. 4.
Chuck. J. J. N. Van Hamersveld. 1,817,721; Aug. 4.
Churn. J. O'Connell and H. H. Kerr. 1,817,833; Aug. 4.
Cigar bunches, Apparatus for forming. F. H. B. Stelzer. 1,817,326; Aug. 4.
Cigarette. A. Deinstein. 1,817,546; Aug. 4.
Circuit for protecting electric rectifiers from reverse currents. R. Keller. 1,817,084; Aug. 4.
Circuit for vacuum tubes, Protective. J. C. Schelleng. 1,816,913; Aug. 4.
Circuit interrupter and magnetic arc extinguishing device therefor. G. A. Burnham. 1,816,894; Aug. 4.
Circulating system for pulp digesters. D. B. Davies. 1,817,129; Aug. 4.
Clamp: *See*—
Chain clamp. Newspaper clamp.
Hose clamp. Wire clamp.
Clamp-head railroad spike, Detachable. L. Koen. 1,817,569; Aug. 4.
Cleaner: *See*—
Vacuum cleaner. Windshield cleaner.
Cleaning composition. S. W. Putman and N. Poffenberger. 1,817,582; Aug. 4.
Cleaning composition. T. J. Stinson. 1,817,276; Aug. 4.
Clip. B. F. Horsting and G. C. Leppla. 1,817,149; Aug. 4.
Clocks, Synchronizing mechanism for secondary. C. E. Larrabee. 1,817,490; Aug. 4.
Closure. C. M. Villanyi. 1,817,218; Aug. 4.
Closure for bracelets and the like. E. Becker. 1,817,475; Aug. 4.
Cloth or cloth goods, Method of and apparatus for shrinking. M. Spuhr. 1,817,855; Aug. 4.
Clothes wringer. T. W. Behan. 1,817,604; Aug. 4.
Clutch. C. F. Doll. 1,816,929; Aug. 4.
Clutch, Centrifugal. J. Bethenod and H. Coudet. 1,817,542; Aug. 4.
Coat and vest, Combined. P. H. Einbinder. 1,817,302; Aug. 4.
Coating (alborizing), Protective. R. E. Lowe. 1,817,888; Aug. 4.
Coating for cotton mill rolls. W. D. Robinson. 1,817,267; Aug. 4.
Coating for metal casting molds and cores. M. L. Freed. 1,817,245; Aug. 4.
Coating the interior wall of hollow bodies. A. M. Hageman and A. F. Lindstrom. 1,816,903; Aug. 4.
Coil winding apparatus. J. J. Vienneau. 1,817,884; Aug. 4.
Coin-controlled mechanism. A. G. Gran. 1,817,076; Aug. 4.
Collapsible box. C. H. Goodyear. 1,817,135; Aug. 4.
Collar pressing machine. A. M. McLendon. 1,817,574; Aug. 4.
Colored facsimile system. R. H. Ranger and S. B. Smith. 1,817,098; Aug. 4.
Combustion chamber. G. A. Bryan. 1,817,801; Aug. 4.
Communication system. J. W. Horton. 1,816,905; Aug. 4.
Compartment box. A. P. Hodge. 1,817,562; Aug. 4.
Compressor, Rotary. O. E. Clark. 1,817,735; Aug. 4.
Concrete blower. A. R. Cuthbertson. 1,817,240; Aug. 4.
Concrete floors, Apparatus for forming. J. J. Morgan. 1,817,757; Aug. 4.
Concrete with rubber and product, Coating. P. H. Watkins. 1,816,922; Aug. 4.
Condenser. L. S. Chadwick. 1,816,956; Aug. 4.
Condenser, Electric. G. Steerup. 1,817,108; Aug. 4.
Condenser, Electrical. C. E. Vawter. 1,817,657; Aug. 4.
Condenser, Sounding. H. Vogt. 1,816,992; Aug. 4.
Conduits and the like, Apparatus for cleaning out. J. C. Miller. 1,817,015; Aug. 4.
Confections, Method of and machine for producing. W. B. Laskey. 1,817,383; Aug. 4.
Confections. W. B. Laskey. 1,817,383; Aug. 4.
Connection, Insulated driving. W. E. Krotee. 1,817,517; Aug. 4.
Contact bar for electrical warp stop-motions. O. V. Payne. 1,817,165; Aug. 4.
Container. L. A. Danco. 1,817,128; Aug. 4.
Container, Electrically operated key. W. H. Loyte. 1,817,752; Aug. 4.
Container for gases or liquids under high pressure. A. Belcimano. 1,817,226; Aug. 4.
Container, Non-refillable. C. H. Rollason. 1,817,709; Aug. 4.
Container, Packing and display. A. J. Tanner. 1,817,045; Aug. 4.
Container, Tube. S. Boruss. 1,817,732; Aug. 4.
Container, Sharp freezing. L. G. Copeman. 1,817,544–5; Aug. 4.
Containers during vacuumizing, sterilizing, and sealing, Preventing the collapse of. W. B. Fenn. 1,817,550; Aug. 4.
Control apparatus. N. K. Andersen. 1,817,431; Aug. 4.
Control, Aircraft. C. E. Giessner. 1,817,074; Aug. 4.
Control apparatus. W. H. Smith. 1,817,213; Aug. 4.
Control for electrically operated liquid fuel burning devices. I. E. McCabe. 1,817,635; Aug. 4.
Control means for hot blast stoves. F. H. Willcox and J. C. Hayes, jr. 1,817,219; Aug. 4.
Control mechanism for crawler loader booms. F. F. Waechter and L. F. Snyder. 1,817,789; Aug. 4.
Control mechanism for internal grinding machines. A. M. Drake. 1,817,180; Aug. 4.
Control, Supervisory. R. C. Hummel. 1,817,439; Aug. 4.
Control system. H. E. Trent. 1,816,942; Aug. 4.
Control system. J. M. McNairy. 1,817,756; Aug. 4.
Control system for motor vehicle. H. E. Lippert. 1,817,416; Aug. 4.
Converter smelting. H. H. Stout and J. M. Samuel. 1,817,043; Aug. 4.
Conveyer. A. Redler. 1,817,647; Aug. 4.
Conveyer. C. R. Claghorn. 1,817,348; Aug. 4.
Conveyer. E. C. Hopkins. 1,817,373; Aug. 4.
Conveyer belt, Flanged. F. N. Woodman. 1,817,117; Aug. 4.
Conveyer pad. C. L. Mattison. 1,817,037; Aug. 4.
Cooking apparatus. H. T. Hunter. 1,817,887; Aug. 4.
Cooking device. C. F. Cookson. 1,817,351; Aug. 4.
Cooler. H. L. Miller. 1,816,984; Aug. 4.
Cooling and heating beds, Arrangement for. A. Uhlig. 1,817,277; Aug. 4.
Copper boiler, Steel jacketed. A. H. Trageser and L. Hassinger. 1,817,857; Aug. 4.
Copper, Electrolytic separation of. M. Schlotter. 1,817,527; Aug. 4.
Core, Collapsible. F. L. Johnson. 1,817,515; Aug. 4.

Cork sterilizer cage. H. Weber. 1,816,923; Aug. 4.
Corn removing device. D. Pétard. 1,817,579; Aug. 4.
Corset, Maternity. C. T. Davis. 1,817,408; Aug. 4.
Coupling: *See*—
Tube and pipe coupling.
Coupling. J. G. Hawley. 1,817,255; Aug. 4.
Coupling. H. E. Sipe. 1,817,776; Aug. 4.
Coupling and constructing the same, Tubular. H. E. Sipe. 1,817,774; Aug. 4.
Coupling boring and threading machine. F. H. Bogart. 1,817,668; Aug. 4.
Coupling device, Metallic. H. E. Sipe. 1,817,775; Aug. 4.
Coupling flanges, Producing. J. Sorensen. 1,817,854; Aug. 4.
Coupling for conduits, Flanged. C. Benz. 1,817,289; Aug. 4.
Coupling member. A. Friedman. 1,817,615; Aug. 4.
Coupon cutter. K. Takamatsu. 1,817,428; Aug. 4.
Cover, Book. A. M. De S. Greaves. Des. 84,779; Aug. 4.
Cover for automobile seats, Slip. J. W. Whaley. 1,817,404; Aug. 4.
Cover, Water meter. N. H. Abrams. 1,816,818; Aug. 4.
Covering, Hand. E. I. Marks. 1,817,385; Aug. 4.
Coverings, Making floor. H. A. Bell. 1,816,822; Aug. 4.
Crane, Truck. E. Obliger. 1,817,392; Aug. 4.
Crate, Metallic. A. E. Davenport. 1,817,805; Aug. 4.
Crib, Infant's. H. Gertler. 1,816,965; Aug. 4.
Crosshead. S. Giustiniani. 1,817,684; Aug. 4.
Crown block. E. O. Bennett. Re18,147; Aug. 4.
Crushing machine. E. B. Symons. 1,817,044; Aug. 4.
Crutch attachment. W. H. Lanning. 1,817,829; Aug. 4.
Cultivator. G. F. Galloway. 1,817,551; Aug. 4.
Current channels with superposed telegraph circuits, Combining alternating. R. V. Morgenstern. 1,817,702; Aug. 4.
Current collector. H. P. Chandler. 1,817,175; Aug. 4.
Current telemetering system, Rectified. H. B. Rex. 1,817,765; Aug. 4.
Curtain. J. Stam. 1,817,716; Aug. 4.
Curtain fixture. M. J. Brunner. 1,816,824; Aug. 4.
Curves, Production of cycloidal. L. K. Baren. 1,817,405; Aug. 4.
Cutter: *See*—
Coupon cutter. Weed cutter.
Guarded cutter.
Cutting and swatching mechanism. C. A. Upson and O. R. Winter. 1,817,113; Aug. 4.
Cutting, stamping, and photo printing machines, Automatic. R. de Silva and M. E. Long. 1,817,880; Aug. 4.
Cylinder head machining fixture. O. L. Snyder. 1,817,400; Aug. 4.
Cylinder of internal combustion engines. H. Austin. 1,816,819; Aug. 4.
Debarking machine. H. S. Mitchell and R. V. Schafer. 1,817,158; Aug. 4.
Decorative effects upon textile fabrics by brilliant metallic deposits, Obtainment of. M. C. R. Hedde. 1,817,311; Aug. 4.
Defroster, Window. T. J. French. 1,817,305; Aug. 4.
Dehydrating apparatus. R. M. Washburn. 1,817,048; Aug. 4.
Dentifice. B. B. Badanes. 1,817,664; Aug. 4.
Depth gauge, Micrometer. P. W. Hansen. 1,817,622; Aug. 4.
Detector against hit and run drivers. J. Stangler. 1,816,939; Aug. 4.
Developing apparatus. A. Langsner. 1,817,198; Aug. 4.
Device utilizable for camouflage and the like. E. W. Grandt. 1,817,871 Aug. 4.
Dial, Orientator or architect's solar. A. S. Clay. 1,817,350 Aug. 4.
Diaper washer. R. O'Connor. 1,817,759; Aug. 4.
Die coil winding machine, Mandrelless multiple. F. W. Walton. 1,816,880; Aug. 4.
Die of the extruding and wire drawing type and making the same. J. T. Pratt. 1,817,680; Aug. 4.
Disconnecting switch. H. J. Crabbs. 1,817,065; Aug. 4.
Disinfecting and aerating device. A. N. Spanel. 1,817,535; Aug. 4.
Dispenser, Cigarette. L. D. Conroy. Des. 84,777; Aug. 4.
Dispensing can. B. O. Rhodes. 1,817,322; Aug. 4.
Display apparatus. R. M. Craig. 1,817,508; Aug. 4.
Display box. R. I. Rhodes, jr. 1,817,766; Aug. 4.
Display, Folding. H. Ziemmerman. 1,817,598; Aug. 4.
Display, Illuminated. H. Sarafian. 1,817,397; Aug. 4.
Distributing block, Potential. E. A. Demonet and P. S. Copenhaver. 1,817,737; Aug. 4.
Distributor, Rotary. H. Steeneck. 1,817,717; Aug. 4.
Ditch trimmer. J. D. Gabrieau. 1,817,306; Aug. 4.
Door appliance, Garage. T. Kloss. 1,816,977; Aug. 4.
Door, Car. A. Campbell. 1,817,346; Aug. 4.
Door, Car. A. Campbell and G. B. Willard. 1,817,347; Aug. 4.
Dough molding machine. L. S. Harber. 1,816,844; Aug. 4.
Dough raiser. M. L. Kuntz. 1,816,908; Aug. 4.
Drill: *See*—
Upright drill.
Drill stem. E. V. Crowell. 1,817,067; Aug. 4.
Drive, Variable speed supercharger. E. A. Ryder. 1,817,650; Aug. 4.
Driving and torquing arrangements for road vehicles. A. I. Marcum. 1,816,981; Aug. 4.
Drying apparatus. J. B. Welch. 1,817,402; Aug. 4.
Duct terminal. R. L. Dodd. 1,817,130; Aug. 4.
Dummy for football practice, Tackling and blocking. H. Goldsmith. 1,817,364; Aug. 4.
Duplicating machine, Feeding device for. L. J. Sauer. 1,817,423; Aug. 4.
Dustguard. W. F. Cremean. 1,817,238; Aug. 4.
Edges of loose leaf filler sheets, Device for securing together the binding. C. B. Irving. 1,817,488; Aug. 4.
Electric hot water distributor. F. Graf. 1,817,306; Aug. 4.
Electric machine, Dynamo. H. P. Linders. 1,816,859; Aug. 4.
Electric motor. H. L. Zabriskie and D. H. Chason. 1,817,597; Aug. 4.
Electric motor, Self cooled. A. G. Sutcliffe. 1,816,920; Aug. 4.
Electric necktie restorer. D. M. Benford. 1,817,731; Aug. 4.
Electric pick-up. W. H. Schimpf. 1,817,021; Aug. 4.
Electric switch. F. C. De Reamer. 1,817,807; Aug. 4.
Electric switch. C. A. Fox. 1,817,244; Aug. 4.
Electric switch. B. M. Leece. 1,817,155; Aug. 4.
Electric switch, Time controlled. R. D. Delamere. 1,817,806; Aug. 4.
Electrical axes in crystals, Determining. H. Eberhard. 1,817,181; Aug. 4.
Electrical connecter. W. H. Harvey. 1,816,846; Aug. 4.
Electrical coupling system. F. Cutting and J. L. Taylor. 1,817,294; Aug. 4.
Electrical side slip feeler. J. F. Hartman. 1,817,141; Aug. 4.
Electrical switch. W. L. Butler, W. H. Fabrey, and J. Weber. 1,817,234; Aug. 4.
Electrical warp stop motion. C. R. Kronoff. 1,817,154; Aug. 4.
Electrode box. F. A. Ciraolo. 1,817,543; Aug. 4.
Electrolytic apparatus. R. D. Mershon and P. A. Ross. 1,817,200; Aug. 4.
Electrolytic device. H. O. Siegmund. 1,816,875; Aug. 4.
Electromagnet. B. N. Sokoloff. 1,817,592; Aug. 4.
Electromagnetic device. W. C. Jones. 1,816,906; Aug. 4.
Electron emissive materials. F. Meyer and H. J. Spanner. 1,817,636; Aug. 4.
Elevator: *See*—
Silo elevator.
Elevator. A. T. Munns. 1,817,418; Aug. 4.
Elevator control system. W. F. Eames. 1,817,509; Aug. 4.
Engine: *See*—
Beater engine. Internal-combustion engine.
Gas engine. Rotary engine.
Engine. E. Dickey. 1,817,069; Aug. 4.
Engine crankshaft. A. J. Meyer. 1,817,389; Aug. 4.
Engines, Gas generator for internal combustion. P. Schneider. 1,816,936; Aug. 4.
Engines, Lubrication of. L. Saives. 1,817,422; Aug. 4.
Envelope, Double. C. F. Backmyer. 1,816,815; Aug. 4.
Envelope machine. M. Vierengel. 1,817,539; Aug. 4.
Esters, Manufacture of. G. Steimmig and H. Ulrich. 1,817,425; Aug. 4.
Esters, Preparation of. J. Martin and I. J. Krchma. 1,817,898–9; Aug. 4.
Excavating machine. A. Ellersgaard. 1,817,809; Aug. 4.
Extension device. N. T. Nelson. 1,817,163; Aug. 4.
Extruding and casting substances, Process and machine for centrifugally. J. Merle. 1,817,012; Aug. 4.
Eye mounting for dolls. L. J. Grubman. 1,817,001; Aug. 4.
Fabric: *See*—
Knitted fabric. Mesh fabric.
Fabric forming machine. Zene R. and J. R. Maulsby. Re18,146; Aug. 4.
Fabrics, Embossing. E. L. and W. L. Fuchs. 1,817,184; Aug. 4.
Fabrics, Treating means for. A. N. Spanel. 1,817,532–3; Aug. 4.
Factory, Portable. D. H. Lentz. 1,817,632; Aug. 4.
Fastener, Car door. D. S. Barrows. 1,817,729; Aug. 4.
Fastener, Chain. A. A. Thomas. 1,816,941; Aug. 4.
Fastener device for luggage. S. Lacher. 1,817,518; Aug. 4.
Fastener forming and assembling machine. M. F. Carr. 1,817,886; Aug. 4.
Fastener, Separable. N. J. Poux. 1,817,838–41; Aug. 4.
Fastener, Separable. N. J. Poux. 1,817,843; Aug. 4.
Fastener, Separable. N. J. Poux, V. H. Hall, and P. H. Crowe. 1,817,842; Aug. 4.
Fastening device. H. Leberman. 1,816,858; Aug. 4.
Fastening device. N. J. Poux. 1,817,837; Aug. 4.
Fastening device. J. F. Schylander. 1,816,914; Aug. 4.
Fastening device for handbags. W. H. Zachman. 1,816,885; Aug. 4.
Fastening device for shipping cases, Lid. F. D. Perry. 1,817,578; Aug. 4.
Fastening for hub caps, radiator caps, and gasoline tank caps. D. M. Anderson and A. W. McNeish. 1,817,794; Aug. 4.
Feed device. H. J. Kerr and C. U. Savoye. 1,817,627; Aug. 4.
Feeding device, Automatic. L. J. Sauer. 1,817,103; Aug. 4.
Feeding device, Automatic. L. J. Sauer. 1,817,211; Aug. 4.
Feeding mechanism. W. E. Reed. 1,817,099; Aug. 4.
Fence post. H. Nielsen. 1,817,832; Aug. 4.
Fenders, Attachment for auto. J. W. Outterside. 1,817,705; Aug. 4.

File, Storage. A. C. Strayer. 1,817,427; Aug. 4.
File, Ticket. K. Seifert and E. Sachse. 1,817,466; Aug. 4.
Film numbering machine. P. C. Armitage. 1,817,728; Aug. 4.
Film spool. D. T. Eighmey. 1,817,134; Aug. 4.
Film spool and mounting. A. F. Victor. 1,817,217; Aug. 4.
Filter and skimmer, Oil. F. H. Linley and F. E. Boyd. 1,817,572; Aug. 4.
Filter apparatus. A. Jordahl. 1,816,854–5; Aug. 4.
Filter, Drain. R. C. Worswick. 1,817,283; Aug. 4.
Filter for internal combustion engines, Air. A. F. Pando. 1,817,265; Aug. 4.
Filters, Cleaning and coating air. C. H. Gagen. 1,816,836; Aug. 4.
Firearm. C. H. Bierbaum. 1,817,058; Aug. 4.
Firearm. C. C. Loomis. 1,817,454; Aug. 4.
Firearm. O. V. Payne. 1,817,321; Aug. 4.
Fire extinguisher and support therefor. W. B. Bronander. 1,816,892; Aug. 4.
Fish trap. T. J. Goodrum. 1,817,185; Aug. 4.
Fishing reel. R. B. Bennett. 1,816,889; Aug. 4.
Fishing reel. S. G. Russell. 1,817,102; Aug. 4.
Flashlight switch. E. Tompkins. 1,816,877; Aug. 4.
Flowerpot. M. Schling. Des. 84,793; Aug. 4.
Fluid meter. H. Chrisman and J. T. Madison. 1,816,957; Aug. 4.
Fluids, Stopping the travel of exploding and burning. A. P. Hornor. 1,817,148; Aug. 4.
Footwear, Rubber. I. and L. Dorogi. 1,817,300; Aug. 4.
Form, Shoe. W. J. De Witt. 1,817,299; Aug. 4.
Forming machine for plastic material. G. H. Petri. 1,817,643; Aug. 4.
Fountain for poultry, Drinking. A. R. Hocft. 1,816,849; Aug. 4.
Frame: *See*—
Soap frame.
Frame and clock casing, Terrestrial globe. H. E. Schulse. Des. 84,794; Aug. 4.
Frame and support therefor, Combined terrestrial globe. H. E. Schulse. Des. 84,796; Aug. 4.
Frame corner bead. L. A. Mulligan. 1,817,162; Aug. 4.
Frame for weaving tufted fabrics, Tuft. C. Alvord. 1 817,601; Aug. 4.
Frame, Terrestrial globe. H. E. Schulse. Des. 84,795; Aug. 4.
Frequency meter, Piezo-electric. H. Eberhard. 1,817,030; Aug. 4.
Fuel burning apparatus and method. H. Adams. 1,817,470; Aug. 4.
Furnace: *See*—
Gas furnace.
Furnace. E. B. Kay. 1,817,459; Aug. 4.
Furnace forehearth, Glass. A. F. McNish. 1,816,982; Aug. 4.
Furniture, Article of. J. H. Clements, jr. 1,817,878; Aug. 4.
Furniture top construction. D. E. Hunter. 1,817,453; Aug. 4.
Fur treating composition and making same. J. E. Awad. 1,817,120; Aug. 4.
Fuse. J. G. Clemens. 1,817,291; Aug. 4.
Fuse block. J. Messing. 1,817,521; Aug. 4.
Garage, Storage. L. D. Cook. 1,817,237; Aug. 4.
Garment hanger. M. L. Harding. 1,817,621; Aug. 4.
Garment hanger, Adjustable. R. Hadden. 1,817,369; Aug. 4.
Garment, Nether. A. Fridolph. 1,817,360; Aug. 4.
Garment, Self adjusting. J. Cohen. 1,817,236; Aug. 4.
Garment steaming and stretching device. S. Simon. 1,817,590; Aug. 4.
Gas burner. B. F. Crow. 1,817,066; Aug. 4.
Gas engine, Two cycle. W. E. Ewart. 1,817,610; Aug. 4.
Gas furnace. F. E. Grunwaldt. 1,817,368; Aug. 4.
Gas heater, Radiant. J. M. Packer. 1,817,420; Aug. 4.
Gas manufacturing process and apparatus. F. W. Sperr, jr. 1,817,777; Aug. 4.
Gas saving device. F. C. Grohoski. 1,817,555; Aug. 4.
Gases and of gases with vapors, Separating mixtures of. H. Blau. 1,817,667; Aug. 4.
Gate and hose connection, Water. F. M. Van Sickle. 1,817,538; Aug. 4.
Gauge: *See*—
Depth gauge. Snap thread gauge.
Oil tank gauge.
Gauge control device and train stopping device, Combined track. H. Karl. 1,817,380; Aug. 4.
Gauge for looms, Warp tension. O. V. Payne. 1,817,203; Aug. 4.
Gear change speed unit, Reduction. F. T. Potter. 1,816,867; Aug. 4.
Gear, Dump wagon door operating. G. E. Armington. 1,817,602; Aug. 4.
Gear, Dumping. E. J. Dondlinger. 1,817,132; Aug. 4.
Gear shift control, Pneumatic. H. T. Goss. 1,817,365; Aug. 4.
Gearing. A. Ruetschi. 1,817,019; Aug. 4.
Gearing for driving the shaft of the rotary cutter in cigarette rod making machines, Planetary. M. P. E. Hohn. 1,817,314; Aug. 4.
Gearing, Timing. G. R. Poyer. 1,817,645; Aug. 4.
Gearing, Variable velocity ratio. F. J. Healey. 1,817,819; Aug. 4.
Generator. L. M. Perkins. 1,817,495; Aug. 4.
Generator regulator. J. S. Juergens. 1,817,378; Aug. 4.
Glass, Making sheet. M. L. Begeman. 1,817,055; Aug. 4.
Glass tumbler or article of similar nature. A. H. Nicholson. Des. 84,792; Aug. 4.
Glass washing machine. A. G. Worrall. 1,817,332; Aug. 4.
Goblets and similar articles, Making. W. E. Kee. 1,817,826; Aug. 4.
Golf club and home practicing device. J. B. Henderson. 1,817,896; Aug. 14.
Governor, Engine. E. R. Klemm. 1,817,629; Aug. 4.
Grass destroyer, Quack. J. N. Watkins. 1,817,450; Aug. 4.
Grate. T. Goebel. 1,817,484; Aug. 4.
Grating structure, Continuous. P. L. Price. 1,817,463; Aug. 4.
Grilling, toasting, and the like, Appliance for. F. Adami. 1,817,118; Aug. 4.
Gripping device for praline and like wrapping machines. O. Lauenstein. 1,817,695; Aug. 4.
Guard for cable hooks and the like, Safety. C. V. Koons. 1,816,979; Aug. 4.
Guarded cutter. W. Fairchild. 1,817,481; Aug. 4.
Hair net. L. Seidner. 1,817,713; Aug. 4.
Handle: *See*—
Sadiron handle.
Hanger: *See*—
Garment hanger.
Hanger for elongated articles. J. M. Ahn. 1,817,600; Aug. 4.
Hank bundling mechanism. W. H. Gosch. 1,817,618; Aug. 4.
Harmonica. I. L. Stein and C. H. Benington. 1,817,109; Aug. 4.
Headlight, Dirigible. R. Helkens. 1,817,256; Aug. 4.
Headlight, Locomotive. G. F. Miller. 1,817,091; Aug. 4.
Headrest. C. I. Holmes. 1,817,625; Aug. 4.
Headrest. A. J. May. 1,817,755; Aug. 4.
Heat exchange apparatus. N. L. Hurd. 1,816,850; Aug. 4.
Heater: *See*—
Gas heater. Water heater.
Medical moxa heater.
Heater. A. P. Schwalbach. 1,817,850; Aug. 4.
Heating device with heat accumulators. A. Pais. 1,817,394; Aug. 4.
Heating system for locomotives, Feed water. G. H. Emerson. 1,817,811; Aug. 4.
Heating system, Train. J. C. Stillman. 1,817,426; Aug. 4.
Hinge. H. E. Sipe. 1,817,773; Aug. 4.
Hinge and check, Door. J. M. Eva. 1,816,834; Aug. 4.
Hoist. O. E. Clark. 1,817,736; Aug. 4.
Holder. T. G. McGirr. 1,817,262; Aug. 4.
Holder, Candle. W. L. Orme. 1,817,834; Aug. 4.
Holder, Collar. J. F. Allison. 1,817,662; Aug. 4.
Holder, Door. J. E. Hagstrom. 1,817,452; Aug. 4.
Holder for facilitating distribution of accounts, Record sheet. N. E. Newman and F. A Niemann. 1,817,640; Aug. 4.
Holder, Price tag. C. H. Jarvis. 1,817,151; Aug. 4.
Holder, Razor blade. A. F. Sniegocki. 1,817,023; Aug. 4.
Holder, Thread. C. P. Bergstrom. 1,817,121; Aug. 4.
Holder, Visible label. F. W. and H. H. Panchot. 1,817,396; Aug. 4.
Hook: *See*—
Chain hook.
Hopple, Cow. J. Reichert. 1,817,845; Aug. 4.
Horn. S. A. Stoneback. 1,816,919; Aug. 4.
Horseshoe. B. P. Gray. 1,817,814; Aug. 4.
Hose clamp. H. H. Bailey and J. L. Thomas. 1,817,473; Aug. 4.
Hosiery. O. U. Zerk. 1,817,053; Aug. 4.
Hospital table. P. E. Graff. 1,817,186; Aug. 4.
Hub plate, Hydraulic adjustable. A. J. Sams. 1,817,020; Aug. 4.
Humidifier. J. B. Fisher. 1,817,357; Aug. 4.
Humidifier. J. W. Martin, jr. 1,817,442; Aug. 4.
Humidifying device. E. C. Rosenow. 1,817,648; Aug. 4.
Hydraulic machine, Continuous automatic. R. M. Galloway. 1,817,552; Aug. 4.
Hydrocarbons, Device for treating. R. Cross. 1,816,827; Aug. 4.
Hydrocarbons, Process and apparatus for producing light. H. Butler. 1,817,672; Aug. 4.
Hydrogen and apparatus therefor, Producing. M. K. Vinther. 1,817,726; Aug. 4.
Hydrogen sulphide, Purifying air containing. F. W. Sperr, jr. 1,817,778; Aug. 4.
Ice can. L. S. Morse. 1,817,263; Aug. 4.
Ice carrier. W. L. Belgard. 1,817,056; Aug. 4.
Ice cream making unit. W. G. Smith. 1,817,498; Aug. 4.
Impaling pin. H. A. W. Wood. 1,816,947; Aug. 4.
Incinerator. E. H. Graver. 1,817,033; Aug. 4.
Index and signal. L. E. Hutchings. 1,817,564; Aug. 4.
Index or file. W. H. Day. 1,817,031; Aug. 4.
Indicating device. J. J. N. Van Hamersveld. 1,817,722; Aug. 4.
Indicating device. J. J. N. Van Hamersveld. 1,817,724; Aug. 4.
Indicating system. A. C. Finney. 1,817,744; Aug. 4.
Indicator: *See*—
Water level indicator.
Indicator. J. J. N. Van Hamersveld. 1,817,723; Aug. 4.
Indicator for cooling system of automobiles. H. E. Christie and K. W. Couse. 1,817,676; Aug. 4.
Inductance system. L. A. Gebhard. 1,817,247; Aug. 4.

Inductance system, Adjustable. L. A. Gebhard. 1,817,248; Aug. 4.
Ink base, Printing. G. D. Knight. 1,816,978; Aug. 4.
Ink distributing mechanism for printing presses. A. J. Daane. 1,817,677; Aug. 4.
Inks, Manufacture of printing. W. P. Price. 1,817,522; Aug. 4.
Inlays, Forming. C. W. Scott. 1,816,915; Aug. 4.
Insulating material, Sound deadening and heat, and making the same. H. B. Lindsay and A. L. Clements. 1,817,086; Aug. 4.
Insulator. G. Jansson. 1,816,852; Aug. 4.
Intaglio printing method. L. Freuder. 1,817,435; Aug. 4.
Intermittent actuating mechanism and method. D. R. Yarnall and T. P. Tapper. 1,816,886; Aug. 4.
Internal combustion engine. W. R. Griswold. 1,817,187; Aug. 4.
Internal combustion engine. R. V. L. Hartley. 1,817,747; Aug. 4.
Internal combustion engine. F. R. Higley. 1,817,624; Aug. 4.
Internal combustion engine. L. Imblum. 1,817,375; Aug. 4.
Internal combustion engine. C. L. Kinder. 1,817,153; Aug. 4.
Internal combustion engine. A. J. Meyer. 1,817,390; Aug. 4.
Internal combustion engine. E. Rector. 1,817,208; Aug. 4.
Internal combustion engine, Rotary. P. J. Ashworth. 1,817,663; Aug. 4.
Jack: *See*—
Well casing jack.
Jack panel unit. E. A. Demonet. 1,817,738; Aug. 4.
Jacking device for road vehicles. W. Hall. 1,817,190; Aug. 4.
Jar: *See*—
Radium emanating jar.
Jewelry clasp, Costume. M. Lucomlin. Des. 84,787; Aug. 4.
Joint: *See*—
Rail joint. Universal joint.
Joint for pipes. L. Billé. 1,817,870; Aug. 4.
Joints, Making tight threaded. G. M. Eaton. 1,817,808; Aug. 4.
Journal boxes, Method and apparatus for casting. L. W. Melcher. 1,817,388; Aug. 4.
Jute fiber, Treatment of. J. Viallet. 1,817,279; Aug. 4.
Key ring, Lockable. M. C. Gardine. 1,817,246; Aug. 4.
Knitted fabric. V. Lombardi. 1,817,199; Aug. 4.
Knitting machine. A. Hofmann. 1,817,822; Aug. 4.
Knitting machine, Circular. T. H. Jones. 1,817,565–6; Aug. 4.
Knitting machine, Circular rib. J. H. G. Bales. 1,817,285; Aug. 4.
Knitting machines, Needle arresting means for. L. N. D. Williams. 1,817,116; Aug. 4.
Label retaining device. J. Borovicka. 1,817,229; Aug. 4.
Lace edging. H. W. Hucknall. Des. 84,783–4; Aug. 4.
Lacquer. I. W. Humphrey. 1,817,561; Aug. 4.
Lamp and heater. J. S. Scharf. 1,817,040; Aug. 4.
Lamp unit, Therapeutic. F. A. Anderson. 1,817,027; Aug. 4.
Last, Shoe. I. Moskow. 1,817,639; Aug. 4.
Latch, Combination window. H. L. Roby. 1,817,101; Aug. 4.
Laundry device. H. Hirsch. 1,817,821; Aug. 4.
Lifting and transferring device. C. W. Nickerson. 1,817,264; Aug. 4.
Ligature holding and tying instrument. G. E. Bergman. 1,816,952; Aug. 4.
Light: *See*—
Aeo light. Buoy light.
Light and speech transmission device, Combined dome. J. J. McCarthy. Des. 84,789; Aug. 4.
Light projecting and dispersing device. G. Robinson and F. A. and L. A. Kmieske. 1,817,100; Aug. 4.
Light sensitive layer. M. P. Schmidt, W. Neugebauer, and R. Franke. 1,816,989; Aug. 4.
Lighter construction. L. V. Aronson. 1,817,335; Aug. 4.
Lighters for coal or other fuel, Production of fire. E. B. Munchow. 1,817,458; Aug. 4.
Lighting fixture, Dental. J. Hansen. Des. 84,780; Aug. 4.
Lighting fixture, Wall bracket electric. G. E. McFadden. Des. 84,790; Aug. 4.
Lighting plant for air port landing lights. V. Kolár. 1,817,827; Aug. 4.
Lighting system, Cove and other. P. M. Hotchkin. 1,817,034; Aug. 4.
Lime and magnesia, Separating and preparing. H. N. Barrett. 1,816,996; Aug. 4.
Link, Forming a permanent connecting. N. Skillman. 1,817,529; Aug. 4.
Liquid, Apparatus for determining the frictional qualities of a. J. G. Dintilhac. 1,817,739; Aug. 4.
Liquid depth indicating device. H. W. King. 1,816,932; Aug. 4.
Liquid dispensing apparatus. A. L. Grisé. 1,816,900–01; Aug. 4.
Liquid elevating device. A. C. Wood. 1,817,052; Aug. 4.
Liquid gun or pistol. W. F. Schmidt. 1,817,769; Aug. 4.
Liquid, Noninflammable. G. O. Curme, jr. 1,817,893; Aug. 4.
Lithopone, Manufacture of. C. W. Farber. 1,817,183; Aug. 4.
Load securing device. G. C. Fedderman and G. W. Marlin. 1,816,897; Aug. 4.
Loaders, Feeder for bucket. H. H. Barber. 1,817,474; Aug. 4.
Loading device for machine tools. F. H. Bogart. 1,817,669; Aug. 4.
Lock: *See*—
Bank lock.
Lock. C. A. Añez. 1,816,951; Aug. 4.
Lock and cover, Faucet. E. E. Cooper. 1,817,802; Aug. 4.
Lock for liquid dispensing apparatus, Safety. L. Gusmus. 1,817,409; Aug. 4.
Lock for tilting body. L. E. Williams. 1,816,882; Aug. 4.
Lock up for rolls. H. A. W. Wood. 1,816,948; Aug. 4.
Locker. W. N. Vance. 1,817,785; Aug. 4.
Locking device for doors. W. T. Hormes. 1,817,689; Aug. 4.
Loom dobby. A. A. Gordon. 1,817,139; Aug. 4.
Loom harness. F. G. Cobb. 1,817,292; Aug. 4.
Loom, Jacquard type. E. Hall. 1,817,818; Aug. 4.
Loom, Shuttle changing pick and pick. A. A. Gordon. 1,817,138; Aug. 4.
Loom temple. W. H. Bahan. 1,817,336; Aug. 4.
Loom, Weft replenishing. C. E. Brown. 1,817,124; Aug. 4.
Looms, Beam hoist for. H. A. Davis. 1,817,894; Aug. 4.
Looms, Gripper for tuft weaving. H. W. Shannon. 1,816,938; Aug. 4.
Looms, Shuttle actuating mechanism for narrow ware. E. R. Holmes. 1,817,146; Aug. 4.
Looms, Thread cutting mechanism for double shuttle. R. G. Turner. 1,817,112; Aug. 4.
Looms, Thread extractor for weft replenishing. A. A. Gordon. 1,817,136; Aug. 4.
Looms, Thread holder for. A. A. Gordon. 1,817,137; Aug. 4.
Looms, Weft detector for drop box. S. A. Nelson. 1,817,164; Aug. 4.
Loud speaker and the like, Wireless. G. G. de Andia-Yrarrgzaval. 1,817,354; Aug. 4.
Lubricant dispensing apparatus. L. W. Pierce. 1,816,987; Aug. 4.
Lubricant, Emulsifiable. E. W. Adams and F. W. Kittrell. 1,817,599; Aug. 4.
Machine for cleaning timbers especially boards, beams or the like. W. Grinke. 1,816,969; Aug. 4.
Machine for cutting threads on tubes. P. Taurel. 1,817,111; Aug. 4.
Machine for forming gear guards. W. H. Wakefield. 1,817,115; Aug. 4.
Machine for marking, ornamenting and cementing shoes. B. W. Freeman, W. S. Herschel, and H. E. Patterson. 1,817,359; Aug. 4.
Machine for sealing containers. W. E. Molins and J. W. Chalmers. 1,817,831; Aug. 4.
Machine for separating liquids from solid bodies mixed or suspended therein. R. E. Wagner and J. D. Ullgren. 1,817,594; Aug. 4.
Machine for spreading and surfacing construction material. J. H. Mosel and C. I. Bohmer. 1,817,161; Aug. 4.
Magnesium, Manufacture and purification of. A. Jessup. 1,816,972; Aug. 4.
Magnet system for converting electrical into mechanical energy or inversely. R. Vermeulen and A T. van Urk. 1,817,787; Aug. 4.
Magnetic chuck and circuits therefor. W. Arter, H. Arter, and S. T. Webster. 1,816,888; Aug. 4.
Magneto electric machine. J. M. Heinrich. 1,817,410; Aug. 4.
Mail box, Rural. J. S. Swanlund. 1,817,718; Aug. 4.
Mail box station. M. M. Harmony. 1,817,191; Aug. 4.
Manicuring appliance. E. Soreny. 1,816,876; Aug. 4.
Manifold. O. C. Kreis. 1,817,382; Aug. 4.
Manifolding process. J. Q. Sherman and A. W. Metzner. 1,817,399; Aug. 4.
Margin bar. L. J. Sauer. 1,817,168; Aug. 4.
Marker, Floor. J. S. George. 1,816,839; Aug. 4.
Marker, Flue. C. E. Ferguson and C. E. Shockency. 1,817,243; Aug. 4.
Marker for goods, Price. C. W. Skogh. 1,817,105; Aug. 4.
Marker, Golf ball. J. E. McGinness. 1,817,317; Aug. 4.
Marking machine. H. R. Fletcher. 1,817,358; Aug. 4.
Massaging machine. N. E. Goodrich. 1,817,553; Aug. 4.
Match book. C. J. Langley. 1,817,009; Aug. 4.
Metal hydrides, Preparation of. F. H. Driggs. 1,816,830; Aug. 4.
Material handling apparatus. E. W. Larsen. 1,816,909; Aug. 4.
Material handling plant. C. F. Bledsoe. 1,817,343; Aug. 4.
Materials and products, Making rubberized sheet. H. D. Rice. 1,817,323; Aug. 4.
Materials made with or containing cellulose derivatives. Treatment of. G. H. Ellis. 1,817,741; Aug. 4.
Materials, Method and mechanism for separating intermixed divided. K. Davis. 1,817,296; Aug. 4.
Materials, Process and mechanism for separating intermixed divided. K. Davis. 1,817,297–8; Aug. 4.
Matrix setting mechanism. H. A. W. Wood. 1,816,945; Aug. 4.
Measuring apparatus. A. E. Young. 1,816,949–50; Aug. 4.
Measuring instrument, Electrical. G. Sperti. 1,817,537; Aug. 4.
Meat cutting device. C. A. Dunseth. 1,817,678; Aug. 4.
Meat, Handling. J. C. Agar. 1,817,541; Aug. 4.

Meat slicing machine. A. C. Van Hooydonk. 1,817,658; Aug. 4.
Medical moxa heater. K. Ito. 1,817,823; Aug. 4.
Memorandum device. O. Aebi and R. Dinichert. 1,817,793; Aug. 4.
Mesh fabric. S. G. Manfalian. 1,817 519; Aug. 4.
Metal, Open annealing sheet. A. T. Kathner. 1,817,152; Aug. 4.
Metal phosphates by converting ferrophosphorus with alkali metal sulphates, Producing alkali. F. Ullmann, J. Breslauer, and E. Lie. 1,817,858; Aug. 4.
Metal pickling process. G. L. Magoun and D. H. Tompkins. 1,816,860; Aug. 4.
Metal treating apparatus. C. Schumacher. 1,817,902; Aug. 4.
Metallurgy of ores or materials containing tin. E. A. Ashcroft. 1,817,865; Aug. 4.
Metals and compositions therefor, Treating. J. C. Vignos. 1,817,500; Aug. 4.
Metals, Case carburizing and heat treating. P. V. Brower. 1,817,345; Aug. 4.
Metals, Case carburizing and heat treating. P. V. Brower. 1,817,407; Aug. 4.
Meter: *See*—
Fluid meter. Respiration meter.
Frequency meter.
Meter. D. J. Angus. 1,817,432; Aug. 4.
Meter box, Extensible. L. G. Haase and F. M. Brooks. 1,817,307; Aug. 4.
Meters, Combined pressure recording and volume registering attachment for fluid. J. R. Armstrong and L. H. Duncan. 1,816,995; Aug. 4.
Micrometer construction. O. V. Karlsson. 1,817,516; Aug. 4.
Mirror. R. J. Ward. 1,817,401; Aug. 4.
Mirror for retinoscopes. J. R. Buelow. 1,817,734; Aug. 4.
Mixer: *See*—
Safety mixer.
Moccasin, Collapsible house. P. S. Hervey. 1,817,623; Aug. 4.
Mold. M. B. Barnes. 1,817,339; Aug. 4.
Mold. J. C. Miller. 1,817,391; Aug. 4.
Mold for glass cylinders. W. G. Twyman. 1,817,046; Aug. 4.
Mop. J. G. Butler. 1,817,876; Aug. 4.
Mop wringing apparatus. P. N. Mancuso. 1,816,861; Aug. 4.
Mothproofing means for pressing machines. P. N. Braun. 1,817,406; Aug. 4.
Motion, System for transmitting. W. Löhr. 1,817,753; Aug. 4.
Motor: *See*—
Electric motor. Rotary motor.
Motor. F. C. Holtz. Re18,145; Aug. 4.
Motor control. I. F. Baker. 1,817,797; Aug. 4.
Motor control system. R. F. Emerson. 1,817,810; Aug. 4.
Motor unit, Geared electric. W. R. Uggla. 1,817,216; Aug. 4.
Motors, Combustion chamber for. C. H. Vyse. 1,817,280; Aug. 4.
Motors, Controlling vibratory. C. S. Weyandt. 1,817,403; Aug. 4.
Mounting for electric switches, Terminal box. T. R. Martin. 1,817,573; Aug. 4.
Mounting for microscopes, Objective. H. N. Ott. 1,817,642; Aug. 4.
Mounting, Radiator. L. T. Ward. 1,817,889; Aug. 4.
Mounting, Vacuum tube. H. F. Elliott. 1,817,355; Aug. 4.
Mower construction. B. Privat. 1,816,868; Aug. 4.
Mowing machine. H. R. Lontz. 1,816,980; Aug. 4.
Mowing machines, Method of and mechanism for adjusting. J. M. Heald. 1,817,372; Aug. 4.
Muff, Pocketbook. L. and M. B. Lipschutz. 1,817,750; Aug. 4.
Music instruction board. B. M. Newton. 1,816,865; Aug. 4.
Musical instrument. O. M. Osborne. 1,817,704; Aug. 4.
Musical instrument, Automatic. C. F. Stoddard. 1,817,499; Aug. 4.
Musical instruments, Tailpiece mute for stringed. R. H. Page. 1,817,461; Aug. 4.
Mustard dispensing device. J. G. Coffin. 1,817,293; Aug. 4.
Nailing implement, Hand. D J Ajouelo. 1,817,224; Aug. 4.
Nest, Hen's. L. R. Shaffer. 1,817,588; Aug. 4.
Newspaper clamp. H. D. Smiley. 1,817,424; Aug. 4.
Nitrates, Stabilization of organic. R. McGill. 1,817,456; Aug. 4.
Nozzle for swing joints and pipe line connections, Tank. T. J. Calhoun. 1,817,029; Aug. 4.
Oil burning mechanism, Electrically operated and controlled. W. W. Williams. 1,817,051; Aug. 4.
Oil control. R. T. Williams. 1,817,282; Aug. 4.
Oil tank gauge. J. E. McNeil. 1,817,457; Aug. 4.
Oiler, Stock. H. N. Vaughan. 1,817,449; Aug. 4.
Oils, Purification of benzenoid hydrocarbon. P. Damm. 1,817,804; Aug. 4.
Oils, Refining lubricating. W. D. Rial. 1,816,872; Aug. 4.
Open mouth bag. G. A. Bauman. 1,817,868; Aug. 4.
Opener, Combination can and bottle. F. Quarnstrom. 1,817,393; Aug. 4.
Ores or products containing aluminum oxide, Refining. T. R. Haglund. 1,816,842; Aug. 4.
Ornament, Mirror. E. Burton. Des. 84,776; Aug. 4.
Ornament, Shoe. W. E. Smith. Des. 84,798; Aug. 4.
Oven system. A. O. Roberts. 1,817,209; Aug. 4.
Oxygen breathing implement, particularly for aeronauts. O. H. Dräger. 1,817,881; Aug. 4.
Package, Fabricated. G. B. Beaman. 1,817,286; Aug. 4.
Packing, Pump. K. T. and A. J. Penick and H. W. Millmine. 1,817,095; Aug. 4.
Pad: *See*—
Conveyer pad.
Paddle, Canoe. H. Korth. 1,817,414; Aug. 4.
Pan: *See*—
Baking pad.
Paper machines, Automatic steam control and differential for. C. Stickle. 1,817,110; Aug. 4.
Paper pulp, Manufacture of. E. Wahlforss. 1,816,879; Aug. 4.
Paper, Roll. G. T. Johnson. 1,817,897; Aug. 4.
Paper, Safety. B. W. Smith. 1,817,171; Aug. 4.
Parachute. J. L. Brown, jr. 1,816,927; Aug. 4.
Parachute. F. H. Packard. 1,816,986; Aug. 4.
Parachute kit. M. Ater. 1,816,814; Aug. 4.
Partition, Duplex sink. J. F. Wilson, jr. 1,817,330; Aug. 4.
Pencil. J. P. Lynn. 1,817,011; Aug. 4.
Perambulator attachment. P. Iacovino. 1,817,412; Aug. 4.
Perambulator or the like. F. H. Headley. 1,817,513; Aug. 4.
Percolator, Automatic coffee. C. C. Armstrong. 1,816,994; Aug. 4.
Phenol from liquors containing the same, Recovering. C. L. Masters. 1,817,444; Aug. 4.
Phonograph. N. C. Durand and S. G. Langley. 1,816,896; Aug. 4.
Phonograph apparatus. E. W. McSheen. 1,817,758; Aug. 4.
Phonograph styli, Production of. S. T. Moore. 1,817,094; Aug. 4.
Photographic printing device. F. Bern. 1,817,606; Aug. 4.
Photographic shutter. C. F. Foth. 1,816,964; Aug. 4.
Photography and sound recording and reproducing, Synchronized. C. W. Ebeling. 1,816,832; Aug. 4.
Picture printing apparatus, Motion. F. H. Owens. 1,817,320; Aug. 4.
Picture projector, Motion. W. L. Wright and S. M. Wright. 1,817,026; Aug. 4.
Picture screen. J. C. Kroesen. 1,817,630; Aug. 4.
Pin: *See*—
Impaling pin.
Pin construction, Wrist. H. Heiermann. Re18,144; Aug. 4.
Pipe: *See*—
Smoking pipe. Tobacco pipe.
Pipe closing device. A. M. Arnott. 1,817,796; Aug. 4.
Pipe sections, Detachable. J. N. Jacobson. 1,817,691; Aug. 4.
Pipe upsetting machine. J. H. Tayler. 1,817,215; Aug. 4.
Pipes and the like, Extrusion of metal. P. Dunsheath, 1,817,301; Aug. 4.
Piston, Valved. N. M. Small. 1,817,853; Aug. 4.
Plane, Rotary. A. U. Kerns. 1,817,197; Aug. 4.
Plaquette. O. J. Hlavaty. Des. 84,782; Aug. 4.
Plaster bandage with wound or healing pad. J. Lohmann. 1,817,696; Aug. 4.
Playing card block, Adjustable. O. T. Gylleck. 1,817,078; Aug. 4.
Plow, Tractor. A. C. Lindgren. 1,817,085; Aug. 4.
Plug. M. J. De Mask. 1,817,879; Aug. 4.
Plug, Anchoring. E. J. Whiffen. 1,817,790; Aug. 4.
Poise. C. Dollack. 1,817,131; Aug. 4.
Pole reinforcement. E. M. Beecher. 1,817,341–2; Aug. 4.
Polishing machine for spoons. D. G. Griswold. 1,817,554; Aug. 4.
Pot: *See*—
Annealing pot.
Powder, Colored dusting. L. B. Burnett and D. W. Bissell. 1,816,928; Aug. 4.
Power brush rake. F. Mahre. 1,817,697; Aug. 4.
Power driven implement. O. J. Bready. 1,817,873; Aug. 4.
Power mechanism. H. I. Morris. 1,817,638; Aug. 4.
Power transmission means. F. R. Higley. 1,817,820; Aug. 4.
Power transmission system. H. J. Kratzer. 1,817,006; Aug. 4.
Press. A. A. Byerlein. 1,817,885; Aug. 4.
Press operating mechanism. J. R. Oliver. 1,817,703; Aug. 4.
Pressing machine for use in the manufacture of boots and shoes. A. Eppler. 1,816,962–3; Aug. 4.
Pressing machine (work holding means). T. N. Braun. 1,817,344; Aug. 4.
Press stopping device. O. C. Roesen. 1,816,934; Aug. 4.
Priming mechanism for centrifugal pumps. A. B. Singleton. 1,817,041; Aug. 4.
Printing machine. F. E. Fowler. 1,817,812; Aug. 4.
Printing machine. H. L. Thompson. 1,817,655; Aug. 4.
Printing machine for golf balls and the like. H. W. Vosbeck. 1,817,788; Aug. 4.

Printing mechanism for accounting machines. H. A. Weinlich. 1,817,501; Aug. 4.
Printing plate holding means. J. Schmutz. 1,817,587; Aug. 4.
Printing press bed movement. F. Barney. 1,816,816; Aug. 4.
Projectile. R. W. James. 1,817,377; Aug. 4.
Prop Clothes. H. G. Knoth. 1,817,568; Aug. 4.
Propeller for aircraft. T. F. Hamilton. 1,817,556; Aug. 4.
Protective device, Electrical. E. A. Hester. 1,817,486; Aug. 4.
Protective system. F. W. Gay. 1,816,838; Aug. 4.
Protective system. R. Rüdenberg. 1,817,526; Aug. 4.
Pulp, Producing. J. M. Estapé. 1,817,548; Aug. 4.
Pump. W. H. Hoddless. 1,816,931; Aug. 4.
Pump. I. A. Weaver. 1,817,659; Aug. 4.
Pump, Liquid. R. S. Bassett. 1,816,821; Aug. 4.
Pump, Metal. H. A. W. Wood. 1,816,946; Aug. 4.
Pump, Sirup. W. C. Buttner. 1,817,673; Aug. 4.
Pump, Water. L. Schwitzer and C. J. Winkler. 1,817,169; Aug. 4.
Punch, Duplicating gang. C. D. Lake and R. E. Page. 1,817,631; Aug. 4.
Punch, Metal. J. H. Abramson and E. C. Swanson. 1,817,223; Aug. 4.
Punching machine, Automatic Jacquard. R. W. Barker. 1,817,284; Aug. 4.
Radiator section. A. M. Mertzanoff. Des. 84,788; Aug. 4.
Radio appliance. O. E. Marvel. 1,817,443; Aug. 4.
Radi cabinet. F. J. Foley. Des. 84,778; Aug. 4.
Radiocabinet or the like. E. Worthington. Des. 84,800; Aug. 4.
Radium emanation jar. J. C. Wichmann. 1,817,329; Aug. 4.
Rail joint. J. Brunner. 1,817,733; Aug. 4.
Rail joint construction, welded. V. C. Armstrong. 1,817,225; Aug. 4.
Railroad spreader. H. W. Protzeller. 1,816 869; Aug. 4.
Railroad spreader. H. W. Protzeller. 1,817,524; Aug. 4.
Rail tie plate. A. F. Schupp. 1,817,849; Aug. 4.
Rake: *See*—
Brush rake. Power brush rake.
Range, Electric. R. J. Patterson. 1,816,866; Aug. 4.
Rate change device. E. J. and R. S. Condon. 1,817,036; Aug. 4.
Receptacle and cigarette snuffer, Combination tobacco ash. S. L. Moody and W. M. Loucks. Des. 84,791; Aug. 4.
Receptacle, Attachment plug. L. M. Hausmann and J. A. Widmer. 1,816,847; Aug. 4.
Receptacle, Electrical. T. J. Madigan. 1,817,441; Aug. 4.
Receptacle for automobiles, Stub and ash. C. A. Benjamin. 1,817,288; Aug. 4.
Receptacle, Street lighting waste. M. J. Kavanagh. 1,816,974; Aug. 4.
Recorder and reproducer for phonographs, Combined electrical. O. M. Dunning. 1,816,831; Aug. 4.
Recorder for telephone systems, Traffic. M. Schwartz. 1,817,324; Aug. 4.
Rectifier and like device based upon the use of mercury vapor. A. Becq. 1,817,799; Aug. 4.
Rectifier, Metal tank. E. B. Shand. 1,817,714; Aug. 4.
Rectractile device. F. A. Voos. 1,817,024; Aug. 4.
Reed instrument and more especially a saxophone. J. Heyworth, P. J. Packman, and J. L. Mold. 1,817,487; Aug. 4.
Reel: *See*—
Fishing reel.
Refrigerating apparatus. J. S. Belt and E. M. Ladd. 1,817,605; Aug. 4.
Refrigerating apparatus and method of refrigerating food products. C. Birdseye. 1,817,890; Aug. 4.
Refrigerating mechanism, Expansion chamber for. G. Muffly. 1,817,202; Aug. 4.
Refrigeration apparatus. D. F. Keith. 1,816,975; Aug. 4.
Refrigerator construction. L. S. Chadwick and M. Resek. 1,816,955; Aug. 4.
Refrigerator construction. G. Muffly. 1,816,863; Aug. 4.
Register: *See*—
Cash register.
Register. J. V. Petrelli. 1,817,836; Aug. 4.
Register and first aid kit, Combined. J. L. Peavy. 1,817,706; Aug. 4.
Regulator: *See*—
Boiler feed regulator. Generator regulator.
Relay mechanism. A. N. Van Nostrand. 1,817,468; Aug. 4.
Resilient mounting bracket. H. D. Geyer. 1,817,482; Aug. 4.
Respiration meter. W. P. Hobart. 1,817,145; Aug. 4.
Retaining device. D. L. Townsend. 1,817,720; Aug. 4.
Rim, Demountable. D. B. Gentry. 1,817,813; Aug. 4.
Rim, Tire. G. C. Ramsay. 1,817,764; Aug. 4.
Ring: *See*—
Key ring.
Riveter, Squeeze. E. W. Stevens. 1,816,918; Aug. 4.
Rocking horse. G. F. Sargent. 1,817,768; Aug. 4.
Roller: *See*—
Stencil roller.
Roller massage machine D. Gustaveson. 1,817,077; Aug. 4.
Roof. D. Greenwald. 1,817,619; Aug. 4.
Roof and shingle securing means. C. C. Figge. 1,817,743; Aug. 4.
Roof body for automobiles, Collapsible. C. E. E. Wolfermann. 1,816,924; Aug. 4.
Roof construction. H. W. Reel. 1,817,900; Aug. 4.
Rope, Jumping. W. F. Goff. 1,817,616; Aug. 4.
Rotary engine. A. Marcum. 1,817,492; Aug. 4.
Rotary motor. H. H. Hammerstrom. 1,817,370; Aug. 4.
Rotor, Large, high speed R. A. Baudry. 1,817,054; Aug. 4.
Rubber compound, Age resisting vulcanized. J. R. Ingram. 1,816,851; Aug. 4.
Rubber surfaces. Treating unvulcanized. W. A. Gibbons. 1,817,363; Aug. 4.
Sadiron handle. M. A. Rollman. 1,817,583; Aug. 4.
Safety brake. A. H. Wilson. 1,816,884; Aug. 4.
Safety deposit box. C. G. Halstead. 1,817,002; Aug. 4.
Safety device for motion picture projecting machines. J. F. Adams and T. T. Allen. 1,817,661; Aug. 4.
Safety device for multiple control mechanism. H. A. W. Petersen. 1,817,204; Aug. 4.
Safety mixer. F. L. Craddock. 1,817,353; Aug. 4.
Safety projectile for gun practice and gun barrels suitable for the same. E. Schuler. 1,817,273; Aug. 4.
Safety razor. H. J. Gaisman. 1,817,512; Aug. 4.
Saw filing machine. J. Judt. 1,817,082; Aug. 4.
Saw, Long pole power pruning. A. S. Gray and U. A. Simmons. 1,816,966; Aug. 4.
Saw setting device. F. N. Schroeder. 1,817,272; Aug. 4.
Scale and chart therefor. J. E. Rogers. 1,817,446; Aug. 4.
Scraper. W. Potter. 1,817,761; Aug. 4.
Screen: *See*—
Picture screen.
Screen for X-rays and material used in making same, Fluorescent. R. Jahoda and L. Lillenfeld. 1,817,005; Aug. 4.
Screw thread coupled members. H. L. Dardelet. 1,817,295; Aug. 4.
Seal for hydraulic turbine gates and the like, Adjustable. R. V. Terry. 1,817,654; Aug. 4.
Seal for mercury arc rectifiers. D. C. Prince. 1,817,762; Aug. 4.
Sealing compound. A. W. Schorger. 1,817,496; Aug. 4.
Sealing the ends of vessels against internal fluid pressure. H. Willshaw, W. G. Gorham, and E. Ramsbottom. 1,816,883; Aug. 4.
Seat: *See*—
Toilet seat.
Seat and cushion pack for parachute, Combined. J. W. Van Horn. 1,817,725; Aug. 4.
Seat and rest, Rumble. J. C. Scott. 1,816,937; Aug. 4.
Securing device for hub caps. J. H. Hunt. 1,817,194; Aug. 4.
Separating apparatus. T. and J. R. Ray. 1,817,207; Aug. 4.
Separator: *See*—
Centrifugal separator. Yarn separator.
Separator. D. C. Baker. 1,817,338; Aug. 4.
Separator. P. B. Shee. 1,817,464–5; Aug. 4.
Service station. S. I. Esses and E. I. Esses. 1,817,679; Aug. 4.
Settling apparatus. H. S. Rumsey. 1,817,640; Aug. 4.
Sewing machines, Feeding mechanism for. A. J. Wohlpart. 1,817,727; Aug. 4.
Shackle, Rubber. H. D. Geyer. 1,817,436; Aug. 4.
Shade and curtain fixture. J. Owsiak. 1,817,460; Aug. 4.
Shade, lamp. L. S. Seelig. Des. 84,797; Aug. 4.
Shaft, Flexible. B. Granville. 1,817,000; Aug. 4.
Shafting, Mechanism and process for fabricating flexible. R. C. Angell. Re18,142; Aug. 4.
Shake-out apparatus. V. J. Davis. 1,817,613; Aug. 4.
Sharpener for shears and scissors blades. W. W. Brisben. 1,817,506; Aug. 4.
Sharpener, Lawn mower. B. T. Wilson. 1,817,331; Aug. 4.
Shearing machine. G. W. Russell. 1,817,039; Aug. 4.
Sheet bar unstacking device. H. E. McGrery. 1,817,387; Aug. 4.
Sheet rolling and finishing machine. T. E. Rees. 1,817,707; Aug. 4.
Shock absorber. H. E. Jackson. 1,817,195; Aug. 4.
Shock absorber for suspending vehicles, Friction. R. Masquelier. 1,817,088; Aug. 4.
Shock absorbing device. C. H. Chapin. 1,817,675; Aug. 4.
Shoe. A. M. Kessler. 1,816,907; Aug. 4.
Shoe heel sheet, Composite. B. Gilowitz. 1,817,249; Aug. 4.
Shoes, Operating upon. J. B. Hadaway. 1,816,902; Aug. 4.
Shower compartment. G. A. Nilson. 1,817,641; Aug. 4.
Shutter for automobiles, Thermostatically operated. M. See. 1,817,398; Aug. 4.
Shuttle, Self threading. H. A. Davis. 1,817,895; Aug. 4.
Sign, Highway. P. A. Preus. 1,817,646; Aug. 4.
Sign, Night aerial advertising. R. Rohlfs. 1 817,269; Aug. 4.
Sign or the like and fastening means therefor, Night aerial advertising. R. Rohlfs. 1,817,268; Aug. 4.
Sign, Road. W. H. Carson. 1,817,064; Aug. 4.
Signal for motor vehicles, Traffic. A. D. Angelides. 1,816,813; Aug. 4.
Signaling system. M. Taniguchi. 1,817,782; Aug. 4.
Signaling system, Privacy. R. Bown. 1,816,953; Aug. 4.
Silk obtained from centrifuges, Treating artificial. L. Monkemeyer. 1,817,576; Aug. 4.

Silk, Weighting natural. R. Clavel. 1,816,959; Aug. 4.
Silo elevator. I. K. Kreider. 1,817,693; Aug. 4.
Skate, Ice. H. Lewis. 1,817,156; Aug. 4.
Skid. A. Procofieff-Seversky. 1,817,901; Aug. 4.
Slack adjuster for brake rigging, Automatic. E. J. Jonas. 1,817,081; Aug. 4.
Slicer, Veneer. E. G. Stack. 1,817,779; Aug. 4.
Slicing machine. C. F. Essig. 1,817,303; Aug. 4.
Smoking pipe. H. R. Kimberling. 1,817,257; Aug. 4.
Snap thread gauge. P. V. Miller. 1,817,637; Aug. 4.
Snubber. H. E. Sipe. 1,817,771; Aug. 4.
Soap frame. E. R. Luckow. 1,817,157; Aug. 4.
Socket, Anchor. G. Hess. 1,816,970; Aug. 4.
Soles of molded plastic composition, Producing shoe. D. H. Bell. 1,817,287; Aug. 4.
Solutions, Evaporating and concentrating. C. B. Clark. 1,817,349; Aug. 4.
Solvent sand emulsifying agents, Producing. F. Pospiech. 1,817,205; Aug. 4.
Sostenuto piano. S. Cooper. 1,817,507; Aug. 4.
Sound-recording and sound-reproducing and locating apparatus. F. M. Doolittle. 1,817,177; Aug. 4.
Sound reproducing apparatus. O. Steiner. 1,817,781; Aug. 4.
Sound reproducing system. P. H. Craig. 1,817,612; Aug. 4.
Sound transmission. W. B. Jones. 1,817,489; Aug. 4.
Soundings at remote points, Taking. E. Wilckens. 1,817,864; Aug. 4.
Space charge device. D. Ulrey. 1,817,448; Aug. 4.
Spacer. E. E. Hawkinson. 1,817,437; Aug. 4.
Spanner wrench. J. C. Cordell. 1,817,352; Aug. 4.
Spark plug. G. H. E. Berthold. 1,817,505; Aug. 4.
Speedometer, Recording. E. Cooper and A. S. Piper. 1,816,826; Aug. 4.
Spindle for spinning or twisting machines. F. K. Hendrickson. 1,817,144; Aug. 4.
Spoon, Luminous fishing. A. F. J. Lafky. 1,817,694; Aug. 4.
Spray material and method of application. R. M. Bird. 1,817,227; Aug. 4.
Sprayer, Centrifugal liquid. W. Weimers. 1,817,328; Aug. 4.
Spring conditioning device. E. D. Cawley. 1,817,877; Aug. 4.
Spring connection. R. Henry and F. E. Bradfield. 1,817,438; Aug. 4.
Spring members, Apparatus for connecting coiled. C. Lofman. 1,817,087; Aug. 4.
Spring shackle. C. Claus. 1,817,891–2; Aug. 4.
Spring tooth and spring disk harrow. W. M. Shelton. 1,817,851; Aug. 4.
Stack. J. V. Schaefer. 1,817,104; Aug. 4.
Stamping chase and palette, Combined. W. Hehn. 1,817,142; Aug. 4.
Stand structure, News. W. J. Byrnes, R. A. Byrnes, and C. J. Saunders. 1,817,062; Aug. 4.
Stapling machine. E. Craig. 1,817,803; Aug. 4.
Starter mechanism for engines. A. Dow. 1,817,179; Aug. 4.
Starter mechanism for internal combustion engines. A. Dow. 1,817,178; Aug. 4.
Starters of automobiles and concurrently retarding the ignition sparks in the engines thereof, Actuating the electric. A. H. Alkire. 1,817,472; Aug. 4.
Starting device, Engine. J. B. Dyer. 1,817,490; Aug. 4.
Starting device for aeroplanes, Engine. C. B. Kirkham. 1,816,976; Aug. 4.
Staybolt tap. E. Duchesne. 1,817,133; Aug. 4.
Steam distillation. J. G. Glasgow. 1,817,250; Aug. 4.
Steam generator, High pressure. W. G. Noack. 1,817,419; Aug. 4.
Stencil roller. A. Geiger. 1,817,683; Aug. 4.
Stencil, Spray. R. Z. Hopkins and E. F. Seger. 1,817,147; Aug. 4.
Stepladders, Adjustable automatic folding platform for. S. M. Peters and A. B. Rochester. 1,817,760; Aug. 4.
Stereotype plate casting and finishing machine, Multiple. H. A. W. Wood. 1,816,944; Aug. 4.
Stop-cock. K. Klinger. 1,817,258; Aug. 4.
Stop for stop and start motors, Automatic. C. H. Bissell. 1,817,172; Aug. 4.
Storage battery. W. L. Reinhardt. 1,817,846; Aug. 4.
Storing and dispensing apparatus. T. L. Valerius. 1,817,656; Aug. 4.
Stove and range, Cabinet gas. J. Teller. 1,817,856; Aug. 4.
Stove, Cooking. J. G. Scheer. 1,817,712; Aug. 4.
Stove, Gas. F. A. Gercich. 1,817,362; Aug. 4.
Strainer, Drain. A. Izquierdo. 1,817,376; Aug. 4.
Street sweeping machine. N. H. G. Spradbrow. 1,817,042; Aug. 4.
Stretching machine for stockings. W. H. Gosch. 1,817,617; Aug. 4.
Strip, Dividing. R. W. Hardie. 1,817,309; Aug. 4.
Strip, Wall ground work. C. A. Robinson and K. S. Frazier. 1,816,933; Aug. 4.
Structural material. H. H. Potts. 1,816,988; Aug. 4.
Stud driver. L. A. Weil. 1,817,049; Aug. 4.
Submarine. P. Escobedo. 1,817,742; Aug. 4.
Substances from female internal secretive sex organs, Manufacture of physiologically active. M. Hartmann. 1,817,686; Aug. 4.
Sucker rods, Device for pulling or carrying. A. R. Bumgardner. 1,817,233; Aug. 4.
Superheater tubes in boiler flues, Apparatus for installing. W. N. Tatro. 1,817,327; Aug. 4.
Support, Fire extinguisher. W. B. Bronander. 1,816,893; Aug. 4.
Support, Fire extinguisher. W. B. Bronander. 1,817,231; Aug. 4.
Support for brake backing plates. E. J. Hirvonen and W. W. Tuttle. 1,817,748; Aug. 4.
Support for locomotive air pumps, etc. J. A. Pilcher. 1,816,912; Aug. 4.
Support for rock drills, Steel. C. C. Hansen. 1,817,308; Aug. 4.
Support, Pipe. L. L. Barr. 1,817,798; Aug. 4.
Supporting articles on tires or the like, Device for. A. W. Rosen. 1,817,711; Aug. 4.
Supporting device for electrical apparatus. L. R. Crow. 1,817,239; Aug. 4.
Surgical instrument. C. R. Meltzler. 1,817,417; Aug. 4.
Surgical splint. J. R. Siebrandt. 1,817,212; Aug. 4.
Suspending device for conducting cables. J. W. Hofmann. 1,817,313; Aug. 4.
Suspension device. O. Werner. 1,817,540; Aug. 4.
Swaging roll, Self feeding. E. W. Stoler. 1,816,940; Aug. 4.
Switch: *See*—
Disconnecting switch. Electrical switch.
Electric switch. Flashlight switch.
Switch. L. F. Meunier and C. J. Dresser. 1,817,013; Aug. 4.
Switch operating device, Pressure actuated. I. E. McCabe. 1,817,634; Aug. 4.
Switching device. S. T. Quilliam. 1,817,206; Aug. 4.
Syringe cartridge. I. Kulik. 1,816,857; Aug. 4.
Syringe, Hypodermic. G. N. Hein. 1,817,003; Aug. 4.
Syringe, Hypodermic. A. E. Smith. 1,817,652; Aug. 4.
Table: *See*—
Bathing table. Hospital table.
Table top. W. S. Belloss. 1,817,433; Aug. 4.
Tabulating machine. J. W. Bryce. 1,817,434; Aug. 4.
Talking machine. O. H. Brasier. 1,817,230; Aug. 4.
Talking machine. H. L. T. Buckle. 1,817,477; Aug. 4.
Tank: *See*—
Water heating tank.
Tap. G. E. Miller. 1,817,575; Aug. 4.
Tappet, Self adjusting. R. H. Hamilton. 1,817,620; Aug. 4.
Target throwing device. E. Van Antwerp. 1,817,786; Aug. 4.
Teapot or similar article. L. Anduze. Des. 84,774; Aug. 4.
Telephone-phonographic means of communication. G. R. Cooper. 1,817,611; Aug. 4.
Telephone signaling. H. G. Hall. 1,817,079; Aug. 4.
Telephone system. I. W. Green. 1,816,967; Aug. 4.
Television apparatus. V. K. Zworykin. 1,817,502; Aug. 4.
Temperature regulation, Apparatus for. H. F. Bühring. 1,817,232; Aug. 4.
Testing device. L. L. Bray. 1,817,872; Aug. 4.
Testing machine. L. M. Showers. 1,817,170; Aug. 4.
Therapeutic composition. S. Bialos. 1,816,817; Aug. 4.
Thiocyano derivatives, Production of. E. L. Helwig. 1,816,848; Aug. 4.
Thrasher machines, Apparatus for gathering and feeding in crop to stripper harvesting and reaper. H. S. Taylor. 1,817,429; Aug. 4.
Threading machine. L. H. Blood. 1,817,607; Aug. 4.
Tie for reenforcing rods. E. Ehlers. 1,816,833; Aug. 4.
Tie-plate or iron tie and anticreeper for rails, Combination. D. Sinkovich. 1,817,325; Aug. 4.
Tire, Hollow cushion. G. F. Fisher. 1,817,356; Aug. 4.
Tires on wheels, Means locking pneumatic. P. M. Miller. 1,817,700; Aug. 4.
Tobacco pipe. S. Schishka. 1,817,271; Aug. 4.
Tobacco spreader for cigarette machines. C. W. Müller. 1,817,319; Aug. 4.
Toilet seat. C. A. Meath. 1,817,520; Aug. 4.
Tong, Tool joint. T. P. Williams. 1,817,791; Aug. 4.
Tool, Automatic taper thread cutting. E. A. Roberts. 1,817,018; Aug. 4.
Tool, Combination. F. D. Allison. 1,816,812; Aug. 4.
Tool, Dental. D. D. Levy. 1,817,571; Aug. 4.
Tool, Fishing. C. L. Van Amburgh and J. R. Russell. 1,816,991; Aug. 4.
Tool, Machine. E. J. Kearney and J. B. Armitage. 1,817,083; Aug. 4.
Tool retainer. A. G. Slatcher. 1,817,591; Aug. 4.
Tool, Vacuum valve grinding. D. E. Hicks. 1,817,688; Aug. 4.
Tools, Feed for well drilling. W. N. Thompson. 1,817,467; Aug. 4.
Toothbrush. E. D. Pollock. 1,817,096; Aug. 4.
Torque device, Mobile. E. S. Purington. 1,817,763; Aug. 4.
Totalizing device. F. G. L. Boyer. 1,817,476; Aug. 4.
Toy. C. C. Elliotte. 1,817,882; Aug. 4.
Toy. S. L. Long. 1,817,751; Aug. 4.
Toy, Mechanical. A. S. Littlefield. 1,817,491; Aug. 4.
Toy vehicle. J. C. Koerber. 1,817,316; Aug. 4.
Tractor, Trench. G. H. Greiman. 1,817,367; Aug. 4.
Traffic signaling system. A. J. Massey. 1,817,754; Aug. 4.
Tramway, railway, and like system, Electric. U. Kloss, A. Peters, and K. Krüger. 1,817,692; Aug. 4.

Transit lever. W. and J. R. Brunstetter. 1,817,671; Aug. 4.
Transmission. A. and M. P. Winther. 1,817,660; Aug. 4.
Transmission levels on telecommunication circuits, Apparatus for measuring. M. Leduc. 1,817,259; Aug. 4.
Transmission measuring system. A. B. Clark and F. H. Best. 1,816,958; Aug. 4.
Transmission mechanism. J. Carrie and G. E. Howard. 1,817,063; Aug. 4.
Transmission mechanism. G. E. Howard. 1,817,080; Aug. 4.
Transmission mechanism. G. S. Morison. 1,817,159; Aug. 4.
Transmission mechanism, Apron disk. F. B. Cockburn. 1,816,960; Aug. 4.
Transmission of force by liquid pressure. R. T. Knapp. 1,817,315; Aug. 4.
Trap: *See*—
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Trap. W. I. Simmons. 1,817,589; Aug. 4.
Tray, Record. E. W. Davis. 1,817,073; Aug. 4.
Tree, Stocking. O. J. Howe. 1,817,411; Aug. 4.
Trichloroethylene, Stabilization of. C. Dangelmajer. 1,816,895; Aug. 4.
Trimmer: *See*—
Ditch trimmer.
Trolley, Flexible. J. E. Morgan. 1,817,093; Aug. 4.
Truck, Car. L. Tartaglia. 1,817,719; Aug. 4.
Trunk, Automobile luggage. P. F. Spery. 1,817,107; Aug. 4.
Trunk, Extensible. J. F. Bellinger. 1,817,504; Aug. 4.
Tube: *See*—
Vacuum tube.
Tube and pipe coupling. H. E. Sipe. 1,817,772; Aug. 4.
Tubes, Preparing luminescent. F. W. Zons. 1,817,333; Aug. 4.
Tumbler. E. E. Bartlett. Des. 84,775; Aug. 4.
Turbine. C. L. Hoff and T. P. Long. 1,816,971; Aug. 4.
Turn-button for clocks, etc., Direction indicating. J. O. Simpson. 1,817,447; Aug. 4.
Turning machine. C. L. Mattison. 1,817,493; Aug. 4.
Typewriters, Envelope feeding apparatus for. H. L. Chenery. 1,817,235; Aug. 4.
Typewriting machine. G. G. Going. 1,817,251–4; Aug. 4.
Typewriting machines. J. Phelps. 1,817,038; Aug. 4.
Universal joint. R. C. Boyden. 1,816,891; Aug. 4.
Unloading device. J. O. McMillan. 1,817,698; Aug. 4.
Unloading system for aid and gas compressors. C. Wainright. 1,817,862; Aug. 4.
Upright drill, Hydraulic. A. L. de Leeuw. 1,816,829; Aug. 4.
Vacuum cleaner. D. C. Baker. 1,817,337; Aug. 4.
Vacuum cleaner. P. H. Robinson. 1,816,873; Aug. 4.
Vacuum tube. J. V. Capicotto. 1,817,674; Aug. 4.
Vacuum tube and method of manufacture. E. Y. Robinson. 1,817,445; Aug. 4.
Valve device, Quick coupling. W. C. Todd. 1,817,430; Aug. 4.
Valve device, Quick coupling. W. J. McJannet. 1,817,830; Aug. 4.
Valve for sewage injectors, Vent. I. C. Jennings. 1,817,196; Aug. 4.
Valve in head double action bell ringer for locomotive engines. G. W. Gill. 1,817,032; Aug. 4.
Valve, Unloading. T. E. Crockett. 1,817,127; Aug. 4.
Vaporizer. L. Berry. 1,817,057; Aug. 4.
Vaporizer. M. Keim. Des. 84,785; Aug. 4.
Vehicle. G. H. Cook. 1,817,478; Aug. 4.
Vehicle. E. R. Young. 1,817,220; Aug. 4.
Vehicle body. J. L. Brownell. 1,817,125; Aug. 4.
Vehicle, Dump. H. F. Flowers. 1,817,681; Aug. 4.
Vehicle frame construction. R. M. Lovejoy 1,817,633; Aug. 4.
Vehicle, Motor W. G. Rogers. 1,817,848; Aug. 4.
Vehicle, Motor road. A. C. Hutt. 1,817,514; Aug. 4.
Vehicle wheel. L. G. Bartlett. 1,816,820; Aug. 4.
Vehicle wheel. W. N. Booth. 1,816,925; Aug. 4.
Vehicle with load lifting means. C. Cohen-Venezian. 1,817,859; Aug. 4.
Vending machine. M. Dunn. 1,817,740; Aug. 4.
Ventilating, Land air conditioning method and system for inclosures. L. L. Lewis and A. C. Buensod. 1,817,384; Aug. 4.
Ventilator for automobiles. J. W. Greig. 1,817,140; Aug. 4.
Ventilator structure, Granary. W. M. Rowles. 1,817,270; Aug. 4.
Vessel. E. H. Ewertz. 1,817,071–2; Aug. 4.
Vibrometer. G. B. Karelitz. 1,817,567; Aug. 4.
Voltage control system. A. N. Anderson. 1,817,334; Aug. 4.
Wagon, Shopping. J. V. Longan. 1,817,260; Aug. 4.
Wall of cellular blocks, Building. K. Slidell and E. M. Wyatt. 1,817,022; Aug. 4.
Warp stop motion. J. G. Ahlin. 1,817,119; Aug. 4.
Warp stop motion. J. Regan. 1,817,167; Aug. 4.
Warp stop-motion, Electric. O. V. Payne. 1,817,166; Aug. 4.
Washer: *See*—
Diaper washer.
Washing apparatus. J. E. Van Dall. 1,816,990; Aug. 4
Washing apparatus. H. Zemke. 1,817,222; Aug. 4.
Watch cleaning machine. F. Regero. 1,817,266; Aug. 4.
Watch, Novelty. G. Huguenin. 1,817,374; Aug. 4.
Water craft, Construction in. H. K. Stack. 1,817,780; Aug. 4.
Water heater. H. R. Stuckwisch. 1,817,214; Aug. 4.
Water heater, Feed. J. F. Grace. 1,816,841; Aug. 4.
Water heater, Feed. J. F. Grace. 1,817,075; Aug. 4.
Water heater, Feed. C. R. Hardy. Des. 84,781; Aug. 4.
Water heater, Storage automatic. V. J. Evans. 1,817,549; Aug. 4.
Water heater, Tender feed. C. A. Schellens. 1,816,874; Aug. 4.
Water heating device, Electrical. I. R. and F. J. McGowen. 1,817,090; Aug. 4.
Water heating tank. W. A. Graham. 1,817,685; Aug. 4.
Water level indicator, Battery. L. R. Willits. 1,816,993; Aug. 4.
Weed cutter. H. L. Booth. 1,816,890; Aug. 4.
Welding machine, Wheel. J. W. Hughes. 1,817,193; Aug. 4.
Welding method and apparatus. T. E. Murray, jr. 1,816,864; Aug. 4.
Welding process, Electric. O. L. Mills. 1,817,092; Aug. 4.
Well casing jack. W. D. McCarley. 1,817,261; Aug. 4.
Wheel: *See*—
Vehicle wheel. Wire wheel.
Wheel. J. W. White. 1,816,943; Aug. 4.
Wheel construction. B. Meigs. 1,817,699; Aug. 4.
Wheel disks, Method and machine for rolling. J. W. Hughes. 1,817,035; Aug. 4.
Whipstock. F. Kinzbach and H. M. Wheeler. 1,816,856; Aug. 4.
Winding machine. C. L. Sall. 1,817,767; Aug. 4.
Window pane, Ventilating. W. R. McMann. 1,817,494; Aug. 4.
Windshield and support therefor. T. B. Nisbet. 1,817,577; Aug. 4.
Windshield cleaner, Automatic. H. Hueber and J. R. Oishei. 1,817,563; Aug. 4.
Wing for aeroplanes. A. Soldenhoff. 1,817,275; Aug. 4.
Wing for aeroplanes, Auto vent. G. W. Williams, jr. 1,817,281; Aug. 4.
Wire and the like, Apparatus for galvanizing. H. G. Black. 1,817,122; Aug. 4.
Wire clamp. A. M. Maszczyk. 1,817,386; Aug. 4.
Wire, Cleaning. C. J. Warnke. 1,816,881; Aug. 4.
Wire wheel. W. N. Booth. 1,816,926; Aug. 4.
Wood patch making machine. A. R. Jayne. 1,816,853; Aug. 4.
Wood pulp, Production of chemical. G. A. Richter. 1,817,525; Aug. 4.
Wrapping machinery. W. H. Norton. 1,817,017; Aug. 4.
Wreath, Decorative. A. Brandt. 1,817,173; Aug. 4.
Wrench: *See*—
Spanner wrench.
Wrench. J. E. Bialock. 1,817,060; Aug. 4.
Wrench. G. Breen. 1,816,997; Aug. 4.
Wrench. W. J. Greutman, C. A. Shook, and M. F. Brandt. 1,816,968; Aug. 4.
Wringer: *See*—
Clothes wringer.
Wringer. T. W. Behan. 1,817,603; Aug. 4.
Yarn, Apparatus for spinning. E. Hartley. 1,817,192; Aug. 4.
Yarn separator. F. K. Hendrickson. 1,817,143; Aug. 4.
Zinciferous materials containing cadmium, Treatment of. H. M. Cyr and R. K. Waring. 1,817,068; Aug. 4.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 4, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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U. S. GOVERNMENT PRINTING OFFICE: 1931

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Abelson, Meyer H., Wilkes-Barre, Pa. Candy. 286,087; Aug. 11. Class 46.

Abrasive Products, Inc., Boston, Mass. Natural abrasives of flint, abrasive papers and cloths. 286,029; Aug. 11; Serial No. 312,252; published May 26, 1931. Class 4.

Abrasive Products, Inc., Boston, Mass. Natural abrasive of flint, emery, and garnet, artificial abrasive and abrasive papers and cloths. 286,030; Aug. 11; Serial No. 312,250; published May 26, 1931. Class 4.

Alamo Novelty Company, San Antonio, Tex. Table games. 286,099; Aug. 11. Class 22.

Alaska Pacific Salmon Corporation, Seattle, Wash. Canned salmon. 285,849; Aug. 11; Serial No. 312,856; published May 12, 1931. Class 46.

Alco Advertising & Supply Co. (See Cohen, Alex A.)

Allbron Products, Inc., East Orange, N. J. Perspective drawing charts. 286,036; Aug. 11; Serial No. 313,820; published June 2, 1931. Class 26.

Allin, A., & Son. (See Allina, Edgar M.)

Allina, Edgar M., doing business as A. Allin & Son, Chicago, Ill. Paints, paint enamels, varnishes, etc. 286,089; Aug. 11. Class 16.

Alpha Game Company, The. (See Stellmacher, Herbert.)

Alpine Käse A. G., Burgdorf, Switzerland. Cheese. 285,889; Aug. 11; Serial No. 313,171; published May 26, 1931. Class 46.

Alrite Mfg. Co. (See Fidelity Manufacturing Co., Inc.)

American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Planographic plates. 285,828; Aug. 11; Serial No. 312,938; published June 2, 1931. Class 50.

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Arizona Canneries, Incorporated, Casa Grande, Ariz. Canned figs. 286,071; Aug. 11. Class 46.

Arrowhead Manufacturing Co. (See Forselins, Arthur.)

Asbestos Manufacturing Company, Huntington, Ind. Asbestos brake lining and clutch facings. 286,096; Aug. 11. Class 35.

Automatic Canteen Company, Chicago, Ill. Candy bars. 285,841; Aug. 11; Serial No. 313,531; published May 26, 1931. Class 46.

B-Y Company, The, Providence, R. I. Washing preparation for silk and rayon fabrics. 286,059; Aug. 11; Serial No. 306,554; published June 2, 1931. Class 4.

Bauer Paper Box Company, The, Cincinnati, Ohio. Paper boxes. 286,063; Aug. 11. Class 2.

Bauer, W. A., Co., Norristown, Pa. Coffee and canned vegetables. 285,952; Aug. 11; Serial No. 294,106; published June 2, 1931. Class 46.

Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic lenses. 286,037; Aug. 11; Serial No. 313,828; published June 2, 1931. Class 26.

Bear Brand Hosiery Co. (See Paramount Knitting Company, assignor.)

Beatrice Creamery Company, Chicago, Ill. Milk and cream. 285,893; Aug. 11; Serial No. 313,417; published May 26, 1931. Class 46.

Beecher Peck & Lewis, Detroit, Mich. Papers. 285,932; Aug. 11; Serial No. 312,942; published May 26, 1931. Class 37.

Bell Punch and Printing Company Limited, The, Uxbridge, Middlesex, England. Rotary printing presses. 285,999; Aug. 11; Serial No. 311,993; published May 26, 1931. Class 23.

Bergman, Richard A., Chicago, Ill. Paints, paint enamels, varnishes, etc. 286,088; Aug. 11. Class 16.

Best, Richard, Pencil Company, Inc., New York, N. Y. Lead pencils. 286,093; Aug. 11. Class 37.

Binney & Smith Co., New York, N. Y. Pigments. 286,052; Aug. 11; Serial No. 297,294; published May 13, 1930. Class 12.

Blair Laboratories. (See Morton Manufacturing Corporation.)

Bradley, Milton, Company, Springfield, Mass. Games. 285,945; Aug. 11; Serial No. 298,426; published May 19, 1931. Class 22.

Brechet & Richter Company, Minneapolis, Minn. Flavored powdered preparations. 285,916; Aug. 11; Serial No. 311,556; published May 26, 1931. Class 46.

Brignall, Guy E., doing business as Lite Soap Company, Aurora, Ill. Mineral soap. 286,050; Aug. 11; Serial No. 300,323; published May 26, 1931. Class 4.

British Ropes, Limited, London, England. Steel ropes, cables, and strands. 285,969; Aug. 11; Serial No. 308,353; published June 2, 1931. Class 7.

Brook, Helen T., Inc., Brooklyn, N. Y. Candy. 285,852; Aug. 11; Serial No. 312,792; published June 2, 1931. Class 46.

Builders Iron Foundry, Providence, R. I. Fluid meters. 286,009; Aug. 11; Serial No. 313,280; published May 26, 1931. Class 26.

California Medicinal Wine Co., Los Angeles, Calif. Medicinal and pharmaceutical preparations. 286,072; Aug. 11. Class 6.

Carli & Son, Washington, D. C. Seed. 285,891; Aug. 11; Serial No. 313,329; published June 2, 1931. Class 1.

Carlough, Louis E. (See Goldstein, Bernard J., assignor.)

Caro-Maid Ice Cream Co. (See Wood Grocery Co., The.)

Carter, James, & Co., assignors to Carters Tested Seeds Limited, London, England. Seeds. 84,308; renewed Nov. 28, 1931. Class 1.

Carter's Ink Company, The, Cambridge, Mass. Writing inks, typewriter ribbons, and carbon paper. 285,833; Aug. 11; Serial No. 313,419; published May 26, 1931. Class 11.

Chambers, J. B., doing business as Chambers Candy Co., Griffin, Ga. Candy. 285,855; Aug. 11; Serial No. 313,074; published May 26, 1931. Class 46.

Chappel Bros., Inc., Rockford, Ill. Canned meat and cereals for dogs, etc. 285,884; Aug. 11; Serial No. 312,693; published May 26, 1931. Class 46.

Chermendy, Carl V., doing business as Everglaze Products Co., Denver, Colo. Polish. 285,897; Aug. 11; Serial No. 311,026; published May 26, 1931. Class 16.

Chicago Coil Spring Co., Chicago, Ill. Valve springs. 286,008; Aug. 11; Serial No. 313,233; published June 2, 1931. Class 23.

Chicago Musical Instrument Company, Chicago, Ill. Accordions. 286,084; Aug. 11. Class 36.

Chicago Pneumatic Tool Company, New York, N. Y. Pumping and compressing apparatus and parts thereof. 285,993; Aug. 11; Serial No. 309,262; published May 26, 1931. Class 23.

Chiron, H., Company, Inc., New York, N. Y. Reeds for saxophones, clarinets and similar musical instruments. 286,091; Aug. 11. Class 36.

Cir-Cul-Air Refr'g. Corp., St. Louis, Mo. Display refrigerators, air conditioning and cooling devices, and storage coolers. 285,957; Aug. 11; Serial No. 282,772; published May 26, 1931. Class 31.

Clicquot Club Company, Millis, Mass. Syrups and extracts. 285,863; Aug. 11; Serial No. 312,414; published May 26, 1931. Class 45.

Cochran, Walter R., doing business as Just-Rite Laboratories No. 1, Panhandle, Tex., and Eldorado Springs, Mo. Washing compounds and cleaners. 286,062; Aug. 11. Class 4.

Cohen, Alex A., Providence, R. I., doing business as Alco Advertising & Supply Co. Maltless beverages, sirups, and extracts. 285,873; Aug. 11; Serial No. 313,769; published June 2, 1931. Class 45.

Cohen, Goldman & Co. Inc., New York, N. Y. Woven fabric of wool. 285,826; Aug. 11; Serial No. 312,886; published June 2, 1931. Class 2.

Cohn, Samuel, Chicago, Ill. Throat gargles. 286,078; Aug. 11. Class 6.

Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving cream. 286,026; Aug. 11; Serial No. 312,547; published June 2, 1931. Class 4.

Colonial Mills Inc., New York, N. Y. Rayon piece goods. 285,823; Aug. 11; Serial No. 312,416; published May 26, 1931. Class 42.

Colonial Products Company. (See Silberman, L. E.)

Colorado Fuel and Iron Company, The, Denver, Colo. Wire fence. 286,068; Aug. 11. Class 13.

Conklin Pen Company, The, Toledo, Ohio. Fountain pens. 285,914–15; Aug. 11; Serial No. 311,367–8; published May 26, 1931. Class 37.

Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Wire fencing. 285,909; Aug. 11; Serial No. 313,466; published June 2, 1931. Class 13.

Cooper Stamp Works. (See Zimmer, Charles.)

Co-Operative Central Exchange, Superior, Wis. Men's pants, boys' breeches, etc. 285,877; Aug. 11; Serial No. 312,174; published May 26, 1931. Class 39.

Crab Orchard Stone Co., Inc., Nashville, Tenn. Quartzite for rubble and building stone, etc. 286,048; Aug. 11; Serial No. 303,838; published June 2, 1931. Class 12.

Crystal Shoe Polish Manufacturing Co., The. (See Vasiliatos, William T.)

Cyclofile Corporation, Rochester, N. Y. Filing cabinets. 286,010; Aug. 11; Serial No. 313,363; published May 26, 1931. Class 32.

Cyco Manufacturing Co. (See Fisher, Cecil C.)

Dairy Corporation of America, Chicago, Ill. Powdered skim milk and powdered cream. 285,938; Aug. 11; Serial No. 313,234; published May 26, 1931. Class 46.

Dante Candy Company, Chicago, Ill. Candy bars. 285,980; Aug. 11; Serial No. 307,656; published June 2, 1931. Class 46.

Dattelbaum, Henry, doing business as Dattlebaum Bros., New York, N. Y. Mink and sable furs. 286,086; Aug. 11. Class 1.

Davies-Young Soap Company, The, Dayton, Ohio. Liquid wax for rubber floors, etc. 285,885; Aug. 11; Serial No. 312,796; published June 2, 1931. Class 16.

Davies-Young Soap Company, The, Dayton, Ohio. Liquid wax for floors, etc. 285,896; Aug. 11; Serial No. 312,701; published June 2, 1931. Class 16.
Dayton Company, The, Minneapolis, Minn. Textile rugs. 285,824; Aug. 11; Serial No. 312,553; published June 2, 1931. Class 42.
Dayton Scale Company, Dayton, Ohio. Automatic weighing scales. 286,054; Aug. 11; Serial No. 285,661; published June 2, 1931. Class 26.
Decker, Jacob E., & Sons, Mason City, Iowa. Bacon. 285,836; Aug. 11; Serial No. 313,165; published June 2, 1931. Class 46.
Deering, Charles M., doing business as Salta Products, Worcester, Mass. Powdered cleanser. 286,044; Aug. 11; Serial No. 309,809; published May 26, 1931. Class 4.
Déja, Inc., New York, N. Y. Articles of clothing for women. 285,898; Aug. 11; Serial No. 311,129; published May 26, 1931. Class 39.
Derfler, Nathan, New York, N. Y. Photographic prints. 285,902; Aug. 11; Serial No. 312,945; published May 26, 1931. Class 38.
Des Moines Steel Tank Company, Des Moines, Iowa. Sheet metal articles. 285,820; Aug. 11; Serial No. 311,409; published June 2, 1931. Class 50.
Dieker, Louis G., doing business as The Duryana Company, Los Angeles, Calif. Health foods. 285,840; Aug. 11; Serial No. 313,460; published May 26, 1931. Class 46.
Disney, Walt, Productions, Ltd., Hollywood, Calif. Dolls. 285,972; Aug. 11; Serial No. 313,591; published May 26, 1931. Class 22.
Domko, Joseph, doing business as Joseps Domko & Co., Chicago, Ill. Canned fruits, vegetables, fish, etc. 285,985; Aug. 11; Serial No. 299,379; published Aug. 5. Class 46.
Dorfmann Bros., Corona, N. Y. Thermometers. 286,055; Aug. 11; Serial No. 284,525; published June 2, 1931. Class 23.
Douglas, Bernard M., New York, N. Y. Roquefort cheese. 285,941; Aug. 11; Serial No. 313,730; published June 2, 1931. Class 46.
Dresner, S., & Son, Inc., Chicago, Ill. Luggage. 285,890; Aug. 11; Serial No. 313,285; published May 26, 1931. Class 3.
Du Pont Viscoloid Company, New York, N. Y. Hair ornament. 285,880; Aug. 11; Serial No. 312,335; published May 26, 1931. Class 40.
Duryana Company, The. (See Dieker, Louis G.)
E-Z Walk Corporation, New York, N. Y. Arch supports. 286,097; Aug. 11. Class 44.
Egan Cotton Mills, Atlanta, Ga. Textile padding. 285,817; Aug. 11; Serial No. 310,217; published May 26, 1931. Class 42.
Ellis, Lawrence D., Toledo, Ohio, doing business as Ellis Machine and Tool Company. Electrical vibrator and massage machine. 286,015; Aug. 11; Serial No. 313,775; published June 2, 1931. Class 44.
Empire Gas Burner Co., The, Easthamnton, Mass. Gas burners. 285,908; Aug. 11; Serial No. 313,337; published June 2, 1931. Class 34.
Empire Manufacturing Company, New York, N. Y. Drawing boards, triangles, etc. 286,035; Aug. 11; Serial No. 313,287; published June 2, 1931. Class 26.
Ettelbrick Shoe Co. Inc., Greenup, Ill. Infants' shoes. 285,879; Aug. 11; Serial No. 312,295; published May 26, 1931. Class 39.
Everglaze Products Co. (See Chermendy, Carl V.)
Fashion Park Associates, Inc., Rochester, N. Y. Sweaters, hats, caps, stockings, underwear, etc. 285,901; Aug. 11; Serial No. 312,046; published May 26, 1931. Class 39.
Favreau & Collette, Spencer, Mass. Syrup for coughs or temporary hoarseness. 286,092; Aug. 11. Class 6.
Fem-Pac Company, The. (See Snyder, John B.)
Fidelity Manufacturing Co., Inc., doing business as Alrite Mfg. Co., Zionsville, Pa. Auto top dressing. 286,018; Aug. 11; Serial No. 313,365; published May 26, 1931. Class 4.
Field, Alfred, Seattle, Wash. Pyrophoric cigarette lighters. 285,948; Aug. 11; Serial No. 295,610; published May 26, 1931. Class 34.
Firemaster Company, New York, N. Y. Portable hand fire extinguishing apparatus. 286,006; Aug. 11; Serial No. 313,080; published May 26, 1931. Class 23.
Fisher, Cecil C., doing business as Cyco Manufacturing Co., Des Moines, Iowa. Tables, bookcases, shelving, racks, etc. 285,998; Aug. 11; Serial No. 311,870; published May 26, 1931. Class 32.
Floridagold Citrus Corporation, Winter Haven, Fla. Canned grapefruit cut into individual miniature portions. 285,838; Aug. 11; Serial No. 313,290; published June 2, 1931. Class 46.
Ford, J. B., Company, The, Wyandotte, Mich. Cleaning, cleansing, and detergent materials. 286,016; Aug. 11; Serial No. 313,655; published June 2, 1931. Class 4.
Forselius, Arthur, doing business as Arrowhead Manufacturing Co., Ely, Minn. Artificial bait for fish. 285,874–5; Aug. 11; Serial Nos. 313,845–6; published June 2, 1931. Class 22.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 285,818; Aug. 11; Serial No. 310,979; published May 26, 1931. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 285,827; Aug. 11; Serial No. 312,909; published May 26, 1931. Class 42.
Foster Wheeler Corporation, New York, N. Y. Plate air heaters, condensers, evaporators, etc. 285,960; Aug. 11; Serial No. 296,963; published Nov. 18, 1930. Class 34.
Foster Wheeler Corporation, New York, N. Y. Metal tubes and pipes and expansion joints. 285,961; Aug. 11; Serial No. 300,266; published Nov. 4, 1930. Class 13.
Frankfort Distillery, Inc., The, Louisville, Ky. Whiskey. 285,970; Aug. 11; Serial No. 306,947; published June 2, 1931. Class 49.
Freudenberg, Carl, Inc., Boston, Mass. Leather. 285,895; Aug. 11; Serial No. 313,657; published June 2, 1931. Class 1.
Frohlich, Samuel D., New York, N. Y. Hair nets. 285,856; Aug. 11; Serial No. 313,081; published May 26, 1931. Class 42.
Frostilla Company, The. (See Shoemaker, Flora H.)
Gabilla, Incorporated, New York, N. Y. Toilet soap. 286,028; Aug. 11; Serial No. 311,437; published May 26, 1931. Class 4.
Gabilla, Incorporated, New York, N. Y. Toilet soap. 286,041; Aug. 11; Serial No. 311,429; published June 2, 1931. Class 4.
Gaess & Hollander, Long Island City, N. Y. Table board games, checker men and chess men, toys, etc. 285,858; Aug. 11; Serial No. 309,970; published June 2, 1931. Class 22.
General Paint Corporation, San Francisco, Calif. Paint comprising aluminum powder and a suitable binder or the component parts thereof. 285,886; Aug. 11; Serial No. 312,798; published May 26, 1931. Class 16.
Gerber, Charles A., New York, N. Y. Ladies' hats. 285,992; Aug. 11; Serial No. 305,902; published May 26, 1931. Class 39.
Giering, J. F., Bottling Co., The, Youngstown, Ohio. Orange juice beverage. 286,067; Aug. 11. Class 45.
Gold Coast Paint Company, San Francisco, Calif. Paint, floor enamel, varnishes. 285,878; Aug. 11; Serial No. 313,291; published May 26, 1931. Class 16.
Goldstein, Bernard J., assignor to Louis E. Carlough, doing business as The Safety Fire Extinguisher Co., New York, N. Y. Chemical fire engines. 83,246; renewed Aug. 29, 1931. Class 23.
Grand Rapids Plaster Company, Grand Rapids, Mich. Plaster. 286,058; Aug. 11; Serial No. 306,530; published June 2 1931. Class 12.
Granite City Steel Company, Granite City, Ill., and Wilmington, Del. Copper iron culvert stock. 285,821–2; Aug. 11; Serial Nos. 311,582–3; published June 2, 1931. Class 14.
Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Toilet or dressing cases, overnight bags, and fitted hand baggage. 285,899; Aug. 11; Serial No. 311,375; published June 2, 1931. Class 3.
Greco Canning Company, Inc., San Jose, Calif. Canned vegetables. 285,951; Aug. 11; Serial No. 294,424; published July 1, 1930. Class 46.
Griswoldville Manufacturing Company, Griswoldville, Mass. Sand-paper. 286,043; Aug. 11; Serial No. 309,815; published May 26, 1931. Class 4.
Gross Millinery Co., Inc., Trenton, N. J. Women's, misses', and children's hats. 285,990; Aug. 11; Serial No. 304,554; published May 26, 1931. Class 39.
Grout & Company, Limited, Norfolk, England. Bandages and abdominal binders or supports. 286,023; Aug. 11; Serial No. 312,644; published June 2, 1931. Class 44.
Halverson, Orris H., Waukesha, Wis. Maltless beverage. 286,066; Aug. 11. Class 45.
Hammel Riglander-Pennant Corporation, New York, N. Y. Wrist bands for watches. 286,000; Aug. 11; Serial No. 312,259; published May 26, 1931. Class 40.
Hawaiian Pineapple Company, Ltd., San Francisco, Calif., and Honolulu, Hawaii. Canned pineapple. 285,853; Aug. 11; Serial No. 312,910; published June 2, 1931. Class 46.
Health Heat Laboratories. (See Kelsey, Frank E.)
Hedley, Thomas, & Company, Limited, Newcastle-on-Tyne, England. Toilet soap. 286,017; Aug. 11; Serial No. 313,542; published June 2, 1931. Class 4.
Hemingray Glass Company, Muncie, Ind. Glass bottles. 285,930; Aug. 11; Serial No. 312,912; published May 26, 1931. Class 33.
Hen Houses, Inc., Minneapolis, Minn. Prepared and cooked fowl. 285,989; Aug. 11; Serial No. 304,101; published June 2, 1931. Class 46.
Heuer, Ed., & Co. Jules Jürgensen Watch Co., Bienne, Switzerland. Horological instruments. 285,956; Aug. 11; Serial No. 279,851; published June 2, 1931. Class 27.
Hill, Sam M., doing business as Hill's Mfg. Co., Galveston, Tex. Insecticide. 285,954; Aug. 11; Serial No. 287,703; published May 19 1931. Class 6.
Hill-Shaw Company, Chicago, Ill. Glass coffee brewer. 285,964; Aug. 11; Serial No. 312,214; published May 26, 1931. Class 13.
Hills Brothers Company, The, New York, N. Y. Dried dates. 285,848; Aug. 11; Serial No. 312,342; published May 26, 1931. Class 46.
Hoberg Paper & Fibre Company, Green Bay, Wis. Toilet paper, paper towels, and napkins. 285,939; Aug. 11; Serial No. 313,341; published May 26, 1931. Class 37.

Horn Surgical Company, Philadelphia, Pa. Elastic hosiery. 286,020; Aug. 11; Serial No. 312,917; published May 26, 1931. Class 44.
Houghton, E. F. & Co., Philadelphia, Pa. Compounds for scouring purposes. 286,025; Aug. 11; Serial No. 312,605; published June 2, 1931. Class 4.
Ideal Electric & Manufacturing Co., The, Mansfield, Ohio. Electric motors and generators, electric dynamos for gas engines, and electric tool motors. 84,635; renewed Dec. 26, 1931. Class 21.
Imported & Domestic Novelty Co., New York, N. Y. Knitting tool. 286,007; Aug. 11; Serial No. 313,134; published June 2, 1931. Class 23.
Indiana Limestone Company, Bedford, Ind., and New York, N. Y. Building stone. 285,987; Aug. 11; Serial No. 301,453; published June 2, 1931. Class 1.
Indiana Limestone Company, Bedford, Ind., and New York, N. Y. Building stone. 285,988; Aug. 11; Serial No. 301,456; published June 2, 1931. Class 1.
Ink, Harry H., assignor to The Tonsiline Company, Canton, Ohio. Remedy for diseases of the mouth and throat. 83,495; renewed Sept. 19, 1931. Class 6.
Jewelers Publishing Corporation, New York, N. Y. Weekly magazine. 285,907; Aug. 11; Serial No. 313,296; published May 26, 1931. Class 38.
Joffe Brothers, New York and Brooklyn, N. Y. Candied popcorn. 285,851; Aug. 11; Serial No. 312,788; published May 26, 1931. Class 46.
Johns-Manville Corporation, New York, N. Y. Composition for electrical insulation. 286,079; Aug. 11. Class 21.
Jordeau, Jean, Inc., South Orange, N. J. Depilatories. 285,923; Aug. 11; Serial No. 312,433; published May 19, 1931. Class 6.
Junkers, Hugo, Dessau, Germany. Metallic walls, wall plates, wall brackets, roofs, etc. 286,056; Aug. 11; Serial No. 279,924; published May 26, 1931. Class 12.
Just-Rite Laboratories No. 1. (See Cochran, Walter R.)
Kellogg Company, Battle Creek, Mich. Coffee. 285,850; Aug. 11; Serial No. 312,434; published June 2, 1931. Class 46.
Kellom, Charles F., & Co. Inc., Holmesburg, Philadelphia, Pa. Combined liquid auto polisher and cleaner, a furniture cream, etc. 285,882; Aug. 11; Serial No. 312,520; published June 2, 1931. Class 16.
Kelly Brothers Nurseries, Dansville, N. Y. Catalogs relating to horticultural or nursery products. 285,911; Aug. 11; Serial No. 310,175; published May 26, 1931. Class 38.
Kelsey, Frank E., doing business as Health Heat Laboratories, Battle Creek, Mich. Filters for hot air registers of furnaces. 285,906; Aug. 11; Serial No. 313,192; published June 2, 1931. Class 34.
Kendall Company, The, Boston, Mass., and Chicago, Ill. Chemical heaters. 286,039; Aug. 11; Serial No. 311,547; published June 2, 1931. Class 44.
Kerfoot, Tho., & Co., Ashton-under-Lyne, England, assignor to Thomas Kerfoot & Co., Limited, Bardsley, England. Perfumed lozenges. 37,298; renewed Nov. 12, 1931.
Kerr, Louise M., Buffalo, N. Y. Waterproofing dressing for shoes, etc. 286,019; Aug. 11; Serial No. 313,136; published May 26, 1931. Class 4.
Keuffel & Esser Co., Hoboken, N. J. Slide rules. 286,085; Aug. 11. Class 26.
Keystone Mfg. Co., The, Buffalo, N. Y. Apparatus for grinding cylindrical surfaces, such as the cylinders of engines, etc. 285,995; Aug. 11; Serial No. 311,241; published May 26, 1931. Class 23.
Kilgore Mfg. Company, The, Westerville, Ohio. Paper caps for toy fire arms. 285,869; Aug. 11; Serial No. 313,298; published June 2, 1931. Class 9.
Klingstedt Brothers Company, The, Canton, Ohio. Writing paper, letterheads, invoices, and statements. 285,974; Aug. 11; Serial No. 306,518; published May 26, 1931. Class 37.
Klingstedt Brothers Company, The, Canton, Ohio. Checks, such as bank checks. 285,975; Aug. 11; Serial No. 306,517; published May 26, 1931. Class 37.
Klotz, H. et G., et Cie., Paris, France, and New York, N. Y., assignor to Pinaud Inc., New York, N. Y. Perfumery and other toilet preparations. 82,893; renewed Aug. 1, 1931.
Knights of Peter Claver, Mobile, Ala. Writing paper. 285,918; Aug. 11; Serial No. 311,612; published May 26, 1931. Class 37.
Kohnstamm, H., & Co., Inc., New York, N. Y. Device for marking and identifying laundry. 285,949; Aug. 11; Serial No. 294,477; published June 2, 1931. Class 24.
Krause, Chas. A., Milling Co., Milwaukee, Wis. Flaked corn product. 285,864; Aug. 11; Serial No. 312,436; published May 26, 1931. Class 48.
Langenhaun, Max, Arnstadt, Germany. Billiard tables, cues, and balls. 285,867; Aug. 11; Serial No. 313,247; published June 2, 1931. Class 22.
Leggett, Francis H., & Company, New York, N. Y. Canned peas. 285,984; Aug. 11; Serial No. 299,139; published May 26, 1931. Class 46.
Lehigh Packing Co. Inc., Allentown, Pa. Rabbits for breeding purposes. 285,979; Aug. 11; Serial No. 308,738; published May 26, 1931. Class 1.
Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin, Bordeaux, France. Maltless beverages. 285,859; Aug. 11; Serial No. 310,383; published May 26, 1931. Class 45.

Leyse Aluminum Company, Kewaunee, Wis. Aluminum kitchen and serving utensil. 285,976; Aug. 11; Serial No. 305,617; published June 2, 1931. Class 13.
Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass. 285,973; Aug. 11; Serial No. 307,209; published May 5, 1931. Class 33.
Liquid Cement Co., San Diego, Calif. Adhesive liquid cement. 285,887; Aug. 11; Serial No. 312,850; published May 26, 1931. Class 5.
Lister & Company, Limited, Bradford, England. Piece goods. 285,971; Aug. 11; Serial No. 307,721; published May 26, 1931. Class 42.
Lite Soap Company. (See Brignall, Guy E.)
Lomax Company, The, Chicago, Ill. Ginger ale. 285,868; Aug. 11; Serial No. 313,248; published May 26, 1931. Class 45.
Loughran, H. C., Newark, N. J. Rug cushions, paddings and carpet-cushions. 285,829; Aug. 11; Serial No. 312,992; published May 26, 1931. Class 50.
Lowenbaum, R., Manufacturing Company, St. Louis, Mo. Clothing. 84,501; renewed Dec. 19, 1931. Class 30.
Ludwick, Marion L., Los Angeles, Calif. Safety bathing floats. 285,862; Aug. 11; Serial No. 311,690; published June 2, 1931. Class 22.
Lyons & Company, New York, N. Y. Sandals, moccasins, and play oxfords of leather. 285,876; Aug. 11; Serial No. 312,156; published May 26, 1931. Class 39.
Madam White Company, Minneapolis, Minn. Creams, clay packs, astringents, etc. 286,077; Aug. 11. Class 6.
Madison-Kipp Corporation, Madison, Wis. Tools, parts, replacements, and accessories, tool holders, and tool set holders. 286,075; Aug. 11. Class 23.
McCloskey Varnish Co., Philadelphia, Pa. Oil varnish. 285,888; Aug. 11; Serial No. 313,045; published May 26, 1931. Class 16.
McCollough, W. A., & Sons, Inc., Webster City, Iowa. Portable poultry and hog feeders and waterers. 285,830; Aug. 11; Serial No. 312,994; published June 2, 1931. Class 50.
McLaren-Consolidated Cone Corporation, Dayton, Ohio. Ice cream cones. 286,098; Aug. 11; Class 46.
McNaught Syndicate, Inc., The, New York, N. Y. Comic strips. 285,928; Aug. 11; Serial No. 312,784; published May 26, 1931. Class 38.
Meik, Francis T., Salt Lake City, Utah. Stocking and cloth menders and run stopping comprising a solution of rayon in acetone. 286,095; Aug. 11. Class 6.
Melchner, John, New York, N. Y. Meat products. 285,845; Aug. 11; Serial No. 310,689; published June 2, 1931. Class 46.
Meterice, Incorporated, Los Angeles, Calif. Automatic coin controlled time registering electric switches. 286,038; Aug. 11; Serial No. 313,746; published June 2, 1931. Class 26.
Metropolitan Electric Mfg. Co., New York, N. Y., to Metropolitan Electric Mfg. Co., Long Island City, N. Y. Electric wall and knife switches, panel-boards, switchboards, etc. 83,081; renewed Aug. 15, 1931.
Mezögazdasági Termény es Termékforgalmi Intézet, Budapest, Hungary. Lard made from pork fat. 285,982; Aug. 11; Serial No. 306,740; published June 2, 1931. Class 46.
Michiana Products Corporation, Michigan City, Ind. Heat treating containers. 285,963; Aug. 11; Serial No. 312,566; published May 26, 1931. Class 34.
Midvale Company, The, Nicetown, Philadelphia, Pa. Locomotive frames, roll shells, grinding rings, shafting rings for reduction gears, etc. 286,061; Aug. 11; Serial No. 306,501; published June 2, 1931. Class 23.
Milwaukee Lubricants Co., Milwaukee, Wis. Liquid floor coating, etc. 285,900; Aug. 11; Serial No. 311,923; published May 26, 1931. Class 16.
Minnesota Valley Canning Company, Le Sueur, Minn. Canned peas. 285,942–3; Aug. 11; Serial Nos. 298,645–7; published May 26, 1931. Class 46.
Minnesota Valley Canning Company of Le Sueur, Minn. Canned peas. 285,983; Aug. 11; Serial No. 298,646; published May 26, 1931. Class 46.
Modern Tissues Corporation, New York, N. Y. Toilet and facial tissue. 285,934–5; Aug. 11; Serial Nos. 313,049–50; published May 26, 1931. Class 37.
Moores Lime Company, The, Durbin, Ohio. Material made principally from dolomite or lime. 285,925; Aug. 11; Serial No. 312,716; published May 26, 1931. Class 1.
Morton Manufacturing Corporation, also doing business as Blair Laboratories, Lynchburg, Va. Coffee. 285,837; Aug. 11; Serial No. 313,253; published June 2, 1931. Class 46.
Mount Vernon-Woodberry Mills, Inc., Baltimore, Md. Cotton fabrics. 285,910; Aug. 11; Serial No. 309,440; published May 26, 1931. Class 42.
Muhn, John R., Auburn, Ind. Toy wagons, carts, and the like. 285,953; Aug. 11; Serial No. 293,930; published May 26, 1931. Class 22.
Municipal Service Corporation, Los Angeles, Calif. Football game board. 285,967; Aug. 11; Serial No. 306,958; published May 26, 1931. Class 22.
Myles, L. V., Inc., New York, N. Y. Sanitary pads. 286,083; Aug. 11. Class 44.
National Association of Letter Carriers, Washington, D. C. Magazine. 285,921; Aug. 11; Serial No. 312,853; published May 26, 1931. Class 38.

National Traffic Products, Inc., Detroit, Mich. Traffic markers. 285,978; Aug. 11; Serial No. 303,202; published May 26, 1931. Class 50.
New England Curtain Company, Inc., Fitchburg, Mass. Marquisette. muslin, curtains. 285,825; Aug. 11; Serial No. 312,662; published May 26, 1931. Class 42.
New England Fish Company, Seattle, Wash. Fish and seafoods. 285,958; Aug. 11; Serial No. 284,415; published May 19, 1931. Class 46.
New York Revolving Portable Elevator Co., Jersey City, N. J. Portable tiering machines. 84,669; renewed Dec. 26, 1931.
North American Refractories Company, Cleveland, Ohio. Plastic fire brick. 285,994; Aug. 11; Serial No. 309,651; published June 2, 1931. Class 12.
Northern Jobbing Company, Chicago, Ill.; New York, N. Y.; and St. Paul, Minn. Men's, boys', women's, etc., clothing. 285,955; Aug. 11; Serial No. 287,586; published May 26, 1931. Class 39.
Nowak Milling Corporation, Hammond, Ind. Compressed food for dog, puppy, fox, etc. 285,936; Aug. 11; Serial No. 313,091; published June 2, 1931. Class 46.
Nyal Company, Detroit, Mich. Candy. 285,981; Aug. 11; Serial No. 306,960; published May 19, 1931. Class 46.
Old Ben Coal Corporation, Chicago, Ill. Coal. 285,894; Aug. 11; Serial No. 313,608; published June 2, 1931. Class 1.
Optische Werke G. Rodenstock, Munich, Germany. Spectacle-glasses. 285,001; Aug. 11; Serial No. 312,060; published June 2, 1931. Class 26.
Pabst Corporation, Milwaukee, Wis. Malt beverages. 285,860; Aug. 11; Serial No. 310,405; published May 26, 1931. Class 48.
Packard Food Products Co. (See Polin, Jack.)
Paraffine Companies, Inc., The, San Francisco, Calif. Building paper, thermal and acoustical insulating paper, protective covering, etc. 286,057; Aug. 11; Serial No. 275,125; published May 26, 1931. Class 12.
Paramount Knitting Company, assignor to Bear Brand Hosiery Co., Chicago, Ill. Hosiery. 83,090-1; renewed Aug. 15, 1931.
Parcell, John, New York, N. Y. Combination orange food drink. 286,073; Aug. 11. Class 46.
Parks-Cramer Company, Fitchburg, Mass. Humidifiers and humidifying systems. 285,965; Aug. 11; Serial No. 311,845; published May 26, 1931. Class 34.
Peerless Machinery Company, The, Boston, Mass. Machinery and tools for leather goods. 84,673; renewed Dec. 26, 1931.
Pennicuick, Albert E., Hayward, Calif. Slide rules and scales therefor. 286,034; Aug. 11; Serial No. 312,491; published June 2, 1931. Class 26.
People's Outfitting Company, Detroit, Mich. Laundry washing machine. 285,903; Aug. 11; Serial No. 312,959; published June 2, 1931. Class 24.
Peteb Corporation, The, Lowell, Mass. Cleansing cream, face cream, and cold cream. 285,922; Aug. 11; Serial No. 312,323; published May 19, 1931. Class 6.
Petri Bros., Nashville, Tenn. Ironing board. 285,950; Aug. 11; Serial No. 295,430; published June 2, 1931. Class 24.
Pettinos, George F., Incorporated, Philadelphia, Pa. Sands. 285,892; Aug. 11; Serial No. 313,387; published May 26, 1931. Class 1.
Philadelphia and Reading Coal and Iron Company, The, Philadelphia, Pa. Coal. 285,883; Aug. 11; Serial No. 312,670; published June 2, 1931. Class 1.
Philadelphia Quartz Company, Philadelphia, Pa. Cleansing compound. 286,024; Aug. 11; Serial No. 312,624; published June 2, 1931. Class 4.
Pinaud Inc. (See Klotz, H. et G., et Cie., assignor.)
Pioneer Paper Stock Company, Minneapolis, Minn. Wiping cloths, towels, etc. 286,094; Aug. 11. Class 42.
Polar Water Company. (See Water Delivery Company.)
Polin, Jack, doing business as Packard Food Products Co., Brooklyn, N. Y. Chocolate milk preparation, malted milk preparation, and a chocolate malted milk preparation used for making food beverages. 286,090; Aug. 11. Class 46.
Pomeranz, B. & Son, New York, N. Y. Fur trimmings. 285,986; Aug. 11; Serial No. 299,928; published May 26, 1931. Class 40.
Port Huron Sulphite & Paper Company, Port Huron, Mich. Sulphite manilla papers. 285,940; Aug. 11; Serial No. 313,152; published May 26, 1931. Class 37.
Porter, H. K., Inc., Everett, Mass. Metal working tools and parts thereof. 286,003; Aug. 11; Serial No. 312,310; published June 2, 1931. Class 23.
Princeville Canning Co., Princeville, Pa. Canned corn. 285,843-4; Aug. 11; Serial Nos. 313,671-2; published June 2, 1931. Class 46.
Puresweet Confections, Inc., Tulsa, Okla. Candy. 285,991; Aug. 11; Serial No. 305,827; published May 19, 1931. Class 46.
Purex Corporation, Ltd., Los Angeles, Calif. Bleach and water softener. 286,070; Aug. 11. Class 6.
Pycope Incorporated, Joplin, Mo. Tooth brushes. 285,834; Aug. 11; Serial No. 313,673; published June 2, 1931. Class 29.
R R R Chemical Company, Rader, Tenn. Preparation for the destruction of rats and mice. 285,913; Aug. 11; Serial No. 311,535; published May 5, 1931. Class 6.
Ralston, Glenn S., Rockford, Ill. Deposit books for a savings plan. 285,931; Aug. 11; Serial No. 312,927; published May 26, 1931. Class 37.
Ralston, Glenn S., Rockford, Ill. Bulletins and advertising copy. 285,966; Aug. 11; Serial No. 311,750; published May 26, 1931. Class 38.
Red Wing Corporation, Dayton, Ohio. Frozen confections. 285,926; Aug. 11; Serial No. 312,773; published May 26, 1931. Class 46.
Reierson's Inc., Mitchell, S. Dak. Bread, rolls, fried cakes, etc. 286,053; Aug. 11; Serial No. 291,637; published Oct. 28, 1930. Class 46.
Research Products Corporation, New York, N. Y. Dental alloy. 286,027; Aug. 11; Serial No. 312,530; published June 2, 1931. Class 44.
Rietzel, Adolph F., Charlestown, R. I. Toys. 285,857; Aug. 11; Serial No. 309,700; published May 26, 1931. Class 22.
Robinson, Leah H., Duluth, Minn. Fabric lunch bags. 285,905; Aug. 11; Serial No. 313,155; published June 2, 1931. Class 2.
Rock of Ages Corporation, Burlington, Vt. Polished blocks or slabs of granite, etc. 286,033; Aug. 11; Serial No. 313,358; published June 2, 1931. Class 12.
Rossville Commercial Alcohol Corporation, Lawrenceburg, Ind. Ethyl alcohol. 285,819; Aug. 11; Serial No. 311,204; published May 26, 1931. Class 49.
Roth, Harry, New York, N. Y. Clocks, wrist-watches, and platinum, gold, and silver watches. 285,831; Aug. 11; Serial No. 313,389; published May 26, 1931. Class 27.
Safety Fire Extinguisher Co., The. (See Goldstein, Bernard J.)
Salfa Products. (See Deering, Charles M.)
Sani-Gard Products, Ltd., Los Angeles, Calif. Sanitary belts. 286,013; Aug. 11; Serial No. 313,676; published June 2, 1931. Class 44.
Sani-Gard Products, Ltd., Los Angeles, Calif. Sanitary pad-holders. 286,014; Aug. 11; Serial No. 313,677; published June 2, 1931. Class 44.
Santa Maria Produce Co., Guadalupe, Calif. Fresh vegetables. 285,839; Aug. 11; Serial No. 313,352; published May 26, 1931. Class 46.
Saw & Knife Specialty Co., Inc., The, Cleveland, Ohio. Saws, machine knives and files. 286,005; Aug. 11; Serial No. 312,863; published June 2, 1931. Class 23.
Schmid, Julius, New York, N. Y. Prophylactic rubber and membraneous articles. 286,031-2; Aug. 11; Serial Nos. 311,811-2; published May 26, 1931. Class 44.
Schmid, Julius, New York, N. Y. Rubber nursing nipples. 286,040; Aug. 11; Serial No. 311,217; published May 26, 1931. Class 44.
Schwabacher Bros. & Co., Incorporated, Seattle, Wash. Bathroom tissue. 285,937; Aug. 11; Serial No. 313,097; published May 26, 1931. Class 37.
Scovill Manufacturing Company, Waterbury, Conn. Vehicle radiator caps, crank hole covers, etc. 285,977; Aug. 11; Serial No. 305,496; published May 26, 1931. Class 19.
Sedlmayr, Gabriel, Brauerei zum Spaten, assignor to Gabriel u. Jos. Sedlmayr Spaten-Franziskaner-Leistbräu Aktiengesellschaft München, Munich, Germany. Beer. 82,834; renewed July 25, 1931.
Segal Safety Razor Corporation, New York, N. Y. Razor blades, razors, and mechanical stropping devices. 286,074; Aug. 11. Class 23.
Seneca Food Products Corporation, Utica, N. Y. Malt syrup. 285,912; Aug. 11; Serial No. 310,839; published May 26, 1931. Class 46.
Sewall Paint & Varnish Company, Kansas City, Mo. Color mixing apparatus comprising pedestal, measuring graduates, test plates, etc. 285,997; Aug. 11; Serial No. 311,573; published May 26, 1931. Class 26.
Sharples Specialty Company, The, Philadelphia, Pa. Centrifugal machines. 286,011; Aug. 11; Serial No. 313,513; published May 26, 1931. Class 23.
Shoemaker, Flora H., doing business as The Frostilla Company, Elmira, N. Y. Nonsaponaceous beard softening preparation. 286,045; Aug. 11; Serial No. 307,432; published June 2, 1931. Class 4.
Shunk, L. E., Latex Products, Inc., Akron, Ohio. Prophylactic rubber articles. 286,042; Aug. 11; Serial No. 310,192; published May 26, 1931. Class 44.
Siebe, Gorman & Company Ltd., London, England. Breathing apparatus for use in mines, etc. 83,188; renewed Aug. 22, 1931.
Silberman, L. E., doing business as Colonial Products Company, Des Moines, Iowa. Malt extracts. 285,929; Aug. 11; Serial No. 312,739; published May 26, 1931. Class 46.
Sinclair, T. M., & Co., Limited, Cedar Rapids, Iowa. Bacon. 83,014; renewed Aug. 8, 1931.
Sinclair, T. M., & Co., Limited, Cedar Rapids, Iowa. Hams, shoulders, bacon, and picnics. 82,283; renewed Aug. 29, 1931.
Sinclair, T. M., & Co., Limited, Cedar Rapids, Iowa. Hams, shoulders, bacon, etc. 83,520; renewed Sept. 19, 1931.
Sinclair, T. M., & Co., Limited, Cedar Rapids, Iowa. Hams, shoulders, and bacon. 83,861; renewed Oct. 17, 1931.
Sinclair, T. M., & Co., Limited, Cedar Rapids, Iowa. Foods. 83,951 renewed Oct. 24, 1931.

Sinclair, T. M., & Co., Limited, Cedar Rapids, Iowa. Sausage, picnics, and chickens. 84,540; renewed Dec. 19, 1931.
Sligh, S. J., & Company, Orlando, Fla. Fresh fruits and vegetables. 285,846; Aug. 11; Serial No. 311,492; published June 2, 1931. Class 46.
Smith, Carroll, Boston, Mass. Books, pamphlets, posters, etc. 285,946; Aug. 11; Serial No. 298,416; published May 26, 1931. Class 38.
Smith, Kirkpatrick & Co. Inc., New York, N. Y. Radio receiving sets and parts thereof and assembled audio amplifying units and parts thereof. 286,069; Aug. 11. Class 21.
Smith, L C & Corona Typewriters, Inc., New York, N. Y. Typewriting machines and parts thereof. 286,044; Aug. 11; Serial No. 312,391; published May 26, 1931. Class 23.
Smith, S. K., Company, The, Chicago, Ill. Book and program covers. 286,065; Aug. 11. Class 37.
Snell, Norma R., doing business as N. R. Snell Lumber Company, Cleveland, Ohio. Playground and game apparatus. 285,861; Aug. 11; Serial No. 310,840; published May 26, 1931. Class 22.
Snoko Inc., San Francisco, Calif. Ice shaving machines. 286,051; Aug. 11; Serial No. 299,867; published May 26, 1931. Class 23.
Snyder, John B., doing business as The Fem-Pac Company, New York, N. Y. Catamenial appliances. 286,021; Aug. 11; Serial No. 312,867; published May 26, 1931. Class 44.
Societ Champagne Delamotte Pere & Fils, (Societe a Responsabilitee Limitee), Le Mesnil-sur-Ager, France. Wines. 285,968; Aug. 11; Serial No. 308,559; published June 2, 1931. Class 47.
South Bend Toy Mfg. Co., South Bend, Ind. Juvenile furniture. 286,002; Aug. 11; Serial No. 312,204; published June 2, 1931. Class 32.
Southern Rice Sales Company, Inc., New York, N. Y. Rice, barley, dried peas, etc. 285,927; Aug. 11; Serial No. 312,776; published May 26, 1931. Class 46.
Spalding, A. G., & Bros., New York, N. Y. Golf clubs. 285,865; Aug. 11; Serial No. 312,818; published May 26, 1931. Class 22.
Standard Brands Incorporated, New York, N. Y. Tea. 285,847; Aug. 11; Serial No. 312,273; published May 26, 1931. Class 46.
Standard Commercial Body Corporation, New York, N. Y. Guards for automobile radiators. 285,972; Aug. 11; Serial No. 307,434; published June 2, 1931. Class 19.
Standard Motor Truck Company, Detroit, Mich. Motor trucks and chassis. 286,081; Aug. 11. Class 19.
Steele-Wedeles Company, Chicago, Ill. Coffee. 285,842; Aug. 11; Serial No. 313,566; published June 2, 1931. Class 46.
Stellmacher, Herbert, doing business as The Alpha Game Company, Dallas, Tex. Games played with cards. 285,871; Aug. 11; Serial No. 313,567; published May 26, 1931. Class 22.
Strohmeyer & Arpe Company, New York, N. Y. Dried beans. 285,854; Aug. 11; Serial No. 313,063; published May 26, 1931. Class 46.
Tetley, Joseph, & Co., Inc., New York, N. Y. Tea. 285,835; Aug. 11; Serial No. 313,159; published June 2, 1931. Class 46.
Thomas, S. B., Inc., Long Island City, N. Y. Bread. 285,919; Aug. 11; Serial No. 311,762; published June 2, 1931. Class 46.
Thum, O. & W., Company, The, Grand Rapids, Mich. Sticky fly paper. 37,415; renewed Dec. 3. 1931.
Tonsiline Company, The. (See Ink, Harry H., assignor.)
Truscon Steel Company, Youngstown, Ohio. Plaster base. 285,996; Aug. 11; Serial No. 311,350; published May 26, 1931. Class 12.
U. S. Golf Ball Corporation, Chicago, Ill. Golf balls. 285,870; Aug. 11; Serial No. 313,515; published May 26, 1931. Class 22.
United Elastic Corporation, Easthampton, Mass. Elastic fabrics. 286,082; Aug. 11. Class 42.
Universal Armature Corporation, Cambridge, Mass. Armatures, and armature parts. 286,076; Aug. 11. Class 21.
Universal Atlas Cement Company, Chicago, Ill. Building cement. 286,046-7; Aug. 11; Serial Nos. 305,636-7; published June 2, 1931. Class 12.
Vassilatos, William T., doing business as The Crystal Shoe Polish Manufacturing Co., Chicago, Ill. Leather dressings and polishes for shoes. 286,022; Aug. 11; Serial No. 312,780; published June 2, 1931. Class 4.
Victor Oolitic Stone Company, Bloomington, Ind. Building stone. 285,881; Aug. 11; Serial No. 312,396; published May 26, 1931. Class 1.
Washerless Valve Co. Ltd., San Francisco, Calif. Hardware and plumbing supplies. 285,962; Aug. 11; Serial No. 312,822; published June 2, 1931. Class 18.
Water Delivery Company, by change of name to Polar Water Company, Pittsburgh, Pa. Soft drinks and natural aerated water. 84,705; renewed Dec. 26, 1931.
Waterman, L. E., Company, New York, N. Y. Fountain pens. 37,530; renewed Dec. 31, 1931.
Watkins, J. R., Company, The, Winona, Minn. Astringents, astringent cerates, bleach and beauty creams, etc. 286,080; Aug. 11. Class 6.
Waxler, Nathan, doing business as Waxler's Feed Store, Altoona, Pa. Malt syrup. 286,064; Aug. 11. Class 46.
Western Clock Company, Peru, Ill. Clocks and watches. 285,832; Aug. 11; Serial No. 313,401; published May 26, 1931. Class 27.
Western Precipitation Company, Los Angeles, Calif. Apparatus for subjecting gases to centrifugal action. 286,012; Aug. 11; Serial No. 310,499; published May 19, 1931. Class 23.
Wheatena Corporation, The, Rahway, N. J. Wheat breakfast food. 285,917; Aug. 11; Serial No. 311,579; published June 2, 1931. Class 46.
Winkless, Lamartine W., Jr., San Jose, Calif. Tonic beverage. 83,532; renewed Sept. 19, 1931.
Wise, Julia, New York, N. Y. Condimental sauces. 285,924; Aug. 11; Serial No. 312,583; published May 26, 1931. Class 46.
Wrights' Ropes Ltd., Birmingham, England. Wire rope. 285,866; Aug. 11; Serial No. 313,102; published June 2, 1931. Class 7.
Young's Candy Products Co., Inc., Philadelphia, Pa. Filled taffy candy. 285,944; Aug. 11; Serial No. 298,609; published May 26, 1931. Class 46.
Zeiss, Carl, Jena, Germany. Objectives. 286,060; Aug. 11; Serial No. 307,019; published May 26, 1931. Class 26.
Zimmer Charles, doing business as Cooper Stamp Works, New York, N. Y. Printing, stamping, and stenciling inks. 285,959; Aug. 11; Serial No. 264,564; published May 26, 1931. Class 11.
Zonta International, Chicago, Ill. Publication. 285,920; Aug. 11; Serial No. 312,320; published May 26, 1931. Class 38.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

B. B. Oil Company, Philadelphia, Pa. Penn City Motor Oil. For Motor Oil. 39,523; Aug. 11.
B. B. Oil Company, Philadelphia, Pa. Atlas Motor Oil. For Motor Oil. 39,524; Aug. 11.
B. B. Oil Company, Philadelphia, Pa. Penn National Motor Oil. For Motor Oil. 39,525; Aug. 11.
B. V. D. Company, Inc., New York, N. Y. Swim in the Suit 'Johnny' Weissmuller Developed. For Bathing Suits. 39,526; Aug. 11.
Bennett, P. H., Seattle, Wash. Bennett's Chief Valve Oil. For Valve Oil for Lubricating Valve Stems, Valve Guides, Etc. 39,527; Aug. 11.
Campbell Cereal Company, Northfield, Minn. Malt-O-Meal. For a Wheat Cereal Flavored with Specially Prepared Caramel Malt. 39,528; Aug. 11.
Central Waxed Paper Company, Chicago, Ill. Thriftee. For Biscuits. 39,529; Aug. 11.
Dooley Manufacturing Co., Inc., Philmont, N. Y. Dooley's Ace-Hi Liquid Glue. For Liquid Glue. 39,530; Aug. 11.
General Baking Company, New York, N. Y. Bond Bakers Whole Wheat Bread. For Bread. 39,531; Aug. 11.
Johnston, W. AA., Knoxville, Tenn. W. AA. Johnston. For Adding Machines, Cash Registers and Typewriters. 39,532; Aug. 11.
Kadane-Brown, Inc., Dallas, Fort Worth and Houston, Tex. Lone Star. For Strawberry Preserves. 39,533; Aug. 11.
Kadane-Brown, Inc., Dallas, Fort Worth and Houston, Tex. Lone Star. For Grape Jellies. 39,534; Aug. 11.
Kemp, E. F., Inc., Boston, Somerville and Worcester, Mass. Kemp's Golden Glow Pop Corn—From the Famous Golden Glow Shops—to renew crispness heat in oven for a few minutes—right off the fire. For Pop Corn. 39,535; Aug. 11.
Kroger Grocery & Baking Co. doing business as Wesco Foods Co., Cincinnati, Ohio. Jewel. For Coffee. 39,536; Aug. 11.
Kroger Grocery & Baking Co., Cincinnati, Ohio. County Club. For Salmon. 39,537; Aug. 11.
Maggioli, A., & Company, Boston, Mass. Lucky 7. For Salami. 39,538; Aug. 11.
McIntyre, H. W., Sweetwater, Tex. Castene. For Tooth Powder. 39,539; Aug. 11.
Nestle-Lemur Company, New York, N. Y. Nestle Combination Hot Oil Treatment and Shampoo 1½ Fluid Oz. For Preparation for Treatment of the Human Hair. 39,540; Aug. 11.
Nestle-Lemur Company, New York, N. Y. Nestle Combination Hot Oil Treatment and Shampoo. For Preparation for the Treatment of Human Hair. 39,541; Aug. 11.
Puffies Manufacturing Company, The, Dundee, Ill. Puffies. For Confections. 39,542; Aug. 11.
Remington Rand Inc., Buffalo, N. Y. Remrandco. For Typewriter Ribbons. 39,543; Aug. 11.
Remington Rand Inc., Buffalo, N. Y. Paragon. For Typewriter Ribbons. 39,544; Aug. 11.

Schleicher, F. J., Paper Box Co., St. Louis, Mo. Nuts Chocolate Covered. For Chocolate Covered Nuts. 39,545; Aug. 11.
Sonnenberg, A. H., New York, N. Y. Ritz. For Cigars. 39,546; Aug. 11.
Southern Webbing Mills, Inc., Greensboro, N. C. Best by a Long Stretch. For Overall Elastic. 39,547; Aug. 11.
Southern Webbing Mills, Inc., Greensboro, N. C. Armored Rubber Threads. For Overall Elastic. 39,548; Aug. 11.
Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Seal Brand Green Tea. For Tea. 39,549; Aug. 11.
Standard Brands Incorporated, New York, N. Y. Fleischmann's Irradiated Pure Dry Yeast. For Yeast Especially Prepared for Stock and Poultry. 39,550; Aug. 11.
Strohmeyer & Arpe Company, New York, N. Y. Re Umberto. For Olive Oil. 39,551; Aug. 11.
Waxide Paper Company, Kansas City, Mo. Pan Rolls. For Rolls. 39,552; Aug. 11.
Waxide Paper Company, Kansas City, Mo. Betty Anne. For Bread. 39,553; Aug. 11.
Waxide Paper Company, Kansas City, Mo. Quality. For Bread. 39,554; Aug. 11.
Waxide Paper Company, Kansas City, Mo. Sandwich Buns. For Buns. 39,555; Aug. 11.
Waxide Paper Company, Kansas City, Mo. Golden Krust. For Bread. 39,556; Aug. 11.
Wesco Foods Co. (See Kroger Grocery & Baking Co.)
Wildstein, M., Philadelphia, Pa. Sonny Boy. For Butter. 39,557; Aug. 11.

ALPHABETICAL LIST OF PRINTS

Cable Company, Chicago, Ill. Solve the Song Scenes. For Pianos. 13,334; Aug. 11.
Climalene Company, The, Canton, Ohio. Bowlene. For a Preparation for Cleaning and Deodorizing Closet Bowls. 13,335; Aug. 11.
Cream of Wheat Corporation, The, Minneapolis, Minn. Anxious Young Mothers. For Wheat Breakfast Food. 13,336; Aug. 11.
Heald Machine Company, Worcester, Mass. Borize. For Boring Machines. 13,337; Aug. 11.
Merchants Advertising Company, Adrian, Mich. Electric Mantel Clock. For Electric Clocks. 13,338; Aug. 11.
Norwich Pharmacal Company, Norwich, N. Y. Sunburn? Unguentine goes as deep as the burn. For the Surgical Ointment, Unguentine. 13,339; Aug. 11.
Quaker State Oil Refining Co., Oil City, Pa. On Your Way Home. For Motor Oil. 13,340; Aug. 11.
Quaker State Oil Refining Co., Oil City, Pa. Convenient Storage. For Motor Oil. 13,341; Aug. 11.
Quaker State Oil Refining Co., Oil City, Pa. "Prompt Service" Just around the corner. For Motor Oil. 13,342; Aug. 11.
Quaker State Oil Refining Co., Oil City, Pa. Ready to go. For Motor Oil. 13,343; Aug. 11.
Quaker State Oil Refining Co., Oil City, Pa. A Reminder. For Motor Oils. 13,344; Aug. 11.
Quaker State Oil Refining Co., Oil City, Pa. 7 Days Ago. For Motor Oils. 13,345; Aug. 11.
S. K. F. Industries, Inc., New York, N. Y. Where Performance depends upon Precision . . . For Anti-Friction Bearings. 13,346; Aug. 11.
Southern Webbing Mills, Inc., Greensboro, N. C. Best by a Long Stretch. For Overall Elastic. 13,347; Aug. 11.
Southern Webbing Mills, Inc., Greensboro, N. C. Armored Rubber Threads. For Overall Elastic. 13,348; Aug. 11.
Taylor, Thomas D., Philadelphia, Pa. Quality Wants. For Prints and Publications. 13,349; Aug. 11.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

American Chicle Company, Long Island City, N. Y. Chewing gum. 316,181; Aug. 11. Class 46.
American Lead Pencil Company, New York, N. Y. Lead pencils and pen holders. 316,309; Aug. 11. Class 37.
American Yvette Company, Inc., New York, N. Y. Permanent waving pads. 315,959; Aug. 11. Class 44.
Amoskeag Manufacturing Company, Manchester, N. H. Textile diapers. 316,027; Aug. 11. Class 42.
Ankle Deep Products Company of America. (See Reid, Robert A.)
Automatic Canteen Company, Chicago, Ill. Vending machines. 315,081; Aug. 11. Class 23.
Baldwin, Frank H., Ticonderoga, N. Y. Preparation for the treatment of eczema. 302,665; Aug. 11. Class 6.
Bastian-Morley Co., La Porte, Ind. Gas water heaters. 316,312; Aug. 11. Class 34.
Batschari, A. Cigarettenfabrik A. G., Baden-Baden, Germany. Cigarettes. 315,337; Aug. 11. Class 17.
Bavarian Liquid Malt Company. (See Silnutzer, David.)
Beatrice Creamery Company, Chicago, Ill. Ice cream. 315,182; Aug. 11. Class 46.
Beim, Ivler & Breiter, New York, N. Y. Combs, ric-rac braid, safety pins, and rubber cut in lengths. 313,485; Aug. 11. Class 40.
Bowey's, Inc., Chicago, Ill. Combination of bananas, other fruits, flavors and colors for use in flavoring ice cream, etc. 316,185; Aug. 11. Class 46.
Bowey's, Inc., Chicago, Ill. Hot chocolate powder. 316,248; Aug. 11. Class 46.
Bressler, Albert A., New York, N. Y. Brackets. 314,891; Aug. 11. Class 13.
Briggs Manufacturing Company, Detroit, Mich. Chairs. 315,242; Aug. 11. Class 32.
Broward Cigar Company, Pompane, Fla. Cigars. 315,987; Aug. 11. Class 17.
Brown & Williamson Tobacco Corporation, Louisville, Ky. Cigarette paper and booklets. 316,477; Aug. 11. Class 8.
Brown & Williamson Tobacco Corporation, Louisville, Ky. Tobacco. 316,479; Aug. 11. Class 17.
Butler Paper Corporations, Chicago, Ill. Paper. 316,256; Aug. 11. Class 37.
California-Hawaiian Milling Company, San Francisco, Calif. Dehydrated alfalfa leaf meal and dehydrated alfalfa meal. 316,120; Aug. 11. Class 46.
Campbell, Courtney, doing business as The Educational Press, New York, N. Y. Scrap books. 316,317; Aug. 11. Class 37.
Carscadin, Henry L., doing business as The John Henry Co., Chicago, Ill. Memorandum booklets for salesmen. 316,318; Aug. 11. Class 37.
Carson Pirie Scott & Co., Chicago, Ill. Textile blankets. 315,441; Aug. 11. Class 42.
Carson Pirie Scott & Co., Chicago, Ill. Handkerchiefs. 315,442; Aug. 11. Class 42.
Cee-Bee Products. (See Champion & Barber, Inc.)
Celanese Corporation of America, New York, N. Y. Fabrics made of cellulose derivatives. 316,409–10; Aug. 11. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics made of cellulose derivatives. 316,412–15; Aug. 11. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics made of cellulose derivatives. 316,418; Aug. 11. Class 42.
Champion & Barber, Inc., doing business as Cee-Bee Products, Los Angeles, Calif. Detergent cleaning compounds. 315,728; Aug. 11. Class 4.
Chapman, William O., Washington, D. C. Frozen confection. 315,630; Aug. 11. Class 46.
Chemische Fabrik Flörsheim Dr. H. Noerdlinger A. G. Florsheim-on-the-Main, Germany. Preparations. 312,291; Aug. 11. Class 6.
Chevrolet Motor Company, Detroit, Mich. Polish and cleaner. 315,787; Aug. 11. Class 16.
Chung, Thos. G., Co., Chualar, Calif. Fresh vegetables. 316,148; Aug. 11. Class 46.
Clark, Rex B., Norco, Calif. Canned fruit. 316,529; Aug. 11. Class 46.
Cook & Leary, Brooklyn, N. Y. Preparation for burns, and face and hand cream. 313,589; Aug. 11. Class 6.
Coté, Irene D., New York, N. Y. Cold creams, depilatories, powder, etc. 314,397; Aug. 11. Class 6.
Daniels, Claude H., Boston, Mass. Boots, shoes, and slippers. 316,104; Aug. 11. Class 39.
Dartmoor Coat Co., Inc., New York, N. Y. Sport coats, camel hair coats, and tweed coats, etc. 315,791; Aug. 11. Class 39.
Decker, Alfred, & Cohn, Inc., Chicago, Ill. Coats, overcoats, and raincoats. 314,984; Aug. 11. Class 39.
Double Eagle Garment Co., Waco, Tex. Work clothes. 285,020; Aug. 11. Class 39.
Dougherty Grape Growers Association, Acampo, Fla. Fresh grapes. 316,424; Aug. 11. Class 46.
Educational Press, The. (See Campbell, Courtney.)
Elder Manufacturing Company, St. Louis, Mo. Shirts, waists, and blouses. 315,994; Aug. 11. Class 39.
Elder Manufacturing Company, St. Louis, Mo. Shirts, waists, and blouses. 315,996; Aug. 11. Class 39.
Elder Manufacturing Company, St. Louis, Mo. Shirts, waists, and blouses. 316,001; Aug. 11. Class 39.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Empire Lithographing Co. Inc., New York, N. Y. Writing tablets. 315,834; Aug. 11. Class 37.
Empire Malt Products Co., Los Angeles, Calif., and Brooklyn, N. Y. Malt syrup. 316,488; Aug. 11. Class 46.
Empire Silk Company, New York, N. Y. Silk piece goods. 315,794; Aug. 11. Class 42.
Endicott Johnson Corporation, Endicott, N. Y. Boots and shoes. 316,037; Aug. 11. Class 39.
Exeter Citrus Association, Exeter, Calif. Fresh citrus fruits. 315,905; Aug. 11. Class 46.
Fein & Glass, Inc., Reading, Pa. Shoes. 316,261; Aug. 11. Class 39.
Fisher Flouring Mills Company, Seattle, Wash. Wheat flour. 315,795; Aug. 11. Class 46.
Fishermans's News. (See Matson, Charles H.)
Fleish, Julius, St. Louis, Mo. Dresses. 312,282; Aug. 11. Class 39.
Fulton, Paul, Burlington, Iowa. Wall paper. 316,090; Aug. 11. Class 37.
Gem Clay Forming Company, The, Sebring, Ohio. Miniature theatres, figures therefor, and materials for coloring the same. 316,154; Aug. 11. Class 22.
General Silk Corporation, New York, N. Y. Silk. 315,682; Aug. 11. Class 42.
Glatzer, Gustave, New York, N. Y. Cream. 303,280; Aug. 11. Class 6.
Goldblatt Bros., Inc., Chicago, Ill. Malt syrup. 316,589; Aug. 11. Class 46.
Golden Pond Ginger Ale Co. (See McNutt, Samuel H., jr.)
Goodyear Tire & Rubber Company, The, Akron, Ohio. Tires, treads, tire tubes, etc. 293,320; Aug. 11. Class 35.
Grace, Tom W., Company, Dallas, Tex. Fountain syringes, wafer bottles, etc. 315,403; Aug. 11. Class 44.
Harlacher, J. Cloyd, Providence, R. I. Golf balls. 315,140; Aug. 11. Class 22.
Harrington, Lewis W., New York, N. Y. Outlets for cast metal drains. 315,310; Aug. 11. Class 12.
Hat Nu Corporation, Washington, D. C. Felt hat cleaning powder. 316,486; Aug. 11. Class 4.
Henry, John, Co., The. (See Carscadin, Henry L.)
Horn, William H., & Brother, Incorporated, Philadelphia, Pa. Metallic devices for elastic hosiery. 315,637; Aug. 11. Class 44.
Howlett & Hockmeyer Co., Inc., New York, N. Y. Textile fabrics. 315,537; Aug. 11. Class 42.
Hubbard Milling Company, Mankato, Minn. Wheat flour. 316,489; Aug. 11. Class 46.
Hughes Chemical Company, The, Cleveland, Ohio. Chemical disinfectant and germicide. 311,310; Aug. 11. Class 6.
Indian River Fisheries, The, Sebastian, Fla. Fish and fish meats. 310,829; Aug. 11. Class 46.
International Fruit Corporation, Orlando, Fla. Fresh citrus fruits. 313,240; Aug. 11. Class 46.
International Printing Ink Corporation, The, New York, N. Y. Process printing inks. 316,327; Aug. 11. Class 11.
I. S. Undergarment Co. Inc., New York, N. Y. Ladies' chemises, bloomers, pajamas, etc. 316,326; Aug. 11. Class 39.
Jackson Lumber Company, Lockhart, Ala. Poles and piling. 314,285; Aug. 11. Class 12.
Jaramillo, Rafael R. (See Pacatá Hair Remedy.)
Jefferson Union Company, Inc., New York and Lockport, N. Y., and Lexington, Mass. Metal pipe fittings. 316,092; Aug. 11. Class 13.
Jelke, John F., Company, Chicago, Ill. Oleomargarine. 314,810; Aug. 11. Class 46.
Johnson, Jennie A., assignor to Taylor and Johnson, Spokane, Wash. Flour compound. 312,345; Aug. 11. Class 46.
Johnson-Williams, Ltd., Palo Alto, Calif. Scientific instruments, recording instruments, etc. 315,770; Aug. 11. Class 26.
Jones, Lavern P., doing business as Liquilox Company, Burbank, Calif. Paints. 316,597; Aug. 11. Class 16.
K-Mol Laboratories. (See Lange, Ralph H.)
Knapp-Monarch Company, Belleville, Ill. Vegetable graters and choppers. 315,846; Aug. 11. Class 23.
Koos, N. S., & Son Co., Kenosha, Wis. Lawn and plant food. 316,093; Aug. 11. Class 10.
Koppers Products Company, Pittsburgh, Pa. Paints. 310,178; Aug. 11. Class 16.
Kresge Department Store Corporation, Newark, N. J. Shoes, stockings, and rubbers, etc. 315,540; Aug. 11. Class 39.
Lange, Ralph H., doing business as K-Mol Laboratories, Chicago, Ill. Mouth wash. 311,013; Aug. 11. Class 6.
Lawrence, A. C., Leather Company, Peabody, Mass. Pelts. 316,534; Aug. 11. Class 1.
Leary, Dennis W., Walnut Grove, Calif. Pears. 316,601; Aug. 11. Class 46.
Lehman, A. J., Company, The, Cincinnati, Ohio. Tomato juice food drink. 312,861–2; Aug. 11. Class 46.
Lehne, John C., doing business as John C. Lehne Sales Company, New York, N. Y. Flavoring compounds. 309,135; Aug. 11. Class 46.
Lennox Furnace Company, Marshalltown, Iowa. Furnaces. 314,700; Aug. 11. Class 34.
Liquilox Company. (See Jones, Lavern P.)
Looney, Hubert R., Portland, Oreg. Medicinal preparation. 304,620; Aug. 11. Class 6.
Los Angeles Brewing Co., Los Angeles, Calif. Malt syrup. 315,752; Aug. 11. Class 46.
Malleable Steel Range Mfg. Co., The, South Bend, Ind. Rubbish incinerator. 310,708; Aug. 11. Class 34.
Marshall Field & Company, Chicago, Ill. Sleeping garments and underwear. 312,556; Aug. 11. Class 39.
Marvel Window Cleaner Incorporated, Cleveland, Ohio. Window cleaning devices. 304,005; Aug. 11. Class 29.
Matson, Charles H., doing business as Fisherman's News, New York, N. Y. Monthly magazine. 315,336; Aug. 11. Class 38.
Mautz Paint & Glass Co., Green Bay and Madison, Wis. Paint, varnish, turpentine, etc. 315,466; Aug. 11. Class 16.
Mccabe, John, doing business as John Mccabe & Co., New York, N. Y. Carbon paper, typewriter ribbons, writing inks, etc. 316,158; Aug. 11. Class 11.
McNutt, Samuel H., jr., doing business as Golden Pond Ginger Ale Co., Paducah, Ky. Maltless beverages, sirups, and extracts for making the same. 316,655; Aug. 11. Class 45.
Mead Corporation, The, Dayton, Ohio. Printing paper. 316,277; Aug. 11. Class 37.
Melville Shoe Corporation, New York, N. Y. Shoes. 316,295; Aug. 11. Class 39.
Merton, Charles S., & Co., New York, N. Y., and East Rutherford, N. J. Coats, vests, and trousers, etc. 315,857–8; Aug. 11. Class 39.
Monocraft Products Company, Brooklyn, assignor to Monocraft Products Co., Inc., New York, N. Y. Escutcheon plates. 278,053; Aug. 11. Class 13.
Mountain States Coal Company, Cincinnati, Ohio. Coal. 316,538; Aug. 11. Class 1.
Munson Steamship Line, New York, N. Y. Cigars. 316,371; Aug. 11. Class 17.
New England Chemical Associates. (See Swanson, Oliver A.)
Nirenberg, A. H., Trading Corporation, New York, N. Y. Pelts. 316,131; Aug. 11. Class 1.
Old Quaker Company. (See Stagg, Geo. T., Co., The, assignor.)
Pacatá Hair Remedy, assignor to Rafael R. Jaramillo, San Francisco, Calif. Liquid tonic for the treatment of the hair. 312,027; Aug. 11. Class 6.
Page Steel and Wire Company, Adrian, Mich., and Bridgeport, Conn. Steel and iron strands. 315,553; Aug. 11. Class 7.
Parfumerie Roger et Gallet, Société Anonyme, Paris, France. Perfumery. 314,010; Aug. 11. Class 6.
Parfumerie Roger et Gallet, Société Anonyme, Paris, France. Soaps. 314,011; Aug. 11. Class 4.
Parker Products Co., Needham Heights, Mass. Sandwich spread. 316,296; Aug. 11. Class 46.
Peris Manufacturing Co., Inc., Florin, Pa. Peanuts. 312,471; Aug. 11. Class 46.
Peteb Corporation, The, New York, N. Y. Cream. 315,062; Aug. 11. Class 6.
Pierce, Robert J., Inc., New York, N. Y. Prophylactic rubber articles. 314,962; Aug. 11. Class 44.
Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Oil gauges. 315,553; Aug. 11. Class 26.
Pioneer Shoe Manufacturing Company, The, Kansas City, Mo. Shoes. 316,216; Aug. 11. Class 39.
Pitt, C. M., & Sons Co., The, Baltimore, Md. Cakes. 316,167; Aug. 11. Class 46.
Popsicle Corporation of the United States, The, New York, N. Y. Frozen confections. 315,924; Aug. 11. Class 46.
Popsicle Corporation of the United States, The, New York, N. Y. Maltless syrups. 316,074; Aug. 11. Class 46.
Porges, Oscar, Binghamton, N. Y. Frozen confections. 302,014; Aug. 11. Class 46.
Portner-Harris Co. Inc., Chicago, Ill. Clocks, parts thereof, and watches. 315,012; Aug. 11. Class 27.
Princess Royal Hosiery Mills, Inc., Reading, Pa. Hosiery. 315,605; Aug. 11. Class 39.
Princess Royal Hosiery Mills, Inc., Reading, Pa. Hosiery. 316,297; Aug. 11. Class 39.
Prospect Fire Engine Company, The, Prospect, Ohio. Fire fighting apparatus. 309,569; Aug. 11. Class 23.
Ray-Glo Chemical Company. (See Tumbler, J. A., Laboratories.)
Reid, Robert A., doing business as Ankle Deep Products Company of America, David City, Nebr. Maltless beverage, sirup and extract. 316,663; Aug. 11. Class 45.
Reynolds & Co., New York, N. Y. Cheese. 316,506; Aug. 11. Class 46.
Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Tympan paper and bristol board. 316,507; Aug. 11. Class 37.
Robinette, Clyde B., Cleveland, Ohio. Amusement games. 312,785; Aug. 11. Class 22.
Robinson Milling Company, The, Salina, Kans. Wheat flour. 315,561; Aug. 11. Class 46.
Rogers-Kellogg-Stillson Company, New York, N. Y. Booklets, folders, and prints. 315,332; Aug. 11. Class 38.
Rosedale Knitting Co. Inc., Laureldale, Pa. Hosiery. 316,379; Aug. 11. Class 39.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Ruehlman, P. G., Cincinnati, Ohio. Dry herb flavoring preparation for soft drinks. 314,129; Aug. 11. Class 45.
Schilling, A., & Co., San Francisco, Calif. Tea and coffee. 315,564; Aug. 11. Class 46.
Schnelerson, I., & Sons, Inc., New York, N. Y. Chemises, bloomers, pajamas, etc. 316,104; Aug. 11. Class 39.
Schoenberg, Julius, New York, N. Y. Golf balls, clubs, and bags, and tennis rackets. 316,664; Aug. 11. Class 22.
Sears, Roebuck and Co., Chicago, Ill. Waistbands, pants, and breeches, etc. 313,657; Aug. 11. Class 39.
Shaddick, Robert C., doing business as Woods Mince Meat Co., Baltimore, Md. Mince meat. 311,890; Aug. 11. Class 46.
Sherman, Falk, New York, N. Y. Cotton sheets, sheeting, pillow-cases and quilt covers. 306,668; Aug. 11. Class 42.
Silnutzer, David, doing business as Bavarian Liquid Malt Company, Philadelphia, Pa. Malt beverages. 316,136; Aug. 11. Class 48.
Springfield Photo Mount Company, Springfield, Mass. Paper and mailing envelopes. 316,071; Aug. 11. Class 37.
Stagg, Geo. T., Co., The, Frankfort, Ky., assignor to Old Quaker Company, New York, N. Y. Whiskey. 296,781; Aug. 11. Class 49.
Standard Cheese Corporation, Pleasanton, Calif. Cheese. 315,574; Aug. 11. Class 46.
Standard Register Company, The, Dayton, Ohio. Manifolding assemblies. 315,581; Aug. 11. Class 37.
Sun Diet Health Service, Inc., East Aurora, N. Y. Periodicals, menus, food charts, etc. 312,538; Aug. 11. Class 38.
Swanson, Oliver A., doing business as New England Chemical Associates, New York, N. Y. Chemical cleaning preparation. 315,945; Aug. 11. Class 4.
Tarbox, Edwin W., Findlay, Ohio. Minnow buckets. 316,059; Aug. 11. Class 22.
Taylor and Johnson. (See Johnson, Jennie A., assignor.)
Travel Guild, Inc., The, Chicago, Ill. Publications. 316,227; Aug. 11. Class 38.
Tumbler, J. A., Laboratories, doing business as Ray-Glo Chemical Company, Baltimore, Md. Polish. 314,726; Aug. 11. Class 16.
Ucab Distributing Corporation, Inc., Camden, N. J. Compressed air bundlers. 315,287; Aug. 11. Class 23.
Uddeholm Company of America, Inc., New York, N. Y. Tool steel. 316,346–7; Aug. 11. Class 14.
Universal Pipe and Radiator Company, The, New York, N. Y. Heating and cooling radiators. 313,721; Aug. 11. Class 34.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Wire cables, cord, and rope, etc. 315,218; Aug. 11. Class 7.
Vulcan Match Co., Inc., New York, N. Y. Matches. 316,514; Aug. 11. Class 9.
Waterfalls Paper Mills, New York, N. Y. Paper. 315,711; Aug. 11. Class 37.
Watson-Standard Co., The, Pittsburgh, Pa. Varnishes and paint enamels. 314,936; Aug. 11. Class 16.
Whitlock Cordage Co., New York, N. Y. Rope. 314,937; Aug. 11. Class 7.
Woods Mince Meat Co. (See Shaddick, Robert C.)
Worcester Bleaching Water Co., Worcester, Mass. Bleaching water. 313,878; Aug. 11. Class 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Old Ben Coal Corporation. 285,894; Aug. 11; Serial No. 313,608; published June 2, 1931.
Coal. Philadelphia and Reading Coal and Iron Company. 285,883; Aug. 11; Serial No. 312,670; published June 2, 1931.
Furs, Mink and sable. H. Dattelbaum. 286,036; Aug. 11.
Leather. C. Freudenberg. 285,895; Aug. 11; Serial No. 313,657; published June 2, 1931.
Magnesite. American Refractories Company. 84,158; renewed Nov. 14, 1931.
Material made principally from dolomite or lime. The Moores Lime Company. 285,925; Aug. 11; Serial No. 312,716; published May 26, 1931.
Rabbits for breeding purposes. Lehigh Packing Co. Inc. 285,979; Aug. 11; Serial No. 308,738; published May 26, 1931.
Sands. George F. Pettinos, Incorporated. 285,892; Aug. 11; Serial No. 313,387; published May 26, 1931.
Seed. Carll & Son. 285,891; Aug. 11; Serial No. 313,329; published June 2, 1931.
Seeds. James Carter & Co. 84,308; renewed Nov. 28, 1931.
Stone as it comes from the quarry, Building. Victor Oolitic Stone Company. 285,881; Aug. 11; Serial No. 312,396; published May 26, 1931.
Stone, Building. Indiana Limestone Company. 285,987; Aug. 11; Serial No. 301,453; published June 2, 1931.
Stone, Building. Indiana Limestone Company. 285,988; Aug. 11; Serial No. 301,456; published June 2, 1931.

CLASS 2

Bags, Fabric lunch. L. H. Robinson. 285,905; Aug. 11; Serial No. 313,155; published June 2, 1931
Boxes, Paper. Bauer Paper Box Company. 286,063; Aug. 11.

CLASS 3

Cases, overnight bags, and fitted hand baggage, Toilet or dressing. D. Gray. 285,899; Aug. 11; Serial No. 311,375; published June 2, 1931.
Luggage. S. Dresner & Son, Inc. 285,890; Aug. 11; Serial No. 313,285; published May 26, 1931.

CLASS 4

Abrasive of flint, emery, and garnet, artificial abrasive, and abrasive papers and cloths, Natural. Abrasive Products, Inc. 286,030; Aug. 11; Serial No. 312,250; published May 26, 1931.
Abrasives of flint, abrasive papers and cloths, Natural. Abrasive Products, Inc. 286,029; Aug. 11; Serial No. 312,252; published May 26, 1931.
Beard softening preparations, Non-saponaceous. F. H. Shoemaker. 286,045; Aug. 11; Serial No. 307,432; published June 2, 1931.
Cleaning, cleansing, and detergent materials. J. B. Ford Company. 286,016; Aug. 11; Serial No. 313,655; published June 2, 1931.
Cleanser, Powdered. C. M. Deering. 286,044; Aug. 11; Serial No. 309,809; published May 26, 1931.
Cleansing compound. Philadelphia Quartz Company. 286,024; Aug. 11; Serial No. 312,624; published June 2, 1931.
Compounds for scouring purposes. E. F. Houghton & Co. 286,025; Aug. 11; Serial No. 312,605; published June 2, 1931.
Dressing, Auto top. Fidelity Manufacturing Co., Inc. 286,018; Aug. 11; Serial No. 313,365; published May 26, 1931.
Dressing, Waterproofing for shoes, etc. L. M. Kerr. 286,019; Aug. 11; Serial No. 313,136; published May 26, 1931.
Dressings and polishes for shoes, Leather. W. T. Vassilatos. 286,022; Aug. 11; Serial No. 312,780; published June 2, 1931.
Sand-paper. Griswoldville Manufacturing Company. 286,043; Aug. 11; Serial No. 309,815; published May 26, 1931.
Shaving cream. Colgate-Palmolive-Peet Company. 286,026; Aug. 11; Serial No. 312,547; published June 2, 1931.
Soap, Mineral. G. E. Brignall. 286,050; Aug. 11; Serial No. 300,323; published May 26, 1931.
Soap, Toilet. Gabilla, Incorporated. 286,028; Aug. 11; Serial No. 311,437; published May 26, 1931.
Soap, Toilet. Gabilla, Incorporated. 286,041; Aug. 11; Serial No. 311,429; published June 2, 1931.
Soap, Toilet. Thomas Hedley & Company, Limited. 286,017; Aug. 11; Serial No. 313,542; published June 2, 1931.
Washing compounds and cleaners for fabrics, etc. W. R. Cochran. 286,062; Aug. 11.
Washing preparation for silk and rayon fabrics. B-Y Company. 286,059; Aug. 11; Serial No. 306,554; published June 2, 1931.

CLASS 5

Cement, Adhesive liquid. Liquid Cement Co. 285,887; Aug. 11; Serial No. 312,850; published May 26, 1931.

CLASS 6

Astringents, astringent cerates, bleach and beauty creams, etc. J. R. Watkins Company. 286,080; Aug. 11.
Bleach and water softener. Purex Corporation. 286,070; Aug. 11.
Cream, face cream, and cold cream, Cleansing. Peteb Corporation. 285,922; Aug. 11; Serial No. 312,323; published May 19, 1931.
Creams, clay packs, astringents, etc. Madam White Company. 286,077; Aug. 11.
Depilatories. Jean Jordeau, Inc. 285,923; Aug. 11; Serial No. 312,433; published May 19, 1931.
Gargles, Throat. S. Cohn. 286,078; Aug. 11.
Insecticide. S. M. Hill. 285,954; Aug. 11; Serial No. 287,703; published May 19, 1931.
Medicinal and pharmaceutical preparations. California Medicinal Wine Co. 286,072; Aug. 11.

Perfumery, and other toilet preparations. H. et G. Klotz et Cie. 82,898; renewed Aug. 1, 1931.
Preparation for the destruction of rats and mice. R R R Chemical Company. 285,913; Aug. 11; Serial No. 311,535; published May 5, 1931.
Remedy for diseases of the mouth and throat. H. H. Ink. 83,495; renewed Sept. 19, 1931.
Stocking and cloth menders and run stopping comprising a solution of rayon in acetone. F. T. Meik. 286,095; Aug. 11.
Syrup for coughs and temporary hoarseness. Favreau & Collette. 286,092; Aug. 11.

CLASS 7

Rope, Wire. Wrights' Ropes Ltd. 285,866; Aug. 11; Serial No. 313,102; published June 2, 1931.
Steel ropes, cables, and strands. British Ropes, Limited. 285,969; Aug. 11; Serial No. 303,353; published June 2, 1931.

CLASS 9

Paper caps for toy firearms. Kilgore Mfg. Company. 285,869; Aug. 11; Serial No. 313,298; published June 2, 1931.

CLASS 11

Inks, Printing, stamping, and stenciling. C. Zimmer. 285,959; Aug. 11; Serial No. 264,564; published May 26, 1931.
Inks, Writing, typewriter ribbons, and carbon paper. The Carter's Ink Company. 285,833; Aug. 11; Serial No. 313,419; published May 26, 1931.

CLASS 12

Building paper, insulating paper, Thermal and acoustical. The Paraffine Companies, Inc. 286,057; Aug. 11; Serial No. 275,125; published May 26, 1931.
Cement, Building. Universal Atlas Cement Company. 286,046–7; Aug. 11; Serial Nos. 305,636–7; published June 2, 1931.
Metallic walls, wall plates, wall brackets, roofs, etc. H. Junkers. 286,056; Aug. 11; Serial No. 279,924; published May 26, 1931.
Pigments. Binney & Smith Co. 286,052; Aug. 11; Serial No. 297,294; published May 13, 1930.
Plaster. Grand Rapids Plaster Company. 286,058; Aug. 11; Serial No. 306,530; published June 2, 1931.
Plaster base. Truscon Steel Company. 285,996; Aug. 11; Serial No. 311,350; published May 26, 1931.
Plastic fire brick material. North American Refractories Company. 285,904; Aug. 11; Serial No. 309,651; published June 2, 1931.
Quartzite. Crab Orchard Stone Co. 286,048; Aug. 11; Serial No. 303,838; published June 2, 1931.
Rock, or slabs of granite, etc., Polished. Rock of Ages Corporation. 286,033; Aug. 11; Serial No. 313,358; published June 2, 1931.

CLASS 13

Brewer, Glass coffee. Hill-Shaw Company. 285,964; Aug. 11; Serial No. 312,214; published May 26, 1931.
Fence, Wire. Colorado Fuel and Iron Company. 286,068; Aug. 11.
Fencing, Wire. Continental Steel Corporation. 285,909; Aug. 11; Serial No. 313,466; published June 2, 1931.
Hardware and plumbing supplies. Washerless Valve Co. Ltd. 285,962; Aug. 11; Serial No. 312,822; published June 2, 1931.
Tubes and pipes and expansion joints, Metal. Foster Wheeler Corporation. 285,961; Aug. 11; Serial No. 300,266; published Nov. 4, 1930.
Utensils, Aluminum kitchen and serving. Leyse Aluminum Company. 285,976; Aug. 11; Serial No. 305,617; published June 2, 1931.

CLASS 14

Copper iron culvert stock. Granite City Steel Company. 285,821–2; Aug. 11; Serial Nos. 311,582–3; published June 2, 1931.

CLASS 16

Liquid floor coating, etc. Milwaukee Lubricants Co. 285,900; Aug. 11; Serial No. 311,923; published May 26, 1931.
Paint. General Paint Corporation. 285,886; Aug. 11; Serial No. 312,798; published May 26, 1931.
Paint, floor enamel, varnishes. Gold Coast Paint Company. 285,878; Aug. 11; Serial No. 313,291; published May 26, 1931.
Paints, paint enamels, varnishes, etc. E. M. Allina. 286,089; Aug. 11.
Paints, paint enamels, varnishes, etc. R. A. Gergman. 286,088; Aug. 11.
Polish. C. V. Chermendy. 285,897; Aug. 11; Serial No. 311,026; published May 26, 1931.
Polisher and cleaner, a furniture cream, etc., Combined liquid auto. Charles F. Kellom & Co. Inc. 285,882; Aug. 11; Serial No. 312,520; published June 2, 1931.
Varnish, Oil. McCloskey Varnish Co. 285,888; Aug. 11; Serial No. 313,045; published May 26, 1931.
Wax for floors, etc., Liquid. Davies-Young Soap Company. 285,896; Aug. 11; Serial No. 312,701; published June 2, 1931.
Wax for rubber floors, etc., Liquid. Davies-Young Soap Company. 285,885; Aug. 11; Serial No. 312,796; published June 2, 1931.

CLASS 19

Guards for automobile radiators. Standard Commercial Body Corporation. 285,972; Aug. 11; Serial No. 307,434; published June 2, 1931.
Trucks and chassis, Standard. Standard Motor Truck Company. 286,081; Aug. 11.
Vehicle radiator caps, etc. Scovill Manufacturing Company. 285,977; Aug. 11; Serial No. 305,496; published May 26, 1931.

CLASS 21

Armatures, and armature parts. Universal Armature Corporation. 286,076; Aug. 11.
Electric motors and generators, electric dynamos for gas engines and electric tool motors. Ideal Electric & Manufacturing Co., The. 84,635; renewed Dec. 26, 1931.
Electric wall and knife switches, panel-boards, switchboards, etc. Metropolitan Electric Mfg. Co. 83,081; renewed Aug. 15, 1931.
Composition for electric insulation. Johns-Manville Corporation. 286,079; Aug. 4.
Radio receiving sets and parts thereof and assembled audio amplifying units and parts thereof. Smith, Kirkpatrick & Co. Inc. 286,069; Aug. 11.

CLASS 22

Bait for fish, Artificial. A. Forselius. 285,874–5; Aug. 11; Serial Nos. 313,845–6; published June 2, 1931.
Billiard tables, cues, and balls. M. Langenhaun. 285,867; Aug. 11; Serial No. 313,247; published June 2, 1931.
Dolls. Walt Disney Productions, Ltd. 285,872; Aug. 11; Serial No. 313,591; published May 26, 1931.
Floats, Safety bathing. M. L. Ludwick. 285,862; Aug. 11; Serial No. 311,690; published June 2, 1931.
Football game board. Municipal Service Corporation. 285,967; Aug. 11; Serial No. 306,958; published May 26, 1931.
Games. Milton Bradley Company. 285,945; Aug. 11; Serial No. 298,426; published May 19, 1931.
Games played with cards. H. Stellmacher. 285,871; Aug. 11; Serial No. 313,567; published May 26, 1931.
Games, Table. Alamo Novelty Company. 286,009; Aug. 11.
Golf balls. U. S. Golf Ball Corporation. 285,870; Aug. 11; Serial No. 313,515; published May 26, 1931.
Golf clubs. A. G. Spalding & Bros. 285,865; Aug. 11; Serial No. 312,818; published May 26, 1931.
Playground and game apparatus. N. R. Snell. 285,861; Aug. 11; Serial No. 310,840; published May 26, 1931.
Table board games, checker men and chess men, toys, etc. Gaess & Hollander. 285,858; Aug. 11; Serial No. 309,970; published June 2, 1931.
Toy wagons, carts, and the like. J. R. Muhn. 285,953; Aug. 11; Serial No. 293,930; published May 26, 1931.
Toys. A. F. Rietzel. 285,857; Aug. 11; Serial No. 309,700; published May 26, 1931.

CLASS 23

Apparatus for grinding cylindrical surfaces, such as the cylinders of engines, etc. The Keystone Mfg. Co. 285,995; Aug. 11; Serial No. 311,241; published May 26, 1931.
Apparatus for subjecting gases to centrifugal action. Western Precipitation Company. 286,012; Aug. 11; Serial No. 310,499; published May 19, 1931.
Chemical fire engines. B. J. Goldstein. 83,246; renewed Aug. 29, 1931.
Fire extinguishing apparatus, Portable hand. Firemaster Company. 286,006; Aug. 11; Serial No. 313,080; published May 26, 1931.
Ice shaving machines. Snoko Inc. 286,051; Aug. 11; Serial No. 299,867; published May 26, 1931.
Locomotive frames, roll shells, grinding rings, shafting rings for reduction gears, etc. Midvale Company. 286,061; Aug. 11; Serial No. 306,501; published June 2, 1931.
Machinery and tools for leather goods. Peerless Machinery Company. 84,673; renewed Dec. 26, 1931.
Machines, Centrifugal. The Sharples Specialty Company. 286,011; Aug. 11; Serial No. 313,513; published May 26, 1931.
Metal working tools and parts thereof. H. K. Porter. 286,003; Aug. 11; Serial No. 312,310; published June 2, 1931.
Pumping and compressing apparatus and parts thereof. Chicago Pneumatic Tool Company. 285,993; Aug. 11; Serial No. 309,262; published May 26, 1931.
Razor blades, razors, and mechanical stropping devices. Segal Safety Razor Corporation. 286,074; Aug. 11.
Rotary printing presses. The Bell Punch and Printing Company Limited. 285,999; Aug. 11; Serial No. 311,993; published May 26, 1931.
Saws, machine knives, and files. Saw & Knife Specialty Co. 286,005; Aug. 11; Serial No. 312,863; published June 2, 1931.
Thermometers. Dorfmann Bros. 286,055; Aug. 11; Serial No. 284,525; published June 2, 1931.
Tiering machines, Portable. New York Revolving Portable Elevator Co. 84,669; renewed Dec. 26, 1931.

Tool, Knitting. Imported Domestic Novelty Co. 286,007; Aug. 11; Serial No. 313,134; published June 2, 1931.
Tools, parts, replacements, and accessories, tool holders, and tool set holders. Madison-Kipp Corporation. 286,075; Aug. 11.
Typewriting machines and parts thereof. L C Smith & Corona Typewriters Inc. 285,004; Aug. 11; Serial No. 312,391; published May 26, 1931.
Valve springs. Chicago Coil Spring Co. 286,008; Aug. 11; Serial No. 313,233; published June 2, 1931.
Vegetable peeling and slicing machines. Josiah Anstice & Co. Inc. 286,049; Aug. 11; Serial No. 303,312; published May 26, 1931.

CLASS 24

Device for marking and identifying laundry. H. Kohnstamm & Co. 285,949; Aug. 11; Serial No. 294,477; published June 2, 1931.
Ironing boards. Petri Bros. 285,950; Aug. 11; Serial No. 295,439; published June 2, 1931.
Washing machines, Laundry. People's Outfitting Company. 285,903; Aug. 11; Serial No. 312,959; published June 2, 1931.

CLASS 26

Charts, Perspective drawing. Calibron Products, Inc. 286,036; Aug. 11; Serial No. 313,820; published June 2, 1931.
Color mixing apparatus comprising pedestal, measuring graduates, etc. Sewall Paint & Varnish Company. 285,997; Aug. 11; Serial No. 311,573; published May 26, 1931.
Drawing boards, triangles, etc. Empire Manufacturing Company. 286,035; Aug. 11; Serial No. 313,287; published June 2, 1931.
Lenses, Ophthalmic. Bausch & Lomb Optical Company. 286,037; Aug. 11; Serial No. 313,828; published June 2, 1931.
Meters, Fluid. Builders Iron Foundry. 286,009; Aug. 11; Serial No. 313,230; published May 26, 1931.
Objectives. Carl Zeiss. 286,060; Aug. 11; Serial No. 307,019; published May 26, 1931.
Rules, Slide. Keuffel & Esser Co. 286,085; Aug. 11.
Scales, Automatic weighing. Dayton Scale Company. 286,054; Aug. 11; Serial No. 285,061; published June 2, 1931.
Slide-rules and scales therefor. A. E. Penniculck. 286,034; Aug. 11; Serial No. 312,491; published June 2, 1931.
Spectacle-glasses. Optische. Werke G. Rodenstock. 285,001; Aug. 11; Serial No. 312,060; published June 2, 1931.
Switches, Automatic coin controlled time registering electric. Meterice, Incorporated. 286,038; Aug. 11; Serial No. 313,746; published June 2, 1931.

CLASS 27

Clocks and watches. Western Clock Company. 285,832; Aug. 11; Serial No. 313,401; published May 26, 1931.
Clocks, wrist-watches, and platinum gold, and silver watches. H. Roth. 285,831; Aug. 11; Serial No. 313,389; published May 26, 1931.
Instruments, not including watch springs, Horological. Ed. Heuer & Co. Jules Jurgensen Watch Co. 285,956; Aug. 11; Serial No. 279,851; published June 2, 1931.

CLASS 29

Toothbrushes. Pycope Incorporated. 285,834; Aug. 11; Serial No. 313,673; published June 2, 1931.

CLASS 31

Refrigerators, Display, etc. Cir-Cul-Air Refr'g. Corp. 285,957; Aug. 11; Serial No. 282,772; published May 26, 1931.

CLASS 32

Filing cabinets. Cyclofile Corporation. 286,010; Aug. 11; Serial No. 313,363; published May 26, 1931.
Furniture, Juvenile. South Bend Toy Mfg Co. 286,002; Aug. 11; Serial No. 312,204; published June 2, 1931.
Tables, bookcases, shelving, etc. C. C. Fisher. 285,998; Aug. 11; Serial No. 311,870; published May 26, 1931.

CLASS 33

Glass bottles. Hemingray Glass Company. 285,930; Aug. 11; Serial No. 312,912; published May 26, 1931.
Glass, Sheet. Libbey-Owens-Ford Glass Company. 285,973; Aug. 11; Serial No. 307,209; published May 5, 1931.

CLASS 34

Burners, Gas. Empire Gas Burner Co. 285,908; Aug. 11; Serial No. 313,337; published June 2, 1931.
Filters for hot air registers of furnaces. F. E. Kelsey. 285,906; Aug. 11; Serial No. 313,192; published June 2, 1931.
Heat treating containers. Michiana Products Corporation. 285,963; Aug. 11; Serial No. 312,566; published May 26, 1931.
Heaters, condensers, evaporators, etc., Plate air. Foster Wheeler Corporation. 285,960; Aug. 11; Serial No. 296,963; published Nov. 18, 1930.
Humidifiers and humidifying systems. Parks-Cramer Company. 285,965; Aug. 11; Serial No. 311,845; published May 26, 1931.
Lighters, Pyrophoric cigarette. A. Field. 285,948; Aug. 11; Serial No. 295,610; published May 26, 1931.

CLASS 35

Asbestos brake lining and clutch facings. Asbestos Manufacturing Company. 286,096; Aug. 11.

CLASS 36

Accordions. Chicago Musical Instrument Company. 286,084; Aug. 11.
Reeds for saxophones, clarinets, etc. H. Chiron Company. 286,091; Aug. 11.

CLASS 37

Books for a savings plan, Deposit. G. S. Ralston. 285,931; Aug. 11; Serial No. 312,927; published May 26, 1931.
Checks, such as bank checks. Klingstedt Brothers Company. 285,975; Aug. 11; Serial No. 306,517; published May 26, 1931.
Covers, Book and program. S. K. Smith Company. 286,005; Aug. 11.
Paper, letterheads, etc., Writing. The Klingstedt Brothers Company. 285,974; Aug. 11; Serial No. 306,518; published May 26, 1931.
Paper, paper towels, and napkins, Toilet. Hoberg Paper & Fibre Company. 285,939; Aug. 11; Serial No. 313,341; published May 26, 1931.
Paper, Writing. Knights of Peter Claver. 285,918; Aug. 11; Serial No. 311,612; published May 26, 1931.
Papers. Beecher Peck & Lewis. 285,932; Aug. 11; Serial No. 312,942; published May 26, 1931.
Papers, Sulphite manila. Port Huron Sulphite & Paper Company. 285,940; Aug. 11; Serial No. 313,152; published May 26, 1931.
Pencils, Lead. Richard Best Pencil Company. 286,093; Aug. 11.
Pens, Fountain. Conklin Pen Company. 285,914–15; Aug. 11; Serial Nos. 311,367–8; published May 26, 1931.
Pens, Fountain. L. E. Waterman Company. 37,530; renewed Dec. 31, 1931.
Tissue, Bathroom. Schwabacher Bros. & Co. 285,937; Aug. 11; Serial No. 313,097; published May 26, 1931.
Tissue, Toilet and facial. Modern Tissues Corporation. 285,934–5; Aug. 11; Serial Nos. 313,049–50; published May 26, 1931.

CLASS 38

Books, pamphlets, posters, etc. C. Smith. 285,946; Aug. 11; Serial No. 298,416; published May 26, 1931.
Bulletins and advertising copy. G. S. Ralston. 285,966; Aug. 11; Serial No. 311,750; published May 26, 1931.
Catalogs relating to horticultural or nursery products. Kelly Brothers Nurseries. 285,911; Aug. 11; Serial No. 310,175; published May 26, 1931.
Comic strips. The McNaught Syndicate, Inc. 285,928; Aug. 11; Serial No. 312,784; published May 26, 1931.
Monthly magazine. National Association of Letter Carriers. 285,921; Aug. 11; Serial No. 312,853; published May 26, 1931.
Photographic prints. N. Derfler. 285,902; Aug. 11; Serial No. 312,945; published May 26, 1931.
Planographic prints. American Multigraph Co. 285,904; Aug. 11; Serial No. 313,068; published May 26, 1931.
Publication. Zonta International. 285,920; Aug. 11; Serial No. 312,320; published May 26, 1931.
Weekly magazine. Jewelers Publishing Corporation. 285,907; Aug. 11; Serial No. 313,296; published May 26, 1931.

CLASS 39

Clothing. R. Lowenbaum Manufacturing Company. 84,501; renewed Dec. 19, 1931.
Clothing for women, Articles of. Déjà, Inc. 285,898; Aug. 11; Serial No. 311,129; published May 26, 1931.
Clothing, Men's, boys', women's, etc. Northern Jobbing Company. 285,955; Aug. 11; Serial No. 287,586; published May 26, 1931.
Hats. Gross Millinery Co., Inc. 285,990; Aug. 11; Serial No. 304,554; published May 26, 1931.
Hats, Ladies'. Charles A. Gerber. 285,992; Aug. 11; Serial No. 305,902; published May 26, 1931.
Hosiery. Paramount Knitting Company. 83,090–1; renewed Aug. 15, 1931.
Pants, breeches, shirts, coats, etc. Co-Operative Central Exchange. 285,877; Aug. 11; Serial No. 312,174; published May 26, 1931.
Sandals, moccasins, etc. Lyons & Company. 285,876; Aug. 11; Serial No. 312,156; published May 26, 1931.
Shoes, Infants'. Ettelbrick Shoe Co. Inc. 285,879; Aug. 11; Serial No. 312,295; published May 26, 1931.
Sweaters, hats, caps, etc. Fashion Park Associates, Inc. 285,901; Aug. 11; Serial No. 312,046; published May 26, 1931.

CLASS 40

Fur trimmings. B. Pomeranz & Son. 285,986; Aug. 11; Serial No. 299,928; published May 26, 1931.
Hair ornament. Du Pont Viscoloid Company. 285,880; Aug. 11; Serial No. 312,335; published May 26, 1931.

Wrist band for watches. Hammel, Riglander-Pennant Corporation. 286,000; Aug. 11; Serial No. 312,250; published May 26, 1931.

CLASS 42

Cloths, towels, etc., Wiping. Pioneer Paper Stock Company. 286,094; Aug. 11.
Cotton fabrics. Mount Vernon-Woodberry Mills. 285,910; Aug. 11; Serial No. 309,440; published May 26, 1931.
Curtains, Marquisette, muslin, scrim, and drapery. New England Curtain Company, Inc. 285,825; Aug. 11; Serial No. 312,662; published May 26, 1931.
Fabric, Woven, made from wool. Cohen, Goldman & Co. Inc. 285,826; Aug. 11; Serial No. 312,886; published June 2, 1931.
Fabrics, Elastic. United Elastic Corporation. 286,082; Aug. 11.
Hair nets. S. D. Frohlich. 285,856; Aug. 11; Serial No. 313,081; published May 26, 1931.
Piece goods. Lister & Company, Limited. 285,971; Aug. 11; Serial No. 307,721; published May 26, 1931.
Rayon piece goods. Colonial Mills Inc. 285,823; Aug. 11; Serial No. 312,416; published May 26, 1931.
Rugs, Textile. Dayton Company. 285,824; Aug. 11; Serial No. 312,553; published June 2, 1931.
Textile padding. Egan Cotton Mills. 285,817; Aug. 11; Serial No. 310,217; published May 26, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 285,818; Aug. 11; Serial No. 310,979; published May 26, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 285,827; Aug. 11; Serial No. 312,909; published May 26, 1931.

CLASS 44

Arch supports. E-Z Walk Corporation. 286,097; Aug. 11.
Bandages and abdominal binders or supports (medical and surgical). Grout & Company, Limited. 286,023; Aug. 11; Serial No. 312,644; published June 2, 1931.
Belts, Sanitary. Sani Gard Products, Ltd. 286,013; Aug. 11; Serial No. 313,676; published June 2, 1931.
Breathing apparatus for use in mines, etc. Siebe, Gorman & Company Ltd. 83,188; renewed Aug. 22, 1931.
Catamenial appliances. J. B. Snyder. 286,021; Aug. 11; Serial No. 312,867; published May 26, 1931.
Dental alloy. Research Products Corporation. 286,027; Aug. 11; Serial No. 312,530; published June 2, 1931.
Elastic hosiery. Horn Surgical Company. 286,020; Aug. 11; Serial No. 312,917; published May 26, 1931.
Heaters, used for therapeutic purposes, Chemical. Kendall Company. 286,039; Aug. 11; Serial No. 311,547; published June 2, 1931.
Nursing nipples, Rubber. J. Schmid. 286,040; Aug. 11; Serial No. 311,217; published May 26, 1931.
Pad-holders, Sanitary. Sani-Gard Products, Ltd. 286,014; Aug. 11; Serial No. 313,677; published June 2, 1931.
Rubber and membraneous articles, Prophylactic. J. Schmid. 286,031–2; Aug. 11; Serial No. 311,811–2; published May 26, 1931.
Rubber articles, Prophylactic. L. E. Shunk Latex Products, Inc. 286,042; Aug. 11; Serial No. 310,192; published May 26, 1931.
Sanitary pads. L. V. Myles, Inc. 286,083; Aug. 11.
Vibrator and massage machine for the ears, Electrical. L. D. Ellis. 286,015; Aug. 11; Serial No. 313,775; published June 2, 1931.

CLASS 45

Beverage, Maltless. O. H. Halverson. 286,066; Aug. 11.
Beverage, Orange juice. J. F. Giering Bottling Co. 286,067; Aug. 11.
Beverage, Tonic. L. W. Winkless. 83,532; renewed Sept. 19, 1931.
Beverages, Nonalcoholic, maltless. Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin. 285,859; Aug. 11; Serial No. 310,383; published May 26, 1931.
Beverages, sirups, and extracts. A. A. Cohen. 285,873; Aug. 11; Serial No. 313,769; published June 2, 1931.
Drinks and natural aerated water, Soft. Water Delivery Company. 84,705; renewed Dec. 26, 1931.
Ginger ale. Lomax Company. 285,868; Aug. 11; Serial No. 313,248; published May 26, 1931.
Syrups and extracts. Cliequot Club Company. 285,868; Aug. 11; Serial No. 312,414; published May 26, 1931.

CLASS 46

Bacon. Jacob E. Decker & Sons. 285,836; Aug. 11; Serial No. 313,165; published June 2, 1931.
Bacon. T. M. Sinclair & Co. 83,014; renewed Aug. 8, 1931.
Beans, Dried. Strohmeyer & Arpe Company. 285,854; Aug. 11; Serial No. 313,063; published May 26, 1931.
Bread. S. B. Thomas, Inc. 285,919; Aug. 11; Serial No. 311,762; published June 2, 1931.
Bread, rolls, fried cakes, etc. Reierson's Inc. 286,053; Aug. 11; Serial No. 291,637; published Oct. 28, 1930.
Candy. M. H. Abelson. 286,087; Aug. 11.
Candy. Helen T. Brook, Inc. 285,852; Aug. 11; Serial No. 312,792; published June 2, 1931.
Candy. J. B. Chambers. 285,855; Aug. 11; Serial No. 313,074; published May 26, 1931.
Candy, Nyal Company. 285,981; Aug. 11; Serial No. 306,960; published May 19, 1931.
Candy. Puresweet Confections, Inc. 285,991; Aug. 11; Serial No. 305,827; published May 19, 1931.
Candy bars. Automatic Canteen Company. 285,841; Aug. 11; Serial No. 313,531; published May 26, 1931.
Candy bars. Dante Candy Company. 285,980; Aug. 11; Serial No. 307,656; published June 2, 1931.
Candy, Filled taffy. Young's Candy Products Co. 285,944; Aug. 11; Serial No. 298,609; published May 26, 1931.
Canned corn. Princeville Canning Co. 285,843–4; Aug. 11; Serial Nos. 313,671–2; published June 2, 1931.
Canned figs. Arizona Canneries, Incorporated. 286,071; Aug. 11.
Canned fruits, vegetables, fish, etc. J. Domko. 285,985; Aug. 11; Serial No. 299,379; published Aug. 5, 1930.
Canned peas. F. H. Legget & Company. 285,984; Aug. 11; Serial No. 299,139; published May 26, 1931.
Canned peas. Minnesota Valley Canning Company. 285,942–3; Aug. 11; Serial Nos. 298,645–7; published May 26, 1931.
Canned peas. Minnesota Valley Canning Company. 285,983; Aug. 11; Serial No. 298,646; published May 26, 1931.
Canned Salmon. Alaska Pacific Salmon Corporation. 285,849; Aug. 11; Serial No. 312,356; published May 12, 1931.
Canned vegetables. Greco Canning Company, Inc. 285,951; Aug. 11; Serial No. 294,424; published July 1, 1930.
Cheese. Alphina Käse A. G. 285,889; Aug. 11; Serial No. 313,171; published May 26, 1931.
Cheese, Roquefort. B. M. Douglas. 285,941; Aug. 11; Serial No. 313,730; published June 2, 1931.
Chocolate milk preparation, malted milk preparation, and a chocolate malted milk preparation used for making food beverages. J. Polin. 286,090; Aug. 11.
Coffee. Kellogg Company. 285,850; Aug. 11; Serial No. 312,434; published June 2, 1931.
Coffee. Morton Manufacturing Corporation. 285,837; Aug. 11; Serial No. 313,253; published June 2, 1931.
Coffee. Steele-Wedeles Company. 285,842; Aug. 11; Serial No. 313,566; published June 2, 1931.
Coffee and canned vegetables. W. A. Bauer Co. 285,952; Aug. 11; Serial No. 294,106; published June 2, 1931.
Compressed food for dog, puppy, fox, etc. Nowak Milling Corporation. 285,936; Aug. 11; Serial No. 313,091; published June 2, 1931.
Confections, Frozen. Red Wing Corporation. 285,926; Aug. 11; Serial No. 312,773; published May 26, 1931.
Dates, Dried. Hills Brothers Company. 285,848; Aug. 11; Serial No. 312,342; published May 26, 1931.
Drink, Combination orange food. J. Parcell. 286,073; Aug. 11.
Fish and seafoods. New England Fish Company. 285,958; Aug. 11; Serial No. 284,415; published May 19, 1931.
Foods. T. M. Sinclair & Co. 83,951; renewed Oct. 24, 1931.
Foods, Health. L. G. Dieker. 285,840; Aug. 11; Serial No. 313,460; published May 26, 1931.
Fowl, Prepared and cooked. Hen Houses, Inc. 285,989; Aug. 11; Serial No. 304,101; published June 2, 1931.
Fruits and vegetables, Fresh. S. J. Sligh & Company. 285,846; Aug. 11; Serial No. 311,492; published June 2, 1931.
Grapefruit, cut into individual portions, Canned. Floridagold Citrus Corporation. 285,838; Aug. 11; Serial No. 313,290; published June 2, 1931.
Hams, shoulders, bacon, and picnics. T. M. Sinclair & Co. 83,283; renewed Aug. 29, 1931.
Hams, shoulders, and bacon. T. M. Sinclair & Co. 83,861; renewed Oct. 17, 1931.
Hams, shoulders, bacon, etc. T. M. Sinclair. 83,520; renewed Sept. 19, 1931.
Ice cream cones. McLaren-Consolidated Cone Corporation. 286,098; Aug. 11.
Ice cream sherberts, ices, and frozen confections. Wood Grocery Co. 285,933; Aug. 11; Serial No. 312,969; published May 26, 1931.
Lard made from pork fat. Mezögazdasági Termény es Termékforgalmi Intézet. 285,982; Aug. 11; Serial No. 306,740; published June 2, 1931.
Lozenges, Perfumed. Thos. Kerfoot & Co. 37,298; renewed Nov. 12, 1931.
Malt extracts. L. E. Silberman. 285,929; Aug. 11; Serial No. 312,739; published May 26, 1931.
Meat and cereals for dogs, Canned. Chappel Bros. 285,884; Aug. 11; Serial No. 312,693; published May 26, 1931.
Meat products. J. Melchner. 285,845; Aug. 11; Serial No. 310,689; published June 2, 1931.
Milk and cream. Beatrice Creamery Company. 285,893; Aug. 11; Serial No. 313,417; published May 26, 1931.
Milk and powdered cream, Powdered skim. Dairy Corporation of America. 285,938; Aug. 11; Serial No. 313,234; published May 26, 1931.
Pineapple, Canned. Hawaiian Pineapple Company. 285,853; Aug. 11; Serial No. 312,910; published June 2, 1931.
Plum puddings. Aplin & Barrett & The Western Counties Creameries, Limited. 285,947; Aug. 11; Serial No. 298,780; published June 3, 1930.

Popcorn, Candied. Joffe Brothers. 285,851; Aug. 11; Serial No. 312,783; published May 26, 1931.
Powdered preparations, Flavored. Brechet & Richter Company. 285,916; Aug. 11; Serial No. 311,556; published May 26, 1931.
Rice, barley, dried peas, etc. Southern Rice Sales Company. 285,927; Aug. 11; Serial No. 312,776; published May 26, 1931.
Sauces, Condimental. J. Wise. 285,924; Aug. 11; Serial No. 312,583; published May 26, 1931.
Sausage, picnics, and chickens. T. M. Sinclair & Co. 84,540; renewed Dec. 19, 1931.
Syrup, Malt. N. Waxler. 286,064; Aug. 11.
Syrup, Malt. Senaca Food Products Corporation. 285,912; Aug. 11; Serial No. 310,839; published May 26, 1931.
Tea. Standard Brands Incorporated. 285,847; Aug. 11; Serial No. 312,273; published May 26, 1931.
Tea. Joseph Tetley & Co. 285,835; Aug. 11; Serial No. 313,159; published June 2, 1931.
Vegetables, Fresh. Santa Maria Produce Co. 285,839; Aug. 11; Serial No. 313,352; published May 26, 1931.
Wheat breakfast food. Whentena Corporation. 285,917; Aug. 11; Serial No. 311,579; published June 2, 1931.

CLASS 47

Wines. Societe Champagne Delamotte Pere & Fils (Societe a Responsabilite Limited). 285,968; Aug. 11; Serial No. 308,559; published June 2, 1931.

CLASS 48

Beer. Gabriel Sedlmayr, Brauerei zum Spaten. 82,834; renewed July 25, 1931.

Beverages, Malt. Pabst Corporation. 285,860; Aug. 11; Serial No. 310,405; published May 26, 1931.
Corn product, Flaked. C. A. Krause Milling Co. 285,864; Aug. 11; Serial No. 312,436; published May 26, 1931.

CLASS 49

Alcohol, Ethyl. Rossville Commercial Alcohol Corporation. 285,819; Aug. 11; Serial No. 311,204; published May 26, 1931.
Whiskey. Frankfort Distillery, Inc. 285,970; Aug. 11; Serial No. 306,947; published June 2, 1931.

CLASS 50

Fly paper, Sticky. O. & W. Thum Company. 37,415; renewed Dec. 3, 1931.
Markers, Traffic. National Traffic Products, Inc. 285,078; Aug. 11; Serial No. 303,202; published May 26, 1931.
Planographic plates. American Multigraph Co. 285,828; Aug. 11; Serial No. 312,938; published June 2, 1931.
Poultry and hog feeders and waterers. W. A. McCollough & Sons, Inc. 285,830; Aug. 11; Serial No. 312,994; published June 2, 1931.
Rug cushions, paddings, and carpet-cushions. H. C. Loughran. 285,829; Aug. 11; Serial No. 312,992; published May 26, 1931.
Sheet metal articles. Des Moines Steel Tank Company. 285,820; Aug. 11; Serial No. 311,409; published June 2, 1931.

ALPHABETICAL LIST OF LABELS

Armored Rubber Threads. For Overall Elastic. Southern Webbing Mills, Inc. 39,548; Aug. 11.
Atlas Motor Oil. For Motor Oil. B. B. Oil Company. 39,524; Aug. 11.
Bennett's Chief Valve Oil. For Valve Oil for Lubricating Valve Stems, Valve Guides, Etc. P. H. Bennett. 39,527; Aug. 11.
Best by a Long Stretch. For Overall Elastic. Southern Webbing Mills, Inc. 39,547; Aug. 11.
Betty Anne. For Bread. Waxide Paper Company. 39,553; Aug. 11.
Bond Bakers Whole Wheat Bread. For Bread. General Baking Company. 39,531; Aug. 11.
Castene. For Tooth Powder. H. W. McIntyre. 39,539; Aug. 11.
Chase and Sanborn's Seal Brand Green Tea. For Tea. Standard Brands Incorporated. 39,549; Aug. 11.
Country Club. For Salmon. Kroger Grocery & Baking Co. 39,537; Aug. 11.
Dooley's Ace-Hi Liquid Glue. For Liquid Glue. Dooley Manufacturing Co. 39,530; Aug. 11.
Fleischmann's Irradiated Pure Dry Yeast. For Yeast Especially Prepared for Stock and Poultry. Standard Brands Incorporated. 39,550; Aug. 11.
Golden Krust. For Bread. Waxide Paper Company. 39,556; Aug. 11.
Jewel. For Coffee. Kroger Grocery & Baking Co. 39,536; Aug. 11.
Kemp's Golden Glow Pop Corn—From the Famous Golden Glow Shops—to Renew Crispness Heat in Oven for a few Minutes—Right off the Fire. For Pop Corn. E. F. Kemp, Inc. 39,535; Aug. 11.
Lone Star. For Grape Jellies. Kadane-Brown, Inc. 39,534; Aug. 11.
Lone Star. For Strawberry Preserves. Kadane-Brown, Inc. 39,533; Aug. 11.
Lucky 7. For Salami. A. Maggioli & Company. 39,538; Aug. 11.
Malt-O-Meal. For a Wheat Cereal Flavored with Specially Prepared Caramel Malt. Campbell Cereal Company. 39,528; Aug. 11.
Nestle Combination Hot Oil Treatment and Shampoo. For Preparation for the Treatment of Human Hair. Nestle-Lemur Company. 39,541; Aug. 11.
Nestle Combination Hot Oil Treatment and Shampoo. 1½ Fluid Oz. For Preparation for the Treatment of the Human Hair. Nestle-Lemur Company. 39,540; Aug. 11.
Nuts Chocolate Covered. For Chocolate Covered Nuts. F. J. Schleicher Paper Box Co. 39,545; Aug. 11.
Pan Rolls. For Rolls. Waxide Paper Company. 39,552; Aug. 11.
Paragon. For Typewriter Ribbons. Remington Rand Inc. 39,544; Aug. 11.
Penn City Motor Oil. For Motor Oil. B. B. Oil Company. 39,523; Aug. 11.
Penn National Motor Oil. For Motor Oil. B. B. Oil Company. 39,525; Aug. 11.
Puffies. For Confections. Puffies Manufacturing Company. 39,542; Aug. 11.
Quality. For Bread. Waxide Paper Company. 39,554; Aug. 11.
Remrandeo. For Typewriter Ribbons. Remington Rand Inc. 39,543; Aug. 11.
Re Umberto. For Olive Oil. Strohmeyer & Arpe Company. 39,551; Aug. 11.
Ritz. For Cigars. A. H. Sonnenberg. 39,546; Aug. 11.
Sandwich Buns. For Buns. Waxide Paper Company. 39,555; Aug. 11.
Sonny Boy. For Butter. M. Wildstein. 39,557; Aug. 11.
Swim in the Suit 'Johnny' Weissmuller Developed. For Bathing Suits. B. V. D. Company. 39,526; Aug. 11.
Thriftee. For Biscuits. Central Waxed Paper Company. 39,529; Aug. 11.
W. AA. Johnston. For Adding Machines, Cash Registers, and Typewriters. W. AA. Johnston. 39,532; Aug. 11.

ALPHABETICAL LIST OF PRINTS

A Reminder. For Motor Oils. Quaker State Oil Refining Co. 13,344; Aug. 11.
Anxious Young Mothers. For Wheat Breakfast Food. The Cream of Wheat Corporation. 13,336; Aug. 11.
Armored Rubber Threads. For Overall Elastic. Southern Webbing Mills, Inc. 13,348; Aug. 11.
Best by a Long Stretch. For Overall Elastic. Southern Webbing Mills, Inc. 13,347; Aug. 11.
Borize. For Boring Machines. Heald Machine Company, Worcester, Mass. 13,337; Aug. 11.
Bowlene. For a Preparation for Cleaning and Deodorizing Closet Bowls. The Climalene Company. 13,335; Aug. 11.
Convenient Storage. For Motor Oil. Quaker State Oil Refining Oil. 13,341; Aug. 11.
Electric Mantel Clock. For Electric Clocks. Merchants Advertising Company. 13,338; Aug. 11.
On Your Way Home. For Motor Oil. Quaker State Oil Refining Co. 13,340; Aug. 11.
"Prompt Service" Just around the corner. For Motor Oil. Quaker State Oil Refining Co. 13,342; Aug. 11.
Quality Wants. For Prints and Publications. Thomas D. Taylor. 13,349; Aug. 11.
Ready to go. For Motor Oil. Quaker State Oil Refining Co. 13,343; Aug. 11.
7 Days Ago. For Motor Oils. Quaker State Oil Refining Co. 13,345; Aug. 11.
Solve the Song Scenes. For Pianos. Cable Company. 13,334; Aug. 11.
Sunburn? Unguentine goes as deep as the burn. For the Surgical Ointment, Unguentine. Norwich Pharmacal Company. 13,339; Aug. 11.
Where performance depends upon precision . . . For Antifriction Bearings. S. K. F. Industries, Inc. 13,346; Aug. 11.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 11TH DAY OF AUGUST, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott, Carl G., Haviland, Kans. Gasoline dispensing nozzle. 1,818,663; Aug. 11.
Abegg, Walter A., Los Angeles, Calif. Vise. 1,818,291; Aug. 11.
Aberle, George F., assignor to H. G. Aberle Co., Philadelphia, Pa. Stocking. Des. 84,801; Aug. 11.
Aberle, H. C., Co. (See Aberle, George F., assignor.)
Acoustic Products Company. (See Hutchison, Miller R., assignor.)
Acro Aktiengesellschaft. (See Lang, Franz, assignor.)
Adams, Harry W., and F. M. Salisbury, Dundalk, assignors to The Glenn L. Martin Co., Baltimore, Md. Airplane flotation system. 1,818,597; Aug. 11.
Adams, Lytle S., Seattle, Wash., assignor to Airways Patent Corporation. Airplane package transfer apparatus. 1,818,835; Aug. 11.
Adams, Lytle S., Seattle, Wash., assignor to Airways Patent Corporation. Grapple for airplane package transfer apparatus. 1,818,956; Aug. 11.
Adams, Lytle S., New York, assignor to Aeroplane Hangar and Equipment Corporation, Buffalo, N. Y. Airplane hangar or shed. 1,818,957; Aug. 11.
Aerocrete Corporation of America, The. (See Billner, Karl P., assignor.)
Aeroplane Hangar and Equipment Corporation. (See Adams, Lytle S., assignor.)
Affel, Herman A., Ridgewood, and E. I. Green, East Orange, N. J., assignors to American Telephone and Telegraph Company. Concentric conductor system. 1,818,027; Aug. 11.
Aikman, Burton S., assignor of one-half to R. P. Tell, Milwaukee, Wis. Steering device. 1,817,903; Aug. 11.
Airways Patent Corporation. (See Adams, Lytle S., assignor.)
Ajax Electrothermic Corporation. (See Taylor, George E., assignor.)
Aldrich, Alonzo, and E. E. Berry, assignors to Beloit Iron Works, Beloit, Wis. Paper making machine. 1,818,777; Aug. 11.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alemite Corporation. (See Murphy, Howard J., assignor.)
Alemite Corporation. (See Pierce, Walter H., assignor.)
Alleman, Gellert, Swarthmore, assignor to Sun Oil Company, Philadelphia, Pa. Manufacturing color lakes from petroleum. 1,818,778; Aug. 11.
Allen, Albert M., St. Louis County, Mo. Nasal inhaler. 1,818,028; Aug. 11.
Alsaker, Alfred, and E. Nordbem, assignors to The Delta-Star Electric Company, Chicago, Ill. Switch operating mechanism. 1,817,904; Aug. 11.
American Bosch Magneto Corporation. (See Coe, Frank S., assignor.)
American Bosch Magneto Corporation. (See Lang, G. J., and Martin, assignors.)
American Can Company. (See Hothersall, John M., assignor.)
American Can Company. (See Murch, John H., assignor.)
American Enameled Brick Corporation. (See Jacquart, Charles E., assignor.)
American Face Brick Research Corporation. (See Slidell, Kemper, assignor.)
American Propeller Company. (See Stelzer, William, assignor.)
American Sales Book Company. (See Bottle, Edward K., assignor.)
American Show Case & Mfg. Co. (See Kaufman, Jacob M., assignor.)
American Telephone and Telegraph Company. (See Affel, H. A., and Green, assignors.)
American Telephone and Telegraph Company. (See Carson, J. R., and Mead, assignors.)
American Telephone and Telegraph Company. (See Smith, Temple C., assignor.)
American Telephone and Telegraph Company. (See von Nostitz, Erich, assignor.)
Anderson-Barngrover Mfg. Co. (See Thompson, Albert R., assignor.)
Anderson, Helmer, Minneapolis, Minn., assignor, by mesne assignments, to General Mills, Inc. Reversing mechanism. 1,818,664; Aug. 11.
Andrews, L. V., and O. Craig, assignors to Riley Stoker Corporation, Worcester, Mass. Pulverized fuel burner. 1,817,911; Aug. 11.
Anduze, Lucien, Limoges, France, assignor to Herman C. Kupper, Inc., New York, N. Y. Covered dish or similar article. Des. 84,802; Aug. 11.
Angulo y Perez, José N., Habana, Cuba. Wardrobe trunk. 1,818,525; Aug. 11.
Anstiss, George P., Oak Park, assignor to G. S. Blakeslee & Co., Cicero, Ill. Water throwing apparatus for washing machines. 1,818,029; Aug. 11.
Apple, Vincent G., Dayton, Ohio. Oscillating motor. 1,818,779; Aug. 11.
Arbogast, Adam, assignor to Society of Chemical Industry in Basle, Switzerland. Dyestuff preparation and making same. 1,818,878; Aug. 11.
Archer-Daniels-Midland Company et al. (See Long, James S., assignor.)
Archer, John L., Cairo, Nebr. Sterilizer. 1,818,445; Aug. 11.
Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Reheater. 1,818,446; Aug. 11.
Armstrong Cork Company. (See Grupe, William F., assignor.)
Arnold, M. N., Shoe Company. (See Arnold, William P., assignor.)
Arnold, Max, New York, N. Y. Stamping machine. 1,818,836; Aug. 11.
Arnold, William P., assignor to M. N. Arnold Shoe Company, North Abington, Mass. Shoe bag. 1,818,030; Aug. 11.
Arnstein, Karl, and P. Helms, assignors to Goodyear Zeppelin Corporation, Akron, Ohio. Bulkhead for rigid airships. 1,818,952; Aug. 11.
Atwell, Harold V., et al., trustees. (See Hamblen, Jennings B., assignor.)
Autographic Register Company. (See Brenn, Carl W., assignor.)
Automotive Engineering Corporation. (See Marcum, Arthur I., assignor.)
Automatic Transmission Company. (See Lyman, Kenneth E., assignor.)
Ayars, Charles H., assignor to Ayars Machine Company, Salem, N. J. Canning machine. 1,818,780; Aug. 11.
Ayars Machine Company. (See Ayars, Charles H., assignor.)
Babcock & Wilcox Company, The. (See Hall-Brown, A., and Jones, assignor.)
Babcock & Wilcox Company, The. (See Jones, William A., assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Babcock & Wilcox Company, The. (See Trainer, J. E., and Langvand, assignors.)
Baer, Lawrence E., assignor to The Baer & Wilde Company, Attleboro, Mass. Clasp for neckties. 1,818,292; Aug. 11.
Baer & Wilde Company, The. (See Baer, Lawrence E., assignor.)
Bagasse Products Corporation. (See de la Roza, Joaquin J., sr., assignor.)
Bager, William M., and W. Lehman, assignors to Bucyrus-Erie Company, South Milwaukee, Wis. Excavating machinery. 1,817,905; Aug. 11.
Bailey, Walter C., Norwalk, Calif. Device for washing piston-packers and liners. 1,818,187; Aug. 11.
Bain, Alexander C., Hudson, assignor to Firestone Footwear Company, Boston, Mass. Rubber heel. Des. 84,803; Aug. 11.
Baits, Stuart G., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Steering column support. 1,818,031; Aug. 11.
Bakelite Corporation. (See Schmidt, John H., assignor.)
Baker, Erle K., Chicago, Ill., assignor, by mesne assignments, to Motor Wheel Corporation. Lansing, Mich. Disk wheel hub assembly. 1,818,447; Aug. 11.
Baker, Erle K., Chicago, Ill., assignor to Motor Wheel Corporation, Lansing, Mich. Automobile wheel. 1,818,448; Aug. 11.
Baker, Fred, assignor to Fitchburg Weaving Company, Fitchburg, Mass. Mechanism for evening and tensioning yarn. 1,818,526; Aug. 11.
Baker, Frederick W., Stourbridge, England, assignor to Trinity Wheel Corporation. Wheel rim. 1,817,906; Aug. 11.
Baker, Joseph A., Roseville, Mich., assignor, by mesne assignments, to Chrysler Corporation. Welding apparatus. 1,818,665; Aug. 11.
Baker, Thomas T. (See Goldsmith, J. M., Baker, and Bonamico.)
Bakonyi, Stefan, Budapest, Hungary, assignor to Deutsche Hydrierwerke Aktiengesellschaft, Berlin-Charlottenburg, Germany. Carrying out biochemical processes. 1,818,781; Aug. 11.
Bakonyi, Stefan, Dessau, Germany. Producing butanol and acetone by fermentation. 1,818,782; Aug. 11.

Ball, Percy B., assignor to The Watson Company, Attleboro, Mass. Fork or similar article. Des. 84,804; Aug. 11.
Banbury, Fernley H., assignor to Farrel-Birmingham Company, Incorporated, Ansonia, Conn. Thrust bearing. 1,818,449; Aug. 11.
Bannerman, Levi. (See Talbott, W. D., and Bannerman.)
Barber, William, Brooklyn, N. Y., assignor to Steel Wheel Corporation, Lansing, Mich. Disk wheel. 1,818,450; Aug. 11.
Bardet, George A. and G. V., Berkeley, assignors to M. J. B. Co., San Francisco, Calif. Key dipping machine. 1,818,524; Aug. 11.
Bardet, George V. (See Bardet, G. A. and G. V.)
Barker, Hilan O., Chicago, Ill. Press. 1,818,837; Aug. 11.
Barnes, Renal J., et al. (See Trowbridge, Charles W., assignor.)
Barrett Company, The. (See Harshberger, Norman P., assignor.)
Bartels, Edward E. (See Holcomb, R. L., and Bartels.)
Bartels, Ida M., et al., executors. (See Bartels, Reinhard E.)
Bartels, Reinhard E., deceased, Lynn, Mass.; I. M. Bartels and R. B. Bartels, executors. Fastening point for shank stiffeners. 1,818,666; Aug. 11.
Basmadjian, Aronseag, executrix. (See Basmadjian, Paul K.)
Basmadjian, Paul K., deceased, Philadelphia, Pa.; A. Basmadjian, executrix. Cover for pickles, etc. 1,818,924; Aug. 11.
Bassett, P. R., Rockville Center, and C. B. Mills, assignors, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Position comparator. 1,817,907; Aug. 11.
Bateman, Arthur T., and A. Irvine, assignors to Bohn Aluminum & Brass Corporation, Detroit, Mich. Molding apparatus. 1,818,667; Aug. 11.
Bates, Azariah M., Downs, Kans. Poster rolling and moistening machine. 1,818,451; Aug. 11.
Bates Valve Bag Corporation. (See Peterson, William R., assignor.)
Bath, John. (See Walker, Ernest A., assignor.)
Battilani, Stefano, New York, N. Y. Apparatus for producing rubber having air cells. 1,818,372; Aug. 11.
Baum, Jerome E., New York, N. Y. Paper roll container. Des. 84,805; Aug. 11.
Baylis, Walter S., Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California. Purifying vegetable oil. 1,818,452; Aug. 11.
Baylis, Walter S., Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California. Making chemically treated activated adsorbent material. 1,818,453; Aug. 11.
Beach, Frederick E., assignor to Pines Winterfront Company, Chicago, Ill. Theft preventing device. 1,818,373; Aug. 11.
Beach, Frederick E., and E. G. Petersen, assignors to Pines Winterfront Company, Chicago, Ill. Theft preventing device. 1,818,668; Aug. 11.
Beam, Vilynn O., assignor to Surface Combustion Corporation, Toledo, Ohio. Gas burner. 1,818,783; Aug. 11.
Beardslee Chandelier Manufacturing Company. (See Samuelson, Eric T., assignor.)
Becker, George E., Bremerton, Wash. Sliding valve for internal combustion engines. 1,818,527; Aug. 11.
Beckmann, August, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Radio frequency telegraphy and telephony system. 1,818,669; Aug. 11.
Beers, Harry F., Pelham, N. Y. Display cabinet. 1,818,784; Aug. 11.
Behrendt, Jacob W., San Francisco, Calif. Bottle. 1,817,912; Aug. 11.
Bek, Ernst G. (See Wirth, R., and Bittrolf, assignors.)
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell, Morris. (See Snee, W., and Bell.)
Bell Telephone Laboratories, Incorporated. (See Curtis, A. M., and Burton, assignors.)
Bell Telephone Laboratories, Incorporated. (See Johnson, Herbert B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Lathrop, Hubbel, assignor.)
Bell Telephone Laboratories, Incorporated. (See Melick, John M., assignor.)
Bell Telephone Laboratories, Incorporated. (See O'Neill, Henry W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Rapelje, John A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Stocker, Closman P., assignor.)
Bell, William E. H., Glenside, Pa., assignor, by mesne assignments, to H. W. Butterworth & Sons Company. Dyeing machine construction. 1,818,032; Aug. 11.
Bellemere, Stanley L., Reading, Pa. Box structure. 1,817,913; Aug. 11.
Beloit Iron Works. (See Aldrich, A., and Berry, assignors.)
Beloit Iron Works. (See Berry, Earl E., assignor.)
Belt, Charley E., Jenkins, Ky. Vehicle chassis. 1,818,838; Aug. 11.
Belt, Joseph S., Amarillo, Tex. Separating and utilizing constituents of natural gas. 1,817,908; Aug. 11.
Bendix Brake Company. (See Dodge, A. Y., and Pollard, assignors.)
Bendix Brake Company. (See Norton, Raymond J., assignor.)
Bendix Brake Company. (See Peterson, John W., assignor.)
Benerman, Watkins, El Paso, Tex. Illuminated sign. 1,818,879; Aug. 11.
Benjamin Electric Manufacturing Company. (See Juergens, John, assignor.)
Bennett, Claude C., assignor to A. E. Feragen, Inc., Seattle, Wash. Wheel gauge. 1,818,677; Aug. 11.
Bennett, Claude C., assignor to A. E. Feragen, Inc., Seattle, Wash. Axle press. 1,818,678; Aug. 11.
Bennett, Claude C., assignor to A. E. Feragen, Inc., Seattle, Wash. Axle press. 1,818,679; Aug. 11.
Bennett, Claude C., assignor to A. E. Feragen, Inc., Seattle, Wash. Axle-twisting device. 1,818,680; Aug. 11.
Bennett, Thomas R. (See Quick, C. G., and Bennett.)
Bennington, Earl T., Cleveland Heights, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Overhead traveling carrier. 1,818,374; Aug. 11.
Berger, Charles, Maplewood, N. J., assignor to Groove Lock Co. Inc., New York, N. Y. Vanity case. 1,818,454; Aug. 11.
Bergmann, Carl, et al. (See Brussow, Hermann, assignor.)
Bergquist, Hugo, Swissvale, assignor to Elliott Company, Pittsburgh, Pa. Liquid treating apparatus. 1,818,188; Aug. 11.
Bern, Frank, Cleveland, Ohio. Photographic printing device. 1,818,528; Aug. 11.
Berry, Earl E. (See Aldrich, A., and Berry.)
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Paper making machine. 1,818,681; Aug. 11.
Berry, Lewis R., Portland, Me. Headrest and invalid-raising mechanism for bedsteads and cots. 1,818,598; Aug. 11.
Bertrand, Maurice, St. Nicolas Le Liege, assignor to Societe Anonyme d'Ougree Marihaye, Ougree, Belgium. Treatment or purification of coal. 1,818,189; Aug. 11.
Besag, Ernst, Baden-Baden, Germany. Automatic switch. 1,818,682; Aug. 11.
Bethlehem Steel Company. (See Nieman, Henry W., assignor.)
Bialas, Valentin, Chicago, Ill. Spark plug cleaner. 1,818,293; Aug. 11.
Bigelow, George E., Southgate, assignor of one-half to Pacific Pump Works, Huntington Park, Calif. Deep well oil turbine pump. 1,818,455; Aug. 11.
Bigelow Sanford Carpet Co. (See La Couture, Henry C., assignor.)
Billner, Karl P., assignor to The Aerocrete Corporation of America, New York, N. Y. Floor construction. 1,817,914; Aug. 11.
Bird, Lester F., assignor to Hanovin Chemical and Manufacturing Company, Newark, N. J. Hood for therapeutic lamps. 1,818,599; Aug. 11.
Bischoff, Leonhard, assignor to Schubfabrik Hassia Aktiengesellschaft, Offenbach-on-the-Main, Germany. Boot and shoe. 1,818,683; Aug. 11.
Bishop, George E., Cleveland, Ohio. Automobile inclosure. 1,818,294; Aug. 11.
Bittrolf, Wilhelm. (See Wirth, R., and Bittrolf.)
Bixler, William H. H., Baltimore, Md. Hypodermic equipment. 1,818,670; Aug. 11.
Black-Clawson Company, The. (See Kutter, Herman L., assignor.)
Blackmore, Benjamin, Cuyahoga Falls, Ohio. Radiator. 1,818,600; Aug. 11.
Blaeker, Hannah D. (See Mabry, Annie N., assignor.)
Blair, David, Chicago, Ill. Garment. 1,817,915; Aug. 11.
Blair, Robert S., Stamford, Conn. Holding device for chips or counters used in games and the like. 1,818,033; Aug. 11.
Blakeslee, G. S., & Co. (See Anstiss, George P., assignor.)
Blanning, Harry K., Chicago, Ill., assignor of forty nine-one hundreths to L. K. Blanning, New Castle, Pa. Safety device for motor vehicles. 1,818,938; Aug. 11.
Blanning, Lillie K. (See Blanning, Harry K., assignor.)
Blechman, Irving, New York, N. Y. Vaporizing device. 1,818,684; Aug. 11.
Blodgett, Herbert C., assignor to Overhead Door Corporation, Hartford City, Ind. Electric door control. 1,817,909; Aug. 11.
Bloxom, Harvey L., Fort Dodge, Iowa. Acrobatic toy. 1,817,959; Aug. 11.
Blume, Louis F., Pittsfield, Mass., assignor to General Electric Company. Temperature indicator for electrical apparatus. 1,818,785; Aug. 11.
Blume, William R. (See Dreyfus, C., and Blume.)
Bockwitz, Andrew J., assignor of one-half to Grafton H. Self, Twin Falls, Idaho. Soil corrugator. 1,818,529; Aug. 11.
Boesler, Walter. (See Pier, M., Boesler, and Eisenhut.)
Bohn Aluminum & Brass Corporation. (See Bateman, A. T., and Irvine, assignors.)
Bohn Aluminum & Brass Corporation. (See Nelson, Adolph L., assignor.)
Bohnhardt, Charles F. H., Lynwood, Calif. Tank truck gauge. 1,818,295; Aug. 11.
Bonamico, Charles. (See Goldsmith, J. N., Baker, and Bonamico.)
Bond, Jayson K., Milwaukee, Wis. Circulatory system for refrigerated counters. 1,818,034; Aug. 11.

Bond, Lester W., assignor to The Kroder Reubel Co., Inc., New York, N. Y. Master carrier for curtain tracks. 1,818,786; Aug. 11.
Bondurant, Pauline. (See Roe, Hilton W., assignor.)
Booge, James E., Hillside, N. J., assignor, by mesne assignments, to The Grasselli Chemical Company. Lithopone and preparing same. 1,818,190; Aug. 11.
Borden Company, The. (See Supplee, George C., assignor.)
Bornes, Oscar. (See Rolstad, Martin O., assignor.)
Bortkewicz, Louie, Racoon, Pa. Bit-forging machine. 1,818,601; Aug. 11.
Bosch, Robert, Aktiengesellschaft. (See Kazenmaier, A., and Strauss, assignors.)
Bothe, Andreas, Oreland, Pa. Fiber or paper fork. 1,818,296; Aug. 11.
Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Portable autographic register. 1,817,960; Aug. 11.
Bouda, Bohumil, assignor to The Collis Company, Clinton, Iowa. Bread rack. 1,817,961; Aug. 11.
Bourne, Roland B., assignor, by mesne assignments, to The Maxim Silencer Company, Hartford, Conn. Silencer. 1,818,375; Aug. 11.
Bowie, Augustus J., San Francisco, Calif. Electric switch. 1,818,456; Aug. 11.
Bowlus, Glenn H., Alhambra, Calif. Belt clamp. 1,818,297; Aug. 11.
Bowly, Heyward W., Summit, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Support for strand material. 1,818,602; Aug. 11.
Bowman, Francis H., Swampscott, Mass., E. Lynch, Rio de Janeiro, Brazil, and D. R. Price, Lynn, Mass., assignors to General Electric Company. Synchronoscope. 1,818,787; Aug. 11.
Bowman, Oliver S., Colorado Springs, Colo. Resilient hard surfaced floor. 1,818,298; Aug. 11.
Bowman, Oliver S., Colorado Springs, Colo. Floor construction. 1,818,299; Aug. 11.
Bove, Arne, Stockholm, Sweden. Manufacturing yeast. 1,818,530; Aug. 11.
Boyer, John A., assignor to Globar Corporation, Niagara Falls, N. Y. Electric heating appliance. 1,818,191; Aug. 11.
Brading, Harry M., assignor to Indian Archery & Toy Corporation, Evansville, Ind. Archery target. 1,818,939; Aug. 11.
Braine, Daniel L., Brooklyn, assignor to The Rail Joint Company, New York, N. Y. Forming a compromise rail joint bar. 1,818,880; Aug. 11.
Braunsdorf, Otto. (See Nawiasky, P., Braunsdorf, and Ehrhardt.
Breer, Carl, assignor to Chrysler Corporation, Detroit, Mich. Piston lubrication. 1,818,671; Aug. 11.
Brenn, Carl W., Montclair, assignor to Autographic Register Company, Hoboken, N. J. Typewriting machine. 1,818,940; Aug. 11.
Breuer, Fred, Chicago, Ill. Adjustable curtain holder. 1,817,962; Aug. 11.
Briggs, Albert B. and S. E., assignors to The Perfect Hemstitcher Manufacturing Co., Inc., Springfield, Mass. Hemstitching attachment. 1,818,035; Aug. 11.
Briggs Manufacturing Company. (See Marshall, William, assignor.)
Briggs, Robert W., and J. N. Summers, Pharr, Tex. Subgrading machine. 1,818,457; Aug. 11.
Briggs, Sarah E. (See Briggs, A. B. and S. E.)
Bright, Claude H., Memphis, Tenn. Fountain ink pad. 1,818,531; Aug. 11.
Brindley, George F., New York, N. Y., assignor to Metal Chlorides Corporation. Manufacturing anhydrous aluminum chloride. 1,818,839; Aug. 11.
Britten, Edwin F., jr., Maplewood, and L. R. Brown, East Orange, assignors to Monroe Calculating Machine Company, Orange, N. J. Attachment for calculating machines. 1,817,916; Aug. 11.
Broderick, Frank W. (See Golinick, P. A., and Broderick.)
Brookby, Harry E., Evanston, Ill., and F. J. Gough, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill. Cellular concrete machine. 1,818,376; Aug. 11.
Brooke, Lloyd A., Washington, D. C. Fountain pen. 1,818,377; Aug. 11.
Brown, Charles E. (See Stevens, D. E., and Brown.)
Brown Company. (See Parker, Howard, assignor.)
Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)
Brown, Lee R. (See Britten, E. F., and Brown.)
Brown, Newton N., assignor to Gold Medal Camp Furniture Co., Racine, Wis. Foldable bed. 1,818,036; Aug. 11.
Brown, Ralph E., Evanston, Ill. Soldering pot. 1,818,925; Aug. 11.
Brown, Robert S. (See Oglesby, N. E., and Brown.)
Brown, Robert S., assignor to The New Britain Machine Company, New Britain, Conn. Mortising machine. 1,817,910; Aug. 11.
Brown, Wilbur F., assignor to Libbey Owens Ford Glass Company, Toledo, Ohio. Laminated glass and producing the same. 1,818,458; Aug. 11.
Brown-Lipe Gear Company. (See Eaton, Ernest E., assignor.)
Bruce, Alfred W., New York, N. Y. Locomotive cylinder and supporting structure therefor. 1,818,604; Aug. 11.
Bruck, Walter, and F. Heiwert, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs. 1,818,037; Aug. 11.
Brunk, Harold J., Chicago, Ill., assignor, by mesne assignments, to C. F. Pease Company. Automatic belt adjuster. 1,818,685; Aug. 11.
Bruns, Alfred E., Huntington, assignor, by mesne assignments, to Metal Package Corporation of New York, New York, N. Y. Container. 1,818,605; Aug. 11.
Brüssow, Hermann, Barnimscunow, Germany, assignor of one-half to H. Wolfgramm and one-half to C. Bergmann, Milwaukee, Wis. Potato digging machine. 1,818,192; Aug. 11.
Bryan, Cassius M., West Springfield, assignor to Strathmore Paper Company, Mitteneague, Mass. Laminated ornamental paper. 1,818,459; Aug. 11.
Bucklen, Herbert E., Corporation. (See Bucklen, Herbert E., assignor.)
Bucklen, Herbert E., Elkhart, Ind., assignor to Herbert E. Bucklen Corporation. Wind operated power plant. 1,818,672; Aug. 11.
Bucyrus-Erie Company. (See Bager, W. M., and Lehman, assignors.)
Bucyrus-Erie Company. (See Stevens, Paul S., assignor.)
Buffalo, Hammer Mill Corporation. (See Mursch, John, assignor.)
Buffalo Pressed Steel Co. (See Haas, Lucien L., assignor.)
Buker, Earl L., Great Falls, Mont. Vapor proof switch casing. 1,818,038; Aug. 11.
Burde, Paul J., Vancouver, British Columbia, Canada. Garment hanger. 1,818,193; Aug. 11.
Burgess, C. F., Laboratories, Inc. (See Kliefoth, Max H., assignor.)
Burkhart, Charles, Classon Point, N. Y. Measuring dispenser. 1,818,460; Aug. 11.
Burks, William L., Pleasant Ridge, Va. Combined desk and table. 1,818,606; Aug. 11.
Burnett, Richard W., Chicago, Ill. Slack adjuster for car brakes. 1,818,194; Aug. 11.
Burnham, George A., Saugus, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Self-contained rural substation. 1,818,686; Aug. 11.
Burrows, Michael P., Tacoma, Wash. Safety device. 1,818,300; Aug. 11.
Burton, Everett T. (See Curtis, A. M., and Burton.)
Busch, John S., Cloquet, Minn. Treating fibrous material preliminary to making pulp. 1,818,039; Aug. 11.
Busch, Werner, Cologne-Deutz, and E. Noack, Wiesdorf, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of potassium. 1,818,881; Aug. 11.
Buschman, Abraham L., New York, N. Y. Combined Christmas tree lighting set and display receptacle therefor or the like article. Des. 84,806; Aug. 11.
Buschman, Abraham L., New York, N. Y. Combined Christmas tree lighting set and display receptacle therefor or the like article. Des. 84,807; Aug. 11.
Bushnell, Charles S., assignor to General Railway Signal Company, Rochester, N. Y. Brake applying apparatus. 1,818,941; Aug. 11.
Butler, Thomas S., Chicago, Ill. Toothbrush. 1,818,840; Aug. 11.
Butterworth, H. W., & Sons Company. (See Bell, William E. H., assignor.)
Buttolph, Leroy J., East Orange, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Color fading cabinet and filter. 1,818,687; Aug. 11.
Butz, Walter D., Norristown, assignor of one-half to L. N. D. Williams, Elkins Park, Pa. Needle control mechanism for knitting machines. 1,818,112; Aug. 11.
Butz, Walter D., Norristown, assignor of one-half to L. N. D. Williams, Elkins Park, Pa. Needle control mechanism for knitting machines. 1,818,113; Aug. 11.
Buxton & Skinner Printing and Stationery Co. (See Hermann, Otto L., assignor.)
Byrne, Thomas W., Dorchester, Mass. Golf bag. 1,818,378; Aug. 11.
Cadieux, Joseph O., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Telephone apparatus. 1,818,788; Aug. 11.
Cain, John R., Washington, D. C., and G. Yungblut, Dayton, Ky., assignors to The Richardson Company, Lockland, Ohio. Manufacture of metallic sheets. 1,818,379; Aug. 11.
Calkins, Claude C., Spokane, Wash. Rotary rod weeder. 1,818,532; Aug. 11.
Calkins, Lloyd E., Joliet, Ill., assignor to The Ruberoid Co., Boundbrook, N. J. Siding strip. Des. 84,808; Aug. 11.
Callison, Abner F., New York, N. Y. Equipment for airplane landing fields or terminals. 1,818,841; Aug. 11.
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Load discharging car. 1,818,688; Aug. 11.
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Load discharging car door mechanism. 1,818,689; Aug. 11.
Campbell, Elba E., assignor to Chrysler Corporation, Detroit, Mich. Fan. 1,818,607; Aug. 11.
Campbell, Henry G., Dundee, Scotland. Electric furnace. 1,818,789; Aug. 11.
Canaday, Read B., Anderson, Ind. Toy lariat. 1,818,301; Aug. 11.

Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic camera. 1,818,461; Aug. 11.

Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic apparatus. 1,818,462; Aug. 11.

Capstaff, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Color photography. 1,817,963; Aug. 11.

Carbide and Carbon Chemicals Corporation. (See Curme, George O., jr.)

Cardoza, Antone J., Oakland, Calif. Index binder. 1,818,302; Aug. 11.

Carey, Philip Manufacturing Company, The. (See Rogers, Homer L., assignor.)

Carey, Philip, Manufacturing Company, The. (See Ross, Edgar S., assignor.)

Carlson, Elof L., assignor to The E. Ingraham Co., Bristol, Conn. Pawl for ratchet-mechanisms. 1,818,690; Aug. 11.

Carlson, Knute E., Campello, Mass. Apparatus for moistening shoes. 1,818,691; Aug. 11.

Carman, Glenn B. (See Westman, Le Roy A., and Carman.)

Carolyn Laundry. (See Lane, Edwin, assignor.)

Carothers, John N., Anniston, Ala., and P. Logue, St. Louis, Mo., assignors, by mesne assignments, to Swann Research Inc., Birmingham, Ala. Production of dried acid calcium phosphate. 1,818,114; Aug. 11.

Carpenter, Carl W., Santa Barbara, Calif. Valve. 1,817,917; Aug. 11.

Carrier Construction Company. (See Smith, Milton S., assignor.)

Carson, John R., New Hope, Pa., and S. P. Mead, New York, N. Y., assignors to American Telephone and Telegraph Company. Concentric conductor transmission system. 1,817,964; Aug. 11.

Carteret, Paul A., Neuilly-sur-Seine, France. Spring. 1,818,040; Aug. 11.

Cartier, Raymond. Lausanne, Switzerland. Advertising device. 1,818,380; Aug. 11.

Caruth, William A., Los Angeles, Calif. Gun sight. 1,818,381; Aug. 11.

Celanese Corporation of America. (See Cope, Ernest C., assignor.)

Celanese Corporation of America. (See Dreyfus, C., and Blume, assignors.)

Celanese Corporation of America. (See Ellis, George H., assignor.)

Celanese Corporation of America. (See Rivat, G., and Dreyfus, assignors.)

Central Metallic Casket Co. (See Ostwald, William, assignor.)

Century Furniture Company. (See Tucker, William D., assignor.)

Chafkin, George C., Brooklyn, N. Y. Safety gas tank cap. 1,818,608; Aug. 11.

Chapin, Edward S., Pawtucket, R. I., assignor to The Deltex Company. Apparatus for treating and ageing fabrics. 1,818,041; Aug. 11.

Chapman, Arthur B., assignor to The Double-A Alarm Company, Oshkosh, Wis. Clock for alarm systems. 1,818,958; Aug. 11.

Chase, George C., South Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,818,790; Aug. 11.

Chavanne, Louis, Paris, France. Obtaining various gases and recovering by-products. 1,818,533; Aug. 11.

Chemical Construction Corporation. (See Hechenbleikner, Igenuin, assignor.)

Chemipulp Process, Inc. (See Van de Carr, Charles R., jr., assignor.)

Chéron, Pierre J., Stratford, Conn. Electric wall plug. Des. 84,809; Aug. 11.

Cherry-Burrell Corporation. (See Feldmeier, Harvey, assignor.)

Chevalier, La Rue B., Iola, Kans. Polish rod hanger. 1,818,303; Aug. 11.

Chevalier, La Rue B., Iola, Kans. Wrist pin. 1,818,304; Aug. 11.

Chicago Faucet Company, The. (See Steen, Harry S., assignor.)

Chicago Flexible Shaft Company. (See Madsen, Carl T., assignor.)

Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)

Chicago Pneumatic Tool Company. (See Nickerson, Ira L., assignor.)

Chiksan Oil Tool Co. (See Kubin, V. J., and Funderburk, assignors.)

Chirelstein, Nathan. (See Weisberg, Sidney M., assignor.)

Christie, John, assignor to Eastman Kodak Company, Rochester, N. Y. Holding film flat in roll-film cameras. 1,817,965; Aug. 11.

Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Lathe. 1,818,042; Aug. 11.

Chrysler Corporation. (See Baker, Joseph A., assignor.)

Chrysler Corporation. (See Breer, Carl, assignor.)

Chrysler Corporation. (See Campbell, Elba E., assignor.)

Chrysler Corporation. (See Maynard, Howard E., assignor.)

Claghorn, Clarence R., Baltimore, Md. Conveyer. 1,818,115; Aug. 11.

Clark, J. L., Manufacturing Company. (See Mills, Wallace C., assignor.)

Class, George M., assignor to Gisholt Machine Company, Madison, Wis. Collet chuck. 1,818,305; Aug. 11.

Class, John F., Dayton, Ohio. Fume generating and inhaling apparatus. 1,818,692; Aug. 11.

Claster, Louis, et al. (See Federbusch, Oscar, assignor.)

Claster, Maurice H., et al. (See Federbusch, Oscar, assignor.)

Cleveland Crane & Engineering Company. (See Bennington, Earl T., assignor.)

Cleveland Trust Company, The. (See Covert, Martin B., assignor.)

Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Antioxidant or age-resister. 1,818,942; Aug. 11.

Coady, Sylvester. (See Coady, W. F. and S.)

Coady, William F. and S., Detroit, Mich. Window lock. 1,818,043; Aug. 11.

Coe, Frank S., assignor to American Bosch Magneto Corporation, Springfield, Mass. Bracket for tuners. 1,818,693; Aug. 11.

Cohn, Mary, New York, N. Y. Voice doll rattle. 1,818,306; Aug. 11.

Coleman, Jacques G., Woodmere, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,817,966; Aug. 11.

Collins, George. (See Condon, Wilfred H., assignor.)

Collis Company, The. (See Bouda, Bohumil, assignor.)

Columbian Rope Company. (See Corbett, Herbert A., assignor.)

Compagnie Internationale Pour La Fabrication Des Essences Et Petroles. (See Joseph, Alfred, assignor.)

Condit Electrical Manufacturing Corporation. (See Burnham, George A., assignor.)

Condon, Wilfred H., assignor of fifty per cent to G. Collins, Burlington, Vt. Railroad safety crossing. 1,818,534; Aug. 11.

Cone, Carroll, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,818,195; Aug. 11.

Congor Mfg. Company, The. (See Gorsuch, Robert A., assignor.)

Connecticut Telephone & Electric Corporation. (See Cadieux, Joseph O., assignor.)

Conrad, Clifford V., assignor of one-half to M. Ditchen, Portland, Oreg. Rim. 1,818,791; Aug. 11.

Conrad, Nicholas J., Wilmette, assignor, by mesne assignments, to Schweitzer & Conrad, Inc., Chicago, Ill. Primary cut-out. 1,818,382; Aug. 11.

Consolidation Coal Products Company. (See McIntire, Charles V., assignor.)

Constantin, Louis, Paris, France. Controlling device for aircraft. 1,818,044; Aug. 11.

Continental Gin Company. (See Elliott, Thomas, assignor.)

Coons, Burton C., Rochester, assignor to Coons Machinery Corporation, Gates, N. Y. Method and apparatus for coring fruit. 1,817,967; Aug. 11.

Coons Machinery Corporation. (See Coons, Burton C., assignor.)

Cooper, Hugh S., and M. Merlub-Sobel, Cleveland, Ohio, assignors to Kemet Laboratories, Inc. Coating substances. 1,818,196; Aug. 11.

Cooper, Michael K., Liverpool, England. Vacuum cleaner. 1,818,959; Aug. 11.

Coovert, Richard H., and L. W. Wilkinson, Willard, Ohio. Sheet rubber goods form stripper. 1,818,792; Aug. 11.

Cope, Ernest C., Spondon, near Derby, England, assignor to Celanese Corporation of America. Electrical driving of spindles for spinning, twisting, doubling, winding, and analogous processes. 1,818,535; Aug. 11.

Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerating apparatus and heat transfer therein. 1,818,673; Aug. 11.

Copper Deoxidation Corporation. (See Stout, Harry H., assignor.)

Corbett, Edward L. (See McDonald, John C., assignor.)

Corbett, Herbert A., assignor to Columbian Rope Company, Auburn, N. Y. Twine ball. 1,818,694; Aug. 11.

Cordy, Harry, Los Angeles, Calif. Aeroplane. 1,818,116; Aug. 11.

Corning Glass Works. (See Gray, David E., assignor.)

Cornell, Charles N., Larchmont, N. Y. Vanity case. 1,818,793; Aug. 11.

Cotton Harvester Corporation of America. (See Wirth, Louis E., assignor.)

Couade, Lucien, St. Denis, France. Tin with opening device. 1,818,695; Aug. 11.

Covert, Martin B., Indianapolis, Ind., assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio. Piston. 1,818,307; Aug. 11.

Cowdin, Charles E., Portland, Oreg., assignor to Cowdin Company. Writing device. 1,818,383; Aug. 11.

Cowdin Company. (See Cowdin, Charles E., assignor.)

Cowen, Isidor, New York, N. Y. Doll or similar article. Des. 84,810; Aug. 11.

Cox, John W., assignor to Erie Malleable Iron Company, Erie, Pa. Conduit fitting. 1,818,943; Aug. 11.

Cox, Paul F., assignor to Goss Printing Press Company, Chicago, Ill. Running tympan attachment. 1,818,384; Aug. 11.

Crabbe, George N. (See Lindquist, D. L., and Crabbe.)

Craig, Ollison. (See Andrews, L. V., and Craig.)

Crandell, Arthur O., Newton, Kans. Torpedo and fusee container. 1,818,197; Aug. 11.

Cross Development Corporation. (See Cross, Roy, assignor.)

Cross, Roy, Kansas City, Mo., assignor to Cross Development Corporation. Preparation of adsorbents. 1,817,968; Aug. 11.

Cross, Roy, Kansas City, Mo., assignor to Cross Development Corporation. Treating petroleum hydrocarbons. 1,817,969; Aug. 11.

Cross, Walter M., Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Process and apparatus for converting hydrocarbons. 1,818,674; Aug. 11.

Crossan, Jesse R., Wadsworth, and J. E. Mackel, Johnsons Corners, Ohio, assignors to Seiberling Rubber Company. Valved inflatable rubber formers. 1,818,536; Aug. 11.

Crouse-Hinds Company. (See Hastings, Harold P., assignee.)

Crouse-Hinds Company. (See Olley, Edwin A., assignor.)

Croxford, Arthur. (See Hover, Monte E., assignor.)

Cullander, Adolph, et al. (See Cullander, Adolph, assignor.)

Cullander, Adolph, Belzoni, Miss., assignor to E. Hagor and A. Cullander. Cotton needle and stripper. 1,818,537; Aug. 11.

Curme, George O., jr., White Plains, N. Y., assignor to Carbide and Carbon Chemicals Corporation. Thermal decomposition of hydrocarbons. Re18,148; Aug. 11.

Curtis, Arthur H., Bedford, England. Electrical plug connecter 1,818,926; Aug. 11.

Curtis, Austen M., East Orange, and E. T. Burton, Millburn, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Zero correcting circuit. 1,818,463; Aug. 11.

Curtis Manufacturing Company. (See Steedman, Edwin H., assignor.)

Curtiss Aeroplane & Motor Company. (See Moles, Howard R., assignor.)

Curtiss Aeroplane & Motor Company. (See Wait, William, jr., assignor.)

Cushman, Charles S., Barre, Vt. Stone polisher support. 1,818,675; Aug. 11.

Cutler-Hammer Inc. (See Evans, Clarence T., assignor.)

Cutler-Hammer, Inc. (See Meuer, George J., assignor.)

Da Costa, James S., Merchantville, N. J., assignor of one-half to J. B. Webb, Detroit, Mich. Driving means for conveyer chains. 1,817,970; Aug. 11.

Dana Warp Mills. (See Perrin, Alphonse R., assignor.)

Dance, William H., Cambridge, Mass. Excavating and conveying apparatus. 1,817,971; Aug. 11.

Darby, Samuel E., trustee. (See Parker, Richard B., assignor.)

Darrah, William A., Chicago, Ill. Apparatus for treating solid materials. 1,818,308; Aug. 11.

Darrow, Burgess, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Pneumatic tire casing. 1,818,944; Aug. 11.

Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Working substance for producing heat transforming effects. 1,818,117; Aug. 11.

Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,818,464; Aug. 11.

Davis, Frank K., Silver Sring, Md., and C. C. Taylor, Washington, D. C., assignors to Underwood Elliott Fisher Company, New York, N. Y. Combined typewriting and card-perforating machine. 1,818,045; Aug. 11.

Davis, Harlow M., Buffalo, N. Y. Advertising device. 1,818,538; Aug. 11.

Davis, Stanley H., Toledo, Ohio, assignor to Stokes and Smith Company, Philadelphia, Pa. Wrapper-gumming and delivery system. 1,818,198; Aug. 11.

Day, J. H., Company, The. (See Schiff, Sigmund, assignor.)

Dealers Motor Transport Inc. (See McCrea, John E., assignor.)

De Boer, Rudolph, assignor to Grand Rapids Metalcraft Corporation, Grand Rapids, Mich. Combination ash receiver and electric lighter. Des 84,811; Aug. 11.

Deere and Company. (See Paradise, Louis A., assignor.

Dee Wite, Incorporated. (See Pouliot, Russell J., assignor.)

De la Roza, Joaquin J., sr., Brooklyn, assignor to Bagasse Products Corporation, New York. N. Y. Producing fibrous threads. 1,817,972; Aug. 11.

De la Roza, Joaquin J., sr., Tuinucu, Cuba. Apparatus for removing carbon and the like from cellulose. 1,817,973; Aug. 11.

De Laval Separator Company, The. (See Flowers, Alan E., assignor.)

Delco-Light Company. (See Dickey, E., and Starr, assignors.)

De Leeuw, Adolph L., Plainfield, N. J., assignor to Gotham Knitbac Machine Corporation, New York, N. Y. Fabric repairing apparatus. 1,818,696; Aug. 11.

Dell, George W., Cheviot, assignor to The Triumph Manufacturing Company, Cincinnati, Ohio. Dough molding machine. 1,818,945; Aug. 11.

Delta-Star Electric Company, The. (See Alsaker, A., and Nordhem, assignors.)

Deltex Company, The. (See Chapin, Edward S., assignor.)

Deming, William L., Salem, Ohio. Folding table. 1,818,118; Aug. 11.

Demuynck, Alphonse, Brussels, Belgium. Internal combustion rotary engine. 1,818,882; Aug. 11.

Denison, Frederick S., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Thermostatic switch. 1,818,697; Aug. 11.

De Pamphilis, Gennaro, New York, N. Y. Paper perforating device for typewriters. 1,818,046; Aug. 11.

Deppe, William P. (See Musso, Alfred, assignor.)

De Remer, J. G. Research Corporation. (See De Remer, Jay G., assignor.)

De Remer, Jay G., Greenwich, Conn., assignor, by meane assignments, to J. G. de Remer Research Corporation, Jersey City, N. J. Massage apparatus. 1,818,465; Aug. 11.

De Tovaros, Gyula F., Budapest, Hungary. Pantograph current collector for electric vehicle. 1,818,842; Aug. 11.

Detrick, M. H. Company. (See Hosbein, Louis H., assignor.)

Detroit, Dental Manufacturing Company. (See Kerr, Robert M., assignor.)

Detroit Steel Products Company. (See Loucks, James F., assignor.)

Deutsche Hydrierwerke Aktiengesellschaft. (See Bakonyi, Stefan, assignor.)

Devereaux, Francis A., assignor to B. P. Murphy, Anoka, Minn. Wrench. 1,818,385; Aug. 11.

De Villard, Jean F., assignor of one-tenth to A. Rogul, East St. Louis, Ill. Aeroplane. 1,818,309; Aug. 11.

Dewey and Almy Chemical Company. (See Johnson, Clyde W., assignor.)

Diamond Machine Company. (See Stratton, Frank E., assignor.)

Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)

Dicke, Allen A., Montclair, and C. H. Dicke, Nutley, N. J. Motor for heat regulators. 1,818,698; Aug. 11.

Dicke, Carl H. (See Dicke, Allen A., and C. H.)

Dickey, Ernest, and F. F. Starr, assignors to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,818,047; Aug. 11.

Dickstein, Samuel, and L. H. Weinstein, New York, N. Y. Automatic gas hose shut off device. 1,818,609; Aug. 11.

Dienner, John A., Evanston, assignor to Stromberg Research Corporation, Chicago, Ill. Shock absorber. 1,818,386; Aug. 11.

Dietz, Karl. (See Frank, K., and Dietz.)

Dietzgen, Eugene Co. (See Langsner, Adolph, assignor.)

Di Ionno, Frank, Millburn, N. J. Penholder or similar article. Des. 84,812; Aug. 11.

Dike, George P. (See Mathez, Samuel, assignor.)

Dill, Melvin, Lynn, assignor to H. A. Haley, Plymouth, Mass. Level. 1,818,843; Aug. 11.

Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Mechanical system. 1,818,048; Aug. 11.

Dinzl, Richard W., Margate City, N. J., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa. Steam platen. 1,818,387; Aug. 11.

Direct Control Valve Company. (See Lawler, James J., assignor.)

Ditchen, Mike. (See Conrad, Clifford V., assignor.)

Doane, Leroy C., and H. H. Wolter, assignors to The Miller Company, Meriden, Conn. Lighting fixture wall bracket. 1,818,119; Aug. 11.

Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Lighting appliance. 1,818,120; Aug. 11.

Dobmaier, Karl, Wiesdorf, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New azodyestuff. 1,818,049; Aug. 11.

Dodge, Adiel Y., South Bend, Ind., and W. L. Pollard, Evanston, assignors to Bendix Brake Company, Chicago, Ill. Brake. 1,818,199; Aug. 11.

Dodge, Floyd V., and F. M. Wykert, Grant, assignors of one-third to A. J. Karraker, Venango, Nebr. One-way clutch. 1,818,844; Aug. 11.

Doherty Research Company. (See Setchkin, Nicholas P., assignor.)

Dolding, Chester J. (See Smith, C. J., McNeill, and Dolding.)

Donaldson Manufacturing Company. (See Hadden, William J., assignor.)

Donnelly, John. (See Forsberg, H. S., and Donnelly.)

Dorrington, Neill E. (See Peterson, W. R., and Dorrington.)

Dorsey, Farnum F., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Typewriting machine. 1,818,200; Aug. 11.

Doty, Wade, Jamestown, N. Y., assignor to International Air Brake Company, Salt Lake City, Utah. Fluid braking valve. 1,818,676; Aug. 11.

Double-A Alarm Company, The. (See Chapman, Arthur B., assignor.)

Douglas, Harry A., Bronson, Mich. Internal combustion engine power plant. 1,817,974; Aug. 11.

Douglas, Harry A., Bronson, Mich. Electric lamp. 1,817,975; Aug. 11.

Dow, Edwin A., Worcester, Mass. Valve construction. 1,818,050; Aug. 11.

Dow, Scott J., jr., Hinsdale, Ill. Differential speed power transmission device. 1,818,310; Aug. 11.

Drager, Amil L., Beloit, Wis. Automobile tire chain. 1,818,794; Aug. 11.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Annealing leer. 1,818,201; Aug. 11.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for producing sheet glass. 1,818,202; Aug. 11.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for producing molten glass. 1,818,203; Aug. 11.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for forming sheet glass. 1,818,204; Aug. 11.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass drawing apparatus. 1,818,205; Aug. 11.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process for the production of plate glass blanks. 1,818,206; Aug. 11.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process of and apparatus for forming sheet glass. 1,818,207; Aug. 11.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for forming and annealing sheet glass. 1,818,208; Aug. 11.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,818,209; Aug. 11.

Drescher, Hugh A. E., W. Smith, and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Production of anthraquinone derivatives. 1,818,311; Aug. 11.

Dreyfus, Camille. (See Rivat, G., and Dreyfus.)

Dreyfus, Camille, New York, N. Y. Pile fabric. 1,818,540; Aug. 11.

Dreyfus, Camille, and W. R. Blume, New York, N. Y., assignors to Celanese Corporation of America. Textile material containing organic esters of cellulose and method of preparing the same. 1,818,466; Aug. 11.

Drill, Daniel C. (See Mottweiler, O. F., and Drill.)

Drucker, William J., Chicago, Ill. Cutter. 1,818,467; Aug. 11.

Duebelbeis, George, Kirkwood, Mo. Check book cover. 1,818,210; Aug. 11.

Duncan Electric Manufacturing Company. (See Emens, Albert L., assignor.)

Duncan, Thomas P., jr., Newport News, Va. Furniture caster. 1,818,211; Aug. 11.

Dünhölter, Heinrich, Berlin, Germany. Taximeter or fare recorder. 1,818,853; Aug. 11.

Duplessis, René E., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Device for supplying fastenings. 1,818,051; Aug. 11.

Du Pont, E. I., de Nemours & Company. (See Parratt, Arthur N., assignor.)

Du Pont, E. I., de Nemours and Company. (See Theumann, Max J., assignor.)

Dura Company, The. (See Floraday, Burton S., assignor.)

Dura Company, The. (See Nicholson, Stanley W., assignor.)

Dusenbury, Henry G., Essex Fells, and S. Isermann, Summit, N. J. Toilet preparation. 1,818,699; Aug. 11.

Easterwood, Henry W. (See Weigel, R., and Easterwood.)

Eastman Kodak Company. (See Capstaff, John G., assignor.)

Eastman Kodak Company. (See Christie, John, assignor.)

Eastman Kodak Company. (See Favour, Paul, assignor.)

Eastman Kodak Company. (See Wittel, Otto, assignor.)

Eaton Axle & Spring Company, The. (See Reid, James S., assignor.)

Eaton, Ernest E., assignor to Brown-Lipe Gear Company, Syracuse, N. Y. Clutch member. 1,818,610; Aug. 11.

Eckhard, William K., Dunellen, N. J., assignor to R. Hoe & Co. Inc., New York, N. Y. Timing mechanism for printing machines. 1,818,312; Aug. 11.

Eckstein, Reuben, New York, N. Y. Portable electric lighting outfit. 1,818,884; Aug. 11.

Eclipse Machine Company. (See Richards, Julius H., assignor.)

Edgerton, Israel V., assignor to Palace Poultry Car Company, Chicago, Ill. Compartment lock for poultry cars. 1,818,052; Aug. 11.

Edwards, James H., Passaic, N. J., and R. A. Marble, Ben Avon, Pa., assignors to United States Steel Corporation, New York, N. Y. Rolled H-section. 1,818,121; Aug. 11.

Egry Register Company, The. (See Pfeiffer, Frank E., assignor.)

Egyesult Izzolampa es Villamossagi Reszvenytarsasag. (See Selenyi, Paul, assignor.)

Ehrhardt, Alfred. (See Nawiasky, P., Braunsdorf, and Ehrhardt.)

Eichholz, Willy. (See Luettringhaus, A., Neresheimer, and Eichholz.)

Eichmann, Theophil. (See Rufener H., and Eichmann.)

Eisemann Magneto Corporation, The. (See Tabb, Warner T., assignor.)

Eisenhut, August. (See Pier, M., Boesler, and Eisenhut.)

Electric Heating Devices, Inc. (See Thorsness, O. D., and Tower, assignor.)

Electric Household Utilities Corporation. (See Hume, John T., assignor.)

Electrolux Servel Corporation. (See Ryden, Eric H., assignor.)

Electromatic Typewriters, Inc. (See Dorsey, Farnum F., assignor.)

Elger, Joseph, Chicago, Ill. Duplex automatic air vent valve. 1,818,053; Aug. 11.

Elliott Company. (See Bergquist, Hugo, assignor.)

Elliott, Harry C., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,817,976; Aug. 11.

Elliott, Thomas, Birmingham, Ala., assignor to Continental Gin Company. Screw conveyer. 1,818,055; Aug. 11.

Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Dyeing or coloring of products made with cellulose acetate. 1,818,541; Aug. 11.

Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Dyeing or coloring of products made with cellulose acetate. 1,818,542; Aug. 10.

Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Dyeing and coloring of products made with cellulose acetate. 1,818,543; Aug. 11.

Elmen, Gustaf W., Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Magnetic material. 1,818,054; Aug. 11.

Emens, Albert L., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Electricity meter. 1,818,795; Aug. 11.

Emerson, George H., and W. B. Whitsitt, Baltimore, Md. Siphon generator and circulator for locomotive boilers. 1,818,544; Aug. 11.

Emmer, Hans J. (See Luettringhaus, A., Neresheimer, and Emmer.)

Engbrecht, Herman J., Chicago, Ill. Receptacle evacuating apparatus. 1,817,918; Aug. 11.

Engbrecht, Herman J., Kansas City, Mo., assignor to Standard Oil Company, Whiting, Ind. Receptacle-evacuating apparatus. 1,818,122; Aug. 11.

Engbrecht, Herman J., Kansas City, Mo., assignor to Standard Oil Company, Whiting, Ind. Adapter for the drain outlets of crank cases. 1,818,123; Aug. 11.

Engbrecht, Herman J., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Drain pipe device. 1,818,124; Aug. 11.

Enstrom, August, assignor to Pettibone Mulliken Company, Chicago, Ill. Split-switch structure. 1,818,885; Aug. 11.

Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)

Epstein, Albert K., and B. R. Harris, Chicago, Ill. Egg white process. 1,818,212; Aug. 11.

Epstein, Albert K., and B. R. Harris, Chicago, Ill. Egg white process. 1,818,213; Aug. 11.

Epstein, Albert K., and B. R. Harris, Chicago, Ill. Egg white process. 1,818,214; Aug. 11.

Epstein, Albert K., and B. R. Harris, Chicago, Ill. Egg white product and process. 1,818,215; Aug. 11.

Erickson, Carl I., Glendale, Ariz. Pivot point. 1,818,886; Aug. 11.

Ericson, Gunnar F. (See Jacobson, G., and Ericson.)

Erie Malleable Iron Company. (See Cox, John W., assignor.)

Eriksson, Bengt G., Orebro, Sweden. Tent. 1,818,545; Aug. 11.

Ernst, Walter, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Radial pump. 1,818,611; Aug. 11.

Evans, Clarence T., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer Inc. Thermoresponsive device and method of improving the action thereof. 1,818,546; Aug. 11.

Eve, Robert C., Atlanta, Ga. Smoker's appliance. 1,818,125; Aug. 11.

Everett, Edward A. (See Work, L. T., Imes, and Everett.)

Everett, W. R. (See Holmes, Andrew J., assignor.)

Eversharp Lawn Mower Company. (See Gratiot, Chester A., assignor.)

Everts-Ellington Campony. (See Everts, Walter W., assignor.)

Everts, Walter W., assignor to Everts-Ellington Company, San Antonio, Texas. Power transmitting device. 1,818,313; Aug. 11.

Exact Weight Scale Company, The. (See Hallead, Mervil, assignor.)

F. & N. Lawn Mower Company. (See Lontz, Harry R., assignor.)

Fairbanks, Morse & Co. (See Rosner, Adolph, assignor.)

Fairley, John G., Hattiesburg, Miss. Road machine. 1,818,887; Aug. 11.

Falulah Paper Company. (See Lowe, Joseph A., assignor.)

Fancher, Charles H., jr. (See Gilmore, Frank E., assignor.)

Fandrey, Otto R., Toledo, Ohio. Table lamp. Des. 84,813; Aug. 11.

Farley, Louis L., Los Angeles, Calif. Cleaning device. 1,818,388; Aug. 11.

Farmer, Albert J., Detroit, Mich. Measuring valve for lubricating systems. 1,818,314; Aug. 11.

Farrel-Birmingham Company. (See Banbury, Fernley H., assignor.)

Favour, Paul, assignor to Eastman Kodak Company, Rochester, N. Y. Motion picture film. 1,817,977; Aug. 11.

Federbusch, Oscar, assignor of twenty-five per cent to M. H. Claster and twenty-five per cent to L. Claster, Arnold, Pa. Fountain pen. 1,818,216; Aug. 11.

Little Falls, N. Y. Liquid storage or tempering apparatus. 1,817,978; Aug. 11.

Felt & Tarrant Mfg. Co. (See Niemann, Frederick A., assignor.)

Felten & Guilleaume Fabrikelektrischer Kabel-Stahl- und Kupferwerke Aktiengesellschaft. (See Fessl, Ferdinand, assignor.)

Feltyberger, Samuel, Pittsburgh, Pa. Golf unit. 1,818,700; Aug. 11.

Feragen, A. E., Inc. (See Bennett, Claude C., assignor.)

Ferguson, James H., jr., Wilkinsburg, Pa. Wall or crib structure. 1,818,058; Aug. 11.

Ferngren, Enoch T., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for flowing sheet glass. 1,818,217; Aug. 11.

Ferrier, Peter H., jr., Brookfield, Ill. Water heater. 1,818,057; Aug. 11.

Fessl, Ferdinand, assignor to Felten-Guilleaume Fabrikelektrischer Kabel-Stahl- und Kupferwerke Aktiengesellschaft, Vienna, Austria. Method of and machine for stranding special or figured wires. 1,818,845; Aug. 11.

Feyens, François, assignor to Société Générale D'Etudes Industrielles, General Research Corporation, Société Anonyme, Brussels, Belgium. Internal combustion engine. 1,818,796; Aug. 11.

Feyens, François, assignor to Société Générale D'Etudes Industrielles, General Research Corporation, Société Anonyme, Brussels, Belgium. Hermetic closure for joints such as those between pump bodies and their plungers. 1,818,797; Aug. 11.

Fickenscher, Adam, Moorefield, Nebr. Tractor attachment. 1,818,468; Aug. 11.

Filtrod Company of California. (See Baylis, Walter S., assignor.)

Finkelstein, Hans, Uerdingen, Niederrhein, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Lacquer for application by brushing. 1,818,547; Aug. 11.

Firestone Footwear Company. (See Bain, Alexander C., Aug. 11.

First National Bank of Chattanooga, The. (See Leventhal, Jacob F., assignor.)

Fischer, Franz J., assignor to the firm Koch & Sterzel Aktiengesellschaft, Dresden, Germany. Rectifier. 1,818,701; Aug. 11.

Fitch, William H., Fort Worth, Tex. Automatic tourist log. 1,817,979; Aug. 11.

Fitchburg Weaving Company. (See Baker, Fred., assignor.)

Flinchbaugh, Frederick T. (See Manley, B. E., and Flinchbaugh.)

Floraday, Burton S., assignor to The Dura Company, Toledo, Ohio. Handle. 1,818,612; Aug. 11.

Flowers, Alan E., Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Causing a reaction between an aqueous reagent and impurities in oil. 1,818,702; Aug. 11.

Floyd, Alfred T., jr., assignor of forty-nine per cent to Elmer R. Scott, Little Rock, Ark. Muffler for engines. 1,818,469; Aug. 11.

Folk, Joseph, assignor to U. S. Slicing Machine Company, La Porte, Ind. Slice receiver and collector. 1,818,242; Aug. 11.

Folk, Joseph, assignor to U. S. Slicing Machine Company, La Porte, Ind. Assembling device for slicing machines. 1,818,244; Aug. 11.

Folk, Joseph, assignor to U. S. Slicing Machine Company, La Porte, Ind. Slicing machine. 1,818,245; Aug. 11.

Ford, James G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Reconditioning oils. 1,818,218; Aug. 11.

Forman, Paris R., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Universal control valve. 1,818,703; Aug. 11.

Forsberg, Harold S., Stratford, and J. Donnelly Branford, Conn.; said Donnelly assignor to said Forsberg. Saw frame. 1,817,980; Aug. 11.

Fox, Francis S. (See Pouchain, R. A., and Fox.)

Frank, Karl, and K. Dietz, Hochst-on-the-Main, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing acid-proof cementing or lining compositions. 1,818,888; Aug. 11.

Frantz, Ralph W., Houston, Tex. Wall construction. 1,818,704; Aug. 11.

Fray Jewelry Company. (See Hamin, Samuel A., assignor.)

Frazee, Arthur M., Duluth, Minn. Ore dock. 1,818,470; Aug. 11.

Free Sewing Machine Company, The. (See Kelso, Ralph S., assignor.)

Freedlander, Abraham L., Dayton, Ohio. Pulley. 1,818,798; Aug. 11.

French, Frederick, W., Oakland, Calif. Trap. 1,818,315; Aug. 11.

French Oil Mill Machinery Company, The. (See Simon, Forest C., assignor.)

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,814; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,815; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,816; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,817; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,818; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,819; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,820; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,821; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,822; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,823; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,824; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,825; Aug. 11.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or similar article. Des. 84,826; Aug. 11.

Freund, Herman R., assignor to Intertype Corporation, Brooklyn, N. Y. Assembler drive clutch for typographical machines. 1,818,946; Aug. 11.

Freysinger, John B., assignor to North & Judd Manufacturing Company, New Britain, Conn. Buckle. Des. 84,827; Aug. 11.

Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1,818,548; Aug. 11.

Fried Krupp Aktiengesellschaft. (See Lehmann, K. A., and Ranglack, assignors.)

Friedman, Isaac, Brooklyn, N. Y. Fur or pelt cutting machine. 1,818,058; Aug. 11.

Frigidaire Corporation. (See King, Jesse G., assignor.)

Frigidaire Corporation. (See Ritter, C. C., and Williams, assignors.)

Frost, George, Company. (See Glidden, George B., assignor.)

Fullman, James M. G., Sewickley, Pa., and G. A. Lutz, Plainfield, N. J., assignors to National Electric Products Corporation, New York, N. Y. Wall box base for conduit systems. 1,818,389; Aug. 11.

Funderburk, Perry. (See Kubin, V. J., and Funderburk.)

Furman, Abraham P., assignor to Thames Silk Company, New London, Conn. Apparatus and method for spinning fibers in precipitating baths. 1,818,549; Aug. 11.

Galbreath, William W., Warren, Ohio. Machine for expanding metal. 1,818,246; Aug. 11.

Garfinkel, Samuel L., Wichita, Kans. Necktie pressing form. 1,818,880; Aug. 11.

Gasoline Products Company. (See Cross, Walter M., assignor.)

Gaviak, Joseph G., Monongahela, Pa. Milk bottle holder. 1,818,059; Aug. 11.

Gay, Frazer W., Newark, N. J. Propelling ships. 1,818,705; Aug. 11.

Gaylord Brothers, Incorporated. (See Van Dusen, George, assignor.)

Genauque, Harry A., Galesburg, Ill. Burner. 1,818,471; Aug. 11.

Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Inductance system. 1,818,816; Aug. 11.

General Aniline Works, Inc. (See Bruck, W., and Helwert, assignors.)

General Aniline Works, Inc. (See Dobmaier, Karl, assignor.)

General Aniline Works, Inc. (See Hentrich, W., Hardtmann, and Knoche, assignors.)

General Aniline Works, Inc. (See Lange, Werner, assignor.)

General Aniline Works, Inc. (See Leopold, R., and Paquin, assignors.)

General Aniline Works, Inc. (See Luettringhaus, A., Neresheimer, and Eichholz, assignors.)

General Aniline Works, Inc. (See Luettringhaus, A., Neresheimer, and Emmer, assignors.)

General Aniline Works, Inc. (See Lüttringhaus, A., Nawiasky, and Krause, assignors.)

General Aniline Works, Inc. (See Nawiasky, P., Braunsdorf, and Ehrhardt, assignors.)

General Aniline Works, Inc. (See Wolfram, A., and Hausdörfer, assignors.)

General Aniline Works, Inc. (See Zitscher, Arthur, assignor.)

General Cable Corporation. (See Hunter, Joseph H., assignor.)

General Electric Company. (See Blume, Louis F., assignor.)

General Electric Company. (See Bowman, F. H., Lynch, and Price, assignors.)

General Electric Company. (See Herden, Wilhelm, assignor.)

General Electric Company. (See Hull, John I., assignor.)

General Electric Company. (See Kearsley, William K., assignor.)

General Electric Company. (See McIlvin, Leon D., assignor.)

General Electric Company. (See Otis, Albert N., assignor.)
General Electric Company. (See Stafford, John K., assignor.)
General Electric Company. (See Thumin, Carl, assignor.)
General Electric Company. (See Tolson, William A., assignor.)
General Electric Company. (See Walle, Ludwig S., assignor.)
General Electric Vapor Lamp Company. (See Buttolph, Leroy J., assignor.)
General Engineering Trust. (See Hamblen, Jennings B.)
General Insulating and Manufacturing Company. (See Mottweiler, O. F., and Drill, assignors.)
General Mills, Inc. (See Anderson, Helmer, assignor.)
General Railway Signal Company. (See Bushnell, Charles S., assignor.)
General Railway Signal Company. (See Ross, Oscar A., assignor.)
Germain, Ernest, Montreal, Quebec, Canada. Automobile antiglare lighting system. 1,818,126; Aug. 11.
Gesellschaft für Drahtlose Telegraphie m. b. H. (See Beckmann, August, assignor.)
Gesellschaft für Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.)
Gifford-Wood Company. (See Happel, Albert, assignor.)
Gilbert, John J., Port Washington, L. I., assignor to Western Electric Company, Incorporated, New York, N. Y. Submarine cable insulation. 1,818,127; Aug. 11.
Giles, Stella A., Hutchinson, Kans. Recovering gold and silver. 1,818,846; Aug. 11.
Gill, Donald W., Cincinnati, assignor to The Frank F. Taylor Company, Norwood, Ohio. Child's vehicle. Des. 84,828; Aug. 11.
Gillette, Harleigh, Chicago, Ill. Clock operating mechanism. 1,818,613; Aug. 11.
Gillette Safety Razor Company. (See Coleman, Jacques G., assignor.)
Gillette Safety Razor Company. (See Marcy, Grosvenor D., assignor.)
Gilmore, Frank E., assignor of one-half to C. H. Fancher, jr., Spokane, Wash. Outlet box. 1,818,317; Aug. 11.
Gisholt Machine Company. (See Glass, George M., assignor.)
Glade, George H., jr., Chicago, Ill. Lamp socket. 1,818,614; Aug. 11.
Glaser, Crandell Co. (See McDonough, Frank J., assignor.)
Glasier, Harold H., Los Angeles, Calif. Traction device. 1,818,550; Aug. 11.
Glasier, Harold H., Los Angeles, Calif. Oscillating spader. 1,818,551; Aug. 11.
Gleason Works. (See Head, Ernest C., assignor.)
Glidden, George B., Dighton, assignor to George Frost Company, Boston, Mass. Garter. 1,818,472; Aug. 11.
Globar Corporation. (See Boyer, John A., assignor.)
Gluksmann-Rodanski, Daniel. (See Nourry, P., and Gluksmann-Rodanski.)
Gluud, Wilhelm, Dortmund-Eving, Germany. Eliminating sulphuretted hydrogen from gases. 1,818,615; Aug. 11.
Goddard, Arthur L., Madison, Wis., assignor to K. G. Rennie, Chicago, Ill. Combined vibratory interrupter and transformer. 1,818,318; Aug. 11.
Goldberg, Maximilian M., assignor to The National Cash Register Company, Dayton, Ohio. Auditing machine. 1,818,473; Aug. 11.
Gold Medal Camp Furniture Co. (See Brown, Newton N., assignor.)
Goldsmith, John N., London, T. T. Baker, Hatch End, Middlesex, and C. Bonamico, assignors to Spicers Limited, London, England. Color photography. 1,818,927; Aug. 11.
Gollnick, Paul A., and F. W. Broderick, assignors, by mesne assignments, to Selectograph Company, Chicago, Ill. Inking mechanism for addressing machines. 1,818,706; Aug. 11.
Good, Henry O., Brownwood, Tex. Electric fountain. 1,818,319; Aug. 11.
Good Inventions Co. (See Good, John, assignor.)
Good, John, Garden City, assignor to Good Inventions Co., New York, N. Y. Oil burner. 1,818,610; Aug. 11.
Goodman Manufacturing Company. (See Sloane, William W., assignor.)
Goodman, Max. (See Goodman, S., and M.)
Goodman, Samuel and M., Boston, Mass. Roof flange. 1,818,219; Aug. 11.
Goodrich, William O., Company et al. (See Long, James S., assignor.)
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goodyear Tire & Rubber Company, The. (See Darrow, Burgess, assignor.)
Goodyear Tire & Rubber Company, The. (See Handy, George A., assignor.)
Goodyear Tire & Rubber Company, The. (See Maas, Elov F., assignor.)
Goodyear Tire & Rubber Company, The. (See Teppema, Jan, assignor.)
Goodyear Tire & Rubber Company, The. (See Teppema, J., and Sebrell, assignors.)
Goodyear Tire & Rubber Company, The. (See Van Rennes, Cornelis, assignor.)
Goodyear Zeppelin Corporation. (See Helma, P., and Arnstein, assignors.)
Goodyear-Zeppelin Corporation. (See Rieger, Leonz P. A., assignor.)
Gordon, Charles W., Pleasantville, assignor to The Superheater Company, New York, N. Y. Boiler. 1,818,390; Aug. 11.
Gorsuch, Robert A., assignor to The Congor Mfg. Company, Gambier, Ohio. Unfolding construction for brooders and other inclosures. 1,818,320; Aug. 11.
Goss Printing Press Company. (See Cox, Paul F., assignor.)
Gossrau, Gotthard. (See Jaeger, M., Pokorny, and Gossrau.)
Gotham Knitbac Machine Corporation. (See De Leeuw, Adolph L., assignor.)
Gotham Knitbac Machine Corporation. (See Parlini, Alexander C., assignor.)
Gotham Silk Hosiery Company. (See Redcay, Paul D., assignor.)
Gough, Achilles C., Pocatello, Idaho. Gaff hook. 1,818,474; Aug. 11.
Gough, Fred J. (See Brookby, H. E., and Gough.)
Grand Rapids Metalcraft Corporation. (See De Boer, Rudolph, assignor.)
Grasselli Chemical Company, The. (See Booge, James E., assignor.)
Grasselli Chemical Company, The. (See Lutz, G., and Westbrook, assignors.)
Grasselli Chemical Company. (See Westbrook, Leon R., assignor.)
Gratiot, Chester A., Portland, Oreg., assignor to Eversharp Lawn Mower Company, Reno, Nev. Lawn mower. 1,818,220; Aug. 11.
Gray, Chester E. (See Turnbow, Grover D., assignor.)
Gray, David E., Corning, assignor to Corning Glass Works, New York, N. Y. Loading and unloading device. 1,818,475; Aug. 11.
Green, Estill I. (See Affel, H. A., and Green.)
Green, John L., El Dorado, Ark. Oil purifier. 1,818,476; Aug. 11.
Greene, Oscar V., Cleveland, Ohio. Self cleaning filter. 1,818,391; Aug. 11.
Grennan, Philip H., Detroit, Mich. Display device. 1,818,247; Aug. 11.
Gresser, Peter, Detroit, Mich. Grease gun. 1,818,530; Aug. 11.
Grigsby-Grunow Company. (See Grunow, William C., assignor.)
Grimes, James E., assignor, by mesne assignments, to National Cantube Corporation Inc., Chicago, Ill. Container. 1,818,707; Aug. 11.
Grinwald, Edward J., Seattle, Wash. Smoker's table protector. 1,818,617; Aug. 11.
Gritt, Frank, assignor, by mesne assignments, to Gritt, Inc., Indianapolis, Ind. Display device. 1,818,248; Aug. 11.
Gritt Inc. (See Gritt, Frank, assignor.)
Groble Gas Regulator Co. (See Groble, Jacob C., assignor.)
Groble, Jacob C., assignor to Groble Gas Regulator Co., Anderson, Ind. Mushroom vent plug. 1,818,249; Aug. 11.
Groene, William F., assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio. Automatic lathe. 1,818,128; Aug. 11.
Groove Lock Co. Inc. (See Berger, Charles, assignor.)
Groove Lock Co. Inc. (See Leberman, Harry, assignor.)
Grubb, Herbert H., assignor to Humane Stanchion Works, Baraboo, Wis. Animal stall. 1,818,552; Aug. 11.
Grunow, William C., assignor to Grigsby-Grunow Company, Chicago, Ill. Current supply apparatus. 1,818,947; Aug. 11.
Grupe, William F., Rutherford, N. J., assignor to Armstrong Cork Company, Lancaster, Pa. Refrigerating cabinet. 1,818,129; Aug. 11.
Grüss, Heinz, Berlin-Staaken, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany. Apparatus for measuring a plurality of values. 1,818,847; Aug. 11.
Guardian Trust Company, The. (See Snyder, George C., assignor.)
Guardian Trust Company, executor. (See Vail, George I.)
Gutzke, Robert, Penticton, British Columbia, Canada. Coring and slicing device. 1,818,848; Aug. 11.
Gyro Process Company, The. (See Weaver, J. B., and Wagner, assignors.)
Haas, Ira G., Far Rockaway, assignor to Sherwin, Haas & Co., New York, N. Y. Display device. 1,818,799; Aug. 11.
Haas, Lucien L., assignor to Buffalo Pressed Steel Co., Buffalo, N. Y. Muffler. 1,817,981; Aug. 11.
Hadad, Mitchel E., Brooklyn, N. Y. Negligée pyjama garment. 1,818,849; Aug. 11.
Hadden, William J., assignor to Donaldson Manufacturing Company, Limited, Glasgow, Scotland. Head for golf clubs. 1,818,553; Aug. 11.
Häggland, Erik, Abo, Finland, assignor to the firm Holzhydrolyse Aktiengesellschaft, Heidelberg, Germany. Purification of carbohydrates obtained by hydrolysis of cellulose by means of hydrochloric acid. 1,818,618; Aug. 11.
Hagor, Enoch, et al. (See Cullander, Adolph, assignor.)
Halbach, Howard L., Clarksburg, W. Va., assignor to Pittsburgh Plate Glass Company. Apparatus for making glass sheets. 1,818,130; Aug. 11.

Haley, Harry A. (See Dill, Melvin, assignor.)
Hall-Brown, Archibald, Purley, and E. W. Jones, Lincoln, England, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Airship mooring mast gear. 1,818,603; Aug. 11.
Hall, Randolph F., Ithaca, N. Y. Airplane. 1,818,321; Aug. 11.
Hall, Randolph F., Ithaca, N. Y. Airplane. 1,818,322; Aug. 11.
Hallead, Mervil, assignor to The Exact Weight Scale Company, Columbus, Ohio. Bearing. 1,818,323; Aug. 11.
Hallwood, Nathan A. (See Sundell, Gustaf A., assignor.)
Hamblen, Jennings B., Whiting, Ind., assignor to H. V. Atwell, V. Vorrhees, and J. B. Hamblen, trustees, operating under the name of General Engineering Trust. Mop-shaking device. 1,818,948; Aug. 11.
Hamblen, Jennings, B., et al., trustees. (See Hamblen, Jennings B., assignor.)
Hamin, Samuel A., assignor to Fray Jewelry Company, Providence, R. I. Means and method for mounting stones and the like. 1,818,324; Aug. 11.
Hammon, George L., assignor to National Welding Equipment Co., Ltd., San Francisco, Calif. Mixer for welding torches. 1,818,949; Aug. 11.
Hammond, John H., jr., Gloucester, Mass. Radio dynamic control of gliding bodies. 1,818,708; Aug. 11.
Hammond, John H., jr., Gloucester, Mass. Piano with tone modulators. 1,818,709; Aug. 11.
Handy, George A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Breaker strip. 1,818,950; Aug. 11.
Hannon, Matthew S., assignor to Hannon Tire and Rubber Company Limited, Toronto, Ontario, Canada. Air tube and the like and reenforcing same. 1,818,710; Aug. 11.
Hannon Tire and Rubber Company Limited. (See Hannon, Matthew S., assignor.)
Hanovin Chemical and Manufacturing Company. (See Bird, Lester, assignor.)
Hanratty, Albert. Collinsville, Ill. Graining comb or brush. 1,818,326; Aug. 11.
Hans, Edmund E., Detroit, Mich. Lubricating system. 1,818,392; Aug. 11.
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Feeding device for rock drills. 1,818,393; Aug. 11.
Hansen, Fritz P., Portola, Calif. Shipping crate. 1,818,800; Aug. 11.
Happel, Albert, Toledo, Ohio, assignor, by mesne assignments, to Gifford-Wood Company, Hudson, N. Y. Ice vending machine. 1,818,326; Aug. 11.
Hardtmann, Max. (See Hentrich, W., Hardtmann, and Knoche.)
Harnsberger, Audley E. (See Watson, C. B., and Harnsberger.)
Harrah, Chester P. (See Harrah, Philip J. and C. P.)
Harrah, Philip J., and C. P., Bloimfield, Ind. Check construction. 1,818,250; Aug. 11.
Harrall, Edwin R., Englewood, and R. D. Parrott, West New York, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Duct rod. 1,818,951; Aug. 11.
Harris, Benjamin R. (See Epstein, A. K., and Harris.)
Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Mechanical transmission system. 1,818,131; Aug. 11.
Harrison, Thomas R., assignor to The Brown Instrument Company, Philadelphia, Pa. Gas analysis apparatus. 1,818,619; Aug. 11.
Harshberger, Norman P., Chicago, Ill. assignor to The Barrett Company, New York, N. Y. Composition shingle. 1,818,850; Aug. 11.
Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,818,394; Aug. 11.
Hartford-Empire Company. (See Lorenz, Edward H., assignor.)
Hartmann Trunk Company. (See Ritter, Julius, jr., assignor.)
Hastings, Harold P., assignor to Crouse-Hinds Company, Syracuse, N. Y. Portable cable fuse cut-out. 1,818,251; Aug. 11.
Hausdörfer, Emil. (See Wolfram, A., and Hausdörfer.)
Haws, William H., assignor of one-half to W. W. Hoffman, Johnstown, Pa. Hot tap for ingot molds. 1,818,477; Aug. 11.
Hawke, E. R., et al. (See Ulrich, George J., assignor.)
Hays Manufacturing Co. (See Hitchcock, Otto G., assignor.)
Head, Ernest C., assignor to Gleason Works, Rochester, N. Y. Gear. 1,818,554; Aug. 11.
Hechenbleikner, Ingenuin, Charlotte, N. C., assignor, by mesne assignments, to Chemical Construction Corporation. Apparatus for concentrating nitric acid. 1,818,711; Aug. 11.
Heine, Henry, Chicago, Ill. Lighting fixture. 1,818,252; Aug. 11.
Heinemann, Karl, Dusseldorf, assignor to Rheimische Metallwaaren-und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Automatic firearms. 1,818,890; Aug. 11.
Heinrich, Walter A., assignor to W. N. Matthews Corporation, St. Louis, Mo. Slack puller. 1,818,620; Aug. 11.
Held, Siegfried, Chicago, Ill. Switch. 1,818,132; Aug. 11.
Helland, Sigurd H., assignor to Whitin Machine Works, Whitinsville, Mass. Detaching roll motion. 1,818,555; Aug. 11.
Helma, Paul. (See Arnstein, K., and Helma.)
Helwert, Fritz. (See Bruck, W., and Helwert.)
Hennessy, James J., New York, N. Y. Driving box lubricator. 1,818,327; Aug. 11.
Hentrich, Winfrid, and M. Hardtmann, Wiesdorf-on-the-Rhine, and R. Knoche, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New condensation product for the diazine series. 1,817,982; Aug. 11.
Hercules Powder Company. (See Milliken, Mahlon G., assignor.)
Herden, Wilhelm, Berlin-Hermsdorf, Germany, assignor to General Electric Company. High speed circuit interrupter. 1,818,801; Aug. 11.
Heritage, Clark C., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Heat abstraction. 1,817,983; Aug. 11.
Hermann, Otto L., assignor, by mesne assignments, to Buxton & Skinner Printing and Stationery Co., St. Louis, Mo. Bookkeeping device. 1,818,253; Aug. 11.
Herz Bed Company. (See Herz, Gene, assignor.)
Herz, Gene, assignor to Herz Bed Company, Chicago, Ill. Headrest for beds. 1,818,395; Aug. 11.
Hess, Isaac C., Fern, Pa. Winter front for automobile radiators. 1,818,328; Aug. 11.
Hewett, William S., Minneapolis, Minn. Tying concrete. 1,818,254; Aug. 11.
Hicks, Ernest M. (See Mallery, A. H., and Hicks.)
Higgins, Mark F. (See Nyborg, Tage G., assignor.)
Highway Service, Incorporated. (See Nickerson, Alma N., assignor.)
Higley, Frank R., Cleveland Heights, Ohio. Internal combustion engine. 1,817,919; Aug. 11.
Hilger, George, Chicago, Ill. Refrigerating system. 1,818,133; Aug. 11.
Hill, Geoffrey T. R., Yeovil, assignor to Petters Limited, Yeovil, Somerset, England. Undercarriage for aircraft. 1,818,891; Aug. 11.
Hinkson, Adelbert M., Madawaska, Me., assignor, by mesne assignments, to Paper Machinery Corporation, Dayton, Ohio. Method of and apparatus for making paper. 1,818,712; Aug. 11.
Hirsch, Kupfer- and Messingwerke Akt.-Ges. (See Linnhoff, Franz, assignor.)
Hitchcock, Otto G., assignor to Hays Manufacturing Co., Erie, Pa. Pipe coupling. 1,818,255; Aug. 11.
Hitt, Samuel E., Elyria, Ohio. Aerofoil for aeroships. 1,817,920; Aug. 11.
Hitt, Thomas G., Seattle, Wash. Pyrotechnic display device. 1,818,478; Aug. 11.
Hochmayr, Franz, assignor of one-half to K. Weintogl, Vienna, Austria. Massage apparatus. 1,818,479; Aug. 11.
Hoe, R., & Co. (See Eckhard, William K., assignor.)
Hoe, R. & Co. (See Lamatsch, Frederick, assignor.)
Hoe, R. & Co. (See Quick, C. G., and Bennett, assignors.)
Hoeh, Albert C., Royal Oak, Mich. Reamer. 1,818,621; Aug. 11.
Hoeh, Albert C., Royal Oak, Mich. Driver for reamers and the like. 1,818,622; Aug. 11.
Hoesing, Fred W., St. Helena, Nebr. Tractor hitch. 1,818,256; Aug. 11.
Hoffman, William W. (See Haws, William H., assignor.)
Hoke, Frank. (See Rossebo, G. H., and Hoke.)
Holcomb & Hoke Mfg. Co., The. (See Rossebo, G. H., and Hoke, assignors.)
Holcomb, Roger L., Chesterton, Ind., and E. E. Bartels, Hammond, assignors to Standard Oil Company, Whiting, Ind. Filter press leaf. 1,818,623; Aug. 11.
Holle, Alexander A., Paris, France, assignor to Societe International Holverta, Societe Anonyme, Brussels, Belgium. Steering gear for motor driven vehicles. 1,818,892; Aug. 11.
Holley, Clarence M., Detroit, Mich., assignor, by mesne assignments, to The Hoover Company, North Canton, Ohio. Automatic expansion valve for artificial refrigerating systems. 1,818,061; Aug. 11.
Holley, George M. (See Petie, Henry B., assignor.)
Holman, William, Manly, near Sydney, New South Wales, Australia. Warehouse truck. 1,818,060; Aug. 11.
Holmes, Andrew J., assignor of one-fourth to W. R. Everett, Auburn, Wash. Electric heater. 1,818,953; Aug. 11.
Holzhydrolyse Aktiengesellschaft. (See Hagglund, Erik, assignor.)
Hook, Charles H., Pittsburgh, and N. L. Mercur, McKeesport, Pa.; said Mercur assignor to said Hook. Sectional boiler. 1,818,396; Aug. 11.
Hookless Fastener Company. (See Lamb, Harold, assignor.)
Hooper, Charles L., and R. F. Sutherland, Rochester, assignor to Vacuum Oil Company, New York, N. Y. Drum gripper. 1,818,134; Aug. 11.
Hoover Company, The. (See Holley, Clarence M., assignor.)
Hoover Company, The. (See Smellie, Donald G., assignor.)
Hoppe, Herman, Borger, Tex. Method of and apparatus for treating crude oil. 1,818,480; Aug. 11.
Horix, Carl, Chicago, Ill. Attachment for belts. 1,818,329; Aug. 11.
Horni, Paul P., Newark, N. J. Self-starting synchronous motor. 1,818,330; Aug. 11.

Hosbein, Louis H., Winnetka, assignor to M. H. Detrick Company, Chicago, Ill. Furnace wall construction. 1,818,802; Aug. 11.

Hotchner, Fred, Los Angeles, Calif. Discharge tube display. 1,818,918; Aug. 11.

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Container. 1,818,135; Aug. 11.

Houghton, Harry W., Glen Echo, Md., assignor to Safety Fumigant Company, Boston, Mass. Fumigant material and fumigation. 1,818,136; Aug. 11.

House, Le Roy B. (See Smith, Pleasant E., assignor.)

Hover, Monte E., Venice Calif., assignor of forty-eight per cent to Arthur Croxford, Salt Lake City, Utah. Signaling device for vehicles. 1,818,624; Aug. 11.

Howard, Ezra E., Concrete, Wash. Dust shield for cement packers. 1,818,481; Aug. 11.

Howcott, Harley A. W., Baton Rouge, La. Pumping apparatus. 1,818,851; Aug. 11.

Howell, Albert S., assignor to Bell & Howell Company, Chicago, Ill. Photographic camera. 1,818,062; Aug. 11.

Howland, Harry E., assignor to Ithaca Gun Company, Ithaca, N. Y. Single trigger mechanism for double barreled guns. 1,818,852; Aug. 11.

Howland, Levi S., Oakland, Calif. Apparatus for and method of launching, landing, and mooring dirigibles. 1,818,137; Aug. 11.

Howland, Levi S., Oakland, Calif. Dirigible coupling means. 1,818,138; Aug. 11.

Hoy, Lyman L., Tillamook, Oreg. Artificial limb. 1,818,893; Aug. 11.

Huber, Frederick W., Riverside, Calif. Measuring temperature in boreholes. 1,818,221; Aug. 11.

Hudson Motor Car Company. (See Baits, Stuart G., assignor.)

Huffman, Bird C., Tryon, Nebr. Rake. 1,818,063; Aug. 11.

Hughes, Charles H., Hackensack, N. J., assignor to Semet-Solvay Engineering Corporation, New York, N. Y. Coke oven. 1,818,713; Aug. 11.

Hughes, Paul C., Tulsa, Okla. Gas burner. 1,818,222; Aug. 11.

Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Brush shifting device for alternating current dynamo electric machines. 1,818,803; Aug. 11.

Humane Stanchion Works. (See Grubb, Herbert H., assignor.)

Hume, John T., Chicago, assignor to Electric Household Utilities Corporation, Cicero, Ill. Combined washing machine casing and wringer. Des. 84,829; Aug. 11.

Hummel, Frederick E. (See Talbott, W. D., and Bannerman, assignors.

Humphrey, Almon E., Oklahoma City, Okla. Twine holder. 1,818,894; Aug. 11.

Hunt, John A., Miami, Manitoba, Canada. Gate. 1,818,482; Aug. 11.

Hunter, Joseph H., Detroit, Mich., assignor, by mesne assignments, to General Cable Corporation. Conduit securing means. 1,818,625; Aug. 11.

Huppert, William, New York, N. Y. Electrical outlet. 1,818,804; Aug. 11.

Hurst, Martin C., Los Angeles, Calif. Shingle cutter. 1,818,397; Aug. 11.

Hutchison, Miller R., Llewellyn Park, West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y. Producing compressional waves. 1,818,960; Aug. 11.

Huxford, Jere O., Perry, Fla. Hack. 1,818,398; Aug. 11.

Huxford, Jere O., Perry, Fla. Puller. 1,818,399; Aug. 11.

Hydraulic Press Manufacturing Company, The. (See Ernst, Walter, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Busch, W., and Noack, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Finkelstein, Hans, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Frank, K., and Dietz., assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Jaeger, M., Pokorny, and Gossrau, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Lock, Ludwig, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Pfleiderer, Georg, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Pier, M., Bessler, and Eisenhut, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, O., and Ufer, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Suchy, R., Staib, and Moschel, assignors.)

Imes, Elmer S. (See Work, L. T., Imes, and Everett.)

Indian Archery & Toy Corporation. (See Brading, Harry M., assignor.)

Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)

Ingraham, E., Co., The. (See Carlson, Elof L., assignor.)

International Air Brake Company. (See Doty, Wade, assignor.)

International Carbonic Engineering Company. (See Rufener, H., and Eichmann, assignors.)

International Projector Corporation. (See Dina, Augusto, assignor.)

Intertype Corporation. (See Freund, Herman R., assignor.)

Irgens, Finn T., Wauwatosa, assignor to Outboard Motors Corporation, Milwaukee, Wis. Outboard motor. 1,818,257; Aug. 11.

Irvine, Andrew. (See Bateman, A. T., and Irvine.)

Isaacks, James D., Houston, Tex. Gauge stabilizer. 1,818,258; Aug. 11.

Isermann, Samuel. (See Dusenbury, H. G., and Isermann.)

Ithaca Gun Company. (See Howland, Harry E., assignor.)

Jackson, Alexander M., Evanston, Ill., assignor to Locke Insulator Corporation, Baltimore, Md. Arc extinguishing device. 1,817,984; Aug. 11.

Jackson, William S. (See Watson, B., and Jackson.)

Jacobson, Gustav, and G. F. Ericson, assignors to Superior Floor Surfacing Machine Corporation, New York, N. Y. Floor surfacing machine. 1,818,954; Aug. 11.

Jacquart, Charles E., South River, N. J., assignor to American Enameled Brick Corporation, New York, N. Y. Article conveyer system. 1,818,805; Aug. 11.

Jaeger, Max, Bitterfeld, E. Pokorny, Leipzig, and G. Gossrau, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Purification of iron and steel. 1,818,556; Aug. 11.

Jakosky, John J., assignor to The Radiore Company, Los Angeles, Calif. Determining the character of ore bodies. 1,818,331; Aug. 11.

James, Clifford J., and J. James, Detroit, Mich. Basket holder. 1,818,400; Aug. 11.

Jamison, Tobias H., Oakdale, assignor of one-half to M. J. Ruddy, Modesto, Calif. Power lift scraper. 1,817,985; Aug. 11.

Janda, Anna, Chicago, Ill. Water waving comb. 1,818,401; Aug. 11.

Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)

Johnson, Charles B., Chicago, Ill. Insulating clamp. 1,818,714; Aug. 11.

Johnson, Clyde W., Saugus, assignor to Dewey and Almy Chemical Company, Cambridge, Mass. Cover lining apparatus. 1,818,557; Aug. 11.

Johnson, Edwin F., St. Paul, Minn. Thimble making machine. 1,818,332; Aug. 11.

Johnson, Herbert B., Flushing, N. Y., and E. von Nostitz, Westfield, N. J.; said Johnson assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., and said von Nostitz assignor to American Telephone and Telegraph Company. Telephone system. 1,818,064; Aug. 11.

Johnson, Richard S., York, Pa. Electric lamp. Des. 84,830; Aug. 11.

Johnson, William G., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Tube-forming apparatus. 1,817,923; Aug. 11.

Johnston, Leroy F., assignor to Waterbury Cable Service, Inc., New York, N. Y. Plug extractor. 1,818,626; Aug. 11.

Jones, Edwin W. (See Hall-Brown, A., and Jones.)

Jones, R. A., & Company. (See Jones, Ruel A., assignor.)

Jones, Ruel A., assignor to R. A. Jones & Company, Inc., Covington, Ky. Package assembling machine. 1,818,065; Aug. 11.

Jones, William A., West New Brighton, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler door. 1,818,402; Aug. 11.

Jordan, O. F., Company. (See Protzeller, Harry W., assignor.)

Jordan, Ralph C., Columbus, Ga. Magazine feed for cone winders. 1,818,223; Aug. 11.

Joroit, Camille, Lac-ou-Villers, France. Micrometer calipers. 1,818,853; Aug. 11.

Joseph, Alfred, Enghein, assignor to Compagnie Internationale pour la Fabrication des Essences et Petroles, Paris, France. Carrier for catalysts and the like. 1,818,403; Aug. 11.

Jouy, Jules, Epernay, France. System for recovering the energy of the movements of the sea. 1,818,066; Aug. 11.

Judd, H. L., Company. (See Ulbrich, Frank, assignor.)

Juelson, Edwin, Chicago, Ill. Pump. 1,818,259; Aug. 11.

Juergens, John, assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill. Socket. 1,818,333; Aug. 11.

Junkers, Hugo, Dessau, Germany. Construction of engine cylinders. 1,818,558; Aug. 11.

Kaminsky, Sarah. (See Levy, H. B., and Kaminsky.)

Kapeluchnikoff, Mathieu A., Baku, Russia. Boring appliance. 1,817,986; Aug. 11.

Karpen, S., & Bros. (See Lofman, Charles, assignor.)

Karraker, Arney J. (See Dodge, F. V., and Wykert, assignor.)

Kasik, Charles, Reedpoint, Mont. Gate apparatus. 1,818,224; Aug. 11.

Kathner, Arthur T., New Cumberland, W. Va. Furnace conveyer. 1,818,806; Aug. 11.

Kaufman, Jacob M., assignor to American Show Case & Mfg. Co., Detroit, Mich. Corner support for glass rims. 1,818,404; Aug. 11.

Kazenmaier, August, and A. Strauss, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Brake mechanism. 1,818,384; Aug. 11.

Kearney & Trecker Corporation. (See Parsons, Fred A., assignor.)

Kearsley, William K., Schenectady, N. Y., assignor to General Electric Company. Diaphragm for loud speakers. 1,818,854; Aug. 11.

Kehoe, Thomas J., Perrysburg, Ohio. Air conditioner stand. Des. 84,831; Aug. 11.

Kelso, Ralph S., assignor to The Free Sewing Machine Company, Rockford, Ill. Drive gear for sewing machines. 1,818,336; Aug. 11.

Kemet Laboratories, Inc. (See Cooper, Hugh S., and Merlub-Sobel, assignors.)

Kenison, William I., Solomon, Kans. Grain saver. 1,818,335; Aug. 11.

Kensig, Louis D., Western Springs, assignor to National Aluminate Corporation, Chicago, Ill. Apparatus for continuous blow down for boilers. 1,818,483; Aug. 11.

Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Air heater and making the same. 1,817,987; Aug. 11.

Kerr, Robert M., assignor to Detroit Dental Manufacturing Company, Detroit, Mich. Instrument for treating teeth. 1,818,627; Aug. 11.

Keys, Walter C., Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio. Cushion connection. 1,818,715; Aug. 11.

Kidde, Walter, & Company. (See Mapes, Daniel, assignor.)

Kieper, Jean, assignor to Societe Anonyme Etablissements Jules Marchal, St.-Die, Vosges, France. Apparatus for successively distributing variable and adjustable quantities of any liquids. 1,818,225; Aug. 11.

Kinch, Earl L., assignor to The Waterbury Buckle Company, Waterbury, Conn. Reenforced marking tag. 1,818,559; Aug. 11.

King, C. G., & Co., Inc. (See King, Clifford G., assignor.)

King, Clifford G., Barrington, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,832; Aug. 11.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,818,139; Aug. 11.

Klamt, Emal, Howells, Nebr. Combined pliers and wrench. 1,817,988; Aug. 11.

Kleinewefers, Johannes, Krefeld, Germany. Calender with roll magazine. 1,818,628; Aug. 11.

Kliefoth, Max H., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis. Method of and apparatus for making multiply paper. 1,818,716; Aug. 11.

Kliegl Bros. Universal Electric Stage Lighting Co. (See Kliegl, Herbert A., assignor.)

Kliegl, Herbert A., assignor to Kliegl Bros. Universal Electric Stage Lighting Co., Inc., New York, N. Y. Music stand. 1,818,717; Aug. 11.

Kliegl, Herbert A., assignor to Kliegl Bros. Universal Electric Stage Lighting Co., Inc., New York, N. Y. Synchronous control of color screens. 1,818,718; Aug. 11.

Kliewer, Edward A., Ranger, Tex. Automatic back twist tool for wire lines. 1,818,260; Aug. 11.

Klotz, Otto H., Philadelphia, Pa. Reaction relief device. 1,818,895; Aug. 11.

Knaggs, Joseph, assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio. Double door structure. 1,817,921; Aug. 11.

Knapp, Edward L., assignor to National Brass Company, Grand Rapids, Mich. Table leg. 1,818,629; Aug. 11.

Knoche, Rudolf. (See Hentrich, W., Hardtmann, and Knoche.)

Koch, Dick H., and I. T. Slaton, Coffeyville, Kans. Coupling. 1,818,261; Aug. 11.

Koch & Sterzel Aktiengesellschaft. (See Fischer, Franz J., assignor.)

Kohr, Elton D., York, Pa. Discharge attachment for frozen product machines. 1,818,896; Aug. 11.

Konoff, Alexander. (See Marcus, S., and Konoff.)

Kookogey, Frederic F., New York, N. Y. Aeroplane. 1,818,067; Aug. 11.

Kramer, Frank J., Melvindale, assignor of one-half to M. Wick, Detroit, Mich. Scaffold. 1,818,961; Aug. 11.

Krause, Artur. (See Luttringhaus, A., Nawiasky, and Krause.)

Kreher, Max, Freiberg, assignor to Curt Ludwig, Annaberg, Germany. Floatless carburetor. 1,818,068; Aug. 11.

Kreher, Max, Freiberg, assignor to C. Ludwig, Annaberg, Germany. Floatless carburetor. 1,818,928; Aug. 11.

Kribs, Gordon, Niagara Falls, Ontario, Canada. Electrical protective system. 1,818,337; Aug. 11.

Kroder Reubel Co., The. (See Bond, Lester W., assignor.)

Kroldrup, Otto, Colon, Cuba. Combined flash light and writing pad. 1,818,855; Aug. 11.

Kropff, Wilhelm, Berlin-Charlottenburg, Germany, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,818,338; Aug. 11.

Kruse, Wilhelm, Wilhelmshagen near Berlin, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Connection for telegraph plants. 1,817,989; Aug. 11.

Kubin, Van J., Brea, and P. Funderburk, Fullerton, Calif., assignors to Chiksan Oil Tool Co., Limited. Well reamer. 1,818,405; Aug. 11.

Kucklinsky, Frederick W., Montclair, N. J. Transom or window control means. 1,818,406; Aug. 11.

Kuhn, Harry A. (See Oglesby, N. E., and Brown, assignors.)

Kumagawa, Hachiro, Hongoku, Tokyo, and K. Shimomura, Nishiomachi, Hazugun, Aichiken, Japan. Preparing and separating the cellulose material, suitable for paper-manufacturing, from plant raw material with pith fiber. 1,818,897; Aug. 11.

Kupper, Herman C., Inc. (See Anduze, Lucien, assignor.)

Kurrein, Max, Charlottenburg, Germany. Output meter for working control. 1,817,922; Aug. 11.

Kutter, Herman L., assignor to The Black-Clawson Company, Hamilton, Ohio. Paper making machinery. 1,818,719; Aug. 11.

La Bar, Bert G. (See Mylius, W. G., and La Bar.)

La Couture, Henry C., Hudson County, N. J., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 84,833; Aug. 11.

Laillé, René J., La Rochelle, France. Progressive change-speed and reversing device. 1,818,407; Aug. 11.

Lamatsch, Frederick, Grantwood, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Web roll loading mechanism for printing presses. 1,818,720; Aug. 11.

Lamb, Harold, Meadville, Pa., assignor to Hookless Fastener Company. Fastener making machine. 1,817,990; Aug. 11.

Lambert, Bernice E., Columbus, Ohio. Sealing burial cases. 1,818,485; Aug. 11.

Lamberty, Nicholas F., Chicago, Ill. Sketching device. 1,818,630; Aug. 11.

Lambie, James M. (See Ross, D. W., and Lambie.)

Lamplough, Leslie F., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Device for joining articles. 1,818,560; Aug. 11.

Lancaster Asphalt, Inc. (See Robinson, Thomas, assignor.)

Landvoigt, Thomas E., Westmont, assignor to National Radiator Corporation, Johnstown, Pa. Radiator. 1,818,226; Aug. 11.

Lane, Edwin, assignor to Carolyn Laundry, New York, N. Y. Laundry tagging machine. 1,818,408; Aug. 11.

Lang, Franz, Munich, Germany, assignor to Acro Aktiengesellschaft, Kuessnacht, am Rigi, Switzerland. Internal combustion engine. 1,818,339; Aug. 11.

Lang, George L., South Orange, N. J. Electrical condenser. 1,818,069; Aug. 11.

Lang, Gustave J., Longmeadow, and J. F. Martin, assignors to American Bosch Magneto Corporation, Springfield, Mass. Magneto mounting attachment. 1,818,721; Aug. 11.

Lang, James S., deceased; Old Colony Trust Company, executor, Boston, Mass. Shock absorber. 1,818,140; Aug. 11.

Lang, James S., deceased, Boston, Mass.; Old Colony Trust Company, executor of said James S. Lang. Shock absorber. 1,818,141; Aug. 11.

Langdon Engineering Corporation. (See Langdon, Jesse D., assignor.)

Langdon, Jesse D., assignor to Langdon Engineering Corporation, Los Angeles, Calif. Valves. 1,818,856; Aug. 11.

Lange, Henry, Quincy, Ill. Heater. Des. 84,834; Aug. 11.

Lange, Werner, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Direct azo dyes. 1,818,898; Aug. 11.

Langrock, Joseph H., New Haven, Conn Nonslip device for garments. 1,817,991; Aug. 11.

Langsner, Adolph, assignor to Eugene Dietzgen Co., Chicago, Ill. Developing apparatus. 1,818,484; Aug. 11.

Langvand, Ivar L. (See Trainer, J. E., and Langvand.)

Lapsley, Robert, assignor to Norge Corporation, Detroit, Mich. Four speed transmission. 1,818,262; Aug. 11.

Larson, August, Chicago, Ill. Fretted instrument adjusting means. 1,818,631; Aug. 11.

Lathrop, Hubbel, Greenwich, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnetic body. 1,818,070; Aug. 11.

Laurent, Emile A., Denver, Colo. Automobile signal lamp. 1,818,857; Aug. 11.

Lavino, E. J., and Company. (See Sell, Gilbert E., assignor.)

Lawler, James J., Mount Vernon, N. Y., assignor to Direct Control Valve Company, Chicago, Ill. Thermostatic control device for valves. 1,818,071; Aug. 11.

Leberman, Harry, assignor to Groove Lock Co. Inc., New York, N. Y. Vanity case. 1,818,409; Aug. 11.

Le Blond, R. K., Machine Tool Company, The. (See Groene, William F., assignor.)

Le Clair, Frank J., Attleboro, Mass. Flask. Des. 84,885; Aug. 11.

Leggett, Henry S., Brooklyn, N. Y. Adjustable bracket for clotheslines. 1,818,561; Aug. 11.

Lehigh University et al. (See Long, James S., assignor.)

Lehman, Werner. (See Bager, W. M., and Lehman.)

Lehmann, Karl A., and F. Rangiack, Essen, assignors to Fried Krupp, Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Setting mechanism for cash registers. 1,818,632; Aug. 11.

Leighton, Eugene R., assignor to J. E. Leighton, North Andover, Mass. Capping bottles. 1,818,072; Aug. 11.

Leighton, Jennie E. (See Leighton, Eugene R., assignor.)

Lemoine, Henry G., Perriers-sur-Andelle, France. Powder box. 1,818,340; Aug. 11.

Leo, Albert, Chicago, Ill. Jelly preparation and making the same. 1,818,263; Aug. 11.

Leopold, Richard, Frankfort-on-the-Main-Hochst, and M. Paquin, Koenigstein I/Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Urea derivatives of the 1.3-butylene-glycol and preparing them. 1,817,992; Aug. 11.

Leventhal, Jacob F., New York, N. Y., assignor to The First National Bank of Chattanooga, trustee, Chattanooga, Tenn. Optical apparatus. 1,818,410; Aug. 11.

Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Mine prop. 1,818,633; Aug. 11.

Levy, Helen B., and S. Kaminsky, Brooklyn, N. Y. Sanitary toilet seat bowl spray. 1,818,562; Aug. 11.

Lewis, George K., assignor to Met-L-Wood Corporation, Chicago, Ill. Signboard. 1,818,722; Aug. 11.

Libbey-Owens-Ford Glass Company. (See Brown, Wilbur F., assignor.)

Libbey-Owens-Ford Glass Company. (See Cone, Carroll, assignor.)

Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)

Libbey-Owens-Ford Glass Company. (See Ferngren, Enoch T., assignor.)

Libbey-Owens-Ford Glass Company. (See Mambourg, Leopold, assignor.)

Libbey-Owens-Ford Glass Company. (See McDaniel, Willard C., assignor.)

Libbey-Owens-Ford Glass Company. (See Nobbe, William E., assignor.)

Libbey-Owens-Ford Glass Company. (See Randall, James W. H., assignor.)

Libbey-Owens-Ford Glass Company. (See Thomas, Herbert, assignor.)

Lichtenthaeler, Frank E., Newton Highlands, Mass. Concentrating aqueous solutions of volatile substances. 1,817,993; Aug. 11.

Lily-Tulip Cup Corporation. (See Smith, Charles F., assignor.)

Lindemann, A. J., & Hoverson Company. (See Lindemann, Walter C., assignor.)

Lindemann, A. J., & Hoverson Company. (See Lindemann, W. C., and Rutenber, assignors.)

Lindemann, Walter C., assignor to A. J. Lindemann & Hoverson Company, Milwaukee, Wis. Vapor stove. 1,818,723; Aug. 11.

Lindemann, Walter C., and E. A. Rutenber, assignors to A. J. Lindemann & Hoverson Company, Milwaukee, Wis. Thermostatic device. 1,818,563; Aug. 11.

Lindquist, David L., Hartsdale, N. Y., and G. N. Crabbe, Cresskill, assignors to Otis Elevator Company, Jersey City, N. J. Control system. 1,818,486; Aug. 11.

Line Material Company. (See Johnson, William G., assignor.)

Linnhoff, Franz, Eberswalde, assignor to the firm: Hirsch, Kupfer- and Messingwerke Akt.-Ges., Finow/Mark, Germany. Device for annealing metal rings. 1,818,341; Aug. 11.

Linotype and Machinery Limited. (See Shuttleworth, J., and Murphy, assignors.)

Lischick, Max A., New York, N. Y. Window construction. 1,818,411; Aug. 11.

Liss, Joseph J., Chicago, Ill. Cigar or cigarette lighter. 1,818,724; Aug. 11.

Litty, John R., and T. B. Lundin, Philadelphia, Pa. Cake icing machine. 1,818,412; Aug. 11.

Livensparger, Edward W., Cleveland Heights, Ohio. Machine for producing channel strips. 1,818,227; Aug. 11.

Lock, Ludwig, Dormagen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Making cellulose nitroacetate. 1,817,994; Aug. 11.

Locke Insulator Corporation. (See Jackson, Alexander M., assignor.)

Lofman, Charles, Riverside, assignor to S. Karpen & Bros., Chicago, Ill. Mattress ticking or the like. Des. 84,836; Aug. 11.

Logue, Paul. (See Carothers, J. N., and Logue.)

Long, George M., Boston, Mass., assignor to Warren Telechron Company. Clock case. Des. 84,837; Aug. 11.

Long, George M., Boston, Mass., assignor to Warren Telechron Company. Clock case. Des. 84,838; Aug. 11.

Long, James S., Bethlehem, Pa., assignor of one-third to Lehigh University and one-third to Archer-Daniels-Midland Company and W. O. Goodrich Company. Treating oils and product thereof. 1,818,073; Aug. 11.

Lontz, Harry R., assignor to F. & N. Lawn Mower Company, Richmond, Ind. Gang mower. 1,818,487; Aug. 11.

Lorenz, C., Aktiengesellschaft. (See Kruse, Wilhelm, assignor.)

Lorenz, Edward H., West Hartford, assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Glass blowing machine. 1,818,725; Aug. 11.

Loucks, James F., Cleveland, Ohio, assignor to Detroit Steel Products Company, Detroit, Mich. Building construction. 1,818,634; Aug. 11.

Lowe, Joseph A., assignor to Faiulah Paper Company, Fitchburg, Mass. Paper. 1,818,726; Aug. 11.

Ludwig, Curt. (See Kreher, Max, assignor.)

Ludwig, Oskar R., Gary, Ind. Fin radiator. 1,818,727; Aug. 11.

Luettringhaus, Arthur, Mannheim, H. Neresheimer, Ludwigshafen-on-the-Rhine, and W. Eichholz, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Condensation products and vat dyestuffs of the zenzanthrone series. 1,818,075; Aug. 11.

Luettringhaus, Arthur, Mannheim, H. Neresheimer, Ludwigshafen-on-the-Rhine, and H. J. Emmer, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Condensation products of the benzanthrone series. 1,818,074; Aug. 11.

Luettringhaus, Arthur, Mannheim, H. Neresheimer, Ludwigshafen-on-the-Rhine, and H. J. Emmer, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Derivatives of benzanthrone. 1,818,076; Aug. 11.

Luitwieler, Samuel W., Los Angeles, Calif. Compressor. 1,818,413; Aug. 11.

Lund, Nelson C., Bound Brook, N. J. Automatic travel guide. 1,818,228; Aug. 11.

Lund, Thomas, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on heels. 1,818,142; Aug. 11.

Lundin, Trued B. (See Litty, J. R., and Lundin.)

Lusse Bros., Inc. (See Lusse, Joseph C., assignor.)

Lusse, Joseph C., assignor to Lusse Bros., Inc., Philadelphia, Pa. Amusement car apparatus. 1,818,899; Aug. 11.

Lüttringhaus, Arthur, Mannheim, P. Nawiasky, and A. Krause, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of vat dyestuffs. 1,817,995; Aug. 11.

Lutz, George A. (See Fullman, J. M. G., and Lutz.)

Lutz, George, Rocky River, and L. R. Westbrook, Cleveland Heights, assignors, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Electroplating. 1,818,229; Aug. 11.

Lyman, Arthur L., Berkeley, assignor to Standard Oil Company of California, San Francisco, Calif. Refining hydrocarbon oil. 1,818,488; Aug. 11.

Lyman, Kenneth E., assignor to Automatic Transmission Company, Rockford, Ill. Power transmission. 1,818,564; Aug. 11.

Lynch, Edward. (See Bowman, F. H., Lynch, and Price.)

Lynch, James L., Media, Ill. Antiskid chain. 1,818,919; Aug. 11.

Lyons, Harry C., Mount Vernon, N. Y. Smoke separator. 1,818,143; Aug. 11.

Lyons, Harry C., Mount Vernon, N. Y. Measuring valve. 1,818,230; Aug. 11.

M. J. B. Co. (See Bardet, G. A. and G. V., assignors.)

Maas, Elov F., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Method of and apparatus for manufacturing pneumatic tires. 1,818,955; Aug. 11.

Mabry, Annie N., Jamaica, Long Island, assignor of one-half to H. D. Blacker, New York, N. Y. Combination bedpan and fountain syringe. 1,818,489; Aug. 11.

Macgillivray, Alister D., Santo Domingo, Dominican Republic. Sole straightener. 1,818,490; Aug. 11.

Mackel, Joseph E. (See Crossan, J. R., and Mackel.)

MacLeod, Daniel T., assignor to Perfex Corporation, Milwaukee, Wis. Cooling radiator for internal combustion engines. 1,818,144; Aug. 11.

MacNamee, Joseph B., Ilanerch, Pa. Automatic scissors or shears. 1,818,900; Aug. 11.

Macneir, Donald B., New York, N. Y. Railway tie. 1,818,145; Aug. 11.

Madsen, Carl T., Oak Park, assignor to Chicago Flexible Shaft Company, Chicago, Ill. Handle for laundry irons. 1,817,924; Aug. 11.

Maker, John A., Duluth, Minn. Gum massaging device. 1,818,146; Aug. 11.

Mallery, Arlington H., Poughkeepsie, assignor to Mallery Process Corporation, New York, N. Y. Treating carbonaceous materials to produce gaseous mixtures. 1,818,901; Aug. 11.

Mallery, Arlington H., Poughkeepsie, and E. M. Hicks, Kingston, N. Y. Brick handling mechanism. 1,818,728; Aug. 11.

Mallery Process Corporation. (See Mallery, Arlington H., assignor.)

Maltby, Lewis C., assignor to Stone Straw Corporation, Washington, D. C. Cut-off mechanism for tube machines. 1,817,996; Aug. 11.

Mambourg, Leopold, Lancaster, assignor to Libbey-Owens-Ford-Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,818,231; Aug. 11.

Mambourg, Leopold, Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet forming mechanism. 1,818,232; Aug. 11.

Mancini, Michael Q., Bethesda, Md. Shoe heel. 1,818,233; Aug. 11.

Manley Manufacturing Company. (See Manley, Robert E., assignor.)

Manley Manufacturing Company, The. (See Manley, R. E., and Flinchbaugh, assignors.)

Manley, Robert E., assignor to Manley Manufacturing Company, York, Pa. Service runway. 1,817,997; Aug. 11.

Manley, Robert E., and F. T. Flinchbaugh, assignors to The Manley Manufacturing Company, York, Pa. Mechanical jack. 1,818,077; Aug. 11.

Manly, Roy H., Birmingham, Ala. Underscoring apparatus for typewriters. 1,818,078; Aug. 11.

Mann, John M., Philadelphia, Pa. Variable speed reducer. 1,818,807; Aug. 11.

Mapes, Daniel, Mamaroneck, assignor to Walter Kidde & Company, Inc., New York, N. Y. Fire extinguishing apparatus. 1,818,147; Aug. 11.

Marble, Robert A. (See Edwards, J. H., and Marble.)

Marchant Calculating Machine Company. (See Friden, Carl M. F., assignor.)

Marcum, Arthur L., Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation. Steering and torquing arrangement. 1,818,902; Aug. 11.

Marcus, Samuel, Riverdale, and A. Konoff, New York, assignors, by mesne assignments, to Margon Corporation, New York, N. Y. Mounting for doll eyes. 1,818,635; Aug. 11.

Marcy, Grosvenor D., Newton Highlands, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,817,925; Aug. 11.

Margon Corporation. (See Marcus, S., and Konoff, assignors.)

Marion, Jean. (See Rouilier, G., and Marion.)

Marmorstein, Heinrich, Chicago, Ill. Decorating article of pottery and the like. 1,818,729; Aug. 11.

Marsey, James W., Leavenworth, Kans. Shock absorber. 1,818,414; Aug. 11.

Marshall, William, assignor to Briggs Manufacturing Company, Detroit, Mich. Supporting the operating mechanism for windshields. 1,818,636; Aug. 11.

Martin, Glenn L., Co., The. (See Adams, H. W., and Salisbury, assignors.)

Martin, Glenn L., Company, The. (See Milburn, Lessiter C., assignor.)

Martin, John F. (See Lang, G. J., and Martin.)

Martin, Richard H., assignor to Norton Company, Worcester, Mass. Refractory article and composition for and method of making same. 1,818,903; Aug. 11.

Martin, Richard H., assignor to Norton Company, Worcester, Mass. Silicon carbide refractory article and making the same. 1,818,904; Aug. 11.

Mathez, Samuel, Brooklyn, N. Y., assignor to G. P. Dike, Brookline, Mass. Wrist watch. 1,818,637; Aug. 11.

Matson, Oscar A., Chicago, Ill. Spading device. 1,818,148; Aug. 11.

Matthews, W. N., Corporation. (See Heinrich, Walter A., assignor.)

Mattison, Norman D., New York, N. Y. Footwear. 1,818,730; Aug. 11.

Mattison, Norman D., New York, N. Y. Footwear. 1,818,731; Aug. 11.

Mauser-Werke A. G. (See Nickl, Josef, assignor.)

Max, George T., assignor to Rex Manufacturing Company, Fort Worth, Tex. Electric water heater. 1,818,808; Aug. 11.

Maxim Silencer Company, The. (See Bourne, Roland B., assignor.)

Mayer China Company. (See Wain, Harry J., assignor.)

Mayer, William G., Pittsburgh, Pa. Truck body ventilator. 1,818,415; Aug. 11.

Maynard, Howard E., assignor to Chrysler Corporation, Detroit, Mich. Brake shoe. 1,818,565; Aug. 11.

McAlees, Edward C., Los Angeles, Calif. Adaptable pipe fitting. 1,818,858; Aug. 11.

McAnulty, Semmeon M., assignor to Republic Carbon Company, Niagara Falls, N. Y. Molding granular mixture. 1,818,234; Aug. 11.

McCallum, John W., and A. S. Muscovitch, Winnipeg, Manitoba, Canada. Snow plow. 1,817,998; Aug. 11.

McCann, William J., Lakewood, Ohio. Pneumatic toy gun. 1,818,264; Aug. 11.

McCarthy, Lawrence J., Ogdensburg, N. Y. Aircraft. 1,818,809; Aug. 11.

McClintic-Marshall Corporation. (See Millard, Emmor H., assignor.)

McCrea, John E., assignor to Dealers Motor Transport Inc., Detroit, Mich. System of automobile loading and transportation. 1,818,842; Aug. 11.

McCutcheon, Eva, Brooklyn, N. Y. Can cover remover. 1,818,732; Aug. 11.

McDade, James E., Chicago, Ill. Device for teaching division. 1,818,566; Aug. 11.

McDaniel, Willard C., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass. 1,818,235; Aug. 11.

McDonald, John C., assignor of one-half to E. L. Corbett, New York, N. Y. Electric meter system. 1,818,929; Aug. 11.

McDonough, Frank J., assignor to Glaser, Crandell Co., Chicago, Ill. Food product container. Des. 84,839; Aug. 11.

McFadden, John G., Camp Holabird, Md. Cylinder lapping tool. 1,818,491; Aug. 11.

McFarland, Frank R., Cumberland, Md. Making conveyer and elevator screws. 1,818,492; Aug. 11.

McGee, Frank R., Steubenville, Ohio. Gas cleaner. 1,818,905; Aug. 11.

McGill, Chester T., assignor to Reiter Company, Elgin, Ill. Multiple flow base exchange water softener. 1,818,638; Aug. 11.

McIlvin, Leon D., Lynn, Mass., assignor to General Electric Company. Automatic arc welding machine. 1,818,859; Aug. 11.

McIntire, Charles V., East Orange, N. J., assignor to Consolidation Coal Products Company, Wilmington, Del. Distillation of pitch into coke. 1,817,926; Aug. 11.

McIntire, Charles V., East Orange, N. J., assignor to Consolidation Coal Products Company, Wilmington, Del. Retort discharging means. 1,818,567; Aug. 11.

McKinney Manufacturing Company. (See Woernle, Harry E., assignor.)

McKoy, Edwin A., New Orleans, La. Hacker for turpentine trees. 1,818,906; Aug. 11.

McMath, John E. (See Townsend, Frank B., assignor.)

McNally, Thomas, Massillon, Ohio. Ingot mold. 1,818,236; Aug. 11.

McNeill, George K. (See Smith, C. J., McNeill, and Dolding.)

McWane, Arthur T., Birmingham, Ala. Pipe coupling. 1,818,493; Aug. 11.

Mead, Sallie P. (See Carson, J. R., and Mead.)

Meade, Harold W., Yeddo, Ind. Automatic spark control. 1,818,079; Aug. 11.

Meara, Charles W., San Mateo, Calif. Building wall. 1,818,416; Aug. 11.

Mechanical Rubber Company. (See Keys, Walter C., assignor.)

Mechanical Rubber Company, The. (See Saurer, Curt, assignor.)

Medean, Charles A., jr., Inglewood, Calif. Bolt cutter. 1,818,237; Aug. 11.

Meissner, Alexander, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., H., Berlin, Germany. Radio direction finding. 1,818,639; Aug. 11.

Melick, John M., Cresskill, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Coin collection apparatus. 1,818,568; Aug. 11.

Mellander, Jean, Brussels, Belgium. Propeller for helicopterous aircraft. 1,818,238; Aug. 11.

Mercur, Nathan L. (See Hook, C. H., and Mercur.)

Merlub-Sobel, Menahem. (See Cooper, Hugh S., and Merlub-Sobel.)

Mershimer, Lawrence M., New Castle, Pa. Lighting rod point connection. 1,818,494; Aug. 11.

Metal Chlorides Corporation. (See Brindley, George F., assignor.)

Metal Package Corporation of New York. (See Bruns, Alfred E., assignor.)

Met-L-Wood Corporation. (See Lewis, George K., assignor.)

Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric switch. 1,818,265; Aug. 11.

Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric snap switch. 1,818,569; Aug. 11.

Meyer, John F., Pasadena, Calif. Amusement machine cabinet. Des. 84,840; Aug. 11.

Michalk, Otto. (See Sachse, E., and Michalk.)

Michalka, William J., Cameron, Tex. Stalk cutter. 1,817,999; Aug. 11.

Micromatic Hone Corporation. (See Quigley, Thomas F., assignor.)

Midgley, Herbert, Worcester, Mass. Hand card. 1,818,495; Aug. 11.

Milburn, Lessiter C., Wickliffe, assignor to The Glenn L. Martin Company, Cleveland, Ohio. Landing gear. 1,818,417; Aug. 11.

Millard, Emmor H., Edgeworth, assignor, by mesne assignments, to McClintic-Marshall Corporation, Bethlehem, Pa. Steel frame house construction. 1,818,418; Aug. 11.

Miller, Bianca A., Ardmore, Pa. Separation method and apparatus. 1,818,640; Aug. 11.

Miller Company, The. (See Doane, L. C., and Wolter, assignors.)

Miller, Company, The. (See Doane, Leroy C., assignor.)

Miller, Earl H., Sunnyside, Wash. Automatic air rifle. 1,818,810; Aug. 11.

Miller, Edward T. (See Young, Jacob C., assignor.)

Miller, Henry Lincoln, Nebr. Shirt. 1,818,811; Aug. 11.

Miller, John W., et al. (See Spiegel, Edward R., assignor.)

Miller, Osborn M., New York, N. Y. Print. 1,818,080; Aug. 11.

Miller, Oscar, Spokane, Wash. Pig feeding and oiling device. 1,818,419; Aug. 11.

Milliken, Mahlon G., Parlin, N. J., assignor to Hercules Powder Company, Wilmington, Del. Digestion of nitrocellulose. 1,818,733; Aug. 11.

Mills, Chester B. (See Bassett, P. R., and Mills.)

Mills, Wallace C., assignor to J. L. Clark Manufacturing Company, Rockford, Ill. Spool or reel. 1,818,149; Aug. 11.

Milmoe, Michael J., assignor to F. B. Redington Company, Chicago, Ill. Packaging machine. 1,818,496; Aug. 11.

Milmoe, Michael J., assignor to F. B. Redington Company, Chicago, Ill. Wrapping and sealing machine. 1,818,497; Aug. 11.

Milmoe, Michael J., assignor to F. B. Redington Co., Chicago, Ill. Wrapping and sealing machine. 1,818,498; Aug. 11.

Miner, Arlow W., Sioux City, Iowa. Box cover. 1,818,266; Aug. 11.

Mingos, James T., Boston, Mass. Positioning device for writing implements. 1,818,081; Aug. 11.

Minneapolis-Honeywell Regulator Company. (See Denison, Frederick S., assignor.)

Minturn, Benjamin E., Chicago, Ill. Brake. 1,818,920; Aug. 11.

Mittermeier, Herman. (See Williams, N., and Mittermeier.)
Moesta, Marvin W., Detroit, Mich., assignor to The Murray Corporation of America. Vehicle body construction. 1,818,734; Aug. 11.
Moles, Howard R., Garden City, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Aerofoil operating mechanism. 1,818,040; Aug. 11.
Monroe Calculating Machine Company. (See Britten, E. F., and Brown, assignors.)
Monroe Calculating Machine Company. (See Chase, George C., assignor.)
Monroe, Rollo., assignor to Smith-Monroe Company, South Bend, Ind. Air cooling device. 1,818,343; Aug. 11.
Moore, Claude E. (See Sanine, Pierre, assignor.)
Moore, Columbus E., Keystone, W. Va. Headlight structure. 1,818,735; Aug. 11.
Moore, Ralph B., Portland, Oreg. Lumber carrier. 1,818,420; Aug. 11.
Moore, Raymond H., assignor to Whiting Corporation, Harvey, Ill. Dust arrester. 1,818,736; Aug. 11.
Moore, William E., assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Electric furnace. 1,818,239; Aug. 11.
Moore, William M., Little Rock, Ark. Hot pan holder. 1,818,344; Aug. 11.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,818,001; Aug. 11.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,818,002; Aug. 11.
Mordf, Erik J., Evanston, Ill. Combined toy pistol holster and belt. Des. 84,841; Aug. 11.
Morgan, Porter S., Darien, Conn. Clutch mechanism. 1,818,421; Aug. 11.
Morgan & Wright. (See Smith, C. J., McNeill, and Dolding, assignors.)
Morrell, Jacque C., Oak Park, Ill. Improving fuel and air mixtures for internal combustion engines. 1,818,240; Aug. 11.
Moschel, Wilhelm. (See Suchy, R., Staib, and Moschel.)
Moser, Bryon W., St. Louis, Mo. Ornament for desks. 1,818,737; Aug. 11.
Motor Wheel Corporation. (See Baker, Erle K., assignor.)
Motor Wheel Corporation. (See Van Halteren, Andrew S., assignor.)
Motsinger, Armand V., Edgewood Arsenal, Edgewood, Md. Nozzle mechanism. 1,818,422; Aug. 11.
Mott, George T., Pearl River, N. Y. Apparatus for heat exchanging. 1,818,082; Aug. 11.
Mottweiler, Oliver F., and D. C. Drill, assignors to General Insulating and Manufacturing Company, Alexandria, Ind. Insulating structure. 1,818,345; Aug. 11.
Mottweiler, Oliver F., and D. C. Drill, assignors to General Insulating and Manufacturing Company, Alexandria, Ind. Methods of and apparatus for treating insulating materials. 1,818,346; Aug. 11.
Moulton, Emmons, C., Pasadena, Calif. Gear shift lever lock. 1,818,241; Aug. 11.
Mueller, Albert B., Chicago, Ill., assignor to Postergraph Inc., Cleveland, Ohio. Holder for projection apparatus. 1,818,499; Aug. 11.
Mummert, Harvey C., Hammondsport, N. Y. Metal framed structure for aeroplanes. 1,818,423; Aug. 11.
Murch, John H., East Orange, N. J., assignor to American Can Company, New York, N. Y. Cutting circular and other nonrectangular blanks from sheet metal. 1,818,150; Aug. 11.
Murphy, A. B. (See Smith, Bennie H., assignor.)
Murphy, Bertrand P. (See Devereaux, Francis A., assignor.)
Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating system. 1,818,347; Aug. 11.
Murphy, William G. (See Shuttleworth, J., and Murphy.)
Murray Corporation of America, The. (See Moesta, Marvin W., assignor.)
Mursch, John, Kenmore, assignor to Buffalo Hammer Mill Corporation, Buffalo, N. Y. Hammer mill. 1,818,570; Aug. 11.
Muscovitch, Alec S. (See McCallum, J. W., and Muscovitch.)
Musso, Alfred, East Orange, N. J., assignor of one-half to W. P. Beppe, New York, N. Y. Electric furnace. 1,818,812; Aug. 11.
Myers, Joseph W., Jackson, Mich. Process and apparatus to be used in printing photographs from negatives. 1,818,003; Aug. 11.
Myers, Lewis C., Freeport, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,818,860; Aug. 11.
Myers, Luther B., Warren, Ohio. Dead end clamp. 1,818,571; Aug. 11.
Mylius, Walter G., Summit, and B. G. La Bar, Union, N. J., assignors to Westinghouse Electric and Manufacturing Company. Induction meter device. 1,818,151; Aug. 11.
National Aluminate Corporation. (See Kensig, Louis D., assignor.)
National Aniline & Chemical Co., Inc. (See Heritage, Clark C., assignor.)
National Aniline & Chemical Company Inc. (See Zwilgmeyer, Frithjof, assignor.)
National Brass Company. (See Knapp, Edward L., assignor.)
National Cantube Corporation Inc. (See Grimes, James E., assignor.)
National Carbon Co. (See Williford, Edward A., assignor.)
National Cash Register Company, The. (See Goldberg, Maximilian M., assignor.)
National Cash Register Company, The. (See Kropff, Wilhelm, assignor.)
National Electric Products Corporation. (See Fullman, J. M. G., and Lutz, assignors.)
National Pneumatic Company. (See Forman, Paris R., assignor.)
National Radiator Corporation. (See Landvoigt, Thomas E., assignor.)
National Refrigeration Corporation. (See Osborn, Robert G., assignor.)
National Welding Equipment Co. (See Hammon, George L., assignor.)
Naugatuck Chemical Company, The. (See Tuley, William F., assignor.)
Nawiasky, Paul. (See Luttringhaus, A., Nawiasky, and Krause.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, O. Braunsdorf, Hochst-on-the-Main, and A. Ehrhardt, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Condensation products of the benzanthrone series. 1,818,083; Aug. 11.
Neal, Joseph W., Columbus, Ga. Interchangeable nib section and holder therefor. 1,818,424; Aug. 11.
Nelsen, Arthur G., Willmar, Minn. Chain applying and removing equipment. 1,818,004; Aug. 11.
Nelson, Adolph L., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Grinding. 1,818,084; Aug. 11.
Nelson, Adolph L., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Oval grinding. 1,818,085; Aug. 11.
Nelson, William, Minneapolis, Minn. Wheel and rim structure. 1,818,572; Aug. 11.
Nelson, William, Minneapolis, Minn. Dual wheel. 1,818,573; Aug. 11.
Neresheimer, Heinrich. (See Luettringhaus, A., Neresheimer, and Eichhols.)
Neresheimer, Heinrich. (See Luettringhaus, A., Neresheimer, and Emmer.)
Netz, Fritz, Odell, Nebr. Chain hook. 1,818,813; Aug. 11.
Newark Brush Company. (See Nielsen, Laurits H., assignor.)
New Britain Machine Company, The. (See Brown, Robert S., assignor.)
New Departure Manufacturing Company, The. (See Stevens, Clarence C., assignor.)
Newman, Isidor, New York, N. Y. Closure for receptacles. 1,818,574; Aug. 11.
Newman, Samuel, assignor to J. Schoeneman, Incorporated, Baltimore, Md. Patch pocket. 1,818,738; Aug. 11.
Nicholson, Soterios. (See Rentos, Constantinos G., assignor.)
Nicholson, Stanley W., assignor, by mesne assignments, to The Dura Company, Toledo, Ohio. Window regulator. 1,818,641; Aug. 11.
Nicholson, Stanley W., assignor to The Dura Company, Toledo, Ohio. Window regulator. 1,818,642; Aug. 11.
Nickerson, Alma N., assignor, by mesne assignments, to Highway Service, Incorporated, New Bedford, Mass. Road spreading machine. 1,818,500; Aug. 11.
Nickerson, Ira L., Sound Beach, Conn., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Refrigerating apparatus. 1,818,348; Aug. 11.
Nickl, Josef, assignor to Mauser-Werke A. G., Oberndorf A. N., Germany. Safety device for firearms. 1,818,086; Aug. 11.
Nielsen, Laurits H., Kolding, Denmark, assignor to Newark Brush Company. Apparatus for making rotary brushes. 1,818,087; Aug. 11.
Nieman, Henry W., Bethlehem, Pa., assignor to Bethlehem Steel Company. Power transmission mechanism. 1,818,643; Aug. 11.
Niemann, Frederick A., assignor to Felt & Tarrant Mfg. Co., Chicago, Ill. Calculating machine. 1,818,425; Aug. 11.
Niks, Nickolas J., Chillicothe, Ohio. Paper machine. 1,818,267; Aug. 11.
Noack, Erich. (See Busch, W., and Noack.)
Nobbe, William E., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for forming sheet glass. 1,818,152; Aug. 11.
Nobbe, William E., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for forming sheet glass. 1,818,153; Aug. 11.
Nobbe, William E., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for the manufacture of sheet or plate glass. 1,818,154; Aug. 11.
Noblitt, Quintin G., Indianapolis, Ind. Heating apparatus for vehicles. 1,818,268; Aug. 11.
Nordberg Manufacturing Company. (See Smith-Petersen, Morten, assignor.)
Norcross, Fred A., Nelson, British Columbia, Canada. Toy airplane. 1,818,426; Aug. 11.
Nordhem, Eric. (See Alsaker, A., and Nordhem.)
Norge Corporation. (See Lapsley, Robert, assignor.)

North American Chemical Company. (See Thoma, Andrew, assignor.)
North & Judd Manufacturing Company. (See Freysinger, John B., assignor.)
Norton Company. (See Martin, Richard H., assignor.)
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake element. 1,818,088; Aug. 11.
Nourry, Paul, and D. Klukszmann-Rodanski, Lyon, France. Rotary valve for reciprocating engines. 1,818,921; Aug. 11.
Noyes, Harry F., and R. Weigel, Chicago Heights, Ill., assignors to Victor Chemical Works. Manufacture of phosphoric acid and phosphate compounds. 1,818,644; Aug. 11.
Nyborg, Tage G., assignor of one-half to M. F. Higgins, Worcester, England. Shaker conveyer. 1,817,927; Aug. 11.
O'Brien, Norman B. M., Wimbledon, London, England. Advertising device. 1,818,739; Aug. 11.
O'Connell, James. (See Robbins, H. V., and O'Connell.)
Oden, Eugene R., North Hollywood, Calif. Concrete storage reservoir. 1,818,005; Aug. 11.
Odin, Eugene A., Chicago, Ill. Universal vise. 1,818,501; Aug. 11.
Oglesby, Nicholas E., and R. S. Brown, Edgewood, assignors to H. A. Kuhn, Edgewood Arsenal, Md. Impregnation of filters. 1,818,155; Aug. 11.
Ohagen, Heinrich, Breslau, Germany. Making and playing phonograph or sound records. 1,818,006; Aug. 11.
Old Colony Trust Company, executor. (See Lang, James S.)
Olley, Edwin A., assignor to Crouse-Hinds Company, Syracuse, N. Y. Wall cover plate and mounting therefor. 1,818,269; Aug. 11.
Oman, Christopher H. (See Smith, William M., assignor.)
O'Neill, Henry W., Elmhurst, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Designation strip. 1,818,156; Aug. 11.
O'Neill, Joseph A., New York, N. Y. Automatic disk record player. 1,818,645; Aug. 11.
Osborn, Robert G., assignor to National Refrigeration Corporation, Beloit, Wis. Counter-evaporator. 1,818,740; Aug. 11.
Ostwald, William, assignor to Central Metallic Casket Co., Chicago, Ill. Burial casket. Des. 84,842; Aug. 11.
Ostwald, William, assignor to Central Metallic Casket Co., Chicago, Ill. Burial casket. Des. 84,843; Aug. 11.
Ostwald, William, assignor to Central Metallic Casket Co., Chicago, Ill. Burial casket. Des. 84,844; Aug. 11.
Otis, Albert N., Schenectady, N. Y., assignor to General Electric Company. Electric steam generator. 1,818,861; Aug. 11.
Otis Elevator Company. (See Lindquist, D. L., and Crabbe, assignors.)
Ott, Arthur W., Dubuque, Iowa. Manufacturing liner tubes for pneumatic tires. 1,818,340; Aug. 11.
Ousgst, Webb M., Fort Smith, Ark. Transferring device 1,818,862; Aug. 11.
Outboard Motors Corporation. (See Irgens, Finn T., assignor.)
Overhead Door Corporation. (See Blodgett, Herbert C., assignor.)
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Sound reproducing apparatus. 1,818,502; Aug. 11.
P & M Company, The. (See Warr, Harold G., assignor.)
Pacific Copper and Brass Works, Incorporated. (See Travis, Bertram C., assignor.)
Pacific Pump Works. (See Bigelow, George E., assignor.)
Packard Motor Car Company. (See Christman, John M., assignor.)
Packard Motor Car Company. (See Elliott, Harry C., assignor.)
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Painter, Walter S., Middlebury, Conn., assignor to Pioneer Suspender Company, Philadelphia, Pa. Buckle. Des. 84,845; Aug. 11.
Paisley, James A., assignor to The Valley Camp Coal Company, Cleveland, Ohio. Apparatus for loading mine cars. 1,818,427; Aug. 11.
Palace Poultry Car Company. (See Edgerton, Israel V., assignor.)
Palatini, Thomas, Belmar, N. J. Brick laying machine. 1,818,741; Aug. 11.
Panitzsch, Martin, Forest Park, Ill. Woodwork protector. 1,817,928; Aug. 11.
Pannerot, Fred M., Hyde Park, Mass. Ash tray. Des. 84,846; Aug. 11.
Paper Machinery Corporation. (See Hinkson, Adelbert M., assignor.)
Paquin, Max. (See Leopold, R., and Paquin.)
Paradise, Louis A., assignor to Deere and Company, Moline, Ill. Apparatus for cleaning air. 1,818,742; Aug. 11.
Paramount-Publix Corporation. (See Pomeroy, Roy J., assignor.)
Parker, Clara B., executrix. (See Parker, George D.)
Parker, George D., Riverside, Calif., deceased, Clara B. Parker, executrix. Stop mechanism for box nailing machines. 1,818,646; Aug. 11.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Multiple conduit. 1,818,922; Aug. 11.
Parker, Kenneth S., assignor to The Parker Pen Company, Janesville, Wis. Adjustable feed for fountain pens. 1,818,743; Aug. 11.
Parker Pen Company, The. (See Parker, Kenneth S., assignor.)
Parker, Richard B., Skaneateles, assignor to Samuel E. Darby, trustee, New York, N. Y. Grate construction. 1,818,744; Aug. 11.
Parlini, Alexander C., Woodside, assignor to Gotham Knitbac Machine Corporation, New York, N. Y. Machine for repairing knitted fabrics. 1,818,745; Aug. 11.
Parlini, Alexander C., Woodside, assignor to Gotham Knitbac Machine Corporation, New York, N. Y. Making needle latches. 1,818,746; Aug. 11.
Parlini, Alexander C., Woodside, assignor to Gotham Knitbac Machine Corporation, New York, N. Y. Machine for repairing knitted fabrics. 1,818,747; Aug. 11.
Parrett, Arthur N., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Rubber-coated fabric and making it. 1,818,575; Aug. 11.
Parrett, Arthur N., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Rubber coated fabric and making it. 1,818,576; Aug. 11.
Parrott, Robert D. (See Harrall, E. R., and Parrott.)
Parsell, Mason R., Baltimore, Md. Apparatus for eliminating foam from milk and other liquids. 1,818,062; Aug. 11.
Parsons, Fred A., Milwaukee, assignor to Kearney & Trecker Corporation, West Allis, Wis. Milling machine transmission. 1,818,089; Aug. 11.
Pascoe, William H., Chicago, Ill. Oil burner. 1,818,748; Aug. 11.
Pasaman, Abraham J., New York, N. Y. Stretcher for neckwear skins. 1,818,577; Aug. 11.
Payeen, Magnus, Hebron, Nebr. Collapsible chorus stand. 1,818,428; Aug. 11.
Pease, C. F., Company, The. (See Brunk, Harold J., assignor.)
Pedersen, John, Racine, Wis. Fanciful ornament and manufacture. 1,818,578; Aug. 11.
Pepperell Manufacturing Company. (See Sarg, Antonio F., assignor.)
Perfect Hemstitcher Manufacturing Co., The. (See Briggs, A. B. and S. E., assignors.)
Perfex Corporation. (See MacLeod, Daniel T., assignor.)
Perrin, Alphonse R., assignor to Dana Warp Mills, Westbrook, Me. Slub catcher for winding machines. 1,818,350; Aug. 11.
Petersen, Edgar G. (See Beach, F. B., and Petersen.)
Peterson, John W., assignor to Bendix Brake Company, South Bend, Ind. Brake shoe and making same. 1,818,090; Aug. 11.
Peterson, William R., assignor, by mesne assignments, to Bates Valve Bag Corporation, Chicago, Ill. Automatic cement packing machine. 1,818,091; Aug. 11.
Peterson, William R., Chicago, Ill., assignor, by mesne assignments to St. Regis Paper Company, New York, N. Y. Apparatus for filling and weighing bags. 1,818,092; Aug. 11.
Peterson, William R., Chicago, Ill., assignor to St. Regis Paper Company, New York, N. Y. Feeding device for valve bags. 1,818,093; Aug. 11.
Peterson, William R., Chicago, Ill., assignor to St. Regis Paper Company, New York, N. Y. Shut-off device for bag filling machines. 1,818,094; Aug. 11.
Peterson, William R., Chicago, Ill., assignor to St. Regis Paper Company, New York, N. Y. Valve bag filling machine. 1,818,095; Aug. 11.
Peterson, William R., and N. E. Dorrington, Chicago, Ill., assignors to St. Regis Paper Company, New York, N. Y. Bag filling and discharging apparatus. 1,818,096; Aug. 11.
Petnel, Joseph A., Troy, N. Y. Gauge for the application of lip rouge. 1,818,863; Aug. 11.
Petit, Henry B., assignor to G. M. Holley, Detroit, Mich. Hot spot manifold. 1,818,270; Aug. 11.
Petrelli, Joseph V., New Rochelle, N. Y. Pump. 1,818,097; Aug. 11.
Petters Limited. (See Hill, Geoffrey T. R., assignor.)
Pettibone Mulliken Company. (See Enstrom, August, assignor.)
Peyinghaus, Walter, Egge, near Volmarstein, Germany. Axle box for vehicles. 1,818,864; Aug. 11.
Pfau, Anton, Portland, Oreg. Sawdust burner. 1,818,503; Aug. 11.
Pfeiffer, Frank E., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,818,271; Aug. 11.
Pfeiffer, Fred B., Akron, assignor to Selberling Rubber Company, Barberton, Ohio. Fabric slitting and strip edging apparatus. 1,817,929; Aug. 11.
Pfeiffer, Fred B., Akron, and J. W. White, Barberton, Ohio, assignors to Selberling Rubber Company. Handling and separating sheet materials. 1,818,504; Aug. 11.
Pfleiderer, Georg, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Electrode. 1,818,579; Aug. 11.
Phillips, George A., Middle Park, Victoria, Australia. Document filing device. 1,817,930; Aug. 11.
Phillips, Maurice M., Pittsburgh, Pa. Radio receiving circuits. 1,818,157; Aug. 11.
Phillips, N. V., Gloeilampenfabriken. (See Reerink, Engbert H., assignor.)

Photostat Corporation. (See Caps, Arthur W., assignor.)
Pier, Mathias, Heidelberg, W. Boesler, Ludwigshafen-on-the-Rhine, and A. Eisenhut, Heidelberg, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Removal of monocyclic aromatic hydrocarbons from gases. 1,818,158; Aug. 11.
Pierce, Walter H., Watertown, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Adapter for lubricating apparatus. 1,818,272; Aug. 11.
Pines Winterfront Company. (See Beach, Frederick E., assignor.)
Pines Winterfront Company. (See Beach, F. E., and Petersen, assignors.)
Pioneer Suspender Company. (See Painter, Walter S., assignor.)
Pittler, Robert H., Los Angeles, Calif. Golf game. 1,818,749; Aug. 11.
Pittsburgh Plate Glass Company. (See Halbach, Howard L., assignor.)
Pittsburgh Research Corporation. (See Moore, William E., assignor.)
Pionus, David, Jersey City, N. J. Shoe polish applier. 1,818,930; Aug. 11.
Pokorny, Ernst. (See Jaeger, M., Pokorny, and Gossrau.)
Polak, Gabriel, deceased, Forest City, Pa.; H. Polak, administratrix of said Gabriel Polak. Insulator. 1,818,931; Aug. 11.
Polak, Helen, administratrix. (See Polak, Gabriel, deceased.)
Pollard, Willard L. (See Dodge, A. Y., and Pollard.)
Pollopas Limited. (See Ripper, Kurt, assignor.)
Pomeroy, Roy J., Los Angeles, Calif., assignor of one-half to Paramount Publix Corporation. Composite photographic method and apparatus. 1,818,354; Aug. 11.
Pomeroy, S. H., Company. (See Washburn, Loring, assignor.)
Poole, John L., and H. J. G. Rudolf, Galesburg, assignors to Winslow Boiler and Engineering Company, Chicago, Ill. Burner. 1,818,865; Aug. 11.
Poranski, Sophia, Elmhurst, N. Y. Vanity case. 1,818,351; Aug. 11.
Pösentrup, Heinrich, Munster, Germany. Shiftable buffer stop. 1,817,938; Aug. 11.
Postergraph Inc. (See Mueller, Albert B., assignor.)
Pouchain, René A., Elkins Park, and F. S. Fox, Philadelphia, assignors to Tasty Baking Company, Philadelphia, Pa. Ventilated container. 1,818,908; Aug. 11.
Poullot, Russell J., assignor, by mesne assignments, to Dee Wite, Incorporated, Detroit, Mich. Outboard motor boat. 1,818,273; Aug. 11.
Prestage, Edwin, London, England. High pressure gas compressor. 1,818,580; Aug. 11.
Price, David R. (See Bowman, F. H., Lynch, and Price.)
Process Engineering and Equipment Corporation. (See Schrumn, Jewett F., assignor.)
Prokop, Josef, Pardubice, Czechoslovakia. Apparatus for polishing grain. 1,818,806; Aug. 11.
Prönnecke, Karl. Quedlinburg, Germany. Merry-go-round. 1,818,647; Aug. 11.
Protzeller, Harry W., assignor to O. F. Jordan Company, East Chicago, Ind. Railway maintenance and construction car. 1,818,750; Aug. 11.
Prutzman, Paul W., Los Angeles, Calif. Hot filtration of decolorized oils. 1,818,274; Aug. 11.
Purdy, Chester A., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for pressing condensers. 1,818,648; Aug. 11.
Pure Oil Company, The. (See Watson, C. B., and Harnsberger, assignors.)
Purnell, Samuel J., Herne Hill, Geelong, Victoria, Australia. Latch. 1,817,939; Aug. 11.
Pyle-National Company, The. (See Wulle, William A., assignor.)
Quick, Cecil G., Eltham, London, and T. R. Bennett, Willesden, London, England, assignors to R. Hoe & Co., Inc., New York, N. Y. Late news device for printing machines. 1,818,751; Aug. 11.
Quigley, Thomas F., Cleveland, Ohio, assignor to Micromatic Hone Corporation. Hydraulic honing and lapping machine. 1,818,098; Aug. 11.
Rabbidge, William F., Ulverston, assignors to Vickers Limited, Westminister, England. Structure or framing of internal combustion engines. 1,818,752; Aug. 11.
Radiore Company, The. (See Jakosky, John J., assignor.)
Ragan, Ralph, Atlanta, Ga. Oil purifying system for internal combustion engines. 1,818,429; Aug. 11.
Rail Joint Company, The. (See Braine, Daniel L., assignor.)
Randall, James W. H., New York, N. Y., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass. 1,818,159; Aug. 11.
Randall, Karl C., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Current distributing apparatus. 1,818,160; Aug. 11.
Randles, Oren R., Spokane, Wash. Outlet box and plug. 1,818,352; Aug. 11.
Ranglack, Franz. (See Lehmann, K. A., and Ranglack.)
Rapelje, John A., Boonton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Drive ring. 1,818,099; Aug. 11.
Ratigan, James P., Los Angeles, Calif. Trunnion connection. 1,818,161; Aug. 11.
Ravizza, Louis. (See Samaras, S., and Ravizza.)
Readeker, William C., New York, N. Y. Motion picture machine. 1,818,355; Aug. 11.
Redcay, Paul D., Philadelphia, Pa., assignor to Gotham Silk Hosiery Company, Inc., New York, N. Y. End trimming mechanism for cup feed overseaming machines. 1,818,753; Aug. 11.
Redington, F. B., Company. (See Milmoe, Michael J., assignor.)
Redlee, Albert H., Philadelphia, Pa. Welt hook and rod. 1,818,867; Aug. 11.
Reed, George E., and J. W., Syracuse, N. Y. Air cooling system for combustion engines. 1,818,868; Aug. 11.
Reed, John W. (See Reed, G. E. and J. W.)
Reede, Edmund J., Silverton, Oreg. Tool. 1,818,869; Aug. 11.
Reerink, Engbert H., assignor to N. V. Phillips Gloeilampenfabriken, Eindhoven, Netherlands. Precipitating rhodium, iridium, osmium, ruthenium and the like. 1,818,909; Aug. 11.
Reid, James S., assignor, by mesne assignments, to The Eaton Axle & Spring Company, Cleveland, Ohio. Neck and closure structure. 1,818,581; Aug. 11.
Reiter Company. (See McGill, Chester T., assignor.)
Remington Typewriter Company. (See Hart, Frederick A., assignor.)
Remington, Wolcott. (See Thornton, G. A., and Remington.)
Rennie, Kenneth G. (See Goddard, Arthur L., assignor.)
Rentos, Constantinos G., Brooklyn, N. Y., assignor of one-third to Soterios Nicholson, Washington, D. C. Boat. 1,818,356; Aug. 11.
Republic Carbon Company. (See McAnulty, Semmeon M., assignor.)
Rex Manufacturing Company. (See Max, George T., assignor.)
Rheinische Metallwaaren-und Maschinenfabrik. (See Heinemann, Karl, assignor.)
Ricardo, Harry R., London, England. Rotary blower, pump, or fluid pressure engine. 1,818,430; Aug. 11.
Rice, Maurice A., Concord, N. H. Skate sharpener. 1,818,870; Aug. 11.
Richards, Julius H., Torrington, Conn., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,818,649; Aug. 11.
Richardson Company, The. (See Cain, J. R., and Yungblut, assignors.)
Rieger, Leonz P. A., assignor to Goodyear-Zeppelin Corporation, Akron, Ohio. Transmission shaft connection. 1,818,932; Aug. 11.
Riggs, Greeley R., and C. F. Spreen, Austin, Tex. Electrical outlet box support. 1,818,814; Aug. 11.
Rigotti, Carlo, Turin, Italy. Pneumatic spring. 1,818,357; Aug. 11.
Riley Stoker Corporation. (See Andrews, L. V., and Craig, assignors.)
Ripper, Kurt, Vienna, Austria, assignor, by mesne assignments to Pollopus Limited, Nottingham, England. Treatment of condensation products of carbamide or its derivatives with aldehydes. 1,817,931; Aug. 11.
Ripper, Kurt, Vienna, Austria, assignor, by mesne assignments, to Pollapas Limited, Nottingham, England. Treatment of condensation products of carbamide or its derivatives with aldehydes. 1,817,940; Aug. 11.
Ritter, Carl C., and H. M. Williams, assignors to Frigidaire Corporation, Dayton, Ohio. Manufacturing process. 1,818,008; Aug. 11.
Ritter, Julius, jr., assignor to Hartmann Trunk Company, Racine, Wis. Trunk and suitcase valances. 1,818,754; Aug. 11.
Rivat, George, Paterson, N. J., and C. Dreyfus, New York, N. Y., assignors to Celanese Corporation of America. Treating fabrics. 1,818,505; Aug. 11.
Roberts Brass Manufacturing Company. (See Roberts, Earl W., assignor.)
Roberts, Earl W., assignor to Roberts Brass Manufacturing Company, Detroit, Mich. Adjustable support for gas lighters and the like. 1,818,275; Aug. 11.
Robertson, David, assignor to Vacuum Products (N. Z.) Limited, Wellington, New Zealand. Means for use in the evacuation and sealing of containers for perishable products. 1,817,932; Aug. 11.
Robinson, Thomas, assignor to Lancaster Asphalt, Inc., New York, N. Y. Making roofing products. 1,818,009; Aug. 11.
Robbins, Harold V., and J. O'Connell, New York, N. Y. Burglar alarm system. 1,818,162; Aug. 11.
Rockwell, Edward A., Chicago, Ill. Brake operating mechanism. 1,817,943; Aug. 11.
Rockwell, Edward A., New York, N. Y., assignor to Stewart-Warner Corporation. Apparatus for controlling the transmission of fluctuating fluid pressure. 1,817,941; Aug. 11.
Rockwell, Edward A., Long Island City, N. Y., assignor to Stewart-Warner Corporation, Chicago, Ill. Fluid pressure trapping device. 1,817,942; Aug. 11.
Rodman Chemical Company. (See Rodman, Hugh, assignor.)
Rodman, Hugh, Oakmont, assignor to Rodman Chemical Company, Verona, Pa. Quenching oils. 1,818,481; Aug. 11.
Rogers, Homer L., Hartwell, Ohio, assignor to The Philip Carey Manufacturing Company. Rail filler. 1,818,755; Aug. 11.
Rogul, Abraham. (See De Villard, Jean F., assignor.)

Rolstad, Martin O., Sisseton, S. Dak., assignor of one-half to O. Bornes, Minneapolis, Minn. Tool for grasping bolts and machine parts. 1,818,353; Aug. 11.
Romine, Robert T., Mount Clemens, Mich. Conveyer method and apparatus. 1,818,358; Aug. 11.
Rosacker, Max F., Mount Penn, Pa. Flexible lamp bracket. 1,818,582; Aug. 11.
Rose, Hilton W., assignor of one-half to P. Bondurant, Portland, Oreg. Match holder. 1,818,507; Aug. 11.
Rosen, Victor E., Waltham Highlands, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser and manufacturing the same. 1,818,010; Aug. 11.
Rosenbaum, Louis, New York, N. Y. Quilted blanket. 1,818,756; Aug. 11.
Rosenthal China Corporation, The. (See Wesp, George, assignor.)
Rosner, Adolph, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Power plant. 1,817,944; Aug. 11.
Ross, David H., Boston, Mass. Jardiniere. Des. 84,847; Aug. 11.
Ross, Donald W., and J. M. Lamble, Washington, Pa. Refractory and making the same. 1,818,506; Aug. 11.
Ross, Edgar S., Pittsburgh, Pa., assignor to The Philip Carey Manufacturing Company. Bituminous product. 1,817,933; Aug. 11.
Ross, Oscar A., New York, N. Y. Seal. 1,818,650; Aug. 11.
Ross, Oscar A., New York, N. Y. Seal. 1,818,651; Aug. 11.
Ross, Oscar A., New York, assignor to General Railway Signal Company, Rochester, N. Y. Magnetic car retarder. 1,818,933; Aug. 11.
Rossebo, George H., and F. Hoke, assignors to The Holcomb & Hoke Mfg. Co., Indianapolis, Ind. Pop corn machine. 1,818,276; Aug. 11.
Roth, Hilda Y. (See Vargo, Frank, assignor.)
Rothstein, Barnett, Wilkes-Barre, Pa. Sanding device. 1,818,815; Aug. 11.
Rouiller, Georges, and J. Marion, Paris, France. Cinematographic projecting apparatus. 1,818,432; Aug. 11.
Rowe, Alvin V., assignor to Rowe Manufacturing Company, Galesburg, Ill. Lown mower. 1,818,583; Aug. 11.
Rowe Manufacturing Company. (See Rowe, Alvin V., assignor.)
Royal Typewriter Company. (See Myers, Lewis C., assignor.)
Ruberoid Co., The. (See Calkins, Lloyd E., assignor.)
Ruddy, Martin J. (See Jamison, Tobias H., assignor.)
Rudolf, Henry J. G. (See Poole, J. L., and Rudolf.)
Rufener, Hans, and T. Eichmann, Bern-Lieberfeld, Switzerland, assignor, by mesne assignments, to International Carbonic Engineering Company, Kennett Square, Pa. Process and apparatus for obtaining dense carbon dioxide snow directly from liquid carbon dioxide. 1,818,816; Aug. 11.
Russell, Robert C., Dallas, Tex. Automobile radiator bar. Des. 84,848; Aug. 11.
Rutenber, Edwin A. (See Lindemann, W. C., and Rutenber.)
Ryden, Eric H., assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,818,433; Aug. 11.
Sachse, Erich, Pegau, and O. Michalk, Freital, Germany. Roughening tool for the working of leather. 1,818,011; Aug. 11.
Safety Fumigant Company. (See Houghton, Harry W., assignor.)
Sahler, Herbert, Kansas City, Mo. Wheelbarrow. 1,817,934; Aug. 11.
St. Regis Paper Company. (See Peterson, William R., assignor.)
St. Regis Paper Company. (See Peterson, W. R., and Dorrington, assignors.)
Salesbury, Frank M. (See Adams, H. W., and Salisbury.)
Samaras, Stephen, and L. Ravizza, Oakland, Calif. Adjustable golf club. 1,818,359; Aug. 11.
Samson, Siegfried, and A. Vocke, Kassel, Germany. Device for reading maps and writings, looking at pictures and the like. 1,818,757; Aug. 11.
Samuelson, Eric T., assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill. Lighting fixture globe holder. 1,818,163; Aug. 11.
Sanine, Pierre, assignor of one-fourth to C. E. Moore, Nice, France. Automatic change speed mechanism. 1,818,910; Aug. 11.
Sarg, Antonio F., New York, N. Y., assignor to Pepperell Manufacturing Company, Boston, Mass. Blanket. Des. 84,849; Aug. 11.
Sarg, Antonio F., New York, N. Y., assignor to Pepperell Manufacturing Company, Boston, Mass. Box cover paper or the like. Des. 84,850; Aug. 11.
Sarg, Antonio F., New York, N. Y., assignor to Pepperell Manufacturing Company, Boston, Mass. Blanket. Des. 84,851; Aug. 11.
Sarg, Antonio F., New York, N. Y., assignor to Pepperell Manufacturing Company, Boston, Mass. Box cover paper or the like. Des. 84,852; Aug. 11.
Sasnett, Edward C., Washington, D. C., assignor to The Union Switch & Signal Company, Swissvale, Pa. Automatic train control system. 1,817,945; Aug. 11.
Saurer, Curt, assignor to The Mechanical Rubber Company, Cleveland, Ohio. Non-metallic connection. 1,818,758; Aug. 11.
Savy, Emile, Paris, France. Machine for coating and glazing biscuits. 1,818,911; Aug. 11.
Saymon, William, Brooklyn, N. Y. Lamp receptacle. Des. 84,853; Aug. 11.
Scheck, Johann Oskar Emil, Zurich, Switzerland. Display ticket for marking and pricing goods. 1,818,164; Aug. 11.
Schefold, Carl B., Marquis, Saskatchewan, Canada. Sloper attachment for road grading machines. 1,818,434; Aug. 11.
Schiff, Sigmund, assignor to The J. H. Day Company, Cincinnati, Ohio. Baller. 1,818,277; Aug. 11.
Schley, Jack A., et al. (See Spiegel, Edward R., assignor.)
Schmidt, John H., Bloomfield, N. J., assignor to Bakelite Corporation, New York, N. Y. Resin solution and preparing same. 1,818,360; Aug. 11.
Schmidt, Otto, and Johannes Ufer, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Transforming oxides of carbon into organic compounds particularly methanol. 1,818,165; Aug. 11.
Schneider, Jacques, Antwerp, Belgium. Refrigerating machine. 1,818,166; Aug. 11.
Schoeneman, J., Incorporated. (See Newman, Samuel, assignor.)
Schroeder, William, Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Lifting device. 1,818,584; Aug. 11.
Schröter, Fritz, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. High speed telegraphy system. 1,818,585; Aug. 11.
Schrumn, Jewett F., assignor to Process Engineering and Equipment Corporation, Attleboro, Mass. Furnace. 1,818,759; Aug. 11.
Schuhfabrik Hassia Aktiengesellschaft. (See Bischoff, Leonard, assignor.)
Schumacher, Charles B., Pittsburgh, Pa. Dry closet. 1,818,586; Aug. 11.
Schwabe, Joseph L., jr., Milwaukee, Wis. Surface dressing machine. 1,818,361; Aug. 11.
Schweitzer & Conrad, Inc. (See Conrad, Nicholas J., assignor.)
Scofield, Theodore J., and G. A. White, assignors to The Sparks-Withington Company, Jackson, Mich. Projector for signaling device. 1,818,817; Aug. 11.
Scott, Bernard H., Glendale, Calif. Drill stem. 1,818,508; Aug. 11.
Scott, Elmer R. (See Floyd, Alfred T., jr., assignor.)
Scott, Hermon C., Pomeroy, Wash. Sack chute. 1,818,652; Aug. 11.
Scottish Dyes, Limited. (See Drescher, H. A. E., Smith, and Thomas, assignors.)
Scottish Dyes, Limited. (See Thomson, R. F., and Thomas, assignor.)
Seale, Mitchell J., Birmingham, Ala. Circuit reclosing device. 1,818,818; Aug. 11.
Sears, Edward, and C. F. Wagner, Deer Lodge, Mont. Chuck for machine tools. 1,818,167; Aug. 11.
Sebrell, Lorin B. (See Teppema J., and Sebrell.)
Seiberling Rubber Company. (See Crossan, J. R., and Mackel, assignors.)
Seiberling Rubber Company. (See Pfeiffer, Fred B., assignor.)
Seiberling Rubber Company. (See Pfeiffer, F. B., and White, assignors.)
Seil, Gilbert E., Conshohocken, assignor to E. J. Lavino and Company, Philadelphia, Pa. Gas purification materials and making the same. 1,818,871; Aug. 11.
Selectograph Company. (See Gollnick, P. A., and Broderick, assignors.)
Selényi, Paul, Budapest, assignor to Egyesult Izzolampa es Villamossagi Reszvenytarsasag, Ujpest, Hungary. Process and apparatus for drawing electrical pictures. 1,818,760; Aug. 11.
Self, Grafton H. (See Bockwitz, Andrew J., assignor.)
Self, Joseph D., Waynesville, N. C. Changeable sign. 1,818,509; Aug. 11.
Semet-Solvay Engineering Corporation. (See Hughes, Charles H., assignor.)
Sendler, Theodor, Stettin, Germany. Apparatus for drying clothes, laundry, etc. 1,818,761; Aug. 11.
Seresun, John, Cleveland, Ohio. Plug socket. 1,818,819; Aug. 11.
Setchkin, Nicholas P., assignor to Doherty Research Company, New York, N. Y. Heat transferring means. 1,818,762; Aug. 11.
Sherwin, Haas & Co. (See Haas, Ira G., assignor.)
Shields, Benjamin F., Seattle, Wash. Friction brake. 1,818,100; Aug. 11.
Shigley, Cyrus C., Kalamazoo, Mich. Toy gun. 1,818,763; Aug. 11.
Shimomura, Kamakichi. (See Kumagawa, H., and Shimomura.)
Schlesinger, William H., Brooklyn, N. Y. Lamp. Des. 84,854; Aug. 11.
Shulman, Charles, New York, N. Y. Table lamp base or article of similar nature. Des. 84,855; Aug. 11.
Shulman, Charles, New York, N. Y. Statuette or similar article. Des. 84,856; Aug. 11.
Shuttleworth, John, Ashton-on-Mersey, and W. G. Murphy, Altrincham, England, assignors to Linotype and Machinery Limited, London, England. Sheet separating apparatus. 1,818,820; Aug. 11.
Siemens & Halske, Aktiengesellschaft. (See Grüss, Heins, assignor.)
Siler, Robert W., Willowbrook, Calif. Pipe racking device. 1,818,278; Aug. 11.

Silverstein, William L., Brooklyn, N. Y. Cap. 1,818,764; Aug. 11.

Silverstein, William L., Brooklyn, N. Y. Military cap. 1,818,765; Aug. 11.

Simon, Forest C., assignor to The French Oil Mill Machinery Company, Piqua, Ohio. Locking mechanism for cake former end gates. 1,817,946; Aug. 11.

Sinel, Joseph, New York, N. Y. Gasoline dispenser casing. Des. 84,857; Aug. 11.

Slaton, Ira T. (See Koch, D. H., and Slaton.)

Slidell, Kemper, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Extruding a bloated clay product. 1,818,101; Aug. 11.

Sloane, William W., assignor to Goodman Manufacturing Company, Chicago, Ill. Controller. 1,817,947; Aug. 11.

Smellie, Donald G., Maywood, Ill., assignor to The Hoover Company. Refrigeration. 1,818,587; Aug. 11.

Smith, Bennie H., assignor of one-half to A. B. Murphy, Manatee, Fla. Turpentine worker's tool. 1,818,964; Aug. 11.

Smith, Charles F., Brooklyn, assignor to Lily-Tulip Cup Corporation, New York, N. Y. Paper cup machine. 1,818,279; Aug. 11.

Smith, Clyde J., G. K. McNeill, and C. J. Dolding, assignors to Morgan & Wright, Detroit, Mich. Sectional repair bag. 1,818,766; Aug. 11.

Smith, Frank H., Philadelphia, Pa., and H. A. Stringfellow, Akron, Ohio. Apparatus for joining pipes. 1,818,435; Aug. 11.

Smith, Harold W., Freeport, N. Y. Game. 1,818,012; Aug. 11.

Smith, Milton S., Maplewood, assignor to Carrier Construction Company, Inc., Newark, N. J. Heat exchange device. 1,817,948; Aug. 11.

Smith-Monroe Company. (See Monroe, Rollo O., assignor.)

Smith-Petersen, Morten, assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Safety device for hoist brakes. 1,818,007; Aug. 11.

Smith, Pleasant E., assignor of one-third to L. B. House, Herrin, Ill. Coal loader. 1,818,168; Aug. 11.

Smith, Temple C., Westfield, N. J., assignor to American Telephone and Telegraph Company. Snatch block. 1,817,949; Aug. 11.

Smith, William. (See Drescher, H. A. E., Smith, and Thomas.)

Smith, William M., Hartland, assignor of one-half to C. H. Oman, North Lake, Wis. Railroad crossing gate. 1,818,013; Aug. 11.

Snaman, William E., Pittsburgh, Pa. Floor structure. 1,818,014; Aug. 11.

Snee, William, and M. Bell, West Elizabeth, Pa. Aeroplane. 1,818,588; Aug. 11.

Snow, Norman L., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,818,965; Aug. 11.

Snyder, George C., Long Island City, N. Y., assignor to The Guardian Trust Company, Cleveland, Ohio. Box and making the same. 1,818,102; Aug. 11.

Societe Anonyme d'Ouvree Marihaye. (See Bertrand, Maurice, assignor.)

Societe Anonyme Etablissements Jules Marchal. (See Kiener, Jean, assignor.)

Société Générale D'Etudes Industrielles, General Research Corporation, Societe Anonyme. (See Feyens, François, assignor.)

Societe Internationale Holverta, Societe Anonyme. (See Holle, Alexander A., assignor.)

Society of Chemical Industry in Basle. (See Arbogast, Adam, assignor.)

Soss, Mark, Spokane, Wash. Fountain brush. 1,818,280; Aug. 11.

Soss, Mark, Spokane, Wash. Vibrator fountain brush. 1,818,281; Aug. 11.

Soss, Mark, Spokane, Wash. Drying and cleaning brush. 1,818,282; Aug. 11.

Southwark Foundry & Machine Company. (See Dinzl, Richard W., assignor.)

Sparks-Withington Company, The. (See Scofield, T. J., and White, assignors.)

Spencer, Owen H., Indianapolis, Ind. Engine inlet manifold. 1,818,283; Aug. 11.

Sperry, Elmer A., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Automatic pilot. 1,818,103; Aug. 11.

Sperry, Elmer A., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Controlling dirigible aircraft. 1,818,104; Aug. 11.

Sperry Gyroscope Company. (See Bassett, P. R., and Mills, assignors.)

Sperry Gyroscope Company. (See Sperry, Elmer A., assignor.)

Spicers Limited. (See Goldsmith, J. N., Baker, and Bonamico, assignors.)

Spiegel, Edward R., assignor of thirty-four per cent to J. W. Miller and fifteen per cent to J. A. Schley, Dallas, Tex. Spring mounting for motor vehicles. 1,818,105; Aug. 11.

Spiess, Georg, Leipzig, Germany. Platen printing press. 1,818,821; Aug. 11.

Spreen, Charles F. (See Riggs, G. R., and Spreen.)

Sproston, Edmund, Winnipeg, Manitoba, Canada. Vacuum cleaner. 1,818,872; Aug. 11.

Stadelhofer, Leslie, Newark, N. J. Vapor trap. 1,817,950; Aug. 11.

Stafford, John K., Pittsfield, Mass., assignor to General Electric Company. Resistor fuse. 1,818,822; Aug. 11.

Stalb, Karl. (See Suchy, R., Stalb, and Moschel.)

Stalder, Louis, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company. Deflecting mechanism. 1,818,169; Aug. 11.

Stalder, Louis, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company. Deflecting mchanism. 1,818,170; Aug. 11.

Standard Oil Company. (See Engbrecht, Herman J., assignor.)

Standard Oil Company. (See Holcomb, R. L., and Bartels, assignors.)

Standard Oil Company of California. (See Lyman, Arthur L., assignor.)

Stanley Works, The. (See Stowell, Austin L., assignor.)

Starke, Emil O., Chicago, Ill. Harp. 1,817,951; Aug. 11.

Starr, Frank F. (See Dickey, E., and Starr.)

Steedman, Edwin H., St. Louis, Mo. Cooling unit for refrigerating systems. 1,818,015; Aug. 11.

Steedman, Edwin H., St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Safety mechanism for automobile lifts. 1,818,016; Aug. 11.

Steel Wheel Corporation. (See Barber, William, assignor.)

Steen, Harry S., assignor to The Chicago Faucet Company, Chicago, Ill. Waste mechanism. 1,818,653; Aug. 11.

Stelzer, William, Chicago, Ill., assignor to American Propeller Company, Baltimore, Md. Propelling device for aircraft and the like. 1,817,952; Aug. 11.

Stephens, Percy W., Chicago, Ill. Detachable handle for cooking utensils. 1,818,284; Aug. 11.

Stetson, Leon W., West Newton, Mass. Shoe. Des. 84,858; Aug. 11.

Steuart, Douglas S. S., Regent's Park, London, England. Mouthpiece arrangement for use with telephones and the like. 1,818,654; Aug. 11.

Stevens, Clarence C., assignor to The New Departure Manufacturing Company, Bristol, Conn. Grinding machine. 1,817,953; Aug. 11.

Stevens, Darwin E., and Charles E. Brown, Duluth, Minn. Vibrating stool. Des. 84,859; Aug. 11.

Stevens, Paul S., assignor to Bucyrus-Erie Company, South Milwaukee, Wis. Excavating machinery. 1,818,106; Aug. 11.

Stevens, Raymond K., Sidney, Iowa. Water fountain for poultry. 1,818,017; Aug. 11.

Stevenson, William E., Pittsburgh, Pa. Pump. 1,818,171; Aug. 11.

Stewart-Warner Corporation. (See Rockwell, Edward A., assignor.)

Stiglitz, Ira, Brooklyn, N. Y., assignor to Superb Bronze & Iron Co. Inc. Window. 1,818,436; Aug. 11.

Stiles, Edward M., Burlington, Iowa, assignor to U. S. Slicing Machine Company, La Porte, Ind. Slice collecting device for slicing machines. 1,818,243; Aug. 11.

Stocker, Closman P., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Control circuit. 1,818,018; Aug. 11.

Stokes and Smith Company. (See Davis, Stanley H., assignor.)

Stone Straw Corporation. (See Maltby, Lewis C., assignor.)

Stout, Harry H., Clifton, Ariz., assignor to Copper Deoxidation Corporation, New York, N. Y. Pyrometallurgical copper refining. 1,817,935; Aug. 11.

Stowell, Austin L., assignor to The Stanley Works, New Britain, Conn. Brace bit extension. 1,818,823; Aug. 11.

Strabtmore Paper Company. (See Bryan, Cassius M., assignor.)

Stratton, Frank E., Cranston, assignor to Diamond Machine Company. Providence, R. I. Fluid pressure actuated grinding machine. Re18,149; Aug. 11.

Strauss, Alfons. (See Knzenmaier, A., and Strauss.)

Strauss, Joseph B., Chicago, Ill. Yielding barrier for vehicles. 1,818,824; Aug. 11.

Stringfellow, Henry A. (See Smith, F. H., and Stringfellow.)

Stromberg Research Corporation. (See Dienner, John A., assignor.)

Stuart, Harve R., Springfield, Ohio. Method of and apparatus for electric refrigeration. 1,818,437; Aug. 11.

Stumpf, Joseph F., Chicago, Ill. Subplate for drill jigs. 1,818,986; Aug. 11.

Suchy, Robert, K. Stalb, and W. Moschel, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for the fusion electrolysis of metallic chlorides. 1,818,173; Aug. 11.

Suchy, Robert, K. Stalb, and W. Moschel, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Partition for separating the products of fusion electrolysis of metallic chlorides. 1,818,174; Aug. 11.

Summerfield, Bernard, Chicago, Ill. Doorcheck. 1,818,655; Aug. 11.

Summers, Joe N. (See Briggs, R. W., and Summers.)

Sun Oil Company. (See Alleman, Gellert, assignor.)

Sundell, Gustaf A., assignor to N. A. Hallwood, Columbus, Ohio. Scale. 1,818,285; Aug. 11.

Superb Bronze & Iron Co. (See Stiglitz, Ira, assignor.)

Superheater Company, The. (See Armacost, Wilbur H., assignor.)

Superheater Company, The. (See Gordon, Charles W., assignor.)

Superheater Company, The. (See Thompson, Robert P., assignor.)

Superior Floor Surfacing Machine Corporation. (See Jacobson, G., and Ericson, assignors.)

Super Mold Corporation. (See Woock, Herbert J., assignor.)

Supplee, George C., Bainbridge, assignor, by mesne assignments, to The Borden Company, New York, N. Y. Irradiating milk solids with ultra-violet rays and the product of such method. 1,817,936; Aug. 11.

Surface Combustion Corporation. (See Beam, Vilynn O., assignor.)

Sutcliffe, Edwin A., Oak Park, assignor to Victor Manufacturing & Gasket Co., Chicago, Ill. Tag holder. 1,818,019; Aug. 11.

Sutherland, Robert F. (See Hooper, C. L., and Sutherland.)

Sutherland, Thomas G., Chicago, Ill. Railing fittings. 1,818,172; Aug. 11.

Swann Research, Inc. (See Carothers, J. N., and Logue, assignors.)

Swartwout, Everett W., White Plains, N. Y. Rotary blower and pump. 1,818,767; Aug. 11.

Swartwout, Everett W., White Plains, N. Y. Rotary blower, pump and meter. 1,818,768; Aug. 11.

Swartzbaugh Manufacturing Company, The. (See Knaggs, Joseph, assignor.)

Sweeny, Carey P., College Station, Tex. Retarded circuit breaker. 1,818,873; Aug. 11.

Symington, T. H., and Son, Inc. (See Symington, Thomas H., assignor.)

Symington, Thomas H., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md. Spring retaining means. 1,818,362; Aug. 11.

Tabb, Warner T., Mahwah, N. J., assignor to Eisemann Magneto Corporation, New York, N. Y. Hydraulic transmission. 1,818,825; Aug. 11.

Tabb, Warner T., Mahwah, N. J., assignor to The Eisemann Magneto Corporation, New York, N. Y. Speed responsive control. 1,818,826; Aug. 11.

Talbott, Walter D., and L. Bannerman, assignor of one-third to F. E. Hummel, Hopewell, Va. Barking apparatus. 1,818,657; Aug. 11.

Tasty Baking Company. (See Pouchain, R. A., and Fox, assignors.)

Taunton Pearl Works, Inc. (See Wakefield, Francis J., assignor.)

Taylor, Charles C. (See Davis, F. K., and Taylor.)

Taylor, Frank F., Company, The. (See Gill, Donald W., assignor.)

Taylor, George E., London, England, assignor to Ajax Electrothermic Corporation, Trenton, N. J. High frequency coil for electric induction furnaces. 1,818,107; Aug. 11.

Taylor, George N., East Providence, R. I., assignor to Universal Winding Company, Boston, Mass. Yarn-cleaner and slub-catcher. 1,817,937; Aug. 11.

Taylor, Harry J., New York, N. Y. Applying an advertising medium to bakers' products. 1,818,923; Aug. 11.

Taylor, Julian M., and R. H. Taylor, Las Cruces, N. Mex. Planter attachment. 1,818,656; Aug. 11.

Taylor, Robert H. (See Taylor, J. M. and R. H.)

Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schröter, Fritz, assignor.)

Tell, R. P. (See Aikman, Burton S., assignor.)

Teppema, Jan, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Acceleration of vulcanization of rubber. 1,818,934; Aug. 11.

Teppema, Jan, and L. B. Sebrell, assignors to The Goodyear Tire & Rubber Company, Akron, Ohio. Preparing thiazoles. 1,818,935; Aug. 11.

Thames Silk Company. (See Furman, Abraham P., assignor.)

Theumann, Max J., Lyon, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Manufacturing celluloid-like masses. 1,818,108; Aug. 11.

Thoma, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Filling shoe-bottom cavities. 1,818,827; Aug. 11.

Thomas, Albert L., South Bend, Ind. License tag. 1,818,020; Aug. 11.

Thomas, Herbert, Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Treating glass apparatus. 1,818,175; Aug. 11.

Thomas, John. (See Drescher, H. A. E., Smith, and Thomas.)

Thomas, John. (See Thomson, R. F., and Thomas.)

Thompson, Albert R., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif. Combined cooker and cooler can transfer means—nonagitating type. 1,818,109; Aug. 11.

Thompson, Albert R., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif. Combined cooker and cooler 1,818,110; Aug. 11.

Thomson, Charles D., Walkerville, Ontario, Canada. Juvenile vehicle accessory. 1,818,658; Aug. 11.

Thompson, Robert P., Piermont, assignor to The Superheater Company, New York, N. Y. Spacing and supporting means. 1,818,021; Aug. 11.

Thomson-Gibb Electric Welding Company. (See Thornton, G. A., and Remington, assignors.)

Thomson, Robert F., and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Manufacture of dyestuffs and intermediates. 1,818,510; Aug. 11.

Thornton, George A., Schenectady, N. Y., and W. Remington, Swampscott, assignors to Thomson-Gibb Electric Welding Company, Lynn, Mass. Transformer. 1,818,589; Aug. 11.

Thorsness, Otto D., and D. R. Tower, assignors to Electric Heating Devices, Inc., Lake Preston, S. Dak. Electrical heater. 1,818,176; Aug. 11.

Thumim, Carl, Philadelphia, Pa., assignor to General Electric Company. Electric switching installation. 1,818,828; Aug. 11.

Tolson, William A., Erlton, N. J., assignor to General Electric Company. Speed control apparatus. 1,818,963; Aug. 11.

Tournier, Edward P., Elizabeth, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for supporting strands. 1,818,501; Aug. 11.

Tournier, Edward P., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Clamping device. 1,818,659; Aug. 11.

Tower, Dewey R. (See Thorsness, O. D., and Tower.)

Townsend, Frank B., assignor of one-half to J. E. McMath, Penn Yan, N. Y. Basket handle. 1,818,511; Aug. 11.

Townsend, John R., Lake Bluff, Ill., assignor to Westinghouse Electric & Manufacturing Company. Junction box. 1,818,177; Aug. 11.

Tracy, Michael J., St. Louis County, Mo. Window. 1,818,438; Aug. 11.

Trainer, James E., and I. L. Langvand, Barberton, Ohio, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Economizer. 1,818,769; Aug. 11.

Travis, Bertram C., assignor of one-half to Pacific Copper and Brass Works, Incorporated, Los Angeles, Calif. Valve chamber construction. 1,818,439; Aug. 11.

Trent Process Corporation. (See Trent, Walter E., assignor.)

Trent, Walter E., assignor to Trent Process Corporation, New York, N. Y. Distilling carbonaceous materials. 1,818,912; Aug. 11.

Trinity Wheel Corporation. (See Baker, Frederick W., assignor.)

Triumph Manufacturing Company, The. (See Dell, George W., assignor.)

Trogner, Arthur M., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Inductance system. 1,818,363; Aug. 11.

Trottman, Stafford, Milwaukee, Wis. Timepiece. 1,818,590; Aug. 11.

Trowbridge, Charles W., assignor of one-half to R. J. Barnes and V. F. Barnes, Monmouth, Ill. Curtain hanger. 1,817,954; Aug. 11.

Tucker, William D., assignor to Century Furniture Company, Grand Rapids, Mich. Chair. Des. 84,860; Aug. 11.

Tuck-Tite Lock & Fastener Company. (See Widmer, Harry A., assignor.)

Tuley, William F., Nutley, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Dispersing carbon. 1,818,770; Aug. 11.

Turnbow, Grover D., Davis, assignor of one-half to C. E. Gray, Oakland, Calif. Preparing ice cream. 1,818,364; Aug. 11.

Ufer, Johannes. (See Schmidt, O., and Ufer.)

Ulbrich, Frank, Wallingford, Conn., assignor to H. L. Judd Company, Inc., New York, N. Y. Rod bracket. 1,818,829; Aug. 11.

Ulrich, Carl E., et al. (See Ulrich, George J., assignor.)

Ulrich, George J., assignor of three-fourths to C. E. Ulrich and one-fourth to E. R. Hawkes, Modesto, Calif. Making expansion joints. 1,818,874; Aug. 11.

Underwood Elliott Fisher Company. (See Davis, F. K., and Taylor, assignors.)

Unger, Paul O., Syracuse, N. Y. Loose leaf binder. 1,818,936; Aug. 11.

Union Switch & Signal Company, The. (See Sasnett, Edward C., assignor.)

Union Trust Company. (See Willsie, Henry E., assignor.)

United Shoe Machinery Corporation. (See Duplessis, René E., assignor.)

United Shoe Machinery Corporation. (See Lund, Thomas, assignor.)

United States Gypsum Company. (See Brookby, H. E., and Gough, assignors.)

U. S. Slicing Machine Company. (See Folk, Joseph, assignor)

U. S. Slicing Machine Company. (See Stiles, Edward M., assignor.)

United States Steel Corporation. (See Edwards, J. H., and Marble, assignors.)

Universal Winding Company. (See Taylor, George N., assignor.)

Updegrave, William M., Johnstown, Pa. Testing and exercising the ocular muscles. 1,818,660; Aug. 11.

Usher, John J., St. Helens, Oreg. Wave motor. 1,818,365; Aug. 11.

Vacuum Oil Company. (See Hooper, C. L., and Sutherland, assignors.)

Vacuum Products (N. Z.) Limited. (See Robertson, David, assignor.)

Vail, George I., deceased, Cleveland Heights, Ohio, The Guardian Trust Company, executor. 1,818,286; Aug. 11.

Valley Camp Coal Company, The. (See Paisley, James A., assignor.)
Van de Carr, Charles B., jr., Beaupre, Quebec, Canada, assignor to Chemipulp Process Inc., Watertown, N. Y. Method and apparatus for the chemical treatment of pulp. 1,818,913; Aug. 11.
Van Dusen, George, assignor to Gaylord Brothers, Incorporated, Syracuse, N. Y. Type-card for printing machines. 1,818,830; Aug. 11.
Van Halteren, Andrew S., East Lansing, assignor, by mesne assignments, to Motor Wheel Corporation, Lansing, Mich. Rim mounting. 1,818,440; Aug. 11.
Van Rennes, Cornelis, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Treatment of air bags. 1,818,937; Aug. 11.
Vargo, Frank, assignor of one-half to H. Y. Roth, Toledo, Ohio. Automatic hood lock. 1,818,366; Aug. 11.
Verdini, Jean L. J. R., Oudjda, Morocco. Camping installations. 1,818,914; Aug. 11.
Vesuvio Feuerungsbau-Gesellschaft mit beschrankter Haftung. (See Weigel, Albert, assignor.)
Vickers Limited. (See Babbidge, Wilham F., assignor.)
Victor Chemical Works. (See Noyes, H. F., and Weigel, assignor)
Victor Chemical Works. (See Weigel, R., and Easterwood, assignor.)
Victor Manufacturing & Gasket Co. (See Sutcliffe, Edwin A., assignor.)
Vocke, Alfred. (See Samson, S., and Vocke.)
Von Nostitz, Erich. (See Johnson, H. B., and von Nostitz.)
Voorhees, Vanderveer, et al., trustees. (See Hamblen, J. B., assignor.)
Vossloh, Karl, Werdohl, Germany. Nut lock. 1,818,915; Aug. 11.
Vulcan Radiator Company, The. (See Walworth, Arthur C., assignor.)
Wagenhorst, James H., Jackson, Mich. Arc lamp. 1,817,955; Aug. 11.
Wagers, Ned A., Appomattox, Va. School desk and seat. 1,818,831; Aug. 11.
Wagner, Carl F. (See Sears, E., and Wagner.)
Wagner, Cary R. (See Weaver, J. B., and Wagner.)
Wahl Clipper Corporation. (See Wahl, Leo J., assignor.)
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Vibrator attachment. 1,818,287; Aug. 11.
Wain, Harry J., New Brighton, assignor to Mayer China Company, Beaver Falls, Pa. Plate or similar article. Des. 84,861; Aug. 11.
Wait, William, jr., Garden City, N. Y., assignor to Curtiss Aeroplane & Motor Company. Aeroplane wing. 1,817,956; Aug. 11.
Waite, Fred., Inglewood, Otley, England. Wiping and scraping mechanism of intaglio machines. 1,818,441; Aug. 11.
Wakefield, Francis J., Attleboro, Mass., assignor to Taunton Pearl Works, Inc. Collar holder. Des. 84,862; Aug. 11.
Walker, Ernest A., assignor, by mesne assignments, to J. Bath, Worcester, Mass. Grinding machine. 1,818,288; Aug. 11.
Wallace, Halbert C., Kansas City, Mo. Grain cleaner. 1,818,367; Aug. 11.
Walle, Ludwig S., Lansdowne, Pa., assignor to General Electric Company. Electric switch operating mechanism. 1,818,832; Aug. 11.
Wallerstedt, Charles, St. Louis, Mo. Billfold. 1,818,368; Aug. 11.
Walworth, Arthur C., Newton, Mass., assignor to The Vulcan Radiator Company, Hartford, Conn. Assembling radiator elements. 1,818,592; Aug. 11.
Walworth, Arthur C., Newton, Mass., assignor to The Vulcan Radiator Company, Hartford, Conn. Apparatus for assembling radiator elements. 1,818,593; Aug. 11.
Wardwell, Joseph B., Stamford, Conn. Headlight. 1,818,875; Aug. 11.
Warr, Harold G., Park Ridge, assignor to The P & M Company, Chicago, Ill. Rail anchor. 1,818,022; Aug. 11.
Warren, Floyd A. (See Wemple, L. E., and Warren.)
Warren Telechron Company. (See Long, George M., assignor.)
Wasen, Walter E., Ashland, Ohio. Traffic line machine. 1,818,916; Aug. 11.
Washburn, Loring, Greenwich, Conn., assignor to S. H. Pomeroy Company, Inc., New York, N. Y. Automatic closing device for windows. 1,818,023; Aug. 11.
Waterbury Buckle Company, The. (See Kinch, Earl L., assignor.)
Waterbury Cable Service, Inc. (See Johnston, Leroy F., assignor.)
Watson, Burke, and W. S. Jackson, Sumter, S. C. Poison dispenser for cultivator plows. 1,818,369; Aug. 11.
Watson Company, The. (See Ball, Percy B., assignor.)
Watson, Cornelius B., and A. E. Harnsberger, assignor to The Pure Oil Company, Chicago, Ill. Oil vaporizer and converter. 1,818,512; Aug. 11.
Weaver, Joseph B., and C. R. Wagner, Chicago, Ill., assignors to The Gyro Process Company, Detroit, Mich. Cracking oil vapors into vapor phase. 1,818,513; Aug. 11.
Webb, Jervis B. (See Da Costa, James S., assignor.)
Weeks, William J., Florence, S. C. Stand for holding rolled sheet materials. 1,818,772; Aug. 11.
Weigel, Albert, assignor to the firm: Vesuvio Feuerungsbau-Gesellschaft mit beschrankter Haftung, Munich, Germany. Heating furnace. 1,818,661; Aug. 11.
Weigel, Rothe. (See Noyes, H. F., and Weigel.)
Weigel, Rothe, and H. W. Easterwood, Nashville, Tenn., assignors to Victor Chemical Works. Manufacture of phosphorus and phosphorus compounds by volatilization processes. 1,818,662; Aug. 11.
Weinstein, Louis H. (See Dickstein, S., and Weinstein.)
Weintogl, Karl. (See Hochmayr, Franz, assignor.)
Weisberg, Sidney M., Brooklyn, N. Y., assignor to Nathan Chirelstein, Newark, N. J. Tire inflation device. 1,818,178; Aug. 11.
Weitz, Frank H., Duryea, Pa. Coal mining and loading machine. 1,818,771; Aug. 11.
Wemple, Leland E., Chicago, and F. A. Warren, Peru, Ill. Zinc alloy. 1,818,774; Aug. 11.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Platter or similar article. Des. 84,863; Aug. 11.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Cup or similar article. Des. 84,864; Aug. 11.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 84,865; Aug. 11.
Wesp, George, assignor to The Rosenthal Chinca Corporation, New York, N. Y. Casserole or similar article. Des. 84,866; Aug. 11.
Westbrook, Leon R. (See Lutz, G., and Westbrook.)
Westbrook, Leon R., Cleveland Heights, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Electroplating. 1,818,179; Aug. 11.
Western Electric Company. (See Bowly, Heyward W., assignor.)
Western Electric Company. (See Elmen, Gustaf W., assignor.)
Western Electric Company. (See Gilbert, John J., assignor.)
Western Electric Company. (See Harrison, Henry C., assignor.)
Western Electric Company. (See Lamplough, Leslie F., assignor.)
Western Electric Company. (See Purdy, Chester A., assignor.)
Western Electric Company. (See Schroeder, William, assignor.)
Western Electric Company. (See Tournier, Edward P., assignor.)
Western Electric Company. (See Wright, Esmond P. G., assignor.)
Western Electric Company. (See Zimmerman, Paul P., assignor.)
Western Union Telegraph Company, The. (See Harrall, E. R., and Parrott, assignors.)
Westinghouse Electric & Manufacturing Company. (See Ford, James G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Myllus, W. G., and La Bar, assignors.)
Westinghouse Electric & Manufacturing Company. (See Randall, Karl C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Stalder, Louis, assignor.)
Westinghouse Electric & Manufacturing Company. (See Townsend, John R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Zuhlke, Marcel, assignor.)
Westman, Le Roy A., and G. B. Carman, Cleveland, Ohio. Hydraulic shock absorber. 1,818,773; Aug. 11.
Weston, Lawrence O. (See Weston, L. A., and L. O.)
Weston, Leroy A. and L. O., Adams, Mass. Gasket-shaping device. 1,818,180; Aug. 11.
Whitaker, John E., West Monroe, La. Electrician belt clip tape reel. 1,818,514; Aug. 11.
White, Charles, San Francisco, Calif. Gravity discharging platform. 1,818,289; Aug. 11.
White, George A. (See Scofield, T. J., and White.)
White, John W. (See Pfeiffer, F. B., and White.)
White, Ryall L., San Antonio, Tex. Paving material and manufacturing the same. 1,818,876; Aug. 11.
Whitin Machine Works. (See Helland, Sigurd H., assignor.)
Whiting Corporation. (See Moore, Raymond H., assignor.)
Whitsitt, William B. (See Emerson, G. H., and Whitsitt.)
Wick, Mildred. (See Kramer, Frank J., assignor.)
Widmer, Harry A., assignor to The Tuck-Tite Lock & Fastener Company, Limited, London, England. Fastening. 1,818,442; Aug. 11.
Wilkinson, Louie W. (See Coovert, R. H., and Wilkinson.)
Williams, Harry M. (See Ritter, C. C., and Williams.)
Williams, James E., assignor to Robert F. Williams, Spring City, Pa. Shoe. 1,818,594; Aug. 11.
Williams, Louis N. D. (See Butz, Walter D., assignor.)
Williams, Norman and H. Mittermeier, Kitchener, Ontario, Canada. Windshield wiper. 1,818,775; Aug. 11.
Williams, Robert F. (See Williams, James E., assignor.)
Willliford, Edward A., Lakewood, Ohio, assignor to National Carbon Co., Inc. Brush. 1,818,515; Aug. 11.
Willis, Gail A., Rawlins, Wyo. Horse or trestle. 1,818,516; Aug. 11.
Willsie, Henry E., New York, N. Y., assignor to The Union Trust Company, Cleveland, Ohio. Refrigeration apparatus. 1,818,181; Aug. 11.
Wilsey, Frank E., Chicago, Ill. Fluid-tight packing. 1,818,595; Aug. 11.

Wilson, William H., Los Angeles, Calif. Sectional fireproof ceiling structure. 1,818,443; Aug. 11.
Wine, William E., Toledo, Ohio. Cross bearer. 1,818,370; Aug. 11.
Winslow Boiler and Engineering Company. (See Poole, J. L., and Rudolf, assignors.)
Wintrob, Jacob M., Philadelphia, Pa. Combined valance board, support and curtain rod bracket. 1,818,776; Aug. 11.
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wireless Specialty Apparatus Company. (See Rosen, Victor E., assignor.)
Wirth, Louis E., Pittsburgh, Pa., assignor to Cotton Harvester Corporation of America. Cotton picking needle. 1,818,444; Aug. 11.
Wirth, Richard, Frankfort-on-the-Main, and W. Bittrolf, assignors to Mister Ernst Gideon Bek, Pforzheim, Germany. Manufacture of wire chain. 1,818,111; Aug. 11.
Witte, Carl E., San Francisco, Calif. Charge forming device. 1,818,371; Aug. 11.
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Optical equipment for cameras. 1,818,024; Aug. 11.
Woernle, Harry E., assignor to McKinney Manufacturing Company, Pittsburgh, Pa. Friction hinge. 1,818,182; Aug. 11.
Wolf, Abraham J., Bayonne, N. J. Combination surface treating and conditioning brush. 1,818,917; Aug. 11.
Wolfgramm, Hermann, et al. (See Brussow, Hermann, assignor.)
Wolfram, Arthur, and E. Hausdörfer, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Anthracene derivatives and preparing them. 1,818,025; Aug. 11.
Wolter, Herman H. (See Doane, Leroy C., and Wolter.)
Woock, Herbert J., Lodi, Calif., assignor to Super Mold Corporation, Reno, Nev. Rim tool. 1,818,517; Aug. 11.
Wood, William H., South Euclid, Ohio. Vehicle lamp. 1,818,183; Aug. 11.
Work, Lincoln T., Yonkers, E. S. Imes, New York, and E. A. Everett, Long Island City, N. Y.; said Work and said Imes assignors to said Everett. Electrical resistance composition. 1,818,184; Aug. 11.
Wright, Esmond P. G., Croydon, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,818,026; Aug. 11.
Wullie, William A., assignor to The Pyle-National Company, Chicago, Ill. Combined switch and terminal block. 1,818,290; Aug. 11.
Wykert, Frank M. (See Dodge, F. V., and Wykert.)
Young, Jacob C., assignor of thirty-five one hundredths to E. T. Miller, Beaumont, Tex. Rope display stand. 1,818,518; Aug. 11.
Young, Lewis G., Bronxville, N. Y. Aerofoil construction. 1,818,519; Aug. 11.
Young, Lewis G., Bronxville, N. Y. Aerofoil construction. 1,818,520; Aug. 11.
Young, Lewis G., Bronxville, N. Y. Aerofoil construction. 1,818,521; Aug. 11.
Youngblood, David F., San Antonio, Tex. Metal cell. 1,818,522; Aug. 11.
Yull, Gordon, Sudbury, Ontario, Canada. Indicator for storage batteries. 1,818,185; Aug. 11.
Yungblut, Gibson. (See Cain, J. R., and Yungblut.)
Zadnik, Otto, Vienna, Austria. Electric power transmission with automatic efficiency regulation for vehicles. 1,818,877; Aug. 11.
Zehner, Benjamin F., Ashland, Ohio. Door opening device. 1,818,833; Aug. 11.
Ziederich, William H. F., San Bruno, Calif. Wire fastener. 1,818,523; Aug. 11.
Zimmerman, Henry, St. Louis, Mo. Air mail catcher and refilling device. 1,818,834; Aug. 11.
Zimmerman, Paul P., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Electromagnetic device. 1,818,596; Aug. 11.
Zitscher, Arthur, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. 2:3-hydroxynaphthyl-arylketones. 1,817,957; Aug. 11.
Zühlke, Marcel, Berlin-Weissensee, Germany, assignor to Westinghouse Electric & Manufacturing Company. Choke coil. 1,818,186; Aug. 11.
Zwilgmeyer, Frithjof, Buffalo, assignor to National Aniline & Chemical Company Inc., New York, N. Y. Dispersion. 1,817,958; Aug. 11.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 11TH DAY OF AUGUST, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid and phosphatic compounds, Manufacture of phosphoric. H. F. Noyes and R. Weigel. 1,818,644; Aug. 11.
Acid, Apparatus for concentrating nitric. I. Hechenbleikner. 1,818,711; Aug. 11.
Acid calcium phosphate, Production of dried. J. N. Carothers and P. Logue. 1,818,114; Aug. 11.
Adapter for drain outlets of crank cases. H. J. Engbrecht. 1,818,123; Aug. 11.
Adapter for lubricating apparatus. W. H. Pierce. 1,818,272; Aug. 11.
Adsorbent material, Making chemically treated activated. W. S. Baylis. 1,818,453; Aug. 11.
Adsorbents, Preparation of. R. Cross. 1,817,968; Aug. 11.
Advertising device. R. Cartier. 1,818,380; Aug. 11.
Advertising device. H. M. Davis. 1,818,538; Aug. 11.
Advertising device. N. B. M. O'Brien. 1,818,739; Aug. 11.
Advertising medium to bakers' products, Applying an. H. J. Taylor. 1,818,923; Aug. 11.
Aerofoil construction. L. G. Young. 1,818,519–21; Aug. 11.
Aerofoil for aeroships. S. E. Hitt. 1,817,920; Aug. 11.
Aerofoil operating mechanism. H. R. Moles. 1,818,000; Aug. 11.
Aeroplane. H. Cordy. 1,818,116; Aug. 11.
Aeroplane. J. F. De Villard. 1,818,309; Aug. 11.
Aeroplane. F. F. Kookogey. 1,818,067; Aug. 11.
Aeroplane. W. Snee and M. Bell. 1,818,588; Aug. 11.
Aeroplane wing. W. Walt, jr. 1,817,956; Aug. 11.
Aeroplanes, Metal framed structure for. H. C. Mummert. 1,818,423; Aug. 11.
Air, Apparatus for cleaning. L. A. Paradise. 1,818,742; Aug. 11.
Air conditioner stand. T. J. Kehoe. Des. 84,831; Aug. 11.
Air cooling device. R. Monroe. 1,818,343; Aug. 11.
Air cooling system for combustion engines. G. E. and J. W. Reed. 1,818,868; Aug. 11.
Airbags, Treatment of. C. Van Rennes. 1,818,937; Aug. 11.
Aircraft. L. J. McCarthy. 1,818,809; Aug. 11.
Aircraft, Undercarriage for. G. T. R. Hill. 1,818,891; Aug. 11.
Air mail catcher and refilling device. H. Zimmerman. 1,818,834; Aug. 11.
Airplane. R. F. Hall. 1,818,321; Aug. 11.
Airplane flotation system. H. W. Adams and F. M. Salisbury. 1,818,597; Aug. 11.
Airplane landing fields or terminals, Equipment for. A. P. Callison. 1,818,841; Aug. 11.
Airplane package transferring apparatus. L. S. Adams. 1,818,835; Aug. 11.
Airship mooring mast. A. Hall-Brown and E. W. Jones. 1,818,603; Aug. 11.
Air tube and the like and reenforcing same. M. S. Hannon. 1,818,710; Aug. 11.
Alarm system, Burglar. H. V. Robbins and J. O'Connell. 1,818,162; Aug. 11.
Aluminum chloride, Manufacturing anhydrous. G. F. Brindley. 1,818,839; Aug. 11.
Anchor, Rail. H. G. Warr. 1,818,022; Aug. 11.
Anthracene derivatives and preparing them. A. Wolfram and E. Hausdorfer. 1,818,025; Aug. 11.
Anthraquinone derivatives, Production of. H. A. E. Drescher, W. Smith, and J. Thomas. 1,818,311; Aug. 11.
Antioxidant or age resistor. A. M. Clifford. 1,818,042; Aug. 11.
Aqueous solutions of volatile substances, Concentrating. F. E. Lichtenthaeler. 1,817,993; Aug. 11.
Arc extinguishing device. A. M. Jackson. 1,817,984; Aug. 11.
Ash receiver and electric lighter, Combination. R. De Boer. Des. 84,811; Aug. 11.
Ash tray. F. M. Pannerot. Des. 84,846; Aug. 11.
Auditing machine. M. M. Goldberg. 1,818,473; Aug. 11
Autographic register. F. E. Pfeiffer. 1,818,271; Aug. 11.
Autographic register, Portable. E. K. Bottle. 1,817,960; Aug. 11.
Automatic switch. E. Besag. 1,818,682; Aug. 11.
Automobile inclosure. G. E. Bishop. 1,818,294; Aug. 11.
Automobile loading and transportation, System of. J. E. McCrea. 1,818,342; Aug. 11.
Automobile radiator bar. R. C. Russell. Des. 84,848; Aug. 11.
Automobile wheel. E. K. Baker. 1,818,448; Aug. 11.
Axle box for vehicles. W. Peyinghaus. 1,818,864; Aug. 11.
Axle press. C. C. Bennett. 1,818,678–9; Aug. 11.
Axle-twisting device. C. C. Bennett. 1,818,680; Aug. 11.

Azodyestuff, New. K. Dobmaier. 1,818,049; Aug. 11.
Bag: *See*—
Golf bag. Shoe bag.
Repair bag.
Bag filling and discharging apparatus. W. R. Peterson and N. E. Dorrington. 1,818,096; Aug. 11.
Bag filling machines, Shut-off device for. W. R. Peterson. 1,818,094; Aug. 11.
Bags, Apparatus for filling and weighing. W. R. Peterson. 1,818,092; Aug. 11.
Bags, Feeding device for valve. W. R. Peterson. 1,818,093; Aug. 11.
Ball: *See*—
Twine ball.
Baller. S. Schiff. 1,818,277; Aug. 11.
Bar: *See*—
Rail joint bar.
Barking apparatus. W. D. Talbott and L. Bannerman. 1,818,657; Aug. 11.
Barrier for vehicles, Yielding. J. B. Strauss. 1,818,824; Aug. 11.
Base or article of similar nature, Table lamp. C. Shulman. Des. 84,855; Aug. 11.
Basket handle. F. B. Townsend. 1,818,511; Aug. 11.
Bearing. M. Hallead. 1,818,323; Aug. 11.
Bearing, Thrust. F. H. Banbury. 1,818,449; Aug. 11.
Bed, Foldable. N. N. Brown. 1,818,036; Aug. 11.
Bedpan and fountain syringe, Combination. A. N. Mabry. 1,818,489; Aug. 11.
Belt adjuster, Automatic. H. J. Brunk. 1,818,685; Aug. 11.
Belt clamp. G. H. Bowlus. 1,818,297; 1,818,297; Aug. 11.
Belts, Attachment for. C. Horix. 1,818,329; Aug. 11.
Benzanthrone, Derivatives of. A. Luettringhaus, H. Nereshelmer, and H. J. Emmer. 1,818,076; Aug. 11.
Bill fold. C. Wallerstedt. 1,818,368; Aug. 11.
Binder, Index. A. J. Cardoza. 1,818,302; Aug. 11.
Binder, Loose leaf. P. O. Unger. 1,818,936; Aug. 11.
Biochemical processes, Carrying out. S. Bakonyi. 1,818,781; Aug. 11.
Bit forging machine. L. Bortkewicz. 1,818,601; Aug. 11.
Bituminous products. E. S. Ross. 1,817,933; Aug. 11.
Blanket. A. F. Sarg. Des. 84,849; Aug. 11.
Blanket. A. F. Sarg. Des. 84,851; Aug. 11.
Blanket, Quilted. L. Rosenbaum. 1,818,756; Aug. 11.
Blanks from sheet metal, Cutting circular and other nonrectangular. J. H. Murch. 1,818,150; Aug. 11.
Block: *See*—
Snatch block.
Blower and pump, Rotary. E. W. Swartwout. 1,818,767; Aug. 11.
Blower pump, and meter, Rotary. E. W. Swartwout. 1,818,768; Aug. 11,
Boat. C. G. Rentos. 1,818,356; Aug. 11.
Boat, Outboard motor. R. J. Pouliot. 1,818,273; Aug. 11.
Boiler: *See*—
Sectional boiler.
Boiler. C. W. Gordon. 1,818,390; Aug. 11.
Boiler cleaner. N. L. Snow. 1,818,965; Aug. 11.
Boilers, Apparatus for continuous blow down for. L. D. Kensig. 1,818,483; Aug. 11.
Bolt cutter. C. A. Medean, jr. 1,818,237; Aug. 11.
Bookkeeping device. O. L. Hermann. 1,818,253; Aug. 11.
Boot and shoe. L. Bischoff. 1,818,683; Aug. 11.
Boring appliance. M. A. Kapeluchnikoff. 1,817,986; Aug. 11.
Bottle. J. W. Behrendt. 1,817,912; Aug. 11.
Bottle, Capping. E. R. Leighton. 1,818,072; Aug. 11.
Box: *See*—
Junction box. Powder box.
Outlet box.
Box and making the same. G. C. Snyder. 1,818,102; Aug. 11.
Box cover paper or the like. A. F. Sarg. Des. 84,850; Aug. 11.
Box cover paper or the like. A. F. Sarg. Des. 84,852; Aug. 11.
Box structure. S. L. Bellemere. 1,817,913; Aug. 11.
Brace bit extension. A. L. Stowell. 1,818,823; Aug. 11.
Bracket: *See*—
Lamp bracket. Wall bracket.
Rod bracket.
Bracket for clotheslines, Adjustable. H. S. Leggett, 1,818,561; Aug. 11.
Bracket for tuners. F. S. Coe. 1,818,693; Aug. 11.
Brake: *See*—
Friction brake.
Brake. A. Y. Dodge, and L. Pollard. 1,818,199; Aug. 11.
Brake. B. E. Minturn. 1,818,920; Aug. 11.

Brake applying apparatus. C. S. Bushnell. 1,818,941; Aug. 11.
Brake element. R. J. Norton. 1,818,088; Aug. 11.
Brake mechanism. A. Knzenmaier and A. Strauss. 1,818,334; Aug. 11.
Brake operating mechanism. E. A. Rockwell. 1,817,943; Aug. 11.
Brake shoe. H. E. Maynard. 1,818,565; Aug. 11.
Brake shoe and making same. J. W. Peterson. 1,818,090; Aug. 11.
Bread rack. B. Bouda. 1,817,961; Aug. 11.
Breaker strip. G. A. Handy. 1,818,950; Aug. 11.
Brick handling mechanism. A. H. Mallery and E. M. Hicks. 1,818,728; Aug. 11.
Brick laying machine. T. Palatini. 1,818,741; Aug. 11.
Brooders and other enclosures, Unfolding construction for. R. A. Gorsuch. 1,818,320; Aug. 11.
Brush. E. A. Williford. 1,818,515; Aug. 11.
Brush, Combination surface treating and conditioning. A. J. Wolf. 1,818,917; Aug. 11.
Brush, drying and cleaning. M. Soss. 1,818,282; Aug. 11.
Brush, Fountain. M. Soss. 1,818,280; Aug. 11.
Brush, Vibrator fountain. M. Soss. 1,818,281; Aug. 11.
Brushes, Apparatus for making rotary. L. H. Nielsen. 1,818,087; Aug. 11.
Buckle. J. B. Freysinger. Des. 84,827; Aug. 11.
Buckle. W. S. Painter. Des. 84,845; Aug. 11.
Buckle, Shoe C. G. King. Des. 84,832; Aug. 11.
Building construction. J. F. Loucks. 1,818,634; Aug. 11.
Bulkhead for rigid airships. K. Arnstein and P. Helma. 1,818,952; Aug. 11.
Burner: *See*—
Fuel burner. Oil burner.
Gas burner. Sawdust burner.
Burner. H. A. Geauque. 1,818,471; Aug. 11.
Burner. J. L. Poole and H. J. G. Rudolf. 1,818,865; Aug. 11.
Butanol and acetone by fermentation, Producing. S. Bakonyi. 1,818,782; Aug. 11.
Cabinet, Amusement machine. J. F. Meyer. Des. 84,840; Aug. 11.
Cabinet and filter, Color fading. L. J. Buttolph. 1,818,687; Aug. 11.
Cabinet, Display. H. F. Beers. 1,818,784; Aug. 11.
Cabinet, Refrigerating. W. F. Grupe. 1,818,129; Aug. 11.
Cake icing machine. J. R. Litty and T. B. Lundin. 1,818,412; Aug. 11.
Calculating machine. G. C. Chase. 1,818,790; Aug. 11.
Calculating machine. C. F. Friden. 1,818,548; Aug. 11.
Calculating machine. F. A. Niemann. 1,818,425; Aug. 11.
Calculating machines, Attachment for. E. F. Britten, jr., and L. R. Brown. 1,817,916; Aug. 11.
Calender with roll magazine. J. Kleinewefers. 1,818,628; Aug. 11.
Camera, Photographic. A. W. Caps. 1,818,461; Aug. 11.
Camera, Photographic. A. S. Howell. 1,818,062; Aug. 11.
Cameras, Optical equipment for. O. Wittel. 1,818,024; Aug. 11.
Camping installations. J. L. J. R. Verdini. 1,818,914; Aug. 11.
Can transfer means—non-agitating type, Combined cooker and cooler. A. B. Thompson. 1,818,109; Aug. 11.
Canning machine. C. H. Ayars. 1,818,780; Aug. 11.
Cap. W. I. Silverstein. 1,818,764; Aug. 11.
Cap, Military. W. I. Silverstein. 1,818,765; Aug. 11.
Car apparatus, Amusement. J. C. Lusse. 1,818,899; Aug. 11.
Car, Load discharging. A. Campbell. 1,818,688; Aug. 11.
Car, Railway maintenance and construction. H. W. Protzeller. 1,818,750; Aug. 11.
Car retarder, Magnetic. O. A. Ross. 1,818,933; Aug. 11.
Carbohydrates obtained by hydrolysis of cellulose means of hydrochloric acid, Purification of. E. Hagglund. 1,818,618; Aug. 11.
Carbon and the like from cellulose, Removing. J. J. de la Roza, sr. 1,817,973; Aug. 11.
Carbon, Dispersing. W. F. Tuley. 1,818,770; Aug. 11.
Carbonaceous materials, Distilling. W. E. Trent. 1,818,912; Aug. 11.
Carbonaceous materials to produce a gaseous mixture, Treating. A. H. Mallery. 1,818,901; Aug. 11.
Carburetor, Floatless. M. Kreher. 1,818,068; Aug. 11.
Carburetor, Floatless. M. Kreher. 1,818,928; Aug. 11.
Card, Hand. H. Midgley. 1,818,495; Aug. 11.
Carpet. H. C. La Couture. Des. 84,833; Aug. 11.
Carrier: *See*—
Lumber carrier. Overhead traveling carrier
Carrier for curtain tracks, Master. L. W. Bond. 1,818,786; Aug. 11.
Carriers for catalysts and the like. A. Joseph. 1,818,403; Aug. 11.
Cars. Apparatus for loading mine. J. A. Paisley. 1,818,427; Aug. 11.
Case: *See*—
Vanity case.
Cash register. W. Kropff. 1,818,338; Aug. 11.
Cash registers, Setting mechanism for. K. A. Lehmann and F. Ranglack. 1,818,632; Aug. 11.
Casing, Gasoline dispenser. J. Sinel. Des. 84,857; Aug. 11.
Casing, Pneumatic tire. B. Darrow. 1,818,944; Aug. 11.
Casing, Vapor proof switch. E. L. Buker. 1,818,038; Aug. 11.

Casket, Burial. W. Ostwald. Des. 84,842–4; Aug. 11.
Casserole or similar article. G. Wesp. Des. 84,866; Aug. 11.
Caster, Furniture. T. P. Duncan, jr. 1,818,211; Aug. 11.
Ceiling structure, Sectional fireproof. W. H. Wilson. 1,818,443; Aug. 11.
Celluloid like masses, Manufacturing. M. J. Theumann. 1,818,108; Aug. 11.
Cellulose acetate, Dyeing or coloring of products made with. G. H. Ellis. 1,818,541; Aug. 11.
Cellulose material, suitable for paper manufacturing, from plant raw material with pith fiber, Preparing and separating the. H. Kumagawa and K. Shimomura. 1,818,897; Aug. 11.
Cellulose nitro acetate, Making. L. Lock. 1,817,994; Aug. 11.
Cement packing machine, Automatic. W. R. Peterson. 1,818,091; Aug. 11.
Cementing or lining compositions, Preparing acid-proof. K. Frank and K. Dietz. 1,818,888; Aug. 11.
Chain, Antiskid. J. L. Lynch. 1,818,919; Aug. 11.
Chain applying and removing equipment. A. G. Nelsen. 1,818,004; Aug. 11.
Chain, Automobile tire. A. L. Drager. 1,818,794; Aug. 11.
Chain hook. F. Netz. 1,818,813; Aug. 11.
Chain, Manufacture of wire. R. Wirth and W. Bittrolf. 1,818,111; Aug. 11.
Chair. W. D. Tucker. Des. 84,860; Aug. 11.
Change-speed and reversing device, Progressive. R. J. Lallié. 1,818,407; Aug. 11.
Charge forming device. C. E. Witte. 1,818,371; Aug. 11.
Chassis, Vehicle. C. E. Belt. 1,818,838; Aug. 11.
Check construction. P. J. and C. P. Harrah. 1,818,250; Aug. 11.
Chorus stand, Collapsible. M. Paysen. 1,818,428; Aug. 11.
Chuck, Collet. G. M. Class. 1,818,305; Aug. 11.
Chuck for machine tools. E. Sears and C. F. Wagner. 1,818,167; Aug. 11.
Chute, Sack. H. C. Scott. 1,818,652; Aug. 11.
Cinematographic projecting apparatus. G. Rouiller and J. Marion. 1,818,432; Aug. 11.
Circuit breaker, Retarded. C. P. Sweeny. 1,818,873; Aug. 11.
Circuit, Control. C. P. Stocker. 1,818,018; Aug. 11.
Circuit interrupter, High speed. W. Herden. 1,818,801; Aug. 11.
Circuit reclosing device. M. J. Seale. 1,818,818; Aug. 11.
Circuit, Zero correcting. A. M. Curtis and M. Burton. 1,818,463; Aug. 11.
Circulatory system for refrigerated counters. J. K. Bond. 1,818,034; Aug. 11.
Clamp: *See*—
Belt clamp. Insulating clamp.
Dead end clamp.
Clamping device. E. P. Tournier. 1,818,659; Aug. 11.
Clasp for neckties. L. E. Baer. 1,818,292; Aug. 11.
Clay product, Extruding a bloated. K. Slidell. 1,818,101; Aug. 11.
Cleaner: *See*—
Vacuum cleaner. Grain cleaner.
Boiler cleaner. Spark plug cleaner.
Gas cleaner.
Cleaning device. L. L. Farley. 1,818,388; Aug. 11.
Clock case. G. M. Long. Des. 84,837–8; Aug. 11.
Clock for alarm systems. A. B. Chapman. 1,818,958; Aug. 11.
Clock operating mechanism. H. Gillette. 1,818,613; Aug. 11.
Closet: *See*—
Dry closet.
Closing device for windows, Automatic. L. Washburn. 1,818,023; Aug. 11.
Closure for joints such as those between pump bodies and their plungers, Hermetic. F. Feyens. 1,818,797; Aug. 11.
Closure for receptacles. I. Newman. 1,818,574; Aug. 11.
Clutch for typographical machines, Assembler drive. H. R. Freund. 1,818,946; Aug. 11.
Clutch mechanism. P. S. Morgan. 1,818,421; Aug. 11.
Clutch member. E. E. Eaton. 1,818,610; Aug. 11.
Clutch, One-way. F. V. Dodge and F. M. Wykert. 1,818,844; Aug. 11.
Coal mining and loading machine. F. H. Weitz. 1,818,771; Aug. 11.
Coal, Treatment or purification of. M. Bertrand. 1,818,189; Aug. 11.
Coating substances. H. S. Cooper and M. Merlub-Sobel. 1,818,196; Aug. 11.
Coil, Choke. M. Zuhlke. 1,818,186; Aug. 11.
Coils for electric induction furnaces, High frequency. G. E. Taylor. 1,818,107; Aug. 11.
Coin collection apparatus. J. M. Melick. 1,818,568; Aug. 11.
Collar holder. F. J. Wakefield. Des. 84,862; Aug. 11.
Color lakes from petroleum, Manufacturing. G. Alleman. 1,818,778; Aug. 11.
Comb: *See*—
Water waving comb.
Comb or brush, Graining. A. Hanratty. 1,818,326; Aug. 11.
Compressor. S. W. Luitwieler. 1,818,413; Aug. 11.
Compressor, High pressure gas. E. Prestage. 1,818,580; Aug. 11.

Concrete machine, Cellular. H. E. Brookby and F. J. Gough. 1,818,376; Aug. 11.
Concrete, Tying. W. S. Hewett. 1,818,254; Aug. 11.
Condensation products and vat dyestuffs of the benzanthrone series. A. Luettringhaus, H. Nereshiemer and W. Eichholz. 1,818,075; Aug. 11.
Condensation products of carbamide or its derivatives with aldehydes, Treatment of. K. Ripper. 1,817,931; Aug. 11.
Condensation products of carbamide or its derivatives with aldehydes, Treatment of. K. Ripper. 1,817,940; Aug. 11.
Condensation products of the benzanthrone series. A. Luettringhaus, H. Nereshiemer, and H. J. Emmer. 1,818,074; Aug. 11.
Condensation products of the benzanthrone series. P. Nawiasky, O. Braunsdorf, and A. Ehrhardt. 1,818,083; Aug. 11.
Condensation products of the diazine series, New. W. Hentrich, M. Hardtmann, and R. Knoche. 1,817,982; Aug. 11.
Condenser and manufacturing the same, Electrical. V. E. Rosen. 1,818,010; Aug. 11.
Condenser, Electrical. G. L. Lang. 1,818,069; Aug. 11.
Condensers, Apparatus for pressing. C. A. Purdy. 1,818,648; Aug. 11.
Conductor system, Concentric. H. A. Affel and E. I. Green. 1,818,027; Aug. 11.
Conductor transmission system, Concentric. J. R. Carson and S. P. Mead. 1,817,964; Aug. 11.
Conduit fitting. J. W. Cox. 1,818,043; Aug. 11.
Conduit, Multiple. H. Parker. 1,818,922; Aug. 11.
Conduit securing means. J. H. Hunter. 1,818,625; Aug. 11.
Conduit systems, Wall box base for. J. M. G. Fullman and G. A. Lutz. 1,818,389; Aug. 11.
Connection for telegraph plants. W. Kruse. 1,817,989; Aug. 11.
Connection, Nonmetallic. C. Saurer. 1,818,758; Aug. 11.
Connection, Trunnion. J. P. Ratigan. 1,818,161; Aug. 11.
Container. A. E. Brune. 1,818,605; Aug. 11.
Container. J. E. Grimes. 1,818,707; Aug. 11.
Container. J. M. Hothersall. 1,818,135; Aug. 11.
Container, Torpedo and fusee. A. O. Crandell. 1,818,197; Aug. 11.
Container, Ventilated. R. A. Pouchain and F. S. Fox. 1,818,908; Aug. 11.
Containers for perishable products, Means for use in the evacuation and sealing of. D. Robertson. 1,817,932; Aug. 11.
Control, Automatic spark. H. W. Meade. 1,818,079; Aug. 11.
Control, Electric door. H. C. Blodgett. 1,817,909; Aug. 11.
Control, Speed responsive. W. T. Tabb. 1,818,826; Aug. 11.
Control system. D. L. Lindquist and G. N. Crabbe. 1,818,486; Aug. 11.
Controller. W. W. Sloane. 1,817,947; Aug. 11.
Controlling device for aircraft. L. Constantin. 1,818,044; Aug. 11.
Conveyer. C. R. Claghorn. 1,818,115; Aug. 11.
Conveyer, Furnace. A. T. Kathner. 1,818,806; Aug. 11.
Conveyer method and apparatus. R. T. Romine. 1,818,358; Aug. 11.
Conveyer, Screw. T. Elliott. 1,818,055; Aug. 11.
Conveyer, Shaker. T. G. Nyborg. 1,817,927; Aug. 11.
Conveyer system, Article. C. E. Jacquart. 1,818,805;
Cooker and cooler, Combined. A. R. Thompson. 1,818,110; Aug. 11.
Cooling unit for refrigerating systems. E. H. Steedman. 1,818,015; Aug. 11.
Copper refining, Pyrometallurgical. H. H. Stout. 1,817,935; Aug. 11.
Coring and slicing device. R. Gutzke. 1,818,848; Aug. 11.
Counter-evaporator. R. G. Osborn. 1,818,740; Aug. 11.
Coupling: *See*—
  Pipe coupling.
Coupling. D. H. Koch and I. T. Slaton. 1,818,261; Aug. 11.
Cover, Box. A. W. Miner. 1,818,206; Aug. 11.
Cover, Check book. G. Duebelbeis. 1,818,210; Aug. 11.
Cover for pickles, etc. P. K. Basmadjian. 1,818,924; Aug. 11.
Cover lining apparatus. C. W. Johnson. 1,818,557; Aug. 11.
Cover remover, Can. E. McCutcheon. 1,818,732; Aug. 11.
Crate, Shipping. F. P. Hansen. 1,818,800; Aug. 11.
Cross bearer. W. E. Wine. 1,818,870; Aug. 11.
Crossing gate, Railroad. W. M. Smith. 1,818,013; Aug. 11.
Cup or similar article. G. Wesp. Des. 84,864; Aug. 11.
Current collector for electric vehicle, Pantograph. G. F. de Tovaros. 1,818,842; Aug. 11.
Current distributing apparatus. K. C. Randall. 1,818,160; Aug. 11.
Current supply apparatus. W. C. Grunow. 1,818,947; Aug. 11.
Curtain hanger. C. W. Trowbridge. 1,817,954; Aug. 11.
Cushion connection. W. C. Keys. 1,818,715; Aug. 11.
Cut-off mechanism for tube machines. L. C. Maltby. 1,817,996; Aug. 11.
Cut-out, Primary. N. J. Conrad. 1,818,382; Aug. 11.
Cutter: *See*—
  Belt cutter. Stalk cutter.
  Shingle cutter.
Cutter. W. J. Drucker. 1,818,467; Aug. 11.
Cylinders, Construction of engine. H. Junkers. 1,818,558; Aug. 11.
Cylinder and supporting structure therefor, Locomotive. A. W. Bruce. 1,818,604; Aug. 11.
Dead end clamp. L. B. Myers. 1,818,571; Aug. 11.
Deflecting mechanism. L. Stalder. 1,818,169–70; Aug. 11.
Desk and seat, School. N. A. Wages. 1,818,831; Aug. 11.
Desk and table, Combined. W. L. Burks. 1,818,606; Aug. 11.
Developing apparatus. A. Langsner. 1,818,484; Aug. 11.
Diaphragm for loud speakers. W. K. Kearsley. 1,818,854; Aug. 11.
Dirigible aircraft, Controlling. E. A. Sperry. 1,818,104; Aug. 11.
Dirigible coupling means. L. S. Howland. 1,818,138; Aug. 11.
Dirigibles, Apparatus and method of launching, landing and mooring. L. S. Howland. 1,818,137; Aug. 11.
Discharge attachment for frozen product machine. E. D. Kohr. 1,818,896; Aug. 11.
Dish or similar article, Covered. L. Anduze. Des. 84,802; Aug. 11.
Disk wheel. W. Barber. 1,818,450; Aug. 11.
Dispersion. F. Zwilgmeyer. 1,817,958; Aug. 11.
Display device. P. H. Grennan. 1,818,247; Aug. 11.
Display device. F. Gritt. 1,818,248; Aug. 11.
Display device. I. G. Haas. 1,818,799; Aug. 11.
Document filing device. G. A. Phillips. 1,817,930; Aug. 11.
Doll or similar article. I. Cowen. Des. 84,810; Aug. 11.
Door, Boiler. W. A. Jones. 1,818,402; Aug. 11.
Door check. B. Summerfield. 1,818,055; Aug. 11.
Door mechanism, Load discharging car. A. Campbell. 1,818,689; Aug. 11.
Door opening device. B. F. Zehner. 1,818,833; Aug. 11.
Door structure, Double. J. Knaggs. 1,817,921; Aug. 11.
Dough molding machine. G. W. Dell. 1,818,945; Aug. 11.
Drain pipe device. H. J. Engbrecht. 1,818,124; Aug. 11.
Drill stem. B. H. Scott. 1,818,508; Aug. 11.
Drills, Feeding device for rock. C. C. Hansen. 1,818,393; Aug. 11.
Drive ring. J. A. Rapelje. 1,818,099; Aug. 11.
Driver for reamers and the like. A. C. Hoeh. 1,818,622; Aug. 11.
Driving box lubricator. J. J. Hennessy. 1,818,327; Aug. 11.
Driving means for conveyer chains. J. S. Da Costa. 1,817,970; Aug. 11.
Drum gripper. C. L. Hooper and R. F. Sutherland. 1,818,134; Aug. 11.
Dry closet. C. B. Schumacher. 1,818,586; Aug. 11.
Drying clothes, laundry, etc., Apparatus for. T. Sendler. 1,818,761; Aug. 11.
Dual wheel. W. Nelson. 1,818,573; Aug. 11.
Duct rod. E. R. Harrall and R. D. Parrott. 1,818,951; Aug. 11.
Dust arrester. R. H. Moore. 1,818,736; Aug. 11.
Dust shield for cement packers. E. E. Howard. 1,818,481; Aug. 11.
Dyeing machine construction. W. E. H. Bell. 1,818,032; Aug. 11.
Dyes, Direct azo. W. Lange. 1,818,898; Aug. 11.
Dyestuff preparation and making same. A. Arbogast. 1,818,878; Aug. 11.
Dyestuffs and intermediates, Manufacture of. R. F. Thomson and J. Thomas. 1,818,510; Aug. 11.
Dyestuffs, Production of vat. A. Lüttringhaus, R. Nawiasky, and A. Krause. 1,817,995; Aug. 11.
Dyestuffs, Vat. W. Bruck and F. Helwert. 1,818,037; Aug. 11.
Economizer. J. E. Trainer and I. L. Langvand. 1,818,760; Aug. 11.
Egg white process. A. K. Epstein and B. R. Harris. 1,818,212–14; Aug. 11.
Egg white product and process. A. K. Epstein and B. R. Harris. 1,818,215; Aug. 11.
Electric fountain. H. O. Good. 1,818,319; Aug. 11.
Electric furnace. H. G. Campbell. 1,818,789; Aug. 11.
Electric furnace. W. E. Moore. 1,818,239; Aug. 11.
Electric furnace. A. Musso. 1,818,812; Aug. 11.
Electric heater. A. J. Holmes. 1,818,953; Aug. 11.
Electric machines, Brush shifting device for alternating current dynamo. J. I. Hull. 1,818,803; Aug. 11.
Electric meter system. J. C. McDonald. 1,818,929; Aug. 11.
Electric snap switch. G. J. Meuer. 1,818,569; Aug. 11.
Electric switch. A. J. Bowie. 1,818,456; Aug. 11.
Electric switch. G. J. Meuer. 1,818,265; Aug. 11.
Electric switching installation. C. Thumin. 1,818,828; Aug. 11.
Electrical apparatus. E. Dickey and F. F. Starr. 1,818,047; Aug. 11.
Electrical driving of spindles for spinning, twisting, doubling, winding, and analogous processes. E. C. Cope. 1,818,535; Aug. 11.

Electrical heater. O. D. Thorsness and D. R. Tower. 1,818,176; Aug. 11.
Electrical outlet. W. Huppert. 1,818,804; Aug. 11.
Electrical plug connecter. A. H. Curtis. 1,818,926; Aug. 11.
Electrical protective system. G. Kribs. 1,818,337; Aug. 11.
Electrical resistance composition. L. T. Work, E. S. Imes, and E. A. Everett. 1,818,184; Aug. 11.
Electricity meter. A. L. Emens. 1,818,795; Aug. 11.
Electrode. G. Pfeiderer. 1,818,579; Aug. 11.
Electrolysis of metal chlorides, Apparatus for the fusion. R. Suchy, K Staib and W. Moschel. 1,818,173; Aug. 11.
Electromagnetic device. P. P. Zimmerman. 1,818,596; Aug. 11.
Electroplating. L. R. Westbrook. 1,818,179; Aug. 11.
Electroplating. G. Lutz and L. R. Westbrook. 1,818,229; Aug. 11.
Embroidered textile fabric or a similar article. E. W. Freudenberg. Des. 84,814–26; Aug. 11.
End trimming mechanism for cup feed overseaming machines. P. D. Redcay. 1,818,753; Aug. 11.
Energy of the movements of the sea, System for recovering the. J. Jouy. 1,818,066; Aug. 11.
Engine: *See*—
  Internal-combustion engine. Rotary engine.
Engine power plant, Internal combustion. H. A. Douglas. 1,817,974; Aug. 11.
Engines, Structure or framing of internal combustion. W. F. Rabbidge. 1,818,752; Aug. 11.
Excavating and conveying apparatus. W. H. Dance. 1,817,971; Aug. 11.
Excavating machinery. W. M. Bager and W. Lehman. 1,817,905; Aug. 11.
Excavating machinery. P. S. Stevens. 1,818,106; Aug. 11.
Extractor: *See*—
  Plug extractor.
Fabric: *See*—
  Pile fabric.
Fabric and making it, Rubber coated. A. N. Parrett. 1,818,575; Aug. 11.
Fabric and making it, Rubber coated. A. N. Parrett. 1,818,576; Aug. 11.
Fabric repairing apparatus. A. L. De Leeuw. 1,818,696; Aug. 11.
Fabric slitting and strip edging apparatus. F. B. Pfeiffer. 1,817,929; Aug. 11.
Fabrics, Apparatus for treating and ageing. E. S. Chapin. 1,818,041; Aug. 11.
Fabrics, Treating. G. Rivat and C. Dreyfus. 1,818,505; Aug. 11.
Fan. E. E. Campbell. 1,818,607; Aug. 11.
Fastener making machine. H. Lamb. 1,817,990; Aug. 11.
Fastener, Wire. W. H. F. Ziederich. 1,818,523; Aug. 11.
Fastening. H. A. Widmer. 1,818,442; Aug. 11.
Fastening point for shank stiffeners. R. E. Bartels. 1,818,666; Aug. 11.
Fastenings, Device for supplying. R. E. Duplessis. 1,818,051; Aug. 11.
Fiber or paper fork. A. Bothe. 1,818,296; Aug. 11.
Fibers in a precipitating bath, Apparatus and method for spinning. A. P. Furman. 1,818,549; Aug. 11.
Fibrous material preliminary to making pulp, Treating. J. S. Busch. 1,818,039; Aug. 11.
Film flat in roll-film cameras, Holding. J. Christie. 1,817,965; Aug. 11.
Film, Motion picture. P. Favour. 1,817,977; Aug. 11.
Filter press leaf. R. L. Holcomb and E. E. Bartels. 1,818,623; Aug. 11.
Filter, Self cleaning. O. V. Greene. 1,818,391; Aug. 11.
Filters, Impregnation of. N. E. Oglesby and R. S. Brown. 1,818,155; Aug. 11.
Filtration of decolorized oils, Hot. P. W. Prutzman. 1,818,274; Aug. 11.
Fire arms, Automatic. K. Heinemann. 1,818,890; Aug. 11.
Fire extinguishing apparatus. D. Mapes. 1,818,147; Aug. 11.
Flash light and writing pad, Combined. O. Kroldrup. 1,818,855; Aug. 11.
Flask. F. J. Le Clair. Des. 84,835; Aug. 11.
Floor construction. K. P. Billner. 1,817,914; Aug. 11.
Floor construction. O. S. Bowman. 1,818,299; Aug. 11.
Floor, Resilient hard surfaced. O. S. Bowman. 1,818,298; Aug. 11.
Floor structure. W. E. Snaman. 1,818,014; Aug. 11.
Floor surfacing machine. G. Jacobson and G. F. Ericson. 1,818,954; Aug. 11.
Fluid pressure, Apparatus for controlling the transmission of fluctuating. E. A. Rockwell. 1,817,941; Aug. 11.
Fluid pressure trapping device. E. A. Rockwell. 1,817,942; Aug. 11.
Foam from milk and other liquids, Apparatus for eliminating. M. R. Parsell. 1,818,962; Aug. 11.
Folding table. W. L. Deming. 1,818,118; Aug. 11.
Food product container. F. J. McDonough. Des. 84,839; Aug. 11.
Footwear. N. D. Mattison. 1,818,780–1; Aug. 11.
Fork: *See*—
  Fiber or paper fork.
Fork or similar article. P. B. Ball. Des. 84,804; Aug. 11.
Form, Necktie pressing. S. L. Garfinkel. 1,818,889; Aug. 11.
Form stripper, Sheet rubber goods. R. H. Coovert and L. W. Wilkinson. 1,818,792; Aug. 11.
Fountain: *See*—
  Electric fountain.
Fountain for poultry, Water. R. K. Stevens. 1,818,017; Aug. 11.
Frame: *See*—
  Saw frame.
Fretted instrument adjusting means. A. Larson. 1,818,631; Aug. 11.
Friction brake. B. F. Shields. 1,818,100; Aug. 11.
Fruit, Method and apparatus for coring. B. C. Coons. 1,817,967; Aug. 11.
Fuel and air mixtures for internal combustion engines. J. C. Morrell. 1,818,240; Aug. 11.
Fuel burner, Pulverized. L. V. Andrews and O. Craig. 1,817,911; Aug. 11.
Fume generating and inhaling apparatus. J. F. Class. 1,818,692; Aug. 11.
Fumigant material and method of fumigation. H. W. Houghton. 1,818,136; Aug. 11.
Fur or pelt cutting machine. I. Friedman. 1,818,058; Aug. 11.
Furnace: *See*—
  Electric furnace. Heating furnace.
Furnace. J. F. Schrumn. 1,818,759; Aug. 11.
Furnace wall construction. L. H. Hosbein. 1,818,802; Aug. 11.
Fuse cut-out, Portable cable. H. P. Hastings. 1,818,251; Aug. 11.
Fuse, Resistor. J. K. Stafford. 1,818,822; Aug. 11.
Gaff hook. A. C. Gough. 1,818,474; Aug. 11.
Game. H. W. Smith. 1,818,012; Aug. 11.
Garment. D. Blair. 1,817,915; Aug. 11.
Garment hanger. P. J. Burde. 1,818,193; Aug. 11.
Garments, Non-slip device for. J. H. Langrock. 1,817,991; Aug. 11.
Garter. G. B. Glidden. 1,818,472; Aug. 11.
Gas analysis apparatus. T. R. Harrison. 1,818,619; Aug. 11.
Gas burner. V. O. Beam. 1,818,783; Aug. 11.
Gas burner. P. C. Hughes. 1,818,222; Aug. 11.
Gas cleaner. F. R. McGee. 1,818,905; Aug. 11.
Gas purification material and making the same. G. E. Seil. 1,818,871; Aug. 11.
Gas, Separating and utilizing constituents of natural. J. S. Belt. 1,817,908; Aug. 11.
Gases and recovering by-products, Obtaining various. L. Chavanne. 1,818,533; Aug. 11.
Gasket shaping device. L. A. and L. O. Weston. 1,818,180; Aug. 11.
Gate: *See*—
  Crossing gate.
Gate. J. A. Hunt. 1,818,482; Aug. 11.
Gate apparatus. C. Kasik. 1,818,224; Aug. 11.
Gauge: *See*—
  Tank truck gauge. Wheel gauge.
Gauge for the application of lip rouge. J. A. Petnel. 1,818,863; Aug. 11.
Gauge stabilizer. J. D. Isaacks. 1,818,258; Aug. 11.
Gear. E. C. Head. 1,818,554; Aug. 11.
Gear for motor driven vehicles, Steering. A. A. Holle. 1,818,892; Aug. 11.
Gear for sewing machines, Drive. R. S. Kelso. 1,818,336; Aug. 11.
Gear, Landing. L. C. Milburn. 1,818,417; Aug. 11.
Generator: *See*—
  Steam generator.
Glass: *See*—
  Laminated glass.
Glass and producing the same, Laminated. W. F. Brown. 1,818,458; Aug. 11.
Glass, Apparatus for forming and annealing sheet. J. L. Drake. 1,818,208; Aug. 11.
Glass, Apparatus for producing sheet. J. J. Drake. 1,818,202; Aug. 11.
Glass, Apparatus for the manufacture of sheet or plate. W. E. Nobbe. 1,818,154; Aug. 11.
Glass apparatus, Sheet. L. Mambourg. 1,818,231; Aug. 11.
Glass apparatus, Treating. H. Thomas. 1,818,175; Aug. 11.
Glass blanks, Production of plate. J. L. Drake. 1,818,206; Aug. 11.
Glass blowing machine. E. H. Lorenz. 1,818,725; Aug. 11.
Glass drawing apparatus, Sheet. J. L. Drake. 1,818,205; Aug. 11.
Glass, Laminated. J. W. H. Randall. 1,818,159; Aug. 11.
Glass, Method and apparatus for flowing sheet. E. T. Ferngren. 1,818,217; Aug. 11.
Glass, Method and apparatus for producing. J. L. Drake. 1,818,203; Aug. 11.
Glass, Process and apparatus for forming sheet. J. L. Drake. 1,818,204; Aug. 11.
Glass, Process and apparatus for forming sheet. W. E. Nobbe. 1,818,152–3; Aug. 11.
Glass, Process of and apparatus for forming sheet. J. L. Drake. 1,818,207; Aug. 11.
Glass, Process and apparatus for producing sheet. C. Cone. 1,818,195; Aug. 11.
Glass, Process and apparatus for producing sheet. J. L. Drake. 1,818,209; Aug. 11.
Glass sheets, Apparatus for making. H. L. Halbach. 1,818,130; Aug. 11.

Gold and silver, Recovering. S. A. Giles. 1,818,846; Aug. 11.
Golf bag. T. W. Byrne. 1,818,378; Aug. 11.
Golf club, Adjustable. S. Samaras and L. Ravizza. 1,818,359; Aug. 11.
Golf clubs, Head for. W. J. Hadden. 1,818,553; Aug. 11.
Golf game. R. H. Pittler. 1,818,749; Aug. 11.
Golf unit. S. Feltyberger. 1,818,700; Aug. 11.
Grain, Apparatus for polishing. J. Prokop. 1,818,866; Aug. 11.
Grain cleaner. H. C. Wallace. 1,818,367; Aug. 11.
Grain saver. W. I. Kenison. 1,818,335; Aug. 11.
Granular mixtures, Molding. S. M. McAnulty. 1,818,234; Aug. 11.
Grapple for airplane package transfer apparatus. L. S. Adams. 1,818,956; Aug. 11.
Grate construction. R. B. Parker. 1,818,744; Aug. 11.
Grease gun. P. Gresser. 1,818,539; Aug. 11.
Grinding. A. L. Nelson. 1,818,084; Aug. 11.
Grinding machine. C. C. Stevens. 1,817,953; Aug. 11.
Grinding machine. E. A. Walker. 1,818,288; Aug. 11.
Grinding machines, Fluid pressure actuated. F. E. Stratton. Re. 18,149; Aug. 11.
Grinding, Oval. A. L. Nelson. 1,818,085; Aug. 11.
Gum massaging device. J. A. Maker. 1,818,146; Aug. 11.
Gun sight. W. A. Caruth. 1,818,381. Aug. 11.
H-section Rolled. J. H. Edwards and R. A. Millard. 1,818,121; Aug. 11.
Hack. J. O. Huxford. 1,818,398; Aug. 11.
Hacker for turpentine trees. E. A. McKoy. 1,818,906; Aug. 11.
Hammer mill. J. Mursch. 1,818,570; Aug. 11.
Handle: *See*—
Basket handle.
Handle. B. S. Floraday. 1,818,612; Aug. 11.
Handle for laundry irons. C. T. Madsen. 1,817,924; Aug. 11.
Handle for cooking utensils, Detachable. P. W. Stephens. 1,818,284; Aug. 11.
Hangar or shed, Airplane. L. S. Adams. 1,818,957; Aug. 11.
Hanger: *See*—
Curtain hanger. Polish rod hanger.
Garment hanger.
Harp. E. O. Starke. 1,817,951; Aug. 11.
Headlight. J. B. Wardwell. 1,818,875; Aug. 11.
Headlight structure. C. E. Moore. 1,818,735; Aug. 11.
Headrest and invalid-raising mechanism for bedsteads and cots. L. R. Berry. 1,818,598; Aug. 11.
Headrest for beds. G. Herz. 1,818,395; Aug. 11.
Heat abstraction. C. C. Heritage 1,817,983; Aug. 11.
Heat exchange device. M. S. Smith. 1,817,948; Aug. 11.
Heat exchanging, Apparatus for. G. T. Mott. 1,818,082; Aug. 11.
Heat transferring means. N. P. Setchkin. 1,818,762; Aug. 11.
Heater: *See*—
Electric heater. Water heater.
Electrical heater.
Heater. H. Lange. Des. 84,834; Aug. 11.
Heater and making the same, Air. H. J. Kerr. 1,817,987; Aug. 11.
Heating apparatus for vehicles. Q. G. Noblitt. 1,818,268; Aug. 11.
Heating appliance, Electric. J. A. Boyer. 1,818,191; Aug. 11.
Heating furnace. A. Weigel. 1,818,661; Aug. 11.
Heel, Rubber. A. C. Bain. Des. 84,803; Aug. 11.
Heel, Shoe. M. Q. Mancini. 1,818,233; Aug. 11.
Hemstitching attachment. A. B. and S. E. Briggs. 1,818,035; Aug. 11.
Hinge, Friction. H. E. Woernle. 1,818,182; Aug. 11.
Holder, Adjustable curtain. F. Breuer. 1,817,962; Aug. 11.
Holder, Basket. C. J. and J. James. 1,818,400; Aug. 11.
Holder for projection apparatus. A. B. Mueller. 1,818,499; Aug. 11.
Holder, Hot pan. W. M. Moore. 1,818,344; Aug. 11.
Holder, Lighting fixture globe. E. T. Samuelson. 1,818,163; Aug. 11.
Holder, Match. H. W. Rose. 1,818,507; Aug. 11.
Holder, Milk bottle. J. G. Gaviak. 1,818,059; Aug. 11.
Holder, Tag. E. A. Sutcliffe. 1,818,019; Aug. 11.
Holder, Twine. A. E. Humphrey. 1,818,894; Aug. 11.
Holding device for chips or counters used in games and the like. R. S. Blair. 1,818,033; Aug. 11.
Holster and belt. Combined toy pistol. E. J. Mordt. Des. 84,841; Aug. 11.
Honing and lapping machine, Hydraulic. T. F. Quigley. 1,818,098; Aug. 11.
Hood for therapeutic lamp. L. F. Bird. 1,818,599; Aug. 11.
Hood lock, Automatic. F. Vargo. 1,818,366; Aug. 11.
Hook: *See*—
Chain hook. Gaff hook.
Horse or trestle. G. A. Willis. 1,818,516; Aug. 11.
Hose shut-off device, Automatic gas. S. Dickstein and L. H. Weinstein. 1,818,609; Aug. 11.
House construction, Steel frame. E. H. Millard. 1,818,418; Aug. 11.
Hub assembly, Disk wheel. E. K. Baker. 1,818,447; Aug. 11.
Hydrocarbons from gases, Removal of mono-cyclic aromatic. M. Pier, W. Boesler, and A. Eisenhut. 1,818,158; Aug. 11.
Hydrocarbons, Process and apparatus for converting. W. M. Cross. 1,818,674; Aug. 11.
Hydrocarbons, Thermal decomposition of. G. O. Curme, jr. Re18,148; Aug. 11.
Hydrogen from gases, Eliminating sulphureted. W. Giund. 1,818,615; Aug. 11.
Hypodermic equipment. W. H. H. Bixler. 1,818,670; Aug. 11.
Ice cream, Preparing. G. D. Turnbow. 1,818,364; Aug. 11.
Ice vending machine. A. Happel. 1,818,325; Aug. 11.
Indicator for storage batteries. G. Yull. 1,818,185; Aug. 11.
Inductance system. L. A. Gebhard. 1,818,316; Aug. 11.
Inductance system. A. M. Trogner. 1,818,863; Aug. 11.
Ingot mold. T. McNally. 1,818,236; Aug. 11.
Inhaler, Nasal. A. M. Allen. 1,818,028; Aug. 11.
Ink pad, Fountain. C. H. Bright. 1,818,531; Aug. 11.
Inking mechanism for addressing machines. P. A. Gollnick and F. W. Broderick. 1,818,706; Aug. 11.
Instrument for treating teeth. R. M. Kerr. 1,818,627; Aug. 11.
Insulating clamp. C. B. Johnson. 1,818,714; Aug. 11.
Insulating materials, Methods of and apparatus for trenting. O. F. Mottweiler and D. C. Drill. 1,818,346; Aug. 11.
Insulating structure. O. F. Mottweiler and D. C. Drill. 1,818,345; Aug. 11.
Insulator. G. Polak. 1,818,931; Aug. 11.
Intaglio machines, Wiping and scraping mechanism of. F. Waite. 1,818,441; Aug. 11.
Internal combustion engine. F. Feyens. 1,818,796; Aug. 11.
Internal combustion engine. F. R. Higley. 1,817,919; Aug. 11.
Internal combustion engine. F. Land. 1,818,339; Aug. 11.
Iron and steel, Purification of. M. Jager, E. Pokorny, and G. Gossrau. 1,818,556; Aug. 11.
Jack: *See*—
Magnetic jack.
Jardiniere. D. H. Ross. Des. 84,847; Aug. 11.
Jelly preparation and making the same. A. Leo. 1,818,263; Aug. 11.
Joining articles, Device for. L. F. Lamplough. 1,818,560; Aug. 11.
Joint: *See*—
Pivot joint.
Joints, Making expansion. G. J. Ulrich. 1,818,874; Aug. 11.
Junction box. J. R. Townsend. 1,818,177; Aug. 11.
Key dipping machine. G. A. and G. V. Bardet. 1,818,524; Aug. 11.
Lacquer for application by brushing. H. Finkelstein. 1,818,547; Aug. 11.
Laminated glass. W. C. McDaniel. 1,818,235; Aug. 11.
Lamp. W. H. Shlesinger. Des. 84,854; Aug. 11.
Lamp, Arc. J. H. Wagenhorst. 1,817,955; Aug. 11.
Lamp, Automobile signal. E. A. Laurent. 1,818,857; Aug. 11.
Lamp bracket, Flexible. M. F. Rosacker. 1,818,582; Aug. 11.
Lamp, Electric. H. A. Douglas. 1,817,975; Aug. 11.
Lamp, Electric. R. S. Johnson. Des. 84,830; Aug. 11.
Lamp receptacle. W. Saymon. Des. 84,853; Aug. 11.
Lamp, Table. O. R. Fandrey. Des. 84,813; Aug. 11.
Lamp, Vehicle. W. H. Wood. 1,818,183; Aug. 11.
Latch. S. J. Purnell. 1,817,989; Aug. 11.
Lathe. J. M. Christman. 1,818,042; Aug. 11.
Lathe, Automatic. W. F. Groene. 1,818,128; Aug. 11.
Laundry tagging machine. E. Lane. 1,818,408; Aug. 11.
Leer, Annealing. J. L. Drake. 1,818,201; Aug. 11.
Level. M. Dill. 1,818,843; Aug. 11.
Lever lock, Gear shift. E. C. Moulton. 1,818,241; Aug. 11.
Lifting device. W. Schroeder. 1,818,584; Aug. 11.
Lighter, Cigar or cigarette. J. J. Liss. 1,818,724; Aug. 11.
Lighting appliance. L. C. Doane. 1,818,120; Aug. 11.
Lighting fixture. H. Heine. 1,818,252; Aug. 11.
Lighting outfit, Portable electric. R. Eckstein. 1,818,884; Aug. 11.
Lighting system, Automobile anti-glare. E. Germain. 1,818,126; Aug. 11.
Lightning rod point connection. L. M. Mershimer. 1,818,494; Aug. 11.
Limb, Artificial. L. L. Hoy. 1,818,893; Aug. 11.
Liquid, Apparatus for successively distributing variable and adjustable quantities of any. J. Kiener. 1,818,225; Aug. 11.
Liquid storage or tempering apparatus. H. Feldmeier. 1,817,978; Aug. 11.
Liquid treating apparatus. H. Bergquist. 1,818,188; Aug. 11.
Lithopone and preparing same. J. E. Booge. 1,818,190; Aug. 11.
Loader, Coal. P. E. Smith. 1,818,168; Aug. 11.

Loading and unloading device. D. E. Gray. 1,818,475; Aug. 11.
Lock: *See*—
Hood lock. Nut lock.
Lever lock. Window lock.
Lock for poultry cars, Compartment. I. V. Edgerton. 1,818,052; Aug. 11.
Locking mechanism for cake former end gates. F. C. Simon. 1,817,946; Aug. 11.
Log, Automatic tourist. W. H. Fitch. 1,817,979; Aug. 11.
Lubricating system. E. W. Davis. 1,818,464; Aug. 11.
Lubricating system. E. E. Hans. 1,818,392; Aug. 11.
Lubricating system. H. J. Murphy 1,818,847; Aug. 11.
Lubricator: *See*—
Driving box lubricator.
Lumber carrier. R. B. Moore. 1,818,420; Aug. 11.
Machine for coating and glazing biscuits. E. Savy. 1,818,911; Aug. 11.
Machine for expanding metal. W. W. Galbreath. 1,818,246; Aug. 11.
Machine for operating on heels. T. Lund. 1,818,142; Aug. 11.
Machine for producing channel strips. E. W. Livensparger. 1,818,227; Aug. 11.
Machine, for repairing knitted fabrics. A. C. Parlini. 1,818,745; Aug. 11.
Machine for repairing knitted fabrics. A. C. Parlini. 1,818,747; Aug. 11.
Machine transmission, Milling. F. A. Parsons. 1,818,089; Aug. 11.
Magazine feed for cone winders. R. C. Jordan. 1,818,223; Aug. 11.
Magnetic body. H. Lathrop. 1,818,070; Aug. 11.
Magnetic material. G. W. Elmen. 1,818,054; Aug. 11.
Magneto mounting attachment. G. J. Lang and J. F. Martin. 1,818,721; Aug. 11.
Manifold, Engine inlet. O. H. Spencer. 1,818,283; Aug. 11.
Manifold, Hot spot. H. B. Petit. 1,818,270; Aug. 11.
Manufacturing process. C. C. Ritter and H. M. Williams. 1,818,008; Aug. 11.
Massage apparatus. J. G. De Remer. 1,818,465; Aug. 11.
Massage apparatus. F. Hochmayr. 1,818,479; Aug. 11.
Mattress ticking or the like. C. Lofman. Des. 84,836; Aug. 11.
Measuring a plurality of values, Apparatus for. H. Griss. 1,818,847; Aug. 11.
Measuring dispenser. C. Burkart. 1,818,460; Aug. 11.
Measuring temperature in bore holes. F. W. Huber 1,818,221; Aug. 11.
Mechanical jack. R. E. Manley and F. T. Flinchbaugh. 1,818,077; Aug. 11.
Mechanical system. A. Dina. 1,818,048; Aug. 11.
Merry-go-round. K. Pronnecke. 1,818,647; Aug. 11.
Metal cell. D. F. Youngblood. 1,818,522; Aug. 11.
Metal rings, Device for annealing. F. Linnhoff. 1,818,841; Aug. 11.
Metallic sheets, Manufacture of. J. R. Cain and G. Yungblut. 1,818,379; Aug. 11.
Meter: *See*—
Electricity meter.
Meter device, Induction. W. G. Mylius and B. G. Labar 1,818,151; Aug. 11.
Meter for working control, Output. M. Kurrein. 1,817,922; Aug. 11.
Micrometer calipers. C. Joroit. 1,818,853; Aug. 11.
Milk solids with ultra-violet rays and the product of such method, Irradiating. G. C. Supplee. 1,817,936; Aug. 11.
Mill: *See*—
Hammer mill.
Mixer for welding torches. G. L. Hammon. 1,818,949; Aug. 11.
Mold: *See*—
Ingot mold.
Molding apparatus. A. T. Bateman and A. Irvine. 1,818,667; Aug. 11.
Mop shaking device. J. B. Hamblen. 1,818,948; Aug. 11.
Mortising machine. R. S. Brown. 1,817,910; Aug. 11.
Motor: *See*—
Oscillating motor. Synchronous motor.
Outboard motor. Wave motor.
Motor for heat regulators. A. A. and C. H. Dicke. 1,818,698; Aug. 11.
Mounting for doll eyes. S. Marcus and A. Konoff. 1,818,635; Aug. 11.
Mounting for motor vehicles, Spring. E. R. Spiegel. 1,818,105; Aug. 11.
Mounting, Rim. A. S. Van Halteren. 1,818,440; Aug. 11.
Mouthpiece arrangement for use with telephones and the like. D. S. S. Steuart. 1,818,654; Aug. 11.
Mower, Gang. H. R. Lontz. 1,818,487; Aug. 11.
Mower, Lawn. C. A. Gratiot. 1,818,220; Aug. 11.
Mower, Lawn. A. V. Rowe. 1,818,583; Aug. 11.
Muffler. L. L. Haas. 1,817,981; Aug. 11.
Muffler for engine. A. T. Floyd, jr. 1,818,469; Aug. 11.
Muscles, Testing and exercising the ocular. W. M. Updegrave. 1,818,660; Aug. 11.
Music stand. H. A. Kliegl. 1,818,717; Aug. 11.
Neck and closure structure. J. S. Reid. 1,818,581; Aug. 11.
Needle and stripper, Cotton. A. Cullander. 1,818,537; Aug. 11.
Needle control mechanism for knitting machines. W. D. Buts. 1,818,112–13; Aug. 11.
Needle, Cotton picking. L. E. Wirth. 1,818,444; Aug. 11.
Needle latches, Making. A. C. Parlini. 1,818,746; Aug. 11.
Nib section and holder therefor, Interchangeable. J. W. Neal. 1,818,424; Aug. 11.
Nitrocellulose, Digestion of. M. G. Milliken. 1,818,733; Aug. 11.
Nozzle, Gasoline dispensing. C. G. Abbott. 1,818,663; Aug. 11.
Nozzle mechanism. A. V. Motsinger. 1,818,422; Aug. 11.
Nut lock. K. Vossloh. 1,818,915; Aug. 11.
Oil burner. J. Good. 1,818,616; Aug. 11.
Oil burner. W. H. Pascoe. 1,818,748; Aug. 11.
Oil, Method of and apparatus for treating crude. H. Hoppe. 1,818,480; Aug. 11.
Oil purifier. J. L. Green. 1,818,476; Aug. 11.
Oil purifying system for internal combustion engines. R. Ragan. 1,818,429; Aug. 11.
Oil, Purifying vegetable. W. S. Baylis. 1,818,452; Aug. 11.
Oil, Reconditioning. J. G. Ford. 1,818,218; Aug. 11.
Oil, Refining hydrocarbon. A. L. Lyman. 1,818,488; Aug. 11.
Oil vapors into vapor phase, Cracking. J. B. Weaver and C. R. Wagner. 1,818,513; Aug. 11.
Oils and product thereof, Treating. J. S. Long. 1,818,073; Aug. 11.
Oils, Quenching. H. Rodman. 1,818,431; Aug. 11.
Optical apparatus. J. F. Leventhal. 1,818,410; Aug. 11.
Ore bodies, Determining the character of. J. J. Jakosky. 1,818,331; Aug. 11.
Ore dock. A. M. Frazee. 1,818,470; Aug. 11.
Ornament and method of manufacture, Fanciful. J. Pedersen. 1,818,578; Aug. 11.
Ornament for desks. B. W. Moser. 1,818,737; Aug. 11.
Oscillating motor. V. G. Apple. 1,818,779; Aug. 11.
Outboard motor. F. T. Irgens. 1,818,257; Aug. 11.
Outlet box. F. E. Gilmore. 1,818,317; Aug. 11.
Outlet box and plug. O. R. Randles. 1,818,352; Aug. 11.
Oven, Coke. C. H. Hughes. 1,818,713; Aug. 11.
Overhead traveling carrier. D. T. Bennington. 1,818,374; Aug. 11.
Oxides of carbon into organic compounds particularly methanol, Transforming. O. Schmidt and J. Ufer. 1,818,165; Aug. 11.
Package assembling machine. R. A. Jones. 1,818,065; Aug. 11.
Packaging machine. M. J. Milmoe. 1,818,496; Aug. 11.
Packing, Fluid tight. F. E. Wilsey. 1,818,595; Aug. 11.
Pad: *See*—
Ink pad.
Paper. J. A. Lowe. 1,818,726; Aug. 11.
Paper cup machine. C. F. Smith. 1,818,279; Aug. 11.
Paper, Laminated ornamental. C. M. Bryan. 1,818,459; Aug. 11.
Paper machine. N. J. Niks. 1,818,267; Aug. 11.
Paper making machine. A. Aldrich and E. E. Berry. 1,818,777; Aug. 11.
Paper making machine. E. E. Berry. 1,818,681; Aug. 11.
Paper making machinery. H. L. Kutter. 1,818,719; Aug. 11.
Paper, Method of and apparatus for making. A. M. Hinkson. 1,818,712; Aug. 11.
Paper, Method of and apparatus for making multiply. M. H. Kliefoth. 1,818,716; Aug. 11.
Paper perforating device for typewriters. G. De Pamphilis. 1,818,046; Aug. 11.
Paper roll container. J. E. Baum. Des. 84,805; Aug. 11.
Partition for separating the products of fusion electrolysis of metallic chlorides. R. Suchy, K. Staib, and W. Moschel. 1,818,174; Aug. 11.
Patch pocket. S. Newman. 1,818,738; Aug. 11.
Paving material and manufacturing the same. R. L. White. 1,818,876; Aug. 11.
Pawl for ratchet mechanisms. E. L. Carlson. 1,818,690; Aug. 11.
Pen, Fountain. L. A. Brooke. 1,818,377; Aug. 11.
Pen, Fountain. O. Federbusch. 1,818,216; Aug. 11.
Penholder or similar article. F. Di Ionno. Des. 84,812; Aug. 11.
Pens, Adjustable feed for fountain. K. S. Parker. 1,818,743; Aug. 11.
Petroleum hydrocarbon, Treating. R. Cross. 1,817,969; Aug. 11.
Phosphorus and phosphorus compounds by volatilization processes, Manufacture of. R. Weigel and H. W. Easterwood. 1,818,662; Aug. 11.
Photographic apparatus. A. W. Caps. 1,818,462; Aug. 11.
Photographic method and apparatus, Composite. R. J. Pomeroy. 1,818,354; Aug. 11.
Photographic printing device. F. Bern. 1,818,528; Aug. 11.
Photographs from negatives, Process and apparatus to be used in printing. J. W. Myers. 1,818,003; Aug. 11.
Photography, Color. J. G. Capstaff. 1,817,963; Aug. 11.
Photography, Color. J. N. Goldsmith, T. T. Baker, and C. Bonamico. 1,818,927; Aug. 11.
Piano with tone modulators. J. H. Hammond, jr. 1,818,709; Aug. 11.
Picture machine, Motion. W. C. Readeker. 1,818,355; Aug. 11.
Pictures, Process and apparatus for drawing electrical. P. Selenyi. 1,818,760; Aug. 11.
Pig feeding and oiling device. O. Miller. 1,818,419; Aug. 11.

Pile fabric. C. Dreyfus. 1,818,540; Aug. 11.
Pilot, Automatic. E. A. Sperry. 1,818,103; Aug. 11.
Pin: *See*—
Wrist pin.
Pipe coupling. O. G. Hitchcock. 1,818,255; Aug. 11.
Pipe coupling. A. T. McWane. 1,818,493; Aug. 11.
Pipe fitting, Adaptable. E. C. McAlees. 1,818,858; Aug. 11.
Pipe racking device. R. W. Siler. 1,818,278; Aug. 11.
Pipes, Apparatus for joining. F. H. Smith and H. A. Stringfellow. 1,818,435; Aug. 11.
Piston. M. B. Covert. 1,818,307; Aug. 11.
Piston lubrication. C. Breer. 1,818,671; Aug. 11.
Piston-packers and liners, Device for washing. W. C. Bailey. 1,818,187; Aug. 11.
Pitch into coke, Distillation of. C. V. McIntire. 1,817,926; Aug. 11.
Pivot joint. C. I. Erickson. 1,818,886; Aug. 11.
Planter attachment. J. M. and R. H. Taylor. 1,818,656; Aug. 11.
Plate or similar article. H. J. Wain. Des. 84,861; Aug. 11.
Plate or similar article. G. Wesp. Des. 84,865; Aug. 11.
Platen printing press. G. Spiess. 1,818,821; Aug. 11.
Platform, Gravity discharging. C. White. 1,818,289; Aug. 11.
Platter or similar article. G. Wesp. Des. 84,863; Aug. 11.
Pliers and wrench, Combined. E. Klamt. 1,817,988; Aug. 11.
Plug, Electric wall. P. J. Chéron. Des. 84,809; Aug. 11.
Plug extractor. L. F. Johnston. 1,818,626; Aug. 11.
Plug, Mushroom vent. J. C. Groble. 1,818,249; Aug. 11.
Pneumatic spring. C. Rigotti. 1,818,357; Aug. 11.
Poison dispenser for cultivator plows. B. Watson and W. S. Jackson. 1,818,369; Aug. 11.
Polish applier, Shoe. D. Pionus. 1,818,930; Aug. 11.
Polish rod hanger. L. R. B. Chevalier. 1,818,303; Aug. 11.
Pop corn machine. G. H. Rossebo and F. Moke. 1,818,276; Aug. 11.
Position comparator. P. H. Bassett. 1,817,907; Aug. 11.
Positioning device for writing implements. J. T. Mingos. 1,818,031; Aug. 11.
Poster rolling and moistening machine. A. M. Bates. 1,818,451; Aug. 11.
Pot: *See*—
Soldering pot.
Potassium, Manufacture of. W. Busch, and E. Noack. 1,818,881; Aug. 11.
Potato digging machine. H. Brussow. 1,818,192; Aug. 11.
Pottery and the like, Decorating articles of. H. Marmorstein. 1,818,729; Aug. 11.
Powder box. H. G. Lemoine. 1,818,340; Aug. 11.
Power plant. A. Rosner. 1,817,944; Aug. 11.
Power plant, Wind operated. H. E. Bucklen. 1,818,672; Aug. 11.
Power transmission. K. E. Lyman. 1,818,564; Aug. 11.
Power transmission device, Differential speed. S. J. Dow. 1,818,310; Aug. 11.
Power transmission mechanism. H. W. Nieman. 1,818,643; Aug. 11.
Power transmitting device. W. W. Everts. 1,818,313; Aug. 11.
Press: *See*—
Axle press.
Platen printing press.
Press. H. O. Barker. 1,818,837; Aug. 11.
Print. O. M. Miller. 1,818,080; Aug. 11.
Printing machines, Late news device for. C. G. Quick and T. R. Bennett. 1,818,751; Aug. 11.
Printing presses, Web roll loading mechanism for. F. Lamatsch. 1,818,720; Aug. 11.
Products made with cellulose acetate, Dyeing or coloring of. G. H. Ellis. 1,818,741–3; Aug. 11.
Projector for signaling devices. T. J. Scofield and G. A. White. 1,818,817; Aug. 11.
Prop, Mine. N. D. Levin. 1,818,633; Aug. 11.
Propeller for helicopterous aircrafts. J. Mellander. 1,818,238; Aug. 11.
Propelling device for aircraft and the like. W. Stelzer. 1,817,952; Aug. 11.
Protector, Smoker's table. E. J. Grinwald. 1,818,617; Aug. 11.
Puller: *See*—
Slack puller.
Puller. J. O. Huxford. 1,818,399; Aug. 11.
Pulley. A. L. Freedlander. 1,818,798; Aug. 11.
Pulp, Method of and apparatus for the chemical treatment of. C. R. Van de Carr, Jr. 1,818,913; Aug. 11.
Pump. E. Jnelson. 1,818,259; Aug. 11.
Pump. J. V. Petrelli. 1,818,097; Aug. 11.
Pump. W. E. Stevenson. 1,818,171; Aug. 11.
Pump, Deep well oil turbine. G. E. Bigelow. 1,818,455; Aug. 11.
Pump, or fluid pressure engine, Rotary blower. H. R. Ricardo. 1,818,430; Aug. 11.
Pump, Radial. W. Ernst. 1,818,611; Aug. 11.
Pumping apparatus. H. A. W. Howcott. 1,818,851; Aug. 11.
Pyjama garment, Negligée. M. E. Hadad. 1,818,849; Aug. 11.
Pyrotechnic display device. T. G. Hitt. 1,818,478; Aug. 11.
Rack: *See*—
Bread rack.
Radiator. B. Blackmore. 1,818,600; Aug. 11.
Radiator. T. E. Landvoigt. 1,818,226; Aug. 11.
Radiator elements, Apparatus for assembling. A. C. Walworth. 1,818,593; Aug. 11.
Radiator elements, Assembling. A. C. Walworth. 1,818,592; Aug. 11.
Radiator, Fin. O. R. Ludwig. 1,818,727; Aug. 11.
Radiator for internal combustion engines, Cooling. D. T. MacLeod. 1,818,144; Aug. 11.
Radiators, Winter front for automobile. I. C. Hess. 1,818,328; Aug. 11.
Radio direction finding. A. Meissner. 1,818,639; Aug. 11.
Radio dynamic control of gliding bodies. J. H. Hammond, jr. 1,818,708; Aug. 11.
Radio frequency telegraphy and telephony system. A. Beckmann. 1,818,669; Aug. 11.
Radio receiving circuit. M. M. Phillips. 1,818,157; Aug. 11.
Rail filler. H. L. Rogers. 1,818,755; Aug. 11.
Rail joint bar, Forming a compromise. D. L. Braine. 1,818,880; Aug. 11.
Railing fittings. T. G. Sutherland. 1,818,172; Aug. 11.
Railway tie. D. B. MacNeir. 1,818,145; Aug. 11.
Rake. B. C. Huffman. 1,818,063; Aug. 11.
Rattle, Voice doll. M. Cohn. 1,818,306; Aug. 11.
Razor, Safety. J. G. Coleman. 1,817,966; Aug. 11.
Razor, Safety. G. D. Marcy. 1,817,925; Aug. 11.
Reaction between an aqueous reagent and impurities in oil, Causing a. A. E. Flowers. 1,818,702; Aug. 11.
Reaction relief device. O. H. Klotz. 1,818,895; Aug. 11.
Reading maps and writings, looking at pictures and the like, Device for. S. Samson and A. Vocke. 1,818,757; Aug. 11.
Reamer. A. C. Hoeh. 1,818,621; Aug. 11.
Receptacle evacuating apparatus. H. J. Engbrecht. 1,817,918; Aug. 11.
Receptacle evacuating apparatus. H. J. Engbrecht. 1,818,122; Aug. 11.
Record player, Automatic disk. J. A. O'Neill. 1,818,645; Aug. 11.
Records, Making and playing phonograph or sound. H. Ohagen. 1,818,006; Aug. 11.
Rectifier. F. J. Fischer. 1,818,701; Aug. 11.
Reel: *See*—
Tape reel.
Refractory and making the same. D. W. Ross and J. M. Lamble. 1,818,506; Aug. 11.
Refractory article and a composition for and making same. R. H. Martin. 1,818,903; Aug. 11.
Refrigerating apparatus. J. G. King. 1,818,139; Aug. 11.
Refrigerating apparatus. I. L. Nickerson. 1,818,348; Aug. 11.
Refrigerating apparatus and heat transfer therein. L. G. Copeman. 1,818,678; Aug. 11.
Refrigerating machine. J. Schneider. 1,818,166; Aug. 11.
Refrigerating system. G. Hilger. 1,818,133; Aug. 11.
Refrigeration. E. H. Ryden. 1,818,433; Aug. 11.
Refrigeration. D. G. Smellie. 1,818,587; Aug. 11.
Refrigeration apparatus. H. E. Willsie. 1,818,181; Aug. 11.
Refrigeration, Method of and apparatus for electric. H. R. Stuart. 1,818,437; Aug. 11.
Register: *See*—
Autographic register.
Cash register.
Regulator: *See*—
Window regulator.
Reheater. W. H. Armacost. 1,818,446; Aug. 11.
Repair bag, Sectional. C. J. Smith, G. K. McNeill, and C. J. Dolding. 1,818,766; Aug. 11.
Reservoir, Concrete storage. E. R. Oden. 1,818,005; Aug. 11.
Resin solution and preparing same. J. H. Schmidt. 1,818,360; Aug. 11.
Retort discharging means. C. V. McIntire. 1,818,567; Aug. 11.
Reversing mechanism. H. Anderson. 1,818,664; Aug. 11.
Rhodium, iridium, osmium, ruthenium, and the like, Precipitating. E. H. Reerink. 1,818,909; Aug. 11.
Rifle, Automatic air. E. H. Miller. 1,818,810; Aug. 11.
Rim. C. V. Conrad. 1,818,791; Aug. 11.
Rim, Wheel. F. W. Baker. 1,817,906; Aug. 11.
Ring: *See*—
Drive ring.
Road grading machines, Sloper attachment for. C. B. Scheffold. 1,818,434; Aug. 11.
Road machine. J. G. Fairley. 1,818,887; Aug. 11.
Road spreading machine. A. N. Nickerson. 1,818,500; Aug. 11.
Rod: *See*—
Duct rod.
Rod bracket. F. Ulbrich. 1,818,829; Aug. 11.
Roll motion, Detaching. S. H. Helland. 1,818,555; Aug. 11.
Roof flange. S. and M. Goodman. 1,818,219; Aug. 11.
Roofing products, Making. T. Robinson. 1,818,009; Aug. 11.
Rope display stand. J. C. Young. 1,818,518; Aug. 11.
Rotary engine, Internal combustion. A. Demuynck. 1,818,882; Aug. 11.
Rubber formers, Valved inflatable. J. R. Crossan, and J. E. Mackel. 1,818,536; Aug. 11.
Rubber having air cells, Apparatus for producing. S. Battilani. 1,818,372; Aug. 11.
Safety crossing, Railroad. W. H. Condon. 1,818,534; Aug. 11.

Safety device. M. P. Burrows. 1,818,300; Aug. 11.
Safety device for firearms. J. Nickl. 1,818,086; Aug. 11.
Safety device for hoist brakes. M. Smith-Peterson. 1,818,007; Aug. 11.
Safety device for motor vehicles. H. K. Blanning. 1,818,938; Aug. 11.
Safety mechanism for automobile lifts. E. H. Steedman. 1,818,016; Aug. 11.
Sanding device. B. Rothstein. 1,818,815; Aug. 11.
Sawdust burner. A. Pfau. 1,818,503; Aug. 11.
Saw frame. H. S. Forsberg and J. Donnelly. 1,817,980; Aug. 11.
Scaffold. F. J. Kramer. 1,818,961; Aug. 11.
Scale. G. A. Sundell. 1,818,285; Aug. 11.
Scissors or shears, Automatic. J. B. MacNamee. 1,818,900; Aug. 11.
Scraper, Power lift. T. H. Jamison. 1,817,985; Aug. 11.
Screens, Synchronous control of color. H. A. Kliegl. 1,818,718; Aug. 11.
Screws, Making conveyor and elevator. F. R. McFarland. 1,818,492; Aug. 11.
Seal. O. A. Ross. 1,818,650–1; Aug. 11.
Sealing burial cases. B. E. Lambert. 1,818,485; Aug. 11.
Sectional boiler. C. H. Hook and N. L. Mercur. 1,818,396; Aug. 11.
Separation method and apparatus. B. A. Miller. 1,818,640; Aug. 11.
Separator: *See*—
Smoke separator.
Service runway. R. E. Manley. 1,817,997; Aug. 11.
Sharpener, Skate. M. A. Rice. 1,818,870; Aug. 11.
Sheet forming mechanism. L. Mambourg. 1,818,232; Aug. 11.
Sheet material, Handling and separating. F. B. Pfeiffer and J. W. White. 1,818,504; Aug. 11.
Sheet separating apparatus. J. Shuttleworth and W. G. Murphy. 1,818,820; Aug. 11.
Shingle, Composition. N. P. Harshberger. 1,818,850; Aug. 11.
Shingle cutter. M. C. Hurst. 1,818,397; Aug. 11.
Ships, Propelling. F. W. Gay. 1,818,705; Aug. 11.
Shirt. H. Miller. 1,818,811; Aug. 11.
Shock absorber. J. A. Dienner. 1,818,386; Aug. 11.
Shock absorber. J. S. Lang. 1,818,140–1; Aug. 11.
Shock absorber. J. W. Marsey. 1,818,414; Aug. 11.
Shock absorber, Hydraulic. L. A. Westman and G. B. Carman. 1,818,773; Aug. 11.
Shoe. L. W. Stetson. Des. 84,858; Aug. 11.
Shoe. J. R. Williams. 1,818,594; Aug. 11.
Shoe bag. W. P. Arnold. 1,818,030; Aug. 11.
Shoe bottom cavities, Filling. A. Thoma. 1,818,827; Aug. 11.
Shoes, Apparatus for moistening. K. E. Carlson. 1,818,691; Aug. 11.
Shutter, Awning. G. I. Vail. 1,818,286; Aug. 11.
Signboard. G. K. Lewis. 1,818,722; Aug. 11.
Sign, Changeable. J. D. Self. 1,818,509; Aug. 11.
Sign, Illuminated. W. Benerman. 1,818,879; Aug. 11.
Signaling device for vehicles. M. E. Hover. 1,818,624; Aug. 11.
Silencer. R. B. Bourne. 1,818,375; Aug. 11.
Silicon carbide refractory article and making the same. R. H. Martin. 1,818,904; Aug. 11.
Siphon generator and circulator for locomotive boilers. G. H. Emerson and W. B. Whitsitt. 1,818,544; Aug. 11.
Sketching device. N. F. Lamberty. 1,818,630; Aug. 11.
Slack adjuster for car brakes. R. W. Burnett. 1,818,194; Aug. 11.
Slack puller. W. A. Heinrich. 1,818,620; Aug. 11.
Slice receiver and collector. J. Folk. 1,818,242; Aug. 11.
Slicing machine. J. Folk. 1,818,245; Aug. 11.
Slicing machines, Assembling device for. J. Folk. 1,818,244; Aug. 11.
Slicing machines, Slice collecting device for. E. M. Stiles. 1,818,243; Aug. 11.
Smoke separator. H. C. Lyons. 1,818,143; Aug. 11.
Smoker's appliance. R. C. Eve. 1,818,125; Aug. 11.
Snatch block. T. C. Smith. 1,817,949; Aug. 11.
Snow directly from liquid carbon dioxide, Process and apparatus for obtaining dense carbon dioxide. H. Rufener and T. Eichmann. 1,818,816; Aug. 11.
Snowplow. J. W. McCallum and A. S. Muscovitch. 1,817,998; Aug. 11.
Socket. J. Juergens. 1,818,333; Aug. 11.
Socket, Lamp. G. H. Glade, jr. 1,818,614; Aug. 11.
Socket, Plug. J. Seresun. 1,818,819; Aug. 11.
Soil corrugator. A. J. Bockwitz. 1,818,529; Aug. 11.
Soldering pot. R. E. Brown. 1,818,925; Aug. 11.
Sole straightener. A. D. Macgillivray. 1,818,490; Aug. 11.
Solid materials, Apparatus for treating. W. A. Darrah. 1,818,308; Aug. 11.
Sound reproducing apparatus. F. H. Owens. 1,818,502; Aug. 11.
Spacing and supporting means. R. P. Thompson. 1,818,021; Aug. 11.
Spader, Oscillating. H. H. Glasier. 1,818,551; Aug. 11.
Spading device. O. A. Matson. 1,818,148; Aug. 11.
Spark plug cleaner. V. Bialas. 1,818,293; Aug. 11.
Speed control apparatus. W. A. Tolson. 1,818,963; Aug. 11.
Speed mechanism, Automatic change. P. Sanine. 1,818,910; Aug. 11.
Speed reducer, Variable. J. M. Mann. 1,818,807; Aug. 11.
Spool or reel. W. C. Mills. 1,818,149; Aug. 11.
Spray, Sanitary toilet seat bowl. H. B. Levy and S. Kaminsky. 1,818,562; Aug. 11.
Spring: *See*—
Pneumatic spring.
Spring. P. A. Carteret. 1,818,040; Aug. 11.
Spring retaining means. T. H. Symington. 1,818,362; Aug. 11.
Stalk cutter. W. J. Michalka. 1,817,999; Aug. 11.
Stall, Animal. H. H. Grubb. 1,818,552; Aug. 11.
Stamping machine. M. Arnold. 1,818,836; Aug. 11.
Stand: *See*—
Chorus stand.
Music stand.
Rope display stand.
Stand for holding rolled sheet materials. W. J. Weeks. 1,818,772; Aug. 11.
Starter, Engine. J. H. Richards. 1,818,649; Aug. 11.
Statuette or similar article. C. Shulman. Des. 84,856; Aug. 11.
Steam generator, Electric. A. N. Otis. 1,818,861; Aug. 11.
Steam platen. R. W. Dinzl. 1,818,387; Aug. 11.
Steering and torquing arrangement. A. I. Marcum. 1,818,902; Aug. 11.
Steering device. B. S. Aikman. 1,817,903; Aug. 11.
Sterilizer. J. L. Archer. 1,818,445; Aug. 11.
Stocking. G. F. Aberle. Des. 84,801; Aug. 11.
Stones and the like, Mounting. S. A. Hamin. 1,818,324; Aug. 11.
Stool, Vibrating. Darwin E. Stevens and C. E. Brown. Des. 84,859; Aug. 11.
Stop mechanism for box nailing machines. G. D. Parker. 1,818,646; Aug. 11.
Stop, Shiftable buffer. H. Posentrup. 1,817,938; Aug. 11.
Stove, Vapor. W. C. Lindemann. 1,818,723; Aug. 11.
Strands, Apparatus for supporting. E. P. Tournier. 1,818,591; Aug. 11.
Stretcher for neckwear skins. A. J. Passman. 1,818,577; Aug. 11.
Strip, Designation. H. W. O'Neill. 1,818,156; Aug. 11.
Strip, Siding. L. E. Calkins. Des. 84,808; Aug. 11.
Sub-grading machine. R. W. Briggs and J. N. Summers. 1,818,457; Aug. 11.
Submarine cable insulation. J. J. Gilbert. 1,818,127; Aug. 11.
Subplate for drill jigs. J. F. Stumpf. 1,818,966; Aug. 11.
Sub-stations, Self contained rural. G. A. Burnham. 1,818,686; Aug. 11.
Support, Electrical outlet box. G. R. Riggs and C. F. Spreen. 1,818,814; Aug. 11.
Support for gas lighters and the like, Adjustable. E. W. Roberts. 1,818,275; Aug. 11.
Support for glass rims, Corner. J. M. Kaufman. 1,818,404; Aug. 11.
Support for strand material. H. W. Bowly. 1,818,602; Aug. 11.
Support, Steering column. S. G. Baits. 1,818,031; Aug. 11.
Support, Stone polisher. C. S. Cushman. 1,818,675; Aug. 11.
Supporting the operating mechanism for windshields. W. Marshall. 1,818,636; Aug. 11.
Surface dressing machine. J. L. Schwabe, jr. 1,818,361; Aug. 11.
Switch: *See*—
Automatic switch.
Electric switch.
Electric snap switch.
Thermostatic switch.
Switch. S. Held. 1,818,132; Aug. 11.
Switch and terminal block, Combined. W. A. Wulle. 1,818,290; Aug. 11.
Switch operating mechanism. A. Alsaker and E. Nordhem. 1,817,904; Aug. 11.
Switch operating mechanism, Electric. L. S. Walle. 1,818,832; Aug. 11.
Switch structure, Split. A. Enstrom. 1,818,885; Aug. 11.
Synchronoscope. F. H. Bowman, E. Lynch, and D. B. Price. 1,818,787; Aug. 11.
Synchronous motor, Self starting. P. P. Horni. 1,818,330; Aug. 11.
Table: *See*—
Folding table.
Table leg. E. L. Knapp. 1,818,629; Aug. 11.
Tag, License. A. L. Thomas. 1,818,020; Aug. 11.
Tag, Reenforced marking. E. L. Kinch. 1,818,559; Aug. 11.
Tank cap, Safety gas. G. C. Chafkin. 1,818,608; Aug. 11.
Tank truck gauge. C. F. H. Bohnhardt. 1,818,295; Aug. 11.
Tape reel, Electrician belt clip. J. E. Whitaker. 1,818,514; Aug. 11.
Target, Archery. H. M. Brading. 1,818,989; Aug. 11.
Taximeter or fare recorder. H. Dunbolter. 1,818,883; Aug. 11.
Teaching division, Device for. J. E. McDade. 1,818,566; Aug. 11.
Telegraphy system, High speed. F. Schröter. 1,881,585; Aug. 11.
Telephone apparatus. J. O. Cadieux. 1,818,788; Aug. 11.
Telephone system. H. B. Johnson and E. Von Nostitz. 1,818,064; Aug. 11.
Telephone system. E. P. G. Wright. 1,818,026; Aug. 11.

Temperature indicator for electrical apparatus. L. F. Blume. 1,818,785; Aug. 11.
Tent. B. G. Eriksson. 1,818,545; Aug. 11.
Textile material containing organic esters of cellulose and preparing the same. C. Dreyfus and W. R. Blume. 1,818,466; Aug. 11.
Theft preventing device. F. E. Beach. 1,818,373; Aug. 11.
Theft preventing device. F. E. Beach and E. G. Petersen. 1,818,668; Aug. 11.
Thermo-responsive device and improving the action thereof. C. T. Evans. 1,818,548; Aug. 11.
Thermostatic device. W. C. Lindemann and E. A. Rutenber. 1,818,563; Aug. 11.
Thermostatic switch. F. S. Denison. 1,818,697; Aug. 11.
Thiazoles, Preparing. J. Teppema and L. B. Sebrell. 1,818,935; Aug. 11.
Thimble making machine. E. F. Johnson. 1,818,332; Aug. 11.
Threads, Producing fibrous. J. J. de la Roza, sr. 1,817,972; Aug. 11.
Ticket for marking and pricing goods, Display. J. O. E. Scheck. 1,818,164; Aug. 11.
Tie: *See*—
Railway tie.
Timepiece. S. Trottman. 1,818,590; Aug. 11.
Timing mechanism for printing machines. W. K. Eckhard. 1,818,312; Aug. 11.
Tin with opening device. L. Couade. 1,818,695; Aug. 11.
Tire inflation device. S. M. Weisberg. 1,818,178; Aug. 11.
Tires, Method of and apparatus for manufacturing pneumatic. E. F. Maas. 1,818,955; Aug. 11.
Toilet preparation. H. G. Dusenbury and S. Isermann. 1,818,69?9 Aug. 11.
Tool. E. J. Reede. 1,818,869; Aug. 11.
Tool, Cylinder lapping. J. G. McFadden. 1,818,491; Aug. 11.
Tool for grasping bolts and machine parts. M. O. Rolstad. 1,818,353; Aug. 11.
Tool for working of leather, Roughing. E. Sachse and O. Michalk. 1,818,011; Aug. 11.
Tool, Rim. H. J. Woock. 1,818,517; Aug. 11.
Tool, Turpentine worker's. B. H. Smith. 1,818,964; Aug. 11.
Tools for wire lines, Automatic back twist. E. A. Kilewer. 1,818,260; Aug. 11.
Toothbrush. T. S. Butler. 1,818,840; Aug. 11.
Top for ingot molds, Hot. W. Haws. 1,818,477; Aug. 11.
Toy, Acrobatic. H. L. Bloxom. 1,817,959; Aug. 11.
Toy airplane. F. A. Norcross. 1,818,426; Aug. 11.
Toy gun. C. C. Shigley. 1,818,763; Aug. 11.
Toy gun, Pneumatic. W. J. McCann. 1,818,264; Aug. 11.
Toy, Lariat. R. B. Canaday. 1,818,301; Aug. 11.
Traction device. H. H. Glaster. 1,818,550; Aug. 11.
Tractor attachment. A. Fickenscher. 1,818,468; Aug. 11.
Tractor hitch. F. W. Hoesing. 1,818,256; Aug. 11.
Traffic line machine. W. E. Wasen. 1,818,916; Aug. 11.
Train control system, Automatic. E. C. Sasnett. 1,817,945; Aug. 11.
Transferring device. W. M. Oungst. 1,818,862; Aug. 11.
Transformer. G. A. Thornton and W. Remington. 1,818,589; Aug. 11.
Transmission, Four speed. R. Lapsley. 1,818,262; Aug. 11.
Transmission, Hydraulic. W. T. Tabb. 1,818,825; Aug. 11.
Transmission shaft connection. L. P. A. Rieger. 1,818,932; Aug. 11.
Transmission system, Mechanical. H. C. Harrison. 1,818,131; Aug. 11.
Transmission with automatic efficiency regulation for vehicles, Electric power. O. Zednick. 1,818,877; Aug. 11.
Transom or window control means. F. W. Kucklinsky. 1,818,406; Aug. 11.
Trap: *See*—
Vapor trap.
Trap. F. W. French. 1,818,315; Aug. 11.
Travel guide, Automatic. N. C. Lund. 1,818,228; Aug. 11.
Tree lighting set and display receptacle therefor or the like article, Combined Christmas. A. L. Buschman. Des. 84,806–7; Aug. 11.
Trigger mechanism for double barreled guns, Single. H. E. Howland. 1,818,852; Aug. 11.
Truck body ventilator. W. G. Mayer. 1,818,415; Aug. 11.
Truck, Warehouse. W. Holman. 1,818,060; Aug. 11.
Trunk, Wardrobe. J. N. Angulo y Peres. 1,818,525; Aug. 11.
Tube display, Discharge. F. Hotchner. 1,818,918; Aug. 11.
Tube-forming apparatus. W. G. Johnson. 1,817,923; Aug. 11.
Tubes for pneumatic tires, Manufacturing inner. A. W. Ott. 1,818,849; Aug. 11.
Twine ball. H. A. Corbett. 1,818,694; Aug. 11.
2.3 hydroxynaphthyl-arylketones. A. Zitscher. 1,817,957; Aug. 11.
Tympan attachment, Running. P. F. Cox. 1,818,384; Aug. 11.
Type card for printing machines. G. Van Dusen. 1,818,830; Aug. 11.
Typewriting and card-perforating machine, Combined. F. K. Davis and C. C. Taylor. 1,818,045; Aug. 11.
Typewriting machine. C. W. Brenn. 1,818,940; Aug. 11.
Typewriting machine. F. F. Dorsey. 1,818,200; Aug. 11.
Typewriting machine. F. A. Hart. 1,818,394; Aug. 11.
Typewriting machine. L. C. Myers. 1,818,860; Aug. 11.
Typewriters, Underscoring apparatus for. R. H. Manly. 1,818,078; Aug. 11.
Urea derivative of the 1.3-butylene-glycol and preparing them. R. Leopold and M. Paquin. 1,817,992; Aug. 11.
Vacuum cleaner. M. K. Cooper. 1,818,959; Aug. 11.
Vacuum cleaner. E. Sproston. 1,818,872; Aug. 11.
Valance board support and curtain rod bracket, Combined. J. M. Wintrob. 1,818,776; Aug. 11.
Valance, Trunk and suitcase. J. Ritter, jr. 1,818,754; Aug. 11.
Valve. C. W. Carpenter. 1,817,917; Aug. 11.
Valve. J. D. Langdon. 1,818,856; Aug. 11.
Valve bag filling machine. W. R. Peterson. 1,818,095; Aug. 11.
Valve chamber construction. B. C. Travis. 1,818,439; Aug. 11.
Valve construction. E. A. Dow. 1,818,050; Aug. 11.
Valve for artificial refrigerating system, Automatic expansion. C. M. Holley. 1,818,061; Aug. 11.
Valve for hot water radiators, Duplex. J. Elger. 1,818,053; Aug. 11.
Valve for internal combustion engines, Sliding. G. E. Becker. 1,818,527; Aug 11.
Valve for lubricating systems, Measuring. E. J. Farmer. 1,818,314; Aug. 11.
Valve for reciprocating engines, Rotary. P. Nouray and D. Gluksmann-Rodanski. 1,818,921; Aug. 11.
Valve, Fluid braking. W. Doty. 1,818,676; Aug. 11.
Valve, Measuring. H. C. Lyons. 1,818,230; Aug. 11.
Valve, Universal control. P. R. Forman. 1,818,703; Aug. 11.
Valves, Thermostatic control device for. J. J. Lawler. 1,818,071; Aug. 11.
Vanity case C. Berger. 1,818,454; Aug. 11.
Vanity case. C. N. Coryell. 1,818,793; Aug. 11.
Vanity case. H. Leberman. 1,818,409; Aug. 11.
Vanity case. S. Poranski. 1,818,351; Aug. 11.
Vapor trap. L. Stadelhofer. 1,817,950; Aug. 11.
Vaporizer and converter, Oil. C. B. Watson and A. E. Harnsberger. 1,818,512; Aug. 11.
Vaporizing device. I. Blechman. 1,818,684; Aug. 11.
Vehicle accessory, Juvenile. C. D. Thompson. 1,818,568; Aug. 11.
Vehicle body construction. M. W. Moesta. 1,818,734; Aug. 11.
Vehicle, Child's. D. W. Gill. Des. 84,828; Aug. 11.
Vehicle, Motor. H. C. Elliott. 1,817,976; Aug. 11.
Vehicle, Motor. A. Moorhouse. 1,818,001–2; Aug. 11.
Ventilator: *See*—
Truck body ventilator.
Vibrator attachment. L. J. Wahl. 1,818,287; Aug. 11.
Vibratory interrupter and transformer, Combined. A. L. Goddard. 1,818,318; Aug. 11.
Vise. W. A. Abegg. 1,818,291; Aug. 11.
Vise, Universal. E. A. Odin. 1,818,501; Aug. 11.
Vulcanization of rubber, Acceleration of. J. Teppema. 1,818,934; Aug. 11.
Wall bracket, Lighting fixture. L. C. Doane and H. H. Wolter. 1,818,119; Aug. 11.
Wall, Building. C. W. Meura. 1,818,416; Aug. 11.
Wall construction. R. W. Frantz. 1,818,704; Aug. 11.
Wall cover plate and mounting therefor. E. A. Olley. 1,818,269; Aug. 11.
Wall or crib structure. J. H. Ferguson, jr. 1,818,056; Aug. 11.
Washing machine casing and wringer, Combined. J. T. Hume. Des. 84,829; Aug. 11.
Washing machines, Water throwing apparatus for. G. P. Anstiss. 1,818,029; Aug. 11.
Waste mechanism. H. S. Steen. 1,818,653; Aug. 11.
Watch, Wrist. S. Mathez. 1,818,637; Aug. 11.
Water heater. P. H. Ferrier, jr. 1,818,057; Aug. 11.
Water heater, Electric. G. T. Max. 1,818,808; Aug. 11.
Water softener, Multiple flow base exchange. C. T. McGill. 1,818,638; Aug. 11.
Water waving comb. A. Janda. 1,818,401; Aug. 11.
Wave motor. J. J. Usher. 1,818,365; Aug. 11.
Waves, Producing compressional. M. R. Hutchison. 1,818,960; Aug. 11.
Weeder, Rotary rod. C. C. Calkins. 1,818,532; Aug. 11.
Welding apparatus. J. A. Baker. 1,818,665; Aug. 11.
Welding machine, Automatic arc. L. D. McIlvin. 1,818,859; Aug. 11.
Well reamer. V. J. Kubin and P. Funderburk. 1,818,405; Aug. 11.
Welt hook and rod. A. H. Redles. 1,818,867; Aug. 11.
Wheel: *See*—
Automobile wheel. Dual wheel.
Disk wheel.
Wheel and rim structure. W. Nelson. 1,818,572; Aug. 11.
Wheelbarrow. H. Sahler. 1,817,934; Aug. 11.
Wheel gauge. C. C. Bennett. 1,818,677; Aug. 11.
Winding machines, Slub catcher for. A. R. Perrin. 1,818,350; Aug. 11.
Window. I. Stiglitz. 1,818,436; Aug. 11.
Window. M. J. Tracy. 1,818,438; Aug. 11.
Window construction. M. A. Lischick. 1,818,411; Aug. 11.
Window lock. W. F. and S. Coady. 1,818,043; Aug. 11.
Window regulator. S. W. Nicholson. 1,818,641–2; Aug. 11.

Wiper, Windshield. N. H. Williams and H. Mittermeier. 1,818,775; Aug. 11.
Wires, Method of and machine for stranding special or figured. F. Fessl. 1,818,845; Aug. 11.
Woodwork protector. M. Panitzsch. 1,817,928; Aug. 11.
Working substance for producing heat transforming effects. R. W. Davenport. 1,818,117; Aug. 11.
Wrapper gumming and delivery system. S. H. Davis. 1,818,198; Aug. 11.
Wrapping and sealing machine. M. J. Milmoe. 1,818,497–8; Aug. 11.
Wrench. F. A. Devereaux. 1,818,385; Aug. 11.
Wrist pin. I. R. B. Chevalier. 1,818,304; Aug. 11.
Writing device C. E. Cowdin. 1,818,383; Aug. 11.
Yarn cleaner and slub catcher. G. N. Taylor. 1,817,937; Aug. 11.
Yarn, Mechanism for evening and tensioning. F. Baker. 1,818,526; Aug. 11.
Yeast, Manufacturing. A. Boye. 1,818,530; Aug. 11.
Zinc alloy. L. E. Wemple and F. A. Warren. 1,818,774; Aug. 11.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 11, 1931

NOTE.—First number—class, second number—subclass, third number—patent number

1— 10: 1,818,646
49.5: 1,818,051
2— 30: 1,817,915
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233: 1,818,562
5— 72: 1,818,395
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112: 1,818,036
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26: 1,818,341
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138: 1,818,280
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16— 84: 1,818,250
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18— 2: 1,818,372
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8: 1,818,549
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50: 1,818,937
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19— 118: 1,818,555
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22— 136: 1,818,667
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147: 1,818,477
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42: 1,818,852
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43— 5: 1,818,474
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51— 50: 1,817,953
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92: R. 18,149

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234— 1.5: 1,818,760
235— 30: 1,818,883
58: 1,818,473
63: 1,818,790
130: 1,818,425
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236— 42: 1,818,071
56: 1,817,950
238— 9: 1,818,755
115: 1,818,145
330: 1,818,022
240— 1: 1,817,907
3.1: 1,818,718
6.4: 1,818,855
6.44: 1,818,943
7.1: 1,818,126
8.18: 1,818,735
10.6: 1,818,252
41.35: 1,818,875
52: 1,818,582
73: 1,818,119
81: 1,818,120
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128: 1,818,163
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6: 1,818,104
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15: 1,818,116
19: 1,818,238
25: 1,818,588
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31: 1,818,519
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246— 63: 1,817,945
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125: 1,818,534
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435: 1,818,885
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27: 1,818,389
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32: 1,818,659
33: 1,818,591
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249— 60: 1,818,091
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240— 60: 1,818,063
1,818,094
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11: 1,818,639
20: 1,818,157
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246: 1,818,343
255: 1,818,769
257: 1,818,387
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259— 109: 1,818,029
260— 1: 1,818,778
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263— 6: 1,818,759
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60: 1,818,095
267— 3: 1,818,362
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30: 1,818,758
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279— 2: 1,818,042
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U. S. GOVERNMENT PRINTING OFFICE: 1931

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

A. P. W. Paper Company, Inc., Albany, N. Y. Toilet paper. 286,143; Aug. 18; Serial No. 313,624; published June 2, 1931. Class 37.

Acieries de Gennevilliers, anciens etablissements C. Delachaux, Gennevilliers, France. Iron and steel castings and forgings. 286,214; Aug. 18. Class 14.

Albarosa Packing Co. (See Schroeder Brothers, Inc.)

Alitite Piston Ring Co. Inc., Brooklyn, N. Y. Piston rings. 286,221; Aug. 18. Class 35.

American Crayon Company, The, Sandusky, Ohio. Colored chalk crayons. 286,159; Aug. 18; Serial No. 313,114; published June 9, 1931. Class 37.

American Fire Engine Company, Seneca Falls, N. Y., assignor to American-La France and Foamite Corporation, Elmira, N. Y. Fire engines. 37,461; renewed Dec. 10, 1931.

American Writing Paper Company, Inc., Holyoke, Mass. Writing and printing paper, etc. 286,206; Aug. 18. Class 37.

Anciens Etablissements Pieper, Herstal, near Liege, Belgium. Pistols, rifles, sporting-guns, etc. 84,806; renewed Jan. 9, 1932.

Arcturus Radio Tube Company, Newark, N. J. Electron emissive tubes and parts thereof. 286,129; Aug. 18; Serial No. 312,635; published June 2, 1931. Class 21.

Atuyer, Bianchini, Férier & Co., to Bianchini, Ferier, Lyon, France. Silk piece goods. 82,954; renewed Aug. 8, 1931.

Atwater, J. H., Company, to E. E. Smith Company, Providence, R. I., successor. Files for papers and books. 84,927; renewed Jan. 16, 1932.

Automatic Gold Chain Company. (See Speidel, Edwin F. M.)

B. V. D. Company, Inc., The, Baltimore, Md. Underwear. 286,115; Aug. 18; Serial No. 301,400; published May 26, 1931. Class 39.

Barnhart Bros. & Spindler, to Barnhart Brothers & Spindler, Chicago, Ill., successor. Printers' supplies. 36,767; renewed July 16, 1931.

Beacon Oil Company, by change of name, Colonial Beacon Oil Company. Oils and greases. 286,111; Aug. 18; Serial No. 298,684; published May 26, 1931. Class 15.

Behrens & Kashins, Inc., New York, N. Y. Bath robes and lounge robes. 286,131; Aug. 18; Serial No. 312,973; published May 26, 1931. Class 39.

Best, Richard, Pencil Company, Inc., New York, N. Y. Lead pencils. 286,144–5; Aug. 18; Serial Nos. 313,631–2; published June 2, 1931. Class 37.

Best, Richard, Pencil Company, Inc., New York, N. Y. Black lead and colored pencils. 286,163; Aug. 18; Serial No. 313,628; published June 2, 1931. Class 37.

Best, Richard, Pencil Company, Inc., New York, N. Y. Black lead pencils. 286,164; Aug. 18; Serial No. 313,629; published June 2, 1931. Class 37.

Bettoney, Harry, Boston, Mass., doing business as Cundy-Bettoney Co., Boston, Mass. Flutes, piccolos, etc. 286,175; Aug. 18; Serial No. 311,589; published June 2, 1931. Class 36.

Bianchini, Ferier. (See Atuyer, Bianchini, Férier & Co.)

Big Indian Oil and Development Company, The, Kansas City, Mo. Periodical. 286,170; Aug. 18; Serial No. 314,036; published June 9, 1931. Class 38.

Boracol Chemical Co., Passaic, N. J., assignor to Marthe Fischesser, doing business as Boracol Chemical Company, Mountain Lakes, N. J. Toilet preparations. 83,553; renewed Sept. 26, 1931.

Bradley, Milton, Company, Springfield, Mass. Crayons. 286,190; Aug. 18; Serial No. 313,767; published June 2, 1931. Class 37.

Broadstreets, Inc., New York, N. Y. Dress, negligee, and work shirts. 286,126; Aug. 18; Serial No. 312,410; published June 2, 1931. Class 39.

Brock, John D., doing business as Specialty Optical Company, Kansas City, Mo. Eye glass lenses. 286,224; Aug. 18. Class 26.

Brooks Brothers, New York, N. Y. Collars. 286,205; Aug. 18.

Brooks, Gladys E., doing business as Spokane Shopping News, Spokane, Wash. Guide to shoppers, printed weekly. 286,110; Aug. 18; Serial No. 294,955; published June 2, 1931. Class 38.

Brunswick-Balke-Collender Company, The, Chicago, Ill. Motor driven rotatable support. 286,207; Aug. 18. Class 23.

Buffalo Specialty Manufacturing Co., assignor to Liquid Veneer Corporation, Buffalo, N. Y. Polishes for metal, wood, and enamel. 37,516; renewed Dec. 24. 1931.

Builders' Association of Kansas City, Mo., The, Kansas City, Mo. Magazines. 286,168; Aug. 18; Serial No. 313,902; published June 9, 1931. Class 38.

Campbell Holton & Co., Bloomington, Ill. Coffee. 286,119; Aug. 18; Serial No. 281,765; published May 26, 1931. Class 46.

Carbon Products Company, The, Lancaster, Ohio. Dry cells and batteries. 286,179; Aug. 18; Serial No. 312,752; published May 26, 1931. Class 21.

Carew Manufacturing Company, South Hadley Falls, Mass. Book paper. 286,202; Aug. 18. Class 37.

Carson Pirie Scott & Co., Chicago, Ill. Ladies' underwear. 286,138; Aug. 18; Serial No. 313,073; published May 26, 1931. Class 39.

Ceco Manufacturing Company, Inc., doing business as Argus Radio Tube Co., Providence, R. I. Electric vacuum tubes and valves. 286,146; Aug. 18; Serial No. 313,646; published June 2, 1931. Class 21.

Chamberlain, F. B. Company, St. Louis, Mo., and East St. Louis, Ill. Flour. 83,816; renewed Oct. 17, 1931.

Chicago Electrical Supply Company, Chicago, Ill. Electric lighting fixtures, electric wiring conduits, etc. 286,200; Aug. 18; Serial No. 274,099; published June 2, 1931. Class 21.

Chicago Mail Order Company, Chicago, Ill. Caps, hats, and nainsook underwear. 286,173; Aug. 18; Serial No. 310,472; published Mar. 17, 1931. Class 39.

Cincinnati Grinders Incorporated, Cincinnati, Ohio. Machine tools. 286,120; Aug. 18; Serial No. 291,264; published Dec. 2, 1930. Class 23.

Cincinnati Milling Machine Company, The, Cincinnati, Ohio. Machine tools. 286,109; Aug. 18; Serial No. 291,266; published Nov. 25, 1930. Class 23.

Cleveland Macaroni Company, The, Cleveland, Ohio, assignor, by mesne assignments, to Golden Age Corporation, New York, N. Y. Macaronic paste foods. 79,650; renewed Sept. 27, 1930.

Cleveland Macaroni Company, The, Cleveland, Ohio, assignor, by mesne assignments, to Golden Age Corporation, New York, N. Y. Macaronic paste foods. 79,821; renewed Oct. 11, 1930.

Cohan, Roth & Stiffson, New York, N. Y. Neckties, cravats, and scarfs. 286,140; Aug. 18; Serial No. 313,122; published May 26, 1931. Class 39.

Colonial Beacon Oil Company. (See Beacon Oil Company.)

Colorado Honey Sales Corporation, Montrose, Colo., and Elmhurst, N. Y. Honey. 286,112; Aug. 18; Serial No. 298,792; published June 2, 1931. Class 46.

Conde Nast Publications, Inc. (See Vogue Company, The, assignor.)

Continental Tire Corporation, Chicago, Ill. Storage batteries. 286,142; Aug. 18; Serial No. 313,590; published June 2, 1931. Class 21.

Cooper, Leo M., New York, N. Y., doing business as Leo M. Cooper Co. Men's uniforms. 286,103; Aug. 18; Serial No. 307,655; published June 2, 1931. Class 39.

Crown-Columbia Pulp and Paper Company, assignor, by mesne assignments, to Crown Willamette Paper Company, San Francisco, Calif. Paper bags. 84,602; renewed Dec. 26, 1931.

Crown Willamette Paper Company. (See Crown-Columbia Pulp and Paper Company, assignor.)

Cundy-Bettoney Co. (See Bettoney, Harry.)

Dealers Sales Corporation. (See Koken Barbers' Supply Company, The, assignor.)

De Forest Radio Company, Passaic, N. J. Electric lamps, glow tubes, and electron space discharge tubes. 286,193; Aug. 18; Serial No. 296,731; published June 2, 1931. Class 21.

Delta Star Electric Company, Chicago, Ill. Electrical terminating apparatus. 286,210; Aug. 18.

Dewey, Day H., doing business as Arthur B. Miller Mfg. Co., Bremerton, Wash. Saxophone stands. 286,220; Aug. 18. Class 36.

Dietze, Charles H., sr., doing business as The Kirchhof Patent Company, Newark, N. J. Crickets, ratchet noisemakers, jumbo rattlers, etc. 286,213; Aug. 18.

Dolge, C. B., Company, Inc., The. (See Embalmers Supply Co., The.)

Dorsell Hosiery Co. (See Sabath, Emil.)

Drei-S-Werk Schwabacher Spinnereinadel-U Stahlspitzen-Werk Fr. Reingruber, Schwabach, Bavaria, Germany. Talking machine needles. 286,171; Aug. 18; Serial No. 309,266; published May 26, 1931. Class 36.

Eagle Knitting Mills, Milwaukee, Wis. Knitted snow suits and knitted leggins. 286,153; Aug 18; Serial No. 312,602; published June 2, 1931. Class 39.

Earles, Adelaide L. S. T., Hadleigh, England, doing business as Epoch Delivery Co. Garters, suspenders, and collars. 286,150; Aug. 18; Serial No. 312,044; published June 2, 1931. Class 39.

Embalmers Supply Co., The, to The C. B. Dolge Company, Inc., Westport, Conn., successor. Liquid disinfectants. 36,799; renewed July 23, 1931.

Empire Sales Company, The, Waterbury, Conn. Frozen confections. 286,127; Aug. 18; Serial No. 312,421; published June 2, 1931. Class 46.

Endicott Johnson Corporation, Endicott, N. Y. Boots and shoes of leather, rubber or fabric. 286,154; Aug 18; Serial No. 312,603; published June 2, 1931. Class 39.

Epoch Delivery Co. (See Earles, Adelaide L. S. T.)

Estate Stove Company, The, Hamilton, Ohio. Periodical publication. 286,117; Aug. 18; Serial No. 277,875; published June 2, 1931. Class 38.

Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 286,137; Aug. 18; Serial No. 313,035; published May 26, 1931. Class 39.

Faulkner, A. N., & Co., Highman, Md. Canned tomatoes, fish, roe, and fresh fish, etc. 286,215; Aug. 18. Class 46.
Ferrer, Salvador Milton, New York, N. Y. Advertising material. 286,133; Aug. 18; Serial No. 313,128; published June 2, 1931. Class 38.
Fischesser, Marthe. (See Boracol Chemical Co., assignor.)
Flash Chemical Co., Boston, Mass., to Flash Chemical Company, Cambridge, Mass. Liquid fish glue. 83,723; renewed Oct. 10, 1931.
Flash Chemical Co., Boston, Mass., to Flash Chemical Company, Cambridge, Mass. Insect and vermin exterminator, disinfectant, and talcum powder. 84,088; renewed Nov. 7, 1931.
Fletcher Paper Company, Alpena, Mich. Wrapping paper. 286,160–2; Aug. 18; Serial Nos. 313,427–9; published June 9, 1931. Class 37.
Florence Stove Company, Gardner, Mass. Electric cooker. 286,199; Aug. 18; Serial No. 298,694; published May 26, 1931. Class 21.
"Force" Food Company, The, assignor to Hecker-H-O Company, Inc., Buffalo, N. Y. Cereal food products. 37,560; renewed Dec. 31, 1931.
Ford, Louisa P., Denver, Colo., doing business as Ford Optical Co. Photographic prints. 286,155; Aug. 18; Serial No. 312,640; published June 2, 1931. Class 38.
Ford Optical Co. (See Ford, Louisa P.)
Foulds Milling Company, The, Cincinnati, Ohio, and Chicago, Ill., to The Foulds Milling Company, Libertyville, Ill. Macaroni, spaghetti, and vermicelli, etc. 84,615; renewed Dec. 26, 1931.
Fretz, Gross & Co., Philadelphia, Pa. Umbrella frames, ribs, and trimmings. 84,616; renewed Dec. 26, 1931.
Fuller, James S., Inc., Kingston, N. Y. Shirts. 286,125; Aug. 18; Serial No. 312,297; published May 26, 1931. Class 39.
Gar Wood Inc., Marysville, Mich. Motor boats, speed boats, etc. 286,226; Aug. 18. Class 19.
Garfield Manufacturing Company. (See Hemming Manufacturing Company.)
Golden Age Corporation. (See Cleveland Macaroni Company, The, assignor.)
Goldman-Kolber Co. Inc., New York, N. Y. Finger rings. 286,180; Aug. 18; Serial No. 312,799; published May 26, 1931. Class 28.
Goodman, H. & Sons, Inc. New York, N. Y. Non-electrical hair curlers, hairpins and combs. 286,212; Aug. 18. Class 40.
Gross Millinery Co. Inc., Trenton, N. J. Women's, misses', and children's hats. 286,108; Aug. 18; Serial No. 304,555; published June 2, 1931. Class 39.
Hanson, A. E., doing business as the Hanson Product Co., Blue Earth, Minn. Soft drinks, and syrups. 286,219; Aug. 18. Class 45.
Hawaiian Pineapple Company, Ltd., San Francisco, Calif., and Honolulu, Hawaii. Canned pineapple. 286,130; Aug. 18; Serial No. 312,910; published June 2. Class 46.
Hecker-H-O Company, Inc. (See "Force" Food Company, The, assignor.)
Hemming Manufacturing Company, Wallington Borough, N. J., by change of name to Garfield Manufacturing Company, Garfield, N. J. Electrical supplies. 84,628; renewed Dec. 26, 1931.
Higginson Manufacturing Company, The, Newburgh, N. Y. Plaster. 286,198; Aug. 18; Serial No. 298,633; published June 2, 1931. Class 12.
Hills Brothers Company, The, New York, N. Y. Figs. 84,629; renewed Dec. 26, 1931.
Hooker Electro-Chemical Company, Niagara Falls, N. Y. Caustic soda, bleaching-powder, and sulfur chlorid. 84,909; renewed Jan. 9, 1932.
Johnson, Tomlinson F., Atlanta, Ga. Electrical apparatus and supplies. 286,191; Aug. 18; Serial No. 287,350; published June 2, 1931. Class 21.
Johnston Electric Automobile Signal Co., Des Moines, Iowa. Electrically illuminated automobile direction signal semaphore. 286,101; Aug. 18; Serial No. 296,746; published June 2, 1931. Class 21.
Kelley-How-Thomson Co., Duluth, Minn. Fishing lines, trolling spoons, etc. 83,584; renewed Sept. 26, 1931.
Kellom, Chas. F., & Co., Inc., Philadelphia, Pa. Lubricating oils and greases. 286,195; Aug. 18; Serial No. 297,918; published May 26, 1931. Class 15.
Kellom, Chas. F., & Co., Inc., Philadelphia, Pa. Auxiliary lubricating and anticarbonizing material. 286,196; Aug. 18; Serial No. 298,031; published May 26, 1931. Class 15.
Kidde, Walter, & Company, Inc., New York, N. Y. Fire detecting systems. 286,182; Aug. 18; Serial No. 312,953; published June 2, 1931. Class 21.
Kimberly-Clark Corporation, Neenah, Wis. Wall paper. 286,147; Aug. 18; Serial No. 313,711; published June 2, 1931. Class 37.
Kirchhof Patent Company, The. (See Dietze, Charles H., sr.)
Kirsch, H. & Co., Inc., Brooklyn, N. Y. Soft drinks, and sirups and extracts. 286,223; Aug. 18. Class 45.
Kiwanis International, Chicago, Ill. Decalcomanias. 286,167; Aug. 18; Serial No. 313,855; published June 9, 1931. Class 38.
Knox Hat Company, Inc., New York, N. Y. Hats for men. 286,105; Aug. 18; Serial No. 307,779; published June 2, 1931. Class 39.
Koken Barbers' Supply Company, The, assignor, by mesne assignments, to Dealers Sales Corporation, St. Louis, Mo. Shaving brushes. 83,745; renewed Oct. 10, 1931.
Koken Barbers' Supply Company, The, assignor, by mesne assignments, to Dealers Sales Corporation, St. Louis, Mo. Toilet water. 84,322; renewed Nov. 28, 1931.
Krakavitz, M., and Sons Co., Philadelphia, Pa. Glass mirrors. 286,208; Aug. 18. Class 32.
Kroger Grocery & Baking Co., Cincinnati, Ohio. Canned fruits and fruit preserves, canned vegetables, canned sea food, etc. 286,118; Aug. 18; Serial No. 279,795; published May 26, 1931. Class 46.
Lanner Brothers, New York, N. Y. Hosiery. 286,100; Aug. 18; Serial No. 308,375; published June 2, 1931. Class 39.
Legg, A. C., Packing Co. Inc., Birmingham, Ala. Seasoning for sausages, meats, and other foods. 286,124; Aug. 18; Serial No. 311,841; published June 2, 1931. Class 46.
Levy, M. S., & Sons Incorporated, Baltimore, Md. Men's hats. 286,156; Aug. 18; Serial No. 312,762; published June 2, 1931. Class 39.
Liquid Veneer Corporation. (See Buffalo Specialty Manufacturing Co., assignor.)
Lyon & Healy, assignor to Lyon & Healy, Incorporated, Chicago, Ill. Pianos and organs. 83,846; renewed Oct. 17, 1931.
MacAndrews & Forbes Company, The, New York, N. Y. Licorice paste. 84,018; renewed Oct. 31, 1931.
Mackintosh, John, Limited, Halifax, England, assignor, by mesne assignments, to John Mackintosh & Sons Ltd. Inc., Boston, Mass. Toffee. 82,703; renewed July 18, 1931.
Maison Pierre Bardou Job, Perpignan, France, assignor to Societe Job Anciens Etablissements Bardou-Job et Paulihac, Perpignan and Toulouse, France. Cigarette papers. 37,538; renewed Dec. 31, 1931.
Makransky, S., and Sons, Inc., Philadelphia, Pa. Men's suits, overcoats, and topcoats. 286,139; Aug. 18; Serial No. 313,140; published June 2, 1931. Class 39.
Marathon Company, Attleboro, Mass. Finger rings, bracelets, hand bags, etc. 286,176–7; Aug. 18; Serial Nos. 312,261–2; published May 26, 1931. Class 28.
Meyers Publications, Inc., New York, N. Y. Periodicals. 286,157; Aug. 18; Serial No. 312,995; published June 2, 1931. Class 38.
Mid-West Wax Paper Company, Fort Madison, Iowa. Wrapping paper. 286,128; Aug. 18; Serial No. 312,485; published June 2, 1931. Class 37.
Miller, Arthur B., Mfg. Co. (See Dewey, Day H.)
Miller Company, The, Meriden, Conn. Electric lighting fixtures and lamps. 286,189; Aug. 18; Serial No. 313,382; published June 2, 1931. Class 21.
Modern Tissues Corporation, New York, N. Y. Toilet tissue and facial tissue. 286,132; Aug. 18; Serial No. 313,048; published June 2, 1931. Class 37.
Moore and Bradford, Washington, D. C. Glass and metal cleaning paste. 286,194; Aug. 18; Serial No. 297,450; published May 26, 1931. Class 4.
Moseley & Motley Milling Co., Rochester, N. Y. Wheat-flour. 84,088; renewed Jan. 16, 1932.
Nafziger Corporation, The, Kansas City, Mo. Instruments or independent unitary mechanism. 286,197; Aug. 18; Serial No. 298,199; published May 26, 1931. Class 21.
National Union Radio Corporation, Newark, N. J. Radio electron tubes. 286,174; Aug. 18; Serial No. 311,194; published June 2, 1931. Class 21.
New Process Metals Corporation, Newark, N. J. Pyrophoric household lighter. 286,222; Aug. 18. Class 34.
Nihon Tabi Kabushiki Kaisha, Kurume, Japan. Rubber footwear. 286,107; Aug. 18; Serial No. 304,086; published June 2, 1931. Class 39.
Niles Fire Brick Company, The, Niles, Ohio. Firebrick. 286,227; Aug. 18. Class 12.
Ontario Finance Corporation, Rochester, N. Y. Business history charts and compilations thereof. 286,113; Aug. 18; Serial No. 299,010; published June 9, 1931. Class 38.
Palacios A. Ortiz y, Madrid, Spain. Soaps. 286,218; Aug. 18. Class 4.
Palais Royal, Inc., The, Washington, D. C. Children's shoes of leather, rubber and fabric. 286,151; Aug. 18; Serial No. 312,116; published May 26, 1931. Class 39.
Palmer Lime & Cement Company, New York, N. Y. Lime. 286,203–4; Aug. 18. Class 12.
Panama Glove Company, Los Angeles, Calif. Gloves and mittens of leather and fabric. 286,186; Aug. 18; Serial No. 313,304; published June 2, 1931. Class 39.
Paper Clearings Bureau, Inc., New York, N. Y. Periodical. 286,169; Aug. 18; Serial No. 314,009; published June 9, 1931. Class 38.
Penene Corporation, New York, N. Y. Inks. 286,211; Aug. 18. Class 11.
Phoenix Manufacturing Company. (See Strauss, Leon.)
Pioneer Truck and Transfer Co., El Centro, Calif. Gasoline, lubricating oil, motor fuel oil, etc. 286,185; Aug. 18; Serial No. 313,054; published June 2, 1931. Class 15.
Progressive Publishing Company, Inc., Muscatine, Iowa. Daily evening newspaper. 286,166; Aug. 18; Serial No. 313,796; published June 9, 1931. Class 38.
Retone Company, The, assignor to The Wildroot Company, Inc., Buffalo, N. Y. Dandruff remedy. 84,528; renewed Dec. 19, 1931.

Roberts, J. W., & Son, Tampa, Fla. Cigars. 286,134; Aug. 18; Serial No. 313,447; published June 2, 1931. Class 17.
Rosenfield Jewelry Company, Oklahoma City, Okla. Wedding rings. 286,187; Aug. 18; Serial No. 313,306; published May 26, 1931. Class 28.
Rowe, H. C. & Company, New Haven, Conn. Fresh oysters. 84,682; renewed Dec. 26, 1931.
Royal Baking Powder Company, Jersey City, N. J., and New York, N. Y., to Royal Baking Powder Company, New York, N. Y. Soda for cooking purposes. 84,916; renewed Jan. 9, 1932.
Royersford Foundry & Machine Co. Incorporated, Royersford and Philadelphia, Pa., to Royersford Foundry & Machine Co. Incorporated, Royersford, Pa. Lubricating oil and grease. 82,830; renewed July 25, 1931.
Sabath, Emil, doing business as Dorsell Hosiery Co., not Inc., Chicago, Ill. Hosiery. 286,122; Aug. 18; Serial No. 309,741; published May 26, 1931. Class 39.
Sasieni London, Ltd., New York, N. Y. Smokers' pipes. 286,209; Aug. 18. Class 8.
Scaramelli, Henry, Inc., New York, N. Y. Cheese. 286,114; Aug. 18; Serial No. 299,282; published May 26, 1931. Class 46.
Schmidt, Theo. A., Lithographing Company, Chicago, Ill. Lithographically printed articles. 286,102; Aug. 18; Serial No. 307,060; published June 2, 1931. Class 38.
Schroeder Brothers, Inc., doing business as Albarosa Packing Co., New York, N. Y. Canned tomatoes. 286,121; Aug. 18; Serial No. 308,556; published May 26, 1931. Class 46.
Shell Oil Company, San Francisco, Calif. Gasoline, kerosene, gas oil, etc. 286,178; Aug. 18; Serial No. 312,899; published May 26, 1931. Class 15.
Sheridan Press, Inc., Sheridan, Wyo. Newspapers. 286,165; Aug. 18; Serial No. 313,720; published June 9, 1931. Class 38.
Silberman, Louis J., doing business as Star Gasoline Co., St. Louis, Mo. Gasoline. 286,183; Aug. 18; Serial No. 313,009; published May 26, 1931. Class 15.
Slavick Jewelry Company, The, Los Angeles, Calif. Finger rings. 286,201; Aug. 18; Serial No. 307,223; published May 26, 1931. Class 28.
Smiley-Heide, Inc., New York, N. Y. Creepers, rompers, and baby suits and dresses. 286,123; Aug. 18; Serial No. 311,641; published May 26, 1931. Class 39.
Smith, Carroll N., Boston, Mass. Books, pamphlets, posters, etc. 286,116; Aug. 18; Serial No. 301,767; published June 9, 1931. Class 38.
Smith, E. E., Company. (See Atwater, J. H., Company.)
Societe Job Anciens Etablissements Bardou-Job et Paulihac. (See Maison Pierre Bardou Job, assignor.)
Specialty Optical Company. (See Brock, John D.)
Speidel, Edwin F. M., doing business as Automatic Gold Chain Company, Providence, R. I. Jewelry. 286,225; Aug. 18. Class 28.
Spokane Shopping News. (See Brooks, Gladys E.)
Sprague, Warner & Company, Chicago, Ill. Tea. 37,567; renewed Dec. 31, 1931.
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Rust preventing oils and greases. 286,188; Aug. 18; Serial No. 313,314; published May 26, 1931. Class 15.
Star Gasoline Co. (See Silberman, Louis J.)
Steffen, Ernest, doing business as Swiss Diamond Palace, San Francisco, Calif. Diamond and other kinds of finger rings. 286,184; Aug. 18; Serial No. 313,011; published May 26, 1931. Class 28.
Sterling Materials Company, Limited, Montreal, Quebec, Canada, and New York, N. Y. Plastic roofing material. 286,216; Aug. 18. Class 12.
Strauss, Leon, doing business as Phoenix Manufacturing Company, Baltimore, Md. Combination work suits, overalls, dungarees, etc. 286,106; Aug. 18; Serial No. 305,984; published May 26, 1931. Class 39.
Swayze, Paul D., Kansas City, Mo., doing business as Utility Design Company. Suspenders. 286,149; Aug. 18; Serial No. 311,576; published June 2, 1931. Class 39.
Swiss Diamond Palace. (See Steffen, Ernest.)
Tennessee Copper Company, New York, N. Y. Copper. 37,605; renewed Dec. 31, 1931.
Tide Water Oil Company, New York, N. Y. Lubricating oils and greases. 83,791; renewed Oct. 10, 1931.
Times Publishing Co., Montgomery, Ala. Periodical. 286,152; Aug. 18; Serial No. 312,242; published June 9, 1931. Class 38.
Troy Wholesale Corporation, Troy, N. Y. Hosiery, sweaters, and underwear. 286,192; Aug. 18; Serial No. 296,154; published Apr. 22, 1930. Class 39.
Union Fibre Company, assignor to Union Fibre Co., Incorporated, Winona, Minn. Heat insulating material. 82,926; renewed Aug. 1, 1931.
United States Envelope Company, Springfield, Mass. Correspondence paper and envelopes. 286,148; Aug. 18; Serial No. 313,760; published June 2, 1931. Class 37.
Utah Radio Products Company, Chicago, Ill. Radio speakers. 286,172; Aug. 18; Serial No. 310,356; published June 2, 1931. Class 21.
Utility Design Company. (See Swayze, Paul D.)
Vernon, S. E. & M., Inc., New York, N. Y. Blank books and loose leaf binders. 286,135; Aug. 18; Serial No. 312,464; published June 2, 1931. Class 37.
Vernon, S. E. & M., Inc., New York, N. Y. Blank books binders and blank books. 286,141; Aug. 18; Serial No. 313,517; published June 2, 1931. Class 37.
Villar, José P., Brooklyn, N. Y. Bathing suits. 286,136; Aug. 18; Serial No. 313,015; published May 2, 1931. Class 39.
Virginia Dare Extract Company, Inc., Brooklyn, N. Y. Preparation in powder form to be added to other ingredients in the preparation of icings, toppings, and the like. 286,104; Aug. 18; Serial No. 307,768; published June 2, 1931. Class 46.
Vogue Company, The, assignor to The Conde Nast Publications, Inc., New York, N. Y. Semimonthly magazine. 84,770; renewed Jan. 2, 1932.
Von Duprin Fire Exit Latch Company, assignor to Vonnegut Hardware Company, Indianapolis, Ind. Locks and latches. 85,021; renewed Jan. 16, 1932.
Vonnegut Hardware Company. (See Von Duprin Fire Exit Latch Company.)
Warren Featherbone Co., The, assignor to The Warren Feather Bone Company, Three Oaks, Mich. Stiffening cords, blades, and tapes. 83,112; renewed Aug. 15, 1931.
Weidlich Sterling Spoon Co., Fairfield, Conn. Table silverware. 286,181; Aug. 18; Serial No. 312,823; published June 2, 1931. Class 28.
Wheeling Corrugating Company, Wheeling, W. Va. Receptacles. 82,944; renewed Aug. 1, 1931.
Wheeling Corrugating Company, Wheeling, W. Va. Steel dry measures. 83,115; renewed Aug. 15, 1931.
Wheeling Corrugating Company, Wheeling, W. Va. Galvanized washtubs. 83,299; renewed Aug. 29, 1931.
Wildroot Company, Inc., The. (See Retone Company, The.)
Will, Oscar H., & Co., to Oscar H. Wills & Co., Bismarck, N. Dak., successor. Seeds. 84,443; renewed Dec. 12, 1931.
Williams, James F., Texarkana, Ark. Turnip kraut. 286,217; Aug. 18. Class 46.
Zoll, James C., & Son, Baltimore, Md. Photo-prints, photostat prints, etc. 286,158; Aug. 18; Serial No. 313,104; published June 2, 1931. Class 38.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Alvarez Lopez y Ca. (See Reigosa, Jose F.)
Beatrice Creamery Company, Chicago, Ill. Smooth-Freeze Meadow Gold. For Ice Cream. 39,558; Aug. 18.
Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Grape Drops. For Candy. 39,559; Aug. 18.
Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Raspberry Drops. For Candy. No. 39,560; Aug. 18.
Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Gum, Peppermint Flavored. For Chewing Gum. 39,561; Aug. 18.
Broward Cigar Company, Pompano, Fla. Booker T. Washington. For Cigars. 39,562; Aug. 18.
Campodonico, F. J., Co., Stockton, Calif. Red Top. For Fresh Cherries. 39,563; Aug. 18.
Chevrolet Motor Company, Detroit, Mich. Genuine Chevrolet Body Polish. For Polishing Material in Liquid Form, Designed Especially for Polishing. 39,564; Aug. 18.
Herz Straw Company, Inc., New York, N. Y. Sunshine Straws. For Drinking Straws Made of Paper. 39,565–6; Aug. 18.
Hoberg Paper & Fibre Company, Green Bay, Wis. Evergreen. For Embossed Napkins. 39,567; Aug. 18.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel Cleanser. For Cleanser. 39,568; Aug. 18.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Powdered Ammonia Compound. For Powdered Ammonia Compound. 39,569; Aug. 18.
Jose Fernandez Cigar Co. (See Reigosa, Jose F., and Alvarez Lopez y Ca.)
Kollias, Them., Santa Ana, Calif. Zythos. For Malt Syrup for Food Purposes. 39,570; Aug. 18.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. May Gardens. For Tea. 39,571; Aug. 18.
Kroger Grocery & Baking Co., The., doing business as Wesco Foods Co., Cincinnati, Ohio. May Gardens. For Root Beer. 39,572; Aug. 18.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Company, Cincinnati, Ohio. Hollywood. For Olives. 39,573; Aug. 18.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Latonia Club. For Ginger Ale. 39,574; Aug. 18.
Kroger Grocery & Baking Co., Cincinnati, Ohio. Country Club. For Apricots. 39,575; Aug. 18.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co. May Gardens. For Tea. 39,576; Aug. 18.
Kroger Grocery & Baking Co., Cincinnati, Ohio. Country Club. For Evaporated Milk. 39,577; Aug. 18.

Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. May Gardens. For Tea. 39,578. Aug. 18.

Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. May Gardens (Young Hyson). For Tea. 39,579. Aug. 18.

Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. May Gardens (Orange Pekoe). For Tea. 39,580; Aug. 18.

Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Avalon. For Liquid Bluing. 39,581; Aug. 18.

Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Hollywood. For Olives. 39,582; Aug. 18.

Moonshine Chemical Company, Pittsburgh, Pa. Moonshine. For Washing Fluid. 39,583; Aug. 18.

Natomah Sales Corporation, Chicago, Ill. Real Bohemian Style. For Malt Syrup. 39,584; Aug. 18.

Norcross Carrot Co., San Antonio, Tex. Norcross Carrot Products. For Carrot Products. 39,585; Aug. 18.

Pencheff, Stephen, D. C. N. D., Indianapolis, Ind. Dr. Pencheff's Botanical Laxative Compound. For Laxative Compound. 39,586; Aug. 18.

Piper, Winfield G., West Roxbury, Mass. The Nurse's Foot Health Cream. For Cream for Tired and Aching Feet. 39,587; Aug. 18.

Poultry Producers of Central California, San Francisco, Calif. Our Brand Eggs. For Eggs. 39,588; Aug. 18.

Poultry Producers of Central California, San Francisco, Calif. Preferred Eggs. For Eggs. 39,589; Aug. 18.

Putnam Knitting Co., Cohoes, N. Y. Let Handy Ann Wash your Dishes. For Dishcloths. 39,590; Aug. 18.

Reigosa, Jose F., doing business as Jose Fernandez Cigar Co. and Alvarez Lopez y Ca., Tampa, Fla. Alvarez Lopez y Ca. For Cigars. 39,591; Aug. 18.

S. M. A. Corporation, Cleveland, Ohio. Pantry Whipping Cream. For Whipping Cream. 39,592; Aug. 18.

S. M. A. Corporation, Cleveland, Ohio. Protein S. M. A. (Acidulated). For Food Product for Infants. 39,593; Aug. 18.

S. M. A. Corporation, Cleveland, Ohio. Pantry Table Cream. For Table Cream. 39,594; Aug. 18.

Schlitz, Jos., Beverage Company, Milwaukee, Wis. Milwaukee Club. For Ginger Ale. 39,595; Aug. 18.

Sherwood-Arthur Pharmacal Co. (Inc.), Kansas City, Mo. Persenice. For Medicinal Preparation. 39,596; Aug. 18.

Traxl, Frank J., Chicago, Ill. Hy-G-No. For Denture Cleaner. 39,597; Aug. 18.

Tru-Fit Dress Co. Inc., New York, N. Y. Readi-to-sew. For Fabrics. 39,598; Aug. 18.

Wesco Foods Co. (See Kroger Grocery & Baking Co., The.)

Wylie, Harold C., Harvey, Ill. Buster Brown. For Root Beer. 39,599; Aug. 18.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Capasso, Ralph, Providence, R. I. 3-4-5 Toscani Cigars. For Cigars. 13,350; Aug. 18.

Capehart Corporation, The, Fort Wayne, Ind. Specifications of the New Capehart '400' Series. For Musical Instruments. 13,351; Aug. 18.

Columbia Steel Equipment Co., Philadelphia, Pa. Columbia Steel Equip. Co. For Steel Filing Cabinets. 13,352-3; Aug. 18.

Heinz, H. J., Company, Pittsburgh, Pa. When Hungry Fellows Get Together. For Oven-Baked Beans. 13,354; Aug. 18.

Heinz, H. J., Company, Pittsburgh, Pa. Oven-Baked in the Homelike Kitchens of Heinz. For Oven-Baked Beans. 13,355; Aug. 18.

Hills Bros., San Francisco, Calif. The Flavor of Flavors (17-A-1931). For Coffee. 13,356; Aug. 18.

Hills Bros., San Francisco, Calif. Only This Coffee (17-B-1931). For Coffee. 13,357; Aug. 18.

Hills Bros., San Francisco, Calif. Here is the Secret (17-C-1931). For Coffee. 13,358; Aug. 18.

Hills Bros., San Francisco, Calif. It is Important (17-D-1931). For Coffee. 13,359; Aug. 18.

Hills Bros., San Francisco, Calif. This Coffee Alone (17-E-1931). For Coffee. 13,360; Aug. 18.

Hills Bros., San Francisco, Calif. No Other Coffee (17-F-1931). For Coffee. 13,361; Aug. 18.

Hills Bros., San Francisco, Calif. In All The World (17-G-1931). For Coffee. 13,362; Aug. 18.

Hills Bros., San Francisco, Calif. It is a Revelation (17-H-1931). For Coffee. 13,363; Aug. 18.

Hills Bros., San Francisco, Calif. This Coffee Has Everything (17-J-1931). For Coffee. 13,364; Aug. 18.

Hills Bros., San Francisco, Calif. It is Matchless (17-K-1931.) For Coffee. 13,365; Aug. 18.

Hills Bros., San Francisco, Calif. "Exclusive" is the Word (17-L-1931). For Coffee. 13,366; Aug. 18.

Hills Bros., San Francisco, Calif. The Rare 'Taste' (17-M-1931). For Coffee. 13,367; Aug. 18.

Hills Bros., San Francisco, Calif. This Coffee of Coffees (17-N-1931). For Coffee. 13,368; Aug. 18.

Hills Bros., San Francisco, Calif. The Only Way (17-P-1931). For Coffee. 13,369; Aug. 18.

Hills Bros., San Francisco, Calif. Of all coffees (17-Q-1931). For Coffee. 13,370; Aug. 18.

Hills Bros., San Francisco, Calif. Controlled Roasting (17-R-1931). For Coffee. 13,371; Aug. 18.

Hills Bros., San Francisco, Calif. A New Standard (17-S-1931). For Coffee. 13,372; Aug. 18.

Hills Bros., San Francisco, Calif. It's No Wonder (17-T-1931). For Coffee. 13,373; Aug. 18.

Hills Bros., San Francisco, Calif. Expect the Utmost (17-V-1931). For Coffee. 13,374; Aug. 18.

Hills Bros., San Francisco, Calif. It's a Different Coffee (17-W-1931). For Coffee. 13,375; Aug. 18.

Hills Bros., San Francisco, Calif. Unlike Ordinary Coffees (17-X-1931). For Coffee. 13,376; Aug. 18.

Hills Bros., San Francisco, Calif. Of all Methods 17-Y-1931). For Coffee. 13,377; Aug. 18.

Orchard Products Company, Chicago, Ill. Orchard Maid Pure Fresh Fruit Juice Syrup. For Pure Fresh Fruit Juice Syrups. 13,378; Aug. 18.

Parker, I. C., Fort Worth, Tex. Frozen Drumstick. For Ice Cream Product Consisting of an Ice Cream Cone Dipped in Candy Coating, Etc. 13,379; Aug. 18.

Selmer, H. & A., Inc., Elkhart, Ind. Selmer H. & A. Selmer Inc. Selmer Building—Elkhart, Indiana. For Clarinets, Flutes, Saxophones, All Woodwinds and Accessories. 13,380; Aug. 18.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Acieries De Gennevilliers, Anciens Etablissements C. Delachaux, Gennevilliers, France. Heat producing chemicals. 312,540; Aug. 18. Class 6.

Agfa Ansco Corporation, Binghamton, N. Y. Sensitized photographic paper. 316,799; Aug. 18. Class 26.

Akciová Společnost Továren Na Fezy Strakonice, Czechoslavakia. Wearing apparel. 305,918; Aug. 18. Class 39.

Allen, Lester M., doing business as L. M. Allen Mfg. Co., Portland, Oreg. Mechanical golf caddy. 316,025; Aug. 18. Class 22.

Allroggen, Hanns, Wiesbaden, Germany. Medical preparations. 302,567; Aug. 18. Class 6.

Aluminum Company of America, Pittsburgh, Pa. Aluminum shingles, corrugated roofing, down spouts, etc. 307,869-70; Aug. 18. Class 12.

Aluminum Industries, Inc., Cincinnati, Ohio. Gate valves and bolts. 316,242; Aug. 18. Class 13.

Alvim & Freitas, S. Paulo, Brazil. Perfumery products for the hair. 309,627; Aug. 18. Class 6.

American Beet Sugar Company, Denver, Colo. Sugar. 311,221; Aug. 18. Class 46.

American Bio-Chemical Laboratories, Inc., New York, N. Y. Inorganic preparation. 316,177; Aug. 18. Class 6.

American Chewing Products Corporation, Newark, N. J. Candy coated chewing gum. 315,667; Aug. 18. Class 46.

American Crayon Company, The, Sandusky, Ohio. Charcoal sticks. 315,723; Aug. 18. Class 37.

American Optical Company, Southbridge, Mass. Spectacles, eyeglasses, magnifiers, etc. 310,819; Aug. 18. Class 2.

Ames Harris Neville Co., San Francisco, Calif. Bags. 316,679; Aug. 18. Class 2.

Amsterdam Textiles, Amsterdam, N. Y. Rugs and runners. 316,182; Aug. 18. Class 42.

Art Paint Poster Company, Chicago, Ill. Display signs. 315,176; Aug. 18. Class 50.

Asselin, Ceal, doing business as Del Rio Products Company, Dayton, Ohio. Beverage. 316,519; Aug. 18. Class 45.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Assembled Products Company, Inc., New York, N. Y. Cotton, silk, rayon, and rayon alpaca bias binding. 312,593; Aug. 18. Class 40.

Associated Parts, Inc., doing business as The Lucas Manufacturing Co., Toledo, Ohio. Vehicle heaters and parts thereof. 315,817; Aug. 18. Class 19.

Atlas Mills. (See Goldman, Charles.)

Atlas Supply Company, New York, N. Y. Rubber tires. 315,125; Aug. 18. Class 35.

Backhaus, Willy, Leipzig, Germany. Table board games. 312,637; Aug. 18. Class 22.

Bailey, Lloyd, doing business as Southern Manufacturing Company, Waco, Tex. Insecticidal floor compound. 314,836; Aug. 18. Class 6.

Ballantine, P., and Sons, Newark, N. J. Malt syrup. 315,589; Aug. 18. Class 46.

Bamberger, L., & Co., Newark, N. J. Toys. 309,958; Aug. 18. Class 22.

Banana Royal Peanut Co. (See Hytken, Max.)

Bay Chemical Company, Inc., New Orleans, La. Medicinal product. 315,082; Aug. 18. Class 6.

Becker, Henry, & Son, Inc., Roseland, N. J. Milk. 315,891-2; Aug. 18. Class 46.

Belden-Evans Co., Minneapolis, Minn. Pajamas. 315,519; Aug. 18. Class 39.

Belden-Evans Co., Minneapolis, Minn. Pajamas. 315,521; Aug. 18. Class 39.

Bemis Bro. Bag Co., Minneapolis, Minn. Paper bags and cartons. 316,116; Aug. 18. Class 2.

Biers, Louis D., New York, N. Y. Hats. 305,894; Aug. 18. Class 39.

Birmingham Electric Furnaces Ltd., Erdington, Birmingham, England. Electric industrial furnaces. 316,149; Aug. 18. Class 21.

Bowen Products Corporation, Auburn, N. Y. Unified lubricating system. 309,296; Aug. 18. Class 23.

Bowser, S. F., & Company, Inc. (See Brace-Beluche & Co., assignor.)

Brace-Beluche & Co., Buffalo, N. Y., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Filters. 310,090; Aug. 18. Class 31.

Bradshaw, Wm. B., & Sons, Cartersville, Ga. Butter and ice cream. 314,093; Aug. 18. Class 46.

Braun-Steeple Company, Ltd., San Francisco, Calif. Aluminum solder. 316,803; Aug. 18. Class 14.

Brower, Carrie, Valley Stream, N. Y. Hair restorer. 315,821; Aug. 18. Class 6.

Brownstein-Louis Company, Los Angeles, Calif. Pants and trousers. 316 254; Aug. 18. Class 39.

Bulova Watch Company, Inc., New York, N. Y. Bracelets. 315,132; Aug. 18. Class 28.

Bundesen, Herman N., Chicago, Ill. Booklets. 303,244; Aug. 18. Class 38.

Cain, Julius W., Dallas, Tex. Barbecued meats, barbecue sauce, and prepared sandwiches. 314,444; Aug. 18. Class 46.

California Bankers Association, San Francisco, Calif. Publication. 316,550; Aug. 18. Class 38.

Carnrick, G. W. Co., Newark, N. J. Active estrus inducing principle. 314,980; Aug. 18. Class 6.

Carswell, Firman L., Mfg. Co., The, Kansas City, Mo. Publication. 312,478; Aug. 18. Class 38.

Catholic Publishing Society, Inc., Denver, Colo. Newspaper. 313,994; Aug. 18. Class 38.

Celanese Corporation of America, New York, N. Y. Fabrics. 316,189; Aug. 18. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 316,191; Aug. 18. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 316,417; Aug. 18. Class 42.

Chemical Construction Company, Charlotte, N. C. Machinery. 295,556; Aug. 18. Class 23.

Chemisch-Pharmazeutische A. G. Bad Homburg werk Frankfurt A. M., Bad Homburg, Germany. Preparation for healing arterial high pressure. 306,765; Aug. 18. Class 6.

Chemisch-Pharmazeutische A. G. Bad Homburg werk Frankfurt A. M., Frankfort-on-the-Main, Germany. Preparations of calcium-sodium-double salt containing bromine. 306,766; Aug. 18. Class 6.

Chicago Hand Bag Manufacturing Co., Chicago, Ill. Bags. 315,444; Aug. 18. Class 3.

Chicago Optical Supply Company, Chicago, Ill. Amoptiscopes, eyeglass, goggles, etc. 316,419; Aug. 18. Class 26.

Chicago Pneumatic Tool Company, New York, N. Y. Machinery and tools. 314,484; Aug. 18. Class 23.

Chipman Chemical Engineering Company, Inc., Middlesex, N. J. Chemical compositions. 292,577; Aug. 18. Class 6.

Coachella Valley Citrus Association, Thermal, Calif. Grapefruit and tangerines. 300,404; Aug. 18. Class 46.

Collin County Mill & Elevator Co., McKinney, Tex. Poultry and stock feed. 316,083; Aug. 18. Class 46.

Conklin, John, doing business as Universal Medicine Co., Chicago, Ill. Tonic-diuretic carminative intestinal lubricant. 315,088; Aug. 18. Class 6.

Craftex Company, Boston, Mass. Paints. 316,630; Aug. 18. Class 16.

Crampton Canneries, Inc., Celina, Ohio. Canned vegetables and pickles. 314,154; Aug. 18. Class 46.

Crespo, F. Durban, Y Cia, Seville, Spain. Olive oil. 309,122; Aug. 18. Class 46.

Crosby, Percy L., McLean, Va. Drawings for reproduction. 315,593; Aug. 18. Class 38.

Cross, Henry H., Company, Chicago, Ill. Motor fuels. 314,639; Aug. 18. Class 15.

Crowell, Walter N., doing business as Crowell Chemical Co., East Rutherford, N. J. Metal polish. 268,488; Aug. 18. Class 4.

Curtiss Candy Company, The, Chicago, Ill. Chewing gum. 316,301; Aug. 18. Class 46.

Darling, L. A., Company, Bronson, Mich. Electrical display signs and parts thereof. 315,396; Aug. 18. Class 21.

Deck, John, doing business as Washington Chemical Co., Cincinnati, Ohio. Chigger solution. 313,773; Aug. 18. Class 6.

Defiance Spark Plugs, Inc., Toledo, Ohio. Spark plug testers. 315,832; Aug. 18. Class 26.

Del Rio Products Company. (See Asselin, Ceal.)

De Malaussene, Henri S., North Holywood, Calif. Combined direct current motor and alternating current generator sets, converters, etc. 314,276; Aug. 18. Class 21.

Dennison, Roy K., East Machias, Me. Toy building sets. 314,197; Aug. 18. Class 22.

Di Santo, Joseph, doing business as Di Santo & Company, Duluth, Minn. Malt syrup. 316,258; Aug. 18. Class 46.

Dodge, F. W., Corporation, New York, N. Y. News bulletin. 316,532; Aug. 18. Class 38.

Dojay Tablet Co., New York, N. Y. Preparations in tablet form for hyperacidity. 316,035; Aug. 18. Class 6.

Dona Rosa Toiletries. (See Sontag Chain Stores Co. Ltd.)

Dorett Co., The. (See Gottfried, Dora M.)

Dulany, John R., doing business as Dulany Manufacturing Co., Pittsburgh, Pa. Chemical cleaner. 314,900; Aug. 18. Class 6.

Eastman Kodak Company, Rochester, N. Y. Picture frames and standards therefor. 316,362; Aug. 18. Class 32.

Elder Manufacturing Company, St. Louis, Mo. Shirts, waists, and blouses. 316,003; Aug. 18. Class 39.

Electrad, Inc., New York, N. Y. Impedance units, voltage controls, rheostats, etc. 303,532; Aug. 18. Class 19.

Elgin Softener Corporation, Elgin, Ill. Hydrometers. 313,593; Aug. 18. Class 26.

Embury Manufacturing Co., Warsaw, N. Y. Electric lanterns. 316,469; Aug. 18. Class 21.

Embury Manufacturing Co., Warsaw, N. Y. Oil lanterns. 316,470; Aug. 18. Class 34.

Endo, Sute M., doing business as Honolulu Pharmacy, Honolulu, Hawaii. Preparation for the treatment of inflammations and congestions. 313,586; Aug. 18. Class 6.

Essex Rubber Company Inc., Trenton, N. J. Shoes and sandals. 317,123; Aug. 18. Class 39.

Estancia Drug Co. (See Hairston, William C.)

Etablissements André Gillier, Société Anonyme, Troyes, France. Clothing. 296,329; Aug. 18. Class 39.

Everlastik, Inc., Chelsea, Mass. Narrow elastic webbing. 316,428; Aug. 18. Class 40.

Everett Pulp & Paper Company, The, Everett, Wash. Paper, notebooks, forms, etc. 316,482; Aug. 18. Class 37.

F. & N. Lawn Mower Company, The, doing business as The Henley Lawn Mower Co., Richmond, Ind. Lawn mowers. 316,488; Aug. 18. Class 23.

Fair, R., Modesto, Calif. Dried fruit. 316,722; Aug. 18. Class 46.

Famous Insurers of History, Incorporated, Watertown, N. Y. Printed advertising service. 316,239; Aug. 18. Class 38.

Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, etc. 316,923; Aug. 18. Class 39.

Ferro Engineering Company, The, Cleveland, Ohio. Hot top casings. 307,970; Aug. 18. Class 23.

Five Minute Home Cleaner Company, The, Chicago, Ill. Dry cleaner. 305,520; Aug. 18. Class 4.

Fleischmann Company, The, Dover, Del., and Cincinnati, Ohio, assignor to Standard Brands Incorporated, New York, N. Y. Yeast. 278,078; Aug. 18. Class 46.

Floriana Candy Co. (See Thomson, Florence A.)

Frost, George, Company, Boston, Mass. Suspenders and braces. 314,794; Aug. 18. Class 39.

Fruit Industries, Ltd., San Francisco, Calif. Grape juice and beverages. 314,951; Aug. 18. Class 45.

Furniture Corporation of America, Ltd., Portland, Oreg. Furniture. 311,269; Aug. 18. Class 32.

Furniture Corporation of America, Ltd., Portland, Oreg. Furniture. 312,990; Aug. 18. Class 32.

Gehring Publishing Company, Inc., New York, N. Y. Magazine. 316,587; Aug. 18. Class 38.

General Electric Vapor Lamp Company, Hoboken, N. J. Gaseous electric discharge devices. 310,234; Aug. 18. Class 44.

Gill, James G., Company, The, Norfolk, Va. Coffee and tea and coffee compounds. 306,529; Aug. 18. Class 46.

Globe American Corporation, Kokomo, Ind. Brooders. 316,559; Aug. 18. Class 50.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Globe Grease and Manufacturing Company. (See Thompson, Victor C.)
Goldberger, Leo J., doing business as L. Wohl & Co., New York, N. Y. Suits, dresses, and rompers. 313,910; Aug. 18. Class 39.
Goldenberg, D., Inc., Philadelphia, Pa. Candy. 310,165; Aug. 18. Class 46.
Goldman, Charles, doing business as Atlas Mills, New York, N. Y. Fabrics. 316,638–40; Aug. 18. Class 42.
Gottfried, Dora M., doing business as The Dorett Co., Allston, Mass. Mayonnaise. 316,264; Aug. 18. Class 46.
Greenpoint Metallic Bed Co., Inc., Brooklyn, N. Y. Coil springs. 307,814; Aug. 18. Class 32.
Guild of Prescription Opticians of America, Inc., Philadelphia, Pa. Publication. 316,641; Aug. 18. Class 38.
Hairston, William C., doing business as Estancia Drug Co., Estancia, N. Mex. Digestive tonic and hand lotion. 315,910; Aug. 18. Class 6.
Heald Machine Company, The, Worcester, Mass. Publication. 316,431; Aug. 18. Class 38.
Health Candies, Inc., Miami, Fla. Candies. 315,404; Aug. 18. Class 46.
Health Products Corporation, Newark, N. J. Cod liver oil concentrate. 315,965; Aug. 18. Class 6.
Henley Lawn Mower Co., The. (See F. & N. Lawn Mower Company.)
Hercules Motors Corporation, Canton, Ohio. Internal combustion engines, tower units and accessories. 316,072; Aug. 18. Class 23.
Hillerich & Bradsby Co., Louisville, Ky. Baseball bats. 316,887; Aug. 18. Class 22.
Hoffman, Earl L., doing business as Earl Hoffman Co., Los Angeles, Calif. Wood wall board. 316,125; Aug. 18. Class 12.
Hollywood Eve Toilet Products, Inc., New York, N. Y. Astringent, bath salt, brilliantine, etc. 316,091; Aug. 18. Class 6.
Hollywood Products Company, Ltd., Glendale, Hollywood, and Los Angeles, Calif. Beverages, syrups, extracts, and concentrates. 312,916; Aug. 18. Class 45.
Honda, Noburo, San Francisco, Calif. Costume jewelry. 281,665; Aug. 18. Class 28.
Honolulu Pharmacy. (See Endo, Sute M.)
Hospital Laboratory Company, Baltimore, Md. Liquid preparation for treating ringworm infection or athlete's foot. 315,969; Aug. 18. Class 6.
Houbigant, Inc., New York, N. Y. Face and talcum powder, salts, rouge, etc. 314,616; Aug. 18. Class 6.
Huntington Laboratories, Inc., Huntington, Ind. Cleaning compound. 314,698; Aug. 18. Class 4.
Hytken, Max, doing business as Banana Royal Peanut Co., Ruleville, Miss. Toasted peanuts. 299,658; Aug. 18. Class 46.
Independent Grocers' Alliance Distributing Co., Chicago, Ill. Baking powder and lye. 315,145; Aug. 18. Class 6.
Insulcrete Company, The, Forest Park, Ill. Cellular concrete units. 315,689; Aug. 18. Class 12.
International Medicinal Corporation, Chicago, Ill. Medicinal preparation. 315,749; Aug. 18. Class 6.
Jamieson, C. E. & Company, Detroit, Mich. Mineral oil emulsion. 316,561; Aug. 18. Class 6.
Juillard Cockcroft Corporation, doing business as Juillard Cockcroft Company, Watsonville, Calif. Canned fruits, vegetables, and fish, etc. 297,436; Aug. 18. Class 46.
Kahlenberg Laboratories, Inc., The, Two Rivers, Wis. Surgical sutures. 316,270; Aug. 18. Class 44.
Kasser, Samuel, doing business as Union Products Co., Philadelphia, Pa. Malt syrup. 316,533; Aug. 18. Class 46.
Kenworthy Brothers Company, Westboro, Mass. Sheet material. 306,608; Aug. 18. Class 50.
Keystone Steel & Wire Company, Peoria, Ill. Zinc coated iron and steel sheets. 316,647; Aug. 18. Class 14.
Klaro Products Co., New Bedford, Mass. Powdered cleaning compound. 315,844; Aug. 18. Class 4.
Kleistone Rubber Co., Inc., Warren, R. I. Leg cushion. 316,272; Aug. 18. Class 44.
Klinger, Rich., Gesellschaft mit beschrankter Haftung, Gumpoldskirchen, Austria. Brake and clutch linings. 314,209; Aug. 18. Class 35.
Klis, Cornelius, doing business as Preston Cigar Company, Norwich, Conn. Cigars. 316,648; Aug. 18. Class 17.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Coffee. 315,750; Aug. 18. Class 46.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Company, Cincinnati, Ohio. Candies. 316,927; Aug. 18. Class 46.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Company, Cincinnati, Ohio. Tea. 316,928; Aug. 18. Class 46.
L-B Chemical Co., The, Canton, Ohio. Lotion. 315,849–50; Aug. 18. Class 6.
Lac-Tide Co., The, Long Beach, Calif. Medicinal preparation. 315,644; Aug. 18. Class 6.
Lea's Pharmacy, doing business as Lea Brothers, Chemists, New Orleans, La. Athlete's foot medicine. 314,287; Aug. 18. Class 6.
Lenape Hydraulic Pressing & Forging Co., Lenape, Pa. Valve boxes, repair sleeves, man-hole covers, etc. 315,359; Aug. 18. Class 13.
Lenape Hydraulic Pressing & Forging Co., Lenape, Pa. Boiler nozzles. 315,360; Aug. 18. Class 13.
Lenwells, Inc., Chicago, Ill. Olive oil shampoo. 314,919; Aug. 18. Class 6.
Lenwells, Inc., Chicago, Ill. Hair dressing. 314,921; Aug. 18. Class 6.
Lindsay-McMillan Co., Milwaukee, Wis. Benzol. 298,639; Aug. 18. Class 6.
Little, Earl W., Indianapolis, Ind. Bird cages and parts thereof. 316,012; Aug. 18. Class 2.
Lohdell-Emery Manufacturing Co., Alma, Mich. Folding chairs and tables, and serving tables. 316,207; Aug. 18. Class 32.
Lucas Manufacturing Co., The. (See Associated Parts, Inc.)
M. F. A. Oil Company, Columbia, Mo. Motor oil. 309,693; Aug. 18. Class 15.
Maldonado, Gregorio, Brooklyn, N. Y. Brilliantine. 316,014; Aug. 18. Class 6.
Marco Nordstrom Valve Company, San Francisco, Calif. Lubricating greases. 271,615; Aug. 18. Class 15.
Martha Washington Candies Company, Chicago, Ill. Ice cream. 316,351; Aug. 18. Class 46.
Martin Varnish Company, Chicago, Ill. Finishes for walls, houses, floors, etc. 314,813; Aug. 18. Class 16.
May, Michael F., doing business as May Manufacturing Company, Redondo Beach, Calif. Electric flash light torches. 304,245; Aug. 18. Class 21.
McIlhenny Company, New Iberia, La. Pepper sauce. 315,855; Aug. 18. Class 46.
Meadow Manufacturing Co., The, Bloomington, Ill. Laundry washing machines. 302,639; Aug. 18. Class 24.
Merton, Charles S. & Co., New York, N. Y., and East Rutherford, N. J. Silk, satin, rayon, fabrics, steamer robes, etc. 315,859–60; Aug. 18. Class 42.
Meyercord Co., The, Chicago, Ill. Decalcomania transfers. 313,087; Aug. 18. Class 38.
Micromere Germicide Co. Ltd., Los Angeles, Calif. Antiseptics, disinfectants, and germicides. 314,633; Aug. 18. Class 6.
Midvale Company, The, Nicetown, Philadelphia, Pa. Naval and Army guns, projectiles. 306,503; Aug. 18. Class 9.
Midvale Company, The, Nicetown, Philadelphia, Pa. Tires, wheels, axles, etc. 314,120; Aug. 18. Class 19.
Midway Chemical Company, doing business as Sure-Kil Company, Chicago, Ill. Insecticide. 316,145; Aug. 18. Class 6.
Miller Company, The, Meriden, Conn. Electric lighting fixtures and lamps. 316,212; Aug. 18. Class 21.
Mitchem, Felix A., Oklahoma City, Okla. Sandwiches. 314,121; Aug. 18. Class 46.
Modern Electric Products Corporation, Chicago, Ill. Electric heaters. 307,687; Aug. 18. Class 21.
Moore, Wm. R. Dry Goods Company, Memphis, Tenn. Shirts and overalls. 312,852; Aug. 18. Class 39.
Muralo Company, Inc., The, New Brighton, N. Y. Cold water paint. 316,578; Aug. 18. Class 16.
Murphy, L. J., doing business as Murphy Laboratories, Chicago, Ill. Staphylococcus filtrate in ointment form. 314,768; Aug. 18. Class 6.
N. V. Chemische Fabriek "Rotterdam," Rotterdam, Netherlands. Chemical products. 314,166; Aug. 18. Class 6.
Nash-Finch Co., Minneapolis, Minn., and Oklahoma City, Okla. Fresh tomatoes. 316,310; Aug. 18. Class 46.
National Washboard Company, Chicago, Ill. Wash boards. 316,656; Aug. 18. Class 24.
Neon Products, Inc., Lima, Ohio. Electrical display signs and parts thereof. 315,272; Aug. 18. Class 21.
New England Confectionery Company, Cambridge, Mass. Candy. 308,835; Aug. 18. Class 46.
New Process Gear Company, Inc., Syracuse, N. Y. Gears and transmission gearing. 309,297; Aug. 18. Class 23.
Niagara Sprayer and Chemical Co., Inc., Middleport, N. Y. Dusting machine. 309,138; Aug. 18. Class 23.
Nitragin Company, Inc., The, Milwaukee, Wis. Seed and soil inoculant. 291,287; Aug. 18. Class 10.
Nu-Feet Products Company, Houston, Tex. Skin ointment. 315,756; Aug. 18. Class 6.
O. K. Nut Company. (See Roumel, Constantine.)
O. K. Peanut Company. (See Roumel, Constantine.)
Office System Publishing Co., The, Chicago, Ill. Printed book. 314,424–5; Aug. 18. Class 37.
Ohio Valley Drug Co., Wheeling, W. Va. Insecticides. 315,158; Aug. 18. Class 6.
Ordway, Dr. D. P., Plaster Co., Camden, Me. Plasters. 314,030; Aug. 18. Class 6.
Owye, Harry K., doing business as H. K. Owye & Co., San Francisco, Calif. Salt. 299,459; Aug. 18. Class 6.
Paint Products Company. (See Paraffine Companies, Inc., The.)
Panther Oil & Grease Mfg. Co., Fort Worth, Tex. Lubricating oils and greases. 316,445; Aug. 18. Class 15.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Paraffine Companies, Inc., The, doing business as Paint Products Company, San Francisco, Calif. Roofing, shingles, building papers. 316,499; Aug. 18. Class 12.
Parent, Aubert, Paris, France. Soap. 316,049; Aug. 18. Class 4.
Parents' Publishing Association, Inc., The, New York, N. Y. Section in a monthly magazine. 316,609; Aug. 18. Class 38.
Park Drug Co. Inc., doing business as The Park Laboratories, New York, N. Y. Combination mouth wash and liquid antiseptic, and tooth powder. 311,156; Aug. 18. Class 6.
Park, Philip R. Laboratories Inc., Los Angeles, Calif. Kelp. 312,925; Aug. 18. Class 46.
Parker Brothers Inc., Portland, Me., and Salem, Mass. Pieces for playing board and table games. 316,374; Aug. 18. Class 22.
Patterson-Sargent Company, The, Cleveland, Ohio. Paints, varnishes, stains, etc. 315,108; Aug. 18. Class 16.
Pees, O. Walter, Richmond Hill, L. I., N. Y. Beverages, syrup, and extracts. 312,349; Aug. 18. Class 45.
Pero & Daniels, Inc., Jamaica Plain, Mass. Shoe laces. 310,919; Aug. 18. Class 40.
Pharma-Craft Corporation, The, Louisville, Ky. Dietetic foods and ingredients thereof. 308,949; Aug. 18. Class 46.
Pharmazeutische Industrie A. G., Vienna, Austria. Anæsthetic. 316,100; Aug. 18. Class 6.
Plott, Holmes H., Canton, N. C. Soap. 315,646; Aug. 18. Class 4.
Prest-O-Lite Company, Inc., The, Indianapolis, Ind. Gas engine primers. 309,352; Aug. 18. Class 23.
Preston Cigar Company. (See Klis, Cornelius.)
Puro Sanitary Drinking Fountain Company, Haydenville, Mass. Drinking fountains, bubblers, push button and spring type compression valves. 315,925; Aug. 18. Class 13.
RCA Victor Company, Inc., Camden, N. J. Radio receiving sets and kits, battery eliminators, chokes, etc. 316,073; Aug. 18. Class 21.
Radio Condenser Company, Camden, N. J. Traffic signals. 315,870; Aug. 18. Class 50.
Ralston Purina Company, St. Louis, Mo. Worm capsules, insect powder, etc. 315,697; Aug. 18. Class 6.
Ramapo Ajax Corporation, New York, N. Y. Rail switches. 316,742; Aug. 18. Class 14.
Rasmussen, Geo., Co., Chicago, Ill. Cream tartar. 315,503; Aug. 18. Class 6.
Ravarino & Freschi Importing & Manufacturing Company, St. Louis, Mo. Alimentary pastes. 313,351; Aug. 18. Class 46.
Remarko Company, Cincinnati, Ohio. Preparation for rheumatism, lumbago, etc. 314,514; Aug. 18. Class 6.
Remington Laboratories, Inc., New York, N. Y. Medicinal preparation. 315,871; Aug. 18. Class 6.
Revere Copper and Brass Incorporated, Rome, N. Y. Copper teakettles, tea pots, percolators, etc. 315,367; Aug. 18. Class 13.
Revere Radio Corporation, The, Mansfield, Ohio. Radio broadcast receiving sets. 316,540; Aug. 18. Class 21.
Review Publishing and Printing Company, Philadelphia, Pa. Magazine. 316,785; Aug. 18. Class 38.
Roberts, Lee J., Monessen, Pa. External preparation for rheumatism, sprains, etc. 315,926; Aug. 18. Class 6.
Roessler & Hasslacher Chemical Company, The, New York, N. Y. Solution of formaldehyde and copper carbonate and mixtures of copper carbonate. 312,016; Aug. 18. Class 6.
Rotella, Frank, doing business as Rotella's Beverages, Newark, N. J. Beverages, syrups, and extracts. 315,650; Aug. 18. Class 45.
Roth-Büchner Aktiengesellschaft, Berlin–Tempelhof, Germany. Blades for razors. 311,488; Aug. 18. Class 23.
Roumel, Constantine, doing business as O. K. Peanut Company and O. K. Nut Company, Washington, D. C. Candies and nuts. 315,930; Aug. 18. Class 46.
Schallitz, Charles, Milwaukee, Wis. Malt beverage. 315,113; Aug. 18. Class 48.
Schechter-Guinsberg-Schechter, Inc., New York, N. Y. Dyed rabbit skins. 315,608; Aug. 18. Class 1.
Schilling, A., & Co., San Francisco, Calif. Baking powder and cream of tartar. 315,565; Aug. 18. Class 6.
Schneierson, I., & Sons, Inc., New York, N. Y. Chemises, princess slips, and bloomers, etc. 316,102; Aug. 18. Class 39.
Schwarz, Harry A., doing business as Silver Plate Company of America, New York, N. Y. Plating compound. 307,832; Aug. 18. Class 6.
Seeck & Kade, Inc., New York, N. Y. Pharmaceutical preparation. 316,101; Aug. 18. Class 6.
Seiss Mfg. Co., The, Toledo, Ohio. Electric dry battery lamps. 316,451; Aug. 18. Class 21.
Sego Milk Products Company, Salt Lake City, Utah. Butter, cheese, powdered skim milk, and casein. 302,044; Aug. 18. Class 46.
Serrell, Lemuel W., New York, N. Y. Electrical cooking stoves, ovens, etc. 316,019; Aug. 18. Class 21.
Sharples Specialty Company, The, Philadelphia, Pa. Machines for purifying oils. 316,384; Aug. 18. Class 23.
Sheffield Bronze Powder & Stencil Co., The, Cleveland, Ohio. Paint and varnish removers, bronzing liquid, oil colors, etc. 312,498; Aug. 18. Class 16.
Sheldon Electric Corporation, New York, N. Y. Instruments for comparing colors and parts thereof. 315,114; Aug. 18. Class 26.
Silver Plate Company of America. (See Schwarz, Harry A.)
Simons & French Co., Inc., New York, N. Y. Fresh vegetables and fruits. 316,750; Aug. 18. Class 46.
Simons & French Co., Inc., New York, N. Y. Fresh fruits. 316,751; Aug. 18. Class 46.
Siren Mills Corporation, Chicago, Ill. Prepared chocolate syrups, chocolate ice cream coating, etc. 315,861; Aug. 18. Class 46.
Smith & Company. (See Smitherman, Ida.)
Smitherman, Ida, doing business as Smith & Company, Oklahoma City, Okla. Liquid antiseptic. 315,285; Aug. 18. Class 6.
Societa Anonima Bertozzi, Parma, Italy. Canned tomatoes, peeled tomatoes, and tomato sauce. 308,313; Aug. 18. Class 46.
Societe Anonyme Jean Patou, Paris, France. Perfumes, toilet waters, powder, etc. 316,108–9; Aug. 18. Class 6.
Solvay Process Company, The, Syracuse, N. Y. Chemical preparation. 314,970; Aug. 18. Class 6.
Somerville Laboratories, Inc., New York, N. Y. Tonic. 316,138; Aug. 18. Class 6.
Sontag Chain Stores Co. Ltd., doing business as Studio Products Co., Los Angeles, Calif. Toilet preparations, cosmetics, and medicinal preparations. 309,745; Aug. 18. Class 6.
Sontag Chain Stores Co. Ltd., doing business as Dona Rosa Toiletries, Los Angeles and Hollywood, Calif. Soaps. 315,941; Aug. 18. Class 4.
South Dakota Poultry Improvement Board, Sioux Falls, S. Dak. Live baby chicks and hatching eggs. 312,722; Aug. 18. Class 46.
Southern Manufacturing Company. (See Bailey, Lloyd.)
Southern Mills, Incorporated, Atlanta, Ga. Woven cotton feed ribbons for ironing machines, and laundry net bags. 316,542; Aug. 18. Class 24.
Southwestern Portland Cement Company, Dayton, Ohio. Building cement. 314,192; Aug. 18. Class 12.
Spalding, A. G., & Bros., New York, N. Y. Tennis balls. 316,752; Aug. 18. Class 22.
Squibb, E. R. & Sons, New York, N. Y. Effervescent antacid, laxative, and diuretic tablets. 307,639; Aug. 18. Class 6.
Squibb, E. R. & Sons, New York, N. Y. Intestinal lubricants. 316,510; Aug. 18. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Denaturants. 315,420; Aug. 18. Class 6.
Standard Brands Incorporated, New York, N. Y. Coffee. 310,193; Aug. 18. Class 46.
Standard Brands Incorporated. (See Fleischmann Company, The, assignor.)
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Compounds, substances, and liquid materials used in dry cleaning. 315,068; Aug. 18. Class 4.
Studio Products Co. (See Sontag Chain Stores Co. Ltd.)
Suits, Seymour, Philadelphia, Pa. Headlights, headlight reflectors, lenses, etc. 315,803; Aug. 18. Class 21.
Sunny Child Underwear Company, New York, N. Y. Underwear. 296,553; Aug. 18. Class 39.
Sure-Kil Company. (See Midway Chemical Company.)
Surgident, Ltd., Los Angeles, Calif. Absorbent material. 315,506; Aug. 18. Class 44.
Tell City Chair Company, Tell City, Ind. Chairs. 316,453; Aug. 18. Class 32.
Thomson, Florence A., doing business as Floriana Candy Co., Philadelphia, Pa. Candy. 316,021; Aug. 18. Class 46.
Thompson, Victor C., doing business as Globe Grease and Manufacturing Company, Los Angeles, Calif. Lubricating oils and greases. 316,543; Aug. 18. Class 15.
Titan Metal Manufacturing Company, Bellefonte, Pa. Brass and bronze rods, shapes and forgings and automatic screw machinery parts. 313,209; Aug. 18. Class 14.
Toms River Boat Works, Inc., Toms River, N. J. Pleasure built sea skiff craft, clinker construction. 311,316; Aug. 18. Class 19.
Triple "XXX" Company, Galveston, Tex. Sandwiches and condiment sauce. 305,060; Aug. 18. Class 46.
Tutelman & Kohn, Philadelphia, Pa. Shirts and pajamas. 315,947; Aug. 18. Class 39.
Union Products Co. (See Kasser, Samuel.)
United American Bosch Corporation, Springfield, Mass. Radio receiving sets. 316,060; Aug. 18. Class 21.
United Shoe Machinery Corporation, Boston, Mass., and Paterson, N. J. Rubber heels. 316,348; Aug. 18. Class 39.
United States Radio & Television Corporation, Marion, Ind. Radio sending and receiving sets. 314,436; Aug. 18. Class 21.
United States Rubber Company, New York, N. Y. Belts. 316,454; Aug. 18. Class 35.

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Universal Medicine Co. (See Conklin, John.)
Vanderbilt, R. T., Company, Inc., New York, N. Y. Chemical compound. 316,001; Aug. 18. Class 6.
Valentine Laboratories, Inc., Chicago, Ill. Alterative compounds. 313,516; Aug. 18. Class 6.
Valorbilt Clo. Co., St. Louis, Mo. Clothing. 315,810; Aug. 18. Class 39.
Wadhams Oil Company, Milwaukee, Wis. Gasoline. 316,460; Aug. 18. Class 15.
Wakefield Item Company, Wakefield, Mass. Newspaper. 316,620; Aug. 18. Class 38.
Washington Chemical Co. (See Deck, John.)
Water Works Supply Company, San Francisco, Calif. Pressure manometers and liquid column gauges. 297,829; Aug. 18. Class 26.
Wesco Foods Company (See Kroger Grocery & Baking Co., The.)
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Radio receiving sets. 316,393; Aug. 18. Class 21.
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Electric ranges. 316,516; Aug. 18. Class 21.
Wethree Company (not Inc.), The, Chicago, Ill. Ointment. 315,510; Aug. 18. Class 6.
Wil-Gro Products Co., Willow Grove, Pa. Liquid fertilizer and especially prepared soil. 315,957; Aug. 18. Class 10.
Williams, Thomas S., Dallas, Tex. Door checks. 316,675; Aug. 18. Class 13.
Wohl, L., & Co. (See Goldberger, Leo J.)
Wright & Ditson, Boston, Mass. Tennis balls. 316,793; Aug. 18. Class 22.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Seed, Certain named. Oscar H. Will & Co. 84,443; renewed Dec. 12, 1931.

CLASS 2

Paper bags. Crown-Columbia Pulp and Paper Company. 84,602; renewed Dec. 26, 1931.
Radio speaker. Utah Radio Products Company. 286,172; Aug. 18; Serial No. 310,356; published June 2, 1931.
Receptacles. Wheeling Corrugating Company. 82,944; renewed Aug. 1, 1931.

CLASS 4

Paste, Glass and metal cleaning. Moore and Bradford. 286,194; Aug. 18; Serial No. 297,450; published May 26, 1931.
Polishes for metal, wood, and enamel. Buffalo Specialty Manufacturing Co. 37,516; renewed Dec. 24, 1931.
Soaps. A. O. y Palacios. 286,218; Aug. 18.

CLASS 5

Glue, Liquid fish. Flash Chemical Co. 83,723; renewed Oct. 10, 1931.

CLASS 6

Dandruff remedy. The Retone Company. 84,528; renewed Dec. 19, 1931.
Disinfectants, Liquid. Embalmers Supply Co. 36,799; renewed July 23, 1931.
Insect exterminator, disinfectant, and talcum powder. Flash Chemical Co. 84,088; renewed Nov. 7, 1931.
Paste, Licorice. The MacAndrews & Forbes Company. 84,018; renewed Oct. 31, 1931.
Soda, bleaching-powder, and sulfur chlorid, Caustic. Hooker Electro-Chemical Company. 84,909; renewed Jan. 9, 1932.
Soda for cooking purposes. Royal Baking Powder Company. 84,916; renewed Jan. 9, 1932.
Toilet preparations. Boracol Chemical Co. 83,553; renewed Sept. 26, 1931.
Toilet water. The Koken Barbers' Supply Company. 84,322; renewed Nov. 28, 1931.

CLASS 8

Cigarette papers. Maison Pierre Bardou Job. 37,538; renewed Dec. 31, 1931.
Smokers' pipes. Sasieni London, Ltd. 286,209; Aug. 18.

CLASS 9

Pistols, rifles, sporting-guns, etc. Anciens Etablissements Pieper. 84,806; renewed Jan. 9, 1932.

CLASS 11

Inks. Penene Corporation. 286,211; Aug. 18.

CLASS 12

Fire brick. Niles Fire Brick Company. 286,227; Aug. 18.
Heat insulating material. Union Fibre Company. 82,926; renewed Aug. 1, 1931.
Lime. Palmer Lime & Cement Company. 286,203–4; Aug. 18.
Plaster. Higginson Manufacturing Company. 286,198; Aug. 18; Serial No. 298,633; published June 2, 1931.
Roofing material, Plastic. Sterling Materials Company, Limited. 286,216; Aug. 18.

CLASS 14

Castings and forgings, Iron and steel. Acieries de Genevilliers, Anciens Etablissements C. Delachaux. 286,214; Aug. 18.
Copper. Tennessee Copper Company. 37,605; renewed Dec. 31, 1931.
Printers' supplies. Barnhart Bros. & Spindler. 36,767; renewed July 16, 1931.

CLASS 15

Gasoline. Louis J. Silberman. 286,183; Aug. 18; Serial No. 313,009; published May 26, 1931.
Gasoline, kerosene, gas oil, etc. Shell Oil Company. 286,178; Aug. 18; Serial No. 312,389; published May 26, 1931.
Gasoline, lubricating oil, motor fuel, oil, etc. Pioneer Truck and Transfer Co. 286,185; Aug. 18; Serial No. 313,054; published June 2, 1931.
Lubricating and anticarbonizing material, Auxiliary. C. F. Kellom & Co. 286,196; Aug. 18; Serial No. 298,031; published May 26, 1931.
Oil and grease, Lubricating. Royersford Foundry & Machine Co. Incorporated. 82,830; renewed July 25, 1931.
Oils and greases, Lubricating. C. F. Kellom & Co. 286,195; Aug. 18; Serial No. 297,918; published May 26, 1931.
Oils and greases, Lubricating. Tide Water Oil Company. 83,791; renewed Oct. 10, 1931.
Oils and greases, Refined, semi-refined and unrefined. Beacon Oil Company. 286,111; Aug. 18; Serial No. 298,684; published May 26, 1931.
Oils and greases, Rust preventing. Standard Oil Company. 286,188; Aug. 18; Serial No. 313,814; published May 26, 1931.

CLASS 17

Cigars. J. W. Roberts & Son. 286,134; Aug. 18; Serial No. 313,447; published June 2, 1931.

CLASS 19

Motor boats, speed boats, etc. G. Wood Inc. 286,226; Aug. 18.

CLASS 21

Batteries, Storage. Continental Tire Corporation. 286,142; Aug. 18; Serial No. 313,590; published June 2, 1931.
Dry cells and batteries. Carbon Products Company. 286,179; Aug. 18; Serial No. 312,752; published May 26, 1931.
Electric cooker. Florence Stove Company. 289,199; Aug. 18; Serial No. 298,694; published May 26, 1931.
Electric lamps, glow tubes, and electron space discharge tubes. De Forest Radio Company. 286,193; Aug. 18; Serial No. 296,731; published June 2, 1931.
Electric lighting fixtures and lamps. Miller Company. 286,189; Aug. 18; Serial No. 313,382; published June 2, 1931.
Electric lighting fixtures, electric wiring conduits, etc. Chicago Electrical Supply Company. 286,200; Aug. 18; Serial No. 274,099; published June 2, 1931.
Electrical apparatus and supplies. T. F. Johnson. 286,191; Aug. 18; Serial No. 287,350; published June 2, 1931.
Electrical supplies. Hemming Manufacturing Company. 84,628; renewed Dec. 26, 1931.
Electrical terminating apparatus. Delta Star Electric Company. 286,210; Aug. 18.
Electrical vacuum tubes and valves. Ceco Manufacturing Company, Inc. 286,146; Aug. 18; Serial No. 313,646; published June 2, 1931.
Electrically illuminated automobile direction signal semaphore. Johnston Electric Automobile Signal Co. 286,101; Aug. 18; Serial No. 296,746; published June 2, 1931.
Electron emissive tubes and parts thereof. Arcturus Radio Tube Company. 286,129; Aug. 18; Serial No. 312,635; published June 2, 1931.
Fire detecting systems. W. Kidde & Company. 286,182; Aug. 18; Serial No. 312,953; published June 2, 1931.
Instruments or independent unitary mechanism. The Nafziger Corporation. 286,197; Aug. 18; Serial No. 298,199; published May 26, 1931.
Radio electron tubes. National Union Radio Corporation. 286,174; Aug. 18; Serial No. 311,194; published June 2, 1931.

CLASS 22

Crickets, ratchet noisemakers, jumbo rattlers, etc. C. H. Dietze, sr. 286,213; Aug. 18.
Fishing lines, trolling-spoons, etc. Kelley-How-Thomson Co. 83,584; renewed Sept. 26, 1931.

CLASS 23

Engines, Fire. American Fire Engine Company. 37,461; renewed Dec. 10, 1931.
Support, Motor driven rotatable. Brunswick-Balke-Collender Company. 286,207; Aug. 18.
Tools, Machine. Cincinnati Milling Machine Company. 286,109; Aug. 18; Serial No. 291,266; published Nov. 25, 1930.
Tools, Machine. Cincinnati Grinders Incorporated. 286,120; Aug. 18; Serial No. 291,264; published Dec. 2, 1930.

CLASS 24

Washtubs, Galvanized. Wheeling Corrugating Company. 83,299; renewed Aug. 29, 1931.

CLASS 25

Locks and latches. Von Duprin Fire Exit Latch Company. 85,021; renewed Jan. 16, 1932.

CLASS 26

Lenses, Eyeglass. J. D. Brock. 286,224; Aug. 18.
Steel dry measures. Wheeling Corrugating Company. 83,115; renewed Aug. 15, 1931.

CLASS 28

Jewelry. E. F. M. Speidel. 286,225; Aug. 18.
Rings and other kinds of finger rings, Diamond. E. Steffen. 286,184; Aug. 18; Serial No. 313,011; published May 26, 1931.
Rings, bracelets, hand bags, etc., Finger. Marathon Company. 286,176–7; Aug. 18; Serial Nos. 312,261–2; published May 26, 1931.
Rings, Finger. Goldman-Kolber Co. Inc. 286,180; Aug. 18; Serial No. 312,799; published May 26, 1931.
Rings, Finger. The Slavick Jewelry Company. 286,201; Aug. 18; Serial No. 307,223; published May 26, 1931.
Rings, Wedding. Rosenfield Jewelry Company. 286,187; Aug. 18; Serial No. 313,306; published May 26, 1931.
Table silverware. Weidlich Sterling Spoon Co. 286,181; Aug. 18; Serial No. 312,823; published June 2, 1931.

CLASS 29

Brushes, Shaving. Koken Barbers' Supply Company. 83,745; renewed Oct. 10, 1931.

CLASS 32

Files for papers and books. J. H. Atwater Company. 84,927; renewed Jan. 16, 1932.
Mirrors, Glass. M. Krakovitz & Sons Co. 286,208; Aug. 18.

CLASS 34

Lighter, Pyrophoric household. New Process Metals Corporation. 286,222; Aug. 18.

CLASS 35

Piston rings. Alitite Piston Ring Co. 286,221; Aug. 18.

CLASS 36

Flutes, piccolos, clarinets, etc. H. Bettoney. 286,175; Aug. 18; Serial No. 311,589; published June 2, 1931.
Needles, Talking machine. Drei-S-Werk Schwabacher Spinnereinadel-U Stahlspitzen-Werk Fr. Reingruber. 286,171; Aug. 18; Serial No. 309,266; published May 26, 1931.
Pianos and organs. Lyon & Healy. 83,846; renewed Oct. 17, 1931.
Saxophone stand. D. H. Dewey. 286,220; Aug. 18.

CLASS 37

Binders and blank books, Loose leaf. S. E. & M. Vernon, Inc. 286,141; Aug. 18; Serial No. 313,517; published June 2, 1931.
Books and loose leaf binders, Blank. S. E. & M. Vernon, Inc. 286,135; Aug. 18; Serial No. 312,464; published June 2, 1931.
Chalk crayons, Colored. American Crayon Company. 286,159; Aug. 18; Serial No. 313,114; published June 9, 1931.
Crayons. Milton Bradley Company. 286,190; Aug. 18; Serial No. 313,767; published June 2, 1931.
Paper and envelopes, Correspondence. United States Envelope Company. 286,148; Aug. 18; Serial No. 313,760; published June 2, 1931.
Paper, Book. Carew Manufacturing Company. 286,202; Aug. 18.
Paper, etc., Writing and printing. American Writing Paper Company. 286,206; Aug. 18.
Paper, Toilet. A. P. W. Company. 286,143; Aug. 18; Serial No. 313, 624; published June 2, 1931.
Paper, Wall. Kimberly-Clark Corporation. 286,147; Aug. 18; Serial No. 313,711; published June 2, 1931.
Paper, Wrapping. Fletcher Paper Company. 286,160–2; Aug. 18; Serial Nos. 313,427–9; published June 9, 1931.
Paper, Wrapping. Mid-West Wax Paper Company. 286,128; Aug. 18; Serial No. 312,485; published June 2, 1931.
Pencils, Black lead. Richard Best Pencil Company. 286,164; Aug. 18; Serial No. 313,629; published June 2, 1931.
Pencils, Black lead and colored. Richard Best Pencil Company. 286,163; Aug. 18; Serial No. 313,628; published June 2, 1931.
Pencils, Lead. Richard Best Pencil Company. 286,144–5; Aug. 18; Serial Nos. 313,631–2; published June 2, 1931.
Tissue, Toilet and facial. Modern Tissues Corporation. 286,132; Aug. 18; Serial No. 313,048; published June 2, 1931.

CLASS 38

Advertising material. S. M. Ferrer. 286,133; Aug. 18; Serial No. 313,128; published June 2, 1931.
Books, pamphlets, posters, etc. C. N. Smith. 286,116; Aug. 18; Serial No. 301,767; published June 9, 1931.
Decalcomanias. Kiwanis International. 286,167; Aug. 18; Serial No. 313,855; published June 9, 1931.
Guide to Shoppers, printed weekly. G. E. Brooks. 286,110; Aug. 18; Serial No. 294,955; published June 2, 1931.
History charts and compilations thereof, Business. Ontario Finance Corporation. 286,113; Aug. 18; Serial No. 299,010; published June 9, 1931.
Magazine, A semimonthly. The Vogue Company. 84,770; Jan. 2, 1932.
Magazines. Builders' Association of Kansas City, Mo. 286,168; Aug. 18; Serial No. 313,902; published June 9, 1931.
Newspaper, Daily Evening. Progressive Publishing Company. 286,166; Aug. 18; Serial No. 313,796; published June 9, 1931.
Newspapers. Sheridan Press, Inc. 286,165; Aug. 18; Serial No. 313,720; published June 9, 1931.
Periodical. Big Indian Oil and Development Company. 286,170; Aug. 18; Serial No. 314,036; published June 9, 1931.
Periodical. Paper Clearings Bureau, Inc. 286,169; Aug. 18; Serial No. 314,009; published June 9, 1931.
Periodical. Times Publishing Co. 286,152; Aug. 18; Serial No. 312,242; published June 9, 1931.
Periodicals. Meyers Publications, Inc. 286,157; Aug. 18. Serial No. 312,995; published June 2, 1931.
Photographic prints. L. P. Ford. 286,155; Aug. 18. Serial No. 312,640; published June 2, 1931.
Photo-prints, photostat prints, etc. James C. Zoll & Son. 286,158; Aug. 18; Serial No. 313,104; published June 2, 1931.
Printed articles, Lithographically. Theo. A. Schmidt Lithographing Company. 286,102; Aug. 18. Serial No. 307,060; published June 2, 1931.
Publication, Periodical. Estate Stove Company. 286,117; Aug. 18; Serial No. 277,875; published June 2, 1931.

CLASS 39

Bath robes, men's, boys' and women's. Behrens & Kashins, Inc. 286,131; Aug. 18; Serial No. 312,978; published May 26, 1931.
Bathing suits. José P. Villar. 286,136; Aug. 18; Serial No. 313,015; published May 26, 1931.
Caps, hats, and sainsook underwear. Chicago Mail Order Company. 286,173; Aug. 18; Serial No. 310,472; published Mar. 17, 1931.
Coats, vests, etc. Fashion Park Associates, Inc. 286,137; Aug. 18; Serial No. 313,035; published May 26, 1931.
Collars. Brooks Brothers. 286,205; Aug. 18.
Combination work suits, etc. L. Strauss. 286,106; Aug. 18; Serial No. 305,984; published May 26, 1931.
Creepers, rompers, etc. Smiley-Heide, Inc. 286,123; Aug. 18; Serial No. 311,641; published May 26, 1931.
Footwear, Rubber. Nihon Tabi Kabushiki Kaisha. 286,107; Aug. 14; Serial No. 304,086; published June 2, 1931.
Garters, suspenders, and collars. A. L. S. T. Earles. 286,150; Aug. 18; Serial No. 312,044; published June 2, 1931.
Gloves and mittens of leather and fabric. Panama Glove Company. 286,186; Aug. 18; Serial No. 313,304; published June 2, 1931.
Hats for men. Knox Hat Company. 286,105; Aug. 18; Serial No. 307,779; published June 2, 1931.
Hats, Men's. M. S. Levy & Sons Incorporated. 286,156; Aug. 18; Serial No. 312,762; published June 2, 1931.
Hats, women's, misses', and children's. Gross Millinery Co. Inc. 286,108; Aug. 18; Serial No. 304,555; published June 2, 1931.
Hosiery. Lanner Brothers. 286,100; Aug. 18; Serial No. 308,375; published June 2, 1931.
Hosiery. E. Sabath. 286,122; Aug. 18; Serial No. 309,741; published May 26, 1931.
Hosiery, sweaters, and underwear. Troy Wholesale Corporation. 286,192; Aug. 18; Serial No. 296,154; published Apr. 22, 1930.
Neckties, cravats, and scarfs. Cohan, Roth & Stiffson. 286,140; Aug. 18; Serial No. 313,122; published May 26, 1931.

Shirts, Dress and negligee. James S. Fuller, Inc. 286,125; Aug. 18; Serial No. 312,297; published May 26, 1931.
Shirts, Dress, negligee, and work. Broadstreets, Inc. 286,126; Aug. 18; Serial No. 312,410; published June 2, 1931.
Shoes of leather, rubber, and fabric, Children's. Palais Royal, Inc. 286,151; Aug. 18; Serial No. 312,116; published June 2, 1931.
Shoes of leather, rubber, or fabric. Endicott Johnson Corporation. 286,154; Aug. 18; Serial No. 312,603; published June 2, 1931.
Suits and leggings, Knitted snow. Eagle Knitting Mills. 286,153; Aug. 18; Serial No. 312,602; published June 2, 1931.
Suits, overcoats, and topcoats, Men's. S. Makransky and Sons, Inc. 286,139; Aug. 18; Serial No. 313,140; published June 2, 1931.
Suspenders. P. D. Swayze. 286,149; Aug. 18; Serial No. 311,576; published June 2, 1931.
Underwear. The B. V. D. Company, Inc. 286,115; Aug. 18; Serial No. 301,400; published May 26, 1931.
Underwear, Ladies'. Carson Pirie Scott & Co. 286,138; Aug. 18; Serial No. 313,073; published May 26, 1931.
Uniforms, Men's professional and work. L. M. Cooper. 286,103; Aug. 18; Serial No. 307,655; published June 2, 1931.

CLASS 40

Cords, blades, and tapes, Stiffening. Warren Featherbone Co. 83,112; renewed Aug. 15, 1931.
Hair curlers, hairpins, and combs, Non-electrical. H. Goodman & Sons, Inc. 286,212; Aug. 18.

CLASS 41

Frames, ribs, and trimmings, Umbrella. Fretz Gross & Co. 84,616; renewed Dec. 26, 1931.

CLASS 42

Silk piece goods. Atuyer, Bianchini, Férier & Co. 82,954; renewed Aug. 8, 1931.

CLASS 45

Soft drinks and syrups. A. E. Hanson. 286,219; Aug. 18.
Soft drinks, and sirups and extracts. H. Kirsch & Co. 286,223; Aug. 18.

CLASS 46

Canned fruits and fruit preserves, canned vegetables, canned sea food, etc. Kroger Grocery & Baking Co. 286,118; Aug. 18; Serial No. 279,795; published May 26, 1931.
Canned pineapple. Hawaiian Pineapple Company, Ltd. 286,130; Aug. 18; Serial No. 312,910; published June 2, 1931.
Canned tomatoes. Schroeder Brothers, Inc. 286,121; Aug. 18; Serial No. 308,556; published May 26, 1931.
Canned tomatoes, fish, roe, and fresh fish, etc. A. N. Faulkner & Co. 286,215; Aug. 18.
Cereal food products. "Force" Food Company. 87,560; renewed Dec. 31, 1931.
Cheese. H. Scaramelli Inc. 286,114; Aug. 18; Serial No. 299,282; published May 26, 1931.
Coffee. Campbell Holton & Co. 286,119; Aug. 18; Serial No. 281,765; published May 26, 1931.
Figs. The Hills Brothers Company. 84,629; renewed Dec. 26, 1931.
Flour. F. B. Chamberlain Company. 83,816; renewed Oct. 17, 1931.
Flour, Wheat. Moseley & Motley Milling Co. 84,988; renewed Jan. 16, 1932.
Foods, Macaronic paste. Cleveland Macaroni Company. 79,281; renewed Oct. 11, 1930.
Foods, Macaronic paste. Cleveland Macaroni Company. 79,650; renewed Sept. 27, 1930.
Frozen confections. Empire Sales Company. 286,127; Aug. 18; Serial No. 312,421; published June 2, 1931.
Honey. Colorado Honey Sales Corporation. 286,112; Aug. 18; Serial No. 298,792; published June 2, 1931.
Macaroni, spaghetti, vermicelli, etc. The Foulds Milling Company. 84,615; renewed Dec. 26, 1931.
Oysters, Fresh. H. C. Rowe & Company. 84,682; renewed Dec. 26, 1931.
Preparation in powder form to be added to other ingredients in the preparation of icings, toppings, and the like. Virginia Dare Extract Company, Inc. 286,104; Aug. 18; Serial No. 307,768; published June 2, 1931.
Seasoning for sausages, meats, and other foods. A. C. Legg Packing Co. Inc. 286,124; Aug. 18; Serial No. 311,841; published June 2, 1931.
Tea. Sprague, Warner & Company. 37,567; renewed Dec. 31, 1931.
Toffee. John Mackintosh, Limited. 82,703; renewed July 18, 1931.
Tucnip kraut. J. F. Williams. 286,217; Aug. 18.

ALPHABETICAL LIST OF LABELS

Alvarez Lopez Y Ca. For Cigars. J. F. Relgosa. 39,591; Aug. 18.
Avalon. For Liquid Bluing. Kroger Grocery & Baking Co. 39,581; Aug. 18.
Beech-Nut Grape Drops. For Candy. Beech-Nut Packing Company. 39,559; Aug. 18.
Beech-Nut Gum, Peppermint Flavored. For Chewing Gum. Beech-Nut Packing Company. 39,561; Aug. 18.
Beech-Nut Raspberry Drops. For Candy. Beech-Nut Packing Company. 39,560; Aug. 18.
Booker T. Washington. For Cigars. Broward Cigar Company. 39,562; Aug. 18.
Buster Brown. For Root Beer. H. C. Wylie. 39,599; Aug. 18.
Country Club. For Apricots. Kroger Grocery & Baking Co. 39,575; Aug. 18.
Country Club. For Evaporated Milk. Kroger Grocery & Baking Co. 39,577; Aug. 18.
Dr. Pencheff's Botanical Laxative Compound. For Laxative Compound. S. Pencheff. 39,586; Aug. 18.
Evergreen. For Embossed Napkins. Hoberg Paper & Fibre Company. 39,567; Aug. 18.
Genuine Chevrolet Body Polish. For Polishing Material in Liquid Form, Designed Especially for Polishing. Chevrolet Motor Company. 39,564; Aug. 18.
Hollywood. For Olives. Kroger Grocery & Baking Co. 39,573; Aug. 18.
Hollywood. For Olives. Kroger Grocery & Baking Co. 39,582; Aug. 18.
Hy-G-No. For Denture Cleaner. F. J. Traxl. 39,597; Aug. 18.
Jewel Cleanser. For Cleanser. Jewel Tea Co. 39,568; Aug. 18.
Latonia Club. For Ginger Ale. Kroger Grocery & Baking Co. 39,574; Aug. 18.
Let Handy Ann Wash Your Dishes. For Dishcloths. Putnam Knitting Co. 39,590; Aug. 18.
May Gardens. For Tea. Kroger Grocery & Baking Co. 39,571; Aug. 18.
May Gardens. For Tea. Kroger Grocery & Baking Co. 39,576; Aug. 18.
May Gardens. For Tea. Kroger Grocery & Baking Co. 39,578; Aug. 18.
May Gardens (Orange Pekoe). For Tea. Kroger Grocery & Baking Co. 39,580; Aug. 18.
May Gardens (Young Hyson). For Tea. Kroger Grocery & Baking Co. 39,579; Aug. 18.
Milwaukee Club. For Ginger Ale. J. Schlitz Beverage Company. 39,595; Aug. 18.
Moon-Shine. For Washing Fluid. Moonshine Chemical Company. 39,583; Aug. 18.
Norcross Carrot Products. For Carrot Products. Norcross Carrot Co. 39,585; Aug. 18.
Our Brand Eggs. For Eggs. Poultry Producers of Central California. 39,588; Aug. 18.
Pantry Table Cream. For Table Cream. S. M. A. Corporation. 39,584; Aug. 18.
Pantry Whipping Cream. For Whipping Cream. S. M. A. Corporation. 39,592; Aug. 18.
Persenico. For Medicinal Preparation. Sherwood-Arthur Pharmacal Co. (Inc.) 39,596; Aug. 18.
Powdered Ammonia Compound. For Powdered Ammonia Compound. Jewel Tea Co., Inc. 39,569; Aug. 18.
Preferred Eggs. For Eggs. Poultry Producers of Central California. 39,589; Aug. 18.
Protein S. M. A. (Acidulated). For Food Product for Infants. S. M. A. Corporation. 39,593; Aug. 18.
Readi-to-sew. For Fabrics. Tru-Fit Dress Co. Inc. 39,598; Aug. 18.
Real Bohemian Style. For Malt Syrup. Natomah Sales Corporation. 39,594; Aug. 18.
Red Top. For Fresh Cherries. F. J. Campodonico Co. 39,563; Aug. 18.
Rocky River. For Root Beer. Kroger Grocery & Baking Co., The. 39,572; Aug. 18.
Smooth-Freeze Meadow Gold. For Ice Cream. Beatrice Creamery Company. 39,558; Aug. 18.
Sunshine Straws. For Drinking Straws Made of Paper. Herz Straw Company. 39,565–6; Aug. 18.
The Nurse's Foot Health Cream. For Cream for Tired and Aching Feet. W. G. Piper. 39,587; Aug. 18.
Zythos. For Malt Syrup for Food Purposes. T. Kollins. 39,570; Aug. 18.

ALPHABETICAL LIST OF PRINTS

A New Standard (17–S–1931). For Coffee. Hills Bros. 13,372; Aug. 18.
Columbia Steel Equip. Co. For Steel Filing Cabinets. Columbia Steel Equipment Co. 13,352–3; Aug. 18.
Controlled Roasting (17–R–1931). For Coffee. Hills Bros. 13,371; Aug. 18.
"Exclusive" is the Word (17–L–1931). For Coffee. Hills Bros. 13,366; Aug. 18.
Expect the Utmost (17–V–1931). For Coffee. Hills Bros. 13,374; Aug. 18.
Frozen Drumstick. For Ice Cream Product Consisting of an Ice Cream Cone Dipped in Candy Coating, Etc. L. C. Parker. 13,379; Aug. 18.
Here is the Secret (17–C–1931). For Coffee. Hills Bros. 13,358; Aug. 18.
In The World (17–G–1931). For Coffee. Hills Bros. 13,362; Aug. 18.
It is a Revelation (17–H–1931). For Coffee. Hills Bros. 13,363; Aug. 18.
It is Important (17–D–1931). For Coffee. Hills Bros. 13,359; Aug. 18.
It is Matchless (17–K–1931). For Coffee. Hills Bros. 13,365; Aug. 18.
It's a Different Coffee (17–W–1931). For Coffee. Hills Bros. 13,375; Aug. 18.
It's No Wonder (17–T–1931). For Coffee. Hills Bros. 13,373; Aug. 18.
No Other Coffee (17–F–1931). For Coffee. Hills Bros. 13,361; Aug. 18.
Of all Coffees (17–Q–1931). For Coffee. Hills Bros. 13,370; Aug. 18.
Of all Methods (17–Y–1931). For Coffee. Hills Bros. 13,377; Aug. 18.
Only This Coffee (17–B–1931). For Coffee. Hills Bros. 13,357; Aug. 18.
Orchard Maid Pure Fresh Fruit Juice Syrup. For Pure Fresh Fruit Juice Syrups. Orchard Products Company. 13,378; Aug. 18.
Oven-Baked in the Homelike Kitchens of Heinz. For Oven-Baked Beans. H. J. Heinz Company. 13,355; Aug. 18.
Selmer H. & A. Selmer Inc. Selmer Building—Elkhart, Indiana. For Clarinets, Flutes, Saxophones, all Woodwinds and Accessories. H. & A. Selmer, Inc. 13,380; Aug. 18.
Specifications of the New Capehart '400' Series. For Musical Instruments. The Capehart Corporation. 13,351; Aug. 18.
The Flavor of Flavors (17–A–1931). For Coffee. Hills Bros. 13,356; Aug. 18.
The Only Way (17–P–1931). For Coffee. Hills Bros. 13,369; Aug. 18.
The Rare 'Taste' (17–M–1931). For Coffee. Hills Bros. 13,367; Aug. 18.
This Coffee Alone (17–E–1931). For Coffee. Hills Bros. 13,360; Aug. 18.
This Coffee Has Everything (17–J–1931). For Coffee. Hills Bros. 13,364; Aug. 18.
This Coffee of Coffees (17–N–1931). For Coffee. Hills Bros. 13,368; Aug. 18.
3–4–5 Toscani Cigars. For Cigars. R. Capasso. 13,350; Aug. 18.
Unlike Ordinary Coffees (17–X–1931). For Coffee. Hills Bros. 13,376; Aug. 18.
When Hungry Fellows Get Together. For Oven-Baked Beans. H. J. Heinz Company. 13,354; Aug. 18.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 18TH DAY OF AUGUST, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A. B. A. Specialties Company. (See Fridolph, Annette, assignor.)
Aaronson, Andre, London, England. Hairdressing device. 1,819,667; Aug. 18.
Abeles, John S., Brooklyn, and E. Lind, New York, N. Y. Collar. 1,819,857. Aug. 18.
Abramson, Nathan, Brooklyn, N. Y. Miniature flasher. 1,819,633; Aug. 18.
Ackerman, Frank, St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Automobile lift. 1,819,275. Aug. 18.
Adalet Manufacturing Company, The. (See Boyton, John C., assignor.)
Aderer, Julius, Inc. (See Kunde, Charles C., assignor.)
Affel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Carrier signaling system. 1,819,054; Aug. 18.
Akerlow, Gustav W., Aurora, assignor to Kellman Sycamore Company, Sycamore, Ill. Heating system for ironing machines. 1,819,534; Aug. 18.
Aktiebolaget Nordiska Armaturfabrikerna. (See Weibull, E. H. W., and Hysing, assignors.)
Al, Jan, and F. R. Moser, Amsterdam, assignors to Naamlooze Vennootschap De Bataafoche Petroleum Maatschappij, The Hague, Netherlands. Desulphurization of gases and vapors. 1,819,055; Aug. 18.
Alamo Iron Works. (See Holmgreen, Julius H., assignor.)
Aldeen, Gedor W., assignor to National Lock Co., Rockford, Ill. Sash pulley. 1,819,315; Aug. 18.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Allen, Benjamin H., Beaumont, Tex. Service stand and serving apparatus. 1,819,806; Aug. 18.
Allen, Chauncey D., Philadelphia, Pa. Automatic variable oil control valve for lubricators. 1,819,858; Aug. 18.
Allen, Frank B., Lower Merion Township, Montgomery County, assignor to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Apparatus for handling solids. 1,818,967; Aug. 18.
Allen-Sherman-Hoff Company, The. (See Allen, Frank B., assignor.)
Allen-Sherman-Hoff Company, The. (See Sherman, Max C., assignor.)
Allen, William R., Custer Township, Whatcom County, Wash. Highway dual-light signal. 1,819,316; Aug. 18.
Allison, Fred M., Corpus Christi, Tex. Slips and tool joint for rotary well drilling. 1,819,056; Aug. 18.
Alox Chemical Corporation. (See Burwell, Arthur W., assignor.)
Amalgated Roofing Company. (See MacLean, Robert, assignor.)
Ambrose, Henry A. (See Loomis, A. G., Ambrose, and Brown.)
American Assembling Machine Company. (See Kleineberg, Paul E., assignor.)
American Ball Company. (See Bradley, Charles S., assignor.)
American Cyanamid Company. (See Romieux, C. J., and Christmann, assignors.)
American District Steam Company. (See Gysling, Manuel H., assignor.)
American Electric Furnace Company. (See Hanson, Albert J., assignor.)
American Floor Surfacing Machine Company, The. (See Wolfe, H. H., and Myers.)
American Gasaccumulator Company. (See Dalén, G., and Eskilson, assignors.)
American Kambi Company. (See Wersall, Karl J., assignor.)
American Telephone and Telegraph Company. (See Affel, Herman A., assignor.)
American Telephone and Telegraph Company. (See Bonell, Ralph K., assignor.)
American Telephone and Telegraph Company. (See Edwards, William H., assignor.)
American Woodlite Corporation. (See Wood, William G., assignor.)
Ams, Max, Machine Company, The. (See Lange, Paul H., assignor.)
Anaconda Sales Company. (See Shakespeare, William M., assignor.)
Anderson, Erick T., assignor to The Skayef Ball Bearing Company, Hartford, Conn. Gauging apparatus. 1,818,968; Aug. 18.
Anderson, Johan A., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Winding machine. 1,819,695; Aug. 18.
Anderson, Rexford O., Houston, Tex. Core barrel valve. 1,818,981; Aug. 18.
Angel, Harry K., et al. (See Tumminello, Charles E., assignor.)
Angle, Glenn D., Cincinnati, Ohio. Method and apparatus for obtaining indicator cards from engines. 1,819,143; Aug. 18.
Antoine, Victor, Lambermont, near Ensival, Belgium. Apparatus for the production of paper glazed and/or coloured on one face. 1,818,982; Aug. 18.
Anton, Frederick A., Topeka, Kans. Awning arm support. 1,819,400; Aug. 18.
Archer, George F., New York, N. Y. Controlled water heating means. 1,819,057; Aug. 18.
Arndt, Franklin E., assignor to The Galion Iron Works & Mfg. Co., Galion, Ohio. Steering gear for road graders. Re18,150; Aug. 18.
Arnold, William P., jr., Houston, Tex., assignor to Sinclair Refining Company, New York, N. Y. Tank sampler. 1,819,358; Aug. 18.
Aronoff, Samuel, Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company. Testing meters. 1,819,494; Aug. 18.
Artcraft Iron Works, Inc. (See Korn, Harry, assignor.)
Arvey Corporation. (See Horwath, Julius, assignor.)
Aseltine, Fred E., and W. H. Teeter, assignors, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,819,495; Aug. 18.
Aspenleiter, Peter A., Cincinnati, Ohio, assignor, by mesne assignments, to United Autographic Register Co., Chicago, Ill. Paper cutter. 1,819,727; Aug. 18.
Assael, Maurice M., Paris, France. Decorative product. 1,819,535; Aug. 18.
Attlast Company, Inc. (See McCarthy, Richard B., assignor.)
Atwater Kent Manufacturing Company. (See Miller, John M., assignor.)
Aulenback, James R., Assignor to Aulenback Tool Company, Worcester, Mass. Internal micrometer gauge. 1,819,144; Aug. 18.
Aulenback Tool Company. (See Aulenback, James R., assignor.)
Aungst, Ira A., Canton, Ohio. Self winding electric clock. 1,819,761; Aug. 18.
Autocall Company, The. (See Richmond, Louis E., assignor.)
Autokraft Box Corporation. (See Hoy, John F., assignor.)
Automatic Washer Company. (See Schroeder, Simon E., assignor.)
Baader, Rudolph, Lubeck, Germany. Machine for splitting open, cleaning, and boning fish. 1,819,060; Aug. 18.
Babcock & Wilcox Company, The. (See Hubbard, Norman, assignor.)
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Babcock & Wilcox Company, The. (See Jones, William A., assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Babcock & Wilcox Company, The. (See Roger, John P., assignor.)
Badger, E. B., & Sons Company. (See Lunt, George P., assignor.)
Baehr, Justus W., Minneapolis, Minn. Artificial hand. 1,819,317; Aug. 18.
Bailey, Gerwin P., Salt Lake City, Utah. Sanding machine. 1,189,012; Aug. 18.
Bailey, Otterbein A., Chicago, Ill., assignor to Chicago Bridge and Iron Company. Floating roof. 1,819,401; Aug. 18.
Bailey, Otterbein A., Chicago, Ill., assignor to Chicago Bridge and Iron Company. Tank heater. 1,819,402; Aug. 18.
Baker, Frederick W., Oldswinford, Stourbridge, England, assignor to Trinity Wheel Corporation, New York, N. Y. Wheel rim. 1,819,403; Aug. 18.
Baker Nagle Company. (See Herman, Alfred B., assignor.)
Baker Oil Tools, Inc. (See Baker, Reuben C., assignor.)
Baker, Reuben C., Coalinga, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Well cementing apparatus. 1,819,668; Aug. 18.
Baker, Walter F., Newport News, Va. Manifold bookbinder. 1,819,940; Aug. 18.
Ball, Edwin C., St. Louis, Mo. Alternating current motor. 1,819,013; Aug. 18.
Ball, Harry V., Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y. Web roll controlling mechanism. 1,819,586; Aug. 18.
Ballard, Arthur H., Incorporated. (See Goodridge, George E., assignor.)

Ballauf, Fritz. (See Schmelzer, A., Müth, and Ballauf.)
Balzano, Oresto, New Haven, Conn., assignor to The Greist Manufacturing Company. Thread cutter. 1,819,404; Aug. 18.
Bancroft, James E., Detroit, Mich., assignor to Door-Motive Corporation, Worcester, Mass. Electric switch. 1,819,061; Aug. 18.
Banfield, Thomas H., assignor to Iron Fireman Manufacturing Company, Portland, Ore. Shaft coupling. 1,819,859; Aug. 18.
Banks, Robert W., El Dorado, Ark. Smoker's pipe. 1,819,062; Aug. 18.
Barattucci, Nicala, et al. (See Maile, Michael, assignor.)
Barber, Lytle D. (See Hile, T. J., and Barber.)
Barber, William, Brooklyn, N. Y. Valve seat grinder. 1,819,453; Aug. 18.
Barbieri, Cesare, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill. Cup machine. 1,819,318; Aug. 18.
Barker, Eros V., assignor to J. F. Martin, Bellevue, Ohio. Luggage carrier. Des. 84,867; Aug. 18.
Barrett Company, The. (See Hill, Joseph B., assignor.)
Barrett Company, The. (See Miller, Stuart P., assignor.)
Barron, Emma F., Ashland, Pa. Indicating or order card. 1,819,063; Aug. 18.
Bartholomew, Robert J., Germantown, assignor to Fletcher Works, Incorporated, Philadelphia, Pa. Throwing machine. 1,819,634; Aug. 18.
Baruch, Milton, Beverly Hills, Calif., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,819,454; Aug. 18.
Bassick Company, The. (See Martin, Raymond H., assignor.)
Bates, Ralph E., West Medford, Mass. Baseball game. 1,819,219; Aug. 18.
Bates, Richard W., Alameda, Calif. Smoke producing agent for use with golf balls. 1,819,352; Aug. 18.
Baugh, Homer G., Chicago, Ill. Multiple blade propeller. 1,819,728; Aug. 18.
Baumann, Fritz, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New vat dyestuffs of the dianthraquinonylamine carbazole series. 1,819,014; Aug. 18.
Baumgartner, Ernst, Kladno, Czechoslovakia. Operation of blast furnaces. 1,819,064; Aug. 18.
Bausch & Lomb Optical Co. (See Foster, Leon V., assignor.)
Baylis, Walter S., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif. Actuated clay and producing same. 1,819,496; Aug. 18.
Baysinger, Virgil R., Pittsburgh, Pa., assignor to Torridaire Company. Heating pack and composition therefor. 1,819,807; Aug. 18.
Beach, Harry L., Coshocton, Ohio. Rack for tires. Des. 84,868; Aug. 18.
Bear Manufacturing Company. (See Wochner, Henry, assignor.)
Beardsley & Wolcott Mfg. Co. (See Lucia, Louis V., assignor.)
Beck, John A. (See Rataau, H., and Beck.)
Beck, Walter, assignor to Deutsche Gold & Silber Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany. Destruction of animal pests. 1,819,145; Aug. 18.
Becker, Bernard C., Canton, assignor to The Hoover Company, North Canton, Ohio. Casing for a suction cleaner or similar article. Des. 84,869; Aug. 18.
Beckwith Manufacturing Company. (See Woodruff, Frank O., assignor.)
Beemack Furnace Company. (See MacDougall, Robert, assignor.)
Beeman, Edwin R., Minneapolis, Minn. Electrical door operating device. 1,819,809; Aug. 18.
Behle, Joseph, assignor to The Murray Company, Dallas, Tex. Rib grinding machine. 1,819,353; Aug. 18.
Behrman, Abraham S., assignor to General Zeolite Company, Chicago, Ill. Material preparation. 1,819,354; Aug. 18.
Beidler, George C., Rochester, N. Y. Photographic focus indicator. 1,819,065; Aug. 18.
Beidler, George C., Rochester, N. Y. Developing trays. 1,819,536; Aug. 18.
Bek, Ernst G. (See Smith, Joseph A., assignor.)
Belfils, Georges, Belfort, France, assignor to General Electric Company. Dynamo-electric machine. 1,819,860; Aug. 18.
Bell, Alfred B., assignor to Hale & Kilburn Co., Philadelphia, Pa. Individual chair. 1,819,808; Aug. 18.
Bell, Lawrence D., Los Angeles, and J. C. Rombach, Glendale, Calif., said Rombach assignor to said Bell. Cigar and cigarette lighter. 1,819,319; Aug. 18.
Bell Telephone Laboratories, Incorporated. (See Chaplin, Merle P., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mathes, Robert C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Whiting, Donald F., assignor.)
Bell, William H., North Olmsted, Ohio. Signal timing device. 1,818,983; Aug. 18.
Bendix Brake Company. (See Cautley, John R., assignor.)
Bendix Brake Company. (See Sanford, Roy, S., assignor.)
Bendix, Vincent. (See Snyder, Parke T., assignor.)
Benes, Josef, Vsetin, Czechoslovakia. Liquid fuel pump for internal combustion engines. 1,819,015; Aug. 18.
Benjamin, Bert R., Oak Park, and C. Pearson, Chicago, Ill., assignors to International Harvester Company. Mower hitch. 1,819,587; Aug. 18.
Benjamin Electric Manufacturing Company. (See Campbell, Guy, assignor.)
Bennett, Morris H., assignor to Scovill Manufacturing Company, Waterbury, Conn. Temperature control system and apparatus. 1,819,588; Aug. 18.
Berdell, Theodore V. D. (See Holz, August, assignor.)
Bergdoll, John G., assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,819,861; Aug. 18.
Berger, Herbert R., Brooklyn, N. Y. Tooth anchorage and connecting the same. 1,819,276; Aug. 18.
Bergstedt, Esther, International Falls, Minn. Sewing holder. 1,819,862; Aug. 18.
Berkshire Knitting Mills. See Ischinger, Alfred E., assignor.)
Bernau, Frederick W., Hillside, assignor to Ellis Adding Typewriter Company, Newark, N. J. Overdraft numeral key locking mechanism. 1,819,066; Aug. 18.
Bernau, Frederick W., Hillside, assignor to Ellis Adding Typewriter Company, Newark, N. J. Overdraft and signal printing mechanism for calculating machines. 1,819,067; Aug. 18.
Bernau, Frederick W., Hillside, assignor to Ellis Adding Typewriter Company, Newark, N. J. Overdraft and signal printing mechanism for calculating machines. 1,819,068; Aug. 18.
Berry, Herbert H., London, England. Electric heating element. 1,819,537; Aug. 18.
Beverage, Harold H., and H. O. Peterson, Riverhead, N. Y., assignors to Radio Corporation of America. Elimination of fading on short wave lengths. 1,819,589; Aug. 18.
Beveridge Paper Company. (See Ross, Harry M., assignor.)
Biggert, Florence C., jr., Crafton, and L. Johnson, Ingram, assignors to United Engineering & Foundry Company, Pittsburgh, Pa. Shearing metal plates. 1,819,635; Aug. 18.
Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Anchor. 1,819,762; Aug. 18.
Black, John C., Destreham, La., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Apparatus for decomposition and processing of petroleum hydrocarbons. 1,819,729; Aug. 18.
Blaskewitz, William, C. B. Overly, C. F. Lambert, and J. Ironside, Grosse Pointe, assignors, by mesne assignments, to Clayton & Lambert Manufacturing Co., Detroit, Mich. Stove structure. 1,819,669; Aug. 18.
Blattner, Carl F., assignor to Mission Dry Corporation, Ltd., Los Angeles, Calif. Dispensing stand. Des. 84,870; Aug. 18.
Blecker, William M., assignor of fifty-one per cent to E. A. Langenbach, Canton, Ohio. Continuous sheet mill. 1,819,762; Aug. 18.
Blecker, William M., assignor of fifty-one per cent to E. A. Langenbach, Canton, Ohio. Continuous strip mill. 1,819,764; Aug. 18.
Bleecker, Maitland B., Hempstead, N. Y. Helicopter. 1,819,863; Aug. 18.
Bloomberg, David J., Chelsea, Mass., assignor to General Electric Company. Electric fluid turbine. 1,819,864; Aug. 18.
Blunt, Edmund H., New York, N. Y. Locomotive feed water heater and pump. Re18,157; Aug. 18.
Bogert, John L., Brooklyn, N. Y. Vertical opposed cylinder internal combustion engine. 1,819,730; Aug. 18.
Bohn, Gebhard C., St. Paul, Minn. Door hardware with screw projection. 1,819,696; Aug. 18
Bol, Cornelis, assignor to N. V. Philips Gloeilampenfabrieken, Eindhoven, Netherlands. Incandescent body fastener. 1,819,146; Aug. 18.
Bonell, Ralph K., East Orange, N. J., assignor to American Telephone and Telegraph Company. Static frequency changer. 1,819,069; Aug. 18.
Borrmann, Arthur, assignor to S. Koch, Hamburg, Germany. Chemically impregnating jute sacks, tent cloth, and the like. 1,819,070; Aug. 18.
Bosenberg, Henry F., assignor to L. C. Schubert, New Brunswick, N. J. Climbing or trailing rose. Plant Pat. 1; Aug. 18.
Boudette, Cornelius G., Claremont, N. H., assignor to Sullivan Machinery Company. Power transmission and adjusting mechanism. 1,819,697; Aug. 18.
Bow, Edmund, and L. W. Jenks, Berkeley, Calif. Carburetor. 1,819,698; Aug. 18.
Bowden, Ernest J., West Chester, Pa. Rail connecting means. 1,819,810; Aug. 18.
Boynton, Alexander, San Antonio, Tex. Stage lift flowing device. 1,819,538; Aug. 18.
Boyton, John C., assignor to The Adalet Manufacturing Company, Cleveland, Ohio. Service entrance. 1,819,985; Aug. 18.
Brace, Porter H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical protective device. 1,819,969; Aug. 18.
Bradley, Charles S., assignor to American Ball Company, Minneapolis, Minn. Ball shaping apparatus. 1,819,220; Aug. 18.
Bragg, Gilbert A., Pittsburgh, Pa., assignor to The Koppers Company. Gas purification process. 1,819,833; Aug. 18.

Brancart, Arthur, Ronquieres, Belgium. Process of and apparatus for treating cast glass sheets and plates. 1,819,670; Aug. 18.
Brancart, Yvon, Verriers de Fauquez, Ronquieres, Belgium. Treatment of cast glass sheets and plates. 1,819,221; Aug. 18.
Brancart, Yvon, Verreries de Fauquez, Ronquieres, Belgium. Device for adjusting the thickness of glass plates and sheets. 1,819,222; Aug. 18.
Brancart, Yvon, Verreries de Fauquez, Ronquieres, Belgium. Glass rolling train. 1,819,223; Aug. 18.
Brancart, Yvon, Verreries de Fauquez, Ronquieres, Belgium. Table for casting glass sheets and plates. 1,819,224; Aug. 18.
Brandes Laboratories, Inc. (See Staunton, Le Roy W., assignor.)
Brandes Laboratories, Inc. (See Staunton, L. W., and Brigham, assignors.)
Breisky, John V. (See Crichton, L. N., and Breisky.)
Brennen, William T., Bridgeport, Pa. Steel strut wheel. 1,819,865; Aug. 18.
Bridsboro Steel Foundry and Machine Company. (See Martin, Mark H., assignor.)
Brigham, Cyril A. (See Staunton, L. W., and Brigham.)
Bringardner, Martin P., St. Louis, Mo. Arch support. 1,819,539; Aug. 18.
British Metallic Packings Company (1929) Limited. (See Jones, George F., assignor.)
Broadwell, Halvor S., and S. T. Thorpe, assignors to The Horton Manufacturing Company, Bristol, Conn. Fishing reel. 1,819,724; Aug. 18.
Broadwell, William C., Brooklyn, N. Y. Vehicle cushioning or shock absorbing device. 1,819,455; Aug. 18.
Bronander, Wilhelm B., Montclair, assignor to Scandia Manufacturing Company, Newark, N. J. Thermostatic switch control mechanism. 1,819,834; Aug. 18.
Bronson, Budd, Lakewood, assignor to The Ohio Rubber Company, Cleveland, Ohio. Rubber covered article and producing same. 1,819,147; Aug. 18.
Brooks, Frank T., Minot, N. Dak. Concrete slab. 1,819,405; Aug. 18.
Brosius, Oscar, Oil City, Pa. Hair curling bar. 1,819,731; Aug. 18.
Brotz, Frank G., assignor to Kohler Company, Kohler, Wis. Start and stop switch for combination dishwasher and sink. 1,819,355; Aug. 18.
Brown, Carl H., Macon, Ga. Apparatus for supplying water at various temperatures to dental syringes. 1,819,941; Aug. 18.
Brown Company. (See Richter, George A., assignor.)
Brown Company. (See Sherman, John C., assignor.)
Brown Company. (See Sleeper, C. W., Meglitz, and Parker, assignors.)
Brown, Jasper S. (See Loomis, A. G., Ambrose, and Brown.)
Brown, Leonard J., Tacoma, Wash. Tint laying machine. 1,819,071; Aug. 18.
Brown, Roy W., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Method and apparatus for use in manufacture of rubberized fabrics. 1,819,986; Aug. 18.
Browning, J. E., Company. (See Browning, Jonathan E., assignor.)
Browning, Jonathan E., assignor to J. E. Browning Company, Ogden, Utah. Automatic firearm. 1,818,984; Aug. 18.
Brownlee, Delmar T. (See Starkey, W. C., and Brownlee.)
Bryce, James W., Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y. Delinquency signaling system. 1,819,690; Aug. 18.
Buccola, Joseph, assignor to National Self Feeding Iron Company, Incorporated, Los Angeles, Calif. Electric soldering iron. 1,819,671; Aug. 18.
Budd Wheel Company. (See Hughes, James W., assignor.)
Budd Wheel Company. (See Roberts, Albert O., assignor.)
Budd Wheel Company. (See Wiles, Charles L., assignor.)
Buerger, Walter Z., Chicago, Ill. Storage battery tester. 1,819,072; Aug. 18.
Bulldog Electric Products Company. (See Frank, H. J. L., and Harper, assignors.)
Bumbaugh, George C., Canton, Ohio, assignor of one-half to J. S. McCormick Company, Pittsburgh, Pa. Chill for castings. 1,819,765; Aug. 18.
Buonamano, Salvatore. (See Cecio, L., and Buonamano.)
Burdett, Horace H., assignor to Draper Corporation, Hopedale, Mass. Selvage trimming mechanism. 1,819,540; Aug. 18.
Burke, Paul, and O. Orloff, assignors to Northwest Engineering Corporation, Green Bay, Wis. Excavating machine. 1,819,590; Aug. 18.
Burman, Abel, San Gabriel, Calif. Pocket penholder. 1,819,225; Aug. 18.
Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Pipe coupling. 1,818,985; Aug. 18.
Burt, Edwin, Canutillo, Tex. Filter. 1,819,700; Aug. 18.
Burton, Warren D. (See Page, C. B., and Burton.)
Burwell, Arthur W., Niagara Falls, assignor to Alox Chemical Corporation, New York, N. Y. Production of hydrogen and carbon from hydrocarbons. 1,819,732; Aug. 18.
Buten, William C., et al. (See Rosenhagen, Victor, assignor.)
Cain, John J., Bayonne, N. J. Apparatus for and making boiler headers. 1,819,636; Aug. 18.
Cain, John J., Bayonne, N. J. High pressure gauge cock. 1,819,672; Aug. 18.
California Bank. (See Gruss, Raymond E., assignor.)
Calimani, Attilio, and G. Campana, Milan, Italy, assignors of one-half to said Calimani, and one-half to G. Moneta. Device for milk vessels. 1,819,226; Aug. 18.
Camel Company. (See Wasberg, A., and Tobin, assignors.)
Cameron Can Machinery Company. (See Cameron, William, assignor.)
Cameron, James G., Aberfoyle, Scotland. Tamping and rolling machine operated by vibration. 1,819,866; Aug. 18.
Cameron, William, assignor to Cameron Can Machinery Company, Chicago, Ill. Stop mechanism for presses. 1,819,673; Aug. 18.
Campana, Giuseppe. (See Calimani, A., and Campana.)
Campbell, Guy, Tottenham, London, England, assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Shock absorbing mount or support. 1,819,835; Aug. 18.
Cannard, William H., Green Bay, and A. G. Lewis, La Crosse, Wis. Roll winding machine. 1,819,406; Aug. 18.
Capezio, Salvatore, East Paterson, N. J. Toe shield. 1,819,766; Aug. 18.
Carey-McFall Co. (See Reukauf, Edward, jr., assignor.)
Carey, Philip, Manufacturing Company, The. (See Greider, Harold W., assignor.)
Carleton, Herbert O., Brooklyn, N. Y., assignor to Duplex Motion Picture Industries, Inc. Photographic pointing apparatus. 1,819,541; Aug. 18.
Carlson, Herbert E., and C. S. Morse, De Kalb, Ill. Drink mixer. 1,819,637; Aug. 18.
Carlton, Charles W., Syracuse, N. Y. Rotary engine. 1,819,867; Aug. 18.
Carpenter, William C., San Francisco, Calif. Briquette forming and baking machine. 1,819,277; Aug. 18.
Carter, Emmett F., Schenectady, N. Y., assignor to General Electric Company. Electro-responsive device. 1,819,868; Aug. 18.
Carter, Emmett F., Schenectady, N. Y., assignor to General Electric Company. Control system. 1,819,869; Aug. 18.
Carter, William C., Flint, Mich. Electrically-operated fuel pump. 1,819,591; Aug. 18.
Carter, William C., Flint, Mich. Carburetor. 1,819,674; Aug. 18.
Carty, William M., assignor of one-third to E. J. Kerwin and two-thirds to Standard Brake Shoe & Foundry Co., Pine Bluff, Ark. Casting continuous polygonal bands. 1,819,942; Aug. 18.
Carver, Robert R., Cambridge, Mass., assignor to Union Special Machine Company, Chicago, Ill. Seam for sewed articles. 1,819,407; Aug. 18.
Case, J. I., Company. (See Davies, David P., assignor.)
Case, J. I., Company. (See Hendricks, Simeon B., assignor.)
Casein Manufacturing Company of America, Inc., The. (See Dunham, Henry V., assignor.)
Castelli, John, Carnegie, Pa. Torchière. 1,819,733; Aug. 18.
Caterpillar Tractor Co. (See Radford, William H., assignor.)
Catterall, Nathaniel, Bromley Cross, near Bolton, England. Device for checking or arresting shuttles within the shuttle boxes of looms. 1,819,943; Aug. 18.
Cautley, John R., South Bend, Ind., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill. Control mechanism for vehicle wheel brakes. 1,819,767; Aug. 18.
Cecio, Lorenzo, and S. Buonamano, Brooklyn, N. Y. Lamp. Des. 84,871; Aug. 18.
Central Electric Tool Company. (See Weyandt, Carl S., assignor.)
Central Electric Tool Company. (See Weyandt, C. S., and Fox, assignors.)
Chain Products Company, The. (See Olmstead, Fredrick A., assignor.)
Chamberlain Cartridge & Target Company. (See North, Paul, assignor.)
Channon, Henry C. (See Smith, W. S., Garnett, and Channon.)
Chaplin, Merle P., Waterville, Me., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Switch. 1,819,675; Aug. 18.
Chenney Brothers. (See Hood, L. N., and Scott, assignors.)
Chermack, Winclow R., Hopkins, Minn. Rotary hone. 1,819,408; Aug. 18.
Chicago Bridge and Iron Company. (See Bailey, Ottohein A., assignor.)
Chicago Pneumatic Tool Company. (See Coates, Charles B., assignor.)
Chicago Pneumatic Tool Company. (See Coates, C. B., and Dresser, assignors.)
Chicago Rawhide Manufacturing Co. (See Clark, Harold A., assignor.)
Chicago Telephone Supply Company. (See Schellenger, Newton C., assignor.)
Chinich, Nettie, Newark, N. J. Safety device for fire escapes. 1,819,073; Aug. 18.
Chioli, Angelo., et al. (See Maile, Michael, assignor.)
Chisholm, Charles F., Staten Island, N. Y. Combating sleet on airplanes. 1,819,497; Aug. 18.
Chorlton, Frank O. L., Bury, England. Expansible V-pulley drive. 1,819,227; Aug. 18.
Christie Hugh W., Tulsa, Okla. Gas burner. 1,819,944; Aug. 18.

Christmann, Ludwig J. (See Romieux, C. J., and Christmann.)
Church, John W., Carnegie, Pa. Making precipitated silica. 1,819,356; Aug. 18.
Cipriano, Gandolfo, Dongan Hills, N. Y. Hat press. 1,819,592; Aug. 18.
Clapp, Royal A., Brookline, Mass. Camera. 1,819,593; Aug. 18.
Clark, George C., Indianapolis, Ind. Indentification card and license holder. 1,819,870; Aug. 18.
Clark, Harold A., Northbrook, assignor to Chicago Rawhide Manufacturing Co., Chicago, Ill. Oil seal. 1,819,871; Aug. 18.
Clason, Jan C., Stockholm, Sweden. Arrangement for freeing boats from water. 1,819,074; Aug. 18.
Clausen, Harold C., assignor to The Union Switch & Signal Company. Swissvale, Pa. Track rail contactor. 1,818,970; Aug. 18.
Clayton & Lambert Manufacturing Co. (See Blaskewitz, W., Overly, Lambert, and Ironside, assignors.)
Clayton, Andrew B., Union, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine ruffling mechanism. 1,819,278; Aug. 18.
Clayton, Edwin E., New York, N. Y., assignor to C. P. Mackie, Newark, N. J. Fluid lift for liquids. 1,819,994; Aug. 18.
Clemens, Emanuel, East Orange, N. J. Button making machine. 1,819,811; Aug. 18.
Cleveland Heater Company, The. (See Friedman, Arthur, assignor.)
Cleveland Trust Company, The. (See Jardine, Frank, assignor.)
Coates, Charles B., and Clarence J. Dresser, Cleveland, Ohio, assignors to Chicago Pneumatic Tool Company, New York, N. Y. Electrical apparatus. 1,819,148; Aug. 18.
Coates, Charles B., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Rotor. 1,819,228; Aug. 18.
Coffing, Fredrick W., Perrysville, Ind. Flag clamp for poles. 1,819,768; Aug. 18.
Cole, James D., Cleveland Heights, assignor, by mesne assignments, to The A. I. Root Company, Medina, Ohio. Air circulating and clarifying unit. 1,819,498; Aug. 18.
Cole, John M. (See Schimpf, Walter H., assignor.)
Coley, Archibald T. (See Martin, P. J., and Coley.)
Colitz, Jacob, Chicago, Ill. Wire dispensing apparatus. 1,819,734; Aug. 18.
Collet, Maurice, assignor to Les Fils d'Albert Collet, Paris, France. Ballast tamping machine. 1,819,945; Aug. 18.
Columbia Axle Company, The. (See Mooers, L. P., and Fies, assignors.)
Combustion Engineering Corporation. (See Kreisinger, Henry, assignor.)
Combustion Utilities Corporation. (See Klees, Albert L., assignor.)
Compagnie International Des Freins Automatiques Societe Anonyme. (See Pieper, Henri, assignor.)
Connor, Robert A., assignor to Inca Manufacturing Corporation, Fort Wayne, Ind. Magnet coil and making same. 1,819,638; Aug. 18.
Conrad, Frank, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Telephone receiver. 1,819,409; Aug. 18.
Consolidated Steel Corporation. (See Kinnard, Luther J., assignor.)
Constant, Eugène and L., Roubaix, France. Dyeing machine with pivoting vat. 1,819,229; Aug. 18.
Constant, Louis. (See Constant, Eugène and L.)
Constant, Peter M., assignor to Neckar Water Softener Corporation, New York, N. Y. Hot water treatment. 1,819,149; Aug. 18.
Container Patents Corporation. (See Whiting, Jasper, assignor.)
Continental Can Company. (See O'Neil, J. H., and Kronquest, assignors.)
Continental Oil Company. (See Zurcher, Paul, assignor.)
Cook, Giles H., Des Moines, Iowa. Exhaust steam nozzle for locomotives. 1,819,534; Aug. 18.
Cook, Thomas E., Detroit, Mich. Collapsible chicken crate. 1,819,735; Aug. 18.
Cooke, George G., and M. E. Dayton, assignors of one-third to F. W. Smith, Detroit, Mich. Interchangeable tire valve. 1,819,872; Aug. 18.
Cooke, Milton W., Pittsburgh, Pa. Insulator clevis. 1,819,500; Aug. 18.
Cooling & Air Conditioning Corporation, The. (See Fleisher, Walter L., assignor.)
Cooling Tower Co., The. (See Dauphinee, George S., assignor.)
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,872; Aug. 18.
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,873; Aug. 18.
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,874; Aug. 18.
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,875; Aug. 18.
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,876; Aug. 18.
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,877; Aug. 18.
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,878; Aug. 18.
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,879; Aug. 18.
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,880; Aug. 18.
Cooper, Boris, Brooklyn, N. Y. Belt buckle combination. Des. 84,881; Aug. 18.
Cordes, John H., St. Louis, Mo. Gas generating apparatus. 1,819,230; Aug. 18.
Cornstalk Products Company. (See Darling, Elton R., assignor.)
Cornstalk Products Company. (See Dorner, Béla, assignor.)
Costigan, Charles C., assignor of one-half to A. E. Cromer and one-half to A. R. Jones, Christiansburg, Va. Furniture polish. 1,819,736; Aug. 18.
Cottet, Andre E. (See Nandillon, A. E. G., and Cottet.)
Coupland, Richard C., Norfolk, Va. Gun sight. 1,819,769; Aug. 18.
Courtney, Nicholas P., Passaic, N. J. Receptacle opener. 1,819,873; Aug. 18.
Coyle, John F., St. Louis, Mo. Container. 1,819,279; Aug. 18.
Craig, Richard M., San Antonio, Tex. Radio recording means. 1,819,737; Aug. 18.
Crandall, William B. (See Krotzer, F. A., and Crandall.)
Crawford, Emerick B., New Haven, and M. Turrell, Waterbury, assignors to The Crawford Oven Company, New Haven, Conn. Baking oven. 1,819,231; Aug. 18.
Crawford Oven Company, The. (See Crawford, E. B., and Turrell, assignors.)
Crichton, James V., assignor of one-half to K. Salberg, Philadelphia, Pa. Airplane wing construction. 1,818,971; Aug. 18.
Crichton, Leslie N., and J. V. Breisky, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Relay. 1,819,501; Aug. 18.
Cromar Co., The. (See Dittmar, Irvin F., assignor.)
Cromer, Archie E., et al. (See Costigan, Charles C., assignor.)
Crookshanks, John, Langside, Glasgow, Scotland. Heel for footwear. 1,819,874; Aug. 18.
Cropper, Thomas, Erdington, England. Instrument for determining the quality of balls for games and components therefor. 1,819,232; Aug. 18.
Cross, Roy, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Converting petroleum hydrocarbons. 1,819,542; Aug. 18.
Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Valve stem. 1,819,150; Aug. 18.
Crowley, John C., Cleveland Heights, Ohio. Interchangeable valve stem. 1,819,151; Aug. 18.
Crum, Roland R., Whittier, assignor, by mesne assignments, to J. Grant, Los Angeles, Calif. Underreamer. 1,819,357; Aug. 18.
Crum, Roland R., Whittier, assignor, by mesne assignments, to J. Grant, Los Angeles, Calif. Underreamer. 1,819,358; Aug. 18.
Crutchlow, William, assignor of one-half to W. Crutchlow, jr., Fullerton, Pa. Weft stop motion mechanism. 1,819,320; Aug. 18.
Crutchlow, William, jr. (See Crutchlow, William, assignor.)
Culpepper, Roland L. (See Richardson, E. E., and Culpepper.)
Cunningham, Marion S., Dallas, Tex. Safety casing head for oil wells. 1,819,875; Aug. 18.
Curdes, Louis E., Napoleon, Ohio. Safety razor. 1,819,876; Aug. 18.
Curtis Manufacturing Company. (See Ackerman, Frank, assignor.)
Cutler-Hammer Inc. (See Lockett, Ralph G., assignor.)
Cutler-Hammer, Inc. (See Shroder, Harry A., assignor.)
Cutsinger, Roy. (See Parker, E. A., and Cutsinger.)
Daae, Reinhardt, Youngstown, Ohio. Gas producer. 1,819,836; Aug. 18.
Dalén, Gustav. (See Schopper, A., and Dalén.)
Dalén, Gustaf, and S. A. Eskilson, Stockholm, Sweden, assignors to American Gasaccumulator Company, Elizabeth, N. J. Gas light signal apparatus. 1,819,676; Aug. 18.
Da-Lite Screen Company, The. (See Heck, Jacob C., assignor.)
Dalton, Hubert K., Stamford, Conn. Smoker's stand or analogous article. Des. 84,882; Aug. 18.
Daly, Joseph P., assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine mechanism. 1,819,639; Aug. 18.
Damico, Leo A., Wilkes-Barre, Pa. Shuttle check and release. 1,819,946; Aug. 18.
Daniels, Ludlow, Dallas, Tex. Spectacles. 1,819,738; Aug. 18.
D'ans, Jean, assignor to Deutsche Gasglühlicht-Auer-Gesellschaft mit beschrankter Haftung, Berlin, Germany. Decomposing ores of the rare earths, of zirconium and titanium, in a cycle by means of sulphuric acid. 1,819,770; Aug. 18.
Darling, Elton R., Danville, Ill., assignor to Cornstalk Products Company, Inc., New York, N. Y. Preparation of pentosans. 1,819,233; Aug. 18.
Darr, Milford L., Oakland, Calif. Helicopter. 1,819,075; Aug. 18.

Darrah, William A., Chicago, Ill. Apparatus and process for producing sheets. 1,819,771; Aug. 18.
Darrah, William A., Chicago, Ill. Applying heat. 1,819,772; Aug. 18.
Dauphinee, George S., Brooklyn, assignor to The Cooling Tower Co., Inc., New York, N. Y. Air washer. 1,819,595; Aug. 18.
Davey, George W., Long Island City, N. Y. Air and water cooled furnace and generator block. 1,819,016; Aug. 18.
Davies, David P., assignor to J. I. Case Company, Racine, Wis. Tractor. 1,819,640; Aug. 18.
Davies, Rhys, Fort Wayne, Ind. Electrical heater. 1,819,076; Aug. 18.
Davis, Arthur C., Westminster, London, England. Manufacture of cement and the like. 1,819,739; Aug. 18.
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Control for fluid motors. 1,819,641; Aug. 18.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,819,280; Aug. 18.
Davis, Ernest W., Oak Park, assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating system and lubricator therefor. 1,819,359; Aug. 18.
Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Harness leveling mechanism. 1,819,543; Aug. 18.
Davis, Kenneth, assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del. Mechanism and separating intermixed divided materials. 1,819,995; Aug. 18.
Davis, Kenneth, Ebensburg, Pa., assignor, by mesne assignments to Peale-Davis Company, Wilmington, Del. Mechanism for separating intermixed divided materials. 1,819,996; Aug. 18.
Davis, Norman E., Chelmsford, and W. T. Ditcham, Colchester, England, assignors to Radio Corporation of America. Wireless transmitter. 1,819,596; Aug. 18.
Davis, Roy P. M., Mount Union, Pa. Brick making machine. 1,819,740; Aug. 18.
Davis, Roy P. M., Mount Union, Pa. Brick making machine. 1,819,741; Aug. 18.
Dayton, Max E. (See Cooke, G. G., and Dayton.)
Dech, Herbert A., Northampton, Pa. Weeding apparatus. 1,819,544; Aug. 18.
Decker, Martin L., Kansas City, Mo. Piston groove cleaner and ring compressor. 1,819,321; Aug. 18.
Deere & Company. (See Silver, Walter H., assignor.)
Defiance Sales Corporation. (See Linsner, Arthur F., assignor.)
De Filippi, Carlo, Milan, Italy. Electric-penumatic thermoscope available as fire indicators and for like purposes. 1,819,077; Aug. 18.
De George, Joe, Ashtabula, Ohio. Hat hanger. Des. 84,883; Aug. 18.
De Giers, Clarence A., New York, N. Y., assignor, by mesne assignments, to The Liquidometer Corporation, Wilmington, Del. Liquid level indicator. 1,818,972; Aug. 18.
De Giers, Clarence A., Forest Hills, assignor to Liquidometer Corporation, Long Island City, N. Y. Float arm seal. 1,818,973; Aug. 18.
De Graff, Wilbur C., assignor to The Warner & Swasey Company, Cleveland, Ohio. Chuck. 1,819,837; Aug. 18.
Dehn, William M., Seattle, Wash. Impregnating plant tissues with sodium nitrate for explosive purposes. 1,819,456; Aug. 18.
Dehn, William M., Seattle, Wash. Colloided starch explosive and manufacturing the same. 1,819,457; Aug. 18.
Dehn, William M., Seattle, Wash. Propellent explosive. 1,819,458; Aug. 18.
Delahaye, Armand, Calais, France. Lace. Des. 84,884; Aug. 18.
Delahaye, Armand, Calais, France. Lace. Des. 84,885; Aug. 18.
Delco Products Corporation. (See Aseltine, F. E., and Teeter, assignors.)
Delco Products Corporation. (See Elsey, George W., assignor.)
Delco Products Corporation. (See Rossman, Edwin F., assignor.)
Delco Products Corporation. (See Teeter, Wilford H., assignor.)
Dellinger, Martin C., Lancaster, Pa. Safety razor handle. 1,819,742; Aug. 18.
Delp, Roland A., Oakland, Calif. Automobile top. 1,819,545; Aug. 18.
De Luxe Metal Furniture Company. (See Sandberg, Robert E., assignor.)
Denmire, Harold A., assignor to The General Tire and Rubber Company, Akron, Ohio. Fabric cutting machine. 1,819,773; Aug. 18.
Deutsche Gasglühlicht-Auer-Gesellschaft mit beschrankter Haftung. (See D'ans, Jean., assignor.)
Deutsche Gold & Silber Scheideanstalt, vormals Roessler. (See Beck, Walter, assignor.)
De Waele, Armand, Old Southgate, London, assignor to D. Gestetner, Limited, London, England. Stencil sheet for use in duplicating typewritten or manuscript documents, drawings, and the like. 1,819,078; Aug. 18.
Dewey, Charles S., Hamburg, assignor to National Aniline & Chemical Company Inc., New York, N. Y. Tetrakisazo dyes. 1,819,079; Aug. 18.
Dewey, Charles S., Hamburg, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Production of trisazo dyes. 1,819,080; Aug. 18.
Dexter, Benjamin R., Oakland, Calif. Spring. 1,819,281; Aug. 18.
Diago, Federico G., Habana, Cuba. Airplane. 1,819,948; Aug. 18.
Dickinson, Fairleigh S., Rutherford, N. J. Manometer. 1,819,282; Aug. 18.
Dill Manufacturing Company, The. (See Crowley, John C., assignor.)
Ditcham, William T. (See Davis, N. E., and Ditcham.)
Dittmar, Irvin F., assignor to The Cromar Co., Williamsport, Pa. Guide for strip finishing machines. 1,819,081; Aug. 18.
Dixson, Harry, assignor to Rolscreen Company, Pella, Iowa. Roll screen installation for casement windows. 1,819,360; Aug. 18.
Dodge, Adiel Y., South Bend, Ind. Head lamp lens. 1,819,283; Aug. 18.
Dodge, Horace E., Boat & Plane Corporation. (See Horn, William M., assignor.)
Doehler Die-Casting Co. (See Morin, Louis H., assignor.)
Doehring, Stephen C., Chicago, Ill. Boring ripper. 1,819,949; Aug. 18.
Doherty, Henry L., New York, N. Y. House heating system. 1,819,459; Aug. 18.
Dolia, Antonio, Crescenzago, Italy. Former for artificial flowers. 1,819,234; Aug. 18.
Donmac Products Corporation. (See Mackenzie, Donald G., assignor.)
Donnellan, Edward P., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y. Coin counting machine. 1,819,235; Aug. 18.
Dooley, Channing R. (See Harris, Barnett, assignor.)
Door-Motive Corporation. (See Bancroft, James E., assignor.)
Dorman, Neal W., and M. R. Hatch, assignors to The Toledo Machine & Tool Company, Toledo, Ohio. Power press control. 1,818,986; Aug. 18.
Dorner, Béla, Budapest, Hungary, assignor, by mesne assignments, to Cornstalk Products Company. Treating cellulosic material. 1,819,152; Aug. 18.
Doughnut Machine Corporation. (See Hunter, Herbert T., assignor.)
Douglass, Eloise K. (See Douglass, Frank J., assignor.)
Douglass, Frank J., assignor to E. K. Douglass, Chicago, Ill. Radiator. 1,819,812; Aug. 18.
Dow Chemical Company, The. (See Zuckermandel, Edward C., assignor.)
Downey, Clement L., Cincinnati, Ohio. Coin counting and assorting machine. 1,819,701; Aug. 18.
Drake, George, Linden, N. J. Engine piston. 1,819,702; Aug. 18.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. System for grinding and polishing glass sheets. 1,819,017; Aug. 18.
Draper Corporation. (See Burdett, Horace H., assignor.)
Draper Corporation. (See Davis, Harry A., assignor.)
Draper Corporation. (See Wright, James C., assignor.)
Dresser, Clarence J. (See Coates, C. B., and Dresser.)
Ducasse, Maurice, San Francisco, Calif. Extractor. 1,819,322; Aug. 18.
Duer, Lee W., assignor to Elgin Manufacturing Company. Measuring device for filling machines. 1,819,361; Aug. 18.
Duffy, Charles H., Miami, Fla. Radio loud speaker and the like. 1,818,987; Aug. 18.
Dufour, Léon, Versoix, near Geneva, Switzerland. Tilling machine. 1,819,950; Aug. 18.
Dulany, G. W., Trust, The. (See Page, C. B., and Burton, assignors.)
Dulany, G. W., Trust, The. (See White, Raymond C., assignor.)
Dumas, Edward, Marquette, Mich. Bird nest holder. 1,819,877; Aug. 18.
Du Mond, Chester J., Jersey City, N. J. Bouyant drum for motor pontoons. 1,819,409; Aug. 18.
Duncan, Herbert L., assignor of one-half to L. P. Threlkeld, Highland Park, Mich. Mechanism for automatically and synchronously adjusting the ignition and valve mechanism of internal combustion engines for speed and power. 1,819,743; Aug. 18.
Dundas, Kenneth. (See Melville, A., Dundas, and Whitson.)
Dunham, Henry V., Mount Vernon, assignor, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y. Producing low viscosity casein. 1,818,878; Aug. 18.
Dunham, Henry V., Bainbridge, assignor, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y. Treatment of casein. 1,819,879; Aug. 18.
Dunham, Henry V., Bainbridge, assignor by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y. Treating rennet casein and product thereof. 1,819,880; Aug. 18.

Dunkelmann, Hans., Kiel, assignor to Fried Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Germany. Internal combustion engine cooling system. 1,819,744; Aug. 18.

Dunlop, James, Park Ridge, Ill., assignor, by mesne assignments, to Westinghouse Electric Elevator Company. Safety device for elevators. 1,819,502; Aug. 18.

Dunlop Rubber Company. (See Madge, Evelyn W., assignor.)

Dunn, William G., Clarinda, Iowa. Telephone construction. 1,819,362; Aug. 18.

Duplate Corporation. (See Lytle, William O., assignor.)

Duplate Corporation. (See Penning, Nicholas J., assignor.)

Duplex Motion Picture Industries, Inc. (See Carleton, Herbert O., assignor.)

Du Pont, E. I., de Nemours & Company. (See Funk, Forest J., assignor.)

Du Pont, E. I., de Nemours & Company. (See Hahn, Frederick C., assignor.)

Du Pont, E. I., de Nemours & Company. (See Kharasch, Morris S., assignor.)

Du Pont Viscoloid Company. (See Sherts, James H., assignor.)

Dura Company, The. (See Graff, George, assignor.)

Durdin, Augustus C., jr., Chicago, Ill. Automatic control for motors. 1,819,774; Aug. 18.

Duriron Company, The. (See Jacobsen, Oystein, assignor.)

Duriron Company, The. (See Parsons, James A., assignor.)

Dyche-Teague, Francis C., London, England. Production of plastic products, paints and lacquers. 1,819,136; Aug. 18.

Easton, Henry S., Greenfield, Iowa. Gopher trap. 1,819,546; Aug. 18.

Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. Semitop joint for fluid filled cables. 1,819,881; Aug. 18.

Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. Insulated cable joint. 1,819,882; Aug. 18.

Eckert, Wilhelm, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Nitrogen-containing vat dyestuffs of the naphthoylene-diarylimidazol series and preparing them. 1,819,082; Aug. 18.

Edwards, William A., assignor to Stewart-Warner Corporation, Chicago, Ill. Fuel feeding device. 1,819,236; Aug. 18.

Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Phonograph reproducer. 1,819,083; Aug. 18.

Ehnert, August, Kiel, Wis. Wheelbarrow. 1,819,951; Aug. 18.

Eichwede, Heinz, and E. Fischer, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs from sulphoaryl-3-Carboxylic acid ester-5-pyrazolones. 1,819,547; Aug. 18.

Eisler, Charles, Newark, N. J., assignor to Eisler Electric Corporation. Combined machine for exhausting, bombarding, and sealing off radiotubes, lamp bulbs, and the like. 1,819,597; Aug. 18.

Eisler Electric Corporation. (See Eisler, Charles, assignor.)

Ekedahl, Erik A., assignor to The General Fireproofing Company, Youngstown, Ohio. Bank counter structure. 1,819,153; Aug. 18.

Electric Boat Company. (See Grieshaber, Hugo E., assignor.)

Electrical Engineers Equipment Co. (See Hoye, Peder B., assignor.)

Elgin Manufacturing Company. (See Duer, Lee W., assignor.)

Elko Chemical Company, The. (See Masters, Carl L., assignor.)

Ellenberger, Clarence M., Detroit, Mich., assignor, by mesne assignments, to Oakes Products Corporation. Vise grip lock. 1,819,813; Aug. 18.

Elliott Addressing Machine Company. (See Elliott, Harmon P., assignor.)

Elliott-Fisher Company. (See Vickers, Harry H., assignor.)

Elliott, Harmon P., Watertown, Mass., assignor to Elliott Addressing Machine Company. Stencil machine and stencil therefor. Re18,151; Aug. 18.

Ellis Adding Typewriter Company. (See Bernau, Frederick W., assignor.)

Ellis Adding Typewriter Company. (See Ens, Emil J., assignor.)

Elmendorf, Armin, assignor to The Flexwood Company, Chicago, Ill. Flexible wood-faced sheet material. 1,819,775; Aug. 18.

Elsey, George W., Dayton, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Hydraulic shock absorber. 1,819,503; Aug. 18.

Emerson Electric Mfg. Co., The. (See Rodgers, James A., assignor.)

Engelmann, Max, assignor to Ernst Leitz, Optische Werke, Wetzler, Germany, Binocular microscope. 1,818,974; Aug. 18.

Ens, Emil J., assignor to Ellis Adding Typewriter Company, Newark, N. J. Quadruplex accumulator calculating machine. 1,819,064; Aug. 18.

Erickson, Charles, St. Cloud, Minn. Vehicle snubber. 1,819,548; Aug. 18.

Erie Malleable Iron Company. (See Metcalf, George R., jr., assignor.)

Erie Malleable Iron Company. (See Waite, Lorenzo E., assignor.)

Eriksson, Johan A., Stockholm, Sweden. Manufacturing porous material from Portland cement. 1,819,018; Aug. 18.

Ernst, Walter. (See Niederreither, H., and Ernst.)

Ernst, Walter, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. 1,819,703; Aug. 18.

Eschholz, Otto H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vacuum circuit breaker. 1,819,154. Aug. 18.

Eskilson, Sven A. (See Dalén, G., and Eskilson.)

Euclid Crane & Hoist Company, The. (See White, William, assignor.)

Evans, Albert E., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for applying felts to glass polishing blocks. 1,818,975; Aug. 18.

Evans, Keith J., Chicago, Ill., and A. O. Williams, Battle Creek, Mich.; said Williams assignor to said Evans. Mail bag carrier. 1,819,598; Aug. 18.

Everlastick Varnish, Inc. (See Hayes, Dewey L., assignor.)

Evinrude, Ole, Milwaukee, Wis., assignor, by mesne assignments, to Outboard Motors Corporation. Four cylinder outboard motor. 1,819,323; Aug. 18.

Fairchild, Charles N., Milford, Conn., assignor to Fairchild Lock Corporation, New York, N. Y. Gas lock. 1,819,085; Aug. 18.

Fairchild Lock Corporation. (See Fairchild, Charles N., assignor.)

Fales, Elisha N., Dayton, Ohio. Instrument for indicating velocity and direction of flow of fluid. 1,819,155; Aug. 18.

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,819,504; Aug. 18.

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,819,505; Aug. 18.

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,819,506. Aug. 18.

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,819,507; Aug. 18.

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,819,642; Aug. 18.

Faultless Rubber Company, The. (See Miller, T. W., and Greene, assignors.)

Fazekas, Antou, San Francisco, Calif. House-number-plate. Des. 84,886; Aug. 18.

Federal Telegraph Company. (See Kruesi, Geoffrey G., assignor.)

Felten & Guilleaume Carlswerk Aktiengesellschaft. (See Schurer, Eugen., assignor.)

Fenton, Paul E., Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn. Self adjusting carpet fastener. 1,819,156; Aug. 18.

Ferguson, Samuel B., Harlingen, Tex. Railroad tie. 1,819,019; Aug. 18.

Fernandez, Ataulfe F. y., Habana, Cuba. Fuel burner. 1,819,363; Aug. 18.

Fiat Societa Anonima. (See Valletta, Vittorio, assignor.)

Fiberfraks Inc. (See Holcomb, Harry E., assignor.)

Fies, Herbert W. (See Mooers, L. P., and Fies.)

Fiessler, August, Berlin-Wilmersdorf, Germany. Pessary. 1,819,549; Aug. 18.

Filtrol Company of California. (See Baylis, Walter S., assignor.)

Fink, Berl I., assignor of one-third to J. R. Wheeler and one-third to C. E. Fink, Hinton, W. Va. Automatic hand brake release. 1,819,952; Aug. 18.

Finkenbinder, Charles E., Los Angeles, Calif. Locking apparatus for doors. 1,819,410; Aug. 18.

Fireproof Wall Company. (See Thurman, William B., assignor.)

Firestone Tire and Rubber Company. (See Brown, Roy W., assignor.)

Firestone Tire and Rubber Company, The. (See Jones, Robert R., assignor.)

Firestone Tire and Rubber Company, The. (See Stevens, William C., assignor.)

Firth, David, assignor to Marvel Carbureter Company, Flint, Mich. Heat control apparatus. 1,819,284; Aug. 18.

Firth, Lewis G., Pittsburgh, and E. B. Welch, assignors to Firth-Sterling Steel Company, McKeesport, Pa. Hot top. 1,819,364; Aug. 18.

Firth, Lewis G., Pittsburgh, assignor to Firth-Sterling Steel Company, McKeesport, Pa. Mold. 1,819,365; Aug. 18.

Firth-Sterling Steel Company. (See Firth, Lewis G., assignor.)

Firth-Sterling Steel Company. (See Firth, L. G., and Welch, assignors.)

Fischer, Erich. (See Eichwede, Heinz, and Fischer.)

Fisk Rubber Company, The. (See Lehman, Paul W., assignor.)

Fisk Rubber Company, The. (See Sullivan, Michael F., assignor.)

Fitter, Charles F., Coscob, Conn. Fountain brush. 1,819,157; Aug. 18.

Fitzgerald, Cecil Y. (See Pierson, C. W., Fitzgerald, and Thomae.)

Fleece, Granville S., Memphis, Tenn. Defrosting device for refrigerators. 1,819,324; Aug. 18.

Fleischel, Gaston, Bieneau, France. Control system for automatic gear and clutch shifting assemblies. 1,819,237; Aug. 18.

Fleischer, Max, Brooklyn, assignor to Out of the Inkwell Films, Inc., New York, N. Y. Producing films. 1,819,883; Aug. 18.

Fleisher, Walter L., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y. Cooling and drying air. 1,819,643; Aug. 18.

Fletcher Works, Incorporated. (See Bartholmew, Robert J., assignor.)

Flexwood Company, The. (See Elmendorf, Armin., assignor.)

Flowers, Henry F., Findlay, Ohio. Fluid pressure raising mechanism. 1,819,411; Aug. 18.

Forés, Fernando, Manila, Philippine Islands. Nostril insert. 1,819,884; Aug. 18.

Forrester, Samuel C., Atlanta, Ga., assignor to Fulton Bag & Cotton Mills. Tent. 1,820,002; Aug. 18.

Foster, Leon V., assignor to Bausch & Lomb Optical Co., Rochester, N. Y. Ophthalmic lens. 1,819,325; Aug. 18.

Fourness Development Corporation, The. (See Fourness, Wilfred, assignor.)

Fourness, Wilfred., Oakland, Calif., assignor to The Fourness Development Corporation, New York, N. Y. High speed compressor. 1,819,285; Aug. 18.

Fox, Harold E. (See Weyandt, C. S., and Fox.)

Francis, Oliver T., Quantico, Va. Transmission system. 1,819,599; Aug. 18.

Frank, Alexander, New York, N. Y. Switch box support. 1,819,460; Aug. 18.

Frank, Harrison J. L., and W. A. Harper, assignors to Bulldog Electric Products Company. Detroit, Mich. Duct for current distributing systems. 1,819,885; Aug. 18.

Frank, Harrison J. L., and W. A. Harper, assignors to Bulldog Electric Products Company, Detroit, Mich. Trolley for current distributing systems. 1,819,886; Aug. 18.

Frank, Leo C., Forest Hills, Pa., assignor to Westinghouse Electric Manufacturing Company. Magnetically operated valve. 1,819,461; Aug. 18.

French Battery Company. (See Graham, J. H., and Gunderson, assignors.)

Fridolph, Annette, New York, assignor to A. B. A. Specialties Company, Inc., New York, N. Y. Fastening means. 1,819,412; Aug. 18.

Fried Krupp Germaniawerft Aktiengesellschaft (See Dunkelmann, Hans., assignor.)

Friedman, Arthur, assignor to The Cleveland Heater Company, Cleveland, Ohio. Water heater circulating coil. 1,819,550; Aug. 18.

Friedman, Daniel L. (See Goodman, L., and Friedman.)

Friend, Richard N., Sioux City, Iowa. Tubular structure. 1,189,086; Aug. 18.

Frigidaire Corporation. (See Horlacher, Elmer L., assignor.)

Frigidaire Corporation. (See Hull, Harry B., assignor.)

Frigidaire Corporation. (See Summers, Otto M., assignor.)

Friz, Adolf, Stuttgart-Cannstatt, Germany. Press. 1,819,704; Aug. 18.

Fry, Benjamin L., assignor to National Sales Machine Company, St. Louis, Mo. Coin controlled mechanism. 1,819,413; Aug. 18.

Fry, Lawford H., Burnham, and E. M. Shannon, Bala, Pa. Crosshead. 1,819,887; Aug. 18.

Fuerst, Edwin W., Toledo, Ohio. Bottle. Des. 84,887; Aug. 18.

Fuller Lehigh Company. (See Jacobus, David S., assignor.)

Fulton Bag & Cotton Mills. (See Forrester, Samuel C., assignor.)

Fulton Iron Works Company. (See Hegenbarth, Francis, assignor.)

Funk, Forest J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Seed disinfectant. 1,819,953; Aug. 18.

Furness Corporation. (See Furness, William H., assignor.)

Furness, William H., National Park, N. J., assignor to Furness Corporation, Philadelphia, Pa. Artificial silk making apparatus. 1,819,020; Aug. 18.

G & G Atlas Systems, Inc. (See Stoetzel, Joseph J., assignor.)

G & W Electric Specialty Co. (See Rah., Joseph., assignor.)

Gäbel, Georg, Dresden, Germany. Shaker machine with automatic mold transport for shanking-down chocolate or similar masses in the molds. 1,819,888; Aug. 18.

Gainer, Frank J., Woodriver, Ill., assignor to Standard Oil Company, Whiting, Ind. Filtration of tar. 1,819,745; Aug. 18.

Galanti, Amilcare, Philadelphia, Pa. Transmission mechanism. 1,819,677; Aug. 18.

Gale, Charles E., Boston, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Printing on the pages of a book. 1,819,158; Aug. 18.

Gale, Charles E., Boston, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Book. 1,819,159; Aug. 18.

Gale, Charles E., Boston, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Method of and apparatus for printing. 1,819,160; Aug. 18.

Gale, Charles E., Boston, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Printing machine. 1,819,326; Aug. 18.

Gallon Iron Works & Mfg. Co., The. (See Arndt, Franklin E., assignor.)

Gallagher, George F., assignor to Krem-Ko Company, Chicago, Ill. Bottle or similar article. Des. 84,888; Aug. 18.

Gallagher, John, Philadelphia, Pa. Advertising device. 1,818,088; Aug. 18.

Garnett, Henry J. (See Smith, W. S., Garnett, and Channon.)

Garratt, Stephen E., Manchester, assignor to J. W. Jackman & Company Limited, Salford, England. Sand blast machine. 1,819,021; Aug. 18.

Gasoline Products Company. (See Black, John C., assignor.)

Gasoline Products Company. (See Cross, Roy, assignor.)

Gasoline Recovery Corporation. (See Hass, Henry B., assignor.)

Gathmann, Emil, Baltimore, Md. Ingot mold. 1,819,705; Aug. 18.

Geier, P. A., Company, The. (See Martinet, Eugene F., assignor.)

Geiger, Edward F., Binghamton, N. Y. Carburetor. 1,819,706; Aug. 18.

"Geigy, J. R., S. A." (See Krebser, A., and Wysard, assignors.)

General Aniline Works, Inc. (See Baumann, Fritz, assignor.)

General Aniline Works, Inc. (See Eckert, Wilhelm, assignor.)

General Aniline Works, Inc. (See Eichwede, H., and Fischer, assignors.)

General Aniline Works, Inc. (See Herz, R., and Schubert, assignors.)

General Aniline Works, Inc. (See Laska, L., and Zitscher, assignor.)

General Aniline Works, Inc. (See Schmelzer, A., Müth, and Ballauf, assignors.)

General Aniline Works, Inc. (See Zerweck, W., and Honold, assignors.)

General Electric Company. (See Belfils, Georges, assignor.)

General Electric Company. (See Bloomberg, David J., assignor.)

General Electric Company. (See Carter, Emmett, E., assignor.)

General Electric Company. (See Eby, Eugene D., assignor.)

General Electric Company. (See Kearsley, William K., assignor.)

General Electric Company. (See Love, Joseph E., assignor.)

General Electric Company. (See Maser, Harold T., assignor.)

General Electric Company. (See Taylor, George F., assignor.)

General Electric Company. (See Wilson, Charles E., assignor.)

General Fireproofing Company, The. (See Ekedahl, Erik A., assignor.)

General Ice Scoring Machine Company. (See Lee, Aubrey M., assignor.)

General Tire and Rubber Company. (See Denmire, Harold A., assignor.)

General Zeolite Company. (See Behrman, Abraham S., assignor.)

George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Apparatus for cooling and annealing metal bars. Re18,152; Aug. 18.

Gerber, Albert H., and J. P. Marchal, St. Paul, Minn. Direction signal for motor vehicles. 1,819,087; Aug. 18.

Germain, Herman. (See White, James H., assignor.)

German, Edgar R., Rochester, N. Y., assignor to Taylor Shantz Company. Forming endless rims for reels, wheels, frames, etc. 1,819,678; Aug. 18.

German, Edgar R., Rochester, N. Y., assignor to Taylor Shantz Company. Construction and manufacturing reels. 1,819,707; Aug. 18.

Gesellschaft für Drahtlose Telegraphie m. b. H. (See Kummerer, Wilhelm, assignor.)

Gesellschaft für Drahtlose Telegraphie m. b. H. (See Moser, Wilhelm, assignor.)

Gesellschaft für Mess-und Full-Apparate m. b. H. (See Mohr, Arnold, assignor.)

Gestetner, D., Limited. (See de Waele, Armand, assignor.)

Getz, Alfred C., Sidney, Ohio. Speed control mechanism. 1,819,889; Aug. 18.

Gibbs, Frederick D. (See Guild, W. J., Quimby, and Gibbs.)

Gibson, Ross N., Lansing, Mich. Piston spreader. 1,819,366; Aug. 18.

Gilchrist, William A., Chicago, Ill. Steam supply apparatus. 1,819,286; Aug. 18.

Gleason, Charles J., Augusta, Ga. Piston ring. 1,819,890; Aug. 18.

Goerz, Arthur A., Alhambra, Calif. Assembling structural steel. 1,819,287; Aug. 18.

Goetsch, George W., Elkins Park, assignor to Quaker Hosiery Company, Philadelphia, Pa. Antiravel welt juncture for stockings. 1,819,997; Aug. 18.

Goff, James T., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Impregnating coils. 1,818,976; Aug. 18.
Goldberg, Maximilian M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Speed control switch for cash registers. 1,819,088; Aug. 18.
Goodkind, Leo, Woodmere, N. Y. Boudoir slipper. Des. 84,889; Aug. 18.
Goodlake, Frederick D., Memphis, Tenn. Tire. 1,819,891; Aug. 18.
Goodman, Louis, and D. L. Friedman, New York, N. Y. Sewing machine attachment for mending runs in sheer fabrics. 1,819,161; Aug. 18.
Goodridge, George E., Reading, assignor to A. H. Ballard, Incorporated, Boston, Mass. Fuel feeding apparatus for liquid fuel burners. 1,819,892; Aug. 18.
Gornick, Hugo, Charlottenburg, Germany. Device for measuring slight forces. 1,819,089; Aug. 18.
Goss, Byron C., Cleveland, Ohio. Gas containing projectile or long range tear gas shell. 1,819,090; Aug. 18.
Gotham Knitbac Machine Corporation. (See Parlini, Alexander C., assignor.)
Gourdon, Georges, Montmorency, France. Method and apparatus for capturing insects. 1,819,551; Aug. 18.
Grabowsky, John F., Stevens Point, Wis. Apparatus for regulating the consistency of paper stock. 1,819,552; Aug. 18.
Graff, George, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio. Clock case. Des. 84,800; Aug. 18.
Graham, James H., and G. G. Gunderson, assignors to French Battery Company, Madison, Wis. Core wrapping machine. 1,819,746; Aug. 18.
Graham, William S., Canton, Ill., assignor to International Harvester Company. Tractor lister attachment. 1,819,679; Aug. 18.
Grandy, Raymond M., Superior, Wis. Car replacer clamp. 1,819,162; Aug. 18.
Grant, Albert W., jr., Wilmette, Ill., assignor to The Koppers Company, Pittsburgh, Pa. Manufacture of carbureted gas. 1,819,838; Aug. 18.
Grant, Albert W., jr., Wilmette, Ill., assignor to The Koppers Company, Pittsburgh, Pa. Manufacture of carbureted gas. 1,819,839; Aug. 18.
Grant, John. (See Crum, Roland R., assignor.)
Grant, John, Los Angeles, Calif. Expanding rotary reamer. 1,819,367; Aug. 18.
Gray, Robert C., Warren Township, Somerset County, N. J. Friction casement adjuster. 1,818,977; Aug. 18.
Graybar Electric Company. (See Staples, Charles F., assignor.)
Grayhill, Guy E., Oak Park, Ill. Display stand. Des. 84,891; Aug. 18.
Greenberg, Samuel A., et al. (See Tumminello, Charles E., assignor.)
Greene, Albert E., Medina, Wash. Electric reducing ores. 1,819,238; Aug. 18.
Greene, Albert E., Medina, Wash. Electric smelting apparatus and process. 1,819,239; Aug. 18.
Greene, Arthur D. (See Miller, T. W., and Greene.)
Greider, Harold W., Plymouth Meeting, Pa., assignor to The Philip Carey Manufacturing Company. Heat insulation material and composition. 1,819,893; Aug. 18.
Greist Manufacturing Company, The. (See Balzano, Oresto, assignor.)
Grieshaber, Hugo E., New London, assignor to Electric Boat Company, Groton, Conn. Dry mine laying submarine. 1,819,022; Aug. 18.
Griffith Camera Corporation, Ltd. (See Griffith, Graves, assignor.)
Griffith, Graves, assignor to Griffith Camera Corporation, Ltd., San Francisco, Calif. Elimination of distortion and the creation of stereoscopic effects in moving pictures. 1,819,327; Aug. 18.
Griffith, Morgan J., Cleveland, Ohio. Automatic snow removing device. 1,818,989; Aug. 18.
Grimmer, Joseph. (See Meyer, Bertram, and Grimmer.)
Grindrod, George, Oconomowoc, assignor to Grindrod Process Corporation, Waukesha, Wis. Treating foods. 1,819,023; Aug. 18.
Grindrod Process Corporation. (See Grindrod, George, assignor.)
Groble Gas Regulator Co. (See Groble, William C., assignor.)
Groble, William C., assignor to Groble Gas Regulator Co., Anderson, Ind. Fluid pressure regulator. 1,819,288; Aug. 18.
Grossman, Harold, Caldwell, N. J., assignor of one-fourth to W. S. Pritchard, New York, N. Y. Accelerating the settlement of pigments. 1,819,462; Aug. 18.
Gruber, Earl B. (See Heil, J. F., and Gruber.)
Gruss, Laura E., administratrix. (See Gruss, Raymond L., assignor.)
Gruss, Raymond L., deceased, San Francisco, Calif.; L. E. Gruss, administratrix, assignor, by mesne assignments, to California Bank, Los Angeles, Calif. Shock absorbing device. 1,819,414; Aug. 18.
Guidetti, Ferruccio, Elmhurst, N. Y. Cuff button. 1,819,163; Aug. 18.
Guild, Waldo J., R. A. Quimby, and F. D. Gibbs, assignors to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,819,091; Aug. 18.
Gulbenkian Seamless Rug Company. (See Smith, William E., assignor.)
Gulf Production Company. (See Loomis, A. G., Ambrose, and Brown, assignors.)
Gunderson, George G. (See Graham, J. H., and Gunderson.)
Gustafson, John C. (See Redrup, W. D., and Gustafson.)
Gysling, Manuel H., assignor to American District Steam Company, North Tonawanda, N. Y. Retaining device for pipe coverings. 1,819,553; Aug. 18.
Hadwik Mfg. Co. (See Wikstrom, Frank G., assignor.)
Hahn, Frederick C., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Etherifying cellulose. 1,819,600; Aug. 18.
Hale, Frank B. (See McBride, L. M., and Hale.)
Hale & Kilburn Co. (See Bell, Alfred B., assignor.)
Hall, Philip W., Cranford, N. J. Soil treating mechanism. 1,819,092; Aug. 18.
Hall, Thomas P., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Applying strips of piping to sheet material. 1,819,024; Aug. 18.
Handley, George F. (See Myers, L. C., and Handley.)
Hänel, Paul, assignor to the Firm J. M. Lehmann, Dresden-A., Germany. Pot press. 1,818,990; Aug. 18.
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Communication by frequency variation. 1,819,508; Aug. 18.
Hansen, A. L., Mfg. Company. (See Hansen, Augie L., assignor.)
Hansen, Augie L., assignor to A. L. Hansen Mfg. Company, Chicago, Ill. Display stand. 1,819,814; Aug. 18.
Hansen, Friedrich C. H., Harburg, Germany. Automatic shooting machine. 1,819,954; Aug. 18.
Hanson, Albert J., Arlington, assignor to American Electric Furnace Company, Boston, Mass. Resistor and terminal connection. 1,819,554; Aug. 18.
Hardinge Company. (See Hardinge, Harlowe, assignor.)
Hardinge, Harlow, assignor to Hardinge Company, Incorporated, York, Pa. Joint seal. 1,819,093; Aug. 18.
Hardisky, Andrew. (See Tomeshko, George, assignor.)
Harper, William A. (See Frank, H. J. L., and Harper.)
Harrah, Clayton C., assignor to National-Standard Company, Niles, Mich. Tire-bead reenforcing element. 1,819,747; Aug. 18.
Harris, Barnett, New York, N. Y., assignor of one-half to C. R. Dooley, Summit, N. J. Hypodermic bullet. 1,819,415; Aug. 18.
Harris, Henry H., Detroit, Mich. Counterflow carburizing machine. 1,819,509; Aug. 18.
Harrison, David, St. Louis, Mo. Drapery pleating and supporting means. 1,819,240; Aug. 18.
Hart, Alfred V., Westfield, N. J., and D. B. Thoms, Torrington, Conn. Plant marker. 1,819,708; Aug. 18.
Hart, Frank R., Pacific Grove, Calif. Applicator for administering irrigating fluids and radiant energy to the urethra. 1,819,368; Aug. 18.
Hartenstein, Herman L., Chicago, Ill. Producing pyrophoric iron. 1,819,164; Aug. 18.
Hartford-Empire Company. (See Lorenz, Edward H., assignor.)
Hartman, William W., Los Angeles, Calif. Tray. 1,819,894; Aug. 18.
Hartness, James, Springfield, Vt. Thread gauge. 1,819,025; Aug. 18.
Harvel Corporation, The. (See Harvey, Mortimer T., assignor.)
Harvey, Mortimer T., East Orange, assignor to The Harvel Corporation, Newark, N. J. Compositions of materials and producing them. 1,819,416; Aug. 18.
Hass, Henry B., Charleston, W. Va., assignor to Gasoline Recovery Corporation. Highly active carbon and its manufacture. 1,819,165; Aug. 18.
Hass, Henry B., assignor to Gasoline Recovery Corporation, Charleston, W. Va. Method and apparatus for producing activated charcoal. 1,819,166; Aug. 18.
Hatch, Meredith R. (See Dorman, N. W., and Hatch.)
Hawaiian Canneries, Ltd. (See Taylor, Robert B., assignor.)
Hawley, Jesse B. (See Newcombe, Albert, assignor.)
Hawley, Jesse B., St. Charles, Ill. Making sound amplifiers. 1,819,328; Aug. 18.
Hawley, Kent A., and D. H. Osborne, Victor, N. Y., assignors to Locke Insulator Corporation, Baltimore, Md. Insulator. 1,819,748; Aug. 18.
Hayes, Dewey L., Rossville, Ga., assignor, by mesne assignments, to Everlastick Varnish, Inc., Chattanooga, Tenn. Roll for spinning machines and method and composition for producing the same. 1,819,289; Aug. 18.
Hazel-Atlas Glass Co. (See Stenhouse, Thomas, assignor.)
Heald Machine Company, The. (See Guild, W. J., Quimby, and Gibbs, assignors.)
Heald Machine Company, The. (See Heald, Roger N., assignor.)
Heald, Roger N., assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,819,094; Aug. 18.
Heath, Herbert R. (See Summers, B. S., and Heath.)
Hebeler, Edward S., Williamsville, N. Y. Defrosting apparatus. 1,819,510; Aug. 18.
Heck, Jacob C., assignor, by mesne assignments, to The Da-Lite Screen Company, Inc., Chicago, Ill. Cinematograph screen. 1,819,776; Aug. 18.
Heerenbarth, Francis, New Orleans, La., assignor to Fulton Iron Works Company, St. Louis, Mo. Sugar mill. 1,819,290; Aug. 18.

Heidbreder, Herman H., assignor to The Quincy Stove Manufacturing Company, Quincy, Ill. Gas range. Des. 84,892; Aug. 18.
Heil Co., The. (See Heil, J. F., and Gruber, assignors.)
Heil Co., The. (See Heil, J. P., and Landry, assignors.)
Heil Co., The. (See Thwaits, Frederick G., assignor.)
Heil, Joseph F., Milwaukee, and E. B. Gruber, Waunatosa, assignor to The Heil Co., Milwaukee, Wis. Fluid hoist. 1,819,167; Aug. 18.
Heil, Julius P., Milwaukee, and G. L. Landry, West Allis, assignors to The Heil Co., Milwaukee, Wis. Telescopic fluid hoist. 1,819,168; Aug. 18.
Hempstead, George A., assignor to The National Brass & Copper Co., Lisbon, Ohio. Annealing sheet copper. 1,819,291; Aug. 18.
Henderson, Charles R. (See Lochhead, Elmer C., assignor.)
Henderson, Warner L. (See King, J. S., and Henderson.)
Hendricks, Semeon B., Rockford, Ill., assignor, by mesne assignments, to J. I. Case Company, Racine, Wis. Disk plow. 1,819,202; Aug. 18.
Hepler, Walter. (See Reed, W. B., and Hepler.)
Herman, Alfred B., assignor to Baker Nagle Company, Belleville, Ill. Door hinge construction for stoves. 1,819,644; Aug. 18.
Herschell, Walter G., Wilkes-Barre, assignor to William F. Otto, Hazleton, Pa. Furnace. 1,819,555; Aug. 18.
Herthel, Eugene C., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Sealing containers in the art of cracking hydrocarbons. 1,819,095; Aug. 18.
Herz, Richard, Frankfort-on-the-Main, and M. Schubert, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Water insoluble azo dyestuff. 1,819,096; Aug. 18.
Hiatt, Enos R., Winchester, Ind. Barrow truck. 1,819,601; Aug. 18.
Hickey Fuse & Manufacturing Company. (See Hickey, John H., assignor.)
Hickey, John H., assignor to Hickey Fuse & Manufacturing Company, San Francisco, Calif. Electric fuse. 1,819,293; Aug. 18.
Higby, Roy C. (See Vieau, H. F., and O'Neill, assignors.)
Highfield, Frank W., Coventry, England. Radial-cylinder internal combustion engine. 1,819,097; Aug. 18.
Hildreth, Fred D., Mount Vernon, Ohio. Leak stop. 1,819,169; Aug. 18.
Hile, Thomas J., Iron City, and L. D. Barber, Climax, Ga. Conveyor. 1,819,955; Aug. 18.
Hill, Joseph B., Philadelphia, Pa., assignor to The Barrett Company. Purification of solid aromatic hydrocarbons. 1,819,680; Aug. 18.
Hill, Robert, Aylmer, Quebec, Canada. Apparatus for stacking mail. 1,819,556; Aug. 18.
Hipple, James L. (See Lindgren, A. C., and Hipple.)
Hirschberger, Josef, South Orange, N. J. Treatment of rayon and the product produced thereby. 1,819,241; Aug. 18.
Hobson, John S., assignor to Massey Concrete Products Corporation, Chicago, Ill. Cribbing. 1,819,026; Aug. 18.
Hobson, William S., Aberdeen, Miss. Cotton picking machine. 1,819,242; Aug. 18.
Hodge, William B., Charlotte, N. C., assignor to Parks-Cramer Company, Fitchburg, Mass. Thermostatic apparatus. 1,819,987; Aug. 18.
Hoe, R., & Co. (See Ball, Harry V., assignor.)
Hoe, Robert, Hyde Park, N. Y. Washing apparatus. 1,819,463; Aug. 18.
Hoene, Alexander E., Tacoma, Wash. Wire-twisting tool. 1,819,170; Aug. 18.
Hoerr, Louis A., and F. H. Pletzsch, assignor to Railway Devices Company, St. Louis, Mo. Pipe clamp. 1,819,815; Aug. 18.
Hokanson, Otto A., assignor to Woodstock Typewriter Company, Woodstock, Ill. Case shift mechanism. 1,819,369; Aug. 18.
Holcomb, Harry E., Bound Brook, N. J., assignor to Fiberfraks, Inc., New York, N. Y. Method and apparatus for making fiber and cement shingles and boards. 1,819,840; Aug. 18.
Holden, William C., Ossining, N. Y. Peening tool. 1,819,777; Aug. 18.
Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machinery Company. Compressor mechanism. 1,819,709; Aug. 18.
Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machinery Company. Mine car compressor. 1,819,710; Aug. 18.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,819,778; Aug. 18.
Holmes, Ray H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit for amplifier tubes. 1,819,511; Aug. 18.
Holmgreen, Julius H., assignor to Alamo Iron Works, San Antonio, Tex. Joint packing. 1,819,417; Aug. 18.
Holt, Josephine L., Oakland, Calif. Doll handkerchief. 1,819,295; Aug. 18.
Holt, Josephine L. and W. N., Oakland, Calif. Abdominal support. 1,819,294; Aug. 18.
Holt, William N. (See Holt, J. L. and W. N.)
Holz, August, Irvington, N. J., assignor to T. V. D. Bardell, New York, N. Y. Producing fertilizers. 1,819,464; Aug. 18.
Holzwarth Gas Turbine Co. (See Sedlmeir, Michael, assignor.)
Hommel, O., Company, The. (See Hommel, Oscar, assignor.)
Hommel, Oscar, Pittsburgh, Pa., assignor to The O. Hommel Company. Making enamel ware. 1,819,816; Aug. 18.
Honold, Ernst. (See Zerweck, W., and Honold.)
Honsaker, Charles C., Philadelphia, Pa. Apparatus for administering colon treatments. 1,818,978; Aug. 18.
Hood, Leslie N., Greenville, S. C., and W. M. Scott, South Manchester, assignor to Cheney Brothers, South Manchester, Conn. Piece dyed silk and process. 1,819,027; Aug. 18.
Hookless Fastener Company. (See Walrath, Herbert R., assignor.)
Hoover Company, The. (See Becker, Bernard C., assignor.)
Hopkins, Ralph Z., and E. F. Seger, assignors to Hudson Motor Car Company, Detroit, Mich. Polishing wheel. 1,819,171; Aug. 18.
Horlacher, Elmer L., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,819,172; Aug. 18.
Horn, William M., Detroit, Mich., assignor to Horace E. Dodge Boat & Plane Corporation, New York, N. Y. Clutch control mechanism. 1,819,711; Aug. 18.
Horton, George T., Chicago, Ill. Storage tank. 1,819,418; Aug. 18.
Horton Manufacturing Company, The. (See Breadwell, H. S., and Thorpe, assignors.)
Horton Manufacturing Company, The. (See Thorpe, S. T., and Zipp, assignors.)
Horvath, Sandor, Flushing, N. Y. Submarine vessel. 1,819,681; Aug. 18.
Horwath, Julius, assignor to Arvey Corporation, Chicago, Ill. Display stand and the like. Re18,153; Aug. 18.
Howard, Clifton P., Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts. Water motor. 1,819,098; Aug. 18.
Hoy, John F., Norristown, assignor, by mesne assignments, to Autokraft Box Corporation, York, Pa. Box slitting machine. 1,819,817; Aug. 18.
Hoye, Peder B., Maywood, assignor to Electrical Engineers Equipment Co., Melrose Park, Ill. Disconnecting switch. 1,819,779; Aug. 18.
Hubbard, Norman, Elizabeth, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Hose connection. 1,819,243; Aug. 18.
Hudson, Harry E., Anderson, assignor to W. A. Quebbeman, Indianapolis, Ind. Stacking machine. 1,819,841; Aug. 18.
Hudson Motor Car Company. (See Hopkins, R. Z., and Seger, assignors.)
Hudson Motor Car Company. (See Toncray, Millard H., assignor.)
Hughes, Frederick E., Toronto, Ontario, Canada. Ink roller brake for printing presses. 1,819,329; Aug. 18.
Hughes, James W., assignor to Budd Wheel Company, Philadelphia, Pa. Filtering apparatus. 1,819,602; Aug. 18.
Hughes, James W., assignor to Budd Wheel Company, Philadelphia, Pa. Electroplating apparatus. 1,819,603; Aug. 18.
Hughes Tool Company. (See Scott, Floyd L., assignor.)
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. Re18,154; Aug. 18.
Hunley, James F., and R. W. Pace, Lexington, Ky. Awning support. 1,819,173; Aug. 18.
Hunt, William V., North Vancouver, British Columbia, assignor to International Airex Ltd., Vancouver, British Columbia, Canada. Paper roll. 1,819,895; Aug. 18.
Hunter, Herbert T., Catonsville, Md., assignor to Doughnut Machine Corporation, New York, N. Y. Coating apparatus. 1,819,557; Aug. 18.
Hupp Motor Car Corporation. (See Loewy, Raymond, assignor.)
Husman, Marion M., New York, N. Y. Cap. 1,819,558; Aug. 18.
Hutchins, Le Rio E., Tonawanda, assignor to Remington-Rand, Inc., Buffalo, N. Y. Index file. 1,820,003; Aug. 18.
Hvid, Rasmus M., Chicago, Ill. Expansion valve. 1,819,370; Aug. 18.
Hydraulic Press Manufacturing Company, The. (See Ernst, Walter, assignor.)
Hysing, Erik G. (See Welbull, E. H. W., and Hysing.)
I. G. Farbenindustrie Aktiengesellschaft. (See Walter, W., and Lock, assignors.)
Inca Manufacturing Corporation. (See Connor, Robert A., assignor.)
International Airex Ltd. (See Hunt, William V., assignor.)
International Combustion Engineering Corporation. (See Marshall, Leonard J., assignor.)
International Harvester Company. (See Benjamin, B. R., and Pearson, assignors.)
International Harvester Company. (See Graham, William S., assignor.)
International Harvester Company. (See Johnston, Edward A., assignor.)
International Harvester Company. (See Lindgren, A. C., and Hipple, assignors.)
International Harvester Company. (See Ronning, Andrean G. and A., assignors.)
International Harvester Company. (See Smith, Daniel W., assignor.)

International Harvester Company. (See Sperry Leonard B., assignor.)
International Harvester Company. (See Walker, Earl C., assignor.)
International Silver Company. (See Prétat, Frederick assignor.)
International Time Recording Company of New York, See Bryce, James W., assignor.)
Irgens, Finn T., Jackson, assignor, by mesne assignments, to Outboard Motors Corporation, Detroit, Mich. Water cooling system for marine motors. 1,818,991; Aug. 18.
Irish, Rush W., assignor of one-half to J. P. Thomas, jr., Canon City, Colo. Automatic golf tee. 1,819,806; Aug. 18.
Iron Fireman Manufacturing Company. (See Banfield, Thomas H., assignor.)
Ironside, James. (See Blaskewitz, W., Overly, Lambert, and Ironside.)
Isaacson, William O., Chicago, Ill. Anchor. 1,819,512; Aug. 18.
Ischinger, Alfred E., Reading, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des.84,893; Aug. 18.
Ischinger, Alfred E., Reading, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des.84,894; Aug. 18.
Isco Chemical Company. (See Ladd, Edward T., assignor.)
Jackman, J. W., & Company. (See Garratt, Stephen E., assignor.)
Jackson, David E., Olympia, Wash. Washing machine. 1,819,419; Aug. 18.
Jackson, Harry F., and C. O. Straub, Springfield, Ohio. Liquid dispensing apparatus. 1,819,330; Aug. 18.
Jacobi, Francis J., Floyds Knobs, Ind. Motor vehicle headlight. 1,819,682; Aug. 18.
Jacobsen, Oystein, Dayton, Ohio, assignor to The Duriron Company, Inc. Circulating steam jet construction. 1,818,979; Aug. 18.
Jacobus, David S., Jersey City, N. J., assignor, by mesne assignments, to Fuller Lehigh Company. Air cooled furnace and operating the same. 1,819,174; Aug. 18.
Jacobus, David S., Jersey City, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Temperature regulating and indicating device. 1,819,244; Aug. 18.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic esterification. 1,819,818; Aug. 18.
James, Edward, Cleveland, assignor, by mesne assignments, to H. E. Smith, Cleveland Heights, Ohio. Flexible conduit and making the same. 1,819,175; Aug. 18.
James, Francis F., Philadelphia, Pa. Automatically adjustable connection for shackle bolts. 1,819,176; Aug. 18.
James, Henry D. (See White, H. E., and James.)
James, Henry D., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,819,465; Aug. 18.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Garage elevator. 1,819,513; Aug. 18.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Garage elevator. 1,819,514; Aug. 18.
James Manufacturing Company. (See Olson, John B., assignor.)
Jardine, Frank, assignor, by mesne assignments, to The Cleveland Trust Company, as trustees, Cleveland, Ohio. Piston. 1,819,098; Aug. 18.
Jaumann, Andreas, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany. Constant potential device. 1,819,604; Aug. 18.
Jenkins, Rosser E., Farr, Colo. Loading machine. 1,819,515; Aug. 18.
Jenkins, Wilde E., Macon, Ga. Tide power apparatus. 1,819,749; Aug. 18.
Jenks, Louis W. (See Bow, E., and Jenks.)
Jersey, Neil E., assignor to W. A. Riddell Company, Bucyrus, Ohio. Road working machine. 1,819,466; Aug. 18.
Johnson, Hamilton, Baton Rouge, La. Internal combustion engine. 1,819,897; Aug. 18.
Johnson, Lane. (See Biggert, F. C., jr., and Johnson.)
Johnson, Walter L., Lincoln, Nebr. Applicator. 1,819,898; Aug. 18.
Johnston, Edward A., Chicago, Ill., assignor to International Harvester Company. Harvester. 1,819,605; Aug. 18.
Johnston, Howard H., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,819,177; Aug. 18.
Jones, Albert R., et al. (See Costigan, Charles C., assignor.)
Jones, George F., Westminster, London, England, assignor to British Metallic Packings Company (1929) Limited. Metallic packing for reciprocating shafts. 1,819,559; Aug. 18.
Jones, Gordon F., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker tripping system. 1,819,245; Aug. 18.
Jones, Lester L., Oradell, N. J. Variable resistance unit. 1,819,246; Aug. 18.
Jones, Robert R., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Mill roll cooling device. 1,819,988; Aug. 18.
Jones, Russell G., Van Wert, Ohio. Hydraulic clutch. 1,819,606; Aug. 18.
Jones, William A., West New Brighton, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Sectional boiler door. 1,819,467; Aug. 18.
Justrite Manufacturing Company. (See Raster, Walther, assignor.)
Kabele, Clarence, Schenectady, N. Y. Vacuum circuit breaker. 1,819,420; Aug. 18.
Kahn, Leo M., New York, N. Y. Folding device. 1,819,028; Aug. 18.
Kasch, Henry J., Dayton, Ohio. Housed indicator dial. 1,819,099; Aug. 18.
Kassler, Adolf, New York, N. Y. Match stand. 1,819,645; Aug. 18.
Kearsley, William K., Schenectady, N. Y., assignor to General Electric Company. Time delay apparatus. 1,819,999; Aug. 18.
Kégresse, Adolphe, Levallois Perret, France. Motor car bonnet and radiator mounting device. 1,819,178; Aug. 18.
Kelley, William H., Denver, Colo. Automobile vanity case. 1,819,516; Aug. 18.
Kellmann Sycamore Company. (See Akerlow, Gustav W., assignor.)
Kemp, Paul, Vienna, Austria. Treating waste alloys for the purpose of removing therefrom certain constituents whose presence renders the alloys unsuitable for certain uses. 1,819,607; Aug. 18.
Kendall, Marvin R., Port Townsend, Wash. Self locking valve bag. 1,819,421; Aug. 18.
Kende, George, East Orange, N. J., assignor to Phonodisc Corporation, New York, N. Y. Mechanically synchronized shaft. 1,819,819; Aug. 18.
Kenerson, Stanley M., assignor to Standard Electric Time Company, Springfield, Mass. Electric plug. 1,819,100; Aug. 18.
Kenerson, Stanley M., assignor to The Standard Electric Time Company, Springfield, Mass. Electrical socket. 1,819,101; Aug. 18.
Kent, Earle L., Carthage, Mo. Sound recording and reproducing means. 1,819,820; Aug. 18.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler. 1,819,179; Aug. 18.
Kerwin, Edwin J., et al. (See Carty, William M., assignor.)
Kharasch, Morris S., Chicago, Ill., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Seed disinfectant composition. 1,820,001; Aug. 18.
Kiger, Omar C., and R. Shelton, Yakima, Wash. Relief valve for pressure pumps. 1,819,422; Aug. 18.
King, Currie, Rutherford, Tenn. Seed gathering attachment for mowing machines. 1,819,180; Aug. 18.
King, James S., and W. L. Henderson, Texarkana, Tex. Mechanical toy horse. 1,819,029; Aug. 18.
Kinnard, Luther J., Pasadena, assignor to Consolidated Steel Corporation, Los Angeles, Calif. Elevator signal. 1,819,247; Aug. 18.
Kirkbride, Edmund, Camden, assignor of one-half to S. C. Loveland, Hammonton, N. J. Spool device for type ribbon material. 1,819,712; Aug. 18.
Klees, Albert L., assignor to Combustion Utilities Corporation, New York, N. Y. House heating system. 1,819,560; Aug. 18.
Klein, Herman, Chicago, Ill. Utensil support. 1,819,713; Aug. 18.
Klein, Paul M., Cedarhurst, N. Y. Oil heater. 1,819,181; Aug. 18.
Kleineberg, Paul E., Brewster, assignor to American Assembling Machine Company, New York, N. Y. Book-covering machine. 1,819,030; Aug. 18.
Klopping, Adolph C., Toledo, Ohio. Lever grip. 1,818,992; Aug. 18.
Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,818,993; Aug. 18.
Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,818,995; Aug. 18.
Knopp, Otto A., Oakland, Calif. Calibration system. 1,819,714; Aug. 18.
Knowlton, William, and W. S. Vaughan, Glen Ellyn, Ill. Air humidifier. 1,819,423; Aug. 18.
Kobayakawa, Tokio, Ebara-Machi, Tokyo, Japan, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical contact device. 1,819,248; Aug. 18.
Koch, Siegmund. (See Borrmann, Arthur, assignor.)
Kocjan, Louis, Milwaukee, Wis. Combined table and chair. 1,819,956; Aug. 18.
Koebel, Joseph H., Lowell, Iowa. Cultivator guard. 1,819,899; Aug. 18.
Koehring Company. (See Volk, Ralph, assignor.)
Kohler Company. (See Brotz, Frank G., assignor.)
Koppers Company, The. (See Bragg, Gilbert A., assignor.)
Koppers Company, The. (See Grant, Albert W., jr., assignor.)
Koppers Company, The. (See Sperr, Frederick W., jr., assignor.)
Kordick, Frank, assignor to Regal Musical Instrument Co., Chicago, Ill. Plucked string musical instrument. 1,819,371; Aug. 18.

Korn, Harry, Brooklyn, N. Y., assignor to Artcraft Iron Works, Inc. Holder for beverage sets. Des. 84,895; Aug. 18.
Kraut, John, Brooklyn, N. Y. Trestle or saw horse. 1,819,780; Aug. 18.
Kraxberger, Michael E., Buckingham, Colo. Corn harvesting apparatus. Re18,159; Aug. 18.
Krebser, Adolf, and E. Wysard, assignors to "J. R. Geigy S. A.", Basel, Switzerland. Manufacture of oil and fat soluble azo dyestuffs. 1,819,957; Aug. 18.
Kreisinger, Henry, Piermont, assignor to Combustion Engineering Corporation, New York, N. Y. Dust collector. 1,818,994; Aug. 18.
Kreisler, Jacques, New Rochelle, assignor to Jacques Kreisler Co., New York, N. Y. Terminal snap and loop connection for flexible wrist watch bands. 1,819,781; Aug. 18.
Kreisler, Jacques & Co. (See Kreisler, Jacques, assignor.)
Krell, Joseph, Berlin-Zehlendorf, Germany. Printing machine for printing strips of material. 1,819,561; Aug. 18.
Krem-Ko Company. (See Gallagher, George F., assignor.)
Kriner, Herman W., Greensboro, N. C. Gasoline purifier. 1,819,424; Aug. 18.
Krolzig, Karl, Berlin-Oberschoneweide, Germany, assignor to Locke Insulator Corporation, Baltimore, Md. Clamp for conductors. 1,819,750; Aug. 18.
Kronmiller, Carl G., Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Valve bag. 1,819,425; Aug. 18.
Kronquest, Alfred L. (See O'Neil, J. H., and Kronquest.)
Kröppelin, Johannes, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. System of voltage regulation. 1,819,469; Aug. 18.
Krotzer, Frederick A., and W. B. Crandall, Westfield, N. Y. Luminous sign. 1,818,980; Aug. 18.
Kruesi, Geoffrey G., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Aerial navigation system and method. 1,820,004; Aug. 18.
Kruglick, Harry. (See Nudelman, C. S., and Kruglick.)
Kuhlman, William A., Toledo, Ohio. Sectional knockdown tower for hoists. 1,819,031; Aug. 18.
Kullberg, Wallace L., Minneapolis, Minn. Ironing board. 1,819,821; Aug. 18.
Kummerer, Wilhelm, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Radio system. 1,819,469; Aug. 18.
Kunde, Charles C., assignor to Julius Aderer Inc., New York, N. Y. Clasp and clasp supported dental restoration. 1,819,296; Aug. 18.
Küppers, Johann, Homberg-Niederrhein, assignor to the Firm Sachtleben Aktiengesellschaft fur Bergbau und Chemische Industrie, Homberg, Niederrhein, Germany. Apparatus for drying. 1,819,102; Aug. 18.
L. G. S. Devices Corporation. (See Starkey, W. C., and Brownlee, assignors.)
La Bombard, Leon E., Waltham, and M. H. Sidebotham, Newtonville, assignors to Specialty Automatic Machine Company, Chelsea, Mass. Combination printing press. 1,819,751; Aug. 18.
Ladd, Edward T., Lewiston, assignor to Isco Chemical Company, Inc., Niagara Falls, N. Y. Fumigating device. 1,819,000; Aug. 18.
Ladd, George E., Washington, D. C. Constructing metal culverts or tunnels. 1,819,426; Aug. 18.
La Fayette, Arthur, Dinuba, Calif. Fumigator for fruit, and other cars. 1,819,562; Aug. 18.
La Grange, Clarence, Howard Beach, N. Y. Cooling system pump for outboard motors. 1,819,822; Aug. 18.
Lamb, Albert E. (See Ludlow, Israel, assignor.)
Lambert, Charles F. (See Blaskewitz, W., Overly, Lambert, and Ironside.)
La Mont Corporation. (See La Mont, Walter D., assignor.)
La Mont, Walter D., Larchmont, assignor to La Mont Corporation, New York, N. Y. Steam generator. 1,819,470; Aug. 18.
Lancaster Asphalt, Inc. (See Robinson, Thomas, assignor.)
Landry, George L. (See Heil, J. P., and Landry.)
Lange, Paul H., assignor to The Max Ams Machine Company, Bridgeport, Conn. Seaming mechanism. 1,819,249; Aug. 18.
Lange, Paul H., assignor to The Max Ams Machine Company, Bridgeport, Conn. Seaming mechanism. 1,819,250; Aug. 18.
Langenbach, Edward A. (See Blecker, William M., assignor.)
Larson, Homer W., et al. (See Stearns, Harry C., assignor.)
Larsson, Knut., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Telephone system. 1,819,688; Aug. 18.
Laska, Leopold, and A. Zitscher, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of new azodyestuffs. 1,819,103; Aug. 18.
Lathrop, Elbert C. (See Munroe, T. B., and Lathrop.)
Latta, William I. (See Roberts, C. P., and Latta, assignors.)
Law, Clare H., Chicago, Ill. Signal device for record sheets. 1,819,251; Aug. 18.
Lawaczeck Gesellschaft mit beschrankter Haftung, firm. (See Niedereither, H., and Ernst, assignors.)
Le Bret, Ludwig, Charlottenburg, Germany. Eccentric balance driving gear. 1,819,715; Aug. 18.
Leclerc, Albert A., assignor to J. Robinson, Westmount, Quebec, Canada. Automatic train pipe coupling head. 1,819,372; Aug. 18.
Lee, Aubrey M., assignor, by mesne assignments, to General Ice Scoring Machine Company, Dallas, Tex. Delivery apparatus. Des. 18,155; Aug. 18.
Lehman, Paul W., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Manufacture of inner tubes. 1,819,032; Aug. 18.
Lehman, Paul W., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Feeding and cutting machine. 1,819,033; Aug. 18.
Lehmann, Albert, Brooklyn, N. Y. Life saving vest. 1,819,901; Aug. 18.
Lehmann, J. M. (See Hanel, Paul, assignor.)
Leitz, Ernst, Optische Werke. (See Engelmann, Max., assignor.)
Les Fils D'Albert Collet. (See Collet, Maurice, assignor.)
Lester, Thomas H., Highland Park, Ill. Automobile signaling device. 1,819,902; Aug. 18.
Leverenz, Arthur A. (See Wilkie, W., and Leverenz.)
Lewis, Alden G. (See Cannard, W. H., and Lewis.)
Lewis, Alexander T., Merion, assignor to York Heating and Ventilating Corporation, Philadelphia, Pa. Heating apparatus. 1,819,608; Aug. 18.
Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)
Lichtenthaeler, Frank E., Newton Highlands, Mass. Heating system for liquids. 1,819,517; Aug. 18.
Lincoln Electric Company, The. (See Lincoln, James F., assignor.)
Lincoln, James F., East Cleveland, assignor to The Lincoln Electric Company, Cleveland, Ohio. Dynamo-electric machine. 1,819,182; Aug. 18.
Lind, Edward. (See Abcles, J. S., and Lind.)
Lindgren, Alexus C., Chicago, Ill., and J. L. Hipple, Canton, Ill., assignors to International Harvester Company. Tractor implement. 1,819,684; Aug. 18.
Link-Belt Company. (See Tark, Marcus B., assignor.)
Linsner, Arthur F., Astoria, assignor to Defiance Sales Corporation, New York, N. Y. Horse. 1,819,252; Aug. 18.
Lipovsky, John, Kenosha, Wis. Closure operator and retaining means. 1,819,104; Aug. 18.
Liquidometer Corporation, The. (See de Giers, Clarence A., assignor.)
Littell, Nelson, Mount Vernon, N. Y. Automobile bumper. 1,819,471; Aug. 18.
Lochhead, Elmer C., assignor of one-half to C. R. Henderson, Moberly, Mo. Stocking. 1,819,958; Aug. 18.
Lock, Ludwig. (See Walter, W., and Lock.)
Locke Insulator Corporation. (See Hawley, K. A., and Osborne, assignors.)
Locke Insulator Corporation. (See Krolzig, Karl, assignor.)
Locke Insulator Corporation. (See Osborne, David H., assignor.)
Locke Steel Chain Company, The. (See Stegeman, H. J., and Locke, assignors.)
Locke, Sylvanus D. (See Stegeman, H. J., and Locke, assignors.)
Lockett, Ralph G., Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer Inc. Electric motor controller. 1,819,823; Aug. 18.
Locreille, Claude, Fauquez, Belgium. Receiving table for cast glass. 1,819,959; Aug. 18.
Loewe, Siegmund., Friedenau, Berlin, Germany, assignor to Radio Corporation of America. Beat-frequency heterodyne receiver arrangement. 1,819,609; Aug. 18.
Loewy, Raymond, New York, N. Y., assignor to Hupp Motor Car Corporation, Detroit, Mich. Hub cap. Des. 84,896; Aug. 18.
Lofland, Alfred M., Lebanon, Ind. Demountable felly. 1,819,297; Aug. 18.
Logan Co. (See Resch, Carl W., assignor.)
Loomis, Albert G., H. A. Ambrose, and J. S. Brown, Pittsburgh, Pa., assignors to Gulf Production Company. Drilling of terrestrial bores. 1,819,646; Aug. 18.
Lorenz, Edward H., West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Glass shaping machine. 1,819,903; Aug. 18.
Love, Joseph E., Schenectady, N. Y., assignor to General Electric Company. Antenna regulator. 1,819,904; Aug. 18.
Loveland, S. C. (See Kirkbride, Edmund, assignor.)
Lucia, Louis V., Hartford, Conn.; assignor, by mesne assignments, to Beardsley & Wolcott Mfg. Co. Electrical cigar lighter. 1,819,610; Aug. 18.
Ludlow, Israel, assignor of one-half to A. E. Lamb, New York, N. Y. Loud speaker device. 1,819,183; Aug. 18.
Luellen, Lawrence W. (See Lyons, James, jr., assignor.)
Luelloff, Henry L., Milwaukee, Wis. Fishing apparatus. 1,819,034; Aug. 18.
Luff, Willard J., Cleveland, Ohio. Trap. 1,819,253; Aug. 18.
Luis, Caesar G., London, England. Explosive. 1,820,000; Aug. 18.
Lundell, Torsten A., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Telephone system. 1,819,685; Aug. 18.

Lundquist, Hans, Chicago, Ill., assignor to United States Specialty Corporation. Liquid level gauge. 1,819,373; Aug. 18.
Lunt, George P., Brookline, assignor to E. B. Badger & Sons Company, Boston, Mass. Manufacturing acetic anhydride. 1,819,563; Aug. 18.
Lupton's, David, Sons Company. (See Sheard, Joseph H., assignor.)
Lyons, James, jr., New York, N. Y., assignor of one-half to L. W. Luellen, Mountain Lakes, N. J. Radio apparatus. 1,819,905; Aug 18.
Lytle, William O., New Kensington, Pa., assignor to Duplate Corporation. Sand blasting apparatus. 1,819,331; Aug. 18.
MacDougall, Robert, Downers Grove, assignor to Beemack Furnace Company, Cicero, Ill. Enameling furnace conveyer. 1,819,472; Aug. 18.
Machlett, Raymond R., and J. F. Stokes, New York, N. Y., assignors to Rainbow Light, Inc. High frequency luminous tube. 1,819,105; Aug. 18.
Macintire, Benjamin G., Edgewood, Md. Generating smoke clouds. 1,819,184; Aug. 18.
Mackenzie, Donald G., Montreal, Quebec, Canada, assignor to Donmac Products Corporation, New York, N. Y. Power transmission. 1,819,716; Aug. 18.
Mackie, Charles P. (See Claytor, Edwin E., assignor.)
MacLean, Robert, assignor to Amalgamated Roofing Company, Chicago, Ill. Roofing. 1,820,005; Aug. 18.
Madge, Evelyn W., Erdington, Birmingham, England, assignor to Dunlop Rubber Company, Limited. Manufacture of goods of rubber or similar material. 1,819,647; Aug. 18.
Magarisawa, Kwanichi. (See Sugimura, I., and Magarisawa.)
Maile, Evangeline, et al. (See Maile, Michael, assignor.)
Maile, Michael, assignor of one-sixth to Evangeline Maile, one-sixth to Nicala Barattucci, and one-sixth to Angelo Chioli, Philadelphia, Pa. Train stop. 1,819,374; Aug. 18.
Maisto, Colombo. (See Miasto, Louis F., assignor.)
Maisto, Louis F., assignor of one-half to Colombo Maisto, Brooklyn, N. Y. Combination pocket smoker's accessory. 1,819,427; Aug. 18.
Majestic Company, The. (See Redrup, W. D., and Gustafson, assignors.)
Maley, Thomas C. (See Ohmer, J. F., and Maley.)
Malinite Products, Inc. (See Malinovszky, Andrew, assignor.)
Malinovszky, Andrew, South Gate, assignor to Malinite Products, Inc., Los Angeles, Calif. Making tile. 1,819,686; Aug. 18.
Mamiya, Fusajiro, Los Angeles, Calif. Traffic signal actuating apparatus. 1,819,518; Aug. 18.
Mangano, Charles L., Gouverneur, N. Y. Shingle. 1,819,717; Aug. 18.
Manhattan Spring & Couch Co. (See Massacese, Vincenzo, assignor.)
Manley Manufacturing Company. (See Manley, Robert E., assignor.)
Manley, Robert E., assignor to Manley Manufacturing Company, York, Pa. Jaw. 1,819,428; Aug. 18.
Manteris, Arthur N., Baton Rouge, La. Butter dispensing machine. 1,819,960; Aug. 18.
Mantle, Joseph G. C., Leonia, N. J. Art of extruding cold materials. 1,819,254; Aug. 18.
Manzler, Clarence H., Rochester, N. Y. Appointment book. 1,819,429; Aug. 18.
Manzoli, Giuseppe, Turin, Italy, assignor to The Union Switch and Signal Company, Swissvale, Pa. Railway switch operating mechanism. 1,819,473; Aug. 18.
Marchal, Joseph P. (See Gerber, A. H., and Marchal.)
Marciano, Gerardo F., assignor to Universal Optical Corporation, Providence, R. I. Spectacle frame. Des. 84,897; Aug. 18.
Margon Corporation. (See Nemcovsky, Louis A., assignor.)
Marks, Herbert E., Glen Osborne, Sewickley, Pa., assignor to United States Gypsum Company, Chicago, Ill. Form for supporting monolithic slabs of cementitious material. 1,819,906; Aug. 18.
Marquette Manufacturing Company. (See Nilson, Leonard D., assignor.)
Marshall, Leonard J., Westwood, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y. Apparatus for reheating steam for use in turbines. 1,818,896; Aug. 18.
Martel, Edgar J., Laconia, N. H. Automobile locking mechanism. 1,818,907; Aug. 18.
Martel, Edgar J., Laconia, N. H. Clasp for automobile tire chains. 1,818,908; Aug. 18.
Martin, Albert W. and J. N., Indianapolis, Ind. Locomotive fluid pressure piston rod remover. 1,819,782; Aug. 18.
Martin, Jacob F. (See Barker, Eros V., assignor.)
Martin, Jacob N. (See Martin, A. W. and J. N.)
Martin, Jesse C., jr., Los Angeles, Calif. Crown sheet support for locomotive fireboxes. 1,819,907; Aug. 18.
Martin, Mark H., Reading, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. Railway car truck. 1,819,564; Aug. 18.
Martin, Philip J., Elizabeth, and A. T. Coley, Clifton, N. J. Cable grip. 1,819,430; Aug. 18.
Martin, Raymond H., assignor to The Bassick Company, Bridgeport, Conn. Drawer pull. 1,819,611; Aug. 18.
Martinet, Eugene F., assignor to The P. A. Geier Company, Cleveland, Ohio. Suction cleaner handle grip. Des. 84,898; Aug. 18.
Marvel Carbureter Company. (See Firth, David, assignor.)
Maser, Harold T., Schenectady, N. Y., assignor to General Electric Company. Electric testing circuit. 1,819,908; Aug. 18.
Massacese, Vincenzo, assignor, by mesne assignments, to Manhattan Spring & Couch Co., Inc., New York, N. Y. Bed spring brace. 1,819,909; Aug. 18.
Massey Concrete Products Corporation. (See Hobson, John S., assignor.)
Massingham, Henry R., Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical connecting cord and producing it. 1,819,612; Aug. 18.
Masters, Carl L., assignor to The Elko Chemical Company, Nitro, W. Va. Manufacture of organic monocarboxylic acid chlorides. 1,819,613; Aug. 18.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wave transmission system. 1,819,614; Aug. 18.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wave transmission system. 1,819,648; Aug. 18.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wave transmission system. 1,819,649; Aug. 18.
Mathieu, Napoleon. (See Vallée, Joseph A., assignor.)
Matsumoto, Shigeru, Tokyo, Japan. Link belt. 1,819,185; Aug. 18.
Matthews, Frank J., Seattle, Wash. Check protector. 1,819,375; Aug. 18.
Matthews, W. N., Corporation. (See Birkenmaier, Theodore, assignor.)
Mattia, Philip, Chicago, Ill. Electrical attachment plug. 1,819,910; Aug. 18.
Maull, James L., Orlando, Fla. Box head or end for field boxes. 1,819,752; Aug. 18.
Mayer, Bertram, Basel, and J. Grimmer, Neuewelt, near Basel, assignors to Societe of Chemical Industry in Basle, Basel, Switzerland. Azo dyestuff and making same. 1,819,961; Aug. 18.
Mayr, Karl A., New York, N. Y., assignor to Siemens-Schuckertwerke Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Steam generating system. 1,819,186; Aug. 18.
Mayr, Karl A., and R. E. White; said White assignor, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill. Balanced valve. 1,819,615; Aug. 18.
Mazerock, Albert M., Winnetka, Ill. Attachment for shoes. 1,819,962; Aug. 18.
McAllister, Harry E., Mariners Harbor, Staten Island, N. Y. Automatic window sash lock. 1,819,824; Aug. 18.
McArdle, Michael W., Chicago, Ill. Toaster. Des. 84,899; Aug. 18.
McBride, Carl M., Eureka, Calif. Pneumatic heel. 1,819,565; Aug. 18.
McBride, Lewis M., Fort Sill, Okla., and F. B. Hale, Bel Air, Md. Shell construction. 1,819,106; Aug. 18.
McCarthy, Richard B., Swampscott, assignor to Attlast Company, Inc., Boston, Mass. Lasting shoes. 1,819,911; Aug. 18.
McCormick, J. S., Company. (See Bumbaugh, George C., assignor.)
McCrady Brothers Company. (See Reed, Arthur G., assignor.)
McCullough, Frederick S., Wilkinsgurb, Pa. Radio circuits employing alternating current radio tubes. 1,819,783; Aug. 18.
McCutchen, Brunson S., North Plainfield, and C. V. Sandell, East Orange, N. J. Radiocircuit. 1,819,298; Aug. 18.
McDonald, Charles D., assignor to McDonald Machine Co., Chicago, Ill. Apparatus for forming scroll-edge metal blanks. 1,819,431; Aug. 18.
McDonald Machine Co. (See McDonald, Charles D., assignor.)
McFerren, Henry J., Tiffin, Ohio. Door closer. 1,819,187; Aug. 18.
McGaffey, Hildred, Carmel, N. Y. Golf bag umbrella. 1,819,912; Aug. 18.
McIntyre, Edward W., Cleveland, Ohio, assignor to Westinghouse Electric & Manufacturing Co. Ventilator. 1,819,255; Aug. 18.
McKone, Leo J., Minneapolis, Minn. Connecting rod structure. 1,819,784; Aug. 18.
McQuown, Charles, Detroit, Mich. Rotary engine. 1,819,718; Aug. 18.
Meglitz, William B. (See Sleeper, C. W., Meglitz, and Parker.)
Mehren Lock Company. (See Von Mehren, Oswald D., assignor.)
Melville, Alexander, K. Dundas, and R. A. Whitson, Glasgow, Scotland. Manufacture, centrifugally, of pipes and other hollow articles. 1,819,188; Aug. 18.
Metcalf, George R., jr., assignor to Erie Malleable Iron Company, Erie, Pa. Connecter. 1,819,650; Aug. 18.
Metcalf, George R., jr., assignor to Erie Malleable Iron Company, Erie, Pa. Connecter. 1,819,651; Aug. 18.
Metcalf, George R., jr., assignor to Erie Malleable Iron Company, Erie, Pa. Connecter. 1,819,652; Aug. 18.
Metcalf, George R., jr., assignor to Erie Malleable Iron Company, Erie, Pa. Connecter fitting. 1,819,653; Aug. 18.

Metcalf, George R., jr., assignor to Erie Malleable Iron Company, Erie, Pa. Connecter. 1,819,654; Aug. 18.
Meyer, Gustav, Matanzas, Cuba. Apparatus for feeding heavy crude oil in internal combustion engines of the injection type. 1,819,474; Aug. 18.
Mezeray, Francois H., Perpignan, France. Weft threading device for the shuttles of automatic and other looms. 1,819,189; Aug. 18.
Michell-Crankless Engines Corporation. (See Sherman, Thomas L., assignor.)
Michelsen, William O., Woodhaven, N. Y. Spark plug. 1,819,107; Aug. 18.
Michelsen, William O., Woodhaven, N. Y. Spark plug. 1,819,108; Aug. 18.
Mickle, William, Pilot Mound, Manitoba, Canada. Attachment to harvester-thrashers. 1,819,432; Aug. 18.
Miller, Bert C., Newark, N. J., assignor to S. D. Warren Company, Boston, Mass. Apparatus for treating flexible materials. 1,819,109; Aug. 18.
Miller, Byron W., Denver, Colo. Power transmission mechanism. 1,819,566; Aug. 18.
Miller, Clarke C. (See Whitman, W. G., and Miller.)
Miller, John M., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Tuning system. 1,819,299; Aug. 18.
Miller, Leonard L., Louisville, Ky. Comb. 1,819,433; Aug. 18.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company. Recovering tar acids. 1,819,687; Aug. 18.
Miller, Thomas W., and A. D. Greene, assignors to The Faultless Rubber Company, Ashland, Ohio. Cover for containers. 1,819,913; Aug. 18.
Miller, William G., Bellevue, Pa. Transmission chock for automobiles. 1,819,914; Aug. 18.
Millspaugh, William H., assignor to Paper & Textile Machinery Company, Sandusky, Ohio. Gearless suction roll with extended suction box. 1,819,332; Aug. 18.
Mission Dry Corporation, Ltd. (See Blattner, Carl F., assignor.)
Mitchell, Curtis P. (See Palmer, C. R., and Mitchell.)
Mitchell, Manley R., and R. W. Skoog, assignors, by mesne assignments, to The Baltimore Gas Engineering Corporation, Charleston, W. Va. Distilling apparatus. 1,819,190; Aug. 18.
Mock, Hugo, New York, N. Y. Spoon. 1,819,191; Aug. 18.
Mohr, Arnold, assignor to Gesellschaft fur Mess- und Full-Apparate m. b. H., Berlin, Germany. Apparatus for indicating the level of liquids. 1,819,655; Aug. 18.
Moneta, Guilio, et al. (See Culimani, A., and Campana, assignors.)
Montgomery, Harry S., Oil City, Pa. Cord reel. 1,819,434; Aug. 18.
Moore, Louis P., Cleveland, and H. W. Fies, Cleveland Heights, assignors to The Columbia Axle Company, Cleveland, Ohio. Brake mechanism. 1,819,192; Aug. 18.
Moore, Clarence W., Roslyn, Pa., assignor, by mesne assignments, to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y. Lamp support. 1,819,842; Aug. 18.
Moore, Willard C., Dayton, Ohio. Fuel and speed control device. 1,819,688; Aug. 18.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle axle. 1,819,110; Aug. 18.
Moraine Products Company, The. (See Short, Charles R., assignor.)
Moran, Joseph F., assignor to Scovill Manufacturing Company, Waterbury, Conn. Sprinkler head. Des. 84,900; Aug. 18.
Morehouse, Francis G. (See Ranger, R. H., and Morehouse.)
Morgan Construction Company. (See George, Jerome R., assignor.)
Morgan, John S., Torrance, Calif., assignor to The National Supply Company, of Delaware, New York, N. Y. Rotary machine locking device. 1,819,193; Aug. 18.
Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Metal furniture. 1,819,616; Aug. 18.
Morley, William H., Manchester, N. H. Figure toy. 1,819,475; Aug. 18.
Morrion, Roila O., Chicago Heights, Ill. Boiler flue rolling apparatus. 1,819,915; Aug. 18.
Morris, Elmer C., Chicago, Ill. Folded paper napkin. 1,819,753; Aug. 18.
Morris, Le Roy C., Waterloo, Iowa. Reversible current heating apparatus. 1,819,333; Aug. 18.
Morse, Clyde S. (See Carlson, H. E., and Morse.)
Morterud, Einar, Torderod, near Mose, Norway. Treatment of wood pulp by percolation. 1,819,963; Aug. 18.
Moser, Franz R. (See Al, J., and Moser.)
Moser, Wilhelm, assignor to Gesellschaft für Drahtlose Telepraphie m. b. H., Berlin, Germany. Vibrating converter. 1,819,617; Aug. 18.
Moses, Kirke L., Brookline, Mass. Paper like product and making the same. 1,819,435; Aug. 18.
Motor Wheel Corporation. (See Platt, Howard I., assignor.)
Mott, George T., Pearl River, N. Y. Suspension device. 1,819,754; Aug. 18.
Mueller, Fred K., Chicago, Ill. Bottle capping machine. 1,819,519; Aug. 18.
Muhleisen, Karl, assignor to Schutte and Koerting Company, Philadelphia, Pa. Feed water heater. 1,819,785; Aug. 18.
Muirhead, William, Lockport, N. Y. Bag machine. 1,819,786; Aug. 18.
Müller, Friederich, Elizabeth, N. J. Tube swaging machine and method. 1,819,376; Aug. 18.
Muller, Rudolph G., Irvington, N. J. Hat blocker. 1,819,256; Aug. 18.
Multhaupt, Paul, Dusseldorf, Germany. Mandrel for tube rolling mills. 1,819,257; Aug. 18.
Munroe, Treadway B., and E. C. Lathrop, Chicago, Ill.; said Lathrop assignor to said Munroe. Felted material and manufacturing the same. 1,819,194; Aug. 18.
Munters, Carl G., Stockholm, Sweden. Device for cleaning, dyeing, drying, and the like. 1,819,618; Aug. 18.
Murphy, Edward B., Kansas City, Mo., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill. Protector for loose leaf binders. 1, 818,999; Aug. 18.
Murphy, Martin, E., West Palm Beach, Fla. Form. 1,819,916; Aug. 18.
Murray Company, The. (See Behle, Joseph, assignor.)
Müth, Friedrich. (See Schmelzer, A., Müth, and Ballauf.)
Myers, Harry L. (See Wolfe, H. H., and Myers.)
Myers, Lewis C., Freeport, and G. F. Handley, Glendale, assignors to Royal Typewriter Company, Inc., New York, N. Y. Royal Typewriter Company, Inc., New York, N. Y. Tywepriting machine. Re.18,158; Aug. 18.
Naamlooze Vennootschap De Bataafsche Petroleum Maatschappij. (See Al, J., and Moser, assignors.)
Nandillon, Albert E. G., Cherbourg, France, and A. E. Cottet, Brussels, Belgium. Electromechanical vibrator. 1,819,964; Aug. 18.
National Aniline & Chemical Company. (See Dewey, Charles S., assignor.)
National Aniline & Chemical Company. (See Perkins, Robert L., assignor.)
National Brass & Copper Co., The. (See Hempstead, George A., assignor.)
National Carbon Company. (See Smith, Ralph R., assignor.)
National Cash Register Company, The. (See Goldberg, Maximilian M., assignor.)
National Cash Register Company, The. (See Rawler, Jean, assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Lock Co. (See Aldeen, Gedor W., assignor.)
National Lock Co. (See North, Edwin W., assignor.)
National Malleable and Steel Castings Company. (See Shafer, James A., assignor.)
National Sales Machine Company. (See Fry, Benjamin L., assignor.)
National Self Feeding Iron Company. (See Buccola, Joseph, assignor.)
National-Standard Company. (See Harrar, Clayton C., assignor.)
National Supply Company, The. (See Morgan, John S., assignor.)
Neal, Cecil R., Portland, Oreg. Gas throttle. 1,819,111; Aug. 18.
Neaves, Joseph, R., jr., et al., trustees. (See Shipley, Marion R., assignor.)
Neckar Water Softener Corporation. (See Contant, Peter M., assignor.)
Nelson, Nels H., Elbow Lake, Minn. Metal lath. 1,819,877; Aug. 18.
Nemcovsky, Louis A., assignor, by mesne assignments, to Margon Corporation, New York, N. Y. Eye mounting for dolls. 1,819,035; Aug. 18.
Nevin, Mendel, Brooklyn, N. Y. Syringe. 1,819,258; Aug. 18.
Newcombe, Albert, St. Charles, assignor, by mesne assignments to J. B. Hawley, Geneva, Ill. Device for and making fibrous cones and the like. 1,819,300; Aug. 18.
Nicholson, Henry H., Old Washington, Ohio. Apparatus for roasting ores. 1,819,436; Aug. 18.
Niederreither, Hans, and W. Ernst, Munich, assignors to the firm Lawaczeck Gesellschaft mit beschrankter Haftung, Berlin, Germany. Regulating the circulation of the electrolyte in pressure decomposers with a separate circulation of the anolyte and catholyte. 1,819,917; Aug. 18.
Nilson, Leonard D., Wayzata, assignor to Marquette Manufacturing Company, St. Paul, Minn. Curb hydraulic and general garage service jack. 1,819,378; Aug. 18.
Nobbs, George H., Cambridge, Mass. Water craft. 1,819,787; Aug. 18.
Noble, Warren, Detroit, Mich. Cooking apparatus. 1,819,301; Aug. 18.
Noble & Wood Machine Co., The. (See Weir, Harry N., assignor.)
Noma Electric Corporation. (See Sadacca, Albert, assignor.)
Norling, Wilhelm H., Stockholm, Sweden. Rod for suspending curtains on doors and windows. 1,819,965; Aug. 18.
North, Edwin W., assignor to National Lock Co., Rockford, Ill. Sash pulley. 1,819,334; Aug. 18.
North, Paul, Lakewood, assignor to The Chamberlain Cartridge & Target Company, Cleveland, Ohio. Target trap. 1,819,567; Aug. 18.
Northam Warren Corporation. (See Roessinger, Walter C., assignor.)
Northwest Engineering Corporation. (See Burke, P., and Orloff, assignor.)

Nudelman, Charles S., and H. Kruglick, Chicago, Ill. Hanger for draperies. 1,819,379; Aug. 18.
Oakes Products Corporation. (See Ellenberger, Clarence M., assignor.)
Oberhuber, William F., Lansdowne, Pa. Disk pipe joint. 1,819,036; Aug. 18.
O'Brien, John O. (See Thornton, John E., assignor.)
Ogden, J. Edward, Company. (See Tomkinson, Charles C., assignor.)
Ohio Rubber Company, The. (See Bronson, Budd, assignor.)
Ohmer Fare Register Company. (See Ohmer, J. F., and Maley, assignors.)
Ohmer, John F., and T. C. Maley, assignors to Ohmer Fare Register Company, Dayton, Ohio. Means to prevent misuse of a ticket issuing machine by the introduction of an instrument through the ticket delivery slot. 1,819,195; Aug. 18.
Olmstead, Frederick A., assignor to The Chain Products Company, Cleveland, Ohio. Chain tool. 1,819,520; Aug. 18.
Olson, Charles, Grand Rapids, Mich. Air compressor. 1,819,066; Aug. 18.
Olson, Charles E., Bridgeport, Conn. Apparatus for rescuing crews of submarines. 1,819,918; Aug. 18.
Olson, Johan H., Larchmont, N. Y., assignor to M. H. Treadwell Company. Braking mechanism. 1,819,788; Aug. 18.
Olson, John B., assignor to James Manufacturing Company, Fort Atkinson, Wis. Manger guard. 1,819,335; Aug. 18.
O'Meara, Thomas J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,819,789; Aug. 18.
O'Neil, James H., and A. L. Kronquest, Syracuse, assignors to Continental Can Company, Inc., New York, N. Y. Hermetically sealing food products in vacuum. 1,819,437; Aug. 18.
O'Neill, Edward J. (See Vieau, H. F., and O'Neill.)
Operadio Manufacturing Co. (See Stone, John M., assignor.)
Orloff, Arthur. (See Burke, P., and Orloff.)
Osborn, Mark L., Elida, N. Mex. Cotton picking and gathering machine. 1,819,438; Aug. 18.
Osborne, David H. (See Hawley, K. A., and Osborne.)
Osborne, David H., Victor, N. Y., assignor to Locke Insulator Corporation, Baltimore, Md. Insulator connection. 1,819,380; Aug. 18.
Osgian, James M., Racine, Wis. Signal switch. 1,819,196; Aug. 18.
Ott, Percy O., Rockford, Ill., assignor to Racine Tool & Machine Company, Racine, Wis. Hydraulic pump. 1,819,689; Aug. 18.
Ottenheimer, Reuben E., Baltimore, Md. Refrigerating apparatus. 1,819,568; Aug. 18.
Ottenheimer, Reuben E., Baltimore, Md. Refrigerating apparatus. 1,819,669; Aug. 18.
Otto, William F. (See Herschell, Walter G.)
Out of the Inkwell Films, Inc. (See Fleischer, Max, assignor.)
Outboard Motors Corporation. (See Evinrude, Ole, assignor.)
Outboard Motors Corporation. (See Irgens, Finn T., assignor.)
Overly, Clarence B. (See Blaskewitz W. Overly, Lambert, and Ironside.)
Overstreet, Malcolm D. (See Whitaker, H. M., and Overstreet.)
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Lens mount. 1,819,476; Aug. 18.
Pace, Raymond W. (See Hunley, J. F., and Pace.)
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Page, Charles B., and W. D. Burton, Evanston, assignors, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill. Steam power plant. 1,819,619; Aug. 18.
Palmer, Charles R., and C. P. Mitchell, Cincinnati, assignors to The Palmer Company, St. Bernard, Ohio. Thermometer. 1,819,919; Aug. 18.
Palmer, Company, The. (See Palmer, C. R., and Mitchell, assignors.)
Palmer, Harold B., San Diego, Calif. Automobile steering column and ignition lock. 1,819,259; Aug. 18.
Palmer, John F., Milwaukee, Wis. Dispensing faucet. 1,819,381; Aug. 18.
Palmer, John F., assignor to Palmer Products, Inc., Waukesha, Wis. Dispenser. 1,819,382; Aug. 18.
Palmer Products, Inc. (See Palmer, John F., assignor.)
Paper & Textile Machinery Company. (See Millspaugh, William H., assignor.)
Paquit, Vital, New York, N. Y. Radio receiving apparatus. 1,819,477; Aug. 18.
Parke, Davis Company. (See Wilkie, W., and Leverenz, assignors.)
Parker, Eugene A., and Roy Cutsinger, Morrilton, Ark. Nonsinkable boat. 1,819,570; Aug. 18.
Parker, Howard. (See Sleeper, Charles W., Megiltz, and Parker.
Parker, Kenneth S., assignor to The Parker Pen Company, Janesville, Wis. Fountain pen. 1,819,383; Aug. 18.
Parker Pen Company, The. (See Parker, Kenneth S., assignor.)
Parks-Cramer Company. (See Hodge, William B., assignor.)
Parlini, Alexander C., Woodside, New York, assignor to Gotham Knitbac Machine Corporation, New York, N. Y. Feed roll for run repair machines and the like. 1,819,478; Aug. 18.
Parsons, Carl B., Detroit, Mich. Loading block. 1,819,967; Aug. 18.
Parsons, James A., Dayton, Ohio, assignor to The Duriron Company, Inc. Making silicon iron compounds. 1,819,479; Aug. 18.
Patrick, Robert A., Freeport, N. Y. Rudderless outboard propelling unit driven from an inboard motor. 1,819,968; Aug. 18.
Pausser, Arnaud E., Philadelphia, Pa. Device for winding hair on the stems of hair curling heaters. 1,819,969; Aug. 18.
Paxton, Hale, Redlands, Calif. Disposing of cull lettuce. 1,819,480; Aug. 18.
Peale-Davis Company. (See Davis, Kenneth, assignor.)
Pearson, Charles. (See Benjamin, B. R., and Pearson.)
Pearson, Oscar A., Oak Park, assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Machine for cutting magnetic circuit laminæ. 1,819,481; Aug. 18.
Pearson, Robert D. (See Pierson, C. W., Fitzgerald, and Thomæ, assignors.)
Peden, Norman E., Newellton, Iowa. Building construction. 1,819,970; Aug. 18.
Penning, Nicholas J., Pittsburgh, Pa., assignor to Duplate Corporation. Process and apparatus for making composite glass. 1,819,336; Aug. 18.
Pentz, Albert D., assignor to Pentz Motor Brake Corporation, New Brighton, N. Y. Master cylinder. 1,819,482; Aug. 18.
Pentz Motor Brake Corporation. (See Pentz, Albert D., assignor.)
Perkins, Robert L., East Aurora, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Froth flotation of minerals. 1,819,112; Aug. 18.
Perkins, Robert L., East Aurora, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Flotation reagent and froth flotation. 1,819,113; Aug. 18.
Perkins, Robert L., East Aurora, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Concentration of ores by flotation. 1,819,114; Aug. 18.
Peters, John F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical control system. 1,819,260; Aug. 18.
Peters, John F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter. 1,819,261; Aug. 18.
Peterson, Elwin L., Riverside, Calif. Speed regulating system. 1,819,439; Aug. 18.
Peterson, Harold O. (See Beverage, H. H., and Peterson.)
Peterson, Per A., New York, N. Y. Aeroplane. 1,819,262; Aug. 18.
Pfannenstiel, Hugo. (See Spencler, O., and Pfannenstiel.)
Philips, N. V., Gloeilampenfabrieken. (See Bol, Cornelis, assignor.)
Phonodisc Corporation. (See Kende, George, assignor.)
Platt, Howard I., assignor to Motor Wheel Corporation, Lansing, Mich. Thermoelectric control for heaters. 1,819,620; Aug. 18.
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Liquid fuel stove. 1,819,338; Aug. 18.
Pieper, Henri, assignor to Compagnie International Des Freins Automatiques, Societe Anonyme, Liege, Belgium. Servo brake. 1,819,971; Aug. 18.
Pierson, Charles W., Beverly Hills, and C. Y. Fitzgerald, and G. E. Thomae, assignors of one-fourth to Robert D. Pearson, Los Angeles, Calif. Banjo mute. 1,819,339; Aug. 18.
Pioneer Instrument Company. (See Titterington, Morris M., assignor.)
Pitzsch, Frank H. (See Hoerr, L. A., and Pietzsch.)
Pittsburgh Plate Glass Company. (See Evans, Albert E. assignor.)
Pittsburgh Screw and Bolt Corporation. (See Smith, George S., assignor.)
Plamann, Gust. (See Schillo, G., and Plamann.)
Pneumatic Scale Corporation, Limited. (See Gale, Charles E., assignor.)
Poe, Alfred L., Jacksonville, Fla. Bicycle lock. 1,818,000; Aug. 18.
Pope, William J., Cambridge, England. Gold succinimide compound and making the same. 1,819,384; Aug. 18.
Porter, Horatio A., and W. J. Porter, Springfield, Mass. Faucet. 1,819,571; Aug. 18.
Porter, Walter J. (See Porter, Horatio A., and W. J.)
Powers Regulator Company. (See Snediker, Morton O., assignor.)
Pover, Guy R., Wichita, Kans. Internal combustion engine. 1,819,825; Aug. 18.
Preble, James J., deceased, Newton, and W. B. Thompson, Winchester, Mass.; Livingston Stebbins, administrator of James J. Preble. Apparatus or tool for applying coating. 1,819,115; Aug. 18.
Preble, James J., deceased, Newton; Livingston Stebbins, administrator of said J. J. Preble, assignor to Spraco, Inc., Somerville, Mass. Apparatus or tool for applying coating. 1,819,116; Aug. 18.

Preble, James J., deceased, Newton, and W. B. Thompson, Winchester, Mass.; Livingston Stebbins, administrator of James J. Preble. Apparatus or tool for applying coating material. 1,819,117; Aug. 18.
Preleuthner, Julius, New York, N. Y. Double acting centrifugal pump. 1,819,118; Aug. 18.
Pressley, Charles E., Santa Barbara, Calif. Revolving stage. 1,819,656; Aug. 18.
Prétat, Frederick, Waterbury, Conn., assignor to International Silver Company, Meriden, Conn. Spoon or similar article. Des. 84,901; Aug. 18.
Primos, Gus K., assignor of one-half to G. Thurber, Shreveport, La. Computing basket. 1,819,755; Aug. 18.
Pritchard, William S. (See Grossman, Harold, assignor.)
Prosperity Company, The. (See Daly, Joseph F., assignor.)
Prosperity Company, The. (See Davis, Ernest, assignor.)
Purdy, Percival J., London, England. Bottle and other labeling machines. 1,819,263; Aug. 18.
Pykosz, John, Chicago, Ill. Smoke consumer. 1,819,119; Aug. 18.
Pym, Arthur F., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Smoothing machine. 1,819,120; Aug. 18.
Pym, Arthur F., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Separating shoes and lasts. 1,819,440; Aug. 18.
Quaker Hosiery Company. (See Goetsch, George W., assignor.)
Quebbeman, W. A. (See Hudson, Harry E., assignor.)
Quimby, Ralph A. (See Guild, W. J., Quimby, and Gibbs.)
Quincy Steve Manufacturing Company, The. (See Heidbreder, Herman H., assignor.)
Racine Tool & Machine Company. (See Ott, Percy O., assignor.)
Radford, William H., assignor to Caterpillar Tractor Co., San Leandro, Calif. Clutch brake. 1,819,385; Aug. 18.
Radio Corporation of America. (See Beverage, H. H., and Peterson, assignors.)
Radio Corporation of America. (See Davis, N. E., and Ditcham, assignors.)
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Loewe, Siegmund, assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radio Corporation of America. (See Ranger, R. H., and Morehouse, assignors.)
Radio Corporation of America. (See Round, Henry J., assignor.)
Radio Corporation of America. (See Shapiro, Lazarus, assignor.)
Radio Corporation of America. (See Smale, John A., assignor.)
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Paper product and making the same. 1,819,441; Aug. 18.
Rah, Joseph, assignor to G & W Electric Specialty Co., Chicago, Ill. Oil and air break pothead disconnect. 1,819,302; Aug. 18.
Railway Devices Company. (See Hoerr, L. A., and Pietzsch, assignors.)
Rainbow Light, Inc. (See Machlett, R. R., and Stokes, assignor.)
Rand, James H., jr., Tonawanda, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Index device. 1,819,621; Aug. 18.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Photoradioscope. 1,819,197; Aug. 18.
Ranger, Richard H., Newark, N. J., and F. G. Morehouse, Greenwich, Conn., assignor to Radio Corporation of America. Picture recording. 1,819,264; Aug. 18.
Raster, Walther, assignor to Justrite Manufacturing Company, Chicago, Ill. Safety receptacle for inflammable liquids. 1,819,037; Aug. 18.
Rateau, Henri, and J. A. Beck Weirton, W. Va. Front wall for open hearth furnaces. 1,819,001; Aug. 18.
Rawyler, Jean, Paris, France, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,819,038; Aug. 18.
Reach, A. J., Company. (See Till, Edwin W., assignor.)
Rechter, George, San Francisco, Calif. Horn blowing attachment for steering wheels. 1,819,572; Aug. 18.
Redrup, Will D., Huntington, Ind., and J. C. Gustafson, Chicago, Ill., assignors to The Majestic Company, Huntington, Ind. Adjustable mail box. 1,819,790; Aug. 18.
Reed, Arthur G., Swissvale, assignor to McCrady Brothers Company, Braddock, Pa. Machine for mixing concrete and the like. 1,819,756; Aug. 18.
Reed, Joseph V., New York, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Last for turn shoes. 1,819,121; Aug. 18.
Reed, Matthew H., Chicago, Ill. Power unit adapted to be applied to lawn mowers. 1,819,791; Aug. 18.
Reed Roller Bit Company. (See Stokes, John C., assignor.)
Reed, Warren B., and W. Hepler, Morgan City, La. Multiple stage rotary drill. 1,819,303; Aug. 18.
Regal Musical Instrument Co. (See Kordick, Frank, assignor.)
Reichmann, Reinhold, and K. Zimmerman, Berlin, Germany, assignors to Westinghouse Electric and Manufacturing Company. High voltage fuse. 1,819,198; Aug. 18.
Reininger, Gustave M., et al. (See Rosenhagen, Victor, assignor.)
Remington-Rand Inc. (See Hutchings, Le Roi E., assignor.)
Remington Rand Inc. (See Rand, James H., jr., assignor.)
Remington Rand Inc. (See Wood, Rodney J., assignor.)
Resch, Carl W., Jeffersonville, Ind., assignor to Logan Co., Inc., Louisville, Ky. Switching conveyer. 1,819,972; Aug. 18.
Resnati, Aldo, Monza, Milan, Italy. Container and packing system for polishing cloths. 1,819,122; Aug. 18.
Reukauf, Edward, jr., assignor to Carey-McFall Co., Philadelphia, Pa. Window shade bracket. 1,819,920; Aug. 18.
Rice, Elbert G., Seattle, Wash. Interest calculator. 1,819,921; Aug. 18.
Richardson, Ernest E., and R. L. Culpepper, Albany, Ga. Spindle bolt remover. 1,819,973; Aug. 18.
Richardson, Henry, Passaic, N. J. Car door opener. 1,819,974; Aug. 18.
Richmond, Louis E., assignor to The Autocall Company, Shelby, Ohio. Electromagnetic bell. 1,819,843; Aug. 18.
Richter, George A., assignor to Brown Company, Berlin, N. H. Production of pulp of high alpha cellulose content. 1,819,002; Aug. 18.
Richter, George A., assignor to Brown Company, Berlin, N. H. Multiple-step process of fiber liberation. 1,819,003; Aug. 18.
Ricker, Chester S., Waukesha, Wis. Head lamp control. 1,819,690; Aug. 18.
Riddell, W. A., Company. (See Jersey, Neil E., assignor.)
Ridley, Albert S., Melbourne, Victoria, Australia. Peach pitting machine. 1,819,442; Aug. 18.
Rittenhouse, Arthur E., Honeoye Falls, N. Y. Toy. 1,819,483; Aug. 18.
Ritter Dental Manufacturing Company. (See Moore, Clarence W., assignor.)
Rix, Austin J., San Francisco, Calif. Air compressor. 1,819,691; Aug. 18.
Roberts, Albert O., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Rim feed for wheel assembly machines. 1,819,622; Aug. 18.
Roberts, Charlie P., and W. I. Latta, Atlanta, Ga. Novelty pin. 1,819,757; Aug. 18.
Robertson, Alexander D. (See Wilson, Albert A., assignor.)
Robertson, Robert R., Chicago Heights, Ill. Contraction center strip. 1,819,304; Aug. 18.
Robinson, Joseph. (See Leclerc, Albert A., assignor.)
Robinson, Joseph, Morristown, N. J. Automatic train pipe connecter. 1,819,386; Aug. 18.
Robinson, Joseph, assignor of one-fourth to R. M. Wolvin, New York, N. Y. Electrical vaporizer. 1,819,123; Aug. 18.
Robinson, Joseph, New York, N. Y. Automatic train pipe connecter. 1,819,387; Aug. 18.
Robinson, Thomas, New York, N. Y., assignor to Lancaster Asphalt, Inc. Making building materials. 1,819,199; Aug. 18.
Robinson, Thomas, New York, N. Y., assignor to Lancaster Asphalt, Inc. Apparatus for making building material. 1,819,200; Aug. 18.
Robson, Joseph B., and J. M. Williams, Delagua, Colo. Milk bottle holder. 1,819,758; Aug. 18.
Rocklin, Benjamin, Chicago, Ill. Knife. 1,819,623; Aug. 18.
Rockwood, George I., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Heat actuated mechanism. 1,819,124; Aug. 18.
Rockwood Sprinkler Company. (See Howard, Clifton P., assignor.)
Rockwood Sprinkler Company of Massachusetts. (See Rockwood, George I., assignor.)
Rodgers, James A., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo. Magnetic testing apparatus. 1,819,201; Aug. 18.
Roessinger, Walter C., Forest Hills, assignor, by mesne assignments, to Northam Warren Corporation, New York, N. Y. Toilet article. 1,819,004; Aug. 18.
Roger, John P., Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Tube connection. 1,819,202; Aug. 18.
Rolscreen Company. (See Dixson, Harry, assignor.)
Rombach, John C. (See Bell, Lawrence D., and Rombach.)
Romieux, Charles J., Elizabeth, and L. J. Christmann, Jersey City, N. J., assignors to American Cyanamid Company, New York, N. Y. Rubber accelerator and using the same. 1,819,792; Aug. 18.
Ronning, Adolph. (See Ronning, Andrean G. and A.)
Ronning, Adrean G. and A., Minneapolis, Minn., assignors to International Harvester Company. Tractor cultivator. 1,819,624; Aug. 18.
Root, A. I., Company, The. (See Cole, James D., assignor.)
Root, A. I., Company, The. (See Root, Huber H., assignor.)
Root, Huber H., assignor to The A. I. Root Company, Medina, Ohio. Air purifier. 1,819,521; Aug. 18.
Rosenblatt, Maurice C., Philadelphia, Pa. Isolating support for vibratory equipment. 1,819,039; Aug. 18.

Rosenhagen, Victor, Bellevue, assignor of one-fourth to W. C. Buten and one-fourth to O. Wolff, Newport, and one-fourth to G. M. Reininger, Fort Mitchell, Ky. Vacuum condensation control. 1,819,522; Aug. 18.

Ross, Harry M., assignor of one-half to Beveridge Paper Company, Indianapolis, Ind. Decorating paper. 1,819,793; Aug. 18.

Ross, J. O., Engineering Corporation. (See Ross, John O., assignor.)

Ross, John O., New York, N. Y., assignor to J. O. Ross Engineering Corporation, New York, N. Y. Heat economy method and apparatus. 1,819,265; Aug. 18.

Ross, Oscar A., New York, N. Y. Focussing finder. 1,819,844; Aug. 18.

Rosselle, Robert S., Seattle, Wash. Oven rack. 1,819,388; Aug. 18.

Rossman, Edwin F., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,819,523; Aug. 18.

Round, Henry J., London, England, assignor to Radio Corporation of America. Thermionic amplifier and oscillation generator. 1,819,845; Aug. 18.

Roy, Mildred R., Jackson, Tenn. Necktie. 1,819,922; Aug. 18.

Royal Typewriter Company. (See Myers, L. C., and Handley, assignors.)

Rued, Ole J., Minneapolis, Minn. Vibration absorber. 1,819,266; Aug. 18.

Ryan, John J., Chicago, Ill. Marcel waver. 1,819,389; Aug. 18.

Rybeck, Adolph W., assignor to The T. L. Smith Company, Milwaukee, Wis. Fluid measuring device. 1,819,267; Aug. 18.

Rymal, Raymond L., Riverside, Ill. Aeroplane propeller. 1,819,340; Aug. 18.

Sacerdote, Guido M., Bayside, New York, N. Y. Batter mixing device. 1,819,293; Aug. 18.

Sachs, Joseph, West Hartford, Conn. Automatic circuit breaker. 1,819,005; Aug. 18.

Sachtleben Aktiengesellschaft fur Bergbau und Chemische Industrie. (See Küppers, Johann, assignor.)

Sadacca, Albert, assignor to Noma Electric Corporation, New York, N. Y. Globe and electric lamp holding adapter. 1,819,125; Aug. 18.

Safety Mining Company. (See Kneeland, Frank H., assignor.)

St. Regis Paper Company. (See Kronmiller, Carl G., assignor.)

Salberg, Karl. (See Crichton, James V., assignor.)

Sampson, Charles H., assignor to Sampson Permagraph Company, Inc., Rochester, N. Y. Keyboard mechanism. 1,819,975; Aug. 18.

Sampson Permagraph Company. (See Sampson, Charles H., assignor.)

Sandberg, Robert E., assignor to De Luxe Metal Furniture Company, Warren, Pa. Cabinet. 1,819,524; Aug. 18.

Sandell, Carl V. (See McCutchen, B. S., and Sandell.)

Sandin, Jerome, Wilkins Township, Allegheny County, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fuse box. 1,819,204; Aug. 18.

Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake-operating mechanism. 1,819,846; Aug. 18.

Saunders, Homer, Chicago, Ill. Picture screen. 1,819,268; Aug. 18.

Scalf, William D., Pineville, Ky. Drop-seat for garments. 1,819,976; Aug. 18.

Scandia Manufacturing Company. (See Branander, Wilhelm B., assignor.)

Schaefer, George W., Quincy, Mass. Wrench. 1,819,525; Aug. 18.

Scheibe, Harold M., Belmont, Mass. Push-plate. 1,819,126; Aug. 18.

Schellenger, Newton C., assignor to Chicago Telephone Supply Company, Elkhart, Ind. Plug. 1,819,040; Aug. 18.

Schillo, George, and G. Flamann, Gaylord, Minn. Automobile windshield heater. 1,819,443; Aug. 18.

Schimpf, Walter H., Toledo, Ohio, assignor of one-fourth to John M. Cole, New York, N. Y. Method of and apparatus for translating energy. 1,819,573; Aug. 18.

Schishka, Sydney, London, England. Pocket case for a tobacco pipe and accessories. Des. 84,902; Aug. 18.

Schlegel, Charles P., assignor to Schlegel Mfg. Company, Rochester, N. Y. Window channel. 1,819,205; Aug. 18.

Schlegel Mfg. Company. (See Schlegel, Charles P., assignor.)

Schlumberger, Conrad, assignor to Societe de Prospection Electrique Procedes Schlumberger, Paris, France. Electrical process and apparatus for the determination of the nature of geological formations traversed by drill holes. 1,819,923; Aug. 18.

Schmelzer, Albert, F. Müth, and F. Ballauf, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Hydroxy carboxylic acids of carbazole. 1,819,127; Aug. 18.

Schmid, Ernest, Gladstone, Oreg. Safety key for locks. 1,819,059; Aug. 18.

Schopper, Alfred, Leipzig, and G. Dalén, Berlin-Dahlen, assignor to the firm Louis Schopper, Leipzig, Germany. Apparatus for testing tensile strength. 1,819,719; Aug. 18.

Schopper, Louis. (See Schopper, A., and Dalén, assignors.)

Schrader's, A., Son, Inc. (See Volckhausen, Julius, assignor.)

Schroeder, Simon E., assignor, by mesne assignments, to Automatic Washer Company, Newton, Iowa. Washing machine. 1,819,341; Aug. 18.

Schroeder, William, Orange, N. J., assignor to Western Electric Company, Incorporated, New York N. Y. Industrial truck. 1,819,625; Aug. 18.

Schubert, Louis C. (See Bosenberg, Henry F., assignor.)

Schubert, Max. (See Herz, R., and Schubert.)

Schulse, Herman E. Wilmington, Del., assignor to Uniclox Corporation. Combined terrestrial globe frame and support therefor. Des. 84,903; Aug. 18.

Schultze, Max F., Mandan, N. Dak. Aeroplane. 1,819,794; Aug. 18.

Schürer, Eugen, assignor to Felten & Gilleaume Carlswerk Aktiengesellschaft, Cologne-Mulheim, Germany. Collijunction-box for submarine cables. 1,819,128; Aug. 18.

Schutte and Koerting Company. (See Muhleisen, Karl, assignor.)

Scofield, Edward H., Minneapolis, Minn. Power transmission device. 1,819,626; Aug. 18.

Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Core drill plug. 1,819,484; Aug. 18.

Scott-Ross and Company. (See Yungling, Paul F., assignor.)

Scott, Walter M. (See Hood, L. N., and Scott.)

Scottish Dyes, Limited. (See Wilson, J. S., Shearer, and Thomas, assignors.)

Scovill Manufacturing Company. (See Bennett, Morris H. assignor.)

Scovill Manufacturing Company. (See Fenton, Paul E., assignor.)

Scovill Manufacturing Company. (See Moran, Joseph F., assignor.)

Seager, Edward, Duquesne, Pa. Sling. 1,819,390; Aug 18.

Sedlmeir, Michael, Mulheim-Ruhr, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Turbine nozzle. 1,819,485; Aug. 18.

Seger, Earl F. (See Hopkins, R. Z., and Seger.)

Selden Company, The. (See Jaeger, Alphons O., assignor.)

Sensaud de Lavaud, Mimitri, Paris, France. Hydraulic stress transmitting system. 1,819,947; Aug. 18.

Seppola, Asle, Entwistle, Alberta, Canada. Traction device for vehicles. 1,819,924; Aug. 18.

Shafer, James A., East Cleveland, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Body center plate for railway vehicles. 1,819,269. Aug. 18.

Shahan, John L., Chicago, Ill. Telephone stand. 1,819,977; Aug. 18.

Shakespeare, William M., South Orange, N. J., assignor to Anaconda Sales Company, New York, N. Y. Metal-protected roofing. 1,819,270; Aug. 18.

Shannon, Ellwood M. (See Fry, L. H., and Shannon.)

Shapiro, Lazarus, Bronx, N. Y., assignor to Radio Corporation of America. Variable condenser. 1,819,692; Aug. 18.

Shaw, William H., Scranton, Pa. Guide for power reverse gear floating levers. 1,819,795; Aug. 18.

Sheard, Joseph H., assignor to David Lupton's Sons Company, Philadelphia, Pa. Rack and pinion operator. 1,819,574; Aug. 18.

Shearer, George W. (See Wilson, J. S., Shearer, and Thomas.)

Sheip & Vendegrift, Inc. (See Vandegrift, Nelson M., assignor.)

Shell Development Company. (See Van Senden, Gerhardus H., assignor.)

Shelton, Ray. (See Kiger, O. C., and Shelton.)

Shepherd, Winfred P., Pasadena, Calif. Flyback game and toy. 1,819,342; Aug. 18.

Sherman, John C., Gorham, Me., assignor to Brown Company, Berlin, N. H. Paper towel and the like. 1,819,041; Aug. 18.

Sherman, John E., Foxboro, assignor to S. M. Stone, Attleboro, Mass. Stringed musical instrument. 1,819,796; Aug. 18.

Sherman, Max C., Bala-Cynwyd, assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Hopper construction. 1,819,486; Aug. 18.

Sherman, Thomas L., Melbourne, Australia, assignor to Michell-Crankless Engines Corporation, New York, N. Y. Crankless engine. 1,819,826; Aug. 18.

Sherts, James H., Glen Ridge, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del. Molding plastic. 1,819,444; Aug. 18.

Shiffler, William H., Oakland, assignor to Standard Oil Company of California, San Francisco, Calif. Treating heavy oils for the production of light oils by the employment of metallic halides. 1,819,006; Aug. 18.

Shimizu, Seizo, Tokyo, Japan. Magnetometer. 1,819,797; Aug. 18.

Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,819,042; Aug. 18.

Shipley, Marion R., Hermosa Beach, assignor, by mesne assignments, to Martin P. Smith and Joseph R. Neaves, jr., trustees. Valve and plug seating means for same. 1,819,343; Aug. 18.

Short, Charles R., Detroit, Mich., assignor to The Moraine Products Company, Dayton, Ohio. Bearing. 1,819,272; Aug. 18.

Shroder, Harry A., Jackson, Mich., assignor, by mesne assignments, to Cutler-Hammer, Inc. Combined current tap and pull chain lamp socket. 1,819,206; Aug. 18.

Shur, Edward J., New Orleans, La. Bulk-head construction for refrigerator cars. 1,819,978; Aug. 18.

Sidebotham, Melvin H. (See La Bombard, L. E., and Sidebotham.)

Siemens & Halske Aktiengesellschaft. (See Jaumann, Andreas, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Mayr, Karl A., assignor.)

Silver, Walter H., assignor to Deere & Company, Moline, Ill. Cultivator. 1,819,847; Aug. 18.

Simjian, Luther G., New Haven, Conn. Photographic developing apparatus. 1,819,848; Aug. 18.

Sinclair Refining Company. (See Arnold, William P., jr., assignor.)

Sinclair Refining Company. (See Herthel, Eugene C., assignor.)

Singer Manufacturing Company, The. (See Clayton, Andrew B., assignor.)

Skayef Ball Bearing Company, The. (See Anderson, Erick T., assignor.)

Skoog, Robert W. (See Mitchell, Manley R., and Skoog.)

Slade, Edward, New York, N. Y. Brake lining and making the same. 1,819,344; Aug. 18.

Sleeper, Charles W., and W. B. Meglitz, Lancaster, and Howard Parker, assignors to Brown Company, Berlin, N. H. Valve. 1,819,043; Aug. 18.

Slepian, Joseph, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,819,207; Aug. 18.

Smale, John A., Brentwood, England, assignor to Radio Corporation of America. Electrical frequency stabilizer or time control device. 1,819,487; Aug. 18.

Smith, A. O., Corporation. (See Burnish, Howard J., assignor.)

Smith, A. O., Corporation. (See Smith, George M., assignor.)

Smith, Daniel W., Oak Park, Ill., assignor to International Harvester Company. Trip adjuster for grain binders. 1,819,693; Aug. 18.

Smith, Frederick W. (See Cooke, G. G., and Dayton, assignors.)

Smith, George M., assignor to A. O. Smith Corporation, Milwaukee, Wis. Pipe coupling. 1,819,007; Aug. 18.

Smith, George S., Pittsburgh, Pa., assignor, by mesne assignments, to Pittsburgh Screw and Bolt Corporation. Nut machine. 1,819,044; Aug. 18.

Smith, Harold E. (See James, Edward, assignor.)

Smith, Joseph A., Attleboro, Mass., assignor to E. G. Bek, Pforzheim, Germany. Electroplating and electroplating apparatus. 1,819,130; Aug. 18.

Smith, Martin P., et al., trustees. (See Shipley, Marion R., assignor.)

Smith, Nathan C., and W. W. Wallace, Cullman, Ala. Plow. 1,819,925; Aug. 18.

Smith, Ralph R., Jackson Heights, N. Y., assignor to National Carbon Company, Inc. Battery case. 1,819,129; Aug. 18.

Smith, T. L., Company, The. (See Rybeck, Adolph W., assignor.)

Smith, William E., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Terminal board. 1,819,657; Aug. 18.

Smith, William E., Millitown, assignor to Gulbenkian Seamless Rug Company, New Brunswick, N. J. Picker crank adjustment. 1,819,926; Aug. 18.

Smith, Willoughby S., Benchams, Newton Poppleford, H. J. Garnett, Sevenoaks, and H. C. Channon, Kensington, London, England. Submarine cable. 1,819,720; Aug. 18.

Snediker, Morton O., assignor to Powers Regulator Company, Chicago, Ill. Thermostatic water mixer. 1,819,045; Aug. 18.

Snyder, Charles E., Silver Lake, Kans. Current deflector. 1,819,305; Aug. 18.

Snyder, Parke T., assignor to V. Bendix, Chicago, Ill. 1,819,391; Aug. 18.

Societe D' Exploitation Des Brevets Fort. (See Sundre, René, assignor.)

Societe de Prospection Electrique Procedes Schlumberger. (See Schlumberger, Conrad, assignor.)

Society of Chemical Industry in Basle. (See Mayer, B., and Grimmer, assignors.)

Soeffker, John H., Arlington, Minn. Snow fence lifter. 1,819,445; Aug. 18.

Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,819,271; Aug. 18.

Spanel, Abraham N., Rochester, N. Y., Multiple nozzle vacuum cleaner. 1,819,131; Aug. 18.

Specialty Automatic Machine Company. (See La Bombard, L. E., and Sidebotham, assignors.)

Speer, Frederick W., jr., Pittsburgh, Pa., assignor to The Koppers Company. Gas purification. 1,189,658; Aug. 18.

Spengler, Oskar, Neubabelsberg-Bergstrucken, and H. Pfannestiel, Dessau in Anhalt, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Trichloromethyl-ethoxy-hydroxy-phenyl-carbinol. 1,819,132; Aug. 18.

Sperry, Leonard B., Western Springs, Ill., assignor to International Harvester Company. Gasket. 1,819,694; Aug. 18.

Spinasse, Arthur E., Mount Vernon, Ohio. Means for and method of drawing glass sheets or plates. 1,819,392; Aug. 18.

Spraco, Inc.. (See Preble, James J., assignor.)

Staley, Earl B., Seattle, Wash. Drawer connection. 1,819,393; Aug. 18.

Standard Brake Shoe & Foundry Co., et al. (See Carty, William M., assignor.)

Standard Electric Time Company. (See Kenerson, Stanley M., assignor.)

Standard-Johnson Company. (See Donnellan, Edward P., assignor.)

Standard Oil Company. (See Gainer, Frank J., assignor.)

Standard Oil Company. (See Whitman, W. G., and Miller, assignors.)

Standard Oil Company of California. (See Shiffler, William H., assignor.)

Staples, Charles F., Detroit, Mich., assignor, by mesne assignments, to Graybar Electric Company, Inc., New York, N. Y. Washing machine. 1,819,208; Aug. 18.

Starkey, William C., and D. T. Brownlee, assignors to L. G. S. Devices Corporation, Indianapolis, Ind. Reversing drive. 1,819,306; Aug. 18.

Staunton, Le Roy W., Jackson Heights, N. Y., and C. A. Brigham, East Orange, assignors to Brandes Laboratories, Inc., Newark, N. J. Sound reproducer and manufacturing the same. 1,819,627; Aug. 18.

Staunton, Le Roy W., Jackson Heights, N. Y., assignor to Brandes Laboratories, Inc., Newark, N. J. Sound reproducing diaphragm. 1,819,659; Aug. 18.

Stearns, Frank B., Cleveland, Ohio. Mechanism for controlling the supply of liquid fuel to internal combustion engines. 1,819,209; Aug. 18.

Stearns, Harry C., Oak Park, assignor of one-third to C. A. Whitsett, Chicago, and one-third to H. W. Larson, Downers Groves, Ill. Gasoline gauge for automobiles. 1,819,849; Aug. 18.

Stebbins, Livingston, administrator. (See Preble, James J.)

Stegeman, Henry J., Fairfield, and D. Locke, assignors to The Locke Steel Chain Company, Bridgeport, Conn. Lawn mower. 1,819,133; Aug. 18.

Stenhouse, Thomas, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Glass feeder. 1,819,446; Aug. 18.

Stevens, Henry V., Topeka, Kans. Boiler. 1,819,134; Aug. 18.

Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Winding and reeling device. 1,819,989; Aug. 18.

Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Bond cutting machine. 1,819,990; Aug. 18.

Stevens, William C., assignor to The Firestine Tire and Rubber Company, Akron, Ohio. Band cutting machine. 1,819,991; Aug. 18.

Stewart-Warner Corporation. (See Edwards, William A., assignor.)

Still, Carl. (See Wessel, Carl, assignor.)

Stoetzel, Joseph J., Queens Village, assignor to G & G Atlas Systems, Inc., New York, N. Y. Carrier inserting and discharge device for penumatic dispatch systems. 1,819,307; Aug. 18.

Stokes, John C., assignor to Reed Roller Bit Company, Houston, Tex. Collapsible bit. 1,819,798; Aug. 18.

Stokes, John C., Houston, Tex. Drill bit. 1,819,850; Aug. 18.

Stokes, John F. (See Machlett, R. R', and Stokes.)

Stone, Arthur A., Cleveland, assignor to Pearl F. Stone, Cleveland Heights, Ohio. Broiling device. 1,819,660; Aug. 18.

Stone, John M., assignor to Operadio Manufacturing Co., St. Charles, Ill. Sound reproducing device. 1,819,721; Aug. 18.

Stone, Pearl F. (See Stone, Arthur A., assignor.)

Stone, Samuel M. (See Sherman, John E., assignor.)

Strandberg, Erick W., Omaha, Nebr. Lawn mower. 1,819,447; Aug. 18.

Straub, Charles O. (See Jackson, H. F., and Straub.)

Sudre, René, Paris, assignor to Societe D'Exploitation Des Brevets Fort., Villiers, Neuilly sur Seine, France. Portable shearing tool. 1,819,135; Aug. 18.

Sugimura, Ihei, Shiba Ku, Tokyo, and K. Magarisawa, Tsurumi Ku, Yokohama, assignors to Meijiro Yasumoto, Yokohama, Japan. Composite casting. 1,819,722; Aug. 18.

Sullivan, Edward W., Rockaway Park, N. Y. Hose coupling. 1,819,448; Aug. 18.

Sullivan Machinery Company. (See Boudette, Cornelius G., assignor.)

Sullivan Machinery Company. (See Holdsworth, Fred D., assignor.)

Sullivan Machinery Company. (See Holmes, Morris P., assignor.)

Sullivan, Michael F., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Gauge for fabric cutting machines. 1,819,046; Aug. 18.

Summers, Bertrand S., Evanston, Ill., and H. T. Heath, Cardenas, Cuba. Connecting conveyer device for handling fibrous material in manufacture. 1,819,661; Aug. 18.

Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus switch control. 1,819,979; Aug. 18.

Tark, Marcus B., assignor to Link-Belt Company, Philadelphia, Pa. Bearing. 1,819,394; Aug. 18.

Tate, James E., Minneapolis, Minn., assignor to H. E. Vance, Bemidji, Minn. Superstructure for beacon towers. Des. 84,904; Aug. 18.

Tate, James E., Minneapolis, Minn., assignor to H. E. Vance, Bemidji, Minn. Beacon tower. Des. 84,905; Aug. 18.

Taylor, George F., Schenectady, N. Y., assignor to General Electric Company. Metal stencil. 1,819,827; Aug. 18.

Taylor, Robert B., Hawaii, assignor to Hawaiian Canneries, Ltd., Kapaa, Hawaii. Device for recovering pineapple from waste shells. 1,819,575; Aug. 18.

Taylor Shantz Company. (See Germany, Edgar R., assignor.)

Teeter, Wilford H. (See Aseltine, F. E., and Teeter.)

Teeter, Wilford H., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,819,526; Aug. 18.

Teeter, Wilford H., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,819,527; Aug. 18.

Telefonaktiebolaget L. M. Ericsson. (See Larsson, Knut., assignor.)

Telefonsktiebolaget L. M. Ericsson. (See Lundell, Torsten A., assignor.)

Terry, Matson C., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Refrigerator. 1,819,528; Aug. 18.

Thomae, George E. (See Pierson, C. W. Fitzgerald, and Thomae.)

Thomas, Adolph A., New York, N. Y., assignor to United Reproducers Corporation. Loud speaker. 1,819,210; Aug. 18.

Thomas, John. (See Wilson, J. S., Shearer, and Thomas.)

Thomas, John P., jr. (See Irish, Rush W., assignor.)

Thompson, Allison J., Cleveland, Ohio. Lamp hanger structure. 1,819,529; Aug. 18.

Thompson Manufacturing Company. (See Thompson, Walter Van E., assignor.)

Thompson, Seth W., Montclair, N. J. Internal combustion engine. 1,819,137; Aug. 18.

Thompson, Walter Van E., assignor to Thompson Manufacturing Company, Los Angeles, Calif. Automatic rotating sprinkler head. 1,819,530; Aug. 18.

Thompson, Wayne B. (See Preble, J. J., and Thompson.)

Thoms, David B. (See Hart, A. V., and Thoms.)

Thomson, McLeod, Chelsea, N. J. Railway rail. 1,819,980; Aug. 18.

Thordarson Electric Manufacturing Company. (See Pearson, Oscar A., assignor.)

Thorne, Carl B., Hawkesbury, Ontario, Canada. Pulp storing and mixing machine. 1,819,531; Aug. 18.

Thornton, John E., West Hampstead, London, assignor to John O. O'Brien, Manchester, England. Cinematograph apparatus. 1,819,047; Aug. 18.

Thornton, John E., London, England. Multicolor cinematograph film material. 1,819,981; Aug. 18.

Thorpe, Samuel T. (See Broadwell, H. S., and Thorpe.)

Thorpe, Samuel T., and L. Zipp, assignors to The Horton Manufacturing Company, Bristol, Conn. Fishing reel. 1,819,723; Aug. 18.

Thrasher, Toy, Golden, Miss. Violin. 1,819,928; Aug. 18.

Threlkeld, Lewis P. (See Duncan, Herbert L., assignor.)

Thurber, George. (See Primos, Gus K., assignor.)

Thurman, William B., Stockton, Calif, assignor to Fireproof Wall Company, Reno, Nev. Making coves and corners for plaster lath. 1,819,345; Aug. 18.

Thwaits, Frederick G., Wauwatosa, assignor to The Heil Co., Milwaukee, Wis. Sanitary vent for pressure milk tanks. 1,819,827; Aug. 18.

Till, Edwin W., assignor to A. J. Reach Company, Philadelphia, Pa. Baseball mitt. 1,819,048; Aug. 18.

Titterington, George A., executor. (See Titterington, Morris M.)

Titterington, Morris M., deceased, Brooklyn, N. Y.; George A. Titterington, executor, assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Earth inductor generator. 1,819,488; Aug. 18.

Tobin, Kenneth J. (See Wasberg, A., and Tobin.)

Toledo Machine & Tool Company, The. (See Dorman, N. W., and Hatch, assignors.)

Tolman, Edgar B., jr., Chicago, Ill. Conveyer. 1,819,346; Aug. 18.

Tomeshko, George, assignor of ten percent to Andrew Hardisky, Trucksville, Pa. Drilling machine. 1,819,211; Aug. 18.

Tomkinson, Charles C., Plainfield, N. J., assignor, by mesne assignments, to J. Edward Ogden Company, New York, N. Y. Toggle bolt. 1,819,828; Aug. 18.

Toncray, Millard H., assignor to Hudson Motor Car Company, Detroit, Mich. Doorstop strap. 1,819,212; Aug. 18.

Torridaire Company. (See Baysinger, Virgil R., assignor.)

Trantwein, Jacob O., Chicago, Ill. Match packet. 1,819,395; Aug. 18.

Treadwell, M. H., Company. (See Olson, Johan H., assignor.)

Trinity Wheel Corporation. (See Baker, Frederick W., assignor.)

Trogner, Arthur M., East Orange, N. J., assignor to Wired Radio Inc., New York, N. Y. Fluid flow meter. 1,819,138; Aug. 18.

Trout, Walter C., Lufkin, Tex. Beam hanger. 1,819,799; Aug. 18.

Truax, Frank N., Fonda, Iowa. Automatic spark retarder for internal combustion engines. 1,819,576; Aug. 18.

Tumminello, Charles E., assignor of one-fourth to S. A. Greenberg, and one-fourth to H. K. Angel, Pittsburgh, Pa. Self sorting card files. 1,819,929; Aug. 18.

Turner, William B., East Orange, assignor to Walker-Turner Company, Inc., Jersey City, N. J. Polishing device. 1,819,800; Aug. 18.

Turrell, Merton. (See Crawford, E. B., and Turrell.)

Tyndall, Hattie K., San Leandro, Calif. Method of and apparatus for precipitating drift or sheet salt. 1,819,577; Aug. 18.

Underwood Elliott Fisher Company. (See Walsleben, Fred, assignor.)

Uniclox Corporation. (See Schulse, Herman E., assignor.)

Union Special Machine Company. (See Carver, Robert R., assignor.)

Union Switch & Signal Company, The. (See Clausen, Harold C., assignor.)

Union Switch & Signal Company, The. (See Kobayakawa, Tokio, assignor.)

Union Switch and Signal Company, The. (See Manzoli, Giusenpe, assignor.)

Union Switch & Signal Company, The. (See O'Meara, Thomas J., assignor.)

Union Switch & Signal Company, The. (See Smith, William E., assignor.)

Union Switch & Signal Company, The. (See Sorensen, Andrew J., assignor.)

United Autographic Register Co. (See Aspenleiter, Peter A., assignor.)

United Engineering & Foundry Company. (See Biggert, F. C., jr., and Johnson, assignors.)

United Reproducers Corporation. (See Thomas, Adolph A., assignor.)

United Shoe Machinery Corporation. (See Hall, Thomas P., assignor.)

United Shoe Machinery Corporation. (See Plm, Arthur F., assignor.)

United Shoe Machinery Corporation. (See Reed, Joseph V., assignor.)

United States Gypsum Company. (See Marks, Herbert B., assignor.)

United States Specialty Corporation. (See Lundquist, Hans, assignor.)

Universal Optical Corporation. (See Marciano, Gerardo F., assignor.)

Universal Winding Company. (See Anderson, Johan A., assignor.)

Unterholzner, Josef, Munich, Germany. Temperature indicator. 1,819,347; Aug. 18.

Vadeboncoeur, Henry, Kankakee, Ill. Anti-skid chain. 1,819,930; Aug. 18.

Valerio, Pompilio, Cincinnati, Ohio. Spool holder for spools of thread and the like. Des. 84,906; Aug. 18.

Vallée, Joseph A., assignor of one-half to N. Mathieu, Montreal, Quebec, Canada. Window sash operating mechanism. 1,819,992; Aug. 18.

Valletta, Vittorio, assignor to Fiat Societa Anonima, Turin, Italy. Cylinder for internal combustion engines. 1,819,759; Aug. 18.

Valoppi, Eugene, Scranton, Pa. Curtain and shade fixture. 1,819,396; Aug. 18.

Vance, Henry E. (See Tate, James E., assignor.)

Vandegrift, Nelson M., assignor to Sheip & Vandergrift Inc., Philadelphia, Pa. Lid for refrigerator cabinet. 1,819,851; Aug. 18.

Van Dorn, Herbert E., Chicago, Ill., assignor to William E. Van Dorn, Pasadena, Calif. Car and electric coupler. 1,819,213; Aug. 18.

Van Dorn, Herbert E., Chicago, Ill., assignor to W. E. Van Dorn, Pasadena, Calif. Combined car and electric coupler. 1,819,214; Aug. 18.

Van Dorn, William E. (See Van Dorn, Herbert E., assignor.)

Van Ess Laboratories, Inc. (See Van Sant, Robert H., assignor.)

Van Gytenbeek, Anthony, Paterson, N. J. Toy savings bank. Des. 84,907; Aug. 18.

Van Sant, Robert H., Chicago, Ill., assignor to Van Ess Laboratories, Inc. Massage applicator. 1,819,628; Aug. 18.

Van Senden, Gerhardus, H. Martinez, assignor, by mesne assignments, to Shell Development Company, San Francisco, Calif. Treating liquid hydrocarbons. 1,819,848; Aug. 18.

Vaughan, William S. (See Knowlton, W., and Vaughan.)

Vibrachek Company, The. (See Wiltse, Jerome A., assignor.)

Vickers, Harry H., Corona, assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,819,931; Aug. 18.

Vieau, Harold F., Liverpool, and E. J. O'Neill, Syracuse, assignors of one-third to R. C. Higby, Big Moose, N. Y. Rinsing and drying apparatus. 1,819,982; Aug. 18.

Vieg, Charles J., Appleton, Minn. Weeding shoe. 1,819,662; Aug. 18.

Voituron, Edmond, Brussels, Belgium. Dismounting device for lead columns, pipes, or the like. 1,819,983; Aug. 18.

Volckhausen, Julius, Weehawken, N. J., assignor to A. Schrader's Son Inc., Brooklyn, N. Y. Valve inside. 1,819,852; Aug. 18.

Volk, Ralph, Portland, Oreg., assignor to Koehring Company, Milwaukee, Wis. Excavator. Des. 18,156; Aug. 18.

Von Mehren, Oswald D., New York, N. Y., assignor to Mehren Lock Company, Incorporated, Clifton, N. J. Key operated combination lock. 1,819,853; Aug. 18.

Vortex Cup Company. (See Barbieri, Cesare, assignor.)

Wadsworth, Frank L. O., Pittsburgh, Pa. Lubricating mechanism for deep well drills. 1,819,532; Aug. 18.

Wahlberg, Nils A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Conductor clamp. 1,819,533; Aug. 18.

Waite, Lorenzo E., assignor to Erie Malleable Iron Company, Erie, Pa. Forming metal wheels. 1,819,854; Aug. 18.

Walden, Edwin M., Tampa, Fla. Airplane vertical rudder control mechanism. 1,819,801; Aug. 18.

Walden, Harold L., Helena, Mont. Game apparatus. 1,819,932; Aug. 18.

Walker, Earl C., Chicago, Ill., assignor to International Harvester Company. Lubricating device. 1,819,663; Aug. 18.

Walker, Fred I., Newark, N. J. Button edging machine. 1,819,308; Aug. 18.

Walker-Turner Company. (See Turner, William B., assignor.)

Wallace, Warren W. (See Smith, N. C., and Wallace.)

Walrath, Herbert R., Meadville, Pa., assignor to Hookless Fastener Company. Receptacle fastener. 1,819,349; Aug. 18.

Walrath, Herbert R., Meadville, Pa., assignor to Hookless Fastener Company. Lock-controlled receptacle and improved fastener therefor. 1,819,449; Aug. 18.

Walsleben, Fred, Rockville Center, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,819,215; Aug. 18.

Walter, Wilhelm, Cologne-Niehl, and L. Lock, Dormagen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing cellulose nitroacetate. 1,819,397; Aug. 18.

Ward, Humphrey R., Boston, Mass., assignor to The Warner & Swasey Company, Cleveland, Ohio. Chuck. 1,819,802; Aug. 18.

Ward, Patrick C., Homeville, Pa. Control system. 1,819,489; Aug. 18.

Warner, Douglas K., Bristol, Conn. Air cushion boat. 1,819,216; Aug. 18.

Warner & Swasey Company, The. (See De Graff, Wilbur C., assignor.)

Warner & Swasey Company, The. (See Ward, Humphrey R., assignor.)

Warren, S. D., Company. (See Miller, Bert C., assignor.)

Wasberg, Axel, and K. J. Tobin, assignors to Camel Company, Chicago, Ill. Ball supporting and lifting arrangement. 1,819,809; Aug. 18.

Watson, Arthur C., Marietta, Ohio. Apparatus for producing visual effects. 1,819,217; Aug. 18.

Watson, Arthur C., Marietta, Ohio. Method of and apparatus for advertising. 1,819,218; Aug. 18.

Watson, Frank, Baltimore, Md. Folding box. 1,819,933; Aug. 18.

Watt, Bruce A., Buffalo, Wyo. Power loading dump wagon. 1,819,578; Aug. 18.

Wegehoft, John H., St. Louis, Mo. Illuminated built-in mail box. 1,819,398; Aug. 18.

Wehrle Company, The. (See Pickup, George E., assignor.)

Weibull, Ernst H. W., Saltsjobaden, and E. G. Hysing, assignors to Aktiebolaget Nordiska Armaturfabrikena, Stockholm, Sweden. Striking tool. 1,819,139; Aug. 18.

Weidlein, Edward, Augusta, Kans. Automatic gate. 1,819,984; Aug. 18.

Weimer, Hugo W., Milwaukee, Wis. Rotary screen. 1,819,049; Aug. 18.

Weir, Harry N., assignor to The Noble & Wood Machine Co., Hoosick Falls, N. Y. Jordan engine plug. 1,819,050; Aug. 18.

Weisgerber, Edwin C., Los Angeles, Calif. Expansible fish tail bit. 1,819,273; Aug. 18.

Weiss, Max, Newark, N. J. Canopy. 1,819,490; Aug. 18.

Welch, Elmer B. (See Firth, L. G., and Welch.)

Weller, Frank F., Jennings, La. Automobile jack. 1,819,450; Aug. 18.

Wersall, Karl J., assignor to American Kambi Company, New York, N. Y. Centrifugal clutch. 1,819,829; Aug. 18.

Wersall, Karl J., assignor to American Kambi Company, New York, N. Y. Spring-controlled centrifugal clutch. 1,819,830; Aug. 18.

Wesenberg, Georg, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Media for combating animal and vegetable pests. 1,819,399; Aug. 18.

Wessel, Carl, Borbeck, near Essen-on-the-Ruhr, assignor to the Firm: Carl Still, Recklinghausen, Westphalia, Germany. Coke oven. 1,819,934; Aug. 18.

West, Omar K., Detroit, Mich. Bulkhead. 1,819,664; Aug. 18.

Western Electric Company. (See Massingham, Henry R., assignor.)

Western Electric Company. (See Schroeder, William, assignor.)

Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)

Westinghouse Electric Elevator Company. (See Dunlop, James, assignor.)

Westinghouse Electric & Manufacturing Company. (See Aronoff, Samuel, assignor.)

Westinghouse Electric & Manufacturing Company. (See Baruch, Milton, assignor.)

Westinghouse Electric & Manufacturing Company. (See Brace, Porter H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Conrad, Frank, assignor.)

Westinghouse Electric & Manufacturing Company. (See Crichton,, L. N., and Breisky, assignors.)

Westinghouse Electric & Manufacturing Company. (See Eschholz, Otto H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Frank, Leo C., assignor.)

Westinghouse Electric & Manufacturing Company. (See Goff, James T., assignor.)

Westinghouse Electric & Manufacturing Company. (See Holmes, Ray H., assignor.)

Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.)

Westinghouse Electric & Manufacturing Company. (See Johnston, Howard H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Jones, Gordon F., assignor.)

Westinghouse Electric & Manufacturing Company. (See Kroppelin, Johannes, assignor.)

Westinghouse Electric & Manufacturing Company. (See McIntyre, Edward W., assignor.)

Westinghouse Electric & Manufacturing Company. (See Peters, John F., assignor.)

Westinghouse Electric and Manufacturing Company. (See Reichmann, R., and Zimmermann, assignors.)

Westinghouse Electric & Manufacturing Company. (See Sandin, Jerome, assignors.)

Westinghouse Electric & Manufacturing Company. (See Slepian, Joseph, assignor.)

Westinghouse Electric & Manufacturing Company. (See Terry, Matson C., assignor.)

Westinghouse Electric & Manufacturing Company. (See Wahlberg, Nils A., assignor.)

Westinghouse Electric and Manufacturing Company. (See White, H. E., and James, assignors.)

Westinghouse Electric & Manufacturing Company. (See Whittaker, Charles C., assignor.)

Westinghouse Electric & Manufacturing Company. (See Winkler, Frederic C., assignor.)

Weyandt, Carl S., assignor to Central Electric Tool Company, Pittsburgh, Pa. Method of and apparatus for operating electric motors. 1,819,008; Aug. 18.

Weyandt, Carl S., Pittsburgh, Pa. Tie-tamping system and operating the same. 1,819,009; Aug. 18.

Weyandt, Carl S., and H. E. Fox, Pittsburgh, Pa., assignors, by mesne assignments, to Central Electric Tool Company. Reciprocating motor. 1,819,140; Aug. 18.

Whalen, James, Omaha, Nebr. Electric switch. 1,819,831; Aug. 18.

Wheary, George H., assignor to Wheary Trunk Company, Racine, Wis. Baggage carrier. 1,819,274; Aug. 18.

Wheary Trunk Company. (See Wheary, George H., assignor.)

Wheeler, J. R., et al. (See Fink, Berl I., assignor.)

Whitaker, Herbert M., and M. D. Overstreet, Enfield, N. C. Fertilizer distributor. 1,819,935; Aug. 18.

Whitcomb, Emma E., et al., administratrices. (See Whitcomb, James A.)

Whitcomb, James A., deceased; E. E. Whitcomb and T. G. Whitcomb, Kenosha, Wis., administratrices. Motor vehicle front end suspension. 1,819,579; Aug. 18.

Whitcomb, James A., Kenosha, Wis., deceased; E. E. Whitcomb, and T. G. Whitcomb, Kenosha, Wis., administratrices. Front wheel drive for motor vehicles. 1,819,580; Aug. 18.

Whitcomb, Thelma G., et al., administratrices. (See Whitcomb, James A.)

White, Harold E., Wilkinsburg, and H. D. James, Edgewood, Pa., assignor to Westinghouse Electric and Manufacturing Company. Merchandising establishment. 1,819,491; Aug. 18.

White, James H., assignor to H. Germain, New York, N. Y. Taking and projecting motion pictures. 1,819,492; Aug. 18.

White, Raymond E. (See Mayr, K. A., and White.)

White, William, Cleveland, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Crane. 1,819,803; Aug. 18.

Whiting, Donald F., Port Washington, assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Vacuum tube circuits. 1,819,629; Aug. 18.

Whiting, Jasper, Dublin, N. H., assignor to Container Patents Corporation, New York, N. Y. Container. 1,819,804; Aug. 18.

Whitman, Walter G., and C. C. Miller, assignors to Standard Oil Company, Whiting, Ind. Removal of gas and low-boiling fractions from petroleum products. 1,819,760; Aug. 18.

Whitsett, Cameron A., et al. (See Stearns, Harry C., assignor.)

Whitson, Ralph A. (See Melville, A., Dundas, and Whitson.)

Whittaker, Charles C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Water rheostat. 1,819,141; Aug. 18.

Whitwell, John H., Philadelphia, Pa. Wallpaper. Des. 84,908; Aug. 18.

Wikstrom, Frank G., Brooklyn, assignor to Hadwik Mfg. Co., Inc., New York, N. Y. Closure. 1,819,493; Aug. 18.

Wiles, Charles L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Ring forming machine with knock-out. 1,819,630; Aug. 18.
Wilkie, Warren, and A. A. Leverenz, assignors to Parke, Davis Company, Detroit, Mich. Capsule filling machine. 1,819,936; Aug. 18.
Williams, Alfred O. (See Evans, K. J., and Williams.)
Williams, Charles B., Nashville, Tenn. Tariff binder. 1,819,937; Aug. 18.
Williams, Francis W., Charlotte, N. C. Heat exchange device. 1,819,832; Aug. 18.
Williams, John, Philadelphia, Pa. Piston ring. 1,819,581; Aug. 18.
Williams, John, Philadelphia, Pa. Piston ring. 1,819,582; Aug. 18.
Williams, John M. (See Robson, Joseph B., assignor.)
Wilson, Albert A., Minneapolis, Minn., assignor of one-half to Alexander D. Robertson. Shock absorbing mechanism. 1,819,855; Aug. 18.
Wilson, Charles E., Bridgeport, Conn., assignor to General Electric Company. Cable connecter and applying the same. 1,819,938; Aug. 18.
Wilson, James S., G. W. Shearer, and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Steaming or aging machine for dyeing, printing and like operations. 1,819,051; Aug. 18.
Wilson-Jones Company. (See Murphy, Edward B., assignor.)
Wilson, Lyndon F., Chicago, Ill. Combined compass and light. 1,819,310; Aug. 18.
Wiltse, Jerome A., assignor to The Vibrachek Company, Fremont, Nebr. Vibration reducing device. 1,819,665; Aug. 18.
Wily, James H., Bethlehem, Pa. D-handle. 1,819,142; Aug. 18.
Winkler, Frederic C., Lakewood, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Light fixture hanger. Des. 84,909; Aug. 18.
Winter, Joseph W., Penfield, assignor to John Wood Manufacturing Company, Conshohocken, Pa. Thermostatically operative valve. 1,819,993; Aug. 18.
Winters, Orval C., Youngstown, Ohio. Crusher. 1,819,583; Aug. 18.
Winthrop Chemical Company. (See Spengler, O., and Pfannenstiel, assignors.)
Winthrop Chemical Company. (See Wesenberg, Georg, assignor.)
Wired Radio Inc. (See Troemer, Arthur M., assignor.)
Wissig, Samuel, Susanville, Calif. Book of toothpicks. 1,819,451; Aug. 18.
Wochner, Henry, assignor to Bear Manufacturing Company, Rock Island, Ill. Axle straightening mechanism. 1,819,311; Aug. 18.
Wohlfahrt, Edvard S. S., Fagersta, Sweden. Valve aggregates for regenerative furnaces, heat apparatus, etc. 1,819,052; Aug. 18.
Wolfe, Harry H., and H. L. Myers, assignors to The American Floor Surfacing Machine Company, Toledo, Ohio. Combined casing for a floor polishing brush and handle therefor. Des. 84,910; Aug. 18.
Wolff, Otto, et al. (See Rosenbagen, Victor, assignor.)
Wolvin, Roy M. (See Robinson, Joseph, assignor.)
Wood, Jarrett B., Tulsa, Okla. Steam boiler. 1,819,350; Aug. 18.
Wood, John, Manufacturing Company. (See Winter, Joseph W., assignor.)
Wood, Rodney J., Dayton, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. File system. 1,819,666; Aug. 18.
Wood, William G., assignor to American Woodlite Corporation, San Francisco, Calif. Light projecting reflector. 1,819,725; Aug. 18.
Wood, William G., assignor to American Woodlite Corporation, San Francisco, Calif. Light projector. 1,819,726; Aug. 18.
Woodard, William E., Forest Hills, N. Y. Locomotive driving box and bearing therefor. 1,819,856; Aug. 18.
Woodburn, Charles T., Pitcairn, Pa. Contact staff for cranes. 1,819,010; Aug. 18.
Woodbury, Henry C., Berkeley, Calif. Distributor testing device. 1,819,312; Aug. 18.
Woodland, Percy T., Grahamstown, South Africa. Corn harvesting machine. 1,819,631; Aug. 18.
Woodruff, Frank O., Quincy assignor to Beckwith Manufacturing Company, Boston, Mass. Shoe stiffener material and making. 1,819,011; Aug. 18.
Woodstock Typewriter Company. (See Hokanson, Otto A., assignor.)
Wright, James C., Canton, Ga., assignor to Draper Corporation, Hopedale, Mass. Filling fork grid and clearer for looms. 1,819,939; Aug. 18.
Wright, Leonard K., Jackson Heights, N. Y. Valve. 1,819,452; Aug. 18.
Wysard, Ernst. (See Krebser, A., and Wysard.)
Yasumoto, Meijiro. (See Sugimura, I., and Magarisawa, assignors.)
York Heating and Ventilating Corporation. (See Lewis, Alexander T., assignor.)
York Ice Machinery Corporation. (See Bergdoll, John G., assignor.)
Young, Archer E., Pittsburgh, Pa. Measuring apparatus. 1,819,313; Aug. 18.
Young, George H., Chicago, Ill. Tire cushion. 1,819,632; Aug. 18.
Young, W. J., Machinery Company. (See Young, William J., assignor.)
Young, William J., assignor to W. J. Young Machinery Company, Lynn, Mass. Dowel driving machine. 1,819,584; Aug. 18.
Yungling, Paul F., assignor to Scott-Ross and Company, Los Angeles, Calif. Fluid-operated pump. 1,819,351; Aug. 18.
Zerweck, Werner, and E. Honold, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New vat dyestuffs of the benzanthrone series and making same. 1,819,053; Aug. 18.
Zimmerman, Karl. (See Reichmann, R., and Zimmermann.)
Zipp, Louis. (See Thorpe, S. T., and Zipp.)
Zitscher, Arthur. (See Laska, L., and Zitscher.)
Zuckerman, Nathan, Brooklyn, N. Y. Radio vacuum tube socket adapter. 1,819,805; Aug. 18.
Zuckermandel, Edward C., assignor to The Dow Chemical Company, Midland, Mich. Method of preventing decomposition of halogenated hydrocarbons. 1,819,585; Aug. 18.
Zurcher, Paul, Florence, Colo., assignor, by mesne assignments, to Continental Oil Company, Ponca City, Okla. Activated carbon. 1,819,314; Aug. 18.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 18TH DAY OF AUGUST, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid chlorides, Manufacture of organic mono-carboxylic. C. L. Masters. 1,819,613; Aug. 18.
Acid of carbazole, Hydroxy carboxylic. A. Schmelzer, F. Muth, and F. Ballauf. 1,819,127; Aug. 18.
Advertising device. J. Gallagher. 1,818,988; Aug. 18.
Advertising, Method of and apparatus for. A. C. Watson. 1,819,218; Aug. 18.
Aeroplane. P. A. Peterson. 1,819,262; Aug. 18.
Aeroplane. M. F. Schultze. 1,819,794; Aug. 18.
Aeroplane propeller. R. L. Rymal. 1,819,340; Aug. 18.
Air circulating and clarifying unit. J. D. Cole. 1,819,498; Aug. 18.
Air compressor. C. Olson. 1,819,966; Aug. 18.
Air compressor. A. J. Rix. 1,819,691; Aug. 18.
Air, Cooling and drying. W. L. Fleisher. 1,819,643; Aug. 18.
Air humidifier. W. Knowlton and W. S. Vaughan. 1,819,423; Aug. 18.
Airplane. F. G. Diago. 1,819,948; Aug. 18.
Airplane vertical rudder control mechanism E. M. Walden. 1,819,801; Aug. 18.
Airplane wing construction. J. V. Crichton. 1,818,971; Aug. 18.
Airplanes, Combating sleet on. C. F. Chisholm. 1,819,497; Aug. 18.
Air purifier. H. H. Root. 1,819,521; Aug. 18.
Air washer. G. S. Dauphinee. 1,819,595; Aug. 18.
Alloys for the purpose of removing therefrom certain constituents whose presence renders the alloys unsuitable for certain uses, Treating waste. P. Kemp. 1,819,607; Aug. 18.
Amplifier and oscillation generator, Thermionic. H. J. Round. 1,819,845; Aug. 18.
Amplifiers, Making sound. J. B. Hawley. 1,819,328; Aug. 18.
Anchor. T. Birkenmaier. 1,819,762; Aug. 18.
Anchor. W. O. Isaacson. 1,819,512; Aug. 18.
Anhydride, Manufacturing acetic. G. P. Lunt. 1,819,563; Aug. 18.
Animal pests, Destruction of. W. Beck. 1,819,145; Aug. 18.
Antenna regulator. J. E. Love. 1,819,904; Aug. 18.
Apparatus for rescuing crews of submarines. C. E. Olson. 1,819,918; Aug. 18.
Apparatus or tool for applying coating. J. J. Preble and W. B. Thompson. 1,819,115; Aug. 18.
Apparatus or tool for applying coating. J. J. Preble. 1,819,116; Aug. 18.
Apparatus or tool for applying coating materials. J. J. Preble and W. B. Thompson. 1,819,117; Aug. 18.
Applicator. W. L. Johnson. 1,819,898; Aug. 18.
Applicator for administering irrigating fluids and radiant energy to the urethra. F. B. Hart. 1,819,368; Aug. 18.
Arch support. M. P. Bringardner. 1,819,539; Aug. 18.
Article and producing same, Rubber covered. B. Bronson. 1,819,147; Aug. 18.
Automatic gate. E. Weidlein. 1,819,984; Aug. 18.
Automobile jack. F. F. Weller. 1,819,460; Aug. 18.
Automobile lift. F. Ackerman. 1,819,275; Aug. 18.
Axle, Motor vehicle. A. Moorhouse. 1,819,110; Aug. 18.
Axle straightening mechanism. H. Wochner. 1,819,311; Aug. 18.
Azodyestuffs, Manufacture of new. L. Laska and A. Zitscher. 1,819,103; Aug. 18.
Bag: See—
Valve bag.
Bag machine. W. Muirhead. 1,819,786; Aug. 18.
Baggage carrier. G. H. Wheary. 1,819,274; Aug. 18.
Ball shaping apparatus. C. S. Bradley. 1,819,220; Aug. 18.
Ball supporting and lifting arrangement. A. Wasberg and K. J. Tobin. 1,819,309; Aug. 18.
Ballast tamping machine. M. Collet. 1,819,945; Aug. 18.
Band cutting machine. W. C. Stevens. 1,819,991; Aug. 18.
Banjo mute. C. W. Pierson, C. Y. Fitsgerald, and G. E. Thomae. 1,819,339; Aug. 18.
Bar: See—
Hair curling bar.
Baseball game. R. E. Bates. 1,819,219; Aug. 18.
Basket, Computing. G. K. Primos. 1,819,755; Aug. 18.
Batter mixing device. G. M. Sacerdote. 1,819,203; Aug. 18.
Battery case. R. R. Smith. 1,819,129; Aug. 18.
Battery tester, Storage. W. Z. Buerger. 1,819,072; Aug. 18.
Beacon tower. J. E. Tate. Des. 84,905; Aug. 18.
Beam hanger. W. C. Trout. 1,819,799; Aug. 18.
Bearing. C. R. Shert. 1,819,272; Aug. 18.
Bearing. M. B. Tark. 1,819,394; Aug. 18.
Bed spring brace. V. Massacese. 1,819,909; Aug. 18.
Bell, Electromagnetic. L. E. Richmond. 1,819,843; Aug. 18.
Belt, Link. S. Matsumoto. 1,819,185; Aug. 18.
Bicycle lock. A. L. Poe. 1,819,000; Aug. 18.
Binder, Tariff. C. B. Williams. 1,819,937; Aug. 18.
Binders, Trip adjuster for grain. D. W. Smith. 1,819,693; Aug. 18.
Bit: See—
Collapsible bit. Fish tail bit.
Drill bit
Blade propeller, Multiple. H. G. Baugh. 1,819,728; Aug. 18.
Block: See—
Loading block.
Board: See—
Ironing board. Terminal board.
Boat, Air cushion. D. K. Warner. 1,815,216; Aug. 18.
Boat, Nonsinkable. E. A. Parker and R. Cutsinger. 1,819,570; Aug. 18.
Boats from water, Arrangement for freeing. J. C. Clason. 1,819,074; Aug. 18.
Boiler: See—
Steam boiler.
Boiler. H. V. Stevens. 1,819,134; Aug. 18.
Boiler-flue rolling apparatus. R. O. Morrison. 1,819,915; Aug. 18.
Boiler headers, Apparatus for and making. J. J. Cain. 1,819,630; Aug. 18.
Bolt: See—
Toggle bolt.
Book. C. E. Gale. 1,819,159; Aug. 18.
Book, Appointment. C. H. Manzler. 1,819,429; Aug. 18.
Bookbinder, Manifold. W. F. Baker. 1,819,940; Aug. 18.
Book covering machine. P. E. Kleineberg. 1,819,030; Aug. 18.
Book of tooth picks. S. Wissig. 1,819,451; Aug. 18.
Bores, Drilling of terrestrial. A. G. Loomis, H. A. Ambrose, and J. S. Brown. 1,819,646; Aug. 18.
Boring ripper. S. C. Doehring. 1,819,949; Aug. 18.
Bottle. E. W. Fuerst. Des. 84,887; Aug. 18.
Bottle and other labeling machine. P. J. Purdy. 1,819,263; Aug. 18.
Bottle capping machine. F. K. Mueller. 1,819,519; Aug. 18.
Bottle or similar article. G. F. Gallagher. Des. 84,888; Aug. 18.
Box: See—
Folding box. Mail box.
Fuse box.
Box head or end for field boxes. J. L. Maull. 1,819,752; Aug. 18.
Box slitting machine. J. F. Hoy. 1,819,817; Aug. 18.
Brace: See—
Bed spring brace.
Bracket: See—
Shade bracket.
Brake: See—
Clutch brake. Servo brake.
Fluid pressure brake.
Brake for printing presses, Ink roller. F. E. Hughes. 1,819,329; Aug. 18.
Brake lining and making the same. E. Slade. 1,819,344; Aug. 18.
Brake mechanism. L. P. Mooers and H. W. Fies. 1,819,192; Aug. 18.
Brake operating mechanism. R. S. Sanford. 1,819,846; Aug. 18.
Brake release, Automatic hand. B. I. Fink. 1,819,952; Aug. 18.
Braking mechanism. J. H. Olson. 1,819,788; Aug. 18.
Brick making machine. R. P. M. Davis. 1,819,740–1; Aug. 18.
Briquette forming and baking machine. W. C. Carpenter. 1,819,277; Aug. 18.
Broiling device. A. A. Stone. 1,819,660; Aug. 18.
Brush, Fountain. C. F. Fitter. 1,819,157; Aug. 18.
Buckle combination, Belt. B. Cooper. Des. 83,872–81; Aug. 18.
Building construction. N. E. Peden. 1,819,970; Aug. 18.

Building material, Apparatus for making. T. Robinson. 1,819,200; Aug. 18.
Building materials, Making. T. Robinson. 1,819,199; Aug. 18.
Bulkhead. O. K. West. 1,819,664; Aug. 18.
Bumper, Automobile. N. Littell. 1,819,471; Aug. 18.
Burner: *See*—
Fuel burner. Gas burner.
Butter dispensing machine. A. N. Manteris. 1,819,960; Aug. 18.
Button, Cuff. F. Guidetti. 1,819,163; Aug. 18.
Button edging machine. F. I. Walker. 1,819,308; Aug. 18.
Button making machine. E. Clemens. 1,819,811; Aug. 18.
Cabinet. R. E. Sandberg. 1,819,524; Aug. 18.
Cable connecter and applying the same. C. E. Wilson. 1,819,938; Aug. 18.
Cable grip. P. J. Martin and A. T. Coley. 1,819,430; Aug. 18.
Cable joint, Insulated. E. D. Eby. 1,819,882; Aug. 18.
Calculating machine, Quadruplex accumulator. E. J. Ens. 1,819,084; Aug. 18.
Calculating machines, Overdraft and signal printing mechanism for. F. W. Bernau. 1,819,067–8; Aug. 18.
Calibration system. O. A. Knopp. 1,819,714; Aug. 18.
Camera. R. A. Clapp. 1,819,593; Aug. 18.
Canopy. M. Weiss. 1,819,490; Aug. 18.
Cap. M. M. Husman. 1,819,558; Aug. 18.
Capsule filling machine. W. Wilkie and A. A. Leverenz. 1,819,936; Aug. 18.
Car bonnet and radiator mounting device, Motor. A. Kegresse. 1,819,178; Aug. 18.
Car replacer clamp. R. M. Grandy. 1,819,162; Aug. 18.
Cars, Bulkhead construction for refrigerator. E. J. Shur. 1,819,978; Aug. 18.
Carbon, Activated. P. Zurcher. 1,819,314; Aug. 18.
Carbon and its manufacture, Highly active. H. B. Hass. 1,819,165; Aug. 18.
Carburetor. E. Bow and L. W. Jenks. 1,819,698; Aug. 18.
Carburetor. W. C. Carter. 1,819,674; Aug. 18.
Carburetor E. F. Geiger. 1,819,706; Aug. 18.
Card, Indicating or order. E. F. Barron. 1,819,063; Aug. 18.
Cards from engines, Method and apparatus for obtaining indicator. G. D. Angle. 1,819,143; Aug. 18.
Carrier: *See*—
Baggage carrier. Mail bag carrier.
Carrier signaling system. H. A. Affel. 1,819,054; Aug. 18.
Cartridge, Blasting. F. H. Kneeland. 1,818,993; Aug. 18.
Cartridge, Blasting. F. H. Kneeland. 1,818,995; Aug. 18.
Case: *See*—
Battery case. Vanity case.
Case for a tobacco pipe and accessories, Pocket. S. Schishka. Des. 84,902; Aug. 18.
Case shift mechanism. O. A. Hokanson. 1,819,369; Aug. 18.
Casein and product thereof, Treating rennet. H. V. Dunham. 1,819,880; Aug. 18.
Casein, Producing low viscosity. H. V. Dunham. 1,818,878; Aug. 18.
Casein, Treatment of. H. V. Dunham. 1,819,879; Aug. 18.
Casement adjuster, Friction. R. C. Gray. 1,818,977; Aug. 18.
Cash register. J. Rawyler. 1,819,038; Aug. 18.
Cash register. B. M. Shipley. 1,819,042; Aug. 18.
Casing for a floor polishing brush and handle therefor, Combined. H. H. Wolfe and H. L. Myers. Des. 84,910; Aug. 18.
Casing for a suction cleaner or similar article. B. C. Becker. Des. 84,869; Aug. 18.
Casing head for oil wells, Safety. M. S. Cunningham. 1,819,875; Aug. 18.
Casting, Composite. I. Sugimura and K. Magarisawa. 1,819,722; Aug. 18.
Casting continuous polygonal bands. W. M. Carty. 1,819,942; Aug. 18.
Catalytic esterification. A. O. Jaeger. 1,819,818; Aug. 18.
Cellulose, Etherifying. F. C. Hahn. 1,819,600; Aug. 18.
Cellulose nitroacetate, Preparing. W. Walter and L. Lock. 1,819,397; Aug. 18.
Cellulosic material, Treating. B. Dorner. 1,819,152; Aug. 18.
Cement and the like, Manufacture of. A. C. Davis. 1,819,739; Aug. 18.
Cement, Manufacturing porous material from Portland. J. A. Eriksson. 1,819,018; Aug. 18.
Chain, Antiskid. H. Vadeboncoeur. 1,819,930; Aug. 18.
Chair: *See*—
Individual chair.
Charcoal, Method and apparatus for producing activated. H. B. Hass. 1,819,166; Aug. 18.
Charge forming device. F. E. Aseltine and W. H. Teeter. 7,819,495; Aug. 18.
Charge forming device. W. H. Teeter. 1,819,526–7; Aug. 18.
Check protector. F. J. Matthews. 1,819,875; Aug. 18.
Chill for castings. G. C. Bumbaugh. 1,819,765; Aug. 18.
Chuck. W. C. De Graff. 1,819,837; Aug. 18.
Chuck. H. R. Ward. 1,819,802; Aug. 18.
Cinematograph screen. J. C. Heck. 1,819,776; Aug. 18.
Cinematographic apparatus. J. E. Thornton. 1,819,047; Aug. 18.
Circuit breaker. J. Slepian. 1,819,207; Aug. 18.
Circuit breaker, Automatic. J. Sachs. 1,819,005; Aug. 18.
Circuit breaker tripping system. G. F. Jones. 1,819,245; Aug. 18.
Circuit breaker, Vacuum. O. H. Eschholz. 1,819,154; Aug. 18.
Circuit breaker, Vacuum. C. Kabele. 1,819,420; Aug. 18.
Circuit, Electric testing. H. T. Maser. 1,819,908; Aug. 18.
Circuit for amplifier tubes. R. H. Holmes. 1,819,511; Aug. 18.
Circuit interrupter. J. F. Peters. 1,819,261; Aug. 18.
Circuit, Vacuum tube. D. F. Whiting. 1,819,620; Aug. 18.
Circulation of the electrolyte in pressure decomposers with a separate circulation of the anolyte and catholyte, Regulating the. H. Niederreither and W. Ernst. 1,819,917; Aug. 18.
Clamp: *See*—
Car replacer clamp. Pipe clamp.
Conductor clamp.
Clamp for conductors. K. Kroizig. 1,819,750; Aug. 18.
Clamp for poles, Flag. F. W. Coffing. 1,819,768; Aug. 18.
Clasp and clasp supporter dental restoration. C. C. Kunde. 1,819,296; Aug. 18.
Clasp for automobile tire chain. E. J. Martel. 1,818,998; Aug. 18.
Clay and producing same, Actuated. W. S. Baylis. 1,819,496; Aug. 18.
Cleaner: *See*—
Vacuum cleaner.
Cleaner and ring compressor, Piston groove. M. L. Decker. 1,819,321; Aug. 18.
Cleaning, dyeing, drying and the like, Device for. C. G. Munters. 1,819,618; Aug. 18.
Clock case. G. Graff. Des. 84,890; Aug. 18.
Clock, Self winding electric. I. A. Aungst. 1,819,761; Aug. 18.
Closure. F. G. Wikstrom. 1,819,493; Aug. 18.
Closure operator and retaining means. J. Lipovsky. 1,819,104; Aug. 18.
Clutch brake. W. H. Radford. 1,819,385; Aug. 18.
Clutch, Centrifugal. K. J. Wersall. 1,819,829; Aug. 18.
Clutch control mechanism. W. M. Horn. 1,819,711; Aug. 18.
Clutch, Hydraulic. R. G. Jones. 1,819,696; Aug. 18.
Clutch, Spring controlled centrifugal. K. J. Wersall. 1,819,830; Aug. 18.
Coating apparatus. H. T. Hunter. 1,819,557; Aug. 18.
Cock, High pressure gauge. J. J. Cain. 1,819,672; Aug. 18.
Coil-junction-box for submarine cables. E. Schürer. 1,819,128; Aug. 18.
Coil, Water heater circulating. A. Friedman. 1,819,550; Aug. 18.
Coils, Impregnating. J. T. Goff. 1,818,976; Aug. 18.
Coin controlled mechanism. B. L. Fry. 1,819,413; Aug. 18.
Coin counting and assorting machine. C. L. Downey. 1,819,701; Aug. 18.
Coin counting machine. E. P. Donnellan. 1,819,235; Aug. 18.
Cold materials, Extruding. J. G. C. Mantle. 1,819,254; Aug. 18.
Collapsible bit. J. C. Stokes. 1,819,798; Aug. 18.
Collar. J. S. Abeles and E. Liud. 1,819,857; Aug. 18.
Colon treatments, Apparatus for administering. C. C. Honsaker. 1,818,978; Aug. 18.
Comb. L. L. Miller. 1,819,433; Aug. 18.
Combination lock, Key operated. O. D. von Mehren. 1,819,853; Aug. 18.
Communication by frequency variation. C. W. Hansell. 1,819,508; Aug. 18.
Compass and light, Combined. L. F. Wilson. 1,819,310; Aug. 18.
Composition of materials and producing them. M. T. Harvey. 1,819,416; Aug. 18.
Compressor, High speed. W. Fourness. 1,819,285; Aug. 18.
Compressor mechanism. F. D. Holdsworth. 1,819,709; Aug. 18.
Compressor, Mine car. F. D. Holdsworth. 1,819,710; Aug. 18.
Concrete slab. F. T. Brooks. 1,819,405; Aug. 18.
Condenser, Variable. L. Shapiro. 1,819,692; Aug. 18.
Conductor clamp. N. A. Wahlberg. 1,819,533; Aug. 18.
Conduit and making the same, Flexible. E. James. 1,819,175; Aug. 18.
Cones and the like, Device for and method of making fibrous. A. Newcombe. 1,819,300; Aug. 18.
Connecter. G. R. Metcalf, jr. 1,819,650–2; Aug. 18.
Connecter. G. R. Metcalf, jr. 1,819,654; Aug. 18.
Connecter, Automatic train pipe. J. Robinson. 1,819,386–7; Aug. 18.
Connecter fitting. G. R. Metcalf, jr. 1,819,653; Aug. 18.
Connecting cord and producing it, Electrical. H. R. Massingham. 1,819,612; Aug. 18.
Connecting rod structure. L. J. McKone. 1,819,784; Aug. 18.
Connection for flexible wrist watch bands, Terminal snap and loop. J. Kreisler. 1,819,781; Aug. 18.
Connection for shackle bolts, Automatically adjustable. F. F. James. 1,819,176; Aug. 18.
Connection, Drawbar. E. B. Staley. 1,819,893; Aug. 18.
Connection, Hose. N. Hubbard. 1,819,243; Aug. 18.
Connection, Insulator. D. H. Osborne. 1,819,880; Aug. 18.

Connection, Resistor and terminal. A. J. Hanson. 1,819,554; Aug. 18.
Connection, Tube. J. P. Roger. 1,819,202; Aug. 18.
Contact staff for cranes. C. T. Woodburn. 1,819,010; Aug. 18.
Container. J. F. Coyle. 1,819,279; Aug. 18.
Container. J. Whiting. 1,819,804; Aug. 18.
Container and packing system for polishing cloths. A. Resnati. 1,819,122; Aug. 18.
Containers in the art of cracking hydrocarbons, Sealing. E. C. Herthel. 1,819,095; Aug. 18.
Continuous sheet mill. W. M. Blecker. 1,819,763; Aug. 18.
Continuous strip mill. W. M. Blecker. 1,819,764; Aug. 18.
Control apparatus. H. H. Johnston. 1,819,177; Aug. 18.
Control device, Fuel and speed. W. C. Moore. 1,819,688; Aug. 18.
Control for fluid motors. E. Davis. 1,819,641; Aug. 18.
Control for heaters, Thermoelectric. H. I. Platt. 1,819,020; Aug. 18.
Control for motors, Automatic. A. C. Durdin. 1,819,774; Aug. 18.
Control mechanism for vehicle wheel brakes. J. R. Cautley. 1,819,767; Aug. 18.
Control system. E. F. Carter. 1,819,869; Aug. 18.
Control system. H. D. James. 1,819,465; Aug. 18.
Control system. P. C. Ward. 1,819,489; Aug. 18.
Control system for automatic gear and clutch shifting assemblies. G. Fleischel. 1,819,237; Aug. 18.
Converter, Vibrating. W. Moser. 1,819,617; Aug. 18.
Conveyer. T. J. Hile and L. D. Barber. 1,819,955; Aug. 18.
Conveyer. E. B. Tolman, jr. 1,819,346; Aug. 18.
Conveyer device for handling fibrous material in process of manufacture, Connecting. B. S. Summers and H. T. Heath. 1,819,661; Aug. 18.
Conveyer, Enameling furnace. R. MacDougall. 1,819,472; Aug. 18.
Conveyer, Switching. C. W. Resch. 1,819,972; Aug. 18.
Cooking apparatus. W. Noble. 1,819,301; Aug. 18.
Cooling system for marine motors, Water. F. T. Irgens. 1,818,991; Aug. 18.
Copper, Annealing sheet. G. A. Hempstead. 1,819,291; Aug. 18.
Cord reel. H. S. Montgomery. 1,819,434; Aug. 18.
Core wrapping machine. J. H. Graham and G. G. Gunderson. 1,819,746; Aug. 18.
Corn harvesting apparatus. M. E. Kraxberger. Re18,159; Aug. 18.
Corn harvesting machine. P. T. Woodland. 1,819,631; Aug. 18.
Cotton picking and gathering machine. M. L. Osborn. 1,819,438; Aug. 18.
Cotton picking machine. W. S. Hobson. 1,819,242; Aug. 18.
Counterflow carburizing machine. H. H. Harris. 1,819,509; Aug. 18.
Counter structure, Bank. E. A. Ekedahl. 1,819,253; Aug. 18.
Coupler, Car and electrode. H. E. Van Dorn. 1,819,213; Aug. 18.
Coupler, Combined car and electric. H. E. Van Dorn. 1,819,214; Aug. 18.
Coupling: *See*—
Hose coupling. Shaft coupling.
Pipe coupling.
Coupling head, Automatic train pipe. A. A. Leclerc. 1,819,372; Aug. 18.
Cover for containers. T. W. Miller and A. D. Greene. 1,819,918; Aug. 18.
Coverings, Retaining device for pipe. M. H. Gysling. 1,819,553; Aug. 18.
Crane. W. White. 1,819,803; Aug. 18.
Crankless engine. T. L. Sherman. 1,819,826; Aug. 18.
Crate, Collapsible chicken. T. E. Cook. 1,819,735; Aug. 18.
Cribbing. J. S. Hobson. 1,819,026; Aug. 18.
Crosshead. L. H. Fry. 1,819,887; Aug. 18.
Crusher. O. C. Winters. 1,819,583; Aug. 18.
Cultivator. W. H. Silver. 1,819,847; Aug. 18.
Cultivator guard. J. H. Koebel. 1,819,899; Aug. 18.
Culverts or tunnels, Constructing metal. G. E. Ladd. 1,819,426; Aug. 18.
Cup machine. C. Barbieri. 1,819,318; Aug. 18.
Current deflector. C. E. Snyder. 1,819,305; Aug. 18.
Current heating apparatus, Reversible. L. C. Morris. 1,819,333; Aug. 18.
Current motor, Alternating. E. C. Ballman. 1,819,013; Aug. 18.
Current tap and pull chain lamp socket, Combined. H. A. Shroder. 1,819,206; Aug. 18.
Curtain and shade fixture. E. Valoppi. 1,819,396; Aug. 18.
Cutter: *See*—
Paper cutter. Thread cutter.
Cylinder for internal combustion engines. V. Valletta. 1,819,759; Aug. 18.
Cylinder, Master. A. D. Pentz. 1,819,482; Aug. 18.
D-handle. J. H. Wily. 1,819,142; Aug. 18.
Decorative products. M. M. Assael. 1,819,535; Aug. 18.
Defrosting apparatus. E. S. Hebeler. 1,819,510; Aug. 18.
Defrosting device for refrigerators. G. S. Fleece. 1,819,324. Aug. 18.
Delivery apparatus. A. M. Lee. Re18,155; Aug. 18.
Dial, Housed indicator. H. J. Kasch. 1,819,099; Aug. 18.
Disconnecting switch. P. B. Hoye. 1,819,779; Aug. 18.
Disinfectant composition, Seed. M. S. Kharasch. 1,820,001; Aug. 18.
Disinfectant, Seed. F. J. Funk. 1,819,953; Aug. 18.
Disk pipe joint. W. F. Oberhuber. 1,819,036; Aug. 18.
Dispenser. J. F. Palmer. 1,819,382; Aug. 18.
Dispensing stand. C. F. Blattner. Des. 84,870; Aug. 18.
Display stand. G. E. Graybill. Des. 84,891; Aug. 18.
Display stand. A. L. Hansen. 1,819,814; Aug. 18.
Distilling apparatus. M. R. Mitchell and R. W. Skoog. 1,819,190; Aug. 18.
Distributor testing device. H. C. Woodbury. 1,819,312; Aug. 18.
Doll handkerchief. J. L. Holt. 1,819,295; Aug. 18.
Door closer. H. J. McFerren. 1,819,187; Aug. 18.
Door hardware with screw projections. G. C. Bohn. 1,819,696; Aug. 18.
Door operating device, Electrical. E. R. Beeman. 1,819,809; Aug. 18.
Door, Sectional boiler. W. A. Jones. 1,819,467; Aug. 18.
Door stop strap. M. H. Toncray. 1,819,212; Aug. 18.
Dowel driving machine. W. J. Young. 1,819,584; Aug. 18.
Drapery pleating and supporting means. D. Harrison. 1,819,240; Aug. 18.
Drawer pull. R. H. Martin. 1,819,611; Aug. 18.
Drill: *See*—
Rotary drill.
Drill bit. J. C. Stokes. 1,819,850; Aug. 18.
Drilling machine. G. Tomeshko. 1,819,211; Aug. 18.
Drink mixer. H. E. Carlson and C. S. Morse. 1,819,637; Aug. 18.
Drive, Expansible V-pulley. F. O. L. Chorlton. 1,819,227; Aug. 18.
Drive for motor vehicles, Front wheel. J. A. Whitcomb. 1,819,580; Aug. 18.
Drive, Reversing. W. C. Starkey and D. T. Brownlee. 1,819,306; Aug. 18.
Driving box and bearing therefor, Locomotive. W. E. Woodard. 1,819,836; Aug. 18.
Drum for motor pontoons, Buoyant. C. J. Du Mond. 1,819,409; Aug. 18.
Drying, Apparatus for. J. Küppers. 1,819,102; Aug. 18.
Duct for current distributing systems. H. J. L. Frank and W. A. Harper. 1,819,885; Aug. 18.
Dust collector. H. Kreisinger. 1,818,994; Aug. 18.
Dyeing machine with pivoting vat. E. and L. Constant. 1,819,229; Aug. 18.
Dyestuff and making same, Azo. B. Mayer and J. Grimmer. 1,819,961; Aug. 18.
Dyestuff from sulphoaryl-3-carboxylic acid ester-5-pyrazolones, Azo. H. Eichwede and E. Fischer. 1,819,547; Aug. 18.
Dyestuffs, Manufacture of oil and fat soluble azo. A. Krebser and E. Wysard. 1,819,957; Aug. 18.
Dyestuffs of the benzanthrone series and making same, New vat. W. Zerweck and E. Honold. 1,819,053; Aug. 18.
Dyestuffs of the dianthraquinonylamine carbazole series, New vat. F. Baumann. 1,819,014; Aug. 18.
Dyestuffs of the naphthoylene-diarylimidazol series and preparing them, Nitrogen containing vat. W. Eckert. 1,819,082; Aug. 18.
Dyestuffs, Water insoluble azo. R. Herz and M. Schubert. 1,819,096; Aug. 18.
Dyes, Production of trisazo. C. S. Dewey. 1,819,080; Aug. 18.
Dyes, Tetrakisazo. C. S. Dewey. 1,819,079; Aug. 18.
Electric machine, Dynamo. G. Belfils. 1,819,860. Aug. 18.
Electric machine, Dynamo. J. F. Lincoln. 1,819,182; Aug. 18.
Electric process of reducing ores. A. E. Greene. 1,819,238; Aug. 18.
Electric switch. J. E. Bancroft. 1,819,061; Aug. 18.
Electric switch. J. Whalen. 1,819,831; Aug. 18.
Electrical apparatus. C. B. Coates and C. J. Dresser. 1,819,148; Aug. 18.
Electrical contact device. T. Kobayakawa. 1,819,248; Aug. 18.
Electrical control system. J. F. Peters. 1,819,260; Aug. 18.
Electrical heater. R. Davies. 1,819,076; Aug. 18.
Electrical process and apparatus for the determination of the nature of geological formations traversed by drill holes. C. Schlumberger. 1,819,923; Aug. 18.
Electrical protective system. P. H. Brace. 1,818,969; Aug. 18.
Electroplating and electroplating apparatus. J. A. Smith. 1,819,130; Aug. 18.
Electroplating apparatus. J. W. Hughes. 1,819,603; Aug. 18.
Electroresponsive device. E. F. Carter. 1,819,868; Aug. 18.
Elevator: *See*—
Garage elevator.
Elevator control system. M. Baruch. 1,819,454; Aug. 18.
Elevator signal. L. J. Kinnard. 1,819,247; Aug. 18.
Enamel ware, Making. O. Hommel. 1,819,816; Aug. 18.
Energy, Method of and apparatus for translating. W. H. Schimpf. 1,819,573; Aug. 18.

Engine: *See*—
Crankless engine. Rotary engine.
Internal-combustion engine.
Engine cooling system, Internal combustion. H. Dunkelmann. 1,819,744; Aug. 18.
Engines, Automatic spark retarder for internal combustion. F. N. Truax. 1,819,576; Aug. 18.
Excavating machine. P. Burke and A. Orloff. 1,819,590; Aug. 18.
Excavator. R. Volk. Re18,156; Aug. 18.
Explosive. C. G. Luis. 1,820,000; Aug. 18.
Explosive, Propellent. W. M. Dehn. 1,819,458; Aug. 18.
Explosives and manufacturing the same, Colloided starch. W. M. Dehn. 1,819,457; Aug. 18.
Extractor. M. Ducasse. 1,819,322; Aug. 18.
Eye mounting for dolls. L. A. Nemcovsky. 1,819,035; Aug. 18.
Fabric cutting machine. H. A. Denmire. 1,819,773; Aug. 18.
Fabrics, Method and apparatus for use in manufacture of rubberized. R. W. Brown. 1,819,986; Aug. 18.
Fastener, Incandescent body. C. Bol. 1,819,146; Aug. 18.
Fastener, Receptacle. H. R. Walrath. 1,819,349; Aug. 18.
Fastener, Self adjusting carpet. P. E. Fenton. 1,819,156; Aug. 18.
Fastening means. A. Fridolph. 1,819,412; Aug. 18.
Faucet. H. A. and W. J. Porter. 1,819,571; Aug. 18.
Faucet, Dispensing. J. F. Palmer. 1,819,381; Aug. 18.
Feed water heater. K. Muhleisen. 1,819,785; Aug. 18.
Feeding and cutting machine. P. W. Lehman. 1,819,033; Aug. 18.
Felly, Demountable. A. M. Lofland. 1,819,297; Aug. 18.
Felted material and manufacturing the same. T. B. Munroe and E. C. Lathrop. 1,819,194; Aug. 18.
Felts to glass polishing blocks, Apparatus for applying. A. E. Evans. 1,818,975; Aug. 18.
Fertilizer distributor. H. M. Whitaker and M. D. Overstreet. 1,819,935; Aug. 18.
Fertilizers, Producing. A. Holz. 1,819,464; Aug. 18.
Fiber liberation, Multiple-step process of. G. A. Richter. 1,819,003; Aug. 18.
File, Index. L. E. Hutchings. 1,820,003; Aug. 18.
File, Self sorting card. C. E. Tumminello. 1,819,929; Aug. 18.
File system. R. J. Wood. 1,819,666; Aug. 18.
Film material, Multicolor cinematograph. J. E. Thornton. 1,819,981; Aug. 18.
Films, Producing. M. Fleischer. 1,819,883; Aug. 18.
Filter. E. Burt. 1,819,700; Aug. 18.
Filtering apparatus. J. W. Hughes. 1,819,602; Aug. 18.
Finder, Focusing. O. A. Ross. 1,819,844; Aug. 18.
Firearm, Automatic. J. E. Browning. 1,818,984; Aug. 18.
Fish tail bit, Expansible. R. C. Weisgerber. 1,819,273; Aug. 18.
Fishing apparatus. H. L. Luellioff. 1,819,034; Aug. 18.
Fishing reel. H. S. Broadwell and S. T. Thorpe. 1,819,724; Aug. 18.
Fishing reel. S. T. Thorpe and L. Zipp. 1,819,723; Aug. 18.
Flasher, Miniature. N. Abramson. 1,819,633; Aug. 18.
Flexible materials, Apparatus for treating. B. C. Miller. 1,819,109; Aug. 18.
Flotation reagent and process of froth flotation. R. L. Perkins. 1,819,113; Aug. 18.
Fluid flow meter. A. M. Trogner. 1,819,138; Aug. 18.
Fluid, Instrument for indicating velocity and direction of flow of. E. N. Fales. 1,819,155; Aug. 18.
Fluid lift for liquids. E. E. Claytor. 1,819,994; Aug. 18.
Fluid pressure brake. C. C. Farmer. 1,819,504–7; Aug. 18.
Fluid pressure brake. C. C. Farmer. 1,819,642; Aug. 18.
Fluid pressure raising mechanism. H. F. Flowers. 1,819,411; Aug. 18.
Fluid pressure regulator. W. C. Groble. 1,819,288; Aug. 18.
Folding box. F. Watson. 1,819,933; Aug. 18.
Folding device. L. M. Kahn. 1,819,028; Aug. 18.
Foods, Treating. G. Grindrod. 1,819,023; Aug. 18.
Fork grid and clearer for looms, Filling. J. C. Wright. 1,819,939; Aug. 18.
Form. M. E. Murphy. 1,819,916; Aug. 18.
Form for supporting monolithic slab of cementitious material. H. E. Marks and G. Osborne. 1,819,906; Aug. 18.
Former for artificial flowers. A. Dolia. 1,819,234; Aug. 18.
Frame and support therefor, Combined terrestrial globe. H. E. Schulse. Des. 84,903; Aug. 18.
Fuel burner. A. F. y Fernandez. 1,819,363; Aug. 18.
Fuel feeding apparatus for liquid fuel burners. G. E. Goodridge. 1,819,892; Aug. 18.
Fuel feeding device. W. A. Edwards. 1,819,236; Aug. 18.
Fuel to internal combustion engines, Mechanism for controlling the supply of liquid. F. B. Stearns. 1,819,209; Aug. 18.
Fumigating device. E. T. Ladd. 1,819,900; Aug. 18.
Fumigator for fruit and other cars. A. La Fayette. 1,819,562; Aug. 18.
Furnace. W. G. Herschell. 1,819,555; Aug. 18.
Furnace and generator block, Air and water cooled. G. W. Davey. 1,819,016; Aug. 18.
Furnace and operating the same, Air cooled. D. S. Jacobus. 1,819,174; Aug. 18.
Furnaces, Front wall for open hearth. H. Rateau and J. A. Beck. 1,819,001; Aug. 18.
Furnaces, Operation of blast. E. Baumgartner. 1,819,064; Aug. 18.
Furniture, Metal. L. H. Morin. 1,819,616; Aug. 18.
Fuse box. J. Sandin. 1,819,204; Aug. 18.
Fuse, Electric. J. H. Hickey. 1,819,293; Aug. 18.
Fuse, High voltage. R. Reichmann and K. Zimmermann. 1,819,198; Aug. 18.
Game and toy, Flyback. W. P. Shepherd. 1,819,342; Aug. 18.
Game apparatus. H. L. Walden. 1,819,932; Aug. 18.
Garage elevator. H. D. James. 1,819,513–14; Aug. 18.
Garments, Drop seat for. W. D. Scalf. 1,819,976; Aug. 18.
Gas and low boiling fractions from petroleum products, Removal of. W. G. Whitman and C. C. Miller. 1,819,760; Aug. 18.
Gas burner. H. W. Christie. 1,819,944; Aug. 18.
Gas generating apparatus. J. H. Cordes. 1,819,230; Aug. 18.
Gas lock. C. N. Fairchild. 1,819,085; Aug. 18.
Gas, Manufacture of carbureted. A. W. Grant, Jr. 1,819,838–9; Aug. 18.
Gas producer. R. Daae. 1,819,836; Aug. 18.
Gas purification. F. W. Sperr, jr. 1,819,658; Aug. 18.
Gas purification process. G. A. Bragg. 1,819,833; Aug. 18.
Gases and vapors, Desulphurization of. J. Al. and F. R. Moser. 1,819,055; Aug. 18.
Gasket. L. B. Sperry. 1,819,694; Aug. 18.
Gasoline purifier. H. W. Kriner. 1,819,424; Aug. 18.
Gate: *See*—
Automatic gate.
Gauge: *See*—
Liquid level gauge. Thread gauge.
Micrometer gauge.
Gauge for automobiles, Gasoline. H. C. Stearns. 1,819,849; Aug. 18.
Gauge for fabric cutting machines. M. F. Sullivan. 1,819,046; Aug. 18.
Gauging apparatus. E. T. Anderson. 1,818,968; Aug. 18.
Gear, Eccentric balance driving. L. Le Bret. 1,819,715; Aug. 18.
Gear for road graders, Steering. F. E. Arndt. Des. 18,150; Aug. 18.
Generator: *See*—
Earth inductor generator. Steam generator.
Glass feeder. T. Stenhouse. 1,819,446; Aug. 18.
Glass plates and sheets, Device for adjusting the thickness of. Y. Brancart. 1,819,222; Aug. 18.
Glass, Process and apparatus for making composite. N. J. Penning. 1,819,336; Aug. 18.
Glass rolling train. Y. Brancart. 1,819,223; Aug. 18.
Glass shaping machine. E. H. Lorenz. 1,819,903; Aug. 18.
Glass sheets and plates, Process of and apparatus for treating cast. A. Brancart. 1,819,670; Aug. 18.
Glass sheets and plates, Treatment of cast. Y. Brancart. 1,819,221; Aug. 18.
Glass sheets or plates, Drawing. A. E. Spinasse. 1,819,392; Aug. 18.
Glass sheets, System for grinding and polishing. J. L. Drake. 1,819,017; Aug. 18.
Globe and electric lamp holding adapter. A. Sadacca. 1,819,125; Aug. 18.
Gold succinimide compound and making the same. W. J. Pope. 1,819,384; Aug. 18.
Golf tee, Automatic. R. W. Irish. 1,819,896; Aug. 18.
Goods of rubber or similar material, Manufacture of. E. W. Madge. 1,819,647; Aug. 18.
Gopher trap. H. S. Easton. 1,819,546; Aug. 18.
Grinder, Valve seat. W. Barber. 1,819,453; Aug. 18.
Grinding machine. W. J. Guild, R. A. Quimby, and F. D. Gibs. 1,819,091; Aug. 18.
Grinding machine. R. N. Heald. 1,819,094; Aug. 18.
Grinding machine, Rib. J. Behle. 1,819,353; Aug. 18.
Guard, Manger. J. B. Olson. 1,819,333; Aug. 18.
Guide for power reverse gear floating levers. W. H. Shaw. 1,819,795; Aug. 18.
Guide for strip finishing machines. I. F. Dittmar. 1,819,081; Aug. 18.
Gun sight. R. C. Coupland. 1,819,769; Aug. 18.
Hair curling bar. O. Brosius. 1,819,731; Aug. 18.
Hair curling heaters, Device for winding hair on the stems of. A. E. Pausser. 1,819,969; Aug. 18.
Hairdressing device. A. Aaronson. 1,819,667; Aug. 18.
Hand, Artificial. J. W. Baebr. 1,819,317; Aug. 18.
Handle: *See*—
D-handle. Razor handle.
Handle grip, Suction cleaner. E. F. Martinet. Des. 84,898; Aug. 18.
Hanger: *See*—
Beam hanger.
Hanger for draperies. C. S. Nudelman and H. Kruglick. 1,819,379; Aug. 18.
Harness leveling mechanism. H. A. Davis. 1,819,543; Aug. 18.
Harvester. E. A. Johnston. 1,819,605; Aug. 18.
Harvester-thrashers, Attachment to. W. Mickle. 1,819,432; Aug. 18.
Hat blocker. R. G. Muller. 1,819,256; Aug. 18.
Hat hanger. J. De George. Des. 84,883; Aug. 18.
Hat press. G. Cipriano. 1,819,592; Aug. 18.
Headlamp control. C. S. Ricker. 1,819,690; Aug. 18.
Headlamp lens. A. Y. Dodge. 1,819,288; Aug. 18.
Headlight, Motor vehicle. F. J. Jacobi. 1,819,682; Aug. 18.
Heat actuated mechanism. G. I. Rockwood. 1,819,124; Aug. 18.

Heat control apparatus. D. Firth. 1,819,284; Aug. 18.
Heat economy method and apparatus. J. O. Ross. 1,819,265; Aug. 18.
Heat exchange device. F. W. Williams. 1,819,832; Aug. 18.
Heat insulation material and composition. H. W. Greiber. 1,819,893; Aug. 18.
Heat, Process of applying. W. A. Darrah. 1,819,772; Aug. 18.
Heater: *See*—
Electrical heater. Tank heater.
Feed water heater. Windshield heater.
Oil heater.
Heater and pump, Locomotive feed water. E. H. Blunt. Re18,157; Aug. 18.
Heating apparatus. A. T. Lewis. 1,819,608; Aug. 18.
Heating element, Electric. H. H. Berry. 1,819,537; Aug. 18.
Heating pack and composition therefor. V. R. Baysinger. 1,819,807; Aug. 18.
Heating system for ironing machines. G. W. Akerlow. 1,819,534; Aug. 18.
Heating system for liquids. F. E. Lichtenthaeler. 1,819,517; Aug. 18.
Heating system, House. H. L. Doherty. 1,819,459; Aug. 18.
Heating system, House. A. L. Klees. 1,819,560; Aug. 18.
Heel for footwear. J. Crookshanks. 1,819,874; Aug. 18.
Heel, Pneumatic. C. M. McBride. 1,819,565; Aug. 18.
Helicopter. M. B. Bleecker. 1,819,883; Aug. 18.
Helicopter. M. L. Darr. 1,819,075; Aug. 18.
Heterodyne receiver arrangement, Beat frequency. S. Loewe. 1,819,609; Aug. 18.
Hinge construction for stoves, Door. A. B. Herman. 1,819,644; Aug. 18.
Hoist, Fluid. J. F. Heil and E. B. Gruber. 1,819,167; Aug. 18.
Hoist, Telescopic fluid. J. P. Heil and G. L. Landry. 1,819,168; Aug. 18.
Hoists, Sectional knockdown tower for. W. A. Kuhlman. 1,819,031; Aug. 18.
Holder, Bird nest. E. Dumas. 1,819,877; Aug. 18.
Holder for beverage sets. H. Korn. Des. 84,895; Aug. 18.
Holder for spools of thread and the like, Spool. P. Valerio. Des. 84,906; Aug. 18.
Holder, Identification card and license. G. C. Clark. 1,819,870; Aug. 18.
Holder, Milk bottle. J. B. Robson and J. M. Williams. 1,819,758; Aug. 18.
Holder, Pocket pen. A. Burman. 1,819,225; Aug. 18.
Holder, Sewing. E. Bergstedt. 1,819,862; Aug. 18.
Hone, Rotary. W. R. Chermack. 1,819,408; Aug. 18.
Hopper construction. M. C. Sherman. 1,819,486; Aug. 18.
Horn blowing attachment for steering wheels. G. Rechter. 1,819,572; Aug. 18.
Horse. A. F. Linsner. 1,819,252; Aug. 18.
Hose coupling. E. W. Sullivan. 1,819,448; Aug. 18.
Hot top. L. G. Firth and E. B. Welch. 1,819,864; Aug. 18.
House number plate. A. Fazekas. Des. 84,886; Aug. 18.
Hub cap. R. Loewy. Des. 84,896; Aug. 18.
Hydrocarbons, Preventing decomposition of halogenated. R. C. Zuckermandel. 1,819,505; Aug. 18.
Hydrocarbons, Purification of solid aromatic. J. B. Hill. 1,819,680; Aug. 18.
Hydrocarbons, Treating liquid. G. Van Senden. 1,819,348; Aug. 18.
Hydrogen and carbon from hydrocarbons, Production of. A. W. Burwell. 1,819,732; Aug. 18.
Hypodermic bullet. B. Harris. 1,819,415; Aug. 18.
Ignition and valve mechanism of internal combustion engines for speed and power, Mechanism for automatically and synchronously adjusting the. H. L. Duncan. 1,819,743; Aug. 18.
Index device. J. H. Rand, jr. 1,819,621; Aug. 18.
Indicator: *See*—
Liquid level indicator. Temperature indicator.
Photographic focus indicator.
Individual chair. A. B. Bell. 1,819,808; Aug. 18.
Inductor compass generator. M. M. Titterington. 1,819,488; Aug. 18.
Ingot mold. E. Gathmann. 1,819,705; Aug. 18.
Insects, Method and apparatus for capturing. G. Gourdon. 1,819,551; Aug. 18.
Insulator. K. A. Hawley and D. H. Osborne. 1,819,748; Aug. 18.
Insulator clevis. M. W. Cooke. 1,819,500; Aug. 18.
Instrument for determining the quality of balls for games and components therefor. T. Cropper. 1,819,282; Aug. 18.
Interest calculator. E. G. Rice. 1,819,921; Aug. 18.
Internal combustion engine. H. Johnson. 1,819,897; Aug. 18.
Internal combustion engine. G. R. Poyer. 1,819,825; Aug. 18.
Internal combustion engine. S. W. Thompson. 1,819,137; Aug. 18.
Internal combustion engine, Radial-cylinder. F. W. Highfield. 1,819,097; Aug. 18.
Internal combustion engine, Vertical opposed cylinder. J. L. Bogert. 1,819,730; Aug. 18.
Iron: *See*—
Soldering iron.
Iron, Producing pyrophoric. H. L. Hartenstein. 1,819,164; Aug. 18.
Ironing board. W. L. Kullberg. 1,819,821; Aug. 18.
Jack: *See*—
Automobile jack. Service jack.
Jaw. R. E. Manley. 1,819,428; Aug. 18.
Joint: *See*—
Cable joint. Disk pipe joint.
Joint for rotary well drilling, Slips and tool. F. M. Allison. 1,819,056; Aug. 18.
Key for locks, Safety. E. Schmid. 1,819,059; Aug. 18.
Keyboard mechanism. C. H. Sampson. 1,819,975; Aug. 18.
Knife. B. Rocklin. 1,819,623; Aug. 18.
Lace. A. Delahaye. Des. 84,884–5; Aug. 18.
Lamp. L. Cecio and S. Buonamano. Des. 84,871; Aug. 18.
Lamp hanger structure. A. J. Thompson. 1,819,529; Aug. 18.
Last for turn shoes. J. V. Reed. 1,819,121; Aug. 18.
Lath, Making coves and corners for plaster. W. B. Thurman. 1,819,345; Aug. 18.
Lath, Metal. N. H. Nelson. 1,819,377; Aug. 18.
Lead columns, pipes or the like, Dismounting device for, E. Volturon. 1,819,983; Aug. 18.
Lens mount. F. H. Owens. 1,819,476; Aug. 18.
Lettuce, Disposing of cull. H. Paxton. 1,819,480; Aug. 18.
Lever grip. A. C. Klopping. 1,818,992; Aug. 18.
Lid for refrigerator cabinets. N. M. Vandegrift. 1,819,851; Aug. 18.
Lifter: *See*—
Snow fence lifter.
Light fixture hanger. F. C. Winkler. Des. 84,909; Aug. 18.
Light projector. W. G. Wood. 1,819,728; Aug. 18.
Light signal apparatus, Gas. G. Dalen and S. A. Eskilson. 1,819,676; Aug. 18.
Light signal, Highway dual. W. R. Allen. 1,819,316; Aug. 18.
Lighter, Cigar and cigarette. L. D. Bell and J. C. Rombach. 1,819,319; Aug. 18.
Lighter, Electrical cigar. L. V. Lucia. 1,819,610; Aug. 18.
Liquid dispensing apparatus. H. F. Jackson and C. O. Straub. 1,819,330; Aug. 18.
Liquid level gauge. H. Lundquist. 1,819,373; Aug. 18.
Liquid level indicator. C. A. de Giers. 1,818,972; Aug. 18.
Liquids, Apparatus for indicating the level of. A. Mohr. 1,819,655; Aug. 18.
Loading block. C. B. Parsons. 1,819,967; Aug. 18.
Loading machine. R. E. Jenkins. 1,819,515; Aug. 18.
Lock: *See*—
Bicycle lock. Sash lock.
Combination lock. Vise grip lock.
Gas lock.
Locking apparatus for doors. C. E. Finkenbinder. 1,819,410; Aug. 18.
Locking device, Rotary machine. J. S. Morgan. 1,819,193; Aug. 18.
Locking mechanism, Automobile. E. J. Martel. 1,818,997; Aug. 18.
Locking mechanism, Overdraft numeral key. F. W. Bernau. 1,819,066; Aug. 18.
Loud speaker. A. A. Thomas. 1,819,210; Aug. 18.
Loud speaker device. I. Ludlow. 1,819,103; Aug. 18.
Lubricating device. E. C. Walker. 1,819,663; Aug. 18.
Lubricating mechanism for deep well drills. F. L. O. Wadsworth. 1,819,532; Aug. 18.
Lubricating system. E. W. Davis. 1,819,280; Aug. 18.
Lubricating system and lubricator therefor. E. W. Davis. 1,819,359; Aug. 18.
Luggage carrier. E. V. Carrier. Des. 84,867; Aug. 18.
Luminous tube, High frequency. R. R. Machlett and J. F. Stokes. 1,819,105; Aug. 18.
Machine for applying strips of piping to sheet material. T. P. Hall. 1,819,024; Aug. 18.
Machine for cutting magnetic circuit laminæ. O. A. Pearson. 1,819,481; Aug. 18.
Machine for exhausting, bombarding and sealing off radiotubes, lamp bulbs, and the like, Combined. C. Eisler. 1,819,597; Aug. 18.
Machine for mixing concrete and the like. A. G. Reed. 1,819,756; Aug. 18.
Machine for splitting open, cleaning, and boning fish. R. Baader. 1,819,060; Aug. 18.
Magnet coil and making same. R. A. Connor. 1,819,638; Aug. 18.
Magnetic testing apparatus. J. A. Rodgers. 1,819,201; Aug. 18.
Magnetometer. S. Shimizu. 1,819,797; Aug. 18.
Mail, Apparatus for stacking. R. Hill. 1,819,556; Aug. 18.
Mail bag carrier. K. J. Evans and A. O. Williams. 1,819,598; Aug. 18.
Mail box, Adjustable. W. D. Redrup and J. C. Gustafson. 1,819,790; Aug. 18.
Mail box, Illuminated built-in. J. H. Wegehoft. 1,819,398; Aug. 18.
Mandrel for tube rolling mills. P. Multhaupt. 1,819,257; Aug. 18.
Manometer. F. S. Dickinson. 1,819,282; Aug. 18.
Marcel waver. J. J. Ryan. 1,819,389; Aug. 18.
Marker, Plant. A. V. Hart and D. B. Thoms. 1,819,708; Aug. 18.
Massage applicator. R. H. Van Sant. 1,819,628; Aug. 18.

Match packet. J. O. Trautwein. 1,819,395; Aug. 18.
Match stand. A. Kassler. 1,819,645; Aug. 18.
Material preparation. A. S. Behrman. 1,819,354; Aug. 18.
Materials, Mechanism and process of separating intermixed divided. K. Davis. 1,819,995; Aug. 18.
Materials, Mechanism for separating intermixed divided. K. Davis. 1,819,996; Aug. 18.
Measuring apparatus. A. E. Young. 1,819,313; Aug. 18.
Measuring device, Fluid. A. W. Rybeck. 1,819,267; Aug. 18.
Measuring device for filling machines. L. W. Duer. 1,819,361; Aug. 18.
Measuring slight forces, Device for. H. Gornick. 1,819,089; Aug. 18.
Media for combating animal and vegetable pests. G. Wesenberg. 1,819,399; Aug. 18.
Merchandising establishment. H. E. White and H. D James. 1,819,491; Aug. 18.
Metal bars, Apparatus for cooling and annealing. J. B George. Re18,152; Aug. 18.
Metal blanks, Apparatus for forming scroll-edge. C. D McDonald. 1,819,431; Aug. 18.
Metal plates, Shearing. F. C. Biggerts and L. J. Ingram 1,819,635; Aug. 18.
Meter: *See*—
Fluid flow meter.
Meters, Testing. S. Aronoff. 1,819,494; Aug. 18.
Micrometer gauge, Internal. J. R. Aulenback. 1,819,144; Aug. 18.
Microscope, Binocular. M. Engelmann. 1,818,974; Aug. 18.
Mill: *See*—
Continuous sheet mill. Sugar mill.
Continuous strip mill.
Mill roll cooling device. R. R. Jones. 1,819,988; Aug. 18.
Minerals, Froth flotation of. R. L. Perkins. 1,819,112; Aug. 18.
Mining machine. M. P. Holmes. 1,819,778; Aug. 18.
Mitt, Base ball. E. W. Till. 1,819,048; Aug. 18.
Mixer: *See*—
Drink mixer. Water mixer.
Mold: *See*—
Ingot mold.
Mold. L. G. Firth. 1,819,365; Aug. 18.
Motor: *See*—
Current motor. Reciprocating motor.
Outboard motor. Water motor.
Motor controller, Electric. R. G. Lockett. 1,819,823; Aug. 18.
Motors, Method of and apparatus for operating electric. C. S. Weyandt. 1,819,003; Aug. 18.
Mower hitch. B. R. Benjamin and C. Pearson. 1,819,587; Aug. 18.
Mower, Lawn. H. J. Stegeman and S. D. Locke. 1,819,133; Aug. 18.
Mower, Lawn. E. W. Strandberg. 1,819,447; Aug. 18.
Mowing machines, Seed gathering attachment for. C. King. 1,819,180; Aug. 18.
Musical instrument, Plucked string. F. Kordick. 1,819,371; Aug. 18.
Musical instrument, Stringed. J. E. Sherman. 1,819,796; Aug. 18.
Napkin, Folded paper. E. C. Morris. 1,819,753; Aug. 18.
Navigation system and method, Aerial. G. G. Kruesi. 1,820,004; Aug. 18.
Necktie. M. R. Roy. 1,819,922; Aug. 18.
Nostril insert. F. Fores. 1,819,884; Aug. 18.
Novelty pin. C. P. Roberts and W. I. Latta. 1,819,757; Aug. 18.
Nozzle for locomotives, Exhaust steam. G. H. Cook. 1,819,594; Aug. 18.
Nozzle, Turbine. M. Sedlmeir. 1,819,485; Aug. 18.
Nut machine. G. S. Smith. 1,819,044; Aug. 18.
Oil heater. P. M. Klein. 1,819,181; Aug. 18.
Oil in internal combustion engines of the injection type, Apparatus for feeding heavy crude. G. Meyer. 1,819,474; Aug. 18.
Oils for the production of light oils by the employment of metallic halides, Treating heavy. W. H. Shiffler. 1,819,000; Aug. 18.
Opener, Car door. H. Richardson. 1,819,974; Aug. 18.
Opener, Receptacle. N. P. Courtney. 1,819,873; Aug. 18.
Ophthalmic lens. L. V. Foster. 1,819,325; Aug. 18.
Ores, Apparatus for roasting. H. H. Nicholson. 1,819,436; Aug. 18.
Ores by flotation, Concentration of. R. L. Perkins. 1,819,114; Aug. 18.
Ores of the rare earths of zirconium and titanium, in a cycle by means of sulphuric acid, Decomposing. J. D'ans. 1,819,770; Aug. 18.
Outboard motor, Four cylinder. O. Evindrude. 1,819,823; Aug. 18.
Outboard propelling unit driven from an inboard motor, Rudderless. R. A. Patrick. 1,819,908; Aug. 18.
Oven, Baking. E. B. Crawford and M. Turrell. 1,819,231; Aug. 18.
Oven, Coke. C. Wessell. 1,819,934; Aug. 18.
Oven rack. R. S. Rosselle. 1,819,388; Aug. 18.
Packing for reciprocating shafts, Metallic. G. F. Jones. 1,819,559; Aug. 18.
Packing, Joint. J. H. Holmgreen. 1,819,417; Aug. 18.
Paper cutter. P. A. Aspenleiter. 1,819,727; Aug. 18.
Paper, Decorating. H. M. Ross. 1,819,793; Aug. 18.
Paper glazed and/or colored on one face, Apparatus for the production of. V. Antoine. 1,818,982; Aug. 18.
Paper-like product and making the same. K. L. Moses. 1,819,435; Aug. 18.
Paper product and making the same. H. R. Rafton. 1,819,441; Aug. 18.
Paper roll. W. V. Hunt. 1,819,895; Aug. 18.
Paper stock, Apparatus for regulating the consistency of. J. F. Grabowsky. 1,819,552; Aug. 18.
Peach pitting machine. A. S. Ridley. 1,819,442; Aug. 18.
Pen, Fountain. K. S. Parker. 1,819,383; Aug. 18.
Pentosans, Preparation of. E. R. Darling. 1,819,233; Aug. 18.
Pessary. A. Flessler. 1,819,549; Aug. 18.
Petroleum hydrocarbon, Apparatus for decomposition and processing of. J. C. Black. 1,819,729; Aug. 18.
Petroleum hydrocarbons, Covering. R. Cross. 1,819,542; Aug. 18.
Phonograph reproducer. W. H. Edwards. 1,819,083; Aug. 18.
Photographic developing apparatus. L. G. Simjian. 1,819,848; Aug. 18.
Photographic focus indicator. G. C. Beidler. 1,819,065; Aug. 18.
Photographic pointing apparatus. H. O. Carleton. 1,819,541; Aug. 18.
Photoradioscope. R. H. Ranger 1,819,197; Aug 18
Picker crank adjustment W. E. Smith. 1,189,926; Aug. 18.
Picture recording. R. H. Ranger and F. G. Morehouse. 1,819,264; Aug. 18.
Picture screen. H. Saunders. 1,819,268; Aug. 18.
Pictures, Elimination of distortion and the creation of stereoscopic effects in moving. G. Griffith. 1,819,327; Aug. 18.
Pictures, Taking and projection motion. J. H. White. 1,819,492; Aug. 18.
Pigments, Accelerating the settlement of. H. Grossman, 1,819,462; Aug. 18.
Pin: *See*—
Novelty pin.
Pineapple from waste shell, Device for recovering. R. B. Taylor. 1,819,575; Aug. 18.
Pipe: *See*—
Smoker's pipe.
Pipe clamp. L. A. Hoerr. 1,819,815; Aug. 18.
Pipe connector, Automatic train. J. Robinson. 1,819,386; Aug. 18.
Pipe coupling. H. J. Burnish. 1,818,985; Aug. 18.
Pipe coupling. G. M. Smith. 1,819,007; Aug. 18.
Pipes and other hollow articles, Manufacture, centrifugally, of. A. Melville, K. Dundas, and R. A. Whitson. 1,819,188; Aug. 18.
Piston. F. Jardine. 1,819,998; Aug. 18.
Piston, Engine. G. Drake. 1,819,702; Aug. 18.
Piston ring. C. J. Gleason. 1,819,890; Aug. 18.
Piston ring. J. Williams. 1,819,501–2; Aug. 18.
Piston rod remover, Locomotive fluid pressure. A. W. and J. N. Martin. 1,819,782; Aug. 18.
Piston spreader. R. N. Gibson. 1,819,366; Aug. 18.
Plant tissues with sodium nitrate for explosive purposes, Impregnating. W. H. Dehn. 1,819,456; Aug. 18.
Plaster, Molding. J. H. Sherts. 1,819,444; Aug. 18.
Plastic products, paints and lacquers, Production of. F. C. Dyche-Teague. 1,819,136; Aug. 18.
Plow. N. C. Smith and W. W. Wallace. 1,819,925; Aug. 18.
Plow, Disk. S. B. Hendricks. 1,819,292; Aug. 18.
Plug. N. C. Schellenger. 1,819,040; Aug. 18.
Plug, Core drill. F. L. Scott. 1,819,484; Aug. 18.
Plug, Electric. S. M. Kenerson. 1,819,100; Aug. 18.
Pluz, Electrical attachment. P. Mattia. 1,819,910; Aug. 18.
Plug, Jordan engine. H. N. Weir. 1,819,050; Aug. 18.
Pneumatic dispatch systems, Carrier inserting and discharge device for. J. J. Stoetzel. 1,819,307; Aug. 18.
Pocket smoker's accessory, Combination. L. F. Maisto. 1,819,427; Aug. 18.
Polish, Furniture. C. C. Costigan. 1,819,736; Aug. 18.
Polishing device. W. B. Turner. 1,819,800; Aug. 18.
Polishing wheel. R. Z. Hopkins and E. F. Seger. 1,819,171; Aug. 18.
Pothead disconnect, Oil and air break. J. Rah. 1,819,302; Aug. 18.
Pot press. P. Hanel. 1,818,990; Aug. 18.
Potential device, Constant. A. Jaumann. 1,819,604; Aug. 18.
Power plant, Steam. C. B. Page and W. D. Burton. 1,819,619; Aug. 18.
Power press control. N. W. Dorman and M. R. Hatch. 1,818,986; Aug. 18.
Power transmission. D. G. Mackenzie. 1,819,716; Aug. 18.
Power transmission and adjusting mechanism. C. G. Boudette. 1,819,697; Aug. 18.
Power transmission device. E. H. Scofield. 1,819,626; Aug. 18.
Power transmission mechanism. B. W. Miller. 1,819,566; Aug. 18.
Power unit adapted to be applied to lawn mowers. M. H. Reed. 1,819,791; Aug. 18.
Press: *See*—
Hat press. Printing press.
Pot press.
Press. A. Friz. 1,819,704; Aug. 18.

Pressing machine mechanism. J. P. Daly. 1,819,639; Aug. 18.
Printing machine. C. E. Gale. 1,819,326; Aug. 18.
Printing machine for printing strips of material. J. Krell. 1,819,561; Aug. 18.
Printing, Method of and apparatus for. C. E. Gale. 1,819,160; Aug. 18.
Printing press, Combination. L. E. La Bombard. 1,819,751; Aug. 18.
Printing upon pages of a book. C. E. Gale. 1,819,158; Aug. 18.
Projectile or long range tear gas shell, Gas containing. B. C. Goss. 1,819,090; Aug. 18.
Protector for loose leaf binders. E. B. Murphy. 1,818,999; Aug. 18.
Pulley, Sash. G. W. Aldeen. 1,819,315; Aug. 18.
Pulley, Sash. E. W. North. 1,819,334; Aug. 18.
Pulp of high alpha cellulose content, Production of. G. A. Richter. 1,819,002; Aug 18.
Pulp storing and mixing machine. C. B. Thorne. 1,819,531; Aug. 18.
Pump, Double acting centrifugal. J. Preleuthner. 1,819,118; Aug. 18.
Pump, Electrically operated fuel. W. C. Carter. 1,819,591; Aug. 18.
Pump, Fluid-operated. P. F. Yungling. 1,819,351; Aug. 18.
Pump for internal combustion engines, Liquid. J. Benes. 1,819,015; Aug. 18.
Pump for outboard motors, Cooling system. C. La Grange. 1,819,822; Aug. 18.
Pump, Hydraulic. P. O. Ott. 1,819,689; Aug. 18.
Push-plate. H. M. Schelbe. 1,819,126; Aug. 18.
Rack: *See*—
Oven rack.
Rack and pinion operator. J. H. Sheard. 1,819,574; Aug. 18.
Rack for tires. H. L. Beach. Des. 84,868; Aug. 18.
Radiator. F. J. Douglass. 1,819,812; Aug. 18.
Radio apparatus. J. Lyons, jr. 1,819,905; Aug. 18.
Radiocircuit. B. S. McCutchen and V. Sandell, East Orange, N. J. 1,819,298; Aug. 18.
Radio circuit employing alternating current radio tubes. F. S. McCullough. 1,819,783; Aug. 18.
Radio loud speaker and the like. C. H. Duffy. 1,818,987; Aug. 18.
Radio receiving apparatus. V. Paquit. 1,819,477. Aug. 18.
Radio recording means. R. M. Craig. 1,819,737; Aug. 18.
Radio system. W. Kummerer. 1,819,469; Aug. 18.
Radio vacuum tube socket adapter. N. Zuckerman. 1,819,805; Aug. 18.
Rail connecting means. E. J. Bowden. 1,819,810; Aug 18.
Rail contactor, Track. H. C. Clausen. 1,818,970; Aug. 18.
Railroad tie. S. B. Ferguson. 1,819,019; Aug. 18.
Railway rail. M. Thomson. 1,819,980; Aug. 18.
Range, Gas. H. H. Heidbreder. Des. 84,892; Aug. 18.
Rayon and the product produced thereby, Treatment of. J. Hirschberger. 1,819,241; Aug. 18.
Reamer, Expanding rotary. J. Grant. 1,819,367. Aug. 18.
Razor handle, Safety. M. C. Dellinger. 1,819,742; Aug. 18.
Razor, Safety. L. E. Curdes. 1,819,876; Aug. 18.
Receptacle and improved fastener therefor, Lock controlled. H. R. Walrath. 1,819,449; Aug. 18.
Receptacle for inflammable liquids, Safety. W. Raster. 1,819,037; Aug. 18.
Reciprocating motor. C. S. Weyandt and H. E. Fox. 1,819,140; Aug. 18.
Reel: *See*—
Cord reel. Fishing reel.
Reel. C. K. Pevear. 1,819,337; Aug. 18.
Reels, Construction and manufacturing. E. R. German. 1,819,707; Aug. 18.
Reflector, Light projecting. W. G. Wood. 1,819,725; Aug. 18.
Refrigerating apparatus. E. L. Horlacher. 1,819,172; Aug. 18.
Refrigerating apparatus. H. B. Hull. Re18,154; Aug. 18.
Refrigerating apparatus. R. E. Ottenheimer. 1,819,568–9; Aug. 18.
Refrigeration. J. G. Bergdoll. 1,819,861; Aug. 18.
Refrigerator. M. C. Terry. 1,819,528; Aug. 18.
Register: *See*—
Cash register.
Regulator: *See*—
Antenna regulator. Fluid pressure regulator.
Relay. L. N. Crichton and J. V. Breisky. 1,819,501; Aug. 18.
Relay, Electrical. T. J. O'Meara. 1,819,789; Aug. 18.
Relay, Electrical. A. J. Sorensen. 1,819,271; Aug. 18.
Resistance unit, Variable. L. L. Jones. 1,819,246; Aug. 18.
Rheostat, Water. C. C. Whittaker. 1,819,141; Aug. 18.
Rim, Wheel. F. W. Baker. 1,819,403; Aug. 18.
Rims for reels, wheels, frames, etc., Forming. E. R. German. 1,819,678; Aug. 18.
Ring: *See*—
Piston ring.
Ring forming machine with knockout. C. L. Wiles. 1,819,630; Aug. 18.
Rinsing and drying apparatus. H. F. Vieau and E. J. O'Neill. 1,819,982; Aug. 18.
Road working machine. N. E. Jersey. 1,819,466; Aug. 18.
Rod for suspending curtains on doors and windows. W. H. Norling. 1,819,965; Aug. 18.
Roll controlling mechanism, Web. H. V. Ball. 1,819,586; Aug. 18.
Roll for run repair machines and the like, Feed. A. C. Parlini. 1,819,478; Aug. 18.
Roll for spinning machines and method and composition for producing the same. D. L. Hayes. 1,819,289; Aug. 18.
Roll winding machine. W. H. Cannard and A. G. Lewis. 1,819,406; Aug. 18.
Roof, Floating. O. A. Bailey. 1,819,401; Aug. 18.
Roofing. R. MacLean. 1,819,005; Aug. 18.
Roofing, Metal protected. W. M. Shakespeare. 1,819,270; Aug. 18.
Rose, Climbing or trailing. H. F. Bosenberg. Plant Pat. 1; Aug. 18.
Rotary drill, Multiple stage. W. B. Reed and W. Hepler. 1,819,303; Aug. 18.
Rotary engine. C. W. Carlton. 1,819,867; Aug. 18.
Rotary engine. C. McQuown. 1,819,718; Aug. 18.
Rotary screen. H. W. Weimer. 1,819,049; Aug. 18.
Rotor. C. B. Coates. 1,819,228; Aug. 18.
Rubber accelerator and using the same. C. J. Romieux and L. J. Christmann. 1,819,792; Aug. 18.
Sacks, tent cloth and the like, Chemically impregnating jute. A. Borrmann. 1,819,070; Aug. 18.
Safety device for elevators. J. Dunlop. 1,819,502; Aug. 18.
Safety device for fire escape. N. Chinich. 1,819,073; Aug. 18.
Salt, Method of and apparatus for precipitating drift or sheet. H. K. Tyndall. 1,819,577; Aug. 18.
Sand blast machine. S. E. Garratt. 1,819,021; Aug. 18.
Sand blasting apparatus. W. O. Lytle. 1,819,381; Aug. 18.
Sanding machine. G. P. Bailey. 1,819,012; Aug. 18.
Sanitary vent for pressure milk tanks. F. G. Thwaits. 1,819,827; Aug. 18.
Sash lock, Automatic window. H. E. McAllister. 1,819,824; Aug. 18.
Sash operating mechanism, Window. J. A. Vallée. 1,819,992; Aug. 18.
Screen: *See*—
Cinematograph screen. Rotary screen.
Picture screen.
Screen installation for casement windows, Roll. H. Dixson. 1,819,360; Aug. 18.
Seal, Float arm. C. A. De Giers. 1,818,973; Aug. 18.
Seal, Joint. H. Hardinge. 1,819,093; Aug. 18.
Seal, Oil. H. A. Clark. 1,819,871; Aug. 18.
Sealing food products in vacuum, Hermetically. J. H. O'Neil and A. L. Kronquest. 1,819,437; Aug. 18.
Seam for sewed articles. R. R. Carver. 1,819,407; Aug. 18.
Seaming mechanism. P. H. Lange. 1,819,249–50; Aug. 18.
Selvage trimming mechanism. H. H. Burdett. 1,819,540; Aug. 18.
Semistop joint for fluid filled cables. E. D. Eby. 1,819,881; Aug. 18.
Service entrance. J. C. Boyton. 1,819,985; Aug. 18.
Service jack, Curb hydraulic and general garage. L. D. Nilson. 1,819,378; Aug. 18.
Servo brake. H. Pieper. 1,819,971; Aug. 18.
Sewing machine attachment for mending runs in sheer fabrics. L. Goodman and D. L. Friedman. 1,819,161; Aug. 18.
Sewing machine ruffling mechanism. A. B. Clayton. 1,819,278; Aug. 18.
Shade bracket, Window. E. Reukauf, jr. 1,819,020; Aug. 18.
Shaft coupling. T. H. Banfield. 1,819,859; Aug. 18.
Shaft, Mechanically synchronized. G. Kende. 1,819,819; Aug. 18.
Shaker machine with automatic mold transport for shaking down chocolate or similar masses in the molds. G. Göbel. 1,819,888; Aug. 18.
Sheet material, Flexible wood faced. A. Elmendorf. 1,819,775; Aug. 18.
Sheets, Apparatus and process for producing. W. A. Darrah. 1,819,771; Aug. 18.
Shell construction. L. M. McBride and F. B. Hale. 1,819,106; Aug. 18.
Shield, Toe. S. Capezio. 1,819,766; Aug. 18.
Shingle. C. L. Mangano. 1,819,717; Aug. 18.
Shingles and boards, Method and apparatus for making fiber and cement. H. E. Holcomb. 1,819,840; Aug. 18.
Shock absorber. E. F. Rossman. 1,819,523; Aug. 18.
Shock absorber, Hydraulic. G. W. Elsey. 1,819,503; Aug. 18.
Shock absorbing device. R. L. Gruss. 1,819,414; Aug. 18.
Shock absorbing mechanism. A. A. Wilson. 1,819,855; Aug. 18.
Shock absorbing mount or support. G. Campbell. 1,819,835; Aug. 18.
Shoe stiffener material and art of making. F. O. Woodruff. 1,819,011; Aug. 18.
Shoe, Weeding. C. J. Vieg. 1,819,662; Aug. 18.
Shoes and lasts, Separating. A. F. Pym. 1,819,440; Aug. 18.
Shoes, Attachment for. A. M. Mazerock. 1,819,962; Aug. 18.
Shoes, Lasting. R. B. McCarthy. 1,819,911; Aug. 18.
Shooting machine, Automatic. F. C. H. Hansen. 1,819,954; Aug. 18.

Shuttle check and release. L. A. Damico. 1,819,946; Aug. 18.
Shuttles within the shuttle box of looms, Device for checking or arresting. N. Catterall. 1,819,943; Aug. 18.
Sign, Luminous. F. A. Krotzer and W. B. Crandall. 1,818,980; Aug. 18.
Signal: *See*—
Elevator signal. Light signal.
Signal device for record sheets. C. H. Law. 1,819,251; Aug. 18.
Signal for motor vehicles, Direction. A. H. Gerber and J. P. Marchal. 1,819,087; Aug. 18.
Signal switch. J. M. Ogden. 1,819,196; Aug. 18.
Signal timing device. W. H. Bell. 1,818,983; Aug. 18.
Signaling device, Automobile. T. H. Lester. 1,819,902; Aug. 18.
Signaling system, Delinquency. J. W. Bryce. 1,819,699; Aug. 18.
Silica, Making precipitated. J. W. Church. 1,819,356; Aug. 18.
Silicon iron compounds, Making. J. A. Parsons. 1,819,479; Aug. 18.
Silk and process, Piece dyed. L. N. Hood and W. M. Scott. 1,819,027; Aug. 18.
Silk making apparatus, Artificial. W. H. Furness. 1,819,020; Aug. 18.
Sling. E. Seager. 1,819,390; Aug. 18.
Slipper, Boudoir. L. Goodkind. Des. 84,889; Aug. 18.
Smelting apparatus and process, Electric. A. E. Greene. 1,819,239; Aug. 18.
Smoke clouds, Generating. B. G. Macintire. 1,819,184; Aug. 18.
Smoke consumer. J. Pykosz. 1,819,119; Aug. 18.
Smoker's pipe. R. W. Banks. 1,819,062; Aug. 18.
Smoke producing agent for use with golf balls. R. W. Bates. 1,819,352; Aug. 18.
Smoothing machine. A. F. Pym. 1,819,120; Aug. 18.
Snow fence lifter. J. H. Soeffker. 1,819,445; Aug. 18.
Snow removing device, Automatic. M. J. Grimth. 1,818,989; Aug. 18.
Snubber, Vehicle. C. Erickson. 1,819,548; Aug. 18.
Socket, Electrical. S. M. Kenerson. 1,819,101; Aug. 18.
Soil treating mechanism. P. W. Hall. 1,819,092; Aug. 18.
Soldering iron, Electric. J. Buccola. 1,819,671; Aug. 18.
Solids, Apparatus for handling. F. B. Allen. 1,819,967; Aug. 18.
Sound recording and reproducing means. E. L. Kent. 1,819,820; Aug. 18.
Sound reproducer and manufacturing the same. L. W. Staunton and C. A. Brigham. 1,819,627; Aug. 18.
Sound reproducing device. J. M. Stone. 1,819,721; Aug. 18.
Sound reproducing diaphragm. L. W. Staunton. 1,819,659; Aug. 18.
Spark plug. W. O. Michelsen. 1,819,107–8; Aug. 18.
Spectacle frame. G. F. Marciano. Des. 84,897; Aug 18.
Spectacles. L. Daniels. 1,819,738; Aug. 18.
Speed control mechanism. A. C. Getz. 1,819,889; Aug. 18.
Speed regulating system. E. L. Peterson. 1,819,439; Aug. 18.
Spindle bolt remover. E. E. Richardson and R. L. Culpepper. 1,819,973; Aug. 18.
Spool device for type ribbon material. E. Kirkbride. 1,819,712; Aug. 18.
Spoon. H. Mock. 1,819,191; Aug. 18.
Spoon or similar article. F. Prétat. Des. 84,901; Aug. 18.
Spring. B. R. Dexter. 1,819,281; Aug. 18.
Sprinkler head. J. F. Moran. Des. 84,900; Aug. 18.
Sprinkler head, Automatic rotating. W. Van E. Thompson. 1,819,530; Aug. 18.
Stabilizer or time control device, Electrical frequency. J. A. Smale. 1,819,487; Aug. 18.
Stacking machine. H. E. Hudson. 1,819,841; Aug. 18.
Stage lift flowing device. A. Boynton. 1,819,538; Aug. 18.
Stage, Revolving. C. E. Pressley. 1,819,656; Aug. 18.
Stand: *See*—
Display stand. Telephone stand.
Match stand.
Stand and the like, Display. J. Horwath. Des. 18,153; Aug. 18.
Stand and serving apparatus, Service. B. H. Allen. 1,819,806; Aug. 18.
Stand or analogous article, Smoker's. H. K. Dalton. Des. 84,882; Aug. 18.
Starter, Engine. P. T. Snyder. 1,819,301; Aug. 18.
Static frequency changer. R. K. Bonell. 1,819,069; Aug. 18.
Steam boiler. H. J. Kerr. 1,819,179; Aug. 18.
Steam boiler. J. B. Wood. 1,819,350; Aug. 18.
Steam for use in turbines, Apparatus for reheating. L. J. Marshall. 1,818,996; Aug. 18.
Steam generating system. K. A. Mayr. 1,819,186; Aug. 18.
Steam generator. W. D. La Mont. 1,819,470; Aug. 18.
Steam jet construction, Circulating. O. Jacobsen. 1,818,979; Aug. 18.
Steam supply apparatus. W. A. Gilchrist. 1,819,286; Aug. 18.
Steaming or aging machine for dyeing, printing and like operations. J. S. Wilson, G. W. Shearer, and J. Thomas. 1,819,051; Aug. 18.
Steel, Assembling structural. A. A. Goerz. 1,819,287; Aug. 18.
Steel strut wheel. W. T. Brennen. 1,819,863; Aug. 18.
Steering column and ignition lock, Automobile. H. B. Palmer. 1,819,259; Aug. 18.
Stencil machine and stencil therefor. H. P. Elliott. Re18,151; Aug. 18.
Stencil, Metal. G. F. Taylor. 1,819,927; Aug. 18.
Stencil sheet for use in duplicating typewritten or manuscript documents, drawings and the like. A. De Waele. 1,819,078; Aug. 18.
Stocking. A. E. Ischinger. Des. 84,893–4; Aug. 18.
Stocking. E. C. Lochhead. 1,819,958; Aug. 18.
Stockings, Anti-ravel welt junctures for. G. W. Goetsch. 1,819,997; Aug. 18.
Stop, Leak. F. D. Hildreth. 1,819,169; Aug. 18.
Stop mechanism for presses. W. Cameron. 1,819,678; Aug. 18.
Stop motion mechanism, Weft. W. Crutchlow. 1,819,320; Aug. 18.
Stop, Train. M. Maile. 1,819,374; Aug. 18.
Storage tank. G. T. Horton. 1,819,418; Aug. 18.
Stove, Liquid fuel. G. E. Pickup. 1,819,338; Aug. 18.
Stove structure. W. Blaskewitz, C. B. Overly, C. F. Lambert, and J. Ironside. 1,819,669; Aug. 18.
Strap: *See*—
Door stop strap.
Strip, Contraction center. R. R. Robertson. 1,819,304; Aug. 18.
Submarine cable. W. S. Smith, N. Poppleford, H. J. Garnett, and H. C. Channon. 1,819,720; Aug. 18.
Submarine, Dry mine laying. H. E. Grieshaber. 1,819,022; Aug. 18.
Submarine vessel. S. Horvath. 1,819,681; Aug. 18.
Suction roll with extended suction box, Gearless. W. H. Millspaugh. 1,819,332; Aug. 18.
Sugar mill. F. Hegenbarth. 1,819,290; Aug. 18.
Superstructure for beacon towers. J. E. Tate. Des. 84,904; Aug. 18.
Support, Abdominal. J. L. and W. N. Holt. 1,819,294; Aug. 18.
Support, Awning. J. F. Hunley and R. W. Pace. 1,819,173; Aug. 18.
Support, Awning arm. F. A. Anton. 1,819,400; Aug. 18.
Support for locomotive fire boxes, Crown sheet. J. C. Martin, jr. 1,819,907; Aug. 18.
Support for vibratory equipment, Isolating. M. C. Rosenblatt. 1,819,039; Aug. 18.
Support, Lamp. C. W. Moore. 1,819,842; Aug. 18.
Support, Switch box. A. Frank. 1,819,460; Aug. 18.
Support, Utensil. H. Klein. 1,819,713; Aug. 18.
Suspension device. G. T. Mott. 1,819,754; Aug. 18.
Switch: *See*—
Disconnecting switch. Signal switch.
Electric switch.
Switch. M. P. Chaplin. 1,819,675; Aug. 18.
Switch control mechanism, Thermostatic. W. B. Bronander. 1,819,834; Aug. 18.
Switch control, Refrigerating apparatus. O. M. Summers. 1,819,979; Aug. 18.
Switch for cash registers, Speed control. M. M. Goldberg. 1,819,088; Aug. 18.
Switch for combination dish washer and sink, Start and stop. F. G. Brotz. 1,819,355; Aug. 18.
Switch operating mechanism, Railway. G. Manzoli. 1,819,473; Aug. 18.
Syringe. M. Nevin. 1,819,258; Aug. 18.
Table and chair, Combined. L. Kocjan. 1,819,956; Aug. 18.
Table for cast glass, Receiving. C. Locreille. 1,819,959; Aug. 18.
Table for casting glass sheets and plates. Y. Brancart. 1,819,224; Aug. 18.
Tamping and rolling machine operated by vibration. J. G. Cameron. 1,819,866; Aug. 18.
Tank: *See*—
Storage tank.
Tank heater. O. A. Bailey. 1,819,402; Aug. 18.
Tank sampler. W. P. Arnold, jr. 1,819,058; Aug. 18.
Tar acids, Recovering. S. P. Miller. 1,819,687; Aug. 18.
Tar, Filtration of. F. J. Gainer. 1,819,745; Aug. 18.
Target trap. P. North. 1,819,567; Aug. 18.
Telephone construction. W. G. Dunn. 1,819,362; Aug. 18.
Telephone receiver. F. Conrad. 1,819,499; Aug. 18.
Telephone stand. J. L. Shahan. 1,819,977; Aug. 18.
Telephone system. K. Larsson. 1,819,683; Aug. 18.
Telephone system. T. A. Lundell. 1,819,685; Aug. 18.
Temperature control system and apparatus. M. H. Bennett. 1,819,588; Aug. 18.
Temperature indicator. J. Unterholzner. 1,819,347; Aug. 18.
Temperature regulating and indicating device. D. S. Jacobus. 1,819,244; Aug. 18.
Tensile strength, Apparatus for testing. A. Schopper and G. Dalen. 1,819,719; Aug. 18.
Tent. S. C. Forrester. 1,820,002; Aug. 18.
Terminal board. W. E. Smith. 1,819,657; Aug. 18.
Testing machine. W. C. Stevens. 1,819,990; Aug. 18.
Thermometer. C. R. Palmer and C. P. Mitchell. 1,819,919; Aug. 18.
Thermoscope available as a fire indicator and for like purposes, Electric pneumatic. C. De Filippi. 1,819,077; Aug. 18.

Thermostatic apparatus. W. B. Hodge. 1,819,987; Aug. 18.
Thread cutter. O. Balzano. 1,819,404; Aug. 18.
Thread gauge. J. Hartness. 1,819,025; Aug. 18.
Throttle, Gas. C. R. Neal. 1,819,111; Aug. 18.
Throwing machine. R. J. Bartholomew. 1,819,634; Aug. 18.
Ticket issuing machine by the introduction of an instrument through the ticket delivery slot, Means to prevent misuse of a. J. F. Ohmer and T. C. Maley. 1,819,195; Aug. 18.
Tide power apparatus. W. E. Jenkins. 1,819,749; Aug. 18.
Tie: *See*—
Railroad tie.
Tie-tamping system and operating the same. C. S. Weyandt, 1,819,009; Aug. 18.
Tile, Making. A. Malinovszky. 1,819,686; Aug. 18.
Tilling machine. L. Dufour. 1,819,950; Aug. 18.
Time delay apparatus. W. K. Kearsley. 1,819,999; Aug. 18.
Tint laying machine. L. J. Brown. 1,819,071; Aug. 18.
Tire. F. D. Goodlake. 1,819,891; Aug. 18.
Tire-bead reinforcing element. C. C. Harrah. 1,819,747; Aug. 18.
Tire cushion. G. H. Young. 1,819,632; Aug. 18.
Toaster. M. W. McArdle. Des. 84,899; Aug. 18.
Toggle bolt. C. C. Tomkinson. 1,819,828; Aug. 18.
Toilet article. W. C. Roessinger. 1,819,004; Aug. 18.
Tool, Chain. F. A. Olmstead. 1,819,520; Aug. 18.
Tool, Peening. W. C. Holden. 1,819,777; Aug. 18.
Tool, Portable shearing. R. Sudre. 1,819,135; Aug. 18.
Tool, Spiking. E. H. W. Welbull and E. G. Hysing. 1,819,139; Aug. 18.
Tool, wire twisting. A. E. Hoene. 1,819,170; Aug. 18.
Tooth anchorage and connecting the same. H. R. Berger. 1,819,276; Aug. 18.
Top, Automobile. R. A. Delp. 1,819,545; Aug. 18.
Torchière. J. Castelli. 1,819,733; Aug. 18.
Towel and the like, Paper. J. C. Sherman. 1,819,041; Aug. 18.
Toy. A. E. Rittenhouse. 1,819,403; Aug. 18.
Toy, Figure. W. H. Morley. 1,819,475; Aug. 18.
Toy horse, Mechanical. J. S. King and W. L. Henderson. 1,819,029; Aug. 18.
Toy savings bank. A. Van Gytenbeek. Des. 84,907; Aug. 18.
Traction device for vehicles. A. Seppola. 1,819,924; Aug. 18.
Tractor. D. P. Davies. 1,819,640; Aug. 18.
Tractor cultivator. A. G. and A. Ronning. 1,819,624; Aug. 18.
Tractor implement. A. C. Lindgren and J. L. Hipple. 1,819,684; Aug. 18.
Tractor lister attachment. W. S. Graham. 1,819,679; Aug. 18.
Traffic signal actuating apparatus. F. Mamiya. 1,819,518; Aug. 18.
Transmission chock for automobiles. W. G. Miller. 1,819,914; Aug. 18.
Transmission mechanism. A. Galanti. 1,819,677; Aug. 18.
Transmission system. O. T. Francis. 1,819,599; Aug. 18.
Transmitting system. Hydraulic stress. D. Sensaud de Lavaud. 1,819,947; Aug. 18.
Trap: *See*—
Gopher trap. Target trap.
Trap. W. J. Luff. 1,819,253; Aug. 18.
Tray. W. W. Hartman. 1,819,894; Aug. 18.
Tray, Developing. G. C. Beidler. 1,819,536; Aug. 18.
Trestle or saw horse. J. Kraut. 1,819,780; Aug. 18.
Trichloromethyl - ethoxy - hydroxy - phenol - carbinol. O. Spengler and H. Pfannenstiel. 1,819,132; Aug. 18.
Trolley for current distributing systems. H. J. L. Frank and W. A. Harper. 1,819,886; Aug. 18.
Truck, Barrow. E. R. Hiatt. 1,819,601; Aug. 18.
Truck, Industrial. W. Schroeder. 1,819,625; Aug. 18.
Truck, Railway car. M. H. Martin. 1,819,564; Aug. 18.
Tube: *See*—
Luminous tube.
Tube swaging machine and method. F. Müller. 1,819,376; Aug. 18.
Tubes, Manufacture of inner. P. W. Lehman. 1,819,032; Aug. 18.
Tubular structure. R. N. Friend. 1,819,086; Aug. 18.
Tuning system. J. M. Miller. 1,819,299; Aug. 18.
Turbine, Elastic fluid. D. J. Bloomberg. 1,819,864; Aug. 18.
Typewriting and computing machine, Combined. H. H. Vickers. 1,819,931; Aug. 18.
Typewriting machine. L. C. Myers and G. F. Handley. Re18,158; Aug. 18.
Typewriting machine. F. Walsleben. 1,819,215; Aug. 18.
Umbrella, Golf bag. H. McGaffey. 1,819,912; Aug. 18.
Underreamer. R. R. Crum. 1,819,357–8; Aug. 18.
Vacuum cleaner, Multiple nozzle. A. N. Spanel. 1,819,131; Aug. 18.
Vacuum condensation control. V. Rosenhagen. 1,819,522; Aug. 18.
Valve. W. Ernst. 1,819,703; Aug. 18.
Valve. C. W. Sleeper, W. B. Meglitz, and H. Parker. 1,819,043; Aug. 18.
Valve. L. K. Wright. 1,819,452; Aug. 18.
Valve aggregates for regenerative furnaces, heat apparatus, etc. E. S. S. Wohlfahrt. 1,819,052; Aug. 18.
Valve and plug seating means for same. M. R. Shipley. 1,819,843; Aug. 18.
Valve bag. C. G. Kronmiller. 1,819,425; Aug. 18.
Valve bag, Self locking. M. R. Kendall. 1,819,421; Aug. 18.
Valve, Balanced. K. A. Mayr and R. E. White. 1,819,615; Aug. 18.
Valve, Core barrel. R. O. Anderson. 1,818,981; Aug. 18.
Valve, Expansion. R. M. Hvid. 1,819,370; Aug. 18.
Valve for lubricators, Automatic variable oil control. C. D. Allen. 1,819,858; Aug. 18.
Valve for pressure pumps, Relief. O. C. Kiger and R. Shelton. 1,819,422; Aug. 18.
Valve inside. J. Volckhausen. 1,819,852; Aug. 18.
Valve, Interchangeable tire. G. G. Cooke and M. E. Dayton. 1,819,872; Aug. 18.
Valve, Magnetically operated. L. C. Frank. 1,819,461; Aug. 18.
Valve stem. J. C. Crowley. 1,819,150; Aug. 18.
Valve stem, Interchangeable. J. C. Crowley. 1,819,151; Aug. 18.
Valve, Thermostatically operative. J. W. Winter. 1,819,993; Aug. 18.
Vanity case, Automobile. W. H. Kelley. 1,819,516; Aug. 18.
Vaporizer, Electrical. J. Robinson. 1,819,123; Aug. 18.
Vehicle cushioning or shock absorbing device. W. C. Broadwell. 1,819,455; Aug. 18.
Vehicle front end construction, Motor. J. A. Whitcomb. 1,819,579; Aug. 18.
Vehicles, Body center plate for railway. J. A. Shafer. 1,819,269; Aug. 18.
Ventilator. E. W. McIntyre. 1,819,255; Aug. 18.
Vessels, Device for milk. A. Callmani and G. Campana. 1,819,226; Aug. 18.
Vest, Life saving. A. Lehmann. 1,819,901; Aug. 18.
Vibration absorber. O. J. Rued. 1,819,266; Aug. 18.
Vibration reducing device. J. A. Wiltse. 1,819,665; Aug. 18.
Vibrator, Electromechanical. A. E. G. Nandillon and A. E. Cottet. 1,819,964; Aug. 18.
Violin. T. Thrasher. 1,819,928; Aug. 18.
Vise grip lock. C. M. Ellenberger. 1,819,813; Aug. 18.
Visual effects, Apparatus for producing. A. C. Watson. 1,819,217; Aug. 18.
Voltage regulation, System of. J. Kröppelin. 1,819,468; Aug. 18.
Wagon, Power loading dump. B. A. Watt. 1,819,578; Aug. 18.
Wallpaper. J. H. Whitwell. Des. 84,908; Aug. 18.
Washer: *See*—
Air washer.
Washing apparatus. R. Hoe. 1,819,463; Aug. 18.
Washing machine. D. E. Jackson. 1,819,419; Aug. 18.
Washing machine. S. E. Schroeder. 1,819,841; Aug. 18.
Washing machine. C. F. Staples. 1,819,208; Aug. 18.
Water at various temperatures to dental syringes, Apparatus for supplying. C. H. Brown. 1,819,941; Aug. 18.
Water craft. G. H. Nobbs. 1,819,787; Aug. 18.
Water heating means, Controlled. G. F. Archer. 1,819,057; Aug. 18.
Water mixer, Thermostatic. M. O. Snediker. 1,819,045; Aug. 18.
Water motor. C. P. Howard. 1,819,008; Aug. 18.
Water treatment, Hot. P. M. Contant. 1,819,149; Aug. 18.
Wave lengths, Elimination of fading on short. H. H. Beverage and H. O. Peterson. 1,819,589; Aug. 18.
Wave transmission system. R. C. Mathes. 1,819,614; Aug. 18.
Wave transmission system. R. C. Mathes. 1,819,648–9; Aug. 18.
Weeding apparatus. H. A. Dech. 1,819,544; Aug. 18.
Weft threading device for the shuttles of automatic and other looms. F. H. Mezeray. 1,819,189; Aug. 18.
Well cementing apparatus. R. C. Baker. 1,819,668; Aug. 18.
Wheel: *See*—
Polishing wheel. Steel strut wheel.
Wheel assembly machines, Rim feed for. A. O. Roberts. 1,819,622; Aug. 18.
Wheels, Forming metal. L. E. Waite. 1,819,854; Aug. 18.
Wheelbarrow. A. Ehnert. 1,819,951; Aug. 18.
Winding and reeling device. W. C. Stevens. 1,819,989; Aug. 18.
Window channel. C. P. Schlegel. 1,819,205; Aug. 18.
Windshield heater, Automobile. G. Schillo and G. Plamann. 1,819,443; Aug. 18.
Winging machine. J. A. Anderson. 1,819,695; Aug. 18.
Wire dispensing apparatus. J. Colitz. 1,819,734; Aug. 18.
Wireless transmitter. N. E. Davis and W. T. Ditcham. 1,819,596; Aug. 18.
Wood pulp by percolation, Treatment of. E. Morteurd. 1,819,963; Aug. 18.
Wrench. G. W. Schaefer. 1,819,525; Aug. 18.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 18, 1931

NOTE.—First number—class, second number—subclass, third number—patent number

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27: 1,819,294
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Bagdigian, Hagop, Highland Park, Mich. Hair tonic. 286,258; Aug. 25; Serial No. 311,023; published June 2, 1931. Class 6.

Bamberger, L., & Co., Newark, N. J. Cellulose sanitary napkins. 286,438; Aug. 25; Serial No. 313,825; published June 16, 1931. Class 44.

Beiersdorf, P. & Co. Inc., New York, N. Y. Adhesive plasters. 286,242; Aug. 25; Serial No. 297,000; published July 15, 1930. Class 44.

Belisario Diaz, Los Angeles, Calif. Insecticide. 286,313; Aug. 25; Serial No. 312,950; published June 16, 1931. Class 6.

Bercy Laboratories. (See Fleron, M. M., & Son.)

Birch, Thomas R., doing business as Phoenix Costume Manufacturing Company, Philadelphia, Pa. Tennis racket casings. 286,483; Aug. 25. Class 22.

Birk Bros. Brewing Co., by change of name to Birk Brothers, Inc., Chicago, Ill. Beer. 83,471; renewed Sept. 19, 1931.

Birk Bros. Brewing Co., by change of name to Birk Brothers, Inc., Chicago, Ill. Beer. 83,632; renewed Oct. 3, 1931.

Black Flag Company, The, Baltimore, Md. Insecticides. 286,271; Aug. 25; Serial No. 313,418; published May 26, 1931. Class 6.

Blair & Curtis, Inc., New York, N. Y. Medicinal preparations. 286,233; Aug. 25; Serial No. 312,677; published May 26, 1931. Class 6.

Blair & Curtis, Inc., New York, N. Y. Medicinal preparations. 286,234; Aug. 25; Serial No. 312,676; published May 26, 1931. Class 6.

Blue Seal Extract Company, Cambridge, Mass. Maltless beverages and extracts therefor. 286,291; Aug. 25; Serial No. 314,393; published June 16, 1931. Class 45.

Boos, Henry P., doing business as Henry P. Boos Prosthetic Studios, Minneapolis, Minn. Full and partial dentures and bridges. 286,353; Aug. 25; Serial No. 313,993; published June 9, 1931. Class 44.

Bowman, Erick, doing business as Bowman Laboratory, Owatonna, Minn. Preparation for treating live stock. 286,316; Aug. 25; Serial No. 312,899; published May 26, 1931. Class 6.

Bradley, Milton, Company, Springfield, Mass. Table board game. 286,320; Aug. 25; Serial No. 313,325; published June 9, 1931. Class 22.

Breck, Joseph, & Sons Corporation, Boston, Mass. Lawn seed. 286,358–9; Aug. 25; Serial Nos. 313,462–3; published June 9, 1931. Class 1.

Bredemeier, E. W., & Co., Chicago, Ill. Portfolios and pocket-books. 286,363; Aug. 25; Serial No. 312,790; published June 16, 1931. Class 3.

Brener, J. Co., Boston, Mass. Rayon knitted cloth in the piece. 286,475; Aug. 25. Class 42.

Brinly-Hardy Company, Louisville, Ky. Toy walking devices. 286,378; Aug. 25; Serial No. 313,728; published June 16, 1931. Class 22.

Brown Company, Portland, Me., and Berlin, N. H. Cellulose pulps. 286,367; Aug. 25; Serial No. 306,555; published Dec. 2, 1930. Class 1.

Burpee, W. Atlee, Co., Philadelphia, Pa. Garden vegetable seeds. 286,408; Aug. 25; Serial No. 278,891; published June 9, 1931. Class 1.

Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y. Medicinal acids, alkalies, ammonium compounds, etc. 286,409; Aug. 25; Serial No. 278,089; published June 16, 1931. Class 6.

Byk-Guldenwerke Chemische Fabrik Aktiengesellschaft, Berlin, Germany. Medicinal preparations. 286,337; Aug. 25; Serial No. 312,838; published May 26, 1931. Class 6.

California Packing Corporation, San Francisco, Calif. Canned fruits and vegetables, jams, jellies, olives, etc. 286,243–4; Aug. 25; Serial Nos. 294,466–7; published May 27, 1930. Class 46.

Calvert Company, Inc., Seattle, Wash. Canned salmon. 286,470; Aug. 25. Class 46.

Candy Kitchens, Inc., Chicago, Ill. Candy. 286,397; Aug. 25; Serial No. 314,360; published June 16, 1931. Class 46.

Caruthers, Henry T., doing business as Zenith Cleaner Products Company, Memphis, Tenn. Preservative preparation. 286,255; Aug. 25; Serial No. 311,637; published May 26, 1931. Class 16.

Cassett, Albert, New York, N. Y. Prophylactic rubber or tissue membraneous articles. 286,445; Aug. 25; Serial No. 312,598; published June 16, 1931. Class 44.

Cedar Grove Shoe Mfg. Co., Cedar Grove, Wis. Shoes. 286,452; Aug. 25. Class 39.

Celanese Corporation of America, New York, N. Y. Underwear. 286,279; Aug. 25; Serial No. 313,178; published May 26, 1931. Class 39.

Celolac Products Company, Minneapolis, Minn. Cleaner for duco, lacquer, etc. 286,355; Aug. 25; Serial No. 310,433; published June 9, 1931. Class 4.

Challenge Cream & Butter Association, Los Angeles, Calif. Butter. 286,346; Aug. 25; Serial No. 313,882; published June 9, 1931. Class 46.

Chelsea Packing Co. Inc., Brooklyn, N. Y. Mayonnaise, apple butter, canned cherries, spices, pickles, preserves, etc. 286,453; Aug. 25. Class 46.

Chemische Fabrik Helfenberg A. G. vorm Eugene Dietrich, Helfenberg, near Dresden, Germany. Medicinal preparation. 286,432; Aug. 25; Serial No. 308,614; published June 16, 1931. Class 6.

Chesebrough Manufacturing Company, Consolidated, New York, N. Y. Petroleum jelly. 286,262; Aug. 25; Serial No. 310,211; published May 26, 1931. Class 6.

Chicago Garment Co., Inc., Argos, Ind. Play suits, overalls, rompers, etc. 286,450; Aug. 25. Class 39.

Chiswick Products Limited. (See Nugget Polish Co., Ltd., The.)

Clarke, A. G., Drug Company, The, Denver, Colo. Skin lotion. 286,278; Aug. 25; Serial No. 313,283; published May 26, 1931. Class 6.

Climax Cleaner & Cleveland Paste Co., The, by change of name to The Climax Cleaner Mfg. Company, Cleveland, Ohio. Preparation used as a cleaner for wallpaper. 83,987; renewed Oct. 31, 1931.

Clinton Company, The, Cleveland, Ohio. Coal. 286,342; Aug. 25; Serial No. 314,323; published June 16, 1931. Class 1.

Cold Snap Incorporated, New York, N. Y. Frozen confection. 286,439; Aug. 25; Serial No. 313,330; published June 9, 1931. Class 46.

Colgate-Palmolive-Peet Company, Chicago, Ill. Toilet soap and shaving cream. 286,437; Aug. 25; Serial No. 313,882; published June 16, 1931. Class 4.

Columbia Laboratories Inc., New York, N. Y. General tonic. 286,392; Aug. 25; Serial No. 311,471; published June 9, 1931. Class 6.

Combine Hosiery Corporation, Wilmington, Del. and New York, N. Y. Hosiery. 286,247; Aug. 25; Serial No. 265,891; published July 10, 1928. Class 39.

Conron Bros. Company, New York, N. Y. Butter, eggs, and dressed poultry. 84,600; renewed Dec. 26, 1931.

Cooper, William, & Nephews, Incorporated, Chicago, Ill. Insecticide. 286,260; Aug. 25; Serial No. 310,473; published May 26, 1931. Class 6.

Corvallis Creamery Co., Portland, Oreg. Sandwich spread, mayonnaise, canned chicken with noodles. 286,464; Aug. 25. Class 46.

Crallo Sweets, Incorporated, Brooklyn, N. Y. Confectionery. 286,399; Aug. 25; Serial No. 314,274; published June 16, 1931. Class 46.

Crepe-Kraft Company, Inc., The, Newark, N. J. Paper. 286,461; Aug. 25. Class 37.
Crystal Soap & Chemical Co., Inc., Philadelphia, Pa. Preparation used as a spreader in conjunction with contact insecticides. 286,311; Aug. 25; Serial No. 312,364; published June 2, 1931. Class 6.
Danchak, Mrs. Lydia, doing business as Gold-Vein Co., Waco, Tex. Ointment. 286,317; Aug. 25; Serial No. 312,876; published June 16, 1931. Class 6.
Dauer, Morris, doing business as Redau Laboratory, Brooklyn, N. Y. Perfume, toilet water, eau de cologne, rouge, etc. 286,418; Aug. 25; Serial No. 299,499; published Aug. 12, 1930. Class 6.
De Rosa, Michele, New York, N. Y. Canned tomatoes. 286,431; Aug. 25; Serial No. 308,819; published June 9, 1931. Class 46.
Dilling & Company, Indianapolis, Ind. Candies. 286,396; Aug. 25; Serial No. 314,462; published June 16, 1931. Class 46.
Donaldson Manufacturing Company, Limited, Glasgow, Scotland. Golf clubs, golf club shafts, golf balls, etc. 286,376; Aug. 25; Serial No. 314,447; published June 16, 1931. Class 22.
Donnen-Fuel, Inc., New York, N. Y. Coal. 286,332; Aug. 25; Serial No. 311,461; published June 16, 1931. Class 1.
D'Orsay Perfumeries Corporation, New York, N. Y. Soaps. 286,446; Aug. 25; Serial No. 312,366; published June 9, 1931. Class 4.
Doug'ass, Bernard M., New York, N. Y. Roquefort cheese. 286,270; Aug. 25; Serial No. 313,468; published June 16, 1931. Class 46.
Drug Products Co., Inc., The, Long Island City, N. Y. Preparation used in selected cases of amenorrhea, etc. 286,290; Aug. 25; Serial No. 313,424; published June 2, 1931. Class 6.
Eccles, M. B., Omaha, Nebr. Maltless compound for maltless beverages. 286,299; Aug. 25; Serial No. 313,997; published June 16, 1931. Class 45.
Electrovita Company, The, San Francisco, Calif. Semi-organic preparation serving to eliminate toxic matter. 286,267; Aug. 25; Serial No. 313,592; published June 2, 1931. Class 6.
El-O-Pathic Laboratories. (See Henkin, Henry.)
Emkins. (See Satnick, Max.)
Erasm Chemical Corporation of America, Inc., Cincinnati, Ohio. Dry window cleaning powder and metal polish. 286,443; Aug. 25; Serial No. 313,030; published June 9, 1931. Class 4.
Esslinger's, Inc., Philadelphia, Pa. Malt beverages. 286,298; Aug. 25; Serial No. 314,045; published June 16, 1931. Class 48.
Europa Health Restorer Co. (See Howell, Charlotte E.)
Eusey Co., Ltd., The, Los Angeles, Calif. Bleach and water softener having cleaning, etc., properties. 286,315; Aug. 25; Serial No. 312,907; published June 2, 1931. Class 6.
Every Buddy's Blouse Co., New York, N. Y. Blouses, shirts, and playsuits. 286,465; Aug. 25. Class 39.
Fashion Park Associated, Inc., Rochester, N. Y. Coats, beats, pants, etc. 286,284; Aug. 25; Serial No. 313,031; published June 2, 1931. Class 39.
Fear, Fred, & Co., Brooklyn, N. Y. Dyes. 286,238; Aug. 25; Serial No. 308,620; published June 2, 1931. Class 6.
Federal Star Dyers Corporation, New York, N. Y. Dyed furs, skins, pelts, and hides. 286,361; Aug. 25; Serial No. 313,426; published June 16, 1931. Class 1.
Five Minute Home Cleaner Company, The, Chicago, Ill. Dry cleaner. 286,369; Aug. 25. Class 4.
Flaherty, Lena, doing business as Rhealinzo Co., Portland, Oreg. Medicine for pyorrhea. 286,369; Aug. 25; Serial No. 306,437; published May 26, 1931. Class 6.
Flavo Lax Corporation, Brooklyn, New York. Physic and laxative for human use. 286,365; Aug. 25; Serial No. 313,264; published June 16, 1931. Class 6.
Fleron, M. M., & Son, Inc., doing business as Bercy Laboratories, Trenton, N. J. Hair tonics. 286,423; Aug. 25; Serial No. 296,640; published Apr. 22, 1930. Class 6.
Florasynth Laboratories, Inc., New York, N. Y. Synthetic organic products for general food flavoring purposes. 286,411; Aug. 25; Serial No. 276,931; published June 16, 1931. Class 6.
Fox & Fox, Philadelphia, Pa. Beef, mutton, pork, etc. 286,410; Aug. 25; Serial No. 277,783; published June 16, 1931. Class 46.
Franklin Simon & Co. Inc., New York, N. Y. Perfumes and hygienic products. 286,259; Aug. 25; Serial No. 310,939; published May 26, 1931. Class 6.
Franklin Simon & Co. Inc., New York, N. Y. Wearing apparel. 286,288; Aug. 25; Serial No. 312,866; published June 2, 1931. Class 39.
Fried, Samuel, doing business as Golden-Voice Bird Food Products Co., Brooklyn, N. Y. Bird seed food and bird colored pepper food. 286,348; Aug. 25; Serial No. 313,503; published June 9, 1931. Class 46.
Gane's Chemical Works, Inc., New York, N. Y. Medicinal preparation. 286,230; Aug. 25; Serial No. 312,728; published June 2, 1931. Class 6.
Garner, Lyle A., doing business as S & S Specialty Co., Long Beach, Calif. Therapeutic devices for holding absorptive pads. 286,390; Aug. 25; Serial No. 312,000; published June 9, 1931. Class 44.
Gibotone Co., Savannah, Ga. Alternative tonic and system builder. 286,272; Aug. 25; Serial No. 313,366; published May 26, 1931. Class 6.
Golt, Kenneth E., Minneapolis, Minn. Preparation for the treatment of nasal and sinus infections. 286,381; Aug. 25; Serial No. 313,540; published May 26, 1931. Class 6.
Gold-Vein Co. (See Danchak, Mrs. Lydia.)
Golden Glow Shops, Inc., Somerville, Mass. Pop corn. 286,336; Aug. 25; Serial No. 312,888; published June 16, 1931. Class 46.
Golden-Voice Bird Food Products Co. (See Fried, Samuel.)
Goldsholl, Abraham, New York, N. Y. Elastic belts for bloomers. 286,456; Aug. 25. Class 40.
Goldwyn, William, St. Louis, Mo. Cosmetics. 286,235; Aug. 25; Serial No. 312,643; published May 26, 1931. Class 6.
Greenville Products Co., Greenville, Ala. Prepared mineral water. 286,393; Aug. 25; Serial No. 311,097; published June 2, 1931. Class 6.
Grey Iron Casting Company, Mount Joy, Pa. Jack stones and jack sets. 286,295; Aug. 25; Serial No. 314,050; published June 9, 1931. Class 22.
Guthrie, Balfour & Company, assignor to Balfour Guthrie & Co., Limited, San Francisco, Calif. Canned fruits, vegetables, fish, and fresh deciduous fruits, vegetables and dried fruits. 286,457; Aug. 25. Class 46.
Gutmann, Franz, & Weinberg G. m. b. H., Chemnitz, Germany. Gloves. 286,472; Aug. 25. Class 39.
Gysin, Sebastian, doing business as Modern Health Products, Milwaukee, Wis. Laxative. 286,305; Aug. 25; Serial No. 312,049; published June 2, 1931. Class 6.
Harwood, Charles E., Company, by change of name to Harwood Counter Company, Lynn, Mass. Counter-stiffeners for boots and shoes. 84,316; renewed Nov. 28, 1931.
Hawk, Henry C., Battle Creek, Mich., to Postum Company, Inc., New York, N. Y., successor. Food made of corn, sugar, and salt. 82,436; renewed June 27, 1931.
Haworth, Z. L., Kansas City, Mo. Liquid medical preparation for use in treatment of swine. 286,285; Aug. 25; Serial No. 312,989; published June 2, 1931. Class 6.
Henkin, Henry, doing business as El-O-Pathic Laboratories, Los Angeles, Calif. Absorbent liniment, etc. 286,256; Aug. 25; Serial No. 311,609; published May 26, 1931. Class 6.
Herzog, Henry J., New York, N. Y. Tonic in the form of tablets, salts, or powder. 286,282–3; Aug. 25; Serial Nos. 313,038–9; published May 26, 1931. Class 6.
Hindu Incense Manufacturing Co., Inc., Chicago, Ill. Incense. 286,476; Aug. 25. Class 6.
Howell, Charlotte E., doing business as Europa Health Restorer Co., Glendale, Calif. Preparation for purifying the blood. 286,379; Aug. 25; Serial No. 313,661; published June 16, 1931. Class 6.
Ischerland, Frederick E., Flint, Mich. Hair tonic. 286,274; Aug. 25; Serial No. 313,343; published May 26, 1931. Class 6.
Ischerland, Frederick E., Flint, Mich. Hair tonic. 286,275; Aug. 25; Serial No. 313,342; published May 26, 1931. Class 6.
International Shoe Co., St. Louis, Mo. Boots and shoes. 286,264; Aug. 25; Serial No. 309,084; published May 26, 1931. Class 39.
International Shoe Co., St. Louis, Mo. Boots and shoes. 286,265; Aug. 25; Serial No. 309,083; published Feb. 10, 1931. Class 39.
Interstate Chemical Mfg. Co., Jersey City, N. J. Insecticides. 286,254; Aug. 25; Serial No. 311,838; published May 26, 1931. Class 6.
James, Thomas R., Dallas, Tex. Pads used during hair treating or waving operations. 286,435; Aug. 25; Serial No. 313,546; published June 16, 1931. Class 44.
Jelenko, J. F., & Co., Inc., New York, N. Y. Casting golds. 286,436; Aug. 25; Serial No. 311,528; published June 16, 1931. Class 44.
Jimison, Floyd S., Los Angeles, Calif. Game boards. 286,321; Aug. 25; Serial No. 312,010; published June 9, 1931. Class 22.
Johnson, Theodore, New York, N. Y. Preparations for cleaning linoleum. 286,374; Aug. 25; Serial No. 307,206; published June 16, 1931. Class 4.
Jones, Frank H., Boston, Mass. Chemical jelly compound for cleaning metals. 286,248; Aug. 25; Serial No. 313,135; published June 9, 1931. Class 4.
Kaplan, Thomas, doing business as Midwest Drug Co., Minneapolis, Minn. Prophylactic rubber articles. 286,444; Aug. 25; Serial No. 312,952; published June 9, 1931. Class 44.
Kelly Graphite Mills, Inc., Stockertown, Pa. Facings and facing products for use in casting metals. 286,246; Aug. 25; Serial No. 281,005; published June 3, 1930. Class 1.
Kingdon, A. M., doing business as Nu-Age Laboratories, Omaha, Nebr. Preparation for the treatment of sour stomach, etc. 286,310; Aug. 25; Serial No. 311,613; published May 26, 1931. Class 6.
Kissana Chem.-Pharm. Laboratorium G. m. b. H., Bad Kissingen, Germany. Adhesive plasters, dressings of iodoform gauze, perfumery, etc. 286,263; Aug. 25; Serial No. 309,086; published May 26, 1931. Class 6.
Kitchen & Retail Store. (See Miller, Stuart W.)

Koehler Bros., Saginaw, Mich. Target backstops. 286,377; Aug. 25; Serial No. 314,411; published June 16, 1931. Class 9.
Kohn, Samuel, doing business as Thrift Rubber Company, Newark, N. J. Prophylactic rubber and membraneous articles. 286,340; Aug. 25; Serial No. 314,204; published June 16, 1931. Class 44.
Kresge, S. S., Company, Detroit, Mich. Hosiery. 286,460; Aug. 25. Class 39.
Lamb, Mrs. Eleanor, Norwalk, Ohio. Mayonnaise dressing, Thousand Island dressing, and sandwich spread. 286,388; Aug. 25; Serial No. 311,548; published June 9, 1931. Class 46.
Largman, Gray Company, New York, N. Y. Hosiery. 286,454; Aug. 25. Class 39.
Law, H. P., Co., Lincoln, Nebr. Canned fish, fruits, meats, milk, etc. 286,237; Aug. 25; Serial No. 300,950; published Oct. 28, 1930. Class 46.
Lawrence, A. C., Leather Company, Peabody, Mass. Shearlings or wool pelts. 286,391; Aug. 25; Serial No. 312,608; published June 16, 1931. Class 1.
Lawrence Paper Manufacturing Company, Lawrence, Kans. Cartons. 286,462; Aug. 25. Class 2.
Lemingwell Rancho Company, Whittier, Calif. Insecticides, liquid spreader compounds, a compound of emulsified kerosene, lime sulfur. 286,416; Aug. 25; Serial No. 309,247; published June 9, 1931. Class 6.
Lentheric, Incorporated, New York, N. Y. Perfumes, toilet waters, face and dusting powders, etc. 286,414; Aug. 25; Serial No. 310,059; published May 26, 1931. Class 6.
Leocopoulos, George D., Chicopee Falls, Mass. Candy. 286,352; Aug. 25; Serial No. 313,272; published June 16, 1931. Class 46.
Levin, Samuel G., New York, N. Y., doing business as Medicinal Health Laboratories. Medicinal preparation for the alleviation of pain. 286,269; Aug. 25; Serial No. 313,440; published June 2, 1931. Class 6.
Life Savers, Inc., Port Chester, N. Y. Candy. 286,404–6; Aug. 25; Serial Nos. 281,434–6; published June 9, 1931. Class 46.
Life Savers, Inc., Port Chester, N. Y. Candy. 286,428; Aug. 25; Serial No. 282,119; published June 9, 1931. Class 46.
Life Savers, Inc., Port Chester, N. Y. Candy. 286,429–30; Aug. 25; Serial Nos. 281,437–8; published June 9, 1931. Class 46.
Lyons, Arthur C., Brantford, Ontario, Canada. Complexion soap and shaving soap. 286,417; Aug. 25; Serial No. 299,849; published June 9, 1931. Class 4.
Lyons & Company, New York, N. Y. Preparation for polishing, cleaning, and dressing shoes. 286,441; Aug. 25; Serial No. 313,139; published June 16, 1931. Class 4.
M. M. A. Chemical Company, Boston, Mass. Paste or semi-liquid in the nature of a dry cleaner. 286,447; Aug. 25; Serial No. 312,190; published June 16, 1931. Class 4.
MacKay, Donald, Twin Falls, Idaho. Liniment. 286,394; Aug. 25; Serial No. 310,325; published May 26, 1931. Class 6.
Matthias, Maximilian P., Forest Hills, N. Y. Astringents. 286,277; Aug. 25; Serial No. 313,302; published May 26, 1931. Class 6.
Matz Company. (See Tangen, Martin A.)
Meadows, C. G., doing business as Aracoma Laboratories, Logan, W. Va. Mouth wash and a preparation used in the treatment of dandruff. 286,380; Aug. 25; Serial No. 313,605; published June 16, 1931. Class 6.
Medicinal Health Laboratories. (See Levin, Samuel G.)
Melatol Laboratories, San Francisco, Calif. Capsules for the treatment of diabetes. 286,308; Aug. 25; Serial No. 311,880; published May 26, 1931. Class 6.
Midwest Drug Co. (See Kaplan, Thomas.)
Miller, Stuart W., doing business as Kitchen & Retail Store, Colmar Manor, Md. Potato chips. 286,484; Aug. 25. Class 46.
Minneapolis-Honeywell Regulator Company. (See Time-O-Stat Controls Company, assignor.)
Minnesota Valley Canning Company, Le Sueur, Minn. Canned peas. 286,422; Aug. 25; Serial No. 298,644; published June 16, 1931. Class 46.
Mizrahi, R. B., doing business as Laboratorium Mizrahi, Mexico, Mexico. Medicinal cream, liquid powder and cream dentifrice, cold cream, etc. 286,407; Aug. 25; Serial No. 281,038; published June 2, 1931. Class 6.
Modern Health Products. (See Gysin, Sebastian.)
Monaderb Tea Co. (See Trillo, Rocco.)
Müller, Frederick H., doing business as F. H. Muller & Co., Chicago, Ill. Toilet preparations. 286,249; Aug. 25; Serial No. 312,618; published June 2, 1931. Class 6.
Munsch Laboratories, Inc., New York, N. Y. Compound of pantago psyllium. 286,236; Aug. 25; Serial No. 312,620; published May 26, 1931. Class 6.
Myers, Louis H., Atlantic City, N. J. Acidophilus culture. 286,266; Aug. 25; Serial No. 309,032; published May 26, 1931. Class 6.
Nadoolman, Jacob S., South Fallsburg, N. Y. Salve and also a preparation for treatment of dandruff. 286,384; Aug. 25; Serial No. 313,349; published June 16, 1931. Class 6.
Neptune Trading Corporation, New York, N. Y. Bath salts. 286,268; Aug. 25; Serial No. 313,445; published June 2, 1931. Class 6.
Nettleton, A. E., Company, Syracuse, N. Y. Shoes. 286,418; Aug. 25; Serial No. 313,607; published June 9, 1931. Class 39.
Neutrasol Products Corporation, New York, N. Y. Liquid soluble compound. 286,232; Aug. 25; Serial No. 312,718; published May 26, 1931. Class 6.
Newport Chemical Works, Incorporated, Carrollville, Wis. Synthetic perfume. 286,372; Aug. 25; Serial No. 304,292; published May 26, 1931. Class 6.
Newton Balsam Company, Newton, Kans. Balsam used externally. 286,366; Aug. 25; Serial No. 306,618; published June 9, 1931. Class 6.
New York Evening Journal Publishing Company, to New York Evening Journal, Inc., New York, N. Y., successor. Periodical publication. 84,662; renewed Dec. 26, 1931.
New York Evening Journal Publishing Company, to New York Evening Journal, Inc., New York, N. Y., successor. Periodical publication. 84,664–5; renewed Dec. 26, 1931.
Northwestern Mining & Exchange Company of Erie, Pa., Dunmore, Pa. Coal. 286,477; Aug. 25. Class 1.
Nu-Age Laboratories. (See Kingdon, A. M.)
Nugget Polish Co., Ltd., The, assignor to Chiswick Products Limited, London, England. Certain polishing materials. 82,629; renewed July 11, 1931.
O'Brien, Geo., & Son, Incorporated, Greenville, Ohio. Wheat flour, pastry flour, whole wheat Graham flour, etc. 286,344; Aug. 25; Serial No. 314,008; published June 9, 1931. Class 46.
Oesterling, P. J., & Son, Inc., Butler, Pa. Tonic for treatment of poultry. 286,425; Aug. 25; Serial No. 293,339; published May 26, 1931. Class 6.
Orbit Listerated Gum Company, Chicago, Ill. Chewing gum. 286,402; Aug. 25; Serial No. 314,070; published June 9, 1931. Class 46.
Orizaba Distributing Company. (See Acevedo, Pedro C.)
Pabst Corporation, Milwaukee, Wis. Cheese preparation. 286,385; Aug. 25; Serial No. 310,406; published June 16, 1931. Class 46.
Packer Manufacturing Company, Inc., The, New York, N. Y. Tonic for the scalp. 286,424; Aug. 25; Serial No. 296,494; published Apr. 29, 1930. Class 6.
Peck, Harry, & Company Limited, London, England. Fish paste. 286,373; Aug. 25; Serial No. 308,791; published June 9, 1931. Class 46.
Penaten, Pharmazeutische Fabrik Dr. Max Riese & Co., Rhondorf-on-the-Rhine, Germany. Skin cream. 286,304; Aug. 25; Serial No. 312,529; published May 26, 1931. Class 6.
Phillips & Uppercu, New York, N. Y. Table board games of skill. 286,383; Aug. 25; Serial No. 313,670; published June 16, 1931. Class 22.
Phoenix Costume Manufacturing Company. (See Birch, Thomas R.)
Planters Oyster Company, Inc., Port Norris, N. J. Canned oysters. 286,335; Aug. 25; Serial No. 313,000; published June 16, 1931. Class 46.
Postum Company, Inc. (See Hawk, Henry C.)
Princess Royal Hosiery Mills, Inc., Reading, Pa. Hosiery. 286,459; Aug. 25. Class 39.
Pronper-McCallum Hosiery Co., Inc., New York, N. Y. Hosiery. 286,455; Aug. 25. Class 39.
Pure Candy Kitchen, Inc., New York, N. Y. Chocolate. 286,398; Aug. 25; Serial No. 314,296; published June 16, 1931. Class 46.
Puritan Chocolate Co., The, Cincinnati, Ohio. Candy. 286,339; Aug. 25; Serial No. 309,313; published June 9, 1931. Class 46.
Puritan Soap Company, Rochester, N. Y. Soap, fabric cleaner, and nickel polish. 286,389; Aug. 25; Serial No. 311,070; published June 16, 1931. Class 4.
Pyle, Conard, Company, The, West Grove, Pa. Plants treated to preserve them during shipment. 286,341; Aug. 25; Serial No. 313,270; published June 9, 1931. Class 1.
Pyle, Robert W., New Philadelphia, Ohio, to John Knox Smith, Amsterdam, Ohio, successor. Remedy for colic, indigestion, and azoturia in cattle and horses. 84,338; renewed Nov. 28, 1931.
Radiator Specialty Company, Charlotte, N. C. Composition for cleaning the interior of hot water circulating systems. 286,370; Aug. 25; Serial No. 306,287; published May 26, 1931. Class 6.
Red Band Co., Inc., Johnson City, Tenn. Flour. 286,356; Aug. 25; Serial No. 314,250; published June 16, 1931. Class 46.
Redau Laboratory. (See Dauer, Morris.)
Research Laboratories, The, Warren, Pa. Anti-freeze compound. 286,241; Aug. 25; Serial No. 304,890; published June 2, 1931. Class 6.
Research Products Corporation, New York, N. Y. Preparation for treating the skin. 286,318; Aug. 25; Serial No. 312,815; published June 9, 1931. Class 6.
Rhealinzo Co. (See Flaherty, Lena.)
Riedel-De Haen, Inc., New York, N. Y. Hypnotic in ampoules for intramuscular injection. 286,257; Aug. 25; Serial No. 311,446; published May 26, 1931. Class 6.
Robbins & Myers, Inc., Springfield, Ohio. Seasoning for pop corn. 286,375; Aug. 25; Serial No. 305,542; published June 9, 1931. Class 46.
Rochester Bread Company, The, Rochester, Minn. Cookies. 286,360; Aug. 25; Serial No. 313,448; published June 16, 1931. Class 46.

Roth, Adolf, Philipsburg, Pa. Preparation for treating poison sores, eczema, piles, etc. 286,382; Aug. 25; Serial No. 313,449; published May 26, 1931. Class 6.
Russell, Frank C., doing business as Russell & Co., New York, N. Y. Coffee. 286,450; Aug. 25; Serial No. 313,511; published June 9, 1931. Class 46.
S. & S. Cone Corporation, New York, N. Y. Ice cream sandwich wafers. 286,387; Aug. 25; Serial No. 311,697; published June 9, 1931. Class 46.
S & S Specialty Co. (See Garner, Lyle A.)
St. Louis Products Company, St. Louis, Mo. Malt syrup. 286,473; Aug. 25. Class 46.
Salomon, Adolph, & Son, Chicago, Ill. Sole leather. 286,364; Aug. 25; Serial No. 312,775; published June 9, 1931. Class 1.
Sandfelder Company, The, Chicago, Ill. Elastic reducing garments. 286,442; Aug. 25; Serial No. 312,314; published June 16, 1931. Class 44.
Sano Products Co., Inc., The, Binghamton, N. Y. Medicinal preparation formulated to stimulate the scalp, etc. 286,231; Aug. 25; Serial No. 312,721; published June 2, 1931. Class 6.
Santarub Chemical Company. (See Santee, Joe. F.)
Santee, Joe F., doing business as Santarub Chemical Company, Okmulgee, Okla. Ointment. 286,239; Aug. 25; Serial No. 306,418; published May 26, 1931. Class 6.
Satnick, Max, doing business as Emkins, Brooklyn, N. Y. Astringents, etc. 286,309; Aug. 25; Serial No. 311,850; published May 26, 1931. Class 6.
Schiller Piano Company, Oregon, Ill. Sled coasters. 286,297; Aug. 25; Serial No. 313,804; published June 16, 1931. Class 22.
Schilling, A., & Co., San Francisco, Calif. Coffee and tea. 286,412; Aug. 25; Serial No. 247,342; published June 9, 1931. Class 46.
Schlensig, John, Soldier, Iowa. Preparation for the treatment of skin diseases of hogs. 286,280; Aug. 25; Serial No. 313,096; published May 26, 1931. Class 6.
Schneider, F. A., doing business as Warren Dried Fruit Co., San Jose, Calif. Dried fruits. 286,421; Aug. 25; Serial No. 294,445; published Feb. 10, 1931. Class 46.
Schrank, M. C., Company, Bridgeton, N. J. Pajamas, petticoats, and shorts. 286,479; Aug. 25. Class 39.
Schwartz, Walter, Yonkers, N. Y. Liquid preparations used in and beneficial for reducing congestion of the nose. 286,312; Aug. 25; Serial No. 312,891; published June 2, 1931. Class 6.
Seminole Bottling Co., Huntsville, Ala., assignor to Seminole Fruit Flavor Company, Chattanooga, Tenn. Beverages, syrups, and extracts. 286,480; Aug. 25. Class 45.
Seminole Bottling Co., Huntsville, Ala., assignor to Seminole Fruit Flavor Company, Chattanooga, Tenn. Beverages, syrups, and extracts. 286,482; Aug. 25. Class 45.
Seneca Coal & Coke Company, The, Tulsa, Okla. Coal. 286,343; Aug. 25; Serial No. 314,174; published June 16, 1931. Class 1.
Shineen Products Corporation, Neenah, Wis. Chemically treated polishing cloths. 286,449; Aug. 25; Serial No. 312,068; published June 16, 1931. Class 4.
Shloman, Daniel M., doing business as Whipponong Novelty Co., Whippoany, N. J. Game played with discs. 286,296; Aug. 25; Serial No. 313,980; published June 16 1931. Class 22.
Silvertex Company, The, Philadelphia, Pa. Coats, vests, pants etc. 286,481; Aug. 25. Class 39.
Simonin's, C. F., Sons, Inc., Philadelphia, Pa. Shortenings. 286,334; Aug. 25; Serial No. 313,261; published June 16, 1931. Class 46.
Simplex Typewriter Co., Inc., New York, N. Y. Toy typewriters. 286,294; Aug. 25; Serial No. 314,079; published June 16, 1931. Class 22.
Sinclair Refining Company. (See Union Petroleum Company.)
Slack, Thomas W., Fort Worth, Tex. Cleaning and polishing pads. 286,386; Aug. 25; Serial No. 311,935; published June 9, 1931. Class 4.
Smith, John K. (See Pyle, Robert W.)
Societe Anonyme Jean Patou, Paris, France. Face, talcum, and sachet powders. 286,302; Aug. 25; Serial No. 312,631; published June 2, 1931. Class 6.
Societe Anonyme Jean Patou, Paris, France. Powder. 286,303; Aug. 25; Serial No. 312,630; published June 2, 1931. Class 6.
Sordillo, Joseph L., doing business as Sordillo Candy Co., Baltimore, Md. Candy. 286,395; Aug. 25; Serial No. 314,381; published June 16, 1931. Class 46.
Soyex Company, Inc. (See Soyolk Company, Inc.)
Soyolk Company, Inc., doing business as Soyex Company, Inc., New York, N. Y. Soya bean flour. 286,233; Aug. 25; Serial No. 309,624; published June 9, 1931. Class 46.)
Sperl, Anna, doing business as The Anna Sperl Mfg. Co., New York, N. Y. Hair rejuvenating ointment. 286,261; Aug. 25; Serial No. 310,267; published May 26, 1931. Class 6.
Spreckels, J. D. and A. B., Investment Company, doing business as Western Sugar Refinery, San Francisco, Calif. Sugar. 286,354; Aug. 25; Serial No. 310,701; published June 9, 1931. Class 46.
Standard Brands Incorporated, New York, N. Y. Coffee. 286,349; Aug. 25; Serial No. 313,757; published June 16, 1931. Class 46.
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Mothproofing compound and insecticide. 286,276; Aug. 25; Serial No. 313,313; published May 26, 1931. Class 6.
Steele, Raymond D., Candor, N. Y. Negligee and work shirts. 286,467; Aug. 25. Class 39.
Steffen, M., & Co., Inc., Chicago, Ill. Apple butter, fruit preserves, and pickles, and cider vinegar. 286,474; Aug. 25. Class 46.
Stoddard, G. S., & Co., Inc., New York, N. Y. Concentrated lipoidal extract. 286,319; Aug. 25; Serial No. 312,778; published May 26, 1931. Class 6.
Stokely Brothers & Company, Louisville, Ky. Canned vegetables; and chili sauce, cranberry sauce, etc. 286,468; Aug. 25. Class 46.
Stroehmann Brothers Co., Norristown, Pa. Bread. 286,331; Aug. 25; Serial No. 313,062; published June 16, 1931. Class 46.
Sunny Farm Products. (See Weinger, Morris.)
Swamp & Dixie Laboratories, Inc., Fort Smith, Ark. Fever and pain powder. 286,403; Aug. 25; Serial No. 313,762; published June 16, 1931. Class 6.
Sweetser & Son, Inc., New York, N. Y. Shirts and collars. 286,471; Aug. 25. Class 39.
Tangen, Martin A., doing business as Matz Company, Taylors Falls, Minn. Corn and callous preparation. 286,463; Aug. 25. Class 6.
Tanner, Helene, Haddonfield, N. J. Cold cream and skin tonic. 286,229; Aug. 25; Serial No. 312,819; published June 2, 1931. Class 6.
Temptation Company, The, Chicago, Ill. Candies generally. 286,427; Aug. 25; Serial No. 282,964; published Sept. 2, 1930. Class 46.
Tetlow, Henry, Company, Philadelphia, Pa. Face, talcum, and dusting powders, compacts, etc. 286,287; Aug. 25; Serial No. 312,870; published June 2, 1931. Class 6.
Thrift Rubber Company. (See Kohn, Samuel.)
Time-O-Stat Controls Company, Elkhart, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical switches. 286,451; Aug. 25. Class 21.
Tomango Limited, Mataffin, Eastern Transvaal, Union of South Africa. Maltless beverages and fruit juices for beverage purposes. 286,419; Aug. 25; Serial No. 299,417; published June 9, 1931. Class 45.
Trillo, Rocco, doing business as Monaderb Tea Co., Merchantville, N. J. Liquid tonic. 286,426; Aug. 25; Serial No. 290,439; published June 9, 1931. Class 6.
Tripoli Barber Supply Co., Inc., Philadelphia, Pa. Hair tonics and toilet waters. 286,273; Aug. 25; Serial No. 313,353; published May 26, 1931. Class 6.
U-Ni-L Health Institute. (See Wright, Alfred C.)
Uncle Sam Breakfast Food Company, Omaha, Nebr. Cereal breakfast food. 286,357; Aug. 25; Serial No. 313,482; published June 9, 1931. Class 46.
Union Petroleum Company, assignor to Sinclair Refining Company, Philadelphia, Pa. Lubricating oils and greases. 84,296; renewed Nov. 21, 1931.
U. S. Hame Company, Buffalo, N. Y. Wrenches. 286,485; Aug. 25. Class 23.
United States Rubber Company, New York, N. Y. Raincoats. 286,458; Aug. 25. Class 39.
Urbana Laboratories, The, Urbana, Ill. Solution for testing soils for acidity. 286,228; Aug. 25; Serial No. 312,820; published June 2, 1931. Class 6.
Van Charme Toiletries. (See Van Cleve, Charles C.)
Van Cleve, Charles C., doing business as Van Charme Toiletries, Kansas City, Mo. Perfume, toilet water, face powder, etc. 286,250; Aug. 25; Serial No. 312,502; published June 2, 1931. Class 6.
Vecon, Incorporated, Chicago, Ill. Concentrated vegetables. 286,351; Aug. 25; Serial No. 313,455; published June 9, 1931. Class 46.
Verkaufsstelle des Internationalen Süsstoff-Syndikats Gesellschaft mit beschränkter Haftung, Hamburg, Germany. Artificial sweetening substances and combinations of the same. 286,434; Aug. 25; Serial No. 308,047; published June 2, 1931. Class 6.
Wagner, John G., San Francisco, Calif. Salve for the treatment of cancer. 286,289; Aug. 25; Serial No. 286,083; published May 20, 1930. Class 6.
Vitamin Company of America, The, Orlando, Fla. Fruit juices for making soft drinks. 286,300; Aug. 25; Serial No. 313,398; published June 16, 1931. Class 45.
Von Bremen, Asche, De Bruyn, Inc., New York, N. Y. Canned mushrooms. 286,338; Aug. 25; Serial No. 311,499; published June 9, 1931. Class 46.
Vuitton & Vuitton, Societe a Responsabilite Limitee, Paris, France. Hat boxes and shoe boxes. 286,345; Aug. 25; Serial No. 313,984; published June 16, 1931. Class 3.
Wagner, John G., San Francisco, Calif. Salve for the treatment of cancer. 286,289; Aug. 25; Serial No. 312,826; published June 2, 1931. Class 6.
Wallace-Roberts, Inc., Boston, Mass. Medicinal preparation. 286,307; Aug. 25; Serial No. 311,989; published June 9, 1931. Class 6.
Warren Dried Fruit Co. (See Schneider, F. A.)
Watseka Wholesale Grocery Company, Watseka, Ill. Maltless beverages. 286,301; Aug. 25; Serial No. 313,166; published June 16, 1931. Class 45.
Weinger, Morris, doing business as Sunny Farm Products, Chicago, Ill. Butter, eggs, cream, and cheese. 286,347; Aug. 25; Serial No. 313,572; published June 9, 1931. Class 46.

Weissbard Bros., Newark, N. J. Face powders. 286,371; Aug. 25; Serial No. 305,202; published June 9, 1931. Class 6.
Wells, S. C., & Co., Le Roy, N. Y. Soothing and healing preparation for burns, etc. 286,251; Aug. 25; Serial No. 312,245; published May 26, 1931. Class 6.
Western Sugar Refinery. (See Spreckels, J. D. and A. B., Investment Company.)
Whipponong Novelty Co. (See Shipman, Daniel M.)
Worcester Salt Company, New York, N. Y. Salt. 286,252; Aug. 25; Serial No. 311,992; published May 26, 1931. Class 6.
Worcester Salt Company, New York, N. Y. Salt. 286,253; Aug. 25; Serial No. 311,991; published May 26, 1931. Class 6.
Wright, Alfred C., doing business as U-Ni-L Health Institute, Whittier, Calif. Pure water. 286,306; Aug. 25; Serial No. 312,031; published June 9, 1931. Class 45.
Wright & Ditson, Boston, Mass. Golf clubs. 286,292; Aug. 25; Serial No. 314,385; published June 16, 1931. Class 22.
Wrigley, Wm., jr., Company, Chicago, Ill. Chewing gum. 286,400–1; Aug. 25; Serial Nos. 314,090–1; published June 9, 1931. Class 46.
Young, L. A., Company, The, Detroit, Mich. Golf clubs. 286,203; Aug. 25; Serial No. 314,185; published June 9, 1931. Class 22.
Young, L. A., Company, The, Detroit, Mich. Wood and metal golf clubs. 286,322–3; Aug. 25; Serial Nos. 308,413–14; published June 16, 1931. Class 22.
Young, L. A., Company, The, Detroit, Mich. Wood and metal golf clubs. 286,324–7; Aug. 25; Serial Nos. 308,408–11; published June 16, 1931. Class 22.
Young, L. A., Company, The, Detroit, Mich. Wood and metal golf clubs. 286,328–0; Aug. 25; Serial Nos. 308,404–5; published June 16, 1931. Class 22.
Young, L. A., Company, The, Detroit, Mich. Golf clubs and bags. 286,330; Aug. 25; Serial No. 308,408; published June 16, 1931. Class 22.
Zamarang Laboratories, Van Nuys, Calif. Nerve tonic and blood purifier. 286,368; Aug. 25; Serial No. 306,473; published June 9, 1931. Class 6.
Zenith Cleaner Products Company. (See Caruthers, Henry T.)
Zo-Ro-Lo, Inc., Ada, Ohio. Medicine. 286,281; Aug. 25; Serial No. 313,066; published May 26, 1931. Class 6.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Atlanta Milling Co., Atlanta, Ga. Miss Dixie Scratch Feed. For Scratch Feed. 39,600; Aug. 25.
Ballantine, P., & Sons, Newark, N. J. Golden Glow. For Malt Syrup. 39,601; Aug. 25.
Blue Ribbon Products Co., Inc., San Francisco, Calif. Camp Fire. For Coffee. 39,602; Aug. 25.
Collins, D. A., Mfg. Co., Inc., Brooklyn, N. Y. Collins Lustre-Lac Polish. For Liquid Polish. 39,603; Aug. 25.
Crocker, Josiah H., doing business as Pingo Company, Boston, Mass. Tarfree. For Asbestos Fibre and Asphalt Roof Coatings. 39,604; Aug. 25.
Dixie Rush Company, New York, N. Y. Dixie Rush. For Laxative in the Form of a Drink Made with Orange Juice. 39,605; Aug. 25.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's 100% Whole Wheat Pecan Rolls. For Pecan Rolls. 39,606; Aug. 25.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's 100% Whole Wheat Nut Pound Cake. For Nut Pound Cake. 39,607; Aug. 25.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's Pure Apple Jelly. For Apple Jelly. 39,608; Aug. 25.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's Marble Pound Cake. For Marble Pound Cake. 39,609; Aug. 25.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's 100% Whole Wheat Citron Pound Cake. For Citron Pound Cake. 39,610; Aug. 25.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's 100% Whole Wheat Plain Pound Cake. For Plain Pound Cake. 39,611; Aug. 25.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's 100% Whole Wheat Crackers. For Crackers. 39,612; Aug. 25.
Duosol Company, The, Chicago, Ill. Duosol. For Wash for Mouth and Throat. 39,613; Aug. 25.
Earl Fruit Company, Wenatchee, Wash. Hi-Ful-Pak. For Apples. 39,614; Aug. 25.
Foster Lumber Company, Kansas City, Mo. Foster Premium. For Coal. 39,615; Aug. 25.
Golden State Company, Ltd., San Francisco, Calif. Golden State. For Butter. 39,616; Aug. 25.
High Point Coffee Company, Inc., High Point, N. C. Good Coffee. For Coffee. 39,617; Aug. 25.
Higrade Products Co., Pittsburgh and Braddock, Pa. Higrade. For Ginger Ale. 39,618; Aug. 25.
Holman Paper Box Co., Inc., St. Louis, Mo. Famous-Barr Co. Fine Footwear. For Footwear. 39,619; Aug. 25.
Krank, A. J., Co., St. Paul, Minn. Krank. For Hair Root Oil. 39,620; Aug. 25.
Krank, A. J., Company, St. Paul, Minn. Sporicide. For Germicide. 39,621; Aug. 25.
Krank, Alfred J., Inc., St. Paul, Minn. Triple-C. For Germicide. 39,622; Aug. 25.
Lekas and Drivas, New York, N. Y. L. & D. For Olivé Oil. 39,623; Aug. 25.
Limpio Manufacturing Company, Tucson, Ariz. Limpio Mouth Wash. For Mouth Wash. 39,624; Aug. 25.
New England Coke Company, Boston, Mass. Genuine New England Coke. For Coke. 39,625; Aug. 25.
Pingo Company. (See Crocker, Josiah H.)
Popsicle Service, Inc., Chicago, Ill. Popsicles—A Frozen Drink on a Stick. For Frozen Confections. 39,626; Aug. 25.
Prescott, J. L., Company, Passaic, N. J. Oxo. For Preparation Used as a Germicide Deodorant, Sterilizer, Disinfectant, Cleanser, and Bleacher. 39,627; Aug. 25.
Rex Research Corporation, Toledo, Ohio. Insec-Tox. For Insecticide. 39,628–9; Aug. 25.
Society of the Colonaide, Incorporated, New York, N. Y. Colonaide. For Medicinal Tablet. 39,630; Aug. 25.
Standard Brands Incorporated, New York, N. Y. Royal. For Gelatin Aspic. 39,631; Aug. 25.
Standard Solophone Mfg. Co., Inc., New York, N. Y. Mitzie Green's Art Needlework Outfit. For Art Needle Work Outfits. 39,632; Aug. 25.
Sun-Maid Raisin Growers of California, Fresno, Calif. Amber Beauty. For Raisins. 39,633; Aug. 25.
Williamson Candy Company, Chicago, Ill. Mates. For Candy Bars. 39,634; Aug. 25.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Borden Company, The, New York, N. Y. Pony Malted Milk—(Window Strip). For Malted Milk. 13,381; Aug. 25.
Indera Mills Company, Winston-Salem, N. C. Indera Figurfit. For Bathing Suits. 13,382; Aug. 25.
Johnson, Earl D., Chicago, Ill. My Adeline. For Cakes. 13,383; Aug. 25.
McLennan, Robert, San Francisco, Calif. The Little Lemon Man. For Pure Lemon Juice. 13,384; Aug. 25.
Mogaco Laboratories, Buffalo, N. Y. Now is the time to clean-out Radiators with Norust. For Cleaner for Radiators, Boiler Tubes, and the Like. 13,385; Aug. 25.
Stearns & Foster Co., The, Cincinnati, Ohio. Old Fashioned Rose. For Quilting Cotton. 13,386; Aug. 25.
Stearns & Foster Co., The, Cincinnati, Ohio. Acorn and Oak Leaf. For Quilting Cotton. 13,387; Aug. 25.
Stearns & Foster Co., The, Cincinnati, Ohio. The Double Wedding Ring. For Quilting Cotton. 13,388; Aug. 25.
Stearns & Foster Co., The, Cincinnati, Ohio. New York Beauty. For Quilting Cotton. 13,389; Aug. 25.
Stearns & Foster Co., The, Cincinnati, Ohio. The Ohio Rose. For Quilting Cotton. 13,390; Aug. 25.
Wanamaker, John, New York, N. Y. Low Point Now. For Kashan Rugs. 13,391; Aug. 25.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & J. Manufacturing Co., The, Binghamton, N. Y. Kitchen tools and utensils. 303,082; Aug. 25. Class 23.
A. & J. Manufacturing Co., The, Binghamton, N. Y. Kitchen tools and utensils. 303,084; Aug. 25. Class 23.
A. & J. Manufacturing Co., The, Binghamton, N. Y. Kitchen tools and utensils. 303,087; Aug. 25. Class 23.
A. & J. Manufacturing Co., The, Binghamton, N. Y. Kitchen tools and utensils. 303,089; Aug. 25. Class 23.
Aborn Hat Manufacturing Co., Chicago, Ill. Men's hats. 305,686; Aug. 25. Class 39.
Air Reduction Sales Company, New York, N. Y. Welding rods. 312,936; Aug. 25. Class 14.
Aktiebolaget Kanthal, Stockholm and Hallstahammer, Sweden. Heat resistant iron and steel alloys. 315,080; Aug. 25. Class 14.
Albert Lea Packing Company, Incorporated, Albert Lea, Minn. Smoked meats, boiled hams, and sausage. 302,612; Aug. 25. Class 46.
Alligator Company, The. St. Louis, Mo. Raincoats and all kindred waterproof garments. 315,982; Aug. 25. Class 39.
Aluminum Industries, Inc., Cincinnati, Ohio. Piston pins, explosion mufflers, machinery bushings, etc. 316,243; Aug. 25. Class 23.
American Chemical Paint Company, Ambler, Pa. Primer or enamel. 312,228; Aug. 25. Class 16.
American Envelope Co., The, West Carrollton, Ohio. Envelopes. 305,154; Aug. 25. Class 37.
Aoyama, Y., doing business as Y. Aoyama Company, Brawley, Calif. Fresh melons, cantaloupes, and vegetables. 298,478; Aug. 25. Class 46.
Apffel and Colclough, New Orleans, La. Cosmetic composition for beautifying the skin. 305,992; Aug. 25. Class 6.
Armstrong Cork & Insulation Company, Lancaster, Pa. Isolation material for dampening vibration and sound. 315,433; Aug. 25. Class 12.
Asamen, Z., Brawley, Calif. Fresh cantaloupes. 315,237; Aug. 25. Class 46.
Ayer Company, The, Lowell, Mass. Face powder, brilliantine, muscle oil, etc. 306,482; Aug. 25. Class 6.
Battenfeld, Carl F., Detroit, Mich. Lubricating oils and greases. 316,115; Aug. 25. Class 15.
Belknap Hardware & Manufacturing Company, Louisville, Ky. Knives, razors, scissors, etc. 313,486; Aug. 25. Class 23.
Bellevue Oilall Company. (See Luty, Richard T.)
Bernstein, Max, Cincinnati, Ohio. Dog harness. 312,897; Aug. 25. Class 3.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 312,691; Aug. 25. Class 42.
Bortell, Marjorie, Chicago, Ill. Ladies' hats and dresses. 316,174; Aug. 25. Class 38.
Brandle & Smith Co., Philadelphia, Pa. Candy. 315,984–6; Aug. 25. Class 46.
British Sure Seal Company Limited, The, London, England. Metal tins, cans, boxes, and canisters. 314,357; Aug. 25. Class 2.
Buhl Aircraft Company, Marysville and Detroit, Mich. Airplanes and structural parts thereof. 316,827; Aug. 25. Class 19.
California Peach and Fig Growers Association, Fresno, Calif. Dried figs. 315,896; Aug. 25. Class 46.
Car-Mor Metal Co., Inc., Philadelphia, Pa. Ingots. 316,956; Aug. 25. Class 14.
Cattell, J. McKeen, doing business as The Science Press, New York, N. Y. Magazine. 313,958; Aug. 25. Class 38.
Chemische Fabrik Eisendrath Gesellschaft mit beschränkter Haftung Mettmann/Rhld, Germany. Preparation for making leather processing substances. 296,483; Aug. 25. Class 6.
Chesapeake Conserving Co. (See Lang, Charles G.)
Chicago Forging & Manufacturing Co., Chicago, Ill. Automobile shields. 310,766; Aug. 25. Class 19.
Citrus Beverage Supply Co. (See Citrus Juice & Flavor Company.)
Citrus Juice & Flavor Company, doing business as Citrus Beverage Supply Co., Los Angeles, Calif. Beverages, syrups, extracts, and concentrates. 317,021; Aug. 25. Class 45.
City Brewing Corporation, New York, N. Y., and Ridgewood, N. Y. Malt syrup. 300,926; Aug. 25. Class 46.
Clark, Joseph H., San Francisco, Calif. Hosiery. 312,043; Aug. 25. Class 39.
Colgate-Palmolive-Peet Company, Chicago, Ill. Soap flakes, granulated soap and liquid soap. 310,555; Aug. 25. Class 4.
Collins, Thomas E., Seattle, Wash. Canned, smoked, and fresh oysters. 317,162; Aug. 25. Class 46.

Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Pistols. 317,068; Aug. 25. Class 9.
Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Revolvers. 317,069; Aug. 25. Class 9.
Cooper, Leo M., doing business as Leo M. Cooper Co., New York, N. Y. Nurses' uniforms, uniform dresses, and daytime frocks. 316,579; Aug. 25. Class 39.
Crawford-Austin Manufacturing Company, Waco, Tex. Tents, tarpaulins, and wagon covers. 315,903; Aug. 25. Class 50.
Crofut & Knapp Company, The, South Norwalk, Conn. Hats. 314,042; Aug. 25. Class 39.
Curtis-Wright Airplane Company, Robertson, Mo. Aeroplanes and structural parts thereof. 315,583; Aug. 25. Class 19.
Dennison Play Equipment Co., Reading, Mass. Games. 301,251; Aug. 25. Class 22.
Distributing Company of America, The, doing business as New England Extract Company, Hartford, Conn. Malt beverages. 316,016; Aug. 25. Class 48.
Dixie Polish Company, Inc., Washington, D. C. Polishing compounds. 315,090; Aug. 25. Class 16.
Dixon, Joseph, Crucible Company, Jersey City, N. J. Pencils. 306,645; Aug. 25. Class 37.
Drew Canning Company, Ltd., San Jose, Calif. Canned fruits and vegetables. 317,112; Aug. 25. Class 46.
Droge, Claud, Astoria, L. I., N. Y. Union suits. 313,690; Aug. 25. Class 39.
Earl Fruit Company, San Francisco, Calif. Fresh deciduous fruits. 317,031; Aug. 25. Class 46.
Eastern Drug & Chemical Co. (See Regnante and Calajoe.)
Elham Products Co., The. (See Hampshire, Ernest L.)
Empire Art Import Co. Inc., New York, N. Y. Pictures, paintings, and reproductions. 315,490; Aug. 25. Class 38.
Fashion Park Associates, Inc., Rochester, N. Y. Stockings and socks. 316,924; Aug. 25. Class 39.
Faultless Manufacturing Company, The, Baltimore, Md. Garters. 302,380; Aug. 25. Class 39.
Fear, Fred, & Co., Brooklyn, N. Y. Syrups and extracts. 306,519; Aug. 25. Class 46.
Fear, Fred, & Co., Brooklyn, N. Y. Egg dyes. 316,260; Aug. 25. Class 6.
Federal Auto Products Co., Chicago, Ill. Spot lights for automobiles. 316,633; Aug. 25. Class 21.
Ferber, A. H., doing business as The Ferbo Company, Bayonne, N. J. Food flavoring extracts. 315,042; Aug. 25. Class 46.
Ferbo Company, The. (See Ferber, A. H.)
Finn, J. A., & Company, New York, N. Y. Cotton piece goods. 304,453; Aug. 25. Class 42.
Flacss Products Company, Madison, Wis. Varnish remover. 316,309; Aug. 25. Class 16.
Flick & Kupfer, Los Angeles, Calif. Fresh vegetables. 304,131; Aug. 25. Class 46.
Fox Hearst Corporation, now by change of name to Movietonews, Inc., New York, N. Y. Motion picture films. 313,909; Aug. 25. Class 26.
Fracy, Inc., New York, N. Y. Nail white. 314,844; Aug. 25, 1931. Class 6.
Fruit Industries, Ltd., San Francisco, Calif. Concentrated grape juice and beverages. 314,950; Aug. 25. Class 45.
Gardner Tooth-Brush Co., Inc., The, New York, N. Y. Toothbrushes. 316,699; Aug. 25. Class 29.
Gasoline Retailer, Inc., The, New York, N. Y. Periodical. 316,484; Aug. 25. Class 39.
Gibson, John P., Los Angeles, Calif. Record card books. 315,355; Aug. 25. Class 37.
Goodman & Dumeracki, Salem, Mass. Frozen banana firmly secured to a stick. 304,720; Aug. 25. Class 46.
Griswold, Stanley M., doing business as Griswold Shoe Company, South Danville, N. H. Boots and shoes. 316,947; Aug. 25. Class 39.
Haas-Baruch & Company, Los Angeles, Calif. Canned sardines. 317,114; Aug. 25. Class 46.
Hamilton-Brown Shoe Company, St. Louis, Mo. Shoes. 315,262; Aug. 25. Class 39.
Hammond Clock Company, The, Chicago, Ill. Electric clocks. 316,839; Aug. 25. Class 27.
Hampshire, Ernest L., doing business as The Elham Products Co., Chicago, Ill. Disinfectant. 316,885; Aug. 25. Class 6.
Hartmann, Paul, A.-G., Heidenheim-on-the-Brenz, Germany. Surgical dressing materials. 315,142; Aug. 25. Class 44.
Herman, Joseph, Brooklyn, N. Y. Anti-freeze solution. 307,674; Aug. 25. Class 6.
Hills Brothers Company, The, New York, N. Y. Dried dates. 316,592–4; Aug. 25. Class 46.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Hindes Limited, Birmingham, England. Body friction brushes. 315,096; Aug. 25. Class 29.
Hitt, Thomas G., doing business as Northwest Flower Extractions Co., Seattle, Wash. Perfumes. 304,323; Aug. 25. Class 6.
Hollywood Packing Co. (See Ross, Dr. W. J., Co.)
Horwitz, J., Inc., New York, N. Y. Infant's and children's clothing. 314,910; Aug. 25. Class 39.
Ideal Malt Supply Company. (See Kulick, Nathan.)
Indian Motorcycle Company, Springfield, Mass. Motor vehicles of the motorcycle type. 316,268; Aug. 25. Class 19.
International Shoe Co., St. Louis, Mo. Boots and shoes. 316,967; Aug 25. Class 39.
Iron-Jon Laboratories, Los Angeles, Calif. General tonic. 315,100; Aug 25. Class 6.
Jantzen Knitting Mills, Portland, Oreg. Swimming suits. 316,432; Aug. 25. Class 39.
January and Wood Company, Maysville, Ky. Cotton twine and cord. 317,191; Aug. 25. Class 7.
Jarratt, Walter J., Chicago, Ill. Electrical vulcanizing equipment. 304,049; Aug. 25. Class 23.
Jensen Radio Manufacturing Company, Chicago, Ill. Radio loud speakers. 316,889–90; Aug. 25. Class 21.
Joseph, Chester V. Ligonier, Ill. Instrument for telling and recording golf scores. 316,127; Aug. 25. Class 26.
Keller Knitting Company, The, Cleveland, Ohio. Knitted snow suits. 316,729; Aug. 25. Class 39.
Kidd, Mrs. E. G., Inc., doing business as Virginia Pickle Company, Richmond, Va. Vegetable relishes. 315,460; Aug. 25. Class 46.
Kulick, Nathan, doing business as Ideal Malt Supply Company, Los Angeles, Calif. Malt syrup. 316,730; Aug. 25. Class 46.
Lang, C. C., & Son. (See Lang, Charles G.)
Lang, Charles G., doing business as C. C. Lang & Son, Chesapeake Conserving Co., and Milford Packing Co., Baltimore, Md. Pickles, pickle chows, and relishes. 316,731; Aug. 25. Class 46.
Lavino, E. J., and Company, Philadelphia, Pa. Bricks. 316,733; Aug. 25. Class 12.
Lawrence Manufacturing Company, Lowell, Mass. Knitted garments. 308,832; Aug. 25. Class 39.
Lawrence Paper Manufacturing Company, Lawrence, Kans. Paper and paper board. 303,693; Aug. 25. Class 37.
Levin, Meyer, doing business as Levin Chemical Co., Newark, Ohio. Cleansing powder. 315,056; Aug. 25. Class 4.
Luty, Richard T. doing business as Bellevue Oilall Company, Bellevue, Pa. Lubricating oil. 315,408; Aug. 25. Class 15.
Mabley & Carew Company, The, Cincinnati, Ohio. Shoes for women. 301,182; Aug. 25. Class 39.
Maiden Form Brassiere Co., Inc., New York, N. Y. Brassières. 316,931; Aug. 25. Class 39.
Malandra, Warren, Philadelphia, Pa. Medicine for stomach trouble. 316,537; Aug. 25. Class 6.
Marchaudon, Lucie, Paris, France. Preparation of milk and rennet. 309,480; Aug. 25. Class 46.
Maritime Milling Co., Inc., Buffalo, N. Y. Poultry feeds. 316,974; Aug. 25. Class 46.
Marlew Products Company, Inc., New York, N. Y. Golf club grips. 316,602; Aug. 25. Class 22.
Martin Brothers Electric Company, The, Cleveland, Ohio. Electric hair driers. 316,210; Aug. 25. Class 44.
McCoy, Lawrence R., & Co., Inc., Worcester, Mass. Shingles, doors, and cedar siding. 303,448; Aug. 25. Class 12.
McDaniel & Ratcliffe, Baltimore, Md. Malt syrup. 316,330; Aug. 25. Class 46.
McKay, John A. Manufacturing Co., Dunn, N. C. Truck trailers. 313,666; Aug. 25. Class 19.
Medusa Portland Cement Company, Cleveland, Ohio. Mortar cement. 314,454; Aug. 25. Class 12.
Metal Glass Products Co., Belding, Mich. Porcelain enamel beverage tank. 313,861; Aug. 25. Class 2.
Midway Chemical Company, Chicago, Ill. Liquid insecticide. 315,002; Aug. 25. Class 6.
Milford Packing Co. (See Lang, Charles G.)
Modern Tissues Corporation, New York, N. Y. Toilet tissue and facial tissue. 314,507; Aug. 25. Class 37.
Morrison Manufacturing Co., Inc., Conway, N. H. Construction toys. 316,607; Aug. 25. Class 22.
Movietonews, Inc. (See Fox Hearst Corporation.)
Muralo Company, Inc., The, New Brighton, N. Y. Cement paint. 316,577; Aug. 25. Class 16.
Narricot Company, New York, N. Y. Insulating tape and/or ribbons. 317,006; Aug. 25. Class 21.
Nathan-Marshall Co. Inc., New York, N. Y. Suits and overcoats. 315,800; Aug. 25. Class 39.
National Washboard Company, Chicago, Ill. Washboards. 316,977; Aug. 25. Class 24.
Neff, Lawrence W., Emory University, Ga. Periodical. 316,441; Aug. 25. Class 38.

Nelson, Thomas F., Stellacoom, Wash. Composition for cleaning false teeth. 314,207; Aug. 25. Class 6.
New England Extract Company. (See Distributing Company of America, The.)
Northwest Flower Extractions Co. (See Hitt, Thomas G.)
Northwest Paper Company, The, Cloquet, Minn. Chemical wood pulp and chemical pulp. 313,750; Aug. 25. Class 1.
Novo Engine Company, Lansing, Mich. Internal combustion engines. 314,168; Aug. 25. Class 23.
Old River Farms Co., Stockton, Calif. Fresh fruits, pears. 314,437; Aug. 25. Class 46.
Orchard Products Company, Chicago, Ill. Syrups, fruit preserves, jams, etc. 306,600; Aug. 25. Class 46.
Paraffine Companies, Inc., The, San Francisco, Calif. Paint lacquer, enamel, colors, and thinners. 317,132; Aug. 25. Class 16.
Parrish, Amos, & Company, New York, N. Y. Periodical. 316,568; Aug. 25. Class 38.
Pearson, Frederick A., Great Barrington, Mass. Humidity measuring instrument. 314,927; Aug. 25. Class 26.
Phi Mu Delta Fraternity, The, Brooklyn, N. Y. Fraternity pins, badges, and buttons. 316,657; Aug. 25. Class 28.
Photoplay Publishing Company, Chicago, Ill. Fashion section of magazines. 314,715; Aug. 25. Class 38.
Pieper, O. R., Company, Milwaukee, Wis. Canned fruits and vegetables. 306,963; Aug. 25. Class 46.
Pierce, I. M., Oklahoma City, Okla. Sandwiches. 317,133; Aug. 25. Class 46.
Pond, John D., doing business as Re-Zillo Printing Plate Company, Springfield, Mass. Printing plates. 316,849; Aug. 25. Class 50.
Popsicle Corporation of the United States, The, New York, N. Y. Wrappers and bags. 314,880; Aug. 25. Class 2.
Process Engineering and Equipment Corporation, Attleboro, Mass. Adhesive furnace cement. 308,034; Aug. 25. Class 5.
Provol, Nathan, Chicago, Ill. Birds. 315,160; Aug. 25. Class 1.
Psyras, George P., doing business as Vitamone Medicine Company, Boston, Mass. Medicines for rheumatism, etc. 316,376; Aug. 25. Class 6.
Pyle-National Company, The, Chicago, Ill. Circuit breaking plugs and receptacles. 317,134; Aug. 25. Class 21.
Regnante and Calajoe, doing business as Eastern Drug & Chemical Co., New York, N. Y. Preparation for treatment of coughs, etc. 313,425; Aug. 25. Class 6.
Re-Zillo Printing Plate Company. (See Pond, John D.)
Roberson, C. H., Freehold, N. J. Liquid chemical for the treatment of corn. 314,463; Aug. 25. Class 6.
Ross, Dr. W. J., Co., doing business as Hollywood Packing Co., Norwalk, Calif. Dog and cat food. 316,450; Aug. 25. Class 46.
Rossman Brothers & Messner, Inc., New York, N. Y. Cotton goods, cotton and silk goods, and artificial silk goods, all in the piece. 313,802; Aug. 25. Class 42.
Rue-Vim Company, Johnston, Pa. Medicinal preparation. 316,070; Aug. 25. Class 6.
Ryan, Matthew W., Sons & Co. Inc., New York, N. Y. Linen, cotton, and silk piece goods, etc. 316,900; Aug. 25. Class 42.
Schreck, Louis, Argenteuil, France. Sea planes. 309,945–6; Aug. 25. Class 19.
Science Press, The. (See Cattell, J. McKeen.)
Sears, Roebuck and Co., Chicago, Ill. Women's rayon undergarments and nightwear. 314,658; Aug. 25. Class 39.
Sheldon, William O., Lakewood, Ohio. Metal building beams. 308,519; Aug. 25. Class 12.
Shell Oil Company, San Francisco, Calif. Gasoline. 315,570; Aug. 25. Class 15.
Sherwin-Williams Company, The, Cleveland, Ohio. Thinners for liquid and paste paints, paint colors, etc. 273,517; Aug. 25. Class 16.
Simons & French Co., Inc., New York, N. Y. Fresh vegetables, citrus fruits, and deciduous fruits. 315,932; Aug. 25. Class 46.
Smith's Delicious Home Made Pies, Inc., Mrs., Philadelphia, Pa. Pies. 306,509; Aug. 25. Class 46.
Societe Anonyme Premet, Paris, France. Perfumes, toilet water, face powder, etc. 309,401; Aug. 25. Class 6.
Southwest Utility Dairy Products Company, Oklahoma City, Okla. Ice cream. 315,504; Aug. 25. Class 46.
Stein, A., & Company, Chicago, Ill. Garters. 316,905; Aug. 25. Class 39.
Sterling Company, The, Chicago, Ill. Ladies' house dresses. 316,616; Aug. 25. Class 39.
Swift and Company, Chicago, Ill. Soap. 316,910; Aug. 25. Class 4.
Titman Egg Corporation, New York, N. Y. Dressed poultry, turkeys. 301,529; Aug. 25. Class 46.
Try Me Beverage and Compound Company, Birmingham, Ala. Beverages. 315,481; Aug. 25. Class 45.
United Drug Company, Boston, Mass. Electric appliances. 314,589; Aug. 25. Class 21.

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United States Rubber Company, New York, N. Y. Vaginal douches. 317,100; Aug. 25. Class 44.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Mattress springs. 315,221; Aug. 25. Class 32.
Virginia Pickle Company. (See Kidd, Mrs. E. G., Inc.)
Vitagiene Laboratories, Philadelphia, Pa. Liquid preparation for treatment of dandruff. 308,496; Aug. 25. Class 6.
Vitamone Medicine Company. (See Psyras, G. P.)
Walden, Stevens, Incorporated, Worcester, Mass. Wrenches and wrench sets. 315,977; Aug. 25. Class 23.
Waterfalls Paper Mills, New York, N. Y. Bond and writing paper. 315,712; Aug. 25. Class 37.
Whirlpool Incorporated, Keyport, N. J. Table board games played with pieces. 316,945; Aug. 25. Class 22.
Wilson, Geo. N., doing business as Wilson Coffee & Tea Co., Dallas, Tex. Coffee and tea. 316,064; Aug. 25. Class 46.
Zottola, Maria Caso, Gilroy, Calif. Cheese. 315,613; Aug. 25. Class 46.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Cellulose pulps. Brown Company. 286,367; Aug. 25; Serial No. 306,555; published Dec. 2, 1930.
Coal. Clinton Company. 286,342; Aug. 25; Serial No. 314,323; published June 16, 1931.
Coal. Donnen-Fuel, Inc. 286,332; Aug. 25; Serial No. 311,461; published June 16, 1931.
Coal. Northwestern Mining & Exchange Company. 286,477; Aug. 25.
Coal. Seneca Coal & Coke Company. 286,343; Aug. 25; Serial No. 314,174; published June 16, 1931.
Facings and facing products for use in casting metals. Kelly Graphite Mills, Inc. 286,246; Aug. 25; Serial No. 281,005; published June 3, 1930.
Furs, skins, pelts, and hides, Dyed. Federal Star Dyers Corporation. 286,361; Aug. 25; Serial No. 313,426; published June 16, 1931.
Leather. Adler & Oppenheimer Aktiengesellschaft. 286,362; Aug. 25; Serial No. 313,879; published June 9, 1931.
Leather, Sole. Adolph Salomon & Son. 286,364; Aug. 25; Serial No. 312,775; published June 9, 1931.
Plants treated to preserve them. Conard Pyle Company. 286,341; Aug. 25; Serial No. 313,270; published June 9, 1931.
Seed, Lawn. J. Breck & Sons Corporation. 286,358–9; Aug. 25; Serial Nos. 313,462–3; published June 9, 1931.
Seeds, Garden vegetable. W. A. Burpee. 286,408; Aug. 25; Serial No. 278,891; published June 9, 1931.
Shearlings or wool pelts. A. C. Lawrence Leather Company. 286,391; Aug. 25; Serial No. 312,608; published June 16, 1931.

CLASS 2

Cartons. Lawrence Paper Manufacturing Company. 286,462; Aug. 25.

CLASS 3

Boxes and shoe boxes, Hat. Vuitton & Vuitton, Societe a Responsabilite Limitee. 286,345; Aug. 25; Serial No. 313,984; published June 16, 1931.
Portfolios and pocket-books. E. W. Bredemeier & Co. 286,363; Aug. 25; Serial No. 312,790; published June 16, 1931.

CLASS 4

Cleaner, Dry. The Five Minute Home Cleaner Company. 286,469; Aug. 25.
Cleaner for duco, etc. Celolac Products Company. 286,355; Aug. 25; Serial No. 310,433; published June 9, 1931.
Cleaner for wall-paper. Preparation used as a. The Climax Cleaner & Cleveland Paste Co. 83,987; renewed Oct. 31, 1931.
Cleaning and polishing pads. T. W. Slack. 286,386; Aug. 25; Serial No. 311,935; published June 9, 1931.
Cleaning compounds. Absorene Manufacturing Company. 286,448; Aug. 25; Serial No. 312,081; published June 9, 1931.
Cleaning powder and metal polish, Dry window. Erasm Chemical Corporation of America. 286,443; Aug. 25; Serial No. 313,030; published June 9, 1931.
Compound for cleaning, scouring, and polishing metals, Chemical jelly. F. H. Jones. 286,248; Aug. 25; Serial No. 313,135; published June 9, 1931.
Paste or semi-liquid preparation in the nature of a dry cleaner. M. M. A. Chemical Company. 286,447; Aug. 25; Serial No. 312,100; published June 16, 1931.
Polishing cloths, Chemically treated. Shineen Products Corporation. 286,449; Aug. 25; Serial No. 312,008; published June 16, 1931.
Polishing materials. The Nugget Polish Co., Ltd. 82,629; renewed July 11, 1931.
Preparation for polishing, cleaning, and dressing shoes. Lyons & Company. 286,441; Aug. 25; Serial No. 313,139; published June 16, 1931.
Preparations for cleaning linoleums. T. Johnson. 286,374; Aug. 25; Serial No. 307,206; published June 16, 1931.
Soap and shaving cream, Toilet. Colgate-Palmolive-Peet Company. 286,437; Aug. 25; Serial No. 313,882; published June 16, 1931.
Soap and shaving soap, Complexion. A. C. Lyons. 286,417; Aug. 25; Serial No. 299,849; published June 9, 1931.
Soap, fabric cleaner, and nickel polish. Puritan Soap Company. 286,389; Aug. 25; Serial No. 311,070; published June 16, 1931.
Soaps. D'Orsay Perfumeries Corporation. 286,446; Aug. 25; Serial No. 312,366; published June 9, 1931.
Solvent preparation for removing nicotine stains. Alberco Corporation, Ltd. 286,440; Aug. 25; Serial No. 313,273; published June 16, 1931.

CLASS 6

Anti-freeze compound. Research Laboratories. 286,241; Aug. 25; Serial No. 304,890; published June 2, 1931.
Astringents. Maximilian P. Matthias. 286,277; Aug. 25; Serial No. 313,302; published May 26, 1931.
Astringents, etc. Max Satnick. 286,300; Aug. 25; Serial No. 311,850; published May 26, 1931.
Balsam used externally. Newton Balsam Company. 286,366; Aug. 25; Serial No. 306,618; published June 9, 1931.
Bath salts. Neptune Trading Corporation. 286,268; Aug. 25; Serial No. 313,445; published June 2, 1931.
Bleach and water softener having cleaning properties. Eusey Co., Ltd. 286,315; Aug. 25; Serial No. 312,907; published June 2, 1931.
Capsules for the treatment of diabetes. Melatol Laboratories. 286,308; Aug. 25; Serial No. 311,880; published May 26, 1931.
Chemicals. American Multigraph Co. 286,314; Aug. 25; Serial No. 312,937; published May 26, 1931.
Cold cream and skin tonic. H. Tanner. 286,229; Aug. 25; Serial No. 312,819; published June 2, 1931.
Composition for cleaning the interior of hot water circulating systems. Radiator Specialty Company. 286,370; Aug. 25; Serial No. 306,287; published May 26, 1931.
Compound and insecticide mothproofing. Standard Oil Company. 286,276; Aug. 25; Serial No. 313,313; published May 26, 1931.
Compound, Liquid Soluble. Neutrasol Products Corporation. 286,232; Aug. 25; Serial No. 312,718; published May 26, 1931.
Compound of plantago psyllium. Munsch Laboratories, Inc. 286,236; Aug. 25; Serial No. 312,620; published May 26, 1931.
Corn and callous preparation. M. A. Tangan. 286,463; Aug. 25.
Cosmetics, Certain. William Goldwyn. 286,235; Aug. 25; Serial No. 312,643; published May 26, 1931.
Cream, Skin. Penaten, Pharmazeutische Fabrik Dr. Max Riese & Co. 286,304; Aug. 25; Serial No. 312,529; published May 26, 1931.
Culture, Acidophilus. L. H. Myers. 286,266; Aug. 25; Serial No. 309,032; published May 26, 1931.
Dyes. F. Fear & Co. 286,238; Aug. 25; Serial No. 308,620; published June 2, 1931.
Fever and pain powder. Swamp & Dixie Laboratories, Inc. 286,403; Aug. 25; Serial No. 313,762; published June 16, 1931.
Hair tonic. H. Bagdigian. 286,258; Aug. 25; Serial No. 311,023; published June 2, 1931.
Hair tonic. Frederick E. Iscberland. 286,274; Aug. 25; Serial No. 313,343; published May 26, 1931.

Hair tonics. M. M. Fieron & Son. 286,423; Aug. 25; Serial No. 296,640; published Apr. 22, 1930.
Hair tonics and toilet waters. Tripoli Barber Supply Co., Inc. 286,273; Aug. 25; Serial No. 313,353; published May 26, 1931.
Hypnotic in ampoules for intramuscular injection. Riedel-De Haen, Inc. 286,257; Aug. 25; Serial No. 311,446; published May 26, 1931.
Incense. Hindu Incense Manufacturing Co., Inc. 286,476; Aug. 25.
Insecticide. William Cooper & Nephews, Incorporated. 286,260; Aug. 25; Serial No. 310,473; published May 26, 1931.
Insecticide. B. Diaz. 286,313; Aug. 25; Serial No. 312,950; published June 16, 1931.
Insecticides. The Black Flag Company. 286,271; Aug. 25; Serial No. 313,418; published May 26, 1931.
Insecticides. Interstate Chemical Mfg. Co. 286,254; Aug. 25; Serial No. 311,838; published May 26, 1931.
Insecticides, liquid spreader compounds, a compound of emulsified kerosene, lime sulfur. Lemingwell Rancho Company. 286,416; Aug. 25; Serial No. 309,247; published June 9, 1931.
Insecticides, Preparation used as a spreader with contact. Crystal Soap & Chemical Co. 286,311; Aug. 25; Serial No. 312,364; published June 2, 1931.
Laxative. S. Gysin. 286,305; Aug. 25; Serial No. 312,049; published June 2, 1931.
Liniment. D. MacKay. 286,394; Aug. 25; Serial No. 310,325; published May 26, 1931.
Liniment, etc., Absorbent. H. Henkin. 286,256; Aug. 25; Serial No. 311,609; published May 26, 1931.
Lipoidal, Concentrated extract of. G. S. Stoddard & Co., Inc. 286,319; Aug. 25; Serial No. 312,778; published June 2, 1931.
Liquid medical preparation for use in treatment of swine, etc. Z. L. Haworth. 286,285; Aug. 25; Serial No. 312,989; published June 2, 1931.
Liquid preparations beneficial for reducing congestion of the mucous membranes of the nose. W. Schwartz. 286,312; Aug. 25; Serial No. 312,891; published June 2, 1931.
Lotion, Skin. The A. G. Clarke Drug Company. 286,278; Aug. 25; Serial No. 313,283; published May 26, 1931.
Medicinal acids, alkalies, ammonium compounds, etc. Burroughs Wellcome & Co. (U. S. A.) Inc. 286,409; Aug. 25; Serial No. 278,089; published June 16, 1931.
Medicinal cream, liquid powder and cream dentifrice, cold cream, etc. R. B. Mizrahi. 286,407; Aug. 25; Serial No. 281,038; published June 2, 1931.
Medicinal preparation. Ante-Ferman Co. 286,415; Aug. 25; Serial No. 309,665; published May 26, 1931.
Medicinal preparation. Chemische Fabrik Helfenberg A. G. Vorm. Eugene Dietrich. 286,432; Aug. 25; Serial No. 308,614; published June 16, 1931.
Medicinal preparation. Gane's Chemical Works. Inc. 286,230; Aug. 25; Serial No. 312,728; published June 2, 1931.
Medicinal preparation. Wallace-Roberts, Inc. 286,307; Aug. 25; Serial No. 311,989; published June 9, 1931.
Medicinal preparation for the alleviation of pain. S. G. Levin. 286,269; Aug. 25; Serial No. 313,440; published June 2, 1931.
Medicinal preparation to stimulate the scalp. Sano Products Co. Inc. 286,231; Aug. 25; Serial No. 312,721; published June 2, 1931.
Medicinal preparations. Blair & Curtis, Inc. 286,233; Aug. 25; Serial No. 312,677; published May 26, 1931.
Medicinal preparations. Blair & Curtis, Inc. 286,234; Aug. 25; Serial No. 312,676; published May 26, 1931.
Medicinal preparations. Byk-Guldenwerke Chemische Fabrik Aktiengesellschaft. 286,337; Aug. 25; Serial No. 312,838; published May 26, 1931.
Medicine. Zo-Ro-Lo. Inc. 286,281; Aug. 25; Serial No. 313,066; published May 26, 1931.
Medicine for pyorrhea. L. Flaherty. 286,369; Aug. 25; Serial No. 306,437; published May 26, 1931.
Mineral oils. American Druggists Syndicate. 286,433; Aug. 25; Serial No. 308,281; published June 9, 1931.
Mineral water, Prepared. Greenville Products Co. 286,393; Aug. 25; Serial No. 311,097; published June 2, 1931.
Mouth wash and a preparation used in the treatment of dandruff. C. G. Meadows. 286,380; Aug. 25; Serial No. 313,605; published June 16, 1931.
Ointment. Mrs. L. Danchak. 286,317; Aug. 25; Serial No. 312,876; published June 16, 1931.
Ointment. J. F. Santee. 286,239; Aug. 25; Serial No. 306,418; published May 26, 1931.
Ointment, Hair rejuvenating. A. Sperl. 286,261; Aug. 25; Serial No. 310,267; published May 26, 1931.
Perfume, Synthetic. Newport Chemical Works, Incorporated. 286,372; Aug. 25; Serial No. 304,292.
Perfume, toilet water, eau de Cologne, etc. M. Dauer. 286,418; Aug. 25; Serial No. 299,499; published Aug. 12, 1930.
Perfume, toilet water, face powder. C. C. Van Cleve. 286,250; Aug. 25; Serial No. 312,502; published June 2, 1931.
Perfumery, Bath. A/S. Apothekernes Laboratorium For Specialpræparater. 286,240; Aug. 25; Serial No. 305,801; published May 26, 1931.
Perfumes and hygienic products. Franklin Simon & Co. Inc. 286,259; Aug. 25; Serial No. 310,939; published May 26, 1931.
Perfumes, toilet waters, face and dusting powders, etc. Lentheric, Incorporated. 286,414; Aug. 25; Serial No. 310,059; published May 26, 1931.
Petroleum jelly. Chesebrough Manufacturing Company. 286,262; Aug. 25; Serial No. 310,211; published May 26, 1931.
Physic and laxative for human use. Flavo Lax Corporation. 286,365; Aug. 25; Serial No. 313,264; published June 16, 1931.
Plasters, dressings of iodoform gauze, Adhesive. Kissana Chem.-Pharm. Laboratorium G. m. b. H. 286,263; Aug. 25; Serial No. 309,086; published May 26, 1931.
Powder. Societe Anonyme Jean Patou. 286,303; Aug. 25; Serial No. 312,630; published June 2, 1931.
Powder, Face. Weissbard Bros. 286,371; Aug. 25; Serial No. 305,202 published June 9, 1931.
Powders, compacts, etc., Face, talcum, and dusting. Henry Tetlow Company. 286,287; Aug. 25; Serial No. 312,870; published June 2, 1931.
Powders, Face, talcum, and sachet. Societe Anonyme Jean Patou. 286,302; Aug. 25; Serial No. 312,631; published June 2, 1931.
Preparation for burns, etc., Soothing and healing. S. C. Wells & Co. 286,251; Aug. 25; Serial No. 312,245; published May 26, 1931.
Preparation for the treatment of nasal and sinus infections. K. E. Goit. 286,381; Aug. 25; Serial No. 313,540; published May 26, 1931.
Preparation for the treatment of skin diseases of hogs. J. Schlensig. 286,280; Aug. 25; Serial No. 313,096; published May 26, 1931.
Preparation for the treatment of sour stomach, etc. A. M. Kingdon. 286,310; Aug. 25; Serial No. 311,613; published May 26, 1931.
Preparation for treating live stock. E. Bowman. 286,316; Aug. 25; Serial No. 312,899; published May 26, 1931.
Preparation for treating poison sores, eczema, piles, etc. A. Roth. 286,382; Aug. 25; Serial No. 313,449; published May 26, 1931.
Preparation for treating the skin. Research Products Corporation. 286,318; Aug. 25; Serial No. 312,815; published June 9, 1931.
Preparation taken internally for purifying the blood. C. E. Howell. 286,379; Aug. 25; Serial No. 313,661; published June 16, 1931.
Preparation used in selected cases of amenorrhea, etc. Drug Products Co. 286,290; Aug. 25; Serial No. 313,424; published June 2, 1931.
Remedy for colic, indigestion, and azoturia in cattle and horses. R. W. Pyle. 84,338; renewed Nov. 28, 1931.
Salt. Worcester Salt Company. 286,252; Aug. 25; Serial No. 311,992; published May 26, 1931.
Salt. Worcester Salt Company. 286,253; Aug. 25; Serial No. 311,991; published May 26, 1931.
Salve and also a preparation for treatment of dandruff, Cold. J. S. Nadoolman. 286,384; Aug. 25; Serial No. 313,849; published June 16, 1931.
Salve for the treatment of cancer. J. G. Wagner. 286,289; Aug. 25; Serial No. 312,826; published June 2, 1931.
Semiorganic preparation serving to eliminate toxic matter. Electrovita Company. 286,267; Aug. 25; Serial No. 313,592; published June 2, 1931.
Solution of sodium compound. Visco Products Company. 286,245; Aug. 25; Serial No. 286,093; published May 20, 1930.
Solutions for testing soils for acidity. Urbana Laboratories. 286,228; Aug. 25; Serial No. 312,820; published June 2, 1931.
Sweetening substances and combinations of the same, Artificial. Verkaufsstelle des Internationalen Süsstoff-Syndikats Gesellschaft mit beschrankter Haftung. 286,434; Aug. 25; Serial No. 308,047; published June 2, 1931.
Synthetic organic products for general food flavoring purposes. Florasynth Laboratories, Inc. 286,411; Aug. 25; Serial No. 276,931; published June 16, 1931.
Toilet preparation. F. H. Muller. 286,249; Aug. 25; Serial No. 312,618; published June 2, 1931.
Tonic and blood purifier, Nerve. Zamarang Laboratories. 286,368; Aug. 25; Serial No. 306,473; published June 9, 1931.
Tonic and system building, Alterative. Gibotone Co. 286,272; Aug. 25; Serial No. 313,866; published May 26, 1931.
Tonic for the scalp. Packer Manufacturing Company. 286,424; Aug. 25; Serial No. 296,494; published Apr. 29, 1930.
Tonic for treatment of poultry. P. J. Oesterling & Son, Inc. 286,425; Aug. 25; Serial No. 293,339; published May 26, 1931.
Tonic, General. Columbia Laboratories Inc. 286,392; Aug. 25; Serial No. 311,471; published June 9, 1931.
Tonic, Hair. Frederick E. Iscberland. 286,275; Aug. 25; Serial No. 313,342; published May 26, 1931.
Tonic in the form of tablets, salts, or powder. Henry John Herzog. 286,282–3; Aug. 25; Serial Nos. 313,038–9; published May 26, 1931.
Tonic, Liquid. R. Trillo. 286,426; Aug. 25; Serial No. 290,439; published June 9, 1931.

CLASS 9

Target backstops. Koehler Bros. 286,377; Aug. 25; Serial No. 314,411; published June 16, 1931.

CLASS 15

Oils and greases, Lubricating. Union Petroleum Company. 84,296; renewed Nov. 21, 1931.

CLASS 16

Preservative preparation. Henry T. Caruthers. 286,255; Aug. 25; Serial No. 311,637; published May 26, 1931.

CLASS 21

Electrical switches. Time-O-Stat Controls Company. 286,451; Aug. 25.
Transformers. American Flyers Mfg. Co. 286,478; Aug. 25.

CLASS 22

Casings, Tennis racket. T. R. Birch. 286,483; Aug. 25.
Game boards. F. S. Jimison. 286,321; Aug. 25; Serial No. 312,010; published June 9, 1931.
Game played with discs. D. M. Shipman. 286,296; Aug. 25; Serial No. 313,990; published June 16, 1931.
Game, Table board. Milton Bradley Company. 286,320; Aug. 25; Serial No. 313,325; published June 9, 1931.
Games of skill, Table board. Phillips & Uppercu. 286,383; Aug. 25; Serial No. 313,670; published June 16, 1931.
Golf clubs. Wright & Ditson. 286,292; Aug. 25; Serial No. 314,385; published June 16, 1931.
Golf clubs. L. A. Young Company. 286,293; Aug. 25; Serial No. 314,185; published June 9, 1931.
Golf clubs and bags. L. A. Young Company. 286,330; Aug. 25; Serial No. 308,403; published June 16, 1931.
Golf clubs, golf club shafts, golf balls, etc. Donaldson Manufacturing Company. 286,376; Aug. 25; Serial No. 314,447; published June 16, 1931.
Golf clubs, Wood and metal. L. A. Young Company. 286,322–3; Aug. 25; Serial Nos. 308,413–4; published June 16, 1931.
Golf clubs, Wood and metal. L. A. Young Company. 286,324–7; Aug. 25; Serial Nos. 308,408–11; published June 16, 1931.
Golf clubs, Wood and metal. L. A. Young Company. 286,328–9; Aug. 25; Serial Nos. 308,404–5; published June 16, 1931.
Jack stones and jack sets. Grey Iron Casting Company. 286,295; Aug. 25; Serial No. 314,030; published June 9, 1931.
Sled coasters. Schiller Piano Company. 286,297; Aug. 25; Serial No. 313,804; published June 16, 1931.
Toy typewriters. Simplex Typewriter Co. 286,294; Aug. 25; Serial No. 314,079; published June 16, 1931.
Toy walking devices. Brinly-Hardy Company. 286,378; Aug. 25; Serial No. 313,728; published June 16, 1931.

CLASS 23

Saws of all kinds. E. C. Atkins & Company. 82,950; renewed Aug. 8, 1931.
Saws of all kinds. E. C. Atkins & Company. 82,951; renewed Aug. 8, 1931.
Wrenches. U. S. Hame Company. 286,485; Aug. 25.

CLASS 37

Paper. The Crepe-Kraft Company, Inc. 286,461; Aug. 25.
Publication, Periodical. New York Evening Journal Publishing Company. 84,662; renewed Dec. 26, 1931.
Publication, Periodical. New York Evening Journal Publishing Company. 84,664–5; renewed Dec. 26, 1931.

CLASS 39

Blouses, shirts, and playsuits. Every Buddy's Blouse Co. 286,465; Aug. 25.
Boots and Shoes. International Shoe Co. 286,264; Aug. 25; Serial No. 309,084; published May 26, 1931.
Boots and shoes. International Shoe Co. 286,265; Aug. 25; Serial No. 309,083; published Feb. 10, 1931.
Boots and shoes, Counter-stiffeners for. Charles E. Harwood Company. 84,516; renewed Nov. 28, 1931.
Coats, vests, pants, etc. The Silvertex Company. 286,481; Aug. 25.
Coats, vests, pants, etc., for men and boys. Fashion Park Associates, Inc. 286,284; Aug. 25; Serial No. 313,031; published June 2, 1931.
Gloves. Franz Gutmann & Weinberg G. m. b. H. 286,472; Aug. 25.
Hosiery. Combine Hosiery Corporation. 286,247; Aug. 25; Serial No. 265,491; published July 10, 1928.
Hosiery. S. S. Kresge Company. 286,460; Aug. 25.
Hosiery. Largman, Gray Company. 286,454; Aug. 25.
Hosiery. Princess Royal Hosiery Mills, Inc. 286,459; Aug. 25.
Hosiery. Propper-McCallum Hosiery Co., Inc. 286,455; Aug. 25.
Negligee and work shirts. R. D. Steele. 286,467; Aug. 25.
Pajamas, petticoats, and shorts. M. C. Schrank Company. 286,479; Aug. 25.
Raincoats. United States Rubber Company. 286,458; Aug. 25.
Shirts and collars. Sweetser & Son, Inc. 286,471; Aug. 25.
Shoes. Cedar Grove Shoe Mfg. Co. 286,452; Aug. 25.
Shoes. A. E. Nettleton Company. 286,413; Aug. 25; Serial No. 313,607; published June 9, 1931.
Suits, overalls, rompers, Play. Chicago Garment Co., Inc. 286,450; Aug. 25.
Underwear, Men's, women's, and children's. Celanese Corporation of America. 286,279; Aug. 25; Serial No. 313,178; published May 26, 1931.
Underwear, Women's. Augusta Knitting Corporation. 286,286; Aug. 25; Serial No. 312,880; published May 26, 1931.
Wearing apparel. Franklin Simon & Co. Inc. 286,288; Aug. 25; Serial No. 312,866; published June 2, 1931.

CLASS 40

Belts for bloomers, Elastic. A. Goldsholl. 286,456; Aug. 25.

CLASS 42

Rayon knitted cloth in the piece. J. Brener Co. 286,475; Aug. 25.

CLASS 44

Adhesive plasters. P. Beiersdorf & Co. 286,242; Aug. 25; Serial No. 297,000; published July 15, 1930.
Dentures and bridges, Full and partial. H. P. Boos. 286,353; Aug. 25; Serial No. 313,993; published June 9, 1931.
Elastic reducing garments. Sandfelder Company. 286,442; Aug. 25; Serial No. 312,314; published June 16, 1931.
Golds, Casting. J. F. Jelenko & Co. 286,436; Aug. 25; Serial No. 311,528; published June 16, 1931.
Pads used during hair treating or waving operations. T. R. James. 286,435; Aug. 25; Serial No. 313,546; published June 16, 1931.
Prophylactic rubber and membranous articles. S. Kohn. 286,340; Aug. 25; Serial No. 314,204; published June 16, 1931.
Prophylactic rubber articles. T. Kaplan. 286,444; Aug. 25; Serial No. 312,952; published June 9, 1931.
Prophylactic rubber or tissue membraneous articles. A. Cassett. 286,445; Aug. 25; Serial No. 312,598; published June 16, 1931.
Sanitary napkins, Cellulose. L. Bamberger & Co. 286,438; Aug. 25; Serial No. 313,825; published June 16, 1931.
Therapeutic devices for holding absorbtive pads. L. A. Garner. 286,390; Aug. 25; Serial No. 312,000; published June 9, 1931.

CLASS 45

Beverages and extracts therefor, Maltless. Blue Seal Extract Company. 286,291; Aug. 25; Serial No. 314,393; published June 16, 1931.
Beverages and fruit juices for beverage purposes, Maltless. Tomango Limited. 286,419; Aug. 25; Serial No. 299,417; published June 9, 1931.
Beverages, Maltless. Watseka Wholesale Grocery Company. 286,301; Aug. 25; Serial No. 313,166; published June 16, 1931.
Beverages, syrups, and extracts. Seminole Bottling Co. 286,480; Aug. 25.
Beverages, syrups, and extracts. Seminole Bottling Co. 286,482; Aug. 25.
Fruit juices for making soft drinks. Vitamin Company of America. 286,300; Aug. 25; Serial No. 313,398; published June 16, 1931.
Maltless compound for maltless beverages. M. B. Eccles. 286,299; Aug. 25; Serial No. 313,997; published June 16, 1931.
Water, Pure. A. C. Wright. 286,306; Aug. 25; Serial No. 312,031; published June 9, 1931.

CLASS 46

Apple butter, fruit preserves, and pickles, and cider vinegar. M. Steffen & Co., Inc. 286,474; Aug. 25.
Beef, mutton, pork, etc. Fox & Fox. 286,410; Aug. 25; Serial No. 277,783; published June 16, 1931.
Bread. Stroehmann Brothers Co. 286,331; Aug. 25; Serial No. 313,062; published June 16, 1931.
Butter. Challenge Cream & Butter Association. 286,346; Aug. 25; Serial No. 313,882; published June 9, 1931.
Butter, eggs, and dressed poultry. Conron Bros. Company. 84,600; renewed Dec. 26, 1931.
Butter, eggs, cream, and cheese. M. Weinger. 286,347; Aug. 25; Serial No. 313,572; published June 9, 1931.
Candies. Dilling & Company. 286,396; Aug. 25; Serial No. 314,362; published June 16, 1931.
Candies generally. Temptation Company. 286,427; Aug. 25; Serial No. 282,964; published Sept. 2, 1930.
Candy. Candy Kitchens, Inc. 286,397; Aug. 25; Serial No. 314,360; published June 16, 1931.
Candy. G. D. Leocoponlos. 286,352; Aug. 25; Serial No. 313,272; published June 16, 1931.
Candy. Life Savers, Inc. 286,404–6; Aug. 25; Serial Nos. 281,434–6; published June 9, 1931.
Candy. Life Savers, Inc. 286,428; Aug. 25; Serial No. 282,119; published June 9, 1931.
Candy. Life Savers, Inc. 286,429–30; Aug. 25; Serial Nos. 281,437–8; published June 9, 1931.
Candy. Puritan Chocolate Co. 286,339; Aug. 25; Serial No. 309,313; published June 9, 1931.
Candy. J. L. Sordillo. 286,395; Aug. 25; Serial No. 314,381; published June 16, 1931.

Canned fish, fruits, meats, milk, etc. H. P. Lau Co. 286,237; Aug. 25; Serial No. 300,950; published Oct. 28, 1930.
Canned fruits and vegetables, jams, jellies, olives, etc. California Packing Corporation. 286,243–4; Aug. 25; Serial Nos. 294,466–7; published May 27, 1930.
Canned fruits, vegetables, fish, fresh deciduous fruit, vegetables and dried fruits. Balfour Guthrie & Company. 286,457; Aug. 25.
Canned mushrooms. Von Bremen, Asche, De Bruyn, Inc. 286,338; Aug. 25; Serial No. 311,499; published June 9, 1931.
Canned oysters. Planters Oyster Company. 286,335; Aug. 25; Serial No. 313,000; published June 16, 1931.
Canned peas. Minnesota Valley Canning Company. 286,422; Aug. 25; Serial No. 298,644; published June 16, 1931.
Canned salmon. Calvert Company, Inc. 286,470; Aug. 25.
Canned tomatoes. M. De Rosa. 286,431; Aug. 25; Serial No. 308,819; published June 9, 1931.
Canned vegetables; and chili and cranberry sauce, etc. Stokely Brothers & Company. 286,468; Aug. 25.
Cereal breakfast food. Uncle Sam Breakfast Food Company. 286,357; Aug. 25; Serial No. 313,482; published June 9, 1931.
Cheese preparation. Pabst Corporation. 286,385; Aug. 25; Serial No. 310,406; published June 16, 1931.
Cheese, Roquefort. B. M. Douglas. 286,270; Aug. 25; Serial No. 313,468; published June 16, 1931.
Chocolate. Pure Candy Kitchen, Inc. 286,398; Aug. 25; Serial No. 314,296; published June 16, 1931.
Coffee. F. C. Russell. 286,350; Aug. 25; Serial No. 313,511; published June 9, 1931.
Coffee. Standard Brands Incorporated. 286,349; Aug. 25; Serial No. 313,757; published June 16, 1931.
Coffee and tea. A. Schilling & Co. 286,412; Aug. 25; Serial No. 247,342; published June 9, 1931.
Confection, Frozen. Cold Snap Incorporated. 286,439; Aug. 25; Serial No. 313,330; published June 9, 1931.
Confectionery. Crallo Sweets, Incorporated. 286,399; Aug. 25; Serial No. 314,274; published June 16, 1931.
Cookies. Rochester Bread Company. 286,360; Aug. 25; Serial No. 313,448; published June 16, 1931.
Feed, Dairy. Allied Mills, Inc. 286,420; Aug. 25; Serial No. 300,601; published June 9, 1931.
Fish paste. H. Peck & Company. 286,373; Aug. 25; Serial No. 308,791; published June 9, 1931.
Flour. Red Band Co. 286,356; Aug. 25; Serial No. 314,250; published June 16, 1931.
Flour, pastry flour, whole wheat flour, etc., Wheat. Geo. O'Brien & Son, Incorporated. 286,344; Aug. 25; Serial No. 314,008; published June 9, 1931.
Flour, Soya bean. Soyolk Company. 286,233; Aug. 25; Serial No. 309,624; published June 9, 1931.
Food and bird colored pepper food, Bird seed. S. Fried. 286,348; Aug. 25; Serial No. 313,503; published June 9, 1931.
Food made of corn, sugar, and salt. H. C. Hawk. 82,436; renewed June 27, 1931.
Fruits, Dried. F. A. Schneider. 286,421; Aug. 25; Serial No. 294,445; published Feb. 10, 1931.
Gum, Chewing. Orbit Listerated Gum Company. 286,402; Aug. 25; Serial No. 314,070; published June 9, 1931.
Gum, Chewing. Wm. Wrigley Jr. Company. 286,400–1; Aug. 25; Serial Nos. 314,090–1; published June 9, 1931.
Ice cream sandwich wafers. S. & S. Cone Corporation. 286,387; Aug. 25; Serial No. 311,697; published June 9, 1931.
Mayonnaise, apple butter, canned cherries, spices, pickles, preserves, etc. Chelsea Packing Co. Inc. 286,463; Aug. 25.
Mayonnaise dressing, Thousand Island dressing, and sandwich spread. Mrs. B. Lamb. 286,388; Aug. 25; Serial No. 311,548; published June 9, 1931.
Pop corn. Golden Glow Shops, Inc. 286,336; Aug. 25; Serial No. 312,888; published June 16, 1931.
Potato chips. S. W. Miller. 286,484; Aug. 25.
Sandwich spread, mayonnaise, canned chicken with noodles. Corvallis Creamery Co. 286,464; Aug. 25.
Seasoning for pop corn. Robbins & Myers, Inc. 286,375; Aug. 25; Serial No. 305,542; published June 9, 1931.
Shortenings. C. F. Simonin's Sons, Inc. 286,334; Aug. 25; Serial No. 313,261; published June 16, 1931.
Sugar. J. D. and A. B. Spreckels Investment Company. 286,354; Aug. 25; Serial No. 310,701; published June 9, 1931.
Syrup, Malt. P. C. Acevedo. 286,466; Aug. 25.
Syrup, Malt. St. Louis Products Company. 286,473; Aug. 25.
Vegetables, Concentrated. Vecon, Incorporated. 286,351; Aug. 25; Serial No. 313,455; published June 9, 1931.

CLASS 48

Beer. Birk Bros. Brewing Co. 83,471; renewed Sept. 19, 1931.
Beer. Birk Bros. Brewing Co. 83,632; renewed Oct. 3, 1931.
Malt beverages. Esslinger's, Inc. 286,298; Aug. 25; Serial No. 314,045; published June 16, 1931.

ALPHABETICAL LIST OF LABELS

Amber Beauty. For Raisins. Sun-Maid Raisin Growers of California. 39,633; Aug. 25.
Camp Fire. For Coffee. Blue Ribbon Products Co. 39,602; Aug. 25.
Collins Lustre-Lac Polish. For Liquid Polish. D. A. Collins Mfg. Co. 39,603; Aug. 25.
Colonaide. For Medicinal Tablets. Society of the Colonaide, Incorporated. 39,630; Aug. 25.
Dixie Rush. For Laxative in the Form of a Drink Made with Orange Juice. Dixie Rush Company. 39,605; Aug. 25.
Dugan's Marble Pound Cake. For Marble Pound Cake. Dugan Brothers, Inc. 39,609; Aug. 25.
Dugan's 100% Whole Wheat Citron Pound Cake. For Citron Pound Cake. Dugan Brothers, Inc. 39,610; Aug. 25.
Dugan's 100% Whole Wheat Crackers. For Crackers. Dugan Brothers, Inc. 39,612; Aug. 25.
Dugan's 100% Whole Wheat Nut Pound Cake. For Nut Pound Cake. Dugan Brothers, Inc. 39,607; Aug. 25.
Dugan's 100% Whole Wheat Pecan Rolls. For Pecan Rolls. Dugan Brothers, Inc. 39,606; Aug. 25.
Dugan's 100% Whole Wheat Plain Pound Cake. For Plain Pound Cake. Dugan Brothers, Inc. 39,611; Aug. 25.
Dugan's Pure Apple Jelly. For Apple Jelly. Dugan Brothers, Inc. 39,608; Aug. 25.
Duosol. For Wash for Mouth and Throat. The Duosol Company. 39,613; Aug. 25.
Famous-Barr Co. Fine Footwear. For Footwear. Holman Paper Box Co. 39,619; Aug. 25.
Foster Premium. For Coal. Foster Lumber Company. 39,615; Aug. 25.
Genuine New England Coke. For Coke. New England Coke Company. 39,625; Aug. 25.
Golden Glow. For Malt Syrup. P. Ballantine & Sons. 39,601; Aug. 25.
Golden State. For Butter. Golden State Company, Ltd. 39,616; Aug. 25.
Good Coffee. For Coffee. High Point Coffee Company, Inc. 39,617; Aug. 25.
Hi-Ful-Pak. For Apples. Earl Fruit Company. 39,614; Aug. 25.
Higrade. For Ginger Ale. Higrade Products Co. 39,618; Aug. 25.
Insec-Tox. For Insecticide. Rex Research Corporation. 39,628–9; Aug. 25.
Krank. For Hair Root Oil. A. J. Krank Co. 39,620; Aug. 25.
L. & D. For Olive Oil. Lekas and Drivas. 39,623; Aug. 25.
Limpio Mouth Wash. For Mouth Wash. Limpio Manufacturing Company. 39,624; Aug. 25.
Mates. For Candy Bars. Williamson Candy Company. 39,634; Aug. 25.
Miss Dixie Scratch Feed. For Scratch Feed. Atlanta Milling Co. 39,600; Aug. 25.
Mitzie Green's Art Needlework Outfit. For Art Needle Work Outfits. Standard Solophone Mfg. Co. 39,632; Aug. 25.
Oxo. For Preparation Used as a Germicide Deodorant, Sterilizer, Disinfectant, Cleanser, and Bleacher. J. L. Prescott Company. 39,627; Aug. 25.
Popsicles—A frozen drink on a stick. For Frozen Confections. Popsicle Service, Inc. 39,626; Aug. 25.
Royal. For Gelatin Aspic. Standard Brands Incorporated. 39,631; Aug. 25.
Sporicide. For Germicide. A. J. Krank Company. 39,621; Aug. 25.
Tarfree. For Asbestos Fibre and Asphalt Roof Coatings. J. H. Crocker. 39,604; Aug. 25.
Triple-C. For Germicide. A. J. Krank, Inc. 39,622; Aug. 25.

ALPHABETICAL LIST OF PRINTS

Acorn and Oak Leaf. For Quilting Cotton. The Stearns & Foster Co. 13,387; Aug. 25.

Indera Figurfit. For Bathing Suits. Indera Mills Company. 13,382; Aug. 25.

Low Point Now. For Kashan Rugs. John Wanamaker New York. 13,391; Aug. 25.

My Adeline. For Cakes. E. D. Johnson. 13,383; Aug. 25.

New York Beauty. For Quilting Cotton. The Stearns & Foster Co. 13,389; Aug. 25.

Now is the time to clean-out Radiators with No-Rust. For Cleaner for Radiators, Boiler Tubes, and the Like. Mogaco Laboratories. 13,385; Aug. 25.

Old Fashioned Rose. For Quilting Cotton. The Stearns & Foster Co. 13,386; Aug. 25.

Pony Malted Milk—(Window Strip). For Malted Milk. The Borden Company. 13,381; Aug. 25.

The Double Wedding Ring. For Quilting Cotton. The Stearns & Foster Co. 13,388; Aug. 25.

The Little Lemon Man. For Pure Lemon Juice. R. McLennan. 13,384; Aug. 25.

The Ohio Rose. For Quilting Cotton. The Stearns & Foster Co. 13,390; Aug. 25.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 25TH DAY OF AUGUST, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Blair, Mark L., assignor.)

A C Spark Plug Company. (See Zeibig, Bruno H., assignor.)

Aberfoyle Manufacturing Company. (See Holt, Joseph P., assignor.)

Abt, Louis, assignor to W. Paddor, Chicago, Ill. Skylight. 1,820,764; Aug. 25.

Acme Canning Machine Company. (See Duncan, Arthur L., assignor.)

Adams, Kempton, Redding Ridge, Conn. Mixer. 1,820,171; Aug. 25.

Aerick, Calven, Los Angeles, Calif. Universal nursing stand. 1,820,420; Aug. 25.

Agee, Alfred W., Ogden, Utah. Acoustic device. 1,820,107; Aug. 25.

Agfa Ansco Corporation. (See Liebeskind, Bernhard, assignor.)

Agfa Ansco Corporation. (See Vehl, P., and Schwitzler, assignors.)

Agramonte, Albert, Camaguey, Cuba. Vehicle running gear. 1,820,108; Aug. 25.

Air Preheater Corporation, The. (See Riley, Robert S., assignor.)

Air-Way Pump Company. (See Andreasen, Alfred C., assignor.)

Akron Standard Mold Company, The. (See Fletter, Andrew J., assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Sauter, Erwin, assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Suter, Philipp, assignor.)

Albert, Ruth F., New York, N. Y. Garment. 1,820,293; Aug. 25.

Albertine, Herman, East Rutherford, N. J., assignor, by mesne assignments, to Rogers Products Co., Inc. Lubricating system. 1,820,109; Aug. 25.

Aldeborgh, Erik H., and C. E. Ruf, Poughkeepsie, N. Y., assignor to Standard Gage Company, Inc. Dial gauge. 1,820,370; Aug. 25.

Alexander, William J. (See Hazlett, R. R., and Alexander.)

Alland, Maurice, Atlantic City, N. J. Indicator for cameras. 1,820,421; Aug. 25.

Allen, Andrews, Glencoe, assignor to Allen & Garcia Company, Chicago, Ill. Floating storage and mixing bin. 1,820,521; Aug. 25.

Allen, Carl G. (See McCormick, J. H., Allen, and Bender.)

Allen, Earl M., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,820,110; Aug. 25.

Allen & Garcia Company. (See Allen, Andrews, assignor.)

Allen, Joseph H., assignor to Inland Glass Works, Inc., Chicago, Ill. Lamp globe. Des. 84,911; Aug. 25.

Allen, Joseph H., assignor to Inland Glass Works, Inc., Chicago, Ill. Lamp globe. Des. 84,912; Aug. 25.

Allen, Joseph H., assignor to Inland Glass Works, Inc., Chicago, Ill. Lamp globe. Des. 84,913; Aug. 25.

Allen, Joseph H., assignor to Inland Glass Works, Inc., Chicago, Ill. Lantern. Des. 84,914; Aug. 25.

Allen, S. L., & Co. (See Bowen, James M., assignor.)

Allison, John T., et al. (See Cleveland, Charles H., assignor.)

American Aluminum Ware Co. (See Brucker, Henry, assignor.)

American Buckle Company, The. (See Salisbury, Jessup, assignor.)

American Can Company. (See Hothersall, John M., assignor.)

American Laundry Machinery Company, The. (See Perry, Emanuel J., assignor.)

American Maize-Products Company. (See Viele, Walter S., assignor.)

American Seating Company. (See Hamilton, G. H., and Chapman, assignors.)

American Telephone and Telegraph Company. (See Burns, Roy W., assignor.)

American Telephone and Telegraph Company. (See Parker, R. D., and Best, assignors.)

American Telephone and Telegraph Company. (See Smith, T. C., Spowart, and Fitzpatrick, assignors.)

Amos, John A., assignor to The Pyle-National Company, Chicago, Ill. Electric switch. 1,820,339; Aug. 25.

Anderson, Charles, Eltingville, Staten Island, N. Y. Hand truck. 1,820,765; Aug. 25.

Anderson, Raymond T., assignor to The V. D. Anderson Campany, Cleveland, Ohio. Press. 1,820,590; Aug. 25.

Anderson, Robert G., Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Brake rigging. 1,820,723; Aug. 25.

Anderson, Robert H., assignor of one-half A. B. Bowman, San Diego, Calif. Jig saw. 1,820,294; Aug. 25.

Anderson, Roy A. (See Judd, P. L., Atkinson, and Anderson.)

Anderson, V. D., Company, The. (See Anderson, Raymond T., assignor.)

André, Henri, Paris, France. Variable conductor of high negative temperature co-efficient. 1,820,591; Aug. 25.

Andreasen, Alfred C., Oak Park, Ill., assignor to Air-Way Pump Company, Chicago, Ill. Pump. Re18,167; Aug. 25.

Anglada, Domingo, New York, assignor to Wolf Safety Lamp Company of America, Inc., Brooklyn, N. Y. Signal lamp. 1,820,642; Aug. 25.

Appleton, Ernst G. (See Newman, C., and Appleton.)

Arbuckle, Samuel F., Highland Park, Mich., and C. P. Brockway, Paterson, N. J., assignors to Monogram Lens Corporation, Detroit, Mich. Lamp shield. 1,820,522; Aug. 25.

Arias, Argimiro, Brooklyn, N. Y. Aerial device. 1,820,643; Aug. 25.

Arico, Joseph, assignor of one-fourth to Sectional Tire Corporation, and one-fourth to L. Morosini, New York, N. Y. Pneumatic tire. 1,820,766; Aug. 25.

Armstrong Cork Company. (See Vincke, Enrique, assignor.)

Arndt, Paul. (See Scognamillo, S., and Arndt.)

Arrasmith, Claude C., and H. D. Markwell, Edmonds, Wash. Camera. 1,820,767; Aug. 25.

Art Metal Company, The. (See Glatthar, George E., assignor.)

Associated Electrical Industries, Ltd., of England. (See Bailey, Richard W., assignor.)

Aston, James. (See Beale, A. H., and Aston.)

Aston, James, and A. H. Beale, assignors, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa. Manufacture of wrought iron from Bessemer steel. 1,820,177; Aug. 25.

Atkinson, Earl B. (See Judd, P. L., Atkinson, and Anderson.)

Atlantic, Gulf and Pacific Company. (See Dietert, Rudolph H., assignor.)

Atlantic Refining Company, The. (See Bennett, Harry T., assignor.)

Atmospheric Nitrogen Corporation. (See Loud, Henry S., assignor.)

Atwater, Harry A., Kansas City, Mo. Self relighting pilot light for gas burners. 1,820,724; Aug. 25.

Augustin, Charles, and T. P. Carroll, St. Louis, Mo. Collapsible fruit and novelty box. 1,820,523; Aug. 25.

Austin, Walter M., and J. B. MacNeill, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,820,687; Aug. 25.

Automatic Food Machinery Corporation. (See Hall, Charles G., assignor.)

Autoyre Company, The. (See Mosgrove, Charles A., assignor.)

Awalt, George A., Minneapolis, Minn. Storm sash holder. 1,820,111; Aug. 25.

Ayer, Frank, and A. Crowfoot, Morenci, Ariz., assignors of fifty-five one-hundredths to Phelps Dodge Corporation. Concentrating ores. 1,820,172; Aug. 25.

Baader, Herman, Mountainville, assignor to Textile Patents Corporation, Allentown, Pa. Narrow fabric loom. 1,820,422; Aug. 25.

Baader, Herman, Mountainville, assignor to Textile Patents Corporation, Allentown, Pa. Batten construction for narrow fabric looms. 1,820,423; Aug. 25.

Baader, Herman, Mountainville, assignor to Textile Patents Corporation, Allentown, Pa. Loom. 1,820,424; Aug. 25.

Babst, Joseph C., and J. H. Fisch, Barnesville, and Joseph Buaer, St. Paul, Minn. Ice sawing machine. 1,820,340; Aug. 25.

Bach, Harold, Oak Park, Ill. Coupling device. 1,820,644; Aug. 25.

Bacon, Harry S. C., assignor to Ketterlinus Lithographic Mfg. Co., Philadelphia, Pa. Educational device. 1,820,209; Aug. 25.

Baden, William, Chicago, Ill. Water heater. 1,820,425; Aug. 25.

Baer, Charles E., Emporium, Pa. Sign. 1,820,008; Aug. 25.

Bahner, Ernest T., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 84,915; Aug. 25.

Bahner, Ernest T., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 84,916; Aug. 25.

Bahner, Ernest T., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 84,917; Aug. 25.

Bahner, Ernest T., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 84,918; Aug. 25.

Bahner, Ernest T., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 84,919; Aug. 25.

Bailey, Richard W., Altrincham, England, assignor, by mesne assignments, to Associated Electrical Industries, Ltd., of England. Elastic fluid turbine. 1,820,725; Aug. 25.

Baker, Frederick W., Stourbridge, England, assignor to Trinity Wheel Corporation. Demountable wheel rim. 1,820,173; Aug. 25.

Baker, Frederick W., Stourbridge, England, assignor to Trinity Wheel Corporation, New York, N. Y. Disk wheel. 1,820,174; Aug. 25.

Bamford, Frank L., assignor to C. M. Hall Lamp Company, Detroit, Mich. Lamp. 1,820,112; Aug. 25.

Barker, Albert A. S., Southchurch, England. Pocket comb. 1,820,768; Aug. 25.

Barker, Albert A. S., Southchurch, assignor to D. Simpson, London, England. Electrotherapeutic hairbrush. 1,820,769; Aug. 25.

Barker, Lyle M., assignor to United Verde Copper Company, Clarkdale, Ariz. Reagent feeding. 1,820,210; Aug. 25.

Barone, Salvatore A., Freeport, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Transmission system. 1,820,898; Aug. 25.

Barrett Company, The. (See Cowderey, Arthur B., assignor.)

Barrier, William C., Fremont, Nebr. Swiveled tool handle. 1,820,211; Aug. 25.

Barrows, Stanley H., assignor, by mesne assignments, to California Chemical Corporation, Chicago, Ill. Building construction. 1,820,041; Aug. 25.

Baseler, Wolfgang, Munich, and A. Meyer, Berlin-Schoneberg, Germany. Speed responsive apparatus. 1,820,042; Aug. 25.

Basile, Joseph. (See Frank, B. M., and Basile.)

Baskerville, John B., assignor to Impactograph Corporation, Roanoke, Va. Impact recorder. 1,820,770; Aug. 25.

Bassick, William R. (See Kincaid, Frank M., assignor.)

Battner, Stephen, assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y. Expression device for musical instruments. 1,820,865; Aug. 25.

Bauer, Joseph. (See Babst, J. C., Fisch, and Bauer.)

Bauer, Paul S., Cambridge, Mass. Electric meter. 1,820,212; Aug. 25.

Bauer, William J., New York, N. Y. Collapsible table. 1,820,592; Aug. 25.

Bay State Optical Company. (See Nerney, George E., assignor.)

Bayha, Helmut, Berlin-Charlottenburg, C. Hahn, Berlin-Siemensstadt, and O. Heymann, Berlin-Wilmersdorf, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Humidifying gas prior to purifying it. 1,820,729; Aug. 25.

Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Drill column. 1,820,727; Aug. 25

Beale, Addison H. (See Aston, J., and Beale.)

Beale, Addison H., assignor, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa. Producing puddled iron ingots. 1,820,175; Aug. 25.

Beale, Addison H., and J. Aston, assignors, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa. Granulating steel and forming wrought iron. 1,820,176; Aug. 25.

Beale, Addison H., Pittsburgh, Pa., H. A. Brassert and F. Wille, Chicago, Ill., assignors, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa. Preparing and remelting synthetic slags. 1,820,178; Aug. 25.

Beattey, Earle J. R., Edgewood, assignor to Universal Optical Corporation, Providence, R. I. Bridge for an eyeglass mounting. Des. 84,920; Aug. 25.

Beebe, Murray, Cheshire, Conn., and H. V. Herlinger, Fort Thomas, assignors to The Wadsworth Watch Case Co., Dayton, Ky. Lithographic plate and preparation. 1,820,593; Aug. 25.

Beeson, Joseph W., East St. Louis, assignor to J. E. Corson, Belleville, Ill. Cigar vending machine. 1,820,341; Aug. 25.

Beghetti, Peter, San Francisco, Calif. Rod bending apparatus. 1,820,426; Aug. 25.

Belden Manufacturing Company. (See Wermine, Hugo H., assignor.)

Bender, Frank M. (See McCormick, J. H., Allen, and Bender.)

Bendix Brake Company. (See Dodge, Adiel Y., assignor.)

Bendix Brake Company. (See McConkey, Montgomery W., assignor.)

Bennett, Harry T., Tulsa, Okla. Treating crude petroleum. 1,820,295; Aug. 25.

Bennett, Harry T., Tulsa, Okla., assignor to The Atlantic Refining Company. Separating wax from mineral oils. 1,820,645; Aug. 25.

Bent, Leavitt N., Holly Oak, Del., and A. C. Johnston, Kenvil, N. J., assignors to Hercules Powder Company, Wilmington, Del. Ester gum and method of producing. 1,820,265; Aug. 25.

Bens, Charles F., Providence, R. I. Rubber heel. 1,820,043. Aug. 25.

Bering, George A., Berkeley, Calif. Button. 1,820,771; Aug. 25.

Beringer, Roscoe., assignor to General Motors Corporation, Detroit, Mich. Four speed transmission. 1,820,006; Aug. 25.

Berkshire Knitting Mills. (See Ischinger, Alfred E., assignor.)

Berthold, Rudolf G., Berlin-Siemensstadt, and P. Fritsch, Berlin-Tegelort, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Device for cutting off vacuum vessels from the exhaust tubes of vacuum pumps. 1,820,553; Aug. 25.

Bertout, Gabriel., Bois-Colombes, France. Device for opening preserve tins with a wire. 1,820,594; Aug. 25.

Best, Fred H. (See Parker, R. D., and Best.)

Bethlehem Steel Company. (See Keller, Albert T., assignor.)

Bethlehem Steel Company. (See Ulrich, John R., assignor.)

Bethlehem Steel Company. (See Winship, B. W., and Harder, assignors.)

Bettini, Gianni, New York, N. Y. Camera. 1,820,113; Aug. 25.

Betz, Frank S. (See Walter, Joseph, assignor.)

Bigelow-Sanford Carpet Co. (See Stone, Edwin W., assignor.)

Bilderbeck, John T., assignor to Western Concrete Pipe Company, Los Angeles, Calif. Pump. 1,820,266; Aug. 25.

Binder, Martin, New Hyde Park, N. Y. Extension table. 1,820,860; Aug. 25.

Birmann, Otto, assignor to Gifford-Wood Company, Hudson, N. Y. Lowering machine. 1,820,427; Aug. 25.

Birmingham Electric Furnaces Limited. (See Lobley, Alfred G., assignor.)

Biscayne Trust Company, et al., executors. See Gold, E. H., and Russell.)

Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Lath attaching clip. 1,820,688; Aug. 25.

Black, John C., Los Angeles, and M. L. Chappell, Watson, Calif. Producing gasoline from high boiling hydrocarbon oils. 1,820,371; Aug. 25.

Black, Knox C., Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Vacuum tube rectifier. 1,820,114; Aug. 25.

Blackburne, Frederick W. (See Simmons, T. H. J., and Blackburne.)

Blackmer, Robert M., assignor to S. A. Griggs, Detroit, Mich. Rotary pump. 1,820,009; Aug. 25.

Blair, George D. (See Corwin, H. G., Blair, and Gilman.)

Blair, Mark L., assignor to A C Spark Plug Company, Flint, Mich. Ventilating apparatus for dynamo electric machines. 1,820,007; Aug. 25.

Blair, Robert S., Sound Beach, Conn. Map construction. 1,820,115. Aug. 25.

Blake, George A., New Bedford, Mass. Faucet. 1,820,772; Aug. 25.

Blaw-Knox Company. (See Prescott, L. A., and Marshall, assignors.)

Blomquist, August E. R., Cleveland, Ohio. Exercising machine. 1,820,372; Aug. 25.

Blossom, Carl W., and E. C. Peterson, assignors to The Blossom Lock Company, Cleveland, Ohio. Automobile locking mechanism. 1,820,428; Aug. 25.

Blossom Lock Company, The. (See Blossom, C. W., and Peterson, assignors.)

Blossom Lock Company. (See Peterson, Elmer C., assignor.)

Blue Ridge Glass Corporation. (See Crawford, William R., assignor.)

Blunt, James G., and R. W. Clifford, Schenectady, N. Y. Throttle valve operating mechanism. 1,820,378; Aug. 25.

Boehmer, Theodore J., Columbus, Ohio. Cheese cutter. 1,820,342; Aug. 25.

Bogdanov, Vladimir N., Moscow, Union of Socialist Soviet Republics. Automatic coupling. 1,820,213; Aug. 25.

Bohan, John C., Hawley, Pa. Conductor terminal. 1,820,429; Aug. 25.

Bohn, Harry. (See Roberts, Charles, assignor.)

Bollweg, Bernhard. (See Zeh, L., Kramer, and Bollweg.)

Bombard, Joseph A., Saranac Lake, N. Y., and R. J. Rogers, Laguna Beach, Calif., assignors of one-half to E. W. Dixon, Baltimore, Md. Ventilator. 1,820,430; Aug. 25.

Bontempi, Giuseppe, New York, N. Y. Machine for the production of artificial flowers. 1,820,524; Aug. 25.

Borden, Stephen W., Summit, N. J. Meter for measuring ground resistance. 1,820,214; Aug. 25.

Bornstein, Albert, Westwood, N. J. Lamp. Des. 84,921; Aug. 25.

Bosch, Robert, Aktiengesellschaft. (See Mensel, Friedrich, assignor.)

Boss, John H., assignor of one-half to J. Stabele, Baltimore, Md. Window shade bracket. 1,820,646; Aug. 25.

Bott, Wister P., Homer, La. Score board. 1,820,431; Aug. 25.

Bouquet, Marcel, Issoudun, France. Grading and sorting-grading apparatus. 1,820,773; Aug. 25.

Bowen, David R., assignor, by mesne assignments, to Farrel-Birmingham Company, Incorporated, Ansonia, Conn. Pressure regulating device for roller mills. 1,820,689; Aug. 25.

Bowen, James M., Cape May Court House, N. J., assignor to S. L. Allen & Co. Inc., Philadelphia, Pa. Sled. 1,820,044; Aug. 25.

Bowman, A. B. (See Anderson, Robert H., assignor.)

Bowser, S. F., & Company. (See Foley, Charles B., assignor.)

Bowzer, Augustus M. (See Lewis, Daniel W., assignor.)

Box, William A., Denver, Colo. Automobile lift. 1,820,267; Aug. 25.

Boyce, Carrol R., Wadtoma, Wis. Apparatus for burning liquid fuel. 1,820,774; Aug. 25.

Boyd, Thomas A. (See Lovell, W. G., and Boyd.)

Boyette, Noah A., Hahira, Ga. Log sawing machine. 1,820,775; Aug. 25.

Bradshaw, Aubrey O., Bluefield, W. Va. Card holder for freight cars. 1,820,776; Aug. 25.

Bradshaw, Lawrence, Bainbridge, assignor, by mesne assignments, to Casein Manufacturing Company of America, Inc., New York, N. Y. Adhesive base. 1,820,432; Aug. 25.

Braeutigam, Henry P., and G. S. Dickey, assignors to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,820,045; Aug. 25.

Brandt Automatic Cashier Company. (See Brandt, Edward J., assignor.)

Brandt, Edward J., Watertown, assignor to Brandt Automatic Cashier Company, Watertown, Wis. Change making machine. 1,820,343; Aug. 25.

Brassert, Herman A. (See Beale, A. H., Brassert, and Wille.)

Breaker, Harry O., assignor to Industrial Furnace Corporation, Buffalo, N. Y. Heat treating furnace. 1,820,879; Aug. 25.

Breslauer, A., Inc. (See Weber, Jacob H., assignor.)

Bridgeport Brass Company. (See Oakley, Erastus G., assignor.)

Briggs & Stratton Corporation. (See Fitz Gerald, John W., assignor.)

British Maxium Company Limited. (See Jesup, Alfred C., assignor.)

Brockway, Carl P. (See Arbuckle, S. F., and Brockway.)

Brodie, William M., administrator. (See Kelly, Loomis L.)

Brooks, Charles E., Montreal, Quebec, Canada. Locomotive boiler. 1,820,296; Aug. 25.

Brooks, Winfred M., West Orange, N. J. Seal. 1,820,595; Aug. 25.

Brown, Arthur L., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Fluid condensation product. 1,820,690; Aug. 25.

Brown, Arthur W., Langland, Swansea, Wales. Indicating direction. 1,820,647; Aug. 25.

Brown & Bigelow. (See Fischer, Howard L., assignor.)

Brown, James M., deceased, Pittsburgh, Pa., by Jane D. Brown, Pittsburgh, Pa., administratrix, assignor to Westinghouse Electric and Manufacturing Company. Switch mechanism. 1,820,691; Aug. 25.

Brown, Jane D., administratrix. (See Brown, James M.)

Brown, Samuel G., assignor to C. W. Lovett, Lynn, Mass. Floor drain trap. 1,820,596; Aug. 25.

Bruce, Alfred W., New York, N. Y. Locomotive bed. 1,820,215; Aug. 25.

Brucker, Henry, Maplewood, N. J., assignor to American Aluminum Ware Co. Fly and leader receptacle. 1,820,648; Aug. 25.

Bruguiere, Faurie, New Orleans, La. Paddle wheel propeller. 1,820,866; Aug. 25.

Buckeye Steel Castings Company, The. (See Whitridge, J. C., and Orr.)

Budd, Edward G., Manufacturing Company. (See Edelson, Leon, assignor.)

Budd, Edward G., Manufacturing Co. (See Green, Charles R., assignor.)

Budd, Edward G., Manufacturing Co. (See Ledwinka, Joseph, assignor.)

Budd, Edward G., Mfg. Company. (See Tarbox, John P., assignor.)

Budlong & Funchess Motor Products Co. (See Funchess, Fred H., assignor.)

Buhl Stamping Company. (See Fahlman, Duncan J., assignor.)

Burgess, Laurie L., Cambridge, Mass., assignor to Plastic, Inc. Making product from vegetable growths and the products thereof. 1,820,046; Aug. 25.

Burkart, Harry J., Kirkwood, Mo. Cushion pad. 1,820,047; Aug. 25.

Burner, William L., Columbus, Ohio, assignor to Western Wheeled Scraper Company, Aurora, Ill. Door operating mechanism for dump cars. 1,820,525; Aug. 25.

Burnish, Howard J., Milwaukee, Wis. Forming and feeding weld rods. 1,820,649; Aug. 25.

Burnley, Robert C., Louisville, Ky. Tray rack. 1,820,433; Aug. 25.

Burns, Roy W., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Testing system. 1,820,116; Aug. 25.

Burrell Engineering & Construction Company. (See Miller, Herman, assignor.)

Burton, Frank C., assignor to Grigsby-Grunow Company, Chicago, Ill. Radiocabinet. Des. 84,922; Aug. 25.

Buschman, Sol L., assignor, by mesne assignments, to Metal Package Corporation, New York, N. Y. Waste receptacle. 1,820,554; Aug. 25.

Buschman, Sol L., assignor, by mesne assignments, to Metal Package Corporation, New York, N. Y. Waste receptacle. 1,820,555; Aug. 25.

Busque, Charles S., St. Gideon De Beauce, Quebec, Canada. Saw. 1,820,434; Aug. 25.

Butler, Morgan R., Waukesha, Wis. Material handling equipment. 1,820,297; Aug. 25.

Butterworth, H. W., & Sons Company. (See Farquhar, J. W., and Hensel, assignor.)

Butts, Durain C., Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del. Purifying rosin. 1,820,298; Aug. 25.

Butts, Harry E., assignor of one-half to E. L. Stewart, Sandusky, Ohio. Trolley for electric cars. 1,820,180; Aug. 25.

Byers, A. M., Company. (See Aston, J., and Beale, assignors.)

Byers, A. M., Company. (See Beale. Addison H., assignor.)

Byers, A. M., Company. (See Beale, A. H., and Aston, assignors.)

Byers, A. M., Company. (See Beale, A. H., Brassert, and Wille, assignors.)

Byers, A. M., Company. (See Ives, Edward L., assignor.)

Cadman, Addi B., Beloit, Wis., assignor, by mesne assignments, to Warner Electric Brake Corporation, South Beloit, Ill. Vehicle brake. 1,820,650; Aug. 25.

Caldwell, Frederick W., New York, N. Y. Truck loading mechanism. 1,820,526; Aug. 25.

Caldwell, Prince D., Los Angeles, Calif. Centrifugal compressor. 1,820,844; Aug. 25.

Calhoun, Van Leonard, Baton Rouge, La. Lawn mower grinder. 1,820,777; Aug. 25.

California Chemical Corporation. (See Barrows, Stanley H., assignor.)

Calls, John G., Clifton, N. J. Truck. 1,820,728; Aug. 25.

Calkins, James M., Miami, Fla. Dirigible headlight. 1,820,117; Aug. 25.

Callahan, John J., and W. D. McDermott, Lynn, Mass. Closure for collapsible tubes. 1,820,435; Aug. 25.

Cameron Machine Company. (See Johnstone, Robert M., assignor.)

Campbell, Sterling H., and F. K. Habenicht, assignor to Western Railway Equipment Company, St. Louis, Mo. Bolt. 1,820,556; Aug. 25.

Canulette, Andrew D., assignor to Canulette Ship Building Co. Inc., Slidell, La. Material handling grapple. 1,820,118; Aug. 25.

Canulette Ship Building Co. Inc. (See Canulette, Andrew D., assignor.)

Capellman, Joseph, Tarentum, Pa. Glass edging machine. 1,820,778; Aug. 25.

Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)

Carey-McFall Co. (See Reukauf, Edward, jr., assignor.)

Carlson, Axel F., Cambridge, assignor to The Reece Button Hole Machine Company, Boston, Mass. Thread holder and trimmer for buttonhole sewing machines. 1,820,557; Aug. 25.

Carlson, Chester L., Crockett, Calif. Control device for affination centrifugals. 1,820,374; Aug. 25.

Carlson, Ernest J., Reading, Pa. Mason's leveling table. 1,820,436; Aug. 25.

Carroll, Thomas P. (See Augustin, C., and Carroll.)

Carson, Clifford C., Chicago, Ill. Unit heater. 1,820,779; Aug. 25.

Carson, Clifford C., Chicago, Ill. Down draft unit heater. 1,820,780; Aug. 25.

Carson, Clifford C., Cleveland, Ohio. Method of heating. 1,820,893; Aug. 25.

Case, J. I., Company. (See Krause, Norman R., assignor.)

Casein Manufacturing Company. (See Bradshaw, Lawrence, assignor.)

Cavagnaro, John J., Ridgewood, N. J. Press. 1,820,437; Aug. 25.

Celastic Corporation, The. (See Randolph, Alan F., assignor.)

Chalmers, James B., Gary, Ind., assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio. Preventing shifting of loads in railway cars and the like. 1,820,729; Aug. 25.

Champion Fibre Company, The. (See Schuber, John, assignor.)

Chandler, Homer P., assignor to The Ohio Brass Company, Mansfield, Ohio. Molded receptacle. 1,820,375; Aug. 25.

Chapman, Edward W. (See Hamilton, G. H., and Chapman.)

Chappell, Marvin L. (See Black, J. C., and Chappell.)
Chase Machine Company. (See Chase, Stephen, 4th, assignor.)
Chase, Stephen, 4th, assignor to Chase Machine Company, Chicago, Ill. Cleaning pile fabrics. 1,820,048; Aug. 25.
Chason, Daniel H., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Graduated tension regulator for sewing machines. 1,820,119; Aug. 25.
Chason, Daniel H., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Disappearing machine rest. 1,820,527; Aug. 25
Cherry, Charles K., Little Rock, Ark. Vending machine. 1,820,345; Aug. 25.
Cheshire, Edward, St. Petersburg, Fla. Sheet delivering device. 1,820,730; Aug. 25.
Chicago Forging & Manufacturing Co. (See Hynes, D., P., and Johnson, assignors.)
Chicago Forging & Manufacturing Co. (See Mears, N. A., and Hynes, assignors.)
Chidley, Alfred T., Arlington Heights, assignor to Union Special Machine Company, Chicago, Ill. Presser foot for sewing machines. 1,820,438; Aug. 25.
Christensen, Holger C., Waukegan, Ill. Window construction. 1,820,346; Aug. 25.
Christian, George B. (See Hankins, C., and Christian.)
Christians, George W., Chattanooga, Tenn. Apparatus for sealing crevices in rock formations or the like. 1,820,347; Aug. 25.
Church, Harold D., assignor to The White Motor Company, Cleveland, Ohio. Valve actuating mechanism. 1,820,299; Aug. 25.
Church, Robert J. G., Detroit, Mich. Toothbrush. 1,820,439; Aug. 25.
Cincinnati Milling Machine Company, The. (See Ernst, Hans, assignor.)
Claar, Harry Watson, assignor to Deere & Company, Moline, Ill. Lime spreading attachment for manure spreaders. 1,820,528; Aug. 25.
Clarke, Charles J., Kingsburg, Calif. Fishing reel. 1,820,781; Aug. 25.
Clarke, Frank L., et al., executors. (See Cogswell, Leander A.)
Claude Neon Lights, Inc. (See Smalley, Robert C., assignor.)
Cleveland, Charles H., assignor of one-third to C. A. Heine, and one-third to J. T. Allison, Minneapolis, Minn. Lock ring. 1,820,268; Aug. 25.
Clifford, Roger W. (See Blunt, J. G., and Clifford.)
Clifford, Roger W., Schenectady, N. Y. Whistle. 1,820,538. Aug. 25.
Climenson, William W., Honey Brook, Pa. Crayon or pencil holder. 1,820,782; Aug. 25.
Coffing, Fredrick W., Perrysville, Ind. Chain jack. 1,820,894; Aug. 25.
Cogley, William H., Greenacres, Wash. Water gate. 1,820,441; Aug. 25.
Cogswell, Edward M., et al., executors. (See Cogswell, Leander A.)
Cogswell, Leander A., deceased; E. M. Cogswell, Henniker, A. M. Heard, and F. L. Clarke, Manchester, N. H., executors, assignors to Lacene Manufacturing Company, Manchester, N. H. Grading machine. 1,820,010; Aug. 25.
Coleman, John P., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway interlocking apparatus. 1,820,049; Aug. 25.
Collins, John N., York, Pa., assignor to The Shirtcraft Co. Inc., New York, N. Y. Collar. Re18,161; Aug. 25.
Collins, Justus, Charleston, W. Va. Tire gauge valve. 1,820,120; Aug. 25.
Colorfuse Limited. (See Cox, Samuel J., assignor.)
Colwell, Zack, Niles, Ohio. Manufacturing ingots. 1,820,597; Aug. 25.
Compagnies Reunis Des Glaces & Verres Speciaux Du Nord De La France. (See Despret, Georges P., assignor.)
Conard, Frederick U., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Forming type-bar guides. 1,820,440; Aug. 25.
Condit Electrical Manufacturing Company. (See Wood, Joseph D., assignor.)
Continental Can Company. (See O'Neil, James H., assignor.)
Continental-Diamond Fibre Company. (See McIntosh, James, assignor.)
Continental Motors Corporation. (See Niven, Archie M., assignor.)
Continental Motors Corporation. (See Sampson, Frederick W., assignor.)
Cook, Ell. (See Wells, C. M., and Cook.)
Cooper, Charles, assignor to W. C. Holmes and Company, Limited, Huddersfield, England. Drying of gases. 1,820,121; Aug. 25.
Cooper, Henry W., West Newton, assignor to New England Mica Co., Waltham, Mass. Apparatus for making reinforced washers for commutator rings. 1,820,181; Aug. 25.
Cooper, Henry W., West Newton, assignor to New England Mica Co., Waltham, Mass. Apparatus for producing laminated mica washers. 1,820,182; Aug. 25.
Cooper, Herbert, Brooklyn, N. Y. Power transmission mechanism. 1,820,442; Aug. 25.
Cooper, James W., Haddon Heights, N. J. Snow shovel. 1,820,692; Aug. 25.
Cornillat, Joseph M. H., Paris, France. Manufacture of zinc white. 1,820,598; Aug. 25.
Corson, John E. (See Beeson, Joseph W., assignor.)
Corwin, Harley G., G. D. Blair, and C. W. Gilman, Los Angeles, Calif. Adjustable lighting fixture for mirrors. 1,820,348; Aug. 25.
Couch, Glenn F., Rochester, assignor to The Gould Coupler Company, New York, N. Y. Brake hanger bracket. 1,820,443; Aug. 25.
Cowdery, Arthur B., Needham, Mass., assignor to The Barrett Company. Pigment and producing the same. 1,820,444; Aug. 25.
Cox, Samuel J., assignor to Colorfuse Limited, London, England. Transfer of color designs to fibrous materials. 1,820,559; Aug. 25.
Craft, Kenneth D., Whites, Wash. Shingle shake machine. 1,820,445; Aug. 25.
Craig, Alvin M., New Haven, Conn., assignor to Universal Gear Shift Corporation. Pneumatic gear shift. 1,820,269; Aug. 25.
Craighead, Thomas G., Seattle, Wash. Necktie. 1,820,876; Aug. 25.
Cramblet, Paul K., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch. 1,820,300; Aug. 25.
Crandall, Delmer F., Seattle, Wash. Adjustable piston. 1,820,446; Aug. 25.
Crawford, William R., assignor to Blue Ridge Glass Corporation, Kingsport, Tenn. Sheet glass. Des. 84,923; Aug. 25.
Creed and Company. (See Salmon, Reginald D., assignor.)
Crehore, Robbins B., assignor to Hacker Manufacturing Co., Chicago, Ill. Method of and apparatus for marking objects. 1,820,880; Aug. 25.
Cross, Walter M., Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Heat exchanger. 1,820,349; Aug. 25.
Crowder, Havy Q. R., Chicago, Ill. Transfer sheet and making same. 1,820,867; Aug. 25.
Crowell, Charles H., Fairville, Pa. Gummed cloth. 1,820,050; Aug. 25.
Crowell, Charles H., Bellefonte, Del. Making fiber filled woven fabric. 1,820,122; Aug. 25.
Crowfoot, Arthur. (See Ayer, F., and Crowfoot.)
Crown Cork & Seal Company. (See Weisenburg, Andrew, assignor.)
Curry, Benjamin W., Visalia, Calif. Height measuring device. 1,820,447; Aug. 25.
Curtis, Edward W., Jamestown, N. Y. Sanding machine. 1,820,377; Aug. 25.
Cushing, George H., Washington, D. C. Theater illumination device. 1,820,599; Aug. 25.
Cycletow Corporation. (See Hess, Albert L., assignor.)
Cyzon, Leon, Wichita Falls, assignor of one-half to W. D. Keith, Burkburnett, Tex. Time calculating and wage computing machine. 1,820,878; Aug. 25.
Dainow, Max, West New York, N. J. Motion picture rewinding mechanism. 1,820,731; Aug. 25.
Da-Lite Screen Company. (See Heck, John T., assignor.)
Dallerup, John R., assignor to Reed Roller Bit Company, Houston, Tex. Drill cutter mounting. 1,820,379; Aug. 25.
Dance, Clifford C., assignor to Dance Suction Sweeper Company, Denver, Colo. Vacuum cleaner. 1,820,350; Aug. 25.
Dance Suction Sweeper Company. (See Dance, Clifford C., assignor.)
Darling, J. Frank, Wilmington, Del. Scouring device. 1,820,183; Aug. 25.
Darrieus, Georges J. M., assignor to Société Anonyme Pour L'Exploitation Des Procédés Maurice Leblanc-Vickers, Paris, France. Wind motor. 1,820,529; Aug. 25.
Daumling, Walter C. (See Miner, F. M., jr., and Daumling.)
Davey Development Company. (See Davey, Paul H., assignor.)
Davey, Paul H., assignor to Davey Development Company, Kent, Ohio. Compressor. 1,820,732; Aug. 25.
Davies, Henry R., Valley Cottage, N. Y., assignor, by mesne assignments, to The Tillotson Manufacturing Company, Toledo, Ohio. Air cleaner. 1,820,530; Aug. 25.
Davis, Anthony E., Philadelphia, Pa. Wall radiator support. 1,820,560; Aug. 25.
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine (pressure adjusting means). 1,820,011; Aug. 25.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Motion transmitting mechanism. 1,820,051; Aug. 25.
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Operating mechanism for pressing machines. 1,820,052; Aug. 25.
Davis & Furber Machine Company. (See Dutton, William A., assignor.)
Davis, Roy J., and G. E. Watts, Portland, Oreg. Aeroplane hatch coaming. 1,820,053; Aug. 25.
Davis, William H. H., San Francisco, Calif. Protector. 1,820,783; Aug. 25.
Davy, Lynden N., Butte, Mont. Fan blade. 1,820,448; Aug. 25.
Day, Edmund L., Westline, Pa. Destructive distillation apparatus. 1,820,600; Aug. 25.

De Boer, Rudolph. (See Harding, J. V., and De Boer.)
Deckman, Robert C. (See Tellier, E. H., and Deckman.)
Deere & Company. (See Claar, Harry, assignor.)
Deere & Company. (See Paul, William L., assignor.)
Delamere, Rudolf D., Toronto, Ontario, assignor to Delamere and Williams, Toronto, Canada. Cutting plastic substances. 1,820,301; Aug. 25.
Delamere and Williams. (See Delamere, Rudolf D., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delco-Remy Corporation. (See Shippy, Leo C., assignor.)
Delco-Remy Corporation. (See Wilson, Charles E., assignor.)
De Liso, Vincent, Astoria, N. Y., assignor to Saks & Co., New York, N. Y. Shoe. Des. 84,924; Aug. 25.
Deming, William L., Salem, Ohio. Writing pad support. 1,820,184; Aug. 25.
De Orlow Products Corporation. (See De Orlow, Stephen, assignor.)
De Orlow, Stephen, assignor to De Orlow Products Corporation, Lansing, Mich. Skate. 1,820,302; Aug. 25.
De Penning, John C., Portland, Oreg. Iron holder. 1,820,270; Aug. 25.
Despret, Georges P., Paris, assignor to Compagnies Reunis Des Glaces & Verres Speciaux Du Nord De La France, Boussois-Sur-Sambre, Nord, France. Wind screen and glazing for motor and other vehicles. 1,820,601; Aug. 25.
Detrick, M. H., Company. (See Hosbein, Louis H., assignor.)
Deutsche Gesellschaft Fuer Schaedlingsbekaempfung m. b. H. (See Lingler, Johann, assignor.)
Devol, Arthur E., assignor of one-half to Edward Hartwig, Tinley Park, Ill. Window sash snubber. 1,820,784; Aug. 25.
Dick, Talbert M., Des Moines, Iowa. Face mask or the like. 1,820,602; Aug. 25.
Dickerson, James B. (See Ries, L. B., and Dickerson.)
Dickey, Granville S. (See Braeutigan, H. P., and Dickey.)
Dickey, Granville S., Dayton, Ohio., assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,820,012; Aug. 25.
Dickson, Oscar A., Tucson, Ariz. Switch point construction. 1,820,603; Aug. 25.
Diehl Manufacturing Company. (See Peets, Wilbur J., assignor.)
Dietert, Rudolph H., Ridgewood, N. J., assignor to Atlantic, Gulf and Pacific Company. Spud and spud-point. 1,820,881; Aug. 25.
Dimmick, Glenn L., Scotia, N. Y., assignor to General Electric Company. Oscillograph galvanometer. 1,820,785; Aug. 25.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Light guard for motion picture projection machines. 1,820,054; Aug. 25.
Ditto Inc. (See Pederson, John P., assignor.)
Divoky, Thomas E., Western, Nebr. Grain beater sieve. 1,820,055; Aug. 25.
Dixon, Elizabeth W. (See Bombard, J. A., and Rogers, assignors.)
Dixon, Paul, assignor to J. P. Stevens Engraving Co., Atlanta, Ga. Sheet of writing paper. Des. 84,925; Aug. 25.
Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriter. Des. 84,926; Aug. 25.
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Braking system. 1,820,604; Aug. 25.
Dodge, Prestel O., Denver, Colo. Deckle edging device. 1,820,308; Aug. 25.
Doehler Die-Casting Co. (See Morin, Louis H., assignor.)
Doherty Research Company. (See Lyons, Henry N., assignor.)
Doherty Research Company. (See Wyckoff, George H., assignor.)
Donovan, John J., Bronx, N. Y. Partition. 1,820,123; Aug. 25.
Dorogi, Dr., Es Tarsa Gummigyár R. T. (See Dorogi, Istvan, and L., assignors.)
Dorogi, Istvan and L., Budapest, assignors to Dr. Dorogi Es Tarsa Gummigyár R. T., Budapest-Albertfalva, Hungary. Rubber ball. 1,820,124; Aug. 25.
Dorogi, Lajos. (See Dorogi, Istvan and L.)
Dover, Samuel M., Chicago, Ill. Signaling device. 1,820,605; Aug. 25.
Dow Chemical Company, The. (See Hunter, Ralph M., assignor.)
Draper Corporation. (See Nichols, Edward C., assignor.)
Dreisbach, Charles A., New Haven, Conn. Adjustable reel for strip material, etc. 1,820,693; Aug. 25.
Drowns, Irvin, assignor to The Timken Roller Bearing Company, Canton, Ohio. Boring tool holder. 1,820,056; Aug. 25.
Dubbs, Carbon P., assignor to Universal Oil Products Company, Chicago, Ill. Converting hydrocarbons. 1,820,057; Aug. 25.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for treating oils. 1,820,125; Aug. 25.
Dulany, G. W., Trust, The. (See Page, C. B., and Kalk, assignors.)
Duncan Arthur L., Piedmont, Calif., assignor to Acme Canning Machines Company, Reno, Nev. Paring apparatus. 1,820,351; Aug. 25.
Dunlop, Henry J. L., Blundellsands, and A. J. Sibbald, Wallasey, England. Machine for expressing liquid from solids. 1,820,126; Aug. 25.
Du Pont Ammonia Corporation. (See Williams, Roger, assignor.)
Du Pont, E. I., de Nemours & Company. (See Martone, Thomas A., assignor.)
Durant, John D., Detroit, Mich., assignor to The Gabriel Company, Cleveland, Ohio. Lamp mounting and clamp. 1,820,651; Aug. 25.
Dutton, Orlie W., assignor of one-half to H. E. Thomas, Dodge Center, Minn. Antiskid device. 1,820,449; Aug. 25.
Dutton, William A., Lawrence, assignor to Davis & Furber Machine Company, North Andover, Mass. Hand card. 1,820,380; Aug. 25.
Eagle Foundry Company. (See Lemme, Alvin H. L., assignor)
Earle Anti-Freeze Valve Corporation. (See Milone, Samuel, assignor.)
Easterwood, Henry W., Nashville, Tenn., assignor to Victor Chemical Works. Production of phosphorus in volatilization furnaces. 1,820,606; Aug. 25.
Eaton, John, Schenectady, N. Y., assignor to General Electric Company. Motor control system. 1,820,786; Aug. 25.
Eavenson, Howard N., Pittsburgh, Pa. Apparatus for taking samples of coal and the like. 1,820,381; Aug. 25.
Ebel, William K., Cleveland, and L. C. Milburn, Wickliffe, assignors to The Glenn L. Martin Company, Cleveland, Ohio. Adjustable stabilizer and fin. 1,820,271; Aug. 25.
Eberhardt, Hermann W., and K. Friedlmaier, Columbus, Ohio. Water power plant. 1,820,652; Aug. 25.
Eclipse Machine Company. (See McGrath, William L., assignor.)
Eclipse Machine Company. (See Ringwald, Clarence, assignor.)
Economy Housing Co. (See Rowles, Walter M., assignor.)
Edelson, Leon, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Latch mechanism. 1,820,058; Aug. 25.
Egry Register Company, The. (See Neth, George J., assignor.)
Electro Dynamic Company. (See Engelhardt, Karl, assignor.)
Electro-Mobile Corporation. (See Neuland, Alfons H., assignor.)
Elkington, Vivian, St. Margarets Bay, England. Manhole cover and frame and the like. 1,820,127; Aug. 25.
Elkins, William M. (See Longnecker, M., and Elkins.)
Ellis, George H., St. Paul, assignor to The Insulite Company, Minneapolis, Minn. Refrigerator. 1,820,304; Aug. 25.
Ellis, Lockwood B., assignor to General Motors Corporation, Detroit, Mich. Oil filtering and lubricating system. 1,820,382; Aug. 25.
Else, Harry D., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Short circuiting device. 1,820,694; Aug. 25.
Elze, Walter C., Forest Hills, assignor to Hauck Manufacturing Company, Brooklyn, N. Y. Portable torch. 1,820,383; Aug. 25.
Emsco Derrick & Equipment Company. (See Rawson, Leslie A., assignor.)
Engel, Edwin F., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Apparatus for washing barrels. 1,820,608; Aug. 25.
Engelhardt, Karl, Kenilworth, assignor to Electro Dynamic Company, Bayonne, N. J. Dynamo electric machine construction. 1,820,531; Aug. 25.
Engelhardt, Rudolf, Leverkusen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Nonirritating composition containing organic compounds which irritate the skin. 1,820,607; Aug. 25.
Engstrom, Ernest P., assignor to The McNeil Boiler Company, Akron, Ohio. Traction device. 1,820,695; Aug. 25.
Engstrom, Ernest P., assignor to The McNeil Boiler Company, Akron, Ohio. Tractor band. 1,820,882; Aug. 25.
Enochs, Clifford I., Ardmore, Pa. Memorial stone for graves. Des. 84,927; Aug. 25.
Enochs, Clifford I., Ardmore, Pa. Memorial stone for graves. Des. 84,928; Aug. 25.
Enterprise Manufacturing Company, The. (See Pfueger, Charles T., assignor.)
Epstein, Benjamin B., Brooklyn, assignor to The Lees Manufacturing Company, New York, N. Y. Tie cord. 1,820,868; Aug. 25.
Erikson, Peter S., Chicago, Ill. Bucket elevator. 1,820,609; Aug. 25.
Ernst, Hans, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Hydraulic valve. 1,820,653; Aug. 25.
Essex, Carl C., assignor to Pierce Governor Company, Anderson, Ind. Automatic governor. 1,820,384; Aug. 25.

Estate Stove Company, The. (See Kahn, Bertrand B., assignor.)
Ethridge, Roy J., San Antonio, Tex. Protractor. 1,820,128; Aug. 25.
Eugene Dietzgen Company. (See Langsner, Adolph, assignor.)
Evans, Allen J., and R. T. Raines, Atlanta, Ga.; said Evans assignor to said Raines. Automatic powder brush. 1,820,787; Aug. 25.
Evers, William H., Rutherford, assignor to General Aviation Corporation, Teterboro, Hasbrouck Heights, N. J. Fastening device. 1,820,869; Aug. 25.
Eves, Parvin B., Whitewater, Wis. Milk strainer. 1,820,610; Aug. 25.
Fabian, Vincent J., Washington, D. C. Radio apparatus. 1,820,059; Aug. 25.
Fahlman, Duncan J., assignor to Buhl Stamping Company, Detroit, Mich. Milk can and forming same. 1,820,733; Aug. 25.
Failing, Flora A., Scarsdale, N. Y. Automobile identification device. 1,820,788; Aug. 25.
Falkovitz, Morris, Philadelphia, Pa. Pocket construction for trousers. Re18,171; Aug. 25.
Farmer, Chester J., Chicago, Ill. Support for laboratory appliances. 1,820,305; Aug. 25.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,820,013; Aug. 25.
Farmer, George C., Chicago, Ill., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Sound producer. 1,820,129; Aug. 25.
Farquhar, Joseph W., Philadelphia, Pa., and W. Hensel, Merchantville, N. J., said Hensel assignor to H. W. Buterworth & Sons Company. Dyeing machine. 1,820,385; Aug. 25.
Farrand, Hiram A., Inc. (See Farrand, Hiram A., assignor.)
Farrand, Hiram A., assignor to Hiram A. Farrand, Inc., Berlin, N. H. Coiling concavo-convex springs. 1,820,789; Aug. 25.
Farrel Birmingham Company. (See Bowen, David R., assignor.)
Federal Telegraph Company. (See Barone, Salvatore A., assignor.)
Federal Telegraph Company. (See Kruesi, Geoffrey G., assignor.)
Feezer, Clarence H., Gilgore, Nebr. Strainer and sediment bowl for gasoline tanks. 1,820,790; Aug. 25.
Feldkamp, Frederick A., Newark, N. J., assignor to E. C. White, New York, N. Y. Clock mechanism. 1,820,886; Aug. 25.
Feldmann, Wilhelm, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Gas purifying plant. 1,820,734; Aug. 25.
Fellroth, Erick O., Minneapolis, assignor to Martin Brothers Company, Minneapolis, Minn. Overall. 1,820,532; Aug. 25.
Fenton, Herbert W., Dowagiac, Mich. Twine cutter. 1,820,014; Aug. 25.
Fenton, Paul E., Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn. Resilient button loop. 1,820,450; Aug. 25.
Ferguson, James, San Francisco, Calif. Time switch. 1,820,306; Aug. 25.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Turnbuckle. 1,820,216; Aug. 25.
Fetters, Arthur H., Omaha, Nebr., assignor to General Steel Castings Corporation, Granite City, Ill. Locomotive construction. 1,820,654; Aug. 25.
Figge, Carroll C., Chicago, Ill. Roof and shingle therefor. 1,820,015; Aug. 25.
Findlay, James T. (See Garver, Harold, assignor.)
Fireston Footwear Company. (See Peterson, Gunnard P., assignor.)
Firestone Tire and Rubber Company, The. (See Stevens, Horace D., assignor.)
Firth, Richard H., assignor to United Cigar Stores Company of America, New York, N. Y. Gas burner. 1,820,016; Aug. 25.
Fisch, James H. (See Babst, J. C., Fisch, and Bauer.)
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturng Company. Constructional material. 1,820,217; Aug. 25.
Fischer, Hellmut, Berlin-Friedenau, Germany, assignor, by mesne assignments, to Metal & Thermit Corporation, New York, N. Y. Obtaining beryllium compounds from beryllium bearing minerals. 1,820,655; Aug. 25.
Fischer, Howard L., assignor to Brown & Bigelow, St. Paul, Minn. Lead pusher for mechanical pencils. 1,820,130; Aug. 25.
Fischer, Howard L., assignor to Brown & Bigelow, St. Paul, Minn. Pocket lighter. 1,820,131; Aug. 25.
Fishel, Walter H. (See White, H. E., and Fishel.)
Fisher, R. Fenton. (See White, Ernest C., assignor.)
Fisher, William G., Redlands, Calif. Combined die and wheel remover. 1,820,870; Aug. 25.
Fitts, Charles F., et al., trustees. (See Miller, Frank W., assignor.)
Fitz Gerald, John W., Shorewood, assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Current supply device. 1,820,060; Aug. 25.
Fitzgerald Manufacturing Company, The. (See Fitzgerald, Patrick J., assignor.)
Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Anti-rattling device for automobile panes. 1,820,451; Aug. 25.
Fitzpatrick, Paul G. (See Smith, T. C., Spowart, and Fitzpatrick.)
Flagg, John H., Oradell, assignor to Watson-Flagg Machine Company, Paterson, N. J. Speed change unit. 1,820,061; Aug. 25.
Fleiter, Andrew J., assignor to The Akron Standard Mold Company, Akron, Ohio. Watchcase vulcanizer. 1,820,132; Aug. 25.
Fogel, Irene, and S. Shulkin, Los Angeles, Calif. Bathing suit. Des. 84,929; Aug. 25.
Foley, Charles B., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Filter. 1,820,533; Aug. 25.
Fonda Container Company. (See Toscano, Louis P., assignor.)
Ford, John L., assignor to Ford Meter Box Company, Wabash, Ind. Service line meter mounting. 1,820,650; Aug. 25.
Ford Meter Box Company. (See Ford, John L., assignor.)
Forney Combustion Engineering Company. (See Forney, Ross H., assignor.)
Forney, Ross H., assignor to Forney Combustion Engineering Company, Dallas, Tex. Steam atomizing oil burner. 1,820,352; Aug. 25.
Forrest, Robert J., Port Angeles, Wash. Angle indicator for aircraft. 1,820,791; Aug. 25.
Forshee, Frank F., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Support for electric heating units. 1,820,696; Aug. 25.
Foster Wheeler Corporation. (See Keenan, Walter F., jr., assignor.)
Foulks, Robert, assignor to The Timken Roller Bearing Company, Canton, Ohio. Removable bearing mounting. 1,820,017; Aug. 25.
Francis, Alfred W., Cambridge, Mass., assignor to Magnolia Petroleum Company, Galveston, Tex. Manufacture of carbon black. 1,820,657; Aug. 25.
Francotte, Jean R. P., Ixelles-Brussels, Belgium. Beacon for luminous signalization. 1,820,534; Aug. 26.
Frank, Benjamin M., and J. Basile, New York, assignors to Greenpoint Metallic Bed Co., Inc., Brooklyn, N. Y. Bed structure. 1,820,658; Aug. 25.
Frank, Paul A., Akron, Ohio. Safety razor. 1,820,218; Aug. 25.
Frantz Manufacturing Co. (See Ferris, William D., assignor.)
Fraser, Warren F., Westboro, Mass. Grinding machine. 1,820,735; Aug. 25.
Frederics, E., Inc. (See Frederics, Ernest O., assignor.)
Frederics, Ernest O., assignor to E. Frederics, Inc., New York, N. Y. Hair curling device. 1,820,387; Aug. 25.
Freeman, Benjamin W., Cincinnati, Ohio. Power drive for slides. Re18,162; Aug. 25.
French, Henry R., Rutherford, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Interlocking roofing. 1,820,888; Aug. 25.
Friedlmaier, Karl. (See Eberhardt, H. W., and Friedlmaier.)
Frigidaire Corporation. (See Braeutigam, H. P., and Dickey, assignors.)
Frigidaire Corporation. (See Dickey, Granville S., assignor.)
Frigidaire Corporation. (See Geller, Frederick C., assignor.)
Frigidaire Corporation. (See Hippee, Herndon P., assignor.)
Frigidaire Corporation. (See Neal, Duane R., assignor.)
Frigidaire Corporation. (See Reeves, Donald H., assignor.)
Fritsch, Paul. (See Berthold, R. G., and Fritsch.)
Fullemann, Gottfried. (See Steinbuch, E., and Fullemann.)
Funchess, Fred H., assignor to Budlong & Funchess Motor Products Co., Hanford, Calif. Regrooving tool. 1,820,792; Aug. 25.
Gabriel Company, The. (See Durant, John D., assignor.)
Gafney, James, New York, N. Y. Runway for airplanes. 1,820,062; Aug. 25.
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razors. 1,820,659; Aug. 25.
Gall, Douglas C., South Norwood, England. Optical pyrometer. 1,820,219; Aug. 25.
Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Percussive tool. 1,820,185; Aug. 25.
Garver, Harold, Merriam, assignor of one-half to J. T. Findley, Dickinson County, Kans. Toy basket ball game. Re18,163; Aug. 25.
Gaskill, Kenneth W., Cleveland, Ohio. Fluid operated gear-shifting mechanism. 1,820,452; Aug. 25.
Gaskins, Maude E., Arcadia, Fla. Bait holder. 1,820,186; Aug. 25.
Gasoline Products Company. (See Cross, Walter M., assignor.)
Gatewood, Ando Z., Temple, Okla. Wheel tightener. 1,820,793; Aug. 25.
Gay, Azel, assignor to Multipost Company, Rochester, N. Y. Stamp affixing machine. 1,820,697; Aug. 25.
Gaylord, Henry J., Syracuse, N. Y. Temporary binder for pamphlets and other folded articles. 1,820,736; Aug. 25.

Gaynor, James A., Brooklyn, N. Y. Recording means for readings of theodolites and the like. 1,820,187; Aug. 25.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Electrical measuring system. 1,820,018; Aug. 25.
Geller, Frederick C., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Pressure electric switch. 1,820,063; Aug. 25.
General Abrasive Company. See Richmond, H. A., and MacLaughlin, assignors.)
General Airmotors Company. (See Moore, Robert S., assignor.)
General Aniline Works, Inc. (See Heidenreich, R., Zerweck, and Honold, assignors.)
General Aniline Works, Inc. (See Kalischer, G., and Honold, assignors.)
General Aniline Works, Inc. (See Keller, F., and Schnitzspahn, assignors.)
General Aniline Works, Inc. (See Zeh, L., Kramer, and Bollweg, assignors.)
General Aniline Works, Inc. (See Zitscher, Arthur, and Schmitt, assignors.)
General Aviation Corporation. (See Evers, William H., assignor.)
General Electric Company. (See Dimmick, Glenn L., assignor.)
General Electric Company. (See Eaton, John, assignor.)
General Electric Company. (See Kellogg, Edward W., assignor.)
General Electric Company. (See Hough, Eugene L., assignor.)
General Electric Company. See Pinkerton, H. K., and Rhyndress, assignors.)
General Electric Company. (See Pirani, Marcello, assignor.)
General Electric Company. (See Ring, Andrew D., assignor.)
General Electric Company. See Searsley, William K., assignor.)
General Ice Scoring Machine Company. (See Komp, George, sr., assignor.)
General Motors Corporation. (See Beringer, Roscoe, assignor.)
General Motors Corporation. (See Ellis, Lockwood B., assignor.)
General Motors Corporation. (See Swan, Harry B., assignor.)
General Motors Research Corporation. (See Lee, Roger K., assignor.)
General Motors Research Corporation. (See Lovell, W. G., and Boyd, assignors.)
General Steel Castings Corporation. (See Fetters, Arthur H., assignor.)
General Water Heater Corporation. (See Kipper, Allen F., assignor.)
Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Von Bronk, O., and Rukop, assignors.)
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Resilient connecter. 1,820,133; Aug. 25.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Freezing container. 1,820,134; Aug. 25.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Steering wheel and shaft assembly. 1,820,220; Aug. 25.
Geyer, Harvey D., and F. W. Sampson, assignors to The Inland Manufacturing Company, Dayton, Ohio. Freezing tray. 1,820,221; Aug. 25.
Gifford-Wood Company. (See Birmann, Otto, assignor.)
Giguere, Rosario, Springfield, Mass., assignor of one-half to J. H. Wilson, Hartford, Conn. Bluing device. 1,820,794; Aug. 25.
Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)
Gilbert, Alfred C., Hamden, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Toy building construction. 1,820,660; Aug. 25.
Gilbert, Alfred C., Hamden, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Construction toy. 1,820,661; Aug. 25.
Gillen, George A., assignor to Gillen, Kinney, Baker Syndicate, New York, N. Y. Speaker. 1,820,561; Aug. 25.
Gillen, Kinney, Baker Syndicate. (See Gillen, George A., assignor.)
Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)
Gillette Safety Razor Company. (See Thompson, Ralph B., assignor.)
Gilman, Clarence W. (See Corwin, H. G., Blair, and Gilman.)
Glatthar, George E., Cleveland Heights, assignor to The Art Metal Company, Cleveland, Ohio. Electric light fixture. Des. 84,930; Aug. 25.
Glenn, Jay A., Hendersonville, N. C. Badge or similar article. Des. 84,931; Aug. 25.
Globe Machine & Stamping Company, The. (See Green, Lee B., assignor.)
Gold, Egbert H., deceased, Evanston, M. J. Gold and Biscayne Trust Company, executors, and E. A. Russell, said Russell assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Hose coupler. 1,820,535; Aug. 25.
Gold, Margaret J., et al., executors. (See Gold, E. H., and Russell.)
Goldman, Albert D., Baltimore, Md. Storage battery terminal. 1,820,611; Aug. 25.
Good Inventions Co. (See Good, J., and Olsen, assignors.)
Good, John, Garden City, and E. H. Olsen, assignors to Good Inventions Co., New York, N. Y. Liquid pumping apparatus. 1,820,612; Aug. 25.
Goodman, Joseph, New York, N. Y. Automatic ash truck loader. 1,820,698; Aug. 25.
Gordon, Ray F., and J. S. Gwaltney, Suffolk, Va. Air cleaner. 1,820,795; Aug. 25.
Gould Coupler Company, The. (See Couch, Glenn F., assignor.)
Graham, George A., Washington, D. C. Printing telegraphy. 1,820,737; Aug. 25.
Gray, William H., Parramatta, New South Wales, Australia. Aeroplane. 1,820,613; Aug. 25.
Green, Charles R., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Attaching upholstery. 1,820,064; Aug. 25.
Green, John P., Philadelphia, Pa. System of refrigeration. 1,820,453; Aug. 25.
Green, Lee B., Lakewood, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Grille or screen for automobile radiators. 1,820,614; Aug. 25.
Greenpoint Metallic Bed Co. (See Frank, B. M., and Basile, assignors.)
Greenewalt, Mary H., Philadelphia, Pa. Lighting appliance. 1,820,899; Aug. 25.
Grier Press, Incorporated. (See Wilcox, Robert A., assignor.)
Griggs, Stephen A. (See Blackmer, Robert M., assignor.)
Grigsby-Grunow Company. (See Bruton, Frank C., assignor.)
Grüss, Heinz, Berlin-Staaken, and K. Rau, Berlin-Charlottenburg, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Arrangement for the determination of resistances. 1,820,738; Aug. 25.
Gubitosi, James, Nutley, N. J. Radiocabinet. Des. 84,932; Aug. 25.
Guenther, Henry L., Los Angeles, Calif. Accelerating can feed. 1,820,562; Aug. 25.
Gumpper, Harold D., Detroit, Mich. Electric governor for automobiles. 1,820,272; Aug. 25.
Guy, Henry L., Hale, England, assignor to Westinghouse Electric & Manufacturing Company. Evaporator. 1,820,065; Aug. 25.
Guyatt, George H., Warwick Lane, London, assignor to John Walker & Company, Limited, London, England. File, temporary binder, loose leaf book, and the like. 1,820,222; Aug. 25.
Gwaltney, James S. (See Gordon, R. F., and Gwaltney.)
Gwynne, Joseph H., Warren, Ohio. Batcher. 1,820,615; Aug. 25.
Habenicht, Frederick K. (See Campbell, S. H., and Habenicht.)
Hacker Manufacturing Co. (See Crehore, Robbins B., assignor.)
Hackney Bros. Body Co. (See Jewell, George A., assignor.)
Hackney, William W., Fort Wayne, Ind., assignor to The Western Gas Construction Company. Gas distribution apparatus. 1,820,662; Aug. 25.
Haden, Elbridge G., Charlottesville, Va. Flush valve. 1,820,796; Aug. 25.
Hadley Company, The. (See Mealy, Charles A., assignor.)
Hahn, Carl. (See Bayha, H., Hahn, and Heymann.)
Hahnemann, Walter, Berlin-Marienfelde, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. High-frequency machine transmitter. 1,820,228; Aug. 25.
Hall, Charles G., assignor to Automatic Food Machinery Corporation, Boise, Idaho. Stacking machine. 1,820,563; Aug. 25.
Hall, C. M., Lamp Company. (See Bamford, Frank L., assignor.)
Hall, Charles G., assignor to Automatic Food Machinery Corporation, Boise, Idaho. Kitchen arrangement. 1,820,564; Aug. 25.
Halleck, Frank A., Michigan City, Ind., assignor to Sullivan Machinery Company. Forging machine. 1,820,188; Aug. 25.
Hamilton, George H., and E. W. Chapman, assignor to American Seating Company, Grand Rapids, Mich. Aisle light. 1,820,797; Aug. 25.
Hammers, William J., Grand Rapids, Mich. Electric water heater. Re18,160; Aug. 25.
Handley, George F., Glendale, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,820,066; Aug. 25.
Hankins, Cyrus, Washington, D. C., and G. B. Christian, Chevy Chase, Md., assignors to Wine Railway Appliance Company, Toledo, Ohio. Railway car. 1,820,136; Aug. 25.
Hanley, William, Mountain Home, Idaho. Sack holder. 1,820,135; Aug. 25.
Hann, William E., assignor, by mesne assignments, to The Lubricating Equipment Company, Detroit, Mich. Lubricating means. 1,820,616; Aug. 25.
Hanna, Richard W., Piedmont, assignor to Standard Oil Company of California, San Francisco, Calif. Treating hydrocarbon oils with metallic halides. 1,820,389; Aug. 25.

Hanna, Richard W., Piedmont, assignor to Standard Oil Company of California, San Francisco, Calif. Treating hydrocarbon oil with metallic halides. 1,820,390; Aug. 25.

Hanna, Wylie J., Bayside, N. Y. Maximum range radio loud speaker. 1,820,137; Aug. 25.

Hansen, Carl H., Portland, Conn. Window sash. 1,820,273; Aug. 25.

Harban, Steven J., Riverside, Calif. Orchard heater. 1,820,067; Aug. 25.

Harder, William T. (See Winship, Benjamin W., and Harder.)

Harding, John V., Detroit, and R. De Boer, assignors to Metalcraft Heater Corporation, Grand Rapids, Mich. Hot water heater for automobiles. 1,820,454; Aug. 25.

Hargis, Andrew B., Jellico, Tenn. Automatic drain valve. 1,820,138; Aug. 25.

Harrington, Norman T., assignor to The Simplex Piston Ring Company of America, Inc., Cleveland, Ohio. Piston ring. 1,820,353; Aug. 25.

Harrison Radiator Corporation. (See White, James A., assignor.)

Hart Glass Manufacturing Company. (See McDonald, Harry R., assignor.)

Hart, Harry S., et al., trustees. (See Miller, Frank W., assignor.)

Hartford-Empire Company. (See Raeder, Johan K. B., assignor.)

Hartford-Empire Company. (See Wardley, Thomas, assignor.)

Hartman, Harry F., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Brushholder. 1,820,699; Aug. 25.

Hartman, William W., Los Angeles, Calif. Stabilizer. 1,820,391; Aug. 25.

Hartsook-Rennick, Inc. (See Rennick, Lyle S., assignor.)

Hartwig, Edward. (See Devol, Arthur E., assignor.)

Hatch, Charles T., assignor to Union Steel Products Company, Albion, Mich. Structural element. 1,820,700; Aug. 25.

Hauck Manufacturing Company. (See Elze, Walter C., assignor.)

Havener, Arthur R., Wayland, assignor to Judson L. Thomson Manufacturing Co., Waltham, Mass. Holder and carrier for a riveting machine. 1,820,224; Aug. 25.

Hawkins, Thomas W., Ruabon, Wales. Machine for washing wool and other fibrous material. 1,820,798; Aug. 25.

Hazlett, Raymond R., and W. J. Alexander, Linden, N. J. Electric soldering iron. 1,820,799; Aug. 25.

Heard, Arthur M., et al., executors. (See Cogswell, Leander A.)

Heather, George B., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Button loop. 1,820,068; Aug. 25.

Heck, John. (See Vogt, H., and Heck.)

Heck, John T., assignor, by mesne assignments, to Da-Lite Screen Company, Inc., Chicago, Ill. Motion picture screen frame. 1,820,739; Aug. 25.

Heckman, George T., Cleveland, Ohio. Paddle wheel. 1,820,307; Aug. 25.

Heidenreich, Rudolf, Leverkusen-on-the-Rhine, W. Zerweck, and E. Honold, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Compounds of the anthanthrone series. 1,820,019; Aug. 25.

Heine, Charles A., et al. (See Cleveland, Charles H., assignor.)

Helander, Lillian V. M., assignor to Oneida Community Limited, Oneida, N. Y. Spoon or similar article. Des. 84,933; Aug. 25.

Hempel, Albert, Leipzig-Oetzsch, Germany. Manufacture of phenols. 1,720,274; Aug. 25.

Hemphill Company. (See Taubel, Clarence H., assignor.)

Henrard, Fernand, Brussels, assignor to Societe Anonyme Ecremeuses Melotte, Remicourt, Belgium. Straining milk and a strainer for separating machines. 1,820,800; Aug. 25.

Hensel, Walter. (See Farquhar, J. W., and Hensel.)

Hercules Powder Company. (See Bent, L. N., and Johnston, assignors.)

Hercules Powder Company. (See Butts, Durain C., assignor.)

Herlinger, Harold V. (See Beebe, M. C., and Herlinger.)

Herr, Frank E., Lancaster, Pa. Oil burner. 1,820,801; Aug. 25.

Herr, Herbert T., Philadelphia, Pa., assignor to Westinghouse Electric and Manufacturing Company. Refrigerator. Re18,168; Aug. 25.

Herr, Herbert T., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Manufacturing an engine cylinder. 1,820,069; Aug. 25.

Herr, Herbert T., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Reduction gear with dynamometer. 1,820,740; Aug. 25.

Herzberg, Max, assignor, by mesne assignments, to Pictorial Review Company, New York, N. Y. Pattern set. 1,820,225; Aug. 25.

Hess, Albert L., assignor to Cycletow Corporation, Ltd., Los Angeles, Calif. Towable cycle. 1,820,189; Aug. 25.

Hess, Albert L., assignor to Cycletow Corporation, Ltd., Los Angeles, Calif. Auxiliary wheel attachment for cycles. 1,820,190; Aug. 25.

Hess, Francis M., Chicago, Ill. Dephlegmating apparatus for distilling plants. 1,820,741; Aug. 25.

Hetherington, George V., Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company. Binding post for electrical instruments. 1,820,701; Aug. 25.

Hewitt, Edward R., Midvale, N. J., assignor to International Motor Company, New York, N. Y. Fan. 1,820,742; Aug. 25.

Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Pipe coupling. 1,820,020; Aug. 25.

Heymann, Oscar. (See Bayha, H., Hahn, and Heymann.)

Hill, Harry H., assignor of one-half to G. Lipman, Chicago, Ill. Bird-cage food-holder. 1,820,802; Aug. 25.

Hines, John, Astoria, assignor to Segal Lock & Hardware Co. Inc., New York, N. Y. Lock. 1,820,565; Aug. 25.

Hippee, Herndon P., deceased, Des Moines, Iowa; M. B. Hippee, administratrix, assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerator. 1,820,070; Aug. 25.

Hippee, Marguerite B., administratrix. (See Hippee, Herndon P.)

Hirner, Emil A., Allentown, Pa. Wringer. 1,820,308; Aug. 25.

Hobart Manufacturing Company, The. (See Rataiczak, Thomas F., assignor.)

Hoch, Otto M., assignor to M. D. Knowlton Company, Rochester, N. Y. Trip mechanism for sheet cutting machines. 1,820,021; Aug. 25.

Hodge, David, Centralia, assignor to Safety Mining Company, Chicago, Ill. Blasting device. 1,820,566; Aug. 25.

Hodgkins, Charles H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electromagnetic switch. 1,820,702; Aug. 25.

Hoeft, Adolph R., Evanston, Ill., assignor to Hoeft & Company, Inc., North Chicago, Ill. Poultry feeder. 1,820,071; Aug. 25.

Hoeft & Company. (See Hoeft, Adolph R., assignor.)

Holbrook, Charles. (See Pardue, G. P., and Holbrook.)

Holmberg, Edward P., Oklahoma City, Okla. Game apparatus. 1,820,617; Aug. 25.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Haulage mechanism. 1,820,191; Aug. 25.

Holmes, W. C., and Company Limited. (See Cooper, Charles, assignor.)

Holt, Joseph P., Merion, assignor to Aberfoyle Manufacturing Company, Chester, Pa. Treating yarn. 1,820,663; Aug. 25.

Honold, Ernst. (See Heidenreich, R., Zerweck, and Honold.)

Honold, Ernst. (See Kalischer, G., and Honold.)

Honstain, Vernon G., Minneapolis, Minn. Creeper for tractor belts. 1,820,743; Aug. 25.

Hooey, William C., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Treatment of zinc-bearing material. 1,820,455; Aug. 25.

Hopwood, John M. (See Peebles, Thomas A., assignor.)

Horton, Erwin C. (See Hueber, H., and Horton.)

Hosbein, Louis H., Winnetka, assignor to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,820,664; Aug. 25.

Hotchner, Fred, Los Angeles, Calif. Discharge tube electrode. 1,820,392; Aug. 25.

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Container closure. 1,820,192; Aug. 25.

Hough, Eugene L., St. Louis, Mo., assignor to General Electric Company. Method of and apparatus for starting alternating current motors. 1,820,803; Aug. 25.

Houzenga, George, Phoenix, Ariz. Indoor table golf course. 1,820,618; Aug. 25.

Hubbell, Harvey, Incorporated. (See Hubbell, Harvey, jr., assignor.)

Hubbell, Harvey, jr., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn. Device for rolling screw threads. 1,820,193; Aug. 25.

Huber, Fritz, Mannheim, assignor to Heinrich Lanz Aktiengesellschaft, Mannheim, Germany. Sparking device. 1,820,858; Aug. 25.

Hübl, Franz, Warnsdorf, Czechoslovakia. Process of and arrangement for performing mechanical work. 1,820,619; Aug. 25.

Hudson Motor Car Company. (See Toncray, Millard H. assignor.)

Hueber, Henry, assignor to Trico Products Corporation, Buffalo, N. Y. Pump. 1,820,883; Aug. 25.

Hueber, Henry, Buffalo, and E. C. Horton, Hamburg, assignors to Trico Products Corporation, Buffalo, N. Y. Suction intensifier. 1,820,884; Aug. 25.

Huebner, William C., Chicago, Ill. Process of and apparatus for printing. 1,820,194; Aug. 25.

Huestis, Thomas B. (See Luce, G. E., and Huestis.)

Huffman, Charles E., Sutton, Nebr. Box closure. 1,820,804; Aug. 25.

Hughes, Horace R., Alcester, England. Reservoir pen. 1,820,226; Aug. 25.

Hughes, James R., South Bend, Ind. Combined fender and lamp casing for vehicles. Des. 84,934; Aug. 25.

Hume, Walter R., Melbourne, Victoria, Australia. Electric welding machine. 1,820,130; Aug. 25.

Hungerford, Wallace R., assignor, by mesne assignments, to L. D. Woodruff, Chicago, Ill. Coupling mechanism. 1,820,703; Aug. 25.

Hunter, Percy E., Pittsburgh, Pa. Pipe thread protector. 1,820,140; Aug. 25.

Hunter, Ralph M., assignor to The Dow Chemical Company, Midland, Mich. Producing substantially pure metallic magnesium directly by electrolysis of a fused bath. 1,820,022; Aug. 25.

Huntley, Ernest R., Milwaukee, Wis., assignor to Industrial Research Corporation, Toledo, Ohio. Starter mechanism. 1,820,536; Aug. 25.

Hupp Motor Car Corporation. (See Punke, John J., assignor.)

Hynes, Dibrell P. (See Mears, N. A., and Hynes.)

Hynes, Dibrell P., and E. R. Johnson, assignors to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,820,663; Aug. 25.

I. G. Farbenindustrie Aktiengesellschaft. (See Engelhardt, Rudolf, assignor.)

Ichio, Tatsuo H., San Francisco, Calif. Vehicle signalling window. 1,820,456; Aug. 25.

Impactgraph Corporation. (See Baskerville, John B., assignor.)

Indiana Lamp Corporation. (See Neuner, Frederick W. C., assignor.)

Industrial Development Corporation. (See Wilkins, Richard A., assignor.)

Industrial Furnace Corporation. (See Breaker, Harry O., assignor.)

Industrial Patents Corporation. (See Yoder, Benjamin H., assignor.)

Industrial Research Corporation. (See Huntley, Ernest R., assignor.)

Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)

Inland Glass Works, Inc. (See Alfen, Joseph H., assignor.)

Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)

Inland Manufacturing Company, The. (See Geyer, H. D., and Sampson, assignors.)

Insulite Company, The. (See Ellis, George H., assignor.)

International Motor Company. (See Anderson, Robert G., assignor.)

International Motor Company. (See Hewitt, Edward R., assignor.)

International Motor Company. (See Loeffler, Bruno, assignor.)

International Motor Company. (See Masury, Alfred F., assignor.)

International Motor Company. (See Matthews, Philip E., assignor.)

International Projector Corporation. (See Dina, Augusto, assignor.)

International Standard Electric Corporation. (See Stevens, C. E., and Mamor, assignors.)

Ischinger, Alfred E., Reading, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 84,935; Aug. 25.

Ischinger, Alfred E., Reading, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 84,936; Aug. 25.

Ischinger, Alfred E., Reading, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 84,937; Aug. 25.

Ischinger, Alfred E., Reading, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 84,938; Aug. 25.

Ives, Edward L., Chicago, Ill., assignor, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa. Preparing or remelting wrought iron slag. 1,820,179; Aug. 25.

Jackson, Byron, Co. (See Smith, Nelson K., assignor.)

Jakopec, George, J. F. Salley, and V. Schwartz, Chicago, Ill. Burglar alarm. 1,820,805; Aug. 25.

Jamieson, C. E., & Company. (See Russell, J. L., and Melton, assignors.)

Janda, Joseph, Brooklyn, N. Y. Saw-frame. 1,820,457; Aug. 25.

Janssen, Henry, assignor to Textile Machine Works, Wyomissing, Pa. Ash receiver. Des. 84,939; Aug. 25.

Jeffrey Manufacturing Company, The. (See Richardson, Conley W., assignor.)

Jenkins, Frederick A. E., Canterbury, near Sydney, Australia. Electrical water heater. 1,820,458; Aug. 25.

Jennings, Oliver S., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,820,704; Aug. 25.

Jessup, Alfred C., Clamart, France, assignor to British Maxlum Company Limited, London, England. Purification of metals. 1,820,141; Aug. 25.

Jewell, George A., Wilson, N. C., assignor to Hackney Bros. Body Co. Refrigerating apparatus. 1,820,806; Aug. 25.

Johnson, Clarence G., Detroit, Mich. Garage door. 1,820,195; Aug. 25.

Johnson, Clarence G., Hartford City, Ind. Roller device and track. 1,820,459; Aug. 25.

Johnson, Elmer R. (See Hynes, D. P., and Johnson.)

Johnston, Alan C. (See Bent, L. N., and Johnston.)

Johnstone, Robert M., Short Hills, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y. Slitting device. 1,820,142; Aug. 25.

Jones, Charles H., Philadelphia, Pa., assignor to Union Special Machine Company, Chicago, Ill. Presser foot for serving machines. 1,820,460; Aug. 25.

Jones, Clarence W., Philadelphia, Pa. Holder for safety razor blades when sharpening the same. 1,820,666; Aug. 25.

Jones, Homer W., Elmhurst, N. Y., assignor to National Carbon Company, Inc. Focusing flash light. 1,820,620; Aug. 25.

Jones, Llewellyn J. W., Tacoma, assignor to J. F. O'Brien, Seattle, Wash. Explosive. 1,820,567; Aug. 25.

Jones, Llewellyn J. W., Tacoma, assignor to J. F. O'Brien, Seattle, Wash. Explosive. 1,820,568; Aug. 25.

Jones, Russell E., Lebanon, Pa. Steam boiler. 1,820,807; Aug. 25.

Joyce, Lyndon W., Greensboro, N. C. Overall suspender elastic. 1,820,072; Aug. 25.

Judd, Percival L., Lakewood, E. B. Atkinson, Bay Village, and R. A. Anderson, Lakewood, Ohio. Switch box holder. 1,820,309; Aug. 25.

Junkers, Adolf H., Rheydt, Germany. Apparatus for drying yarn. 1,820,621; Aug. 25.

Kaegebein, Charles F., Hoboken, N. J., assignor to R. T. Vanderbilt Co., Inc., New York, N. Y. Soap manufacture. 1,820,744; Aug. 25.

Kahn, Bertrand B., Cincinnati, assignor to The Estate Stove Company, Hamilton, Ohio. Heater. Des. 84,940; Aug. 25.

Kahn, Bertrand B., Cincinnati, assignor to The Estate Stove Company, Hamilton, Ohio. Heater. Des. 84,941; Aug. 25.

Kali-Chemie, Aktiengesellschaft. (See Rusberg, Friedrich, assignor.)

Kalischer, Georg, Frankfort-on-the-Main, and E. H. Harold, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Acid wool dyestuffs of the anthraquinone series and making the same. 1,820,023; Aug. 25.

Kalk, Albert C. (See Page, C. B., and Kalk.)

Kater, Gustav, New York, N. Y. Electric bread toaster. 1,820,745; Aug. 25.

Kearsley, William K., Schenectady, N. Y., assignor to General Electric Company. Time switch. 1,820,808; Aug. 25.

Keenan, Walter F., jr., Pelham, assignor to Foster Wheeler Corporation, New York, N. Y. Fluid heating element. 1,820,227; Aug. 25.

Keith, Wayland D. (See Cygon, Leon, assignor.)

Kellar, Francis A., Grand Rapids, Mich. Apparatus for use in and assembling spring constructions. 1,820,587; Aug. 25.

Keller, Albert T., Bethlehem, Pa., assignor to Bethlehem Steel Company. Manipulator for rolling mills. 1,820,622; Aug. 25.

Keller, Ferdinand, and K. Schnitzspahn, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Diazosalt preparations for dyeing and printing. 1,820,024; Aug. 25.

Kelley, Cecil S., East McKeesport, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Sound producer. 1,820,143; Aug. 25.

Kelley, William C., Des Moines, Iowa. Display rack for magazines, folders, and the like. 1,820,275; Aug. 25.

Kellogg, Edward W., Schenectady, N. Y., assignor to General Electric Company. Electrical system. 1,820,809; Aug. 25.

Kelly, Loomis L., deceased, Roanoke, Va.; W. M. Brodie, administrator. Exhaust apparatus. 1,820,355; Aug. 25.

Kennedy, Arthur L., Keene, N. H., assignor to Plastic, Inc. Making mineral fiber articles. 1,820,538; Aug. 25.

Kestenman Bros. Mfg. Co. (See Kestenman, Charles H., assignor.)

Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Clasping device for flexible bracelet or the like. 1,820,393; Aug. 25.

Ketterlinus Lithographic Mfg. Co. (See Bacon, Harry S. C., assignor.)

Key-Tag Checking System Company, The. (See Todd, John H., assignor.)

Kibele, Eugene, deceased, San Antonio, Tex.; E. Schroeder, executrix. Pump piston. 1,820,228; Aug. 25.

Kiewicz, John, assignor to The Reece Button Hole Machine Company, Boston, Mass. Thread trimmer for sewing machines. 1,820,569; Aug. 25.

Kilborn, Karl B., Fairlawn, assignor to Sieberling Rubber Company, Barberton, Ohio. Cooling means for roller mills. 1,820,073; Aug. 25.

Kilborn, Karl B., Fairlawn, assignor to Seiberling Rubber Company, Barberton, Ohio. Cooling mill rolls. 1,820,074; Aug. 25.

Kincaid, Frank M., Lima, Ohio, assignor to W. R. Bassick, Chicago, Ill. Top lubricating system. 1,820,705; Aug. 25.

King, C. G., & Co. (See King, Clifford G., assignor.)

King, Clifford G., Barrington, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,942; Aug. 25.

King, Edward S., Kansas City, Mo. Valve. 1,820,075; Aug. 25.

King, Otis C. F. (See Leeson, B. H., and King.)

Kipper, Allen F., Glendale, assignor to General Water Heater Corporation, Los Angeles, Calif. Pilot control for gas burners. 1,820,461; Aug. 25.

Kipper, Herman B., Muskegon, Mich. Wood digestion. 1,820,276; Aug. 25.

Kirkland, Sanford H., assignor. (See Mays, H., and Kirkland.)

Kirkpatrick, Leighton H., Walsenburg, Colo. Computing gasoline gauge. 1,820,025; Aug. 25.

Kittay, Paul, Vienna, Austria. Grinding mills. 1,820,462; Aug. 25.

Klein, Otto G., Barron, Wis. Clinker tongs. 1,820,403; Aug. 25.

Kleist, Edward, Portland, Oreg. Protective cover for the mouths of bottles. 1,820,144; Aug. 25.

Klemme, Alvin H. L., assignor to Eagle Foundry Company, Belleville, Ill. Gas stove. 1,820,277; Aug. 25.

Knickerbocker Company. (See Walker, Sidney L., assignor.)

Knott, Warren E., Grand Rapids, Mich., assignor, by mesne assignments, to Pioneer Pearl Button Company, Poughkeepsie, N. Y. Saw setting machine. 1,820,278; Aug. 25.

Knowlton, M. D., Company. (See Hoch, Otto M., assignor.)

Koehring Company. (See Tellier, Edgar H., and Deckman, assignors.)

Komp, George, sr., Hattiesburg, Miss., assignor, by mesne assignments, to General Ice Scoring Machine Company. Ice scoring machine. 1,820,464; Aug. 25.

Koolstra, John A., assignor to Whitin Machine Works, Whitinsville, Mass. Spindle driving mechanism. 1,820,310; Aug. 25.

Koppers Company, The. (See Sauchelli, Vincent, assignor.)

Korenchan, John J., Chicago, Ill. Chilling unit. 1,820,746; Aug. 25.

Korns, Clarence C., Johnstown, Pa. Conduit support. 1,820,229; Aug. 25.

Kowan, Maurice H., Chicago, Ill. Irrigator. 1,820,076; Aug. 25.

Kramer, Erwin. (See Zeh, L., Kramer, and Bollweg.)

Krause, Norman R., assignor to J. I. Case Company, Racine, Wis. Combination harvester-thrasher. 1,820,570; Aug. 25.

Krausz, Arthur F., Boston, Mass. Arch support. 1,820,747; Aug. 25.

Krieger, Franklin O., assignor to Refinoil Manufacturing Corporation, Kansas City, Mo. Apparatus for refining used oil. 1,820,871; Aug. 25.

Kruesi, Geoffrey G., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radioantenna system. 1,820,571; Aug. 25.

Kuenbold, Otto J., Cleveland, Ohio. Clothes drying rack. 1,820,026; Aug. 25.

Kulus, Matthew M., New York, assignor to Photoself Machine Corporation, Jamaica, N. Y. Automatic photographic apparatus. 1,820,230; Aug. 25.

Kunkel, Victor V. (See Mehline, Emil O., assignor.)

Kyle, Joseph M., Greene, Iowa. Hay fork. 1,820,279; Aug. 25.

L. C. L. Corporation, The. (See Woodruff, Graham C., assignor.)

Lacene Manufacturing Company. (See Cogswell, Leander A., assignor.)

Lackie, Harry M., Madison, Wis. Incubator. 1,820,311; Aug. 25.

Laing, William L., Montreal, Quebec, Canada. Car dumping device. 1,820,312; Aug. 25.

Lancaster Asphalt, Inc. (See Robinson, Thomas, assignor.)

Lancaster Iron Works, Inc. (See Luce, G. E., and Huestis, assignors.)

Landers, Frary & Clark. (See Smith, Charles F., assignor.)

Lane, Franklin L., assignor to Yates-American Machine Company, Beloit, Wis. Cutter head. 1,820,231; Aug. 25.

Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Reforming bars. Re18,165; Aug. 25.

Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,820,280; Aug. 25.

Lanz, Heinrich, Aktiengesellschaft. (See Huber, Fritz, assignor.)

Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Fountain pen. Des. 84,943; Aug. 25.

Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Pencil. Des. 84,944; Aug. 25.

Larson, John M., Los Angeles, Calif. Combined cigarette extinguisher and receptacle. 1,820,077; Aug. 25.

Larsson, Sven, Sandviken, Sweden. Feeding arrangement in sharpening machines for razor blades. 1,820,810; Aug. 25.

Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Accumulator operating mechanism. 1,820,078; Aug. 25.

Law, Otis E., Brookfield, Ill., assignor to Pliless Clothes Line Corp. Garment hangers. 1,820,706; Aug. 25.

Lawrence, William H., Oklahoma City, Okla. Railway car brake. 1,820,196; Aug. 25.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Pressed metal automobile body. 1,820,079; Aug. 25.

Lee, Roger K., assignor to General Motors Research Corporation, Dayton, Ohio. Vibrecorder. 1,820,232; Aug. 25.

Leeds, Ruby, Seattle, Wash. Kitchen utensil. 1,820,233; Aug. 25.

Lees Manufacturing Company, The. (See Epstein, Benjamin B., assignor.)

Lees, Nora E., Sheffield, England. Cutlery and the like. 1,820,234; Aug. 25.

Leeson, Bruce H., Tynemouth, and O. C. F. King, London, assignors to A. Reyrolle & Company, Limited, Hebburn-on-Tyne, England. Electrical remote control system. 1,820,354; Aug. 25.

Lehr, Horace, Easton, Pa. Combined desk and radiocabinet. Des. 84,945; Aug. 25.

Lemm, Bonnie E. (See Schnell, W., and Lemm.)

Lemming, John C., and A. H. Valentine, assignors to The Moraine Products Company, Dayton, Ohio. Briquetting machine. 1,820,235; Aug. 25.

Leslie, John W., Evanston, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company. Shock absorbing support. 1,820,281; Aug. 25.

Leuteritz, Ehrhardt. (See Niemann, K., and Leuteritz.)

Levett, Alexander, Hendersonville, N. C. Buffer wheel. 1,820,465; Aug. 25.

Le Vine, Harry C., Grand Rapids, Mich. Electric toaster. 1,820,885; Aug. 25.

Lewis, Daniel W., assignor of one-half to A. M. Bowzer, Lynn, Mass. Heel. 1,820,539; Aug. 25.

Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,820,080; Aug. 25.

Leyes, Louis, City Island, N. Y. Work holding clamp. 1,820,667; Aug. 25.

Liaset, George P., Seattle, Wash. Thermostatic valve. 1,820,145; Aug. 25.

Libold, Stanley A., Duluth, Minn. Candlestick or article of analogous nature. Des. 84,946; Aug. 25.

Liebeskind, Bernhard, Berlin-Lichterfelde, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Packing photographic plates. 1,820,146; Aug. 25.

Lieblein, Chaim, New York, N. Y. Collapsible delivery wagon. 1,820,466; Aug. 25.

Lien, Syver. (See Moen, A. B., and Lien.)

Lighting Appliance Company, Inc. (See Boettges, Frederick W., assignor.)

Lilienfeld, Leon, Vienna, Austria. Artificial thread and making same. Re18,170; Aug. 25.

Lilienfeld, Leon, Vienna, Austria. Artificial material and making same. 1,820,811; Aug. 25.

Lindgren, Carl W., Los Angeles, Calif. Clothes hanger. 1,820,468; Aug. 25.

Lindstrom, John T., Allentown, Pa. Automatic feed water regulator. 1,820,356; Aug. 25.

Lindstrom, Linn O. B., San Francisco, Calif., and A. D. Ruedemann, Cleveland, Ohio. Vision-tone device. 1,820,357; Aug. 25.

Ling, Olof P., Cambridge, Minn. Pocket closure device. 1,820,572; Aug. 25.

Lingler, Johann, Offenbach-on-the-Main, assignor to Deutsche Gesellschaft fuer Schaedlingsbekaempfung m. b. H., Frankfort-on-the-Main, Germany. Method of fumigating with calcium cyanide. 1,820,394; Aug. 25.

Lipman, Gabriel. (See Hill, Harry H., assignor.)

Lisenby Manufacturing Company. (See Low, Charles L., assignor.)

Liska, Joseph, Lakewood, Ohio. Aeroplane propeller. 1,820,467; Aug. 25.

Littell, F. J., Machine Co. (See Skriba, R. A., and Littell, assignors.)

Littell, Frederick J. (See Skriba, R. A., and Littell.)

Lobley, Alfred G., assignor of one-half to Birmingham Electric Furnaces Limited, Birmingham, England. Electric furnace. 1,820,668; Aug. 25.

Loeffler, Bruno, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Lubricating device for clutch throw out bearings. 1,820,748; Aug. 25.

Loeffler, Bruno, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Torque damper. 1,820,749; Aug. 25.

Loerke, Walter J., assignor of one-third to F. P. Lutz and one-third to E. F. McClintock, Dayton, Ohio. Conveyer or handling device. 1,820,669; Aug. 25.

Longnecker, Morton, and W. M. Elkins, assignors to Overmyer Mould Company, Winchester, Ind. Workholding device. 1,820,812; Aug. 25.

Loomis, Frederick W., Chestnut Hill, Conn. Device for trapping and exterminating insects. 1,820,813; Aug. 25.

Lord, Hugh C., Erie, Pa. Flexible coupling. 1,820,750; Aug. 25.

Lorenz, C., Aktiengesellschaft. (See Hahnemann, Walter, assignor.)

Lorenzen, Julius L., et al. (See Wooley, Ernest G., assignor.)

Loud, Henry S., Syracuse, assignor to Atmospheric Nitrogen Corporation, New York, N. Y. Process and apparatus for utilizing the energy of a liquid under pressure. 1,820,236; Aug. 25.

Lougheed, Victor, Washington, D. C. Screw propeller. 1,820,814; Aug. 25.

Lovell, Wheeler G., and T. A. Boyd, assignors to General Motors Research Corporation, Detroit, Mich. Removing carbon deposits. 1,820,395; Aug. 25.

Lovett, Charles W. (See Brown, Samuel G., assignor.)

Low, Charles L., assignor to Lisenby Manufacturing Company, Fresno, Calif. Automatic paper feeding mechanism for printing presses. 1,820,469; Aug. 25.

Low, Charles L., assignor to Lisenby Manufacturing Company, Fresno, Calif. Gripper motion for cylinder printing presses. 1,820,470; Aug. 25.

Lubricating Equipment Company, The. (See Hann, William E., assignor.)

Luce, Grafton E., Chicago, Ill., and T. B. Huestis, Greencastle, Ind., assignors to Lancaster Iron Works, Inc., Lancaster, Pa. Brick and pallet centering device. 1,820,471; Aug. 25.

Ludwig, Abraham, Detroit, Mich. Portable power operated hammer. 1,820,081; Aug. 25.

Lutz, F. P., et al. (See Loerke, Walter J., assignor.)

Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)

Lyons, Henry N., Dover, N. J., assignor to Doherty Research Company, New York, N. Y. Process of and apparatus for distilling oil. 1,820,573; Aug. 25.

Lyons, Leon L., Omaha, Nebr. Hose protector. 1,820,623; Aug. 25.

MacLaughlin, David D. (See Richmond, H. A., and MacLaughlin.)

MacLean, Allen D., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Multiple flow regulator. 1,820,358; Aug. 25.

MacNeill, John B. (See Austin, W. M., and MacNeill.)

Magnavox Company, The. (See Tolerton, Ray E., assignor.)

Magnolia Petroleum Company. (See Francis, Alfred W., assignor.)

Magrath, George H., Whitinsville, Mass. Bobbin clutch for spindles. 1,820,574; Aug. 25.

Malcom, Robert, Chicago, Ill. Face and head protector. 1,820,237; Aug. 25.

Malleable Iron Fittings Company. (See Pickop, George B., assignor.)

Mamor, Armand. (See Stevens, C. E., and Mamor.)

Maney, Thomas, Louisville, Ky. Lubricating device. 1,820,815; Aug. 25.

Manning, Prentice H., Bowling Green, Mo. Combined clutch release and brake setting device. 1,820,359; Aug. 25.

Mansel, Paul, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Stamping apparatus for registration of any desired values of business or work operations. 1,820,751; Aug. 25.

Margon Corporation. (See Nemcovsky, Louis A., assignor.)

Markwell, Harry D. (See Arrasmith, C. C., and Markwell.)

Marshall Drug Company, The. (See Marshall, George G., assignor.)

Marshall, George G., Shaker Heights, assignor to The Marshall Drug Company, Cleveland, Ohio. Beverage container. Des. 84,947; Aug. 25.

Marshall, Ira W. (See Prescott, L. A., and Marshall.)

Martin Brothers Company. (See Fellroth, Erick O., assignor.)

Martin, Glenn L., Company, The. (See Ebel, W. K., and Milburn, assignors.)

Martone, Thomas A., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Making lakes. 1,820,540; Aug. 25.

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Ventilating device for garbage, ash, and refuse trucks. 1,820,752; Aug. 25.

Matthews, Philip E., Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Front axle stabilizing device. 1,820,753; Aug. 25.

Mayhew, George E., assignor to Swift and Company, Chicago, Ill. Cover lifter. 1,820,575; Aug. 25.

Maynard, Frank J., St. Louis, Mo. Storage battery tool. 1,820,313; Aug. 25.

Mays, Hubert, and S. H. Kirkland, Tampa, Fla. Artificial bait. 1,820,670; Aug. 25.

McClintock, Edward, Minneapolis, Minn. Lamp. 1,820,027; Aug. 25.

McClintock, Earl F., et al. (See Loerke, Walter J. assignor.)

McConkey, Montgomery W., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake operating mechanism. 1,820,472; Aug. 25.

McCormick, John H., C. G. Allen, and F. M. Bender, assignors to Vendicator, Inc., Williamsport, Pa. Vending machine. 1,820,671; Aug. 25.

McCullough, Frederick S., Edgewood, assignor to Stupakoff Laboratories, Inc., Pittsburgh, Pa. Electrode structure. 1,820,396; Aug. 25.

McCune, Joseph C., Edgewood, assignor to the Westinghouse Air Brake Company, Wilmerding, Pa. Signal valve device. 1,820,147; Aug. 25.

McDermott, Wilfred D. (See Callahan, J. J., and McDermott.)

McDonald, Harry R., assignor to Hart Glass Manufacturing Company, Dunkirk, Ind. Glass jar. Des. 84,948; Aug. 25.

McGee, Thurman, and P. Woodhead, Hayward, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Filling valve. 1,820,197; Aug. 25.

McGrath, William L., Elmira, assignor to Eclipse Machine Company, Elmira Heights, N. Y. Engine starter. 1,820,897; Aug. 25.

McGuire, Michael J., Chicago, Ill. Tobacco pouch. 1,820,282; Aug. 25.

McIntosh, James, Norristown, Pa., assignor, by mesne assignments to Continental-Diamond Fibre Company, Newark, Del. Synthetic resin and making same 1,820,816; Aug. 25.

McKenna Process Company of Illinois. (See Langford, George, assignor.)

McLain, Lewis A., Wichita, Kans. Crooked hole indicator. 1,820,082; Aug. 25.

McLeod, Neil P., Seattle, Wash. Fluid controlled curtain. 1,820,148; Aug. 25.

McMullen, Joseph I., Bethesda, Md. Preparing liquid fuel for burning. 1,820,755; Aug. 25.

McNeil Boiler Company, The. (See Engstrom, Ernest P., assignor.)

McRae, Martin J., Spokane, Wash. Salt shaker, etc. 1,820,817; Aug. 25.

McRae, Walter S., St. David, Ariz. Windmill. 1,820,818; Aug. 25.

McWhirter, William C., Wilkinsburg, assignor to the Union Switch & Signal Company, Swissvale, Pa. Railway switch operating apparatus. 1,820,756; Aug. 25.

Mealy, Charles A., West Barrington, assignor to the Hadley Company, Inc., Providence, R. I. Bracelet construction. 1,820,576; Aug. 25.

Mears, Norton A., and D. P. Hynes, assignors to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,820,238; Aug. 25.

Mechdovits, Bernat, New York, N. Y. Apparatus for casting bars for buckles. 1,820,757; Aug. 25.

Mecklenburg, Richard J., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Overshoe and making same. 1,820,149; Aug. 25.

Meggitt, Robert F., Cheboygan, Mich. Fly swatter. 1,820,360; Aug. 25.

Mehline, Emil O., Alameda, assignor to V. V. Kunkel, Oakland, Calif. Metallic tile. 1,820,624; Aug. 25.

Melton, Henry E. (See Russell, J. L., and Melton.)

Mendelson, Jacob, Council Bluffs, Iowa. Towing motor vehicles and the like. 1,820,314. Aug. 25.

Menzel, Friedrich, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Electric switch. 1,820,361; Aug. 25.

Merrill, Ralph K., Grand Rapids, Mich. Cushioning shield for retractable seats. 1,820,754; Aug. 25.

Mers, Karl, Tiengen, Germany. Compensating oscillating masses. 1,820,239; Aug. 25.

Metal & Thermit Corporation. (See Fischer, Hellmut, assignor.)

Metal Package Corporation. (See Buschman, Sol L., assignor.)

Metalcraft Heater Corporation. (See Harding, J. V., and De Boer, assignors.)

Metropolitan Importing & Mfg. Co. (See Selikowitz, Adolph, assignor.)

Meyer, Alcid A., Minneapolis, Minn. Foundry tool. 1,820,819; Aug. 25.

Meyer, August. (See Baseler, W., and Meyer.)

Michel, Philip A., New Brighton, N. Y. Coil. 1,820,240; Aug. 25.

Micklin Lumber Company. (See Wilson, Theodore R., assignor.)

Midland Steel Products Company, The. (See Sneed, John, assignor.)

Miguet, Paul L. J., assignor to Société Electrometallurgique de Montricher, Ste. Julien de Maurienne, France. Electrode for electric furnaces. 1,820,625; Aug. 25.

Milburn, Lessiter C. (See Ebel, W. K., and Milburn.)

Miller, Charles F., Columbus, Ohio. Step attachment for ladders. 1,820,315; Aug. 25.

Miller, Frank W., assignor to H. S. Hart and C. F. Fitts, trustees, Chicago, Ill. Cleaning apparatus. 1,820,316; Aug. 25.

Miller, Herman, assignor to Burrel Engineering & Construction Company, Chicago, Ill. Oil burner. 1,820,758; Aug. 25.

Miller, Rollin B., Toledo, Ohio. Hydraulic variable speed power transmitting mechanism. 1,820,083; Aug. 25.

Miller, William H. (See Monn, J. C., and Miller.)

Mills, Frank L., Chicago, Ill. Animal bed. 1,820,283; Aug. 25.

Mills, Frank L., Chicago, Ill. Animal bed. 1,820,284; Aug. 25.

Mills, Frank L., Chicago, Ill. Bed. 1,820,285; Aug. 25.

Milone, Samuel, assignor, by mesne assignments, to Earle Anti-Freeze Valve Corporation, Camden, N. J. Antifreeze device for water systems. 1,820,473; Aug. 25.

Miner, Frederick M., jr., and W. C. Daumling, Madison, Wis. Boiler. 1,820,286; Aug. 25.

Minneapolis-Honeywell Regulator Company. (See Cramblet, Paul K.)

Minor, Burt S., San Pedro, Calif. Grease packed gland. 1,820,577; Aug. 25.

Mishawaka Rubber and Woolen Manufacturing Company. (See Mecklenburg, Richard J., assignor.)

Mishawaka Rubber and Woolen Manufacturing Company. (See Saunders, Emmett A., assignor.)

Moen, Anver B., St. James, and S. Lien, Comfrey, Minn. Snowplow. 1,820,707; Aug. 25.

Molinari, Michele, Philadelphia, Pa. Toy vehicle. 1,820,474; Aug. 25.

Moline, Ernest L., Mead, Nebr. Automobile wheel. 1,820,064; Aug. 25.

Monn, James C., Harrisburg, and W. H. Miller, Penbrook, Pa. Hydraulic brake. 1,820,362; Aug. 25.

Monogram Lens Corporation. (See Arbuckle, S. F., and Brockway, assignors.)

Moody, Lewis F., Philadelphia, Pa. Labyrinth packing for turbines. 1,820,150; Aug. 25.

Moore, Robert S., assignor to General Airmotors Company, Scranton, Pa. Gas engine. 1,820,475; Aug. 25.
Moore & White Company. (See White, Joseph A., assignor.)
Moormann, Thomas A., Milwaukee, Wis., assignor to The Shaler Company, Wilmington, Del. Liquid heat transferring composition. 1,820,085; Aug. 25.
Moraine Products Company, The. (See Lemming, J. C., and Valentine, assignors.)
Morck, Alfred A., New York, N. Y. Shirt attachment. 1,820,287; Aug. 25.
Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Cabinet. 1,820,476; Aug. 25.
Morosini, Louis, et al. (See Arico, Joseph, assignor.)
Morral, Samuel E., Morral, Ohio. Transmission mechanism. 1,820,363; Aug. 25.
Mosgrove, Charles A., Waterbury, assignor to The Autoyre Company, Oakville, Conn. Slide buckle. 1,820,578; Aug. 25.
Muchlinski, Leon, Kenosha, Wis. Recess folding bed. 1,820,072; Aug. 25.
Mullen, Raymond F., assignor, by mesne assignments to North East Appliance Corporation, Rochester, N. Y. Overrunning clutch. 1,820,151; Aug. 25.
Müller, Eduard, Dusseldorf, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Pointing mechanism for guns. 1,820,820; Aug. 25.
Multipost Company. (See Gay, Azel, assignor.)
Nakagawa, Shoichi, San Jose, Calif. Collapsible mousetrap. 1,820,579; Aug. 25.
Nath, Carl A., et al. (See Wooley, Ernest G., assignor.)
National Aniline & Chemical Co. (See Walt, Justin F., assignor.)
National Carbon Company. (See Jones, Homer W., assignor.)
National Carbon Company. (See Ray, Arthur B., assignor.)
National Cellulose Corporation. (See Wandel, Kurt, assignor.)
Naylor, James P., London, England. Sign. 1,820,086; Aug. 25.
Neal, Duane R., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,820,152; Aug. 25.
Neilsen, Neils A., Cupertino, Calif. Gap filler. 1,820,288; Aug. 25.
Nekoosa-Edwards Paper Company. (See Youngchild, C. E., Vanatta, and Youngchild.)
Nemcovsky, Louis A., assignor, by mesne assignments, to Margon Corporation, New York, N. Y. Eye mounting for dolls. 1,820,087; Aug. 25.
Nerney, George E., assignor to Bay State Optical Company, Attleboro, Mass. Eyeglass construction. 1,820,627; Aug. 25.
Neth, George J., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,820,241; Aug. 25.
Neuland, Alfons H., assignor to Electro-Mobile Corporation, Irvington, N. J. Electric system for vehicles. 1,820,861; Aug. 25.
Neuland, Alfons H., assignor to Electro-Mobile Corporation, Irvington, N. J. Electric system for vehicles. 1,820,862; Aug. 25.
Neuland, Alfons H., assignor to Electro-Mobile Corporation, Irvington, N. J. Electric system for vehicles. 1,820,863; Aug. 25.
Neuland, Alfons H., assignor to Electro-Mobile Corporation, Irvington, N. J. Electric system for vehicles. 1,820,864; Aug. 25.
Neuner, Frederick W. C., assignor to Indiana Lamp Corporation, Connersville, Ind. Vehicle lamp. 1,820,477; Aug. 25.
New England Mica Co. (See Cooper, Henry W., assignor.)
New Era Electro Devices. (See Whitehead, Connie W., assignor.)
Newhouse, George A., assignor of one-half to C. H. Wright, Yorktown, Ind. Auxiliary gearing. 1,820,886; Aug. 25.
New Jersey Zinc Company, The. (See Hooey, William C., assignor.)
Newman, Charles, New York, N. Y., and E. G. Appleton, assignors to Roach-Appleton Manufacturing Company, Chicago, Ill. Outlet receptacle. 1,820,626; Aug. 25.
Nichols, Edward C., Upton, assignor to Draper Corporation, Hopedale, Mass. Shuttle feeler for looms. 1,820,821; Aug. 25.
Niemann, Karl, and E. Leuteritz, assignors to the firm Siemens-Reiniger-Veifa Gesellschaft fur medizinische Technik m. b. H., Berlin, Germany. Regulating system for transformers. 1,820,242; Aug. 24.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Cylinder head. 1,820,628; Aug. 25.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve valve and making same. 1,820,629; Aug. 25.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,820,630; Aug. 25.
Nordberg Manufacturing Company. (See Talboys, Henry H., assignor.)
Nordberg Manufacturing Company. (See Wintzer, Rudolf, assignor.)
Norris, Charles E., London, Ontario, Canada, assignor to The Summit Mold and Machine Company, Akron, Ohio. Tire repair vulcanizer. 1,820,478; Aug. 25.
North East Appliance Corporation. (See Mullen, Raymond F., assignor.)
Norton, Charles L., jr., Boston, Mass. Furnace. 1,820,028; Aug. 25.
Norviel, Harry E., Anderson, assignor to Delco-Remy Corporation, Dayton, Ohio. Apparatus for locking ignition timers. 1,820,243; Aug. 25.
Oakley, Erastus G., Southport, assignor to Bridgeport Brass Company, Bridgeport, Conn. Waste fitting for sinks or the like. 1,820,673; Aug. 25.
O'Brien, Frederick J., assignor to Struthers Wells-Titusville Corporation, Titusville, Pa. Casing slip. 1,820,479; Aug. 25.
O'Brien, James F. (See Jones, Llewellyn J. W., assignor.)
Ogren, Olof, Braddock, Pa. Rotary engine. 1,820,859; Aug. 25.
O'Hearn, George E., assignor to O'Hearn Manufacturing Company, Gardner, Mass. Woven fabric. Des. 84,949; Aug. 25.
O'Hearn Manufacturing Company. (See O'Hearn, George E., assignor.)
Ohio Brass Company, The. (See Chandler, Homer P., assignor.)
Olsen, Edgar H. (See Good, J., and Olsen.)
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company, Inc., Chicago, Ill. Safety shut-off device for conveyer systems. 1,820,674; Aug. 25.
Olson, Samuel, & Company. (See Olson, Samuel, assignor.)
Oneida Community Limited. (See Helander, Lillian V. M., assignor.)
O'Neil, James H., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Brine supplying attachment for can closing machines. 1,820,480; Aug. 25.
O'Neil, James H., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Container and vacuumizing the same. 1,820,481; Aug. 25.
O'Neill, Joseph, Akron, Ohio. Advertising display device. 1,820,708; Aug. 25.
Orlando, Paolo, assignor to Silurificio Whitehead Di Fiume Societa Anonima, Fiume, Italy. Torpedo. 1,820,822; Aug. 25.
Orr, Claude L. (See Whitridge, J. C., and Orr.)
Orth, William G., New York, N. Y. Portable power-driven machine for scrubbing, polishing, resurfacing, or otherwise treating floors. 1,820,482; Aug. 25.
Oster, Walter E., Chicago, Ill. Artificial fish bait. 1,820,759; Aug. 25.
Ostromislensky, Iwan, assignor to The Piridium Corporation, New York, N. Y. Obtaining an azo compound from phenyl-diazo-amino-alpha-monamino-pyridine. 1,820,483; Aug. 25.
Otis Elevator Company. (See Simmons, T. H. J., and Blackburne, assignors.)
Overmyer Mould Company. (See Longnecker, M., and Elkins, assignors.)
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation. New York, N. Y. Focusing lens mount. 1,820,484; Aug. 25.
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Paddor, William. (See Abt, Louis, assignor.)
Page, Charles B., Evanston, and A. C. Kalk, assignors, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill. Heater. 1,820,317; Aug. 25.
Paget, Harry E., Chicago, Ill. Water heater. 1,820,318; Aug. 25.
Palmbush, Andrew H., Conrad, Mont. Detachable milk pail holder. 1,820,485; Aug. 25.
Pannier Brothers Stamp Company. (See Pannier, W. J., Jr., and O. M., assignors.)
Pannier, Oscar M. (See Pannier, W. J., jr., and O. M.)
Pannier, William J., jr., Bellevue, and O. M. Pannier, Kilbuck Township, Allegheny County, assignors to Pannier Brothers Stamp Company, Pittsburgh, Pa. Embossing machine. 1,820,760; Aug. 25.
Pardue, George P., and C. Holbrook, Calexico, Calif. Cotton chopper. 1,820,153; Aug. 25.
Parker, Ralzemond D., Brooklyn, N. Y., and F. H. Best, Westfield, N. J., assignors to American Telephone and Telegraph Company. Recording apparatus. 1,820,088; Aug. 25.
Park, Stanley J., Long Island City, assignor to A. H. Woods, New York, N. Y. Casing for a camera. Des. 84,950; Aug. 25.
Patent and Licensing Corporation, The. (See French, Henry R., assignor.)
Patrick, James H. and L. H., San Jose, Calif. Doorstop. 1,820,486; Aug. 25.
Patrick, Leonard H. (See Patrick, J. H. and L. H.)
Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Harrow. 1,820,541; Aug. 25.
Pearson, Erick, Columbia Heights, Minneapolis, Minn. Automatic synchronizer. 1,820,319; Aug. 25.
Pederson, John P., assignor to Ditto Inc., Chicago, Ill. Carriage roll release for hectograph machines. 1,820,244; Aug. 25.
Peebles, Thomas A., Mount Lebanon, assignor to J. M. Hopwood, Dorimont, Pa. Combustion control system. 1,820,580; Aug. 25.

Peets, Wilbur J., assignor to Diehl Manufacturing Company, Elizabeth, N. J. Phonograph driving mechanism. 1,820,154; Aug. 25.
Penman, Frank H. (See Roberts, Elmo M., jr., and Penman.)
Penn, Thornton, Des Moines, Iowa. Garment repair means. 1,820,631; Aug. 25.
Perry, Emanuel J., New Bedford, Mass., assignor, by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio. Washing machine. 1,820,487; Aug. 25.
Perry, Emanuel J., New Bedford, Mass., assignor by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio. Washing machine. 1,820,488; Aug. 25.
Perry, Emanuel J., New Bedford, Mass., assignor, by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio. Fluid discharge control device. 1,820,489; Aug. 25.
Perry, William A., Sidney, Ohio. Earthworking apparatus. 1,820,823; Aug. 25.
Peters, George E. (See Russell, L. E., jr., and Peters.)
Peters, Henry, Clifton, N. J. Stocking. Des. 84,951; Aug. 25.
Peters, Henry, Clifton, N. J. Stocking. Des. 84,952; Aug. 25.
Peterson, Elmer C. (See Blossom, C. W., and Peterson.)
Peterson, Elmer C., assignor to The Blossom Lock Company, Cleveland, Ohio. Vehicle locking mechanism. 1,820,491; Aug. 25.
Peterson, Gonerd W., et al. (See Testa, Joseph A., assignor.)
Peterson, Gunnard P., Naugatuck, Conn., assignor to Firestone Footwear Company, Hudson, Mass. Separable fastener. 1,820,089; Aug. 25.
Peterson, Henry G., et al. (See Testa, Joseph A., assignor.)
Pettis, Clifton D., New York, N. Y. Brake shoe. 1,820,490; Aug. 25.
Pfiasterer, George R. (See Willard, P. F., and Pfiasterer.)
Pfiueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Fishhook. 1,820,887; Aug. 25.
Phelps Dodge Corporation. (See Ayer, F., and Crowfoot, assignors.)
Phelps, Joseph, Stamford, Conn., assignors to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,820,542; Aug. 25.
Phiffer, Willard L., Horton, Kans. Outlet box. 1,820,824; Aug. 25.
Photoself Machine Corporation. (See Kulus, Matthew M., assignor.)
Picard, Sidney L., Detroit, Mich. Carburetor. 1,820,825; Aug. 25.
Pickop, George B., assignor to Malleable Iron Fittings Company, Branford, Conn. Vibrator. 1,820,320; Aug. 25.
Pickop, George B., New Haven, assignor to Malleable Iron Fittings Company, Branford, Conn. Vibrator rapping and drawing iron. 1,820,675; Aug. 25.
Pickop, George B., New Haven, assignor to Malleable Iron Fittings Company, Branford, Conn. Apparatus for vibrating objects. 1,820,676; Aug. 25.
Pictorial Review Company. (See Herzberg, Max, assignor.)
Pierce Governor Company. (See Essex, Carl C., assignor.)
Piggott, Warren M., Leavenworth, Kans. Heat distributor. 1,820,826; Aug. 25.
Pinkerton, Howard K., Madison, Wis., and F. L. Rhyndress, Kansas City, Mo., assignors, by mesne assignments, to General Electric Company. Fountain tank. Re18,169; Aug. 25.
Pinless Clothes Line Corp. (See Law Otis E., assignor.)
Pioneer Pearl Button Company. (See Knott, Warren E., assignor.)
Pirani, Marcello, Berlin-Wilmersdorf, Germany, assignor to General Electric Company. Construction of electric devices. 1,820,827; Aug. 25.
Pittsburgh Equitable Meter Company. (See MacLean, Allen D., assignor.)
Plastic, Inc. (See Burgess, Laurie L., assignor.)
Plastic, Inc. (See Kennedy, Arthur L., assignor.)
Plow-Mate, Inc., The. (See Soule, George M., assignor.)
Poirot, Louis C. A., Villemonble Seine, France. Bench convertible into bedstead for vehicles. 1,820,155; Aug. 25.
Polk, Edward H., Sacramento, Calif. Deck for trucks, trailers, and the like. 1,820,321; Aug. 25.
Polkosnik, Bernard L., West Haven, Conn. Combined card and stencil for visible indexes. 1,820,090; Aug. 25.
Polkosnik, Bernard L., Derby, Conn. Pulley guard and hanger. 1,820,322; Aug. 25.
Pond, Shepard, Winchester, Mass., assignor to Warren Telechron Company. Clock case. Des. 84,953; Aug. 25.
Potter, Henry S., Johannesburg, South Africa. Rock drilling machine of the hammer type. 1,820,245; Aug. 25.
Powell, Delbert J., administrator. (See Powell, James F.)
Powell, Henry T., Louisville, Ky. Game indicator. 1,820,828; Aug. 25.
Powell, James F., deceased; D. J. Powell, administrator, Flint, Mich. Fastener. 1,820,323; Aug. 25.
Preis, Georg, Weinbohla, Germany. Gear. 1,820,246; Aug. 25.
Prescott, Lyle A., and I. W. Marshall, assignors to Blaw-Knox Company, Pittsburgh, Pa. Structural tower. 1,820,156; Aug. 25.
Price, Charles W., Birmingham, England. Light reflector. 1,820,632; Aug. 25.
Pringle, William P., Washington, D. C. Spark plug tool. 1,820,364; Aug. 25.
Procházka, Václav, Brunn, Czechoslovakia. Transparent flag. 1,820,157; Aug. 25.
Prosperity Company, The. (See Davis, Ernest, assignor.)
Punke, John J., assignor to Hupp Motor Car Corporation, Detroit, Mich. Running board construction. 1,820,824; Aug. 25.
Purchas, Harry L., McGraw, N. Y. Box and the like. Des. 84,954; Aug. 25.
Pyle-National Company, The. (See Amos, John A., assignor.)
Pyridium Corporation, The. (See Ostromislensky, Iwa., assignor.)
Radio Corporation of America. (See Black, Knox C., assignor.)
Ræder, Johan K. B., Holmenkollen, near Oslo, Norway, assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for making glass. 1,820,247; Aug. 25.
Ræder, Johan K. B., Holmenkollen, near Oslo, Norway, assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Glass making furnace and method. 1,820,248; Aug. 25.
Rage, Sofus, Minneapolis, Minn. Cooker with heat and pressure. 1,820,825; Aug. 25.
Raines, Robert T. (See Evans, A. J., and Raines.)
Ramelli, Charles D., Reno, Nev. Vehicle brake operating device. 1,820,158; Aug. 25.
Rand, Benjamin G., North Tonawanda, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Follower for vertical files. 1,820,888; Aug. 25.
Randall, Karl C., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,820,709; Aug. 25.
Randolph, Alan F., Verona, N. J., assignor, by mesne assignments, to The Celastic Corporation, Wilmington, Del. Noninflammable fabric and process of making the same. 1,820,198; Aug. 25.
Rataiczak, Thomas F., assignor to The Hobart Manufacturing Company, Troy, Ohio. Apparatus for treating foodstuffs. 1,820,677; Aug. 25.
Rattazzi, John, Brooklyn, N. Y. Clamp and shoe last vise. 1,820,492; Aug. 25.
Rau, Kurt. (See Gruss, H., and Rau.)
Raule, Clifford T., Brookline, Pa. External center grinder. 1,820,029; Aug. 25.
Rawson, Leslie A., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Detachable ladder and cage construction. 1,820,289; Aug. 25.
Ray, Arthur B., Bayside, N. Y., assignor to National Carbon Company, Inc. Apparatus for the removal of odors from air. 1,820,030; Aug. 25.
Ray, Eugene J., Beverly, Mass., assignor, by mesne assignments, to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine. 1,820,829; Aug. 25.
Ray, Eugene J., Beverly, Mass., assignor, by mesne assignments, to The Singer Manufacturing Company, Elizabeth, N. J. Attachment for sewing machines. 1,820,830; Aug. 25.
Raymond, Charles E., Boston, Mass. Fishing apparatus. 1,820,326; Aug. 25.
Reagan, Martin, Duncan, Okla. Gas burner. 1,820,493; Aug. 25.
Reavis, Andrew B., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Engine cooling. 1,820,091; Aug. 25.
Reece Button Hole Machine Company, The. (See Carlson, Axel F., assignor.)
Reece Button Hole Machine Company, The. (See Klewicz, John, assignor.)
Reed, George B., Brooklyn, N. Y. Light projection apparatus. 1,820,543; Aug. 25.
Reed Roller Bit Company. (See Dallerup, John R., assignor.)
Reeves, Donald H., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,820,031; Aug. 25.
Refinoil Manufacturing Corporation. (See Krieger, Franklin O., assignor.)
Rehrig, William J., Los Angeles, Calif. Machine for making coat hangers. 1,820,249; Aug. 25.
Reinhardt, Otto, Pawtucket, R. I. Bobbin filling carrier. 1,820,159; Aug. 25.
Remington Rand Inc. (See Lasker, William W., assignor.)
Remington Rand Inc. (See Rand, Benjamin G., assignor.)
Remington Rand Inc. (See Sibley, Edward W., assignor.)
Remington Typewriter Company. (See Phelps, Joseph, assignor.)
Rennick, Lyle S., San Francisco, assignor to Hartsook-Rennick, Inc., Los Angeles, Calif. Photo printing machine. 1,820,494; Aug. 25.
Reukauf, Edward, jr., assignor to Carey-McFall Co., Philadelphia, Pa. Window shade mechanism. 1,820,831; Aug. 25.
Reyrolle A., & Company. (See Leeson, B. H., and King, assignors.)
Rheinische Metallwaaren- und Maschinefabrik. (See Müller, Eduard, assignor.)

Rhyndress, Freeman L. (See Pinkerton, H. K., and Rhyndress.)
Ribbonew Company, The. (See Switzer, Floyd R., assignor.)
Rich, Robert H., East Hampton, Conn. Lamp or analogous article. Des. 84,955; Aug. 25.
Richardson, Conley W., Marion, Va., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Cable guide. 1,820,495; Aug. 25.
Richmond, Harold A., and D. D. MacLaughlin, assignors to General Abrasive Company, Inc., Niagara Falls, N. Y. Abrasive wheel. 1,820,481; Aug. 25.
Ries, Lewis B., Donora, and J. B. Dickerson, Monongahela, Pa. Plumb level. 1,820,365; Aug. 25.
Rigaux, Gaston, Jumet, Belgium. Mechanical brick press. 1,820,366; Aug. 25.
Riker, Samuel M., Chester, N. J. Shoe ornament. Des. 84,956; Aug. 25.
Riley, Gerald A., Los Angeles, Calif. License plate holder and protector. 1,820,092; Aug. 25.
Riley, Robert S., Worcester, Mass., assignor, by mesne assignments, to The Air Preheater Corporation, New York, N. Y. Furnace heat exchange apparatus. 1,820,199; Aug. 25.
Ring, Andrew D., Schenectady, N. Y., assignor to General Electric Company. Neutralizing device for vacuum tubes. 1,820,832; Aug. 25.
Ring, Andrew D., Washington, D. C., assignor to General Electric Company. Testing instrument for transmitters. 1,820,833; Aug. 25.
Ringwald, Clarence, North Hampton, Ohio, assignor to Eclipse Machine Company, Elmira Heights, N. Y. Drive for engine starters. Re18,164; Aug. 25.
Riviere, Albert S., assignor to Union Special Machine Company, Chicago, Ill. Presser foot for sewing machines. 1,820,496; Aug. 25.
Roach-Appleton Manufacturing Company. (See Newman, C., and Appleton, assignors.)
Roberts, Charles, New York, N. Y., assignor to H. Bohn, Dayton, Ohio. Clothes wringer. 1,820,032; Aug. 25.
Roberts, Elmo M., jr., and F. R. Penman, Nacogdoches, assignors of one-third to B. T. Wilson, Nacogdoches County, Tex. Advertising display device. 1,820,250; Aug. 25.
Robinson, Edward A., et al. (See Workman, Ellison E., assignor.)
Robinson, John T., assignor to John T. Robinson Company, Boston, Mass. Creasing mechanism. 1,820,251; Aug. 25.
Robinson, John T., Company. (See Robinson, John T., assignor.)
Robinson, Thomas, assignor to Lancaster Asphalt, Inc., New York, N. Y. Prepared building product. 1,820,834; Aug. 25.
Roebling, Robert C., Trenton, N. J. Mechanical movement. 1,820,033; Aug. 25.
Roettges, Frederick W., Brooklyn, assignor to Lighting Appliance Company, Inc., New York, N. Y. Lighting fixture or article of similar nature. Des. 84,957; Aug. 25.
Rogers, Harry T., Chicago, Ill. Marionette toy. 1,820,367; Aug. 25.
Rogers Products Co. (See Albertine, Herman, assignor.)
Rogers, Roland J. (See Bombard, J. A., and Rogers.)
Rolledor Manufacturing Company. (See Babner, Ernest T., assignor.)
Rose, Anton J., Cleveland, Ohio. Carrier for containers. 1,820,497; Aug. 25.
Rowles, Walter M., assignor to Economy Housing Co., Inc., Onawa, Iowa. Tourist house. Des 84,958; Aug. 25.
Rowley, Guy O., San Jose, Calif. Hair curler. 1,820,498; Aug. 25.
Royal Protector Company. (See Sterling, Royal, assignor.)
Royal Typewriter Company. (See Handley, George F., assignor.)
Royal Typewriter Company. (See Scherer, Gilbert M., assignor.)
Rudenberg, Reinhold, Berlin-Grunewald, Germany, assignor to Westinghouse Electric & Manufacturing Company. High speed oil circuit breaker. 1,820,710; Aug. 25.
Ruedemann, Albert D. (See Lindstrom, L. O. B., and Ruedemann.)
Ruf, Cristian E. (See Aldeborgh, E. H., and Ruf.)
Rukop, Hans. (See von Bronk, O., and Rukop.)
Rüsberg, Friedrich, Berlin-Niederschoneweide, assignor to Kali-Chemie, Aktiengesellschaft, Berlin, Germany. Separating magnesium compounds from potash salts. 1,820,160; Aug. 25.
Russell, Edward A. (See Gold, E. H., and Russell.)
Russell, Jason L., and H. E. Melton, assignors to C. E. Jamieson & Company, Detroit, Mich. Mercuric ricinoleate. 1,820,761; Aug. 25.
Russell, Linus E., jr., and G. E. Peters, Springfield, Ohio. Automobile control. 1,820,678; Aug. 25.
Rzeczkowski, Bronislaw, Sosnowice, Poland. Plant for treating gas. 1,820,101; Aug. 25.
Safety Mining Company. (See Hodge, David, assignor.)
Saks & Co. (See De Liso, Vincent, assignor.)
Salisbury, Jessup, Hamden, assignor to The American Buckle Company, West Haven, Conn. Button loop. 1,820,290; Aug. 25.
Salley, John F. (See Jakopec, G., Salley, and Schwarz.)
Salmon, Reginald D., assignor to Creed and Company, Limited, Croydon, England. Telegraph transmitter. 1,820,499; Aug. 25.
Salvat, Pierre, San Francisco, Calif. Wood working machine. 1,820,162; Aug. 25.
Salz, Ignatz, New York, N. Y. Special tool. 1,820,163; Aug. 25.
Sampson, Frederick W. (See Geyer, H. D., and Sampson.)
Sampson, Frederick W., assignor to Continental Motors Corporation, Detroit, Mich. Drag link. 1,820,633; Aug. 25.
Sanders, Charles E., La Plata, Mo. Beehive brood frame. 1,820,500; Aug. 25.
Sargent, William D., West Orange, N. J. Vehicle wheel. 1,820,711; Aug. 25.
Sauchelli, Vincent, Pittsburgh, Pa., assignor to The Koppers Company. Sulphur soap. 1,820,872; Aug. 25.
Saunders, Emmett A., South Bend, assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Fastener. 1,820,327; Aug. 25.
Sauter, Erwin, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Interpole for rotary converters. 1,820,398; Aug. 25.
Sauvageau, Emile, South Peabody, Mass. Poultry fountain. 1,820,835; Aug. 25.
Sawyer, Florence, Chicago, Ill. Shoe and ankle protector. 1,820,679; Aug. 25.
Schaelchlin, Walter, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Voltage regulator. 1,820,712; Aug. 25.
Scher, Louis, assignor to The Tickometer Company, Cleveland, Ohio. Automatic feeding mechanism for counters and the like. 1,820,680; Aug. 25.
Scherer, Gilbert M., assignor to Royal Typewriter Company, Inc., New York, N. Y. Platen for typewriters and analogous machines. 1,820,164; Aug. 25.
Scherer, William F., Kansas City, Mo. Combination collar button and tie holder. 1,820,762; Aug. 25.
Schlegel, Charles P., assignor to Schlegel Manufacturing Company, Rochester, N. Y. Tassel. 1,820,328; Aug. 25.
Schlegel Manufacturing Company. (See Schlegel, Charles P., assignor.)
Schmalbach, Jane, New York, N. Y. Dancer's illuminating paraphernalia. 1,820,681; Aug. 25.
Schmidt, Benjamin F., Los Angeles, Calif. Twin cable gear shifting mechanism. 1,820,501; Aug. 25.
Schmitt, Robert. (See Zitscher, A., and Schmitt.)
Schneider, Frederick P., et al. (See Testa, Joseph A., assignor.)
Schnell, William, and B. E. Lemm, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Radiator cap or similar article for an automotive vehicle. Des. 84,959; Aug. 25.
Schnitzler, Eduard. (See Vehl, P., and Schnitzler.)
Schnitzspahn, Karl. (See Keller, F., and Schnitzspahn.)
Schrank, Max C., Bridgeton, N. J. Slip. 1,820,899; Aug. 25.
Schroeder, Eugenia, executrix. (See Kibele, Eugene.)
Schubart, Benno, Nuremberg, Germany. Box for baby's shoes. Des. 84,960; Aug. 25.
Schuber, John, Asheville, N. C., assignor to The Champion Fibre Company, Canton, N. C. Bleaching cellulose pulp. 1,820,502; Aug. 25.
Schuberth, Louis T., Chicago, Ill. Railway structure. 1,820,034; Aug. 25.
Schulz, Arthur P. (See Teller, J., and Schulz.)
Schwarz, Vincent. (See Jakopec, G., Salley, and Schwarz.)
Schweitzer, William P., Hillside, N. J. Paper-making machine. 1,820,165; Aug. 25.
Schylander, John F., Chicago, Ill. Paint sprayer. 1,820,544; Aug. 25.
Scognamillo, Salvatore, and P. Arndt, New York. N. Y. Electron discharge device. 1,820,836; Aug. 25.
Scott, John E., Danville, Ill. Supporting means for doors. 1,820,200; Aug. 25.
Scovill Manufacturing Company. (See Fenton, Paul F., assignor.)
Sectional Fire Corporation et al. (See Arico, Joseph, assignor.)
Segal Lock & Hardware Co. Inc. (See Hines, John, assignor.)
Seiberling Rubber Company. (See Kilborn, Karl B., assignor.)
Seidelinger, Robie, Philadelphia, Pa. Typewriter. 1,820,329; Aug. 25.
Seifert, Charles H., Hempstead, N. Y. Admission valve for two-cycle engines. 1,820,093; Aug. 25.
Selikowitz, Adolph, Brooklyn, assignor to Metropolitan Importing & Mfg. Co., New York, N. Y. Combined telephone information card and magnifying glass. Des. 84,961; Aug. 25.
Senior, William, Bedford, Ind. Window shade. 1,820,503; Aug. 25.
Shaler Company, The. (See Moormann, Thomas A., assignor.)
Shelton, William G., St. Louis, Mo. Hair waving clamp. 1,820,763; Aug. 25.
Shippy, Leo C., assignor to Delco-Remy Corporation, Anderson, Ind. Electric control. 1,820,252; Aug. 25.
Shirtcraft Co. Inc., The. (See Collins, John N., assignor.)
Showers, Joseph R., Shelbyville, Ind. Cash drawer mechanism. 1,820,400; Aug. 25.

Sibbald, Albert J. (See Dunlop, H. J., and Sibbald.)
Sibley, Edward W., Kenmore, assignor to Remington Rand Inc., Buffalo, N. Y. Index card. 1,820,889; Aug. 25.
Sieman, William, jr., Menominee, Mich. Engine piston and making the same. 1,820,253; Aug. 25.
Siemens-Bauunion G. m. b. H. Kommanditgesellschaft. (See Zemlin, Carl, assignor.)
Siemens & Halske, Aktiengesellschaft. (See Gruss, H., and Rau, assignors.)
Siemens & Halske Aktiengesellschaft. (See Mansel, Paul, assignor.)
Siemens-Reiniger-Veifa Gesellschaft fur medizinische Technik m. b. H. (See Niemann, K., and Leuteritz, assignors.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Bayha, H., Hahn, and Heymann, assignors.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Berthold, R. G., and Fritsch, assignors.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Feldmann, Wilhelm, assignor.)
Signode Steel Strapping Company. (See Leslie, John W., assignor.)
Silurificio Whitehead Di Fiume Societa Anonima. (See Orlando, Paolo, assignor.)
Simmen, Paul J., Eden, N. Y. Automatic train control. 1,820,713; Aug. 25.
Simmons, Leon E., Claremont, N. H., assignor to Sullivan Machinery Company. Lubricating system. 1,820,201; Aug. 25.
Simmons, Thomas H. J., Potters Bar, and F. W. Blackburne, London, England, assignors, by mesne assignments, to Otis Elevator Company, New York, N. Y. Belt supporting and driving mechanism. 1,820,634; Aug. 25.
Simon, Robert, Chicago, Ill. Locking door handle. 1,820,504; Aug. 25.
Simplex Engineering Company. (See Sylvester, Julius, assignor.)
Simplex Piston Ring Company of America, Inc., The. (See Harrington, Norman T., assignor.)
Simpson, Dundas. (See Barker, Albert A. S., assignor.)
Singer Manufacturing Company, The. (See Chason, Daniel H., assignor.)
Singer Manufacturing Company, The. (See Ray, Eugene J., assignor.)
Sipp Eastwood Corporation. (See Sipp, Grant, assignor.)
Sipp, Grant, Paterson, assignor to Sipp Eastwood Corporation, Paterson, N. J. Warping machine. 1,820,401; Aug. 25.
Sipp, Grant, assignor to Sipp Eastwood Corporation, Paterson, N. J. Lubricating system for quilling machines. 1,820,402; Aug. 25.
Sittig, Herman W., Youngstown, Ohio. Scaffold bracket. 1,820,830; Aug. 25.
Skriba, Rudolph A., and F. J. Littell, assignors to F. J. Littell Machine Co., Chicago, Ill. Automatic riveting press. 1,820,254; Aug. 25.
Smalley, Robert C., Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Vacuum tube lamp support. 1,820,202; Aug. 25.
Smalley, Robert C., Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Adjustable support for vacuum tube lights. 1,820,837; Aug. 25.
Smalley, Robert C., Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Support for vacuum tube lamps. 1,820,838; Aug. 25.
Smalley, Robert C., Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Tube support. 1,820,839; Aug. 25.
Smith, Charles F., assignor to Landers, Frary & Clark, New Britain, Conn. Percolator. Des. 84,962; Aug. 25.
Smith, Nelson K., Los Angeles, assignor to Byron Jackson Co., West Berkeley, Calif. Casing tong. 1,820,545; Aug. 25.
Smith, Philip M. (See Whitehead, Oton L., assignor.)
Smith, Russell, Gosport, Ind. Tire. Des. 84,963; Aug. 25.
Smith, Temple C., Westfield, J. B. Spowart, Newark, N. J., and P. G. Fitzpatrick, New York, N. Y., assignors to American Telephone and Telegraph Company. Winch rope winder. 1,820,094; Aug. 25.
Smith, Theodore R., Rolfe, Iowa. King bolt. 1,820,840; Aug. 25.
Smith, Wallace D., Kalamazoo, Mich. Rubber with mud guard device. 1,820,095; Aug. 25.
Sneed, John, Ferndale, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio. Brake. 1,820,255; Aug. 25.
Societe Anonyme Ecremeuses Melotte. (See Henrard, Fernand, assignor.)
Société Anonyme Pour L'Exploitation Des Procédés Maurice Leblanc-Vickers. (See Darrieus, Georges J. M., assignor.)
Societe Electrometallurgique de Montricher. (See Miquet, Paul L. J., assignor.)
Society of Chemical Industry in Basle. (See Steinbuch, E., and Fullemann, assignors.)
Soref, Harry E., Milwaukee, Wis. Display stand. 1,820,841; Aug. 25.
Soule, George M., assignor to The Plow-Mate Inc., Cleveland, Ohio. Soil pulverizer. 1,820,096; Aug. 25.
Sparks, Robert M., Daytona Beach, Fla. Electrical heating device. 1,820,842; Aug. 25.
Sperry Development Company. (See Sperry, Elmer A., assignor.)
Sperry, Elmer A., Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del. Fissure detector in metals. 1,820,505; Aug. 25.
Spiller, William R., assignor to The White Motor Company, Cleveland, Ohio. Valve actuating mechanism. 1,820,890; Aug. 25.
Spiller, William R., assignor to The White Motor Company, Cleveland, Ohio. Valve actuating mechanism. 1,820,891; Aug. 25.
Spitz, William, Brooklyn, N. Y. Plant stand. 1,820,843; Aug. 25.
Spowart, John B. (See Smith, T. C., Spowart, and Fitzpatrick.)
Sprague-Sells Corporation. (See McGhee, T., and Woodhead, assignor.)
Spry, Burgess T., San Dimas, Calif. Adjusting lever for cultivators and the like. 1,820,097; Aug. 25.
Stabele, Joseph. (See Boss, John H., assignor.)
Standard Brands Incorporated. (See Walters, Joseph C., assignor.)
Standard Gage Company. (See Aldeborgh, E. H., and Ruf, assignors.)
Standard Oil Company. (See Engel, Edwin F., assignor.)
Standard Oil Company of California. (See Hanna, Richard W., assignor.)
Stanley, Ernest J., Los Nietos, and C. H. Taylor, Los Angeles, Calif., said Taylor assignor to said Stanley. Operating mechanism for hoods. 1,820,506; Aug. 25.
Starnes, Lillie E. (See Wells, C. M., and Cook, assignors.)
Steinbuch, Ewald, Basel, and G. Füllemann, Monthey, Valais, assignors to the firm Society of Chemical Industry in Basle, Basel, Switzerland. Apparatus for obtaining light metals by electrolysis. 1,820,844; Aug. 25.
Sterling, Royal, assignor to Royal Protector Company, Boston, Mass. Protecting device for pipe coverings or the like. 1,820,845; Aug. 25.
Stevens, Charles E., and A. Mamor, Antwerp, Belgium, assignors to International Standard Electric Corporation, New York, N. Y. Telephone system. 1,820,682; Aug. 25.
Stevens, George H., Woodbury Heights, N. J. Safety valve. 1,820,403; Aug. 25.
Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tire mold opener. 1,820,892; Aug. 25.
Stevens, J. P., Engraving Co. (See Dixon, Paul, assignor.)
Stewart, Edmund L. (See Butts, Harry B., assignor.)
Stewart, Robert, Ozone Park, N. Y. Combination sponge and wash rag. 1,820,256; Aug. 25.
Stimson, Jonathan C., Chicago, Ill. Luminous display or reflector sign. Re18,166; Aug. 25.
Stokes, Charles L., Los Angeles, Calif. Temperature regulator. 1,820,035; Aug. 25.
Stone, Edwin W., Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Take-up mechanism for looms. 1,820,846; Aug. 25.
Storm, William J., Burbank, Calif. Grain door for box cars. 1,820,098; Aug. 25.
Strandell, Arthur, Tallinn, Estonia. Oil extracting device. 1,820,291; Aug. 25.
Strayer, Daniel H., Venice, Calif. Waterproof receptacle. 1,820,582; Aug. 25.
Strickland, John W., Nashville, N. C. Tray. 1,820,635; Aug. 25.
Strobel, Charles K., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Copper oxide rectifier. 1,820,166; Aug. 25.
Stromberg-Carlson Telephone Manufacturing Company, The. (See Worthington, Everett, assignor.)
Struthers Wells-Titusville Corporation. (See O'Brien, Frederick J., assignor.)
Stull, Roy H., Sunbury, Pa. Automatic fuel feeder. 1,820,507; Aug. 25.
Stupakoff Laboratories, Inc. (See McCullough, Frederick S., assignor.)
Sullivan, John V., Fremont, Ohio. Glove. 1,820,847; Aug. 25.
Sullivan Machinery Company. (See Gartin, Elmer G., assignor.)
Sullivan Machinery Company. (See Halleck, Frank A., assignor.)
Sullivan Machinery Company. (See Holmes, Morris P., assignor.)
Sullivan Machinery Company. (See Simmons, Leon E., assignor.)
Sullivan Machinery Company. (See Wineman, Wade H., assignor.)
Summit Mold and Machine Company, The. (See Norris, Charles E., assignor.)
Suter, Philipp, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rotary electric machine having ventilation features. 1,820,404; Aug. 25.
Swan, Harry B., assignor to General Motors Corporation, Detroit, Mich. Molding machine. 1,820,405; Aug. 25.
Swift and Company. (See Mayhew, George E., assignor.)

Switzer, Floyd R., Birmingham, Ala., assignor to The Ribbonew Company. Typewriter ribbon rejuvenator. 1,820,583; Aug. 25.
Sylvester, Julius, Washington, Pa., assignor to Simplex Engineering Company. Glass feeding apparatus. 1,820,508; Aug. 25.
Taffel, Sigmund, Brooklyn, N. Y. Bed convertible seating furniture. 1,820,167; Aug. 25.
Talboys, Henry H., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Adzing machine. 1,820,636; Aug. 25.
Tarbox, John P., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Front post construction for vehicle bodies. 1,820,636; Aug. 25.
Tarbox, John P., assignor to Edward G. Budd Mfg., Company, Philadelphia, Pa. Vehicle body. 1,820,099; Aug. 25.
Tatum, John J., Baltimore, Md. Car ladder. 1,820,848; Aug. 25.
Taubel, Clarence H., Riverside, N. J., assignor to Hemphill Company, Central Falls, R. I. Seamless stocking and making same. 1,820,037; Aug. 25.
Taylor, Claude H. (See Stanley, E. J., and Taylor.)
Teller Corporation. (See Teller, J., and Schulz, assignors.)
Teller, Jacob, Chicago, and A. P. Schulz, Berwyn, Ill., assignors to Teller Corporation, Chattanooga, Tenn. Gas or electric cooking range. 1,820,849; Aug. 25.
Tellier, Edgar H., and R. C. Deckman, assignors to Koehring Company, Milwaukee, Wis. Solenoid dipper trip. 1,820,546; Aug. 25.
Ternstedt Manufacturing Company. (See Schnell, W., and Lemm, assignors.)
Testa, Joseph A., assignor to F. P. Schneider, G. W. Peterson, and H. G. Peterson, St. Paul, Minn. Battery cable terminal. 1,820,584; Aug. 25.
Textile Machine Works. (See Janssen, Henry, assignor.)
Textile Patents Corporation. (See Baader, Herman, assignor.)
Thomas, Harold E. (See Dutton, Orlie W., assignor.)
Thompson, Albert W., Lowell, Mass. Pouring attachment for bottles. 1,820,406; Aug. 25.
Thompson, George F., assignor to G. H. Williams Company, Erie, Pa. Drag line bucket. 1,820,714; Aug. 25.
Thompson, Harry E., Detroit, Mich. Crank case seal. 1,820,100; Aug. 25.
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor blade. 1,820,407; Aug. 25.
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,820,408; Aug. 25.
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,820,408; Aug. 25.
Thomson, Judson L., Manufacturing Co. (See Havener, Arthur R., assignor.)
Tickometer Company, The. (See Scher, Louis, assignor.)
Tillotson Manufacturing Company, The. (See Davies, Henry R., assignor.)
Timken Roller Bearing Company, The. (See Drowns, Irvin, assignor.)
Timken Roller Bearing Company, The. (See Foulks, Robert, assignor.)
Todd, John H., assignor to The Key-Tag Checking System Company, Cleveland, Ohio. Laundry checking device. 1,820,101; Aug. 25.
Tolerton, Ray E., Fort Wayne, Ind., assignor to The Magnavox Company, Chicago, Ill. Loud speaker. 1,820,585; Aug. 25.
Toncray, Millard H., assignor to Hudson Motor Car Company, Detroit, Mich. Automobile body. 1,820,257; Aug. 25.
Toogood, Henry H., Los Angeles, Calif. Tie or clamp for building forms. 1,820,509; Aug. 25.
Toscano, Louis P., assignor to Fonda Container Company, Inc., Utica, N. Y. Clamp for a machine for forming paper containers. 1,820,102; Aug. 25.
Tower, Henry M., Hastings-on-Hudson, N. Y. Connection for connecting piston rods to main rods of engines. 1,820,638; Aug. 25.
Toy, Hugh T., Sidney, Ohio. Pedestal. 1,820,103; Aug. 25.
Tracy, James J., Cleveland, Ohio. Carburation. 1,820,873; Aug. 25.
Trans-Lux Daylight Picture Screen Corporation. (See Weller, Frank E., assignor.)
Travis, Simeon E., jr., Hattiesburg, Miss., assignor to The Weldmech Steel Products Co. End closure structure for truck bodies. 1,820,850; Aug. 25.
Trbojevich, Nikola, Highland Park, Mich. Cutting gears and apparatus therefor. 1,820,409; Aug. 25.
Trbojevich, Nikola, Highland Park, Mich. Gear hob and making and using the same. 1,820,410; Aug. 25.
Trevorrow, Havelock, Birmingham, England. Apparatus for the dipping of tubes or rods for pickling, etc. 1,820,851; Aug. 25.
Trico Products Corporation. (See Hueber, Henry, assignor.)
Trico Products Corporation. (See Hueber, H., and Horton, assignors.)
Trinity Wheel Corporation. (See Baker, Frederick W., assignor.)
Truscon Steel Company. (See White, H. E., and Fishel, assignors.)
Tuck, George A., San Francisco, Calif. Control valve mechanism for gas furnaces. 1,820,510; Aug. 25.
Ulrich, John R., Bethlehem, Pa., assignor to Bethlehem Steel Company. Railway track structure. 1,820,586; Aug. 25.
Underwood Elliott Fisher Company. (See Conard, Frederick U., assignor.)
Underwood Elliott Fisher Company. (See Dopson, William A., assignor.)
Underwood Elliott Fisher Company. (See Vickers, Harry H., assignor.)
Union Special Machine Company. (See Chidley, Alfred T., assignor.)
Union Special Machine Company. (See Jones, Charles H., assignor.)
Union Special Machine Company. (See Riviere, Albert S., assignor.)
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
Union Steel Products Company. (See Hatch, Charles T., assignor.)
Union Switch & Signal Company, The. (See Allen, Earl M., assignor.)
Union Switch & Signal Company, The. (See Coleman, John P., assignor.)
Union Switch & Signal Company, The. (See Lewis, Lloyd V., assignor.)
Union Switch & Signal Company, The. (See McWhirter, William C., assignor.)
Union Switch & Signal Company, The. (See Strobel, Charles K., assignor.)
Union Switch & Signal Company, The. (See Willard, P. F., and Pfiasterer, assignors.)
United Cigar Stores Company of America. (See Firth, Richard H., assignor.)
United Verde Copper Company. (See Barker, Lyle M., assignor.)
Universal Gear Shift Corporation. (See Craig, Alvin M., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Optical Corporation. (See Beattey, Earle J. R. assignor.)
Valentine, Albert H. (See Lemming, J. C., and Valentine.)
Vanatta, Jean K. (See Youngchild, C. E., Vanatta, and Youngchild.)
Vance, Walter N., Chicago Heights, assignor, by mesne assignments, to Lyon Metal Products Incorporated, Aurora, Ill. Locking device. 1,820,715; Aug. 25.
Vance, Walter N., North Aurora, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Rack. 1,820,716; Aug. 25.
Vanderbilt, R. T., Co. (See Kaegebehn, Charles F., assignor.)
Van Patten, Burton, Brea, Calif. Earth boring drill. 1,820,511; Aug. 25.
Vapor Car Heating Company. (See Gold, E. H., and Russell, assignor.)
Varvel, Sidney L., Berowra, New South Wales, Australia. Carburetor. 1,820,512; Aug. 25.
Vehl, Paul, and Eduard Schnitzler, Dessau in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghampton, N. Y. Photographic roll film cartridge. 1,820,168; Aug. 25.
Vendi Cater, Inc. (See McCormick, J. H., Allen, and Bender, assignors.)
Vickers, Harry H., Corona, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,820,258; Aug. 25.
Victor Chemical Works. (See Easterwood, Henry, assignor.)
Viele, Walter S., New York, N. Y., assignor to American Maize-Products Company. Jug. Des. 84,964; Aug. 25.
Vincke, Enrique, Barcelona, Spain, assignor, by mesne assignments, to Armstrong Cork Company, Lancaster, Pa. Manufacturing artificial cork. 1,820,411; Aug. 25.
Vogt, Harry, and J. Heck, Brooklyn, N. Y. Device for winding, combing, stretching and tying hair in the making of permanent waves. 1,820,513; Aug. 25.
Von Bronk, Otto, and H. Rukop, assignors to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Intensity control. 1,820,335; Aug. 25.
Von Hoorn, Fred G., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Switch. 1,820,683; Aug. 25.
Von Riesen, Cornelius, Beatrice, Nebr. Clutch. 1,820,331. Aug. 25.
Wadell, Albert H., Newark, N. J. Machine for trimming metal parts. 1,820,717; Aug. 25.
Wadsworth Watch Case Co. (See Beebe, M. C., and Herlinger, assignors.)
Wait, Justin F., New York, N. Y., assignor to National Aniline & Chemical Co., Inc. Increasing the apparent density of organic compounds before fusion with caustic alkali. 1,820,684; Aug. 25.
Walker, John, & Company. (See Guyatt, George H., assignor.)
Walker, Sidney L., Jackson, Mich., assignor to The Knickerbocker Company. Measuring and weighing device for concrete mixers. 1,820,547; Aug. 25.
Wallace, Lilla B., administratrix. (See Wallace, William W., assignor.)
Wallace, William W., Chicago, Ill., deceased; Lilla B. Wallace, administratrix. Brick setter. 1,820,332; Aug. 25.

Walle, Leroy, Macomb, Ill. Electric heater for washing machines. 1,820,514; Aug. 25.
Walter, Joseph, Calumet City, Ill., assignor to Frank S. Betz Company, Hammond, Ind. Drawer support and guide. 1,820,548; Aug. 25.
Walter, Raymond A., New York, N. Y. Driving mechanism. 1,820,852; Aug. 25.
Walters, Joseph C., Philadelphia, Pa., assignor to Standard Brands Incorporated, New York, N. Y. Bag or similar article. Des. 84,965; Aug. 25.
Wandel, Kurt, New York, N. Y., assignor to National Cellulose Corporation. Tissue pad. 1,820,259; Aug. 25.
Wardley, Thomas, Greenford, England, assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for annealing glassware. 1,820,260; Aug. 25.
Warner Electric Brake Corporation. (See Cadman, Addi B., assignor.)
Warren, Arthur J., Pawtucket, R. I. Hand washer. 1,820,853; Aug. 25.
Warren, Roscoe F., Los Angeles, Calif. Tent. 1,820,412; Aug. 25.
Warren Telechron Company. (See Pond, Shepard, assignor.)
Waterman, L. E., Company. (See Larsen, Gabriel, assignor.)
Watson-Flagg Machine Company. (See Flagg, John H., assignor.)
Watson, William A., New Haven, Conn. Valve unit for player pianos. 1,820,037; Aug. 25.
Watts, George E. (See Davis, R. J., and Watts.)
Weaver, Joseph B., Toledo, Ohio. Gas generating apparatus. 1,820,336; Aug. 25.
Webel, Jacob H., assignor to A. Breslauer, Inc., New York, N. Y. Therapeutical device. 1,820,895; Aug. 25.
Weinberg, Alexander, New York, N. Y. Game apparatus. 1,820,515; Aug. 25.
Weise, Alfred, New York, N. Y. Umbrella. 1,820,639; Aug. 25.
Weisenburg, Andrew, assignor to Crown Cork & Seal Company, Inc., Baltimore, Md. Closure cap. Des. 84,966; Aug. 25.
Welder, Helen, San Antonio, Tex. Napkin clip or similar article. Des. 84,967; Aug. 25.
Weldmech Steel Products Co., The. (See Travis, Simeon E., jr., assignor.)
Weller, Frank E., Newark, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Control system for viewing devices. 1,820,516; Aug. 25.
Wells, Carl E., Estherville, Iowa. Comb sterilizer. 1,820,517; Aug. 25.
Wells, Chester M., and E. Cook, assignors of one-third to L. E. Starnes, Asheville, N. C. Key duplicating device. 1,820,518; Aug. 25.
Wenzel, John, Foley, Ala. Automobile identification plate. Des. 84,968; Aug. 25.
Wermine, Hugo H., Villa Park, assignor to Belden Manufacturing Company, Chicago, Ill. Electric connecter plug. 1,820,333; Aug. 25.
Wertzberger, Dallas D., Tulsa, Okla. Top casting and derrick construction. 1,820,519; Aug. 25.
Western Concrete Pipe Company. (See Bilderbeck, John T., assignor.)
Western Gas Construction Company, The. (See Hackney, William W., assignor.)
Western Railway Equipment Company. (See Campbell, S. H., and Habenicht, assignors.)
Western Wheeled Scraper Company. (See Burner, William L., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. (See Hewitt, Ellis E., assignor.)
Westinghouse Air Brake Company, The. (See Kelley, Cecil S., assignor.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Austin, W. M., and MacNeill, assignors.)
Westinghouse Electric and Manufacturing Company. (See Brown, Arthur L., assignor.)
Westinghouse Electric and Manufacturing Company. (See Brown, James M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Else, Harry D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Forshee, Frank F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Guy, Henry L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hartman, Harry F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Herr, Herbert T., assignor.)
Westinghouse Electric and Manufacturing Company. (See Herr, Herbert T., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hetherington, George V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hodgkins, Charles H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jennings, Oliver S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Randall, Karl C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Reavis, Andrew B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Rudenberg, Reinhold, assignor.)
Westinghouse Electric & Manufacturing Company. (See Schaelchlin, Walter, assignor.)
Westinghouse Electric & Manufacturing Company. (See Von Hoorn, Fred G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wise, Allen S., assignor.)
Wetherbee, Ashur U., Chicago, Ill. Boiler. 1,820,520; Aug. 25.
Whaley, John W., Richmond, Va. Seat cover. 1,820,104; Aug. 25.
White, Ernest C. (See Feldkamp, Frederick A., assignor.)
White, Ernest C., New York, N. Y., assignor of one-half to R. F. Fisher, Philadelphia, Pa. Electric lamp socket. 1,820,261; Aug. 25.
White, Herbert E., and W. H. Fishel, assignors to Truscon Steel Company, Youngstown, Ohio. Lath structure. 1,820,896; Aug. 25.
White, Herbert E., and W. H. Fishel, assignors to Truscon Steel Company, Youngstown, Ohio. Lath structure. 1,820,897; Aug. 25.
White, James A., assignor to Harrison Radiator Corporation, Lockport, N. Y. Radiator structure. 1,820,413; Aug. 25.
White, James A., assignor to Harrison Radiator Corporation, Lockport, N. Y. Radiator assembly. 1,820,414; Aug. 25.
White, James M., Champaign, Ill. Reducing sound in subways. 1,820,874; Aug. 25.
White, Joseph A., Melrose Park, assignor to The Moore & White Company, Philadelphia, Pa. Save-all, paper making machine, etc. 1,820,854; Aug. 25.
White Motor Company, The. (See Church, Harold D., assignor.)
White Motor Company, The. (See Spiller, William R., assignor.)
Whitehead, Connie W., assignor, by mesne assignments, to New Era Electro Devices, Chattanooga, Tenn. Automatic cut-off switch. 1,820,203; Aug. 25.
Whitehead, Oton L., assignor of two-thirds to P. M. Smith; Tohula, Miss. Pump attachment for automobiles. 1,820,855; Aug. 25.
Whitin Machine Works. (See Koolstra, John A., assignor.)
Whitmill, James E., Haynesville, La. Valve seat grinder. 1,820,303; Aug. 25.
Whitridge, John C., and C. L. Orr, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Brake rigging for railway cars. 1,820,856; Aug. 25.
Wiesman, Jerome, Denver, Colo. Purifying system for dry cleaning solutions. 1,820,334; Aug. 25.
Wigand, Edward H., St. Paul, Minn. Pliers and the like. 1,820,169; Aug. 25.
Wilcox, Robert A., assignor to Grier Press, Incorporated, Chicago, Ill. Advertising stand. 1,820,685; Aug. 25.
Wildhaber, Ernest, Brooklyn, N. Y. Gear cutting tool. 1,820,415; Aug. 25.
Wildhaber, Ernest, Brooklyn, N. Y. Cutter heat for rotary gear cutting tools. 1,820,416; Aug. 25.
Wilkins, Richard A., Beverly, assignor to Industrial Development Corporation, Salem, Mass. Electrolytic method and apparatus. 1,820,204; Aug. 25.
Willard, Paul F., Wilkinsburg, and G. R. Pfiasterer, assignors to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of highway crossing signals. 1,820,170; Aug. 25.
Wille, Fred. (See Beale, A. H., Brassert, and Wille.)
Willems, August J., Chicago, Ill. Device for whipping cream and similar uses. 1,820,718; Aug. 25.
Williams, Clayton, Camden, N. J. Motion picture machine. 1,820,418; Aug. 25.
Williams, G. H., Company. (See Thompson, George F., assignor.)
Williams, Harrison R., New York, N. Y. Milk container. 1,820,549; Aug. 25.
Williams, Roger, assignor to Du Pont Ammonia Corporation, Wilmington, Del. Effecting catalytic reactions. 1,820,417; Aug. 25.
Williams, Stephen F., Montreal East, Quebec, Canada. Truck for transporting annular objects. 1,820,263; Aug. 25.
Wilson, Ben T. (See Roberts, E. M., jr., and Penman, assignors.)
Wilson, Charles E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Switch. 1,820,264; Aug. 25.
Wilson, Evan G., Blundellsands, near Liverpool, England. Device for use in stretching skins or the like. 1,820,550; Aug. 25.
Wilson, John H. (See Giguere, Rosario, assignor.)
Wilson, John L., Wisner, La. Filler strip for drop center wheel rims. 1,820,857; Aug. 25.
Wilson, Theodore R., assignor to Micklin Lumber Company, Omaha, Nebr. Corner piece for frame strips. 1,820,205; Aug. 25.
Wilson, Theodore R., assignor to Micklin Lumber Company, Omaha, Nebr. Fastening corner frame strips. 1,820,206; Aug. 25.
Wine Railway Appliance Company. (See Hankins, C., and Christian, assignors.)
Wineman, Wade H., Michigan City, Ind., assignor to Sullivan Machinery Company. Forging machine. 1,820,207; Aug. 25.

Wineman, Wade H., Michigan City, Ind., assignor to Sullivan Machinery Company. Forging machine. 1,820,208; Aug. 25.
Winship, Benjamin W., and W. T. Harder, Steelton, Pa., assignors to Bethlehem Steel Company. Valve. 1,820,587; Aug. 25.
Wintzer, Rudolph, assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Steam engine valve. 1,820,588; Aug. 25.
Wire Novelty Manufacturing Company, The. (See Heather, George B., assignor.)
Wired Radio Inc. (See Gebhard, Louis A., assignor.)
Wise, Allen S., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Valve operating mechanism. 1,820,686; Aug. 25.
Withrow, Floyd G., Grand Rapids, Mich. Brake rattle silencer. 1,820,719; Aug. 25.
Withrow, Floyd G., Grand Rapids, Mich. Service brake lever silencer. 1,820,720; Aug. 25.
Withrow, Floyd G., Grand Rapids, Mich. Brake rod antirattler. 1,820,721; Aug. 25.
Wittliff, Theodore H., Cleveland, Ohio. Furniture brace and control therefor. 1,820,589; Aug. 25.
Wobbe, Aloysius B., Springfield, Ohio. Garment hanger. 1,820,419; Aug. 25.
Wolf Safety Lamp Company of America, Inc. (See Anglada, Domingo, assignor.)
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Matrix roller. 1,820,551; Aug. 25.
Wood, Joseph D., Wollaston, Mass. Electric switch. 1,820,877; Aug. 25.
Wood, Joseph D., Wollaston, assignor to Condit Electrical Manufacturing Company, South Boston, Mass. Electric switch and terminal. 1,820,875; Aug. 25.
Wood, Joseph D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and contact structure therefor. 1,820,876; Aug. 25.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodhead, Peter. (See McGhee, T., and Woodhead.)
Woodruff, Graham C., Bronxville, N. Y., assignor to The L. C. L. Corporation. Sectional carload container. 1,820,105; Aug. 25.
Woodruff, Leonidas D. (See Hungerford, Wallace R., assignor.)
Woods, Al. H. (See Pask, Stanley J., assignor.)
Wooley, Ernest G., assignor of forty-five one-hundredths to C. A. Nath and ten one-hundredths to J. L. Lorenzen, Wichita, Kans. Motor cleaning means. 1,820,552; Aug. 25.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. 1,820,106; Aug. 25.
Workman, Ellison E., Montreal, Quebec, assignor to himself and E. A. Robinson, Montreal, Canada. Terminal tube adjustment for train connecters. 1,820,337; Aug. 25.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or the like. Des. 84,969; Aug. 25.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or the like. Des. 84,970; Aug. 25.
Wright, Carl H. (See Newhouse, George A., assignor.)
Wright, George J., Boston, assignor to Mary Wright, Quincy, Mass. Rear curtain operator device. 1,820,292; Aug. 25.
Wright, Mary. (See Wright, George J., assignor.)
Wurdack, William, jr., assignor to Wm. Wurdack Electric Manufacturing Company, St. Louis, Mo. Bus bar connecter. 1,820,640; Aug. 25.
Wurdack, Wm., Electric Manufacturing Company. (See Wurdack, William, jr., assignor.)
Wurlitzer, Rudolph, Manufacturing Company, The. (See Battner, Stephen, assignor.)
Wyckoff, George H., Mountain Lakes, N. J., assignor to Doherty Research Company, New York, N. Y. Catalytic combustion by means of refractories. 1,820,878; Aug. 25.
Yates-American Machine Company. (See Lane, Franklin L., assignor.)
Yoder, Benjamin H., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Tank frame for refrigerator cars. 1,820,641; Aug. 25.
Youngchild, Casper E., and J. K. Vanatta, Port Edwards, and J. W. Youngchild, Nekoosa, assignors to Nekoosa-Edwards Paper Company, Port Edwards, Wis. Marking roll. 1,820,338; Aug. 25.
Youngchild, John W. (See Youngchild, C. E., Vanatta, and Youngchild.)
Youngstown Sheet and Tube Company. (See Chalmers, James B., assignor.)
Zeh, Ludwig, Wiesdorf-on-the-Rhine, E. Kramer, Cologne-Deutz, and B. Bollweg, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Nitro compounds of dinaphthylene-dioxides. 1,820,038; Aug. 25.
Zelbig, Bruno H., assignor to A C Spark Plug Company, Flint, Mich. Electric gasoline gauge. 1,820,369; Aug. 25.
Zemlin, Carl, Berlin-Pankow, assignor to Siemens Bauunion, G. m. b. H., Kommanditgesellschaft, Siemensstadt near Berlin, Germany. Solidifying layers of ground and similar masses. 1,820,722; Aug. 25.
Zerweck, Werner. (See Heidenreich, R., Zerweck, and Honold.)
Zitscher, Arthur, Offenbach-on-the-Main, and R. Schmitt, Darmstadt, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azodyestuffs insoluble in water and making same. 1,820,039; Aug. 25.
Zuckerman, Roscoe C., Stockton, Calif. Protecting envelope for trees. 1,820,040; Aug. 25.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 25TH DAY OF AUGUST, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive wheel. H. A. Peeblond and D. D. MacLaughlin. 1,820,581; Aug. 25.
Accumulator operating mechanism. W. W. Lasker. 1,820,078; Aug. 25.
Acoustic device. A. W. Agee. 1,820,107; Aug. 25.
Adhesive base. L. Bradshaw. 1,820,432; Aug. 25.
Advertising display device. J. O'Neill. 1,820,708; Aug. 25.
Advertising display device. E. M. Roberts, jr., and F. R. Penman. 1,820,250; Aug. 25.
Advertising stand. R. A. Wilcox. 1,820,685; Aug. 25.
Adzing machine. H. H. Talboys. 1,820,636; Aug. 25.
Aerial device. A. Arias. 1,820,643; Aug. 25.
Aeroplane. W. H. Gray. 1,820,613; Aug. 25.
Aeroplane hatch coaming. R. J. Davis and G. E. Watts. 1,820,053; Aug. 25.
Air cleaner. H. R. Davies. 1,820,530; Aug. 25.
Air cleaner. R. F. Gordon and J. S. Gwaltney. 1,820,795; Aug. 25.
Airplanes, Runway for. J. Gafney. 1,820,062; Aug. 25.
Aisle light. G. H. Hamilton and E. W. Chapman. 1,820,797; Aug. 25.
Alarm: *See*—
Burglar alarm.
Antifreeze device for water systems. S. Milone. 1,820,473; Aug. 25.
Antirattling device for automobile panes. P. J. Fitzgerald. 1,820,451; Aug. 25.
Antiskid device. O. W. Dutton. 1,820,449; Aug. 25.
Arch support. A. F. Krausz. 1,820,747; Aug. 25.
Artificial thread and process for making same. L. Lilienfeld. Re18,170; Aug. 25.
Ash receiver. H. Janssen. Des. 84,939; Aug. 25.
Ash tray. E. T. Bahner. Des. 84,915–19; Aug. 25.
Autographic register. G. J. Neth. 1,820,241; Aug. 25.
Automatic coupling. V. N. Bogdamov (Bogdanoff). 1,820,213; Aug. 25.
Automatic cut-off switch. C. W. Whitehead. 1,820,208; Aug. 25.
Automobile body, Pressed metal. J. Ledwinka. 1,820,079; Aug. 25.
Automobile identification plate. J. Wenzel. Des. 84,968; Aug. 25.
Automobile wheel. E. L. Moline. 1,820,084; Aug. 25.
Axle stabilizing device, Front. P. E. Matthews. 1,820,753; Aug. 25.
Azo compound from phenyl-diazo-amino-alpha-monamino-pyridine, Oobtaining an. I. Ostromislensky. 1,820,483; Aug. 25.
Azodyestuffs insoluble in water and making same. A. Zitscher and R. Schmitt. 1,820,039; Aug. 25.
Badge or similar article. J. A. Glenn. Des. 84,931; Aug. 25.
Bag or similar article. J. C. Walters. Des. 84,965; Aug. 25.
Bait, Artificial. H. Mays and S. H. Kirkland. 1,820,670; Aug. 25.
Bait, Artificial fish. W. E. Oster. 1,820,759; Aug. 25.
Ball: *See*—
Rubber ball.
Band, Tractor. E. P. Engstrom. 1,820,882; Aug. 25.
Barrels, Apparatus for washing. E. F. Engel. 1,820,608; Aug. 25.
Bars for buckles, Apparatus for casting. B. Mechlovits. 1,820,757; Aug. 25.
Batcher. J. H. Gwynne. 1,820,615; Aug. 25.
Battery cable terminal. J. A. Testa. 1,820,584; Aug. 25.
Battery terminal, Storage. A. D. Goldman. 1,820,611; Aug. 25.
Beacon for luminous signalization. J. R. P. Francotte. 1,820,534; Aug. 25.
Bed. F. L. Mills. 1,820,285; Aug. 25.
Bed, Animal. F. L. Mills. 1,820,283–4; Aug. 25.
Bed, Recess folding. L. Muchlinski. 1,820,672; Aug. 25.
Bed structure. B. M. Frank and J. Basile. 1,820,658; Aug. 25.
Beehive brood frame. C. E. Sanders. 1,820,500; Aug. 25.
Belt supporting and driving mechanism. T. H. J. Simmons and F. W. Blackburne. 1,820,634; Aug. 25.
Bench convertible into bedstead for vehicles. L. C. A. Poirot. 1,820,155; Aug. 25.
Beryllium compounds from beryllium bearing minerals, Obtaining. H. Fischer. 1,820,655; Aug. 25.
Beverage container. G. G. Marshall. Des. 84,947; Aug. 25.
Binder for pamphlets and other folded articles, Temporary. H. J. Gaylord. 1,820,736; Aug. 25.
Blade, Safety razor. R. E. Thompson. 1,820,407; Aug. 25.
Blasting device. D. Hodge. 1,820,566; Aug. 25.
Bluing device. R. Giguere. 1,820,794; Aug. 25.
Board: *See*—
Score board.
Bobbin clutch for spindles. G. H. Magrath. 1,820,574; Aug. 25.
Bobbin filling carrier. O. Reinhardt. 1,820,159; Aug. 25.
Body, Automobile. M. H. Toncray. 1,820,257; Aug. 25.
Boiler: *See*—
Steam boiler.
Boiler. F. M. Miner, jr., and W. C. Daumling. 1,820,286; Aug. 25.
Boiler. A. U. Wetherbee. 1,820,520; Aug. 25.
Bolt: *See*—
King bolt.
Bolt. S. H. Campbell and F. K. Habenicht. 1,820,556; Aug. 25.
Bottles, Pouring attachment for. A. W. Thompson. 1,820,406; Aug. 25.
Box: *See*—
Fruit and novelty box. Outlet box.
Box and the like. H. L. Purchas. Des. 84,954; Aug. 25.
Box closure. C. E. Huffman. 1,820,804; Aug. 25.
Box for baby's shoes. B. Schubart. Des. 84,960; Aug. 25.
Brace and control therefor, Furniture. T. H. Wittliff. 1,820,589; Aug. 25.
Bracelet construction. C. A. Mealy. 1,820,576; Aug. 25.
Bracket: *See*—
Brake hanger bracket. Shade bracket.
Scaffold bracket.
Brake: *See*—
Fluid pressure brake. Railway car brake.
Hydraulic brake. Vehicle brake.
Brake. J. Sneed. 1,820,255; Aug. 25.
Brake hanger bracket. G. F. Couch. 1,820,443; Aug. 25.
Brake lever silencer, Service. F. G. Withrow. 1,820,720; Aug. 25.
Brake operating device, Vehicle. C. D. Ramelli. 1,820,158; Aug. 25.
Brake operating mechanism. M. W. McConkey. 1,820,472; Aug. 25.
Brake rattle silencer. F. G. Withrow. 1,820,719; Aug. 25.
Brake rigging. R. G. Anderson. 1,820,723; Aug. 25.
Brake rigging for railway cars. J. C. Whitridge and C. L. Orr. 1,820,856; Aug. 25.
Brake rod antirattler. F. G. Withrow. 1,820,721; Aug. 25.
Brake shoe. C. D. Pettis. 1,820,490; Aug. 25.
Braking system. D. Y. Dodge. 1,820,604; Aug. 25.
Breaker, Circuit. W. M. Austin and J. B. MacNeill. 1,820,769; Aug. 25.
Brick and pallet centering device. G. E. Luce and T. B. Huestis. 1,820,471; Aug. 25.
Brick press, Mechanical. G. Rigaux. 1,820,366; Aug. 25.
Briquetting machine. J. C. Lemming and A. H. Valentine. 1,820,235; Aug. 25.
Brush, Automatic powder. A. J. Evans and R. T. Raines. 1,820,787; Aug. 25.
Brush, Electro-therapeutic hair. A. A. S. Barker. 1,820,769; Aug. 25.
Brushholder. H. F. Hartman. 1,820,699; Aug. 25.
Bucket, Drag line. G. F. Thompson. 1,820,714; Aug. 25.
Bucket elevator. P. S. Erikson. 1,820,609; Aug. 25.
Buckle, Slide. C. A. Mosgrove. 1,820,578; Aug. 25.
Buffer wheel. A. Levett. 1,820,465; Aug. 25.
Building construction. S. H. Barrows. 1,820,041; Aug. 25.
Building product, Prepared. T. Robinson. 1,820,834; Aug. 25.
Burglar alarm. G. Jakopec, J. F. Salley, and V. Schwarz. 1,820,805; Aug. 25.
Burner: *See*—
Gas burner. Oil burner.
Button. G. A. Bering. 1,820,771; Aug. 25.
Button loop. G. B. Heather. 1,820,068; Aug. 25.
Button loop. J. Salisbury. 1,820,290; Aug. 25.
Button loop, Resilient. P. E. Fenton. 1,820,450; Aug. 25.
Cabinet. L. H. Morin. 1,820,476; Aug. 25.
Cable guide. C. W. Richardson. 1,820,495; Aug. 25.
Camera. C. C. Arrasmith and H. D. Markwell. 1,820,767; Aug. 25.
Camera. G. Bettini. 1,820,113; Aug. 25.

Cameras, Indicator for. M. Alland. 1,820,421; Aug. 25.
Can and forming same, Milk. D. J. Fabiman. 1,820,733; Aug. 25.
Can closing machines, Brine supplying attachment for. J. H. O'Neil. 1,820,480; Aug. 25.
Candlestick or article of analogous nature. S. A. Libold. Des. 84,946; Aug. 25.
Cap, Closure. A. Weisenburg. Des. 84,966; Aug. 25.
Car dumping device. W. L. Laing. 1,820,312; Aug. 25.
Car, Railway. C. Hankins and G. B. Christian. 1,820,136; Aug. 25.
Carbon black, Manufacture of. A. W. Francis. 1,820,657; Aug. 25.
Carbon deposits, Removing. W. G. Lovell and T. A. Boyd. 1,820,395; Aug. 25.
Carburation. J. J. Tracy. 1,820,873; Aug. 25.
Carburetor. S. L. Picard. 1,820,825; Aug. 25.
Carburetor. S. L. Varvel. 1,820,512; Aug. 25.
Card and stencil for visible indexes, Combined. B. L. Polkosnik. 1,820,090; Aug. 25.
Card, Hand. W. A. Dutton. 1,820,380; Aug. 25.
Card, Index. E. W. Sibley. 1,820,889; Aug. 25.
Carrier: *See*—
Bobbin filling carrier.
Carrier for container. A. J. Ross. 1,820,497; Aug. 25.
Casing for a camera. S. J. Park. Des. 84,950; Aug. 25.
Casing slip. F. J. O'Brien. 1,820,479; Aug. 25.
Catalytic combustion by means of refractories. G. H. Wyckoff. 1,820,876; Aug. 25.
Catalytic reactions, Effecting. R. Williams. 1,820,417; Aug. 25.
Chain jack. F. W. Coffing. 1,820,894; Aug. 25.
Change making machine. E. J. Brandt. 1,820,343; Aug. 25.
Cheese cutter. T. J. Boehmer. 1,820,342; Aug. 25.
Chilling unit. J. J. Korenchan. 1,820,746; Aug. 25.
Chopper: *See*—
Cotton chopper.
Chute. C. M. Wilkinson. 1,820,262; Aug. 25.
Cigarette extinguisher and receptacle, Combined. J. M. Larson. 1,820,077; Aug. 25.
Circuit breaker. K. C. Randall. 1,820,709; Aug. 25.
Circuit breaker, High speed oil. R. Rudenberg. 1,820,710; Aug. 25.
Clamp: *See*—
Hair waving clamp. Work holding clamp.
Clamp and shoe last vise. J. Rattazzi. 1,820,492; Aug. 25.
Clamp for a machine for forming paper containers. L. P. Toscano. 1,820,102; Aug. 25.
Clasping device for flexible bracelet or the like. C. H. Kestenman. 1,820,393; Aug. 25.
Cleaner: *See*—
Air cleaner. Vacuum cleaner.
Cleaning apparatus. F. W. Miller. 1,820,316; Aug. 25.
Cleaning solutions, Purifying system for dry. J. Wiesman. 1,820,334; Aug. 25.
Clip: *See*—
Lath attaching clip.
Clip or similar article, Napkin. H. Welden. Des. 84,967; Aug. 25.
Clock case. S. Pond. Des. 84,953; Aug. 25.
Clock mechanism. F. A. Feldkamp. 1,820,386; Aug. 25.
Closure device, Pocket. O. P. Ling. 1,820,572; Aug. 25.
Closure for collapsible tubes. J. J. Callahan and W. D. McDermott. 1,820,435; Aug. 25.
Cloth, Gummed. C. H. Crowell. 1,820,050; Aug. 25.
Clothes drying rack. O. J. Kuenhold. 1,820,026; Aug. 25.
Clothes hanger. C. W. Lindgren. 1,820,468; Aug. 25.
Clothes wringer. C. Roberts. 1,820,032; Aug. 25.
Clutch. C. Von Riesen. 1,820,331; Aug. 25.
Clutch, Overrunning. R. F. Mullen. 1,820,151; Aug. 25.
Clutch release and brake setting device, Combined. P. H. Manning. 1,820,359; Aug. 25.
Coal and the like Apparatus for taking samples of. H. N. Eavenson. 1,820,381; Aug. 25.
Coil. P. A. Michel. 1,820,240; Aug. 25.
Coiling means for concavo-convex springs. H. A. Farrand. 1,820,789; Aug. 25.
Collar. J. N. Collins. Re18,161; Aug. 25.
Color designs to fibrous materials, Transfer of. S. J. Cox. 1,820,550; Aug. 25.
Comb: *See*—
Pocket comb.
Combustion control system. T. A. Peebles. 1,820,580; Aug. 25.
Compounds of the anthanthrone series. R. Heidenreich. 1,820,019; Aug. 25.
Compressor. P. H. Davey. 1,820,732; Aug. 25.
Compressor, Centrifugal. P. D. Caldwell. 1,820,344; Aug. 25.
Conductor of high negative temperature co-efficient, Variable. H. André. 1,820,591; Aug. 25.
Conductor terminal. J. C. Bohan. 1,820,429; Aug. 25.
Connecter, Bus bar. W. Wurdack, jr. 1,820,640; Aug. 25.
Connecter, Resilient. H. D. Geyer. 1,820,133; Aug. 25.
Connection for connecting piston rods to a main rod of engines. H. M. Tower. 1,820,638; Aug. 25.
Construction material. A. C. Fischer. 1,820,217; Aug. 25.
Container and vacuumizing the same. J. H. O'Neil. 1,820,481; Aug. 25.
Container closure. J. M. Hothersall. 1,820,192; Aug. 25.
Container, Freezing. H. D. Geyer. 1,820,134; Aug. 25.
Container, Milk. H. R. Williams. 1,820,549; Aug. 25.
Container, Sectional carload. G. C. Woodruff. 1,820,105; Aug. 25.
Control, Automobile. L. E. Russell, jr. and G. E. Peters. 1,820,078; Aug. 25.
Control device for affination centrifugals. C. L. Carlson. 1,820,374; Aug. 25.
Control system for viewing devices. F. E. Weller. 1,820,516; Aug. 25.
Conveyer or handling device. W. J. Loerke. 1,820,669; Aug. 25.
Cooker with heat and pressure. S. Rage. 1,820,325; Aug. 25.
Cooling means for roller mills. K. B. Kilborn. 1,820,073; Aug. 25.
Cord, Tie. B. B. Epstein. 1,820,868; Aug. 25.
Cork, Manufacturing artificial. E. Vincke. 1,820,411; Aug. 25.
Corner frame strips, Fastening means for. T. R. Wilson. 1,820,206; Aug. 25.
Corner piece for frame strips. T. R. Wilson. 1,820,205; Aug. 25.
Cotton chopper. G. P. Pardue. 1,820,153; Aug. 25.
Counters and the like, Automatic feeding mechanism for. L. Scher. 1,820,680; Aug. 25.
Coupler, Hose. E. H. Gold and E. A. Russell. 1,820,535; Aug. 25.
Coupling: *See*—
Automatic coupling. Pipe coupling.
Flexible coupling.
Coupling device. H. Bach. 1,820,644; Aug. 25.
Coupling mechanism. W. R. Hungerford. 1,820,703; Aug. 25.
Cover and frame and the like, Manhole. V. Elkington. 1,820,127; Aug. 25.
Cover for the mouths of bottles, Protective. E. Kleist. 1,820,144; Aug. 25.
Cover lifter. G. E. Mayhew. 1,820,575; Aug. 25.
Cover, Seat. J. W. Whaley. 1,820,104; Aug. 25.
Creeper for tractor belts. V. G. Honstain. 1,820,743; Aug. 25.
Crevices in rock formations or the like, Apparatus for sealing. G. W. Christians. 1,820,347; Aug. 25.
Crooked hole indicator. L. A. McLain. 1,820,082; Aug. 25.
Curling device, Hair. E. O. Frederics. 1,820,387; Aug. 25.
Current supply device. J. W. Fitzgerald. 1,820,060; Aug. 25.
Curtain, Fluid controlled. N. P. McLeod. 1,820,148; Aug. 25.
Curtain operator device, Rear. G. J. Wright. 1,820,292; Aug. 25.
Cushion pad. H. J. Burkart. 1,820,047; Aug. 25.
Cushioning shield for retractable seats. R. K. Merrill. 1,820,754; Aug. 25.
Cutlery and the like. N. E. Lees. 1,820,234; Aug. 25.
Cutter: *See*—
Cheese cutter. Twine cutter.
Cutter head. F. L. Lane. 1,820,231; Aug. 25.
Cutter head for rotary gear cutting tools. E. Wildhaber. 1,820,416; Aug. 25.
Cycle, Towable. A. L. Hess. 1,820,189; Aug. 25.
Cylinder head. A. M. Niven. 1,820,628; Aug. 25.
Cylinder, Manufacturing an engine. H. T. Herr. 1,820,069; Aug. 25.
Damper, Torque. B. Loeffler. 1,820,749; Aug. 25.
Deck for trucks, trailers and the like. E. H. Polk. 1,820,321; Aug. 25.
Deckle edging device. P. O. Dodge. 1,820,303; Aug. 25.
Density of organic compounds before fusion with caustic alkali, Increasing the apparent. J. F. Wait. 1,820,684; Aug. 25.
Dephlegmating apparatus for distilling plants. F. M. Hess. 1,820,741; Aug. 25.
Desk and radiocabinet, Combined. H. Lehr. Des. 84,945; Aug. 25.
Detector for metals, Fissure. E. A. Sperry. 1,820,505; Aug. 25.
Developing apparatus. A. Langsner. 1,820,280; Aug. 25.
Device for opening preserve tins with a wire. G. Bertout. 1,820,594; Aug. 25.
Device for whipping cream and similar uses. A. J. Willems. 1,820,718; Aug. 25.
Dial gauge. E. H. Aldeborgh and C. E. Ruf. 1,820,370; Aug. 25.
Diazosalt preparations for dyeing and printing. F. Keller and K. Schnitzspahn. 1,820,024; Aug. 25.
Die and wheel remover, Combined. W. G. Fisher. 1,820,870; Aug. 25.
Digestion, Wood. H. B. Kipper. 1,820,276; Aug. 25.
Direction, Indicating. A. W. Brown. 1,820,647; Aug. 25.
Disk wheel. F. W. Baker. 1,820,174; Aug. 25.
Display or reflector sign, Luminous. J. C. Stimson. Re18,160; Aug. 25.
Display stand. H. E. Soref. 1,820,841; Aug. 25.
Distillation apparatus, Destructive. E. L. Day. 1,820,600; Aug. 25.
Door for box cars, Grain. W. J. Storm. 1,820,098; Aug. 25.
Door, Garage. C. G. Johnson. 1,820,195; Aug. 25.
Door operating mechanism for dump cars. W. L. Burner. 1,820,525; Aug. 25.

Doors, Supporting means for. J. E. Scott. 1,820,200; Aug. 25.
Drag link. F. W. Sampson. 1,820,633; Aug. 25.
Drain trap, Floor. S. G. Brown. 1,820,596; Aug. 25.
Drawer mechanism, Cash. J. R. Showers. 1,820,400; Aug. 25.
Drawer support and guide. J. Walter. 1,820,548; Aug. 25.
Drill: *See*—
Earth boring drill.
Drill column. L. C. Bayles. 1,820,727; Aug. 25.
Drive for engine starters. C. Ringwald. Re18,164; Aug. 25.
Drive for slides, Power. B. W. Freeman. Re18,162; Aug. 25.
Driving mechanism. R. A. Walter. 1,820,852; Aug. 25.
Dyeing machine. J. W. Farquhar and W. Hensel. 1,820,385; Aug. 25.
Dyestuffs of the anthraquinone series and making the same, Acid wool. G. Kalischer and E. Honol. 1,820,023; Aug. 25.
Earth boring drill. B. Van Patten. 1,820,511; Aug. 25.
Earth working apparatus. W. A. Perry. 1,820,823; Aug. 25.
Educational device. H. S. C. Bacon. 1,820,209; Aug. 25.
Elastic, Overall suspender. L. W. Joyce. 1,820,072; Aug. 25.
Electric control. L. C. Shippy. 1,820,252; Aug. 25.
Electric devices, Construction of. M. Pirani. 1,820,827; Aug. 25.
Electric furnace. A. G. Lobley. 1,820,668; Aug. 25.
Electric light fixture. G. E. Glatthar. Des. 84,930; Aug. 25.
Electric machine construction, Dynamo. K. Engelhardt. 1,820,531; Aug. 25.
Electric machine having ventilation features, Rotary. P. Suter. 1,820,404; Aug. 25.
Electric meter. P. S. Bauer. 1,820,212; Aug. 25.
Electric switch. J. A. Amos. 1,820,339; Aug. 25
Electric switch. F. Menzel. 1,820,361; Aug. 25.
Electric switch. J. D. Wood. 1,820,877; Aug. 25.
Electric switch and contact structure therefor. J. D. Wood. 1,820,876; Aug. 25.
Electric switch and terminal. J. D. Wood. 1,820,875; Aug. 25.
Electric switch, Pressure. F. C. Geiler. 1,820,063; Aug. 25.
Electric system for vehicles. A. H. Neuland. 1,820,861–4; Aug. 25.
Electric toaster. H. C. Le Vine. 1,820,885; Aug. 25.
Electrical system. E. W. Kellogg. 1,820,809; Aug. 25.
Electrode, Discharge tube. F. Hotchner. 1,820,392; Aug. 25.
Electrode for electric furnaces. P. L. J. Miquet. 1,820,625; Aug. 25.
Electrode structure. F. S. McCullough. 1,820,396; Aug. 25.
Electrolytic method and apparatus. R. A. Wilkins. 1,820,204; Aug. 25.
Electromagnetic switch. C. H. Hodgkins. 1,820,702; Aug. 25.
Electron discharge device. S. Scognamillo and P. Arndt. 1,820,836; Aug. 25.
Elevator: *See*—
Bucket elevator.
Embossing machine. W. J. Pannier, jr., and O. M. Pannier. 1,820,760; Aug. 25.
End closure structure for truck bodies. S. E. Travis, jr. 1,820,850; Aug. 25.
Engine: *See*—
Gas engine. Rotary engine.
Internal-combustion engine.
Engine cooling. A. B. Reavis. 1,820,091; Aug. 25.
Envelope for trees, Protecting. R. C. Zuckerman. 1,820,040; Aug. 25.
Evaporator. H. L. Guy. 1,820,065; Aug. 25.
Exercising machine. A. E. R. Blomquist. 1,820,372; Aug. 25.
Exhaust apparatus. L. L. Kelly. 1,820,355; Aug. 25.
Explosive. L. J. W. Jones. 1,820,567–8; Aug. 25.
Extension table. M. Binder. 1,820,860; Aug. 25.
Eye mounting for dolls. L. A. Nemcovsky. 1,820,087; Aug. 25.
Eyeglass construction. G. E. Nerney. 1,820,627; Aug. 25.
Eyeglass mounting, Bridge for an. E. J. R. Beattey. Des. 84,920; Aug. 25.
Fabric and process of making the same, Noninflammable. A. F. Randolph. 1,820,198; Aug. 25.
Fabric, Woven. G. E. O'Hearn. Des. 84,949; Aug. 25.
Fabrics, Cleaning pile. S. Chase, 4th. 1,820,048; Aug. 25.
Face mask or the like. T. M. Dick. 1,820,602; Aug. 25.
Fan. E. R. Hewitt. 1,820,742; Aug. 25.
Fan blade. L. N. Davy. 1,820,446; Aug. 25.
Fastener. J. F. Powell. 1,820,323; Aug. 25.
Fastener. E. A. Saunders. 1,820,327; Aug. 25.
Fastener, Separable. G. P. Peterson. 1,820,059; Aug. 25.
Fastening device. W. H. Evers. 1,820,869; Aug. 25.
Faucet. G. A. Blake. 1,820,772; Aug. 25.
Feed, Accelerating can. H. L. Guenther. 1,820,562; Aug. 25.
Feed water regulator, Automatic. J. T. Lindstrom. 1,820,356; Aug. 25.
Feeder, Automatic fuel. R. H. Stull. 1,820,507; Aug. 25.
Feeder, Poultry. A. R. Hoeft. 1,820,071; Aug. 25.
Fender and lamp casing for vehicles, Combined. J. H. Hughes. Des. 84,934; Aug. 25.
Fiber filled woven fabric, Making. C. H. Crowell. 1,820,122; Aug. 25.
Files, temporary binders, loose leaf books and the like. G. H. Guyatt. 1,820,222; Aug. 25.
Filler strip for drop center wheel rims. J. L. Wilson. 1,820,857; Aug. 25.
Filter. C. B. Foley. 1,820,538; Aug. 25.
Fishhook. C. T. Pflueger. 1,820,887; Aug. 25.
Fishing apparatus. C. E. Raymond. 1,820,326; Aug. 25.
Fishing reel. C. J. Clarke. 1,820,781; Aug. 25.
Fitting for sinks or the like, Waste. E. G. Oakley. 1,820,673; Aug. 25.
Flag, Transparent. V. Prochazka. 1,820,157; Aug. 25.
Flashlight, Focusing. H. W. Jones. 1,820,620; Aug. 25.
Flexible coupling. H. C. Lord. 1,820,750; Aug. 25.
Fluid condensation product. A. L. Brown. 1,820,690; Aug. 25.
Fluid discharge control device. E. J. Perry. 1,820,489; Aug. 25.
Fluid heating element. J. W. F. Keenan. 1,820,227; Aug. 25.
Fluid pressure brake. C. C. Farmer. 1,820,013; Aug. 25.
Fly swatter. R. F. Meggitt. 1,820,360; Aug. 25.
Follower for vertical files. B. G. Rand. 1,820,888; Aug. 25.
Foodstuffs, Apparatus for treating. T. F. Rataiczak. 1,820,677; Aug. 25.
Forging machine. F. A. Halleck. 1,820,188; Aug. 25.
Forging machine. W. H. Wineman. 1,820,207–8; Aug. 25.
Fork: *See*—
Hay fork.
Fountain: *See*—
Poultry fountain.
Fountain tank. H. K. Pinkerton and F. L. Rhyndress. Re18,169; Aug. 25.
Frame: *See*—
Beehive brood frame. Screen frame.
Saw frame.
Frame for refrigerator cars, Tank. B. H. Yoder. 1,820,641; Aug. 25.
Fruit and novelty box, Collapsible. C. Augustin and T. P. Carroll. 1,820,523; Aug. 25.
Fuel, Apparatus for burning liquid. C. R. Boyce. 1,820,774; Aug. 25.
Fuel for burning, Preparing liquid. J. I. McMullen. 1,820,755; Aug. 25.
Fumigating with calcium cyanide. J. Lingler. 1,820,394; Aug. 25.
Furnace: *See*—
Electric furnace. Heat treating furnace.
Furnace. C. L. Norton, jr. 1,820,028; Aug. 25.
Furnace and method, Glass making. J. K. B. Raeder. 1,820,248; Aug. 25.
Furnace construction. L. H. Hosbein. 1,820,664; Aug. 25.
Furnace heat exchange apparatus. R. S. Riley. 1,820,199; Aug. 25.
Furniture, Bed convertible seating. S. Taffel. 1,820,167; Aug. 25.
Game apparatus. E. P. Holmberg. 1,820,617; Aug. 25.
Game apparatus. A. Weinberg. 1,820,515; Aug. 25.
Game indicator. H. T. Powell. 1,820,828; Aug. 25.
Gap filler. N. A. Neilsen. 1,820,288; Aug. 25.
Garment. R. F. Albert. 1,820,293; Aug. 25.
Garment hanger. O. E. Law. 1,820,706; Aug. 25.
Garment hanger. A. B. Wobbe. 1,820,419; Aug. 25.
Garment repair means. T. Penn. 1,820,631; Aug. 25.
Gas burner. R. H. Firth. 1,820,016; Aug. 25.
Gas burner. M. Reagan. 1,820,493; Aug. 25.
Gas distribution apparatus. W. W. Hackney. 1,820,662; Aug. 25.
Gas engine. R. S. Moore. 1,820,475; Aug. 25.
Gas generating apparatus. J. B. Weaver. 1,820,336; Aug. 25.
Gas purifying plant. W. Feldmann. 1,820,734; Aug. 25.
Gases, Drying of. C. Cooper. 1,820,121; Aug. 25.
Gases prior to purifying it, Humidifying. H. Bayha, C. Hahn, and O. Heymann. 1,820,726; Aug. 25.
Gasoline from high boiling hydrocarbon oils, Producing. J. C. Black and M. L. Chappell. 1,820,371; Aug. 25.
Gasoline gauge, Computing. L. H. Kirkpatrick. 1,820,025; Aug. 25.
Gasoline gauge, Electric. B. H. Zeibig. 1,820,369; Aug. 25.
Gate: *See*—
Water gate.
Gauge: *See*—
Dial gauge. Gasoline gauge.
Gear. G. Preis. 1,820,246; Aug. 25.
Gear hob and making and using the same. N. Trbojevich. 1,820,410; Aug. 25.
Gear shift, Pneumatic. A. M. Craig. 1,820,269; Aug. 25.
Gear-shifting mechanism, Fluid operated. K. W. Gaskill. 1,820,452; Aug. 25.
Gear shifting mechanism, Twin cable. B. F. Schmidt. 1,820,501; Aug. 25.
Gear, Vehicle running. A. Agramonte. 1,820,108; Aug. 25.
Gear with dynamometer, Reduction. H. T. Herr. 1,820,740; Aug. 25.
Gearing, Auxiliary. G. A. Newhouse. 1,820,886; Aug. 25.
Gears and apparatus therefor, Cutting. N. Trbojevich. 1,820,409; Aug. 25.
Gland, Grease packed. B. S. Minor. 1,820,577; Aug. 25.

Glass edging machine. J. Capellman. 1,820,778; Aug. 25.
Glass feeding apparatus. J. Sylvester. 1,820,508; Aug. 25.
Glass, Sheet. W. R. Crawford. Des. 84,923; Aug. 25.
Glassware, Method of and apparatus for annealing. T. Wardley. 1,820,260; Aug. 25.
Globe, Lamp. J. H. Allen. Des. 84,911–13; Aug. 25.
Glove. J. V. Sullivan. 1,820,847; Aug. 25.
Golf course, Indoor table. G. Houzenga. 1,820,618; Aug. 25.
Governor, Automatic. C. C. Essex. 1,820,384; Aug. 25.
Governor for automobiles, Electric. H. D. Gumpper. 1,820,272; Aug. 25.
Grading and sorting grading apparatus. M. Bouquet. 1,820,773; Aug. 25.
Grading machine. L. A. and E. M. Cogswell, A. M. Heard, and F. L. Clarke. 1,820,010; Aug. 25.
Grapple, Material handling. A. D. Canulette. 1,820,118; Aug. 25.
Greasing mechanism. J. T. Robinson. 1,820,251; Aug. 25.
Grille or screen for automobile radiators. L. B. Green. 1,820,614; Aug. 25.
Grinder, External center. C. T. Raule. 1,820,029; Aug. 25.
Grinder, Lawn mower. V. L. Calhoun. 1,820,777; Aug. 25.
Grinder, Valve seat. J. E. Whitmill. 1,820,368; Aug. 25.
Grinding machine. W. F. Fraser. 1,820,735; Aug. 25.
Ground and similar masses, Solidifying layers of. C. Zemlin. 1,820,722; Aug. 25.
Guard and hanger, Pulley. B. L. Polkosnik. 1,820,322; Aug. 25.
Gum and producing, Ester. L. N. Bent and A. C. Johnston. 1,820,265; Aug. 25.
Guns, Pointing mechanism for. E. Müller. 1,820,820; Aug. 25.
Hair curler. G. O. Rowley. 1,820,498; Aug. 25.
Hair in the making of permanent waves, Device for winding, combing, stretching and tying. H. Vogt and J. Heck. 1,820,513; Aug. 25.
Hair waving clamp. W. G. Shelton. 1,820,763; Aug. 25.
Hammer, Portable power operated. A. Ludwig. 1,820,081; Aug. 25.
Hand washer. A. J. Warren. 1,820,853; Aug. 25.
Handle: *See*—
Locking door handle. Tool handle.
Hanger: *See*—
Clothes hanger. Garment hanger.
Harrow. W. L. Paul. 1,820,541; Aug. 25.
Harvester-thrasher. Combination. N. R. Krause. 1,820,570; Aug. 25.
Haulage mechanism. M. P. Holmes. 1,820,191; Aug. 25.
Hay fork. J. M. Kyle. 1,820,279; Aug. 25.
Headlight, Dirigible. J. M. Calkins. 1,820,117; Aug. 25.
Heat distributor. W. M. Piggott. 1,820,826; Aug. 25.
Heat exchanger. W. M. Cross. 1,820,849; Aug. 25.
Heat transferring composition, Liquid. T. A. Moormann. 1,820,085; Aug. 25.
Heat treating furnace. H. O. Breaker. 1,820,879; Aug. 25.
Heater: *See*—
Down draft unit heater. Unit heater.
Orchard heater. Water heater.
Heater. B. B. Kahn. Des. 84,940–1; Aug. 25.
Heater. C. B. Page and A. C. Kalk. 1,820,317; Aug. 25.
Heater for automobiles, Hot water. J. V. Harding and R. De Boer. 1,820,454; Aug. 25.
Heater for washing machines, Electric. L. Walle. 1,820,514; Aug. 25.
Heating. C. C. Carson. 1,820,893; Aug. 25.
Heating device, Electrical. R. M. Sparks. 1,820,842; Aug. 25.
Hectograph machines, Carriage roll release for. J. P. Pederson. 1,820,244; Aug. 25.
Heel. D. W. Lewis. 1,820,539; Aug. 25.
Heel, Rubber. C. F. Benz. 1,820,043; Aug. 25.
Height measuring device. B. W. Curry. 1,820,447; Aug. 25.
Holder and carrier for a riveting machine. A. R. Havener. 1,820,224; Aug. 25.
Holder and protector. License plate. G. A. Riley. 1,820,092; Aug. 25.
Holder and trimmer for button sewing machines, Thread. A. F. Carlson. 1,820,557; Aug. 25.
Holder, Bait. M. E. Gaskins. 1,820,186; Aug. 25.
Holder, Bird-cage food. H. H. Hill. 1,820,802; Aug. 25.
Holder, Boring tool. I. Drowns. 1,820,050; Aug. 25.
Holder, Combination collar button and tie. W. F. Scherer. 1,820,762; Aug. 25.
Holder, Crayon or pencil. W. W. Climenson. 1,820,782; Aug. 25.
Holder, Detachable milk pail. A. H. Palmbush. 1,820,485; Aug. 25.
Holder for freight cars, Card. A. O. Bradshaw. 1,820,776; Aug. 25.
Holder for safety razor blades when sharpening the same. C. W. Jones. 1,820,666; Aug. 25.
Holder, Iron. J. C. De Penning. 1,820,270; Aug. 25.
Holder, Sack. W. Hanley. 1,820,135; Aug. 25.
Holder, Storm sash. G. A. Awalt. 1,820,111; Aug. 25.
Holder, Switch box. P. L. Judd, E. B. Atkinson and R. A. Anderson. 1,820,309; Aug. 25.
Hoods, Operating mechanism for. E. J. Stanley and C. H. Taylor. 1,820,506; Aug. 25.
Hook: *See*—
Fish hook.
House, Tourist. W. M. Rowles. Des. 84,958; Aug. 25.
Hydraulic brake. J. C. Monn and W. H. Miller. 1,820,362; Aug. 25.
Hydrocarbon motor. L. M. Woolson. 1,820,106; Aug. 25.
Hydrocarbons, Converting. C. P. Dubbs. 1,820,057; Aug. 25.
Ice sawing machine. J. C. Babst, J. H. Fisch, and J. Bauer. 1,820,340; Aug. 25.
Ice scoring machine. G. Komp, sr. 1,820,464; Aug. 25.
Identification device, Automobile. F. A. Failing. 1,820,788; Aug. 25.
Ignition timers, Apparatus for locking. H. E. Norviel. 1,820,243; Aug. 25.
Illuminating paraphernalia, Dancer's. J. Schmalbach. 1,820,681; Aug. 25.
Impact recorder. J. B. Baskerville. 1,820,770; Aug. 25.
Incubator. H. M. Lackie. 1,820,311; Aug. 25.
Indicator: *See*—
Crooked hole indicator. Game indicator.
Indicator for aircraft, Angle. R. J. Forrest. 1,820,791; Aug. 25.
Ingots, Manufacturing. Z. Colwell. 1,820,597; Aug. 25.
Insects, Device for trapping and exterminating. F. W. Loomis. 1,820,813; Aug. 25.
Intensity control. O. von Bronk and H. Rukop. 1,820,335; Aug. 25.
Internal combustion engine. A. M. Niven. 1,820,630; Aug. 25.
Interpole for rotary converters. E. Sauter. 1,820,398; Aug. 25.
Iron: *See*—
Soldering iron.
Iron from Bessemer steel, Manufacture of wrought. J. Aston and A. H. Beale. 1,820,177; Aug. 25.
Iron ingots, Producing puddled. A. H. Beale. 1,820,175; Aug. 25.
Iron slag, Preparing or remelting wrought. E. L. Ives. 1,820,179; Aug. 25.
Irrigator. M. H. Kowan. 1,820,076; Aug. 25.
Jack: *See*—
Chain jack.
Jar, Glass. H. R. McDonald. Des. 84,948; Aug. 25.
Jug. W. S. Viele. Des. 84,964; Aug. 25.
Key duplicating device. C. M. Wells and E. Cook. 1,820,518; Aug. 25.
King bolt. T. R. Smith. 1,820,840; Aug. 25.
Kitchen arrangement. C. G. Hall. 1,820,564; Aug. 25.
Ladder and cage construction, Detachable. L. A. Rawson. 1,820,289; Aug. 25.
Ladder, Car. J. J. Tatum. 1,820,848; Aug. 25.
Ladders, Step attachment for. C. F. Miller. 1,820,315; Aug. 25.
Lakes, Making. T. A. Martone. 1,820,540; Aug. 25.
Lamp. F. L. Bamford. 1,820,112; Aug. 25.
Lamp. A. Bornstein. Des. 84,921; Aug. 25.
Lamp. E. McClintock. 1,820,027; Aug. 25.
Lamp or analogous article. R. H. Rick. Des. 84,955; Aug. 25.
Lamp, Vehicle. F. W. C. Neuner. 1,820,477; Aug. 25.
Lantern. J. H. Allen. Des. 84,914; Aug. 25.
Latch, Hood. D. P. Hynes and E. R. Johnson. 1,820,665; Aug. 25.
Latch, Hood. N. A. Mears and D. P. Hynes. 1,820,238; Aug. 25.
Latch mechanism. L. Edelson. 1,820,058; Aug. 25.
Lath attaching clip. D. H. Bitney. 1,820,688; Aug. 25.
Lath structure. H. E. White and W. H. Fishel. 1,820,896–7; Aug. 25.
Laundry checking device. J. H. Todd. 1,820,101; Aug. 25.
Lead pusher for mechanical pencils. H. L. Fischer. 1,820,130; Aug. 25.
Lens mount, Focusing. F. H. Owens. 1,820,484; Aug. 25.
Level, Plumb. L. B. Ries and J. B. Dickerson. 1,820,365; Aug. 25.
Lever for cultivators and the like, Adjusting. B. T. Spry. 1,820,097; Aug. 25.
Lift, Automobile. W. A. Box. 1,820,267; Aug. 25.
Lifter: *See*—
Cover lifter.
Light: *See*—
Aisle light.
Light for gas burners, Self re-lighting pilot. H. A. Atwater. 1,820,724; Aug. 25.
Light guard for motion picture projection machines. A. Dina. 1,820,054; Aug. 25.
Light projection apparatus. G. B. Reed. 1,820,543; Aug. 25.
Lighter, Pocket. H. L. Fischer. 1,820,131; Aug. 25.
Lighting appliance. M. H. Greenewalt. 1,820,899; Aug. 25.
Lighting fixture for mirrors, Adjustable. H. G. Corwin, G. D. Blair, and C. W. Gilman. 1,820,348; Aug. 25.
Lighting fixture or article of similar nature. F. W. Roettges. Des. 84,957; Aug. 25.
Liquid pumping apparatus. J. Good and E. H. Olsen. 1,820,612; Aug. 25.
Liquid under pressure, Process and apparatus for utilising the energy of a. H. S. Loud. 1,820,236; Aug. 25.
Lithographic plate and process of preparation. M. Beebe and H. V. Herlinger. 1,820,593; Aug. 25.
Loader, Automatic ash truck. J. Goodman. 1,820,698; Aug. 25.

Loads in railway cars and the like, Preventing shifting of. J. B. Chalmers. 1,820,829; Aug. 25.
Lock. J. Hines. 1,820,565; Aug. 25.
Lock ring. C. H. Cleveland. 1,820,268; Aug. 25.
Locking device. W. N. Vance. 1,820,715; Aug. 25
Locking door handle. R. Simon. 1,820,504; Aug. 25.
Locking mechanism, Automobile. C. W. Blossom and E. C. Peterson. 1,820,428; Aug. 25.
Locking mechanism, Vehicle. E. C. Peterson. 1,820,491; Aug. 25.
Locomotive bed. A. W. Bruce. 1,820,215; Aug. 25.
Locomotive boiler. C. E. Brooks. 1,820,296; Aug. 25
Locomotive construction. A. H. Fetters. 1,820,654; Aug. 25.
Log sawing device. N. A. Boyette. 1,820,775; Aug. 25.
Loom. H. Baader. 1,820,424; Aug. 25.
Loom, Narrow fabric. H. Baader. 1,820,422; Aug. 25.
Looms, Batten construction for narrow fabric. H. Baader. 1,820,423; Aug. 25.
Looms, Shuttle feeler for. E. C. Nichols. 1,820,821; Aug. 25.
Looms, Take-up mechanism for. E. W. Stone. 1,820,846; Aug. 25.
Loud speaker. R. E. Tolerton. 1,820,585; Aug. 25.
Lowering machine. O. Birmann. 1,820,427; Aug. 25.
Lubricating device. T. Maney. 1,820,815; Aug. 25.
Lubricating device for clutch throw out bearing. B. Loeffler. 1,820,748; Aug. 25.
Lubricating means. W. E. Hann. 1,820,616; Aug. 25.
Lubricating system. H. Albertine. 1,820,109; Aug. 25.
Lubricating system. L. E. Simmons. 1,820,201; Aug. 25.
Lubricating system for quilling machines. G. Sipp. 1,820,402; Aug. 25.
Lubricating system, Top. F. M. Kincaid. 1,820,705; Aug. 25.
Machine for expressing liquids from solids. H. J. L. Dunlop and A. J. Sibbald. 1,820,226; Aug. 25.
Machine for making coat hangers. W. J. Rehrig. 1,820,249; Aug. 25.
Machine for the production of artificial flowers. G. Bontempi. 1,820,524; Aug. 25.
Machine for washing wool and other fibrous materials. T. W. Hawkins. 1,820,798; Aug. 25.
Magnesium compounds from potash salts, Separating. F. Rusberg. 1,820,160; Aug. 25.
Magnesium directly, by electrolysis, of a fused bath, Producing substantially pure metallic. R. M. Hunter. 1,820,022; Aug. 25.
Making glass, Method and apparatus for. J. K. B. Raeder. 1,820,247; Aug. 25.
Manipulator for rolling mills. A. T. Keller. 1,820,622; Aug. 25.
Manure spreaders, Lime spreading attachment for. H. Claar. 1,820,528; Aug. 25.
Map construction. R. S. Blair. 1,820,115; Aug. 25.
Marking roll. C. E. Youngchild, J. K. Vanatta, and J. W. Youngchild. 1,820,338; Aug. 25.
Mason's leveling table. E. J. Carlson. 1,820,436; Aug. 25.
Material and making same, Artificial. L. Lilienfeld. 1,820,811; Aug. 25.
Material handling equipment. M. R. Butler. 1,820,297; Aug. 25.
Matrix roller. H. A. Wood. 1,820,551; Aug. 25.
Measuring and weighing device for concrete mixers. S. L. Walker. 1,820,547; Aug. 25.
Measuring system, Electrical. L. A. Gebhard. 1,820,018; Aug. 25.
Mechanical movement. R. C. Roebling. 1,820,033; Aug. 25.
Mechanical work, Process of and arrangement for performing. F. Hübl. 1,820,619; Aug. 25.
Mercury switch. P. K. Cramblet. 1,820,800; Aug. 25.
Metal parts, Machine for trimming. A. H. Wadell. 1,820,717; Aug. 25.
Metals by electrolysis, Obtaining light. E. Steinbuch and G. Fullemann. 1,820,844; Aug. 25.
Metals, Purification of. A. C. Jessup. 1,820,141; Aug. 25.
Meter: *See*—
Electric meter.
Meter for measuring ground resistance. S. W. Borden. 1,820,214; Aug. 25.
Mica washers, Apparatus for producing laminated. H. W. Cooper. 1,820,182; Aug. 25.
Mill: *See*—
Grinding mill.
Mill rolls, Cooling. K. B. Kilborn. 1,820,074; Aug. 25.
Mills, Grinding. P. Kittay. 1,820,462; Aug. 25.
Mineral fiber articles, Making. A. L. Kennedy. 1,820,538; Aug. 25.
Mixer. K. Adams. 1,820,171; Aug. 25.
Motion transmitting mechanism. E. Davis. 1,820,051; Aug. 25.
Motor: *See*—
Wind motor.
Motor cleaning means. E. G. Wooley. 1,820,552; Aug. 25.
Motor control system. J. Eaton. 1,820,786; Aug. 25.
Motors, Method of and apparatus for starting alternating current. E. L. Hough. 1,820,803; Aug. 25.
Moulding machine. H. B. Swan. 1,820,405; Aug. 25.
Mounting and clamp, Lamp. J. D. Durant. 1,820,651; Aug. 25.
Mounting, Drill cutter. J. R. Dallerup. 1,820,379; Aug. 25.
Mounting, Removable bearing. R. Foulks. 1,820,017; Aug. 25.
Mounting, Service line meter. J. L. Ford. 1,820,656; Aug. 25.
Mouse trap, Collapsible. S. Nakagawa. 1,820,579; Aug. 25.
Multiple flow regulator. A. D. MacLean. 1,820,358; Aug. 25.
Musical instruments, Expression device for. S. Battner. 1,820,865; Aug. 25.
Necktie. T. G. Craighead. 1,820,876; Aug. 25.
Neutralizing device for vacuum tubes. A. D. Ring. 1,820,832; Aug. 25.
Nitro compounds of dinaphthylene-dioxides. L. Zeh, E. Kramer, and B. Bollweg. 1,820,038; Aug. 25.
Nursing stand, Universal. C. Aerick. 1,820,420; Aug. 25.
Objects, Method of and apparatus for marking. R. B. Crehore. 1,820,880; Aug. 25.
Odors from air, Apparatus for the removal of. A. B. Ray. 1,820,030; Aug. 25.
Oil, Apparatus for refining used. F. O. Krieger. 1,820,871; Aug. 25.
Oil burner. F. E. Herr. 1,820,801; Aug. 25.
Oil burner. H. Miller. 1,820,768; Aug. 25.
Oil extracting device. A. Strandell. 1,820,291; Aug. 25.
Oil filtering and lubricating system. L. B. Ellis. 1,820,382; Aug. 25.
Oil, Process of and apparatus for distilling. H. N. Lyons. 1,820,573; Aug. 25.
Oils, Process and apparatus for treating. C. P. Dubbs. 1,820,125; Aug. 25.
Oils with metallic halides, Treating hydraulic. R. W. Hanna. 1,820,389–90; Aug. 25.
Orchard heater. S. J. Harban. 1,820,067; Aug. 25.
Ores, Concentrating. F. Ayer and A. Crowfoot. 1,820,172; Aug. 25.
Organic compounds which irritate the skin, Non-irritating compositions containing. R. Engelhardt. 1,820,607; Aug. 25.
Oscillating masses, Compensating. K. Merz. 1,820,239; Aug. 25.
Oscillograph galvanometer. G. L. Dimmick. 1,820,785; Aug. 25.
Outlet box. W. L. Phiffer. 1,820,824; Aug. 25.
Overall. E. O. Fellroth. 1,820,532; Aug. 25.
Overshoe and making same. R. J. Mecklenburg. 1,820,149; Aug. 25.
Packing for turbines, Labyrinth. L. F. Moody. 1,820,150; Aug. 25.
Pad: *See*—
Cushion pad. Tissue pad.
Paddle wheel. G. T. Heckman. 1,820,307; Aug. 25.
Paper making machine. W. P. Schweitzer. 1,820,165; Aug. 25.
Paper, Sheet of writing. P. Dixon. Des. 84,925; Aug. 25.
Paring apparatus. A. L. Duncan. 1,820,351; Aug. 25.
Partition. J. J. Donovan. 1,820,123; Aug. 25.
Pattern set. M. Herzberg. 1,820,225; Aug. 25.
Pedestal. H. T. Toy. 1,820,103; Aug. 25.
Pen, Fountain. G. Larsen. Des. 84,943; Aug. 25.
Pen, Reservoir. H. R. Hughes. 1,820,226; Aug. 25.
Pencil. G. Larsen. Des. 84,944; Aug. 25.
Percolator. C. F. Smith. Des. 84,962; Aug. 25.
Petroleum, Treating crude. H. T. Bennett. 1,820,295; Aug. 25.
Phenols, Manufacture of. A. Hempel. 1,820,274; Aug. 25.
Phonograph driving mechanism. W. J. Peets. 1,820,154; Aug. 25.
Phosphorus in volatilization furnaces, Production of. H. W. Easterwood. 1,820,600; Aug. 25.
Photographic apparatus, Automatic. M. M. Kulus. 1,820,230; Aug. 25.
Photographic plates, Packing. B. Liebeskind. 1,820,146; Aug. 25.
Photographic roll film cartridge. P. Vehl and E. Schnitzler. 1,820,168; Aug. 25.
Photo printing machine. L. S. Rennick. 1,820,494; Aug. 25.
Picture machine, Motion. C. Williams. 1,820,418; Aug. 25.
Picture rewinding mechanism, Motion. M. Dainow. 1,820,731; Aug. 25.
Pigment and producing the same. A. B. Cowdery. 1,820,444; Aug. 25.
Pilot control for gas burners. A. F. Kipper. 1,820,461; Aug. 25.
Pipe coupling. E. E. Hewitt. 1,820,020; Aug. 25.
Piston, Adjustable. D. F. Crandall. 1,820,446; Aug. 25.
Piston and making the same, Engine. W. Sieman, jr. 1,820,253; Aug. 25.
Piston, Pump. E. Kibele. 1,820,228; Aug. 25.
Piston ring. N. T. Harrington. 1,820,353; Aug. 25.
Plant for treating gas. B. Rzeczkowski. 1,820,161; Aug. 25.
Plant stand. W. Spitz. 1,820,843; Aug. 25.
Plastic substances, Cutting. R. D. Delamere. 1,820,301; Aug. 25.
Platen for typewriters and analogous machines. G. M. Scherer. 1,820,164; Aug. 25.
Pliers and the like. E. H. Wigand. 1,820,169; Aug. 25.
Plug, Electric connecter. H. H. Wermine. 1,820,333; Aug. 25.

Pocket comb. A. A. S. Barker. 1,820,768; Aug. 25.
Pocket construction for trousers. M. Falkowitz. Re18 171; Aug. 25.
Post for electrical instruments, Binding. G. V. Hetherington. 1,820,701; Aug. 25.
Pouch, Tobacco. M. J. McGuire. 1,820,282; Aug. 25.
Poultry fountain. E. Sauvageau. 1,820,835; Aug. 25.
Power-driven machine for scrubbing, polishing, resurfacing, or otherwise treating floors, Portable. W. G. Orth. 1,820,482; Aug. 25.
Power plant, Water. H. W. Eberhardt and K. Friedlmaier. 1,820,652; Aug. 25.
Power transmission mechanism. H. Cooper. 1,820,442; Aug. 25.
Power transmitting mechanism, Hydraulic variable speed. R. B. Miller. 1,820,083; Aug. 25.
Press: *See*—
Brick press.
Press. R. T. Anderson. 1,820,590; Aug. 25.
Press. J. J. Cavagnaro. 1,820,437; Aug. 25.
Presser foot for sewing machines. A. T. Chidley. 1,820,438; Aug. 25.
Presser foot for sewing machines. C. H. Jones. 1,820,460; Aug. 25
Presser foot for sewing machines. A. S. Riviere. 1,820,496; Aug. 25.
Pressing machine (pressure adjusting means). E. Davis. 1,820,011; Aug. 25.
Pressing machines, Operating mechanism for. E. Davis. 1,820,052; Aug. 25.
Pressure regulating device for roller mills. D. R. Bowen. 1,820,689; Aug. 25.
Printing presses, Automatic paper feeding. C. L. Low. 1,820,469; Aug. 25.
Printing presses, Gripper mechanism for cylinder. C. L. Low. 1,820,470; Aug. 25.
Printing, Process and apparatus for. W. C. Huebner. 1,820,194; Aug. 25.
Products from vegetable growths and the products thereof, Making. L. L. Burgess. 1,820,046; Aug. 25.
Propeller, Aeroplane. J. Liska. 1,820,467; Aug. 25.
Propeller, Paddle wheel. F. Bruguiere. 1,820,866; Aug. 25.
Protecting device for pipe coverings or the like. R. Sterling. 1,820,845; Aug. 25.
Protector. W. H. H. Davis. 1,820,783; Aug. 25.
Protector, Face and head. R. Malcom. 1,820,237; Aug. 25.
Protector, Hose. L. L. Lyons. 1,820,623; Aug. 25.
Protector, Pipe thread. P. E. Hunter. 1,820,140; Aug. 25.
Protector, Shoe and ankle. F. Sawyer. 1,820,679; Aug. 25.
Protractor. R. J. Ethridge. 1,820,128; Aug. 25.
Pulp, Bleaching cellulose. J. Schuber. 1,820,502; Aug. 25.
Pump. A. C. Andreason. Re18,167; Aug. 25.
Pump. J. T. Bilderbeck. 1,820,266; Aug. 25.
Pump. H. Hueber. 1,820,885; Aug. 25.
Pump attachment for automobiles. O. L. Whitehead. 1,820,855; Aug. 25.
Pump, Rotary. R. M. Blackmer. 1,820,009; Aug. 25.
Pyrometer, Optical. D. C. Gall. 1,820,219; Aug. 25.
Rack: *See*—
Clothes drying rack. Tray rack.
Rack. W. N. Vance. 1,820,716; Aug. 25.
Rack for magazines, folders, and the like, Display. W. C. Kelley. 1,820,275; Aug. 25.
Radiator assembly. J. A. White. 1,820,414; Aug. 25.
Radiator cap or similar article for an automotive vehicle. W. Schnell and B. E. Lemm. Des. 84,959; Aug. 25.
Radiator structure. J. A. White. 1,820,413; Aug. 25.
Radioantenna system. G. C. Kruesi. 1,820,571. Aug. 25.
Radio apparatus. V. J. Fabian. 1,820,059; Aug. 25.
Radiocabinet. F. G. Burton. Des. 84,922; Aug. 25.
Radiocabinet. J. Gubitosi. Des. 84,932; Aug. 25.
Radiocabinet or the like. R. Worthington. Des. 84,969–70; Aug. 25.
Radio loud speaker, Maximum range. W. J. Hanna. 1,820,137; Aug. 25.
Railway car brake. W. H. Lawrence. 1,820,106; Aug. 25.
Railway interlocking apparatus. J. P. Coleman. 1,820,049; Aug. 25.
Railway structure. L. T. Schuberth. 1,820,034; Aug. 25.
Range, Gas or electric cooking. J. Teller, and A. P. Schulz. 1,820,849; Aug. 25.
Razor, Safety. P. A. Frank. 1,820,218; Aug. 25.
Razor, Safety. H. J. Gaisman. 1,820,659; Aug. 25.
Razor, Safety. R. E. Thompson. 1,820,408; Aug. 25.
Reagent feeding. L. M. Barker. 1,820,210; Aug. 25.
Receptacle, Fly and leader. H. Brucker. 1,820,648; Aug. 25.
Receptacle, Molded. H. P. Chandler. 1,820,375; Aug. 25.
Receptacle, Outlet. C. Newman and E. G. Appleton. 1,820,626; Aug. 25.
Receptacle, Waste. S. L. Buschman. 1,820,554–5; Aug. 25.
Receptacle, Waterproof. D. H. Strayer. 1,820,582; Aug. 25.
Recorder: *See*—
Impact recorder.
Recording apparatus. R. D. Parker and F. H. Best. 1,820,088; Aug. 25.
Rectifier, Copper oxide. C. K. Strobel. 1,820,166; Aug. 25.
Rectifier, Vacuum tube. K. C. Black. 1,820,114; Aug. 25.
Reel: *See*—
Fishing reel.
Reel for strip material, etc., Adjustable. C. A. Dreisbach. 1,820,693; Aug. 25.
Reflector, Light. C. W. Price. 1,820,632; Aug. 25.
Reforming bars. G. Langford. Re18,165; Aug. 25.
Refrigerating apparatus. H. P. Braeutigam and G. S. Dickey. 1,820,045; Aug. 25.
Refrigerating apparatus. G. S. Dickey. 1,820,012; Aug. 25.
Refrigerating apparatus. G. A. Jewell. 1,820,806; Aug. 25.
Refrigerating apparatus. D. R. Neal. 1,820,152; Aug. 25.
Refrigerating apparatus. D. H. Reeves. 1,820,031; Aug. 25.
Refrigeration, System of. J. P. Green. 1,820,453; Aug. 25.
Refrigerator. G. H. Ellis. 1,820,304; Aug. 25.
Refrigerator. H. T. Herr. Re18,168; Aug. 25.
Refrigerator. H. P. Hippee. 1,820,070; Aug. 25.
Register: *See*—
Autographic register.
Regulator: *See*—
Feed water regulator. Temperature regulator.
Multiple flow regulator. Voltage regulator.
Remote control system, Electrical. B. H. Leeson and O. C. F. King. 1,820,354; Aug. 25.
Resin and making same, Synthetic. J. McIntosh. 1,820,816; Aug. 25.
Resistances, Arrangement for the determination of. H. Grüss and K. Rau. 1,820,738; Aug. 25.
Rest, Disappearing machine. D. H. Chason. 1,820,527; Aug. 25.
Ricinoleate, Mercuric. J. L. Russell and H. E. Melton. 1,820,761; Aug. 25.
Rim, Demountable wheel. F. W. Baker. 1,820,173; Aug. 25.
Ring: *See*—
Lock ring. Piston ring.
Riveting press, Automatic. R. A. Skriba and F. J. Littell. 1,820,254; Aug. 25.
Rock drilling machine of the hammer type. H. S. Potter. 1,820,245; Aug. 25.
Rod bending apparatus. P. Beghetti. 1,820,426; Aug. 25.
Roller: *See*—
Matrix roller.
Roller device and track. C. G. Johnson. 1,820,459; Aug. 25.
Roof and shingle therefor. C. C. Figge. 1,820,015; Aug. 25.
Roofing, Interlocking. H. R. French. 1,820,388; Aug. 25.
Rope winder, Winch. T. C. Smith, J. B. Spowart and P. G. Fitzpatrick. 1,820,094; Aug. 25.
Rosin, Purifying. D. C. Butts. 1,820,298; Aug. 25.
Rotary engine. O. Ogren. 1,820,859; Aug. 25.
Rubber ball. I. Dorogi and L. Dorogi. 1,820,124; Aug. 25.
Rubber with mud guard device. W. D. Smith. 1,820,095; Aug. 25.
Running board construction. J. J. Punke. 1,820,324; Aug. 25.
Sanding machine. E. W. Curtis. 1,820,377; Aug. 25.
Sash snubber, Window. A. E. Devol. 1,820,784; Aug. 25.
Sash, Window. C. H. Hansen. 1,820,273; Aug. 25.
Save-all, paper making machine, etc. J. A. White. 1,820,854; Aug. 25.
Saw. C. S. Busque. 1,820,434; Aug. 25.
Saw-frame. J. Janda. 1,820,457; Aug. 25.
Saw, Jig. R. H. Anderson. 1,820,294; Aug. 25.
Saw setting machine. W. E. Knott. 1,820,278; Aug. 25.
Scaffold bracket. H. W. Sittig. 1,820,330; Aug. 25.
Score board. W. P. Bott. 1,820,431; Aug. 25.
Scouring device. J. F. Darling. 1,820,183; Aug. 25.
Screen and glazing for motor and other vehicles, Wind. G. P. Despret. 1,820,601; Aug. 25.
Screen frame, Motion picture. J. T. Heck. 1,820,730; Aug. 25.
Screw propeller. V. Lougheed. 1,820,814; Aug. 25.
Screw threads, Device for rolling. H. Hubbell, jr. 1,820,193; Aug. 25.
Seal. W. M. Brooks. 1,820,595; Aug. 25.
Seal, Crank case. H. E. Thompson. 1,820,100; Aug. 25.
Setter, Brick. W. W. Wallace. 1,820,332; Aug. 25.
Sewing machine. E. J. Ray. 1,820,829; Aug. 25.
Sewing machines, Attachment for. E. J. Ray. 1,820,830; Aug. 25.
Sewing machines, Thread trimmer for. J. Kiewicz. 1,820,569; Aug. 25.
Shade bracket, Window. J. H. Boss. 1,820,646; Aug. 25.
Shade mechanism, Window. E. Reukauf, jr. 1,820,831; Aug. 25.
Shade, Window. W. Senior. 1,820,503; Aug. 25.
Shaker, etc., Salt. M. J. McRae. 1,820,817; Aug. 25.
Sharpening machines for razor blades, Feeding arrangement in. S. Larsson. 1,820,810; Aug. 25.
Sheet and making the same, Transfer. H. Q. R. Crowder. 1,820,867; Aug. 25.
Sheet cutting machines, Trip mechanism for. O. M. Hoch. 1,820,021; Aug. 25.
Sheet delivering device. E. Cheshire. 1,820,730; Aug. 25.
Shield, Lamp. S. F. Arbuckle. 1,820,522; Aug. 25.
Shingle shake machine. K. D. Craft. 1,820,445; Aug. 25.
Shoe. V. De Liso. Des. 84,924; Aug. 25.

Shoe buckle. C. G. King. Des. 84,942; Aug. 25.
Shoe ornament. S. M. Biker. Des. 84,956; Aug. 25.
Short-circuiting device. H. D. Else. 1,820,694; Aug. 25.
Shovel: *See*—
Snow shovel.
Shut-off device for conveyer systems, Safety. S. Olson. 1,820,674; Aug. 25.
Sieve, Grain beater. T. E. Divoky. 1,820,055; Aug. 25.
Sign. C. E. Baer. 1,820,008; Aug. 25.
Sign. J. P. Naylor. 1,820,086; Aug. 25.
Signal lamp. D. Angiadn. 1,820,642; Aug. 25.
Signaling device. S. M. Dover. 1,820,605; Aug. 25.
Signals, Apparatus for the control of highway crossing. P. F. Willard and G. R. Pfasterer. 1,820,170; Aug. 25.
Skate. S. De Orlow. 1,820,802; Aug. 25.
Skins or the like, Device for use in stretching. E. G. Wilson. 1,820,550; Aug. 25.
Skirt attachment. A. A. Morck. 1,820,287; Aug. 25.
Skylight. L. Abt. 1,820,764; Aug. 25.
Slags, Preparing and remelting synthetic. A. H. Beale, H. A. Brassert and F. Wilie. 1,820,178; Aug. 25.
Sled. J. M. Bowen. 1,820,044; Aug. 25.
Slip. M. C. Schrank. 1,820,399; Aug. 25.
Slitting device. R. M. Johnstone. 1,820,142; Aug. 25.
Snowplow. A. B. Moen and S. Lien. 1,820,707; Aug. 25.
Snow shovel. J. W. Cooper. 1,820,692; Aug. 25.
Soap manufacture. C. F. Knegebehn. 1,820,744; Aug. 25.
Soap, Sulphur. V. Sauchelli. 1,820,872; Aug. 25.
Socket, Electric lamp. E. C. White. 1,820,261; Aug. 25.
Soil pulverizer. G. M. Soule. 1,820,096; Aug. 25.
Soldering iron, Electric. R. R. Hazlett and W. J. Alexander. 1,820,709; Aug. 25.
Solenoid dipper trip. E. H. Tellier and R. C. Deckman. 1,820,546; Aug. 25.
Sound in subways, Reducing. J. M. White. 1,820,874; Aug. 25.
Sound producer. G. C. Farmer. 1,820,129; Aug. 25.
Sound producer. C. S. Kelley. 1,820,143; Aug. 25.
Sparking device. F. Huber 1,820,858; Aug 25
Speaker. G. A. Gillen. 1,820,561; Aug. 25.
Speed change unit. J. H. Flagg. 1,820,061; Aug. 25.
Speed responsive apparatus. W. Baseler and A. Meyer. 1,820,042; Aug. 25.
Spindle driving mechanism. J. A. Koolstra. 1,820,810; Aug. 25.
Sponge and wash rag, Combination. R. Stewart. 1,820,256; Aug. 25.
Spoon or similar article. L. V. M. Helander. Des. 84,938; Aug. 25.
Sprayer, Paint. J. F. Schylander. 1,820,544; Aug. 25.
Spring constructions, Apparatus for use in and method of assembling. F. A. Kellar. 1,820,537; Aug. 25.
Spud and spud-point. R. H. Dietert. 1,820,881; Aug. 25.
Stabilizer. W. W. Hartman. 1,820,381; Aug. 25.
Stabilizer and fin, Adjustable. W. K. Ebel and L. C. Millburn. 1,820,271; Aug. 25.
Stacking machine. C. G. Hall. 1,820,563; Aug. 25.
Stamp affixing machine. A. Gay. 1,820,697; Aug. 25.
Stamping apparatus for registration of any desired values of business or work operations. P. Mansel. 1,820,751; Aug. 25.
Stand: *See*—
Advertising stand. Nursing stand.
Display stand. Plant stand.
Starter, Engine. W. L. McGrath. 1,820,397; Aug. 25.
Starter mechanism. E. R. Huntley. 1,820,536; Aug. 25.
Steam atomizing oil burner. R. H. Forney. 1,820,352; Aug. 25.
Steam boiler. R. E. Jones. 1,820,807; Aug. 25.
Steel and forming wrought iron, Granulating. A. H. Beale and J. Aston. 1,820,176; Aug. 25.
Sterilizer, Comb. C. E. Wells. 1,820,517; Aug. 25.
Stocking. H. Peters. Des. 84,951–2; Aug. 25.
Stocking. A. E. Ischinger. Des. 84,935–8; Aug. 25.
Stocking and making same, Seamless. C. H. Taubel. 1,820,637; Aug. 25.
Stone for graves, Memorial. C. I. Enochs. Des. 84,927–8; Aug. 25.
Stop, Door. J. H. and L. H. Patrick. 1,820,486; Aug. 25.
Storage and mixing bin, Floating. A. Allen. 1,820,521; Aug. 25.
Stove, Gas. A. H. L. Klemme. 1,820,277; Aug. 25.
Strainer and sediment bowl for gasoline tanks. C. H. Feeger. 1,820,700; Aug. 25.
Strainer, Milk. P. B. Eves. 1,820,610; Aug. 25.
Straining milk and a strainer for a separating machine. F. Henrard. 1,820,800; Aug. 25.
Structural element. C. T. Hatch. 1,820,700; Aug. 25.
Suction intensifier. H. Hueber and E. C. Horton. 1,820,884; Aug. 25.
Suit, Bathing. I. Fogel and S. Shulkin. Des. 84,929; Aug. 25.
Support, Conduit. C. C. Korns. 1,820,229; Aug. 25.
Support for electric heating units. F. F. Forshee. 1,820,696; Aug. 25.
Support for laboratory appliances. C. J. Farmer. 1,820,305; Aug. 25.
Support for vacuum tube lamps. R. C. Smalley. 1,820,838; Aug. 25.
Support for vacuum tube lights, Adjustable. R. C. Smalley. 1,820,837; Aug. 25.
Support, Shock absorbing. J. W. Leslie. 1,820,281; Aug. 25.
Support, Tube. R. C. Smalley. 1,820,839; Aug. 25.
Support, Wall radiator. A. E. Davis. 1,820,560; Aug. 25.
Support, Writing pad. W. L. Deming. 1,820,184; Aug. 25.
Switch: *See*—
Automatic cut-off switch. Mercury switch.
Electric switch. Time switch.
Electromagnetic switch.
Switch. F. G. Von Hoorn. 1,820,683; Aug. 25.
Switch. C. E. Wilson. 1,820,264; Aug. 25.
Switch mechanism. J. M. Brown. 1,820,691; Aug. 25.
Switch mechanism. O. S. Jennings. 1,820,704; Aug. 25.
Switch operating apparatus, Railway. W. C. McWhirter. 1,820,756; Aug. 25.
Switch point construction. O. A. Dickson. 1,820,603; Aug. 25.
Synchronizer, Automatic. E. Pearson. 1,820,319; Aug. 25.
Table: *See*—
Collapsible table. Mason's leveling table.
Extension table.
Table, Collapsible. W. J. Bauer. 1,820,592; Aug. 25.
Tassel. C. P. Schlegel. 1,820,328; Aug. 25.
Telegraph transmitter. R. D. Salmon. 1,820,499; Aug. 25.
Telegraphy, Printing. G. A. Graham. 1,820,737; Aug. 25.
Telephone information card and magnifying glass, Combined. A. Selikowitz. Des. 84,961; Aug. 25.
Telephone system. C. E. Stevens and A. Mamor. 1,820,682; Aug. 25.
Temperature regulator. C. L. Stokes. 1,820,035; Aug. 25.
Tension regulator for sewing machines, Graduated. D. H. Chason. 1,820,119; Aug. 25.
Tent. R. F. Warren. 1,820,412; Aug. 25.
Testing system. R. W. Burns. 1,820,116; Aug. 25.
Theatre illumination device. G. H. Cushing. 1,820,509; Aug. 25.
Theodolites and the like, Recording means for readings of. J. A. Gaynor. 1,820,187; Aug. 25.
Therapeutic device. J. H. Weber. 1,820,895; Aug. 25.
Throttle valve operating mechanism. J. G. Blunt and R. W. Clifford. 1,820,373; Aug. 25.
Tie or clamp for building forms. H. H. Toogood. 1,820,509; Aug. 25.
Tile, Metallic. E. O. Mehline. 1,820,624; Aug. 25.
Time calculating and wage computing machine. L. Cygon. 1,820,378; Aug. 25.
Time switch. J. Ferguson. 1,820,306; Aug. 25.
Time switch. W. K. Kearsley. 1,820,808; Aug. 25.
Tire. R. Smith. Des. 84,963; Aug. 25.
Tire mold opener. H. D. Stevens. 1,820,892; Aug. 25.
Tire, Pneumatic. J. Arico. 1,820,766; Aug. 25.
Tissue pad. K. Wandel. 1,820,259; Aug. 25.
Toaster, Electric bread. G. Kater. 1,820,745; Aug. 25.
Tongs, Casing. N. K. Smith. 1,820,545; Aug. 25.
Tongs, Clinker. O. G. Klein. 1,820,463; Aug. 25.
Tool, Foundry. A. A. Meyer. 1,820,819; Aug. 25.
Tool, Gear cutting. E. Wildhaber. 1,820,415; Aug. 25.
Tool handle, Swiveled. W. C. Barrier. 1,820,211; Aug. 25.
Tool, Percussive. E. G. Gartin. 1,820,185; Aug. 25.
Tool, Regrooving. F. H. Funchess. 1,820,792; Aug. 25.
Tool, Spark plug. W. P. Pringle. 1,820,364; Aug. 25.
Tool, Special. I. Salz. 1,820,163; Aug. 25.
Tool, Storage battery. F. J. Maynard. 1,820,313; Aug. 25.
Toothbrush. R. J. G. Church. 1,820,439; Aug. 25.
Top casting and derrick construction. D. D. Wertzberger. 1,820,519; Aug. 25.
Torch, Portable. W. C. Elze. 1,820,383; Aug. 25.
Torpedo. P. Orlando. 1,820,822; Aug. 25.
Tower, Structural. L. A. Prescott and I. W. Marshall. 1,820,156; Aug. 25.
Towing means for motor vehicles and the like. J. Mendelson. 1,820,314; Aug. 25.
Toy basket ball game. H. Garver. Re18,163; Aug. 25.
Toy building construction. A. C. Gilbert. 1,820,660; Aug. 25.
Toy, Construction. A. C. Gilbert. 1,820,661; Aug. 25.
Toy, Marionette. H. T. Rogers. 1,820,367; Aug. 25.
Toy vehicle. M. Molinari. 1,820,474; Aug. 25.
Track structure, Railway. J. R. Ulrich. 1,820,586; Aug. 25.
Traction device. E. P. Engstrom. 1,820,695; Aug. 25.
Traffic controlling apparatus, Railway. E. M. Allen. 1,820,110; Aug. 25.
Traffic controlling apparatus, Railway. J. V. Lewis. 1,820,080; Aug. 25.
Train control, Automatic. P. J. Simmen. 1,820,713; Aug. 25.
Transformers, Regulating system for. K. Niemann and E. Leuteritz. 1,820,242; Aug. 25.
Transmission, Four speed. R. Beringer. 1,820,006; Aug. 25.
Transmission mechanism. S. E. Morral. 1,820,363; Aug. 25.
Transmission system. S. A. Barone. 1,820,898; Aug. 25.
Transmitter, High-frequency machine. W. Hahnemann. 1,820,223; Aug. 25.
Transmitters, Testing instrument for. A. D. Ring. 1,820,833; Aug. 25.
Trap: *See*—
Drain trap. Mouse trap.
Tray. J. W. Strickland. 1,820,635; Aug. 25.
Tray, Freezing. H. D. Geyer and F. W. Sampson. 1,820,221; Aug. 25.
Tray rack. R. C. Burnley. 1,820,433; Aug. 25.

Trolley for electric cars. H. E. Butts. 1,820,180; Aug. 25.
Truck. J. G. Calls. 1,820,728; Aug. 25.
Truck for transporting annular objects. S. F. Williams. 1,820,263; Aug. 25.
Truck, Hand. C. Anderson. 1,820,765; Aug. 25.
Truck loading mechanism. F. W. Caldwell. 1,820,526; Aug. 25.
Tube adjustment for train connecters, Terminal. E. E. Workman. 1,820,337; Aug. 25.
Tubes or rods for pickling, etc., Apparatus for the dipping of. H. Trevorrow. 1,820,851; Aug. 25.
Turbine, Elastic fluid. R. W. Bailey. 1,820,725; Aug. 25.
Turnbuckle. W. D. Ferris. 1,820,216; Aug. 25.
Twine cutter. H. W. Fenton. 1,820,014; Aug. 25.
Type-bar guides, Forming. F. U. Conard. 1,820,440; Aug. 25.
Typewriter. W. A. Dobson. Des. 84,926; Aug. 25.
Typewriter. R. Seidelinger. 1,820,329; Aug. 25.
Typewriter machine. J. Phelps. 1,820,542; Aug. 25.
Typewriter ribbon rejuvenator. F. R. Switzer. 1,820,583; Aug. 25.
Typewriting machine. G. F. Handley. 1,820,066; Aug. 25.
Typewriting machine. H. H. Vickers. 1,820,258; Aug. 25.
Umbrella. A. Weise. 1,820,839; Aug. 25.
Unit heater. C. C. Carson. 1,820,779; Aug. 25.
Unit heater, Down draft. C. C. Carson. 1,820,780; Aug. 25.
Upholstery, Attaching. C. R. Green. 1,820,064; Aug. 25.
Utensil, Kitchen. R. Leeds. 1,820,233; Aug. 25.
Vacuum cleaner. C. C. Dance. 1,820,350; Aug. 25.
Vacuum tube lamp support. R. C. Smalley. 1,820,202; Aug. 25.
Vacuum vessels from the exhaust tubes of vacuum pumps, Device for cutting off. R. G. Berthold and P. Fritsch. 1,820,553; Aug. 25.
Valve. E. S. King. 1,820,075; Aug. 25.
Valve. B. W. Winship and W. T. Harder. 1,820,587; Aug. 25.
Valve actuating mechanism. H. D. Church. 1,820,299; Aug. 25.
Valve actuating mechanism. W. R. Spiller. 1,820,890–1; Aug. 25.
Valve and making same, Sleeve. A. M. Niven. 1,820,829; Aug. 25.
Valve, Automatic drain. A. B. Hargis. 1,820,138; Aug. 25.
Valve device, Signal. J. C. McCune. 1,820,147; Aug. 25.
Valve, Filling. T. McGhee and P. Woodhead. 1,820,197; Aug. 25.
Valve, Flush. B. G. Haden. 1,820,796; Aug. 25.
Valve for two-cycle engines, Admission. C. H. Seifert. 1,820,093; Aug. 25.
Valve, Hydraulic. H. Ernst. 1,820,653; Aug. 25.
Valve mechanism for gas furnaces, Control. G. A. Tuck. 1,820,510; Aug. 25.
Valve operating mechanism. A. S. Wise. 1,820,686; Aug. 25.
Valve, Safety. G. H. Stevens. 1,820,403; Aug. 25.
Valve, Steam engine. R. Wintzer. 1,820,588; Aug. 25.
Valve, Thermostatic. G. P. Liaset. 1,820,145; Aug. 25.
Valve, Tire gauge. J. Collins. 1,820,120; Aug. 25.
Valve unit for player pianos. W. A. Watson. 1,820,037; Aug. 25.
Vehicle brake. A. B. Cadman. 1,820,650; Aug. 25.
Vehicle bodies, Front post construction for. J. P. Tarbox. 1,820,036; Aug. 25.
Vehicle body. J. P. Tarbox. 1,820,099; Aug. 25.
Vending machine. C. K. Cherry. 1,820,345; Aug. 25.
Vending machine. J. H. McCormick. 1,820,671; Aug. 25.
Vending machine, Cigar. J. W. Beeson. 1,820,341; Aug. 25.
Ventilating apparatus for dynamo electric machines. M. L. Blair. 1,820,007; Aug. 25.
Ventilating device for garbage, ash, and refuse trucks. A. F. Masury. 1,820,752; Aug. 25.
Ventilator. J. A. Bombard and R. J. Rogers. 1,820,430; Aug. 25.
Vibrating objects, Apparatus for. G. B. Pickop. 1,820,676; Aug. 25.
Vibrator. G. B. Pickop. 1,820,320; Aug. 25.
Vibrator rapping and drawing iron. G. B. Pickop. 1,820,675; Aug. 25.
Vibrecorder. R. K. Lee. 1,820,323; Aug. 25.
Vision-tone device. L. O. B. Lindstrom. 1,820,357; Aug. 25.
Voltage regulator. W. Schaelchlin. 1,820,712; Aug. 25.
Vulcanizer, Tire repair. C. E. Norris. 1,820,478; Aug. 25.
Vulcanizer, Watch case. A. J. Fleiter. 1,820,132; Aug. 25.
Wagon, Collapsible delivery. C. Lieblein. 1,820,466; Aug. 25.
Warping machine. G. P. Sipp. 1,820,401; Aug. 25.
Washer: *See*—
Hand washer.
Washers for commutator rings, Apparatus for making reenforced. H. W. Cooper. 1,820,181; Aug. 25.
Washing machine. E. J. Perry. 1,820,487–8; Aug. 25.
Water gate. W. H. Cogley. 1,820,441; Aug. 25
Water heater. W. Baden. 1,820,425; Aug. 25.
Water heater. H. E. Paget. 1,820,318; Aug. 25.
Water heater, Electric. W. J. Hammers. Re18,160; Aug. 25.
Water heater, Electrical. F. A. E. Jenkins. 1,820,458; Aug. 25.
Wax from mineral oils, Separating. H. T. Bennet. 1,820,645; Aug. 25.
Welding machine, Electric. W. R. Hume. 1,820,139; Aug. 25.
Weldrods, Forming and feeding. H. J. Burnish. 1,820,649; Aug. 25.
Wheel: *See*—
Abrasive wheel.
Automobile wheel.
Buffer wheel.
Disc wheel.
Paddle wheel.
Wheel and making the same, Vehicle. W. D. Sargent. 1,820,711; Aug. 25.
Wheel and shaft assembly, Steering. H. D. Geyer. 1,820,220; Aug. 25.
Wheel attachment for cycles, Auxiliary. A. L. Hess. 1,820,190; Aug. 25.
Wheel tightener. A. Z. Gatewood. 1,820,793; Aug. 25.
Whistle. R. W. Clifford. 1,820,558; Aug 25
Windmill. W. S. McRae. 1,820,818; Aug. 25.
Wind motor. G. J. M. Darrieus. 1,820,529; Aug. 25.
Window construction. H. C. Christensen. 1,820,340; Aug. 25.
Window, Vehicle signaling. T. H. Ichio. 1,820,456; Aug. 25.
Wood working machine. P. Salvat. 1,820,162; Aug. 25.
Work holding clamp. L. Leyes. 1,820,667; Aug. 25.
Workholding device. M. Longnecker and W. M. Elkins. 1,820,812; Aug. 25.
Wringer: *See*—
Clothes wringer.
Wringer. E. A. Hirner. 1,820,308; Aug. 25.
Yarn, Apparatus for drying. A. H. Junkers. 1,820,621; Aug. 25.
Yarn, Treating. J. P. Holt. 1,820,883; Aug. 25.
Zinc bearing material, Treatment of. W. C. Hooey. 1,820,455; Aug. 25.
Zinc white, Manufacture of. J. M. H. Cornillat. 1,820,598; Aug. 25.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 25, 1931

NOTE.—First number—class, second number—subclass, third number—patent number

1— 3: 1,820,224
47: 1,820,061
2— 8: 1,820,506
9: 1,820,237
73: 1,820,293
1,820,309
132: R.18,161
1,820,287
144: 1,820,376
162: 1,820,847
227: 1,820,532
239: 1,820,631
248: R.18,171
252: 1,820,572
5— 21: 1,820,658
31: 1,820,167
140: 1,820,672
187: 1,820,285
6— 10: 1,820,500
7— 15: 1,820,819
8— 2: 1,820,502
6: 1,820,094
19: 1,820,385
12— 123: 1,820,492
13— 6: 1,820,247
1,820,248
21: 1,820,668
15— 8: 1,820,350
40: 1,820,048
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308— 4: 1,820,391
207: 1,820,017
312— 7: 1,820,476
30: 1,820,527
36: 1,820,671
44: 1,820,345
80: 1,820,341
84: 1,820,517
184: 1,820,026

U. S. GOVERNMENT PRINTING OFFICE: 1931

Patents Nos. 1,816,812 to 1,817,902

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Designs	27—No.	84,774 to No. 84,800, inclusive.
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Total	1,402	

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,592,560, C. P. Dubbs, Process for cracking petroleum oil, decided July 18, 1931, claims 1, 2, 3, 4, and 5.

Pat. 1,705,834, R. Mercer and F. Tench, Telephone system, decided May 26, 1931, claims 1, 2, and 3.

Pat. 1,757,783, Carl Schlesinger, Cowl construction, decided July 15, 1931, claims 3 and 4.

Pat. 1,773,605, W. Sefton and P. Sefton, Loud speaker, decided July 15, 1931, claims 1, 2, 3, 4, 5, and 6.

Pat. 1,777,407, P. M. Hotchkin, Lighting fixture, decided July 18, 1931, claims 1, 2, and 5.

Pat. 1,783,797, C. J. Klein, Material handling device, decided July 18, 1931, claims 1, 5, and 6.

Pat. 1,786,042, Edward Toman, Electric pick-up device, decided July 15, 1931, claim 10.

Pat. 1,792,653, Claud Moxley, Apparatus for cracking off and handling sheet glass, decided July 17, 1931, claim 3.

Interference Notice

U. S. Patent Office, *Washington, July 17, 1931.*

Road-O-Graph Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Wilbur B. Tucker, 324 South Holmes street, Lansing, Mich., for registration of a trade-mark and trade-mark registered May 21, 1929, No. 256,583, to Road-O-Graph Co., Chamber of Commerce Bldg., Broadway at Twelfth street, Los Angeles, Calif., and a notice of such declaration sent by registered mail to said Road-O-Graph Co. at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Road-O-Graph Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. Patent Office, *Washington, July 15, 1931.*

James D. Waterman, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of George M. Wolff, of 835 Crescent Place, Chicago, Ill., to effect the cancellation of the trade-mark registration of James D. Waterman, of 2624 San Pablo Ave., Oakland, Calif., No. 90,491, dated February 25, 1918, and the notice of such proceeding sent by registered mail to the said James D. Waterman at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said James D. Waterman, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. Patent Office, *Washington, July 28, 1931.*

Electromatic System Company, its assigns or legal representatives, take notice:

A cancellation proceeding has been instituted by this Office upon the application of the Williams Oil-O-Matic Heating Corporation, 207 East Washington Street, Bloomington, Ill., to effect the cancellation of the trade-mark registration of Clarence B. Stroube, of Chicago, Ill., No. 126,582, dated September 16, 1919, which registration, the assignment records of the Office show, has been transferred to the Electromatic System Company, Portland, Me. The notice of such proceeding sent by registered mail to the Electromatic System Company, at the said address having been returned by the post office as undeliverable, notice is hereby given that unless the Electromatic System Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

314082

Condition of Applications Under Examination at Close of Business July 18, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 91,814; Trade-Mark Division, 1,145. Oldest new case, Nov. 18, 1930; oldest amended, Nov. 18, 1930. The dates given are 1930 except where † indicates 1931.)

Room No	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	†Mar. 6	†Mar. 16	778
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	†Jan. 20	†Jan. 24	1,484
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Mar. 3	†Apr. 16	865
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Feb. 17	†Feb. 21	761
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	†Jan. 30	†Feb. 4	703
318	6. LEWERS, A. M., Carbon Chemistry	Dec. 24	Dec. 26	2,033
106	7. JARBOE, C. G., Optics; Photography	Dec. 27	Dec. 23	2,017
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	†Jan. 3	†Jan. 3	1,598
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 24	†Jan. 15	1,375
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	†Feb. 19	†Mar. 5	1,045
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Feb. 20	†Feb. 24	787
380	12. HENRY, O. C., Machine Elements	Nov. 24	†Jan. 23	1,269
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 27	†Feb. 2	1,134
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Jan. 22	†Feb. 19	1,152
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 29	Dec. 29	2,537
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Apr. 10	†Apr. 3	789
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Dec. 22	Dec. 22	1,487
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 22	†Jan. 22	1,095
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Dec. 2	Dec. 6	1,965
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	†Feb. 28	†Feb. 28	932
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	†Jan. 23	†Mar. 21	985
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Feb. 25	†Mar. 19	750
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Nov. 22	Nov. 19	1,055
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Jan. 21	†Jan. 28	1,000
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	†Jan. 19	†Jan. 20	1,542
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	†Jan. 28	†Feb. 4	961
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	†Jan. 23	†Jan. 28	1,102
225	28. BENSON, A. R., Internal-Combustion Engines	†Jan. 17	†Jan. 17	1,676
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	†Mar. 13	†Apr. 8	561
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Feb. 25	†May 1	895
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Nov. 18	Nov. 18	2,630
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Feb. 17	†Feb. 19	1,312
182	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	†Jan. 21	†Jan. 20	2,414
304	34. SIMPSON, G. E., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Mar. 19	†Mar. 16	851
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†May 4	†Apr. 28	877
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Dec. 1	Nov. 29	2,265
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	†Jan. 12	†Jan. 12	1,450
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Apr. 11	†Apr. 13	548
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	†Feb. 5	†Jan. 31	1,589
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Dec. 18	†Jan. 13	2,969
126	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	†Feb. 24	†Feb. 28	731
223*	42. CUTTING, H. C., Electric Signaling	†Jan. 15	†Jan. 15	1,377
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	†Jan. 21	†Jan. 23	1,597
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Nov. 22	Nov. 29	2,192
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Dec. 18	Dec. 18	2,095
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	†Jan. 30	†Feb. 12	1,139
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	†Jan. 19	†Jan. 19	2,160
212*	48. ROEPKE, O. B., Electricity, General Applications	†Jan. 19	†Jan. 19	1,112
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Feb. 20	†Feb. 20	1,386
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Dec. 10	Dec. 18	2,475
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Dec. 2	Dec. 2	2,169
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Feb. 9	†Feb. 9	1,475
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Mar. 12	†Mar. 10	737
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Nov. 27	Nov. 27	2,787
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery Designs	†June 8 †June 29	†June 8 †July 7	185 333
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 19	Dec. 27	1,741
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	†Jan. 22	†Jan. 23	780
270*	58. DOWELL, E. F., Abrading; Typewriting	Dec. 18	Dec. 18	1,510
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	†Feb. 5	†Feb. 11	1,701
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Dec. 18	Dec. 20	1,904
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Nov. 24	Nov. 21	2,092
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Nov. 28	Nov. 28	2,584
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Dec. 5	Dec. 5	2,314
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND... {Trade-Marks {Labels and Prints	†June 24 †June 22	†July 6 †July 6	1,001 144

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

KENNEDY *v.* SLADE

No. 2,616. Decided March 2, 1931

INTERFERENCE—PRIORITY.

Evidence reviewed and *Held* that priority of invention was properly awarded to S., the senior party.

BLAND, *J.* dissenting.

APPEAL from the Patent Office. Affirmed.

Mr. Gustave R. Thompson and *Messrs. Milans & Milans* for Kennedy.

Mr. Elmer Stewart for Slade.

GRAHAM, *P. J.*:

An interference proceeding was instituted in the Patent Office upon the application of the appellant Kennedy, Serial No. 37,713, filed June 17, 1925, and an application filed by the appellee Slade, Serial No. 681,112, on December 17, 1923. Each of these applications sought a patent for an invention relating to the connection of a tractor and a semitrailer in road vehicles, by which connection the same would be jointed together to form a single closed body, and particularly to a weather-tight closure between said tractor and trailer by means of which the tractor and trailer might assume any angular movement with respect to each other, and still remain in such condition of closure. The subject matter of the interference is stated in eight counts, of which counts 1 and 2 are given as illustrative:

1. In a vehicle, two or more articulated units, means on the end of one of said units to receive an adjacent unit and complementary means on said adjacent unit adapted for extended interfitting closure engagement with said first named unit independent of any relative angular movement between said units.

2. In an articulated vehicle whose several sections are connected as to permit relative changes of angularity in all planes, a body closure construction providing interfitting means whereby the several body sections are maintained in weathertight contact regardless of relative angular changes.

Priority was awarded by both tribunals in the Patent Office to the appellee Slade. The Board of Appeals, in its written decision filed in the case, stated the following:

The record shows that the junior party, Kennedy, had been active in this art for some time; that he established the Kennedy Engineering Corporation for the purpose of building these motor vehicles; and that he had previously filed, on May 24, 1922, an application relating to this general subject matter, as shown by his Exhibit A, which is a copy of the Patent Office drawing in that application. During November, 1923, the party Slade became associated with Kennedy in the enterprise, the two occupying the positions, respectively, of vice-president and president of the Kennedy Engineering Corporation. According to the testimony of Kennedy (X Q. 35), he devoted his energies especially to the business end of the organization, while Slade devoted his attention principally to the designing work.

The testimony is to the effect that Kennedy developed his model, Exhibit E, early in January, 1923, and disclosed it to Slade and the other members of the corporation prior to any development by Slade; that the device as designed by Kennedy was considered cumbersome and exceedingly impractical and was followed in a few days by Slade's development of his spherical closure which, it was agreed by all interested parties, was a superior construction; and that his design was adopted and built into the first coach shown in photograph, Exhibit I, and completed in December, 1923. There is conflicting testimony as to whether Kennedy's Exhibit F, developed shortly after Kennedy's Exhibit E, was made before or after Slade's model. The Examiner of Interferences held Kennedy had not established that it was made ahead of Slade's model.

The first and main question for consideration is whether Kennedy's Exhibit E fairly discloses the issue of the interference. All the counts call for a closure between the two units, or the tractor and semi-trailer elements, during angular or vertical and horizontal movements between the two elements. Count 2 distinctly specifies a weather-tight contact, and it is believed that the term "closure" in all of the counts implies a weather-tight closure since this is the very purpose of the invention. We agree with the Examiner of Interferences that Kennedy's Exhibit E does not disclose such a closure. A projection of the tractor into the opening of the cylinder does not fill the opening but leaves a considerable space above or below it. This space is apparently necessary to permit the ends of the tractor projection to move up and down. (Kennedy's testimony, page 10).

Kennedy's Exhibit F is an extremely crude pasteboard model showing a somewhat different construction. It does not show a weather-tight closure of the rear end of the tractor with the forward end of the trailer, and appears to be no better as evidence of conception of the invention of the issue than Kennedy's Exhibit E. It therefore is immaterial whether this exhibit was made before or after Slade's model.

It is further noted that neither of the Exhibits E or F upon which Kennedy relies shows the operator's seat and control mechanism called for in count 6, nor the enclosure or compartment for the operator mentioned in counts 5 and 8.

We agree with the Examiner of Interferences that Kennedy had a conception of the problem of the desirability of doing what the invention is designed to do, but he fails to show any adequate conception of means for accomplishing the result (*Herman* v. *Wullman*, 1903 C. D. 452, and *Mergenthaler* v. *Scudder* 1897 C. D., 724): It follows that Slade was the first to conceive and the first to reduce to practice, and was rightly entitled to an award of priority by the Examiner of Interferences.

Another aspect of the case detrimental to Kennedy arises from the fact that he gave up his construction in favor of the Slade construction; that he knew of the filing of the Slade application and of the several steps of its prosecution, and that he collaborated with Slade in the matter (Kennedy's testimony, X Qs. 57—59). It appears from the record that he was satisfied with this situation as long as he thought that the Slade application or patent would be assigned to the corporation. Although such an assignment was drawn up for Slade to sign, as shown by Slade's Exhibit F, he left the corporation and went to Paris without making such an assignment. Kennedy was a man of experience in patent matters and he should have known that if he made the broad invention and disclosed it to Slade this should have been embodied in his own instead of in the Slade application. Such a situation is analogous to that in the case of *Murphy* v. *Meissner*, 1905 C. D. 592, in which the court said:

"It must suffice to say that the question is really not one of priority of invention, but of originality; that the relations of the parties to each other were such that one must have derived the invention from the other; that the appellee shows the earlier conception and reduction to practice; and that the testimony of the principal witness for the appellant shows quite conclusively that the invention belonged to the appellee, and not to the appellant. This witness, who was the person most interested in sustaining the claim of the appellant, testified that the appellee filed his application at the request and solicitation of the witness, and that no other application would have been filed if the appellee had not refused to assign his application to the company which employed him, after the application had been filed. And this witness was a man familiar with patents, and had taken out many himself. It cannot be supposed that he would have urged the appellee to make the application, if the invention had been really made by his own son, the appellant here."

As held by the court in that case, these circumstances are believed to show quite conclusively that the senior party is the inventor.

In this statement of law and fact by the Board of Appeals, we concur. It is quite apparent, from this record, that Slade was the inventor of the device which is here in litigation.

Little further comment on the matter is necessary. The appellant argues that Slade's failure to testify should be taken as a failure to meet the burden of proof which, it is argued, is cast upon him after Kennedy has established a prima facie case

of prior invention. This might be true if Kennedy had so established priority. As the Board of Appeals has found, and in which finding we have concurred, Kennedy did not establish such a prima facie case. In fact, the showing made by him, in our opinion, fully establishes that Slade was the inventor and not he.

The decision of the Board of Appeals is affirmed.

Affirmed.

BLAND, *J.*, dissenting:

Count 1 calls for "two or more articulated units" with "interfitting closure engagement" with a "relative angular movement between said units."

Count 2 calls for a "weathertight contact regardless of relative angular changes."

If any distinction is to be made between the two counts, it seems to me that the record is clear that Kennedy was the first and only one to *conceive* the idea of the two or more articulated units and the subject matter of count 1. Indeed, it is not disputed that he was the first to conceive this notion and to disclose it, by the use of two models, to Slade. Slade improved on the Kennedy structure, reduced it to practice and filed application for a patent.

Slade can only have priority in an invention.

An invention is the result of an inventive act; it consists in conceiving an idea and reducing it to practice. (Walker on Patents, Lotsch Rev., 6th Ed., Sec. 59, p. 66.

Slade took Kennedy's conception and improved it and reduced it to practice. He is entitled to reward for his improvement but should not be rewarded by being granted a monopoly for reducing to practice an art first conceived and taught by another. The art which was first conceived and taught by another was the broad idea of two or more articulated units with interfitting closure engagement with relative angular movement between said units, which count 1 calls for.

Probably Slade did first conceive a certain kind of "weathertight contact" structure called for broadly in count 2, but he certainly was not the first to conceive and disclose the broad idea set out in count 1.

Any subsequent conduct on the part of the two cannot supply the lack of invention in Slade for count 1.

That Kennedy reduced to practice the subject matter of count 1 is not questioned, and he, being the original inventor of the subject matter of this count, should be awarded priority therein. It makes no difference if Slade was the first to reduce to practice as to the improvements he made. He did not *conceive* and reduce to practice the broad subject matter of count 1.

The majority opinion affirms the view expressed by the Board that—

we agree with the Examiner of Interferences that Kennedy had a conception of the problem of the desirability of doing what the invention is designed to do.

Kennedy not only had a conception of the desirability of doing what count 1 calls for, but he constructed a model which did everything count 1 calls for and disclosed it to Slade. Slade's invention began from that point.

For the reasons above assigned, priority in count 1 should be awarded to Kennedy. To me it is not very clear that Slade was the inventor of the subject matter of count 2, but on account of my doubts on this question, I am not disposed to disagree with the conclusion reached by my associates and the Board of Appeals.

If I agreed with the majority that Kennedy did not have a complete conception of the subject matter of count 1, I would hesitate a long while before I would conclude that there was not a joint invention of this count and that as a consequence neither of them was entitled to priority over the other.

U. S. Court of Customs and Patent Appeals

IN RE ARMBRUSTER

No. 2,529. Decided March 25, 1931

PATENTABILITY—METHOD OF WALL CONSTRUCTION.

Claims for a method of wall construction *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Harry A. Beimes for Armbruster.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

This is an appeal from the decisions of the Board of Appeals, rejecting claims 20, 21, 22, 23, 24 and 25 of appellant's application for patent upon a process for building and constructing concrete walls. On the hearing before this court, appellant abandoned his said claim 23. The claims were rejected on a number of references, the ones relied upon, however, by the Board of Appeals, being Rau, 518,076, April 10, 1894, McNamee, 645,325, March 13, 1900, and Smith, 1,402,906, January 10, 1922. Claim 20 is typical of the rejected claims, and reads as follows:

20. The method of wall construction which consists in erecting a series of standards in spaced relation longitudinally of the wall, said standards being of a width to correspond with the thickness of the finished wall and having flanges extending in the direction of the wall, tying said standards together with tie rods, or the equivalent thereof, extending longitudinally between the standards, and filling the spaces between the standards with concrete, or other suitable wall filling material, so as to incorporate said standards into the wall with the outer faces of the flanges flush with the wall surface.

The alleged invention of appellant is a process for constructing concrete walls which consists in erecting a row of standards which are of the ordinary I-beam construction, the exterior surfaces of the flanges of which are to become a part of the outside of the wall, said standards being connected by longitudinal tie rods. The wall is formed by means of mold boards which are clamped to the exterior faces of the flanges of the standards, and which thus make forms into which the concrete is poured. The wall, when completed, consists of monolithic blocks of cement separated by the standards, the flanges of which are flush with the surface of the wall.

We are of opinion the references cited fully anticipate the disclosure of appellant. Rau shows standards of similar construction with mold-boards attached thereto by clasps and sliding bars, into which concrete is poured. It also discloses connecting rods placed in a diagonal fashion between the standards. McNamee shows a construction of standards and longitudinal connecting rods. Smith shows mold-boards held by clamps, which clamps operate on substantially the same principle as those of the appellant.

If the various elements which go to make up appellant's disclosure are found in the references, even though a part may be taken from one and another part from another, if no new and useful result is obtained and if there be no invention, the disclosure is anticipated. This has been held to be the law in process, as well as in device patents. *In re Nissen*, 17 C. C. P. A. (Patents) 749, 36 F.(2d) 434, 393 O. G. 254; *In re Mond*, 16 App. D. C. 351, 91 O. G. 1437; *In re Droop*, 30 App. D. C. 334, 133 O. G. 517; *In re Harris*, 37 App. D. C. 374, 170 O. G. 484.

The appellant claims the references do not anticipate his disclosure in the feature that the walls resulting from the use of the various devices described in the references, particularly that of Rau, will not have a smooth finish, in which the exterior surfaces of the flanges of the standards are flush with the concrete structure. A rough surface will result, he argues, because of the depressions in the concrete caused by the clasps and sliding bars of Rau. The Board of Appeals states, as to this matter, that the appellant has made no specific claim for this feature. From an inspection of his claims, this appears to be true. In any event, Smith's method of attachment would make no such depressions.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MCDONALD

No. 2,538. Decided March 25, 1931

PATENTABILITY—POWER-DISTRIBUTION AND CONTROL SYSTEMS.

Claims for a power-distribution and control system providing for the energizing and de-energizing of specified load circuits by remote control from a central station *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. John B. Brady for McDonald.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellant has applied for a patent on a remote control system for incandescent electric lamp circuits. His apparatus consists of the following: A wire circuit carrying a two-phase alternating electric current extends from the generating system to relays located at the load. The applicant states in his specification, however, that the device may be used with a direct current. These relays are of a highly specialized construction, and are so arranged as to cut the current off the lighting circuit, or turn it on, at the throwing of a switch at the generating station. This switch is moved, and, reverses the phase sequence of the energy supplied over the control line to said relays. These relays are of a type by which a contact may be made by the impression of a momentary impulse of current on the relay windings in a particular phase sequence, upon receiving which impression the relay remains in the position in which it is set. When it is desired to change the position of this relay, a second impulse is sent over the circuit, caused by the throwing of the switch in question, which second impulse is in reversed phase sequence and by which the relays are caused to operate in an opposite direction from the position in which they had theretofore been. By this method the operator at the generating station can turn the lights at a distant point on or off as desired.

The references relied upon for rejection were Sargent, et al., 766,391, August 2, 1904, and Currier et al., 1,441,267, January 7, 1923.

In the Sargent and Hall reference, the inventors devised a method of remote control of light or power circuits in connection with a direct current system. This consisted of the placing of electromagnetically actuated switches in the power circuit which are supplied with actuating coils connected to the source of current supply and to the contact terminals of a relay, preferably a polarized relay. These are connected in such a way that a reversal of polarity caused at the generating station by a manually operated switch, will cause these switches to open or shut as is desired by the operator, thus turning the current on or off in the desired way. The Board of Appeals has stated that this is an anticipation of the appellant's device, and that there is no invention in substituting the relays and change in phase sequences of appellant's disclosure for the relays and reversal of polarity in Sargent's and Hall's disclosure; that those skilled in the art would readily understand the change of construction required when the operator was dealing with a polyphase system instead of a direct current system; that the underlying principles, and the idea which constitutes the invention, are in the Sargent and Hall reference.

In addition, the Board of Appeals calls attention to the Currier reference, in which the inventor discloses a protecting device for polyphase circuits, and which is of particular use in electric elevators and similar mechanical contrivances. In the Currier reference a relay is found in the power circuit which remains in a certain condition until a change in the phase sequence, whereupon a contact device operable by the relay, either opens or closes the circuit, as the case may be. As to this reference, the appellant here claims that the same is not an anticipation, because the Currier relay is constantly energized by current, whereas in his device a momentary impulse is all that is required to operate the relays, thus making a useful improvement in the art, by economizing in power consumption.

In discussing the references, the Board of Appeals states:

In one sense it is true that the reversal of polarity in the Sargent et al. direct current system is really a reversal of phase in an alternating current system of zero frequency.

The board therefore comes to the conclusion that it would be uninventive to substitute in the Sargent and Hall system a frequency other than zero, either with one or more phases, and to change the control relay to be responsive to the new current.

because there exists in the prior art an alternating current relay known to be capable of actuation to close one or the other of two contacts on reversal of the phase sequence.

From this suggestion the appellant vigorously dissents, and argues that the application of the principle to a polyphase current is entirely different.

We are not prepared to hold that the Sargent and Hall reference is, in itself, an anticipation of the appellant's device. That question is one which requires the views of experts in the art, with which we have not been favored in this matter, except such suggestions as have come from the tribunals of the Patent Office. Nor is it important that this matter be determined. It is sufficient to say that in our opinion the Currier reference is an anticipation of the idea involved herein, in view of the Sargent and Hall reference. The invention, if there be any, consists in a device which, by means of a switch, will reverse or change the phase sequence of an electric current in such a way as to energize or deenergize a relay, and connect or disconnect a load circuit connected with said relay. Currier taught this art when used with a polyphase alternating current by utilizing the result of a change of phase sequence and anyone skilled in the art would have no difficulty, after having studied the Currier reference, to apply the same principle to a remote lighting or power circuit which it was desired to control from a central station.

It is not claimed that in the relays or contacts or method of wiring used there is novelty or invention, as we understand it. The only claim is that the underlying idea of a change in phase sequence and its consequent effect on a relay is new, and should be the subject of patent. This is indicated by claim 5, which has been suggested by the Board of Appeals as typical, and which is as follows:

5. An electrical control system comprising in combination a source of two phase alternating current, a control circuit, independent sets of two phase relay systems connected with said control circuit, manually controlled means for momentarily connecting or disconnecting said source from said control circuit, an actuator for each of said relay systems capable of movement to either one of two positions according to the sequence of phases of the current from said source which may be impressed upon said relay systems and means for selecting the order of the phases of current from said source through said sets of independent relay systems for moving said actuators to selected positions.

We are of opinion this idea is not inventive with the appellant, and that the field was covered fully before he entered it.

This being true, it follows that the decision of the Board of Appeals should be, and is, affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

CELANESE CORPORATION OF AMERICA *v.* VANITY FAIR SILK MILLS

No. 2,612. Decided February 25, 1931

1. TRADE-MARKS—OPPOSITION—NONUSE OF MARK.
Where the testimony showed that the applicant for registration had not used the trade-mark upon the goods specified in its application *Held* that registration was properly refused.

2. SAME—LIKELIHOOD OF CONFUSION.
Held that the applicant is not entitled to register the trade-mark "Silkenese" for use on knitted, netted, and textile fabrics of silk and Bemberg fiber in view of the prior use by the opposer of the term "Celanese" as a trade-mark for goods of the same descriptive properties.

APPEAL from the Patent Office. Modified.

Messrs. Baldwin & Wight, Mr. Frank A. Bower, Mr. Isadore Seltzer and *Mr. Chas. W. Levinson* for Celanese Corporation of America.

Messrs. Mason, Fenwick & Lawrence, Mr. Edward T. Fenwick, Mr. Edward C. Fenwick and *Mr. Charles R. Fenwick* for Vanity Fair Silk Mills.

HATFIELD, *J.*:

This is an appeal in a trade-mark opposition proceeding from the decision of the Commissioner of Patents.

It appears from the record that appellee filed an application for the registration of the trade-mark "Silkenese" for use on "knitted, netted, and textile fabrics" composed of "silk and Bemberg fiber." Thereafter, a notice of opposition was filed by appellant, in which it was claimed that appellant was the owner of the trade-mark "Celanese"; that it had used its mark on its goods for many years prior to the use by appellee of its mark; that the goods of the parties possessed the same descriptive properties; that the involved marks were confusingly similar; and that appellant would be injured by the registration of appellee's mark.

It appearing from the testimony submitted by appellee that it had not used the trade-mark "Silkenese" on the goods set forth in its application for registration, counsel for appellee, on the hearing before the Examiner of Interferences, stated that appellee did not intend to contest the opposition.

Thereupon, the Examiner of Interferences sustained the opposition and held that appellee was not entitled to register its trade-mark.

Appellee appealed to the Commissioner of Patents, who, after stating the facts substantially as hereinbefore recited, dismissed the opposition on the ground that the involved trade-marks were not confusingly similar. He held, however, that, as appellee had not used the trade-mark "Silkenese" on the goods described in its application, it was not entitled to have the mark registered.

It is claimed by appellant that the Commissioner erred in dismissing the opposition.

[2] Although we do not mean to be understood as holding that, in all cases of this character, the opposition should be sustained, nevertheless, in view of the fact that this proceeding was consolidated in the Patent Office with the case of the *Celanese Corporation of American* v. *Vanity Fair Silk Mills*, Opposition No. 8,349, involving the same parties, the same trade-marks, and goods of the same descriptive properties, and, as the parties presented such evidence as they desired relative to the issues raised by the notice of opposition and the answer thereto, including the similarity of their goods and the involved trade-marks, we are of opinion that the parties were entitled to a decision on the merits of the case. Accordingly, on the authority of our decision in the case of *Celanese Corporation of America* v. *Vanity Fair Silk Mills*, Opposition No. 8,349, 18 C. C. P. A. (Patents) ——, —— F.(2d) ——, the decision of the Commissioner of Patents is modified, being affirmed insofar as it holds that appellee is not entitled to have its trade-mark registered, and in all other respects reversed.

Modified.

U. S. Court of Customs and Patent Appeals

IN RE PITT

No. 2,634. Decided March 2, 1931

PATENTABILITY — CENTRIFUGALLY-CONTROLLED VARIABLE-SPEED GEARING.
Certain claims for a centrifugally-controlled variable-speed gearing *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Henry J. Lucke, Mr. Paul A. Blair, and *Mr. J. R. Kilcoyne* for Pitt.

Mr. T. A. Hostetler for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals affirming the decision of the Primary Examiner denying claims 11, 12, 13, 14, 15, 16, 17, and 18 of appellant's application for an alleged invention relating to improvements in transmissions for automobiles or other motor-driven vehicles.

Claim 13 is illustrative. It reads:

13. Centrifugally-controlled variable-speed gearing, comprising a driving member and a driven member co-axial therewith, a gear secured to revolve with each of said members, said gears being of different diameters, a housing arranged for rotation independently of said members about the common axis thereof, planet shafts revolubly mounted in the housing in symmetrical relation to said common axis, a pair of planet gears of different diameters on each planet shaft, each of said planet gears engaging one of the gears first mentioned, and an eccentric weight secured on each planet shaft, the lines intersecting the planet axes and the centers of gravity of the respective weights being all at equal and symmetrical angles to radii intersecting said common axis and the respective planet axes, and the weights all extending radially outward at one part of each rotation of the planet shafts.

The references are: Bicknell, 60,126, December 4, 1866; Masterman, 341,491, May 11, 1886; Lombard, 741,686, October 20, 1903; Lefinski, 760,218, May 17, 1904; Coleman, 1,525,070, February 3, 1925; Burri, French, 603,223, January 7, 1926.

Appellant's alleged invention is sufficiently described in the quoted claim.

Each of the tribunals below held that the involved claims were unpatentable over the references of record.

The Examiner concluded an exhaustive discussion of the issues by holding that "applicant has incorporated the ideas" disclosed in the patents to Lombard and Burri "with those of Lefinski without producing a new result."

The Board of Appeals, after describing fully the mechanism disclosed by appellant and that shown in the patent to Lombard, said:

As the retarding means for the planet gears Lombard employs braking mechanism instead of centrifugal weights as in the application. However, it is old, as disclosed in the patents to Coleman and Burri, to employ centrifugal weights mounted on planet gear shafts for the purpose of retarding movement. In Coleman these weights are illustated in their outer position in Figure 1 and in their inner position in Figure 3. The patent explains, page 1, lines 69 et seq. that the retarding action occurs during those portions of the cycle of revolution in which the weights are moving inwardly. In Burri the same action necessarily results and a fly wheel 13 is mounted on the driven shaft which functions like appellant's fly wheel 43 to steady the driving movement.

Claims 11, 12, 13, 15, and 16 are deemed unpatentable over Lombard, taken in connection with either Coleman or Burri. It is not seen that invention can be predicated upon the use of the old form of centrifugal retarding means shown in the latter references in lieu of the frictional retarding means disclosed in Lombard.

Claim 14 is the same as claim 13 with the addition of a brake applicable to the driven member to facilitate shifting gears. The patents to Masterman and Lefinski disclose reversing levers connected to toggles arranged to apply brakes to fly wheels carried by the driven shafts at the time the reversing mechanism is being shifted by said levers. Claims 17 and 18 are respectively the same as claims 11 and 13 and in addition thereto include a fly wheel on the driven member. Such wheel is shown at *p* in Lefinski and at 8 in Masterman, and also at 13 in Burri. We believe the additional limitations in claims 14, 17, and 18 are insufficient to render these claims patentable over the reference relied upon in the rejection of claims 11 and 13, in view of the patents to Masterman and Lefinski.

It is argued by counsel that, although the various elements in appellant's combination are old, they are so combined that appellant has obtained a new and useful result; that the new combination was not suggested by the references; and that, therefore, appellant is entitled to a patent.

In view of the fact that each of the tribunals below has discussed the issues at considerable length, we deem it unnecessary to say more than that we concur in the conclusion reached by them.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE DANN

No. 2,594. Decided March 2, 1931

1. PATENTS—CLAIMS—MULTIPLICITY.
"It may here be remarked that in our judgment applicant has presented an unnecessarily large number of claims. We can see no reason why all that he discloses in this relatively simple device might not have been embraced in a much smaller number."

2. PATENTABILITY—RESERVOIR FOR WRITING FLUID.
Certain claims for a reservoir for writing fluid *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Mr. Horace B. Fay, Messrs. Fay, Oberlin & Fay and *Mr. George E. Tew* for Dann.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

Nine claims are before us on appeal from a decision of the Board of Appeals of the Patent Office affirming the action of the Examiner disallowing them. Ten were in this appeal but the one numbered 7 was withdrawn during the argument before us.

The alleged invention is, in the application, designated as "new and useful improvements in liquid reservoir".

More specifically it comprises a combination of elements which combination results in a reservoir for writing fluid—ink—provided with an inclined rigidly positioned conduit designed to receive a pen holder, with pen therein, in such manner as that the pen will extend into the ink to a determined point when the holder is inserted into the conduit, the holder being provided with a shoulder which engages the inner surface of the conduit in a manner that serves to seal the opening and prevent evaporation of the fluid. There is provided also a capillary tube adapted to draw the fluid from the reservoir against the action of gravity and store it in space in communication with the pen, thus keeping the holder automatically filled with ink. A small vent is provided in the reservoir cover, and the reservoir has certain described dimensions.

[1] It may here be remarked that in our judgment applicant has presented an unnecessarily large number of claims. We can see no reason why all that he discloses in this relatively simple device might not have been embraced in a much smaller number.

Numbers 4, 13 and 16, as drawn, appear to comprise all the features, except a vent claimed in 14. No. 5 contains a limitation hereinafter referred to.

4. In apparatus of the character described, the combination of a reservoir adapted to receive writing fluid and having an upwardly extending conduit in communication with its interior, a pen holder received within said conduit in a pre-determined position, a pen in said holder, said pen being immersed in the fluid in said reservoir, and means in said pen adapted to draw fluid from said reservoir against the action of gravity, and store the same in communication with said pen.

13. In apparatus of the character described, the combination of a base provided with a shallow reservoir having a depth approximating the exposed length of an ordinary pen and a maximum horizontal dimension of several times its depth, a cover for said chamber comprising a member adapted to fit snugly therein and having a conduit extending from above the level of the top of said base to a point closely adjacent the level of the top of said base to a point closely adjacent the level of the bottom of said chamber, and a pen holder and pen received within said conduit, said holder having a substantially unyielding exterior surface making a substantially sealing engagement with the wall of said conduit at a point above the top of said chamber, and said pen extending to substantially the bottom of said chamber.

16. A cover for a reservoir for writing fluid, comprising a plate provided with an opening therethrough, and a conduit fixed to said plate and surrounding such opening, said conduit being provided with means limiting the depth to which a pen-holder and pen may enter said conduit, whereby the pen point may be supported at a desired level within the fluid in the reservoir supporting said cover.

Against the claims nine references were cited by the Examiner as follows: Esser, 28,024, December 14, 1897; Hormann, 183,853, October 31, 1876; Thomson, 430,446, June 17, 1890; Miller, 544,990, August 20, 1895; Stanek, 639,913, December 26, 1899; James, 1,218,663, March 13, 1917; Nilsson et al., 1,577,067, March 16, 1926; Yoshinaga, 1,608,970, November 30, 1926; Eickelberg, German, 296,306, April 29, 1916.

The Examiner rejected the claims upon "the grounds of aggregation, no patentable relation being seen between the ink well elements and the writing pen parts", and also on "the art of record". The board denied the rejection on the ground of aggregation but rejected them on Eickelberg, Thomson and Nilsson, the here withdrawn claim 7 being rejected as too indefinite. We think the reversal of rejection on the ground of aggregation was correct.

Admittedly many, probably all, of the elements involved are old and appear in the references, and applicant's invention, if any, lies in the combination which he discloses.

For illustration, the patent to Eickelberg (which is a foreign patent) discloses a "reservoir adapted to receive writing fluid" with an "upwardly extending conduit in communication with its interior", a pen holder "received within said conduit in a predetermined position", said holder having in it a pen "immersed in" the fluid of the reservoir.

These features being clearly disclosed by Eickelberg renders it a proper reference as to them, notwithstanding it is a foreign patent. To so use it is not contrary to the rule stated in *Carson* v. *American Smelting & Refining Co.*, 4 F.(2d) 463, cited by appellant.

A foreign patent is a valid reference for all that is clearly disclosed therein. *In re Crowell*, 17 C. C. P. A. (Patents) 1009, 39 F.(2d) 681, 397 O. G. 3.

Other features of the claims are that (*a*) the arrangement results in the pen "extending to substantially the bottom" of the reservoir or chamber; that (*b*) the reservoir is shallow, "having a depth approximating the exposed length of an ordinary pen and a maximum horizontal dimension of several times its depth"; (*c*) the sealing of the opening in the conduit by the engagement of the holder with the conduit wall; and (*d*) the means for drawing the ink "from the reservoir against the action of gravity, thus automatically filling the pen".

The board found that features (*a*) and (*c*) were disclosed in Eickelberg. Relative to feature (*a*) appellant insists that a certain valve shown in the Eickelberg patent is disclosed as showing that—

the pen at no time, regardless of the adjusted position of the tubular holder, can be normally held closely adjacent the bottom of the reservoir.

This statement appears to be correct, but the mere positioning of the pen with relation to the bottom, standing alone, would probably be more a matter of skill than of invention. As for the sealing feature (*c*) there does appear to be a ledge feature in Eickelberg upon which the pen holder rests, but this appears only from the drawing and is not described in the specification of Eickelberg for the function for which used by appellant. Furthermore, it seems obvious that when the holder is depressed in order to open the trap and lower the pen point into the ink an opening is produced which admits air. No sealing result was intended or claimed by patentee and we do not think this feature is disclosed so as to make Eickelberg a valid reference against same.

Foreign patents may not be measured as anticipatory by what may be made out of them, but only by what is clearly and definitely expressed in them. *In re Gillam*, 17 C. C. P. A. (Patents) 877, 37 F.(2d) 959, 395 O. G. 1135.

Feature (*b*) relating to the dimensions of the reservoir would not of itself or by itself be patentable.

The Nilsson patent discloses—

an ink well, receptacle, or container with means by which a fountain pen can be filled by limiting its entrance into the receptacle, or by limiting the depth to which the pen-point may be dipped into the fluid, or by limiting the descent of the holder into the well for the purpose of pumping the ink into the same; * * * .

The specification (the patent being for "ink receptacles for filling fountain pens") makes no specific reference to the filling of pens other than by "pumping". It is argued, however, in the brief of the Solicitor for the Patent Office that all that is required to meet feature (*d*), supra, is—

that the pen be one of the type having a capillary tube, as an ordinary fountain pen, * * * .

The vent of claim 14 seems to be anticipated by both Nilsson and Thomson.

The Thomson patent, it may be here said, is entitled "Adjustable pen-rest for ink stands".

Claim 5 includes a limitation to a pen holder having a capillary passage therein in communication with the pen. This capillary passage enables an increase in the amount of ink that may be supplied the pen point and eliminates the necessity of frequent dipping of the pen into the reservoir.

This element of itself is probably anticipated by Nilsson.

It is thus seen that upon dissecting the claims, elements substantially corresponding to most of their features are found in the prior art cited, one or more elements in one reference, another in another reference, etc., but no one reference contains all the elements, or their equivalents, and, even when several of them are found in combination, as in the Eickelberg patent, they are not found in a relation which produces some of the substantial functions of appellant's device taken as a whole.

We think appellant has fairly stated the case in the following paragraph of his brief:

It is admitted that appellant is not the first to provide an ink well adapted to receive a pen when not in use, nor is he the first to provide an ink well having means to position the pen at a given height in the well when not in use. It is submitted, however, that he is the first to provide a main reservoir having an opening which cooperates with a pen; first, to seal the well when not in use; second, to position the pen at a given height in the reservoir and in a position to maintain the pen immersed in the liquid; and, third, to maintain the pen in the liquid to permit of the automatic loading of a substantial quantity into the pen by means of the peculiar construction of the latter.

By the combination thus described in the foregoing quotation, we think appellant has produced an article which is new and useful, differing in its character from that of any of the references, and that the particular elements recited in the quotation, when combined as described, perform functions which differ from the functions performed by them where found in the patents cited. The combination was not obvious to one skilled in the art and, in our opinion, involves invention. Certain of appellant's claims are, therefore, allowable. Decisions of this court applicable here are: *In re Champeau*, 17 C. C. P. A. (Patents) 568, 34 F.(2d) 1012, 388 O. G. 783; *In re Hamachek*, 17 C. C. P. A. (Patents) 633, 36 F.(2d) 119, 390 O. G. 707; *In re Baker*, 17 C C. P. A. (Patents) 681, 36 F.(2d) 138, 391 O. G. 504.

Language is found in a decision of the Commissioner of Patents in *Ex parte McCullom*, C. D. 1914, 70, which seems to be quite apropos:

In determining the patentability of a claim over features found only in a plurality of references it is necessary to consider the structural differences specified in the claims as well as their functional differences or result. If the structures of the several references cannot be combined without the exercise of invention, even though the result is old, the claims should be allowed. If the structures of the references may be combined or substituted one for the other and the combined function or result is new, the claim should be allowed. It is only when both the structural features found in the references may be combined without the exercise of invention, even though the result claim and the function or result involves no invention that the claim should be rejected.

[2] As already indicated, we think there were entirely too many claims drawn for this application. The allowance of numbers 4, 5, 13, 14 and 16 will embrace all that seems to be necessary to give applicant the protection to which we deem him entitled.

The decision of the Board of Appeals is reversed as to claims 4, 5, 13, 14 and 16.

As to the others it is affirmed.

Modified.

U. S. Court of Customs and Patent Appeals

IN RE MCDONALD

No. 2,687. Decided March 25, 1931

PATENTABILITY—REMOTE CONTROL SYSTEM FOR INCANDESCENT-ELECTRIC-LAMP CIRCUITS.

Claims for a remote control system for incandescent-electric-lamp circuits *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. John B. Brady for McDonald.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming that of the Examiner, rejecting all of the claims of appellant's application, eight in number, for failure to define invention over the prior art.

Claim 7 is illustrative of the claims on appeal and reads as follows:

7. In a power distribution and control system a source of polyphase power, distribution circuits for supplying power to a plurality of different load circuits from said source, polyphase relays located adjacent selected ones of said load circuits and having means for controlling the supply of power to said load circuits and effecting a change in phase sequence of the power in said power distribution circuit at predetermined time intervals for energising or de-energizing selected ones of said load circuits from one of the phases of said polyphase source while maintaining the phase sequence in others of said load circuits constant.

The references cited by the Board of Appeals are: Edison, 430,934, June 24, 1890; Gale, 1,182,265, May 9, 1916; Currier et al., 1,441,267, January 3, 1923; Macmillan, 1,551,529, August 25, 1925.

As will be seen from the above claim the application of appellant relates to a system for the energizing and deenergizing of specified load circuits by remote control from the central station. Briefly, it consists of a manually-operated switch in the control room by which it is possible to reverse the phase sequence in a polyphase electric system; at those points in the system where it is desired to connect and disconnect the load, polyphase relays are inserted which are responsive to the reversal of phase sequence so that whenever the phase sequence of the power supply is reversed these relays assume the reverse position, thus either closing the circuit

or disconnecting it, as the case may be. This scheme is especially applicable in the case of street-lighting loads, which may through this method be turned on in the evening and disconnected in the morning following by merely throwing the phase-reversal switch in the central station. Wherever there are power loads, such as motors, which necessitate a constant phase sequence and which would be injured by phase reversal during motion, applicant has provided what is referred to as a "safety panel" which consists of a pair of relays which respond to the reversal of phase sequence in the supply line and are so connected that when one is open the other is closed. They are so arranged that the one, when closed, connects the motor to the supply line, and upon a reversal of phase in the supply line this relay opens, disconnecting the motor from the line, and the other relay closes, again connecting the motor to the line in such manner that the phase sequence of the power supplied to the motor is the same as before. In other words, these relays operate substantially as a reversing switch which, at the critical time, reverses the connections of the motor to the supply system to correspond with the phase reversal of the system, thus maintaining the identical phase sequence within the motor itself.

The Edison reference discloses a system for connecting or disconnecting specified load circuits at remote points of a direct-current system by means of polarized relays responsive to a reversal of polarity of the supply line; means is also shown for maintaining constant polarity of the power supplied to any device where a constant polarity is essential, irrespective of position of the reversing switch, said means also being in the form of a relay.

The Macmillan reference discloses a switch by means of which the phase sequence of a polyphase alternating-current system may be reversed.

The Currier reference discloses a form of relay which opens or closes a pair of contacts, as the case may be, upon the phase sequence of the system supplying it being reversed.

The reference Gale shows a form of electric switch for maintaining the phase sequence of a motor constant when the phase sequence of the line supplying it is reversed.

The Examiner and the Board held that appellant's application shows nothing more than the invention of Edison with changes made to conform to operation on alternating current, and that these changes involve merely the use of equivalents which are well known in the art. On the other hand, appellant argues that this is incorrect and that he has made a true invention.

In discussing the Edison disclosure, the Board of Appeals endeavored to make it more responsive to appellant's alleged invention considering a direct current system in which the polarity is reversed as, "broadly speaking", an alternating-current system of zero frequency in which the phase sequence is reversed. While this might be so considered for some purposes, we are not impressed with it insofar as the issues here involved are concerned; it is too technical and strained, we think, to warrant the assumption that this analogy would occur to those skilled in the art and that it would make the Edison reference a stronger anticipation of appellant's system than would be the case without it. However, we believe the Edison reference does show the basic inventive thought behind appellant's application; it clearly points out a method, applied to a direct-current system, of securing the real objective of appellant's application, that is, remote control to connect or disconnect specified load circuits without the use of any wires other than those necessary for supplying power to the load circuits. This, we think, is the real basis of both systems, and furnishes to the Edison reference its greatest strength.

The question then remains, was it inventive to apply to a polyphase alternating-current system the priciple shown in the Edison reference? This, in turn, will depend on what changes were necessary in the Edison system and whether these changes are inventive.

We have examined the references very carefully and conclude that appellant's method of accomplishing, on an alternating-current system, what Edison did on a direct-current system, was not, in view of the references, inventive. Edison's polarized relay would not work on alternating current; Currier shows a relay which will respond to phase reversal of a polyphase system, and Gale shows a device which prevents a phase reversal of the supply line from effecting a phase reversal in loads where constant phase sequence is essential. The reversing switch, which appellant shows as manually operated, is clearly shown by Macmillan.

Appellant argues in his brief that these devices are not the same as used by him. This may be true; the devices shown in the references probably are not the best of their kind. The point is, however, that they do show means for overcoming the difficulties arising in applying Edison's method of remote control for direct-current systems to an alternating-current system. Appellant is not claiming any specific form of polyphase relays; he is claiming a control system set out in the claims. We believe that the basic idea of that system was disclosed by Edison and that the obstacles lying in the path of applying the same system to an alternating-current line were such as were well known to men skilled in the art, and that, in view of the references cited, the combination of means employed by appellant, as stated in the claims, did not involve invention.

Whether this conclusion be correct or not, the Patent Office tribunals have so held. The question involved are highly technical and the rule that in such cases the decision of the Board of Appeals should be affirmed, unless manifestly wrong, is applicable. *In re Demarest*, 17 C. C. P. A. (Patents) 904, 38 F.(2d) 395, 396 O. G. 4; *In re Wietzel*, 17 C. C. P. A. (Patents) 1079, 39 F.(2d) 669, 400 O. G. 463. We cannot find that the decision of the Board of Appeals herein is manifestly wrong, but on the contrary we believe it to be correct.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,052,167, C. Nessler, Process of waving hair, D. C., N. D. Ohio, E. Div., Doc. E 2966, *The Nestle Le Mur Co. v. S. Bonat & Bro.* Dismissed without prejudice May 23, 1931.

1,156,122, J. C. Woodley, Fibrous composition and process of manufacture, D. C., S. D. Ind. (Indianapolis), Doc. 1170. *The Richardson Co. et al. v. Rub-Tex Products Co.* Dismissed without prejudice April 11, 1931.

1,157,699, M. H. Kern, Numbering machine, appeal filed May 28, 1931, C. C. A., 2d Cir., Doc. 11540, *Roberts Numbering Machines Co. v. Wetter Numbering Machine Co.*

1,225,460, J. B. McCarthy, Insulator wall bracket, D. C., N. D. Ohio, E. Div., Doc. E 3388, *National Electric Products Corp. v. Line Material Co.* Patent held valid and infringed June 2, 1931.

1,228,009, C. F. Feltz, Motor driven vehicle, filed May 27, 1931, D. C., E. D. Mo., E. Div., Doc. 9478, *C. F. Feltz et al. v. A. R. Lindburg, Inc., et al.*

1,258,423, F. Lowenstein, Variable electrical apparatus, D. C. Conn. (New Haven), Doc. E 1850, *Scovill Mfg. Co. v. J. Satler (Eagle Radio Co.).* Claims 1, 2, 3, and 4 held infringed Sept. 20, 1927.

1,276,753, F. Groch, Ore concentration, included by stipulation May 21, 1931, in suit filed Jan. 24, 1930, D. C. Colo. (Denver), Doc. 9178, *J. P. Ruth, jr., v. Stearns-Rogers Mfg. Co.*

1,307,734, A. V. Gullborg, Lubricating means, D. C. Mass., Doc. E 2150, *The Bassick Mfg. Co. v. J. M. Cohen et al. (Haymarket Hardware Co.).* Injunction Nov. 27, 1925.

1,308,324, P. M. Bellard, Device for gaging circular work, D. C. Mass., Doc. E 2045, *The L. S. Starrett Co. v. B. C. Ames Co.* Dismissed without prejudice Dec. 23, 1925.

1,331,884, G. Sundback, Sheet metal forming and setting machine, D. C., S. D. N. Y., Doc. E 54/211, *Hookless Fastener Co. v. Interstate Mechanical Laboratories, Inc.* Consent decree for plaintiff June 6, 1931.

1,354,096, W. Fels, Buttless knitting machine needle, filed Mar. 18, 1931, D. C., E. D. N. Y., Doc. 5415, *M. Nudegger v. K. Kessling.*

1,371,231, S. Elliott, Controlling means for centrifugal oil burners, filed June 4, 1931, D. C. Mass., Doc. E 3430, *Elliott Addressing Machine Co. v. Petroleum Heat & Power Co.*

1,417,622, J. J. Marx, Ironing machine, D. C., E. D. N. Y., Doc. 5435, *Brillo Mfg. Co., Inc., v. Pierce Steam Laundry, Inc.* Consent decree for plaintiff June 2, 1931.

1,483,361, J. P. McCarthy, Method of reclaiming waste, D. C., S. D. Ind. (Indianapolis), Doc. 1232, *The American Laundry Machinery Co. v. Hoosier Waste Renovating Co.* Dismissed without prejudice May 14, 1931.

1,521,537, H. W. Houghton, Fumigant and process of fumigation, filed May 25, 1931, D. C., N. D. Calif., S. Div., Doc. 2896-L, *Safety Fumigant & Chemical Co., Inc., et al. v. J. J. Reid et al.*

1,552,826, P. J. Luhati, Lifting device for motor vehicles, filed June 2, 1931, D. C., W. D. Wash., S. Div., Doc. E 454, *Rotary Lift Co. et al. v. American Mfg. Co.*

1,570,364, J. Wieder, Sample tab, filed Mar. 9, 1931, D. C., E. D. N. Y., Doc. 5408, *Standard Sample Card Co., Inc., et al. v. Tango Gown Shop, Inc.*

1,580,847, H. E. Moineau, Wire receptacle, D. C. Mass., Doc. E 2667, *Marlboro Wire Goods Co. v. Home Accessories Co.* Decree affirmed April 28, 1928.

1,611,444, D. M. Hepburn, Stone asphalt road and method of preparing and laying same, D. C., E. D. Mo., E. Div., Doc. 9319, *Amiesite Asphalt Co. of America v. Flinn Paving Co. et al.* Consent decree holding claims 1 to 6, inclusive, valid and infringed May 29, 1931.

1,635,115, Deutsch & Pfeifer, Apparatus for cleaning containers, D. C., N. D. Ohio, E. Div., Doc. E 2840, *Fry Equipment Corp. et al. v. Merit Equipment Corp.* Dismissed without prejudice May 23, 1931.

1,658,392, Prentice and Legat, Separable fastener, D. C., S. D. N. Y., Doc. 1 51/113, *G. E. Prentice Mfg. Co. v. Jiffee Fastener Co., Inc.* Consent decree for plaintiff June 1, 1931.

1,690,091, J. K. Marcus, Process for extracting the non-saponifiable and difficultly saponifiable matter from fatty material, filed Mar. 9, 1931, D. C., E. D. N. Y., Doc. 5409, *International Vitamin Corp. v. E. R. Squibb & Sons.*

1,694,702, B. B. Deitel, Vanity case, appeal filed May 29, 1931, C. C. A., 2d Cir., Doc. 11541, *B. B. Deitel v. Unique Specialty Corp. et al.*

1,711,814, C. C. Shipp, Radiator box base, D. C., S. D. Ind. (Indianapolis), Doc. 1208, *C. C. Shipp v. Scott School Township et al.* Dismissed for want of equity April 28, 1931.

1,731,967, L. J. Antonsen, Paper excelsior machine, D. C., N. D. Calif. (San Francisco), Doc. 2689-S, *L. J. Antonsen v. J. Scherman (Western Paper Stock Co.).* Decree for plaintiff May 29, 1931.

1,734,465, C. Hardy, Cigar lighter, D. C., S. D. N. Y., Doc. E 51/160, *Wales Novelties Corp. et al. v. H. Belove (Belove Watch Case Co.).* Consent decree for plaintiff June 6, 1931. Doc. E 51/161, *Wales Novelties Corp. et al. v. J. Gottlieb (Jagot Watch Co.).* Decree as above.

1,749,734, T. J. Kelly, Netted cord fabric bag, filed Mar. 11, 1931, D. C., N. D. Ga. (Rome), Doc. E 109. *Southern Brighton Mills v. Aragon Mills.*

1,757,825, F. Albach, Straddle stand or support, filed Apr. 13, 1931, D. C., S. D. Ind. (Indianapolis), Doc. 1307, *F. Medart Mfg. Co. v. Hill Standard Co.*

1,773,651, F. Tourtois, Brush, D. C., S. D. N. Y., Doc. E 56/252, *Coty, Inc., v. Northam Warren Corp.* Consent decree for plaintiff June 1, 1931.

1,779,325, T. Manning, Sectional building construction, filed June 6, 1931, D. C., N. D. Okla. (Tulsa), Doc. E 649, *T. Manning v. Oil States Mfg. Co. et al.*

1,781,489, A. I. Abrahams, Loud speaker horn, filed Mar. 12, 1931, D. C., E. D. N. Y., Doc. 5412, *A. I. Alexander et al. v. N. Faggan et al.*

1,786,969, C. Van Der Heuel, Hair drying apparatus, filed Mar. 12, 1931, D. C., E. D. N. Y., Doc. 5413, *C. Van Der Heuel v. M. Heischfeld et al.*

1,789,476, C. Riegger, Faucet, filed May 21, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U-8-J, *Good Mfg. Co., Inc., v. Plumbers Specialty Mfg. Co. et. al.*

1,790,925, N. W. Kinney, Wood heel grooving machine, filed June 8, 1931, D. C., S. D. Ohio, W. Div., Doc. E 748, *Slipper City Wood Heel Co. v. Vulcan Corp.*

Re. 16,067, C. F. Feltz, Motor driven vehicle, filed May 27, 1931, D. C., E. D. Mo., E. Div., Doc. 9479, *C. F. Feltz et al. v. A. R. Lindburg, Inc., et al.*

Des. 78,795, C. R. Sheaffer, Fountain pen, D. C., S. D. N. Y., Doc. E 53/188, *W. A. Sheaffer Pen Co. et al. v. Worth Featherweight Pen Co.* Decree for plaintiff June 1, 1931.

Des. 82,797, S. I. Cole, Condenser casing, filed Mar. 6, 1931, D. C., E. D. N. Y., Doc. 5407, *Aerovox Wireless Corp. v. Micamold Radio Corp.*

Adjudicated Patents

(C. C. A. Ill.) Hult patent, No. 1,166,523, for outboard motor *Held* invalid. *Johnson Bros. Engineering Corporation* v. *Masters*, 49 F.(2d) 187.

(C. C. A. Okla.) Fardon patent, No. 1,184,673, for storage-tank, claim 1, *Held* valid and infringed. *Johns-Manville Corporation* v. *National Tank Seal Co.*, 49 F.(2d) 142.

(C. C. A. Ill.) Hult and Hult patent, No. 1,207,761, for outboard motor, *Held* invalid. *Johnson Bros. Engineering Corporation* v. *Masters*, 49 F.(2d) 187.

(C. C. A. Ill.) Johnson patent, No. 1,467,641, claims 2 and 9, *Held* not infringed. *Id.*

(C. C. A. Mich.) Sweetland patent, No. 1,594,334, for method of preventing wear of the moving parts of an automotive internal combustion engine, *Held* valid and infringed. *Motor Improvements* v. *General Motors Corporation*, 49 F.(2d) 543.

(C. C. A. Mich.) Sweetland patent, No. 1,594,335, for means of filtering oil in the lubricating system of an internal combustion engine, *Held* valid and infringed. *Id.*

(C. C. A. Mich.) Sweetland patent, No. 1,624,689, for lubricating system of internal combustion engines, *Held* invalid. *Id.*

(C. C. A. Mich.) Sweetland patent, No. 1,646,377, for renewable filter unit, *Held* invalid. *Id.*

(C. C. A. Mich.) Sweetland patent, No. 1,646,378, for renewable filter unit, *Held* invalid. *Id.*

(C. C. A. Del.) Bassett patent, No. 1,666,589, for elevator signal system, *Held* valid and infringed. *Graham & Norton Co.* v. *Elevator Supplies Co.*, 49 F.(2d) 268.

(D. C. Ill.) Edelman patent, No. 1,680,870, for radio power supply unit, claims 1 to 3, *Held* valid and infringed. *Banning* v. *Hartmann Furniture & Carpet Co.*, 49 F.(2d) 331.

(D. C. Ill.) Edelman patent, No. 1,682,492, for radio battery eliminator, claims 3 and 4, *Held* valid and infringed. *Id.*

(D. C. Ill.) Edelman patent, No. 1,682,778, for radio-chassis, *Held* invalid. *Id.*

Disclaimers

1,456,505.—*William A. Knoop*, Brooklyn, and *Paul P. Cioffi*, New York, N. Y. ELECTRIC DISCHARGE DEVICE. Patent dated May 29, 1923. Disclaimer filed July 7, 1931, by the assignee, *Western Electric Company, Incorporated.*

Hereby enters this disclaimer relative to claims 2, 11, and 12 of said Letters Patent to wit: to the combination of elements set forth in said claims, except as the same are embodied in a vacuum tube wherein the frame comprises a pair of upright members connected to the press and supporting both anode and cathode.

Your petitioner hereby further enters this disclaimer relative to claim 15 of said Letters Patent to wit: to the combination of elements set forth in said claim, except as the same are embodied in a vacuum tube wherein the upright members support the anode intermediate their ends and are interconnected by insulating material at their ends opposite the press, which material supports the cathode.

Your petitioner hereby further enters this disclaimer to said claim 17 of said Letters Patent to wit: to the combination of elements set forth in said claim, except as the same are embodied in a vacuum tube wherein the anode and grid electrodes are circumferentially complete, and the said electrodes are solely supported by wires embedded in the stem of the tube.

Your petitioner hereby further enters this disclaimer to said claim 19 of said Letters Patent which is in the following words, to wit:

"19. An electron discharge device comprising a stem, a plurality of electrodes having their axes substantially parallel to said stem, a metallic member arising from said stem for supporting one of said electrodes, and a metallic member arising from said stem for supporting another of said electrodes independently of said other member."

Your petitioner hereby further enters this disclaimer relative to claim 21 of said Letters Patent to wit: to the combination of elements set forth in said claim except as the same are embodied in a vacuum tube wherein the rigid wires support the anode intermediate their ends and are interconnected by insulating material at their ends opposite the press, which material supports the cathode.

1,165,825.—*Garfield A. Wood*, St. Paul, Minn. HYDRAULIC DUMP. Patent dated December 28, 1915. Disclaimer filed July 8, 1931, by the assignees, *Wood Corporation of Delaware*, and *Wood Hydraulic Hoist & Body Company.*

Hereby make disclaimer to that part of the specification reading as follows:

"Any form of prime mover in place of the engine B may be employed for driving the equivalent of the pump 13 and any form of impelling medium such as oil, water and other liquid, gas or air may be used."

Your petitioners further with respect to claim 5 of said Letters Patent No. 1,165,825 hereby make disclaimer with respect to the improvements described and defined in said claim 5 of so much thereof as is in excess of the following:

"A self-propelling vehicle having a propelling motor, a dumping body tiltably mounted on said vehicle adjacent the rear end of the vehicle, a gear pump connected with said motor an upwardly extending cylinder having its piston operatively connected to said body, and a system of passages connecting the ingress and egress openings of said gear pump with the upper and lower ends of said cylinder, said piston being adapted to partly overlap the upper connection of said passages thereby forming a duct around the piston."

Your petitioners further hereby make disclaimer with respect to the improvement described and defined in claim 12 of said Patent No. 1,165,825, of so much thereof as is in excess of the following:

"A self-propelled vehicle having a propelling motor, a dumping body tiltingly mounted on said vehicle adjacent the rear end of the vehicle, a gear pump connected to said motor, a hydraulic cylinder interposed between said gear pump and body and having its piston operatively connected to said body, a system of piping connecting said gear pump with said cylinder and means for establishing communication between the portions of said cylinder above and below said piston and with said piping to prevent the piston locking in said cylinder."

1,699,625.—*Carl F. B. Olofson*, West Orange, N. J. ELEVATOR-CONTROL DEVICE. Patent dated January 22, 1929. Disclaimer filed July 6, 1931, by the assignee, *A. B. See Elevator Company, Inc.*

Hereby enters this disclaimer of that part of the claim in said specification which is in the following words, to wit:

"12. In an elevator control system, a car controller comprising a main control lever, contacts for up motion and contacts for down motion, a motor and drive gear for the actuation of said elevator, cooperating control means including contactors connected between said car controller and said motor for the control thereof, and an auxiliary control means incorporated in said controller for the independent actuation of said control means for stopping and starting the car during the travel in a given direction while said main control lever occupies an operating position."

"21. In an elevator control device, a controller having contact members for the normal control thereof including selection between upward and downward directions, and auxiliary contact members for the actuation of auxiliary control devices to stop and start said elevator without moving the controller from the operative position."

"24. In an elevator control device a controller element comprising main control members for determining the direction of travel and auxiliary control members effective to stop and start in a given direction only without movement of the main control element from its operative position, and means for rendering said auxiliary members effective with respect to a floor level."

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 4, 1931

[VOL. 409. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 313,612. SHAWNEE STONE COMPANY, Bloomington, Ind. Filed Apr. 21, 1931.

SHAWNEE STONE CO.

The words "Stone Co." not being claimed apart from the other features of the mark.

For Indiana Limestone for Building Purposes, Stone as It Comes from the Quarry, Including "Mill Blocks", Which is the Raw Material Shipped to Plants Which in Turn Saw It to the Dimensions Required for Building Purposes, and "Sawed Slabs", Which are a Semi-Finished Product Wherein the Rough Mill Blocks Have Been Sawed into Standard Size Slabs for Shipment to Points Throughout the Country to Local Cut Stone Plants Who do Not do Their Own Sawing but Who Take the Sawed Slabs and Work Them Up into the Cut Stone for Building Purposes.

Claims use since Sept. 1, 1929.

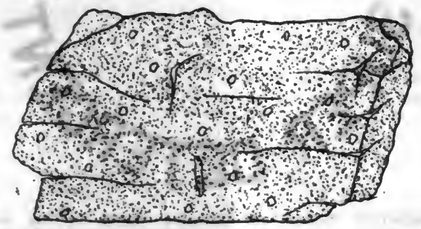
Ser. No. 314,889. ALGEMEENE KUNSTZIJDE UNIE N. V., Arnhem, Netherlands. Filed May 22, 1931.

ENCONA

For Artificial Horsehair and Artificial Straw Made of Cellulose.

Claims use since May 1, 1930.

Ser. No. 316,039. THE KOPPERS COMPANY, Pittsburgh, Pa. Filed June 19, 1931.



The drawing is intended to show spots of material on the surfaces of lumps of coke having the appearance of burnished copper or flaming gold. Applicant disclaims the representation of a lump of coke shown in the drawing. Applicant is the owner of registration No. 279,253.

For Coke.

Claims use since June 1, 1931.

Ser. No. 316,253. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England. Filed June 25, 1931.

FIDULA

For Imitation Straw and Imitation Horsehair Made of Cellulose.

Claims use since Mar. 26, 1931.

CLASS 2

Receptacles

Ser. No. 309,298. THE AMERICAN PAPER GOODS COMPANY, Montclair, N. J., and Kensington, Conn. Filed Dec. 24, 1930.

Amkleer

For Merchandising Envelopes and Bags of the Same General Character and Used for the Same General Purpose as the Envelopes.

Claims use since Oct. 5, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 314,300. BENJAMIN G. ROBERTSON, doing business as Suzanne Bags, Louisville, Ky. Filed May 7, 1931.

Suzanne Bag

No claim is herein made to the exclusive use of the word "Bag" apart from the mark as shown.

For Hand Purses or Bags.

Claims use since Apr. 1, 1926.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 284,840. F. L. & J. C. CODMAN COMPANY, Boston and South Boston, Mass. Filed May 31, 1929.

PASTEL

For Buffing Wheels.
Claims use since Sept. 11, 1928.

Ser. No. 307,431. FLORA HOLMES SHOEMAKER, doing business as The Frostilla Company, Elmira, N. Y. Filed Oct. 31, 1930.

FROSTILLA

For Non-Saponaceous Beard-Softening Preparations Useful as an Aid Both During and After Shaving.
Claims use since Sept. 9, 1930.

Ser. No. 312,131. HERMAN M. UHLIG, doing business as Speede Products Co., Cedarburg, Wis. Filed Mar. 13, 1931.

SPEEDEE

For Washing Powder.
Claims use since Mar. 1, 1928.

Ser. No. 313,549. KATIE M. JOHNSTON, doing business as Angelite Soap Manufacturing Co., Los Angeles, Calif. Filed Apr. 20, 1931.

ANGELITE

For Soap.
Claims use since June 2, 1930.

Ser. No. 314,652. ROBERT P. MILLER, doing business as Parlor Pride Mfg. Co. Inc., North Andover, Mass. Filed May 16, 1931.

Parlor Pride

For Stove Polish.
Claims use since July 1, 1879.

Ser. No. 314,688. GLO-BRITE LABORATORIES, Des Moines, Iowa. Filed May 18, 1931.

GLO-BRITE

For Preparations for Cleaning and Polishing Glass and Metal Surfaces.
Claims use since Apr. 1, 1931.

Ser. No. 314,965. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y. Filed May 23, 1931.

No. 300

For Preparations Used as Cleansing Agents for General Household and Industrial Cleansing Purposes.
Claims use since Apr. 20, 1930.

Ser. No. 314,966. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y. Filed May 23, 1931.

No. 400

For Preparations Used as Cleansing Agents for General Household and Industrial Cleansing Purposes.
Claims use since July, 1926.

Ser. No. 314,968. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y. Filed May 23, 1931.

GREEN LABEL

For the purposes of this application applicant claims no exclusive rights to the use of a label colored green based upon a registration of the trade-mark herein shown.
For General Household and Industrial Cleansing Compounds, Particularly of Walls, Floors, Painted, Tiled, and Enamelled Surfaces, for the Cleansing of Dishes, Glass, Enamelled and Metal Vessels, Etc.
Claims use since July, 1926.

Ser. No. 314,969. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y. Filed May 23, 1931.

SUPER DETERGENT

Applicant claims no exclusive rights in the word "Detergent" apart from the mark as shown in the drawing.
For Cleansing and Scouring Compound.
Claims use since Sept. 29, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 308,720. A. BREELAUER, INC., New York, N. Y. Filed Dec. 8, 1930.

Contouré

For Skin Freshener, Lotion for Lines and Wrinkles, Emulsion for Reducing Purposes, Tissue Creams, Cleansing Cream, Liquid Bandage, Reducing Cream, Finishing Lotion, Rouge, Lipsticks.
Claims use since June 17, 1926.

Ser. No. 309,927. THE FRENCH MFG. COMPANY, Chicago, Ill. Filed Jan. 12, 1931.



The descriptive words "The Finest Hair Dressing Made for Men and Women—Price 25¢" appearing on the drawing are hereby disclaimed. The portraits appearing on the drawing are fanciful.
For Hair Pomade.
Claims use since Oct. 4, 1928.

Ser. No. 310,151. MAX MURRAY ALBERTS, doing business as The Altreit Co., Brooklyn, N. Y. Filed Jan. 20, 1931.

CEDAFLAXE
XPELS
MOTHS

Applicant disclaims the words "Xpels Moths."
For Preparation in the Form of Wood Shavings for Use in Repelling Moths.
Claims use since Nov. 10, 1930.

Ser. No. 310,508. ROSE ANN BROWN, doing business as Brown Mfg. Co., St. Paul, Minn. Filed Jan. 29, 1931.

NO-LYMP

For Foot Lotion.
Claims use since Dec. 28, 1930.

Ser. No. 311,114. FREDERICK A. UPSHER SMITH, doing business as Upsher Smith Company, Minneapolis, Minn. Filed Feb. 16, 1931.

KHELLAVIS

For Medicinal Preparations in Liquid, Powder, Capsule, Tablet, and Suppository Forms as Diuretics and for the Treatment of Urinary Calculi.
Claims use since Jan. 27, 1931.

Ser. No. 311,120. TOSHIO SHIMIZU, Los Angeles, Calif. Filed Feb. 16, 1931.



The drawing is lined for red. The word "Gotas" is disclaimed.
For Medicine Preparation, Particularly as a Medicine for Indigestion and Dispepsia and as a Stomach Tonic.
Claims use since Jan. 1, 1929.

Ser. No. 311,925. CHARLES L. POPE, doing business as The Tannol Company, Yonkers, N. Y. Filed Mar. 9, 1931.

TANNOL

For Tooth Powder.
Claims use since Feb. 2, 1931.

Ser. No. 312,577. STICKSTOFFWERKE GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Berlin, Germany. Filed Mar. 26, 1931.

Calmed

For Compounds for Use in the Calcium Therapy.
Claims use since Jan. 1, 1928.

Ser. No. 312,825. CONVENT AVENUE DRUG CO., Bennington, Vt. Filed Apr. 1, 1931.

Gastro Cura

For Medicinal Preparation for Treating Stomach and Bowel Disorders.
Claims use since 1910.

Ser. No. 313,148. OKASA G. M. B. H., Berlin, Germany. Filed Apr. 9, 1931.

OKASA

For a Medicine in Tablet Form for Treating General Debility and Sexual Weakness.
Claims use since 1912.

Ser. No. 313,149. OKASA G. M. B. H., Berlin, Germany. Filed Apr. 9, 1931.



For a Medicine in Tablet Form for Treating General Debility and Sexual Weakness.
Claims use since Aug. 16, 1930.

Ser. No. 313,307. SAYELL LABORATORIES, New York, N. Y. Filed Apr. 13, 1931.

SYRUP SAYELL

The word "Syrup" is disclaimed apart from the mark shown in the drawing.
For Medicinal Preparation Containing Acetyl, Salicylic Acid Used for Headaches, Colds, Neuralgia, and Grippe.
Claims use since Dec. 12, 1929.

Ser. No. 313,710. GRAFREE PRODUCTS COMPANY, Long Beach, Calif. Filed Apr. 23, 1931.

Grafree



The portrait appearing on the label is entirely fanciful.
For Hair Color Restorer and Tonic.
Claims use since Feb. 1, 1931.

Ser. No. 313,799. EDUARD RITSERT, doing business as Dr. Eduard Ritsert, Fabrik Pharmazeutischer Praparate, and Fa. Dr. E. Ritsert, Frankfurt A. M., Frankfort-on-Main, Germany. Filed Apr. 25, 1931.

Dolofugin

For Sulphophenylic Aminobenzoldethylester (German Designation: Phenolsulphosaurer Aminobenzoesaureaethylester).
Claims use since 1911.

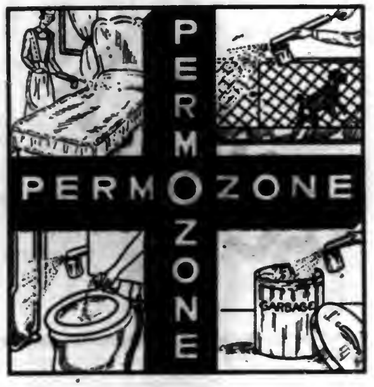
Ser. No. 313,812. TAKARA LABORATORIES, Portland, Oreg. Filed Apr. 25, 1931.

TAKARA

For Hygienic Powder Used as a Douche for Feminine Hygiene, as a Foot Bath, and as a Gargle; Laxative Pills for Constipation, Billiousness, and Disorder of the Stomach or Liver; Cold Tablets for Colds, La Grippe, Constipation, and Headache; Liniment for Rheumatism, Cuts, Sprains, Wounds, Neuralgia, Headache, Sores, Lame Back, and Stiff Joints; Fragrant Cream for Chapped Hands, Face, and Lips or any Roughness of the Skin; Hair Tonic Used as a Germicidal Scalp Cleanser and Dandruff Eradicator; Gums for Treating Coughs, Hoarseness, Husky Voice, or Tickling of the Throat; Corn Remover for Treating Hard and Soft Corns and Warts, Mentholated Skin Lotion to be Used as an After Shaving Lotion; Healing Ointment for Treating Eczema, Herpes, Salt Rheum, Tetters, Poison Oak, Poison Ivy, Pimples, Burns, Scalds, and Cuts; Toothache Drops for Aching Teeth, Antiseptic Suppositories for Treating Leucorrhœa and Vaginal Infection.
Claims use since Jan. 1, 1915.

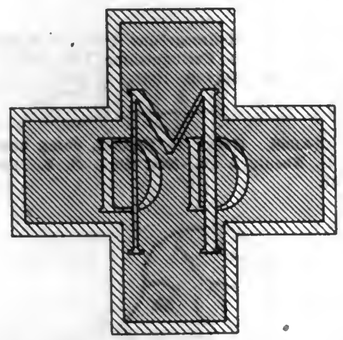
CARNEGIE LIBRARY OF ATLANTA

Ser. No. 314,072. PERMOZONE INC., New York, N. Y. Filed May 1, 1931.



No claim is made to the exclusive use of the word "Garbage" apart from the mark as shown in the drawing.
For Preparation Used as a Disinfectant, Insecticide, and Deodorant.
Claims use since Aug. 29, 1930.

Ser. No. 314,088. JOSEPH A. WEINSTEIN, doing business as The M D Laboratories, Cleveland, Ohio. Filed May 1, 1931.



The drawing is lined to indicate two tones of green color.
For Disinfectants, Deodorants and Germicides.
Claims use since Apr. 15, 1931.

Ser. No. 314,133. GREGORY B. STOLBERG, doing business as Stolberg Laboratories, New York, N. Y. Filed May 2, 1931.

3x IRON

The exclusive right to the word "Iron" is disclaimed except in the association shown.
For Medicinal Compounds for the Treatment of Anæmia.
Claims use since July 1, 1930.

Ser. No. 314,406. MEYER A. FEINBERG, New York, N. Y. Filed May 11, 1931.

ASPIRAL

For Antipyretic and Analgesic Preparation.
Claims use since September, 1929.

Ser. No. 314,584. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y. Filed May 14, 1931.



For a Chemical Preparation for Use as a Cream Neutralizer.
Claims use since Apr. 18, 1930.

Ser. No. 314,588. MCKINLEY STEPHENS, doing business as The Mck. Stephens Company, St. Louis, Mo. Filed May 14, 1931.



The signature is that of the applicant, the words "Dental Powder" being disclaimed apart from the mark shown. The shading indicates colors, blue and red letters and yellow marginal border.
For Dental Powder Used as a Healing Antiseptic and Deodorant Application for the Teeth, Mouth, and Gums.
Claims use since Apr. 28, 1931.

Ser. No. 314,680. THEODORE J. BENDLAGE, doing business as Tenex Laboratories, Cedar Rapids, Iowa. Filed May 18, 1931.

10-X

TENEX

For Medicine for Treatment of Fungus Infections.
Claims use since Apr. 1, 1931.

Ser. No. 314,776. STERLING PRODUCTS (INCORPORATED), Wheeling, W. Va. Filed May 19, 1931.

NARIDOL

For Analgesic.
Claims use since Apr. 20, 1931.

Ser. No. 314,777. STERLING PRODUCTS (INCORPORATED), Wheeling, W. Va. Filed May 19, 1931.

NULADOL

For Analgesic.
Claims use since Apr. 20, 1931.

Ser. No. 314,781. YBRY, INC., New York, N. Y. Filed May 19, 1931.

"Entrust Your Lips to Ybry"

For Lipsticks.
Claims use since Sept. 1, 1930.

Ser. No. 314,812. ELI LILLY AND COMPANY, Indianapolis, Ind. Filed May 20, 1931.

AMERTAN

For Jelly Miscible with Water Containing Tannic Acid and Merthiolate Which is Intended for Use on Burns to Promote Healing.
Claims use since Apr. 25, 1931.

Ser. No. 314,837. ETIENNE BEJEAN, doing business as The Bejan Laboratories, New York, N. Y. Filed May 21, 1931.

BEXOLAN

For Salve for the Relief of Muscle Strain and Soreness.
Claims use since May 1, 1931.

Ser. No. 314,913. KINETIC CHEMICALS, INC., Wilmington, Del. Filed May 22, 1931.

KINETIC

For Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.
Claims use since May 9, 1931.

Ser. No. 314,996. HARRY D. KOENIG, doing business as Harry D. Koenig & Co., New York, N. Y. Filed May 25, 1931.



For Face Powder, Lip Stick, Face Rouge, Cleansing Cream, Cold Cream, Foundation Cream, Astringent Lotion, Nail Polish, Nail Polish Remover and Tissue Cream, Mascara, Eye Shadow, Hand Lotion, Cucumber Face Cream.
Claims use since January, 1930.

Ser. No. 315,054. LANCASTER CO. LTD., Los Angeles, Calif. Filed May 26, 1931.

TANICYTE

For Unguent for Use in the Treatment of Burns and Various Skin Afflictions and Ailments Including Skin and Cuticle Afflictions Resulting from Contact with Poison Oak, Poison Ivy, and the Like.
Claims use since Jan. 1, 1930.

Ser. No. 315,055. LANCASTER CO. LTD., Los Angeles, Calif. Filed May 26, 1931.

TANOIN

For Unguent for the Treatment of Burns.
Claims use since June 1, 1930.

Ser. No. 315,060. MILLER WHOLESALE DRUG COMPANY, Cleveland, Ohio. Filed May 26, 1931.

PLANTOL

For Liquid Laxative Preparations.
Claims use since May 1, 1930.

Ser. No. 315,098. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed May 27, 1931.

Selarom

Salt Substitute for Salt Free Diet.
Claims use since Apr. 15, 1931.

Ser. No. 315,099. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed May 27, 1931.

Selvadin

For Calcium Compound for Diseases on the Basis of Calcium Deficiency (Exudative Diathesis, Serum Sickness Anaphylaxis, General Inflammations, and Relative Conditions).
Claims use since Apr. 15, 1931.

Ser. No. 315,159. THE PAINE DRUG COMPANY, Rochester, N. Y. Filed May 28, 1931.

DIGITERIC

For Preparation Used in the Treatment of Heart Affections.
Claims use since Mar. 12, 1931.

Ser. No. 315,175. AMERICAN COLLOID CORPORATION, New York, N. Y. Filed May 29, 1931.

AMEROID

For Chemicals for Clarifying Water of Rust, Sediment, Impurities, and the Like.
Claims use since Jan. 2, 1930.

Ser. No. 315,253. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Filed June 1, 1931.

OXYMINE

For Preparation Used as an Alkaline Gargle for Vincent's Angina and Related Infections of the Mouth, Gums, and Throat.
Claims use since Feb. 27, 1929.

Ser. No. 315,258. MAY GRAFF, doing business as Bluekamel Manufacturing Company, Detroit, Mich. Filed June 1, 1931.

ALBUMO

For Cleansing Cream.
Claims use since Sept. 25, 1930.

Ser. No. 315,260. MAY GRAFF, doing business as Bluekamel Manufacturing Company, Detroit, Mich. Filed June 1, 1931.

PROBOSO

For Nose Creams.
Claims use since Sept. 25, 1930.

Ser. No. 315,299. BI-BI PRODUCTS COMPANY, Tulsa, Okla. Filed June 2, 1931.

Bi-Bi

For Insecticide.
Claims use since Dec. 31, 1930.

Ser. No. 315,334. FREDERICK STEARNS & COMPANY, Detroit, Mich. Filed June 2, 1931.

TRICOTOX

For Preparation Used for Treating Various Forms of Infection with Trichophyton or Epidermophyton.
Claims use since May 25, 1931.

Ser. No. 315,371. ELMER M. SOMYLO, doing business as San-O-Tabs Co., Los Angeles, Calif. Filed June 3, 1931.

SAN-O-TABS

For Antiseptic, Germicidal, and Therapeutic Composition of the Type Employed for Vaginal Douching.
Claims use since May 22, 1931.

Ser. No. 315,383. BERNARD BOEKER, New York, N. Y. Filed June 4, 1931.

ANOTOK

For Medicinal Preparation Having Laxative Properties.
Claims use since Oct. 19, 1930.

Ser. No. 315,402. GLY-TEX CO., Brookville, Ind. Filed June 4, 1931.

GLY-TEX

For Preparation for Treating Piles.
Claims use since Mar. 1, 1931.

Ser. No. 315,416. PHOSPHORONE CORPORATION, Dover, Del., and San Antonio, Tex. Filed June 4, 1931.

PHOSPHORONE

For Antiseptics and Germicides.
Claims use since Feb. 22, 1922.

Ser. No. 315,456. E. F. HOUGHTON & CO., Philadelphia, Pa. Filed June 5, 1931.

Scourol

For Compounds Used in Softening Textile Fabrics.
Claims use since Nov. 30, 1929.

Ser. No. 315,543. JOSEPH LAZAROS, Detroit, Mich. Filed June 8, 1931.

GON-EXILE

For Medicine in Liquid or Capsule Form Taken Internally for Relief of Gonorrhea.
Claims use since May 28, 1930.

Ser. No. 315,594. LEON DI SALVO, Philadelphia, Pa. Filed June 9, 1931.

SETTEEN

For Hair Waving Preparation.
Claims use since Apr. 21, 1931.

Ser. No. 315,619. THE STANDARD MEDICINE COMPANY, Lakeland, Fla. Filed June 9, 1931.

BRONCHOLAX

For Medicine for Coughs and Colds.
Claims use since June, 1927.

Ser. No. 315,624. BUFFALO ELECTRO-CHEMICAL CO., INC., Tonawanda, N. Y. Filed June 10, 1931.

BECCO

For Hydrogen Peroxide, Ammonium Persulphate, and Potassium Persulphate.
Claims use since May, 1929.

Ser. No. 315,639. THE ANDREW JERGENS COMPANY, Cincinnati, Ohio. Filed June 10, 1931.

MEMOIRES DE PARIS

For Perfume.
Claims use since Apr. 28, 1931.

Ser. No. 315,656. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y. Filed June 10, 1931.

CHINOPLASMIN

For Preparation for the Treatment of Malaria.
Claims use since Apr. 22, 1931.

Ser. No. 315,669. WALTER M. BROWN, doing business as The Mapo Company, Yakima, Wash. Filed June 11, 1931.

MAPO

For Medicinal Preparation for the Relief of Certain Chronic Conditions Peculiar to Women.
Claims use since 1926.

Ser. No. 315,681. GENERAL DYESTUFF CORPORATION, New York, N. Y. Filed June 11, 1931.

ZAPON

For Dyes and Dyestuffs.
Claims use since October, 1922.

Ser. No. 315,694. EMMA B. NASON, Santa Monica, Calif. Filed June 11, 1931.

CALEUR

For Solid Perfume.
Claims use since October, 1930.

Ser. No. 315,695. EMMA B. NASON, Santa Monica, Calif. Filed June 11, 1931.

CLIX

For Solid Perfume.
Claims use since October, 1930.

Ser. No. 315,698. RALSTON PURINA COMPANY, St. Louis, Mo. Filed June 11, 1931.

CHLORENA

For Disinfectant.
Claims use since May 1, 1931.

Ser. No. 315,699. RALSTON PURINA COMPANY, St. Louis, Mo. Filed June 11, 1931.

CRE-SO-FEC

For Disinfectant.
Claims use since May 1, 1931.

Ser. No. 315,729. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed June 12, 1931.



Applicant without waiver of its common-law rights makes no claim herein to the representation of a carton appearing on the drawing or to the words "Crema Dentifrica". The vertical lining on the drawing on the three name panels and the two end panels denote the color red; the vertical lining on the margins of these panels denotes the color salmon; the vertical lining on the illustration panel denotes the color salmon; the oblique lining on the drawing denotes the color green.
For Dental Cream.
Claims use since May, 1929.

Ser. No. 315,746. HARRIS DRUG CO. INC., New York, N. Y. Filed June 12, 1931.

Efracoids

For Capsules for Reducing Congestion of the Mucous Membranes of the Nose and for Treating Head Colds, Asthma, and Hay Fever.
Claims use since Apr. 1, 1931.

Ser. No. 315,784. BOURJOIS, INC., New York, N. Y. Filed June 13, 1931.

ULTRA

For Perfume, Toilet Water, Face Powder, Dusting Powder, Bath Crystals, Skin Freshener, Cleansing Cream, Tissue Cream, Finishing Cream, and Hair Tonic.
Claims use since June 4, 1931.

Ser. No. 315,785. BOURJOIS, INC., New York, N. Y. Filed June 13, 1931.

Ultra VIOLET RAY

For Perfume, Toilet Water, Face Powder, Dusting Powder, Bath Crystals, Skin Freshener, Cleansing Cream, Tissue Cream, Finishing Cream, and Hair Tonic.
Claims use since June 4, 1931.

Ser. No. 315,786. BOURJOIS, INC., New York, N. Y. Filed June 13, 1931.

VIOLET RAY

For Perfume, Toilet Water, Face Powder, Dusting Powder, Bath Crystals, Skin Freshener, Cleansing Cream, Tissue Cream, Finishing Cream, and Hair Tonic.
Claims use since June 4, 1931.

Ser. No. 315,883. UNITED DRUG COMPANY, Boston, Mass. Filed June 15, 1931.

Fungi-Rex

For Medicinal Preparation Consisting of an Ointment for Treating Athlete's Foot.
Claims use since June 5, 1931.

Ser. No. 315,927. WILLIAM H. ROHER INC., Philadelphia, Pa. Filed June 16, 1931.

DYLATOL

For Medicine for the Treatment of Inflammatory Condition of the Nose and Throat.
Claims use since Aug. 22, 1929.

Ser. No. 315,929. WILLIAM H. ROHER INC., Philadelphia, Pa. Filed June 16, 1931.

UTERALGINE

For Medicine Used in Connection with Spasms of the Uterus and Particularly at the Start of Anticipated Monthly Periods.
Claims use since Mar. 18, 1931.

Ser. No. 315,933. WILLARD J. SLAGLE, Wellesley, Mass. Filed June 16, 1931.

Listeraide

For Deodorants, Disinfectants, Nasal Sprays, and Mouth Sprays.
Claims use since May 1, 1931.

Ser. No. 315,934. WILLARD J. SLAGLE, Wellesley, Mass. Filed June 16, 1931.

Listerfume

For Skin Salves.
Claims use since May 1, 1931.

Ser. No. 315,935. WILLARD J. SLAGLE, Wellesley, Mass. Filed June 16, 1931.

Listershave

For Facial and Scalp Lotions.
Claims use since May 1, 1931.

Ser. No. 316,013. ELI LILLY AND COMPANY, Indianapolis, Ind. Filed June 18, 1931.

CARBARSONE

For P-Carbamino-Phenyl Arsonic Acid to be Used in the Treatment of Amebic Dysentery.
Claims use since May 28, 1931.

Ser. No. 316,117. BINNEY & SMITH COMPANY, New York, N. Y. Filed June 22, 1931.

ANTI-AGE

For Chemicals and Compositions Used for Preserving Rubber Compositions and for Altering the Physical and Chemical Properties of Rubber Compositions.
Claims use since June 6, 1931.

Ser. No. 316,171. SERAFINO TROIANI, Newton, Mass. Filed June 23, 1931.

VERBASCOL

For Medical Preparation for Use in Treating Rheumatism, Sprains, and Soreness of the Muscles.
Claims use since July, 1927.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 315,920. I. OPPLEMAN, doing business as L. Oppleman, New York, N. Y. Filed June 16, 1931.



For Pistols.
Claims use since Mar. 15, 1931.

Ser. No. 315,921. I. OPPLEMAN, doing business as L. Oppleman, New York, N. Y. Filed June 16, 1931.



For Pistols.
Claims use since Mar. 15, 1931.

CLASS 10

Fertilizers

Ser. No. 316,076. ATLANTIC & GULF FERTILIZER CO., Jacksonville, Fla. Filed June 20, 1931.

VITALIZER

For Fertilizer.
Claims use since May 1, 1925.

CLASS 12

Construction Materials

Ser. No. 297,821. CLARENCE R. REX, doing business as Great Lakes Industrial Laboratories, Toledo, Ohio. Filed Mar. 24, 1930.

NEWKOTE

For Plastic Coating.
Claims use since June 10, 1927.

Ser. No. 300,794. HARRINGTON & KING PERFORATING COMPANY, Chicago, Ill. Filed May 19, 1930.

Grilframe

No claim is made to the word "Grilframe" apart from the representation shown.
For Ornamental Metal Molding, Fittings for Connecting Adjacent Molding Members, and Reticulated Sheet Material, Such as Inter-Woven Wire Mesh, Perforated or Cast Metal Plates, Etc., for Use as Grille Panels and Similar Purposes.
Claims use since May 7, 1930.

Ser. No. 315,407. LOEB AND WELCH, INC., Memphis, Tenn. Filed June 4, 1931.

X-ITE

For Mantels.
Claims use since October, 1928.

Ser. No. 315,820. BROOKS-SCANLON CORPORATION, Foley, Fla. Filed June 15, 1931.

BROOKS-SCANLON
Foley, Florida
Alūm-WOOD

No claim is made for the words "Foley, Florida" or the word "Wood" apart from the trade-mark as shown.
For Lumber.
Claims use since Jan. 1, 1931.

Ser. No. 316,062. WASHINGTON VENEER COMPANY, Olympia, Wash. Filed June 19, 1931.

WESTBOARD

For Wrapped Trim Lumber and Plywood.
Claims use since Mar. 15, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 315,666. AMERICAN CAST IRON PIPE COMPANY, Birmingham, Ala. Filed June 11, 1931.

ACIPCO

For Hollow Cast Metal Bodies—Namely, Cast Iron Pipes and Fittings Having Plain or Flanged Ends, and with or without Bell and Spigot Ends.
Claims use since March, 1906.

CLASS 14

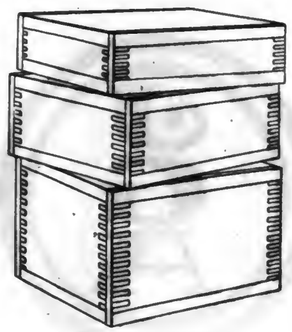
Metals and Metal Castings and Forgings

Ser. No. 316,144. GULF STATES STEEL COMPANY, Birmingham, Ala. Filed June 22, 1931.

GULFSTEEL

For Black Sheets, Annealed Sheets, Galvanized Sheets, and Painted Sheets Made from Steel, Iron, and/or Metal Alloys, Either Plain or Formed by Crimping, Corrugating, or Other Designs; Plain Sheets Include Sheets for Stamping, Pressing, Drawing, and Other Methods of Forming or Fabricating; Formed Sheets Include V-Crimped Roofing, Corrugated Roofing and Siding, and Ridge Roll.
Claims use since Sept. 3, 1930.

Ser. No. 316,199. FRICTIONLESS METAL COMPANY, St. Louis, Mo. Filed June 24, 1931.



For Bearing Metal.
Claims use since Jan. 1, 1895.

Ser. No. 316,205. LE ROY KAUFFMAN, San Francisco, Calif. Filed June 24, 1931.

ALUMETAL

For Aluminum Alloy and Aluminum Solder, Used for Joining and Filling Aluminum.
Claims use since May 11, 1927.

CLASS 15

Oils and Greases

Ser. No. 308,727. GILMORE OIL COMPANY LTD., Los Angeles, Calif. Filed Dec. 8, 1930.



The word "Oil" is disclaimed apart from the mark shown in the drawing.
For Motor Lubricating Oil.
Claims use since Oct. 22, 1930.

Ser. No. 314,126. RADIAL OIL CORPORATION, Oklahoma City, Okla. Filed May 2, 1931.



The drawing is lined for red, orange, and yellow.
For Gasoline, Lubricating Oil, and Lubricating Grease.
Claims use since Apr. 1, 1931.

CLASS 17

Tobacco Products

Ser. No. 313,915. ABRAHAM A. GREENWALD, doing business as Jacob Stahl Jr. & Co., New York, N. Y. Filed Apr. 28, 1931.

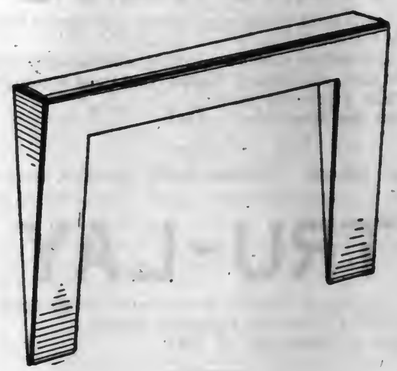


No claim is made to the exclusive use of the word "Special" apart from the mark shown.
For Cigars.
Claims use since Apr. 1, 1930.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 309,794. AMERICAN BRAKE SHOE AND FOUNDRY COMPANY, Wilmington, Del., and New York, N. Y. Filed Jan. 8, 1931.



For Brake Shoes.
Claims use since May 3, 1915.

Ser. No. 315,329. ROCKNE MOTORS CORPORATION, Indianapolis, Ind. Filed June 2, 1931.

ROCKNE

The lines shown on the drawing represent lines on the name plate and do not represent color.
For Automotive Vehicles—Namely, Automobiles, Trucks, Funeral Cars, Ambulances, Busses, Taxi Cabs, Motorcycles, and Their Structural Parts.
Claims use since May 28, 1931.

Ser. No. 315,330. ROCKNE MOTORS CORPORATION, Indianapolis, Ind. Filed June 2, 1931.

Knute Rockne

The trade-mark is the name of the late Knute Rockne, famous football coach.
For Automotive Vehicles—Namely, Automobiles, Trucks, Funeral Cars, Ambulances, Busses, Taxi Cabs, Motorcycles, and Their Structural Parts.
Claims use since June 1, 1931.

Ser. No. 315,331. ROCKNE MOTORS CORPORATION, Indianapolis, Ind. Filed June 2, 1931.

KNUTE ROCKNE

The trade-mark is the name of the late Knute Rockne, famous football coach.

For Automotive Vehicles—Namely, Automobiles, Trucks, Funeral Cars, Ambulances, Busses, Taxi Cabs, Motorcycles, and Their Structural Parts.

Claims use since June 1, 1931.

Ser. No. 315,658. AMERICAN CABLE COMPANY, INC., New York, N. Y., and Bridgeport, Conn. Filed June 10, 1931.

TRU-LAY

For Devices of Flexible Reciprocating Shaft Type for Transmitting Power for Operating Brakes.

Claims use since Apr. 27, 1931.

Ser. No. 315,816. ASSOCIATED PARTS, INC., doing business as The Lucas Manufacturing Co., Toledo, Ohio. Filed June 15, 1931.

RED HEAD

For Vehicle Heaters and Parts Thereof, Said Heaters Utilizing Hot Fluids from the Engine.

Claims use since August, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 272,474. ELECTRIC INDICATOR CORPORATION, Stamford, Conn. Filed Sept. 15, 1928.

ACCURATE REMOTE ELINCO INDICATING SYSTEMS

The use of the words "Accurate Remote Indicating Systems" apart from the mark shown is disclaimed.

For Float Operated Electrical Regulators of the Level of Liquids in Tanks and Containers, Electrical Control Apparatus Adapted to be Operatively Associated with Motor Operated Valves or Doors Movable Between Two Extreme Positions and to Operate Switches Located at a Distant Point Controlling the Operation of Indicators Indicating the Position of Such Valves or Doors, Electrical Control Apparatus Adapted to be Operatively Associated with Electric Motors or Power Generating Units and to Operate Switches Located at a Distant Point Controlling the Operation of Indicators Indicating the Load upon Such Motors or Power Units, Electrical Control Apparatus Adapted to be Operatively Associated with Gas Holders and to Operate Indicators Located at a Distant Point Indicating the Position of Such Gas Holders, and Electrical Control Apparatus for the Remote Control of Indicators Indicating or Recorders Recording the Performance of Machine or Power Units Operatively Associated with Said Electrical Control Apparatus.

Claims use since Sept. 1, 1925.

Ser. No. 302,313. AMBER ALLIS, Milwaukee, Wis. Filed June 11, 1930.



For Electrical Headlights.

Claims use since Apr. 1, 1930.

Ser. No. 303,531. ELECTRAD, INC., New York, N. Y. Filed July 16, 1930.

VITMONEL

For Impedance Units for Use as Electric Motor Controls, Voltage Controls, Rheostats, and Resistors.

Claims use since May 13, 1930.

Ser. No. 312,047. R. G. FISHEL INC., Chicago, Ill. Filed Mar. 12, 1931.

CATH-O-GLO

For Gaseous Content Glow Lamps for Advertising Signs and Novelties.

Claims use since Mar. 4, 1931.

Ser. No. 313,538. DWARF RADIO MANUFACTURING CO. LTD., Los Angeles, Calif. Filed Apr. 20, 1931.

Dwarf

For Radio Receiving Sets and Parts Thereof and Accessories Thereto—Namely, Loud Speakers, Vacuum Tubes, Switches, and Aerial and Ground Apparatus.

Claims use since Jan. 16, 1931.

Ser. No. 313,966. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn. Filed Apr. 29, 1931.

Koldair

For Electric Fans.

Claims use since Feb. 15, 1931.

Ser. No. 314,736. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

G. T. I.

For Electrical Motors.

Claims use since Apr. 1, 1931.

Ser. No. 314,740. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

WAVERIDER

For Electrical Motors.

Claims use since Apr. 1, 1931.

Ser. No. 314,741. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

WESTOY

For Electrical Motors.

Claims use since Apr. 1, 1931.

Ser. No. 315,674. CINE-A-GRAPH CORPORATION, New York, N. Y. Filed June 11, 1931.

CINE-A-GRAPH

For Electrical Display Signs.

Claims use since May 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

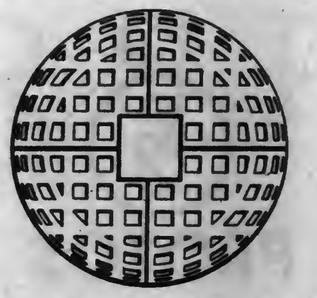
Ser. No. 301,757. E. WARREN GILBERT, doing business as W. H. Ryan & Co., Allentown, Pa. Filed May 30, 1930.

SPOOK-O-GRAPH

For a Toy Having Means Whereby the Writing or Drawing may be Made Visible or Invisible at the Option of the Operator.

Claims use since May 8, 1930.

Ser. No. 310,190. ST. MUNGO MANUFACTURING COMPANY OF AMERICA, Newark, N. J. Filed Jan. 20, 1931.



No claim is made to the representation of a golf ball or to the indentations shown thereon as a part of the trade-mark, the golf ball being shown in the drawing merely for the purpose of exemplifying the mark.

For Golf Balls.

Claims use since Dec. 12, 1930.

Ser. No. 311,571. GREAT LAKES AIRCRAFT CORPORATION, Cleveland, Ohio. Filed Feb. 28, 1931.

TRAINAIR

GREAT LAKES AIRCRAFT CORPORATION CLEVELAND, OHIO

No claim being made to the words "Cleveland" and "Ohio" apart from the mark shown in the drawing.

For Device Simulating an Airplane but Not Having Either Vertical or Forward Movement and Sold Principally to Amusement Parks or for Amusement Purposes.

Claims use since Jan. 6, 1931.

Ser. No. 312,669. ROYAL MANUFACTURING COMPANY, Toledo, Ohio. Filed Mar. 28, 1931.

SPEEDEE

For Golf Clubs and Balls.

Claims use since May, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 255,935. SIEMENS-SCHUCKERTWERKE AKTIENGESELLSCHAFT, Berlin-Siemensstadt, Germany. Filed Oct. 11, 1927.

Protos

For Sowing Machines, Threshing Machines, and Mowing Machines, and Parts Thereof; Sewing Machines, Typewriting Machines, Machines for Scraping and Polishing Floors, Machines for Cleaning Carpets and Furniture, Pumps, and Parts Thereof.

Claims use since 1910.

Ser. No. 258,555. SIEMENS-SCHUCKERTWERKE AKTIENGESELLSCHAFT, Berlin-Siemensstadt, Germany. Filed Dec. 6, 1927.

PROTOS

For Sowing Machines, Threshing Machines, and Mowing Machines, and Parts Thereof; Sewing Machines, Typewriting Machines, Machines for Scraping and Polishing Floors, Machines for Cleaning Carpets and Furniture, Pumps, and Parts Thereof.

Claims use since 1925.

Ser. No. 298,900. MADISON-KIPP CORPORATION, Madison, Wis. Filed Apr. 15, 1930.

air Kipp Grinder

No claim is made to the words "Kipp," "Air," and "Grinder," nor to the representation of the goods aside from the mark shown in the drawing.

For Pressure-Fluid Operated Grinding, Cutting, Buffing, Cleaning, and Polishing Tools, Parts, Replacements, and Accessories, Including Cutters, Mounted Wire Brushes, Wire Brush Holders, Abrasive Sleeve Holders, Abrasive Tubes, Mounted Tips, Mounted Grinding Wheels, Mounted Points, Mounted Smoothing Stones, Felt Buffing Tips, Tool Post Adapters, Grinding Wheel Guards, and Diamond Point Wheel Dressers.

Claims use since Feb. 3, 1930.

Ser. No. 303,088. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



The trade-mark consists in three white bands around the handles of the goods near the free end thereof as indicated in the drawing. The legend "White" and its guide arrows and the representation of the handle are disclaimed.

For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Pan Greasers, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers, and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.

Claims use since Dec. 9, 1929.

Ser. No. 314,213. W. J. SAVAGE COMPANY, INCORPORATED, Knoxville, Tenn. Filed May 5, 1931.

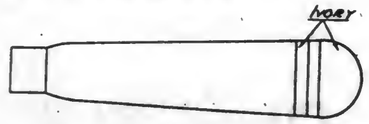


No claim being made to the words "A Savage Product" apart from the mark as shown.

For Flour and Feed Mill Equipment—Namely, Rolls, Feeders, Separators, Purifiers, Burr Mills, Mixers, and Plansifters; Stone Working Equipment—Namely, Gang Saws, Rubbing Beds, Polishing Machines, and Quarry Bars; Coal Mine Equipment—Namely, Shaker Screens and Picking Tables; Rock Conveyors, Gravel Conveyors, Sand Loaders, Loading Booms, and Tipples; Dry Chemical Feed Apparatus—Namely, Feeders for Dry Pulverized Chemicals, Particularly as Used for Water Purification; Nibbling Machines—Namely, Metal Working Machines for Nibbling or Cutting Metal.

Claims use since Mar. 1, 1931.

Ser. No. 314,351. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed May 9, 1931.

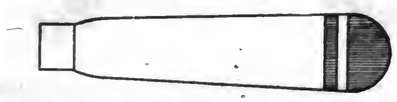


The legend "Ivory" and its guide arrows and the representation of the handle are disclaimed.

For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Pan Greasers, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers, and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Mechanical Flour Sifters.

Claims use since January, 1930.

Ser. No. 314,353. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed May 9, 1931.



, The trade-mark consists in a blue tip and a blue stripe on the free end of the handles of the goods as indicated

by the lining shown in the drawing and is applied to the handles by dipping, painting, or otherwise placing the same thereon. The representation of the handle is disclaimed.

For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Pan Greasers, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers, and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Mechanical Flour Sifters.

Claims use since January, 1930.

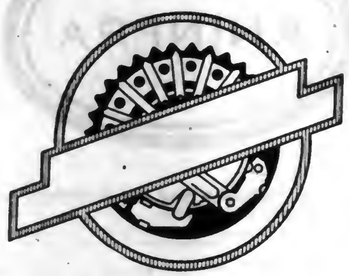
Ser. No. 314,694. HERCULES MOTORS CORPORATION, Canton, Ohio. Filed May 18, 1931.



For Internal Combustion Engines; Power Units, Including Internal Combustion Engines and Accessories—Namely, Reduction Gears and Clutches.

Claims use since May, 1916.

Ser. No. 315,575. UNIVERSAL GEAR CORPORATION, Chicago, Ill. Filed June 8, 1931.



The shading or lining on the drawing represents red. No claim is made to the representation of certain mechanisms shown except as part of the mark illustrated.

For Rotary Clutches, Speed-Reducers Adapted to Provide Rotative Movement at a Reduced Rate or Rates from Rotating Shafts and the Like, and Transmission Mechanisms Adapted to Provide Rotative Movement at Variable Rates from Rotating Shafts and the Like.

Claims use since May 15, 1931.

Ser. No. 315,576. WILCOX-RICH CORPORATION, Detroit, Battle Creek, Marshall, and Saginaw, Mich. Filed June 8, 1931.

RSP

For Valves for Internal Combustion Engines.

Claims use since Jan. 1, 1918.

Ser. No. 315,660. GODWARD GAS GENERATOR, INC., New York, N. Y. Filed June 10, 1931.

PREVAPOWER VAPORIZER

No claim to word "Vaporizer."

For Fuel Vaporizers for Internal Combustion Engines.

Claims use since March, 1931.

Ser. No. 316,352. J. H. WILLIAMS & CO., Buffalo, N. Y. Filed June 26, 1931.

TWINHEX

For Wrenches, Wrench Sets, Wrench Sockets, and Tool Handles.

Claims use since June 9, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 299,145. E. B. METROWITH, INC., New York, N. Y. Filed Apr. 19, 1930.



For Opera Glasses, Reading and Magnifying Glasses.

Claims use since June 1, 1922.

Ser. No. 309,917. MOTO-VITA CORPORATION, Wilmington, Del., and New York, N. Y. Filed Jan. 13, 1931.

MOTO-VITA

For Apparatus for Analyzing Gaseous Mixtures.

Claims use since Dec. 31, 1930.

Ser. No. 315,149. KEUFFEL AND ESSER COMPANY, Hoboken, N. J. Filed May 28, 1931.

METAGRAD

For Surveyors' Leveling Rods.
Claims use since Nov. 6, 1930.

Ser. No. 315,256. B. K. ELLIOTT COMPANY, Pittsburgh, Pa. Filed June 1, 1931.

LIN-O

For Sensitized Printing Paper.
Claims use since May 12, 1931.

Ser. No. 315,671. CINAMETTE CORPORATION, New York, N. Y. Filed June 11, 1931.

Cinamette

For Cameras, Motion Picture Cameras, Picture Projectors, Motion Picture Projectors, Talking Picture Apparatus.
Claims use since June 10, 1930.

Ser. No. 315,672. CINAMETTE CORPORATION, New York, N. Y. Filed June 11, 1931.



For Cameras, Motion Picture Cameras, Picture Projectors, Motion Picture Projectors, Talking Picture Apparatus.
Claim use since June 10, 1930.

Ser. No. 315,673. CINAMETTE CORPORATION, New York, N. Y. Filed June 11, 1931.



For Cameras, Motion Picture Cameras, Picture Projectors, Motion Picture Projectors, Talking Picture Apparatus.
Claims use since June 10, 1930.

Ser. No. 315,799. E. B. MEYROWITZ, INC., New York, N. Y. Filed June 13, 1931.



No claim to words "For Eye Safety."
For Goggles, Eyeglasses, and Spectacles.
Claims use since Dec. 1, 1930.

Ser. No. 316,006. HALPERT & FRYXELL, INC., New York, N. Y. Filed June 18, 1931.

DENTISPEC

For Ophthalmic Mountings.
Claims use since December, 1930.

Ser. No. 316,094. LUFKIN RULE CO., Saginaw, Mich. Filed June 20, 1931.

CRESCENT

For Measuring Tapes.
Claims use since May 2, 1931.

Ser. No. 316,160. E. B. MEYROWITZ, INC., New York, N. Y. Filed June 23, 1931.



For Goggles, Spectacles, and Eye-Protectors.
Claims use since Dec. 1, 1930.

Ser. No. 316,206. KEUFFEL AND ESSER COMPANY, Hoboken, N. J. Filed June 24, 1931.

Madro

For Brownprint Papers and Cloths.
Claims use since May 23, 1928.

Ser. No. 316,323. JULIEN P. FRIEZ & SONS, INC., Baltimore, Md. Filed June 26, 1931.

WEATHERMAN

For Weather Direction Transmitter Anemometer, Wind Direction Indicators, Wind Velocity Indicators, Barometer, Barograph, Thermometer, Thermograph, Hygrometer, Hygrographs, Hygrothermographs, Rain Gauges, Recording Rain Gauges, Meteorograph, Aerograph, Wind Velocity Recorder, Wind Direction Recorder, Wind Direction and Wind Velocity Recorder, Nephoscope, and Evaporation Gauge.
Claims use since Oct. 20, 1930.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 302,671. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed June 21, 1930.

SUN-GOLD

No claim is made for the word "Gold" apart from the mark shown in the drawing.
For Bracelets and Wrist Bands and Straps for Wrist Watches, Said Wrist Bands and Straps being Completely Fitted with Attaching Means.
Claims use since April, 1929.

Ser. No. 313,164. ANTHONY R. LE BRAUN, San Francisco, Calif. Filed Apr. 6, 1931.

You & I

For Finger Rings.
Claims use since Jan. 5, 1930.

Ser. No. 314,815. THE NATIONAL SOCIAL SCIENCE HONOR SOCIETY, PI GAMMA MU, INCORPORATED, Winfield, Kans. Filed May 20, 1931.

ΠΓΜ

For Jewelry for Personal Wear Not Including Watches.
Claims use since December, 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 285,371. OLIGODYN A.-G., Zug, Switzerland. Filed June 10, 1929.

Oligodyn

For Metallic Substance Having Oligodynamic Activity Used as a Sterilizing and Water Purifying Mass in Filters or Water Coolers.
Claims use since Apr. 24, 1928.

Ser. No. 285,374. OLIGODYN A.-G., Zug, Switzerland. Filed June 10, 1929.

Katadyn

For Metallic Substance Having Oligodynamic Activity Used as a Sterilizing and Water Purifying Mass in Filters or Water Coolers.
Claims use since May 31, 1928.

Ser. No. 315,327. REVELATION WATER PURIFIER COMPANY, LTD., Glendale, Calif. Filed June 2, 1931.



No claim is made for the words "Water Purifier" apart from the mark shown in the drawing.
For Water Filters.
Claims use since June 1, 1929.

Ser. No. 315,733. CRYSTAL REFRIGERATOR CO., Fremont, Nebr. Filed June 12, 1931.

Crystal

For Syrup Filters and Refrigerator Cabinets for Domestic and Commercial Use.
Claims use since March, 1906.

CLASS 32

Furniture and Upholstery

Ser. No. 303,758. ADJUSTO CHAIR CORPORATION, New York, N. Y. Filed July 24, 1930.



No claim being made to the word "Chair" apart from the mark shown.
For Household Chairs.
Claims use since June 24, 1930.

Ser. No. 308,037. REMINGTON RAND INC., Buffalo, N. Y. Filed Nov. 18, 1930.



For Cabinets, Lockers, Cupboards, Shelving Constituting Office and Factory Furniture and Equipment; Filing Cabinets or Safes Scientifically Constructed to Protect the Contents Thereof Against the Effects of Excessive Temperature; File Cabinets, Drawers, Trays, Panels, and Holders for Index Cards, Sheets, Folders, Binders, Envelopes, and Similar Articles; Card Record Desks, Tables, Stands, Chairs, Bookcases, and Apparel Racks Constituting Furniture for Office and Household Use; Indexing, Recording, and Filing Systems Comprising Cabinets, Cases, and Trays or Parts Thereof, and Record and Card Holding Boards and Frames, and Record, Index, and Cardholding Racks, All Constituting Office Furniture; File Boxes for Cards, Sheets, and Folders.
Claims use since Oct. 14, 1930.

Ser. No. 314,229. BURTON-DIXIE CORPORATION, Chicago, Ill. Filed May 6, 1931.

STYLE-O-STITCH

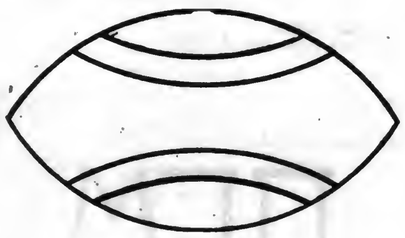
For Mattresses, Bed Springs, and Pillows.
Claims use since Apr. 8, 1931.

Ser. No. 315,268. KINDEL FURNITURE COMPANY, Grand Rapids, Mich. Filed June 1, 1931.



For Bedroom Furniture Namely—Beds, Bureaus, Dressers, Cedar Chests, Chiffoniers, Chifforobe, Chairs, Benches, Mirrors; Living Room Furniture Namely Davenports, Day Beds, Settees, Highboys, Secretaries, Tables, Chairs; Dining Room Furniture Namely Tables, Chairs, Buffets, Serving Tables, and China Cabinets.
Claims use since Feb. 1, 1931.

Ser. No. 315,696. NORTHERN FEATHER WORKS, INC., Newark, N. J. Filed June 11, 1931.



For Pillows, Cushions, and Mattresses.
Claims use since Jan. 10, 1930.

Ser. No. 316,048. THE NIGHTINGALE FIREPLACE CABINET MANUFACTURING COMPANY, Philadelphia, Pa. Filed June 19, 1931.

NIGHTINGALE

For Fireplace Cabinet.
Claims use since Mar. 10, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 307,742. THE SHALER COMPANY, Waupun, Wis. Filed Nov. 10, 1930.

SHALER

Applicant claims ownership of Trade-Mark No. 129,872, registered Mar. 9, 1920, and of Trade-Mark No. 130,235, registered Apr. 13, 1920.
For Vehicle Tire and Tube Patching Materials.
Claims use since December, 1909.

Ser. No. 314,254. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Filed May 6, 1931.

HANDY ANDY

For Faucet Seats, Fuller Balls, Piston Packing, and Non-Metallic Gaskets, Washers, Friction-Rings, Ball-Cock Washers, and Slip Joint Washers.
Claims use since December, 1923.

Ser. No. 314,630. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed May 15, 1931.

RED MAN

For Belting, Hose and Packing Composed of Rubber and Fabric.
Claims use since 1921.

Ser. No. 316,203. WILLIAM A. HARDING, doing business as Harding Company, New York, N. Y. Filed June 24, 1931.

IBEX



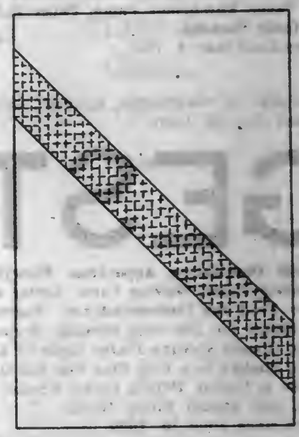
For Brake Linings.
Claims use since Jan. 2, 1930.

Ser. No. 316,241. ALLENSTOS CORPORATION, Philadelphia, Pa. Filed June 25, 1931.

RED-KNIGHT

For Brake Linings.
Claims use since June 12, 1931.

Ser. No. 316,315. BOSTON WOVEN HOSE & RUBBER COMPANY, Cambridge, Mass. Filed June 26, 1931.



The trade-mark consists of a distinctly colored yellow stripe disposed obliquely upon a face of the belt or belting. The crosshatched shading in the drawing represents the color yellow. The representation of a portion of a belt is disclaimed apart from the mark as shown.
For Belts and Belting of Rubber, Fabric, or a Combination Thereof.
Claims use since Jan. 15, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 314,634. STROMBERG-CARLSON TELEPHONE MANUFACTURING COMPANY, Rochester, N. Y. Filed May 15, 1931.

Stromberg-Carlson

For Talking Machines, Electrically-Operated Talking Machines, Automatic Record Shifting Devices, Talking Machines Provided with Record Shifting Devices, Talking Machines Adapted for Use in Centralized Electrical Program Distributing Systems.
Claims use on talking machines and electrically-operated talking machines since Sept. 1, 1927; on automatic record shifting devices, talking machines provided with record shifting devices since October 31, 1930; and on talking machines adapted for use in centralized electrical program distributing systems since May 29, 1928.

CLASS 37

Paper and Stationery

Ser. No. 299,591. PAPER SPECIALTY COMPANY, Wausau, Wis. Filed Apr. 28, 1930.



For Lining Paper for Cupboards, Shelves, Drawers, Tables, and Similar Household and Culinary Purposes; and Waxed Paper, Parchment Paper, Paper Table Covers, and Paper Table Napkins.
Claims use since Mar. 1, 1930.

Ser. No. 303,962. D. GESTETNER, LIMITED, London, England. Filed July 29, 1930.

GEST

For Stencil Duplicating Apparatus, Stencils, Stencil Sheets; Printing Paper, Writing Paper, Letter Paper, and Other Paper Used for Correspondence; Correcting and Developing Fluids for Use with Stencils, Styles for Cutting Stencils, Stencil Writing Plates Made of Metal Having a Surface Similar to a Very Fine File and Over Which the Wax Base is Placed, Drying Books, Frames for Holding Stencils, and Stencil Filing Books.
Claims use since June 15, 1929.

Ser. No. 313,535. CROWN CARD AND PAPER COMPANY, New York, N. Y. Filed Apr. 20, 1931.

MILROSE BOND

The word "Bond" used in connection with this trademark is disclaimed apart from the mark shown.
For Bond Paper.
Claims use since June 1, 1929.

Ser. No. 314,210. ROGERS PRINTING COMPANY, Baltimore, Md. Filed May 5, 1931.

STA-STAN TRADE MARK

The applicant disclaims the words "Trade Mark" appearing on the drawing.
For Cardboard Easels.
Claims use since Apr. 1, 1931.

Ser. No. 315,110. ROBERT D. PORTER, San Francisco, Calif. Filed May 27, 1931.

"Rodport"

For Accounting Forms Sold to the Trade as Such.
Claims use since May 1, 1930.

CLASS 38

Prints and Publications

Ser. No. 299,682. CHURCH OF THE HEAVENLY REST, New York, N. Y. Filed Apr. 30, 1930.

RELIGION

For Magazines.
Claims use since Mar. 1, 1930.

Ser. No. 302,781. HARRY LATZ SERVICE, INC., New York, N. Y. Filed June 24, 1930.

GIANT-GRAM

For Completely Printed Advertising Devices Sold to the Trade as Such.
Claims use since June 3, 1930.

Ser. No. 302,782. HARRY LATZ SERVICE, INC., New York, N. Y. Filed June 24, 1930.



For Completely Printed Advertising Devices Sold to the Trade as Such.
Claims use since June 3, 1930.

Ser. No. 310,034. ADVERTISING AND SELLING PUBLISHING COMPANY, New York, N. Y. Filed Jan. 16, 1931.

ADVERTISING ARTS

For Bi-Monthly Magazine.
Claims use since Jan. 8, 1930.

Ser. No. 315,167. BROOKLYN DAILY TIMES, Brooklyn, N. Y. Filed May 28, 1931.



The picture shown is a portrait of the author of the column in said publication under the head of "Sportopics."
For Newspaper Feature Articles.
Claims use since 1925.

Ser. No. 315,344. CONSOLIDATED AUTOMATIC MERCHANDISING CORPORATION, New York, N. Y. Filed June 3, 1931.

Engrav-o-tints

Applicant disclaims any exclusive right to the word "Tints" apart from the mark shown on the drawing.
For Scale Tickets.
Claims use since Mar. 17, 1931.

Ser. No. 315,571. SIGNAL PUBLISHING CORPORATION, Huntington Park, Calif. Filed June 8, 1931.

Huntington Park Signal

For a Newspaper Published Every Evening Except Sunday.
Claims use since Aug. 20, 1925.

Ser. No. 315,592. THE CONDE NAST PUBLICATIONS, INC., New York, N. Y. Filed June 9, 1931.

Vogue Dressmaking

For Publication Published Every Two Months.
Claims use since March, 1930.

Ser. No. 315,882. THE TRAVEL GUILD, INC., Chicago, Ill. Filed June 15, 1931.

"Travel ~ The Greatest Educator"

For Publications Relating to Travel Issued at Irregular Intervals.
Claims use since January, 1926.

Ser. No. 315,911. HUTTER & MAXWELL, East Palestine, Ohio. Filed June 16, 1931.

Nip and Tuck

For Newspaper Cartoons.
Claims use since June 9, 1931.

Ser. No. 316,141. THE CLEVELAND TRACTOR COMPANY, Cleveland, Ohio. Filed June 20, 1931.



No exclusive right is claimed to the words "Agricultural Engineering Dept." and "The Cleveland Tractor Co." except in the arrangement as shown in the drawing.
For Periodical Issued from Time to Time.
Claims use since September, 1930.

Ser. No. 316,202. GRIGSBY-GRUNOW COMPANY, Chicago, Ill. Filed June 24, 1931.

The VOICE *of* *Majestic*

For Publication in Magazine Form.
Claims use since June 1, 1931.

CLASS 39

Clothing

Ser. No. 296,566. THE AMERICAN HAT CO. INC., Norwalk, Conn. Filed Feb. 27, 1930.

Airweight

For Men's Hats.
Claims use since Feb. 12, 1930.

Ser. No. 309,271. GOODWEAR KNITTING MILLS, Philadelphia, Pa. Filed Dec. 23, 1930.

FLEXO

The drawing is lined for the colors green, orange, and brown. The applicant does not limit itself to these specific colors, but reserves the right to use any color or any combinations of colors.
For Bathing Suits.
Claims use since Dec. 13, 1930.

Ser. No. 310,918. NOMEND HOSIERY MILLS M. B. LAUBACH CO. INC., Philadelphia, Pa. Filed Feb. 10, 1931.

Mamselle

For Hosiery.
Claims use since Feb. 9, 1931.

Ser. No. 313,521. C. CRAWFORD HOLLIDGE, East Milton, Mass. Filed Apr. 17, 1931.

Nonchalant
Flex-Back

The descriptive word "Back" is hereby disclaimed apart from the mark, shown on the drawing.

For Women's, Girls', Misses', Children's, and Infants' Clothing—Namely, Sweaters, Jackets, Cardigans, Coats, and Sport Coats for Outer Wear, Woven or Manufactured by Any Process, or Made from Any Material.

Claims use since Mar. 2, 1931.

Ser. No. 313,932. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn. Filed Apr. 28, 1931.

MUNSING Wear

Exclusive rights to the word "Wear" apart from the mark shown on the drawing are disclaimed.

For Swim Suits for Men, Women, and Children.

Claims use since Apr. 11, 1931.

Ser. No. 314,002. HERBERT W. HANAN, doing business as Hanan & Son, Brooklyn, N. Y. Filed Apr. 30, 1931.

HANAN
TRADE
ASTRILD
MARK
NEW YORK

No claim is made to the exclusive use of the words "Trade Mark" and "New York" apart from the trade-mark shown on the drawing.

For Leather, Cloth, and Rubber Boots, Shoes, and Slippers.

Claims use since Dec. 15, 1930.

Ser. No. 314,456. THE NOLDE & HORST COMPANY, Reading, Pa. Filed May 12, 1931.

TRIPLE-GUARD

For Hosiery.

Claims use since Apr. 9, 1931.

Ser. No. 314,552. F. BRODY & SONS COMPANY, Des Moines, Iowa. Filed May 14, 1931.

"Oh Yeah!"

For Play Suits, Jackets, and Mackinaws.

Claims use since February, 1931.

Ser. No. 314,935. WASHINGTON KNITTING CO., INC., New York, N. Y. Filed May 22, 1931.



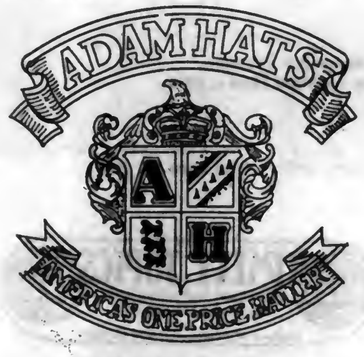
WASHINGTON KNITTING CO., Inc.

The portrait shown in the drawing is that of George Washington.

For Bootees, Sacques, Sweaters, Shawls, Capes, Toques, Hoods, Hamlets, Berets, and Caps, Knitted Yarn Mittens; Legging Sets Made Up of Caps, Leggings, and Sacques; Bootee Sets Made Up of Caps, Bootees, and Sacques; and Leggings Intended for the Use of Infants and Children.

Claims use since May 1, 1931.

Ser. No. 314,975. ADAM HAT STORES, INC., New York, N. Y. Filed May 25, 1931.



"FETHE-FLEX"

Applicant disclaims the right to the exclusive use of the word "Hats," to the descriptive slogan "America's One Price Hatter", and to the heraldic design apart from the mark shown.

For Men's Hats.

Claims use since January, 1931.

Ser. No. 315,105. THE EDW. MALLEY CO., New Haven, Conn. Filed May 27, 1931.

Emalleyn

For Women's, Misses', and Girls' Wool Coats, with and without Fur Trimming, Coats Made Principally of Fur, Dresses of Silk, Wool, Cotton, or Linen, Blouses of Silk, Cotton, or Linen, Sweaters of Silk, Wool, or Silk and Wool, Shoes Made Principally of Leather, Gloves of Leather or Fabric, Hosiery of Silk, and Hats.

Claims use since Apr. 1, 1927.

Ser. No. 315,248. JOS. S. COHEN & SONS CO. INC., New York, N. Y. Filed June 1, 1931.

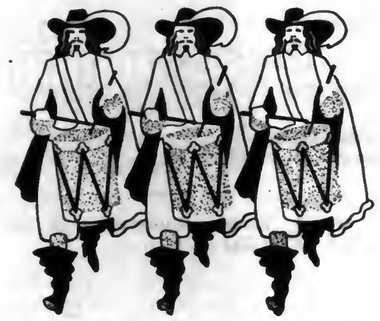
GARDEN FROCKS

No claim is made to the word "Frocks" apart from the mark shown in the drawing nor to the word "Garden."

For Children's, Misses', and Ladies' Frocks, Dresses, and Smocks.

Claims use since Mar. 15, 1931.

Ser. No. 315,511. WILSON BROTHERS, Chicago, Ill. Filed June 6, 1931.



For Dress and Negligee Shirts, Pajamas, Men's Underwear, Hosiery, and Neckties.

Claims use since Apr. 14, 1931.

Ser. No. 315,512. WILSON BROTHERS, Chicago, Ill. Filed June 6, 1931.



For Dress and Negligee Shirts, Pajamas, Men's Underwear, Hosiery, and Neckties.

Claims use since Apr. 16, 1931.

Ser. No. 315,997. ELDER MANUFACTURING COMPANY, St. Louis, Mo. Filed June 18, 1931.

McPherson

No exclusive claim is made to the word "McPherson" as a technical trade-mark apart from the mark as shown.

For Men's and Boys' Dress and Negligee Shirts and Boys' and Children's Waists and Blouses.

Claims use since Mar. 10, 1930.

Ser. No. 316,002. ELDER MANUFACTURING COMPANY, St. Louis, Mo. Filed June 18, 1931.

SPARKLEEN

For Men's and Boys' Dress and Negligee Shirts, and Boys' and Children's Waists and Blouses.

Claims use since Aug. 8, 1930.

Ser. No. 316,041. LAMBERT BEWKES CO., Paterson, N. J. Filed June 19, 1931.

ELBY

Applicant is the owner of registration Number 230,884, issued Aug. 9, 1927.

For Ladies' Undergarments—Namely, Bloomers, Vests, Slips, Panties, Step-Ins (a Type of Underwear), Combinations Consisting of Vests and Drawers, Nightgowns, Chemise, Pajamas, and Dance Sets; and for Ladies' Blouses and for Ladies' and Children's Dresses and Aprons and for Men's and Boys' Shirts and Blouses.

Claims use since 1926.

Ser. No. 316,103. I. SCHNEIERSON & SONS, INC., New York, N. Y. Filed June 20, 1931.

RAYOKREPE

For Ladies' Chemises, Princess Slips, Bloomers, Step-Ins, Nightgowns, Pajamas, and Step-In Drawers of a Textile Fabric.
Claims use since July 10, 1929.

CLASS 42

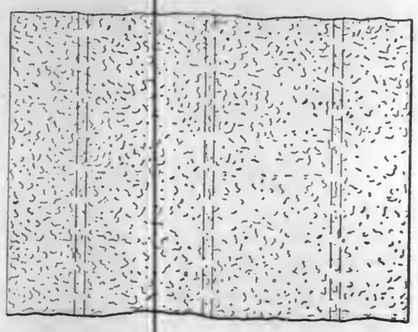
Knitted, Netted, and Textile Fabrics

Ser. No. 303,043. ATLANTA KNITTING MILLS, Brooklyn, N. Y. Filed July 2, 1930.

GLOVEKNIT

The lining in the drawing is not to show color but is for shading purposes only.
For Knitted and Woven Fabrics of Silk, Rayon, and Cotton.
Claims use since May 7, 1930.

Ser. No. 312,859. THOMAS OAKES & Co., Bloomfield, N. J. Filed Apr. 2, 1931.



The trade mark consists of a marker or label in the form of green threads separate from the structural parts of the goods and constituting no part of the goods but spaced apart and woven into the back of the goods and extending longitudinally thereof in parallel lines, said parallel lines forming no part of the pattern of the woven goods and being arranged in groups of two lines each, with the proportions of the spacings between the lines in each group to the spacings between two adjacent groups and to the selvage of the cloth substantially as shown in the annexed drawing.
No claim is made herein for the representation of the woven goods, this being shown merely to illustrate the location of the mark and arrangement of the marking threads on the goods.
For Woolen and Worsted Cloths Made for Uniform Purposes in the Piece, Except Fabrics Colored an Olive Drab Shade.
Claims use since Oct. 1, 1930.

Ser. No. 315,183. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed May 29, 1931.

Doelam

For Pile Fabrics.
Claims use since May 20, 1931.

Ser. No. 315,184. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed May 29, 1931.

Gallitu

For Pile Fabrics.
Claims use since Feb. 18, 1931.

Ser. No. 315,186. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed May 29, 1931.

Pebblelam

For Pile Fabrics.
Claims use since May 22, 1931.

Ser. No. 315,187. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed May 29, 1931.

Polartex

For Pile Fabrics.
Claims use since May 20, 1931.

Ser. No. 315,189. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed May 29, 1931.

Texsquir

For Pile Fabrics.
Claims use since May 12, 1931.

Ser. No. 315,191. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed May 29, 1931.

Zebrair

For Pile Fabrics.
Claims use since May 20, 1931.

Ser. No. 315,397. A. G. DEWEY COMPANY, Quechee, Vt. Filed June 4, 1931.

H.P. McKenney & Co. HMK DEWEY CHINTEX

For Woolen Cloth in the Piece.
Claims use since Mar. 1, 1931.

Ser. No. 315,739. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed June 12, 1931.

Jornella

For Woolen Piece Goods.
Claims use since May 1, 1931.

Ser. No. 315,741. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed June 12, 1931.

Kashmirolga

For Woolen Piece Goods.
Claims use since May 1, 1931.

Ser. No. 315,760. SALUBRA S. A., Basel, Switzerland. Filed June 12, 1931.

Tekko

For Textile Wall Coverings of All Kinds.
Claims use since Aug. 1, 1900.

Ser. No. 315,762. SALUBRA S. A., Basel, Switzerland. Filed June 12, 1931.

Salubra

For Textile Wall Coverings of All Kinds.
Claims use since Apr. 5, 1900.

Ser. No. 316,026. AMOSKEAG MANUFACTURING COMPANY, Manchester, N. H. Filed June 19, 1931.

BO-PEEP

For Textile Diapers.
Claims use since Jan. 3, 1930.

Ser. No. 316,187. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 24, 1931.

LIDONESE

For Fabrics Made Partially or Wholly of Cellulose Derivatives.
Claims use since June 20, 1931.

Ser. No. 316,251. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England. Filed June 25, 1931.

FIDULA

For Piece Goods Made of Cellulose.
Claims use since Mar. 26, 1931.

Ser. No. 316,280. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 25, 1931.

AVENESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 23, 1931.

Ser. No. 316,281. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 25, 1931.

CARANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 23, 1931.

Ser. No. 316,283. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 25, 1931.

CIRANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 23, 1931.

Ser. No. 316,284. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 25, 1931.

CLAIRANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 23, 1931.

Ser. No. 316,286. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 25, 1931.

FAILLANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 23, 1931.

Ser. No. 316,287. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 25, 1931.

LURANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 23, 1931.

CLASS 44
Dental, Medical, and Surgical Appliances

Ser. No. 305,780. DEUTSCHE GOLD- UND SILBER-SCHEIDEANSTALT VORMALS ROESSLER, Frankfort-on-the-Main, Germany. Filed Sept. 17, 1930.

DEGUSSA STANDALLOY

For Silver Alloys for Dental Use.
Claims use since Feb. 27, 1930.

Ser. No. 305,781. DEUTSCHE GOLD- UND SILBER-SCHEIDEANSTALT VORMALS ROESSLER, Frankfort-on-the-Main, Germany. Filed Sept. 17, 1930.

DEGUSSA N-AMALGAM 670

No claim is made to the exclusive use of the word "Amalgam" apart from the mark as shown.
For Silver Alloys for Dental Use.
Claims use since Feb. 27, 1930.

Ser. No. 305,806. DEUTSCHE GOLD- UND SILBER-SCHEIDEANSTALT VORMALS ROESSLER, Frankfort-on-the-Main, Germany. Filed Sept. 18, 1930.

Optidosan

For Noble Metals and Alloys and Amalgams Thereof—Namely, Those of Silver, Gold, and Platinum; All of Such Metals and Alloys Being for Dental Use.
Claims use since May 17, 1928.

Ser. No. 309,322. STOWALL AND CO., San Francisco, Calif. Filed Dec. 24, 1930.

TUXEDO

For Prophylactic Membraneous Articles for the Prevention of Contagious Diseases.
Claims use since January, 1923.

Ser. No. 312,105. KOM-FUT ARCH SUPPORT CO., INC., New York, N. Y. Filed Mar. 13, 1931.

THE TRUE-FORM ARCH SUPPORT

The words "Arch Support" are disclaimed apart from the mark as shown in the drawing.
For Arch Supports.
Claims use since Feb. 5, 1921.

Ser. No. 314,205. SAMUEL S. KOHN, doing business as Thrift Rubber Company, Newark, N. J. Filed May 5, 1931.

Tuxedo

For Prophylactic Rubber and Membraneous Articles for the Prevention of Contagious Diseases.
Claims use since January, 1923.

Ser. No. 312,240. ELPHA E. BAILEY, Denver, Colo. Filed June 1, 1931.

LOALOY

For Metal Alloy Adapted Especially for Temporary Dental Restorations.
Claims use since Jan. 5, 1931.

Ser. No. 315,461. KNY-SCHEERER CORPORATION, New York, N. Y. Filed June 5, 1931.



For Surgical, Chirurgical, and Medical Instruments—Namely, Apparatus for the Examination of the Blood, the Stomach, and the Urine; Apparatus for Producing Anesthesia, Apparatus for Draining and Dressing Wounds and Hot-Air Treatment; Suspension, Infusion, Massage, Narcosis, Transfusion, and Guttafer Apparatus; for Saws, Needles, Buttons, Syringes, Retractors, Spatulas, Curettes, Drills, Excavators, Gouges, Forceps, Percussors, Nippers, Specula, Probes, Clamps, Irrigators, Sounds, Hooks, Rollers, Bandages, Files, Cauterizers, Dilators, Wrenches, Twisters, Extractors, Depressors, Divulsors, Tubes, Perforators, Clippers, Insulators, Protectors, Hammers, Mallets, Masks, Magnets, Gags, Shields, Needle-Holders, Punchers, Searchers, Snares, Splints, Spoons, Sprays, Staves, Scrapers, Pins, Wedges, Separators, Lances, Scissors, and Shears for the Use of Surgeons; for Angioclasts, Angiotribes, Autoscopes, Basiotribes, Bistouries, Bladder-Phantoms, Calibrators, Catheters, Centrifuges, Cephalotribes, Conchotomes, Cranioclasts, Cystoscopes, Cystotomes, Dakrytomes, Endoscopes, Urethroscopes, Enterotomes, Evacuators, Gorgorets, Hematokrits, Hysterotomes, Tonsillotomes, Lithoclasts, Lithotrites, Meatotomes, Microtomes, Osteoclasts, Osteotrites, Otoscopes, Polypotomes, Probangs, Protoscopes, Rachiotomes, Rarefacters, Respatories, Rhineeurynters, Rhinoscopes, Rongeurs, Saw-Conductors, Scarificators, Sclerotomes, Segregators, Serrefines, Sigmoidoscopes, Spincteroscopes, Spuds, Stethoscopes. Tampon-Expellers, Tampon-Screws, Tenacula, Test-Drums, Tracheotomes, Trephines, Turbinotomes, Urethroscopes, Urethrotomes, Sterilizers, Operating-Tables, Trocars, Inhalers, Aspirators, Repositors, Vaporizers, Applicators, Cooling-Coils, Symphyseotomy Compressors, Croup-Kettles, Phantom-Faces, Incubators, Obstetrical Phantoms, and Stretch-Boards; for Anal, Antrum, Appendictomy, Aural, Aural Operating, Auscultation, Autopsy, Bronchocele, Bullet-Extracting, Cataract, Cornea, Craniotomy, Obstetrical, Cupping, Dermal, Diagnostic, Embryotomy, Endo-Urethal, Endorectal, Enucleation, Eye-Testing, Foreign-Body Extracting, Gastric, Gynecological, Hemorrhoidal, Hare-Lip, Hernia, Intestinal, Intubation, Iris, Kidney Operation, Laryngeal, Ligature, Lithotomy, Urethral, Nasal, Æsophageal, Ophthalmic, Oral, Osteotomy, Perineal, Periosteum, Phlebotomy, Plaster-Dressing, Polypus, Prostatectomy, Rectal, Resection, Scrotal, Septum, Staphylorrhaphy, Strabismus, Suture, Symphysiotomy, Throat, Tonsil, Tracheoscopy, Tracheotomy, Transluminating, Trepanning, Uranoplastic, Uterine, Uvula, Vaccinating, and Varicocele Instruments.
Claims use since Dec. 1, 1889.

Ser. No. 316,220. SCHERING-KAHLBAUM, A. G., Berlin, Germany. Filed June 24, 1931.

BRILLAT

For Dental Compounds.
Claims use since Dec. 10, 1930.

CLASS 45
Beverages, Nonalcoholic

Ser. No. 309,723. CALIFORNIA CRUSHED FRUIT CORPORATION, now by change of name Mission Dry Corporation, Ltd., Los Angeles, Calif. Filed Jan. 8, 1931.

MISSION

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks and Ginger Ale.
Claims use since Dec. 1, 1919, on carbonated orange punch; since Dec. 2, 1930, on ginger ale.

Ser. No. 315,489. THE DISTILLATA COMPANY, Cleveland, Ohio. Filed June 6, 1931.



No claim is made to the words "A Crystal Pure Drinking Water" apart from the mark shown.
For Bottled Mineral Water.
Claims use since Apr. 29, 1931.

Ser. No. 315,585. LEE RICHARDSON, Richardson Springs, Chico, Calif. Filed June 8, 1931.



For Bottled Mineral Waters.
Claims use since May 20, 1929.

Ser. No. 315,726. ALBERT B. SPENCER & F. J. SPERNAK, Monongahela, Pa. Filed June 12, 1931.

INTELLIGENT

For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks and Sirups and Extracts for Making the Same.
Claims use since Feb. 1, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 300,334. CHICAGO CREAM FRIED CAKE COMPANY, Chicago, Ill. Filed May 12, 1930.



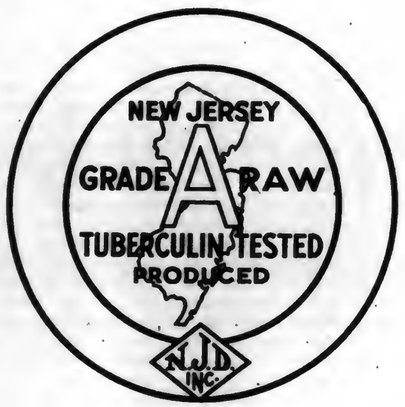
The drawing is lined to indicate the colors red and blue. No claim is made to the word "Cream Cakes" apart from the mark.
For Bakery Products Commonly Designated as Cakes.
Claims use since Apr. 1, 1929.

Ser. No. 300,527. VLADIMIR K. KEDROVICH, doing business as Old Dutch Mustard Company, New York, N. Y. Filed May 14, 1930.



The lining on the drawing is to indicate the color red. No claim is made to the exclusive use of any of the words except the word "Grandfathers" apart from the mark as shown in the drawing.
For Mustard.
Claims use since Apr. 1, 1930.

Ser. No. 308,846. NEW JERSEY DAIRYMEN, INC., Trenton, N. J. Filed Dec. 10, 1930.



No claim is made to the words "Grade A Raw Tuberculin Tested Produced" and "New Jersey" apart from the mark as shown on the drawing.
For Raw Milk.
Claims use since Aug. 1, 1930.

Ser. No. 309,064. CHICAGO MACARONI CO., Chicago, Ill. Filed Dec. 17, 1930.

CYRILLA

For Macaroni.
Claims use since 1915.

Ser. No. 312,120. FRED WOLFERMAN, INCORPORATED, Kansas City, Mo. Filed Mar. 13, 1931.



For Butter, Eggs, Jam, Jellies, Marmalade, Fruit Butters, Canned and Dried Vegetables; Canned, Pickled, Spiced, and Preserved Fruits; Vinegar, Olives, Salad Dressing, French Dressing, Sandwich Fillers, Tartar Sauce, Mincemeat, Puddings, Dried Fruits, Canned Fish, Canned Shellfish, Sugars, Maple Syrup, Canned Mushroom Broth, Canned Tomato Puree, Canned Tomato Juice, Canned Pineapple Juice, Coffee, Tea, for Food Purposes.
Claims use since January, 1900.

Ser. No. 312,574. ST. MARTIN PRESERVING COMPANY LIMITED, London, England. Filed Mar. 26, 1931.



The words "Care & Quality" and "Slough & London" are disclaimed apart from the mark as shown in the drawing.
For Jams, Marmalades, Preserves (for Food), Christmas Pudding, Mincemeat; Preserved, Canned, Bottled, Crystalized, and Dried Fruits, Vegetables, Fish, and Meats.
Claims use since Dec. 24, 1927.

Ser. No. 313,930. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo. Filed Apr. 28, 1931.



The words "Standard Feeds" are disclaimed apart from the mark as shown. The ruling on the drawing represents the colors red and green.
For Laying Mash, Baby Chick Grains, Laying Grains and Grain Products for Use as Stock Feed, Including Products Made from the Whole Grains of Wheat, Buckwheat, Corn, Kaffir Corn, Milo Maize, Barley, Rye, Oats, Grohoma and Proso.
Claims use since Mar. 1, 1930.

Ser. No. 314,122. NICOLO MUSCO, New York, N. Y. Filed May 2, 1931.



No claim is made to the words "Ricotta" and "Pecorina" apart from the mark shown on the drawing.
For Cheese.
Claims use since Apr. 1, 1926.

Ser. No. 314,628. GREGORY A. SPRALEY, Dayton, Ohio. Filed May 15, 1931.

FROSTYEAST

No claim is made to the word "Yeast" apart from the other features of the mark shown in the drawings.
For Frozen Confection Comprising Milk, Yeast, Flavoring, Etc.
Claims use since May 1, 1931.

Ser. No. 314,746. HENRY BECKER & SON, INC., Roseland, N. J. Filed May 19, 1931.

Becker's

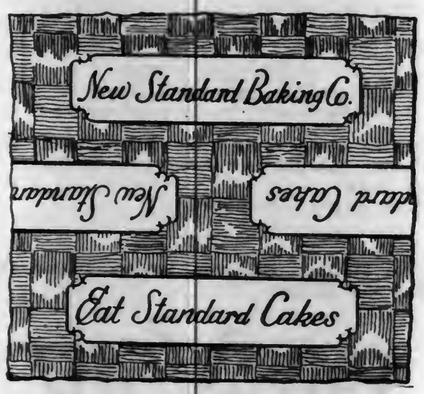
For Milk, Cream, Butter, Eggs, Cheese, Buttermilk, Lard, Dressed Poultry, Acidophilus Milk, Condensed Milk, Powdered Milk, Ice Cream.
Claims use since 1900.

Ser. No. 314,779. UNITED BISCUIT COMPANY OF AMERICA, Chicago, Ill. Filed May 19, 1931.

PADDY CAKE

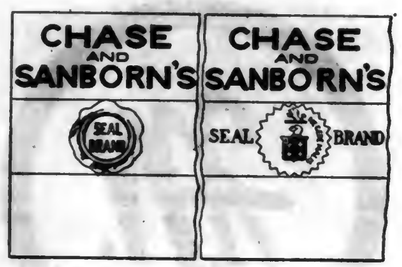
No claim is made to the word "Cake" apart from the mark shown in the drawing.
For Cookies.
Claims use since Apr. 23, 1931.

Ser. No. 314,858. NEW STANDARD BAKING COMPANY, Philadelphia, Pa. Filed May 21, 1931.



For registration purposes only the applicant makes no claim to the word "Standard" now forming a part of the expression "Eat Standard Cakes," except as a part of the composite trade-mark illustrated on the drawing.
For Cakes.
Claims use since Feb. 6, 1931.

Ser. No. 315,117. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed May 27, 1931.



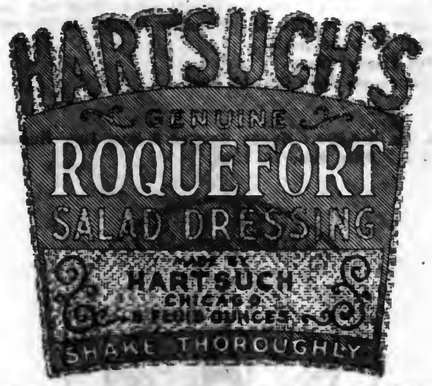
No claim is made to the word "Brand" except in connection with mark as shown. The lining on the drawing is for shading only.
For Coffee and Tea.
Claims use since October, 1885, on coffee; since March, 1892, on tea.

Ser. No. 315,138. JACOB DOLD PACKING CO., Buffalo, N. Y. Filed May 28, 1931.



The circular band and the figure enclosed therein have been printed in contrasting colors but the specific color combination represented by the color lining of the drawing is not an essential feature of the trade mark and is disclaimed.
For Dressed Carcasses and Cuts of Fresh Beef, Pork, Mutton, and Veal.
Claims use since July 1, 1930.

Ser. No. 315,198. EARL R. HARTSUCH, doing business as Hartsuch, Chicago, Ill. Filed May 29, 1931.



No claim is made to the words "Roquefort, Genuine, Salad Dressing, Made by, Chicago, 8 Fluid Ounces," and "Shake Thoroughly" apart from the mark, but applicant waives none of his common-law rights. The drawing is lined to indicate the colors green and yellow.
For Salad Dressing.
Claims use since June 1, 1928.

Ser. No. 315,208. JOHN MORRELL & CO., Ottumwa, Iowa. Filed May 29, 1931.



For Fresh, Cured, Pickled, Smoked, Cooked, and Canned Meats—Namely, Bacon, Bacon Backs, Tongues, Boneless Butts, Dried Beef, Hams, Picnics, Pork Loins, Shoulders, Meat Loaf, Sausages, Brains, Corned Beef, Roast Beef, Souse, Tripe, Hearts, Hocks, Hash, Deviled Meat, Potted Meat, Tenderloins, Luncheon Meat, Pigs' Feet, Pig Snouts, Pig Lips, Ox Lips, and Sweetbreads; and Prepared Food Products—Namely, Lard, Lard Oil, Butter, Cheese, Eggs, Extract of Beef, Marmalade, Soups, Mincemeat, Chilli Con Carne, Plum Pudding, Pork and Beans, and Chicken.
Claims use since Oct. 13, 1920.

Ser. No. 315,296. MEYER H. ABELSON, Wilkes-Barre, Pa. Filed June 2, 1931.



Regina

For Chocolate Candy.
Claims use since 1916.

Ser. No. 315,588. THE BALLIF DISTRIBUTING COMPANY, Portland, Oreg. Filed June 9, 1931.

BALCO

For Malt Syrup.
Claims use since February, 1925.

Ser. No. 315,600. FRANCIS H. LEGGETT & COMPANY, New York, N. Y. Filed June 9, 1931.

ENTICE MINTS

The applicant hereby disclaims the word "Mints" as a part of the trade mark.
For Mint Confections.
Claims use since May 28, 1931.

Ser. No. 315,602. JOHN MORRELL & COMPANY, Ottumwa, Iowa. Filed June 9, 1931.



For Lard (Manteca Pura De Cerdo).
Claims use since May, 1880.

Ser. No. 315,678. ENID POULTRY & EGG CO., INC., Enid, Okla. Filed June 11, 1931.

HOLLY

For Dressed Poultry.
Claims use since Oct. 4, 1930.

Ser. No. 315,721. RAYMOND KNIGHT, New York, N. Y. Filed June 10, 1931.

KUKU

For Candy.
Claims use since May, 1931.

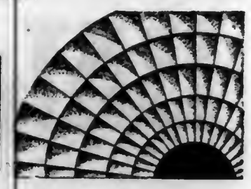
Ser. No. 315,842. RAYMOND KNIGHT, New York, N. Y. Filed June 15, 1931.

CUCKOO

For Candy.
Claims use since May, 1931.

Ser. No. 315,862. SIREN MILLS CORPORATION, Chicago, Ill. Filed June 15, 1931.

SIREN



For Chocolate Bars.
Claims use since Nov. 1, 1929.

Ser. No. 315,868. NEW ENGLAND CONFECTIONERY COMPANY, Cambridge, Mass. Filed June 15, 1931.

BREAK-A-WAY

For Candy.
Claims use since May 15, 1931.

Ser. No. 315,888. HENRY BECKER & SON, INC., Roseland, N. J. Filed June 16, 1931.



The drawing is lined to represent the color orange. The words "Grade" and "Raw," "A," "Exclusively," and "Roseland, N. J." are disclaimed apart from the mark as shown on the drawing. No claim is made to the representation of the bottle.
For Milk.
Claims use since Feb. 15, 1931.

Ser. No. 315,889. HENRY BECKER & SON, INC., Roseland, N. J. Filed June 16, 1931.



The drawing is lined to represent the color red, and the small figure of the square within which is the figure "4" surrounded by the word "Quality" is also represented as red. The words "Heavy Cream," "A," "Quality 4," and "Roseland, N. J." are disclaimed apart from the mark as shown in the drawing. No claim is made to the representation of the bottle.
For Heavy Cream.
Claims use since Oct. 15, 1930.

Ser. No. 315,890. HENRY BECKER & SON, INC., Roseland, N. J. Filed June 16, 1931.



The drawing is lined to represent the color blue, and the small figure of the square within which is the figure "4" surrounded by the word "Quality" is also represented as blue. The words "Light Cream," "A," "Quality 4," and "Roseland, N. J." are disclaimed apart from the mark as shown in the drawing. No claim is made to the representation of a bottle.
For Light Cream.
Claims use since Oct. 15, 1930.

Ser. No. 315,893. CLARENCE BESSINO, Los Angeles, Calif. Filed June 16, 1931.

ALL YEAR

For Fresh Citrus Fruits.
Claims use since May 27, 1931.

Ser. No. 315,894. F. A. BUGGE, doing business as Bangor Packing Company, Bangor, Wash. Filed June 16, 1931.

F·A·B

For Canned Clams, Canned Clam Nectar, Bottled Clam Nectar.
Claims use since March, 1919.

Ser. No. 315,900. COAST FISHING CO., Wilmington, Calif. Filed June 16, 1931.

SPOT

For Dog and Cat Food.
Claims use since May 15, 1931.

Ser. No. 315,943. SUSSMAN, WORMSER & COMPANY, San Francisco, Calif. Filed June 16, 1931.



For Canned Fruits.
Claims use since Apr. 27, 1931.

Ser. No. 315,966. D. GOLDENBERG, INC., Philadelphia, Pa. Filed June 17, 1931.

POP-EYE

For Candy.
Claims use since June 4, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 310,838. SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y. Filed Feb. 7, 1931.



For Nonalcohol, Cereal, Malt Beverage Containing Less Than One-Half of One Per Cent Alcohol, by Volume.
Claims use since February, 1928.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 311,742. LOS ANGELES BREWING CO., Los Angeles, Calif. Filed Mar. 4, 1931.



Applicant disclaims the word "Trugrain."
For Grain Alcohol.
Claims use since Jan. 19, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 315,019. ST. CLAIR RUBBER COMPANY, Marysville and Detroit, Mich. Filed May 25, 1931.

INSUL-DEK

No claim is made to the exclusive use of the word "Dek" apart from the mark shown in the drawing.
For Roofing Deck.
Claims use since May 16, 1931.

Ser. No. 316,058. THE SUNTEX CORPORATION, Brooklyn, N. Y. Filed June 19, 1931.

SUNTEX

For Painted and Waterproof Fabrics for Awnings, Tents, and Wagons.
Claims use since 1925.

Ser. No. 316,234. THE ZAPON COMPANY, Wilmington, Del. Filed June 25, 1931.



For Pyroxylin or Otherwise Coated Fabrics—Namely, Leather Cloth.
Claims use since Aug. 11, 1891.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

AUGUST 4, 1931

285,631. MEDICINE FOR DYSPEPSIA, ACID STOMACH, AND INDIGESTION. SAMUEL STEIGROD, doing business as Gento Laboratories, Paulsboro, N. J., assignor to L. Weinberg Company, Philadelphia, Pa.
Filed January 17, 1931. Serial No. 310,076. PUBLISHED MAY 19, 1931. Class 6.

285,632. MEDICAL COMPOUND FOR ACIDITY OF THE STOMACH, FLATULENCE, SOUR STOMACH, AND A STIMULANT TO THE APPETITE. THOMAS A. WATSON, doing business as Watson Chemical Laboratories, Chicago, Ill.
Filed January 10, 1931. Serial No. 309,837. PUBLISHED MAY 19, 1931. Class 6.

285,633. FILLED COMPACTS CONTAINING FACE POWDER, ROUGE, FACE POWDER AND ROUGE; FACE POWDER, ROUGE, AND LIP-STICK. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y.
Filed December 30, 1930. Serial No. 309,471. PUBLISHED MAY 12, 1931. Class 6.

285,634. FILLED COMPACTS CONTAINING FACE POWDER, ROUGE, FACE POWDER AND ROUGE; FACE POWDER, ROUGE, AND LIP-STICK. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y.
Filed December 30, 1930. Serial No. 309,468. PUBLISHED MAY 12, 1931. Class 6.

285,635. LIQUID MEDICAL PREPARATION FOR THE RELIEF OF INDIGESTION. OMER H. EDWARDS, doing business as Royal Digesto Co., Stamford, N. Y.
Filed March 19, 1931. Serial No. 312,294. PUBLISHED MAY 19, 1931. Class 6.

285,636. TOILET POWDER. THE ARMAND COMPANY, Des Moines, Iowa.
Filed March 17, 1931. Serial No. 312,280. PUBLISHED MAY 19, 1931. Class 6.

285,637. CURING SALT. THE GRIFFITH LABORATORIES, INC., Chicago, Ill.
Filed March 16, 1931. Serial No. 312,219. PUBLISHED MAY 19, 1931. Class 6.

285,638. DIURETIC IN TABLET FORM. CHARLES F. KELLER, doing business as The Keller Company, Mechanicsburg, Ohio.
Filed March 14, 1931. Serial No. 312,153. PUBLISHED MAY 12, 1931. Class 6.

285,639. DENTAL CREAMS. ERNEST G. RURUP, doing business as Scientific Laboratories of America, San Francisco, Calif.
Filed March 12, 1931. Serial No. 312,065. PUBLISHED MAY 19, 1931. Class 6.

285,640. GLOSS STARCH. AMERICAN MAIZE-PRODUCTS COMPANY, New York, N. Y.
Filed March 12, 1931. Serial No. 312,035. PUBLISHED MAY 19, 1931. Class 6.

285,641. PILE OINTMENT AND SALVE. HALE AND SHOOK, Long Beach, Calif.
Filed March 12, 1931. Serial No. 312,050. PUBLISHED MAY 12, 1931. Class 6.

285,642. PESSARIES USED AS MEDICATED SUPPOSITORIES. DUREX PRODUCTS INC., New York, N. Y.
Filed March 11, 1931. Serial No. 311,997. PUBLISHED MAY 19, 1931. Class 6.

285,643. SALT. HOUSTON SALT CO., Houston, Tex.
Filed March 7, 1931. Serial No. 311,901. PUBLISHED MAY 19, 1931. Class 6.

285,644. PREPARATION FOR THE TREATMENT OF ASTHMA, BRONCHITIS, HAY FEVER, COLDS, AND OTHER AFFECTIONS OF THE RESPIRATORY PASSAGES. NICHOLAS D. YORDONOFF, doing business as Yordonoff Medicine Company, Waterloo, Iowa.
Filed March 4, 1931. Serial No. 311,858. PUBLISHED MAY 12, 1931. Class 6.

285,645. COMPOUND FOR DEODORIZING THE BREATH. MARY E. STEWART, doing business as Stewart & Cobb Chemical Co., Covington, Ky.
Filed March 2, 1931. Serial No. 311,630. PUBLISHED MAY 19, 1931. Class 6.

285,646. ANTISEPTIC GERMICIDE IN THE FORM OF TABLETS AND POWDER. THE LAWRENCE PRODUCTS COMPANY, INC., Kelso and Seattle, Wash., and Los Angeles, Calif.
Filed March 2, 1931. Serial No. 311,615. PUBLISHED MAY 12, 1931. Class 6.

285,647. MEDICINES—NAMELY, AN HERB TEA FOR CAUSING THE ORGANS TO ELIMINATE. GERMANIA TEA COMPANY, Minneapolis, Minn.
Filed February 16, 1931. Serial No. 311,095. PUBLISHED MAY 12, 1931. Class 6.

285,648. MEDICINAL TREATMENT FOR THE HAIR, SCALP, AND TISSUES OF THE FACE AND BODY. BERNARD S. ARTZT, doing business as B. S. Artzt Laboratories, Philadelphia, Pa.
Filed February 2, 1931. Serial No. 310,704. PUBLISHED MAY 12, 1931. Class 6.

285,649. MEDICINAL PREPARATION IN LIQUID FORM FOR THE TREATMENT OF RHEUMATISM. B. F. CHAMBERS, doing business as Chambers Laboratories, Blountsville, Ala.
Filed February 2, 1931. Serial No. 310,637. PUBLISHED MAY 12, 1931. Class 6.

285,650. DENTAL CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed January 26, 1931. Serial No. 310,367. PUBLISHED MAY 12, 1931. Class 6.

285,651. DENTAL ALLOY. RESEARCH PRODUCTS CORPORATION, New York, N. Y.
Filed April 1, 1931. Serial No. 312,816. PUBLISHED MAY 19, 1931. Class 44.

285,652. WALL BOARD AND TILE. SIDNEY C. FOURNET, New Orleans, La., assignor to Borgloss, Incorporated, New Orleans, La., a Corporation of Louisiana.
Filed March 31, 1931. Serial No. 312,755. PUBLISHED MAY 19, 1931. Class 12.

285,653. FABRICATED DOORS. CURTIS COMPANIES, INCORPORATED, Clinton, Iowa.
Filed March 30, 1931. Serial No. 312,700. PUBLISHED MAY 19, 1931. Class 12.

285,654. BASE COURSE BLOCKS, PLINTHS, PILASTER AND BASES AND SHAFTS, ETC. THE DEXTONE COMPANY, New Haven, Conn.
Filed March 26, 1931. Serial No. 312,554. PUBLISHED MAY 19, 1931. Class 12.

285,655. REFRACTORY CEMENT. J. H. FRANCE REFRACTORIES CO., Snow Shoe, Pa.
Filed March 25, 1931. Serial No. 312,515. PUBLISHED MAY 19, 1931. Class 12.

285,656. REFRACTORY CONCRETE. J. H. FRANCE REFRACTORIES CO., Snow Shoe, Pa.
Filed March 25, 1931. Serial No. 312,516. PUBLISHED MAY 19, 1931. Class 12.

285,657. MOISTURE-RESISTANT COMPOUNDS FOR APPLICATION TO PLASTIC MASONRY SURFACES. R. E. CONREY, doing business as Aquabar Waterproofing Products, Philadelphia, Pa.
Filed March 25, 1931. Serial No. 312,512. PUBLISHED MAY 19, 1931. Class 12.

285,658. PAINT PIGMENTS. THE OZARK SMELTING & MINING COMPANY, Cleveland, Ohio.
Filed March 24, 1931. Serial No. 312,490. PUBLISHED MAY 12, 1931. Class 16.

285,659. OAK FLOORING. E. L. BRUCE COMPANY, Memphis, Tenn.
Filed March 24, 1931. Serial No. 312,474. PUBLISHED MAY 12, 1931. Class 12.

285,660. ASBESTOS COMPOSITION BOARD. AMBLER ASBESTOS SHINGLE & SHEATHING COMPANY, Ambler, Pa.
Filed March 24, 1931. Serial No. 312,469. PUBLISHED MAY 12, 1931. Class 12.

285,661. ASPHALT. VISCO-MENT CORPORATION, Chicago, Ill.
Filed March 21, 1931. Serial No. 312,395. PUBLISHED MAY 12, 1931. Class 12.

285,662. DIVIDING STRIPS USED IN FORMING SURFACES OF TERRAZZO, CEMENT, AND SIMILAR COMPOSITION. LOCKSTRIP MANUFACTURING CORPORATION, Long Island City, N. Y.
Filed March 20, 1931. Serial No. 312,346. PUBLISHED MAY 12, 1931. Class 12.

285,663. THERMAL INSULATING MATERIALS AND PIPE COVERINGS. PLANT RUBBER & ASBESTOS WORKS, San Francisco, Calif.
Filed March 17, 1931. Serial No. 312,239. PUBLISHED MAY 12, 1931. Class 12.

285,664. PROCESSED MATERIAL WHICH IN ITS FINISHED STATE IMITATES THE APPEARANCE OF EXPENSIVE WOODS OR STONES. RICHARD C. POWELL, Princeton, N. J.
Filed March 16, 1931. Serial No. 312,220. PUBLISHED MAY 12, 1931. Class 12.

285,665. FLOORING — NAMELY, TONGUED AND GROOVED, END-MATCHED, SQUARE EDGE STRIPS, PARQUETRY, AND FABRICATED BLOCKS. SOUTHERN OAK FLOORING INDUSTRIES, Little Rock, Ark.
Filed March 16, 1931. Serial No. 312,205. PUBLISHED MAY 12, 1931. Class 12.

285,666. CONCRETE UNITS FOR USE IN BUILDINGS AND MAKING ORNAMENTAL WALLS. THE MAUL COMPANY, Detroit, Mich.
Filed March 12, 1931. Serial No. 312,057. PUBLISHED MAY 5, 1931. Class 12.

285,667. PLASTIC MONOLITHIC REFRACTORIES. THE M. W. KELLOGG COMPANY, New York, N. Y.
Filed March 10, 1931. Serial No. 311,963. PUBLISHED MAY 5, 1931. Class 12.

285,668. CERAMIC STRUCTURAL UNITS. NATIONAL FIREPROOFING CORPORATION, Pittsburgh, Pa.
Filed March 6, 1931. Serial No. 311,843. PUBLISHED MAY 5, 1931. Class 12.

285,669. CERTAIN ARTICLES USED IN BUILDING CONSTRUCTION—TO WIT, FLASHING AND SKYLIGHTS. W. A. FINGLES, INC., Baltimore, Md.
Filed March 6, 1931. Serial No. 311,832. PUBLISHED MAY 5, 1931. Class 12.

285,670. CONCRETE BUILDING BLOCKS. MARTIN BROS., INC., Yardville, N. J.
Filed February 27, 1931. Serial No. 311,639. PUBLISHED MAY 12, 1931. Class 12.

285,671. CAPSULES OF COPPER AND IRON USED IN THE DIETARY TREATMENT OF ANÆMIA. IRVING SYDNOR BARKSDALE, doing business as Table Rock Laboratories, Inc., Greenville, S. C.
Filed March 13, 1931. Serial No. 312,083. PUBLISHED MAY 12, 1931. Class 6.

285,672. LIQUID DEMULCENT PREPARATION GIVEN AS AN EXPECTORANT AND BRONCHIAL ANTISPASMODIC IN DISEASES OF THE RESPIRATORY TRACT. THE NORWICH PHARMACAL COMPANY, Norwich, N. Y.
Filed March 12, 1931. Serial No. 312,059. PUBLISHED MAY 19, 1931. Class 6.

285,673. FACE POWDERS, ROUGES (LIP AND FACE), COLD CREAMS, BRILLIANTINE, NAIL POLISH, AND A LIQUID PREPARATION USED FOR THE REMOVAL OF NAIL POLISH. ELITE PERFUME SHOP, doing business as Niktarf Cie., Brooklyn, N. Y.
Filed March 10, 1931. Serial No. 311,957. PUBLISHED MAY 12, 1931. Class 6.

285,674. PREPARATION FOR THE TREATMENT OF COLD IN THE HEAD, THROAT, AND CHEST. RICHARDS LABORATORIES, Duluth and Grand Rapids, Minn.
Filed March 9, 1931. Serial No. 311,931. PUBLISHED MAY 19, 1931. Class 6.

285,675. NASAL OILS. KARL WOOD, doing business as The Haywood Company, Memphis, Tenn.
Filed March 7, 1931. Serial No. 311,897. PUBLISHED MAY 19, 1931. Class 6.

285,676. INSECTICIDES, DEODORANTS, AND DISINFECTANTS. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed March 5, 1931. Serial No. 311,796. PUBLISHED MAY 5, 1931. Class 6.

285,677. LIQUID FOR USE IN CONDITIONING VALVES AND CONTROLLING CARBON IN INTERNAL COMBUSTION ENGINES. MARTIN B. COVERT, doing business as Covite Manufacturing Company, Holland, Mich.
Filed March 2, 1931. Serial No. 311,765. PUBLISHED MAY 5, 1931. Class 6.

285,678. FINISH AND COLOR RESTORER FOR LEATHERS, KIDS, AND ARTICLES MADE THEREFROM, SUCH AS GLOVES. PERRY E. NORRIS, doing business as Norris Products, Chicago, Ill.
Filed March 2, 1931. Serial No. 311,620. PUBLISHED MAY 12, 1931. Class 6.

285,679. PRINTED MAILING CARD PUBLISHED WEEKLY. PURITY OATS COMPANY, Keokuk, Iowa.
Filed March 9, 1931. Serial No. 311,928. PUBLISHED MAY 19, 1931. Class 38.

285,680. PINTICKETS, LABELS, AND TAGS. THE J. L. MAY COMPANY, New York, N. Y.
Filed February 28, 1931. Serial No. 311,584. PUBLISHED MAY 19, 1931. Class 37.

285,681. WRITING AND PRINTING PAPER. HURLBUT PAPER COMPANY, South Lee, Mass.
Filed March 4, 1931. Serial No. 311,733. PUBLISHED MAY 19, 1931. Class 37.

285,682. MONTHLY PERIODICAL. UNITED STATES COAST ARTILLERY ASSOCIATION, Washington, D. C.
Filed February 18, 1931. Serial No. 311,211. PUBLISHED MAY 19, 1931. Class 38.

285,683. WALL COVERINGS OF COATED PAPER. SHEETPAINT PRODUCTS CORPORATION, New York, N. Y.
Filed February 12, 1931. Serial No. 311,004. PUBLISHED MAY 19, 1931. Class 37.

285,684. DEODORIZING CAKES. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed February 12, 1931. Serial No. 310,998. PUBLISHED MAY 5, 1931. Class 6.

285,685. ASTRINGENTS, BLEACH CREAMS, DRY ROUGES, HAND LOTIONS, ETC. A. P. BABCOCK CO., New York, N. Y.
Filed February 9, 1931. Serial No. 310,850. PUBLISHED MAY 5, 1931. Class 6.

285,686. COD LIVER OIL PREPARATION. C. E. JAMIESON, Detroit, Mich.
Filed January 26, 1931. Serial No. 310,381. PUBLISHED MAY 5, 1931. Class 6.

285,687. CARTOONS, ADVERTISING CIRCULATING LETTERS, AND A PERIODICAL PUBLICATION. MICHAEL DESTIN PELLETIER, New York, N. Y.
Filed January 30, 1931. Serial No. 310,586. PUBLISHED MAY 19, 1931. Class 38.

285,688. CLEANSING TISSUES FORMED OF PAPER. VELDOWN COMPANY, INC., New York, N. Y.
Filed January 15, 1931. Serial No. 310,000. PUBLISHED MAY 19, 1931. Class 37.

285,689. CORRESPONDENCE FORMS AND PARTIALLY PRINTED FORMS SOLD AS SUCH. EDWARDS & DEUTSCH LITHOGRAPHING COMPANY, Chicago, Ill.
Filed January 9, 1931. Serial No. 309,771. PUBLISHED MAY 19, 1931. Class 37.

285,690. CANNED FLUIDS, COMPOSED OF OXIDIZED BITUMINOUS MATERIALS DISSOLVED IN A PETROLEUM SPIRITS SOLVENT FOR IMPREGNATING FIBERS OF CURTAINS TO MAKE FIBERS FIRMER AND STRONGER AND TO PREVENT SOAKING UP WATER. O. G. MCDONALD, doing business as Kurtain Krisp Co., Detroit, Mich.
Filed December 31, 1930. Serial No. 309,544. PUBLISHED MAY 12, 1931. Class 6.

285,691. CHEESE. COMPAGNIE CENTRALE FROMAGÈRE SOCIÉTÉ ANONYME, La Roche S/Foron, France.
Filed May 28, 1930. Serial No. 301,406. PUBLISHED MAY 5, 1931. Class 46.

285,692. ELECTRIC DIRECTION SIGNALS CARRIED BY AUTOMOBILES. ORAN YARNELL, doing business as Always Signal Co., Marion, Ind.
Filed May 20, 1930. Serial No. 300,903. PUBLISHED AUGUST 12, 1930. Class 21.

285,693. FACE CREAMS, HAIR OILS AND GROWERS, ETC. HATTIE VAN ESTHER HILL, doing business as Van Esther Beauty Shoppe, Cleveland, Ohio.
Filed May 9, 1930. Serial No. 300,197. PUBLISHED MAY 12, 1931. Class 6.

285,694. MAGAZINES. KEITH CORPORATION, Chicago, Ill.
Filed April 9, 1930. Serial No. 298,574. PUBLISHED MAY 19, 1931. Class 38.

285,695. READY MIXED PAINT—NAMELY, ROOF COATING. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed March 22, 1930. Serial No. 297,764. PUBLISHED MAY 12, 1931. Class 16.

285,696. RADIO LOUD SPEAKERS, CHOKE COILS, AND ELECTROMAGNETS. NATIONAL MALLEABLE AND STEEL CASTINGS COMPANY, Cleveland, Ohio.
Filed February 25, 1930. Serial No. 296,491. PUBLISHED MAY 12, 1931. Class 21.

285,697. REFRACTORY STONES AND BRICKS, SILICA STONES AND BRICKS, ETC. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed February 17, 1930. Serial No. 296,157. PUBLISHED MAY 19, 1931. Class 12.

285,698. LAXATIVE MEDICINAL PREPARATION IN LIQUID FORM. PLOUGH, INC., doing business as The St. Joseph's Laboratories, Memphis, Tenn.
Filed February 15, 1930. Serial No. 296,079. PUBLISHED APRIL 29, 1930. Class 6.

285,699. CREOSOTE OIL FOR USE AS A WOOD PRESERVATIVE AND DISINFECTANT. THE BARRETT COMPANY, New York, N. Y.
Filed January 31, 1930. Serial No. 295,417. PUBLISHED MAY 19, 1931. Class 6.

285,700. ELECTRIC RANGES, ELECTRIC OVENS, ELECTRIC HOT PLATES, ELECTRIC GRILL STOVES, ELECTRIC ROOM HEATERS OF THE WALL TYPE, AND ELECTRIC WATER HEATERS. MALLEABLE IRON RANGE COMPANY, Beaver Dam, Wis.
Filed January 22, 1930. Serial No. 295,075. PUBLISHED APRIL 15, 1930. Class 21.

285,701. SHAMPOO. LA VAY PRODUCTS COMPANY, New York, N. Y., and Hackensack, N. J.
Filed October 8, 1929. Serial No. 290,786. PUBLISHED APRIL 29, 1930. Class 6.

285,702. LIP STICKS, ROUGE COMPACTS, COLD CREAMS, ETC. SCOTT & GILBERT CO., doing business as Lady Peggy, Inc., San Francisco, Calif.
Filed October 1, 1929. Serial No. 290,478. PUBLISHED MAY 5, 1931. Class 6.

285,703. A PREPARATION FOR USE AS A RUST SOLVENT AND LUBRICANT AND LUBRICATING OILS AND GREASES. HALSTEAD OIL COMPANY, INC., New York, N. Y.
Filed August 10, 1929. Serial No. 288,378. PUBLISHED MAY 19, 1931. Class 15.

285,704. ELECTRICALLY HEATED BOILERS, ELECTRICAL STOVES AND RADIATORS, ETC. HUGO JUNKERS, Dessau, Germany.
Filed February 26, 1929. Serial No. 279,925. PUBLISHED MAY 19, 1931. Class 21.

285,705. STOMACH BITTERS. FRATELLI BRANCA, Milan, Italy.
Filed September 14, 1928. Serial No. 272,397. PUBLISHED MAY 19, 1931. Class 6.

285,706. STOMACH BITTERS. FRATELLI BRANCA, Milan, Italy.
Filed September 14, 1928. Serial No. 272,396. PUBLISHED MAY 19, 1931. Class 6.

285,707. STOMACH BITTERS. FRATELLI BRANCA, Milan, Italy.
Filed September 14, 1928. Serial No. 272,395. PUBLISHED MAY 19, 1931. Class 6.

285,708. RADIO ELECTRON TUBES. NATIONAL UNION RADIO CORPORATION, Newark, N. J.
Filed February 11, 1931. Serial No. 310,943. PUBLISHED MAY 12, 1931. Class 21.

285,709. TEMPERATURE CONTROLLED ELECTRIC SWITCHES USED, FOR EXAMPLE, IN THE CONTROL OF THE GAS-BURNING FURNACES. SPENCER THERMOSTAT COMPANY, Cambridge, Mass.
Filed February 9, 1931. Serial No. 310,888. PUBLISHED MAY 19, 1931. Class 21.

285,710. CARBONACEOUS ELECTRODES. REPUBLIC CARBON COMPANY, Niagara Falls, N. Y.
Filed February 9, 1931. Serial No. 310,883. PUBLISHED MAY 12, 1931. Class 21.

285,711. ELECTRICALLY-OPERATED AERATING EQUIPMENT FOR PRODUCING LATHER OR FOAM FOR SHAMPOOING THE HAIR. SOAPLESS FOAM, LIMITED, London, England.
Filed January 28, 1931. Serial No. 310,493. PUBLISHED MAY 19, 1931. Class 21.

285,712. ORNAMENTAL BELT BUCKLES MADE WHOLLY OR IN PART OF PRECIOUS METAL OR PLATED THEREWITH. ABBOLOID NOVELTY COMPANY, Chicago, Ill.
Filed January 26, 1931. Serial No. 310,364. PUBLISHED MAY 12, 1931. Class 28.

285,713. RADIO RECEIVING SETS. MILES A. LONG, doing business as Cardinal Radio Mfg. Co., Los Angeles, Calif.
Filed January 8, 1931. Serial No. 309,738. PUBLISHED MAY 19, 1931. Class 21.

285,714. ELECTRIC LAMPS FOR USE ON VEHICLES TO DISPLAY MANUAL SIGNALS. ERNEST E. HIGHFILL, doing business as The Safe Way Auto Light Co., Los Angeles, Calif.
Filed January 3, 1931. Serial No. 309,588. PUBLISHED MAY 19, 1931. Class 21.

285,715. DRY BATTERIES. BLAKE MANUFACTURING COMPANY, Springfield, Mass.
Filed March 28, 1931. Serial No. 312,638. PUBLISHED MAY 19, 1931. Class 21.

285,716. MOISTURE PROOF CABLES OR CONDUCTORS PROVIDED WITH MOISTURE PROOF SOCKETED OUTLETS AT DESIRED INTERVALS AND WITH SUITABLE END CONNECTORS. SULLIVAN MACHINERY COMPANY, Boston, Mass., and Chicago, Ill.
Filed March 24, 1931. Serial No. 312,569. PUBLISHED MAY 12, 1931. Class 21.

285,717. ELECTRIC BATTERIES. GENERAL DRY BATTERIES, INC., Cleveland, Ohio.
Filed March 26, 1931. Serial No. 312,558. PUBLISHED MAY 12, 1931. Class 21.

285,718. ELECTRIC VACUUM CLEANERS AND DUST-BAGS THEREFOR. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., and New York, N. Y.
Filed March 25, 1931. Serial No. 312,535. PUBLISHED MAY 19, 1931. Class 21.

285,719. ELECTRICAL CONNECTORS FOR WIRES, CABLES, TUBE, ROD AND THE LIKE. BURNDY ENGINEERING COMPANY, INC., New York, N. Y.
Filed March 26, 1931. Serial No. 312,545. PUBLISHED MAY 19, 1931. Class 21.

285,720. PORTABLE ELECTRIC PLANTS. SULLIVAN MACHINERY COMPANY, Boston, Mass., and Chicago, Ill.
Filed March 24, 1931. Serial No. 312,506. PUBLISHED MAY 12, 1931. Class 21.

285,721. UNBREAKABLE NECKLACE CABLES. PREMIER JEWELRY COMPANY, New York, N. Y.
Filed March 24, 1931. Serial No. 312,494. PUBLISHED MAY 19, 1931. Class 28.

285,722. UNBREAKABLE NECKLACE CABLES. PREMIER JEWELRY COMPANY, New York, N. Y.
Filed March 24, 1931. Serial No. 312,493. PUBLISHED MAY 19, 1931. Class 28.

285,723. LUBRICATING OILS AND LUBRICATING GREASES MADE FROM PENNSYLVANIA CRUDE. ARTHUR F. SCHROEDER, doing business as A. F. Schroeder Oil Co., Milwaukee, Wis.
Filed March 23, 1931. Serial No. 312,458. PUBLISHED MAY 12, 1931. Class 15.

285,724. KEYS AND BADGES ALL MADE OR PLATED WITH PRECIOUS METAL. PHI LAMBDA UPSILON, Tucson, Ariz.
Filed March 24, 1931. Serial No. 312,492. PUBLISHED MAY 12, 1931. Class 28.

285,725. LUBRICATING OILS, MOTOR FUEL OILS, AND LUBRICATING GREASES. THE TWIN CITIES DISTRIBUTING COMPANY, Covington, Ky.
Filed March 16, 1931. Serial No. 312,208. PUBLISHED MAY 19, 1931. Class 15.

285,726. GASOLINE. APEX OIL CO., St. Louis, Mo.
Filed March 16, 1931. Serial No. 312,170. PUBLISHED MAY 19, 1931. Class 15.

285,727. ELECTRIC DRILLS AND MINING BITS AND BIT TEETH ADAPTED FOR USE IN SAME. HARDSOCG MANUFACTURING CO., Ottumwa, Iowa.
Filed March 11, 1931. Serial No. 312,003. PUBLISHED MAY 12, 1931. Class 21.

285,728. ELECTRIC TOOLS CONSISTING IN DRILLS, HAMMERS, SCREWDRIVERS, GRINDERS (BENCH, AERIAL, AND PEDESTAL), SAWS, SHEARS, AND SANDERS. THE STANLEY WORKS, New Britain, Conn.
Filed March 9, 1931. Serial No. 311,936. PUBLISHED MAY 19, 1931. Class 21.

285,729. TROPHIES CONSISTING OF LOVING CUPS, SPORT STATUETTE FIGURES AND PLAQUES, AND THE LIKE AND MADE OR PLATED WITH PRECIOUS METAL. THE WEIDLICH BROS. M'F'G. Co., Bridgeport, Conn.
Filed March 4, 1931. Serial No. 311,857. PUBLISHED MAY 19, 1931. Class 28.

285,730. INCANDESCENT ELECTRIC LAMP BULBS. HACHMEISTER-LIND COMPANY, McKees Rocks, Pa
Filed March 4, 1931. Serial No. 311,726. PUBLISHED MAY 12, 1931. Class 21.

285,731. ELECTRIC BATTERIES. GENERAL DRY BATTERIES, INC., Cleveland, Ohio.
Filed February 28, 1931. Serial No. 311,570. PUBLISHED MAY 12, 1931. Class 21.

285,732. PIANOS. STEINWAY & SONS, New York, N. Y.
Filed February 21, 1931. Serial No. 311,347. PUBLISHED MAY 12, 1931. Class 36.

285,733. SPARK PLUGS. FIRESTONE BATTERY COMPANY, Akron, Ohio.
Filed February 17, 1931. Serial No. 311,133. PUBLISHED MAY 12, 1931. Class 21.

285,734. PERFUMERY AND TOILET PREPARATIONS — NAMELY, POWDERS, ROUGES, COMPACTS, CREAMS, AND LIPSTICKS. SOCIETE CADOLLE FRERES, Paris, France.
Filed November 10, 1930. Serial No. 307,744. PUBLISHED MAY 12, 1931. Class 6.

285,735. PAINTS. NORFOLK PAINT & VARNISH COMPANY, Quincy and Atlantic, Mass.
Filed June 26, 1930. Serial No. 302,871. PUBLISHED MAY 12, 1930. Class 16.

285,736. COMPOUND AND LIQUID FOR THE HAIR, HAIR RESTORER, ETC. HERMANN SCHELLENBERG, Berlin, Germany.
Filed June 20, 1930. Serial No. 302,647. PUBLISHED MAY 19, 1931. Class 6.

285,737. MONTHLY MAGAZINE. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y.
Filed May 31, 1930. Serial No. 301,900. PUBLISHED MAY 19, 1931. Class 38.

285,738. RADIO RECEIVING SETS AND PARTS, SUPPLIES, ETC., FOR TALKING MACHINES, ETC. STROMBERG-CARLSON TELEPHONE MANUFACTURING COMPANY, Rochester, N. Y.
Filed December 12, 1930. Serial No. 308,911. PUBLISHED MAY 12, 1931. Class 21.

285,739. LIQUID GAS. UNIVERSAL BOTTLED GAS CORPORATION, Rochester, N. Y.
Filed December 11, 1930. Serial No. 308,870. PUBLISHED MAY 19, 1931. Class 6.

285,740. VIOLINS, VIOLAS, CELLOS, DOUBLE BASSES, MANDOLINS, ETC. CZECHOSLOVAK MUSICAL INSTRUMENTS COMPANY, New York, N. Y.
Filed December 3, 1930. Serial No. 308,534. PUBLISHED MAY 19, 1931. Class 36.

285,741. OZONE GENERATORS. THE FRANCE MANUFACTURING COMPANY, Cleveland, Ohio.
Filed December 1, 1930. Serial No. 308,499. PUBLISHED MAY 12, 1931. Class 21.

285,742. PLASTIC REFRACTORY MATERIAL FOR BOILER AND FURNACE LININGS. CAMBRIDGE PLIABLE BRICK COMPANY, Cambridge, Ohio.
Filed November 29, 1930. Serial No. 308,425. PUBLISHED MAY 5, 1931. Class 12.

285,743. CREAMS USED FOR TREATING AND KEEPING THE FINGER-NAILS FREE FROM RIDGES AND PITS. MRS. F. ANDREW SCOTT, Los Angeles, Calif.
Filed November 22, 1930. Serial No. 308,223. PUBLISHED MAY 19, 1931. Class 6.

285,744. CHEMICAL FOR TREATING STEAM BOILER WATER TO PREVENT THE FORMATION OF BOILER SCALE. HAGAN CORPORATION, Pittsburgh, Pa.
Filed November 10, 1930. Serial No. 307,716. PUBLISHED MAY 12, 1931. Class 6.

285,745. MEDICINE FOR EXTERNAL USE IN ELIMINATING DIZZINESS. EMMANUEL GIANIKOS, Cleveland, Ohio.
Filed November 7, 1930. Serial No. 307,647. PUBLISHED MAY 19, 1931. Class 6.

285,746. HAIR TONIC, A SALVE FOR STRAIGHTENING THE HAIR, FACE LOTION, FOOT LOTION, FACE CREAM. MATTIE D. WARDE, Philadelphia, Pa.
Filed October 21, 1930. Serial No. 307,025. PUBLISHED MAY 5, 1931. Class 6.

285,747. COMPOSITION MATERIAL FOR CONSTRUCTING THE SURFACE OF MINIATURE GOLF GREENS OR THE LIKE. MARVEX INC., Canton, Ohio.
Filed October 16, 1930. Serial No. 306,822. PUBLISHED MAY 19, 1931. Class 12.

285,748. INSECTICIDES. TAR PRODUCTS CORPORATION, Providence, R. I.
Filed October 14, 1930. Serial No. 306,751. PUBLISHED MAY 5, 1931. Class 6.

285,749. CERTAIN NAMED PAINT PRODUCTS. ELCO PAINT PRODUCTS INC., doing business as Elco Paint Sales Co., New York, N. Y.
Filed October 11, 1930. Serial No. 306,673. PUBLISHED MAY 19, 1931. Class 16.

285,750. OUTSIDE COVERINGS MADE OF FLEXIBLE FELT AND IMPREGNATED WITH ASPHALTUM FOR ATTACHMENT TO THE OUTER WALLS OF BUILDINGS. THE LOGAN-LONG COMPANY, Chicago, Ill.
Filed August 29, 1930. Serial No. 305,137. PUBLISHED NOVEMBER 4, 1930. Class 12.

285,751. HAIR-CURLING TONIC. THE PARIS HAIR TONIC COMPANY, SOCIEDAD ANONIMA, Mexico, Mexico.
Filed August 7, 1930. Serial No. 304,342. PUBLISHED MAY 5, 1931. Class 6.

285,752. STORAGE BATTERIES. WHITE STAR REFINING COMPANY, Detroit, Mich.
Filed July 28, 1930. Serial No. 303,931. PUBLISHED MAY 12, 1931. Class 21.

285,753. ROSE DISINFECTANT, INSECTICIDES, PERFUMES, ROUGE, ETC. GUSTAVE GLATZER, New York, N. Y.
Filed July 9, 1930. Serial No. 303,281. PUBLISHED MAY 19, 1931. Class 6.

285,754. PAPER CONES OR TUBES FOR WINDING THREADS AND YARNS. SONOCO PRODUCTS COMPANY, Hartsville, S. C.
Filed March 25, 1931. Serial No. 312,536. PUBLISHED JUNE 2, 1931. Class 2.

285,755. ENAMEL TILES. SANIMETAL TILE CORPORATION, New York, N. Y.
Filed February 28, 1931. Serial No. 311,551. PUBLISHED MAY 19, 1931. Class 12.

285,756. PRE-FINISHED FLOORING AND PLYWOOD. UNITED PLYWOOD CORPORATION, New Albany, Ind.
Filed February 27, 1931. Serial No. 311,544. PUBLISHED MAY 12, 1931. Class 12.

285,757. ENAMEL PAINTS. SAPOLIN CO. INC., New York, N. Y.
Filed March 2, 1931. Serial No. 311,625. PUBLISHED APRIL 28, 1931. Class 16.

285,758. BUILDING STONE DRESSED AND READY FOR USE. H. BENUREAU, New York, N. Y.
Filed February 21, 1931. Serial No. 311,318. PUBLISHED MAY 5, 1931. Class 12.

285,759. FLOOR POLISH, FURNITURE CREAM, AND MOTOR CAR POLISH. RONUK, LIMITED, doing business as Ronuk Sanitary Polish Works, Portslade, near Brighton, England.
Filed February 18, 1931. Serial No. 311,203. PUBLISHED MAY 19, 1931. Class 16.

285,760. PORTLAND CEMENT. KEYSTONE PORTLAND CEMENT COMPANY, Philadelphia, Pa.
Filed February 14, 1931. Serial No. 311,063. PUBLISHED MAY 5, 1931. Class 12.

285,761. CEMENT, PARTICULARLY BUILDING OR HYDRAULIC CEMENTS. EDDYSTONE CEMENT CORP., New York, N. Y.
Filed February 12, 1931. Serial No. 310,977. PUBLISHED MAY 12, 1931. Class 12.

285,762. DRY FIRE BRICK MATERIAL USED FOR PATCHING FURNACE WALLS. NORTH AMERICAN REFRACTORIES COMPANY, Cleveland, Ohio.
Filed January 6, 1931. Serial No. 309,650. PUBLISHED MAY 5, 1931. Class 12.

285,763. PAINTS AND PAINTER'S SIZE. ROBERT MURJAHN, doing business as Deutsche Amphibolin-Werke von Robert Murjahn, Ober Ramstedt, Germany.
Filed January 5, 1931. Serial No. 309,619. PUBLISHED MAY 12, 1931. Class 16.

285,764. HEAT AND COLD INSULATION MATERIAL IN WHICH MINERAL WOOL IS THE MAIN INGREDIENT IN SHEET, GRANULATED, WOOL, AND BRICK FORMS. GENERAL INSULATING & MFG. CO., Alexandria, Ind.
Filed December 29, 1930. Serial No. 309,428. PUBLISHED MAY 19, 1931. Class 12.

285,765. CERTAIN NAMED DENTAL APPLIANCES. BUFFALO DENTAL MANUFACTURING COMPANY, Buffalo, N. Y.
Filed December 30, 1930. Serial No. 309,458. PUBLISHED MAY 12, 1931. Class 44.

285,766. HEAT AND COLD INSULATION MATERIAL IN WHICH MINERAL WOOL IS THE MAIN INGREDIENT IN SHEET, GRANULATED, WOOL, AND BRICK FORMS. GENERAL INSULATING & MFG. CO., Alexandria, Ind.
Filed December 29, 1930. Serial No. 309,427. PUBLISHED MAY 19, 1931. Class 12.

285,767. BOOKLETS. AMERICAN INSTITUTE OF BANKING, New York, N. Y.
Filed March 30, 1931. Serial No. 312,733. PUBLISHED MAY 19, 1931. Class 38.

285,768. SECTION, DEPARTMENT, OR COLUMN OF NEWSPAPERS. PULITZER PUBLISHING COMPANY, St. Louis, Mo.
Filed March 27, 1931. Serial No. 312,625. PUBLISHED MAY 19, 1931. Class 38.

285,769. MEDICINE FOR THE TREATMENT OF IMPURE BLOOD, STOMACH, LIVER, AND BOWEL AILMENTS. JAMES A. CURRENT, doing business as Current Medicine Co., Lorain, Ohio.
Filed March 26, 1931. Serial No. 312,551. PUBLISHED MAY 19, 1931. Class 6.

285,770. PERIODICAL PUBLICATIONS. OHIO STATE AUTOMOBILE ASSOCIATION, Columbus, Ohio.
Filed March 25, 1931. Serial No. 312,526. PUBLISHED MAY 19, 1931. Class 38.

285,771. PAPER PRODUCTS. THE ROYAL LACE PAPER WORKS, INC., Brooklyn, N. Y.
Filed March 24, 1931. Serial No. 312,497. PUBLISHED MAY 19, 1931. Class 37.

285,772. HAIR AND TOILET BRUSHES. EDWARD J. FAY, New York, N. Y.
Filed March 21, 1931. Serial No. 312,368. PUBLISHED MAY 19, 1931. Class 29.

285,773. PHARMACEUTICAL MOUTH WASH. ETON PRODUCTS, INC., Newark, N. J.
Filed March 12, 1931. Serial No. 312,126. PUBLISHED MAY 12, 1931. Class 6.

285,774. ELECTRICAL CONDUIT FITTINGS. CROUSE-HINDS COMPANY, Syracuse, N. Y.
Filed March 30, 1931. Serial No. 312,690. PUBLISHED MAY 12, 1931. Class 21.

285,775. FINGER RINGS AND OTHER ARTICLES OF JEWELRY FOR BERSONAL WEAR, NOT INCLUDING WATCHES. FIFTH AVENUE PLATINUM SHOPS, INC., New York, N. Y.
Filed March 25, 1931. Serial No. 312,514. PUBLISHED MAY 19, 1931. Class 28.

285,776. CLEANING AND BLEACHING DISINFECTANT. EARL R. HARFORD, doing business as Bond Chemical Company, Middletown, N. Y.
Filed April 4, 1931. Serial No. 312,951. PUBLISHED MAY 19, 1931. Class 6.

285,777. GENERAL MEDICINAL TONIC HAVING A WINE BASE. FRANK LOTITO, doing business as West Coast Wine Jelly Co., Los Angeles, Calif.
Filed April 3, 1931. Serial No. 312,923. PUBLISHED MAY 19, 1931. Class 6.

285,778. WELDING FLUX. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed April 2, 1931. Serial No. 312,832. PUBLISHED MAY 19, 1931. Class 6.

285,779. WELDING FLUX. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed April 2, 1931. Serial No. 312,831. PUBLISHED MAY 19, 1931. Class 6.

285,780. FOOT CREAM. CASTEEN CO., INC., Union City, N. J.
Filed April 1, 1931. Serial No. 312,793. PUBLISHED MAY 19, 1931. Class 6.

285,781. MEDICINAL SPRAYS AND INHALANTS FOR THE TREATMENT OF SINUS TROUBLE, HEAD-COLDS, AND CATARRH. JOHN HIGGINS & COMPANY, LTD., Waterford, N. Y.
Filed March 31, 1931. Serial No. 312,782. PUBLISHED MAY 19, 1931. Class 6.

285,782. MEDICINAL TABLETS USED AS AN AID TO INTESTINAL DIGESTION AND FOR TREATING DIABETES MELLITUS. G. S. STODDARD & CO., INC., New York, N. Y.
Filed March 31, 1931. Serial No. 312,779. PUBLISHED MAY 19, 1931. Class 6.

285,783. COMPOUND OF PLANTAGO PSYLLIUM. MUNECH LABORATORIES, INC., New York, N. Y.
Filed March 27, 1931. Serial No. 312,619. PUBLISHED MAY 19, 1931. Class 6.

285,784. PREPARATION FOR KIDNEY DISEASES. RENOTRAT CORPORATION OF AMERICA, New York, N. Y.
Filed March 26, 1931. Serial No. 312,571. PUBLISHED MAY 19, 1931. Class 6.

285,785. MEDICINAL PREPARATION DESIGNED TO BE USED AS A LAXATIVE FOR DOGS. PACIFIC REMEDY CORPORATION, New York and Brooklyn, N. Y.
Filed March 26, 1931. Serial No. 312,570. PUBLISHED MAY 19, 1931. Class 6.

285,786. ANALGESIC AND HYPNOTIC RECOMMENDED AS A SUBSTITUTE FOR OPIATES IN THE RELIEF OF PAINS. G. S. STODDARD & CO., INC., New York, N. Y.
Filed March 31, 1931. Serial No. 312,777. PUBLISHED MAY 12, 1931. Class 6.

285,787. DYES AND DYESTUFFS. GENERAL DYESTUFF CORPORATION, New York, N. Y.
Filed March 26, 1931. Serial No. 312,559. PUBLISHED MAY 12, 1931. Class 6.

285,788. PREPARATIONS AND COMPOUNDS FOR USE AS ACCELERATORS, ANTIOXIDANTS, ANTIFLEXERS, AND AIDS TO VULCANIZATION OF RUBBER AND RUBBER COMPOUNDS. BINNEY & SMITH COMPANY, New York, N. Y.
Filed March 25, 1931. Serial No. 312,508. PUBLISHED MAY 12, 1931. Class 6.

285,789. TISSUE AND CLEANSING CREAM, ROUGE, MUSCLE OIL, ETC. JENNY SELTZER THOMAS, doing business as Jenny Seltzer, Philadelphia, Pa.
Filed March 24, 1931. Serial No. 312,501. PUBLISHED MAY 12, 1931. Class 6.

285,790. PHARMACEUTICAL PREPARATION. ROBET PHAR. CO., NOT INC., Chicago, Ill.
Filed March 23, 1931. Serial No. 312,454. PUBLISHED MAY 12, 1931. Class 6.

285,791. SALVE FOR THE TREATMENT OF COLDS. MILTON-BYRON COMPANY, Dayton, Ohio.
Filed March 23, 1931. Serial No. 312,444. PUBLISHED MAY 12, 1931. Class 6.

285,792. PERFUMES; FACE, TALCUM, AND BATH POWDERS; TOILET WATER, FACE CREAMS, ROUGE, COLOGNE, AND LIPSTICK. EDWARD J. FAY, New York, N. Y.
Filed March 21, 1931. Serial No. 312,369. PUBLISHED MAY 19, 1931. Class 6.

285,793. SOOTHING LOTIONS, SALVE, OR OINTMENT FOR MOUTH GUM IRRITATIONS. HULDA A. VINJE, doing business as Mar-Vel Products Co., Chicago, Ill.
Filed March 18, 1931. Serial No. 312,324. PUBLISHED MAY 19, 1931. Class 6.

285,794. PERFUMES, FACE LOTIONS, FACE POWDER, TALCUM POWDER, SACHETS, FACE CREAMS, BATH SALTS, BRILLIANTINE, LIP ROUGE, AND TOILET WATER. SOCIÉTÉ ANONYME JEAN PATOU, Paris, France.
Filed March 19, 1931. Serial No. 312,316. PUBLISHED MAY 19, 1931. Class 6.

285,795. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. RUSSELL ARTHUR, Chicago, Ill.
Filed May 8, 1930. Serial No. 300,009. PUBLISHED JULY 1, 1930. Class 44.

285,796. LIQUID PREPARATION FOR THE REMOVAL OF SCRATCHES, GREASE, AND DIRT FROM LEATHER AND FOR POLISHING THE SAME. FRANK MEYERS, doing business as The F & M Chemical Co., Los Angeles, Calif.
Filed May 7, 1930. Serial No. 300,080. PUBLISHED JUNE 24, 1930. Class 4.

285,797. LUBRICATING OILS. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif.
Filed April 26, 1930. Serial No. 299,531. PUBLISHED MAY 19, 1931. Class 15.

285,798. MEDICINAL PREPARATION FOR RELIEVING COLDS. UNITED DRUG COMPANY, Boston, Mass.
Filed April 11, 1930. Serial No. 298,730. PUBLISHED JUNE 17, 1930. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

285,799. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FAVREAU & COLLETTE, Spencer, Mass. Filed May 11, 1931. Serial No. 314,405.

MATHIEU'S HEADACHE POWDERS

POUDRES DE MATHIEU

Applicant is the owner of registered Trade-Mark No. 237,305.

For Powders for Simple Headache or Simple Neuralgia.
Claims use since Oct. 9, 1929.

285,800. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo. Filed Apr. 28, 1931. Serial No. 313,927.

HY-KWALTY

For Baby Chick Starter Mash, Growing Mash, Laying Mash, Growing Grains, Crate Fattener Mash, House Fattener Mash, Pigeon Feed; Dairy Concentrate Consisting of Ground Corn and Barley, Bran, Cottonseed Meal, Gluten Meal, Linseed Meal, Soy Bean Meal, Calcium Carbonate, Salt, and Cane Molasses; Dairy Ration, Calf Meal, Pig Meal, Hog Fattener, Horse and Mule Feed, Laying Grains, Baby Chick Grains, Turkey Mash, Polished Cracked Corn, Clipped Rolled Barley, Sweetened Barley, Sweetened Corn, Alfalfa Molasses Feed, and Rabbit Rolled Mix Consisting of the Whole Grains of Wheat, Barley, Oats, and Corn, All Steamed and Rolled with Cottonseed Meal, and Cane Molasses Added.
Claims use since Mar. 1, 1930.

285,801. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) KATTERMANN AND MITCHELL COMPANY, New York, N. Y. Filed July 7, 1930. Serial No. 303,187.

Gloria Gay

For Silk Piece Goods.
Claims use since June 25, 1930.

285,802. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ELDER MFG. CO., St. Louis, Mo. Filed June 12, 1930. Serial No. 302,343.

STA-SHRUNK

For Fabrics of Cotton, Wool, Linen, and Combinations Thereof.
Claims use since May 1, 1930.

285,803. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE HOME OIL BURNER COMPANY, INC., Stratford, Conn. Filed July 17, 1930. Serial No. 303,567.

The Oronoque

For Oil Burners.
Claims use since Apr. 14, 1930.

285,804. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. L. HALMAN, Los Angeles, Calif. Filed Aug. 2, 1930. Serial No. 304,138.

HALMAN'S
ALL-MADE

For Prepared Pancake Flour.
Claims use since June 1, 1930.

285,805. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) S. PFEIFFER MFG. CO., St. Louis, Mo. Filed Nov. 28, 1930. Serial No. 308,387.

BORO-STIK

For Preparation for the Relief of Chapped Lips, Cold Sores, and Fever Sores.
Claims use since Jan. 1, 1925.

285,806. (CLASS 39. CLOTHING.) SAMUEL DORFMAN, Philadelphia, Pa. Filed Dec. 15, 1930. Serial No. 308,982.

FEST FIT STEP-IN SLIP TRADE MARK

For Ladies' Combination Step-In and Slip.
Claims use since July, 1929.

285,807. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) GEORGE MCCONNELL, doing business as The Desmond-Stephan Mfg. Company, Urbana, Ohio. Filed Mar. 28, 1931. Serial No. 312,657.

SHERMAN

For Emery-Wheel Dressers and Cutters.
Claims use since Feb. 1, 1909.

285,808. (CLASS 15. OILS AND GREASES.) FRANK D. PRESCOTT, Franklin, N. H. Filed June 16, 1928. Serial No. 268,171.

OLD PENN

For Lubricating Oils, Illuminating Oils, and Lubricating Greases.
Claims use since May 1, 1928.

285,809. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PHILLIPS PACKING COMPANY, INC., Cambridge, Md. Filed May 1, 1930. Serial No. 299,798.

PHILLIPS' DELICIOUS

For Canned Vegetables, Canned Soups, Canned Pork and Beans, and Canned Spaghetti.
Claims use since 1925.

285,810. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HAHNE & COMPANY, Newark, N. J. Filed Apr. 24, 1930. Serial No. 299,388.

Helen Hale

For Rouge, Lipsticks, Face Powder, Tonic and Lotion for Application to and Treatment of the Skin, Cold Cream, Cleansing Cream, and Shampoo.
Claims use since Jan. 18, 1930.

285,811. (CLASS 12. CONSTRUCTION MATERIALS.) PALMER LIME & CEMENT COMPANY, New York, N. Y. Filed May 2, 1930. Serial No. 299,856.

PALMER

For Lime.
Claims use since January, 1907.

285,812. (CLASS 39. CLOTHING.) ELDER MFG. CO., St. Louis, Mo. Filed June 12, 1930. Serial No. 302,342.

STA-SHRUNK

For Men's and Boys' Dress and Negligee Shirts, Boys' Blouses, and Boys' and Children's Wash and Play Suits.
Claims use since May 1, 1930.

285,813. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ELDER MFG. CO., St. Louis, Mo. Filed June 12, 1930. Serial No. 302,346.

SHUR-SHRUNK

For Fabrics of Cotton, Wool, Linen, and Combinations Thereof.
Claims use since May 1, 1930.

285,814. (CLASS 39. CLOTHING.) ELDER MFG. CO., St. Louis, Mo. Filed June 12, 1930. Serial No. 302,347.

SHUR-SHRUNK

For Men's and Boys' Dress and Negligee Shirts, Boys' Blouses, and Boys' and Children's Wash and Play Suits.
Claims use since May 1, 1930.

285,815. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HARRY ELY, Hampton, Va. Filed June 21, 1930. Serial No. 302,678.

ELY'S

For Bunion and Corn Preparation.
Claims use since May 1, 1930.

285,816. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed July 3, 1930. Serial No. 303,108.

CROYDON
BROADLOOM
FRIEZE

For Textile Carpets.
Claims use since June 17, 1930.

TRADE-MARK REGISTRATIONS RENEWED

36,308. FARM AND GARDEN FORKS. Registered April 23, 1901. WITHINGTON AND COOLEY MFG. CO., Jackson, Mich. Renewed April 23, 1931, to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio, successor.

36,687. CERTAIN NAMED COOPERAGE. Registered July 2, 1901. J. H. HAMLEN AND SON, Portland, Me., a Corporation of Maine. Renewed July 2, 1931.

36,987. PORTLAND CEMENT. Registered August 27, 1901. ATLAS PORTLAND CEMENT CO., New York, N. Y. Renewed August 27, 1931, to Universal Atlas Cement Company, Chicago, Ill., a Corporation of Indiana, assignee by mesne assignments.

37,409. CERTAIN NAMED FELT GOODS. Registered December 3, 1901. THE WESTERN FELT WORKS. Renewed December 3, 1931, to Western Felt Works, Chicago, Ill., a Corporation of Illinois, assignee by mesne assignments.

37,467. WRAPPING AND TOILET PAPER. Registered December 17, 1901. ALBANY PERFORATED WRAPPING PAPER CO. Renewed December 17, 1931, to A. P. W. Paper Company, Inc., Albany, N. Y., a Corporation of New York, by change of name.

37,499. SOAPS AND PERFUMERY. Registered December 24, 1901. COLGATE & CO., New York, N. Y. Renewed December 24, 1931, to Colgate-Palmolive-Peet Company, Chicago, Ill., a Corporation of Delaware, assignee.

82,196. BALLS USED IN BEARINGS. Registered June 13, 1911. ATLAS BALL COMPANY, Merchantville, N. J. Renewed June 13, 1931, to Atlas Ball Company, Philadelphia, Pa., a Corporation of New Jersey.

82,454. STEEL IN BARS, BLOCKS, BLOOMS, AND OTHER SHAPES. Registered June 27, 1911. A. MILNE & Co., New York, N. Y. Renewed June 27, 1931, to Forsbacka Jernverks Aktiebolag, Forsbacka, Sweden, a Corporation of Sweden, assignee.

82,852. SELF-RISING FLOUR. Registered August 1, 1911. AKIN-ERSKINE MILLING COMPANY. Renewed August 1, 1931, to Sterling Products Company, Evansville, Ind., a Corporation of Indiana, assignee.

82,952. BALLS USED IN BEARINGS. Registered August 8, 1911. ATLAS BALL COMPANY, Merchantville, N. J. Renewed August 8, 1931, to Atlas Ball Company, Philadelphia, Pa., a Corporation of New Jersey.

83,125. MAGNIFYING GLASSES AND LENSES. Registered August 22, 1911. AMERICAN OPTICAL COMPANY. Renewed August 22, 1931, to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts, assignee.

83,650. WHEAT-FLOUR. Registered October 3, 1911. HUBBARD MILLING COMPANY, Mankato, Minn., a Corporation of Minnesota. Renewed October 3, 1931.

83,974. CHILDREN'S LEATHER AND CANVAS SHOES. Registered October 24, 1911. S. FREIBURGER & BRO. Renewed October 24, 1931, to S. Freiburger & Bro. Co., Fort Wayne, Ind., a Corporation of Indiana, assignee.

84,043. CERTAIN FOODS. Registered October 31, 1911. CRESCA COMPANY, as assignee of Reiss & Brady. Renewed October 31, 1931, to Cresca Company, Incorporated, New York, N. Y., a Corporation of New York.

84,169. INDIA PAPER. Registered November 14, 1911. JAMES R. CROMPTON & BROTHERS, LIMITED, London and near Bury, England. Renewed November 14, 1931, to James R. Crompton & Brothers, Limited, Bury, England, a Corporation of Great Britain.

84,282. LUBRICATING OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,285. LUBRICATING OILS. Registered November 21, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed November 21, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,379. HOES AND SHOVELS OF METAL. Registered December 12, 1911. THE CHILLINGTON TOOL COMPANY, LIMITED, Wolverhampton, England, a Corporation of Great Britain. Renewed December 12, 1931.

84,686. COFFEE. Registered December 26, 1911. WILLIAM S. SCULL COMPANY, Camden, N. J., a Corporation of New Jersey. Renewed December 26, 1931.

LABELS

REGISTERED AUGUST 4, 1931

39,466.—*Title:* SIGARI ALLEGRA. For Cigars. PETER ALLEGRA, doing business as Allegra Cigar Company, New York, N. Y. Published April 16, 1931.

39,467.—*Title:* SIGARI AVANTI. For Cigars. PETER ALLEGRA, doing business as Allegra Cigar Company, New York, N. Y. Published April 16, 1931.

39,468.—*Title:* CAMPFIRE COCONUT TOASTED, MARSHMALLOWS. For Marshmallows. ANGELUS-CAMPFIRE COMPANY, Chicago, Ill. Published May 7, 1931.

39,469.—*Title:* ZIP! ZOWIE IT POLISHES. For Cleaners and Polishers Used for Nickel, Chromium, Monel, Etc. BARTLETT PRODUCTS, INC., Chicago, Ill. Published March 14, 1931.

39,470.—*Title:* BEECH-NUT BRAND CHEWING GUM, SPEARMINT. For Chewing Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published September 21, 1929.

39,471.—*Title:* ONAIDA TURKISH BEAUTY PREPARATIONS. For Beauty Preparations. OLGA BENOS, doing business as Onaida Turkish Beauty Preparations. Published January 2, 1930.

39,472.—*Title:* WINTERLEIN. For Bacon. BLOOMINGTON PACKING COMPANY, Bloomington, Ind. Published March 24, 1931.

39,473.—*Title:* SACKETT DE-NICOTINED. For Cigars, Cigarettes and Tobaccos. THE BONDED TOBACCO COMPANY, INC., New York, N. Y. Published May 21, 1931.

39,474.—*Title:* BUNTE. For Candy. BUNTE BROTHERS, Chicago, Ill. Published May 21, 1931.

39,475.—*Title:* DRISLANE'S SELECTED FRESH EGGS. For Eggs. W. E. DRISLANE COMPANY, Albany, N. Y. Published March 10, 1931.

39,476.—*Title:* BRITE-KOTE FLOOR PAINT. For Floor Paints. EAGLE PAINT & VARNISH WORKS, INC., Brooklyn, N. Y. Published June 17, 1931.

39,477.—*Title:* FRENLY ENEMA CREAM. For Enema Cream. FRENLY PRODUCTS, INC., New York, N. Y. Published May 16, 1931.

39,478.—*Title:* BERLIN CLUB MALT SYRUP. For Malt Syrup. MAURICE B. FREY, doing business as Berlin Malt Co., New York, Scranton, Pa. Published December 15, 1929.

39,479.—*Title:* BOND BAKERS WHOLE WHEAT BREAD SLICED. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published June 29, 1931.

39,480.—*Title:* OLYMPIC. For Suspenders. IRWIN A. GLICKMAN, doing business as Irwin A. Glickman Company, Los Angeles, Calif. Published February 1, 1930.

39,481.—*Title:* SIMPLY WONDERFUL GLUE. For Glue. S. W. GLUE CO., Portland, Oreg. Published April 24, 1931.

39,482.—*Title:* TASTE HOLDER. For Cigar Holders. ADOLPH H. HEILBRONNER, Butte, Mont. Published April 15, 1931.

39,483.—*Title:* MILK NUT MALLOW. For Candy Bars Made of Marshmallow Containing Nuts, Coated with Milk Chocolate. HERZ-OAKES CANDY CO., St. Louis, Mo. Published March 24, 1931.

39,484.—*Title:* BRAV SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published May 5, 1931.

39,485.—*Title:* QUEEN QUALITY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 23, 1931.

39,486.—*Title:* AMERICAN LASSIE SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 13, 1931.

39,487.—*Title:* SPORTSTER. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 6, 1931.

39,488.—*Title:* DR. GREENE'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 16, 1931.

39,489.—*Title:* UNITED. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published May 25, 1931.

39,490.—*Title:* SPERLING SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 11, 1931.

39,491.—*Title:* CAMILLA. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published May 25, 1931.

39,492.—*Title:* STEINBERG'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 12, 1931.

39,493.—*Title:* GENUINE REPTILE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 4, 1931.

39,494.—*Title:* ACE-HI SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 10, 1931.

39,495.—*Title:* FANCY WAXED PAPER. For Waxed Paper. KALAMAZOO VEGETABLE PARCHMENT COMPANY, Parchment, Mich. Published February 1, 1931.

39,496.—*Title:* KISKY READY MIXED BISCUIT FLOUR. For Prepared Flour. KISKY MILLING COMPANY, Portland, Oreg. Published May 27, 1931.

39,497.—*Title:* KNOX JELL. For Gelatine Dessert. CHARLES B. KNOX GELATINE COMPANY INCORPORATED, Johnstown, N. Y. Published June 4, 1931.

39,498.—*Title:* LIQUID SOLDER. For Liquid Soldering Preparation. H. W. LAMB, doing business as Agneau Laboratories, Vineland, N. J. Published May 21, 1931.

39,499.—*Title:* SNOWHITE. For Bread Loaves. THE W. E. LONG CO., Chicago, Ill. Published March 1, 1931.

39,500.—*Title:* E. H. LOOSE'S CALIFORNIA SELECTED SUN DRIED FRUITS. For Sun Dried Fruits. E. H. LOOSE, Los Angeles, Calif. Published March 19, 1931.

39,501.—*Title:* EASTSIDE LIME RICKEY MAKES THE PARTY. For a Carbonated Beverage. LOS ANGELES BREWING CO., Los Angeles, Calif. Published April 20, 1931.

39,502.—*Title:* MONDAY'S. For Bread. MCGAVIN'S BREAD, INC., Denver, Colo. Published April 3, 1931.

39,503.—*Title:* MCKESSON'S YODORA. For Delicate Deodorant Cream. MCKESSON & ROBBINS, INCORPORATED, Fairfield, Conn. Published December 1, 1930.

39,504.—*Title:* SLEEPYTOWN, "NIGHTWEAR". For Nightwear. MORGAN-FAIRFIELD MANUFACTURING CO. INC., Fairfield, Ill. Published March 28, 1931.

39,505.—*Title:* PABCOTITE. For Waterproof Layer or Sheet for Building Construction. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Published August 7, 1931.

39,506.—*Title:* BAMBY BUN JUNIORS. For Buns. THE H. PIPER COMPANY, Chicago, Ill. Published March 27, 1931.

39,507.—*Title:* KNOXAGE. For Skin Cream. S. EARL REECE, Baltimore, Md. Published March 4, 1931.

39,508.—*Title:* DENTOL. For Antiseptic. SCHAFER-HILLIARD CHEMICAL CO., Raleigh, N. C. Published March 13, 1931.

39,509.—*Title:* WALDORF. For Paper Towels. SCOTT PAPER COMPANY, Chester, Pa. Published April 24, 1931.

39,510.—*Title:* SCOT TOWELS. For Paper Towels in Roll Form. SCOTT PAPER COMPANY, Chester, Pa. Published May 19, 1931.

39,511.—*Title:* ROYAL. For Chocolate Flavor Pudding. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 3, 1931.

39,512.—*Title:* CHASE AND SANBORN'S SEAL BRAND GREEN TEA. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 12, 1931.

39,513.—*Title:* ROYAL RASPBERRY FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 8, 1931.

39,514.—*Title:* ROYAL CHERRY FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 8, 1931.

39,515.—*Title:* ROYAL LEMON FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 8, 1931.

39,516.—*Title:* ROYAL STRAWBERRY FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 8, 1931.

39,517.—*Title:* ROYAL ORANGE FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 8, 1931.

39,518.—*Title:* ROYAL LIME FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 8, 1931.

39,519.—*Title:* FLEISCHMANN'S PHOS-FO-LAC. For Phosphate and Lactate Mixture Suitable for Use with Sodium Bicarbonate for the Same Purposes as Baking Powder. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 5, 1931.

39,520.—*Title:* SUNAIRE VITALIZED SCALP TONIC. For Scalp Tonic. SUNAIRE COMPANY, Los Angeles, Calif. Published April 14, 1931.

39,521.—*Title:* TISSUE PAPER MANUFACTURERS ASSOCIATION. For Paper. TISSUE PAPER MANUFACTURERS ASSOCIATION, New York, N. Y. Published April 3, 1931.

39,522.—*Title:* VAGO-KLENZ. For Antiseptic Toilet Powders. CHARLES E. WINN, doing business as Vago-Klenz Company, Utica, N. Y. Published August 2, 1930.

PRINTS

REGISTERED AUGUST 4, 1931

13,318.—*Title:* THE ABCO. For Golf Handicap Boards, Bulletin Boards, Building Directories, and Statistical Boards, Etc. THE ABCO, New York, N. Y. Published April 6, 1931.

13,319.—*Title:* HAPPY DAYS ARE HERE AGAIN. For Anti-Brown-Spot Ointment and Ardena Skin Tonic. ELIZABETH ARDEN INC., New York, N. Y. Published April 1, 1931.

13,320.—*Title:* ALL SIMPLICITY IS GREAT. For Amoretta Cream, Creme de France, Lilie Lotion, Etc. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published May 28, 1931.

13,321.—*Title:* ZARIFA. For Preparation for Treating Dandruff and Falling Hair. PAULINE L. DIVER, New York, N. Y. Published March 4, 1931.

13,322.—*Title:* IT'S THE CORE THAT MAKES THE DOOR. For Veneered Doors. FARLEY & LOETSCHER MFG. CO., Dubuque, Iowa. Published April 21, 1931.

13,323.—*Title:* ENEMAS. For Nozzle or Pipe for Attachment to Fountain Syringe and One Bottle of Enema Cream for Mixture in Fountain Syringes. FRENLY PRODUCTS, INC., New York, N. Y. Published May 28, 1931.

13,324.—*Title:* THE THRILL IN EVERY PICNIC—ETC. For Peanut Butter, Apple Butter, Sandwich Relish, Etc. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published June 21, 1931.

13,325.—*Title:* DESKITS. For Bran Food. KELLOGG COMPANY, Battle Creek, Mich. Published June 17, 1931.

13,326.—*Title:* MISION MODEL "C" DUPLEX DISPENSER AUTOMATIC MIXING & ICING WITH SPECTACULAR LIGHTING M2. For Beverage Dispensers. MISION DRY CORPORATION, LTD. Published March 16, 1931.

13,327.—*Title:* CHOCOLATE SODA. For Ice Cream Sodas. NATIONAL DAIRY & FOOD BUREAU, Chicago, Ill. Published March 7, 1931.

13,328.—*Title:* FROZEN DRUMSTICK. For Ice Cream Product Consisting of an Ice Cream Cone Dipped in Candy Coating, Etc. I C PARKER, Fort Worth, Tex. Published April 18, 1931.

13,329.—*Title:* DIC-A-DOO. For Paint Cleaners. THE PATENT CEREALS CO., Geneva, N. Y. Published April 1, 1931.

13,330.—*Title:* RADIARN. For Spun Rayon. PUTNAM SPINNERS, INC., Putnam, Conn. Published April 13, 1931.

13,331.—*Title:* LOW POINT SALE. For Misses' Dinner-Dance Ensemble, Junior Misses' Sport Frocks, Women's Silk Crepe Coats, Etc. JOHN WANAMAKER, New York, N. Y. Published May 25, 1931.

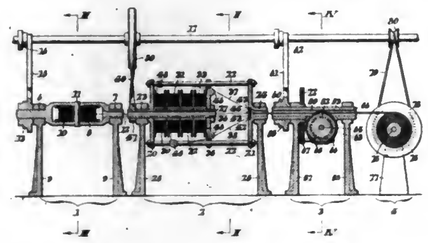
13,332.—*Title:* LOW POINT NOW. For "Farmington" Universal Silver Plate, Hand Bags, Real Stone Jewelry, Cool Linen Frocks, Etc. JOHN WANAMAKER NEW YORK, New York, N. Y. Published May 26, 1931.

13,333.—*Title:* LOW POINT NOW. For Silk Crepe. JOHN WANAMAKER NEW YORK, New York, N. Y. Published June 1, 1931.

REISSUES

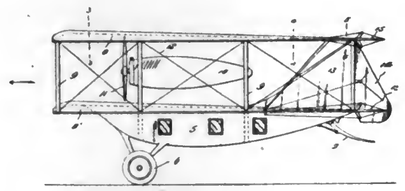
AUGUST 4, 1931

18,142. MECHANISM AND PROCESS FOR FABRICATING FLEXIBLE SHAFTING. ROBERT C. ANGELL, Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Original No. 1,671,951, dated May 29, 1928, Serial No. 730,740, filed Aug. 7, 1924. Application for reissue filed Feb. 5, 1930. Serial No. 426,171. 21 Claims. (Cl. 117—20.)



13. In a machine of the class described, the combination with means arranged to dispense a core, of means arranged to form helical convolutions about said core, means for progressing the product longitudinally and contemporaneously rotating said pocket about the axis of its core, and a talk-up for the product thus formed, cooperative with said progressing means, to untwist said fabricated product.

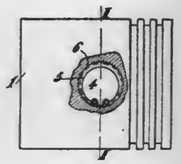
18,143. AEROPLANE. ELMER L. CROZIER, Birmingham, Ala. Original No. 1,471,327, dated Oct. 23, 1923, Serial No. 654,580, filed July 30, 1923. Application for reissue filed May 29, 1931. Serial No. 541,056. 3 Claims. (Cl. 244—14.)



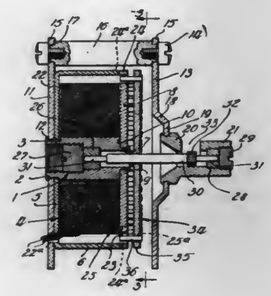
1. An aeroplane comprising a fuselage having at least one plane of elongated form extending longitudinally thereof, an engine operatively carrying a propeller, said plane being of upwardly curved form in cross section to provide a longitudinal recess at the under side thereof, said recess being of major depth at the forward end of the plane and gradually tapering shallower toward the rear end of the plane.

18,144. WRIST-PIN CONSTRUCTION. HUGO HEIERMANN, Frankfort-on-the-Main, Germany. Original No. 1,758,515, dated May 13, 1930, Serial No. 251,681, filed Feb. 3, 1928, and in Germany Feb. 4, 1927. Application for reissue filed May 9, 1931. Serial No. 536,280. 3 Claims. (Cl. 74—108.)

1. In combination, a hollow piston having spaced and aligned bearings, a wrist-pin located in said bearings, said wrist-pin being restrained from longitudinal play by spring rings located adjacent the ends thereof and being held against movement relative to said wrist-pin in a direction parallel to its longitudinal axis, each of said spring rings tapering and diminishing in thickness towards the end portions thereof, said end portions being separate from each other and having enlarged heads.



18,145. MOTOR. FREDERICK C. HOLTZ, Springfield, Ill., assignor to Sangamo Electric Co., Springfield, Ill., a Corporation of Illinois. Original No. 1,747,870, dated Feb. 18, 1930, Serial No. 365,857, filed May 25, 1929. Application for reissue filed Nov. 15, 1930. Serial No. 496,028. 21 Claims. (Cl. 172—275.)

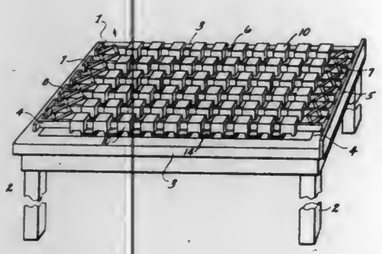


10. In an electric motor of the character described, a rotor comprising a disc of non-magnetic material, and a collar set into the disc and provided with a plurality of axially projecting magnetic elements.

12. In an electric motor of the character described, a stator element comprising two discs of magnetic material and a third disc of non-magnetic material of high electrical conductivity secured between the two magnetic discs.

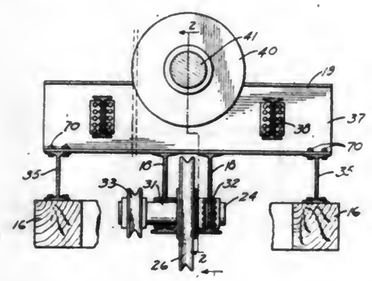
15. In an electric motor of the character described, a stator comprising, a core, a cup-shaped casing member secured to the core and having close magnetic coupling therewith, and a disc member of magnetic material disposed adjacent the other end of the casing member, said disc member having close magnetic coupling with the core, the core and the casing member being of magnetic material, a coil disposed about the core and within the casing member with one end adjacent the head thereof, one of said members being provided with projections extending toward and spaced from the other member, and a rotor provided with elements disposed outwardly of and adjacent said other member to be acted upon by the magnetic flux incident to energizing of the coil by an alternating current for rotating said rotor.

18,146. FABRIC FORMING MACHINE. ZENE R. MAULSBY and JOHN R. MAULSBY, Everett, Wash. Original No. 1,733,353, dated Oct. 29, 1929, Serial No. 58,354, filed Sept. 24, 1924. Application for reissue filed Feb. 24, 1930. Serial No. 431,038. 4 Claims. (Cl. 223—52.)



1. In a fabric forming machine of the character described, a frame, a bed of fabric shaping elements mounted in the frame and movable from and toward each other, both lengthwise and transversely of the frame and spaced from each other, and over which a fabric piece may be spread, means associated therewith for drawing the said fabric piece about all sides of said shaping elements except their mounting surfaces, incident to their bearing moved together, thereby to cause the fabric to conform to the shape of the elements.

18,147. CROWN BLOCK. EDWIN O. BENNETT, Ponca City, Okla., assignor, by direct and mesne assignments, of one-half to Emsco Derrick & Equipment Company, a Corporation of California, and one-half to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Original No. 1,673,346, dated June 12, 1928, Serial No. 679,917, filed Dec. 11, 1923. Application for reissue filed Jan. 2, 1929. Serial No. 329,858. 5 Claims. (Cl. 254—190.)



1. In a crown block construction for oil derricks, the combination of: a pillow block; a pair of lower sheaves mounted to rotate about different axes in said pillow block; a pair of brackets extending upward from said pillow block; and a plurality of upper sheaves mounted to rotate between said brackets about a single axis disposed substantially at right angles to the axes of said lower sheaves.

DESIGNS

AUGUST 4, 1931

84,774. TEAPOT OR SIMILAR ARTICLE. LUCIEN ANDUZE, Limoges, France, assignor to Herman C. Kupper, Inc., New York, N. Y., a Corporation of New York. Filed June 6, 1931. Serial No. 40,099. Term of patent 7 years.



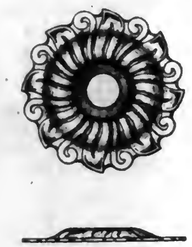
The ornamental design for a teapot or similar article as shown.

84,775. TUMBLER. EDWARD E. BARTLETT, Sapulpa, Okla. Filed June 18, 1931. Serial No. 40,257. Term of patent 14 years.



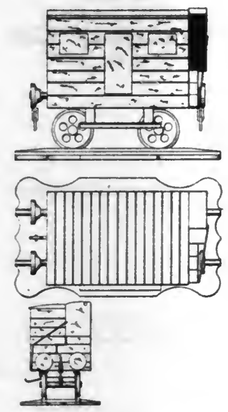
The ornamental design for a tumbler, substantially as shown.

84,776. MIRROR ORNAMENT. EDWARD BURTON, Rockford, Ill., assignor to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed May 15, 1931. Serial No. 39,860. Term of patent 7 years.



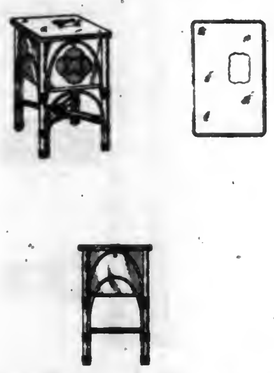
The ornamental design for a mirror ornament as shown.

84,777. CIGARETTE DISPENSER. LEMUEL D. CONROY, Whipple, Calif. Filed May 1, 1931. Serial No. 39,683. Term of patent 3½ years.



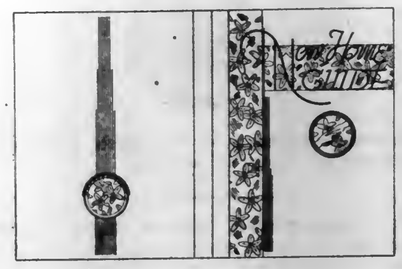
The ornamental design for a cigarette dispenser substantially as shown.

84,778. RADIO CABINET. FRANCIS J. FOLEY, Norwood, Mass. Filed June 2, 1931. Serial No. 40,058. Term of patent 3½ years.



The ornamental design for a radio cabinet as shown.

84,779. BOOK COVER. ABILIO MARIA DE SILVA GREAVES, New York, N. Y. Filed Mar. 9, 1931. Serial No. 39,002. Term of patent 7 years.



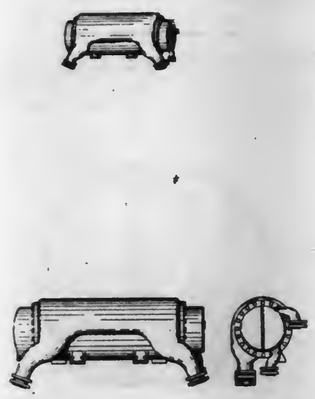
The ornamental design for a book cover, as shown.

84,780. DENTAL LIGHTING FIXTURE. JASPER HANSEN, Decatur, Ill., assignor to Faries Manufacturing Company, Decatur, Ill., a Corporation of Illinois. Filed May 25, 1931. Serial No. 39,961. Term of patent 14 years.



The ornamental design for a dental lighting fixture, as shown and described.

84,781. FEED-WATER HEATER. CHARLES R. HARDY, Mount Vernon, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Jan. 10, 1931. Serial No. 38,265. Term of patent 14 years.



The ornamental design for a feed-water heater, as shown.

84,782. PLAQUETTE. OTTO J. HLAVATY, Chicago, Ill. Filed Aug. 21, 1930. Serial No. 36,727. Term of patent 14 years.



The ornamental design for a plaquette or like object, substantially as shown and described.

84,783. LACE EDGING. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed June 1, 1931. Serial No. 40,040. Term of patent 3½ years.



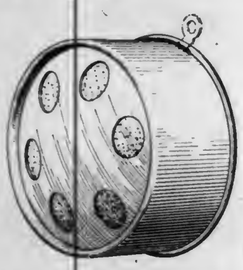
The ornamental design for lace edging substantially as shown and described.

84,784. LACE EDGING. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed June 5, 1931. Serial No. 40,093. Term of patent 3½ years.



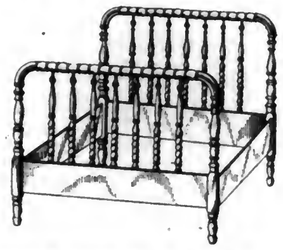
The ornamental design for lace edging substantially as shown and described.

84,785. VAPORIZER. MELVILLE KEIM, Chicago, Ill., assignor to Apex Products Corp., Chicago, Ill., a Corporation of Illinois. Filed Dec. 9, 1929. Serial No. 33,715. Term of patent 14 years.



The ornamental design for a vaporizer as shown and described.

84,786. BED OR SIMILAR ARTICLE. THOMAS G. KINDEL, Grand Rapids, Mich., assignor to Kindel Furniture Company, a Corporation of Michigan. Filed Nov. 5, 1930. Serial No. 37,547. Term of patent 3½ years.



The ornamental design for a bed or similar article, as shown.

84,787. COSTUME JEWELRY CLASP. MORRIS LUCOMLIN, New York, N. Y. Filed Oct. 22, 1930. Serial No. 37,344. Term of patent 3½ years.

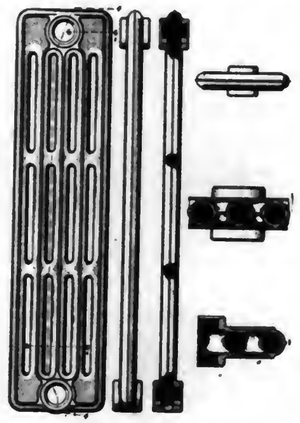






The ornamental design for a costume jewelry clasp as shown.

84,788. RADIATOR SECTION. ANDRÉ M. MERTZANOFF, New York, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 8, 1927. Serial No. 20,653. Term of patent 14 years.



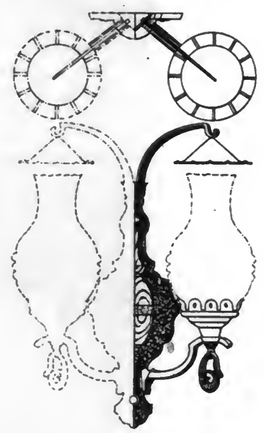
The ornamental design for a radiator section, as shown.

84,789. COMBINED DOME LIGHT AND SPEECH TRANSMISSION DEVICE. JOHN J. MCCARTHY, Malden, Mass. Filed May 2, 1930. Serial No. 35,476. Term of patent 14 years.



The ornamental design for a combined dome light and speech transmission device, as shown.

84,790. WALL BRACKET ELECTRIC LIGHTING FIXTURE. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products, Buffalo, N. Y., a Corporation of New York. Filed Mar. 17, 1931. Serial No. 39,125. Term of patent 3½ years.



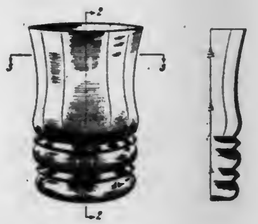
The ornamental design for a wall bracket electric lighting fixture, substantially as shown and described.

84,791. COMBINATION TOBACCO ASH RECEPTACLE AND CIGARETTE SNUFFER. STANLEY L. MOODY, Des Moines, and WARREN M. LOUCKS, Valley Junction, Iowa. Filed Apr. 16, 1931. Serial No. 39,510. Term of patent 7 years.



The ornamental design for a combination tobacco ash receptacle and cigarette snuffer, as shown.

84,792. GLASS TUMBLER OR ARTICLE OF SIMILAR NATURE. ALBERT H. NICHOLSON, Columbus, Ohio, assignor to The Federal Glass Company, Columbus, Ohio, a Corporation of Ohio. Filed May 13, 1931. Serial No. 39,822. Term of patent 14 years.



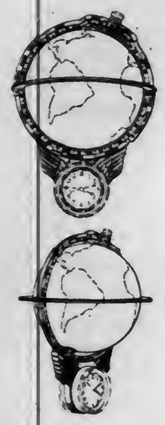
The ornamental design for a glass tumbler or article of similar nature, as shown.

84,793. FLOWERPOT. MAX SCHLINO, Scarsdale, N. Y. Filed Oct. 29, 1930. Serial No. 37,431. Term of patent 3½ years.



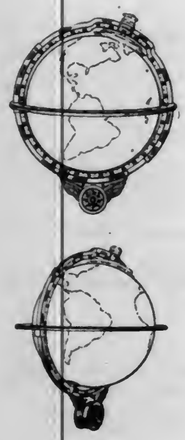
The ornamental design for a flower pot, as shown and described.

84,794. TERRESTRIAL GLOBE FRAME AND CLOCK CASING. HERMAN E. SCHULSE, Wilmington, Del., assignor to Uniclox Corporation, a Corporation of Delaware. Filed Apr. 11, 1931. Serial No. 39,448. Term of patent 14 years.



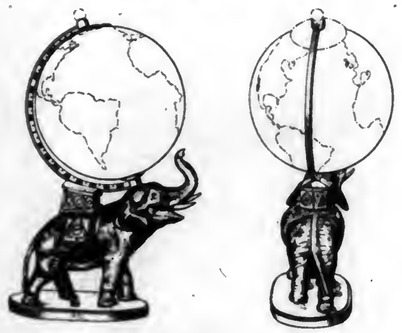
The ornamental design for a terrestrial globe frame and clock casing as shown.

84,795. TERRESTRIAL GLOBE FRAME. HERMAN E. SCHULSE, Wilmington, Del., assignor to Uniclox Corporation, a Corporation of Delaware. Filed Apr. 11, 1931. Serial No. 39,449. Term of patent 14 years.



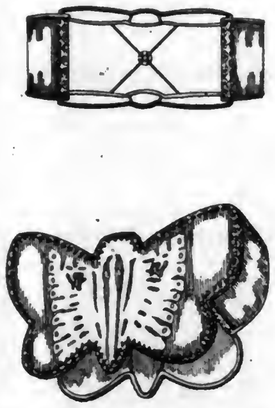
The ornamental design for a terrestrial globe frame as shown.

84,796. COMBINED TERRESTRIAL GLOBE FRAME AND SUPPORT THEREFOR. HERMAN E. SCHULSE, Wilmington, Del., assignor to Uniclox Corporation, a Corporation of Delaware. Filed Apr. 11, 1931. Serial No. 39,451. Term of patent 3½ years.



The ornamental design for a combined terrestrial globe frame and support therefor as shown.

84,797. LAMP SHADE. LESTER S. SEELIG, New Orleans, La. Filed May 22, 1931. Serial No. 39,933. Term of patent 7 years.



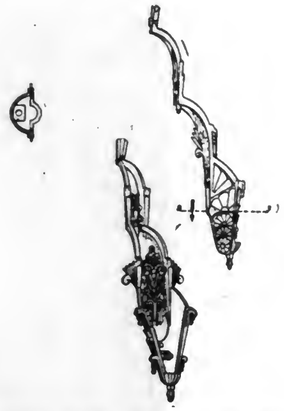
The ornamental design for a lamp shade as shown.

84,798. SHOE ORNAMENT. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. C. King & Co., Inc., Providence, R. I. Filed June 3, 1931. Serial No. 40,060. Term of patent 3½ years.



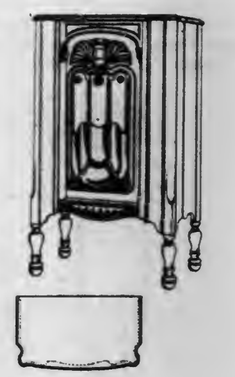
The ornamental design for a shoe ornament as shown.

84,799. BRACE FOR LIGHTING FIXTURES. VICTOR WILLIAMS, Kansas City, Mo., assignor to The Mid-West Chandelier Company, Kansas City, Mo., a Corporation of Missouri. Filed Feb. 24, 1931. Serial No. 38,795. Term of patent 3½ years.



The ornamental design for a brace for lighting fixtures, as shown.

84,800. RADIOCABINET OR THE LIKE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 2, 1931. Serial No. 39,349. Term of patent 3½ years.

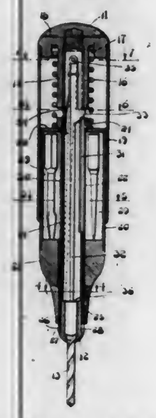


The ornamental design for a radio cabinet or the like, as shown.

PATENTS

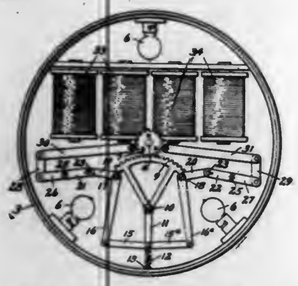
GRANTED AUGUST 4, 1931

1,816,812. COMBINATION TOOL. FLETCHER D. ALLISON, Columbus, Ohio. Filed Sept. 2, 1930. Serial No. 479,266. 6 Claims. (Cl. 145—63.)



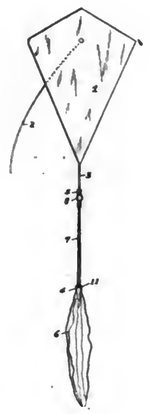
1. A combination tool comprising a hollow handle, a bit magazine mounted for reciprocatory movement in the handle, a tube within the magazine and mounted to permit movement of the magazine thereon, and a bar in the tube adapted to function to release tool bits from the magazine upon reciprocatory movement of the magazine.

1,816,813. TRAFFIC SIGNAL FOR MOTOR VEHICLES. ANGELOS D. ANGELIDES, Santa Barbara, Calif. Filed Dec. 22, 1922. Serial No. 608,478. 2 Claims. (Cl. 177—337.)



1. In a traffic signal for motor vehicles a shell having a cylindrical wall, a flat back and an open front, a pair of electromagnets having their operative poles mounted in substantially a horizontal plane, a shaft mounted in the said wall below the electromagnets and centrally positioned in relation to such magnets, a pinion fixed on the shaft, a single indicator connected to the pinion, a gear sector mounted on a pivot below the shaft, such sector meshing with the pinion, a radial arm rigid with the sector extending in the opposite direction from the pivot, a retractile spring connecting the outer end of the arm to the shell, armatures mounted on pivots adjacent the shaft and extending in opposite directions therefrom, such armatures being positioned in relation to the poles of the magnets to be actuated thereby, and an interlinking mechanism between the armatures and the radial arm to operate the arm on operating movement of the armatures and hence rotate the sector, the pinion, the shaft and the indicator.

1,816,814. KITE PARACHUTE. MILFORD ATER, Chillicothe, Ohio. Filed Apr. 10, 1930. Serial No. 443,069. 3 Claims. (Cl. 244—24.)



1. The combination with an elevating element, of a parachute including an air bag and a plurality of holding strings, a connecting member being secured to said holding strings and having a releasable attachment with said elevating element, a balance weight carried by said connecting member for turning and maintaining said parachute in its descending position in the air when released from said elevating element, and means mounted on said holding strings and engaging said air bag for securing the latter in the collapsed position while ascending, said means being shiftable on said holding strings for releasing said air bag to permit the opening and inflation of the latter while descending.

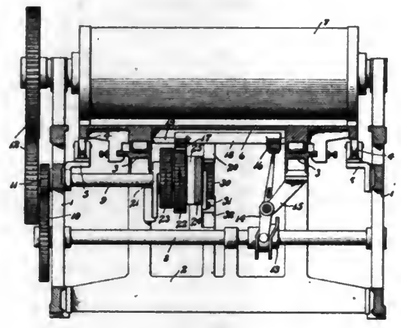
1,816,815. DOUBLE ENVELOPE. CHRISTOPHER F. BACKMYER, Chicago, Ill., assignor to Magill-Weinsheimer Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 11, 1928. Serial No. 245,824. 4 Claims. (Cl. 229—72.)



1. An envelope formed from a blank, there being a flap formed on said blank projecting laterally therefrom and

shaped to be folded thereacross, a second flap, shaped to be folded across said blank, a portion of said blank shaped to be folded upon itself and to contact and overlap the edges of said flaps, said last mentioned portion provided with extended edges positioned to be folded about said blank, a second portion of said blank positioned and shaped to be folded upon and across the upper edges of said flaps to close them, said first mentioned flap forming with the blank and the first mentioned folded portion of the blank, a pocket, and said two flaps forming together a pocket of substantially less depth than said first mentioned pocket.

1,816,816. PRINTING PRESS BED MOVEMENT. FREEMAN BARNEY, Grand Haven, Mich., assignor to Challenge Machinery Company, Grand Haven, Mich., a Corporation of Michigan. Filed Jan. 3, 1928. Serial No. 244,137. 7 Claims. (Cl. 74—98.)



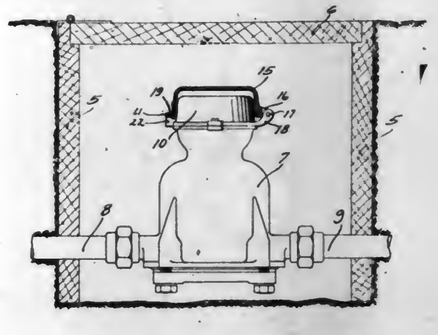
1. In a construction of the class described, a supporting frame, a horizontal table mounted thereon for reciprocatory movements, a driven shaft, a gear mounted thereon, a second gear loosely mounted over said shaft alongside said first gear, the upper sides of said gears lying in the same horizontal plane, means for driving said gears at the same peripheral speed but in opposite directions, a rack movably mounted on the lower side of said table, means for shifting said rack into two different positions in alinement respectively with said gears, said shifting of the rack occurring substantially at the ends of the movement of the table in each direction, a slidably mounted beam, a pinion rotatably mounted at each end of the beam, short racks connected onto and depending from each end of the table in the same vertical plane with said pinions, additional racks at each end of the support below and engaging with said pinions, and means connecting said beam with the first of said gears whereby said beam is reciprocated on rotation of the gears.

1,816,817. THERAPEUTIC COMPOSITION. STANLEY BIALOS, San Francisco, Calif. Filed Sept. 13, 1927. Serial No. 219,369. 5 Claims. (Cl. 167—56.)

1. A therapeutic composition comprising a homogeneous and stable mixture of mineral oil and concentrated prune juice.

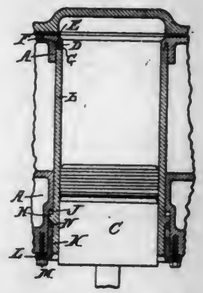
1,816,818. WATER METER COVER. NORMAN H. ABRAMS, Waco, Tex., assignor to Badger Meter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 30, 1929. Serial No. 396,235. 3 Claims. (Cl. 235—1.)

3. The combination with a housing including an upwardly projecting gear case having an upwardly exposed transparent face, of a cap hinged to said gear case and comprising a member in the form of an inverted cup extending downwardly about said gear case to a point adjacent the bottom thereof, the hinged connection between said case and cap including an offset pintle, and



the extent of projection of said cap below the face of said case being adapted to exclude water therefrom by the pressure of air entrapped within the cap.

1,816,819. CYLINDER OF INTERNAL COMBUSTION ENGINES. HERBERT AUSTIN, Bromsgrove, England. Filed Aug. 28, 1928, Serial No. 302,465, and in Great Britain Sept. 20, 1927. 3 Claims. (Cl. 123—173.)

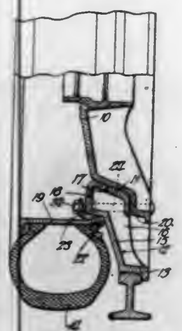


1. A cylinder for an internal combustion engine comprising a liner which is put in from the lower end of the cylinder, an annular abutment at the top of the liner, a packing, an internal shoulder at the top of the cylinder against which said annular abutment bears through the medium of said packing, a screw device at the bottom of said cylinder, through the agency of which device said liner is pressed up without rotation against said packing, and means for packing the lower end of said liner in the cylinder.

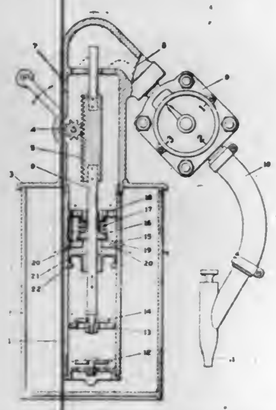
1,816,820. VEHICLE WHEEL. LINTON G. BARTLETT, Chicago, Ill., assignor to William L. O'Connell, Chicago, Ill. Filed Jan. 8, 1930. Serial No. 419,270. 14 Claims. (Cl. 295—8.5.)

1. A vehicle wheel for road and rail travel comprising in combination, a wheel body having a seating surface, a removable rail wheel seated against said surface, said

rail wheel having a seat for a tire rim, and a tire rim seated against said seat, said wheel body having a seat corresponding to that on said rail body to receive said tire rim, whereby said rim may be seated against the latter seat in the event of removal of said rail wheel.



1,816,821. LIQUID PUMP. ROBERT S. BASSETT, Buffalo, N. Y. Filed Dec. 13, 1930. Serial No. 502,138. 7 Claims. (Cl. 221—95.)

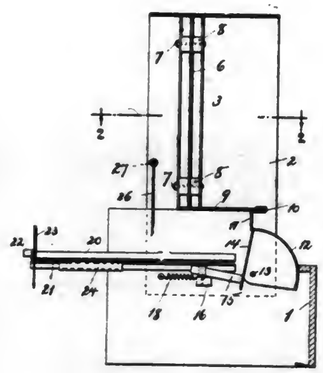


1. In a liquid pump of the measuring type; a liquid operated meter; a pump inlet opening; a main delivery opening leading to the liquid operated meter; a liquid circulating device between said openings; a flow retarding check valve between said liquid circulating device and said main delivery opening; and a gas discharge opening between said check valve and said liquid circulating device, substantially as and for the purpose described.

1,816,822. METHOD OF MAKING FLOOR COVERINGS. HARRY A. BELL, Chicago, Ill., assignor to The Mechanical Rubber Company, Chicago, Ill., a Corporation of New Jersey. Filed June 15, 1927. Serial No. 199,136. 2 Claims. (Cl. 18—58.8.)

1. The method of manufacturing flooring which comprises grinding vulcanized rubber composition into lumps, intermixing unvulcanized rubber composition with a quantity of the differently colored lumps of the vulcanized rubber composition to form a conglomerate mass containing vulcanized rubber composition dispersed through the unvulcanized rubber composition, sheeting the mass, semi-curing the sheet, abrading away the surface of the sheet, and completing the vulcanization of the sheet under pressure.

1,816,823. BURGLARPROOF ARRANGEMENT FOR THE PROTECTION OF BANK CLERKS. CARL B. BORMANN, Westwood, N. J. Filed July 1, 1930. Serial No. 465,155. 4 Claims. (Cl. 20—1.01.)



1. In combination with a bank-clerk's window, a movable guard pivotally mounted in front of the window and provided with an arm, a spring-controlled means normally engaging said arm to thereby hold said guard in raised position, a movable tray having a slot disposed to engage said arm, and a cam on the bottom of said tray adapted to engage said spring-controlled means so as to release said arm permitting said movable guard to be moved to its lowered position.

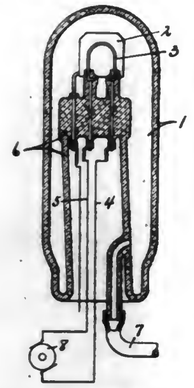
1,816,824. CURTAIN FIXTURE. MATTHEW J. BRUNNER, Buffalo, N. Y. Filed May 14, 1930. Serial No. 452,209. 4 Claims. (Cl. 156—22.)



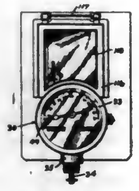
4. A bracket for curtain rods, comprising an attaching base, and a longitudinally slotted arm projecting from said base, one of the resulting arm-portions defined by the slot being detached from the base and being yieldingly movable toward and from the companion arm-portion to constitute a latching element, said first-named arm-portion having a locking tooth thereon and a finger piece for shifting such arm-portion from an engaged to a released position.

1,816,825. AEO LIGHT. THEODORE WILLARD CASE, Auburn, N. Y., assignor to Case Research Laboratory Incorporated, Auburn, N. Y., a Corporation of New York. Filed May 28, 1927. Serial No. 195,129. 13 Claims. (Cl. 176—126.)

11. In the process of producing a glow lamp comprising coating an electrode with an alkaline earth metal, inserting said electrode and a second electrode in a bulb connecting said coated electrode in circuit with a source of direct current potential and allowing current to flow for a period of time, then connecting a high voltage source of alternating current between the two electrodes and allowing alternating current to flow through the tube while a high vacuum is maintained until the characteristic spectrum of the electrode coating material is observed between the electrodes.

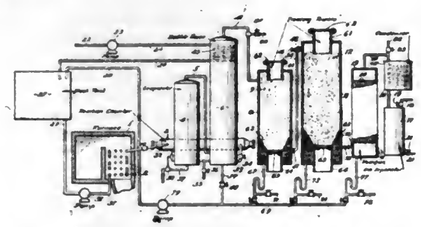


1,816,826. RECORDING SPEEDOMETER. ERNEST COOPER and ALONZO S. PIPER, Riverside, Calif. Filed Apr. 12, 1926. Serial No. 101,281. 5 Claims. (Cl. 234—1.)



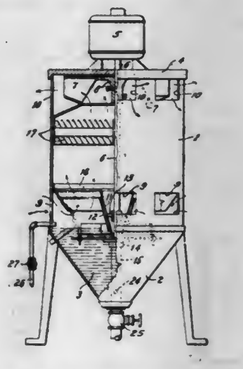
1. In a device of the class described, a casing, a speed recording marker, a strip of paper, said marker normally engaging said strip, a pair of spaced plates on which said paper is mounted, a lever pivoted within said casing, means on said lever for engaging said marker, and means on said plate for engaging said lever to lift said marker when the plates and the paper thereon are being inserted in, or removed from, the casing.

1,816,827. APPARATUS FOR TREATING HYDROCARBONS. ROY CROSS, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed Jan. 20, 1926, Serial No. 82,465. Divided and this application filed Apr. 5, 1926. Serial No. 99,838. 6 Claims. (Cl. 196—27.)



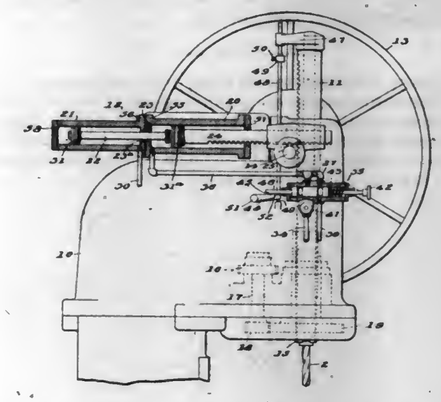
1. An apparatus for treating oil, comprising a cracking unit including heating tubes and a reaction chamber, connected evaporator and reflux towers in communication with the chamber, a plurality of treating towers, one of said towers being charged with solid desulphurising material and another of said towers being charged with solid adsorptive material means to conduct gases and vapors from the reflux tower serially through the treating towers, a rectifier connected to the treating towers, and means to recover the treated vapors as a liquid condensate.

1,816,828. AIR WASHING APPARATUS. SAMUEL C. CUTLER, Murray Hill, N. J. Filed Oct. 22, 1926. Serial No. 143,389. 9 Claims. (Cl. 261—91.)



1. In a device of the character described, a sump, a rotary pumping element adapted to dip into said sump, and means within said sump and surrounding the lower end of said pumping element for restraining the imparting of rotation to the water of said sump by said pumping element, said means comprising a fixed supporting plate, a dam spaced from said plate, and means for varying the position of the plate within the sump.

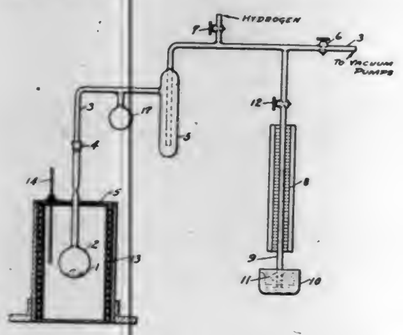
1,816,829. HYDRAULIC UPRIGHT DRILL. ADOLPH L. DE LEEUW, Plainfield, N. J. Filed Dec. 4, 1926. Serial No. 152,681. 8 Claims. (Cl. 77—32.)



1. In a machine tool, a rotatable spindle; piston means for translating said spindle; pressure fluid means connected to act constantly on said piston means to urge it in one direction; a second fluid pressure means for moving said piston means in the opposite direction; and control means for the latter comprising a slide valve, a projection from one end thereof for moving said valve manually whereby the second fluid pressure means moves said piston means against the pressure of said first fluid pressure means,

elastic means for resisting the manual movement of said valve, a projection extending from the opposite end of said valve, latch mechanism for engaging said projection to lock it in the manually moved position; and means operated by the spindle for releasing said latch mechanism whereby the valve is moved to allow the exhaust of the second fluid pressure means thereby permitting the first fluid pressure means to operate said piston means.

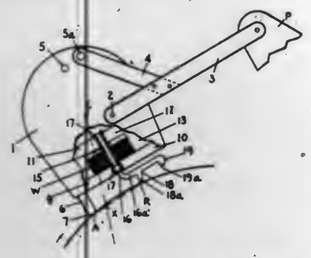
1,816,830. PREPARATION OF METAL HYDRIDES. FRANK H. DRIGGS, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania: Filed Nov. 25, 1929. Serial No. 409,442. 8 Claims. (Cl. 23—204.)



1. The method of preparing uranium hydride which comprises heating uranium metal powder in a hydrogen atmosphere to temperatures in excess of about 225° C. maintaining at the temperature of heating a pressure of hydrogen in excess of the dissociation pressure of uranium hydride at that temperature.

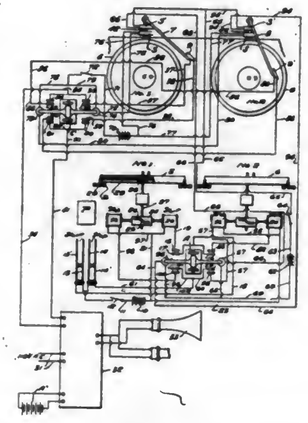
4. The method of preparing metal hydrides from metal powders which comprises enclosing the metal powder in a container, evacuating the container, degasifying the metal powder, introducing an atmosphere of hydrogen into the container and heating the metal powder to elevated temperatures to effect the formation of the metal hydride compound, maintaining the hydrogen pressure in excess of the equilibrium pressure of said metal hydride compound at the temperature of said heating.

1,816,831. COMBINED ELECTRICAL RECORDER AND REPRODUCER FOR PHONOGRAPHS. ORVILLE M. DUNNING, Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed July 10, 1930. Serial No. 466,902. 9 Claims. (Cl. 179—100.41.)



1. A combined electrical sound recorder and reproducer unit comprising, in combination, a frame, a recording stylus carried by said frame, a reproducing stylus carried by said frame, reversible means for converting electric currents into mechanical vibrations associated with said styli, an advance ball mounted on said frame, and means for selectively supporting said unit in different positions on a record, in one of which said advance ball and said recording stylus engage said record, and in the other said reproducing stylus only engages said record.

1,816,832. SYNCHRONIZED PHOTOGRAPHY AND SOUND RECORDING AND REPRODUCING. CHARLES W. EBELING, New York, N. Y., assignor to Harrison W. Rogers, Incorporated, a Corporation of Delaware. Filed Nov. 26, 1927. Serial No. 235,857. 10 Claims. (Cl. 88—16.2.)



1. The combination with two film-controlled switches, an electrical sound amplifying circuit and two sound reproducing machines for operation one at a time, of two electrically operated means in circuit with and under the control of said film controlled switches for selectively starting and stopping said sound reproducing machines and means controlled by either of said sound reproducing machines for selecting the film controlled switches for controlling the operation of the other machine.

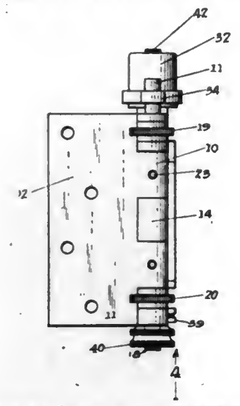
1,816,833. TIE FOR REENFORCING RODS. EDWARD EHLERS, Rockaway, N. J. Filed Nov. 25, 1929. Serial No. 409,501. 2 Claims. (Cl. 72—122.)



1. In combination a pair of intersecting concrete reenforcing rods and a tie therefor comprising, a loop extending around a portion of one of said rods and acting to directly press said rod against the second of said rods, shanks formed on said loop and terminating adjacent a side of said second rod, oppositely extending leg portions of unequal lengths formed on said shanks and hooks provided at the ends of said leg portions and partially surrounding said second rod and urging the same toward the first of said rods.

1,816,834. DOOR HINGE AND CHECK. JOSÉ M. EVA, San Francisco, Calif. Filed Nov. 3, 1930. Serial No. 492,977. 5 Claims. (Cl. 16—50.)

1. A combined door hinge and check of the class described comprising, a hinge member and a fixed check member associated with the hinge member, pintles for both members gear connected together, a spring surrounding the check member pintle and adapted to act to normally close the door, and frictional check members carried by the upper end of the check spindle and adapted to normally check the return movement of the door against the spring urge.

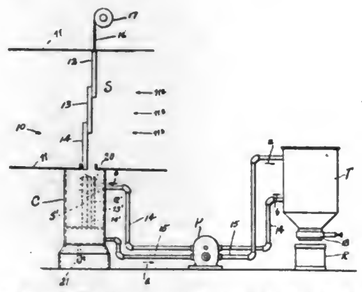


1,816,835. CARTON AND CARTON OPENER. PAUL E. FISCHER, Milwaukee, Wis. Filed Aug. 18, 1930. Serial No. 476,006. 4 Claims. (Cl. 229—51.)



1. A carton opener comprising a sheet of frangible material corresponding in over-all dimensions to the carton wall to be opened and provided with means defining a transverse line of frangibility upon which the end of said sheet may be broken off when lifted slightly, so as to provide a quick snap action to the broken end and facilitate the opening of an overlying carton wall.

1,816,836. PROCESS FOR CLEANING AND COATING AIR FILTERS. CHARLES H. GAGEN, New York, N. Y., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Apr. 21, 1927. Serial No. 185,644. 6 Claims. (Cl. 183—52.)



1. An apparatus for cleaning and recoating air filters, comprising a collapsible air filter, a receptacle for said filter when in a collapsed position, means to fill said receptacle with a bath of a suitable liquid, means to collapse said filter into said bath and to again remove it from said receptacle into operative position.

1,816,837. PROCESS OF FINISHING CADMIUM PLATED GOODS. CARL A. GANSER, Hartford, Conn. Filed Mar. 14, 1930. Serial No. 435,968. 11 Claims. (Cl. 148—8.)

1. The method of giving a lustrous surface finish to cadmium plated goods which consists in the withdrawal of said plated goods from the electrolytic bath and, before any perceptible change takes place in the surface of the cadmium plate from its condition while in the electrolytic bath, subjecting said surface to the action of an extremely dilute aqueous solution of an oxidizing acid.

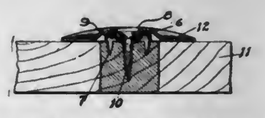
1,816,838. PROTECTIVE SYSTEM. FRAZER W. GAY, Newark, N. J. Filed Oct. 2, 1929. Serial No. 396,658. 8 Claims. (Cl. 175—30.)



3. In an electrical apparatus, the combination with a winding, of a second winding in inductive relation to said first named winding, said second winding providing an inductance path for high frequency currents and acting by magnetic induction to supply voltage to said first named winding for maintaining a substantially uniform rate of increase of voltage in all portions of said first named winding.

6. In an electrical apparatus, the combination with a core, of a winding of many turns having a multiplicity of sections on said core, a surge winding of few turns having sections corresponding to and in surrounding inductive relation to the sections of said winding of many turns, capacitors connected in series with the ends of said surge winding, said capacitors and surge winding being connected in multiple with said winding of many turns, and conductive means electrically connecting said windings, said conductive means causing each of said capacitors to absorb substantially one half of the normal operating voltage of said winding of many turns.

1,816,839. FLOOR MARKER. JAMES S. GEORGE, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 2, 1929. Serial No. 396,635. 4 Claims. (Cl. 94—1.5.)



2. In a floor marker, and in combination, an anchoring element having a plurality of prongs capacitated to be

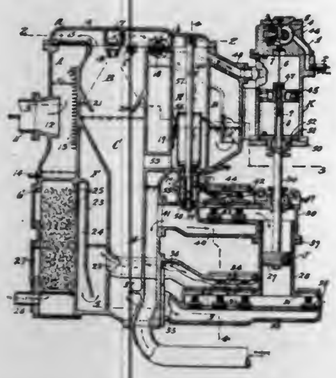
driven into a floor, a domed head for marking association with the floor, said head having a plurality of radial ribs on its under side for engagement with the floor, and means for centering the head with respect to the anchoring element and for holding it to the floor.

1,816,840. METHOD OF TREATING USED BURLAP BAGS. GEORGE I. GOLDWYN, Chicago, Ill. Filed Apr. 14, 1930. Serial No. 443,940. 1 Claim. (Cl. 2—275.)



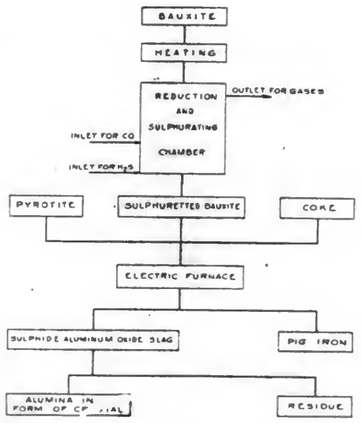
The method of treating used bags of burlap and the like which consists in turning the bag inside out, thereby exposing margin portions above and below the body fabric layers of the bag, the frayed edges of said margin portions extending inwardly and also exposing the line of stitching which passes through the two margin portions and the two body layers to secure them together, in forming a line of overcast stitching with the interconnecting loops thereof passing through both margin portions and both layers of the bag fabric in a plane between the first mentioned line of stitching and said frayed edges and with the other loops of the overcast stitching passing around the folds of said margin and body fabric and crossing the first mentioned line of stitching and, subsequent to turning the bag inside out, removing the frayed edges of the margins.

1,816,841. FEED WATER HEATER. JOHN F. GRACE, Kearny, N. J., assignor to Worthington Pump and Machinery Corporation, a Corporation of Virginia. Filed Aug. 20, 1920. Serial No. 404,933. 18 Claims. (Cl. 261—34.)



1. In a feed water heating apparatus, the combination with a heating chamber and a storage chamber of pumping means comprising a supply pump portion and a feed water pump portion for delivering relatively fixed quantities of water to and from the heater, a float chamber in communication with the storage chamber and arranged separate from and at one side of the storage chamber, a connection between the float chamber and the supply pump portion of the pumping means, a bucket float controlling the inlet to said connection to conduct the excess water due to steam condensation to the supply pump portion of the pumping means, and means for maintaining a supply of water in the bucket float for closure of the inlet to said connection during normal flow through the heater.

1,816,842. PROCESS FOR REFINING ORES OR PRODUCTS CONTAINING ALUMINUM OXIDE. TURE ROBERT HAGLUND, Stockholm, Sweden, assignor to International Patent Corporation, a Corporation of Maryland. Filed May 18, 1925, Serial No. 31,211, and in Sweden June 2, 1924. 13 Claims. (Cl. 23—142.)



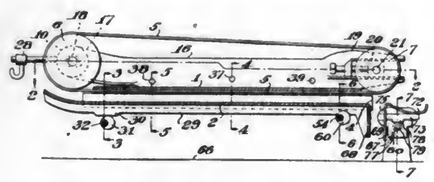
1. The process of refining ores or products containing aluminum oxide, which comprises converting impurities of oxide of iron into sulphides of iron by treating said material, before fusing, in a heated condition in a reducing atmosphere with a gaseous sulphurating agent, and fusing the treated material together with a reducing agent.

1,816,843. METHOD FOR PREPARING ALKALI METAL ALCOHOLATES. PAUL HALBIG and FELIX KAUFLER, Munich, Germany, assignors to Dr. Alexander Wacker Gesellschaft fur Elektrochemische Industrie G. m. b. H., Munich, Germany. Filed Sept. 14, 1929, Serial No. 392,737, and in Germany Nov. 21, 1928. 10 Claims. (Cl. 260—156.)

1. Method of preparing alkali metal alcoholates from alkali metal hydroxides, comprising reacting an alkali metal hydroxide with an excess of an alcohol and distilling off the water formed by the reaction and the excess alcohol at a temperature materially above the atmospheric boiling point of said alcohol.

9. Method of preparing alkali metal alcoholates comprising suspending an alkali metal hydroxide in a high boiling point oil and passing an excess of an alcohol vapor through said oil held at a temperature materially above the atmospheric boiling point of said alcohol.

1,816,844. DOUGH MOLDING MACHINE. LAURENCE SEYMOUR HARBER, Peterborough, England, assignor to Baker Perkins Company, Incorporated, Saginaw, Mich., a Corporation of New York. Filed June 1, 1927. Serial No. 195,742. 17 Claims. (Cl. 107—9.)



1. A dough molding machine having in combination, a pressure plate, a belt running across said plate, a second pressure plate between which and the belt the dough is rolled, means for yieldingly pressing said plates toward each other, means by which the distance of said plates from each other may be adjusted at the ends of said plates at which the dough enters, and adjustable stop means for limiting definitely the movement of the discharge end of one of said plates toward the other plate.

1,816,845. MANUFACTURE OF ORGANIC CHLORIDES. EARLE ATHERTON HARDING, La Salle, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Co., New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1924. Serial No. 759,106. 11 Claims. (Cl. 260—162.)

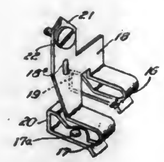
1. The process of producing ethyl chloride comprising reacting ethyl alcohol, water and ferric chloride in proportions by weight of about 16 to 11 to 73 respectively.

1,816,846. ELECTRICAL CONNECTER. WILLIAM H. HARVEY, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 21, 1930. Serial No. 454,497. 1 Claim. (Cl. 200—51.)



A tool for making test connection to winding terminals of relays comprising a mounting block, a member arranged for movement in said block, means carried by said member for engagement with the terminals of said relay, means carried by said block for engagement with the spoolhead of said relay, a spring tensioned by the movement of said block with respect to said member for holding the tool in position on the relay and switch means actuated by the movement of said member.

1,816,847. ATTACHMENT PLUG RECEPTACLE. LEMUEL M. HAUSMANN, Highland Park, and JULES A. WIDMER, Detroit, Mich., assignors to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 29, 1921. Serial No. 525,786. 6 Claims. (Cl. 173—330.)

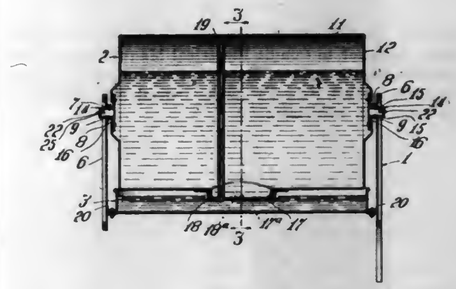


1. In an attachment plug receptacle, upper and lower insulating body portions, and terminal-receiving members embraced between said portions, said body portions being recessed to hold said members in operative position solely by the clamping action of said body portions, and said terminal receiving members being provided with supplemental spring portions to take up the play between said body portions.

1,816,848. PROCESS FOR THE PRODUCTION OF THIOCYANO DERIVATIVES. EDWARD LESLIE HELWIG, Bristol Township, Bucks County, Pa. Filed Oct. 3, 1929. Serial No. 397,163. 29 Claims. (Cl. 204—9.)

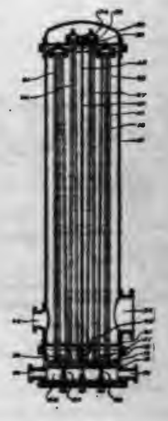
1. A process for the production of thiocyano derivatives of organic compounds which comprises mixing the compound whose derivative is desired with a substance capable of yielding thiocyanogen ions and electrolyzing the mixture.

1,816,849. DRINKING FOUNTAIN FOR POULTRY. ADOLPH R. HOEFT, Evanston, Ill., assignor to Hoeft & Company, Inc., North Chicago, Ill., a Corporation of Illinois. Filed Aug. 13, 1928. Serial No. 299,145. 5 Claims. (Cl. 119—77.)



1. A drinking fountain embodying therein end members, a drinking pan supported thereby, a reservoir above the pan having a filling neck, a cap operatively connected to said neck, a coacting means on said end members and reservoir respectively providing a bearing for the reservoir, which coacting means include trunnions and bearing openings therefor having engaging flat sides and removable means extending through said trunnions and arranged to engage the outer face of the top ends of said end members to prevent displacement of said trunnions in said openings and the spreading apart of said top ends of said end members.

1,816,850. HEAT EXCHANGE APPARATUS. NORMAN L. HURD, Brooklyn, N. Y., assignor to C. H. Leach Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1930. Serial No. 468,266. 3 Claims. (Cl. 257—223.)



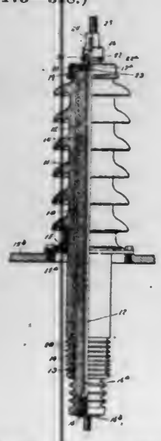
1. Heat exchange apparatus comprising a series of tubes divided into bundles, means for fixedly supporting all of

the tubes at one end, a head connected to the opposite end of each tube bundle in staggered relationship, a shell surrounding all of the bundles, a partition extending longitudinally of the bundles between adjacent heads, and means for connecting the partition to the shell to permit withdrawal of the shell and connected partition.

1,816,851. AGE RESISTING VULCANIZED RUBBER COMPOUND. JOSEPH R. INGRAM, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 15, 1930. Serial No. 444,609. 15 Claims. (Cl. 18—50.)

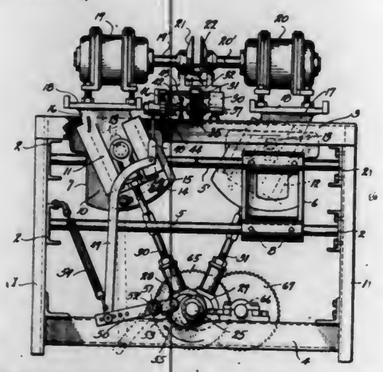
1. A process of treating rubber which comprises heating rubber and sulfur in the presence of an anti-oxidant comprising a reaction product of an amino diphenyl and an aryl hydroxide.

1,816,852. INSULATOR. GUSTAV JANSSON, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 23, 1926. Serial No. 89,888. 7 Claims. (Cl. 173—318.)



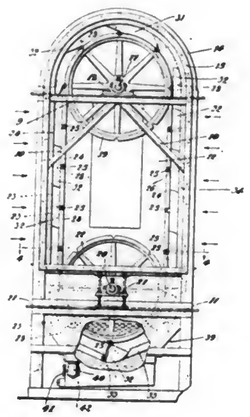
1. In an insulator, the combination of two concentric insulating tubes having an annular space between them, and a loose granular filler of insulating material contained in said annular space.

1,816,853. WOOD PATCH MAKING MACHINE. AMES R. JAYNE, Tacoma, Wash., assignor to Globe Machine Manufacturing Company, a Corporation of Washington. Filed July 23, 1930. Serial No. 470,120. 11 Claims. (Cl. 144—2.)



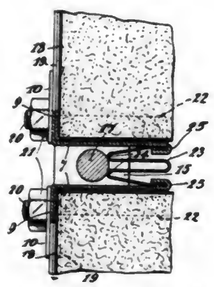
3. A patch cutting machine comprising means for supporting and guiding a strip from which patches are to be cut, a pair of circular cupped saws facing in opposite directions and disposed axially in a direction transversely with respect to the strip guiding means, means for driving the saws, means for alternately moving the saws to engage the strip to form arcuate intersecting cuts therein whereby the patches are defined and severed from the strip, and means for intermittently advancing the strip in accordance with action from the saws.

1,816,854. FILTER APPARATUS. ANDERS JORDAHL, New York, N. Y., assignor to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed May 6, 1926. Serial No. 107,118. 13 Claims. (Cl. 183—63.)



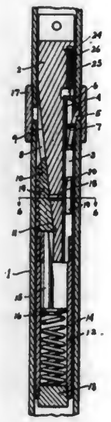
1. In filter apparatus, a series of filter medium containing cells and means connecting the cells for movement as a unit, said cells having opposite open sides for the ingress and egress of air, and barrier means preventing the passage of air laterally around the respective filter cells.

1,816,855. FILTER APPARATUS. ANDERS JORDAHL, New York, N. Y., assignor to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed June 12, 1926. Serial No. 115,501. 18 Claims. (Cl. 183—63.)



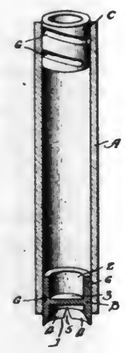
1. In filter apparatus, a series of rectangular frames, means linking said frames together for relative angular movement, a filter medium containing cell for each frame, and means for demountably securing said cells in the respective frames with each marginal portion of the cell in supported contact with a part of the frame.

1,816,856. WHIPSTOCK. FRANK KINZBACH, Houston, and HARVE M. WHEELER, Humble, Tex. Filed Oct. 27, 1928, Serial No. 315,378. Renewed Feb. 6, 1931. 6 Claims. (Cl. 255—1.)



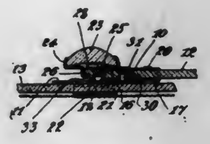
1. The combination with a whip stock adapted to be inserted into a pipe in a well bore, of means adapted to engage the pipe to anchor the whip stock against downward movement in the pipe, said means comprising a yieldably mounted pipe engaging jaw, releasable means for locking said jaw in inactive position out of engagement with the pipe, a slidably mounted dog anchor, a dog adapted to engage an inside shoulder in said pipe and hold said anchor stationary upon upward movement of the whip stock said anchor forming an abutment effective to engage and trip said releasing means upon further upward movement of the whip stock.

1,816,857. SYRINGE CARTRIDGE. IRVING KULIK, Brooklyn, N. Y., assignor to Cook Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 14, 1927. Serial No. 168,169. 2 Claims. (Cl. 128—218.)



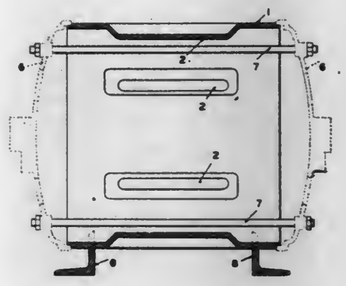
1. A syringe cartridge comprising a sealed liquid containing tube embodying a stopper to be pierced by a needle or canula fitted in the fore end of the tube, the cartridge being constructed to have its interior volume reduced for ejecting the liquid through the needle, said stopper having a notched tubular protrusion beyond the fore end of the tube adapted to be bent over the end of the tube to cushion the same when the cartridge is employed in a syringe instrument.

1,816,858. FASTENING DEVICE. HARRY LEBERMAN, New York, N. Y., assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed Sept. 24, 1929. Serial No. 394,813. 7 Claims. (Cl. 24—201.)



7. A fastening device for the purpose set forth, comprising a first plate, a second plate placeable flatwise on the first plate and having a free edge portion, a projection on the contacting face of one of the plates engaging a recess in the contacting face of the other plate for preventing flatwise shifting of the plates, a rail on the first plate extending along a line parallel to and into a position in front of said free edge portion when the plates are engaged to prevent flatwise shifting thereof, and a button slidable along the rail and having a lateral part for engaging over the outer face of said free edge portion whereby to secure the plates together against lateral separation one outwardly from the other.

1,816,859. DYNAMO ELECTRIC MACHINE. HARRY P. LINDENS, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Feb. 20, 1930. Serial No. 429,864. 7 Claims. (Cl. 171—252.)

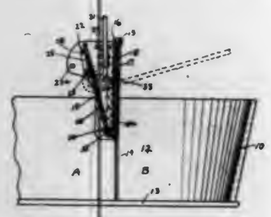


3. A dynamo electric machine comprising a stator member and a one-piece sheet metal casing member surrounding the peripheral portion of the stator member and provided with integral inwardly depressed stator supporting portions.

1,816,860. METAL PICKLING PROCESS. GEORGE L. MAGOUN and DEAL H. TOMPKINS, Nitro, W. Va., assignors to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 6, 1930. Serial No. 493,907. 24 Claims. (Cl. 148—8.)

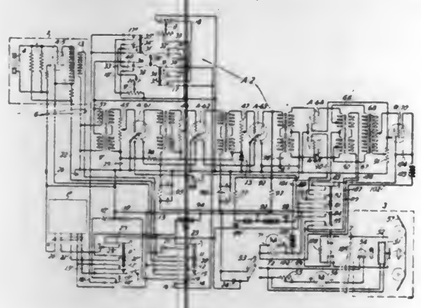
1. A process of pickling a metal which comprises subjecting the metal to be pickled to the action of a substantially non-oxidizing mineral acid solution containing a small proportion of an acid derivative of a reaction product of a thiourea and an aldehyde-ammonia.

1,816,861. MOP WRINGING APPARATUS. PETER N. MANCUSO, Hollywood, Calif. Filed Oct. 16, 1928. Serial No. 312,924. 2 Claims. (Cl. 15—261.)



1. In a device as described the combination of a fixed perforated wall, a movable perforated wall pivoted contiguous to the lowermost end of the fixed wall, a spring normally holding the movable wall in open position, parallel side walls flanking the edges of the movable wall, a shaft journaled in the side walls, a plurality of pushers secured upon said shaft, rollers journaled in the pushers bearing at all times upon the movable wall, cranks on said shaft pointing in a direction counter to the pushers, and operating levers connected to the cranks, and a cross rod connected to said operating levers.

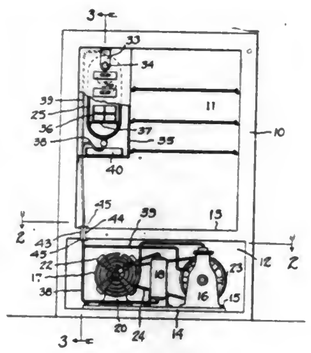
1,816,862. AMPLIFYING SYSTEM. ROBERT A. MILLER, Plainfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 2, 1930. Serial No. 440,887. 7 Claims. (Cl. 179—100.3.)



7. A system comprising a light-valve having a light-valve string, a vacuum tube for feeding said light-valve string, and switching means operable to sequentially short circuit said light-valve string and deenergize said vacuum tube.

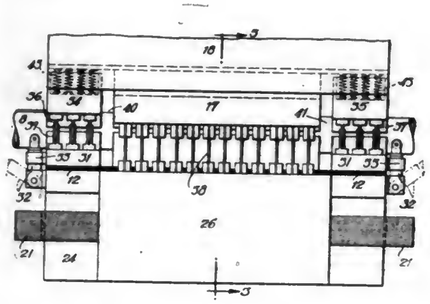
1,816,863. REFRIGERATOR CONSTRUCTION. GLENN MUFFLY, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed June 3, 1927. Serial No. 196,164. 4 Claims. (Cl. 62—116.)

1. In a refrigerator, a pair of chambers provided with an insulating wall therebetween, a compressor element and a receiver element in one of said chambers, a cooling element in the other of said chambers, a notch in an exposed edge of said wall, an unbroken pipe connecting said receiver element to said cooling element, an unbroken pipe



connecting said cooling element to said compressor element, said pipes passing through said notch, and a removable filler block received within said notch closely embracing said pipes.

1,816,864. WELDING METHOD AND APPARATUS. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor to Metropolitan Engineering Company, a Corporation of New York. Filed May 29, 1929. Serial No. 366,833. 14 Claims. (Cl. 219—6.)

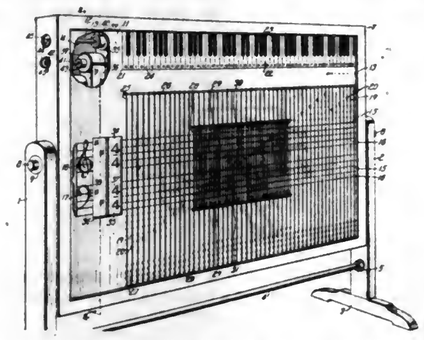


12. Apparatus for electrically butt welding which comprises a pair of welding electrodes means for compressing the edge portions of a hollow article into abutment between said electrodes, an electrode spaced from an end of said welding electrodes, and means for connecting a source of electric energy alternatively between said welding electrodes and said spaced electrodes and between the individual electrodes of said pair of welding electrodes.

1,816,865. MUSIC INSTRUCTION BOARD. BERTHA M. NEWTON, Sapulpa, Okla. Filed Apr. 2, 1930. Serial No. 441,045. 14 Claims. (Cl. 84—472.)

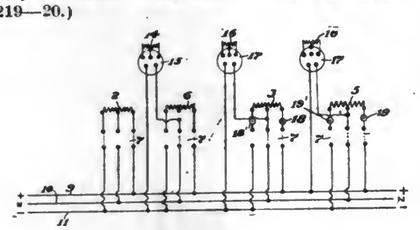
7. In apparatus of the character described, a panel or the like bearing a representation of a keyboard and a musical staff, said lines of the staff being in transverse relation with the keys of the board, said panel having a sight opening intersecting the staff, guides crossing the staff lines and aligning with said keys, notes on the guides

adapted to be moved into relative position with the staff lines, ribbons cooperating with the opening and carrying



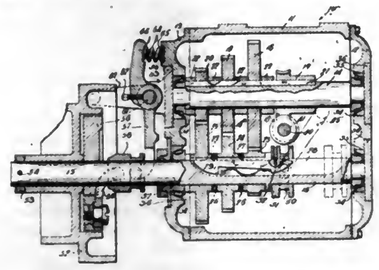
respectively time and key signatures, and means for moving the ribbons across said opening to selectively align signatures with the staff.

1,816,866. ELECTRIC RANGE. RALPH J. PATTERSON, Boston, Mass., assignor to Walker & Pratt Mfg. Co., Boston, Mass., a Corporation of Massachusetts. Filed July 10, 1929. Serial No. 377,259. 5 Claims. (Cl. 219—20.)



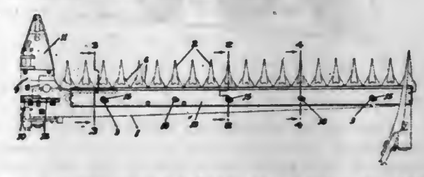
1. In an electric range, the combination of an electric heating unit, a three wire supply circuit, a load balancing switch, connections whereby said switch is operable to control the flow of current from said supply circuit through said unit to produce either a high or low heat, as desired, a second electrical unit, and connections for enabling said switch to control the flow of current through said second unit, said connections including conductors leading from the neutral wire of said circuit through the switch to said second unit.

1,816,867. REDUCTION-GEAR CHANGE-SPEED UNIT. FREDERICK T. POTTER, Newton, Mass., assignor to Stark Tool Company, Waltham, Mass., a Corporation of Massachusetts. Filed July 19, 1929. Serial No. 379,410. 2 Claims. (Cl. 74—59.)



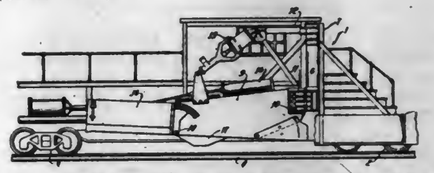
2. In a device of the class described, the combination of a casing comprising a shell and removable end plates therefor, bearings mounted in the end plates, cover plates for the bearings, substantially parallel shafts mounted in the bearings, change-speed gearing mounted on the substantially parallel shafts, other bearings in the sides of the shell, a drive shaft mounted in said other bearings and disposed transversely between the substantially parallel shafts, reduction gearing between the drive shaft and one of the substantially parallel shafts, and an actuating member slidable along the other of the latter shafts past the drive shaft for effecting a change in speed of said other shaft, thereby providing an accessible and yet compact, nested arrangement of parts.

1,816,868. MOWER CONSTRUCTION. BERNARD PRIVAT, Stockton, Calif. Filed Sept. 15, 1928. Serial No. 306,177. 2 Claims. (Cl. 56—298.)



1. In a mower having a finger bar, a sickle bar slidably cooperating therewith, knives mounted on the sickle bar, and a knife-head secured to and projecting beyond one end of the sickle bar; a knife-head cap mounted in connection with the finger bar and engaging the rear side edge of the head and having a longitudinal flange overhanging the head, said flange being cut away from its end adjacent the sickle bar to an extent sufficient to clear the outer end of the head when the sickle bar is shifted longitudinally a predetermined distance beyond its normal limit of operation whereby said head may then be tilted upwardly along its rear edge and moved rearwardly clear of the cap, and removable means mounted on the finger bar and normally engaging the knives.

1,816,869. RAILROAD SPREADER. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Dec. 18, 1929. Serial No. 414,892. 5 Claims. (Cl. 37—105.)



1. A railroad spreader embodying therein a car, a spreader wing operatively connected thereto and having a cut away portion at its inner bottom corner, and a member pivoted to said wing adjacent said cut away corner and swingably adjustable in the plane of the wing to define the ballast breast forming edge for said wing at said corner.

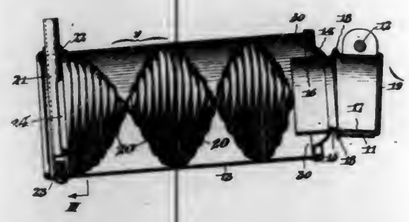
1,816,870. CHAPLET. CHARLES H. REEDER, St. Louis, Mo., assignor to Reeder Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed June 3, 1929. Serial No. 367,865. 9 Claims. (Cl. 22—184.)



1. A chaplet comprising a top member, a bottom member, and a connecting member extending from said bottom mem-

ber to one edge of said top member, said edge being provided with a vent opening for the discharge of gases from the chaplet.

1,816,871. AIR CLEANER. JOSEPH P. REMINGTON, Philadelphia, Pa. Filed Sept. 22, 1927. Serial No. 221,255. 7 Claims. (Cl. 183—90.)

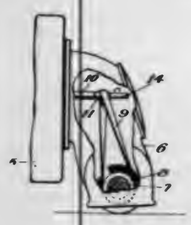


1. An air cleaner comprising a cylinder having an adapter attachment at one end with an inlet for diametrical discharge of oily vapor thereacross at the other end, a spiral insert in the cylinder defining a comparatively extensive corrugate-surface over which the air to be cleansed—as well as the oily vapor—must flow, and means whereby the vapor inlet is connectable into a source producing such oily vapor.

1,816,872. PROCESS OF REFINING LUBRICATING OILS. WIRT D. RIAL, Watson, Calif. Filed Feb. 13, 1929. Serial No. 339,738. 2 Claims. (Cl. 196—41.)

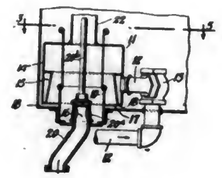
1. That step in the process of refining lubricating oil stocks, comprising, separating by vacuum distillation a lubricating oil stock from an asphalt or mixed base crude petroleum oil, continuously and immediately with the exclusion of air condensing and re-distilling the lubricating oil stock as produced, continuously condensing the re-distilled lubricating oil stock with the exclusion of air and immediately treating the same in liquid phase with a water solution of potassium hydroxide in the presence of steam to separate the oxidizable constituents therefrom.

1,816,873. VACUUM CLEANER. PATRICK H. ROBINSON, Waterbury, Conn., assignor to Hamilton Beach Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 19, 1929. Serial No. 400,806. 2 Claims. (Cl. 15—8.)



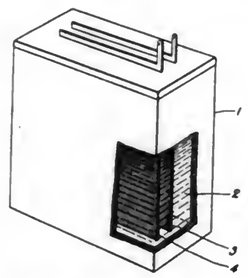
1. In a vacuum-cleaner having a suction nozzle, a brush carrying shaft rotatably mounted in the suction nozzle parallel with the mouth of the nozzle, a drive shaft located at right angles to a plane including the axis of the brush carrying shaft and a belt extending around said brush shaft and drive shaft for driving the brush shaft, said drive shaft consisting of an elongated member having an unobstructed tapered end and a rounded pulley portion merging with the tapered end.

1,816,874. TENDER FEED WATER HEATER. CHRISTOPHER A. SCHELLENS, Marblehead, Mass., assignor to C-S Engineering Company, Jersey City, N. J., a Corporation of Delaware. Filed June 30, 1926. Serial No. 119,630. 14 Claims. (Cl. 122—441.)



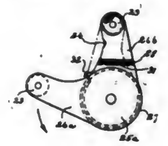
1. The combination with a locomotive tender and its water withdrawal orifice of a heater casing associated with the orifice and adapted to segregate that portion of the water in the immediate zone of the orifice from the remainder of the water in the tender, and means for discharging through said casing a heating medium into direct contact with the water as it passes to said zone for discharge through the withdrawal orifice.

1,816,875. ELECTROLYTIC DEVICE. HUMPHREYS O. SIEGMUND, West Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1927. Serial No. 187,068. 11 Claims. (Cl. 175—315.)



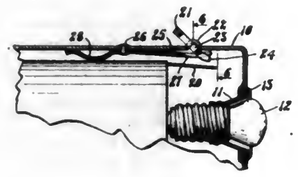
1. A film forming electrode for an electrolytic device comprising a film forming metal containing aluminum and having a small percentage of a substantially non-film forming metal combined therewith for improving the corrosion-resisting properties of the electrode, said metal comprising silicon, manganese and iron.

1,816,876. MANICURING APPLIANCE. ERNEST SORENY, New York, N. Y. Filed July 18, 1930. Serial No. 468,773. 11 Claims. (Cl. 132—73.)



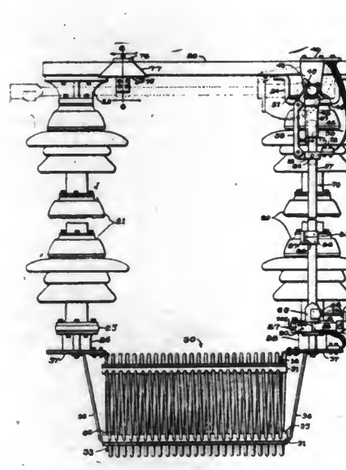
11. A nail cleaning holder comprising two symmetrical metallic elements having a circular body portion and an arm extension integral therewith, a cup-shaped member attached to and within the boundary of each of said body portions and adapted to be interlocked to form a friction bearing for said elements, wedging buttons carried on the ends of said arms, and means projecting from one of said arms limiting the rotary movement of the other arm in either direction.

1,816,877. FLASH LIGHT SWITCH. EMERSON TOMPKINS, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 20, 1929. Serial No. 393,873. 8 Claims. (Cl. 200—60.)



8. Switch mechanism including a casing providing open bearings, a switch lever provided with spindles each having adjoining surfaces at an angle to each other, a leaf spring, means securing said spring intermediate its ends to the casing, said spring on one side of said means having a battery-engaging portion extending away from said casing, and, on the other side of said means having a pair of spindle-engaging arms holding said spindles in said open bearings and biasing said switch lever in set position.

1,816,878. COMBINED CHOKE COIL AND GROUND SWITCH. TONY VAN RYAN and ALFRED ALSAKER, Chicago, Ill., assignors to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 30, 1926. Serial No. 84,842. 3 Claims. (Cl. 200—48.)

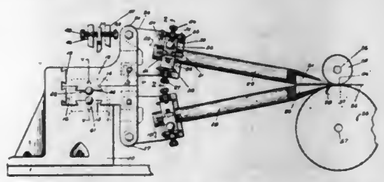


1. In combination, a switch arm pivotally supported, a first clip cooperable with the switch arm when it is in one position, a second clip cooperable with the arm when it is in a second position, and means for first moving the arm in the direction of its length and towards its pivot and for then moving it angularly about its pivot away from the first clip into its second position and into cooperation with the second clip, the said means being adapted to move the arm when it is in its second position first in the direction of its length away from its pivot and then angularly about its pivot away from the said second clip into cooperation with the first clip.

1,816,879. PROCESS FOR THE MANUFACTURE OF PAPER PULP. ERIC WAHLFORSS, St. Cloud, Minn., assignor, by mesne assignments, to Arthur D. Little Industrial Corporation, New York, N. Y., a Corporation of Delaware. Filed July 30, 1926. Serial No. 126,087. 5 Claims. (Cl. 92—20.)

2. The process of producing paper pulp from hardwood in chip or similar form which consists in subjecting the wood to the action of organic compounds derived from the hardwood itself when heated in the presence of water to a temperature corresponding to a steam pressure in approximately the range of from 75 to 100 pounds until the organic encrusting substances contained in the hardwood are softened and rendered plastic and the fibrous mass capable of further separation and conversion into pulp without chemical treatment or mechanical pulp grinding.

1,816,880. MANDRELLESS MULTIPLE DIE COIL WINDING MACHINE. FRANK W. WALTON, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 30, 1927. Serial No. 223,043. 17 Claims. (Cl. 153—65.)

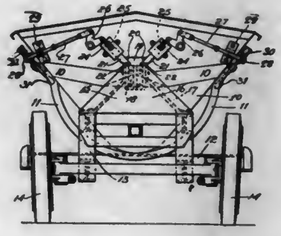


1. A machine for bending a wire into helical form comprising means for driving a wire, a plurality of die-members, each die having a cavity positioned to constitute a continuous cavity to engage the driven wire to bend the same into a series of convolutions, a die rod extending from each die member and means at the ends of said die rods for changing the relative positions of said die members.

1,816,881. PROCESS OF CLEANING WIRE. CARL JOHN WARNKE, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,498. 3 Claims. (Cl. 148—8.)

1. The hereindescribed process of cleaning the lead-in wires of mercury switches which consists in dipping the switches and the wires successively in hydrochloric acid, nitric acid, and sodium ammonium borate.

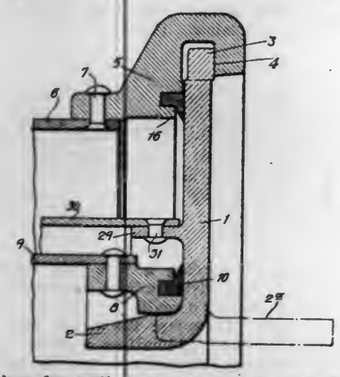
1,816,882. LOCK FOR TILTING BODIES. LEROY E. WILLIAMS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Jan. 2, 1929. Serial No. 329,867. 4 Claims. (Cl. 298—38.)



1. In combination with a vehicle frame and a body tiltably mounted thereon, an upright frame adjacent each end of the body, said upright frames each having an undercut head formed with two oppositely disposed stop faces, and

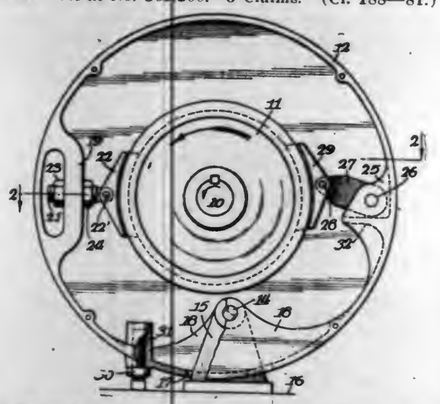
a pair of spaced, longitudinally movable latches at each end of the body which engage said faces for locking the body against lateral displacement with respect to said vehicle frame, said opposed faces of the undercut head being obliquely disposed and the latch members being mounted with their co-operating abutting faces extending and movable in substantially parallel relation to the corresponding stop faces of the undercut head when the body is in locking position.

1,816,883. SEALING THE ENDS OF VESSELS AGAINST INTERNAL FLUID PRESSURE. HARRY WILLSHAW, Wilde Green, near Birmingham, WALTER GEORGE GORHAM, Erdington, and EDWIN RAMSBOTTOM, Heywood, England, assignors, by direct and mesne assignments, of one-half to Dunlop Rubber Company, Limited, Erdington, Birmingham, England, a Corporation of Great Britain, and one-half to J. Mills & Co., Ltd., a Corporation of Great Britain. Filed Feb. 18, 1930, Serial No. 429,426, and in Great Britain Feb. 19, 1929. 6 Claims. (Cl. 220—46.)



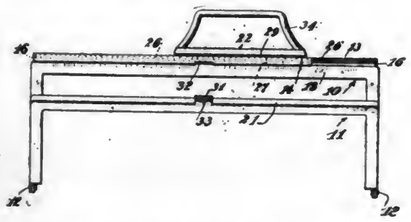
1. A door for sealing vessels which contain a fluid between two concentric shells and which have two rings of resilient fluid-proof material adapted to form a fluid tight seal, in which the door is rotatable to compress the resilient rings so as to form a fluid-proof joint by the engagement of one or of two concentric rows of spaced inclined surfaces upon the door adapted to engage or disengage with corresponding parts upon the vessel when the door is rotated.

1,816,884. SAFETY BRAKE. ALEXANDER H. WILSON, Oak Park, Ill., assignor to Thomas Elevator Company, Chicago, Ill., a Corporation of Illinois. Filed May 11, 1929. Serial No. 362,200. 5 Claims. (Cl. 188—81.)



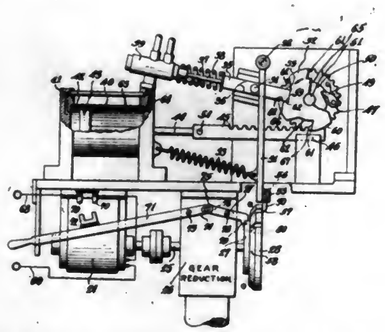
1. In an automatic safety brake of the type described, the combination with a horizontally rotating brake drum, of a brake shoe holder pivotally mounted below the axis of said drum and to one side of a vertical line passing through the center of gravity of said holder, said holder having portions lying on opposite sides of said drum, a pair of brake shoes so mounted on said oppositely lying portions of the holder as to ride idly on said drum when the latter is rotating in the direction in which said holder tends to tilt by gravity, and to grip said drum under the friction of the latter on one of said shoes where the drum rotates in the opposite direction, and a stop limiting the gravity tilting movement of said holder.

1,816,885. FASTENING DEVICE FOR HAND BAGS. WILLIAM H. ZACHMAN, Woodhaven, N. Y., assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed Mar. 12, 1931. Serial No. 521,945. 7 Claims. (Cl. 292—145.)



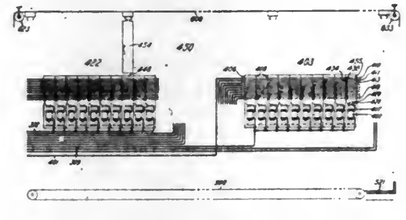
1. Fastening means for a pair of movably connected bag frames, the first of which has a top shaped to overhang the top of the second when the frames are in closed relation, a rail located in a channel within the overhanging top, a button slide slidable along the overhanging top and slidably engaging said rail to hold the slide operatively to the top, and a projection on the second member adapted to enter the channel on the movement of the members into closed relation and adapted to be therein interengaged by said shank when the slide is moved in one direction, whereby to secure the two frames in closed relation.

1,816,886. INTERMITTENT ACTUATING MECHANISM AND METHOD. DAVID ROBERT YARNALL, Germantown, Philadelphia, and THOMAS P. TAPPER, Roslyn, Pa., assignors to Yarnall-Waring Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 15, 1927. Serial No. 233,406. 13 Claims. (Cl. 161—7.)



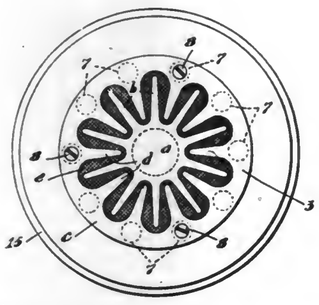
1. In a time-controlled mechanism for rotating a shaft to a predetermined extent, a constant speed driving mechanism, a timing disc having a notch and rotated by the mechanism, a hydraulic cylinder, a piston therein, a piston rod, a rack and pinion, the rack operatively connected to the rod and the pinion gearing with the rack and having a ratchet connection with the shaft, a valve having inner and outer positions controlling the position of the piston and thereby of the rack and pinion, a valve stem, a cam operatively connected to the shaft and adapted to engage the stem to limit the outward movement of the stem, a spring pressing the stem towards its outer position, a lever having a latch connection with the disc adapted to be released at the notch, a second spring pulling the lever into the disc, loose connection between the lever and stem adapting the lever in releasing to shift the stem rearwardly and thereby effect a shifting of the position of the piston and of the rack connected to the piston, a loose operative connection between the rack and lever adapting the outward movement of the rack to relatch the lever, the cam operatively connecting to the shaft holding the stem from retracting outwardly during the relatching movement of the lever and having an inward step to permit a spring retraction of the stem and thereby effecting a reverse shifting of the position of the piston.

1,816,887. AUTOMATIC ARTICLE SELECTING AND DISTRIBUTING SYSTEM. EDGAR W. ADAMS, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 28, 1929. Serial No. 374,318. 17 Claims. (Cl. 129—1.)



1. In a filing system, a calling station, a plurality of filed articles, means connected with and controlled from said calling station for selecting any one of said articles, and means for delivering said selected article to a designated point.

1,816,888. MAGNETIC CHUCK AND CIRCUITS THEREFOR. WILLIAM ARTER, HARRY ARTER, and SAMUEL T. WEBSTER, Worcester, Mass., assignors to Arter Grinding Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 28, 1929. Serial No. 374,521. 8 Claims. (Cl. 175—367.)



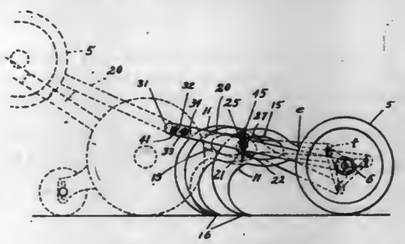
1. In a magnetic chuck, the combination of top and bottom plates of magnetic material, a core, a coil encircling said core, and a series of members of magnetic metal spaced around said coil and connecting said top and bottom plates in the magnetic circuit with said core.

1,816,889. FISHING REEL. RAYMOND B. BENNETT, Montague City, Mass., assignor to Montague Rod & Reel Company, Montague City, Mass., a Corporation of Massachusetts. Filed Apr. 5, 1929. Serial No. 352,848. 2 Claims. (Cl. 242—84.5.)



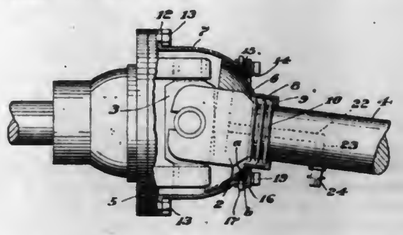
1. In a fishing reel of the type described an end plate having an integral rivet extruded to its inside face, a leaf drag spring bound at one end to the plate by such a rivet headed over against the spring and with the other end of the spring tending to lie away from the plate to create a steady friction on the flange of the reel spool, a button mounted to slide in a slot in the side plate and having an inner head with a shank running through a slot in said spring, said slot having an enlargement which will admit said head when said enlargement is in registration with the slot in the side plate but which enlargement is offset from the slot in the side plate when the spring, the button and the side plate are finally assembled.

1,816,890. WEED CUTTER. HERBERT L. BOOTH, Beverly Hills, Calif. Filed June 19, 1929. Serial No. 372,176. 6 Claims. (Cl. 97—36.)



1. In a device of the character described, ground wheels, a shaft operatively connected with said ground wheels to be rotated thereby, said shaft having a plurality of crank portions, a plurality of vertically disposed plates connected with said crank portions to be trailed thereby, said plates having toothed portions adapted to engage the soil, propelling arms operatively connected with said ground wheels, and a cross-bar connecting said propelling arms, there being openings in said plates through which said cross-bar extends, said openings being of a sufficient size to permit said crank portions to reciprocate said plates, without withdrawing said toothed portions of said plate from the soil.

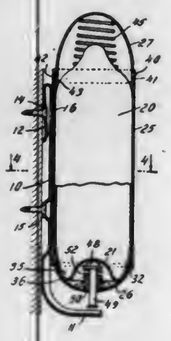
1,816,891. UNIVERSAL JOINT. REAGH C. BOYDEN, Atlantic, Mass. Filed Mar. 30, 1929. Serial No. 351,238. 5 Claims. (Cl. 64—89.)



1. In a universal joint comprising two joint members movable in different directions about a common center,

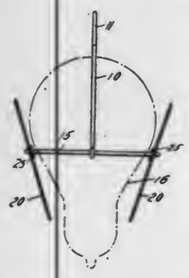
a casing comprising an inner casing member, an outer casing member having a part encircling and overlapping the margin of said inner member, a packing for closing the joint between said casing members, a retaining ring for holding said packing pressed against the outer surface of said inner casing member, and means carried by said outer casing member for releasably holding said ring in its operative position, said means being constructed to permit the removal of said ring to release said packing.

1,816,892. FIRE EXTINGUISHER AND SUPPORT THEREFOR. WILHELM B. BRONANDER, Montclair, N. J. Filed Jan. 24, 1928. Serial No. 248,999. 2 Claims. (Cl. 169—31.)



1. In combination, a casing comprising an elongated central portion, a perforated bottom and a removable top, a frangible container in the casing, a spring surrounding and engaging the top of the container and disposed between the container and top of the casing for holding the container against endwise movement in the casing, and a plunger slidable in and extending through the perforated bottom of the casing for puncturing the container and releasing the fire extinguishing liquid therefrom.

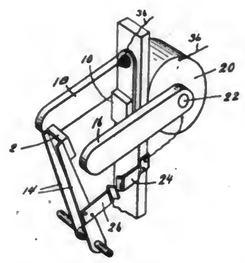
1,816,893. FIRE EXTINGUISHER SUPPORT. WILHELM B. BRONANDER, Montclair, N. J. Filed Apr. 15, 1929. Serial No. 355,166. 7 Claims. (Cl. 169—26.)



1. A support for frangible fire extinguisher grenades comprising a member adapted for suspension from a ceiling, a pair of rods carried by said member and shaped to embrace the grenade, and means for securing said rods against separation in grenade supporting position, said means including a fusible element at each end of said rods.

2. A support for frangible fire extinguisher grenades comprising a bail adapted for suspension from a ceiling and having separated ends, a rod carried by each end of the bail, said rods being shaped to embrace a grenade, and means independent of said bail for securing said rods against separation in grenade supporting position, said means including a fusible element.

1,816,894. CIRCUIT INTERRUPTER AND MAGNETIC ARC EXTINGUISHING DEVICE THEREFOR. GEORGE A. BURNHAM, Saugus, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Apr. 23, 1929. Serial No. 357,565. 8 Claims. (Cl. 200—147.)

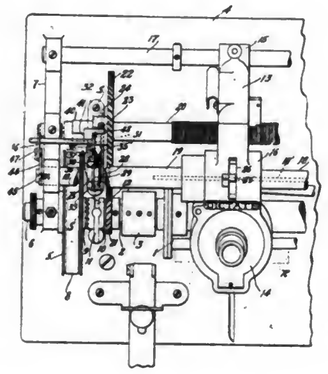


1. An electric switch for the control of an electric circuit having contact members which are separable in the circuit, and a blowout magnet for the circuit interrupting arc having an energizing winding that is energized at the full potential of the circuit during the time that the arc exists.

1,816,895. STABILIZATION OF TRICHLOROETHYLENE. CHARLES DANGELMAJER, Niagara Falls, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 11, 1929. Serial No. 331,945. 9 Claims. (Cl. 23—250.)

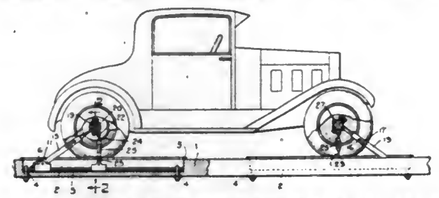
1. Composition of matter comprising trichloroethylene and stabilizing amounts of gasoline.

1,816,896. PHONOGRAPH. NELSON C. DURAND, East Orange, and SAM G. LANGLEY, Maplewood, N. J., assignors to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Mar. 29, 1929. Serial No. 350,918. 16 Claims. (Cl. 274—17.)



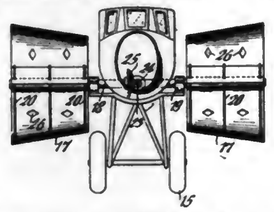
1. In a phonograph, a device adapted to be adjusted to reproducing and recording positions, and warning means including an actuator, a member operable by said actuator when in the path of movement thereof and movable into and out of said path, and means whereby said member is positioned in said path whenever said device is in reproducing position, substantially as described.

1,816,897. LOAD SECURING DEVICE. GEORGE C. FEDDERMAN and GEORGE W. MARLIN, Detroit, Mich.; said Marlin assignor to said Fedderman. Filed Mar. 1, 1929. Serial No. 343,617. 15 Claims. (Cl. 105—308.)



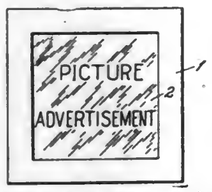
1. A hold down device comprising a fixed rail having a head, a foot slidably engaging and straddling the head, a leg pivotally engaging the foot, and means on the leg for engaging a part of a vehicle.

1,816,898. AIRPLANE. SONIA FONTAINE FEW, Niagara Falls, N. Y. Filed Dec. 29, 1928, Serial No. 329,153. Renewed Dec. 15, 1930. 4 Claims. (Cl. 244—16.)



1. A flying machine, comprising a body, propelling means therefor, rotatable supports extending from opposite sides of said body transversely to the longitudinal axis thereof, and radial wings mounted on said supports and having their outer edges converging inwardly toward said body to direct the air against the undersurface thereof.

1,816,899. ADVERTISING DEVICE. HOWARD F. GODEL, Portland, Oreg. Filed Apr. 4, 1929. Serial No. 352,347. 4 Claims. (Cl. 88—28.)



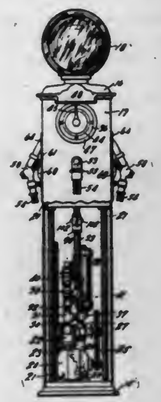
1. In an advertising device, the combination of a box, a translucent screen in the front wall of the box, a projector at the rear wall within the box, and an endless strip of films passing through the projector from the top toward the bottom, said endless strip of film making a half turn at the bottom of the box and then proceeding in zig-zag formation and in vertical alinement along the bottom of the box, making a half turn near a front corner of the box, then proceeding along the front wall of said box and parallel to the screen toward the top, and thence proceeding parallel to the top toward the projector, and then entering the projector.

1,816,900. LIQUID DISPENSING APPARATUS. ALFRED L. GAISE, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed June 18, 1929. Serial No. 371,854. 13 Claims. (Cl. 221—100.)

1. Liquid dispensing apparatus, comprising, a pair of measuring cylinders, a piston in each of said cylinders, liquid forcing means, valve mechanism for alternately connecting said cylinders to said means and for enabling liquid to discharge from either cylinder while the other is being filled, connections between said pistons by which each piston when moved on its filling stroke by liquid entering one cylinder will move the other piston to discharge liquid from the other cylinder, said connections including elastic means stressed by each piston during the latter part of its filling stroke and initiating with a spring impulse the subsequent discharge stroke of such piston, and means for locking said valve mechanism against operation until one piston has completed its filling stroke and the other its discharge stroke.

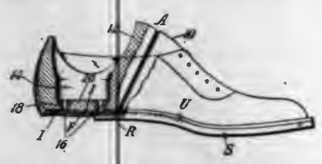


1,816,901. LIQUID DISPENSING APPARATUS. ALFRED L. GAISE, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed June 18, 1929. Serial No. 371,855. 8 Claims. (Cl. 221—95.)



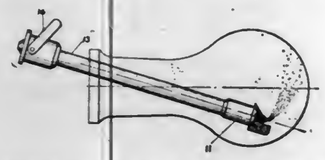
1. Liquid dispensing apparatus, comprising, power-operated pumping means, a delivery conduit connected therewith and including a flexible hose terminating with a nozzle, a valve in said conduit, a normally closed casing housing said means and part of said conduit leaving the hose and nozzle outside said casing, said casing having an opening in which the nozzle may be partially inserted when not in use, said casing serving to support said nozzle when inserted in said opening, and a member movable into and out of a position in which it obstructs insertion of the nozzle in said opening, said member effective when moved into said position to open said valve and when out of said position to close said valve, said member also effective when moved out of said position to stop said pumping means.

1,816,902. METHOD OF OPERATING UPON SHOES. JOHN B. HADAWAY, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 3, 1928. Serial No. 251,670. 11 Claims. (Cl. 12—147.)



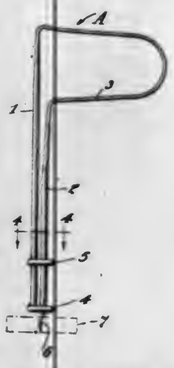
1. The method of operating upon shoes, which consists in assembling portions of a shoe upon a last, producing locating means upon the assembled portions while they are upon the last and under the guidance of said last, positioning the portions of the shoe as determined by the locating means, and performing the desired operation upon the positioned work.

1,816,903. METHOD FOR COATING THE INTERIOR WALL OF HOLLOW BODIES. AARON M. HAGEMAN, Bloomfield, and ALBERT F. LINDSTROM, Nutley, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original application filed Dec. 9, 1927, Serial No. 238,734. Divided and this application filed July 24, 1928. Serial No. 295,091. 9 Claims. (Cl. 91—70.)



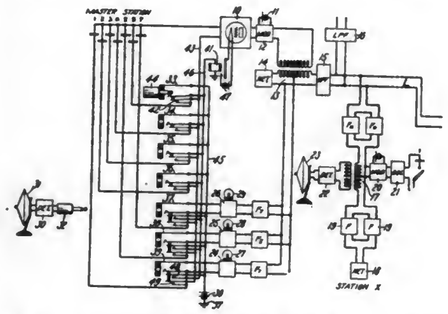
1. The method of depositing a layer of a light diffusing material on the interior surface of a hollow body which comprises rotating the body about its longitudinal axis, moving a spray gun a given distance into said body, creating a spray of coating material and effecting a movement of said spray into said body through a path intersecting the axis of rotation of the body.

1,816,904. BUTTER HANDLING DEVICE. RANDOLPH HEIMROTH, Maplewood, N. J. Filed Aug. 8, 1928. Serial No. 298,179. 1 Claim. (Cl. 30—5.)



A butter-pick comprising a single piece of metal bent upon itself to form two parallel rods connected at their upper ends by a spring bow forming a handle, one of said rods being adapted to hold a piece of butter at its lower end, the other rod being provided with means to eject the butter from the first rod.

1,816,905. COMMUNICATION SYSTEM. JOSEPH W. HORTON, Cambridge, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 21, 1929. Serial No. 341,597. 10 Claims. (Cl. 179—2.5.)

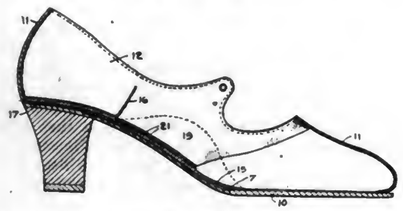


1. In a communication system, means for communicating with a plurality of stations in different combinations, and means comprising filters having overlapping transmission bands for determining said combinations.

1,816,906. ELECTROMAGNETIC DEVICE. WARREN C. JONES, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1928. Serial No. 326,941. 5 Claims. (Cl. 179—100.41.)

1. In a vibration translating device, a casing containing viscous matter, a magnetic atructure having four working gaps within the casing, an armature and a diaphragm forming a closure for the casing and a pivot for the armature substantially equidistant from all the gaps.

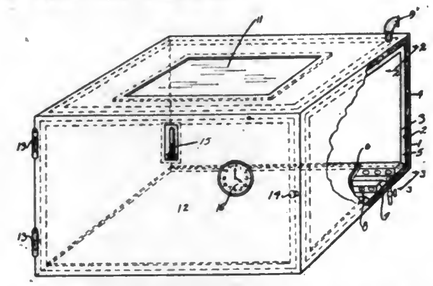
1,816,907. SHOE. ALEXANDER M. KESSLER, Brooklyn, N. Y., assignor to Premier Shoe Company, Inc., a Corporation of New York. Filed Dec. 11, 1928. Serial No. 325,161. 1 Claim. (Cl. 36—18.)



In a shoe, the combination with a sole and an upper comprising an outer member and a lining secured thereto; of a shank piece comprising a piece of material split throughout a portion of its length into an upper and a lower layer, said lower layer having a laterally and upwardly projecting portion; said lining having a cut extending upwardly from the lower edge thereof at a point intermediate the ends of said shank piece, a portion of said lining being secured between the layers of said shank piece and another portion being secured below said shank piece.

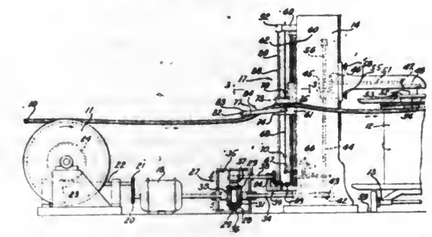
CARNEGIE LIBRARY OF ATLANTA

1,816,908. DOUGH RAISER. MINNIE L. KUNTZ, Whitefish, Mont. Filed Apr. 17, 1929. Serial No. 355,952. 1 Claim. (Cl. 126—281.)



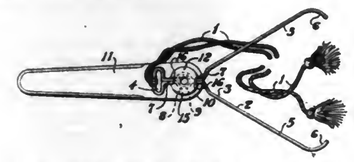
A cabinet comprising double walls and a layer of heat insulating material between them, a spaced interior casing forming a water space between the case and the double walls, said space having an inlet and an outlet for water, a transparent window in the top of the cabinet and a hinged door at the front of the cabinet, and ported channel plates located between the bottom of the case and the bottom of the cabinet.

1,816,909. MATERIAL HANDLING APPARATUS. EINER WILLIAM LARSEN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1929. Serial No. 352,987. 13 Claims. (Cl. 242—147.)



1. In an apparatus for winding material, a take-up member, means for communicating power to the take-up member, an element responsive to the tension on the strand and having a normal range of movement during winding under constant tension and movable differently from its normal movement in response to tension variations in the material being wound, and means operatively connected to the element and operable in response to a movement of the element differing from its normal movement for varying the power communicated to the take-up member.

1,816,910. BOOKMARK. ROBERT H. MOORE, New York, N. Y. Filed Apr. 12, 1929. Serial No. 354,523. 6 Claims. (Cl. 281—42.)

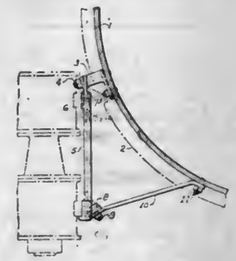


1. A book mark device having the combination of a marker cord, means for attaching said cord to said device, means for retaining the device between the back binding and leaves of a book, and a leaf cutting element said element being pivoted relatively to said retaining means whereby it may be disposed side by side with said retaining means or opposite thereto.

1,816,911. PROCESS FOR THE PREPARATION OF ALKALI METAL DERIVATIVES OF ORGANIC COMPOUNDS. JOHANNES PFLEGER, Frankfort-on-the-Main, and EMIL SCHELLER, Lorsbach, Taunus, Germany, assignors, by mesne assignments, to The Roessler & Hasslacher Chemical Company, a Corporation of Delaware. Filed June 25, 1928, Serial No. 288,281, and in Germany June 30, 1927. 4 Claims. (Cl. 260—127.)

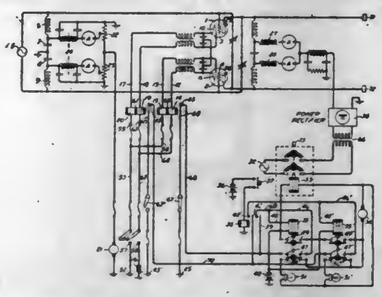
1. A process for the preparation of alkali metal derivatives of organic nitrogen containing compounds containing at least one replaceable hydrogen atom attached to a nitrogen atom which comprises reacting said organic nitrogen containing compound with an alkali metal hydride.

1,816,912. SUPPORT FOR LOCOMOTIVE AIR PUMPS, ETC. JOHN A. PILCHER, Roanoke, Va. Filed Nov. 19, 1928. Serial No. 320,415. 1 Claim. (Cl. 103—218.)



The combination in a support for locomotive air pumps and the like of a bracket arranged to be secured to the shell of the locomotive boiler, a frame suspended from the bracket and arranged to carry an air pump or the like and a rigid brace securing the lower end of the frame to the body of the boiler.

1,816,913. PROTECTIVE CIRCUIT FOR VACUUM TUBES. JOHN C. SCHELLENG, Milburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 26, 1928. Serial No. 280,666. 8 Claims. (Cl. 250—27.)

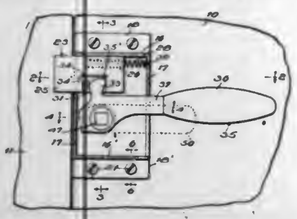


1. In a space discharge system, a space discharge device having an anode and an electron emitting cathode, an anode circuit comprising leads from said cathode to a source of heating current, and indicating means in said leads operated by space current variations for indicating when said anode circuit is overloaded.

1,816,914. FASTENING DEVICE. JOHN F. SCHYLANDER, Chicago, Ill. Filed Oct. 6, 1928. Serial No. 310,777. 1 Claim. (Cl. 292—169.)

In a device of the class described, a housing, a handle rotatably mounted in said housing, a latch comprising an

apertured bolt slidable in said housing, means integral with said handle and disposed in the aperture of said bolt for controlling said latch, said bolt having a recess in the aperture thereof, a leaf spring the shape of a



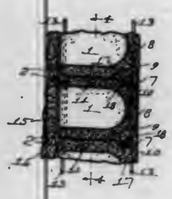
cotter pin having its head secured in said recess for maintaining said bolt in engagement with said controlling means, and means for resiliently urging said bolt out of said housing.

1,816,915. METHOD OF FORMING INLAYS. CRESTON W. SCOTT, Springfield, Mass., assignor to The Fiberloid Corporation, Indian Orchard, Mass., a Corporation of Massachusetts. Filed Apr. 12, 1929. Serial No. 354,666. 2 Claims. (Cl. 41—35.)



1. A method of making plastic inlays which comprises forming in the surface to be inlaid recesses corresponding in configuration to the design to be produced, forming an inlay blank with projecting portions shaped to interfit with the recesses and held solidly in their proper relative positions by the integral body portion of the inlay blank, said projections being of slightly greater length than the depth of the recesses, applying to the recess and to the projecting portions of the inlay blank a substance adapted to cause their adhesion, inserting the projecting portions of the inlay blank into the corresponding recesses while the projections are still held assembled by the body portion, and then cutting away the body portion of the inlay blank and that part of the projecting portions extending outside the recesses.

1,816,916. BUILDING BLOCK. JOHANNES T. SENTROP, Grand Rapids, Mich. Filed Feb. 11, 1928. Serial No. 253,555. 5 Claims. (Cl. 72—42.)

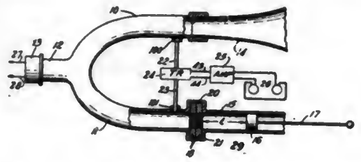


1. An approximately rectangular building block having concave ends, and made hollow by recesses extending inwardly from one of its vertical sides and spaced by a vertical partition, and having also a vertical groove in its opposite vertical side extending inwardly therefrom in a direction parallel with the partition, a longitudinal flange at its second-mentioned vertical side extending vertically from one of its horizontal sides, and a longitudinal rabbet in its opposite horizontal side and in its second-mentioned vertical side adapted to receive the flange of a vertically adjacent block, the concave ends of horizontally adjacent blocks and the vertical groove of a vertically adjacent block being adapted to receive a reinforcing rod.

2. A wall composed of building blocks having a longitudinal flange extending vertically from one of the horizontal faces of the edge block and a longitudinal rabbet in the opposite longitudinal face of each block, the flanges of the blocks fitting in the rabbets and the latter being of greater width than the flanges to provide spaces in rear of the said flanges, longitudinal reinforcing rods arranged in the said spaces, and plastic material filling the said spaces around the reinforcing rods and having the latter embedded in it.

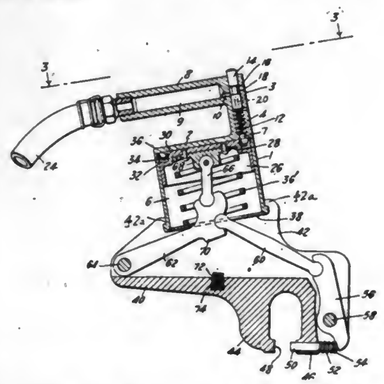
3. A wall composed of building blocks provided at one face with inwardly extending recesses closed at the inner end and open at the outer end and having top, bottom and side walls, lathing applied to the building blocks at the open ends of the recesses, and plastering supported by the lathing and covering the open ends of the recesses and spaced from the same by the said lathing, leaving empty spaces between the plastering and the blocks extending between the open ends of the recesses to provide air passages therebetween.

1,816,917. APPARATUS FOR THE MEASUREMENT OF ACOUSTIC IMPEDANCE. EDWIN H. SMYTHE, Evanston, Ill., and PAUL B. FLANDERS, East Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 1, 1929. Serial No. 343,778. 10 Claims. (Cl. 181—0.5.)



1. Apparatus for the comparison of acoustic impedances comprising means defining a pair of sound wave transmission paths, the impedances of which are in a known ratio, a variable acoustic impedance coupled to one of said paths, means for connecting to the other of said paths a device to be measured, means for impressing sound waves equal in intensity upon said paths simultaneously, and means for indicating a difference in the wave pressures at the other ends of said paths.

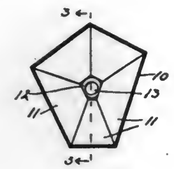
1,816,918. SQUEEZE RIVETER. EDWARD W. STEVENS, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 17, 1928. Serial No. 247,312. 12 Claims. (Cl. 78—48.)



1. A squeeze riveter comprising a frame, a cylinder mounted on said frame, an anvil jaw and another jaw rigidly mounted on said frame, the latter jaw having a compression plunger reciprocably mounted thereon in operative relation to said anvil jaw, a lever pivoted to said frame and adapted, at a point rearwardly of its pivotal

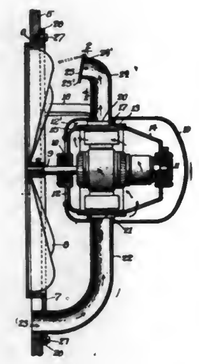
connection, to engage said compression plunger, a toggle arm pivoted to said frame, a second toggle arm having pivotal connection with said lever at a point further from the pivot of said lever than the plunger engaging part of said lever and having cooperative pivotal connection with said toggle arm, a piston in said cylinder, and power transmitting means connected between said piston and toggle arms.

1,816,919. HORN. SAMUEL A. STONEBACK, Philadelphia, Pa. Filed Apr. 9, 1929. Serial No. 353,874. 11 Claims. (Cl. 181—27.)



8. A horn consisting of a plurality of panels, the edges of which diverge toward their outer ends, each of said panels being of a different width relative to all other panels.

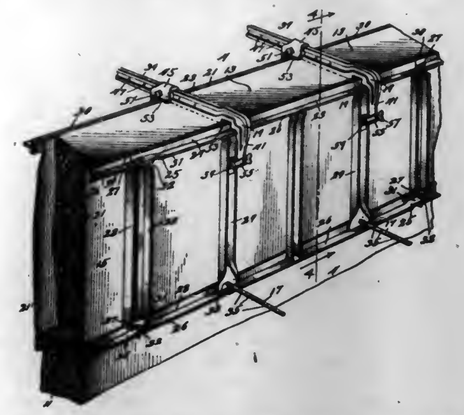
1,816,920. SELF COOLED ELECTRIC MOTOR. ARTHUR G. SUTCLIFFE, Chicago, Ill., assignor to Ilg Electric Ventilating Company, Chicago, Ill., a Corporation of Louisiana. Filed Apr. 22, 1929. Serial No. 357,017. 3 Claims. (Cl. 172—36.)



1. The combination with a wall formed with an opening, of an electric motor mounted on one side of said wall, a casing enclosing said motor, a propeller-type fan driven by said motor opposite said opening, an air inflow pipe connecting the space on the other side of said wall with the lower portion of the interior of said casing, an air outflow pipe communicating with the upper portion of the interior of said casing and having a discharge opening located behind the peripheral portion of said fan, and a self-closing valve guarding said discharge opening adapted to be opened by the air current created by said fan.

1,816,921. BUILDING FORM. WILLIAM E. URSCHEL, Valparaiso, Ind. Filed Dec. 14, 1927. Serial No. 239,901. 10 Claims. (Cl. 25—131.)

5. In a building form, side plates adapted to support a wall course, a tie rod for maintaining the lower portions of said wall portions in spaced relationship and a clamp having arms embracing the upper portions of said wall portions, and having notches adapted to receive the edges

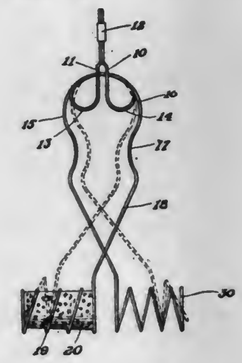


of said wall portions and to provide pivot points for the wall portions and means carried by said arms for adjusting the relative position of the walls in the pivot points.

1,816,922. PROCESS OF COATING CONCRETE WITH RUBBER AND PRODUCT. PARKE H. WATKINS, Naugatuck, Conn., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Sept. 19, 1928. Serial No. 307,063. 7 Claims. (Cl. 91—68.)

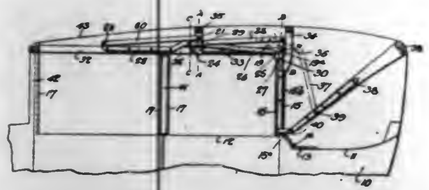
4. In a process of coating concrete with rubber, the steps of applying and drying an iron paste to the surface of the concrete, applying and drying a copper sulphate solution over the iron, applying and drying rubber cement on the treated surface, applying a coating of compounded rubber latex over the dried rubber cement, coagulating the latex to deposit solid constituents thereof, and vulcanizing.

1,816,923. CORK STERILIZER CAGE. HERMANN WEBER, Paterson, N. J. Filed May 23, 1929. Serial No. 365,547. 1 Claim. (Cl. 167—3.)



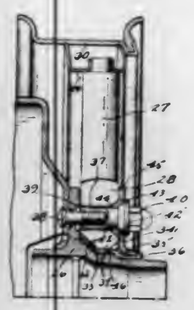
In a device of the class described, a hook formed of a pair of parallel pieces of joined wires, a pair of stems extending from said hook, loops at the extremity of said stems, flexible arms continuing from said loops, extensions on said arms, sterilizer cages formed at the extremities of said extensions adapted to receive corks therein, said extensions crossing each other at a position along their length, deformed portions on said arms forming cradles for the reception of fingers.

1,816,924. COLLAPSIBLE ROOF BODY FOR AUTOMOBILES. CARL H. E. WOLFERMANN, New York, N. Y. Filed May 12, 1928. Serial No. 277,237. 1 Claim. (Cl. 296—116.)



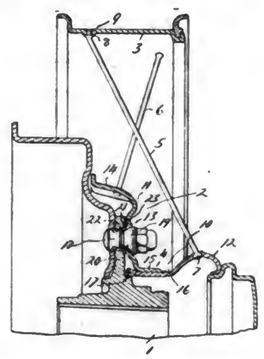
In a collapsible roof for automobiles and similar vehicles the combination with a car body, having a downwardly extending recess at its rear end, comprising a double bent perpendicularly disposed brace, having its short arm extend rearwardly, a rear bow hingedly secured to the end of the aforesaid short arm, a horizontally disposed brace hingedly connected with the aforesaid double bent brace at its outside and shortly below its upper end, having a depending lug near its hinge point and projecting upwardly at its front end, a horizontally disposed brace, having its front end project upwardly and its rear end terminating in an upwardly opening grip, a link connecting the front ends of both aforesaid horizontally disposed braces, a link hingedly connecting the bayonet shaped rear end of one of aforesaid horizontally disposed braces and the upper end of aforesaid perpendicularly disposed brace at the inside of both parts, a lever terminating at its rear end into a depending arm, hingedly connected to the outside of the end of the one and to the inside of the lug of the other horizontally disposed brace, a stop rigidly secured on the inside of the perpendicularly disposed brace and abutting the end of the depending arm of the aforesaid lever.

1,816,925. VEHICLE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 11, 1927. Serial No. 182,823. 1 Claim. (Cl. 301—9.)



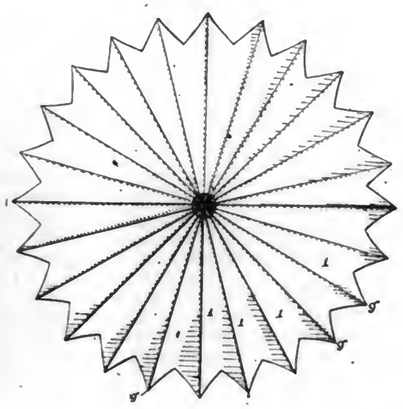
In a vehicle wheel, in combination, a hub member having a radial fixed flange with recesses in its front face, transverse bolts upon said fixed flange extending through said recesses, a wooden spoked wheel body mounted upon said hub member immediately adjacent the front face of said fixed flange and having transverse openings in alignment with said bolts, means for holding said body positioned with respect to said hub member including a sleeved member within one of the transverse openings of said body and extending into one of the recesses of said fixed flange, and means for detachably securing said body to said hub member including a nut threaded upon one of said bolts.

1,816,926. WIRE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed June 25, 1928. Serial No. 288,194. 3 Claims. (Cl. 301—9.)



1. In a vehicle wheel, the combination with an inner hub member, of a wheel body adapted to be mounted upon said inner hub member comprising a rim member, an outer hub member having a barrel section provided with spoke engaging portions at its front end and a flange section at the rear end of and sleeved upon and secured to said barrel section and provided with spoke engaging portions, spokes between said rim and outer hub members engaging said portions, means upon said inner hub member forming a stop for the rear end of said barrel section to limit the rearward movement of said wheel body upon said inner hub member, and means engaging said flange section for securing said wheel body to said inner hub member and separating said spoke engaging portions in an axial direction to effect tensioning of said spokes, said stop forming means being placed to cooperate with said barrel section to prevent overstressing the joint between said flange and barrel sections.

1,816,927. PARACHUTE. JAMES L. BROWN, Jr., Lancaster, Pa., assignor to Follmer, Clogg & Company, a Corporation of New York. Filed Sept. 1, 1928. Serial No. 303,525. 9 Claims. (Cl. 244—21.)

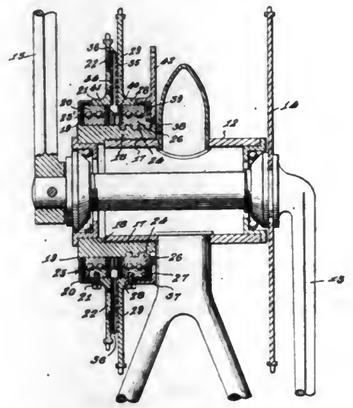


4. A parachute having a sail composed of gores made of a woven fabric, said sail containing gores in which the edges of the fabric forming the same, where said edges form a portion of the peripheral edge of the sail, have the edges of said fabric indented toward the peak of the parachute sail.

1,816,928. COLORED DUSTING POWDER. LYLE B. BURNETT, Chicago, and Don W. Bissell, Maywood, Ill., assignors to Wm. J. Stange Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 17, 1929. Serial No. 386,732. 1 Claim. (Cl. 134—58.5.)

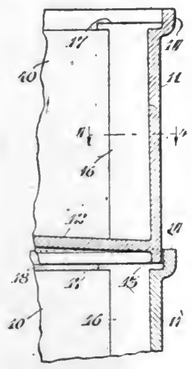
A free-flowing dry dusting powder for flowers comprising in combination a base of kaolin, a dyestuff mordanted into the kaolin, and starch grains as a diluent.

1,816,929. CLUTCH. CHARLES F. DOLL, Aberdeen, Wash. Filed Apr. 23, 1928. Serial No. 272,171. 4 Claims. (Cl. 192—63.)



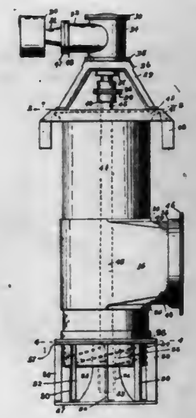
1. In a motor driven bicycle, a frame supported crank hanger, a sleeve mounted upon the crank hanger, a sprocket freely rotatable upon the sleeve, a bearing threadedly engaging the sleeve, a driving sprocket freely rotatable upon the bearing, and means connected to the bearing to move the latter and engage the driving sprocket with the freely rotatable sprocket to rotate the latter.

1,816,930. ANNEALING POT. CHARLES A. FINN, Racine, Wis., assignor to Belle City Malleable Iron Company, Racine, Wis., a Corporation of Wisconsin. Filed July 8, 1930. Serial No. 466,435. 2 Claims. (Cl. 263—149.)



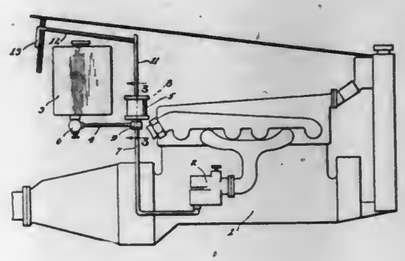
1. An integrally formed annealing pot having side and end walls forming corners, a raised bottom for the pot leaving a leg flange, an outwardly and upwardly flared flange around the top edge of the pot walls, a thickened portion in each corner forming a post, each said post extended upwardly a distance above the top edge of the walls to form a raised pad, and each pad extending over the adjacent wall parts and connected to the flared flange mentioned.

1,816,931. PUMP. WILLIAM H. HOODLESS, Philadelphia, Pa. Filed Feb. 26, 1927. Serial No. 171,344. 5 Claims. (Cl. 103—89.)



1. A portable drainage pump intended to be carried from light supports and provided with pump rests that are widely extended and are carried unconnectedly by said supports, comprising in combination a pump barrel positioned below said rests and carried rigidly therefrom and having an intake and discharge mouth below the same, a water lifting screw in said barrel, gearing positioned above said pump rests, supports for said gearing extending from said rests to said gearing, a vertical shaft extending from said gearing to said water lifting screw, and a pulley connected to said gearing; the discharge mouth of said barrel being positioned at such a substantial distance below the pump rests that the moment of the water in the barrel will exceed the moment caused by the operation of the driving of said pulley.

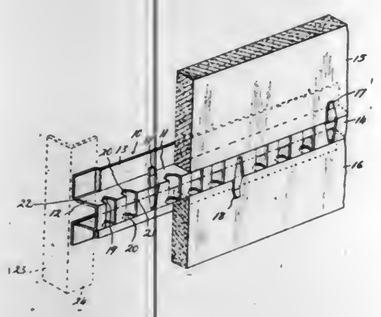
1,816,932. LIQUID DEPTH INDICATING DEVICE. HORACE W. KING, Berkeley, Calif., assignor to King-Seeley Corporation, Ann Arbor, Mich., a Corporation of Michigan. Filed Dec. 16, 1926. Serial No. 155,289. 6 Claims. (Cl. 73—54.)



5. The combination with an internal combustion engine, a liquid fuel tank and a carburetor for said engine, and a

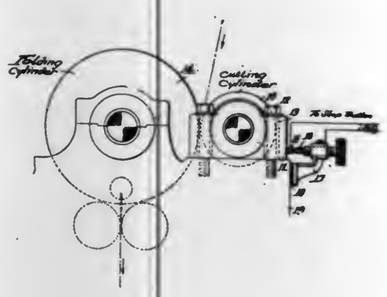
connection establishing communication between said tank and carburetor for supplying liquid fuel to the latter, of a depth indicating device for the liquid fuel in said tank, including an air chamber in said connection and through which the fuel passes and arranged to be heated by said engine, a pressure gage and pressure transmitting means between said pressure gage and the upper end of said air chamber.

1,816,933. WALL GROUND WORK STRIP. CLAUDE A. ROBINSON and KENNETH S. FRAZIER, Detroit, Mich., assignors to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 13, 1930. Serial No. 420,576. 8 Claims. (Cl. 72—103.)



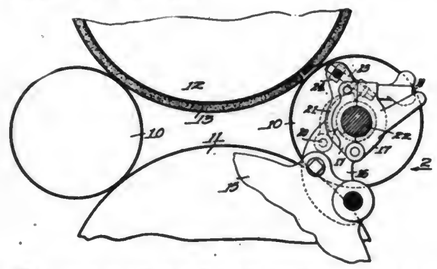
1. A strip for use in building construction to secure adjacent sections of wall ground work in spaced relation to each other, said strip having a body portion substantially channel-shaped in cross-section with the legs of the channel forming abutments for the adjacent edges of the sections aforesaid, and tongues struck out from the base of the channel at longitudinally spaced points and arranged to extend over the adjacent edges of the said sections to secure the same in place.

1,816,934. PRESS STOPPING DEVICE. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 7, 1928, Serial No. 304,582. Renewed Jan. 5, 1931. 4 Claims. (Cl. 270—77.)



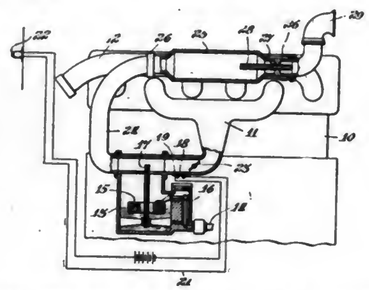
1. The combination with a folding couple, of a circuit connected with the stop button control of a printing press, and means whereby when a choke occurs between the folding cylinders, said circuit will act to stop the press.

1,816,935. ANTIJUMPING DEVICE FOR FORM ROLLERS. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Dec. 1, 1928, Serial No. 323,106. Renewed Jan. 21, 1931. 5 Claims. (Cl. 101—349.)



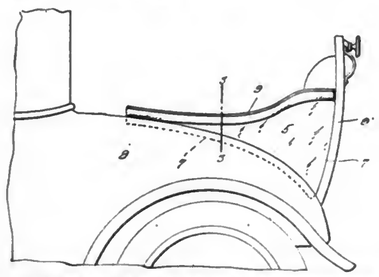
1. The combination with a plate cylinder, an ink drum, and a form roll for transferring ink from ink drum to the plate cylinder, of means for applying pressure to the journal of the form roll in a direction toward the work side of its socket and holding the journal against that side.

1,816,936. GAS GENERATOR FOR INTERNAL COMBUSTION ENGINES. PHILIP SCHNEIDER, Chicago, Ill. Filed Aug. 6, 1928. Serial No. 297,873. 4 Claims. (Cl. 123—122.)



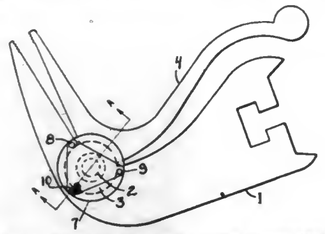
1. The combination with an internal combustion engine having a carbureter and intake manifold, of a heater for generating the carbureter mixture into a hot gas, a hot storage receptacle, means for passing said hot gas to the intake manifold, a pipe communicating with the atmosphere and extending into the hot receptacle, and a horn for directing air currents to the pipe.

1,816,937. RUMBLE SEAT AND REST. JULIAN C. SCOTT, Midland, Tex. Filed Mar. 15, 1930. Serial No. 436,121. 2 Claims. (Cl. 155—198.)



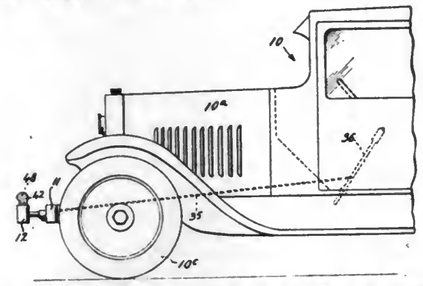
1. In combination with a back of an automobile body having a rumble seat incorporated therein and formed with side water grooves, of panels frictionally held in the grooves and rising therefrom to form arm rests.

1,816,938. GRIPPER FOR TUFT WEAVING LOOMS. HENRY WILLIAM SHANNON, Worcester, Mass., assignor to Worcester Loom Works, Worcester, Mass. Filed Jan. 23, 1930. Serial No. 422,805. 3 Claims. (Cl. 139—2.)



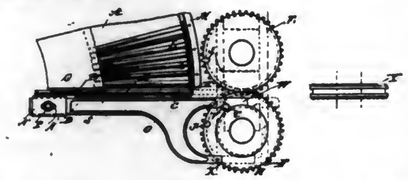
1. A gripper for tuft weaving looms comprising a body part, a jaw part pivoted thereon, said body and jaw having counterbores to receive a retaining disk and a retaining disk seated in said counterbores and riveted to said body part, said disk normally being of convex configuration before being secured in place.

1,816,939. DETECTOR AGAINST HIT AND RUN DRIVERS. JACK STANGLER, Brooklyn, N. Y., assignor of forty-nine one-hundredths to Herman Mitkoff, Brooklyn, N. Y. Filed Oct. 3, 1930. Serial No. 486,260. 13 Claims. (Cl. 116—32.)



1. A protective system of the kind described, including the combination, with the running gear of a vehicle, of a structure carried by said gear and protuberant in a direction of travel of said vehicle; said structure including relatively movable parts of which one, hereinafter called the striker, is positioned ahead of the other in said direction; means operable during travel of the vehicle for yieldingly holding said structure projected to a certain position; and means operable, on said striker being forced to a position of less projection due to its impact against an object in said path, to give a plurality of abnormal signals, one visual and deposited on the ground in the vicinity of such impact, and the other audible and carried away from such vicinity with the vehicle.

1,816,940. SELF FEEDING SWAGING ROLL. EDWARD W. STOLER, Mansfield, Ohio, assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Mar. 8, 1929. Serial No. 345,437. 2 Claims. (Cl. 80—24.)



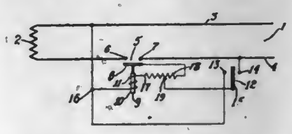
1. In an automatically acting spoke swaging machine, said spokes being provided with heads, a narrow hopper open at its lower end and provided with guide means for the heads of said spokes, a platform under the said hopper adapted to receive one spoke at a time therefrom, a pair of swaging rolls adjacent to the forward ends of said spoke while lying upon said platform, and a plunger horizontally reciprocable over said platform to move a blank from the hopper and a reciprocable arm secured to said plunger, said arm being provided with a forked outer end, the upper arm of said fork being provided with a recess in its lower edge and a pin or engaging member secured to the lower swaging roll and revolvable therewith to engage with said recess in said arm, and to move said plunger forward, said pin thereafter engaging with the lower arm of said fork to move said arm rearwardly.

1,816,941. CHAIN FASTENER. ALBIN A. THOMAS, York, Pa., assignor to United States Chain & Forging Company, Pittsburgh, Pa., a Corporation of Delaware. Filed June 11, 1930. Serial No. 460,389. 2 Claims. (Cl. 24—69.)



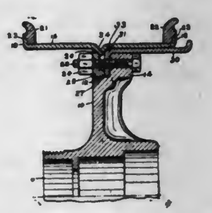
1. A fastener for chain links comprising a link of elongated loop form having a depression formed therein in a direction offset from the plane thereof, a latch lever pivotally connected at one of its ends to one end of said link and having its free end of backwardly-turned hook form and movable between the sides of said link, the lever being provided with a link-receiving recess which lies opposite to the said depression when the lever is in closed positon, and a keeper slidably mounted on said link and movable into position above the said hook when the lever is in closed position.

1,816,942. CONTROL SYSTEM. HAROLD E. TRENT, Lansdowne, Pa. Filed Mar. 14, 1925. Serial No. 15,561. 10 Claims. (Cl. 175—294.)



1. A control system for an electric circuit comprising a double-break switch, a window for effecting closure of the switch, a thermostat for controlling the circuit of the winding, a resistor and means for so connecting the resistor that a portion thereof is in circuit with the winding when the thermostat is operated and all of it is in circuit with the winding when the switch is closed.

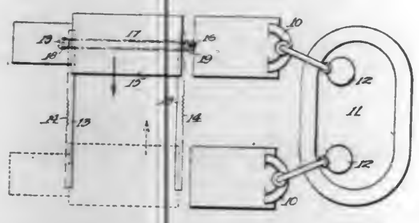
1,816,943. WHEEL. JOHN WILLIAM WHITE, Buffalo, N. Y., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Aug. 7, 1925. Serial No. 48,794. 5 Claims. (Cl. 301—6.)



1. In a steel spoke wheel having at the end of each spoke a seat, a block behind said seat, a brake drum

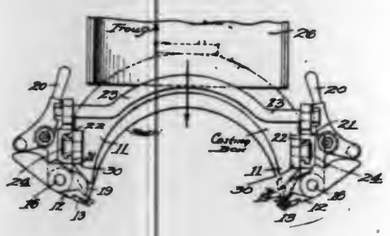
secured upon said blocks, a rim carried by said spokes, and having an annular bead, the front outer corner of said drum having an annular inclined face against which said bead bears and means resting on said seats for bearing against said bead and clamping said rim onto sid spokes.

1,816,944. MULTIPLE STEREOTYPE PLATE CASTING AND FINISHING MACHINE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 10, 1926. Serial No. 134,696. 5 Claims. (Cl. 22—2.)



1. In a plant for making stereotype printing plates, the combination of a pair of casting boxes and a finishing machine, of a pair of racks, a pair of pinions meshing with said racks, means for rotating said pinions to secure a relative side-ways translating movement between the pinions and racks, the racks being connected with the plate making apparatus to transfer a part of it with them.

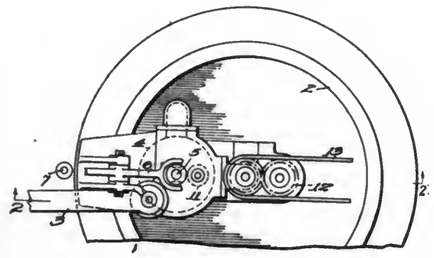
1,816,945. MATRIX SETTING MECHANISM. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 24, 1927. Serial No. 163,183. Renewed Aug. 7, 1930. 17 Claims. (Cl. 22—2.)



1. The combination with a stereotype plate casting mold, of means for holding the edges of the matrix in place in the mold, said means being movable with the matrix to a position outside and clear of the mold cavity, whereby the matrix may be removed and a new matrix secured in position and the matrix holding means with the new matrix secured thereto returned to position in the mold.

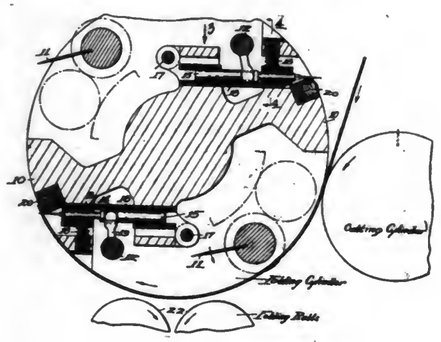
1,816,946. METAL PUMP. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 30, 1927. Serial No. 202,554. 7 Claims. (Cl. 22—70.)

1. In a pump for delivering molten metal, the combination with a pump barrel, a piston in the barrel for raising the metal therein and delivering it, a chamber above the pump barrel for receiving the metal and delivering



it into the barrel, and means for keeping the level of the molten metal and its volume in said chamber constant when the pump is not pumping metal.

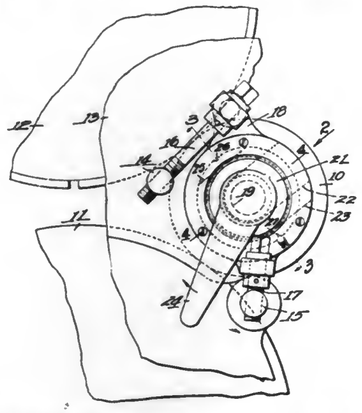
1,816,947. IMPALING PIN. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 27, 1928, Serial No. 308,687. Renewed Dec. 4, 1930. 17 Claims. (Cl. 270—77.)



1. The combination with a folding cylinder provided with reciprocable impaling pins, of a folding blade, of means whereby when the forward edge of the paper is drawn back on the surface of the cylinder by the projection of the folding blade, the impaling pins will move rearwardly on the cylinder a short distance in the direction in which said paper is being drawn back.

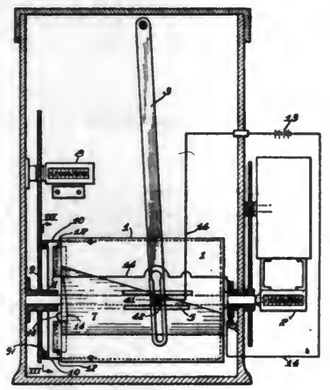
1,816,948. LOCK-UP FOR ROLLS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed May 4, 1929. Serial No. 360,448. 5 Claims. (Cl. 101—348.)

1. The combination with a socket for receiving the shaft and bearing of a roll, said socket having a radial slot through which both the shaft and bearing can be introduced radially, of a movable member having a slot for receiving the bearing and adapted to be placed in posi-



tion to permit the insertion or removal of the bearing and to be moved to a different position in which the bearing is locked in position.

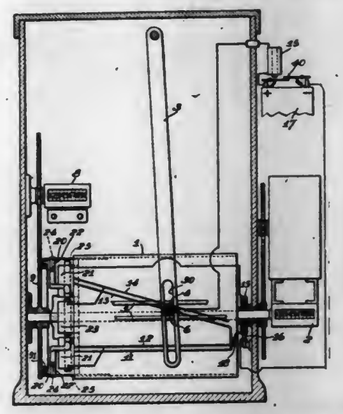
1,816,949. MEASURING APPARATUS. ARCHER E. Young, Pittsburgh, Pa. Filed Mar. 25, 1929. Serial No. 349,639. 2 Claims. (Cl. 235—61.)



1. In apparatus for aggregating the value of a variable during successive intervals of time, a rotating member and a rotatable member, a rotation-imparting member borne by said rotating member and movable radially with respect to the axis of rotation to and from rotation-imparting engagement with the rotatable member, means for moving said rotation-imparting member to such engagement and maintaining it in such engagement during a greater or less fraction of a complete rotation of said rotating member, according to the value of the variable during successive periods of rotation.

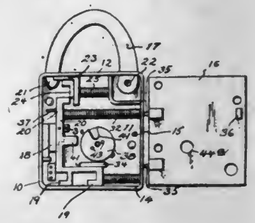
1,816,950. MEASURING APPARATUS. ARCHER E. YOUNG, Pittsburgh, Pa. Filed Apr. 18, 1929. Serial No. 354,861. 7 Claims. (Cl. 235—61.)

7. In apparatus for aggregating the value of a variable during successive intervals of time, a rotating member provided with two electrical contact pieces spaced apart at intervals of varying circumferential extent from point to point, a brush movable longitudinally opposite the face of said carrier in response to variation in the value of the variable under measurement and adapted to make electrical contacts with said contact pieces successively as the rotating member rotates, tally mechanism including a rotatable member, a resilient clutch member borne by the rotating member first named, standing normally in its released position and adapted to be drawn aside under tension to clutch-engaging position, a spring-backed latch



adapted to retain the drawn-aside clutch member in clutch-engaging position, an electro-magnet energized by the contact of said brush with one of said contact pieces and when energized adapted to draw said clutch member to clutch-engaging position, and a second electro-magnet energized by contact of said brush with the other of said contact pieces and adapted when energized to open said latch against spring tension.

1,816,951. LOCK. GERMÁN ALBERTO AÑEZ AÑEZ, Maracaibo, Venezuela. Filed Nov. 9, 1928. Serial No. 318,189. 1 Claim. (Cl. 70—112.)



In a lock, a casing, a locking element movable therein, tumbler discs adapted to coact with the locking element to maintain the latter in locking position, spring means normally tending to move the locking element to locking position, a rotatable key controlled member adapted to retract the locking element, a bolt slidably mounted in the casing, and a pin passing through the locking element and bolt to cause movement of the latter with the locking element, said pin being removable whereby the bolt may be uncoupled from the locking element, a clip member adapted to embrace the bolt and engage the casing to retain the bolt in retracted position when the pin is removed from the locking element.

1,816,952. LIGATURE HOLDING AND TYING INSTRUMENT. GERTRUDE E. BERGMAN, Fort Dodge, Iowa. Filed Jan. 16, 1930. Serial No. 421,255. 7 Claims. (Cl. 128—334.)

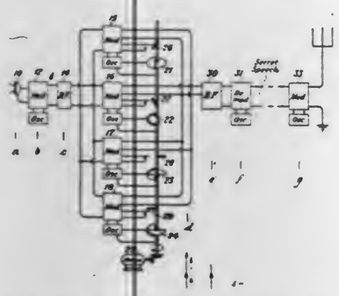
1. A ligature holding and tying instrument, comprising a body made up of a pair of elongated crossed and

pivotally connected members, said members at one end being formed to provide a pair of bowed tips the concave sides thereof being in opposed relation, the said tips each being formed to provide an eye for the passage



therethrough of an end of a looped and knotted ligature, and a shiftable element carried by the members adjacent their other ends having the ends of the ligature secured thereto, said bowed tips being directed laterally from the members of which they form a part.

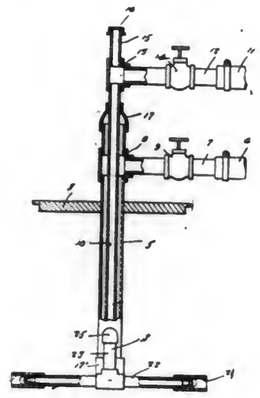
1,816,953. PRIVACY SIGNALING SYSTEM. RALPH BOWN, Maplewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 24, 1929. Serial No. 394,898. 15 Claims. (Cl. 179—1.)



1. In a secrecy communication system, the method of obtaining secrecy, which consists in modulating the signal band against a plurality of carrier frequencies, causing the carrier frequencies to change continuously and cyclically, suppressing all but a band of width equal to the original signal band.

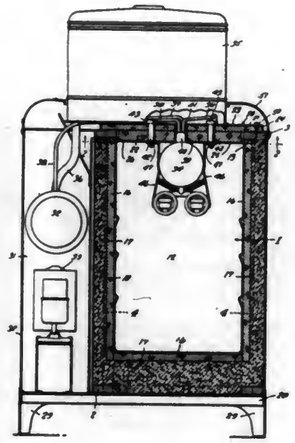
1,816,954. TANK CAR CLEANING APPARATUS. MARSHAL E. BYERLEY, Big Spring, Tex. Filed May 20, 1930. Serial No. 457,420. 1 Claim. (Cl. 299—140.)

A tank car cleaning apparatus of the character described comprising a steam conducting pipe, supporting means for the steam conducting pipe, a water conducting pipe extending longitudinally through the steam conducting pipe, a steam discharge pipe having communication, at an intermediate point, with the steam conducting pipe for receiving steam therefrom, nozzles on the ends of the steam discharge pipe, mixing chambers on the free end portions of the steam discharge pipe extending longitudinally over and beyond the nozzles, and conduits connected with the water conducting pipe and with the mixing chamber in a



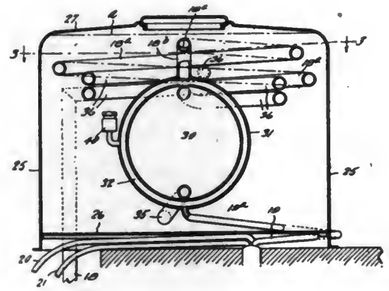
manner to discharge water thereinto in a direction at right angles to the direction of flow of the steam and to impinge the water against the outlet ends of the nozzles.

1,816,955. REFRIGERATOR CONSTRUCTION. LEE S. CHADWICK, Shaker Heights Village, and MARC RESEK, Cleveland Heights, Ohio, assignors to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 7, 1929. Serial No. 344,954. 7 Claims. (Cl. 62—118.)



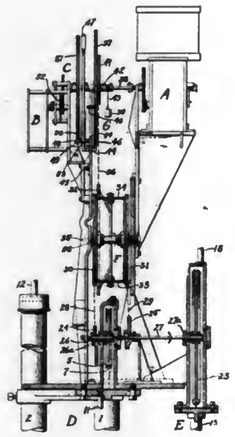
1. In refrigeration apparatus of the class set forth, the combination of a cabinet incorporating an open frame of non-heat conducting material, a wall section for application thereto consisting of a body of insulating material having a portion that occupies said frame and a marginal portion that overlies and engages the frame, metal plates applied to the inner and outer surfaces of said body of insulating material, said body and said plates having registering openings, spools of non-heat conducting material extending through the openings in the outer plate and said body of insulating material and having heads overlying the portions of the outer plate adjacent said openings, an evaporator disposed within the cabinet, and fastening means connecting it to said spools.

1,816,956. CONDENSER. LEE S. CHADWICK, Shaker Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 27, 1929. Serial No. 358,468. 25 Claims. (Cl. 257—28.)



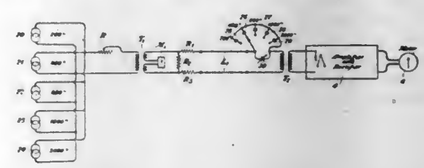
1. A condenser for use in refrigeration apparatus of the class set forth, the same comprising a condensing chamber, means for maintaining a substantially stationary body of cooling fluid in contact with a part of the wall of said chamber, and means for circulating a cooling fluid in contact with another part of the wall of said chamber.

1,816,957. FLUID METER. HORACE CHRISMAN and JOHN T. MADISON, Pittsburgh, Pa., assignors, by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 12, 1925, Serial No. 8,601. Renewed Nov. 30, 1928. 16 Claims. (Cl. 235—61.)



2. A fluid meter comprising, in combination, an indicator, a source of power, transmission means interposed between them, a differential pressure gauge, a static pressure gauge, means associated with said gauges adapted to disconnect the transmission means, and means actuated by the source of power adapted to permit periodic adjustment by the gauges of the disconnecting means associated with said gauges.

1,816,958. TRANSMISSION MEASURING SYSTEM. ALVA B. CLARK, Wyoming, and FRED H. BEST, Westfield, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Original application filed Apr. 5, 1927, Serial No. 181,244. Patent No. 1,746,241, dated Feb. 11, 1930. Divided and this application filed Aug. 23, 1929. Serial No. 387,994. 5 Claims. (Cl. 179—175.)

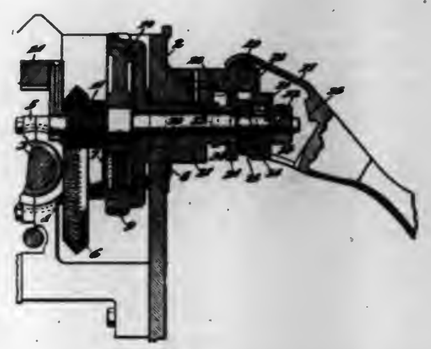


1. In a transmission measuring system, the combination with a circuit whose transmission equivalent is to be measured, of a source of electrical oscillations connected with the said circuit, the said source being capable of impressing upon the said circuit a plurality of discrete frequencies, means connected with the said circuit to tune it for each of said frequencies, and means also connected with said circuit to indicate the transmission equivalent thereof at each frequency transmitted.

1,816,959. WEIGHTING NATURAL SILK. RENE CLAVEL, Basel, Switzerland. Filed May 16, 1927, Serial No. 191,941, and in Germany Sept. 17, 1926. 14 Claims. (Cl. 8—131.)

3. A method of weighting natural silk which comprises the steps of treating the silk with aqueous solutions of heavy metal compounds in presence of acid compounds and then transferring the silk directly, without washing, neutralizing or acidifying it, into the following weighting bath.

1,816,960. APRON DISK TRANSMISSION MECHANISM. FRANCIS B. COCKBURN, Cincinnati, Ohio, assignor to The Lodge & Shipley Machine Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 21, 1927. Serial No. 241,505. 6 Claims. (Cl. 74—7.)

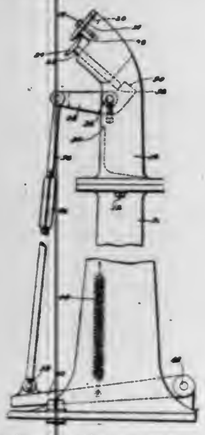


1. In a device of the class described, a support, a sleeve element journaled in said support, a shaft element journaled to said sleeve element, friction clutch means operative to couple said elements upon their relative longitudinal displacement, opposed abutments on said elements, an interrupted ring having wedge faces adapted to engage between said abutments upon radial contraction of the ring to displace the abutments and therewith their associated elements to engage the clutch means, and means to contract said ring.

1,816,961. ALLOY AND METHOD OF PREPARING SAME. HUGH S. COOPER, Cleveland, Ohio, assignor to Beryllium Corporation of America, New York, N. Y., a Corporation of New York. Filed Dec. 2, 1925. Serial No. 72,817. 2 Claims. (Cl. 75—1.)

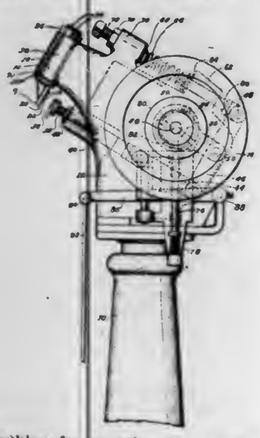
2. An alloy containing silver and from 3% to 5% of beryllium.

1,816,962. PRESSING MACHINE FOR USE IN THE MANUFACTURE OF BOOTS AND SHOES. ANDREW EPPLER, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 30, 1927. Serial No. 243,702. 10 Claims. (Cl. 12—67.2.)



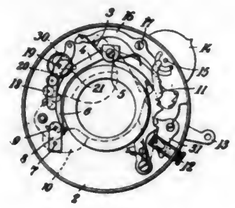
1. A machine for pressing the welt lap of a boot or shoe having, in combination, a tool having a flat surface for engaging the welt lap of a shoe, a support having a flat surface to engage the shoe bottom, and manually operated means having a great mechanical advantage for relatively moving the tool and support to apply heavy sustained pressure perpendicularly of the welt to all portions of the welt lap to cause the welt lap to be reduced in thickness.

1,816,963. PRESSING MACHINE FOR USE IN THE MANUFACTURE OF BOOTS AND SHOES. ANDREW EPPLER, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 30, 1927, Serial No. 243,703. Renewed Mar. 25, 1931. 12 Claims. (Cl. 12—67.2.)



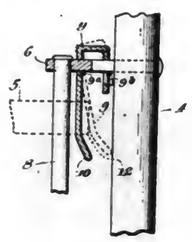
1. In a machine for pressing the welt lap of a stitch-down shoe in which the welt is carried entirely around the shoe and the ends lapped one upon the other, the combination of a tool having a flat lower surface to engage the welt and having a lateral extent sufficient to cover the lapped area of the welt, a sole engaging member having a surface parallel to the welt engaging face of the tool, said surfaces being inclined downwardly and outwardly with respect to the machine, and power operated means including a powerful spring for relatively moving the tool and said sole engaging member in a direction perpendicular to their work engaging surfaces to apply predetermined powerful pressure to the material between them and to cause the lapped portions of the welt to be reduced in thickness.

1,816,964. PHOTOGRAPHIC SHUTTER. CARL FRIEDRICH FOTH, Berlin, Germany. Filed Oct. 10, 1928, Serial No. 311,674, and in Germany Feb. 9, 1928. 2 Claims. (Cl. 95—62.)



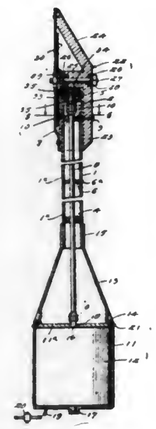
1. In a photographic shutter including a casing provided with a central exposure aperture, a diaphragm structure adapted to close and open the said aperture for the exposing purpose, a clockwork mounted in the said casing and adapted to be started from without, a shaft adapted to be revolved by the said clockwork, two cams on the said shaft, a lever adapted to actuate the said diaphragm, and a pin fixed on said lever and adapted to be engaged by the said cams and in turn to displace the lever for the actuation purpose.

1,816,965. INFANT'S CRIB. HYMAN GERTLER, Montreal, Quebec, Canada. Filed Oct. 3, 1928. Serial No. 310,134. 3 Claims. (Cl. 5—100.)



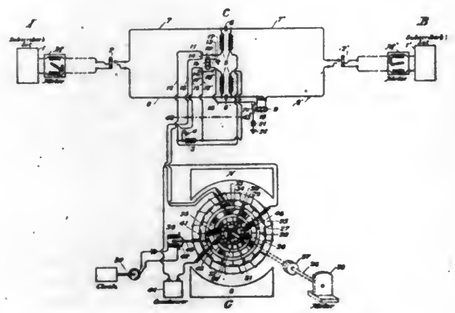
1. An infant's crib comprising a frame having corner posts, vertically movable sides for the crib adapted to occupy a raised and a lowered position, upper and lower lugs rigidly carried by each corner post, vertical rods mounted in said lugs and forming guides upon which the sides slide, depending latches substantially of U-shape, each arm of the U-shaped latches being provided with rectangular openings loosely engaging the upper lugs, one of the arms of the U-shaped latches being longer than the other and provided with a hole, and projections on the sides adapted to be brought into detachable engagement with the latches through the holes.

1,816,966. LONG POLE POWER PRUNING SAW. ALBERT S. GRAY and ULYS A. SIMMONS, Wenatchee, Wash. Filed May 19, 1930. Serial No. 453,655. 1 Claim. (Cl. 30—11.)



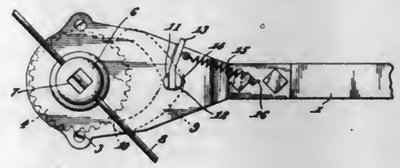
A pruning device comprising a hollow pole, a shaft extending longitudinally of and rotatably supported within the pole, an electric motor secured to the lower end of the pole with its armature shaft secured to said first shaft, a sleeve on the upper end of the pole and extending above the same, an arm extending longitudinally of one side of the sleeve and provided at its upper end with a bearing boss extending across the upper end of the sleeve, means removably securing the sleeve and arm to the pole, an arbor journaled in the bearing boss, a circular saw secured to the arbor, a stub shaft journaled in the sleeve and detachably connected to said first shaft, meshing gears fixed to the arbor and stub shaft, an arm extending upwardly from the upper end of said first arm in the direction of the opposite side of the sleeve and to a point beyond the saw, and a shield for the saw removably secured to the upper end of said second arm and to the sleeve.

1,816,967. TELEPHONE SYSTEM. IRVING W. GREEN, Cranford, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 21, 1928. Serial No. 327,583. 5 Claims. (Cl. 179—11.)



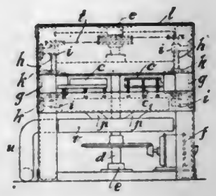
1. In combination, a magnet having a plurality of poles, an armature including a core and a plurality of coils around said core adapted to have electromotive force induced therein by relative rotation between said magnet and said armature, a commutator including a plurality of bars, said bars and said coils being electrically connected to one another, a pair of collector rings insulated from each other, a pair of brushes fastened to said collector rings and adapted to be in electrical contact with opposite sides of said commutator, and means for periodically rotating said collector rings through a predetermined arc to vary the current therethrough.

1,816,968. WRENCH. WILLIAM J. GREUTMAN, CHARLES A. SHOOK, and MAX F. BRANDT, Miller, Nebr. Filed Mar. 20, 1931. Serial No. 524,130. 2 Claims. (Cl. 81—63.)



1. A lever having a bifurcated end providing a head, a toothed wheel having rounded portions extending therefrom and the opposite sides thereof journaled through the head and sockets projecting from said rounded portions, a substantially U-shaped dog having its ends formed with teeth arranged between the head, a pivot to which the dog is secured journaled through the head and having one of its ends bifurcated, an angle arm pivotally secured in the said bifurcation and a coiled pressure spring secured to the angle end of the arm and to the lever at its juncture with the head.

1,816,969. MACHINE FOR CLEANING TIMBERS ESPECIALLY BOARDS, BEAMS OR THE LIKE. WILHELM GRINKE, Hemelingen, near Bremen, Germany. Filed Oct. 4, 1930, Serial No. 486,331, and in Germany Oct. 5, 1929. 5 Claims. (Cl. 51—110.)

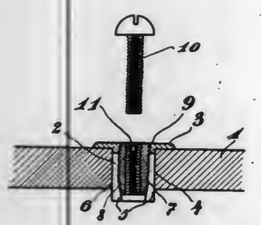


1. A machine for cleaning timbers especially boards, beams or the like, comprising in combination a spring supported guide table, a grinding wheel rotatably mounted above said table, a grinding ring on said grinding wheel and grinding rolls at the side of said grinding wheel for guiding said timber and for cleaning the edges of the same.

1,816,970. ANCHOR SOCKET. GOTTFRIED HESS, Winznau, near Olten, Switzerland. Filed Mar. 3, 1930, Serial No. 432,859, and in Germany Mar. 11, 1929. 1 Claim. (Cl. 85—2.4.)

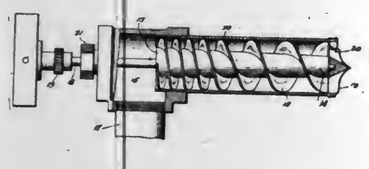
An anchor-socket for fastening current-carrying devices to relatively thin slabs serving as switch-boards, comprising a sleeve provided with a lateral flange to bear against the face of said slab, said sleeve having a cylindrical portion longitudinally slitted up to said flange and fitted in a hole of the slab and formed with an internal thread limited by a conically-contracted end portion; an externally and internally threaded hollow thimble fitting in the sleeve

and having its external thread engaged with the internal thread of said sleeve, said thimble terminated in a conical portion which fits in the contracted portion of the sleeve so as to expand the same and to remain immovable against



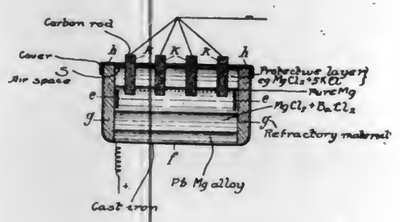
any turning effect of a fastening screw received by the internal thread, and means provided on the flange and screw to permit those elements to be engaged by holding instruments for fixing the socket.

1,816,971. TURBINE. CARLTON L. HOFF and THOMAS P. LONG, York, Pa.; said Long assignor to said Hoff. Filed Aug. 16, 1928. Serial No. 300,054. 3 Claims. (Cl. 253—148.)



1. In a fluid current motor, the combination of a casing having inlet and outlet openings, a tapered shaft in said casing between said openings with its end of major diameter toward said outlet, a spiral blade encircling said shaft, the pitch of said blade decreasing toward said outlet, and means for directing a motive fluid in a spiral path against said blade at said inlet opening.

1,816,972. MANUFACTURE AND PURIFICATION OF MAGNESIUM. ALFRED JESSUP, Paris, France. Filed Apr. 2, 1926, Serial No. 99,411, and in France Oct. 9, 1925. 6 Claims. (Cl. 204—19.)



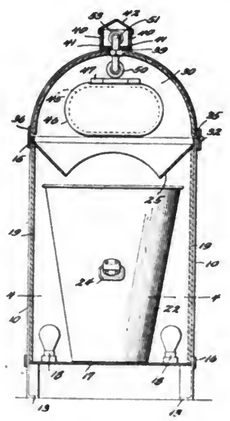
1. A process of starting up the electrochemical purification of magnesium in a secondary cell which comprises first pouring only two heavy layers into the cell, one of such layers consisting of magnesium alloy and the other consisting of a magnesium salt and a heavy metal compound readily miscible therewith when molten, the alloy being heavier than the salt, then starting the current while using a metal piece destined to separate the two chloride layers as the cathode in order to insure its thorough coating with magnesium, and when this object has been achieved, adding a layer of fused light magnesium metal, and a layer of fused light magnesium metal, and a layer of light protective salt, whereupon the cell will commence to function normally.

1,816,973. PROCESS OF INCREASING THE STRENGTH AND RESISTIBILITY AGAINST MOISTURE OF HIGH MOLECULAR CARBOHYDRATES. JULIUS KANTOROWICZ, Breslau, Germany. Filed Oct. 28, 1927, Serial No. 229,527, and in Germany Oct. 30, 1926. 9 Claims. (Cl. 8—20.)

1. The process of increasing the strength and resistibility against moisture and similar agents of high molecular carbo-hydrates, which consists in submitting said carbo-hydrates to the action of formaldehyde and of acid and to the action of a temperature lying in the range of about 110 to 120 degrees centigrade.

8. As a new product of manufacture, paper combined and impregnated with formaldehyde and acid and dried at a temperaure of about 120 degrees centigrade.

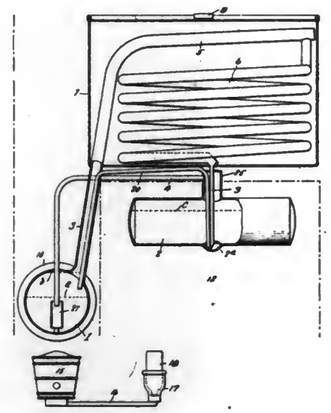
1,816,974. STREET LIGHTING WASTE RECEPTACLE. MICHAEL J. KAVANAGH, Gloversville, N. Y., assignor of one-third to Frederick A. Moore, Gloversville, N. Y., and one-third to Ole Strand, New York, N. Y. Filed July 26, 1928. Serial No. 295,559. 4 Claims. (Cl. 40—132.)



2. In a device of the character described, a rectangular casing having advertisement carrying walls, a cover consisting of a plurality of semi-circular end plates and a semi-cylindrical glass plate having a legend thereon between the end plates, and means within the cover for illuminating the glass plate.

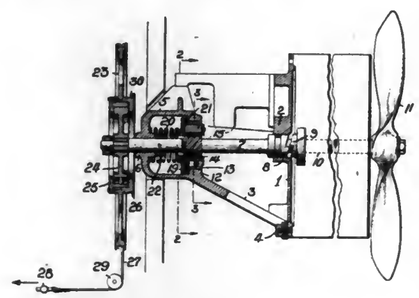
1,816,975. REFRIGERATION APPARATUS. DAVID F. KEITH, Cleveland, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 27, 1927. Serial No. 242,574. 18 Claims. (Cl. 82—120.5.)

1. In refrigeration apparatus of the intermittent absorption type consisting of a closed system involving a generator-absorber section, and evaporator section and vapor conveying means through which said sections communicate; and a siphon independent of said means having its short leg opening into the evaporator section and its long



leg opening into the generator-absorber section, the siphon being otherwise closed throughout its length to the interior of the system.

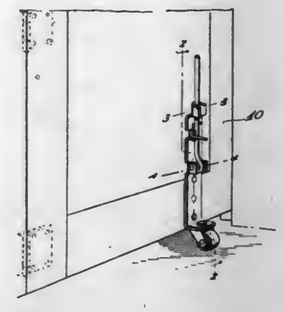
1,816,976. ENGINE STARTING DEVICE FOR AEROPLANES. CHARLES B. KIRKHAM, Garden City, N. Y., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Aug. 3, 1922, Serial No. 579,359. Renewed Jan. 28, 1930. 14 Claims. (Cl. 123—179.)



1. In an aeroplane, a device for starting the motor comprising a starter shaft, means for rotating said shaft from the aviator's seat, means for moving said shaft longitudinally when the latter is rotated, said last-named means being also movable longitudinally with said shaft, resilient means opposing the longitudinal movement of said last-named means, and means for preventing the rotation of said second means in one direction.

1,816,977. GARAGE DOOR APPLIANCE. THOMAS KLOSS, Chicago, Ill. Filed Feb. 26, 1929. Serial No. 342,745. 1 Claim. (Cl. 292—338.)

A door stop comprising an integral sheet metal bracket having formed on its upper end a substantially U-shaped spring clip provided with laterally turned lips, outwardly bent perforated ears formed substantially midway between the ends of the bracket, a vertically swingable stop bar pivoted between said ears and normally retained in inoperative position by said U-shaped clip portion, an outwardly bent perforated portion arranged intermediate said lips and said ears and having a vertically movable bell

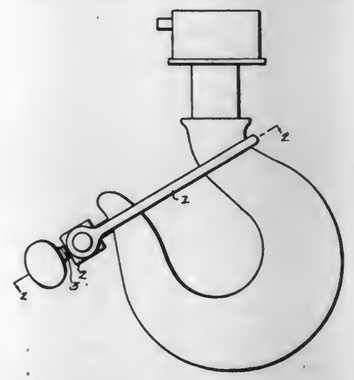


crank journaled therein, said bell crank being provided with a lateral extension engageable with the stop bar to release said bar from the clip portion of the support.

1,816,978. PRINTING INK BASE. GEORGE D. KNIGHT, Redwood City, Calif., assignor to Emory Winship, San Francisco, Calif. Filed Apr. 16, 1924, Serial No. 706,881. Renewed June 30, 1927. 7 Claims. (Cl. 134—35.)

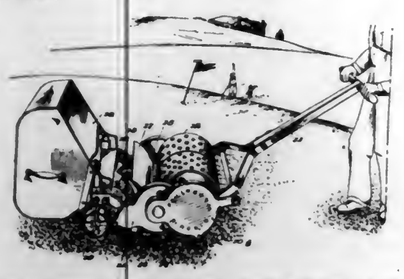
3. An intaglio ink including casein dissolved in an aqueous solution of ammonia, and animal glue and an oxidizing agent.

1,816,979. SAFETY GUARD FOR CABLE HOOKS AND THE LIKE. CHARLES V. KOONS, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 8, 1930. Serial No. 474,049. 6 Claims. (Cl. 24—241.)



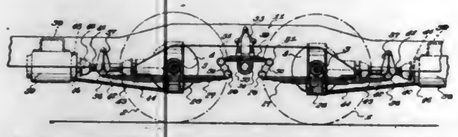
1. A safety guard for hooks comprising a hook-embracing yoke member, a nut pivotally mounted in said yoke, and a thumb screw threaded into said nut and adapted to react with the adjacent embraced portion of the hook to lock the said guard in position, said yoke member being completely detachable from the hook when said screw is released.

1,816,980. MOWING MACHINE. HARRY R. LONTZ, Richmond, Ind., assignor to F. & N. Lawn Mower Company, Richmond, Ind., a Corporation of Indiana. Filed Oct. 16, 1928. Serial No. 312,866. 4 Claims. (Cl. 56—249.)



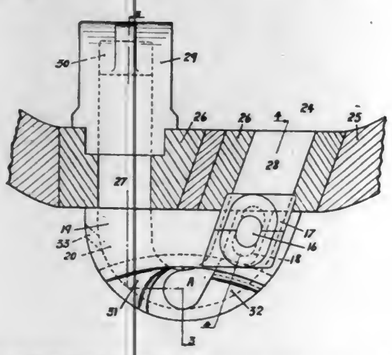
1. In a putting green mower, hollow driving and supporting means extending across the entire width of the mower and having a substantially smooth cylindrical ground engaging periphery provided radially and axially with series of openings extending therethrough and adapted to increase the tractive effect of said means.

1,816,981. DRIVING AND TORQUING ARRANGEMENT FOR ROAD VEHICLES. ARTHUR I. MARCUM, Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation, a Corporation of Delaware. Filed June 26, 1926. Serial No. 118,654. 11 Claims. (Cl. 180—22.)



3. A motor vehicle comprising a frame, tandem driven shafts secured to springs pivoted to said frame on spaced fixed lines extending transversely of the frame, an equalizing member attached to the frame between said lines and shackles connecting said member and springs, a motor for each axle, each motor being pivoted to the frame to swing about an axis that is approximately coincident with one of said lines, and an extensible drive shaft operatively connecting each motor to its axle.

1,816,982. GLASS FURNACE FOREHEARTH. ALEXANDER FRANCIS MCNISH, Perth, Scotland, assignor of one-half to John Moncrieff Limited, Perth, Scotland. Filed Aug. 9, 1929. Serial No. 384,703. 1 Claim. (Cl. 49—56.)

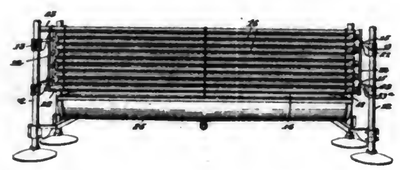


The combination with a glass reservoir, of a horizontally arranged channel open at both ends to said reservoir, said channel being in the form of a return bend having divergent limbs, one limb of which extends out from the wall of the reservoir at right angles thereto, while the other limb returns the glass to the reservoir in a direction away from the glass entering the channel, a gathering portion formed by a substantially semi-circular bend in the channel at the part furthest removed from the reservoir, and a cover over said channel having apertures to receive gathering and circulating devices.

1,816,983. PROCESS OF FORGING MAGNESIUM ALLOYS. GILBERT MICHEL, Bagneux, France, assignor to Societe "Le Magnésium Industriel," Paris, France. Filed Mar. 24, 1928, Serial No. 264,578, and in France Mar. 31, 1927. 7 Claims. (Cl. 148—21.3.)

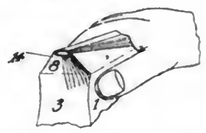
1. The process of forging alloys composed in greater part of magnesium, and containing less than 6% copper which comprises subjecting the member to be forced to a temperature of about 485° C. and maintaining the said member at the said temperature until the entire mass of the said member is raised to the said temperature before performing the usual forging operations and conducting the forging operations while at the temperature of about 485° C. whereby the said member is given a uniform molecular structure.

1,816,984. COOLER. HARRY L. MILLER, Chester, Pa. Filed Mar. 7, 1930. Serial No. 434,022. 5 Claims. (Cl. 257—183.)



1. In a trickle cooler, the combination with a vertical series of horizontally disposed cooling tubes connected at their ends by returns provided with outwardly extending lugs, of vertical supporting racks or bars having inwardly extending lugs on which said outwardly extending lugs rest, said outwardly and inwardly extending lugs being constructed with registering holes, bolts passing loosely through said lugs in said holes and serving to attach said returns to said supporting racks or bars, and means outside of said racks or bars, for supporting them.

1,816,985. CARTON AND POURING SPOUT THEREFOR. WARREN A. MORRIS, Wyoming, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Mar. 5, 1928. Serial No. 259,273. 7 Claims. (Cl. 229—17.)



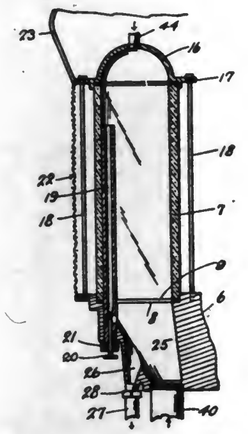
1. A carton having two pairs of closure flaps, opposite pairs of said flaps being adapted to fold correspondingly, one pair adapted to be folded so as to lie one over another forming a top closure for the carton, and the other pair being provided with bellows folding lines of articulation which will permit their being folded into tongues formed of three-ply layers which are not sealed one to another and which may be secured to the carton to form a closure, and one of said tongues having cut away portions forming the mouth of a dispensing spout.

1,816,986. PARACHUTE. FRANCIS HOWARD PACKARD, Boardman, Oreg. Filed May 5, 1930. Serial No. 449,948. 1 Claim. (Cl. 244—21.)



A parachute of the character described comprising a series of radiating connected lobes, flexible substantially rectangular sheets mounted on certain of the lobes and having their marginal portions connected thereto in a manner to provide a leak-proof joint therebetween, said sheets, in conjunction with the lobes constituting bags for the reception of air, the side edges of the sheets being disposed flush with the longitudinal edges of the lobes upon which the sheets are mounted said sheets being arranged in spaced pairs one of the lobes being disposed between the bags constituting each pair, and an inflating valve operatively connected with each of the bags.

1,816,987. LUBRICANT DISPENSING APPARATUS. LELAND W. PIERCE, Stockton, Ill. Filed Aug. 19, 1929. Serial No. 386,966. 1 Claim. (Cl. 221—95.)



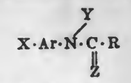
In an oil dispensing device, a measuring container, means for delivering oil to the measuring container, means for draining oil from the container for use, a vertically disposed stationary excess oil receiving pipe in said container arranged in close proximity to one side wall thereof, said excess oil receiving pipe terminating short of the upper end of the container and above a point in the container indicating a measured quantity of liquid, the lower portion of the pipe having communication with the container, a valve mounted within the lower portion of said pipe for controlling the flow of oil from said pipe into said container, and means for operating the valve exteriorly of the measuring container and at a point adjacent to the lower end thereof.

1,816,988. STRUCTURAL MATERIAL. HARRY H. POTTS, Chicago, Ill. Filed May 24, 1930. Serial No. 455,460. 3 Claims. (Cl. 106—24.)

1. Light-weight load bearing concrete, made of water, Portland cement, and an aggregate consisting essentially of hard particles of granulated blast furnace slag, said aggregate being of such character and size as to produce a concrete attaining compressive strength of not less than twelve hundred pounds per square inch of net area, and having a density of not more than substantially one hundred and ten pounds per cubic foot of net volume, and being adapted to be sawed and cut with chisels and to receive and retain ordinary nails.

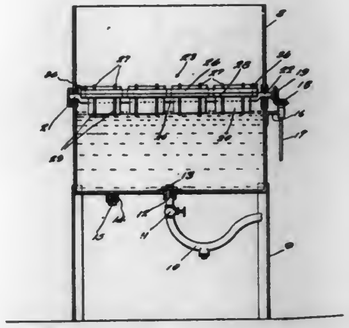
1,816,989. LIGHT-SENSITIVE LAYER. MAXIMILIAN PAUL SCHMIDT, WILHELM NEUGEBAUER, and ROBERT FRANKE, Wiesbaden-Biebrich, Germany, assignors to Kalle & Co., Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Filed Mar. 24, 1930, Serial No. 438,648, and in Germany Mar. 30, 1929. 8 Claims. (Cl. 95—7.)

2. As new products, light-sensitive layers on a suitable base, containing compounds of the following formula:



wherein X stands for a diazonium residue, Ar for an aryl residue substituted or not, Y for hydrogen, alkyl, aryl or aralkyl, Z for O— or S— and R for alkyl, aryl or NH-aryl.

1,816,990. WASHING APPARATUS. JOHN E. VAN DALL, Covington, Okla. Filed Dec. 12, 1928. Serial No. 325,599. 2 Claims. (Cl. 259—81.)

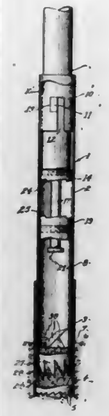


1. In a washing machine of the character described including a tank; a rack supported for gyratory movement within the tank, said rack being divided into a pair of sections, one of said sections being adapted to support a receptacle, the other section being adapted to retain the receptacle against the first mentioned section.

1,816,991. FISHING TOOL. CHARLES L. VAN AMBURGH and JAMES R. RUSSELL, Long Beach, Calif.; said Van Amburgh assignor to Frank I. Kauffman, Long Beach, Calif. Filed Oct. 31, 1927. Serial No. 229,991. 11 Claims. (Cl. 255—72.)

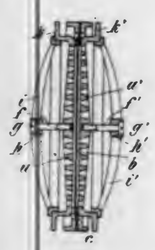
7. In a tool of the character described, a core forming bit, a normally open basket mounted in the bit, means

for producing a hammering action upon the basket in response to rotation of a drill pipe, to force the basket



downwardly into the core formed by the bit, and means for closing the basket when the latter has penetrated the core.

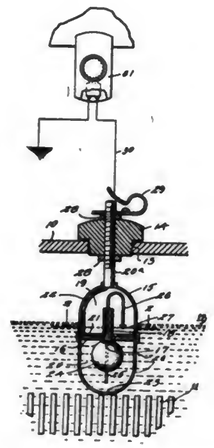
1,816,992. SOUNDING CONDENSER. HANS VOGT, Berlin, Germany. Filed Feb. 26, 1929, Serial No. 342,705, and in Germany May 16, 1928. 2 Claims. (Cl. 179—111.)



1. A sounding condenser comprising two firmly interconnected capacity surfaces, a vibratile diaphragm disposed midway between the said two surfaces, and means for causing the said capacity surfaces to bulge in opposed directions with relation to each other so as to form shallow concavities with the diaphragm freely sandwiched therebetween.

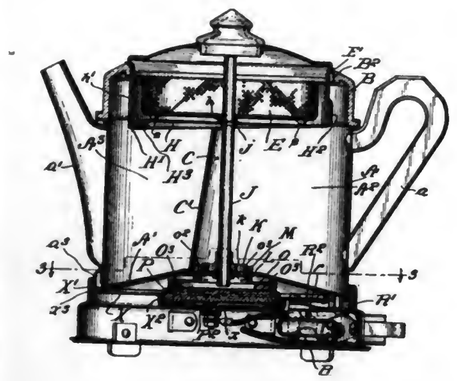
1,816,993. BATTERY WATER LEVEL INDICATOR. LELAND ROSS WILLITS, Atlantic City, N. J. Filed Oct. 25, 1928. Serial No. 314,985. 3 Claims. (Cl. 200—84.)

1. A water level indicator for a storage battery cell, comprising a hollow insulating casing adapted to be arranged in the cell, a partition separating the casing into upper and lower compartments, the casing being provided below the partition with perforations to permit the battery fluid to enter the lower compartment, a stationary contact arranged within the upper compartment, a float arranged within the lower compartment, a contact carried by the float and extending through the partition for engagement with the stationary contact when the battery fluid has lowered to a predetermined extent, a binding post secured to the casing and adapted to extend



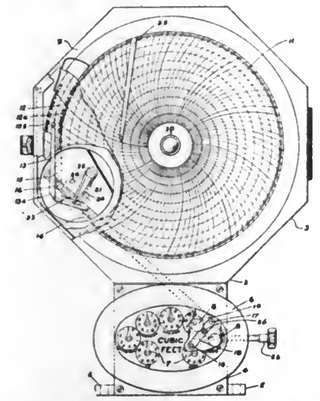
through and be secured to the top of the cell, and an element electrically connecting the binding post to the stationary contact.

1,816,994. AUTOMATIC COFFEE PERCOLATOR. CHARLES C. ARMSTRONG, Huntington, W. Va., assignor, by mesne assignments, to Armstrong Appliance Corporation, a Corporation of Delaware. Filed June 6, 1929. Serial No. 368,860. 15 Claims. (Cl. 219—43.)



1. A coffee percolator comprising a base, an electric heating element pivotally supported thereby substantially central thereof, a coffee pot supported on said heating element and comprising compartments on opposite sides of an approximately vertical plane passing through said pivotal axis, and percolator means operating under the action of the heating element to transfer water from one compartment to the other and thereby rock said base, and means whereby the rocking of said base cuts off current from said heating element.

1,816,995. COMBINED PRESSURE RECORDING AND VOLUME REGISTERING ATTACHMENT FOR FLUID METERS. JAMES R. ARMSTRONG, Crafton, and LEVI H. DUNCAN, Ben Avon, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1925. Serial No. 78,545. 12 Claims. (Cl. 234—17.)

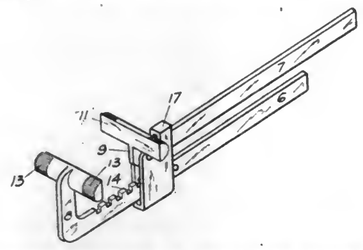


1. A fluid measuring device including a meter index having a plurality of index shafts, a chart associated therewith, a recording stylus operatively associated with the chart, eccentrics on at least two of said index shafts, and an operating connection for the stylus selectively movable into operative engagement with either of the eccentrics.

1,816,996. METHOD OF SEPARATING AND PREPARING LIME AND MAGNESIA. HARVEY N. BARRETT, Tiffin, Ohio, assignor to Dolomite Incorporated, Maple Grove, Ohio, a Corporation of Ohio. Filed Oct. 22, 1928. Serial No. 314,309. 22 Claims. (Cl. 23—201.)

1. The method of treating material containing a calcinable compound of calcium along with other ingredients, which consists in calcining such material to convert such calcium compound into lime, treating the calcined material with a not to exceed 15 per cent. solution of an ammonium salt of an acid capable of forming a soluble calcium salt, whereby a solution of such calcium salt is obtained, and separating the latter from the residual material.

1,816,997. WRENCH. GEORGE BROWN, Oakland, Calif. Filed Jan. 20, 1930. Serial No. 421,993. 5 Claims. (Cl. 81—72.)

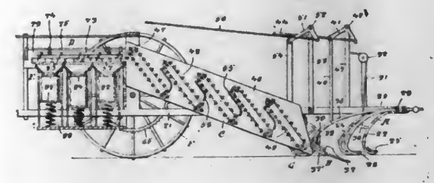


1. A wrench comprising a yoke, a lever pivoted in said yoke and having at one end thereof a transverse semi-cylindrical member provided with peripheral teeth, a sector gear on said lever eccentric to said pivot, a complementary gripping member slidable in said yoke and having rack teeth adapted for engagement with said sector gear, and a transverse semi-cylindrical member provided with peripheral teeth and adapted to engage the inner periphery of an object.

1,816,998. METHOD OF CURING ALFALFA HAY AND OTHER VEGETATIVE PRODUCTS. EVERETT B. CUSHMAN, Hollywood, Calif., assignor of one-half to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed Oct. 21, 1927. Serial No. 227,866. 6 Claims. (Cl. 99—11.)

1. The method of curing alfalfa and the like, which comprises cutting the plant when fresh and green, crushing the plant to release liquid contained in the cells thereof and then allowing the crushed plants to dry, the crushing and releasing of liquid serving to accelerate drying of the plant.

1,816,999. AGRICULTURAL MACHINE. CHARLES C. ENSMINGER, Jacksonville, Fla. Filed Jan. 21, 1929. Serial No. 333,939. 3 Claims. (Cl. 55—9.)



2. In an agricultural machine of the class described, plant lifting members, a digging blade in rear of the said members, upwardly and rearwardly inclined transfer members extending from the rear side of the last mentioned blade, a series of rearwardly inclined conveyors in rear of the transfer members and having their relatively adjacent ends in spaced overlapping relation to one another throughout the series, and means at the upper end of the rearmost conveyor of the series for receiving and sorting the plant bulbs delivered thereto.

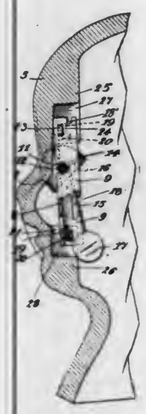
1,817,000. FLEXIBLE SHAFT. BERNARD GRANVILLE, New York, N. Y., assignor to Granville Holding Corporation, a Corporation of New York. Filed Apr. 5, 1926, Serial No. 99,699. Renewed Oct. 13, 1930. 26 Claims. (Cl. 64—30.)



2. In a flexible shaft, the combination of two adjacent rings having co-operating annular crown gears and oppo-

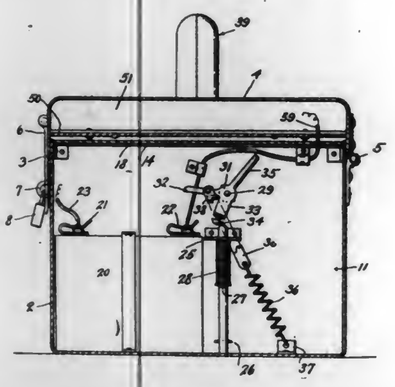
sitely facing concave spherically curved surfaces, and a connecting member having a rod extending through the crown gears and heads with convex spherically curved inner surfaces engaging the spherically curved surfaces of the rings.

1,817,001. EYE MOUNTING FOR DOLLS. LEO J. GRUBMAN, Belle Harbor, Long Island, N. Y., assignor to Margon Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 18, 1927. Serial No. 161,725. 11 Claims. (Cl. 46—40.)



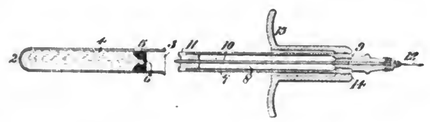
1. An eye mounting for dolls comprising an eye supporting member adapted to be inserted within a doll head in position for attachment to the front wall thereof, resilient anchoring members carried by said supporting member and having parts impaling the structure of said wall when said resilient members are placed under tension, and movable means on the supporting member to coact with said anchoring members and rigidly fix the same in the latter position.

1,817,002. SAFETY DEPOSIT BOX. CHARLES G. HALSTEAD, Kansas City, Mo. Filed Apr. 21, 1928. Serial No. 271,833. 2 Claims. (Cl. 200—85.)



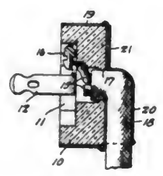
1. A switch construction for safety deposit boxes including a receptacle having plural compartments, divided by a partition wall comprising a shaft journaled through the partition walls having portions thereof projecting on the opposite sides of said walls, a hub secured to the shaft on one side of the partition wall, a contact forming arm, and a trip arm radiating from the hub in spaced relation to each other, a terminal adapted to be operatively connected with an electric circuit disposed in the path of the contact forming arm, resilient means for urging the contact forming arm into engagement with said terminal, a plunger slidably supported on the partition wall and normally engaging the trip arm, while the receptacle is resting on its supporting surface for holding the contact arm in open circuit position, and means associated with the plunger and responsive to the lifting of the receptacle to move the plunger free of the trip arm to permit the contact arm to engage the terminal and close the circuit, and a key mounted on the shaft on the other side of the partition wall for manually holding the contact arm in open position.

1,817,003. HYPODERMIC SYRINGE. GEORGE N. HEIN, San Francisco, Calif. Filed Apr. 26, 1924. Serial No. 709,152. 12 Claims. (Cl. 128—220.)



1. A hypodermic syringe including a tubular piston, a hypodermic needle detachably associated with one end thereof, a piston head associated with the other end, a tubular puncturing element projecting beyond the piston head and communicating with the tubular piston, finger gripping members carried by the piston, a fluid container closed at one end and provided with an open mouth and adapted for positioning with the piston head received in its open end and for telescopic movement over the piston, whereby the contents of the container, discharges through the tubular piston, and a sealing member for the mouth of the container and adapted for being punctured by the puncturing element on the reception of the piston in the end of the container and for movement into the container in advance of the piston.

1,817,004. ANGLE CORD GRIP CAP. HARVEY HUBBELL, Jr., Bridgeport, Conn. Filed Oct. 27, 1927. Serial No. 229,036. 5 Claims. (Cl. 173—361.)

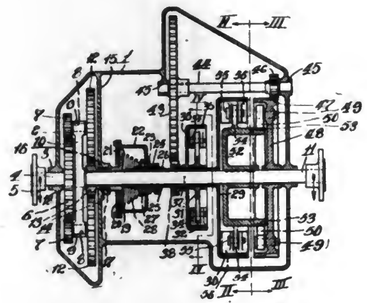


1. In an attachment plug cap, a body member, spaced knife blade contacts projecting from one side of said member adapted for insertion into the spaced blade slots of an outlet receptacle, binding posts connected to said blade contacts, said body having an axial opening for a cord carrying leads for connection to said binding posts, a guard for said cord extending transverse the axis of said body and shiftable relative to the body and to the blade contacts about the axis of the body, and means for securing said guard to the body in different angular positions with respect to said axis.

1,817,005. FLUORESCENT SCREEN FOR X-RAYS AND MATERIAL USED IN MAKING SAME. RUDOLF JAHODA and LEON LILIENFELD, Vienna, Austria, ; Klara Jahoda and Adele Rankl, heiresses of Rudolf Jahoda, deceased, assignors to Leon Lilienfeld, Vienna, Austria. Filed June 16, 1923, Serial No. 645,930, and in Austria July 29, 1922. 7 Claims. (Cl. 250—34.)

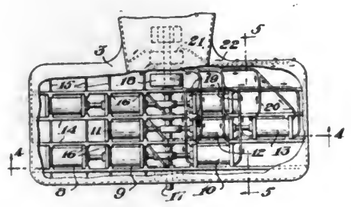
1. A fluorescent screen for X-rays which contains zinc sulfide and at least one other fluorescent substance, and has no considerable afterglow.

1,817,006. POWER TRANSMISSION SYSTEM. HERBERT J. KRATZER, St. Louis, Mo. Filed Jan. 3, 1928. Serial No. 244,158. 22 Claims. (Cl. 74—84.)



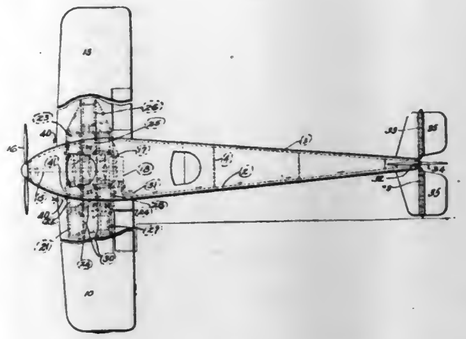
1. A transmission gearing system having a load shaft, a dual planet gear system supported by said shaft, a power gear cooperable with one of said planet gears, an escapement means cooperable with said other planet gear, a counter shaft, gearing for said counterahaft, centrifugally actuated means for clutching said gearing of said counter shaft, to said escapement means, and other gearing extending from said countershaft to the load shaft.

1,817,007. AEROPLANE. ROBERT E. KRUG, Granite City, Ill. Filed June 17, 1929. Serial No. 371,585. 23 Claims. (Cl. 244—14.)



16. In combination, an aeroplane fuselage, a laterally projecting fin on said fuselage, a motor supporting elements in said fuselage and fin, said fuselage and fin being adapted to house an aeroplane driving motor.

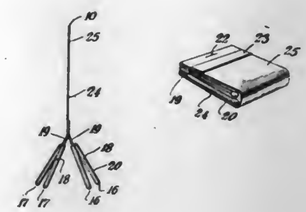
1,817,008. AEROPLANE. ROBERT E. KRUG, Granite City, Ill. Filed July 3, 1930. Serial No. 465,735. 19 Claims. (Cl. 244—14.)



1. In combination, an aeroplane fuselage, a transversely extending wing on said fuselage having upper and lower walls, said walls converging at their forward ends to provide an edge extending transversely of the fuselage, and a motor enclosed in part in said wing and in part in said fuselage.

1,817,009. MATCH BOOK. CORTLANDT J. LANGLEY, New York, N. Y., assignor to Charles W. Bumstead, trustee, Highland Park, N. J. Filed Jan. 29, 1929. Serial No. 335,977. 6 Claims. (Cl. 44—44.)



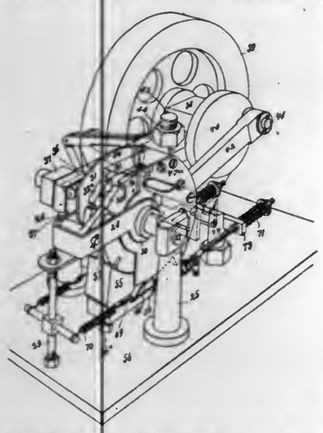


4. A match card comprising a body of wooden match splints, a covering of paper-like material for said splint bodies, and a match card base composed wholly of said paper-like material, the match splints and base being united through said covering.

1,817,010. BEAD THREADING MACHINE. FRANZ LORNITZO, Union City, N. J. Filed Sept. 5, 1928. Serial No. 304,121. 14 Claims. (Cl. 140—71.)

1. In a machine for bending the end of wires for threading beads into loops, the combination of a horizontally disposed shaft, a forwarding roller having an annular centrally disposed groove and equidistantly arranged recesses

in its outer peripheral face, being rotarily arranged on said shaft, an annular plate, of slightly larger diameter than aforesaid roller, being provided with a cam and rotarily arranged on said shaft on one side of the aforesaid forwarding roller, a segmentary plate, of slightly larger diameter than aforesaid roller, having a radially disposed cutting edge, rotarily arranged on said shaft on the other side of the aforesaid roller, a crescent-shaped body, having on its inner side an elevated rib projecting into the groove of aforesaid roller, interposed between and rigidly secured to the aforesaid plates adjoining the aforesaid roller, an anvil, having a recess in its lower portion and



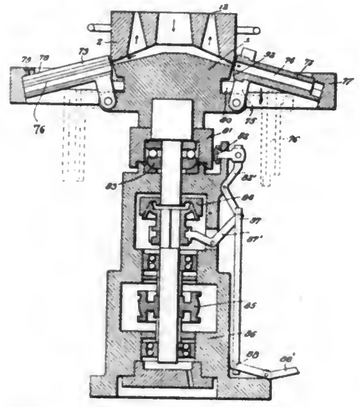
being arranged below the forwarding roller and surrounding with its upper annular shaped terminals the middle portion of the aforesaid forwarding roller, a flat projection at the lower part of the anvil, a shorter projection arranged above and forming a rearwardly disposed slot with the aforesaid flat projection, oscillating motion imparting means operatively engaging the aforesaid crescent shaped body, a flat headed body, rotarily arranged in the anvil, on both of its sides, provided with a radially extending handle, having an elevated rim at part of the edge of the flat head, elastic means arranged on both sides of and operatively connected with aforesaid handle, a pin each arranged on each side near the edges of the wedge shaped lower terminal of aforesaid crescent shaped body.

1,817,011. PENCIL. JOHN P. LYNN, Chicago, Ill., assignor to Dur-O-Lite Pencil Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 22, 1928. Serial No. 263,665. 12 Claims. (Cl. 120—18.)



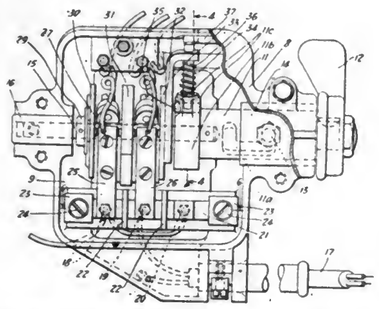
1. In combination, a pencil having two relatively rotatable parts, screw means cooperating with both of said parts and adapted to be advanced axially of the pencil in response to relative rotation of said parts to adjust a lead, a lead carrier movable axially through one of said parts, and a spring threaded connection between the carrier and said screw means, substantially as described.

1,817,012. PROCESS AND MACHINE FOR CENTRIFUGALLY EXTRUDING AND CASTING SUBSTANCES. JOSEPH MERLE, Newark, N. J., assignor to Merle Centrifugal Processes, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 4, 1926. Serial No. 133,588. 27 Claims. (Cl. 22—65.)



3. A centrifugal pressure casting machine for substances, metals and alloys, comprising a rotary distributor having a central charging passage for the substance and radially arranged passages therein, each converging toward the periphery of the distributor and which are adapted to subject the substance to a high pressure, purifying and mixing action upon rotation thereof; a ring associated with the distributor; and a mold secured at one end to the distributor at the peripheral end of each passage into which the substance is projected from the passage and cast in the mold, said mold contacting with and being restrained at the other end by the ring.

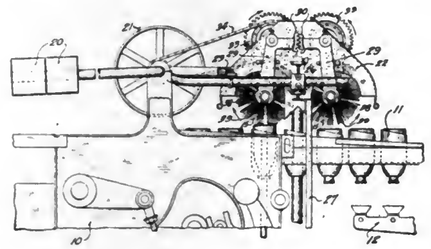
1,817,013. SWITCH. LEON F. MEUNIER and CLARENCE J. DAESSER, Cleveland, Ohio, assignors to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 2, 1929. Serial No. 343,972. 12 Claims. (Cl. 200—4.)



1. An electrical switch comprising a casing, a control shaft supported therein for limited axial and rotative movement, fixed and movable contacts arranged to be engaged and disengaged by rotative movement of said shaft,

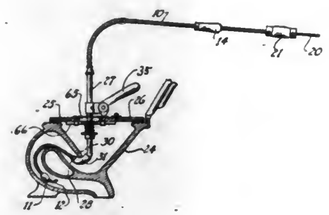
said movable contacts being mounted on said shaft for limited relative movement, and means utilizing the mounting of said movable contacts on said shaft for causing said movable contacts to move with a snap-action.

1,817,014. SWINGING OUTSIDE BRUSH FOR BOTTLE WASHING MACHINES. GEORGE J. MEYER and OTTO DREHER, Milwaukee, Wis., and JAMES CAMPO, Stafford Springs, Conn., assignors to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 9, 1925. Serial No. 7,862. 17 Claims. (Cl. 15—59.)



1. In a bottle-washing machine having a bottle conveyer, a reciprocating bottle-lifter for engaging the bottles and lifting them out of the conveyer, a pair of rotating brushes between which the bottles are moved by the bottle-lifter, and means for yieldingly supporting the brushes to permit them to yield to the pressure of the bottles thereagainst.

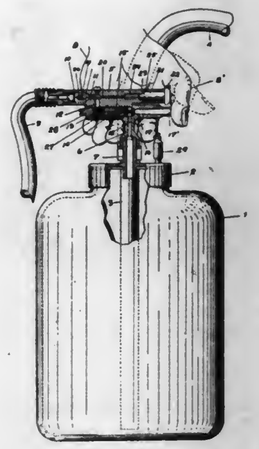
1,817,015. APPARATUS FOR CLEANING OUT CONDUITS AND THE LIKE. JOHN C. MILLER, Chicago, Ill. Filed Oct. 26, 1928. Serial No. 315,155. 7 Claims. (Cl. 15—104.30.)



1. A passageway cleaner comprising a long flexible coil of spring wire, a cleaning attachment fixed to one end of the coil, a handle slidably mounted on the coil, the adjacent turns of the coil being substantially in contact, and a collar mounted on the attachment end of said coil with the attachment projecting, the periphery of said collar being oval-shaped.

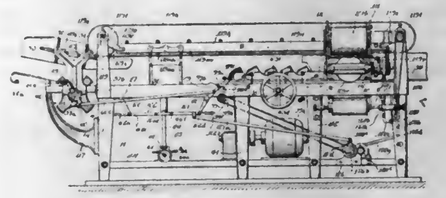
1,817,016. ASPIRATOR DEVICE FOR FLUSHER CONTROL. SAWYER Y. MONCKTON, San Francisco, Calif. Filed Dec. 24, 1928. Serial No. 328,267. 8 Claims. (Cl. 184—1.5.)

1. An aspirator device comprising a substantially T-shaped body, means for connecting a fluid pressure supply pipe at one end of the T arm, a valve for controlling admission of fluid from said pipe to the body, aspirator passages within the body including an exhaust at the opposite end of said T arm, and finger operated means for operating



said valve located above said exhaust in a manner whereby said valve may be operated and said exhaust may be closed and opened by the thumb of a hand holding said device.

1,817,017. WRAPPING MACHINERY. WILLIAM H. NORTON, Chicago, Ill., assignor, by direct and mesne assignments, of nineteen twenty-fifths to Arthur C. Hutchinson, Bangor, Wis., and six twenty-fifths to Earl S. Yule, Summer, Wis. Filed Nov. 10, 1927. Serial No. 232,334. 33 Claims. (Cl. 93—2.)

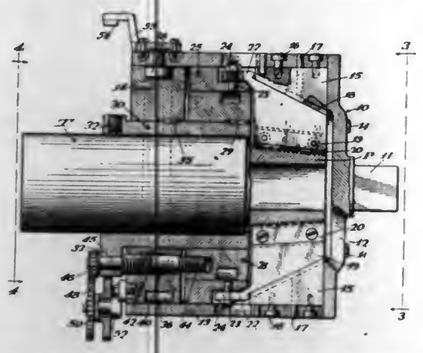


1. In a wrapping machine, the combination of a support, having a roll thereon to be wrapped, means for placing a wrapper about the roll leaving an end thereof projecting beyond the end of the roll, means for folding the projection against the end of the roll comprising a tiltable blade lying in the path of the projection, means for tilting the blade against the projection, and means for moving the roll.

1,817,018. AUTOMATIC TAPER THREAD CUTTING TOOL. EDWARD A. ROBERTS, Long Beach, Calif. Filed Aug. 17, 1927. Serial No. 213,489. 13 Claims. (Cl. 10—120.5.)

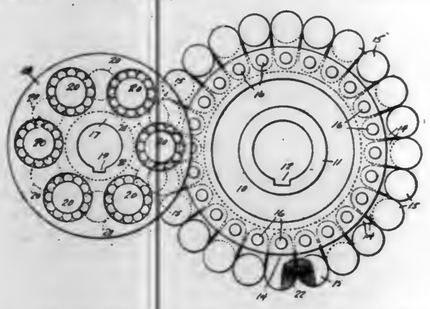
1. A machine for automatically cutting a tapered thread comprising a work holder and a cutter carrier mounted in relation to a common axis, a cutter tool carried by said carrier, the longitudinal axis of said cutter being in-

clined with respect to the common axis of the work holder and carrier, means to feed the cutter tool radially, means



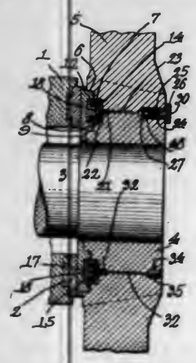
to feed the cutter tool axially, and means correlating said radial and axial feeding means to produce a succession of progressive cuts.

1,817,019. GEARING. ARNOLD RUETSCHI, Lakewood, Ohio. Filed May 15, 1930. Serial No. 452,770. 9 Claims. (Cl. 74—41.)



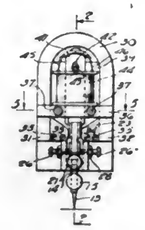
1. A gearing assembly comprising a gear and a pinion, said gear including a circumferentially grooved disk, tooth members pivoted at one end in the groove of said disk, each of said tooth members having a cylindrical portion extending laterally therefrom, alternate said cylindrical members extending in opposite directions.

1,817,020. HYDRAULIC ADJUSTABLE HUB PLATE. ALBERT JEFFERSON SAMS, Chicago, Ill. Filed Jan. 23, 1929. Serial No. 334,497. 6 Claims. (Cl. 308—165.)



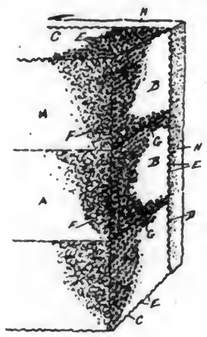
1. A wheel having a slidable hub plate, means for coupling a fluid pressure device to the wheel to put pressure on the hub plate, and means for temporarily relieving the pressure behind the hub plate at the beginning of the operation of the fluid pressure device, thereby to attain an even distribution of the pressure fluid behind the hub plate.

1,817,021. ELECTRIC PICK-UP. WALTER H. SCHIMPF, Toledo, Ohio. Filed Sept. 20, 1929. Serial No. 393,920. 23 Claims. (Cl. 179—100.41.)



1. An electric pickup for phonograph records and the like comprising, a stationary magnet system having fixed, spaced apart poles, a stylus operated vibratory member having magnetizable material carried between the poles but out of contact therewith, a coil, and a magnetizable core in the coil, the core and coil being housed within the magnet of the magnet system with the tip of the core adjacent the vibratory magnetizable material and out of contact therewith.

1,817,022. BUILDING WALL OF CELLULAR BLOCKS. KEMPER SLIDELL and EDWIN M. WYATT, Madison, Wis., assignors, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed Aug. 19, 1929. Serial No. 386,843. 6 Claims. (Cl. 72—37.)

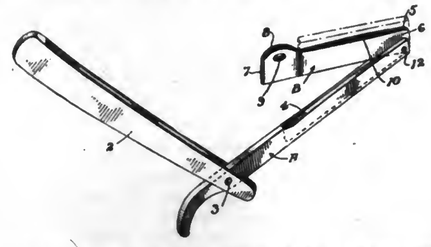


1. A wall composed of a plurality of blocks of cellular argillaceous material, the cell walls of each block being of vitrified material and the cells being individually formed and non-communicating, the superposed surfaces of adjacent blocks being planate and exposing pockets formed by cutting through the cells, and the blocks being bonded by cementitious material filled into the exposed pockets, whereby portions of the adjacent planate surfaces of the blocks may be in substantial contact.

1,817,023. RAZOR BLADE HOLDER. ANTHONY F. SNIEGOCKI, Oakland, Calif. Filed June 24, 1929. Serial No. 373,094. 1 Claim. (Cl. 30—25.)

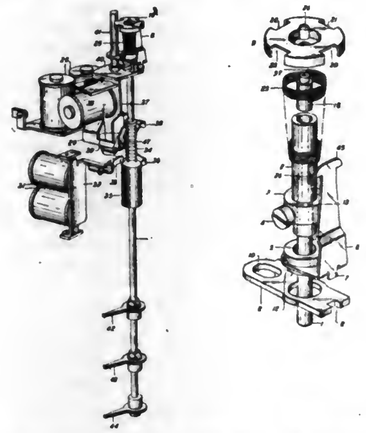
In a device of the character described, a handle provided at its back edge with a longitudinal groove to receive a clamping member, a clamping member composed of a single piece of resilient material folded back upon itself

to provide opposing clamping faces to receive a blade between them, a pivotal connection between the handle and the outer end of the clamping member, said clamping faces being slightly bowed outwardly intermediate their ends and adapted to be forced toward each other on to the sides of the blade by the walls of the groove in the handle when the clamping member is swung on said pivot into said



groove and thereby bind the clamping faces tightly against the side walls of the groove and firmly against the blade, whereby to bind and hold the blade tightly between said clamping faces, said clamping member having its said faces enlarged at the inner end of the clamping member to provide a finger grip to facilitate shifting of the clamping member on its pivot and which may serve as a finger grip when using the device.

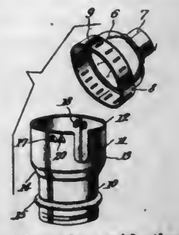
1,817,024. RETRACTILE DEVICE. FREDERICK A. VOOS, Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 21, 1930. Serial No. 454,477. 10 Claims. (Cl. 179—27.5.)



1. In combination, a rotatable shaft, an extension piece having one end securely attached to said shaft, an adjusting cap attached to the other end of said extension piece for rotation relative thereto, a spring surrounding said extension piece and having one end secured thereto, the other end of said spring being attached to said adjusting cap, and a locking spring element having a detachable engagement with said cap to hold the same against rotation.

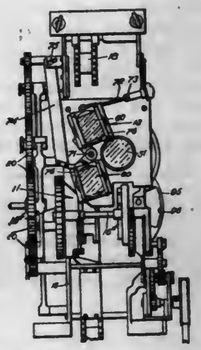
1,817,025. ELECTRIC LAMP SOCKET CASING. JOHN WEBER, Schenectady, N. Y., assignor to Weber Electric Company, Schenectady, N. Y., a Corporation of New York. Filed July 30, 1929. Serial No. 382,259. 3 Claims. (Cl. 173—362.)

2. A socket shell having an open top and having formed in its wall adjacent said top a plurality of openings, the portions of the shell removed from the openings being right angularly bent outwardly to form substantially radially projecting wings, each of said wings having flat parallel side faces extending radially from the shell body and being formed with two free edges, one of said edges extending on a continuous arc from the shell body outwardly and



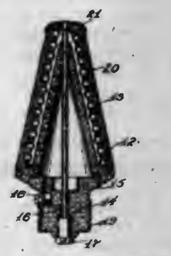
downwardly to the other edge, said other edge forming the wing bottom, said wing bottom meeting said arcuate edge at a sharp corner and extending inwardly from said corner to the shell body at an acute inclination to said body in the direction of its open top, and a cap for said shell having engaging means for said wings.

1,817,026. MOTION PICTURE PROJECTOR. WALTER L. WRIGHT and STANTON M. WRIGHT, Los Angeles, Calif. Filed June 1, 1926. Serial No. 112,969. 10 Claims. (Cl. 88—16.4.)



1. In a projector for handling a film carrying a series of pictures each series including three pictures, means for directing shafts of light passed through the pictures onto a screen in register embodying, two lens devices directly in the path of two of the shafts of light, a third lens device offset from the path of the third shaft of light, and means for offsetting said third shaft of light to pass through said third lens device.

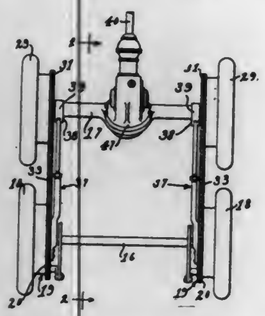
1,817,027. THERAPEUTIC LAMP UNIT. FRITZ A. ANDERSON, Milton, Wis., assignor to The Burdick Corporation, Milton, Wis., a Corporation of Delaware. Filed Oct. 11, 1926. Serial No. 140,840. 8 Claims. (Cl. 174—177.)



1. That method of producing a radiant energy generating unit for therapeutic lamps which comprises providing

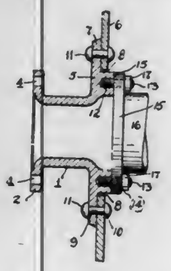
a perishable form, winding a resistance element thereon, embedding said resistance element in non-conducting material, and then destroying said form.

1,817,028. FOUR-WHEEL REAR DRIVE CHASSIS. MURILLO M. BROCKWAY, Burbank, Calif. Filed Mar. 7, 1927. Serial No. 173,295. 7 Claims. (Cl. 180—22.)



1. A four-wheel drive chassis comprising a frame, supports, means connecting the supports with the frame, differential wheels connected with one of the supports, each of said differential wheels including a differential gearing operably associated with the hub of said wheel to effect driving of said wheel, other wheels mounted on the other support, a third differential gearing, driving connections between the differential gearing and the differential gearings of said differential wheels, and driving connections between the respective differential gearings of said differential wheels and said other wheels.

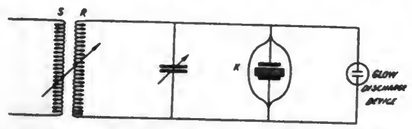
1,817,029. TANK NOZZLE FOR SWING JOINTS AND PIPE LINE CONNECTIONS. TRACY J. CALHOUN, Cleveland, Ohio, assignor to The Oil Conservation Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 2, 1927. Serial No. 165,394. 1 Claim. (Cl. 285—25.)



A tank nozzle for swing joints and tank lines consisting of a casting having a heavy interior flange adapted to extend through the tank wall and having spaced tapped apertures on its inner surface, studs mounted in said apertures for engagement with a swing joint, said casting having an annular collar extending from said flange and adapted to engage the tank wall, and said casting having an outwardly extending portion provided with an apertured flange for engagement with a line pipe.

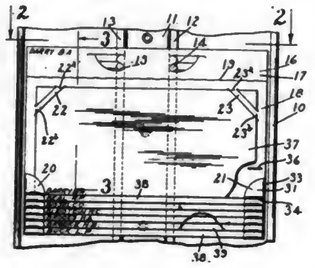
1,817,030. PIEZO-ELECTRIC FREQUENCY METER. HEINRICH EBERHARD, Berlin, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 2, 1926, Serial No. 145,865, and in Germany Dec. 29, 1925. 7 Claims. (Cl. 250—39.)

5. In combination, a primary circuit, a secondary circuit, means connected in said secondary circuit to indicate roughly the condition of resonance between said circuits, and means to indicate substantially exactly the condition of resonance between said primary and said



secondary circuits, said last mentioned means when indicating, being operative to render said first mentioned indicating means inoperative.

1,817,031. INDEX OR FILE. WILLIAM H. DAY, East Haven, Conn., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 14, 1925. Serial No. 15,548. 8 Claims. (Cl. 129—16.)



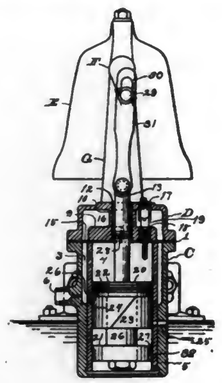
2. In an index or file, a frame member having a plurality of card holders detachably mounted thereon in such a manner that a free margin of each may be exposed to view a card detachably superposed upon one surface of one of said holders and another card detachably superposed upon the other surface of said holder, one of said cards extending to the free edge of said holder to cover the free margin thereof, the other card being spaced from the free edge of said holder.

4. In an index or file, a holder member for record cards comprising a card having a base portion and a flap portion connected thereto, a frame member, lugs on said base portion adapted to engage said frame member whereby a series of holder members may be supported with their edges in overlapping relation, integral ears formed on said flap portion adjacent the lower edge thereof, said ears being adapted to be folded over and secured to said portion so as to form a pocket for detachably supporting a record card, and parts on said flap portion above said pockets for engaging a portion of the upper edge of said record card.

1,817,032. VALVE IN HEAD DOUBLE ACTION BELL RINGER FOR LOCOMOTIVE ENGINES. GEORGE W. GILL, Battle Creek, Mich., assignor to Walter E. Knopp, Battle Creek, Mich. Filed Mar. 23, 1927. Serial No. 177,550. 4 Claims. (Cl. 121—2.)

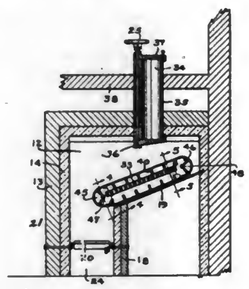
1. In a device of the class set forth the combination of a cylinder having two chambered compartments, one compartment comprising a piston chamber, the other compartment constituting an air supply chamber surrounding said piston chamber for a portion of its length and its head at one end, a reciprocative piston operable in said piston chamber and having a piston stem operable through a gland extending through said air supply chamber, said cylinder having an air inlet into said air chamber and an exhaust port leading into said piston chamber near its end opposite from said gland and an intake port leading from said air chamber into said piston chamber approximately its center and a gland opening through said head between said air chamber and piston chamber, a valve

operable through said gland, amenable to admit air from said air chamber into said piston chamber by an upward contact of said piston with said valve and cushion a further upward movement of said piston, said valve seating by gravity action, said piston adapted to be moved toward



and into contact with said valve by the admission of air through said intake port, said gland about said piston stem forming an exhaust port for that end of said piston chamber through means carried by said stem to alternately seal and unseal said gland at predetermined movements of said piston and valve.

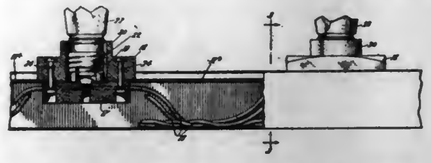
1,817,033. INCINERATOR. EDWIN H. GRAVER, Cleveland, Ohio, assignor to Belle B. Gellner, Trustee, Cleveland, Ohio. Filed Mar. 11, 1926. Serial No. 93,827. 3 Claims. (Cl. 110—15.)



1. An incinerator comprising a rectilinear structure of a height and length in excess of its width, a partition forming a fire box at one end of the interior of the incinerator, an inclined partition extending from the first named partition to the rear wall of the incinerator structure, a fire grate disposed within said fire box compartment dividing the compartment into an ash pit and a firing chamber and an inclined drying grate disposed above said inclined partition, the side walls of the incinerator having openings formed therein above the inclined partition and above the inclined grate and other openings extending into the incinerator above and below the firing grate.

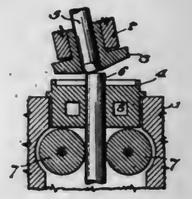
1,817,034. COVE AND OTHER LIGHTING SYSTEM. PAUL M. HOTCHKIN, Chicago, Ill. Filed May 8, 1926. Serial No. 106,578. 18 Claims. (Cl. 247—28.)

1. A lighting system comprising a trough for the reception of electric conductors, means for closing parts of the open portion of said trough, a two-part separable device the respective members of which are positioned respectively inside and outside the housing to close the remaining open portion thereof and for providing support for an electric fitting, means for drawing the parts of



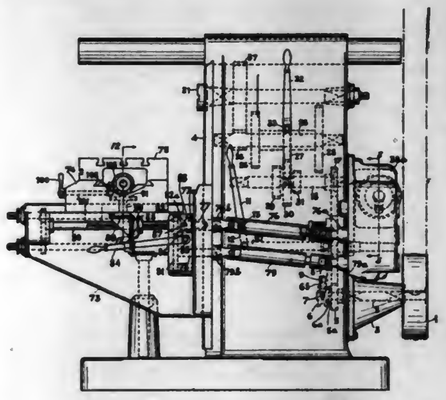
the separable device together to clamp the same to the sides of the trough, and means including said separable device for maintaining said closure means against dislodgment.

1,817,035. METHOD AND MACHINE FOR ROLLING WHEEL DISKS. JAMES W. HUGHES, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1926. Serial No. 149,729. 7 Claims. (Cl. 80—16.)



3. Apparatus of the character described comprising opposed dies, relatively movable into and out of operative position by means capable of exerting great pressures, a combined measuring, forming and cutting-off member carried within one of said dies, a feed channel through the other of said dies, and feed means which operate on a bar of stock to advance its end between the dies and hold it in that position during the operation of the measuring, forming and cutting-off member.

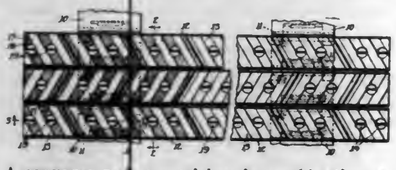
1,817,036. RATE CHANGE DEVICE. EDWARD J. KEARNEY, Wauwatosa, and ROBERT S. CONDON, Milwaukee, Wis., assignors to Kearney & Trecker Corporation, West Allis, Wis. Filed Mar. 21, 1927. Serial No. 176,992. 9 Claims. (Cl. 74—39.)



1. In a rate changer including a plurality of groups of rate change elements, the respective groups being shiftable through cycles of movement productive of different rate

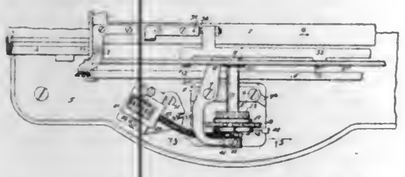
change effect, the combination of a shifting device therefor including a progressively movable shifter lever, means connected with said lever for shifting the one of said groups having the greater rate change effect to complete a cycle of its movement during a portion of a predetermined movement of said lever in a given direction and an eccentric device connected with said lever for shifting the other of said groups through a plurality of cycles of its movement during said portion of lever movement.

1,817,037. CONVEYER PAD. CARL LAWRENCE MATTISON, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed July 9, 1926. Serial No. 121,327. 5 Claims. (Cl. 198—198.)



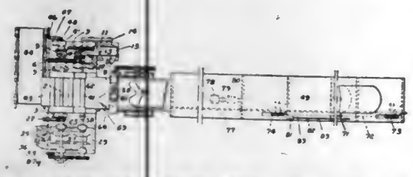
1. A conveyer pad, comprising, in combination, a parallelogrammic base having a plurality of openings therein, a resilient surface on one side of said base, having parts thereof entering said openings to anchor said surface on said base, and a plurality of ridges on said surface extending substantially parallel to one side thereof.

1,817,038. TYPEWRITING MACHINE. JOSEPH PHELPS, North Caldwell, N. J., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Apr. 19, 1927. Serial No. 184,902. 1 Claim. (Cl. 235—102.)



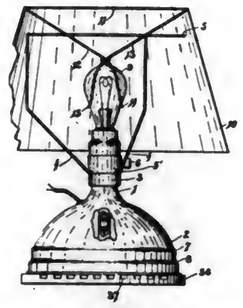
In a typewriting machine the combination with a carriage escapement wheel which turns only in one direction and only when the carriage is fed by the keys, and a support for the shaft of said wheel comprising a fixed sleeve in which said shaft is journaled, of a worm turning with said escapement wheel, a worm wheel operated by said worm, a support for said worm wheel consisting of a bracket having a hole which fits on said fixed sleeve by which sleeve said bracket is supported and to which it is clamped, a counter attached to the fixed frame-work of the machine at an angle inclined to the axis of said worm wheel, and a flexible shaft extending from said worm wheel to said counter and operating the latter.

1,817,039. SHEARING MACHINE. GEORGE W. RUSSELL, Warren, Ohio, assignor to the Aetna Standard Engineering Company, Youngstown, Ohio, a Corporation of Ohio. Filed Feb. 12, 1927. Serial No. 167,608. 18 Claims. (Cl. 164—48.)



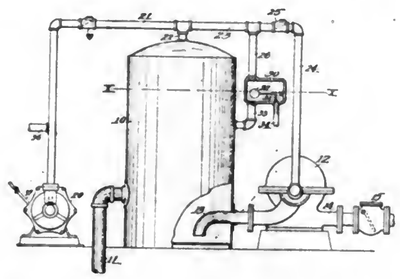
4. In a shearing machine, shear means, feed means, drive means for the feed means including a reciprocable member and a variable ratio means, and a connection between the reciprocable member and the variable ratio means effective for adjusting the variable ratio means.

1,817,040. LAMP AND HEATER. JACOB STUART SCHARF, New York, N. Y. Filed Dec. 10, 1926. Serial No. 154,003. 4 Claims. (Cl. 219—34.)



2. The combination of a lamp and a heater, having terminals for receiving same, arranged at opposite ends of a standard, means for supporting the standard in a normal position, means to automatically shut off the heater, if tilted or overturned from its operative position.

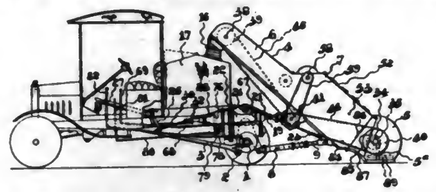
1,817,041. PRIMING MECHANISM FOR CENTRIFUGAL PUMPS. ARTHUR B. SINGLETON, Detroit, Mich., assignor to Nash Engineering Company, South Norwalk, Conn., a Corporation of Connecticut. Filed Aug. 2, 1926. Serial No. 126,434. 5 Claims. (Cl. 103—113.)



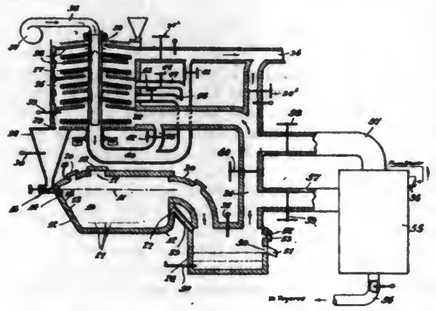
1. Pumping apparatus comprising a separating tank having an inlet connected to a source of lower level water supply, a centrifugal water pump having a casing separate from said tank, said pump being connected to withdraw water from said tank, an air pump having a connection to said tank and to said centrifugal pump casing, whereby to exhaust air therefrom a float-controlled valve effective to admit air to partially disable said air pump when the water level in the tank reaches a predetermined level, and a check valve to prevent reverse flow of air through the vacuum connections to the centrifugal pump when said float valve is opened.

1,817,042. STREET SWEEPING MACHINE. NORMAN H. G. SPRADBROW, Toronto, Ontario, Canada. Filed Mar. 31, 1927. Serial No. 179,965. 11 Claims. (Cl. 15—84.)

1. A street sweeping machine comprising a truck provided with a propeller shaft and carrying a dirt receptacle; sweeping and elevating mechanism including a frame; a rotary brush, an elevator and operating means for the brush and elevator; a central tubular universal joint connection between the truck and said frame; draft connections between the truck and the frame at each side of the universal joint connection; and driving means for the operating means of the elevator and sweeping mechanism including a drive shaft, connected with the propeller shaft, extending through the tubular connection and provided with a universal joint therein.

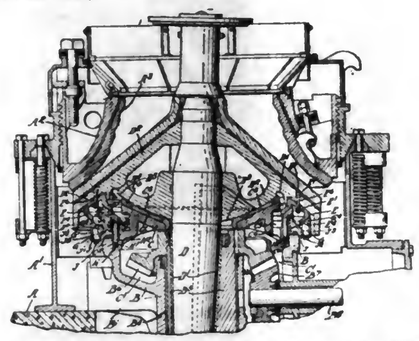


1,817,043. CONVERTER SMELTING. HARRY HOWARD STOUT, Clifton, and JOHN MOORE SAMUEL, Douglas, Ariz. Filed Apr. 8, 1927. Serial No. 181,949. 28 Claims. (Cl. 75—62.)



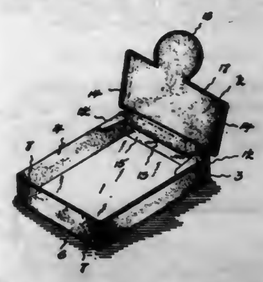
1. That method of pyro-metallurgical concentration of metal from ore which comprises a regulated preheating of the ore before it enters the converter in the gases issuing from a converter and regulatably admixed with air.

1,817,044. CRUSHING MACHINE. EDGAR B. SYMONS, Hollywood, Calif., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 10, 1929. Serial No. 361,907. 19 Claims. (Cl. 83—10.)



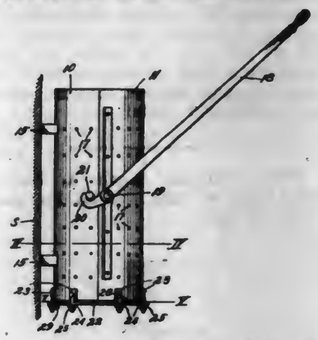
1. In a gyratory crusher including a cone having a downwardly convex spherical bearing surface, a bearing member having an upwardly concave spherical bearing surface conforming thereto, and a plurality of concentric wiping members surrounding and spaced from the bearing member, each having a spherical surface concentric with the main bearing surface, and means for thrusting said wiping members upwardly against the cone, the cone being formed for bearing engagement therewith.

1,817,045. JACKING AND DISPLAY CONTAINER. ARNOLD J. TANNER, North Haven, Conn. Filed May 13, 1929. Serial No. 362,741. 3 Claims. (Cl. 206—44.)



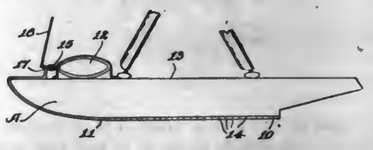
1. A pre-folded packing and display container of the character described consisting of a tray member and an integral cover member therefor, said members being composed of a blank comprising a body portion and a main end extension thereof forming said cover, said body portion being divided into inner sections forming the side and end walls of the container, said sections being connected by diagonally folding corner pieces, outer sections extending from said inner sections forming inner end and side walls, said outer sections having registering retentive means for retaining the container in its erected position, an intermediate section connecting the cover forming extension with said body portion and said intermediate section being arranged to fold against the back wall of the container to bring and retain said cover member in the same plane with the top edges of said tray member when the latter is in its erected position.

1,817,046. MOLD FOR GLASS CYLINDERS. WILLIAM G. TWYMAN, Poteau, Okla. Filed Mar. 28, 1929. Serial No. 350,533. 9 Claims. (Cl. 49—65.)



1. A mold of the character described comprising a pair of semi-cylindrical sections hingedly joined together, and a removable base plate carried adjacent its outer edge by said sections and spaced apart therefrom.

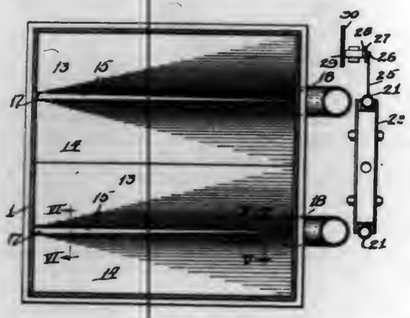
1,817,047. AIRPLANE PONTOON. WALTER H. WALLRAFF, St. Paul, Minn. Filed July 13, 1929. Serial No. 377,991. 5 Claims. (Cl. 244—2.)



1. A pontoon for airplanes including, a pontoon for an airplane adapted to ride in the water to support the

airplane on the water, tubular air passageways extending over the under surface of said pontoon body and oppositely disposed openings in said tubular portions adapted to blow air under the pontoon to force the same out of the water when the airplane starts.

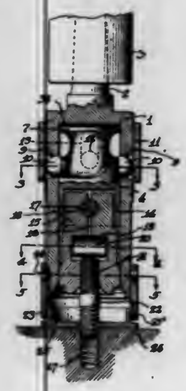
1,817,048. DEHYDRATING APPARATUS. ROBERT M. WASHBURN, Evanston, Ill., assignor, by mesne assignments, to Albert P. Hunt. Filed Dec. 31, 1928. Serial No. 329,604. 3 Claims. (Cl. 159—4.)



1. In apparatus for drying finely comminuted material in a heated gaseous medium, a hopper shaped bottom having a lower tapered discharge opening, a conduit beneath said opening of gradually increasing cross section toward the smaller end of said tapered opening and means for drawing a current of gaseous medium and suspended dried particles through said tapered opening into said conduit.

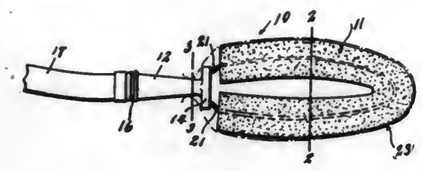
3. In apparatus for collecting dried powdered material suspended in a gaseous medium, a chamber having converging bottom walls forming an opening therebetween, tapering in its width and running substantially the width of said chamber, a conduit running lengthwise of said opening with its exit near the narrow end thereof and means for creating a draft in said conduit to draw said powdered material and gaseous medium through said tapered opening into said conduit.

1,817,049. STUD DRIVER. LOUIS A. WEIL, Detroit, Mich. Filed Mar. 6, 1929. Serial No. 344,905. 5 Claims. (Cl. 81—53.)



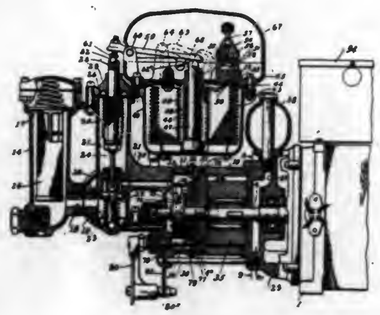
1. In a stud driver, a body adapted to be driven, a carrier rotatably and slidably mounted in said body and having abutments formed peripherally thereon at one end thereof, balls carried by the peripheral wall of said body and adapted to engage said abutments to drive said carrier, said carrier being slidable to an extent sufficient to disengage said abutments from said balls, and stud engaging means carried by said carrier.

1,817,050. AUTOMOBILE BRUSH. AUGUST J. W. WIEGERT, St. Louis, Mo. Filed Apr. 8, 1929. Serial No. 353,629. 1 Claim. (Cl. 15—128.)



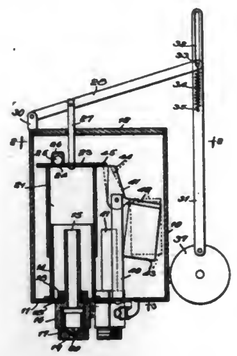
In a device of the class described, the combination of an elongated hollow handle having a longitudinal chamber formed therein, one end of said handle being provided with an internally threaded outwardly opening seat communicating with one end of said chamber and adapted to have screw-seated therein the coupling of a hose, the other end of said handle terminating in an integral transversely disposed head having a central opening forming a discharge outlet for said chamber, said head having a pair of spaced apertures, and a U-shaped bristle member having its wire ends secured in said apertures and extending longitudinally of said handle substantially in the same horizontal plane with the axis thereof and of said discharge opening, whereby the water discharged through said central opening issues in a stream longitudinally of and between the parallel portions of said bristle member, whereby the stream of water discharged through said outlet is directed longitudinally of the parallel portions of said bristle member.

1,817,051. ELECTRICALLY OPERATED AND CONTROLLED OIL BURNING MECHANISM. WALTER W. WILLIAMS, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed June 11, 1928. Serial No. 284,545. 4 Claims. (Cl. 158—36.3.)



1. In a domestic liquid fuel burning mechanism, a motor for operating said mechanism including an end bell thereon a mixing pump mounted upon the end bell having means admitting liquid fuel and air thereto including a chamber within said end bell and means discharging the mixed liquid and air under pressure to the burner nozzle including a chamber in said end bell, said discharging means having an adjustable means communicating with said air admitting means, whereby upon adjustment of said communicating means the pressure of the mixture between the pump and nozzle is regulated.

1,817,052. LIQUID ELEVATING DEVICE. ANDREW C. WOOD, Chicago, Ill. Filed Oct. 6, 1928. Serial No. 310,771. 2 Claims. (Cl. 103—28.)



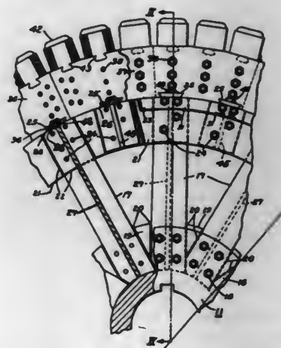
2. In a device of the class described and in combination, a receptacle provided with an inlet and an outlet in the bottom thereof, a cylindrical member communicating with said inlet, a reciprocable tubular member surrounding said cylindrical member and operatively related thereto for pumping fluid into said receptacle, a plate having a laterally extending flange secured adjacent the top of said tubular member, a valve in said plate, means adapted to engage said flange and controllable by the fluid level in said receptacle for retaining said tubular member against reciprocation when a predetermined quantity of fluid is in said receptacle, a continuously operated driving member outside said receptacle, and means operatively connected to said plate and said driving member including a spring adapted to yield as said driving member is operated and when said fluid level controlled means is in engagement with said flange.

1,817,053. HOSIERY. OSCAR U. ZERK, Chicago, Ill. Filed Feb. 18, 1929. Serial No. 340,739. 8 Claims. (Cl. 41—17.)



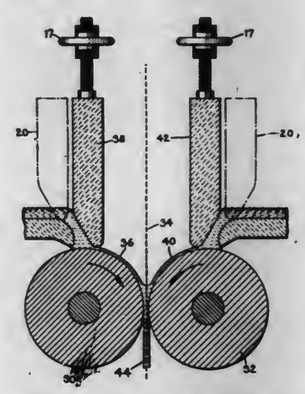
1. As an article of manufacture, a hose adapted to produce the optical illusion of shapeliness of the wearer's leg, substantially the whole of the hose being of one color but having portions thereof of different tints and shades of said color, the portion of the hose which is to cover a part of the wearer's leg at which it is desired to produce an illusion of smallness being of a relatively dark shade and that portion of the hose which is to cover a part of the wearer's leg at which it is desired to produce an illusion of increased size being of a substantially lighter tint, the part of the hose intermediate the shaded portion and the tinted portion varying by substantially imperceptible degrees of color depth from the darkest shade to the lightest tint.

1,817,054. LARGE, HIGH SPEED ROTOR. RENÉ A. BAUDRY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 10, 1929. Serial No. 331,582. 17 Claims. (Cl. 74—6.)



1. A rotatable apparatus comprising separate rim and spider members and circumferentially disposed plates secured, at circumferentially aligned spaced points, to the rim and spider members, respectively, said plates lying against the end surfaces of the spider members, whereby said plates support the weight of the rim member and transmit rotational torque thereto or therefrom, without materially pulling outwardly on the spider member when the rim member expands, under expected speed conditions, due to the centrifugal forces therein.

1,817,055. METHOD OF MAKING SHEET GLASS. MYRON L. BEGEMAN, St. Louis, Mo., assignor to Mississippi Glass Company, New York, N. Y., a Corporation of New York. Filed May 21, 1929. Serial No. 364,754. 4 Claims. (Cl. 49—32.)



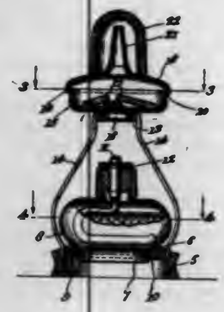
3. In apparatus for making sheet glass, in combination, a pair of horizontal forming rolls side by side, means for feeding molten metal onto the upper surfaces of said rolls, an adjustable non-rotatable member adjacent each of said rolls whereby as said rolls rotate a sheet of metal is formed on each roll, the continued rotation of said rolls acting to carry said sheets between said rolls thereby uniting the two sheets into a finished sheet of desired thickness.

1,817,056. ICE CARRIER. WILFERD L. BELGARD, Newton, Kans. Filed June 11, 1928. Serial No. 284,523. 6 Claims. (Cl. 224—29.)



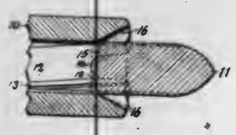
1. In a carrier, a bottom comprising a rod-like structure having side members, end members and transverse members, a back having one edge connected with one of said bottom members, means connected with the other edge of the back for engaging another of said bottom members, a front wall having one edge connected with one of said bottom members, and means connecting the other edge of the front wall with the bottom.

1,817,057. VAPORIZER. LEANNAH BERRY, Fairview, Mont. Filed Jan. 18, 1930. Serial No. 421,741. 2 Claims. (Cl. 167—3.)



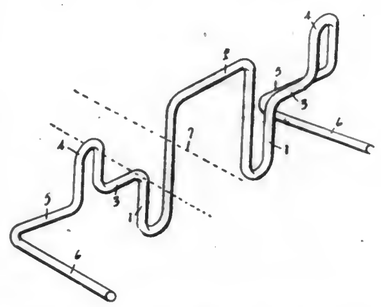
2. An improved vaporizer comprising a base, a lamp thereon, a container suspended by the base above the lamp, an upwardly tapering nozzle projecting up from the upper portion of the container, and an imperforate cap of greater height than the nozzle and of greater diameter than the external diameter of said nozzle placed in removable inverted position above the nozzle, with the rim portion of the cap resting upon the container about the nozzle.

1,817,058. FIREARM. CHRISTOPHER H. BIERBAUM, Buffalo, N. Y. Filed Nov. 16, 1928. Serial No. 319,752. 5 Claims. (Cl. 42—78.)



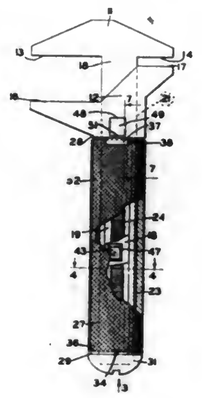
1. A firearm barrel provided at the muzzle of its bore with notches opening throughout their length into said bore whereby gas pressure is caused to immediately engage the side of the projectile before the latter leaves the muzzle.

1,817,059. REENFORCE CHAIR OR SUPPORT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Apr. 29, 1929. Serial No. 358,784. 2 Claims. (Cl. 72—122.)



1. A reenforce chair composed of a single piece of wire conformed to provide a central downwardly facing loop and a pair of spaced upwardly facing intermediate loops, said intermediate and outer loops being substantially one-half the length of the central loop, the inner arms of the outer loops being connected to the outer arms of the intermediate loops by horizontally disposed reaches providing reenforce seats, said loops being all disposed in the same vertical plane, the outer arms of the outer loops being extended into laterally inclined legs terminating in feet disposed horizontally and at substantially right angles to the vertical plane of the loops, the intermediate loops constituting supporting legs.

1,817,060. WRENCH. JAMES E. BLALOCK, Pacific Palisades, Calif. Filed July 23, 1928. Serial No. 294,692. 6 Claims. (Cl. 81—159.)



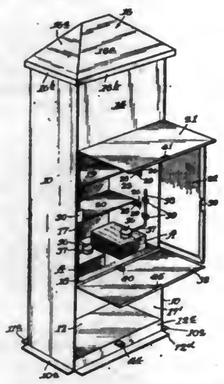
1. A wrench comprising a pair of jaw members adjustable in respect to each other to vary the distance therebetween, a shank rigid with each jaw member, a sleeve mounted for rotary movement upon said shanks, means for locking one of said shanks against longitudinal movement within the sleeve, means releasable upon rotation of the sleeve for locking the other shank against longitudinal movement within the sleeve, a head on said first mentioned shank, and a spring washer interposed between an end of said sleeve and said head to releasably retain said sleeve in selected position.

1,817,061. MEANS AND METHOD FOR WRAPPING AND PACKING BOTTLES AND THE LIKE. ARTHUR L. BOBRICK, Los Angeles, Calif. Filed Feb. 9, 1929. Serial No. 338,824. 5 Claims. (Cl. 229—90.)



1. The method of wrapping bottles and the like which consists in covering the body of a bottle with a non-detachable cushion wrapping to prevent breakage when the bottle is in use, covering the remaining portion of the bottle with a similar wrapper, and detachably securing the last mentioned wrapper to the body wrapper whereby the same may be removed for exposing the mouth of the bottle when the bottle is in use.

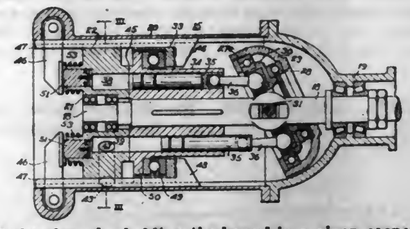
1,817,062. NEWS STAND STRUCTURE. WILLIAM J. BYRNES, Hubbard Woods, RICHARD A. BYRNES, Chicago, and CLYDE J. SAUNDERS, Elgin, Ill.; said Saunders assignor to said William J. Byrnes and said Richard A. Byrnes. Filed May 28, 1928. Serial No. 281,298. 21 Claims. (Cl. 312—100.)



5. In a structure of the character described, a plurality of walls forming a compartment open at its front, another wall adjustable along the top of said compartment and down in front of and over said opening, and side walls which are slidably connected at a plurality of points to the respective sides of said compartment for free adjustment of said walls inwardly and outwardly along the sides of said compartment.

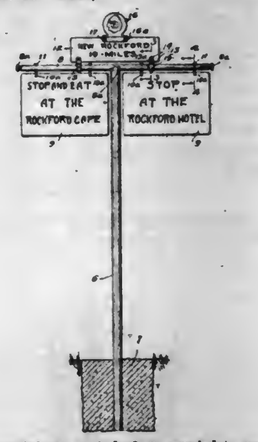
1,817,063. TRANSMISSION MECHANISM. JAMES CARRIE and GEORGE E. HOWARD, Butler, Pa. Filed Nov. 3, 1928. Serial No. 316,972. 12 Claims. (Cl. 103—162.)

1. The combination with a rotatable cylinder barrel having a plurality of bores arranged about its axis, the bores being open at their inner ends, and a piston reciprocable in each bore, of a supporting member against which the inner end of the barrel abuts and which has circumferentially spaced chambers with which the said bores are successively brought into registry during rotation of the barrel, and means radially offset from the axis of the barrel, controlled by pressure within one of



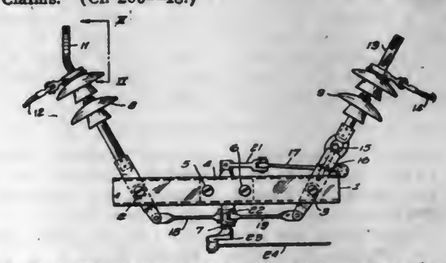
said chambers for holding the barrel in a given cooperative relation with said member, the said means incompletely surrounding the axis of the barrel.

1,817,064. ROAD SIGN. WILLIAM H. CARSON, New Rockford, N. Dak. Filed Aug. 16, 1928. Serial No. 299,964. 1 Claim. (Cl. 40—128.)



A sign comprising a tubular upright post having a semi-circular recess formed in the upper end thereof, a cross piece of circular cross section and of smaller diameter than said post nested in said recessed portion and rigidly secured thereto, said cross piece having arms of equal length projecting horizontally from said post, hook bolts having vertical shanks extending through said cross piece and having depending hook portions adapted to be clamped against the under side of said cross piece and a pair of detachable sign panels disposed on opposite sides of said post and swingably supported from said hook portions.

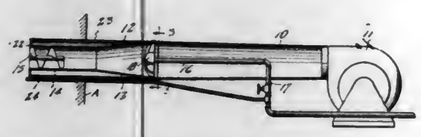
1,817,065. DISCONNECTING SWITCH. HERBERT J. CRABBS, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 6, 1929. Serial No. 337,829. 13 Claims. (Cl. 200—48.)



1. In a switch structure, a pair of insulators pivoted for a tilting movement, an operating mechanism asso-

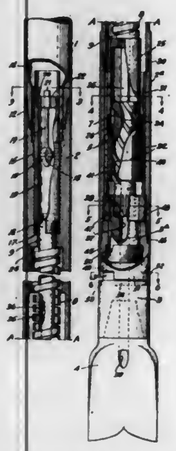
ciated with the insulators to tilt the insulators in opposite directions simultaneously, a switch jaw on one insulator, a cooperating contact on a second insulator, and means for rotating one of the insulators after the contact of the latter has been moved into engagement with the jaw.

1,817,066. GAS BURNER. BENJAMIN F. CROW, Dallas, Tex. Filed Aug. 13, 1928. Serial No. 299,221. 7 Claims. (Cl. 158—118.)



3. In a gas burner, a tubular air conductor for connection with an air blower, a sleeve attached to the conductor, a Venturi tube within the sleeve open only to the conductor and receiving all the air discharged therefrom, a gas pipe extending into the tube, a spiral baffle mounted in the entrance end of the tube and surrounding the gas pipe, a spiral gas baffle in the discharge end of the gas pipe, a perforated ring connecting the outer ends of the sleeve and the tube, said sleeve having air admitting openings remote from the ring, and a spiral baffle in the outer end of the tube for whirling the gaseous mixture prior to its admixture with the secondary air from the ring and sleeve.

1,817,067. DRILL STEM. ERD V. CROWELL, Los Angeles, Calif. Filed Feb. 26, 1929. Serial No. 342,896. 18 Claims. (Cl. 255—28.)

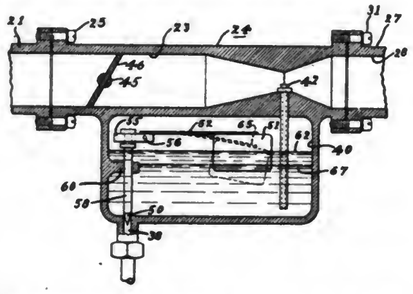


1. A drill stem comprising a body adapted by a string of drill pipe, a section fixed against axial displacement relative to the body and adapted to rotate a drill bit, and a normally non-yielding rotary driving connection between the body and said section adapted to rotatably yield in accordance with a predetermined torque of the drill stem so as to permit rotary lagging of the drill bit with relation to the string of drill pipe.

1,817,068. TREATMENT OF ZINCIFEROUS MATERIALS CONTAINING CADMIUM. HOWARD M. CYR and ROBERT K. WARING, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 15, 1929. Serial No. 399,875. 33 Claims. (Cl. 75—28.)

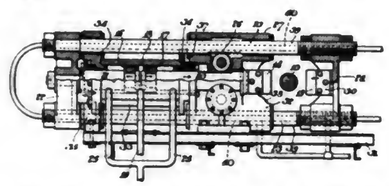
1. The improvement in the treatment of zinciferous material containing cadmium which comprises subjecting the material to a heat treatment operation in the presence of a chloridizing agent and water vapor and under conditions of basicity favorable to effective utilization of acidic compounds of chlorine for chloridizing cadmium and thereby effecting the removal from the material by volatilization of such an amount of cadmium without substantial loss of zinc that the so-treated material is of sufficiently low cadmium content for the pyrometallurgical production of a high grade zinc product therefrom.

1,817,069. ENGINE. ERNEST DICKEY, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 28, 1929. Serial No. 402,831. 11 Claims. (Cl. 123—180.)



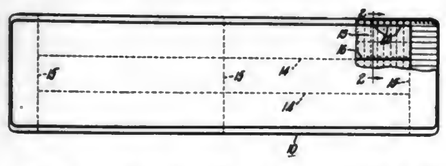
1. A carburetor for internal combustion engines comprising, in combination, a fuel chamber for the carburetor; and means including a thermostatic element for controlling the admission of fuel to said chamber.

1,817,070. BAR CUTTING MECHANISM. CAROLUS L. EKSERGIAN, Detroit, Mich., and WILLIAM A. WEIGHTMAN, Philadelphia, Pa., assignors to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1929. Serial No. 400,480. 2 Claims. (Cl. 164—57.)



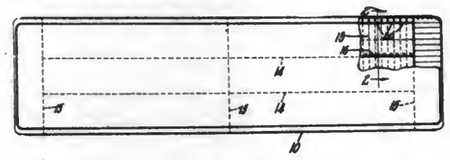
1. A hot bar cut-off machine comprising cut-off knives disposed on opposite sides of the bar axis and a hydraulic cylinder on one side of said axis, opposed pistons in said cylinder, a piston rod connecting that knife and piston adjacent to each other, and a pair of connecting rods disposed symmetrically of the piston rod and connecting the piston and knife remote from each other.

1,817,071. VESSEL. ERIC H. EWERTZ, Elizabeth, N. J. Filed Jan. 20, 1930, Serial No. 421,882. Renewed Jan. 15, 1931. 5 Claims. (Cl. 114—79.)



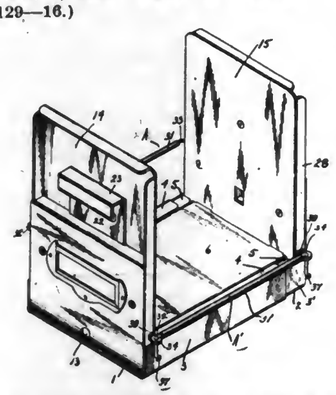
1. A vessel, the outer shell of which embodies therein a plurality of metal plates and an inner shell comprising a plurality of reversely bent plates welded to the outer shell and spaced apart thereon, and other plates welded to the reversely bent plates and co-operating therewith to form an integral structure and a continuous wall.

1,817,072. VESSEL. ERIC H. EWERTZ, Elizabeth, N. J. Filed Jan. 20, 1930, Serial No. 421,883. Renewed Jan. 15, 1931. 5 Claims. (Cl. 114—79.)



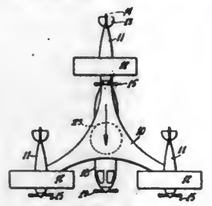
1. A vessel, the outer shell of which embodies therein a plurality of metal plates and an inner shell embodying therein a plurality of angle plates each welded to the outer shell and to an adjacent angle plate and forming an integral structure and a continuous inner wall.

1,817,073. RECORD TRAY. ELMER W. DAVIS, Newton, Mass., assignor, by mesne assignments, to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Dec. 8, 1928. Serial No. 324,745. 16 Claims. (Cl. 129—16.)



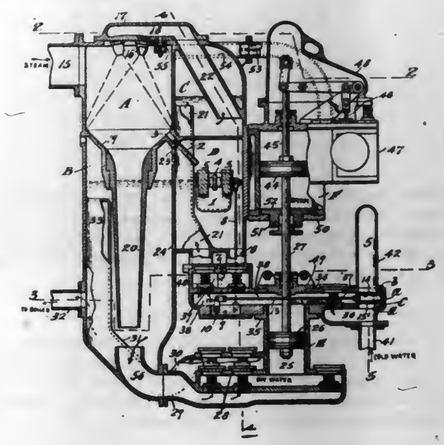
7. In an extensible tray for record files, a plurality of base members assembled in telescopic relation and adapted to support varying numbers of record members, means to move said base members telescopically to vary the length of said tray, and means extending along each side of said tray and adjustable to vary the effective width of the tray.

1,817,074. AIRCRAFT CONTROL. CHARLES E. GLESSNER, Portland, Oreg. Filed Oct. 17, 1928. Serial No. 313,071. 5 Claims. (Cl. 244—15.)



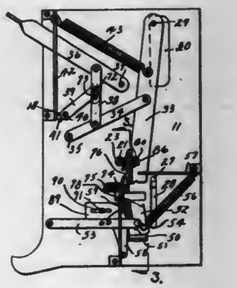
3. A flying machine having three airplane units disposed around a normally vertical axis, each of said units having means for rotating same in a horizontal plane relative to the remaining units in a manner that the first unit shall be rotated one third as much as the second unit and one fifth as much as the third unit.

1,817,075. FEED WATER HEATER. JOHN F. GRACE, Kearny, N. J., assignor to Worthington Pump and Machinery Corporation, a Corporation of Virginia. Filed Aug. 20, 1920. Serial No. 404,932. 16 Claims. (Cl. 261—34.)



1. In a feed water heating apparatus, the combination with the heating chamber and storage tank, of pumping means comprising a supply pump portion and a feed water pump portion for delivering fixed quantities of water to and from the heater, a float tank, a float in the float tank, and means controlled by the float to by-pass a portion of the supply from within the supply pump portion of the pumping means to the suction side thereof.

1,817,076. COIN-CONTROLLED MECHANISM. ALBERT G. GRAN, Storm Lake, Iowa. Filed Jan. 15, 1930. Serial No. 420,880. 9 Claims. (Cl. 194—97.)

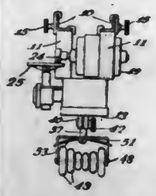


1. A coin controlled mechanism including a coin passage and a by-pass opening for receiving genuine coins, a gate for directing genuine coins through said opening, a gate actuating arm, a hand actuated means adapted to be moved into operative relation with said gate actuating arm to operate said gate, and means controlled by a coin of predetermined diameter for moving said hand actuated means into operative relation with said gate actuating arm.

1,817,077. ROLLER MASSAGE MACHINE. DAVID GUSTAVESON, Los Angeles, Calif. Filed Mar. 14, 1929. Serial No. 346,851. 5 Claims. (Cl. 128—57.)

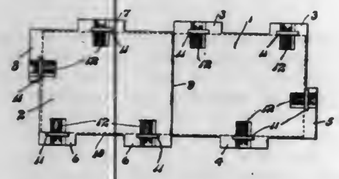
3. In a roller massage machine, a housing, a pair of shafts journaled in one of the walls of said housing,

grooved pulleys mounted on said shafts, a belt operating over said grooved pulleys, a pin projecting from said belt, a member mounted for vertical sliding movement within said housing, a ball and socket connection between said



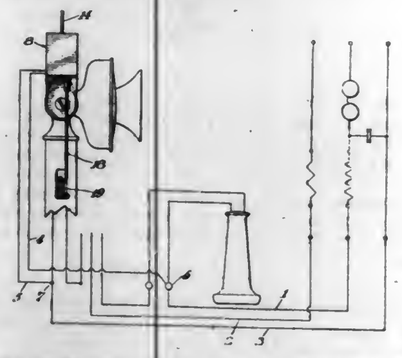
sliding member and pin, a bracket projecting from said sliding member, an applicator carried by said bracket, means for imparting rotary motion to one of said shafts and means whereby the speed of the rotary motion imparted to said shaft may be regulated.

1,817,078. ADJUSTABLE PLAYING CARD BLOCK. OLAF T. GYLLECK, Grand Haven, Mich., assignor to The Challenge Machinery Company, Grand Haven, Mich., a Corporation of Michigan. Filed Nov. 25, 1929. Serial No. 409,526. 9 Claims. (Cl. 101—383.)



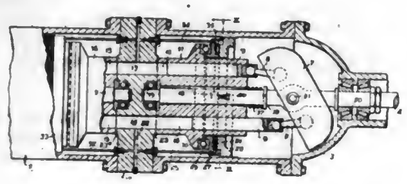
1. A construction of the class described, comprising a blocks of two parts of rectangular outline and of identical construction, each part at one side having two projecting bosses adjacent its ends separated by a recess and at the other side thereof a single projection boss located directly opposite said recess, and each at one end adjacent the corner having a single projecting boss the length of which is substantially one-half the width of said part excluding said bosses, the other end of each of said blocks being plain and in a vertical plane, said two parts being reversed with respect to each other whereby the plain ends of the blocks may be disposed in contact relation to each other or may be separated to receive a filler between them.

1,817,079. TELEPHONE SIGNALING. HAROLD G. HALL, Oneonta, N. Y. Filed Jan. 7, 1930. Serial No. 419,025. 3 Claims. (Cl. 179—84.)



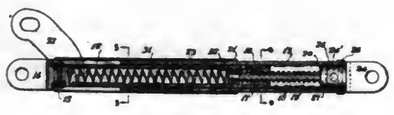
1. In combination, a telephone set and visual signal means in connection therewith, the telephone set comprising the usual transmitter, receiver, receiver-supporting hook, and bell or buzzer circuit controlled by the position of said hook; and the visual signal means comprising a visual signal element movable into signalling and non-signalling position; a latch releasably securing the signal element in its non-signalling position; an electro-magnet in circuit with the bell circuit of the telephone set for releasing said latch; means for actuating the signal element, when released, into its signalling position; and means actuated by the hook upon the removal of the receiver which returns the signal element to its non-signalling position.

1,817,080. TRANSMISSION MECHANISM. GEORGE E. HOWARD, Butler, Pa. Filed Apr. 10, 1929. Serial No. 354,152. 7 Claims. (Cl. 103—162.)



1. The combination with a rotatable cylinder barrel containing a cylindrical bore offset from the axis of the barrel and having a discharge opening at one end and a piston reciprocable therein, of a bearing surface for said end of the barrel, a thrust bearing surface on the barrel similarly offset from said axis, an expansible element engaging said thrust bearing surface for only a portion of the distance circumferentially of the said axis to hold the barrel against said bearing surface, and means for diverting fluid pressure from said bore to said expansible element.

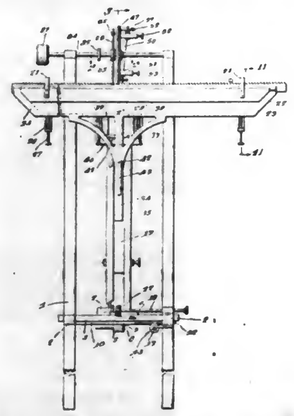
1,817,081. AUTOMATIC SLACK ADJUSTER FOR BRAKE RIGGING. EMIL J. JONAS, Cincinnati, Ohio. Filed Feb. 22, 1929. Serial No. 341,860. Renewed Nov. 28, 1930. 16 Claims. (Cl. 188—202.)



1. An automatic slack adjuster for brake mechanism comprising a two part telescopic push rod, means within said push rod to permit lengthening and to prevent collapse thereof, said means comprising a spring, a feed screw, a rotatable clutch member carried by said screw, a stationary clutch member carried by said rod, an arm, a split sleeve attached to said arm, and frictionally mounted upon said rod for disengaging said clutch during the slack take-up period.

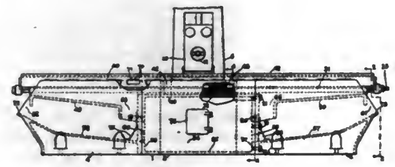
1,817,082. SAW FILING MACHINE. JOSEPH JUDT, Chicago, Ill. Filed June 19, 1929. Serial No. 372,127. 2 Claims. (Cl. 76—39.)

1. In a device of the class described, a supporting frame, a saw supporting frame mounted on the first frame for movement independent thereof, a saw clamp mounted for vertical adjustment in the second frame, movably mounted supporting blocks adjustable in said clamp for engaging a saw in the clamp for supporting saws of different widths, means for mounting said clamp for longitudinal movement,



a movable sharpener for engaging the teeth of a saw in the clamp, and means movable with the sharpener for imparting longitudinal movement to the saw.

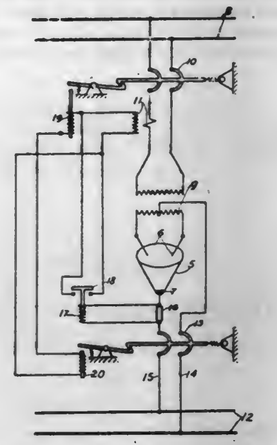
1,817,083. MACHINE TOOL. EDWARD J. KEARNEY and JOSEPH B. ARMITAGE, Wauwatosa, Wis., assignors to Kearney & Trecker Corporation, West Allis, Wis., a Corporation of Wisconsin. Filed Nov. 30, 1928. Serial No. 322,797. 3 Claims. (Cl. 90—58.)



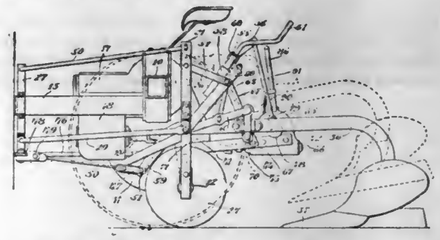
3. In a milling machine the combination of a reciprocable table, a support for said table including a center section having a tool spindle supported therefrom and drive mechanism for said table and spindle also supported therefrom, a fluid reservoir associated with said center section, said support also including a plurality of separately formed end sections respectively fixed at opposite ends of said center section and spaced apart thereby in the direction of table travel, said center section providing guide surfaces resisting table movement in a plurality of mutually transverse directions, said end sections each providing guide surfaces resisting table movement in one only of said directions and also providing channels for guiding fluid into said reservoir, said table being longitudinally extended to simultaneously engage guide surfaces on each of said sections.

1,817,084. CIRCUIT FOR PROTECTING ELECTRIC RECTIFIERS FROM REVERSE CURRENTS. ROBERT KELLER, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Sept. 11, 1928, Serial No. 305,197, and in Germany Sept. 12, 1927. 4 Claims. (Cl. 175—363.)

1. In a rectifying system for electric current, a rectifier having a plurality of anodes and a cathode, an alternating current line, a transformer connecting said rectifier with said current line, a direct current line connected to and supplied by said rectifier, switches for disconnecting said alternating current and said direct current lines from said rectifier, and a second transformer connected in the alternating side of said system and put into operation responsive to conditions in the direct current side thereof, and means for operating said switches upon operation of said second transformer.



1,817,085. TRACTOR PLOW. ALEXUS C. LINDGREN, Chicago, and ARTHUR D. GALLAGHER, Canton, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed May 29, 1929. Serial No. 366,814. 15 Claims. (Cl. 97—72.)



1. The combination with a tractor having rear wheels, an axle structure connecting the wheels and a body portion extending forwardly from the axle structure, of a plow carrying frame having ground wheels located within the transverse vertical planes of the rear tractor wheels, flexible draft connections between the frame and the body portion of the tractor, a plow having a beam supported between its ends on the frame, and a flexible draft connection between the plow beam and the tractor.

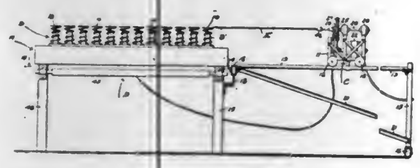
1,817,086. SOUND DEADENING AND HEAT INSULATING MATERIAL AND METHOD OF MAKING THE SAME. HARVEY B. LINDSAY, Evanston, and ARTHUR L. CLEMENTS, Chicago, Ill., assignors to Dry-Zero Corporation, Wilmington, Del., a Corporation of Delaware. Filed Mar. 11, 1929. Serial No. 346,003. 4 Claims. (Cl. 154—28.)



3. That step in the method of forming a sound deadening and insulating material which consists in immersing a

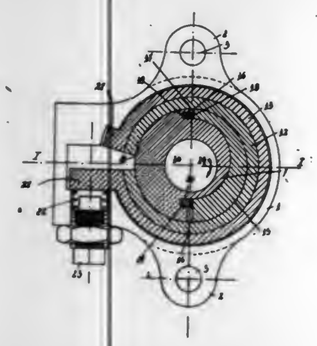
bat containing ceiba fibres in a bath of sizing between outer coverings of impregnable material and forcing air out of said bat and subsequently allowing said bat to expand while immersed to enable said fibres to take on said sizing adjacent said coverings whereby said bat receives an adhesive coating for securing said coverings to it.

1,817,087. APPARATUS FOR CONNECTING COILED SPRING MEMBERS. CHARLES LOFMAN, Los Angeles, Calif., assignor to Roberti Bros., a Corporation of California. Filed Feb. 1, 1930. Serial No. 425,195. 7 Claims. (Cl. 140—3.)



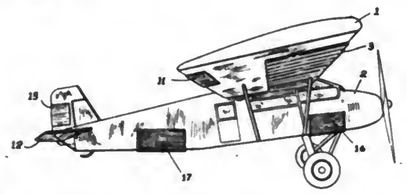
1. An apparatus for connecting coiled spring members by means of a continuous helical coil including: traveling power means for rotating said helical coil in a manner to cause it to encircle end portions of said coiled springs; and means operable to control the rotation of said helical coil.

1,817,088. FRICTION SHOCK ABSORBER FOR SUSPENDING VEHICLES. ROGER MASQUELIER, Tirlemont, Belgium. Filed Aug. 31, 1929, Serial No. 389,642, and in Belgium Sept. 5, 1928. 4 Claims. (Cl. 188—130.)



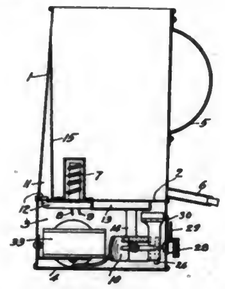
1. In a shock absorber for vehicles, in combination a circular housing, a circular friction band inside the housing, an eccentric arranged inside the said friction band and provided with a circular surface coming into contact with substantially one half of the internal periphery of the friction band, a cam, the internal surface of which is continuous and arranged between the eccentric and the remaining portion of the friction band, means whereby the said eccentric is rotated and means whereby the cam is rotated during only a part of the rotation of the eccentric.

1,817,089. AEROPLANE CONSTRUCTION. JOHN C. MCFADYEN, Lakeport, Calif., assignor of one-third to William H. Edmands and one-third to Ned M. Sleeper. Filed July 15, 1929. Serial No. 378,411. 14 Claims. (Cl. 244—12.)



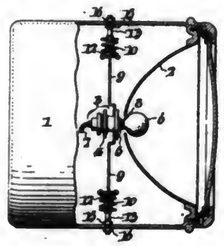
3. In an aeroplane, a layer of tubes open at opposite ends, said tubes arranged adjacent the under-surface of the wing with the tubes extending fore and aft and similar layers of open-ended tubes arranged adjacent the various air guiding surfaces of the plane.

1,817,090. ELECTRICAL WATER HEATING DEVICE. IDA R. MCGOWEN and FRANCIS J. MCGOWEN, San Pedro, Calif. Filed June 18, 1928. Serial No. 286,216. 2 Claims. (Cl. 219—43.)



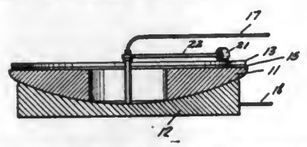
1. An electrical heating device for liquids comprising a container having a wall member extending adjacent a side wall member of the container so as to form an air chamber between said wall members, the distance between said wall members being small compared to the area thereof the wall members of said air chamber being of relatively extended area and extending substantially the full height of said container so as to provide for quick response of the pressure in the said air chamber to the average temperature of liquid in the container, heating means for said container and controlling means for said heating means connected to said air chamber and adapted to be operated in response to the pressure therein to control said heating means.

1,817,091. LOCOMOTIVE HEADLIGHT. GEORGE F. MILLER, Jersey City, N. J. Filed Nov. 11, 1929. Serial No. 406,194. 5 Claims. (Cl. 240—90.)



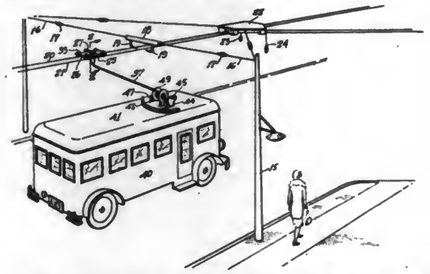
1. A headlight for locomotives comprising a casing, a reflector rigidly attached to said casing, said reflector having a central opening, a lamp socket supported independently of said reflector with said opening with capacity for limited transverse movement without striking said reflector, radial arms for supporting said lamp socket within said casing centrally of said reflector, said arms being arranged in pairs of opposed units and springs connecting said arms with said casing and tending to draw said arms toward the casing.

1,817,092. ELECTRIC WELDING PROCESS. OSCAR L. MILLS, Los Angeles, Calif. Filed Nov. 9, 1928. Serial No. 318,218. 2 Claims. (Cl. 219—10.)



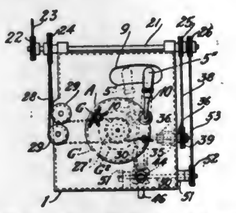
1. The process of welding conducting members together by the aid of an electric arc, which comprises placing a layer of insulation material on one member along the length of the desired weld, placing a bare length of the material to be welded over the insulation layer and in such manner that one end of said bare length projects slightly beyond the length of the layer of insulation, and arcing between said projecting end and the said one member, said insulation being of such a nature that it is eliminated by the heat of the arc.

1,817,093. FLEXIBLE TROLLEY. JAMES E. MORGAN, Portland, Oreg. Filed Oct. 14, 1929. Serial No. 399,494. 5 Claims. (Cl. 191—53.)



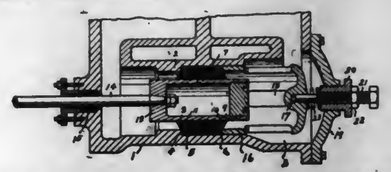
1. The combination of an electrically driven vehicle with an overhead trolley system, a carriage mounted on said trolley system, a flexible trolley between said carriage and vehicle, a spool on said vehicle on which the trolley is wound and a castor mounting for said spool whereby its drum axis may be held normal to the line of pull on said trolley.

1,817,094. PRODUCTION OF PHONOGRAPH STYLI. SHERWOOD T. MOORE, Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Jan. 22, 1929. Serial No. 334,152. 13 Claims. (Cl. 51—124.)



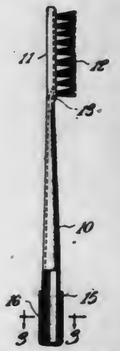
1. Apparatus of the character described comprising a rotatably mounted spirally grooved lap, means for rotating said lap, a stylus support; said lap and support being arranged for relative feeding movement to cause a stylus carried by the support to track the groove of the lap when the latter is rotated, and means for effecting relative rocking movement of said lap and stylus as the latter tracks said groove, substantially as described.

1,817,095. PUMP PACKING. KIRBY T. PENICK, ARTHUR J. PENICK, and HERBERT WILLIAM MILLMINE, Houston, Tex. Filed Apr. 29, 1929. Serial No. 359,148. 5 Claims. (Cl. 286—14.)



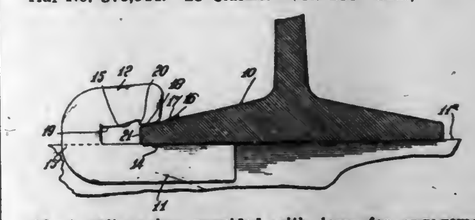
1. In a pump having a casing, a cylinder therein and a plunger reciprocable in the cylinder; packing in the cylinder around the plunger, said packing comprising annular end plates, packing rings anchored to said end plates and terminating in annular lips which closely surround the plunger, and an expansible sleeve between said end plates.

1,817,096. TOOTHBRUSH. EDWARD D. POLLOCK, Westwood, N. J. Filed Apr. 4, 1929. Serial No. 352,337. 4 Claims. (Cl. 15—133.)



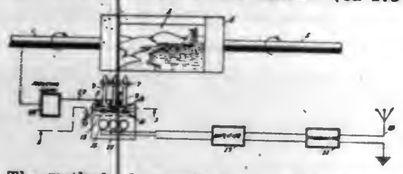
1. A toothbrush having a hollow handle merging integrally into a head portion carrying bristles with the bore of the handle merging into a surface channel on the brush head, and a sliding cap at the outer end of the handle.

1,817,097. RAIL ANCHOR. FREDERICK A. PRESTON, Lake Forest, Ill., assignor to The P & M Company, Chicago, Ill., a Corporation of Illinois. Filed July 8, 1929. Serial No. 376,544. 18 Claims. (Cl. 238—321.)



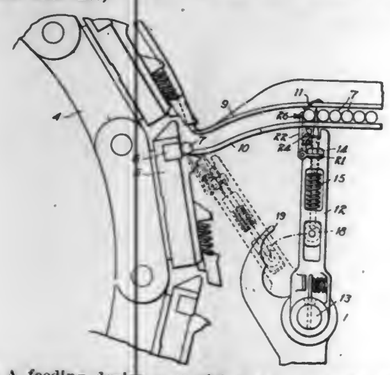
18. A rail anchor provided with jaws for engagement with the top and bottom surfaces of a rail base flange and means providing a shoulder on a portion of the rail base for locking said jaw member on the rail with capacity for adjustment longitudinally of the rail.

1,817,098. COLORED FACSIMILE SYSTEM. RICHARD HOWLAND RANGER, Newark, N. J., and SAMUEL B. SMITH, Brooklyn, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 1, 1929. Serial No. 343,768. 19 Claims. (Cl. 178—13.)



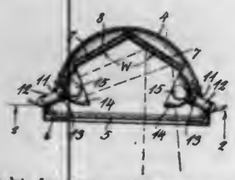
1. The method of recording pictures in colors closely approximating those of an original which includes receiving signals of varying strength corresponding to the several component color tone intensities on elemental areas of a picture surface being transmitted, projecting a recording medium against a record surface for producing the received picture, controlling the path of the said recording medium in accordance with the strength of the received signals, and successively changing the recording from one to another of a series of recording mediums corresponding in color to the several component colors chosen.

1,817,099. FEEDING MECHANISM. WILLIAM EDGAR REED, Pittsburgh, Pa. Original application filed Aug. 13, 1924, Serial No. 731,831. Divided and this application filed Dec. 3, 1928. Serial No. 323,539. 7 Claims. (Cl. 198—27.)



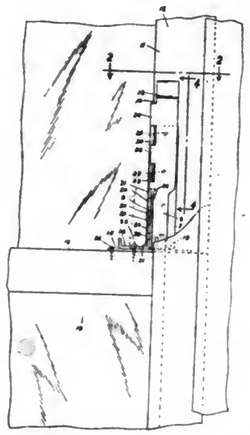
1. A feeding device, comprising an oscillatory member, a movable stop carried thereby in position to engage an article to be fed, a plunger adjacelt to but spaced from said stop, and means for releasably holding said plunger in retracted position, the said means being actuated by movement of said stop when brought into engagement with the article, to release said plunger and permit it to move into position adjacent to the opposite side of said article.

1,817,100. LIGHT PROJECTING AND DISPERSING DEVICE. GEORGE ROBINSON, FLORENCE A. KMIESKE, and LEWIS A. KMIESKE, Littleton, Colo. Filed Jan. 13, 1930. Serial No. 420,359. 3 Claims. (Cl. 240—41.1.)



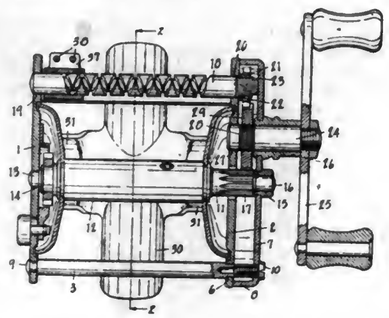
1. A headlight for automobiles or the like comprising two flat reflecting surfaces that intersect each other in a substantially vertical straight line and which lie in planes separated by an angle greater than ninety degrees and less than one hundred eighty degrees and separate means for directing light onto each of the reflecting surfaces from lamps located on the other side of the line of intersection of the reflecting surfaces, said lamps being located at the outer ends of the reflecting surfaces and above a horizontal plane bisecting the vertical line of intersection.

1,817,101. COMBINATION WINDOW LATCH. HARRY L. ROBY, Cincinnati, Ohio, assignor of one-half to The Highland Body Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 8, 1930. Serial No. 419,338. 7 Claims. (Cl. 292—194.)



1. In a device of the class described the combination of a stationary leaf for attachment to one of a pair of relatively movable members, an abutment means on the other member, a safety leaf hinged relative to the stationary leaf, a stop lug on the safety leaf for abutting the said abutment means for limiting movement of the relatively movable members, a fly leaf hinged relative to the stationary leaf and movable into and out of engagement with the abutment means, a stop means for yieldingly limiting movement of the fly leaf in one direction of movement, and a movable keeper having a flat portion for abutting the fly leaf and holding the fly leaf against the force of the yielding stop means.

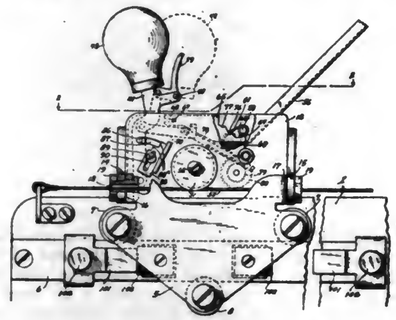
1,817,102. FISHING REEL. SAMUEL G. RUSSELL, Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Sept. 29, 1928. Serial No. 309,154. 6 Claims. (Cl. 242—84.4.)



3. In a fishing reel, the combination of a frame comprising head, and tail end plates and connecting pillars,

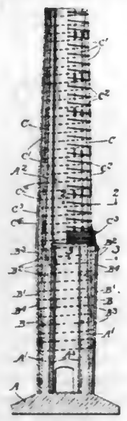
a head housing member provided with a flange coacting with said head plate to provide a housing, said end plates beng provided with alined holes constituting traversing shaft bearings, a traversing shaft journaled in said bearings to project into said housing, a pinion on said shaft within said housing limiting its axial movement in one direction, the housing plate limiting its axial movement in the opposite direction, and a driving gear meshing with said traversing shaft pinion.

1,817,103. AUTOMATIC FEEDING DEVICE. LOUIS J. SAUER, Oak Park, Ill., assignor to Charles H. Joy, sr., Chicago, Ill. Filed Mar. 1, 1930. Serial No. 432,442. 16 Claims. (Cl. 101—133.)



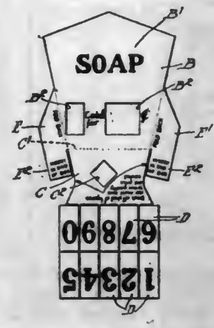
1. A duplicator comprising a bed having a printing surface, a carriage bracket arranged for longitudinal movement relative to said bed, a carriage hinged to said bracket for movement therewith and for pivotal movement relative thereto, a platen roller on said carriage, and a driving means for said roller extending thru and substantially on the axial line of said hinge.

1,817,104. STACK. JOHN V. SCHAEFER, Chicago, Ill., assignor of one-half to Cement-Gun Construction Company, Chicago, Ill., a Corporation of Illinois and one-half to Cement-Gun Company, Inc., Allentown, Pa., a Corporation of New York. Filed Dec. 17, 1928. Serial No. 326,493. 8 Claims. (Cl. 72—94.)



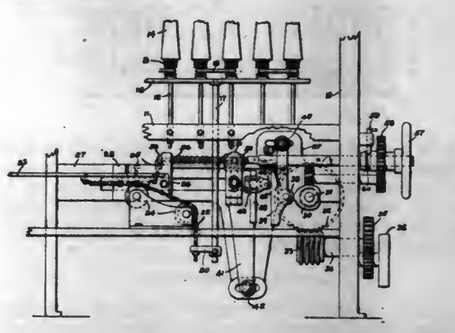
1. A chimney which includes a lower chimney portion, an upper chimney portion, a reinforcing structure surrounding said lower portion and forming a structural unit therewith, an outer chimney extending upwardly from said structure about said upper chimney portion, and structurally independent of said upper chimney portion.

1,817,105. PRICE MARKER FOR GOODS. CLIFFORD W. SKOGH, Chicago, Ill., assignor to Magill-Weinsheimer Company, Chicago, Ill., a Corporation of Illinois. Filed July 31, 1929. Serial No. 382,360. 6 Claims. (Cl. 40—5.)



1. A blank for price signs, formed of a fibrous material, such as paper, which includes a main portion and a second portion adapted to be folded in relation to the main portion, the main portion being apertured in line with the second portion when the second portion is folded, and a plurality of detachable portions having indicating symbols thereon, the detachable portions being of such a size and the symbols being so positioned thereon as to align the symbols with said apertures when the detachable portions are positioned between the main and the second portions with their lower edges engaging the fold between said main and second portions.

1,817,106. BUNCH BUILDING MECHANISM. ALLEN SMITH, Millbury, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Nov. 13, 1929. Serial No. 406,958. 4 Claims. (Cl. 242—43.5.)

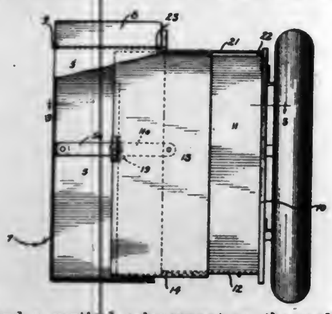


2. In a bunch building mechanism, a slidably mounted member controlling the winding of the yarn, means to regularly reciprocate said member, and means to interrupt the reciprocation of said member for a predetermined period, said means including a locking lever movable into the path of said sliding member, a cam to move said lever to locking position, and means to move said cam from operative position by both rotary and axial advance movement of said cam.

1,817,107. AUTOMOBILE LUGGAGE TRUNK. PHILMORE F. SPERY, Chicago, Ill., assignor, by mesne assignments, to Kari-Keen Manufacturing Company, Sioux City, Iowa. Filed Nov. 1, 1928. Serial No. 316,532. 6 Claims. (Cl. 224—29.)

1. A trunk comprising a main section, a medial section and a terminal section all telescopically arranged, a pair

of links pivotally connected and pivoted at their extreme ends respectively to the main section and the terminal section, a sleeve fixed at the pivot of said links to each

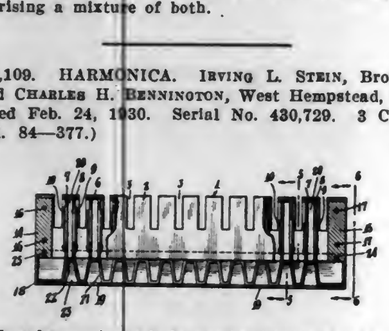


other, and a vertical enlargement on the medial section with which said sleeve slidably engages, whereby said medial section is caused to move with but at a slower rate than the terminal section.

1,817,108. ELECTRIC CONDENSER. GODFREY STEERUP, Maywood, Ill., assignor, by mesne assignments, to American Electric Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 23, 1929. Serial No. 349,517. 3 Claims. (Cl. 154—26.)

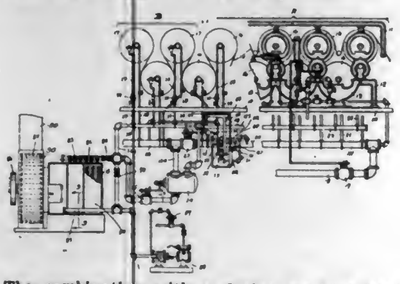
2. A dielectric comprising a layer of gum such as gutta percha, a layer of pure asphalt, and an intervening layer comprising a mixture of both.

1,817,109. HARMONICA. IRVING L. STEIN, Brooklyn, and CHARLES H. BENNINGTON, West Hempstead, N. Y. Filed Feb. 24, 1930. Serial No. 430,729. 3 Claims. (Cl. 84—377.)



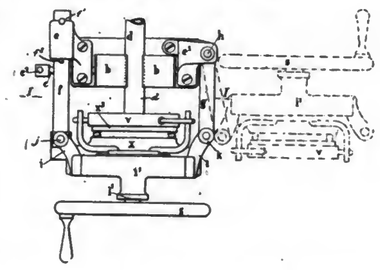
2. In a harmonica, a body member having slots for wind passage, grooves arranged within said body member adjacent to said slots, individual reed plates adapted to removably fit within said grooves and forming reed chambers, and a movable mouthpiece having perforations opposite said reed chambers.

1,817,110. AUTOMATIC STEAM CONTROL AND DIFFERENTIAL FOR PAPER MACHINES. COLE STICKLE, Indianapolis, Ind. Filed May 14, 1928. Serial No. 277,603. 4 Claims. (Cl. 34—48.)



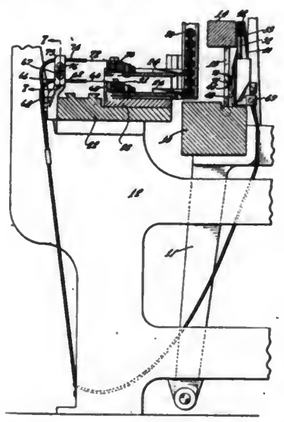
2. The combination with a drying machine having a blowing through section, of a condensing section, a steam supply header and a return header for each of said sections, pipes leading from each of the rolls in the condensing section to the return header of said section, and a restricting valve construction in said pipes having a casing with an inlet port, and a removable nozzle therein having an outlet port reduced in size as compared, with the inlet port.

1,817,111. MACHINE FOR CUTTING THREADS ON TUBES. PAULIN TAUREL, Romainville, France. Filed July 6, 1929, Serial No. 376,376, and in France Dec. 20, 1928. 3 Claims. (Cl. 10—89.)



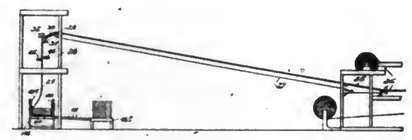
1. A machine for cutting threads on a tube comprising a case hingedly mounted, a gear train mounted in said case, driving gears of different size engaging said gear train, a fork actuated by said gear train, a die stock actuated by said fork and a push member resiliently urging said die stock on said tube.

1,817,112. THREAD CUTTING MECHANISM FOR DOUBLE SHUTTLE LOOMS. RICHARD G. TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 30, 1929. Serial No. 351,297. 6 Claims. (Cl. 139—265.)



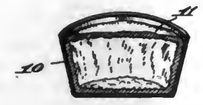
1. In a weft replenishing loom, a pair of shuttles operable in superposed paths between the same terminal limits, a single stationary magazine for replenishing said two shuttles, separate means to transfer a weft carrier horizontally from said magazine to the upper or to the lower shuttle, separate but closely associated devices for severing the out-going weft for each shuttle on weft ejection, said separate devices being mounted on the lay and being normally positioned rearward of the paths of the shuttles and each device being effective to sever the weft outside of the exhausted shuttle, and separately controlled operating means for advancing and actuating each severing device upon transfer to the corresponding shuttle.

1,817,113. CUTTING AND SWATCHING MECHANISM. CHARLES A. UPSON, Lockport, N. Y., and OTTO R. WINTER, Cincinnati, Ohio, assignors to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Apr. 15, 1930. Serial No. 444,555. 6 Claims. (Cl. 270—39.)



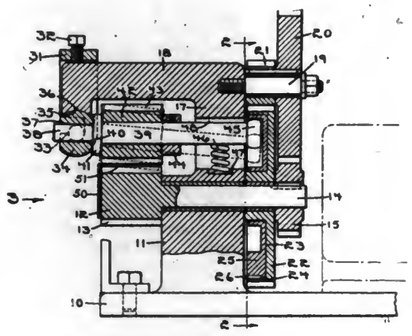
1. In a machine for making insulating bats, the combination with mechanism for conveying a strip of insulating batting, of means for creasing said strip alternately in opposite directions at predetermined intervals, said strip after being creased moving downwardly in a substantially vertical position to be swatched, and mechanism for severing said strip transversely while it is in such substantially vertical position.

1,817,114. METHOD OF MAKING CONFECTION SHELLS. JOSEPH VALENTA, Glendale, Calif. Filed Sept. 19, 1928. Serial No. 306,874. 3 Claims. (Cl. 99—10.)



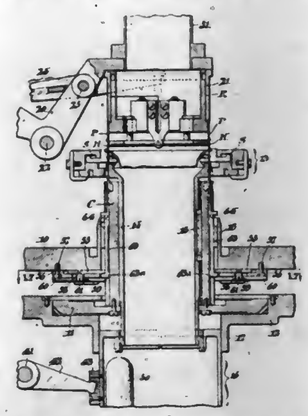
1. The herein described method of producing hollow confection shells which consists in mixing eggs, sugar and a leavening substance and then baking the mixture to form a shell having viscous inner surfaces and a brittle crust-like outer surface and said shell when baked having an open unobstructed chamber.

1,817,115. MACHINE FOR FORMING GEAR GUARDS. WALTER H. WAKEFIELD, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 14, 1930. Serial No. 420,785. 9 Claims. (Cl. 153—69.5.)



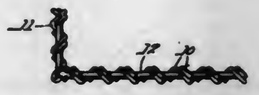
6. In a machine for corrugating sheet material, a pair of corrugating rollers capable of co-acting and operating upon a strip of sheet material to form corrugations therein, and a pattern surface movable in timed relation with the rollers and operatively connected thereto to vary the character of corrugations formed in the sheet material.

1,817,116. NEEDLE ARRESTING MEANS FOR KNITTING MACHINES. LOUIS N. D. WILLIAMS, Ogontz, Pa., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Jan. 14, 1929. Serial No. 332,494. 14 Claims. (Cl. 66—58.)



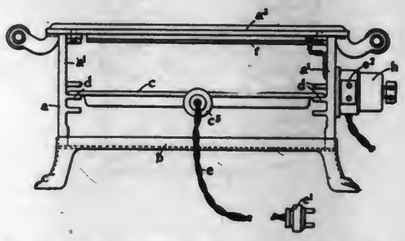
1. Needle arresting means for knitting machines involving transfer mechanism comprising a stop element projectable laterally into the path of the needles to prevent upward movement of the latter incidental to loop transferring operations, and mechanism to actuate the stop element concurrently with withdrawal of fabric from the needles by the transfer device.

1,817,117. FLANGED CONVEYER BELT. FRANCIS N. WOODMAN, Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 24, 1928. Serial No. 328,197. 1 Claim. (Cl. 198—193.)



A spiral wire conveyer belt formed of a plurality of interlaced spiral wire members extending transversely of said belt, and a plurality of cross rods extending transversely of said belt within said spiral members, the end portions of said members and cross rods being bent as a unit substantially perpendicular to the plane of said belt to provide and firmly support upstanding flanges of substantial height along the parallel side edges of said belt, effective to retain material during transportation thereon.

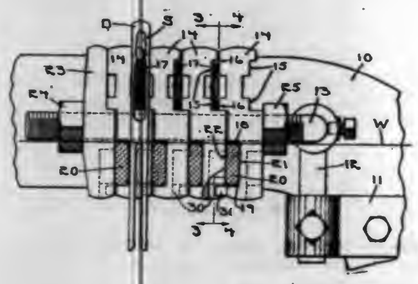
1,817,118. APPLIANCE FOR GRILLING, TOASTING, AND THE LIKE. FELIX ADAMI, Richmond, England. Filed Jan. 26, 1929, Serial No. 335,263, and in Great Britain May 8, 1928. 7 Claims. (Cl. 219—37.)



1. Appliances for grilling, toasting and the like operated electrically and comprising a supporting frame, an

electrically heated hot plate carried by the said frame and an electrically heated grid-like pan adjustable upon the said frame relatively to the said hot plate and adapted for the direct support of food which is subjected to grilling, toasting or the like from above and below.

1,817,119. WARP STOP MOTION. JOHN G. AHLIN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed June 20, 1930. Serial No. 462,674. 9 Claims. (Cl. 139—369.)

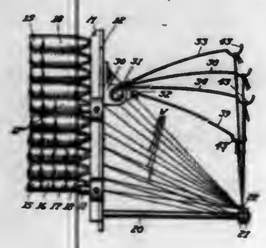


1. In a warp stop motion, a plurality of substantially similar units arranged one adjacent the other, a holder for the units, a detector bar lying between two adjacent units, a separator bar lying between said two units, and means supported by the holder to support the separator bar in position between the units when the elements are spaced apart a distance equal at least to the horisontal dimension of the detector bar.

1,817,120. FUR TREATING COMPOSITION AND PROCESS OF MAKING SAME. JOHN E. AWAD, Newark, N. J. Filed June 13, 1929. Serial No. 370,731. 3 Claims. (Cl. 8—21.)

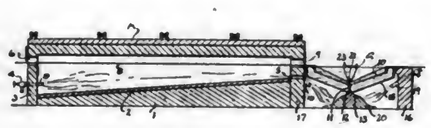
1. A fur treating composition for removing the foreign matter from fur fibres and the like preparatory to felting comprising a solution resulting from the admixture of a major proportion of nitric acid, a lesser proportion of mercury and aqueous ammonium hydroxide.

1,817,121. THREAD HOLDER. CARL P. BERGSTROM, Millbury, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 15, 1929. Serial No. 332,690. 8 Claims. (Cl. 139—247.)



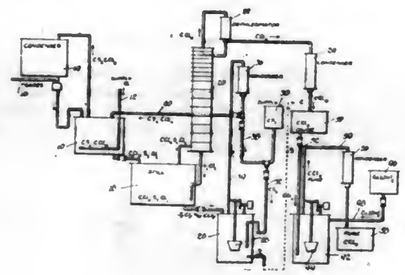
1. In a weft replenishing mechanism having a stack of reserve bobbins from each of which extends a weft end, a fixed thread guide around which the weft thread ends extend, and a single spring formed of resilient wire a portion of which is coiled and another portion of which is adapted for engagement with the weft ends, the coils tending to move that portion of the wire which is adapted for engagement with the weft ends substantially vertical at all times away from the thread guide.

1,817,122. APPARATUS FOR GALVANIZING WIRE AND THE LIKE. HARRY GEAN BLACK, Galveston, Tex. Filed Apr. 22, 1929. Serial No. 356,953. 4 Claims. (Cl. 263—3.)



1. A galvanizing pan for zinc, a pan spaced below said galvanizing pan adapted to contain lead, means to heat the lower of said pans, and partitions in said lower pan acting to divide the same into four chambers for the purpose set forth.

1,817,123. PROCESS FOR MAKING CARBON TETRACHLORIDE. PAUL S. BRALLIER, EDWARD J. DUNLAP and GERALD D. MUGGLETON, Niagara Falls, N. Y., assignors to Niagara Smelting Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed June 30, 1922. Serial No. 571,977. 23 Claims. (Cl. 260—163.)

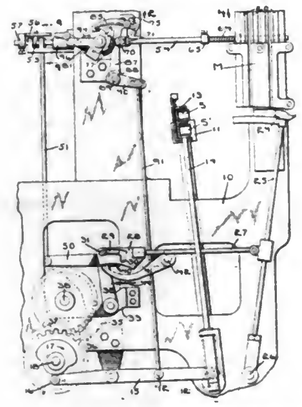


1. A process for making carbon tetrachlorid which comprises, forming carbon tetrachlorid and sulfur monochlorid by the interaction of carbon bisulfid and chlorin, separating part of the carbon tetrachlorid from the sulfur monochlorid to form an end product, and forming more carbon tetrachlorid by the inter-action of carbon bisulfid with the sulfur monochlorid resulting from the preceding steps.

1,817,124. WEFT REPLENISHING LOOM. CLYDE E. BROWN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1930. Serial No. 443,210. 11 Claims. (Cl. 139—232.)

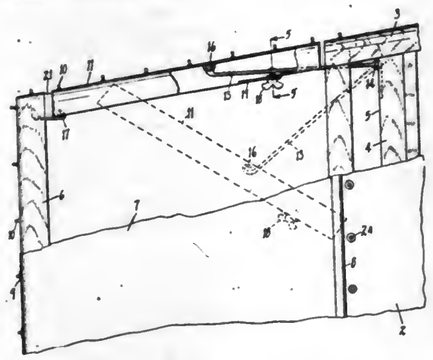
1. In a double shuttle weft replenishing loom, a multicell magazine, and means to cause the lowermost bobbins

in a plurality of the compartments of said magazine to be advanced to transfer position in predetermined order for



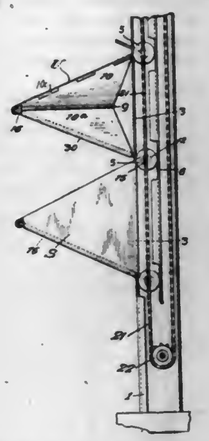
transfer to one of the shuttles and to cause the lowermost bobbin in an additional compartment to be advanced to transfer position for transfer to a second shuttle.

1,817,125. VEHICLE BODY. JAMES L. BROWNELL, Kalamazoo, Mich., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich., a Corporation of New Jersey. Filed Jan. 17, 1930. Serial No. 421,340. 5 Claims. (Cl. 296—99.)



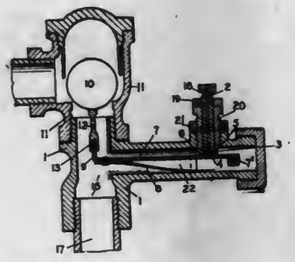
1. The combination of a vehicle body, of a top deck having an inner cross member disposed in spaced relation to its front edge providing a forwardly facing recess, a windshield frame spaced from the top deck, rearwardly projecting outwardly facing hooks disposed at the ends of said windshield frame, channeled longitudinally slotted cover side bars, links pivotally mounted on said cross member and pivotally connected to said bars in the plane of their said slots so that the links may be swung through the slots to collapse the bars upon the links and into said forwardly facing recess of said deck, screws swiveled on said bars to engage said links when the bars are in erected position in engagement with said hooks, cushion members arranged between the forward ends of said bars and said windshield frame, a flexible cover secured at its rear edge to the front end of said deck, said windshield frame, cover bars and said covers having coacting detachable fasteners whereby the cover may be detachably secured thereto or collapsed and disposed upon the top bars collapsed within said recess, and an apron secured at one edge to said cross member and adapted to be passed around the collapsed cover bars and cover, said deck apron being provided with coacting detachably engageable fastener members.

1,817,126. AWNING. AUGUST BRUNS, Jamaica, N. Y. Filed Dec. 11, 1928. Serial No. 325,166. 7 Claims. (Cl. 156—15.)



1. In an awning device, the combination of a pair of rigid roof members having their inner and outer lateral edges formed with telescopic sleeves, one of said members being laterally and adjustably telescoped into the other by means of said inner and outer sleeves, upper rigid side curtain members hingedly connected to the lateral edges of said roof members, lower rigid side curtain members hingedly connected to said upper side curtain members, a vertically movable support for said roof members comprising a lateral rod passing through the inner sleeves and additional vertical movable supports passing through sleeves formed at the lower edges of the lower side curtain members, said additional supports also passing into the outer sleeves of said roof members.

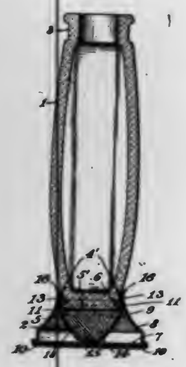
1,817,127. UNLOADING VALVE. THOMAS E. CROCKETT, Tulsa County, Okla., assignor of one-half to William H. Blakley and James R. Cole, Tulsa, Okla. Filed Nov. 19, 1930. Serial No. 496,758. 10 Claims. (Cl. 277—21.)



1. An unloading valve comprising; a body portion; a valve port in said body portion; a valve port seat for said valve port; a lever fulcrumed at one end and pivotally secured within said body portion, and having its power point at its free end; a valve positioned on said lever between its fulcrum point and its power point and adapted to engage said valve port seat and close said valve port; tension means for applying tension on said lever in a direction towards said valve port to cause said valve on said lever to close said port when said lever is not subjected to its actuating power, and with the free end of said lever adapted to be engaged by the moving valve portion of a check valve and to be actuated by it in a direction opposed to the tension applied to it by said tension means, to the effect that said valve port is caused to be opened by the power applied by said moving valve portion of said check valve; means for connecting said unloading

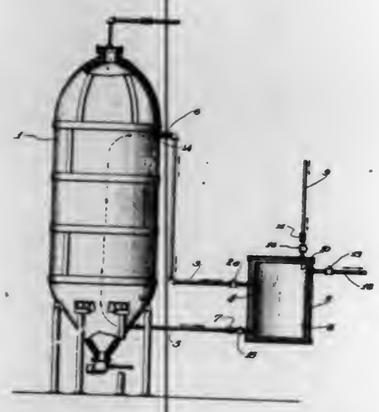
valve with said check valve at the inlet side of said check valve, and with said valve port of said unloading valve communicating with said check valve; means of actuating said lever with the moving valve portion of said check valve, to cause the valve port of the unloading valve to be open when said check valve is closed.

1,817,128. CONTAINER. LEON A. DANCO, Rockville Center, N. Y., assignor to McKesson & Robbins, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 9, 1928. Serial No. 318,120. 18 Claims. (Cl. 215—1.)



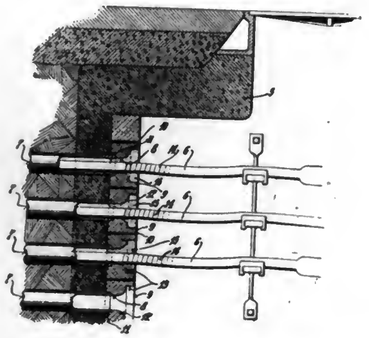
1. A container of the character described comprising in combination a bottle having a neck and body portion, a rectangular base portion depending from said body portion having a lip or flange encircling the lower part thereof and a pedestal for mounting said bottle having means thereon adapted to receive the depending base portion and to cooperate with said depending base portion and said flange whereby the bottle and pedestal may be joined together.

1,817,129. CIRCULATING SYSTEM FOR PULP DIGESTERS. DAVID R. DAVIES, Shelton, Wash. Filed Aug. 18, 1928. Serial No. 300,433. 7 Claims. (Cl. 92—7.)



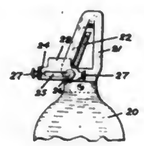
1. A liquor circulating system for pulp digesters, comprising in combination with a digester, an auxiliary container, valve controlled connections from said container to said digester, exhaust means on said container and a fluid pressure connection to said container for forcing liquor from said container into said digester.

1,817,130. DUCT TERMINAL. ROY L. DODD, Wauwatosa, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 7, 1929. Serial No. 330,778. 2 Claims. (Cl. 247—4.)



1. In a device of the character described, a cable, a conduit in which the cable is positioned, a conduit terminal having a bore of substantially the inside diameter of the conduit, a counter-bore in which the end of the conduit is received, the first bore being flared outwardly to provide a rounded surface to prevent injuring the cable and terminating in a bore of larger diameter, flame-proof material wound about the cable outwardly of the flared bore, and flame-proof material filling the bore of larger diameter around the cable.

1,817,131. POISE. CHARLES DOLLACK, Brooklyn, N. Y., assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 9, 1928. Serial No. 311,330. 6 Claims. (Cl. 265—49.)

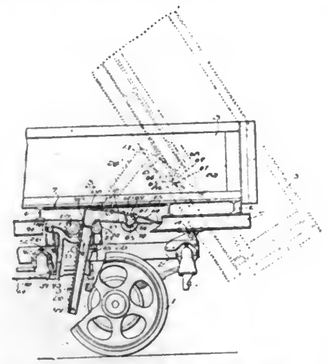


1. A device of the character described including, in combination, a rack bar, a poise-supporting member having an opening to accommodate said rack bar and suspended therefrom and means movably mounted by said supporting member and shiftable to restrict the effective area of said opening to limit the movement of said supporting member and poise with respect to said rack bar.

1,817,132. DUMPING GEAR. EUGENE J. DONDLINGER, Chicago, Ill. Filed Nov. 12, 1928. Serial No. 318,723. 17 Claims. (Cl. 298—21.)

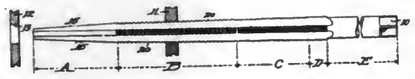
1. In combination, a frame, a platform pivoted thereto, a rocker hung loosely upon and movable relative said platform for imposing the lifting effort upon the platform by rocking coaction therewith, said rocker having a curved side for rocking engagement with the bottom of the platform, said curved side shifting its engagement with the platform continuously toward the platform pivot over the entire platform lifting operation to continuously shorten the distance from the platform pivot on

the frame to the rocking engagement of the rocker with the platform, means for actuating said rocker, keeper means on the rocker for holding the platform against



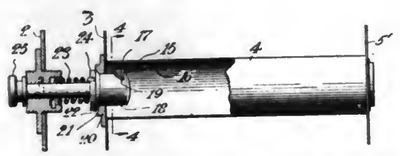
tilting back over rearwardly at the limit of its tilting movement and for locating the rocker on the platform, and pin means on the platform projecting into said keeper means and having orbital movement therein.

1,817,133. STAY BOLT TAP. ERNEST DUCHESNE, Schenectady, N. Y., assignor to Greenfield Tap & Die Corporation, Greenfield, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1929. Serial No. 417,780. 4 Claims. (Cl. 10—141.)



1. A staybolt tap comprising an abruptly tapered pilot and preliminary reaming section, a less abruptly tapered reaming and preliminary threading section for reaming a hole parallel to the axis thereof, and effective to form a thread during the reaming operation, a tapered threading section having teeth progressively increasing in height to full cross section, and a full thread finishing section.

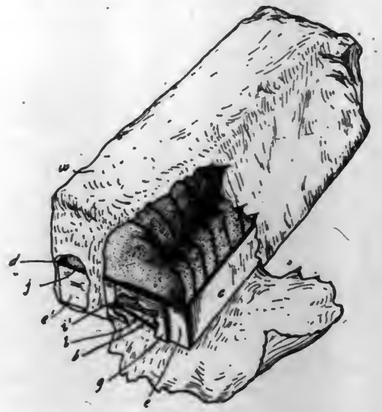
1,817,134. FILM SPOOL. DAVID T. EIGHMEY, Long Island City, N. Y., assignor to Fairchild Aerial Camera Corporation, New York, N. Y., a Corporation of New York. Filed May 25, 1929. Serial No. 365,807. 4 Claims. (Cl. 242—70.)



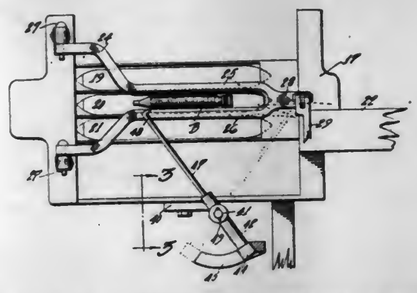
1. In a film spool, an elongated barrel, attachment devices at either end of said barrel, one of said devices consisting in a spring catch integrally formed with said barrel and extending into same, said catch having a bevelled head on its forward end, said barrel being slotted in alignment with and in length and width equal to that of said spring.

1,817,135. COLLAPSIBLE BOX. CHARLES H. GOODYEAR, Portland, Oreg. Filed Sept. 10, 1929. Serial No. 392,951. 4 Claims. (Cl. 229—41.)

1. A paper box for containing a compressible article of the character described, sealed in a wrapper, said box comprising a rectangular bottom section provided with hinged side wall sections, the latter provided at their ends with longitudinal extensions and secured together to form bar-like, inwardly movable end walls of the box, and the ends of the bottom section having obtuse recessions, whereby to cause the inward displacement of said end walls in conformity with said end recessions of the bottom upon the wrapping of the article placed in said box by a wrapper drawn tightly over the box and the article, and thus avoid the upper edges of said end walls presenting shearing edges to the end portions of the wrapper.



1,817,136. THREAD EXTRACTOR FOR WEFT REPLENISHING LOOMS. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 22, 1929. Serial No. 380,178. 13 Claims. (Cl. 139—258.)

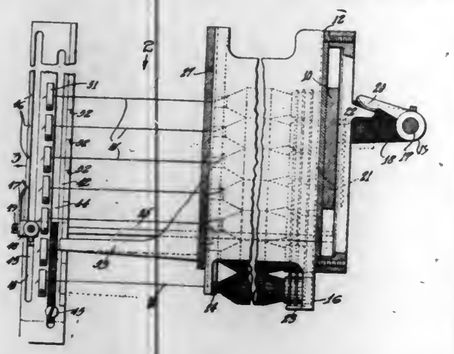


1. In a weft replenishing loom, a magazine to hold reserve bobbins, a thread holder to which is attached the weft ends extending from the reserve bobbins, a lay, a thread extractor pivoted to the lay and movable in a substantially vertical plane inwardly with respect to the length of the lay during the rearward movement of the latter, and means carried by the lay and in substantial horizontal alignment with a portion of the path of the movement of the extractor and lying behind the latter to engage the weft end of a transferred bobbin when said end is moved thereagainst by the extractor to be moved along the lay.

1,817,137. THREAD HOLDER FOR LOOMS. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 12, 1929. Serial No. 392,222. 14 Claims. (Cl. 139—247.)

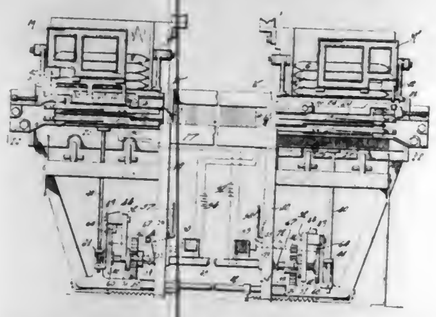
1. In a weft replenishing loom, a bobbin carrier movable from normal non-transferring position to transferring po-

sition to move a bobbin supported thereby into transfer position, said carrier thereafter being returned to normal position, a thread holder to retain the weft ends extending from the bobbins supported by the carrier, said holder



having provision for engaging the weft ends at a plurality of spaced points, and means actuated by the carrier to give the thread holder successive movements all of which are in one direction to advance the weft ends toward transfer position.

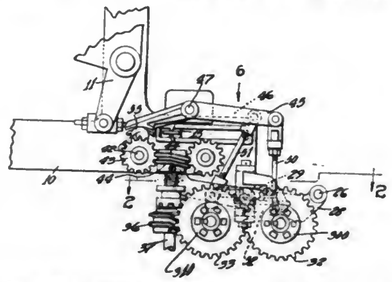
1,817,138. SHUTTLE CHANGING PICK AND PICK LOOM. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1930. Serial No. 428,538. 6 Claims. (Cl. 139—239.)



1. In a shuttle changing loom, a lay, a pair of regularly operated drop boxes at each end of the lay, means to raise either pair of boxes and simultaneously lower the opposite pair, a shuttle storage magazine associated with each pair of boxes, a weft detecting mechanism associated with the lower box of each pair, and means to raise a selected pair of shuttle boxes to an abnormal elevated position after indication of substantial weft exhaustion and to transfer a shuttle from one of said magazines to the associated upper box when so raised on the pick immediately following indication of substantial weft exhaustion in the opposite lower box.

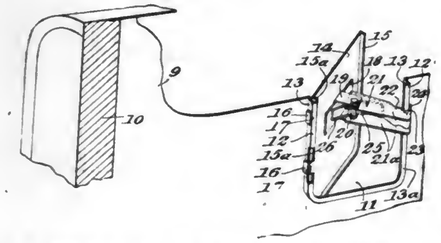
1,817,239. LOOM DOBBY. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 24, 1930. Serial No. 470,497. 2 Claims. (Cl. 139—323.)

1. A double cylinder loom dobby comprising two pattern cylinders, a set of dobby levers, a separate set of cylinder levers for each cylinder, both sets of cylinder levers cooperating with the single set of dobby levers, a rocking support for said levers, an actuating member, pattern-controlled means for moving said actuating member positively in both directions, and direct positive connec-



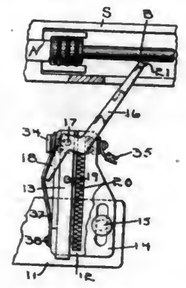
tions from said member to said rocking support, whereby positive movements of said support and cylinder levers in both directions to operative position are effected.

1,817,140. VENTILATOR FOR AUTOMOBILES. JAMES W. GREIG, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 13, 1930. Serial No. 451,959. 10 Claims. (Cl. 180—69.)



1. A ventilator for an automobile comprising a panel having an opening, a door hinged at one edge of the opening and adapted to close the same, and a member secured to the door and spring pressed to contact continuously with the inner edge of the opening and also to exert pressure on the door hinge.

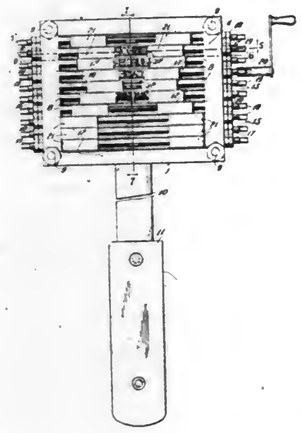
1,817,141. ELECTRICAL SIDE SLIP FEELER. JAMES F. HARTMAN, West Hazleton, Pa., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1930. Serial No. 433,121. 5 Claims. (Cl. 139—273.)



1. In an electrically indicating weft detector, a fixed support, a side slipping weft detector capable of angular and longitudinal movement with respect to said support when in contact with a denuded bobbin, an electric contact carried by but insulated from the support, and a flexible contact spring secured directly to the housing and positioned for engagement at a point intermediate its

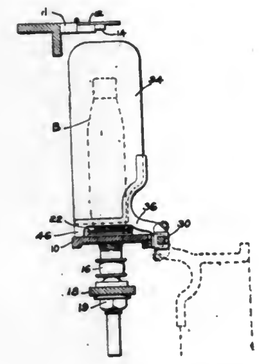
ends with a part of the detector arm, said spring normally being out of engagement with the first named contact and having one end movable into contact therewith by direct engagement with the detector arm as the latter has an indicating motion.

1,817,142. COMBINED STAMPING CHASE AND PALETTE. WALTER HEHN, Chicago, Ill. Filed Dec. 10, 1930. Serial No. 501,189. 11 Claims. (Cl. 101—381.)



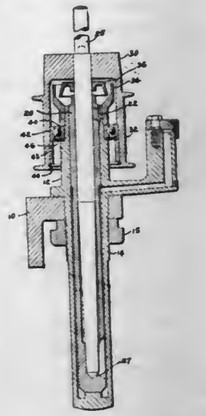
1. A device of the kind described comprising a frame, including a plurality of parts providing supports upon which a plurality of lines of impression members may be composed, and means for clamping each line of impression members and for centering said lines with respect to each other.

1,817,143. YARN SEPARATOR. FRED K. HENDRICKSON, Worcester, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Mar. 27, 1929. Serial No. 350,398. 4 Claims. (Cl. 118—11.)



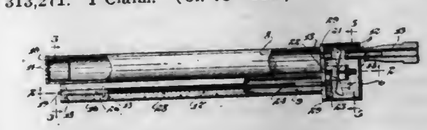
1. In a spinning or twisting machine, a pivoted separator bar, a supporting member mounted on said bar and having diverging grooved arms, and an upstanding sheet metal separator plate supported by said arms and secured in the grooves thereof.

1,817,144. SPINDLE FOR SPINNING OR TWISTING MACHINES. FRED K. HENDRICKSON, Worcester, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Nov. 2, 1929. Serial No. 404,478. 7 Claims. (Cl. 308—228.)



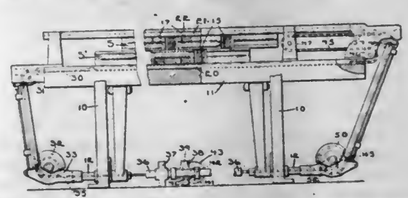
1. A spindle comprising a spindle base, a bolster mounted therein, a blade rotatable in said bolster, a whirl mounted on said blade and having a depending driving flange enclosing the upper end portions of said spindle base and bolster, and bearing means interposed between said depending flange and the upper portion of said spindle base.

1,817,145. RESPIRATION METER. WALTER P. HOBART, Minneapolis, Minn. Filed Oct. 18, 1928. Serial No. 313,271. 1 Claim. (Cl. 73—112.)



A device of the class described, comprising main and secondary tubular members, the former of which has at one end a casing, and at its other end an exhaust port, said casing having a mouth piece and a port leading to said member, a propeller in said casing arranged to be operated either by inhalation or exhalation through the mouth piece, a travelling indicator mounted in said secondary member, and speed reduction connections for operating the indicator from the propeller.

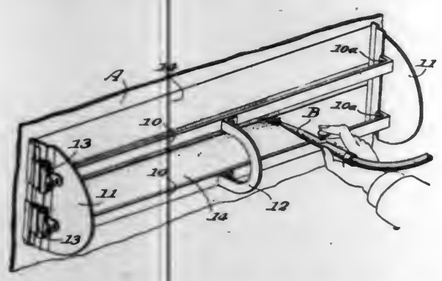
1,817,146. SHUTTLE ACTUATING MECHANISM FOR NARROW WARE LOOMS. ELBRIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1930. Serial No. 428,534. 3 Claims. (Cl. 139—23.)



1. In a narrow ware loom, a lay, a plurality of shuttles mounted in upper and lower series on said lay, a sep-

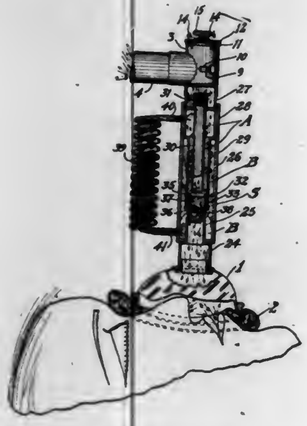
arate rack bar for reciprocating each series of shuttles, said two rack bars being substantially spaced apart vertically, actuating mechanism for said rack bars, a flexible connection from said actuating mechanism to one end of one rack bar, and a second flexible connection from said actuating mechanism to the opposite end of one of said rack bars and said second flexible connection being also connected at an intermediate point to the associated end of the second rack bar.

1,817,147. SPRAY STENCIL. RALPH Z. HOPKINS and EARL F. SEGER, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 10, 1929, Serial No. 384,834. Renewed July 11, 1930. 14 Claims. (Cl. 101—127.)



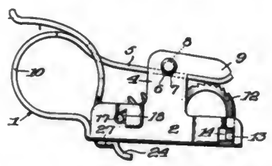
1. A stencil comprising flexible spreader bars, plates carried at opposite ends of said bars, clips connected with said plates, strips extending between said plates and detachably and adjustably supported by said clips, and means for spreading the end plates apart to draw the strips taut against the surface of the work.

1,817,148. MEANS FOR STOPPING THE TRAVEL OF EXPLODING AND BURNING FLUIDS. AURELIUS P. HORNOR, Caldwell, N. J., assignor to E.-K. Medical Gas Laboratories, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed May 2, 1928. Serial No. 274,408. 16 Claims. (Cl. 128—195.)



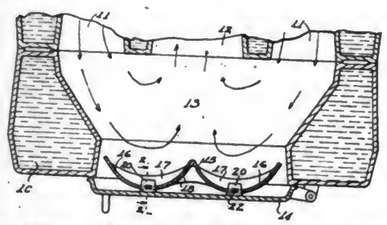
1. In combination, a conduit comprising spaced portions and a by-pass connecting and establishing communication between said portions and having a length greater than the space between such portions, means normally sealing one of said portions and causing fluid to flow from the latter through said by-pass to the other of said portions, and a device associated with said means and actuatable therethrough upon and by the force or impace of an explosion of fluid occurring in the conduit to a position closing the said other of said portions and in which it prevents such flow of the fluid, substantially as described.

1,817,149. CLIP. BERNARD F. HORSTING and GEORGE C. LEPPLA, Chicago, Ill. Filed July 31, 1929. Serial No. 382,531. 13 Claims. (Cl. 24—250.)



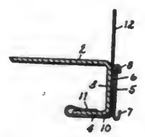
2. A clip of the character described, comprising a substantially elongated U-shaped body portion at one end, means connecting the arms of the U together at its open end, a movable jaw carried by one arm and movable toward and from the other arm to close and open the clip, and means for moving said jaw, said means including spring means acting to hold the jaw open or closed as it is moved into either of said positions.

1,817,150. RETURN BAFFLE FOR FLUE DOORS. FREDRIK W. HVOSLEF, Kohler, Wis., assignor to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Filed Oct. 18, 1930. Serial No. 489,504. 5 Claims. (Cl. 110—97.)



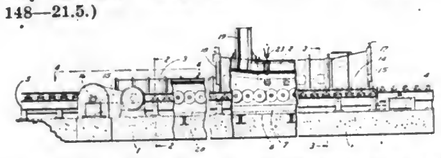
1. A baffle for flue doors comprising a plate having means for attaching it to and spacing it from the inner side of a flue door, said plate being of curved form for deflecting flue gases from one flue to another.

1,817,151. PRICE TAG HOLDER. CHARLES H. JARVIS, Battle Creek, Mich., assignor to United Steel & Wire Company, Battle Creek, Mich. Filed Mar. 2, 1931. Serial No. 519,362. 2 Claims. (Cl. 40—16.)



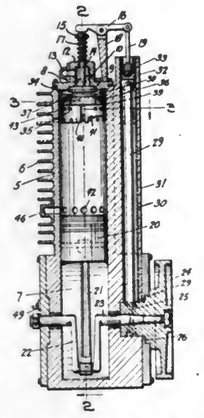
1. In a device of the class described, the combination with a metal shelf having a downwardly and inwardly turned flange on its edge, and a card holder comprising a pair of sheet metal members arranged in superimposed relation and having opposed flanges providing a channel-shaped card holder, the rear member having a supporting flange at its bottom edge disposed below the flange on the shelf and folded inwardly to engage the rearwardly projecting portion thereof whereby the holder is supported at the front edge of the shelf and so that a card may be inserted between the shelf and the holder.

1,817,152. METHOD OF OPEN ANNEALING SHEET METAL. ARTHUR T. KATHNER, Pittsburgh, Pa. Filed July 19, 1929. Serial No. 379,451. 3 Claims. (Cl. 148—21.5.)



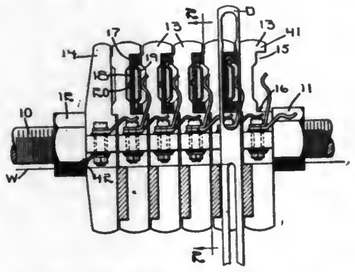
1. The method of open annealing sheet steel which comprises passing unopened hot mill packs of sheet steel progressively through communicating heating and cooling zones while maintaining a substantially non-oxidizing atmosphere in the presence of the said steel in the said zones, heating the steel in the heating zone to below its upper critical temperature range and cooling it in a cooling zone, all in a substantially non-oxidizing atmosphere, delivering the steel from the cooling zone at a substantially non-oxidizing temperature and then shearing and opening the packs.

1,817,153. INTERNAL COMBUSTION ENGINE. CLOYD L. KINDER, Denver, Colo. Filed Oct. 22, 1928. Serial No. 314,138. 3 Claims. (Cl. 123—93.)



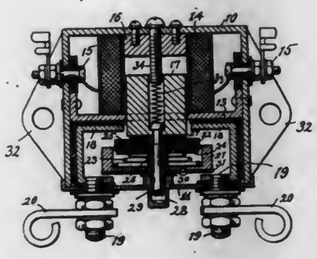
1. In an internal combustion engine, a valve movement comprising a rotary wheel having intersecting grooves of different depths to provide cam faces, and a member adapted to follow the grooves and pass from one to another at their point of intersection during rotation.

1,817,154. ELECTRICAL WARP STOP MOTION. CLARENCE R. KRONOFF, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 9, 1930. Serial No. 466,623. 6 Claims. (Cl. 139—353.)



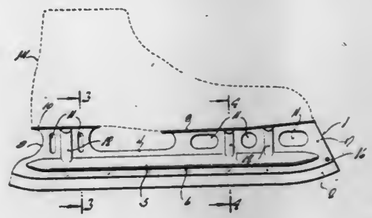
1. In an electrical warp stop motion, a plurality of groups of elements, each group containing an electrode to be energized, a separate supporting spacing unit to hold the electrode, and a contact device to engage the electrode, said contact device being supported by the same spacing unit which supports the electrode in contact therewith, each supporting unit being removable independently of the other units.

1,817,155. ELECTRIC SWITCH. BENNETT M. LEECE, Cleveland, Ohio, assignor to The Leece-Neville Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 17, 1926. Serial No. 123,055. 8 Claims. (Cl. 200—111.)



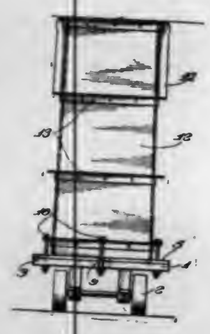
1. In an electric switch, a pair of stationary contacts, a solenoid having a core and carrying a bridging contact mechanism including two annular rotatable contacts, both adapted to engage and also leave the stationary contacts one after the other and means for rotating said contacts step by step as the switch is operated.

1,817,156. ICE SKATE. HARVEY LEWIS, Chicago, Ill., assignor to Nestor Johnson Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 15, 1931. Serial No. 530,187. 12 Claims. (Cl. 208—167.)



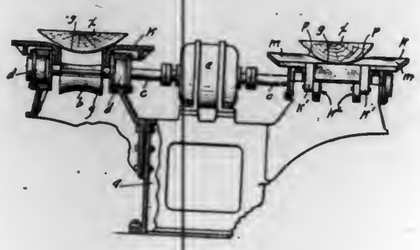
1. An ice skate, comprising a runner blade and a foot supporting frame, the latter consisting of a pair of longitudinally extending similar half sections formed of sheet metal and each secured together with the blade between them, each section having an outwardly bulged portion extending lengthwise of the section to reinforce the same, the said sections being secured together with their bulged portions oppositely disposed to provide a tubular portion along the blade.

1,817,157. SOAP FRAME. ELMER R. LUCKOW, Chicago, Ill., assignor to Allen B. Wrisley Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 25, 1929. Serial No. 409,649. 16 Claims. (Cl. 18—40.)



1. A soap frame comprising a truck bottom, a housing having inclined walls removably supported thereon, and a coating of non-saponifiable material applied to the inner surfaces of said housing to obviate the adherence of soap to said housing.

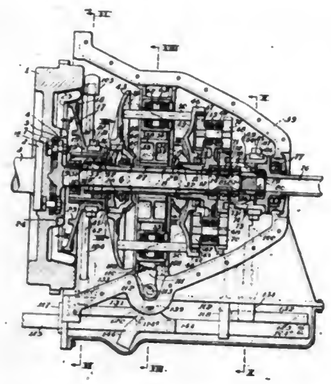
1,817,158. DEBARKING MACHINE. HENRY S. MITCHELL, Portland, Oreg., and RALPH V. SCHAFER, Vancouver, Wash. Filed May 22, 1929. Serial No. 365,087. 2 Claims. (Cl. 144—208.)



1. In a debarking machine of the character described, in combination with a rotary cutter head, of a work supporting table extending parallel with the axis of the cutter head, said table provided with a central transverse work supporting depression, said depression having an opening through which the cutter head projects, the side walls of said depression narrowing upwardly to reduce the area of contact between the work supporting depression and the work, the top of the supporting table extending laterally on both sides of but receding from said depression into a narrow ledge the depending sides of which are sloped, whereby to permit the hands of the operator to be brought into close proximity with the cutter head while manipulating the work.

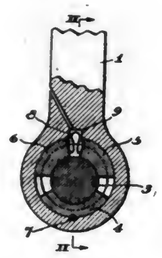
1,817,159. TRANSMISSION MECHANISM. GEORGE SMITH MORISON, Pittsburgh, Pa., assignor to Morison Incorporated, Pittsburgh, Pa., a Corporation of Delaware. Filed Sept. 24, 1927. Serial No. 221,664. 28 Claims. (Cl. 74—34.)

1. A variable speed transmission comprising in combination a planetary differential gear mechanism, friction roller ratio-governing means therefor, means for operatively connecting said differential mechanism to a drive member and to a driven member, means for adjusting said ratio-governing means to produce directional and speed ratio variations of said driven member, and means for



effecting a direct connection of the drive and driven members without actuation of the differential mechanism, said last named means being effective when said drive and driven members are operating at equal speed, and a single operating lever controlling all of said adjusting means.

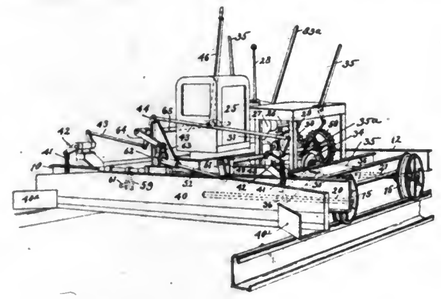
1,817,160. SELF TIGHTENING BEARING. GEORGE SMITH MORISON, Pittsburgh, Pa., assignor to Morison Incorporated, Pittsburgh, Pa., a Corporation of Delaware. Filed Aug. 25, 1928. Serial No. 302,111. 5 Claims. (Cl. 308—63.)



1. A bearing comprising a circular housing having a shaft receiving opening, a shaft disposed in said housing and a three part bushing of cylindrical outer contour fitted in the housing in spaced relation around said shaft, the outer periphery of said bushing conforming to said shaft receiving opening, the shaft engaging surface of the bushing parts being eccentric to their outer periphery two of said bushing parts forming annular wedges and said wedges being adapted to move into a constant shaft engaging position as the bearing surface wears away.

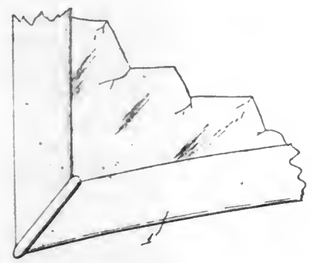
1,817,161. MACHINE FOR SPREADING AND SURFACING CONSTRUCTION MATERIAL. JOSEPH H. MOSEL, Lakewood, and CLARENCE I. BOHMER, Bay Village, Ohio, assignors, by mesne assignments, to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 10, 1928. Serial No. 260,640. 11 Claims. (Cl. 94—48.)

1. In a machine for spreading and surfacing material, a transversely reciprocable member, means for reciprocating



the same, and means including an adjustable lever connection for varying the throw of the member during reciprocation thereof.

1,817,162. FRAME CORNER BEAD. LEONARD A. MULLIGAN, Detroit, Mich., assignor to Joseph N. Smith Co., Detroit, Mich., a Corporation of Michigan. Filed Mar. 28, 1929. Serial No. 350,493. 3 Claims. (Cl. 189—36.)



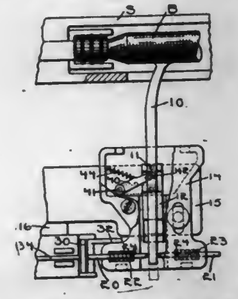
3. In a frame construction comprising a pair of frame members with ends prepared for a miter joint, a corner plug receivable in said ends to connect said members, and a corner bead consisting of a member on said plug and receivable between said ends and having one of its ends headed to cover the prepared ends of said frame members at one face of said frame, said headed portion being crowned transversely and longitudinally.

1,817,163. EXTENSION DEVICE. NELS T. NELSON, Attleboro, Mass., assignor to J. F. Sturdy's Sons Company, a Corporation of Massachusetts. Filed Dec. 5, 1930. Serial No. 500,298. 4 Claims. (Cl. 24—71.)



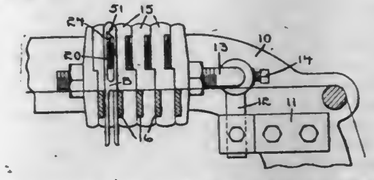
1. In a wrist strap, an extension device comprising a body section, a plate hinged to one end thereof to fold thereover a portion of the length thereof, a cover section, and an intermediate plate hinged to the other end of said body section and to said cover section connecting the two together and so formed intermediate its ends that one part of the plate is offset with reference to the other as to lie along said body section and over the top of said plate when folded over the body section.

1,817,164. WEFT DETECTOR FOR DROP BOX LOOMS. SAMUEL A. NELSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 23, 1930. Serial No. 446,706. 2 Claims. (Cl. 139—286.)



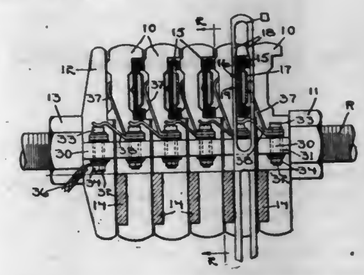
1. In a weft replenishing drop box loom, a side slipping weft feeler, and guiding means for said feeler permitting yielding movement thereof in either of two directions along the bobbin, said guiding means comprising a pair of spring-actuated plungers normally positioned closely adjacent the opposite side edges of the front end portion of said weft feeler.

1,817,165. CONTACT BAR FOR ELECTRICAL WARP STOP-MOTIONS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed June 20, 1930. Serial No. 462,652. 4 Claims. (Cl. 139—353.)



1. In a contact bar for an electrical warp stop motion, an inclosing electrode having two spaced substantially parallel walls, a second electrode between said walls and insulated therefrom, and means on said electrodes defining aligned deformations which resist relative movement of the electrodes in a direction transversely of the contact bar and substantially parallel to the walls, the deformations lying within the outline of the inclosed electrode.

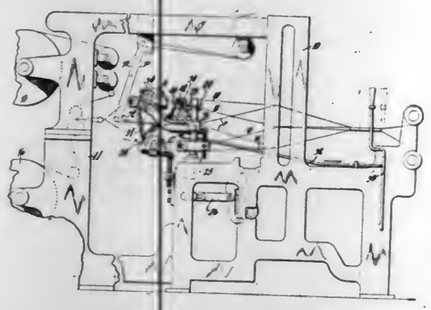
1,817,166. ELECTRIC WARP STOP-MOTION. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 9, 1930. Serial No. 466,710. 13 Claims. (Cl. 139—353.)



1. In an electrical warp stop motion, a plurality of substantially separate similar units, a plurality of elec-

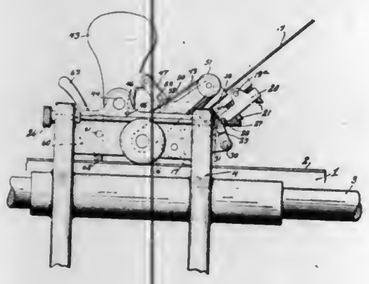
tric contact bars having live and grounded electrodes, each bar held between two separate units, and means carried by each unit to energize the live electrode of one of the bars and establish electric connection with an adjacent unit.

1,817,167. WARP STOP MOTION. JOHN REGAN, New Bedford, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 28, 1930. Serial No. 471,193. 1 Claim. (Cl. 139—336.)



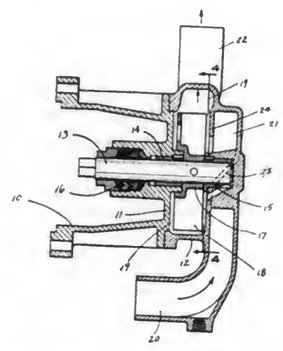
In a loom, a series of warp stop motion units mounted in substantially spaced relation, each unit comprising a separate frame, a plurality of vibrator bars mounted in said frame and link connected to oscillate together, a single actuating arm for the series of bars in each separate unit and associated therewith, a plurality of links pivotally connecting said actuating arms, means to move said links to give said arms simultaneous swinging movements to oscillate said bars, a single loom stopping device mounted adjacent one of said stop motion units, normally inoperative actuating means on said unit for said loom stopping device, and means on said unit effective to render said actuating means operative to cause loom stoppage, said latter means being jointly controlled from every vibrator bar in all of said stop motion units.

1,817,168. MARGIN BAR. LOUIS J. SAUER, Oak Park, Ill., assignor to Charles H. Joy, sr., Chicago, Ill. Filed July 15, 1929. Serial No. 378,202. 24 Claims. (Cl. 101—133.)



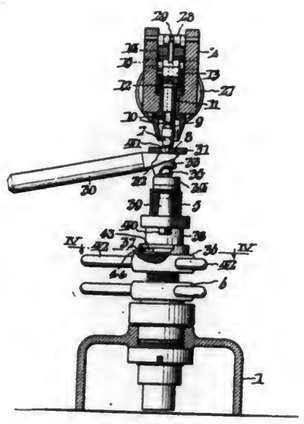
1. In a duplicating machine, a carriage arranged to travel over the printing bed, a paper table on said carriage, a paper stop cooperating with said table to support paper thereon, means for adjusting the position of said stop relative to said table, and automatic means controlled through the normal operation of the carriage to release the paper and deliver it on the printing bed in a position determined by the adjusted position of the paper stop.

1,817,169. WATER PUMP. LOUIS SCHWITZER and CARL J. WINKLER, Indianapolis, Ind., assignors to Schwitzer-Cummins Company, Indianapolis, Ind., a Corporation. Filed Nov. 11, 1929. Serial No. 406,238. 1 Claim. (Cl. 103—103.)



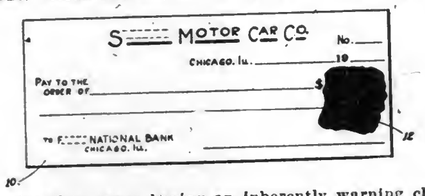
A pump of the character described having a housing forming a main chamber, an outlet conduit communicating therewith, an impeller rotatably mounted in said chamber, an intake chamber formed at one side thereof, a peripheral fin extending inwardly from said housing partially separating said chambers, said intake chamber being provided with a sloping outer wall terminating in said fin for forming in conjunction therewith a substantially spiral passage communicating with said main chamber.

1,817,170. TESTING MACHINE. LEWIS M. SHOWERS, Jr., Juniata, Pa. Filed Dec. 16, 1929. Serial No. 414,304. 6 Claims. (Cl. 265—12.)



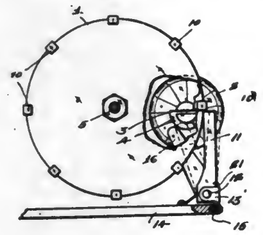
6. In a testing machine of the character described including a testing point and a screw serving as a work support and movable toward the testing point, a nut on said screw, a clamp member carried on said nut adjacent the testing point with its work engaging surface at a fixed angle to the axis thereof, and an opposed clamp member pivoted on said screw with capacity for angular movement to adjust itself to the inclination of the surface of the work to be tested.

1,817,171. SAFETY PAPER. BURGESS W. SMITH, Rochester, N. Y., assignor to The Todd Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 20, 1924. Serial No. 694,040. 8 Claims. (Cl. 283—9.)



1. A safety paper having an inherently warning character formed thereon as an unprinted surface portion on a ground printed in ink of an indelible and initially invisible character adapted to react with and to be rendered conspicuously visible by eradicating fluids applied to the paper.

1,817,172. AUTOMATIC STOP FOR START AND STOP MOTORS. CARL H. BISSELL, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Apr. 26, 1928. Serial No. 273,019. 4 Claims. (Cl. 172—278.)



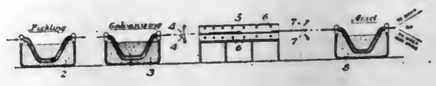
1. The combination of an induction disk motor having a disk rotor and field coils and pole, the disk being provided with a peripheral stop shoulder, a pivoted stop arm extending in a direction tangential to the disk and movable into the path of said shoulder, a pivoted armature member arranged at an angle to the stop arm and normally extending toward the center of the disk and in the field of one of the field coils to be operated thereby to move the stop arm away from the rotor when the field coils are energized and a spring tending to hold the stop arm and the armature arm in their normal positions.

1,817,173. DECORATIVE WREATH. ABRAM BRANDT, New York, N. Y., assignor to Jas. Brandt & Bro., New York, N. Y., a Copartnership composed of Louis Brandt and Abram Brandt. Filed Aug. 6, 1930. Serial No. 473,462. 1 Claim. (Cl. 41—12.)



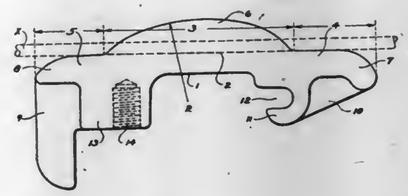
A decorative wreath composed of a base ring of concavo-convex cross-section, a covering comprising a crinkled ribbon of ornamental material wrapped thereon with its edges overlapping whereby the base ring is concealed and an ornament held to said wreath by wrapping a portion of the covering ribbon over a portion of the ornament.

1,817,174. ARTICLE AND METHOD OF MAKING THE SAME. CLARENCE S. BROCK, Youngstown, Ohio. Filed Aug. 19, 1927. Serial No. 214,051. 3 Claims. (Cl. 148—4.)



1. In the method of treating articles having an oxidized zinc coating thereon to remove discoloration, the step consisting in subjecting a previously oxidized coating to the action of an acid solution having a more pronounced action on the discoloration than on the coating.

1,817,175. CURRENT COLLECTOR. HOMER P. CHANDLER, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Sept. 9, 1930. Serial No. 480,685. 10 Claims. (Cl. 191—59.1.)



1. A current collector comprising a shoe to slide along a wire having an elongated portion with a contact surface to engage the wire and having end surfaces curved away from the contact surface, spaced flanges extending along the shoe and projecting away from the contact surface to form with a portion of the contact surface a groove for a predetermined length intermediate the ends of the contact portion of the shoe and means to attach the shoe to a support.

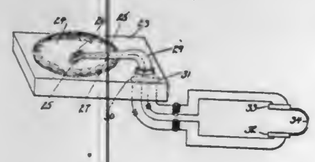
1,817,176. ROTARY BRUSH. EDWARD E. CURTIS, Lakewood, Ohio, assignor to The Osborn Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 2, 1928. Serial No. 251,325. 2 Claims. (Cl. 15—181.)



1. A rotary brush comprising in combination a central ring composed of two mating annuli each having a channel about its inner periphery, a plane annular surface immediately beyond said channel and a second plane annular

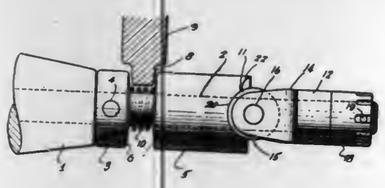
surface beyond said first-named annular surfaces and offset therefrom a distance equal to the depth of said channels, one of said second-named surfaces having tongues radially disposed in the direction of their width and the other said surface having radial slots corresponding thereto, said tongues being of sufficient length to pass through said slots and be bent over at their ends, said two last-named plane surfaces defining between them a channel peripherally open, a circumferential wire in said channel inward of said tongues, a plurality of radially disposed tufts of bristles seated in said channel, said bristle tufts being bent upon themselves over said wire.

1,817,177. SOUND-RECORDING AND SOUND-REPRODUCING AND LOCATING APPARATUS. FRANKLIN M. DOOLITTLE, New Haven, Conn., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 14, 1921. Serial No. 477,360. 6 Claims. (Cl. 274—46.)



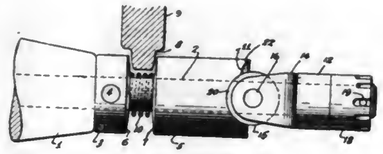
2. The method of sound recording which comprises receiving two time separated independent trains of like sound energy from the same source, permanently and independently recording each of the two separate sounds, and providing, by the recording, a permanent record in which the time separation of the two records of the same sound is varied in accordance with the arrival of sound from the original sound source with respect to a pair of fixed predetermined points so arranged as to simulate the binaural effect which would be produced upon the ears of a listener similarly positioned.

1,817,178. STARTER MECHANISM FOR INTERNAL COMBUSTION ENGINES. ALEXANDER DOW, New York, N. Y., assignor to Dow Patents Holding Corporation, a Corporation of Delaware. Filed May 14, 1930. Serial No. 452,502. 20 Claims. (Cl. 74—7.)



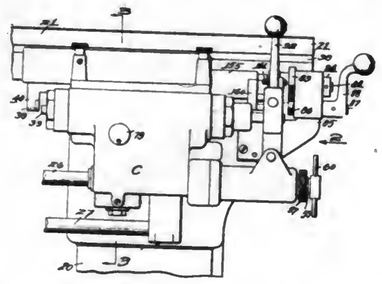
1. A starting mechanism for internal combustion engines embodying a driving shaft suitably mounted for rotation, and means to rotate the same, a plurality of elements arranged in sequence on said shaft;—the first element being a collar fixed on the shaft and having at one end a gripping face; the next element being a sleeve free for rotation and longitudinal sliding movement on said shaft, one end of said sleeve having a gripping face adapted to cooperate with the gripping face of the fixed collar to grip and drive an interposed driven member and the other end of the said sleeve formed with suitable cam faces; the next element being a cam follower mounted for rotation with and for longitudinal sliding adjustment on the shaft and adapted to cooperate with said cam faces; and the last member being a member adjustable longitudinally on the shaft to adjust the relative position of the preceding elements; and a driven member interposed between the gripping faces.

1,817,179. STARTER MECHANISM FOR ENGINES. ALEXANDER DOW, New York, N. Y., assignor to Dow Patents Holding Corporation, a Corporation of Delaware. Filed May 22, 1930. Serial No. 454,566. 5 Claims. (Cl. 74—7.)



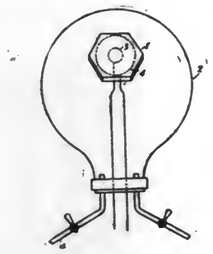
1. A starting mechanism for internal combustion engines, embodying a shaft, means at one end of the shaft for driving the same, spaced apart inboard and outboard bearings to support the shaft, and a plurality of driving elements arranged in the following sequence on said shaft between the inboard and outboard bearings:—the first element being a member longitudinally adjustable on the shaft adjacent the inboard bearing for adjusting the relative position of the succeeding elements; the next element being a cam follower mounted for rotation with and for longitudinal sliding movement on said shaft; the next element being a loose sleeve free for rotation and longitudinal sliding movement on the shaft and provided at its end adjacent the follower with cam faces to cooperate therewith, said loose sleeve having a gripping face at its other end; the next element being a collar fixed on the shaft adjacent the outboard bearing and having at its inner end a gripping face adapted to cooperate with the gripping face of the loose sleeve to grip and drive an interposed driven member; and a driven member interposed between said gripping faces.

1,817,180. CONTROL MECHANISM FOR INTERNAL GRINDING MACHINES. ALDEN M. DRAKE, Greenfield, Mass., assignor to Greenfield Tap and Die Corporation, Greenfield, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1927. Serial No. 209,661. 11 Claims. (Cl. 121—45.)



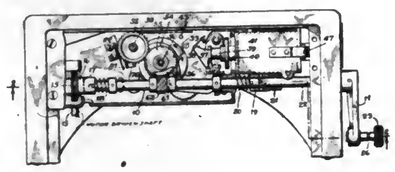
1. In a grinding machine, a base, a table movable thereon, fluid actuated mechanism for moving said table, dogs on said table defining different points of reversal of said table, a valve determining the speed of said table, a control member movable to disable one of said dogs and thereby increase the range of travel by a predetermined amount and effective by the same movement to move said valve to reduce the table speed, and means to lock said valve in said reduced speed position.

1,817,181. MEANS FOR DETERMINING ELECTRICAL AXES IN CRYSTALS. HEINRICH EBERHARD, Berlin-Friedenau, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 3, 1927, Serial No. 196,389, and in Germany July 21, 1926. 5 Claims. (Cl. 175—183.)



1. In apparatus of the character described, a gas filled container, a pair of concentric electrodes within the container, and a piezo-electric crystal resting on said pair of electrodes.

1,817,182. DRIVING AND CONTROLLING MECHANISM FOR AUTOMATIC CAMERAS. SHERMAN M. FAIRCHILD, New York, N. Y. Filed Oct. 17, 1922. Serial No. 595,047. 22 Claims. (Cl. 88—17.)



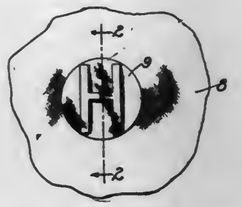
14. In an automatic camera having a shutter operating means, a main driving shaft, the combination of camera driving devices driven thereby, manual means and power-driven means to actuate said devices, and over-running clutches connecting said means with either end of said driving shaft.

1,817,183. MANUFACTURE OF LITHOPONE. CLAYTON W. FARBER, Bowmanstown, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed May 19, 1927. Serial No. 192,789. 3 Claims. (Cl. 134—78.)

3. In the manufacture of lithopone, the improvement in the precipitation of the crude lithopone which comprises mixing solutions of zinc sulfate and barium sulfide with a degree of agitation substantially equivalent to that obtained when employing a tank fifteen feet in diameter and seven feet deep having a conventional stirring device that is rotated at a speed of not more than about five revolutions per minute, whereby there is produced a crude lithopone precipitate containing uniformly aggregated particles composed of from two to eight individual particles in an amount greater than the amount of primary particles and aggregates composed of more than twenty particles.

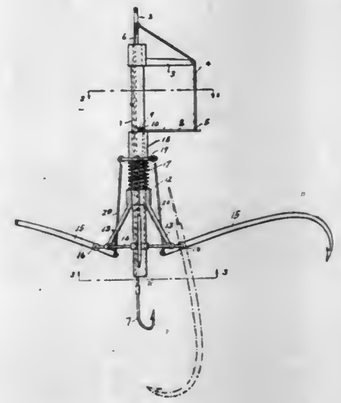
1,817,184. PROCESS OF EMBOSSING FABRICS. EDWARD L. FUCHS and WILLIAM L. FUCHS, St. Louis, Mo. Filed Mar. 24, 1930. Serial No. 438,386. 3 Claims. (Cl. 41—24.)

1. The process of forming permanent designs on automobile tire cover material which consists in applying to a predetermined area of said material a thermoplastic, self-hardening, non-peeling, constantly flexible substance, said material being capable of resisting tensile strains and



of retaining an embossed design without materially decreasing the flexibility of said material, and embossing said area by means of hot dies.

1,817,185. FISH TRAP. THOMAS J. GOODRUM, Houston, Tex. Filed May 9, 1930. Serial No. 450,960. 1 Claim. (Cl. 43—89.)

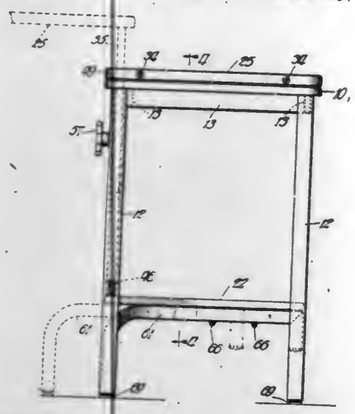


A trap of the character described including a supporting shank, a plurality of snare hooks pivotally supported on the shank, a slidable sleeve on the shank, links connecting said sleeve with said hooks, a yieldable member working against said sleeve, a pivotally mounted trigger, a shaft associated with said shank, a bait hook attached to one end of said shaft and surrounded by said snare hooks, the other end of said shaft being connected to said trigger, a latch pivoted on said shank and adapted to work against said sleeve to place said yieldable member under compression said latch being engageable with said trigger and being held thereby to maintain such compression.

1,817,186. HOSPITAL TABLE. PHILIP E. GRAFF, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 14, 1925. Serial No. 56,146. 11 Claims. (Cl. 45—111.)

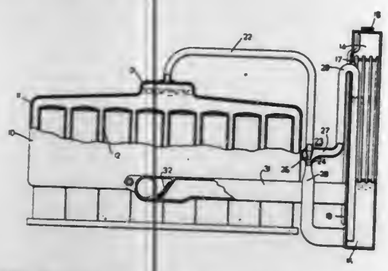
10. In a hospital table, the combination of a supporting frame, a main table top mounted on said frame, an auxiliary table top normally overlying said main top, means for

pivotally mounting said auxiliary top on a vertical axis on said frame adjacent the edge of said main top, whereby



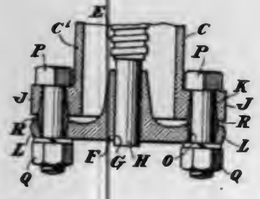
said auxiliary top is shiftable, in a horizontal plane, to an offset position substantially outside of the area of said main top.

1,817,187. INTERNAL COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 20, 1928. Serial No. 271,563. 5 Claims. (Cl. 123—174.)



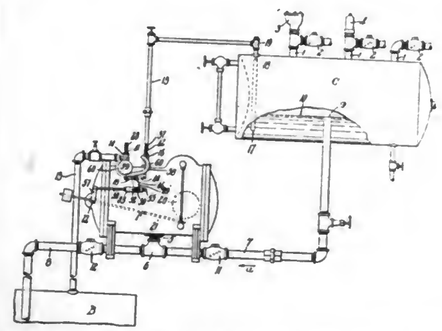
1. The combination with an internal combustion engine, of a cooling system including jackets and a condenser subjected to alternate pressure and vacuum, and a radiator operable at substantially atmospheric pressure to receive condensate from the condenser and to supply cooling water to the jackets and to the condenser.

1,817,188. BOLT AND LOCKING SLEEVE. HARRY V. HAIGHT, Sherbrooke, Quebec, Canada, assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 4, 1928. Serial No. 267,239. 3 Claims. (Cl. 85—1.)



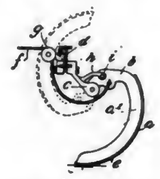
1. In a guide shell for rock drills, the combination of a shell body and a feed screw, a support forming a bearing for one end of the feed screw, bolts for clamping the support to the shell body, and means on the bolts for maintaining the support in axial alignment with the feed screw.

1,817,189. BOLLER FEED APPARATUS. EDWIN SHERMAN HALL, Arlington, Mass., assignor to Sterling Engineering and Manufacturing Corporation, Hyde Park, Mass., a Corporation of Massachusetts. Filed Mar. 2. 1928. Serial No. 258,652. 2 Claims. (Cl. 122—457.)



1. In a boiler feed apparatus, the combination with a boiler of a closed condensation container provided with a permanent water seal therein having a fixed low water level, a water feeder having steam and water connections with both boiler and container, the steam connection between the feeder and container discharging steam into the container below said fixed low level of the water seal therein, valves for the steam connections, a float within the feeder, and means operatively connecting said float and valves whereby the latter are actuated to control the passage of steam from the boiler to the feeder and from the latter to the container.

1,817,190. JACKING DEVICE FOR ROAD VEHICLES. WILLIAM HALL, Heaton, Bolton, England. Filed June 4, 1927, Serial No. 196,578, and in Great Britain Jan. 8, 1927. 1 Claim. (Cl. 254—86.)

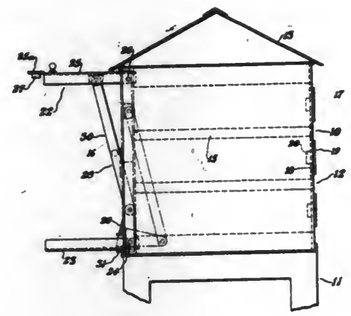


In a jacking device for motor road vehicles, a bracket provided with means for readily attaching it to a motor vehicle wheel axle, an arm in the form of a single length of metal bent to arcuate form and having an outer road engaging face, an integral web on the inner face of said arm, a cranked extension at one end of said web extending away from the inner face of said arm towards said bracket, a pivotal connection between the outer end of said cranked extension and said bracket beneath and to one side of the axle, the road engaging portion when said arm is swung to an operative position being beneath said pivotal connection to the bracket and when said arm is swung from such position through substantially a semicircle to an inoperative position said portion being above the said pivotal connection close to the said axle, and means for relatively immovably connecting the said cranked extension to said bracket when the jacking device is in the operative position.

1,817,191. MAIL BOX STATION. MINNIE M. HARMONY, Canton, Ohio. Filed Mar. 16, 1928. Serial No. 262,202. 4 Claims. (Cl. 232—24.)

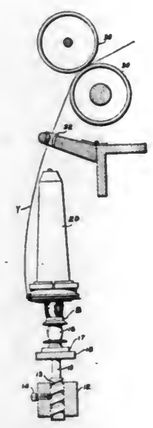
1. A mail box station having a mail carrier's side and a box owner's side, and including a section having

partitions forming a plurality of boxes, each compartment having a pair of opposite open ends, one end being at the carrier's side of the station and the other being at the owner's side of the station, a separate lockable closure for each box end at the owner's side of the station, and means



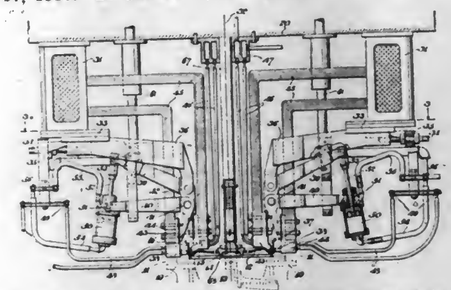
providing in one position a common lockable closure for all of the open ends at the carrier's side of the station and in another position providing a mail sorting shelf, and a protective roof for the shelf and the open ends at the carrier's side.

1,817,192. APPARATUS FOR SPINNING YARN. ELLIS HARTLEY, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1930. Serial No. 433,118. 5 Claims. (Cl. 118—68.)



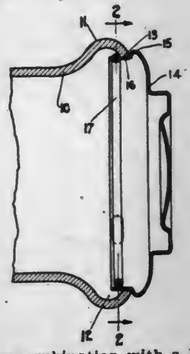
1. In a spinning apparatus having a spindle, a bobbin mounted thereon and rotatable and axially movable relative thereto, and a cap mounted on the upper end of said spindle and depending about said bobbin, in combination, a spinning ring mounted on said cap and adjacent the lower end thereof, and a separate and additional annular yarn guiding member mounted on said cap and positioned below and adjacent said ring, the yarn guiding portion of said member having a diameter as large as the diameter of the largest part of said ring and engaging the yarn at a point substantially further from the axis of the cap than the lower edge of said cap.

1,817,193. WHEEL WELDING MACHINE. JAMES W. HUGHES, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 30, 1928, Serial No. 250,537. Renewed Dec. 17, 1930. 21 Claims. (Cl. 219—4.)



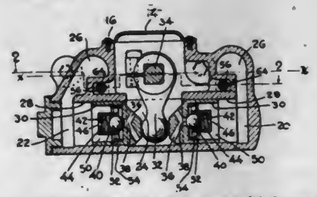
1. In a welding machine, a work support, means to fix the work on the support, an electrode support adjustable laterally of said work support, and electrodes carried by and having a freely floating movement with respect to said electrode support.

1,817,194. SECURING DEVICE FOR HUB CAPS. J. HAROLD HUNT, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 7, 1928. Serial No. 268,345. 1 Claim. (Cl. 301—108.)



In a wheel, the combination with a hub member having an annularly uniform overhanging flange, of a hub cap having a perimetral flange, a spring locking ring confined within said hub cap flange and having portions projecting through apertures in said hub cap flange and adapted to lock behind said overhanging flange, the portions of said spring ring which extend beyond said hub cap flange forming an acute angle with respect to the hub flange portions with which they are adapted to engage, whereby said cap may be attached to or detached from said hub flange by a pure axial movement in any relative rotary position of the parts.

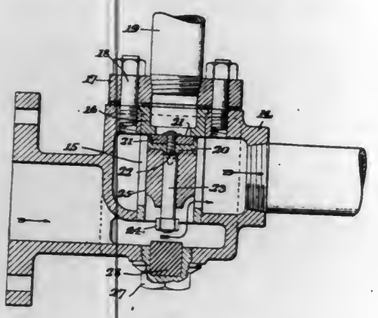
1,817,195. SHOCK ABSORBER. HAROLD E. JACKSON, Detroit, Mich. Filed Feb. 25, 1928. Serial No. 256,852. 7 Claims. (Cl. 188—88.)



1. A shock absorber having a pair of high pressure fluid compression chambers connected by a low pressure com-

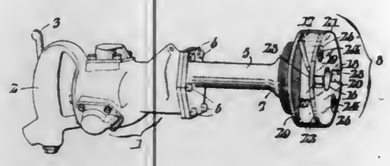
municating cylinder, a double acting piston assembly mounted within the cylinder for reciprocation to exert a pressure upon the fluid in each chamber, each chamber provided with a restricted outlet regulating the flow of fluid therefrom to the other chamber, a valve extending through the outer wall and a portion of the low pressure cylinder controlling each outlet and adjustable to regulate the flow of liquid therethrough within a determined pressure and automatically releasable to increase such flow above a determined pressure.

1,817,196. VENT VALVE FOR SEWAGE EJECTORS. IRVING C. JENNINGS, South Norwalk, Conn. Original application filed Mar. 25, 1925, Serial No. 18,276. Divided and this application filed Nov. 25, 1927. Serial No. 235,629. 5 Claims. (Cl. 137—69.)



2. An automatically operating vent valve, comprising a casing having two openings and a vent opening, a ported cylindrical shell arranged therein, a valve seat, a valve having a depending stem, and a piston loosely arranged on said stem and fitting in said shell.

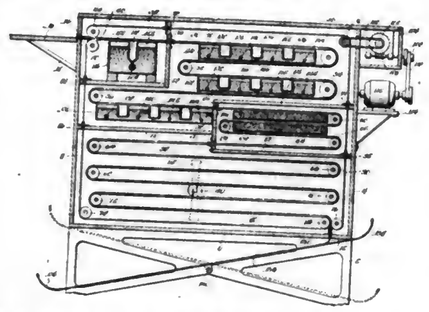
1,817,197. ROTARY PLANE. ADIN U. KERNS, Altoona, Pa. Filed Apr. 23, 1930. Serial No. 446,481. 3 Claims. (Cl. 144—119.)



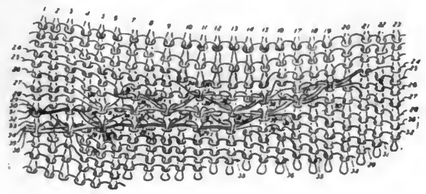
1. A rotary plane including a plane head comprising top and bottom circular faces and an intermediate portion forming therewith a one-piece block of cylindrical outline, said top face being adapted for attachment to a rotating member, said bottom face having openings permitting the passage of cutters therethrough, and said intermedinte portion being cut away to provide within the interior of the block inclined cutter seats leading to the openings in the bottom face.

1,817,198. DEVELOPING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 11, 1928. Serial No. 253,558. 7 Claims. (Cl. 95—94.)

1. In a device of the class described, the combination of an enclosing cabinet forming a developing chamber, an inlet for the cabinet, feeding means disposed adjacent said inlet and passing through said developing chamber for passing light sensitive material through the developing chamber from the exterior of the cabinet, a pan disposed immediately beneath the line of travel of the light sensitive material, a plurality of partitions in said pan located in spaced relation from the bottom so as to provide a plurality of ammonia containing compartments open at the top, said compartments being interconnected and heating means disposed in each compartment for heating the liquid ammonia.

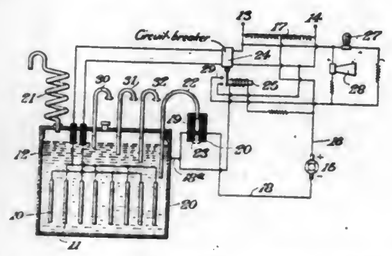


1,817,199. KNITTED FABRIC. VINCENT LOMBARDI, Brooklyn, N. Y. Filed Aug. 5, 1930. Serial No. 473,211. 3 Claims. (Cl. 66—201.)



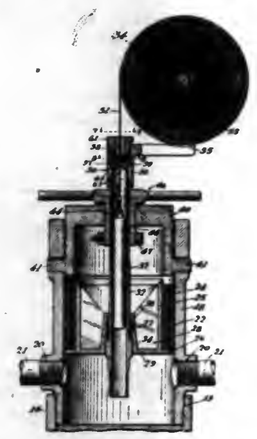
1. A knitted fabric comprising a plurality of yarns knitted to present a pattern effect on the rear side of the fabric, certain of said yarns being formed into loops in a plurality of rows and a plurality of wales, a plurality of other yarns being interlocked in a first wale between the two sides of a loop in a first row and the two sides of a loop in a second row of said wale, while in a third wale, one wale removed from said first wale, one of said other yarns is interlocked between the two sides of a loop in a row and the two sides of a loop in another row, at least one of the two last mentioned rows being a different row from said first row or said second row.

1,817,200. ELECTROLYTIC APPARATUS. RALPH D. MERSHON, New York, and PERCY A. ROSS, Yonkers, N. Y.; said Ross assignor to said Mershon. Filed Apr. 30, 1927. Serial No. 187,721. 5 Claims. (Cl. 175—315.)



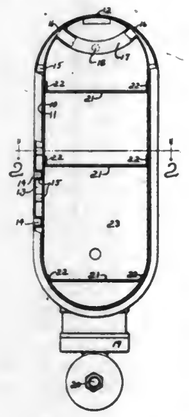
1. In an electrolytic condenser, a vessel, a vaporizable electrolyte therein, filmed electrodes immersed in the electrolyte, a tube open at both ends having one end immersed in the electrolyte so as to be closed thereby until uncovered by fall of the electrolyte surface due to loss of the same, and an electric circuit controlled by abnormal flow of vapor through said tube.

1,817,201. CEMENT HEAD FOR OIL WELLS. BURT S. MINOR, San Pedro, Calif. Filed May 17, 1930. Serial No. 453,190. 5 Claims. (Cl. 166—14.)



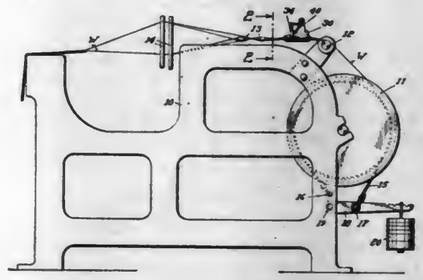
1. A casing head sealing mechanism comprising a vented casing head, an expansible packing member mounted in said head above the vented openings, and screw operated means connected to the packing member for expanding the same, said screw operated means having an opening for the passage of a measuring line therethrough.

1,817,202. EXPANSION CHAMBER FOR REFRIGERATING MECHANISMS. GLENN MUFFLY, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed July 18, 1927. Serial No. 206,438. 9 Claims. (Cl. 62—126.)



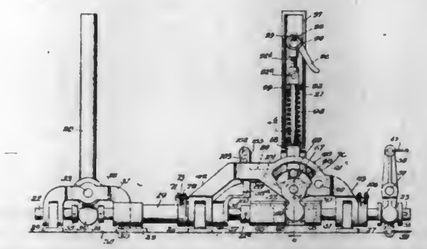
8. An expansion chamber for refrigerating systems comprising a pair of metal sheets joined together throughout their edges and being generally spaced between their edges, said joined sheets being bent to bring two opposed edges thereof into contact with each other whereby to form a tubular structure, and an inlet and an outlet for the space between said sheets.

1,817,203. WARP TENSION GAUGE FOR LOOMS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 6, 1928. Serial No. 244,955. 12 Claims. (Cl. 265—1.)



1. In a gauge to be supported entirely by a sheet of warp threads the plane of which is subject to slight changes as to position, supports for the gauge to rest on certain of the warp threads, means defining a dial, a hand to move across the dial, and means acting against the tension of a group of warp threads to move said hand relatively to the dial, said dial, hand and means being movable with the supports as the sheet or warps change their position.

1,817,204. SAFETY DEVICE FOR MULTIPLE CONTROL MECHANISM. HEINRICH A. W. PETERSEN, Gary, Ind. Filed May 10, 1928. Serial No. 276,553. 12 Claims. (Cl. 244—29.)

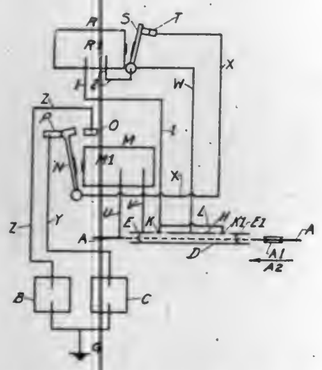


1. A device of the class described comprising a plurality of control levers each mounted on one of a plurality of longitudinal movable rock shafts supported in axial alignment with respect to each other, means mounted on one of said levers for connecting the levers, means mounted on said one of said levers for actuating said connecting means to connect said levers in a manner to cause the levers to be moved in unison and to disconnect the levers in a manner to render one of said levers ineffective to control the movement of the other of said levers, and means operable by the respective longitudinal and rotary movements of said shafts for operating the control devices of an airplane.

1,817,205. PROCESS FOR PRODUCING SOLVENTS AND EMULSIFYING AGENTS. FRIEDRICH POSPIECH, Dresden, Germany, assignor to Chemische Fabrik Pott & Co., Dresden, Germany. Filed Aug. 26, 1927, Serial No. 215,764, and in Germany Feb. 25, 1926. 3 Claims. (Cl. 252—6.)

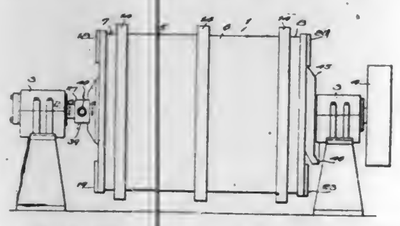
1. As a new article of manufacture, an emulsifying agent comprising a clear aqueous dispersion of benzyl alcohol containing an alkali metal salt of isopropyl-naphthalene sulfonic acid.

1,817,206. SWITCHING DEVICE. SAMUEL THOMAS QUILLIAM, Manchester, England. Filed Jan. 14, 1928, Serial No. 246,805, and in Great Britain May 17, 1927. 12 Claims. (Cl. 246—227.)



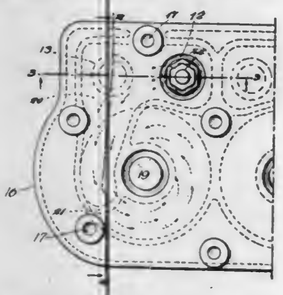
1. In a switch operating mechanism, the combination of a line contactor comprising a series of insulated plates, a double solenoid for throwing the switch, an electromagnet adapted to control a circuit leading to one or the other of said solenoids, said electromagnet being connected to a plurality of independent insulated plates on said contactor.

1,817,207. SEPARATING APPARATUS. THOMAS RAY and JOSHUA R. RAY, Manistee, Mich. Filed Mar. 1, 1928. Serial No. 258,419. 14 Claims. (Cl. 259—9.)



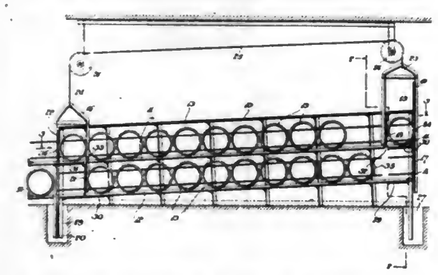
1. In a separator of the kind described, a separator body, and variable means adjacent the inlet to said body for continuously extracting foreign matter from the liquid to be filtered before it enters said separator body.

1,817,208. INTERNAL COMBUSTION ENGINE. ENOCH RECTOR, New York, N. Y., assignor to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Mar. 20, 1923. Serial No. 626,254. 19 Claims. (Cl. 123—191.)



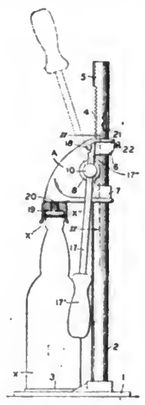
1. In an internal combustion engine, a cylinder, a piston in said cylinder, a combustion space comprising an elongated L-shaped passageway communicating at one end with said cylinder and having a valve controlled combustible gas inlet at its other end, spark ignition means disposed in said passageway with said combustible gas inlet at said other end, and a valve controlled burned gas outlet for said passageway positioned at the crotch thereof, said passageway being otherwise closed.

1,817,209. OVEN SYSTEM. ALBERT O. ROBERTS, Dearborn, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 21, 1928. Serial No. 263,276. 5 Claims. (Cl. 263—6.)



1. An oven comprising a pair of thruways for articles to be treated, and gates for each way at one end of the oven connected together, the one to close through the operation of the other and vice versa.

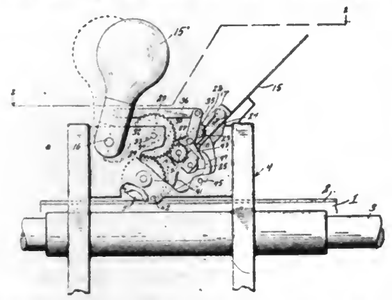
1,817,210. BOTTLE CAPPER. RALPH T. SALSBURY, Oakland, Calif. Filed Apr. 29, 1930. Serial No. 448,225. 5 Claims. (Cl. 226—84.)



1. A bottle capper comprising a base; a standard fixed to said base and having a toothed rack thereon; a traveler guided on said standard; a transverse shaft protruding through said traveler and having integral pinion teeth engaging said rack; means for rotating said shaft; a torsion spring engaging said shaft and traveler and expanding between said traveler and the end of said shaft.

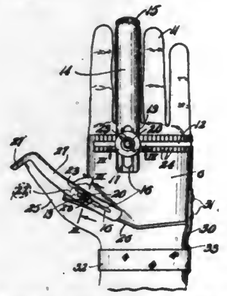
1,817,211. AUTOMATIC FEEDING DEVICE. LOUIS J. SAUER, Oak Park, Ill., assignor to Charles H. Joy, sr., Chicago, Ill. Filed Jan. 13, 1930. Serial No. 420,340. 9 Claims. (Cl. 101—133.)

1. In a duplicating machine, a carriage mounted to travel back and forth over a printing bed, a platen roller, a paper table on said carriage, means above the table for controlling the movement of the paper from the table to the platen roller a movable paper guide for guiding the paper from the paper table and under the platen roller when the carriage is moved in one direction, and auto-



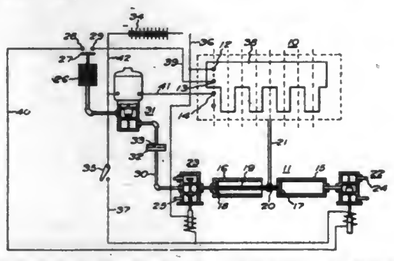
matic means controlling said guide through the normal operation of the carriage to guide the paper away from the paper table and above said controlling means when the direction of movement of the carriage is reversed.

1,817,212. SURGICAL SPLINT. JOHN R. SIEBRANDT, Kansas City, Mo. Filed May 18, 1928. Serial No. 278,783. 6 Claims. (Cl. 128—85.)



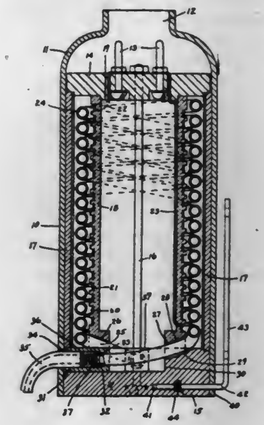
6. A surgical splint structure comprising a body portion having means for securing the same to the palm of the hand, and a finger splint element secured to said body portion and having provision for both lateral and longitudinal adjustment, said body portion having an extension disposed at an angle to the major plane of said body portion, and conforming to the base of the thumb for bracing engagement therewith and also a brace extension provided with means for securing the same to the wrist, and a thumb splint adjustably secured to said angular wing extension.

1,817,213. CONTROL APPARATUS. WALTER H. SMITH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 12, 1927. Serial No. 190,701. 4 Claims. (Cl. 200—82.)



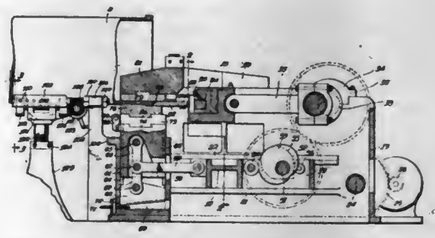
4. In control apparatus, in combination, a sequence switch, an air engine provided with valves disposed to operate the sequence switch, circuits for controlling the operation of the valves, one of said circuits being controlled by the sequence switch, an air-pressure-actuated switch biased to an open position, and disposed to control the other valve circuit, means for conveying compressed air to the pressure-actuated switch when the valve controlled by the sequence switch is open, means for periodically releasing the pressure applied to the switch to permit it to open, said means for conveying compressed air being provided with a constricted opening to delay for a predetermined interval the operation of the switch after the closure of said pressure-releasing means, said pressure-releasing means being adapted to release the air pressure quickly to effect a quick opening of the pressure actuated switch.

1,817,214. WATER HEATER. HENRY R. STUCKWISCH, Indianapolis, Ind.; Nellie J. Stuckwisch administratrix of said Henry R. Stuckwisch, deceased. Filed June 19, 1926. Serial No. 117,019. 1 Claim. (Cl. 219—39.)



In a water heater, the combination of a pair of supporting plates, a plurality of concentric walls forming a tubular channel therebetween and closed at opposite ends by said plates, heating means mounted within the channel and on one of said walls with connections extending outwardly from the heater through one of said plates, a liquid heating multiple thread single layer helix in the same tubular channel and having an intake and outlet supported by the other plate, and means securing said plates and walls together.

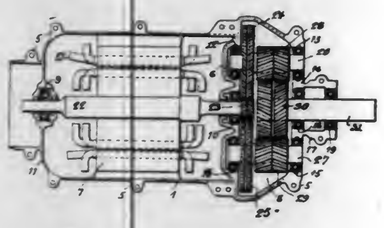
1,817,215. PIPE UPSETTING MACHINE. JAMES HALL TAYLOR, Oak Park, Ill. Filed Nov. 25, 1921, Serial No. 517,569. Renewed Jan. 31, 1929. 9 Claims. (Cl. 78—17.)



1. In combination, an inner die, a slide, a table supported by said slide and movable relative thereto, a plu-

rality of outer dies supported on said table, said table being movable to dispose any one of said dies in operative alignment with said inner die, and means for moving said slide for moving the selected outer die into engagement with the pipe.

1,817,216. GEARED ELECTRIC MOTOR UNIT. WILHELM ROBERT UGGLA, Morby, Stocksund, Sweden, assignor to Luth & Rosens Elektriska Aktiebolag, Stockholm, Sweden, a Corporation of Sweden. Filed Jan. 5, 1926, Serial No. 79,423, and in Sweden Jan. 9, 1925. 2 Claims. (Cl. 74—56.)



1. A geared electric motor unit comprising a casing having a lower part and an upper part, said lower part having integral longitudinally spaced supports disposed adjacent to the ends of the casing and each of said parts including integral transverse partitioning means for separating the casing into a motor section and a gear section, a motor in said motor section, a shaft for said motor, a bearing for said shaft in said transverse partitioning means, counter shafts in said gear section, spaced blind bearings for said counter shafts in said partitioning means, gearing operatively connecting said motor shaft to said counter shafts within said gear section, the center lines of said bearings coinciding with the juncture between the upper and the lower parts of said casing, and means for rigidly connecting the parts of the casing to each other.

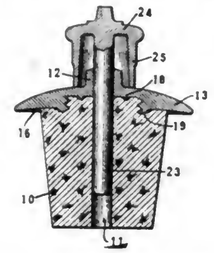
1,817,217. FILM SPOOL AND MOUNTING. ALEXANDER FERDINAND VICTOR, New York, N. Y. Filed Oct. 12, 1927. Serial No. 225,724. 2 Claims. (Cl. 242—70.)



1. A spool for motion picture film or the like comprising a hub, and spaced side plates mounted on said hub, said plates provided with axially alined spindle openings of angular outline with the sides of the opening in one plate being offset with respect to the sides of the opening in the opposite plate and one of the openings having a greater number of sides than the other opening.

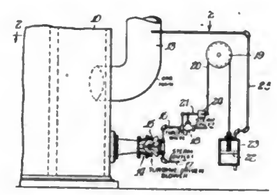
1,817,218. CLOSURE. CHARLES M. VILLANYI, Bayside, N. Y., assignor to L. Mundet & Son, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 4, 1928. Serial No. 251,782. 3 Claims. (Cl. 215—48.)

1. A closure including a body formed with an extended portion having an uninterrupted upper face, a cap formed with a recess in its under face and screw-threaded to receive such extended portion, and a flange extending from the under face of said cap and in line with the edges of



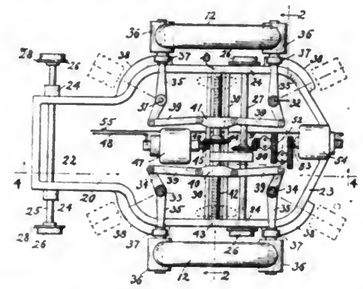
the recess thereof to form a continuation of the latter, and said flange engaging intimately the upper face of said body when the latter is applied to said cap.

1,817,219. CONTROL MEANS FOR HOT BLAST STOVES. FREDERICK H. WILLCOX and JOHN C. HAYES, Jr., Chicago, Ill., assignors to Freyn Engineering Company, Chicago, Ill., a Corporation of Maine. Filed Aug. 13, 1927. Serial No. 212,682. 2 Claims. (Cl. 158—119.)



1. In combination, a burner including an air inlet, a gas inlet, a blower for supplying air under pressure to said air inlet independently of said gas inlet, motive means for operating said blower, a gas main subject to pressure fluctuations therein communicating with said gas inlet, and means communicating with said gas main responsive to changes in gas pressure therein, said means including regulating means for said motive means for controlling the flow of air through said air inlet in response to changes in pressure within said gas main, said regulating means being operable independently of the pressure supplied by said blower.

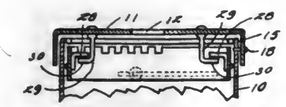
1,817,220. VEHICLE. ELKINS R. YOUNG, Cleveland Heights, Ohio. Filed May 10, 1930. Serial No. 451,215. 13 Claims. (Cl. 254—7.)



1. In combination with a truck adapted to be positioned under a vehicle, two pairs of lifting elements carried by said truck, each pair of elements being adapted to engage one wheel of said vehicle, and means for moving said lifting elements to thereby elevate said wheels.

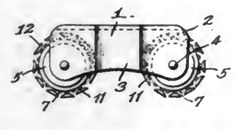
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1,817,221. COMBINATION LOCK ADDING BANK. CHESTER A. YOUNG, St. Joseph, Mo. Filed Apr. 17, 1928. Serial No. 270,764. 2 Claims. (Cl. 232—4.)



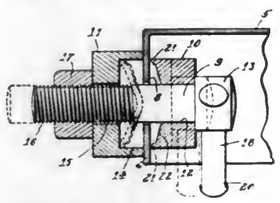
1. A bank, comprising a container having an opening in a side thereof, a cover removably mounted on the container, means holding the cover and container against relative rotation, a hooked element secured to the cover and located in the container, and a ring rotatably mounted in the container and having a flange engaging said element to lock the cover to the container, the ring having serrations accessible through said opening to permit it to be turned to carry its flange out of engagement with said element when it is desired to release the cover.

1,817,222. WASHING APPARATUS. HEINRICH ZEMKE, Berlin, Germany. Filed Aug. 17, 1928, Serial No. 298,905, and in Germany Aug. 17, 1927. 1 Claim. (Cl. 68—8.)



A washing apparatus, comprising a pair of rollers each provided with a plurality of sockets, each of said sockets extending inwardly from the surface of the roller towards the central axis thereof and having its cross sectional area progressively increasing inwardly, and a plurality of resilient suction cups each having a shank embedded in a socket.

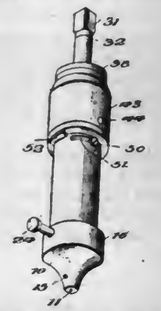
1,817,223. METAL PUNCH. JOHN HERBERT ABRAMSON and EDWIN C. SWANSON, Rockford, Ill., assignors to Greenlee Bros. & Co., Rockford, Ill., a Corporation of Illinois. Filed Jan. 25, 1928. Serial No. 249,388. 2 Claims. (Cl. 164—85.)



1. A metal punch comprising a punch element, and a die element having a bore to receive the punch element, the working face of the punch element having a projecting spur at the peripheral edge thereof arranged to present a sharp point and flat sides to the work to pierce the work first as the punch element enters the die element, and said punch element having substantially the rest of the working face thereof inclined with respect to a normal to the direction of its movement to provide, with said spurs, peripheral shearing edges to exert a shearing action following the piercing of the work by said spur.

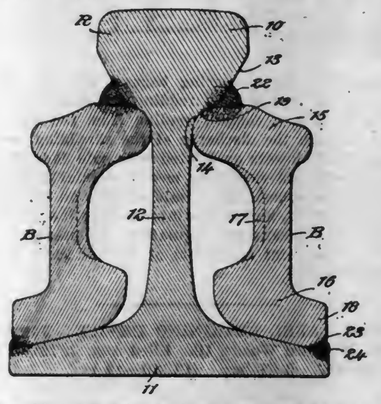
1,817,224. HAND NAILING IMPLEMENT. DAVIS J. AJOUELO, Atlanta, Ga. Filed Oct. 19, 1929. Serial No. 400,936. 2 Claims. (Cl. 1—46.)

1. An improved hand nailing implement comprising a base, a lower magazine section removably coupled to said base, feeding means movable transversely above the base and through said magazine section, an upper magazine section above such lower section, housing means extending about said sections, a guide sleeve mounted within said sections and having an upper slotted portion, a plunger



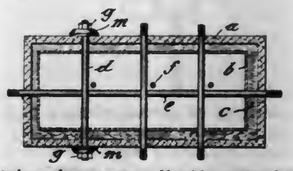
slidably extending through said guide sleeve and having a pin guided in the slotted portions of the sleeve, spring means for holding the plunger elevated, and a removable plunger pin carried upon said plunger for passing through the base.

1,817,225. WELDED RAIL JOINT CONSTRUCTION. VICTOR C. ARMSTRONG, Hackensack, N. J., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed Feb. 24, 1931. Serial No. 517,983. 6 Claims. (Cl. 238—164.)



1. A welded rail joint including the rail having a head fillet, the splice bar having loading engagement at its inner upper corner with the head filled of the rail and clearance at its top from the rail outwardly of said head fillet, and a welded seam between the top of the splice bar and the adjacent face of the rail.

1,817,226. CONTAINER FOR GASES OR LIQUIDS UNDER HIGH PRESSURE. ALEXANDER BELDIMANO, Rotterdam, Netherlands. Filed June 18, 1929, Serial No. 371,948, and in Germany June 26, 1928. 4 Claims. (Cl. 72—14.)



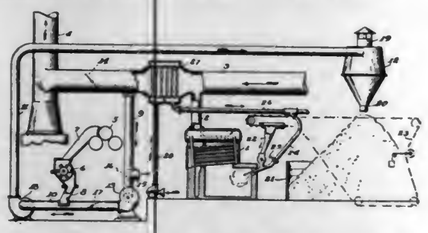
1. A container for gases or liquids under high pressure, comprising an inner and an outer container spaced from

each other, a viscous substance impervious to fluids in the space between said containers, means for bracing said outer container to withstand pressure, said inner container serving merely as a partition between the contents of said inner container and said viscous substance.

1,817,227. SPRAY MATERIAL AND METHOD OF APPLICATION. ROBERT M. BIRD, University, Va., assignor, by mesne assignments, to National Cold Steam Company, Charlottesville, Va., a Corporation of Delaware. Filed Jan. 8, 1925. Serial No. 1,288. 9 Claims. (Cl. 167—15.)

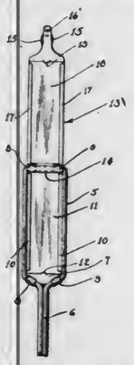
1. A composition of matter for insecticidal use on plants resulting from a mixture of a toxic substance containing arsenious oxide, a colloidal basic hydrated oxide, and an oily substance, non-toxic to plants, which latter substance is further adapted to protect said plant from the burning effects of said toxic substance.

1,817,228. APPARATUS FOR PREPARING AND BURNING BAGASSE AND THE LIKE. EDWIN C. BLISS, Central Manati, Oriente, Cuba. Filed Mar. 11, 1927. Serial No. 174,564. 3 Claims. (Cl. 44—2.)



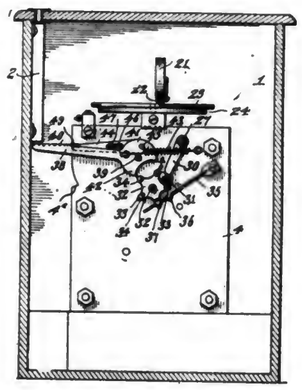
1. Apparatus for preparing bagasse and the like for fuel, including means for shredding the material, a separator, a furnace, a conduit leading from the flue of the furnace through the discharge of the shredding means to the separator, blowers associated with said conduit on opposite sides of the shredding means, regulable means for admitting atmospheric air to said conduit on the flue side of the first blower, and means intermediate the first blower and shredding means for regulating the pressure in the conduit at the point of contact of the hot gases with the shredded material.

1,817,229. LABEL RETAINING DEVICE. JOHN BOROVICKA, Hubbard Woods, Ill. Filed Aug. 2, 1929. Serial No. 382,977. 6 Claims. (Cl. 40—10.)



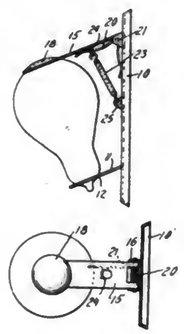
1. A label-retaining device comprising a looped supporting frame, and a pair of members carried by the frame, each of said members having means for retaining a label, one of said members being movably mounted on the frame for providing access to the labels.

1,817,230. TALKING MACHINE. OSCAR H. BRASIER, Tacoma, Wash. Filed Aug. 9, 1929. Serial No. 384,763. 8 Claims. (Cl. 274—9.)



1. In a machine of the class described, a motor including a frame, a record carrier journaled on the frame and operated by the motor, a reproducer so located as to cooperate with a record on the record carrier, means for mounting the reproducer on the frame for swinging movement, a plunger mounted to slide longitudinally and to rotate axially on the frame, the plunger being provided with means for engaging the reproducer in offset relation to the axis of rotation of the plunger, means operated by the motor for moving the plunger longitudinally and for rotating the plunger on its axis, mechanism under the control of an operator to start the motor, and under the control of the plunger, as it moves longitudinally to stop the motor, and means carried by the plunger and engaging with a portion of said mechanism to actuate said mechanism and stop the motor when the plunger moves longitudinally, as aforesaid.

1,817,231. FIRE EXTINGUISHER SUPPORT. WILHELM B. BRONANDER, Montclair, N. J. Filed Mar. 16, 1928. Serial No. 262,201. 22 Claims. (Cl. 169—26.)

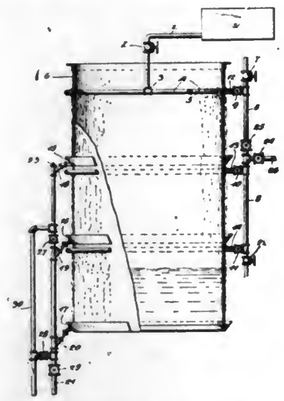


1. A support for fire extinguisher grenades comprising a supporting element, a shelf member extending laterally therefrom and adapted to engage a grenade from below, a second member thereon adapted to engage the grenade from above, said members conjointly acting to support said grenade, one of said members being movable and of such length relative to the other member as to position the grenade in outwardly inclined relation to the supporting element whereby the grenade may drop upon release by said movable member, and heat responsive means to hold said movable member in engagement with the grenade.

5. A support for fire extinguisher grenades comprising a bracket, a shelf member extending laterally therefrom and having a portion positioned to receive the lower end of a grenade, a member connected to the bracket and having a dished outer end positioned to engage and rest on the grenade to support the grenade by cooperation with the said shelf member, said dished member being spaced from the plate a sufficient distance to hold the grenade in upwardly and outwardly inclined position relative to the plate, and fusible means connected to a movable one of said members and to the bracket for holding said member in engagement with the grenade.

12. A support for frangible fire extinguisher grenades comprising a supporting plate, a shelf member extending laterally therefrom and adapted to receive the lower end of a grenade, and a member carried by the plate and of a sufficient length to extend over the top of the grenade and to hold the grenade on the shelf in a position inclined outwardly away from said plate, said members being conjointly effective to support the grenade, one of said members being movable to release the grenade, and heat responsive means normally retaining said movable member in grenade engaging position.

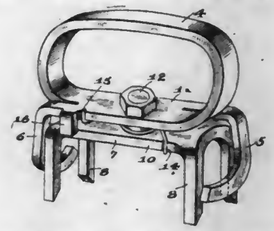
1,817,232. APPARATUS FOR TEMPERATURE REGULATION. HENRY F. BUHRIG, Chicago, Ill., assignor, by mesne assignments, to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed Jan. 22, 1926. Serial No. 83,071. 9 Claims. (Cl. 257—189.)



1. In apparatus adapted for carrying out chemical or biological processes at a controlled temperature, comprising a receptacle having a wall of material which possesses good heat conducting properties, the exterior of said wall being divided into a plurality of cooling zones, each provided with means for supply and uniform distribution of cooling liquid against the outer surface of the wall in such relation thereto that the cooling liquid is caused to flow over the surface of the zone to which it is supplied and provided also with means for independently regulating the supply of cooling liquid to each zone and with means for removing the supplied liquid from each zone at approximately that location where the said liquid has approximately spent its cooling effect and has attained a temperature very nearly equal to that of the contents of the receptacle adjacent the zone.

1,817,233. DEVICE FOR PULLING OR CARRYING SUCKER RODS. ALLEN ROY BUMGARDNER, Peabody, Kans., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed Apr. 13, 1931. Serial No. 529,769. 9 Claims. (Cl. 294—92.)

1. A device for pulling out sucker rods and the like, comprising a handle member provided with oppositely extending hooks, a saddle member pivotally connected to the handle member and having fork-shaped ends which cooperate with the hooks for the trapping of a rod-like



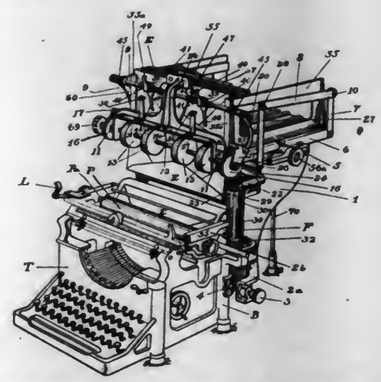
article, a stop connected to one of said members, and resilient means cooperating with said stop for yieldingly holding said members in alignment.

1,817,234. ELECTRICAL SWITCH. WILLIAM L. BUTLER, WILLIAM H. FABREY, and JOHN WEBER, Schenectady, N. Y., assignors to Weber Electric Company, Schenectady, N. Y., a Corporation of New York. Filed Nov. 4, 1927. Serial No. 231,059. 20 Claims. (Cl. 200—67.)



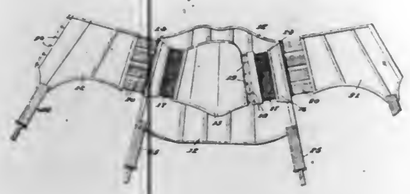
1. A snap switch comprising a support, a pair of contacts, an actuating mechanism including an oscillatory U-shaped element having a lateral extension, an insulator having floating connection with said lateral extension and having lateral movement restrained by contacting with a wall of said support and said U-shaped element, and a contact blade mounted upon said insulator.

1,817,235. ENVELOPE-FEEDING APPARATUS FOR TYPEWRITERS. HENRY L. CHENERY, Portland, Me., assignor to Dana H. Edes, Guilford, and Howard F. Sawyer, Freeport, Me. Filed Mar. 26, 1930. Serial No. 439,245. 11 Claims. (Cl. 197—130.)



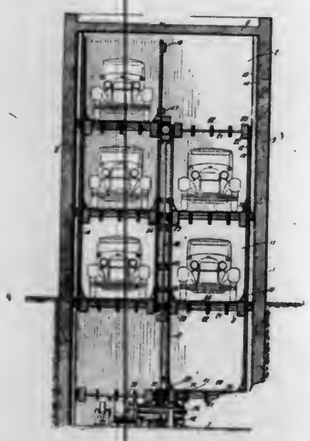
1. In envelope-feeding apparatus for typewriters having a reciprocating carriage, comprising a table adapted to support a body of envelopes, reciprocating elements adapted to engage the flap of the foremost envelope in said body of envelopes, associated with rotary elements to continue the movement imparted to said envelope by said reciprocating elements to continue, intermittently, the movement of said envelope toward said typewriter, and means operable by the impact of said carriage thereon to actuate both the reciprocating and the rotary feeding elements in said apparatus.

1,817,236. SELF-ADJUSTING GARMENT. JACOB COHEN, Worcester, Mass., assignor to Royal Worcester Corset Company, a Corporation of Massachusetts. Filed Oct. 15, 1930. Serial No. 488,915. 2 Claims. (Cl. 2—43.)



1. A self-adjusting or confining garment comprising a back member, a broad inner belt member consisting of two parts provided with detachable fastenings, a front member also consisting of two parts provided with detachable fastenings, a vertical series of broad, parallel straps or tapes connected with the opposite edges of said back member and also connected with the opposite edges of the said inner belt and front members, the connections of said straps or tapes to said three members being equally spaced, and means permitting said straps or loops to slide or reeve to accommodate the form and movements of the wearer.

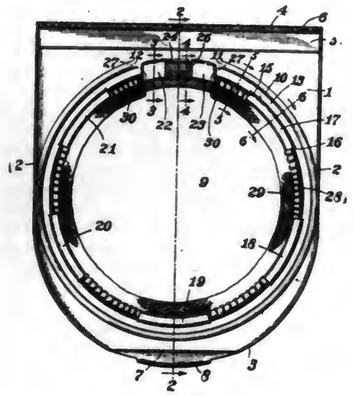
1,817,237. STORAGE GARAGE. L. D. COOK, Kansas City, Mo. Filed Oct. 20, 1928. Serial No. 313,765. 13 Claims. (Cl. 214—16.1.)



1. In garage apparatus of the character described, a plurality of vehicle supporting cages having vertical and horizontal racks, a support, means engageable with the vertical racks for moving the cages vertically of the support, and means including a gear engageable with the horizontal racks for moving the cages laterally of the support.

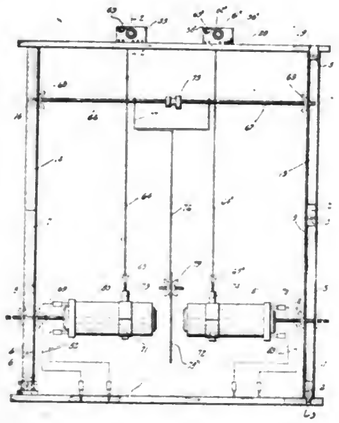
1,817,238. DUSTGUARD. WILLIAM F. CREMEAN, Toledo, Ohio. Filed Mar. 11, 1929. Serial No. 346,165. 8 Claims. (Cl. 286—6.)

1. A dust guard formed of a metal sheet having a large central opening, together with a fixedly held split metal ring having an axle engaging member associated therewith, integral means about the opening for holding the ring in position, and plug means having its ends notched



and located vertically centrally of the opening and adapted to rest on the axle and receive the ends of the split ring.

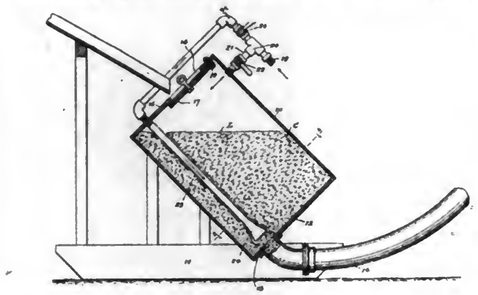
1,817,239. SUPPORTING DEVICE FOR ELECTRICAL APPARATUS. LEONARD R. CROW, Terre Haute, Ind. Filed May 4, 1928, Serial No. 275,244. Renewed May 18, 1931. 8 Claims. (Cl. 35—12.)



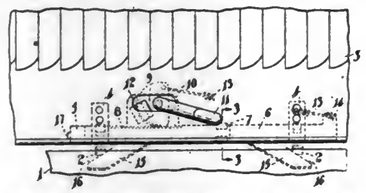
1. A device of the type described comprising a base, lower supports, means for securing one of the ends of said lower supports to said base, upper supports, means for securing said upper supports to the other ends of said lower supports, a top, means for securing said upper supports to said top, said supports having openings therein, relatively long supporting bars extending through openings in the upper supports, a thumb nut for connecting the inner ends of said relatively long supporting bars, and a pendulumlike member, said relatively long supporting bars being adapted to pivotally support said pendulumlike member.

1,817,240. CONCRETE BLOWER. ALEXANDER R. CUTHBERTSON, New York, N. Y. Filed May 25, 1928. Serial No. 280,640. 1 Claim. (Cl. 302—53.)

A device of the character described comprising a receptacle having an outlet opening in its lower end, a conduit communicating with a source of compressed air and leading into the upper part of the receptacle, a pipe mounted within the receptacle and extending from the upper part thereof to a point above the outlet opening, said pipe being in axial alinement with the outlet opening and its lower end being flared outwardly and of a diameter substantially equal to the diameter of the outlet opening and spaced from said opening a distance substantially equal to the diameter of the opening, and a valved connection between said pipe and the source of compressed air supply.

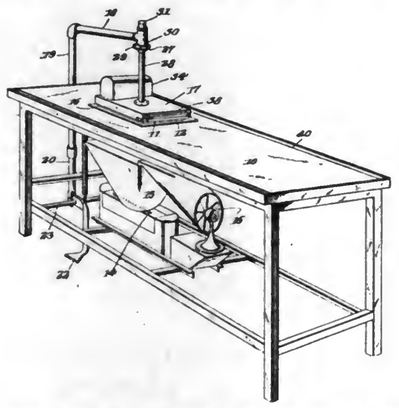


1,817,241. HOOD CATCH FOR MOTOR VEHICLES. GEORGE ALBERT DEWBERY, Oshawa, Ontario, Canada. Filed Sept. 12, 1929. Serial No. 392,162. 16 Claims. (Cl. 292—39.)



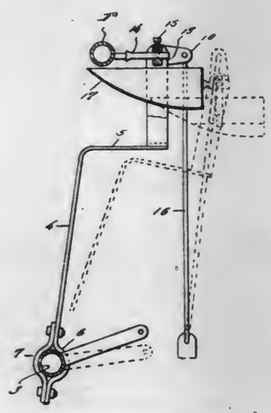
1. A duplex hood cap comprising a part on which the catch is mounted; two parallel latch members independently slidable relative to said part and one another; and manually operable means carried by and slidable with one member and engaging the other member whereby the said members may be moved to their unlatched position.

1,817,242. BLUE PRINTING APPARATUS. ALFRED B. DICKEY, Fort Worth, Tex., assignor, by direct and mesne assignments, to Gulf Production Company, Fort Worth, Tex., a Corporation of Texas. Filed Nov. 26, 1928. Serial No. 321,992. 8 Claims. (Cl. 95—75.)



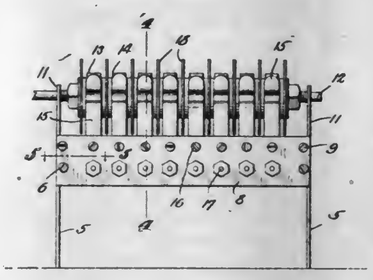
1. In a blue printing apparatus, the combination of a table having an exposure opening, a source of light below said table, a contact pad carried above and disconnected from the table, a closed casing on said pad for a supply of sensitized paper, said paper being adapted to be fed along the bottom surface of said pad, and clips carried by said pad at each end for holding the reach of paper under tension along said bottom surface.

1,817,243. FLUE MARKER. CARY E. FERGUSON and CHARLES E. SHOCKENCY, Lima, Ohio. Filed Feb. 28, 1930. Serial No. 432,276. 4 Claims. (Cl. 91—37.)



1. In a structure of the class described, in combination, an oscillatory operating shaft, a liquid containing receptacle supported thereon and bodily movable therewith, and a multiple brush assembly associated with the pan and movable with said pan and also movable independently of the pan for replenishing purposes.

1,817,244. ELECTRIC SWITCH. CHARLES ADIN FOX, Deer Lodge, Mont. Filed June 15, 1926. Serial No. 116,183. 1 Claim. (Cl. 200—8.)

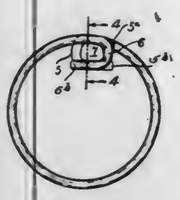


In an electric switch, a body portion, said body portion including end members and side members, the end members extending above the side members, a horizontal shaft extended through the end members, said shaft having threads formed at its ends, insulating members mounted on the shaft, contact members extending through the insulating members, disks mounted on the shaft and separating the insulating members, contact arms secured to the body portion and adapted to engage the contact members of the shaft, and nuts on the threaded portions of the shaft for securing the insulating members and disks together.

1,817,245. COATING FOR METAL CASTING MOLDS AND CORES. MEYER L. FREED, New York, N. Y., assignor to Henry A. Golwynne, New York, N. Y. Filed May 10, 1930. Serial No. 451,522. 12 Claims. (Cl. 22—189.)

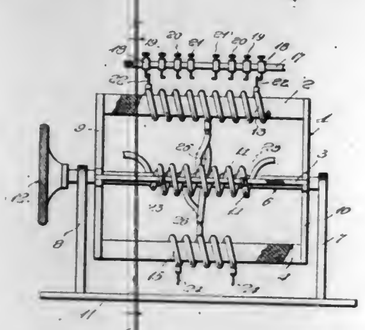
1. A coating for cores and molds used in casting metals consisting of anhydrous aluminum silicate and a binder.

1,817,246. LOCKABLE KEY RING. MANUEL C. GARDINE, St. Louis, Mo. Filed Aug. 13, 1927. Serial No. 212,790. 5 Claims. (Cl. 59—98.)



3. In a key ring, the combination of: a solid outer loop; and a smaller inner loop comprising inwardly disposed U-shaped hooks with approximately parallel limbs, overlapped at the limb portions and having the free end of the innermost limb portion of each hook extended beyond the bend of the other hook, whereby to guide the handle of a key between the lapped limbs of the inner loop.

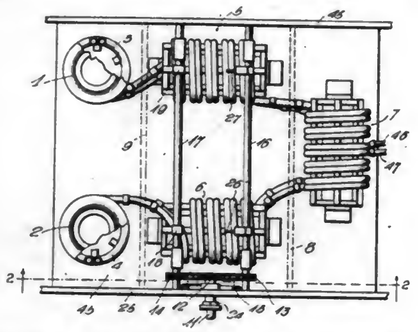
1,817,247. INDUCTANCE SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,692. 12 Claims. (Cl. 171—242.)



1. In an inductance system the combination of an inductance unit, means for connecting a supply of circulating cooling medium to said inductance unit, said inductance unit comprising concentric helical tubes disposed one over the other.

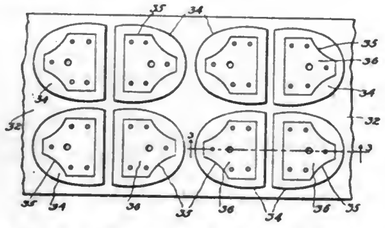
1,817,248. ADJUSTABLE INDUCTANCE SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 31, 1929. Serial No. 382,385. 14 Claims. (Cl. 171—242.)

1. A high frequency inductance system comprising in combination a plurality of inductance coils the winding of each of said inductance coils consisting of a pair of metallic fluid conducting members, said members interconnected by fluid conducting members and said coils positioned at substantially right angles with respect to each other, whereby cooling fluid may be caused to flow



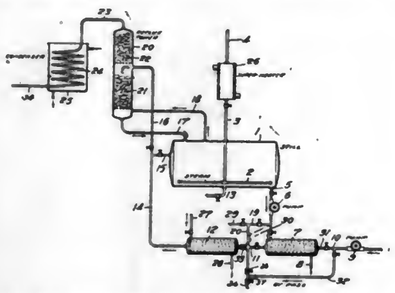
in opposite directions through each of the pair of fluid conducting members constituting a coil, and electrical equilibrium of the system may be maintained.

1,817,249. COMPOSITE SHOE HEEL SHEET. BENJAMIN GILOWITZ, New York, N. Y., assignor of one-eighth to Joseph Smith and twenty per cent to Emanuel S. Steinberg, Bronx, New York, N. Y. Original application filed Aug. 29, 1929, Serial No. 389,236. Divided and this application filed Jan. 31, 1930. Serial No. 424,935. 2 Claims. (Cl. 36—35.)



1. In the shoe heel art, an article of manufacture comprising a flexible sheet, upper and lower sets of resilient shoe tread members joined to the upper and lower sides of said sheet, and wear resisting inserts inset in one set of said tread members, any of said tread members at either side of the sheet being directly opposite one at the other side and being of the same size and shape as the latter.

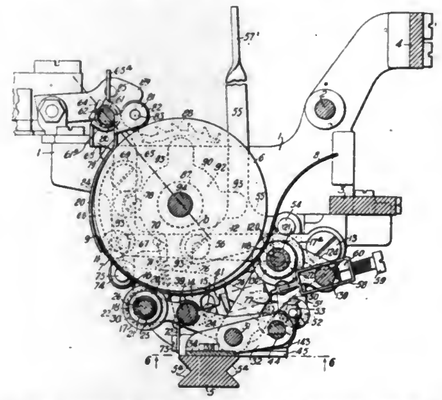
1,817,250. PROCESS OF STEAM DISTILLATION. JOHN G. GLASGOW, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed May 11, 1926. Serial No. 108,319. 6 Claims. (Cl. 196—85.)



1. In the steam distillation of light fractions of petroleum the process which comprises preheating the said

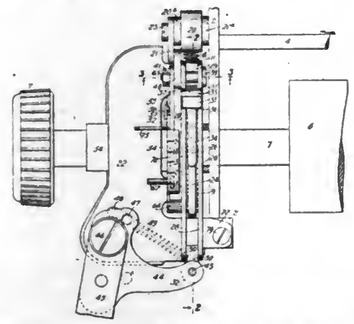
fractions by admixing therewith hot residual oil, stepping up the temperature of such mixture to a point sufficient to supply the necessary heat units for vaporization of the desired fraction, introducing into the still steam under conditions whereby it acts to reduce the boiling point of the material undergoing distillation but not to primarily supply the heat units for such distillation, removing vapors from the still, subjecting them to partial condensation, returning condensate to the still, finally condensing the remaining vapors, and controlling the temperature of the material delivered to the still for distillation to a point below that which will injuriously affect the products of the distillation.

1,817,251. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor, by mesne assignments, to Remington Typewriter Company, a Corporation of New York. Filed Apr. 1, 1927. Serial No. 180,202. 17 Claims. (Cl. 197—138.)



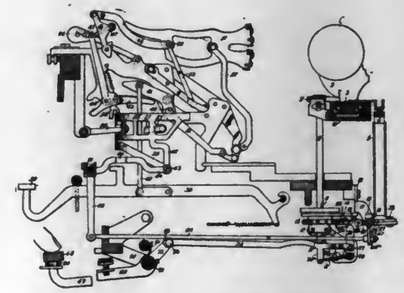
1. The combination of a platen, a spindle, paper feed devices cooperative with the platen and carried by and adjustable along said spindle, supporting arms to which the ends of said spindle are connected, and links mounted for relative pivotal movement and by which said arms are supported and on which they are pivoted, whereby said spindle may automatically move into and out of parallelism with the axis of the platen and a self-righting of the paper feed devices in exerting pressure against the platen is provided.

1,817,252. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor, by mesne assignments, to Remington Typewriter Company, a Corporation of New York. Filed Apr. 19, 1927. Serial No. 184,929. 5 Claims. (Cl. 197—114.)



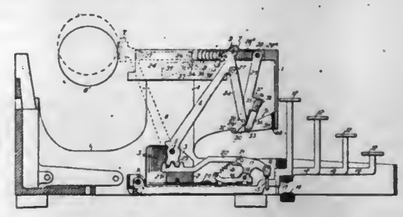
1. The combination of a line spacing wheel; a line spacing lever; a pawl carrier overlying said wheel and supported at its rear end substantially in the plane of said wheel for approximate rectilinear sliding movement fore-and-aft of the machine and having at its forward end a pivotal connection with an arm of said lever, said carrier comprising a single piece of sheet metal formed with two connected parallel side arms; a line spacing pawl located between and pivoted to said arms; and a supporting bracket for said lever and carrier and with which the free end portion of the pawl engages during the operating stroke in order to lock the pawl in engagement with the teeth of the wheel at the last part of the operating stroke and prevent overthrow of the wheel.

1,817,253. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Oct. 31, 1927. Serial No. 229,962. 8 Claims. (Cl. 197—82.)



7. The combination of a carriage, escapement mechanism therefor, and key controlled means for said escapement mechanism including a trip-off device that releases the actuated part controlled thereby before said trip-off device has completed its actuating movement thus affording an independent return movement of the actuated part, a pivot pin on which said device is supported for pivotal actuating movement and sliding clearing movement in the return thereof, and means for adjusting said pivot pin to different set positions.

1,817,254. TYPEWRITING MACHINE. GEORGE G. GOING, Glenbrook, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Sept. 30, 1929. Serial No. 396,156. 17 Claims. (Cl. 197—25.)



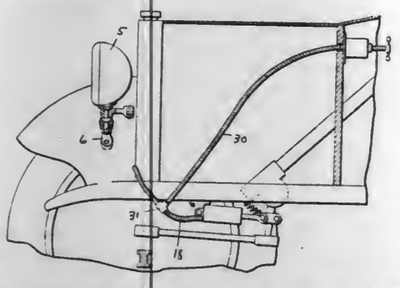
1. The combination of a pivoted type bar, and controlling means connected to said type bar for controlling it to effect a substantially noiseless pressure imprint therefrom, said controlling means comprising a pair of pivotally connected links constituting a toggle anchored at one end to a fixed part of the machine and connected at the other end directly to the type bar, and a second pair of pivotally united links constituting a floating second toggle connected at one end to one of the first mentioned links and at its other end to the other of said first mentioned links, the links of both toggles being substantially straightened at the time the imprint is effected.

1,817,255. COUPLING. JESSE G. HAWLEY, Painted Post, N. Y. Filed May 29, 1925, Serial No. 33,688. Renewed Nov. 19, 1930. 13 Claims. (Cl. 74—17.)



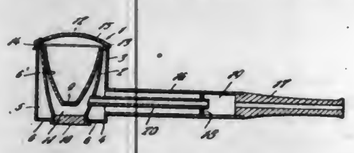
13. A flexible connecting link comprising a rigid body member, rigid end caps, coiled springs sleeved on the body member between its end portions and the end caps, and flexible cable units connecting the end caps to the body member in such a manner that the springs are placed under compression.

1,817,256. DIRIGIBLE HEADLIGHT. ROBERT HEIKENS, Lake Forest, Ill. Filed June 11, 1930. Serial No. 460,472. 1 Claim. (Cl. 240—62.3.)



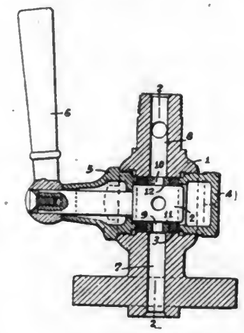
In combination with a vehicle, a steering apparatus including a steering arm, a pair of headlights, means for mounting the headlights so that the same may be rocked from side to side, cranks on the headlights, a connecting rod between the cranks, a spring connected with the rod for holding the lamps in a straight position, a cylinder, a plunger in the cylinder, means operatively connecting the plunger with the steering arm, a second cylinder, a plunger in the second cylinder, means operatively connecting the second plunger with the connecting rod, a conduit between the cylinders, a supply cylinder located adjacent the driver's seat, a conduit connected to said supply cylinder and to the first mentioned conduit and a manually operated plunger in the supply cylinder which when operated will cause fluid to flow from the supply cylinder to the other cylinders and conduit to replenish the fluid therein.

1,817,257. SMOKING PIPE. HENRY R. KIMBERLING, St. Louis, Mo. Filed Mar. 12, 1930. Serial No. 435,315. Renewed May 5, 1931. 3 Claims. (Cl. 131—12.)



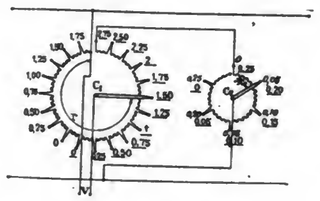
1. A smoking pipe of the character described comprising a casing open at its upper and lower ends and including spaced, integral inner and outer walls and a perforated bottom wall providing an air chamber, a removable plug threadedly mounted in the lower end of the casing in a manner to close the same, a closure hingedly mounted on the upper end of the casing, a bowl mounted in the casing in spaced relation to the inner wall thereof and terminating in spaced relation to the bottom thereof in a manner to provide a smoke receiving chamber, the air chamber, bowl and smoke receiving chamber having communication with each other and a stem mounted on the casing and having communication with the smoke receiving chamber.

1,817,258. STOP-COCK. KARL KLINGER, Gumpoldskirchen, Austria. Filed May 23, 1929, Serial No. 365,469, and in Austria June 1, 1928. 2 Claims. (Cl. 251—103.)



1. A stop-cock of the type specified having a slightly compressible sleeve of packing material inserted between the plug and the casing of the cock, said sleeve being provided with openings, and metal bodies being inserted within said sleeve in said openings, the outer wall of each of the metal bodies being wedge-shaped and said wedges extending parallel to the axis of the sleeve.

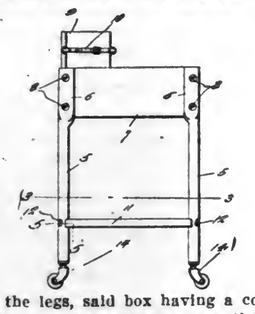
1,817,259. APPARATUS FOR MEASURING TRANSMISSION LEVELS ON TELECOMMUNICATION CIRCUITS. MARCEL LEDUC, Paris, France, assignor to Lignes Telegraphiques & Telephoniques, Paris, France, a Corporation of France. Filed Feb. 15, 1929, Serial No. 340,242, and in France Feb. 18, 1928. 10 Claims. (Cl. 179—175.)



1. Apparatus for the measurement of voltages and voltage levels, comprising the combination with two conductors of a calibrated high impedance, an amplifying voltmeter connected in shunt with a portion of said impedance, means for adjusting said impedance to produce a fixed predetermined reading in said amplifying voltmeter, and means for indicating directly by the setting of said calibrated impedance the voltage or the voltage level between said conductors.

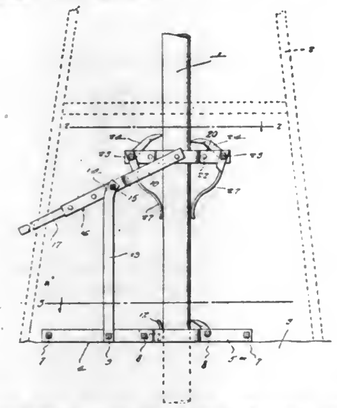
1,817,260. SHOPPING WAGON. JOHN V. LONGAN, Archer City, Tex. Filed June 17, 1930. Serial No. 461,748. 2 Claims. (Cl. 280—29.)

1. In a device of the class described, a plurality of legs merging into corner pieces, a box having its corners in the corner pieces, means holding the box in the corner pieces, and casters on the bottoms of the legs, a shelf across the lower portions of the legs, and means holding



the shelf to the legs, said box having a corner extension rising therefrom, and a strap across the ends of said extension.

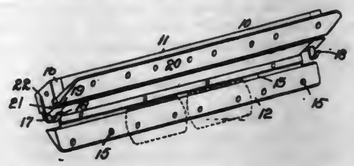
1,817,261. WELL CASING JACK. WILLIAM D. MCCARLEY, Loraine, Tex., assignor of one-half to Clemmie F. Glass, Loraine, Tex. Filed Aug. 16, 1929. Serial No. 386,445. 1 Claim. (Cl. 254—31.)



A pipe jack of the character described comprising a base including a pair of spaced opposed parallel strips having oppositely disposed outwardly bowed casing embracing portions intermediate their ends, co-acting casing gripping elements pivotally supported between the strips outwardly of the bowed portions thereof, spaced opposed vertically extending uprights pivotally mounted at the lower end and adjacent one end of the base, a lever pivotally connected intermediately its ends between said uprights adjacent their upper ends, said lever including a handle portion and a pair of outwardly and forwardly extending forward end portions, a pair of spaced, opposed parallel strips pivotally secured to the forward end of the handle portion, said strips, intermediate their ends being provided with oppositely disposed outwardly bowed casing embracing portions in vertical alinement with the outwardly bowed casing embracing portions of the base, a pair of opposed co-acting casing gripping jaws pivotally mounted between the opposite ends of said strips and extending inwardly and upwardly thereto, and opposed downwardly and inwardly extending guide fingers rigidly secured to the opposite ends of the strips and adapted to slidably engage the casing in a manner to maintain the last named strips against longitudinal movement relative to the casing.

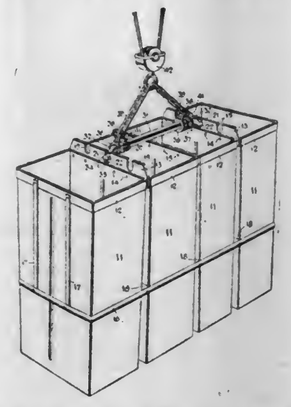
1,817,262. HOLDER. THEODORE G. MCGIRR, Brooklyn, N. Y. Filed May 24, 1928. Serial No. 280,157. 5 Claims. (Cl. 51—218.)

3. A holder for objects to be sharpened comprising a pair of clamping jaws, each having a channeled face, and the channels registering when the jaws are in closed position to provide an opening for receiving the sharpened edge of an object when placed therebetween, a base member to which one of the jaws is rigidly attached, a pair



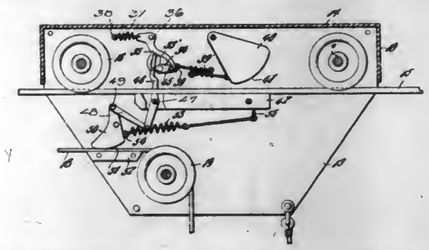
of blocks removably attached to the respective ends of the base, the other jaw pivotally attached at its ends to the respective blocks, and means carried by the blocks for holding the jaws in locked position.

1,817,263. ICE CAN. LOUIS S. MORSE, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed June 25, 1930. Serial No. 463,700. 5 Claims. (Cl. 62—157.)



1. Lifting means for can units comprising in combination with such unit, a pair of spaced lifting members mounted on the unit and each having a slot extending from an edge thereof and terminating in an enlargement; suspending means; a bar normally pendant from said suspending means; and lugs carried by said bar, said lugs being so proportioned that in the normal pendant position of the bar the lugs are incapable of passing through said slots, but are rendered capable of passing through when the bar is tilted about its longitudinal axis.

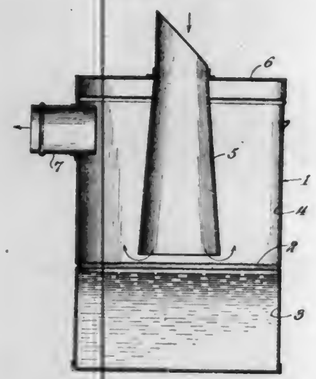
1,817,264. LIFTING AND TRANSFERRING DEVICE. CASSIOUS W. NICKERSON, Bandon, Oreg., assignor of one-twentieth to H. C. Harnagel. Filed Mar. 29, 1926. Serial No. 98,277. 3 Claims. (Cl. 212—91.)



1. A device of the class described, comprising a carrier housing, sheaves mounted therein for engaging a conveying

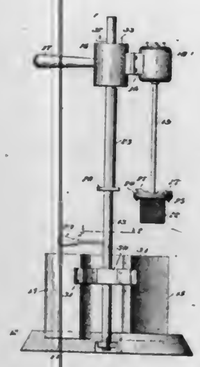
cable, a sheave also mounted in the housing for engaging a hoisting cable, a locking and gripping device for engaging each cable, and means including worm controlled and slide controlled cam mechanism for releasing one of said locking devices and moving the other locking device into engagement with the cable with which it is associated, and devices for controlling said means by the position of the carrier.

1,817,265. AIR FILTER FOR INTERNAL COMBUSTION ENGINES. ADOLFO F. PANDO, La Plata, Argentina. Filed May 3, 1930, Serial No. 449,487, and in Argentina Feb. 7, 1930. 3 Claims. (Cl. 261—119.)



1. An apparatus for cleaning the air supply to internal combustion engines for vehicles, comprising a screen, means for supplying a liquid to said screen continuously to keep it moistened therewith, and means for causing the air passing to the carburetor of the engine to impinge against said screen and be deflected thereby, said means comprising a tube with an open end terminating adjacent the screen, the liquid supply being arranged so as to be continually agitated by the vibration due to the operation of the engine itself, whereby it continually impinges against the screen and assists in removing the impurities adhering thereto.

1,817,266. WATCH CLEANING MACHINE. FRANK REGERO, Macon, Ga., assignor, by direct and mesne assignments, to L. & R. Manufacturing Company, a Corporation of New Jersey. Filed Aug. 5, 1929. Serial No. 383,748. 3 Claims. (Cl. 141—1.)

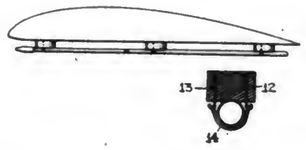


1. In a watch-cleaning machine, the combination with a base, of a standard supported by said base, tanks, for holding solutions mounted on said base, a carrier vertically movable and adapted to be turned on said standard, an electric motor supported by said carrier and having a depending shaft, and nested baskets, for holding parts to be cleansed, connected to the lower end of said shaft.

1,817,267. COATING FOR COTTON MILL ROLLS. WILLIAM DALTON ROBINSON, Cherryville, N. C. Filed Feb. 27, 1929. Serial No. 343,245. 1 Claim. (Cl. 134—7.)

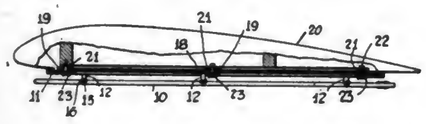
A leather coating material comprising a mixture of two and one half ounces of dry red lead, two and one half ounces oil of origanum, two ounces of lamp black, two and one half ounces of glycerine, one and one half pounds of gelatine and sufficient acetic acid to make one gallon.

1,817,268. NIGHT AERIAL ADVERTISING SIGN OR THE LIKE AND FASTENING MEANS THEREFOR. ROLAND ROHLFS, Forest Hills, N. Y., assignor, by mesne assignments, to L. Frank Kohler, Brooklyn, N. Y. Filed May 14, 1928. Serial No. 277,595. 8 Claims. (Cl. 40—127.)



3. The combination, in aircraft, of a luminous indicia forming tube secured to the aircraft, an elastic means embracing said tube to yieldingly hold it in place on the aircraft, and a shock absorber between said tube and aircraft against which said tube is yieldingly held.

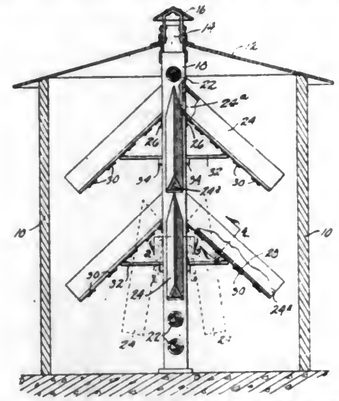
1,817,269. NIGHT AERIAL ADVERTISING SIGN. ROLAND ROHLFS, Forest Hills, N. Y., assignor, by mesne assignments, to L. Frank Kohler, Brooklyn, N. Y. Filed May 14, 1928. Serial No. 277,597. 6 Claims. (Cl. 40—127.)



1. The combination with the external surface of an aeroplane, of an electrical aerial advertising sign or the like comprising two or more sign characters each consisting of one or more luminous tube lights, separate frames to which the sign characters are attached, a vibration or shock absorbing means for fastening said tube lights and hence the sign characters to said frames, and means for fastening each of said frames to said surface close up against one side thereof, said means permitting adjustment of said frames parallel with said surface.

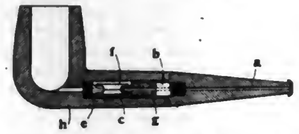
1,817,270. GRANARY VENTILATOR STRUCTURE. WALTER M. ROWLES, Onawa, Iowa. Filed July 15, 1929. Serial No. 378,460. 4 Claims. (Cl. 98—56.)

2. In a granary ventilator structure, a tubular air conducting stack, a plurality of tubular auxiliary ventilator members respectively communicating with openings in the stack and extending away therefrom, said members having each a hinged connection with the stack and movable means for holding said members in their outwardly



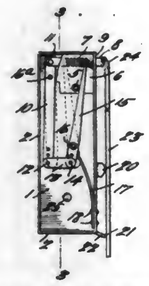
inclined positions, said last means being adjustable for permitting the members to drop downwardly along the stack.

1,817,271. TOBACCO PIPE. SIDNEY SCHISHKA, London, England. Filed Dec. 7, 1926, Serial No. 153,126, and in Great Britain Nov. 25, 1926. 1 Claim. (Cl. 131—12.)



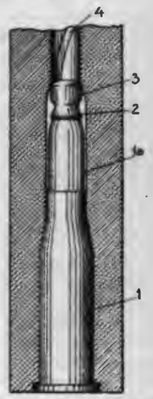
In a tobacco pipe, a hollow stem, a mouth-piece having a part of reduced diameter, constituting a sleeve, fitting within one end of said stem, a trough cylindrical at the ends and semi-cylindrical in its central portion and of uniform internal diameter throughout, said trough fitting within the stem and having internally threaded ends, a connecting tube the body of which is of approximately the same external diameter as the inner diameter of the trough and externally threaded, said tube extending through said sleeve and threaded into the mouthpiece of the rear of the sleeve and into one end of the trough and having an end of reduced diameter projecting into the trough, and a perforated plug threaded into the opposite end of the trough, said plug terminating in a flange at one end, which fits against the said opposite end of the trough, and having its opposite end of reduced diameter and projecting into the trough.

1,817,272. SAW SETTING DEVICE. FRANK V. SCHROEDER, Issaquah, Wash. Filed June 1, 1928. Serial No. 282,161. 1 Claim. (Cl. 33—202.)



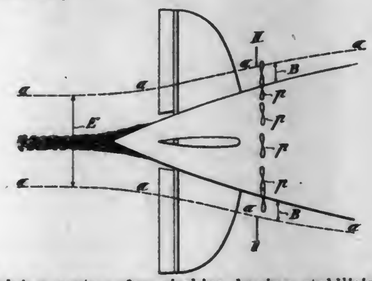
A saw tooth gauging device comprising a substantially thin, rectangular shaped casing, a cross bar having outturned ends secured to one side of the casing, a projection secured to the same side adjacent one end thereof, the extremities of said cross bar and said projection being in the same plane, a movable rod projecting through the said same side adjacent the opposite end and adapted to engage the teeth of the saw, a sheet metal bracket secured to and within the casing and substantially housing the rod, said sheet metal bracket having a scale on one face, a pivoted lever connected to said rod at one end, a link connected to the free end of said lever, a pointer connected to said link and arranged to move across said scale, whereby the indicator may be read through an opening in said casing, the sheet metal bracket separating the pointer and the rod, thereby preventing contact between the two, and a spring for normally maintaining the pointer in zero position.

1,817,273. SAFETY PROJECTILE FOR GUN PRACTICE AND GUN BARRELS SUITABLE FOR THE SAME. EUGENE SCHULER, Budapest, Hungary, assignor of one-half to the Firm Josef Schuler A. G. Erste Ungarische Stahlschreibfeder-, Federhalter- und Indigocopierpapier-Fabrik, and three-tenths to Joseph Benke, Budapest, Hungary. Filed June 26, 1930, Serial No. 463,948, and in Hungary Apr. 15, 1929. 2 Claims. (Cl. 102—14.)



1. A safety projectile for gun practice purposes and a gun barrel suitable for the same, in which a lead projectile per se known is cemented or fixed to the front end of shape of a paper-shell cartridge, whilst the loading chamber of the gun is shaped in such a manner as to ensure that when placing the safety cartridge in position, the cylindrical front end of the lead projectile will penetrate or respectively be jammed into the entrance of the draw-channel of the gun barrel.

1,817,274. AIRSHIP. JOHANN SCHUETTE, Berlin-Lichterfelde-Ost, Germany. Filed Nov. 2, 1929, Serial No. 404,820, and in Germany Oct. 12, 1929. 1 Claim. (Cl. 244—6.)



A driving system for airships having stabilizing and steering gears comprising a plurality of propellers ar-

ranged and secured on the airship around the rear part and in front of the stabilizing and steering gears of the airship, said propellers being substantially arranged in the annular space of the aft-drift of the ship whereby the propellers do not reach to the zone of the eddies, and the propellers being arranged at a distance from the stabilizing and steering gears which is less than the depth of the stabilizing and steering planes.

1,817,275. WING FOR AEROPLANES. ALEXANDER SOLDENHOFF, Zurich, Switzerland. Filed Mar. 8, 1929, Serial No. 345,511, and in Germany Mar. 8, 1928. 2 Claims. (Cl. 244—12.)



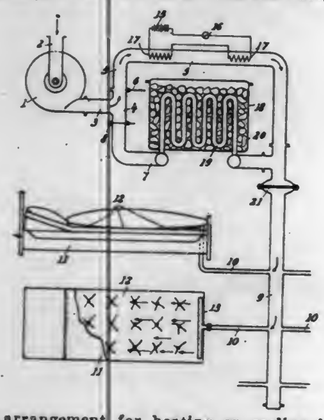
1. An aeroplane wing having various profiles, comprising a lower side of convex curvature increasing from adjacent the fuselage to the wing center and decreasing again towards the wing tip, and the initial and final profiles having undersurfaces curved as desired and the increasing curvature in the center being caused solely by varying the underside of the profile, while the back of the wing at the fuselage is strongly arched and becomes progressively flatter towards the tips.

1,817,276. CLEANING COMPOSITION. THOMAS J. STINSON, Hartford, Conn. Filed Aug. 20, 1924. Serial No. 733,195. 6 Claims. (Cl. 87—5.)

1. A cleaning composition formed by mixing chloride of lime, Prosperity soda and vinegar in substantially the proportion of two and one-half pounds of chloride of lime, two and one-half pounds of Prosperity soda, and one-half pint of vinegar.

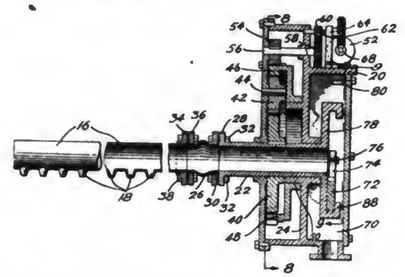
3. A cleaning composition formed by mixing chloride of lime vinegar, and a compound containing sodium carbonate, sodium bicarbonate and ammonium sulphate in substantially the proportion of two and one-half pounds of chloride of lime, two and one-half pounds of the compound, and one-half pint of vinegar, the sodium carbonate, sodium bicarbonate and ammonium sulphate constituting at least 85% of the compound which is mixed with the chloride of lime and the vinegar.

1,817,277. ARRANGEMENT FOR COOLING AND HEATING BEDS. ALBERT UHLIG, Rorschach, Switzerland. Filed Apr. 3, 1930, Serial No. 441,382, and in Switzerland June 4, 1929. 4 Claims. (Cl. 219—39.)



1. An arrangement for heating or cooling beds, comprising in combination a blower, a heating pipe connected with said blower, a cooling pipe connected with said blower, a common pipe to which said heating pipe and said cooling pipe are connected, electric heating bodies in said heating pipe, a refrigerator interposed in said cooling pipe, branch pipes one for each bed branching from said common pipe, a distributing pipe at the end of each branch pipe situated in the foot end of each bed, and means for selectively connecting with said blower said heating pipe or said cooling pipe.

1,817,278. BOILER TUBE CLEANING APPARATUS. GEORGE CARL VENNUM, Westfield, N. J., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 29, 1921. Serial No. 488,454. 33 Claims. (Cl. 122—39.)

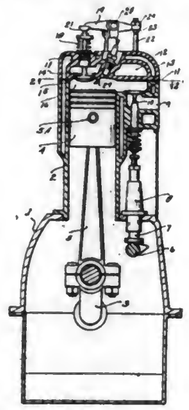


21. A tube cleaner comprising a movable cleaner element, a valve for controlling the flow of cleaning fluid to said cleaner element comprising a valve proper and a valve seat carried by said element, and means coacting with said valve proper to move the latter to open and closed positions when the element is turned.

1,817,279. TREATMENT OF JUTE FIBER. JOSEPH VIALLET, Paris, France, assignor to N. T. Artificial Wool Company, Limited, London, England, a Company of Great Britain. Filed Oct. 5, 1929, Serial No. 397,754, and in France Oct. 8, 1928. 2 Claims. (Cl. 92—5.)

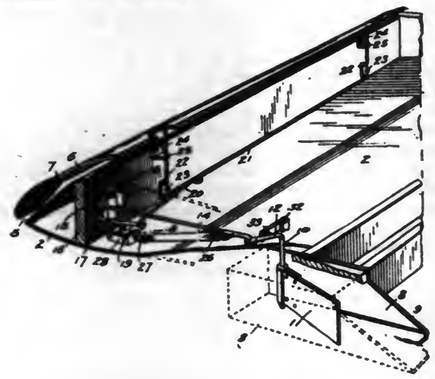
1. In the manufacture of textile fibers suitable for spinning from jute fibers, the step of subjecting the fibers to fermentation in the presence of liquor resulting from the maceration of vegetable fibrous material of the group comprising flax and hemp.

1,817,280. COMBUSTION CHAMBER FOR MOTORS. CHARLES HENRY VYSE, Portland, Oreg. Filed Mar. 17, 1930. Serial No. 436,486. 1 Claim. (Cl. 123—76.)



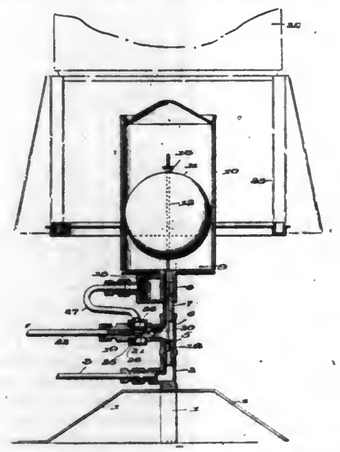
In a device of the class described, the combination of a cylinder, a piston reciprocably disposed within the cylinder, means for reciprocating the piston, a cylinder head having a fuel storage reservoir disposed therein adapted for maintaining a fuel charge under compression therein, a pair of valves disposed within the cylinder head and between the carburetor and the operating cylinder, one of which admits fuel from the inlet manifold into the storage reservoir, the other of which admits compressed fuel from the storage reservoir into the operating cylinder, an exhaust valve leading through the cylinder wall from the cylinder, and a baffle downwardly extending from the cylinder head into the operating cylinder and adjacent the valve disposed between the storage reservoir and the operating cylinder.

1,817,281. AUTO VENT WING FOR AEROPLANES. GEORGE W. WILLIAMS, Jr., Temple, Tex.; Pauline Williams executrix of said George W. Williams, Jr., deceased. Filed Feb. 24, 1930. Serial No. 430,978. 5 Claims. (Cl. 244—29.)



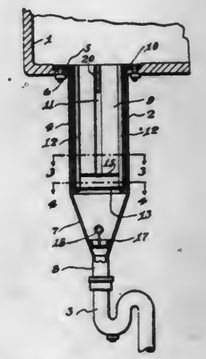
1. An aeroplane wing having a passage, means for opening and closing the passage, and mechanism for actuating said means, said mechanism embodying a vane housing, and a vane operating in the housing.

1,817,282. OIL CONTROL. ROBERT T. WILLIAMS, Quincy, Ill., assignor to H. M. Sheer Company, Quincy, Ill., a Corporation of Illinois. Filed Oct. 27, 1927. Serial No. 229,137. 4 Claims. (Cl. 158—88.)



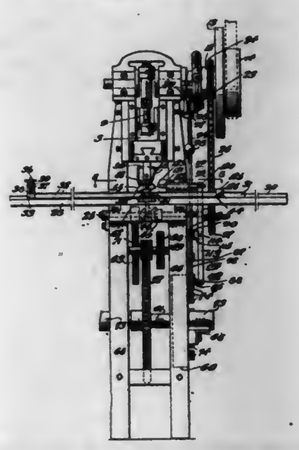
1. In an oil control for heaters, the combination of a support, a nipple mounted thereon and communicating with a source of oil supply, said nipple having a valve seat formed therein, a T communicating with the nipple through the valve seat, a casting mounted upon the T and carrying a burner bowl, a float chamber mounted on the casting and communicating with the T, a float mounted in the float chamber and carrying a depending valve in position to engage the valve seat of the nipple, for regulating the flow of oil therethrough, and means establishing communication between the burner bowl and nipple.

1,817,283. DRAIN FILTER. RAY C. WORSWICK, Roswell, N. Mex. Filed Mar. 18, 1931. Serial No. 523,611. 3 Claims. (Cl. 4—291.)



1. In a device of the class described, the combination of an outer casing, a basin in said casing, two pairs of longitudinal grooves in said casing, one pair of said grooves extending the full length of said casing while the other pair of grooves ending some distance from the bottom of said casing, a strainer of coarse mesh having outwardly extending ears housed and supported at the bottom of said second mentioned grooves, and another strainer of fine mesh having outwardly extending ears housed and supported at the bottom of the first mentioned grooves.

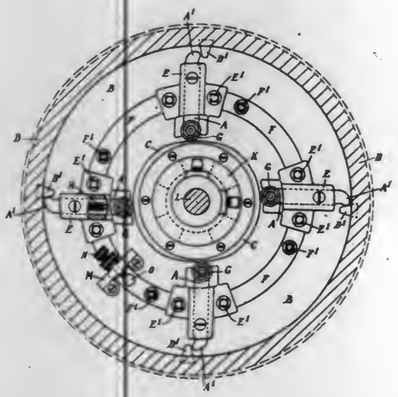
1,817,284. AUTOMATIC JACQUARD PUNCHING MACHINE. ROBERT W. BARKER, Philadelphia, Pa., assignor to Hess & Barker, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 18, 1929. Serial No. 347,889. 7 Claims. (Cl. 164—87.)



1. The combination with a punching mechanism of means for intermittently propelling a piece of sheet ma-

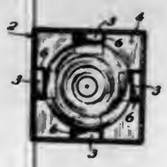
terial through said punching mechanism at a predetermined rate, and adjustable pattern mechanism comprising a rotary disc and a plurality of pins arranged peripherally of said disc, operative connections from said pattern mechanism to said propelling means, and operative connections from said pattern mechanism to said punching mechanism.

1,817,285. CIRCULAR RIB KNITTING MACHINE. JOHN HENRY GLENN BAYLES, Nottingham, England. Filed Mar. 13, 1930, Serial No. 435,550, and in Great Britain Mar. 27, 1929. 6 Claims. (Cl. 66—28.)



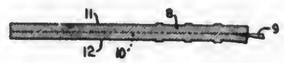
1. In a circular rib knitting machine, the combination of the ribber-dial, a series of mechanically actuated dogs which are employed for connecting the ribber-dial to the needle-cylinder, means for actuating said dogs, a member on the ribber-dial on which all the dogs are carried said member being angularly adjustable relatively to the dial so that all the said dogs can be angularly adjusted to the same extent at one operation, substantially as described.

1,817,286. FABRICATED PACKAGE. GEORGE B. BEAMAN, Crafton, Pa., assignor to Superior Paper Products Company, Carnegie, Pa., a Corporation of Delaware. Filed Dec. 23, 1929. Serial No. 415,924. 3 Claims. (Cl. 229—14.)



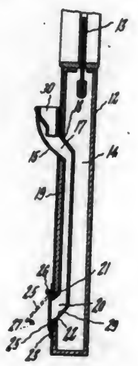
1. A shipping carton comprising an outer casing having end and side walls, a paper board spacer member loosely disposed within said casing, and a plurality of resilient members detachably arranged in the casing with portions extending between the end of the casing and spacer member and yieldably spacing it therefrom, and other portions extending through openings in the spacer member and along the side walls of the casing in a manner to yieldably space an article packed in the carton from the side walls of the casing, said resilient members being arranged midway of the sides of the casing and walls and maintained in position by the spacer member.

1,817,287. METHOD OF PRODUCING SHOE SOLES OF MOLDED PLASTIC COMPOSITION. DONALD H. BELL, Beverly, Mass. Filed Dec. 9, 1929. Serial No. 412,680. 2 Claims. (Cl. 18—55.)



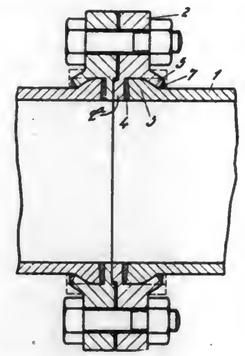
1. The process of producing a pair of shoe soles from plastic material which comprises molding and vulcanizing by heat and pressure while in the mold a suitable plastic material to produce a unit having opposite faces corresponding respectively to the tread surface of a shoe sole and of a thickness twice that of the desired sole, then dividing said unit longitudinally along a central plane parallel to the upper and lower surfaces of the unit, thereby providing a pair of soles having smooth condensed tread surfaces and edges with exactly complementary peripheries and with each sole presenting a rough and porous upper surface adapted to be securely cemented to the inner sole of the shoe.

1,817,288. STUB AND ASH RECEPTACLE FOR AUTOMOBILES. CHARLES A. BENJAMIN, West Bridgewater, Mass. Filed Nov. 13, 1930. Serial No. 495,406. 2 Claims. (Cl. 206—19.5.)



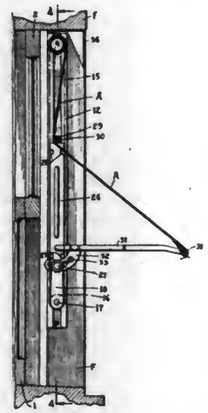
1. A stub and ash receptacle attachable to a hollow door of an automobile body and comprising a receiving end portion having a back formed to bear on the inner side of the door, and provided with means for attachment thereto; an inclined chute portion formed to extend diagonally from the receiving portion through an upper opening in the inner side of the door into the interior thereof, an elongated chute portion joined to the inclined portion and formed to extend downwardly within the door, and a delivery end portion joined to the elongated portion and formed to extend through a lower opening in the inner side of the door, and provided with an outlet and with means for attachment to the door, and a movable closure for said outlet, the lower end of the elongated chute portion having an inclined deflector, the arrangement being such that when the door and closure are opened, the contents of the receptacle are guided by said deflector and discharged by gravity outside the automobile body.

1,817,289. FLANGED COUPLING FOR CONDUITS. CARL BENZ, Biesdorf, near Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed June 27, 1929, Serial No. 374,213, and in Germany Apr. 17, 1929. 7 Claims. (Cl. 285—137.)



1. In a flanged coupling for conduit in combination, a tube with a rim formed by turning the end of the tube over, a ring abutting against said rim, a flange, a welded seam between the face of the tube end and said flange, and a rim on said flange fitting over said ring.

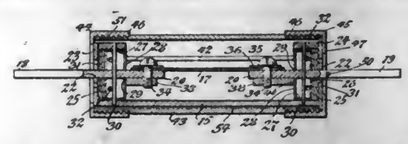
1,817,290. AWNING. AUGUST BRUNS, Jamaica, N. Y. Filed Nov. 15, 1929. Serial No. 407,440. 6 Claims. (Cl. 156—44.)



4. An awning device comprising a roller, a pair of slides associated therewith, pivoted means connected to said slides and having the end of the awning material connected thereto, means adapted to actuate said roller and comprising a turnable handle, and stop means connected to said pivoted means and adapted to cooperate with said handle to hold said pivoted means at a predetermined angle, said handle having a laterally slidable pin and said pivoted means having a locking sector adapted to cooperate with said pin.

1,817,291. FUSE. JOHN G. CLEMENS, Buffalo, N. Y., assignor to Buffalo Fuse Corporation, Buffalo, N. Y., a Corporation of New York. Filed July 27, 1923. Serial No. 654,267. 14 Claims. (Cl. 200—131.)

1. A fuse comprising a terminal blade having an inwardly projecting tang and an inwardly facing shoulder between said blade and tang, a disk arranged on said tang and engaging said shoulder and provided with a vent opening, a tubular frame surrounding said tang and engaging said disk, a plurality of layers of screening material arranged within said frame and engaging said disk so as to



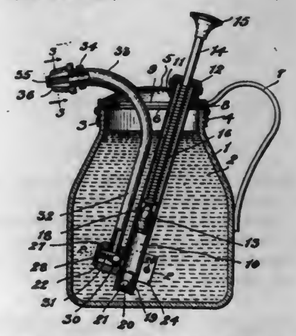
cover the vent opening therein, and a retaining cup having an imperforate end wall and openings in its side and arranged in said frame and engaging its open end with said screening material to compress said layers of screening material and to form a chamber into which gases enter laterally before passing through said screening material.

1,817,292. LOOM HARNESS. FREDERICK GORDON COBB, Lancaster, S. C., assignor to Garland Manufacturing Company, a Corporation of Maine. Filed Aug. 16, 1928. Serial No. 299,900. 4 Claims. (Cl. 139—91.)



1. An improved loom harness comprising interlooped eye supporting strands of yarn, eyes formed integral with half the interlooped strands by single knots therein near where the strands interloop, the other half of the interlooped strands passing through said eyes, and shafts over which said strands extend for supporting said harness, the supporting strand from both ends of the eyes being in the planes of the eyes and extending in parallel relation over the respective shafts on the same side thereof thereby permitting limited motion of the eyes transversely of the supporting strands.

1,817,293. MUSTARD DISPENSING DEVICE. JOSEPH G. COFFIN, New York, N. Y., assignor to Mustomatik Specialties, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 30, 1928. Serial No. 322,732. 2 Claims. (Cl. 65—45.)

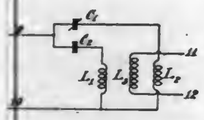


1. A device of the class described comprising a vessel, a feed pipe located within said vessel and having a bent portion extending out of the same to form a dispensing spout, a split end on said spout and means for contracting said split end to regulate the flow from said spout.

1,817,294. ELECTRICAL COUPLING SYSTEM. FULTON CUTTING and JAY L. TAYLOR, New York, N. Y. Filed Mar. 16, 1928. Serial No. 262,252. 3 Claims. (Cl. 178—44.)

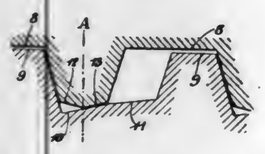
1. A gain control for a radio receiver including an input and an output circuit so connected in respect to the mechanisms of said receiver that substantially all the

signal energy must pass into said input circuit and be delivered by said output circuit, said input circuit comprising two parallel branches, each of said branches consisting of an inductance and a capacitance in series, each of said inductances being equal and fixed and at least one of said capacitances being available over a range of



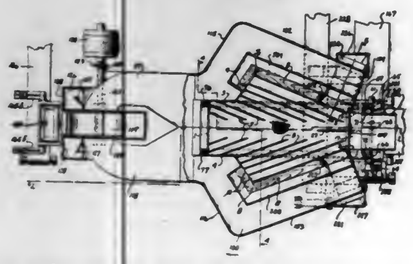
values such that the two capacitances can be made electrically equal to one another, and said output circuit comprising a third inductance coupled equally to each of the aforesaid inductances in the parallel branches, but having opposite inductive relationships with each of the branch inductances respectively.

1,817,295. SCREW THREAD COUPLED MEMBERS. HUGUES LOUIS DARDELET, Nantes, France, assignor, by mesne assignments, to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed June 18, 1930, Serial No. 462,001, and in France June 29, 1929. 1 Claim. (Cl. 151—22.)



Screw thread coupled members comprising an externally threaded part and an internally threaded part, the thread grooves of both parts being wider than the thread ribs; the root of the thread of the externally threaded part being formed of two surfaces of substantially equal area inclined at different degrees to the axial line of the said member, one of said surfaces being adjacent the thrust receiving side of the external thread rib and forming a frictional locking surface at a less angle than the other inclined surface; and the crest of the rib of the internally threaded part being bevelled in opposite directions from the center of said rib, said bevelled surfaces being approximately at the same degree of angle as the surface of the said thread root having the greater angle of inclination.

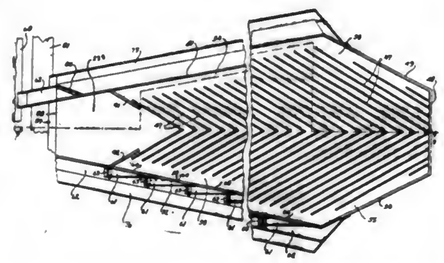
1,817,296. METHOD AND MECHANISM FOR SEPARATING INTERMIXED DIVIDED MATERIALS. KENNETH DAVIS, St. Benedict, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 30, 1923. Serial No. 628,921. 46 Claims. (Cl. 209—467.)



1. A mechanism for separating intermixed divided materials of different specific gravities, including in combination an air pervious table which is widened laterally between the feed and discharge ends thereof, diagonally extending partitions converging in the direction of flow of materials along the table, for guiding the lighter and heavier materials in different lateral directions to different places of discharge, means for longitudinally vibrating the table, and means operating from above the table to draw air currents upwardly therethrough.

30. The method of separating intermixed divided materials comprising stratifying the materials into upper and lower strata by vibration and by upwardly flowing currents of air, guiding the lowest stratum in one direction laterally and deflecting the upwardly flowing currents of air, while still in the upper stratum, in another direction laterally, to cause them to flow laterally and thereby cause the upper stratum to move laterally to a different point of discharge from that for the lower stratum.

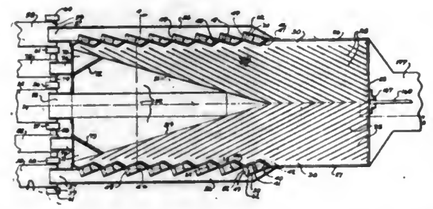
1,817,297. PROCESS AND MECHANISM FOR SEPARATING INTERMIXED DIVIDED MATERIALS. KENNETH DAVIS, Ebensburg, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 3, 1925. Serial No. 72,894. 4 Claims. (Cl. 209—467.)



4. A mechanism for separating intermixed divided material including in combination a longitudinally reciprocable, air-pervious table which decreases in width forwardly, means for feeding said material to the rear end thereof, material-retaining walls along the side edges of the table for maintaining thereon a bed of materials of substantial depth, separating partitions disposed forwardly and outwardly along the table for guiding settled heavier material transversely in a plurality of streams, means for discharging said streams along a side edge of the table through openings in the retaining walls, and means for discharging flotant lighter material at the front end of the table and over one of the side walls near the front end of the table, and means for maintaining the discharging lighter material above and separated from the discharging streams of heavier material.

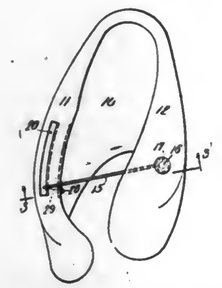
1,817,298. PROCESS AND MECHANISM FOR SEPARATING INTERMIXED DIVIDED MATERIALS. KENNETH DAVIS, Ebensburg, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 11, 1926, Serial No. 93,900. Renewed June 17, 1929. 59 Claims. (Cl. 209—467.)

1. The process of separating intermixed divided materials varying relatively greatly in size and relatively little in their specific gravities, such as unsized coal, which comprises acting on a bed of the intermixed materials of substantial depth, supported on an air-pervious table, by upwardly-directed air currents and mechanical vibration to loosen the materials and to stratify them by flotation of the lighter materials while permitting the heavier materials to settle upon the table, impelling the lighter, superior, stratified material, solely by intermittent mechanical impulses, directly forwardly in a laterally restrained stream straight throughout the length of said table to a place of discharge at the front of said table, and directing the settled heavier material by friction and inertia transversely of the forward movement of the flotant material and directly to a place of discharge at the side of the table.



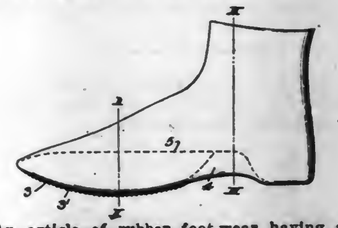
21. A mechanism for separating intermixed divided materials varying relatively greatly in size and relatively little in their specific gravities, such as unsized coal, including in combination an air-pervious table, means for maintaining thereon a bed of the intermixed materials of substantial depth, means for forcing lifting air currents upwardly through the bed to aid in loosening and stratifying the particles by floating the lighter materials while permitting the heavier materials to settle upon the table, devices for reciprocating the table longitudinally comprising the sole force for impelling the lighter, superior, stratified material directly forwardly throughout the length of said table to a place of discharge at the front of said table, means for laterally confining said forwardly-flowing flotant material, and means for directing the settled heavier material by friction and inertia transversely of the table and directly to a place of discharge at the side of the table.

1,817,299. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Dec. 21, 1929. Serial No. 415,841. 10 Claims. (Cl. 12—128.5.)



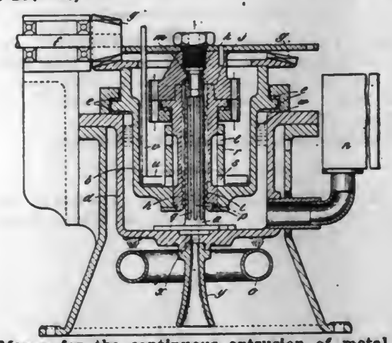
1. A shoe form comprising a hollow walled toe member having flanges at the lower edges of the walls, one of said flanges having a longitudinally extending slot therein, and movable means connecting said flanges and adapted, when moved, to determine the distance between the walls of the toe member, said means consisting of a cross-bar pivoted at one end to one flange and having at the other end an upright portion which passes through the slot in the other flange and is held against removal therefrom, and a pointed tip which projects below the slotted flange and is adapted to engage the insole of the shoe in which the form is placed.

1,817,300. RUBBER FOOTWEAR. ISTVÁN DOROGI and LAJOS DOROGI, Budapest, Hungary, assignors of one-half to Dr. Dorogi Es Tarsa Gummigyar R. T., Budapest-Alberfalva, Hungary, a Limited Company. Filed Jan. 28, 1929, Serial No. 335,682, and in Germany Nov. 12, 1928. 3 Claims. (Cl. 36—5.)



1. An article of rubber foot-wear having a relatively thick sole member, said article being vulcanized so that the sole member is normally bent along a longitudinal line intermediate the longitudinal edges thereof.

1,817,301. EXTRUSION OF METAL PIPES AND THE LIKE. PERCY DUNSHEATH, Sidcup, England, assignor to W. T. Henley's Telegraph Works Company Limited, London, England. Filed June 26, 1930, Serial No. 463,879, and in Great Britain July 1, 1929. 4 Claims. (Cl. 207—2.)



1. Means for the continuous extrusion of metal pipes and the like, comprising two relatively rotatable concentric members the inner one of which forms a point holder or core and the outer one of which forms a casing, one of said members being formed with a screw thread and the other with longitudinal ribs and/or grooves, means being provided for supplying molten lead or lead alloy to said screw thread by which it is extruded after solidification in the form of a tube or cable sheath, in which the screw thread on one member and the ribs and/or grooves on the other member die away toward the outlet end, the former dying away before the latter, in order to produce a smooth exterior and interior surface on the mass of metal without the formation of fissures and folds in the metal.

1,817,302. COMBINED COAT AND VEST. PHILIP H. EINBINDER, Denver, Colo. Filed Feb. 18, 1930. Serial No. 429,289. 2 Claims. (Cl. 2—95.)



1. A combined coat and vest comprising a coat formed with front flaps, relatively wide facings on and secured

along their forward margins to said front flaps, the rear margins of said facings being unsecured to said front flaps or coat, vest halves on and forming continuations of rear margins of said facings and a coat lining secured to margins of said vest halves and the otherwise free margins of said facings, said vest halves and the forward margins of said lining being entirely free of the body portion of said coat.

1,817,303. SLICING MACHINE. GOTTLIEB F. ESSIG, Philadelphia, Pa. Filed Nov. 21, 1930. Serial No. 497,169. 5 Claims. (Cl. 146—168.)



1. In a slicing machine, a frame, an article container slidably mounted therein for reciprocatory movement and having its bottom open, a pair of endless belts mounted in said frame over which said article container reciprocates, a fixed knife having cutting edges at opposite sides positioned between the juxtaposed ends of said belts, and means to effect the reciprocation of said article container.

1,817,304. FLAKED PHTHALIC ANHYDRIDE. HAROLD B. FOSTER, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 21, 1926. Serial No. 82,857. 1 Claim. (Cl. 260—123.)

As a new product, flaked phthalic anhydride.

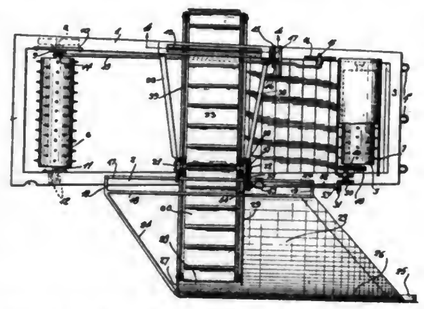
1,817,305. WINDOW DEFROSTER. THOMAS J. FRENCH, Minneapolis, Minn. Filed Jan. 6, 1930. Serial No. 418,840. 2 Claims. (Cl. 15—251.)



1. A window defroster comprising an open top rigid container, a flexible porous closure for the open top of the container, said container having in its bottom a groove-like seat for the blade of a window wiper, the bottom of said seat being below the open top of the container, means for securing the container to the holder for said blade, and a thawing agent in the container.

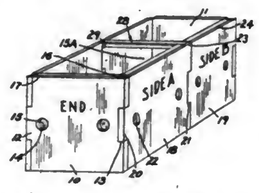
1,817,306. DITCH TRIMMER. JOSEPH D. GABRIEAU, Richland, Wash. Filed Aug. 15, 1929. Serial No. 386,160. 2 Claims. (Cl. 37—80.)

1. In a machine for cleaning the inclined side wall of a ditch, canal or the like, a machine frame adapted to travel along the bank of the ditch, ground traction rollers on the frame, a plow for the inclined side wall of the ditch angularly depending from the frame and cooperating endless conveyors, one disposed above the plow to be



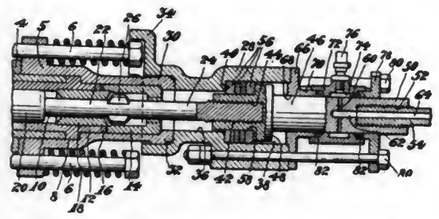
charged with material thereby and the other disposed above the frame to receive material from the lower conveyor for discharge laterally of the frame, and means operated from the front end of the frame for shifting one roller to effect steering of the frame.

1,817,307. EXTENSIBLE METER BOX. LEO G. HAASE and FRANK M. BROOKS, Pasadena, Calif., assignors to Art Concrete Works, Pasadena, Calif., a Corporation of California. Filed Jan. 2, 1930. Serial No. 418,105. 2 Claims. (Cl. 137—13.)



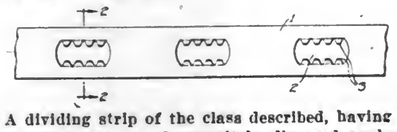
1. A meter box made up of sections providing end and side walls, one edge of each section having a tongue receivable in the wall of an adjacent section, fastening elements extending vertically through the sections and through the tongues connecting the sections together, said fastening elements having heads disposed in recesses in the top edges of the sections, and spreader means disposed between the side walls having portions resting in said recesses over the heads of the fastening elements disposed therein.

1,817,308. STEEL SUPPORT FOR ROCK DRILLS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 20, 1929. Serial No. 341,309. 9 Claims. (Cl. 121—10.)



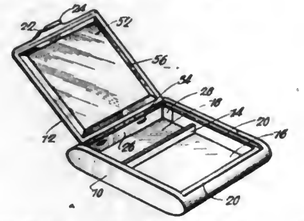
1. In a steel support for rock drills, the combination of a rock drill having a front head, a cap adapted to fit over the front head, a longitudinal cylindrical opening in the cap having a reduced portion and an enlarged portion, a shoulder between the reduced portion and the enlarged portion, thrust collars in the enlarged portion resting against the shoulder, a coupling adapted to seat against the thrust collars, a transverse bore in the coupling intersecting a central longitudinal bore, means for conveying water to the transverse bore, a plate forming a closure for the front end of the cap, and a second plate forming a closure for the front end of the water conveying means.

1,817,309. DIVIDING STRIP. ROBERT W. HARDIE, Fanwood, N. J. Filed Jan. 24, 1930. Serial No. 423,202. 3 Claims. (Cl. 94—17.)



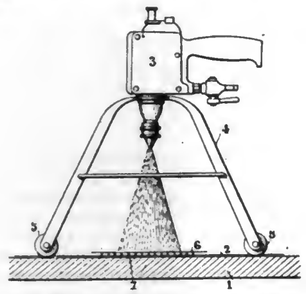
1. A dividing strip of the class described, having longitudinal outer edges, and oppositely disposed anchor segments pressed out from the body of the strip, and located respectively between the central longitudinal line and one of the longitudinal edges of the strip, with free ends inclined inwardly relative to the side of the strip and forming openings in the strip each of which extends above and below the central line thereof between oppositely disposed segments.

1,817,310. VANITY BOX OR CASE. WENDELL M. HAUCH, New York, N. Y. Filed Sept. 30, 1930. Serial No. 485,355. 10 Claims. (Cl. 206—37.)



1. A receptacle of the class described, comprising a composition receptacle body, a metallic cover therefor, recesses formed in the side walls of the said receptacle body, a hinge plate pivotally mounted on said cover, and wing extensions projecting from said hinge plate, and receivable in said recesses to secure the cover to the receptacle body.

1,817,311. METHOD AND MEANS FOR THE OBTAINMENT OF DECORATIVE EFFECTS UPON TEXTILE FABRICS BY BRILLIANT METALLIC DEPOSITS. MARIE CLAUDE ROGER HEDDE, Paris, France, assignor to the Firm; La Societe Dite: Societe Nouvelle de Metallisation, Paris, France. Filed Jan. 24, 1930, Serial No. 423,151, and in France June 19, 1929. 4 Claims. (Cl. 101—129.)



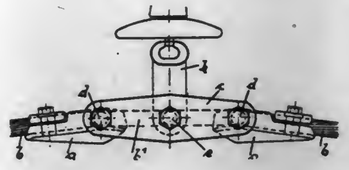
1. Method of obtaining decorative effects on textile fabrics by the application of brilliant metallic deposits, comprising melting the metal or alloy to be deposited, spraying said molten metal or alloy in finely divided droplets upon determined parts of the fabric's surface to be decorated and then subjecting the metallized parts of said surface to a calendering having a rubbing action on the same for the purpose, on the one hand, of maintaining the flexibility of the fabric without appreciable breach of continuity of the metallic deposits, and, on the other hand, of brightening the metal, thus affording a more brilliant decoration.

1,817,312. BUOY LIGHT. EARL W. HIMBERGER, Seattle, Wash., assignor to Pacific Marine Supply Company, Seattle, Wash., a Corporation of Washington. Filed Apr. 14, 1930. Serial No. 444,241. 8 Claims. (Cl. 9—83.)



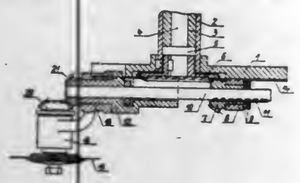
1. A buoy light comprising a light carrying member adapted to be clamped onto a buoy shaft, clamp means for said light carrying member consisting of two coacting clamp members pivotably secured to said carrying member and adapted to be secured in clamping relationship by a clamp bolt which passes through said clamp members; a watertight battery compartment also adapted to clamp onto a buoy shaft and a length of waterproof electric cable connecting said light carrying member and the battery compartment.

1,817,313. SUSPENDING DEVICE FOR CONDUCTING CABLES. JOHANNES WILHELM HOFMANN, Kotzschenbroda, near Dresden, Germany. Filed Dec. 20, 1929, Serial No. 415,450, and in Germany Feb. 26, 1929. 4 Claims. (Cl. 248—31.)



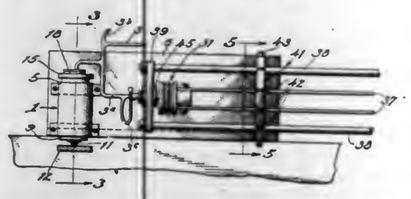
1. A suspending device for conducting cables comprising, a carrying member, carrying plates pivoted on the carrying member, and clamping devices pivoted in the carrying plates, the turning axis of the carrying plates in the carrying member and the turning axes of the clamping devices in said carrying plates lying practically in the middle line of the conducting cable.

1,817,314. PLANETARY GEARING FOR DRIVING THE SHAFT OF THE ROTARY CUTTER IN CIGARETTE ROD MAKING MACHINES. MAX PAUL ERNST HOHN, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinenfabrik J. C. Muller & Co., Dresden, Germany. Filed Aug. 27, 1929, Serial No. 388,747, and in Germany Apr. 18, 1929. 6 Claims. (Cl. 131—37.)



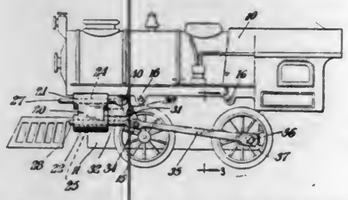
1. A planetary gearing for the rotary cutter of a cigarette making machine, comprising in combination with the cutter shaft, a rotary disk-like support for said shaft arranged and revolving in a plane perpendicular to said shaft, an independently driven intermediate shaft mounted on said support and extending parallel to the plane of the latter and means for transmitting rotation from said intermediate shaft to said cutter shaft.

1,817,315. MEANS FOR TRANSMISSION OF FORCE BY LIQUID PRESSURE. ROBERT T. KNAPP, Riverside, Calif., assignor to Riverside Cement Company, Los Angeles, Calif., a Corporation of Delaware. Original application filed June 11, 1928, Serial No. 284,316. Divided and this application filed Sept. 14, 1929. Serial No. 392,667. 8 Claims. (Cl. 265—47.)



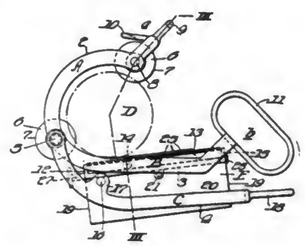
1. An apparatus for transmission of force by liquid pressure comprising means confining a body of liquid, means operable by mechanical force to vary the pressure in said body of liquid, pressure responsive means operable by the pressure in said body of liquid and temperature responsive means connected to said liquid confining means and operable to automatically vary the volume thereof, upon variation in temperature, the variation in volume being such as to prevent substantial variation in pressure in the body of liquid by reason of such variation in temperature.

1,817,316. TOY VEHICLE. JOHN C. KOERBER, South Orange, N. J. Filed June 11, 1929. Serial No. 370,057. 4 Claims. (Cl. 105—26.)



1. A toy locomotive having driving wheels and visible movable means simulating in form and appearance the driving gear of a large locomotive and comprising steam casings and a plurality of separately reciprocating members at each side of said locomotive and a connection between said wheels and said means for moving said means.

1,817,317. GOLF BALL MARKER. JOSEPH E. MCGINNESS, Pittsburgh, Pa. Filed Aug. 27, 1930. Serial No. 478,042. 13 Claims. (Cl. 101—39.)

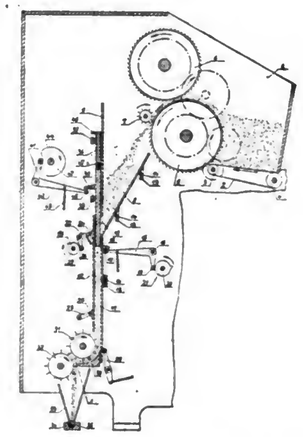


1. A golf ball marker comprising three pivotally connected swinging arm members, one having a ball engaging roller, and a marker slidably mounted in another of the arm members and pivotally connected with the third.

1,817,318. PROCESS OF MANUFACTURING ACETIC ANHYDRIDE. RUDOLF MEINGAST and MARTIN MUGDAN, Munich, Germany, assignors to Consortium fuer Elektrochemische Industrie, Munich, Germany. Filed June 2, 1927, Serial No. 196,136, and in Germany June 16, 1926. 5 Claims. (Cl. 260—123.)

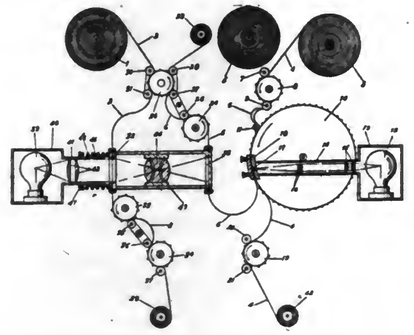
1. Process for preparation of acetic anhydride comprising heating acetic acid vapor to 400–800° C. on heat conducting surfaces composed of an alloy of chromium which does not decompose acetic acid at that temperature.

1,817,319. TOBACCO SPREADER FOR CIGARETTE MACHINES. CARL WILHELM MÜLLER, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Sept. 7, 1929, Serial No. 391,061, and in Germany Oct. 1, 1928. 10 Claims. (Cl. 131—39.)



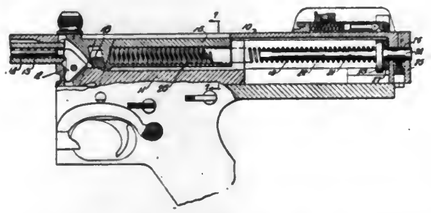
1. A tobacco spreader for cigarette machines comprising substantially parallel walls spaced apart and presenting between them a channel, means for distributing the tobacco on its way to enter said channel, means effecting movement of the tobacco along said channel, means for effecting continuous uniform withdrawal of tobacco from the delivery end of said channel, and movable elements disposed alongside one another responsive to the density of said tobacco for acting on the latter in said channel to compact uniformly the same passing through said channel.

1,817,320. MOTION PICTURE PRINTING APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 26, 1929. Serial No. 409,864. 1 Claim. (Cl. 88—24.)



A photographic printing apparatus, comprising in combination, a pair of light projecting systems having their longitudinal axes in substantial alignment, means for conducting a positive film and a film bearing a negative photographic record in contact with each other across the path of projection of one of said systems in one direction thereby to transfer the record carried by said negative to a portion of the width of said positive film, means for conducting the positive film away from said negative and across the path of projection of the other system in the opposite direction, and means for conducting a second film bearing a negative photographic record across said last path of projection between said positive film and the light source of the system thereby to transfer the record carried by said negative to a portion of said positive in contiguous relation to the record first transferred thereto.

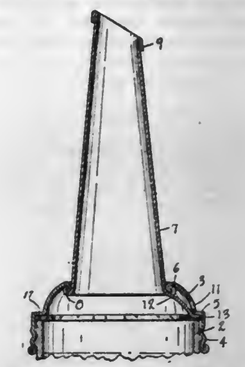
1,817,321. FIREARM. OSCAR V. PAYNE, Worcester, Mass., assignor to Auto-Ordnance Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 24, 1929. Serial No. 402,170. 14 Claims. (Cl. 42—3.)



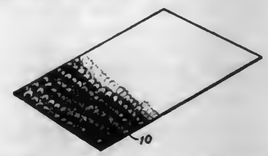
1. In a firearm of the class described, the combination of a bolt and an actuator, the actuator weighing at least approximately one fourth of the total weight of the actuator and the bolt.

1,817,322. DISPENSING CAN. BERT O. RHODES, Kalamazoo, Mich. Filed June 17, 1929. Serial No. 371,646. 9 Claims. (Cl. 221—28.)

1. A dispensing can comprising a receptacle, a cap therefor provided with a downwardly facing gasket seat and having a spout opening provided with an inturned seam flange and a vent located between said gasket seat and spout opening, a gasket arranged in said gasket seat to coact with the end of the neck, and a tapered spout having an upturned seam flange at its lower end interlocking with said inturned seam flange of said cap, said spout having a tongue-like baffle depending from its lower end disposed between said gasket seat and gasket.



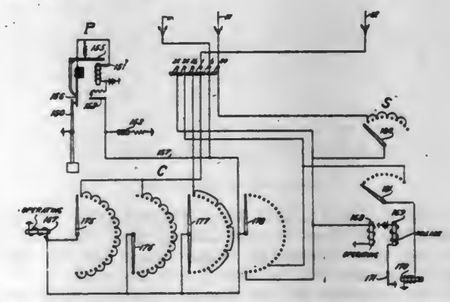
1,817,323. PROCESS OF MAKING RUBBERIZED SHEET MATERIALS AND PRODUCTS. HAROLD D. RICE, Bristol R. I., assignor to Woonsocket Rubber Company, Millville, Mass., a Corporation of Rhode Island. Filed Mar. 22, 1929. Serial No. 349,071. 12 Claims. (Cl. 91—68.)



1. A method of making a leather substitute which comprises impregnating a bat of fibrous sheet material with rubber, applying a coating of rubber to the sheet, superficially treating the coating by halogenation, embossing, vulcanizing, and finally halogenating the finished surface.

10. A leather substitute comprising a vulcanized rubber impregnated backing of compacted fibres impregnated with solids deposited from an aqueous rubber dispersion, and a coating of vulcanized rubber having a surfacing of hardened material containing combined bromine.

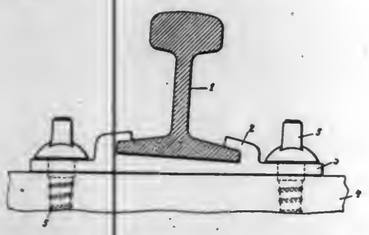
1,817,324. TRAFFIC RECORDER FOR TELEPHONE SYSTEMS. MICHAEL SCHWARTZ, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Original application filed July 12, 1922, Serial No. 574,494. Patent No. 1,668,541, dated May 1, 1928. Divided and this application filed Apr. 2, 1925. Serial No. 20,044. 13 Claims. (Cl. 161—19.)



1. In combination, an impulse conductor, a battery, a rotary switch having a plurality of wipers connected

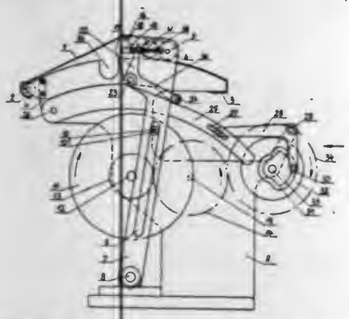
to said conductor, a set of bank contacts accessible to each wiper, means for connecting said conductor to said battery periodically, a plurality of terminals, means controlled over said impulse conductor for operating said switch, and circuit connections between said bank contacts and terminals whereby each of said terminals is connected to battery at different periodic intervals.

1,817,325. COMBINATION TIE-PLATE OR IRON TIE AND ANTICREEPER FOR RAILS. DEZSÖ SINKOVICH, Budapest, Hungary. Filed Jan. 31, 1930, Serial No. 424,870, and in Hungary Feb. 6, 1929. 1 Claim. (Cl. 238—304.)



The herein described method of securing a flanged rail to a metal support having two oppositely positioned normally upright lugs spaced apart a less distance than the width of said flange, consisting in heating said support forcing the rail flange in a straight line between said lugs with the opposed lateral outer faces of said flange in engagement with the opposed inner lateral faces of said lugs and while said lugs are still hot, turning their ends over the adjacent upper faces of said flange.

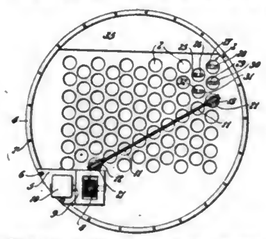
1,817,326. APPARATUS FOR FORMING CIGAR BUNCHES. FRANZ HEINRICH BENNO STELZER, Dresden, Germany, assignor to The Firm Johann Carl Muller, Dresden, Germany. Filed Mar. 29, 1928, Serial No. 265,705, and in Germany Mar. 28, 1927. 12 Claims. (Cl. 131—42.)



1. Means for bunching cigars including in combination with a table a bunching apron and a bunching roller serving to move said bunching apron over said table, forming members, a support for said forming members and means for actuating said support whereby to form the tip and head on one bunch at one end and the tip and head at the reverse end on the succeeding bunch.

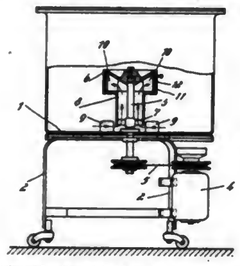
1,817,327. APPARATUS FOR INSTALLING SUPERHEATER TUBES IN BOILER FLUES. WILLIAM N. TATRO, West Springfield, Mass. Filed Oct. 13, 1930. Serial No. 488,198. 8 Claims. (Cl. 29—81.)

1. An apparatus for the purpose described, comprising in combination, a motor, a windlass operated by the motor, a cable attached to the windlass, a means insertable in the tubes of a boiler, sheave wheels attachable to the said means and over which the cable passes, a holder member to which the cable is attached whereby,



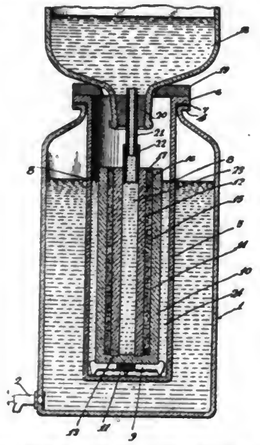
when a superheater unit is placed on the holder, the tubes of the same may be inserted in some of the tubes of the boiler.

1,817,328. CENTRIFUGAL LIQUID SPRAYER. WILHELM WEIMERS, Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Mar. 21, 1929, Serial No. 348,866, and in Germany Mar. 28, 1928. 6 Claims. (Cl. 299—63.)



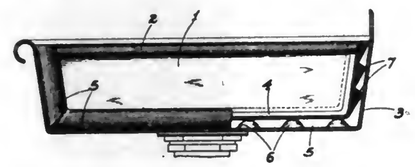
2. A centrifugal liquid sprayer comprising a rotary upright shaft, said shaft being privided with radial vanes, a housing mounted on said shaft and enclosing said radial vanes, said housing being provided with peripheral discharge outlets, means for conveying liquid to said housing, and a shutter for the peripheral wall of said housing for more or less closing said discharge outlets.

1,817,329. RADIUM EMANATION JAR. JOHN C. WICHMANN, Los Angeles, Calif. Filed Mar. 22, 1926. Serial No. 96,639. 2 Claims. (Cl. 167—51).



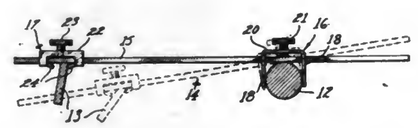
1. A radium emanation jar comprising in combination a water receptacle having a neck, an outer porous tubular jar having a closed base suspended from the neck, means forming a gas tight seal between the jar and neck of the receptacle, a tubular porous inner cell having a closed base, said cell being supported on the base of the jar, an inner porous tube resting on the base of the inner cell, a layer of crushed radio-active material between the inner cell and the porous tube, and means to supply water to the interior of the porous tube, the said jar, inner cell and tube having radio active material embedded therein.

1,817,330. DUPLEX SINK PARTITION. JAY F. WILSON, Jr., Jackson, Calif. Filed Jan. 28, 1931. Serial No. 511,722. 3 Claims. (Cl. 4—183.)



2. A partition for removable insertion into a sink or like device comprising a rigid partition element to fit into the sink in clearance relation to the side and bottom walls thereof, means on the partition and projecting outwardly from the bottom edge of the same for releasable holding engagement with the adjacent surface of the sink, and transversely separated skirts of flexible waterproof material projecting outwardly from and extending all around the side and bottom edges of the partition to engage the sink; the holding means being disposed between the skirts.

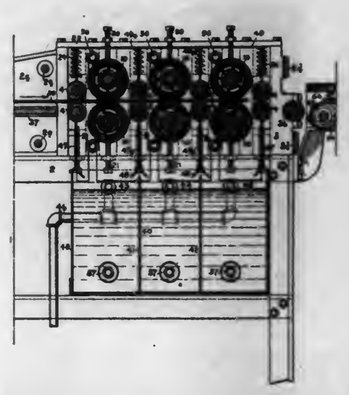
1,817,331. LAWN MOWER SHARPENER. BINGHAM T. WILSON, Covina, Calif. Filed Mar. 19, 1928. Serial No. 262,731. 5 Claims. (Cl. 76—82.1.)



1. A sharpening device for lawn mowers comprising the combination of: a sharpening element; a guide member adjustably mounted on said sharpening element and adapted to slidably engage the axle of a lawn mower; and a blade guide mounted on said sharpening element oppositely to said first mentioned guide member.

1,817,332. GLASS WASHING MACHINE. ARTHUR G. WORRALL, Philadelphia, Pa., assignor to Louis J. Kolb, trading as Safetee Glass Company, Philadelphia, Pa. Filed June 27, 1928. Serial No. 288,581. 4 Claims. (Cl. 15—77.)

1. A machine for washing glass and articles in sheet form, comprising a plurality of pairs of feed rolls of yielding material between which the glass may be successively fed forward while being subjected to the yielding pressure of said rolls, a pair of brushes arranged between each two adjacent pairs of feed rolls one of said brushes of each pair operating upon one surface of the glass and the other operating upon the other surface of the glass, means for feeding jets of separate bodies of fluid to the respective pairs of brushes, means for rotating the feed rolls at a low surface speed, means for rotating the brushes at a relatively high speed, means for recirculating the separate bodies of fluid to their respective brushes and glass sheet, a supporting frame for the brushes and fluid feeding means, and wherein further, the respective pairs of brushes are arranged in separate compartments and the means for supplying heated fluid to the brushes are arranged to discharge into the respective compart-

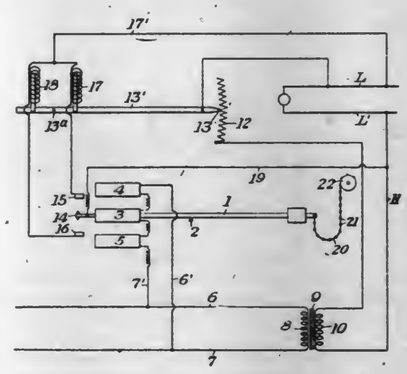


ments for said pairs of brushes, and means for heating the fluid are provided to insure the fluids of each compartment being maintained at different temperatures whereby the glass is successively treated to fluids of increasing temperature.

1,817,333. METHOD OF PREPARING LUMINESCENT TUBES. FREDERICK W. ZONS, New York, N. Y., assignor to American Neon Light Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 13, 1929. Serial No. 339,735. 9 Claims. (Cl. 176—122.)

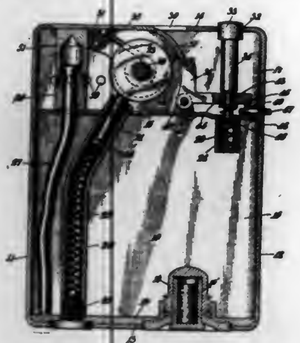
1. In a luminescent tube, an electrode having a coating of an oxygen compound of the alkaline earth metals which delivers oxygen when heated.

1,817,334. VOLTAGE CONTROL SYSTEM. ARTHUR N. ANDERSON, Crafton, Pa. Filed Sept. 2, 1927. Serial No. 217,284. 3 Claims. (Cl. 171—119.)



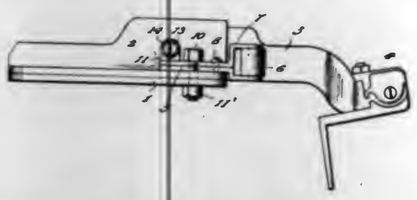
1. A voltage regulating system including input and output circuits, a Kelvin balance in the output circuit, a rheostat in the input circuit, and means responsive to a movement of the balance for varying the rheostat, said balance having a beam, a flexible counterbalance for the beam, and means for adjustably varying the flexible counterbalance.

1,817,335. LIGHTER CONSTRUCTION. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Dec. 27, 1928. Serial No. 328,700. 5 Claims. (Cl. 67—7.1.)



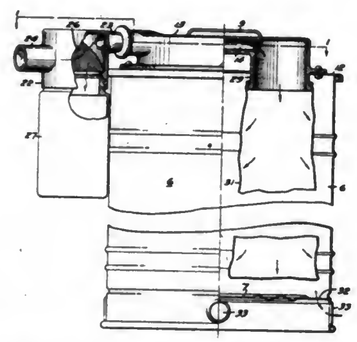
1. A lighter comprising a casing having a bottom wall and a top wall, side and end walls extending therebetween, said top wall having first and second openings, a dividing wall spaced from said bottom wall to form a fuel reservoir therebetween, a wick holder carried by said dividing wall, a wick in said holder extending into said reservoir, sparking material above said dividing wall, a carrying member disposed in said first opening and having a top wall substantially coextensive with said casing top wall and depending side walls sliding within said casing side walls, a spark wheel between the side walls of said carrying member and secured thereto, pivot means connecting the side walls of said casing and of said carrying member, said wheel being disposed against said material, spring means normally urging said carrying member upwardly, said carrying member having a depending abutment, a bell crank catch pivoted in said casing with one end under said abutment, a plunger in said second opening, means to operate said catch by pressing said plunger, spring means normally urging said catch and plunger to their initial positions, a safety member projecting from said casing, and means to prevent accidental operation of said plunger by said safety member.

1,817,336. LOOM TEMPLE. WILLIAM H. BAHAN, Greenville, S. C. Filed Nov. 13, 1929. Serial No. 406,926. 1 Claim. (Cl. 139—301.)



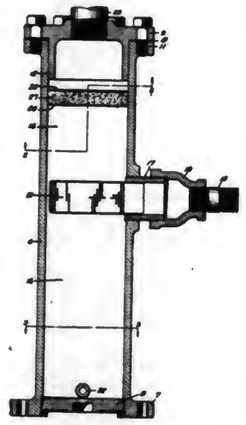
A wear take up and lost motion adjuster for loom temples consisting of a lever comprising juxtaposed complemental members having corresponding ends extending outwardly in opposite directions, thence longitudinally in parallel relation and again laterally in the same direction, and having a lug adjacent the opposite end and side of a member and accommodated in a cut away portion of the companion member, said lug having a threaded opening to receive an adjusting screw, both members having registering openings, the one receiving a fastening to connect the members and the other adapted to receive a pivot upon which the lever is mounted, and a roller mounted between the spaced terminals of the members to engage a side of the temple shank.

1,817,337. VACUUM CLEANER. DEXTER C. BAKER, Oakland, Calif., assignor to Baker-Hansen Manufacturing Co., Alameda, Calif., a Corporation of California. Filed Oct. 9, 1926. Serial No. 140,483. 2 Claims. (Cl. 183—51.)



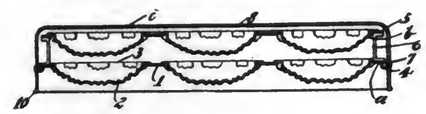
1. A vacuum cleaner comprising a container, a cover hinged to said container, a body secured to said cover and including an air induction mechanism having an induction passage, a dust bag extending into said container and secured to said body at one end of said passage, and a trap for large particles of inducted matter secured to said body at the other end of said passage.

1,817,338. SEPARATOR. DEXTER C. BAKER, Oakland, Calif., assignor to Baker-Hansen Manufacturing Co., Alameda, Calif., a Corporation of California. Filed Jan. 26, 1927. Serial No. 163,588. 2 Claims. (Cl. 183—67.)



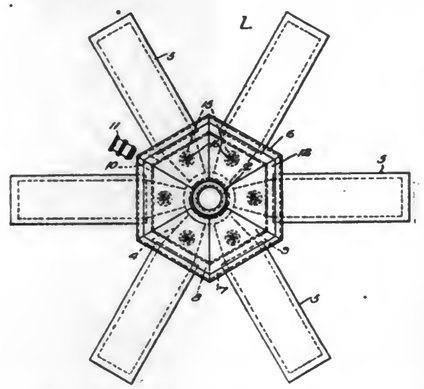
1. A separator comprising a housing having an inlet aperture in the side thereof, said aperture being at a material distance from the end of said housing, a screen disposed in said housing and in communication with said inlet aperture; said screen having a closed end which serves as a baffle, an inlet pipe in communication with said inlet aperture for admitting fluid to said housing at a predetermined velocity, a reducer between said inlet aperture and said inlet pipe for decreasing said velocity, an outlet aperture in an end of said housing, and a filter disposed in said housing intermediate said screen and said outlet aperture.

1,817,339. MOLD. MARIE B. BARNES, Los Angeles, Calif. Filed June 25, 1928. Serial No. 288,117. 2 Claims. (Cl. 62—108.5.)



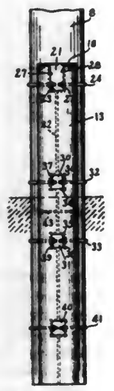
1. As a new article of manufacture, a plate provided with skirting along its marginal edge, a plurality of mold portions in said plate, said mold portions simulating animal life, and a cover adapted to enclose said mold portions.

1,817,340. CASTING APPARATUS. THOMAS B. BARR, Hyde, Pa. Filed Aug. 3, 1929. Serial No. 383,294. 6 Claims. (Cl. 22—147.)



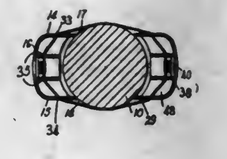
1. Casting apparatus comprising a plurality of molds, a chambered hot top therefor, a distributing pot within the hot top, and runners connecting the pot and molds.

1,817,341. POLE REENFORCEMENT. ELDRIDGE M. BEECHER, New Britain, Conn. Filed Aug. 22, 1927. Serial No. 214,681. 11 Claims. (Cl. 20—100.)



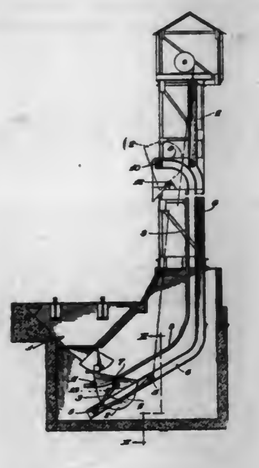
11. A reenforcement member for a pole, said member being generally hollow and having longitudinally directed side walls, the edges of which may be applied to a pole, said member having a generally convex transverse section and a substantially smooth uninterrupted outer surface and clamping means adapted to pass around the pole and into an interior part of the member and said member being provided with openings through which the ends of the clamping means may be reached from the exterior of the member.

1,817,342. POLE REENFORCEMENT. ELDRIDGE M. BEECHER, New Britain, Conn. Filed Oct. 3, 1929. Serial No. 397,020. 14 Claims. (Cl. 20—100.)



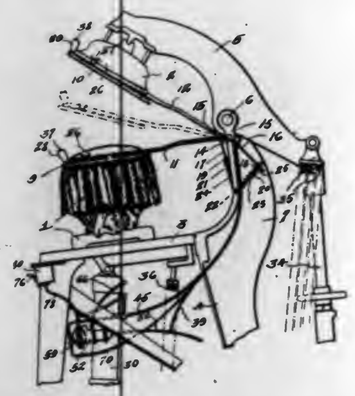
1. In a pole reenforcement, a hollow member adapted to be set into the ground alongside the pole, a strap-like member embracing the pole and extending into the interior of the hollow member, and means carried in the interior of said hollow member and bearing against the strap at one side thereof for placing said strap under tension to clamp the hollow member to the pole.

1,817,343. MATERIAL HANDLING PLANT. CARL F. BLEDSOE, Chicago, Ill., assignor to Ogle Construction Company, Chicago, Ill., a Corporation of Illinois. Filed June 21, 1929. Serial No. 372,627. 4 Claims. (Cl. 214—120.)



1. In a material handling plant, two pair of adjacent guide ways having lower inclined portions, one pair of said guideways terminating at its upper end in outwardly curved portions extending in the same general direction as the lower inclined portions, a bucket having rollers traveling in the guideways having the curved terminals, a bail having rollers traveling in the other guideways, links connecting said bail and bucket, rollers on the forward part of said bucket and means for guiding said last mentioned rollers.

1,817,344. PRESSING MACHINE (WORK HOLDING MEANS). PHILIP N. BRAUN, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 9, 1928. Serial No. 268,450. 9 Claims. (Cl. 68—9.)



1. A pressing machine comprising a buck, a head movable toward and from the buck, means for actuating the head, work holding means movable into engagement with the work on the buck and means for controlling the operation of the actuating means including a manual carried by the work holding means.

1,817,345. PROCESS FOR CASE CARBURIZING AND HEAT TREATING METALS. PAUL V. BROWER, Kenmore, N. Y., assignor to Carbide & Carbon Chemicals Corporation, a Corporation of New Yrok. Filed July 19, 1927. Serial No. 206,830. 9 Claims. (Cl. 148—17.)

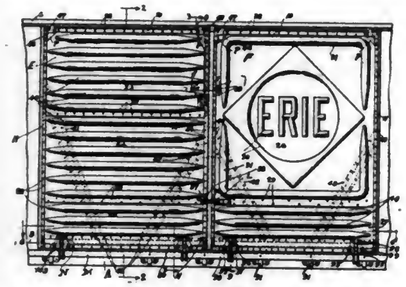
7. Process which comprises heating a metal article and applying to such article a mixture of carbon dioxide and a hydrocarbon gas composed principally of at least one of the following gases; propane, propylene, butane, butylene, iso-butane.

1,817,346. CAR DOOR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 21, 1928. Serial No. 271,727. 4 Claims. (Cl. 189—46.)



2. In a door of the character described, the combination with a marginal framework having upper and lower horizontal members and vertical side members, all of appreciable depth; of metallic covering for said door, extending across said frame in the outer plane thereof, said covering being provided with a series of rigidifying embossments extending across the door and terminating short of the vertical members; and independent reinforcing means on the inner side of the door and confined within the depth thereof, said reinforcing means lying across the rigidifying embossments and having portions extended beyond the ends of said embossments and secured to the vertical marginal members whereby said reinforcing means operate to bridge as beams the intervening space between the ends of the embossments and the respective vertical marginal members.

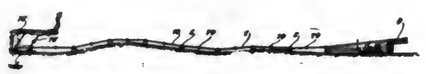
1,817,347. CAR DOOR. ARGYLE CAMPBELL, Chicago, and GEORGE B. WILLARD, Western Springs, Ill., assignors to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 20, 1928. Serial No. 300,862. 25 Claims. (Cl. 189—46.)



23. A car door having a tubular formation along its lower edge; a roller and an axle for said roller, said roller projecting into said tubular formation and said axle being supported beneath the tubular formation.

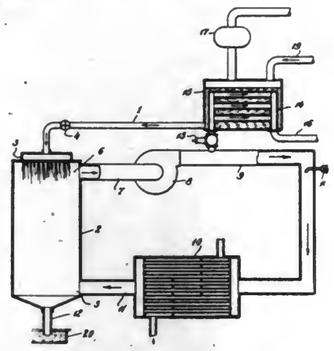
25. In a railway car, the combination of an auxiliary door disposed on the outer side of the car, said door having a main body portion and a reinforcing element at the forward edge of the door, said element having a projecting flange portion adapted to extend in overlapping relation outwardly of a companion sliding door, said element having a web section extending transversely inwardly of the car beyond the inner face of the main body portion and provided with a wall section extending at right angles to said web portion, said last named wall section being spaced lengthwise of the door and on the side of the web opposite to the overlapping flange section; a nailing strip carried by said inwardly spaced wall section; and door anchoring means disposed within the space defined by the main body of the door, the transversely extending web section and nailing strip carrying wall section.

1,817,348. CONVEYER. CLARENCE R. CLAGHORN, Baltimore, Md. Filed Sept. 23, 1929. Serial No. 394,439. 10 Claims. (Cl. 198—203.)



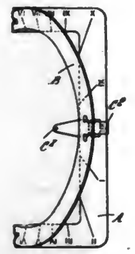
3. In a flexible and extensible conveyer adapted to rest upon and conform to the surface of the ground, a driving and delivery end supporting structure, a receiving end supporting structure, an independent intermediate belt support, a plurality of conveyer rolls in each of said supporting structures and a conveyer roll in said intermediate belt support, a flexible continuous conveyer belt passing over said rolls, and means to anchor said supporting structures to hold them in a predetermined extended linear position.

1,817,349. METHOD OF EVAPORATING AND CONCENTRATING SOLUTIONS. CYRIL B. CLARK, Scarsdale, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1927. Serial No. 166,038. 15 Claims. (Cl. 23—123.)



1. In the process of concentrating a solution of an inorganic salt wherein said solution is concentrated until it has a relatively small temperature range between its freezing and boiling points, that improvement which consists in directly contacting the solution with a heated atmosphere unsaturated with vapor of the solution but having a wet-bulb temperature with respect thereto above the freezing point of said solution.

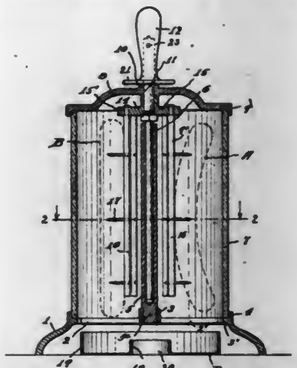
1,817,350. ORIENTATOR OR ARCHITECT'S SOLAR DIAL. ARUNDEL SPENCER CLAY, London, England, assignor to Cooke, Troughton & Simms Limited, York, England, a British Company. Filed Sept. 29, 1930, Serial No. 485,269, and in Great Britain Sept. 3, 1929. 8 Claims. (Cl. 33—62.)



1. An orientator or architect's solar dial comprising a base plate representing a horizon, a second member, representing the plane of the path of the sun, extending upward from and at an inclination to the base plate and which is provided with hour graduations to represent the position of the sun at different times during the day, and a third member pivotally connected to the base plate and movable over the said inclined member, the pivotal point of said third member representing the observer's position on an architectural plan upon which the instrument is placed when in use for the purposes specified.

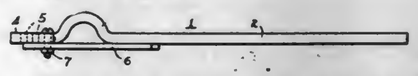
1,817,351. COOKING DEVICE. CLARENCE F. COOKSON, Lyndhurst, N. J., assignor to Counter Cooking Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,210. 6 Claims. (Cl. 53—5.)

1. In a cooking device a cylindrical casing, a rotatably mounted member, pivotally connected to said casing coaxially therewith, one or more holders for spits, connected to said member, one or more series of spits, secured to said holders, to be rotated therewith and said member around the axis of said casing, a centrally disposed opening at the bottom of said casing, for the ingress of heat



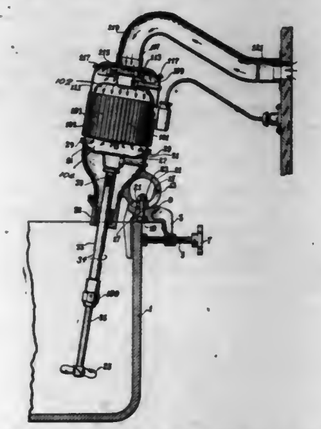
therethrough to said spits, and an annular drip pan, having therein a centrally disposed passage positioned under said opening, for catching the drippings from food on said spits, and said passage to permit the ingress of heat therethrough and through said opening to said spits.

1,817,352. SPANNER WRENCH. JOSEPH C. CORDELL, Glenshaw, Pa. Filed Oct. 19, 1929. Serial No. 400,892. 5 Claims. (Cl. 81—90.)



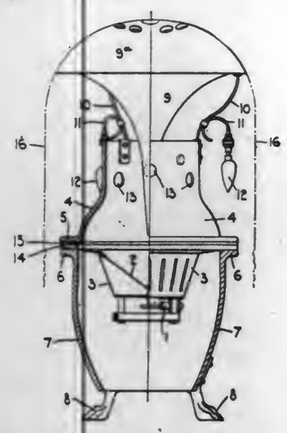
1. A spanner wrench comprising a lever having a curved portion in one plane and adapted to fit only partially around an axle and pivot thereon and a movably mounted bar adapted to be manually actuated to either side of said plane to serve as an engaging lug.

1,817,353. SAFETY MIXER. FREDERICK L. CRADDOCK, New York, N. Y., assignor to Mixing Equipment Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Aug. 28, 1929. Serial No. 388,928. 8 Claims. (Cl. 259—103.)



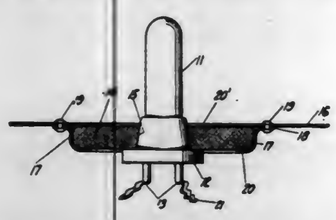
1. A mixer including an electric motor, a mixing shaft provided with a mixing member and a fan actuated by the motor said fan being so arranged as to blow emanations from the mix away from the motor.

1,817,354. WIRELESS LOUD SPEAKER AND THE LIKE. GABRIEL GONZALEZ DE ANDIA-YRARRÁZAVAL, London, England. Filed Apr. 16, 1929, Serial No. 355,564, and in Great Britain Apr. 17, 1928. 4 Claims. (Cl. 181—27.)



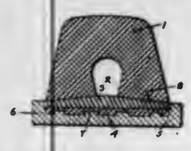
1. A loud speaker, comprising a casing, a loud speaker unit inclosed therein, a converging sound tube having its larger end secured to the top of the casing and having a sound outlet at its upper part, and a hollow sound-distributing cone supported over the upper end of the sound tube with its smaller end portion projecting downwardly into it.

1,817,355. VACUUM TUBE MOUNTING. HAROLD F. ELLIOTT, Palo Alto, Calif., assignor, by direct and mesne assignments, to Victor Talking Machine Company, Camden, N. J., a Corporation of New Jersey. Filed May 24, 1926. Serial No. 111,296. 5 Claims. (Cl. 248—30.)



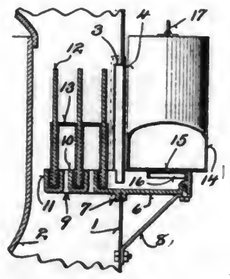
4. In combination, a vacuum tube and socket assembly having an exterior surface concentric with the axis of said assembly, a soft resilient member having a large aperture adapted to engage around said exterior surface and to grip it frictionally, and means for supporting said member.

1,817,356. HOLLOW CUSHION TIRE. GEORGE F. FISHER, Quincy, Mass., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Original application filed July 10, 1922, Serial No. 573,868, now Patent No. 1,613,697. Divided and this application filed Oct. 7, 1926. Serial No. 139,985. 1 Claim. (Cl. 152—1.)



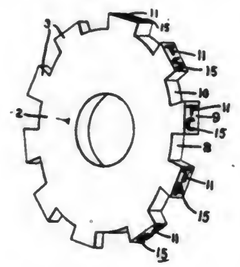
A unitary cushion tire comprising and arranged in radially outward succession, a metallic base, a layer of hard rubber composition, a layer of softer rubber composition having sloping outer surfaces meeting at substantially the center thereof, and a tread layer of rubber composition softer than the second mentioned layer and having sloping inner surfaces for engaging the sloping surfaces of the second mentioned layer and centering the tread layer, there being an inwardly open annular air pocket in the tread layer closed by the second mentioned layer.

1,817,357. HUMIDIFIER. JAMES B. FISHER, Waukesha, Wis. Filed Apr. 25, 1928. Serial No. 272,658. 2 Claims. (Cl. 261—104.)



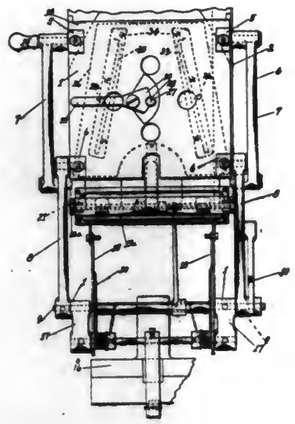
1. A humidifier comprising an evaporating pan having a plurality of openings, upturned flanges surrounding said openings, a marginal flange surrounding the edges of the pan, said flanges forming a plurality of communicating troughs for receiving water, a reversely folded absorbent strip providing a plurality of channels fitting within the troughs, with their intervening upper portions disposed between the channels to form air deflectors, a plurality of upstanding plates fitting within the folded channell portions of the strip and a reservoir closed except for its lowest portion and provided with an opening leading into said pan for supplying the troughs with water.

1,817,358. MARKING MACHINE. HARRY R. FLETCHER, Belmont, Mass., assignor to Markem Machine Company, Keene, N. H., a Corporation of New Hampshire. Filed Aug. 27, 1929. Serial No. 388,781. 4 Claims. (Cl. 101—110.)



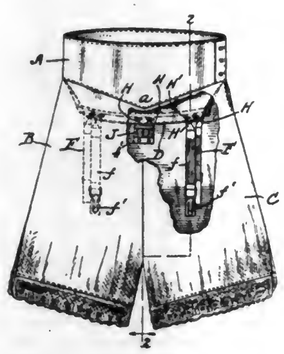
1. A marking machine comprising a platen and a printing head having a plurality of axially aligned independently adjustable type wheels, each of which has a plurality of type carrying faces adapted to be brought individually into printing position, and certain of said type wheels having type characters arranged to make a printed impression on the same line and other type wheels having type characters arranged to make a printed impression on a line separate from that made by the first-named type wheels, both lines being parallel to the axis of the type wheels.

1,817,359. MACHINE FOR MARKING, ORNAMENTING AND CEMENTING SHOES. BENJAMIN W. FREEMAN, Cincinnati, Ohio, WILLIAM S. HERSCHEL, St. Louis, Mo., and HERBERT E. PATTERSON, Columbus, Ohio, assignors to The Louis G. Freeman Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 28, 1927. Serial No. 202,107. 23 Claims. (Cl. 216—9.)



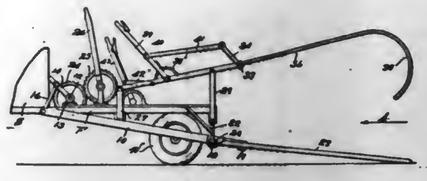
1. In a machine of the class described having members relatively movable, one with relation to another, means for supporting work to be operated on detachably mounted on one of the members, and dies with means for applying thereto material to be impressed on the work, detachably mounted on one of the members having a relative movement with relation to the first noted member, and means associated with said work support for holding down work after said work has been operated on.

1,817,360. NETHER GARMENT. ANNETTE FRIDOLPH, New York, N. Y., assignor to A. B. A. Specialties Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 6, 1928. Serial No. 297,714. 6 Claims. (Cl. 2—224.)



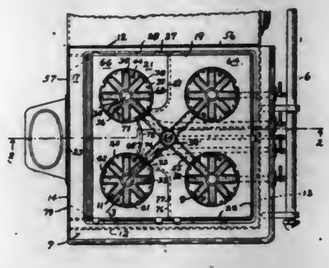
1. A combination garment adapted to be supported from and have a confining influence on the hips of the wearer, comprising a waist band, pant leg portions connected with the waist band adjacent the bottom thereof, and a flap connected with the waist band and depending interiorly of the pant leg portions for a substantial distance and extending at the front from side to side and provided adjacent the lower corners with spaced means for the attachment of supporters, said flap being of substantial dimensions so as to subject a substantial area of the body to a flattening or confining influence when in use.

1,817,361. BRUSH RAKE. DAVIS R. GARRETSON, Whittier, Calif. Filed Jan. 5, 1928. Serial No. 244,616. 9 Claims. (Cl. 56—395.)



1. A brush rake comprising a wheeled vehicle, a plurality of approximately horisontal bars adapted to be thrust into a pile of brush, and a plurality of hold-down bars arranged above said bars, and separate means for moving said hold-down bars toward the first mentioned bars to hold brush thereon, said hold-down bars having their ends curved in a hook-shaped manner.

1,817,362. GAS STOVE. FREDERICK A. GERCICH, Oakland, Calif., assignor to Hammer-Bray Company, Oakland, Calif., a Corporation of California. Filed Apr. 26, 1927. Serial No. 186,610. 7 Claims. (Cl. 126—39.)

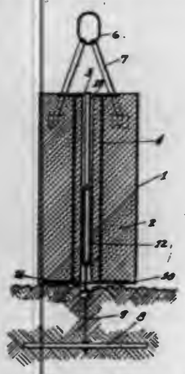


1. In a stove having a top-gas-burner compartment defined beneath a closed cooking top, a burner in said compartment, a member supported from said cooking top and disposed above the level of said burner to divide said compartment into upper and lower chambers and provided with a perforation arranged to overlie said burner, a conduit member secured to said burner and supporting the burner therebeneath, removably mounted in said perforation and provided with a conduit extending upwardly therefrom whereby the air flowing upwardly through said perforation will be directed entirely into the combustion space immediately above said burner.

1,817,363. METHOD OF TREATING UNVULCANIZED RUBBER SURFACES. WILLIS A. GIBBONS, Great Neck, N. Y., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Oct. 14, 1927. Serial No. 226,260. 7 Claims. (Cl. 18—53.)

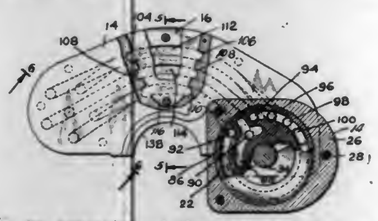
1. Method of reducing the tackiness of unvulcanized rubber surfaces which comprises treating the rubber surface with a tackiness-reducing compound which is decomposable at vulcanizing temperatures into portions at least one of which is volatile said tackiness reducing compound being capable of leaving substantially no deposit on the surface of the rubber at the termination of vulcanization.

1,817,364. TACKLING AND BLOCKING DUMMY FOR FOOTBALL PRACTICE. HUGO GOLDSMITH, Cincinnati, Ohio, assignor to The P. Goldsmith Sons Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 18, 1928. Serial No. 306,639. 4 Claims. (Cl. 273—55.)



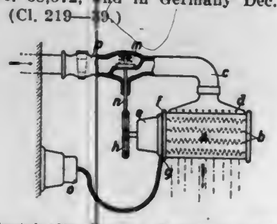
1. A football tackling and blocking dummy comprising a stuffed cylindrical casing having a rigid tubular reinforcement extending through said casing, a flexible member extending through said tubular reinforcement having means for attachment to an anchor, and a resilient member connected to said flexible member.

1,817,365. PNEUMATIC GEAR SHIFT CONTROL. HARRY T. GOSS, Rutherford, N. J., assignor to Universal Gear Shift Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,628. 7 Claims. (Cl. 251—89.)



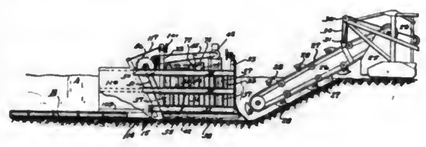
1. In an apparatus of the class described, a casing adapted to be mounted upon and partially encircle a steering post, said casing comprising an upper and a lower section, fluid controlling means mounted at one end of the upper section, fluid distributing means mounted at the opposite end of the lower sections, and conduits within said casing connecting said controlling anad distributing means.

1,817,366. ELECTRIC HOT WATER DISTRIBUTOR. FRANZ GRAF, Baden, Switzerland. Filed Nov. 12, 1925, Serial No. 68,672, and in Germany Dec. 22, 1924. 6 Claims. (Cl. 219—39.)



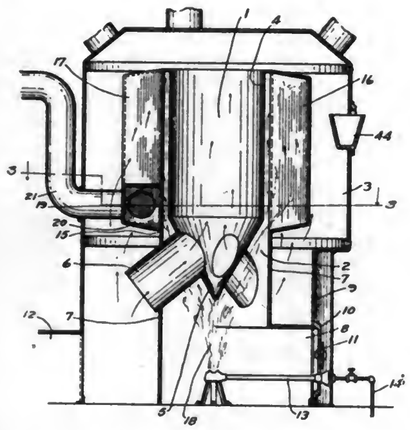
1. An electrically heated device for obtaining a hot water supply from a cold water main, comprising in combination an electric heating unit including a heating element and an enclosing member therefor, a supply pipe for conveying the cold water from the main to the electric heating unit and a water distributor interposed between the supply pipe and the enclosing member of the heating unit and adapted to the shape of the latter for causing the cold water to flow in the form of a thin film externally over the outer surface of the said enclosing member if the heating unit only by gravity alone after it has left the said supply pipe, as set forth.

1,817,367. TRENCH TRACTOR. GEORGE H. GREIMAN, Garner, Iowa. Filed Sept 6 1928. Serial No. 304,287. 14 Claims. (Cl. 61—63.)



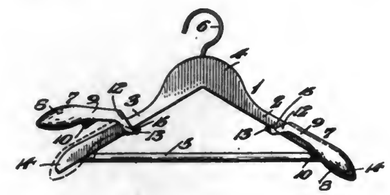
1. A trench tractor adapted to travel longitudinally on the bottom of a trench having trench side wall retaining devices capable of surface travel longitudinally on the side walls of the trench equal to that of the tractor.

1,817,368. GAS FURNACE. FRANK E. GRUNWALDT, Seattle, Wash. Filed Mar. 29, 1928. Serial No. 265,770. 1 Claim. (Cl. 126—109.)



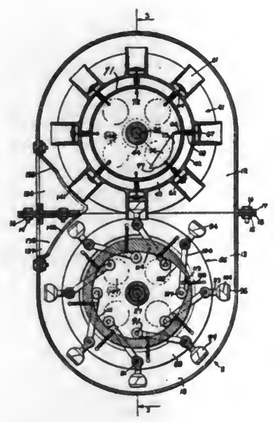
In a furnace of the chamber described, an inner cylindrical chamber having a conical shaped lower end, an intermediate cylindrical shaped chamber with the portion thereof surrounding the straight portion of the said inner chamber corrugated by forming the wall thereof in a zig zag form, said intermediate chamber having an opening at the bottom and in one side with an enclosure around the said opening forming a fire box, comparatively large tubes extending from the conical portion of the inner chamber through the walls of the said intermediate chamber, the aggregate area of the said tubes being substantially equal to the cross section area of the said inner chamber, a jacket surrounding the said intermediate chamber and forming an outer casing to the upper portion of which connections may be made to convey the heated air therefrom to remote points, a burner positioned directly below the conical portion of the said inner chamber, and a stack connection boxed in between the corrugations of the said intermediate chamber at the lower end of the said corrugations and connecting to the said intermediate-chamber through openings in the walls of the said corrugations.

1,817,369. ADJUSTABLE GARMENT HANGER. ROBERT HADDEN, Atlantic City, N. J. Filed Aug. 14, 1929, Serial No. 385,757. Renewed June 25, 1931. 3 Claims. (Cl. 223—64.)



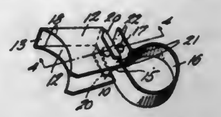
1. The combination of a garment hanger having a supporting member, coat shoulder supports therefor, each comprising an outer enlarged convex portion forming a support for the enlarged shoulder portion of a coat supported by said hanger and merging into an inner reduced portion adapted to enclose and engage one end of said supporting member, terminal inclined arms at the inner ends of said reduced portions having juxtaposed, inwardly projecting lugs adapted to engage the sides and bottoms of said supporting member to prevent accidental disengagement of said coat shoulder supports, and oppositely located bottom spiral lugs carried by said coat shoulder supports and frictionally and resiliently engaging the sides of said supporting arms, to retain said coat shoulder supports in any desired position relative to said supporting member.

1,817,370. ROTARY MOTOR. HENRY H. HAMMERSTROM, Los Angeles, Calif., assignor of one-half to Harry M. Middagh, Los Angeles, Calif. Filed Nov. 7, 1928. Serial No. 317,832. 11 Claims. (Cl. 123—12.)



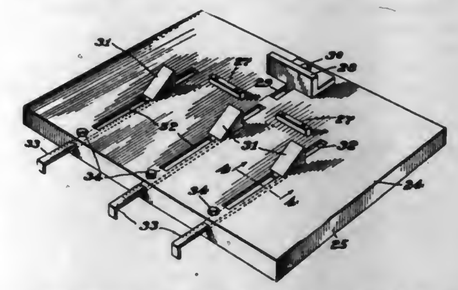
1. In a rotary motor, a housing, a pair of parallel shafts journalled therein, means coupling said shafts together for rotation at the same rate and in opposite directions, a rotor affixed to each shaft, a plurality of cylinders carried by one rotor, a plurality of pistons carried by the other rotor, each being receivable within one of said cylinders as said rotors turn, the walls of each of said pistons being spherical in form, a resilient piston ring associated with each piston and disposed in a complementary groove therein, each of said rings being in the form of a zone of a sphere, means for supplying fuel to said cylinders, and means for igniting the fuel in each of said cylinders.

1,817,371. ARTICLE SECURING BRACKET. PAUL A. HAUENSTEIN, Buffalo, N. Y., assignor to Vimco Mfg. Company, Inc., Buffalo, N. Y. Filed Aug. 6, 1929. Serial No. 383,940. 9 Claims. (Cl. 248—20.)



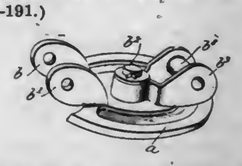
1. An attaching device for securing an article to a support, including a body having three walls, a clamping member extending from one of said walls and engaging an edge only of each of the other walls and formed to grip an article, and a securing element adapted to pass into said support and acting to draw said clamping member tightly upon said article and against said edges and which also holds said attaching device firmly against said support.

1,817,372. METHOD OF AND MECHANISM FOR ADJUSTING MOWING MACHINES. JAY M. HEALD, Greenfield, Mass. Filed May 22, 1928. Serial No. 279,785. 3 Claims. (Cl. 33—185.)



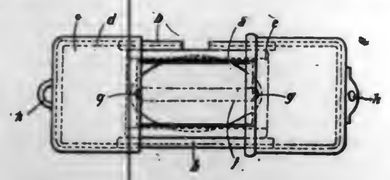
1. The method of adjusting a lawn or greens mowing machine to cut grass to a predetermined height which consists in supporting the mower bed knife elevated a predetermined distance from and parallel to a supporting surface for the mower, then lowering the carriage supporting roller or rollers of the mower into engagement with said surface and securing the rollers in this lowered position so that they will support the bed knife parallel to and at a predetermined distance from the ground.

1,817,373. CONVEYER. EDMUND CHARLES HOPKINS, London, England. Filed Oct. 19, 1928. Serial No. 313,533, and in Great Britain Oct. 31, 1927. 15 Claims. (Cl. 198—191.)



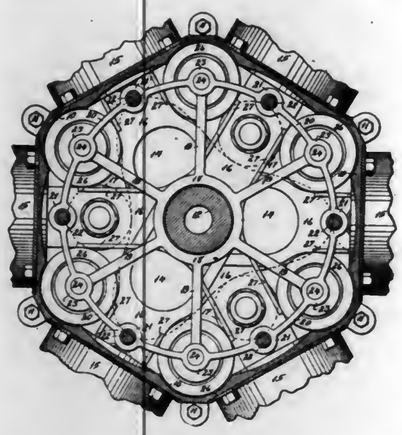
8. In a conveyer, the combination of an endless chain including links connected to have relative rocking movement about both vertical and horizontal axes, a plate-like flight attached to each link to rotate about the said vertical axis of the link and to turn with the link about the said horizontal axis, said flight having an arc-shaped peripheral recess which receives a portion of the next flight in the series, a driving sprocket engaging the links of the chain, a freely rotatable guide wheel mounted to turn about a vertical axis at points intermediate the ends of the operative run of the conveyer and having an edge cooperating with the edges of the flights, and parallel guideways cooperating with the edges of the flights at points on opposite sides of said guide wheel.

1,817,374. NOVELTY WATCH. GEORGES HUGUENIN, Le Locle, Switzerland. Filed June 29, 1927, Serial No. 202,355, and in Germany Oct. 11, 1926. 2 Claims. (Cl. 206—37.)



1. In a novelty watch, the combination of a rectangular case, and an outer extensible two-part protective casing, cooperating guiding means between the case and the two halves of the outer casing, and means for limiting the path of the two extended halves and for maintaining the closed condition of the same.

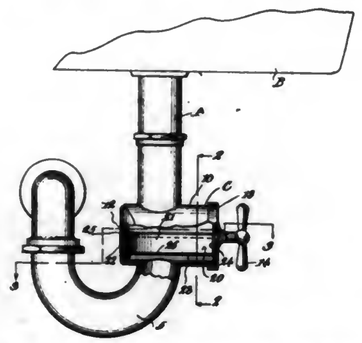
1,817,375. INTERNAL COMBUSTION ENGINE. LEO IMBLUM, Pueblo, Colo., assignor to Imblum Aeronautical Company, Pueblo, Colo., a Corporation of Colorado. Filed May 2, 1929. Serial No. 359,887. 17 Claims. (Cl. 123—55.)



1. An internal-combustion engine of the character described, comprising, in combination, a main shaft, a cam fixed to and rotatable with said main shaft, cylinders disposed in opposed, axially-alined pairs radially of said shaft and cam, pistons mounted for rectilinear reciprocation in said cylinders, links rigidly connecting said pistons in each pair of axially-alined cylinders, cam-followers carried by said links in position for rolling engagement with the eccentric surface of said cam, opposed bearing plates on adjacent margins of adjacent links and rotatable piston guide means between and simultaneously engaging adjacent bearing plates of adjacent links.

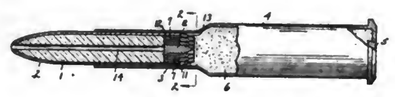
1,817,376. DRAIN STRAINER. ANGEL IZQUIERDO, New Orleans, La. Filed June 24, 1929. Serial No. 373,390. 1 Claim. (Cl. 210—164.)

In a drain including a pipe having a trap and a casing extending diametrically through the pipe above the trap and projecting beyond the opposite sides thereof, having a cylindrical side wall and a rear wall, longitudinal ribs on the inner face of the side wall above the trap, a removable cover threaded on the front of the casing; a removable tray slidably mounted in the casing including spaced side walls, front and rear walls and a perforated bottom wall, the front wall extending beyond the bottom and side walls, laterally extending flanges formed



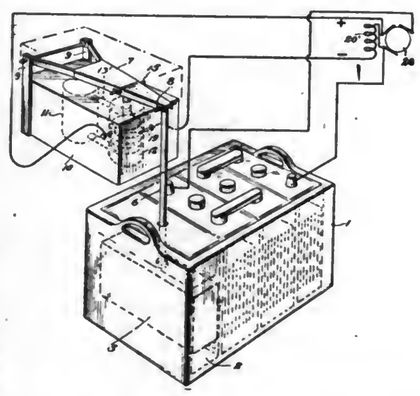
on the upper edges of the side and rear walls and forming a continuation of the front wall, said flanges resting upon the ribs of the side wall of the casing, and engaging the inner face of the wall and rear wall of the casing, the front wall engaging the inner face of the removable cover, the side edges of the bottom wall engaging the inner faces of the side wall of the casing at a point below said ribs, as and for the purpose specified.

1,817,377. PROJECTILE. ROY WALTER JAMES, Covina, Calif. Filed Aug. 15, 1928. Serial No. 299,652. 4 Claims. (Cl. 102—26.)



1. A projectile having an axial bore opening through its respective ends and a telescopic rear end forming an impact surface in alinement with the bore, the telescopic rear end being adapted for rearward axial expansion responsive to air pressure through the bore when the projectile is in flight.

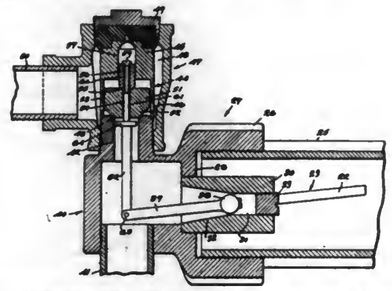
1,817,378. GENERATOR REGULATOR. JAMES S. JUERGENS, Morgantown, W. Va. Filed Sept. 20, 1929. Serial No. 394,115. 5 Claims. (Cl. 171—314.)



1. A generator controller for automobiles, including a secondary battery, a float disposed in the electrolyte of said

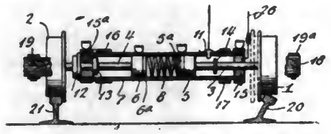
battery, a generator, a variable resistance coil in the field circuit of said generator, an operative connection between the float and variable resistance coil for adjusting the latter, and a stabilizer for preventing the transmission of road shocks to said resistance coil.

1,817,379. BOILER FEED REGULATOR. THEOPHILUS KALLMEYER, Willowbrook, Calif. Filed Sept. 26, 1928. Serial No. 308,451. 9 Claims. (Cl. 137—101.)



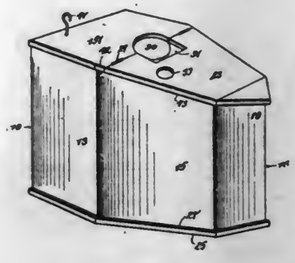
1. In a boiler feed regulator a main tubular valve element forming a closure between a source of liquid under pressure and the boiler, a secondary tubular valve element seated thereon, a valve plug having a depending pin seated on the secondary element, a slidable stem extending upwardly in the main element and having a collar thereon, said stem being operated by means controlled by the water level in the boiler, the stem on its first upward movement engaging the pin and lifting the plug then lifting the secondary element, and finally the collar lifting the main valve element.

1,817,380. COMBINED TRACK GAUGE CONTROL DEVICE AND TRAIN STOPPING DEVICE. HEINRICH KARL, Jersey City, N. J. Original application filed Oct. 1, 1925, Serial No. 59,917, and in Germany June 24, 1927. Divided and this application filed Oct. 26, 1927. Serial No. 228,868. 4 Claims. (Cl. 246—121.)



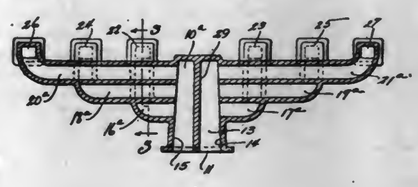
1. In a device for controlling the gauge of the track combined with a train stopping device, two electric contacts arranged on this device, normally contacting each other and comprised in an electric circuit which they keep closed when contacting each other, said track gauge controlling device belonging to that type in which two wheels with flanges are employed, one of which is adapted to be always in contact with the rail-head of the left-side rail of the track when moved along said track and the other adapted to be always in contact with the rail-head of the right-side rail of said track, two piston-like parts arranged in a tube, one of these parts connected to a shaft of one of said wheels and the other connected to another shaft of the other wheel, and compressed fluid introduced between said piston-like parts to exert pressure upon them and thereby keep said wheels always in contact with their respective rail-heads also whenever the gauge of the track becomes abnormal, said two electric contacts, however, being so arranged that they will be separated whenever said two wheels become more distanced from each other or when they approach each other more than they will do when the gauge of the track is normal, a train control mechanism controlled by said circuit and rendered effective when said circuit will be opened, and a signalling means so arranged that it will then become also effective.

1,817,381. BATH CABINET. ROBERT J. KIDENEY, Ontario, Calif. Filed June 2, 1928. Serial No. 282,478. 2 Claims. (Cl. 174—177.)



1. A collapsible electric bath cabinet including a rear section having rigidly connected top, bottom and side members, side walls pivotally connected at their rear edges to said side members, a top pivotally connected at its rear edge to said top member and resting on said side walls, a floor pivotally connected at its rear edge to said bottom member and engaging the under sides of said walls, said walls being foldable inwardly into said rear section, said floor being foldable upwardly over the outer-most folded side wall and said top being foldable downwardly over said floor, the front end of said top member being extended forwardly and the pivotal connection between said top and top member being in advance of the pivotal connection between said floor and bottom member thereby to permit of folding said top flat against said floor.

1,817,382. MANIFOLD. OSCAR C. KREIS, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Original application filed Nov. 3, 1927, Serial No. 230,730. Divided and this application filed Mar. 30, 1929. Serial No. 351,278. 12 Claims. (Cl. 123—52.)

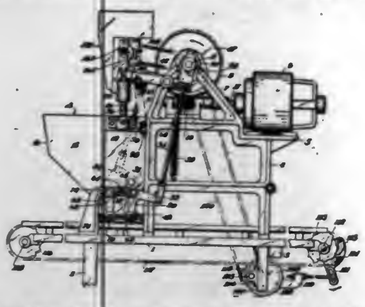


1. An intake manifold for multi-cylinder internal combustion engines comprising fuel mixture chamber means opening vertically for admission of a fuel mixture, and a plurality of conduits each opening into the said chamber means and each extending for connection to an individual engine cylinder intake, the conduit openings to the chamber means being arranged substantially in a common vertical plane with those conduits supplying the inner cylinders located below those conduits supplying the outer cylinders.

1,817,383. METHOD OF AND MACHINE FOR PRODUCING CONFECTIONS. WILLIAM B. LASKEY, deceased, Brooklyn, N. Y., by Rose Dagnais Laskey, executrix, Brooklyn, N. Y., assignor to Mason, An & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Mar. 27, 1929. Serial No. 350,178. 22 Claims. (Cl. 107—1.)

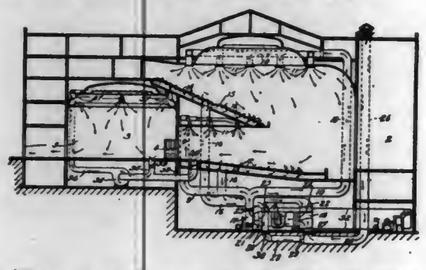
1. The method of forming a candy center consisting in exercising a force in one direction to select a unit from a mass of plastic material contained in a tank, and initially

forming the sides of the said unit, exercising a force in another direction progressively to pack the unit while the



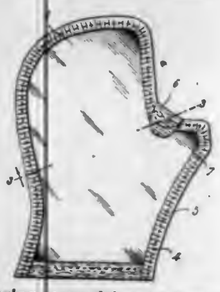
same is being selected, extruding the unit, and forming the upper surface of the unit while the same is being extruded.

1,817,384. VENTILATING AND AIR CONDITIONING METHOD AND SYSTEM FOR INCLOSURES. LEO L. LEWIS, Plainfield, N. J., and ALFRED C. BUENSOD, New York, N. Y., assignors, by mesne assignments, to Auditorium Ventilating Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 2, 1927. Serial No. 210,164. 4 Claims. (Cl. 98—33.)



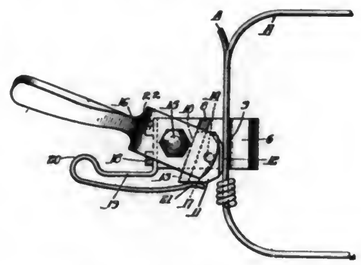
1. The method of ventilating and providing desired atmospheric conditions in a substantially closed main room in which people congregate and in an auxiliary room communicating with said main room, which comprises withdrawing air from said main room, conditioning air for supply to said main room, forcibly delivering, by pressure differences said conditioned air with variable proportions of said withdrawn air and fresh air into said main room and displacing from the main room to the auxiliary room volumes of the air thereof approximately equal to the fresh air delivered into the main room, and relieving air from said auxiliary room to permit of displacement of air thereto from said main room.

1,817,385. HAND COVERING. ERMINIE ISABELLE MARKS, Harrison, N. Y. Filed Nov. 26, 1927. Serial No. 235,946. 1 Claim. (Cl. 2—158.)



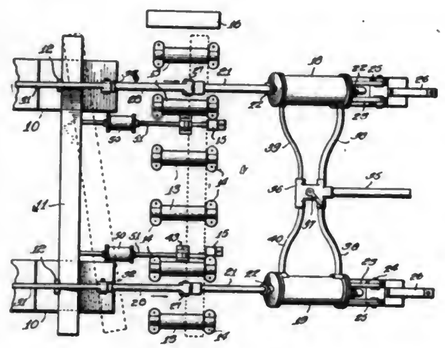
A hand covering comprising a front section of impervious paper, and a back section connected to the front section and formed of two sheets of absorbent paper, one of the sheets of the back section having its grain extended at right angles to the grain of the other sheet of the back section.

1,817,386. WIRE CLAMP. ALEXANDER M. MASZCZYK, Chicago, Ill. Filed Nov. 2, 1929. Serial No. 404,222. 6 Claims. (Cl. 24—136.)



1. A wire clamp comprising a pivoted lever and a slidable gripping member, means including a groove for guiding the gripping member in a straight path which varies in distance from the axis of the lever and means connecting the lever and the member for moving the member in its path as the lever is rotated, said connecting means including a pin on the member and a slot in the end of the lever.

1,817,387. SHEET BAR UNSTACKING DEVICE. HAROLD E. MCCREERY, Apollo, Pa., assignor to Apollo Holding Corporation, Apollo, Pa., a Corporation of Delaware. Filed Oct. 5, 1928. Serial No. 310,612. 5 Claims. (Cl. 214—8.5.)

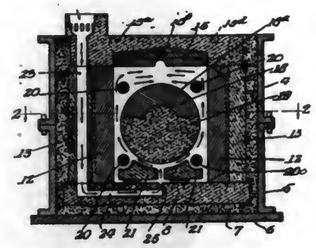


2. A device of the character described comprising a pair of relatively movable members adapted to engage at least the uppermost bar of a stack of superimposed bars, and means for imparting differential movement to said members transversely of the stack.

1,817,388. METHOD AND APPARATUS FOR CASTING JOURNAL BOXES. LEE W. MELCHER, De Pere, Wis., assignor to Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 16, 1929. Serial No. 340,477. 17 Claims. (Cl. 22—126.)

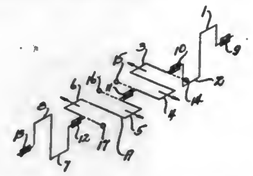
12. A mould for a journal box having an integral cylindrical bearing wall, comprising a flask, a chill-section and a sand section united together to form a composite core

and arranged with the chill-section on top and in the mould cavity so as to form the cylindrical bearing wall for the box with a hard metal upper zone, chill-sections



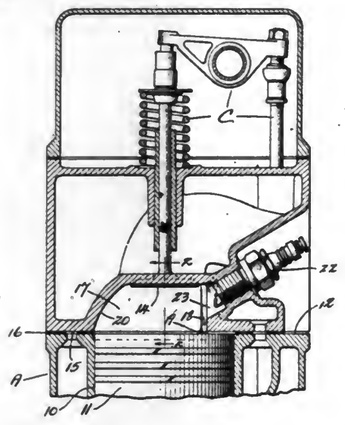
to form the sides of the box, a dry-sand core to form the bottom of the box, dry-sand cores to form the ends of the box, and a gate in the bottom-core.

1,817,389. ENGINE CRANK SHAFT. ANDRE J. MEYER, Detroit, Mich., assignor to Continental Motor Corporation, Detroit, Mich., a Corporation of Virginia. Filed Nov. 14, 1927. Serial No. 232,982. 10 Claims. (Cl. 74—38.)



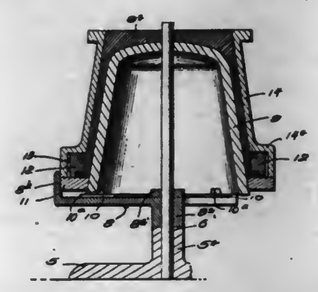
10. A crankshaft for internal combustion engines having a plurality of throws and coaxial bearings, and counterweights associated with only a portion of said throws providing a compromise between non-counterbalancing and fully counterbalancing, said counterweights being distributed so as to favor the center portion of the crankshaft to the greatest extent.

1,817,390. INTERNAL COMBUSTION ENGINE. ANDRE J. MEYER, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Jan. 30, 1928. Serial No. 250,371. 6 Claims. (Cl. 123—191.)



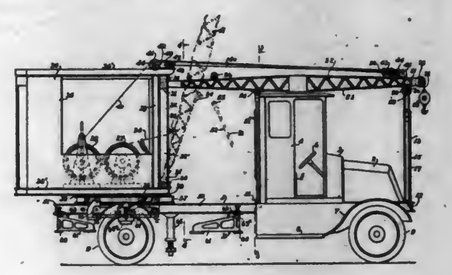
1. A cylinder head for an engine cylinder and associated piston having a combustion chamber above the cylinder and having intake and exhaust valves substantially aligned longitudinally of the engine and carried by the cylinder head in the top of the combustion chamber and opening inwardly of the combustion chamber toward the piston face; said cylinder head having an inwardly extending part closely overlying a portion of the piston when in the outer limit of travel for producing turbulence of the fuel mixture, said cylinder head part being recessed, and a sparking device within said recess.

1,817,391. MOLD. JOHN C. MILLER, Cantonment, Fla. Filed Dec. 31, 1928. Serial No. 329,633. 8 Claims. (Cl. (Cl. 25—129.)



2. A mold comprising a support, a core removably mounted on said support, a shell adapted to be disposed about said core, means for closing the space between said core and shell at the end adjacent said support, said means providing a support for said shell, die means removably supported upon said space closing means, and said die means being confined by said shell.

1,817,392. TRUCK CRANE. ERNEST OHLIGER, Pelham, N. Y. Filed Oct. 16, 1929. Serial No. 399,944. 5 Claims. (Cl. 212—59.)



2. In a truck crane a chassis, a boom, a hoisting member, rotatably mounted on said chassis, one or more upwardly extending guides on said member, the inner end of said boom being slidably pivotally connected to said guides, a hoisting mechanism on said member, a flexible means on said mechanism, secured at the outer end thereof to a part at the outer end of said boom, whereby said outer boom end may be raised or lowered, another flexible means on said mechanism, for moving thereby loads with relation to said boom, removably connected to said boom, a fixed means on said chassis, for supporting said outer boom end in the lowest position thereof, and a swinging support on said chassis, pivotally connected thereto, for intercepting and raising an intermediate portion of said boom, located nearer to the inner end thereof, thereby sliding said inner end upwardly in said guides, whereby said boom may be brought into a substantially horizontal position over said chassis, when said crane is in an inoperative position, said swinging support being located forwardly of said guides and disposed to be swung rearwardly with relation to said

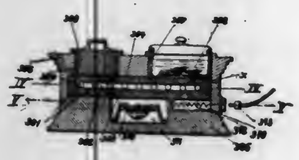
chassis towards the inner end of said boom, and joining means at the upper end of said support and on said boom, for detachably movably connecting the said portion of said boom to said support.

1,817,393. COMBINATION CAN AND BOTTLE OPENER. FOLKE QUARNSTROM, New York, N. Y. Filed June 18, 1929. Serial No. 371,895. 3 Claims. (Cl. 7—1.)



1. In a hand implement of the class described, a handle member terminating at one end in a pair of spaced parallel members, a plate pivotally mounted between said members, longitudinally aligned shanks extending from opposite sides of the plate, a feed wheel rotatably mounted between said members and having an axis common to the axis of the plate, said feed wheel having a portion of the periphery provided with teeth, said feed wheel being further provided on the untoothed portion of its periphery with a radial notch, a pin projecting from one of said members and adapted to engage said notch for maintaining the wheel in a relatively stationary position, one of said shank members at the free end thereof terminating in a laterally disposed angular extension merging into a pentrating point, said extension being further provided with a sharpened edge, the other of said shanks being adapted to abut one of said members for retaining said extension in operative relation with said wheel.

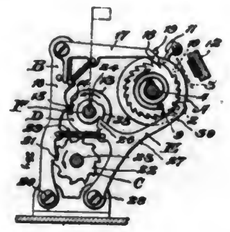
1,817,394. HEATING DEVICE WITH HEAT ACCUMULATORS. ALEXANDER PAIS, Bucharest, Rumania. Filed Nov. 19, 1926. Serial No. 149,372, and in Austria Nov. 19, 1925. 3 Claims. (Cl. 257—1.)



1. In a heating apparatus the combination of at least one metallic block having a heat transmitting face and containing therein a system of fluid tight channels adapted to be filled once and for all with a temperature equalizing medium, heat insulating elements adapted to cover the said heat transmitting face, a heat receiving face on said block, a heat insulating structure covering the said heat receiving face of the block and divided into compartments open to the said heat receiving face and different sources of heat located in such compartments.

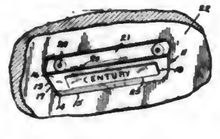
1,817,395. MEANS FOR CHECKING EXCESSIVE DEAD MILEAGE. BRIAN C. PALMER, New York, N. Y., assignor, by mesne assignments, to Ohmer Fare Register Company, Dayton, Ohio, a Corporation of New York. Filed May 24, 1926. Serial No. 111,312. 9 Claims. (Cl. 235—80.)

1. In a taximeter, means for checking dead mileage in excess of a predetermined limit comprising a rotatable actuator, means for continuously operating said actuator while the flag of the meter is in the "For hire" position, a rotatable member, a limit indicating element on said



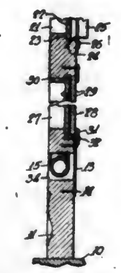
member, and means operated by the actuator for moving the rotatable member until the limit indicating element thereon is brought into operative position and for thereafter discontinuing such movement.

1,817,396. VISIBLE LABEL HOLDER. FREDERICK W. PANCHOT and HARRY H. PANCHOT, Los Angeles, Calif. Filed Aug. 14, 1929. Serial No. 385,937. 2 Claims. (Cl. 40—16.)



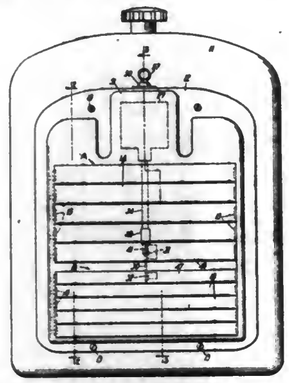
1. A label holder comprising a section of sheet metal folded longitudinally to provide leaves, the forward leaf having an aperture therein through which a label placed between the leaves may be seen, the marginal portions of the leaves being bent at an angle to the planes of the major portions of the leaves and being disposed in contact with each other, there being aligned apertures formed in the marginal portions through which fastening elements may be driven to fasten the marginal portions together and to a vertical surface with the major portions of the leaves projecting outwardly therefrom.

1,817,397. ILLUMINATED DISPLAY. HAIG SARAFIAN, New York, N. Y., assignor to Novelite, Inc., a Corporation of New York. Filed Oct. 12, 1929. Serial No. 399,112. 19 Claims. (Cl. 40—132.)



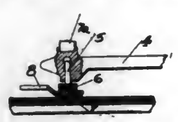
18. A display device including a border frame member, a second frame member disposed within said border frame member and spaced therefrom, a sign member disposed within the inner frame member, and a tubular luminous member disposed within the space formed between said frame members.

1,817,398. THERMOSTATICALLY OPERATED SHUTTER FOR AUTOMOBILES. MILTON SEE, Mount Vernon, N. Y. Filed June 9, 1926. Serial No. 114,612. 11 Claims. (Cl. 123—174.)



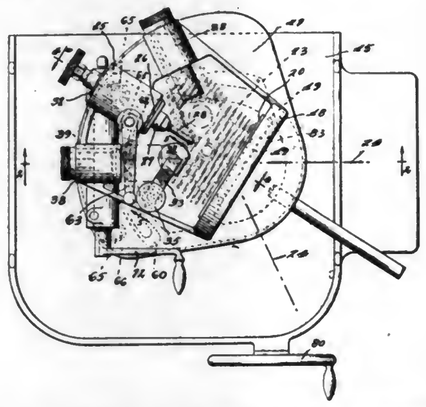
1. In a shutter for hydrocarbon engines, a shutter frame having a plurality of openings therein, slats adapted to be opened and closed mounted in each of said openings, and thermostatic means for opening the slats in each opening in successive order.

1,817,399. MANIFOLDING PROCESS. JOHN Q. SHERMAN and ALBERT W. METZNER, Dayton, Ohio; said Metzner assignor to said John Q. Sherman. Filed Sept. 28, 1927. Serial No. 222,656. 7 Claims. (Cl. 101—113.)



1. A process for forming impressions in manifolding, which consists in passing a perforating type face through alternate layers of paper and printing cloth while same are supported on a platen.

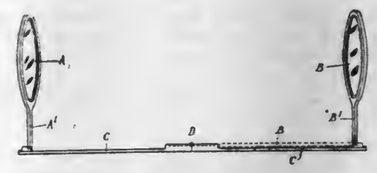
1,817,400. CYLINDER HEAD MACHINING FIXTURE. OSCAR L. SNYDER, Marysville, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company, a Corporation of Delaware. Filed Oct. 7, 1929. Serial No. 397,774. 19 Claims. (Cl. 82—38.)



1. In a cylinder head supporting device, the combination of a base, a cylinder head carrier movably supported by said base and adapted to be moved into operative position with respect to a tool, means for locating said carrier with respect to said tool, and means for moving said base, carrier and cylinder head in a direction parallel to the axis of the tool.

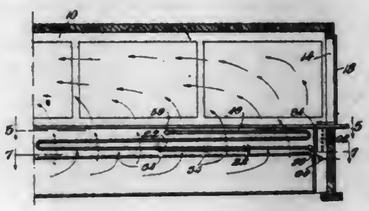
18. In a device for machining a cylinder head casting provided with a plurality of sets of aligned holes having axes which extend radially from a common point, a support, a tool holder supported thereby and having an axis intersecting said common point of intersection of aforesaid axes, a work carriage pivoted to said support and provided with means for supporting a cylinder head casting, and means for adjustably positioning said work carriage to selectively align the axis of a set of aligned holes of said cylinder head casting carried thereby with the axis of said tool holder, said support movably supported to have relative movement with respect to said tool holder in a direction parallel to the axis of the tool holder.

1,817,401. MIRROR. ROBERT JABEZ WARD, Elvaston, England. Filed May 28, 1928, Serial No. 281,327, and in Great Britain June 7, 1927. 3 Claims. (Cl. 45—100.)



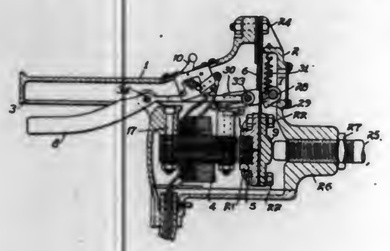
1. In a duplex mirror, a bridge piece formed of two sections hinged together at their adjacent ends and foldable upwardly one upon the other, and mirrors provided with stems pivoted to the outer ends of the said sections and foldable downwardly upon them, said stems and mirrors being shorter than the said hinged sections and said mirrors being foldable upon each other back to back to form a compact structure when the said sections are folded upwardly one over the other.

1,817,402. DRYING APPARATUS. JOHN B. WELCH, New Orleans, La. Filed July 31, 1926. Serial No. 126,119. 2 Claims. (Cl. 34—46.)



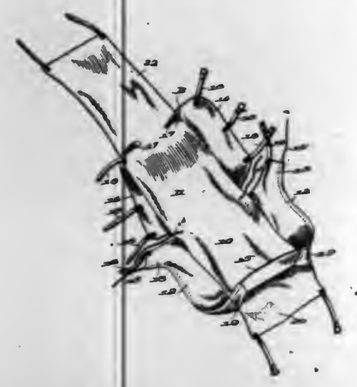
1. In a progressive dry kiln, an elongated heating chamber, means for causing recirculation of the air within said chamber, means for progressively increasing the temperature within said chamber from the green end to the dry end thereof, and means for heating cold air which may leak into the dry end of said chamber before allowing it to mix with the heated air in said dry end of the chamber.

1,817,403. METHOD OF AND MEANS FOR CONTROLLING VIBRATORY MOTORS. CARL S. WEYANDT, Pittsburgh, Pa., assignor to Central Electric Tool Company, a Corporation of Pennsylvania. Filed Nov. 2, 1925. Serial No. 66,414. 7 Claims. (Cl. 172—126.)



1. A vibrating device comprising an electro-magnet, a casing therefor including a handle, an armature for the electro-magnet, a biasing support therefor, and a pivoted lever cooperating with the handle and extending into the casing to control the operation of the support.

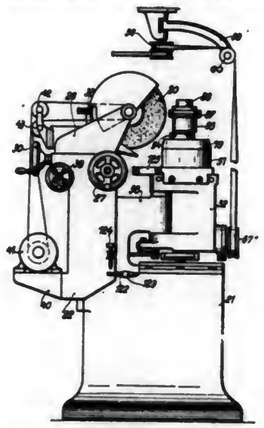
1,817,404. SLIP COVER FOR AUTOMOBILE SEATS. JOHN W. WHALEY, Richmond, Va. Filed Mar. 11, 1930. Serial No. 434,900. 3 Claims. (Cl. 155—182.)



1. A cover for vehicle seat cushions and the like consisting of a body portion of flexible material for extending over and beyond the face of a seat cushion, and a flap portion connected to opposite sides of said body portion for extending over corresponding wall portions of the seat cushion, each flap having an end portion for engaging around corners and portions of the connecting wall between the aforesaid walls of the seat cushion, portions of said flap end portions extending inwardly of said body portion being secured to said body portion where they engage therewith along the line of said connecting wall and face of the cushion to provide with the corresponding body portion extending over said end flap portions a box-like structure, and means for securing said flaps and extending body portion to a seat cushion or the like.

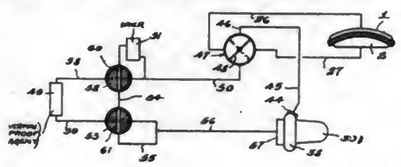
1,817,405. PRODUCTION OF CYCLOIDAL CURVES. LORENZ KONRAD BRAREN, Munich, Germany, assignor to Friedrich Deckel, Präzisionsmechanik und Maschinenbau, Munich, Bavaria, Germany, a Firm. Filed Nov. 30, 1926, Serial No. 151,799, and in Germany Dec. 5, 1925. 17 Claims. (Cl. 51—58.)

1. A method for producing cycloidal curves where tool and work perform relatively to each other two circular movements of which the one is a bodily circular movement with an angular velocity equal to the rolling circle and with a radius equal to the distance of the generating



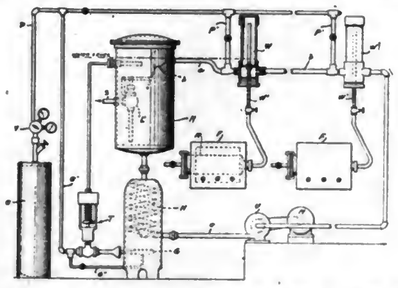
point from the center of the rolling circle and the other a turning movement with the angular velocity of the base circle.

1,817,406. MOTHPROOFING MEANS FOR PRESSING MACHINES. PHILIP N. BRAUN, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed June 12, 1929. Serial No. 370,402. 9 Claims. (Cl. 68—9.)



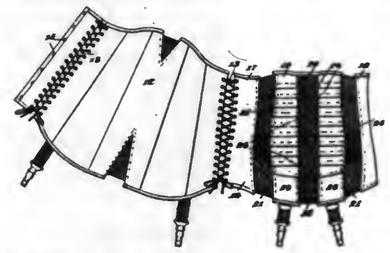
1. In a pressing machine, cooperating pressing elements, a conduit system for passing a current of air through the article being operated upon by said elements, a branch conduit, a chamber for a moth proofing agent in the branch conduit, an operator-operated valve and means to connect and disconnect the branch conduit from the conduit system.

1,817,407. PROCESS FOR CASE CARBURIZING AND HEAT TREATING METALS. PAUL V. BROWER, Kenmore, N. Y., assignor to Carbide & Carbon Chemicals Corporation, a Corporation of New York. Filed July 19, 1927. Serial No. 206,831. 3 Claims. (Cl. 148—17.)



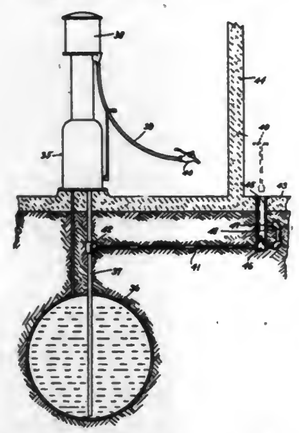
3. Process of case carburizing a steel or iron article, comprising treating the article heated to a carburizing temperature with a gaseous mixture comprising a substantial amount each of water vapor and propane.

1,817,408. MATERNITY CORSET. CLARENCE T. DAVIS, Worcester, Mass., assignor to Royal Worcester Corset Company, a Corporation of Massachusetts. Filed Nov. 13, 1930. Serial No. 495,448. 6 Claims. (Cl. 2—27.)



1. A corset comprising a central front part consisting of a series of pleats, a strip of elastic fabric overlying said pleats and tacked thereto, said strip being stitched at its top to the pleated section, and an elastic abdominal supporting belt section, below the pleated section, to which the lower end of said overlying elastic strip is stitched.

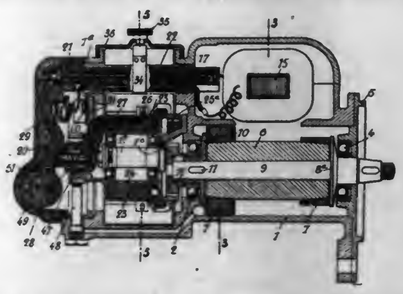
1,817,409. SAFETY LOCK FOR LIQUID DISPENSING APPARATUS. LEO GUSMUS, Sheffield, Ala. Filed Aug. 8, 1930. Serial No. 473,959. 1 Claim. (Cl. 221—99.)



In a liquid dispensing apparatus of the character described including a pump, an underground liquid supply tank, and a suction pipe extending between the pump and the tank, a vent pipe concealed in the ground and connected with the suction pipe intermediate the pump and the tank for admitting air to said suction pipe, said vent pipe extending from a point on the suction pipe to a point beneath a building, a manually operable control valve interposed in the vent pipe at a point beneath the building, and a pipe section communicating with the interior of the building and extending downwardly through the floor of the building into the ground to the control valve and providing means whereby access to the control valve may be had for actuating the same, the vent pipe having one end communicating with an intermediate portion of the pipe section.

1,817,410. MAGNETO ELECTRIC MACHINE. JEAN MARIE HEINRICH, Paris, France, assignor to Societe des Moteurs Salmson, Paris, France. Filed Mar. 27, 1930, Serial No. 439,458, and in France Apr. 13, 1929. 4 Claims. (Cl. 171—209.)

1. A magneto electric machine comprising in combination a rotary field member, a stationary armature, a rotary distributor for the high tension current produced by the armature, said distributor being placed end to end with the field member and having its axis out of alignment with



the axis of the field member, an internally toothed wheel on the distributor and a pinion carried by the rotary field member at one end thereof and in meshing engagement with said wheel.

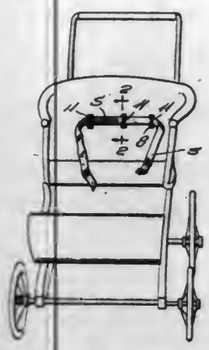
1,817,411. STOCKING TREE. OLIVER J. HOWE, Brockton, Mass., assignor to Daniel C. Rebhun, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Mar. 23, 1929, Serial No. 349,462. Patent No. 1,770,925, dated July 22, 1930. Divided and this application filed Feb. 21, 1930. Serial No. 430,370. 1 Claim. (Cl. 223—17.)

A stocking tree having in combination a leg portion, a foot portion, means connecting said portions together, said foot portion having separate toe and heel sections, said sections provided with longitudinally aligned openings, a connecting bar mounted in said openings and secured to one of said sections, said tree having a recess in one side thereof, a laterally disposed locking plunger operatively connected to said bar and extending into said recess for permitting adjustment and maintaining the sections in predetermined adjusted positions relative to each other, said locking plunger being movable in a direction transverse of the plane of the stocking tree the exposed portion of said plunger lying wholly within said recess so as not to interfere with the inserting or removing of a stocking from the tree.

1,817,412. PERAMBULATOR ATTACHMENT. PAUL IACOVINO, Utica, N. Y. Filed Nov. 26, 1928. Serial No. 322,008. 2 Claims. (Cl. 24—94.)

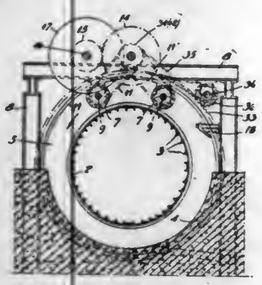
1. A strap-holding device for a woven fibre perambulator body, comprising a single straight-edged strip of metal bent to provide two straight parallel imperforate arms of equal length, and a straight arm-connecting portion, the free ends of said arms being sharpened, said arm-connecting portion being formed with two parallel longitudinal slits and

the metal between said slits being offset from and disposed parallel with the plane of the remainder of said portion, providing a flat loop through which to pass a strap, said arms being of sufficient length to be passed through por-



tions of the carriage body and clinched and to overlap each other throughout the greater part of their lengths, whereby to distribute tugging strain upon the entire portion of the fibre body embraced by said arms and said arm-connecting portion.

1,817,413. BARKING MACHINE. AXEL GUSTAF JOHANSSON, Nalden, Sweden. Filed Feb. 14, 1929, Serial No. 339,982, and in Finland Sept. 15, 1928. 4 Claims. (Cl. 144—208.)



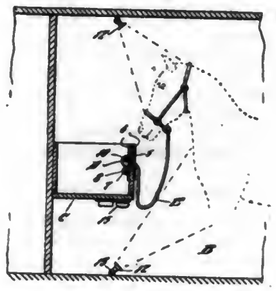
1. Barking machine consisting of a frame, a horizontal drum adapted to receive the material at one end and delivering it at the other end, means for driving and supporting said drum, all the members of said means which engage the drum cooperating only with the upper half parts of annular paths on the drum, said driving and supporting members comprising two shafts rotatably mounted in the frame, means for rotating said shafts, a wheel on each end of each of said shafts, two annular rings on the drum, said rings being spaced apart in the longitudinal direction of the drum and also spaced from the periphery of the drum, the wheels on the one end of said shafts engaging the inside of the upper half part of the one of said annular rings, while the wheels on the other end of said shafts engage the inside of the upper half part of the other annular ring, said rotary shafts being located one on each side of the longitudinal axial plane of the drum.

1,817,414. CANOE PADDLE. HERMAN KORTH, Eagle River, Wis. Filed Mar. 14, 1931. Serial No. 522,693. 1 Claim. (Cl. 9—24.)



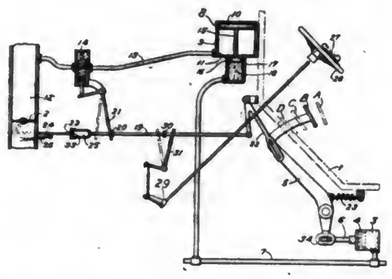
In a paddle structure of the character described, an elongated handle split intermediate the ends thereof, a sleeve member secured to one of said sections, a tapering socket member secured to and integrally formed with said sleeve, a second sleeve member secured to the other of said handle sections, a tapering plug member adapted for engagement in said socket whereby to releasably secure said handle sections together and a cup-shaped member mounted on said handle intermediate the ends thereof and adapted to prevent passage of water toward the inner end of the handle.

1,817,415. ANIMAL RELEASING AND FRIGHTENING MEANS. JACOB LIGINSKI, Whippany, N. J. Filed Oct. 18, 1928. Serial No. 313,270. 1 Claim. (Cl. 119—112.)



In combination, an animal releasing and frightening means for arrangement within a barn having a plurality of animal stalls within each of which stall is a feed box, the outer wall of each feed box having a halter ring receiving opening, a pair of complementary plates disposed on the opposite sides of said outer wall having openings therein registering with said wall openings, a longitudinal shaft bearing on the inner plate of each pair, a rigid shaft mounted for sliding movement in the bearing in each of the plates adjacent the openings therein, pins carried by said shaft adjacent each opening and having straight free end portions disposed in spaced parallelism with the shaft for engagement through the halter rings when the shaft is moved in one direction to lock the rings within the registering openings, a single throw lever mounted on the outer wall of one one of the end stalls and having connection with said shaft for locking and unlocking the halter rings.

1,817,416. CONTROL SYSTEM FOR MOTOR VEHICLE. HENRY E. LIPPERT, Pittsburgh, Pa. Filed Mar. 15, 1929. Serial No. 347,213. 16 Claims. (Cl. 192—3.)



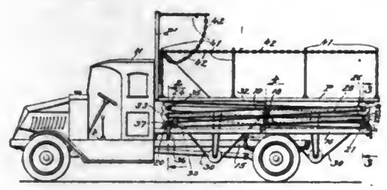
1. In a motor vehicle having a throttle valve and a hydraulic brake system, a fluid pressure motor for creating a pressure in said hydraulic brake system, a valve for controlling the fluid pressure, and a common foot pedal for actuating both said valves and for manually creating a pressure in said hydraulic brake system.

1,817,417. SURGICAL INSTRUMENT. CHARLES R. MEITZLER, Rochester, N. Y., assignor of one-half to Oscar H. Pieper and one-half to Alphonse F. Pieper, Rochester, N. Y. Filed Sept. 11, 1928. Serial No. 305,228. 6 Claims. (Cl. 128—12.)



1. A surgical instrument comprising a base, a lamp casing connected with the base, a support within the casing, a lamp within the casing upon the support, said lamp and support being detachable by a longitudinal movement through the inner end of the casing and a guard upon the casing having a portion spaced from and substantially surrounding that part of the casing in which the lamp is disposed whereby to afford an air space between said part and the guard, said spaced portion having an inwardly extending part arranged when the guard is inserted upon and moved inwardly on the sleeve to engage the end of the latter whereby to check inward movement of said guard.

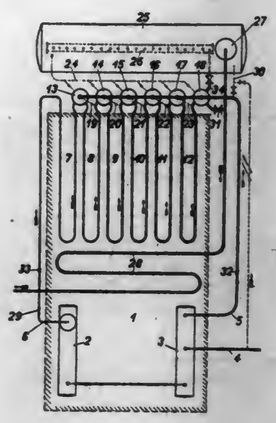
1,817,418. ELEVATOR. ARTHUR T. MUNNS, Santa Monica, Calif. Filed Feb. 18, 1929. Serial No. 340,901. 5 Claims. (Cl. 187—18.)



I. In an elevator, a lazy-tong structure, flexible means for moving said structure vertically to extended position, and means on the uppermost levers of said structure and between the ends of said levers by which the flexible means when operated exerts a force vertically upward on said levers whereby movements of said structure to extended position is initiated by upward movement of said levers.

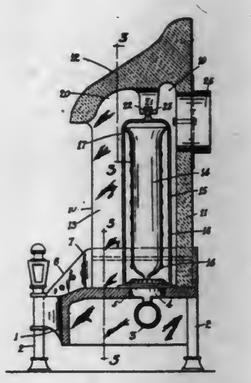
1,817,419. HIGH PRESSURE STEAM GENERATOR. WALTER GUSTAV NOACK, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Filed Apr. 9, 1928, Serial No. 268,493, and in Germany and Switzerland Apr. 14, 1927. 3 Claims. (Cl. 122—1.)

1. In an apparatus of the class described, a steam and water drum, a series of alternately connected substantially dry evaporators and superheaters, an exciter boiler acting as an initial steam source and delivering steam through a superheater into the first of said evaporators, means for delivering water from said steam and water drum individually and in finely divided form into said evaporators, means for returning surplus water from



said evaporators to said steam and water drum, and means for delivering steam from the last of said series of evaporators to a place of consumption.

1,817,420. RADIANT GAS HEATER. JAMES M. PACKER, Colorado Springs, Colo., assignor to F. O. Schoedinger, Columbus, Ohio. Filed Jan. 30, 1930. Serial No. 424,705. 5 Claims. (Cl. 126—92.)



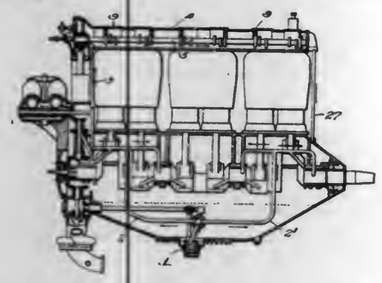
1. In a gas heater, a base frame, a backing of refractory material positioned upon said base frame, said backing being formed to include spaced vertical side walls, a vertical rear wall and a forwardly projecting overhanging top wall, the outer portion of said top wall being provided with a downwardly projecting lip shaped to produce a trapping chamber in the upper portion of the backing, said back wall being provided with a gas outlet communicating in part with said chamber, a web depending from the under surface of said top wall and extending longitudinally of said chamber between said lip and said opening and dividing said chamber into a pair of compartments, burner members carried by said base frame, and vertically disposed radiant elements positioned within the confines of said backing and arranged in registration with said burner members, the upper ends of said radiant elements at their axial portions engaging the under surface of said web.

1,817,421. LINING BRICK FOR ROTARY CEMENT KILNS. HACHIRO SAITO, Tokyo-Fu, Japan. Filed Oct. 18, 1927. Serial No. 226,975. 6 Claims. (Cl. 222—7.)



1. A lining brick for kilns comprising a brick composed of super-refractory material, said brick being provided with a plurality of recesses and a plurality of clay bricks in said recesses, the surfaces of said refractory bricks and clay bricks being in alternate positions on the face of the lining brick.

1,817,422. LUBRICATION OF ENGINES. LÉON SAIVES, Billancourt, France, assignor to M. Louis Renault, Billancourt, France. Filed Jan. 5, 1926, Serial No. 79,414, and in France Jan. 29, 1925. 3 Claims. (Cl. 184—6.)



1. In an internal combustion engine having an overhead cam shaft, the combination of a cam shaft casing, oil supply and exhaust conduits connecting said casing with the crank case, an air exhauster connected with said casing at one end thereof and operated by the cam shaft, and an oil pump in the other end of the casing adapted for exhausting excess oil therefrom.

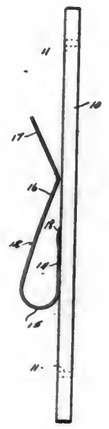
1,817,423. FEEDING DEVICE FOR DUPLICATING MACHINES. LOUIS J. SAUER, Oak Park, Ill., assignor to Charles H. Joy, Sr., Chicago, Ill. Filed June 3, 1929. Serial No. 367,946. 21 Claims. (Cl. 101—133.)



1. An automatic feed for duplicating machines comprising a carriage shiftable over a printing surface, a guide plate on said carriage, means for retaining paper on said guide plate, and means independent of the carriage and cooperating with said retaining means to release the paper through the movement of the carriage.

1,817,424. NEWSPAPER CLAMP. HARRY D. SMILEY, Albia, Iowa, assignor of one-half to Fred W. Campbell, Albia, Iowa. Filed May 31, 1930. Serial No. 458,374. 1 Claim. (Cl. 24—66.)

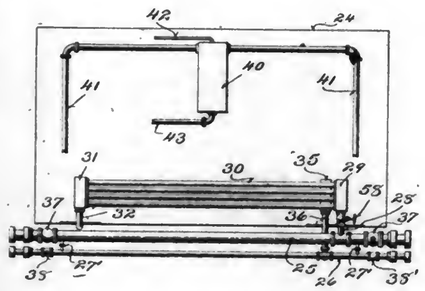
An article holder of the character described, comprising a relatively wide body portion, a looped resilient clamping member secured to said body portion and extending upwardly therefrom, said clamping member terminating in an outwardly diverging portion whereby to facilitate insertion of an article within the clamp, the opposite sides of said body portion extending outwardly beyond the marginal edges of said clamping member and having apertures therethrough, and means extending through said apertures for securing the body portion on a supporting structure, said body portion having a beveled edge portion extending transversely of said clamping member and positioned inwardly of the free end of said clamping member.



1,817,423. MANUFACTURE OF ESTERS. GERHARD STEINMIG and HEINRICH ULRICH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 3, 1927, Serial No. 165,751, and in Germany Jan. 29, 1926. 8 Claims. (Cl. 260—103.)

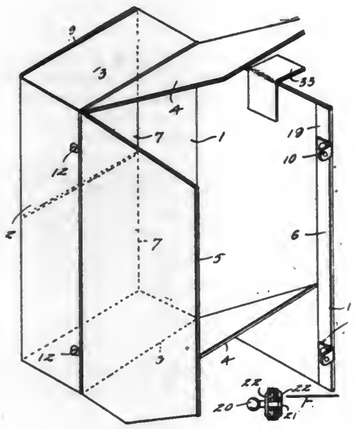
1. The process of producing esters of glycols with organic acids which comprises acting on an organic acid with an aliphatic alkylene oxid at an elevated temperature and in the presence of a catalyst selected from the class consisting of acid salts of mineral acids and salts of organic acids with strong bases, which, under the conditions of working, form a reactive complex compound with said first named organic acid which is of a stronger acidity than said organic acid.

1,817,426. TRAIN HEATING SYSTEM. JOHN C. STILLMAN, Appleton, Wis., assignor of two-fifths to L. M. Betts, Washington, D. C. Filed July 14, 1927. Serial No. 205,670. 1 Claim. (Cl. 237—40.)



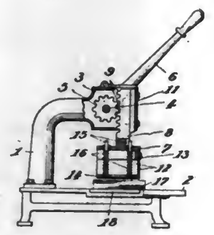
In a railway coach, the combination of a steam supply pipe and a suction drain pipe extending from one end of the coach to the other and arranged in superposed relation, a plurality of steam headers arranged in substantially rectangular formation, means for connecting one of the headers with the steam supply pipe, means for connecting one of the other headers with the suction drain pipe, means connecting the remaining headers, a plurality of parallel pipes connecting the first mentioned header with one of said remaining headers, a plurality of pipes connecting the second header with the other of said remaining headers to provide circulation between all of said headers and the steam supply pipe, and a plurality of small bleed pipes extending downwardly from the steam supply pipe to the suction drain pipe whereby the supply pipe is kept constantly free from air pockets.

1,817,427. STORAGE FILE. ARTHUR CLARE STRAYER, New Brighton, Pa. Filed Oct. 22, 1929. Serial No. 401,580. 3 Claims. (Cl. 229—47.)



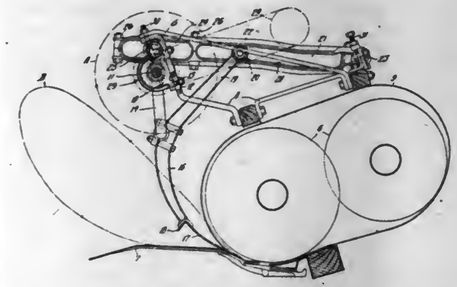
1. A storage file of elongated formation in plan and comprising end and side walls permanently connected together, a bottom flap permanently connected to one of the side walls, fasteners detachably connecting the bottom flap to the other side wall at points located at opposite sides of the transverse center of the storage file, a top flap permanently connected to said other side wall, and a single fastener detachably connecting the top flap to said first side wall.

1,817,428. COUPON CUTTER. KIYOMOTO TAKAMATSU, Tokyo-Fu, Japan. Filed Apr. 19, 1929, Serial No. 356,438, and in Japan May 5, 1928. 1 Claim. (Cl. 164—26.)



A coupon cutter of the character described comprising a bench provided with a recess, a hollow column secured to and rising from the bench and having an offset arm at the upper end thereof, a casing formed integral with the outer end of the arm and provided with aligning openings in the upper and lower walls thereof and also provided with a vertical slot in the front wall, the opposite sides of which constitute spaced vertical guides, a removable front cover plate for the housing, a shaft journalled transversely of the housing, a pinion on the shaft, a handle lever on the projecting end of the shaft for actuating the shaft, a cutter head positioned above the recess in the bench, a shank rising from the head and provided with rack teeth on the rear face and with vertical guides on the front face for respectively engaging the pinion and the vertical guides of the housing and the inner surface of the removable cover plate when the shank is arranged through the lower of the aligning openings in the housing, and an insert in the recess in the bench for coacting with the cutter head when the latter is depressed through the swinging of the handle.

1,817,429. APPARATUS FOR GATHERING AND FEEDING IN CROP TO STRIPPER HARVESTING AND REAPER THRASHER MACHINES. HEADLIE SHIPARD TAYLOR, Sunshine, Victoria, Australia, assignor to H. V. McKay Proprietary Limited, Sunshine, Australia. Filed Oct. 5, 1928, Serial No. 310,603, and in Australia Dec. 23, 1927. 7 Claims. (Cl. 56—219.)

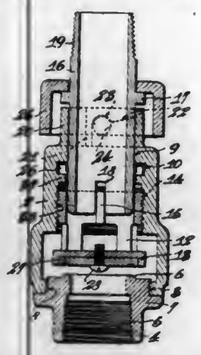


1. In apparatus for gathering and feeding in crop to and over the comb of stripper harvesting and reaper thrasher machines, a shaft rotatively mounted above the level of the comb, eccentrically disposed elements fitted to the said shaft, arms pivotally mounted on the eccentrically disposed elements, oscillatively mounted guiding elements, actuated by the eccentric elements on the shaft, movable connections between the guiding elements and the arms, and a batten supported on the forward ends of the arms, whereby the rotation of the eccentric elements will cause the arms to be thrust out and to be drawn inwardly and the connections between the arms and the guiding elements will constrain the movement of the batten whereby it will be caused to move rearwardly with its rear edge in contact with or close to the comb to free the same of any material jammed between the fingers thereof and to feed the material thereover.

1,917,430. QUICK COUPLING VALVE DEVICE. WILLIAM CHARLES TODD, Victoria, British Columbia, Canada, assignor to Economy Irrigation Company, Inc., Seattle, Wash., a Corporation of Washington. Filed Apr. 2, 1930. Serial No. 441,115. 8 Claims. (Cl. 284—19.)

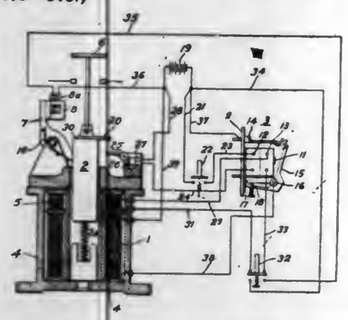
1. In apparatus of the class described, a valve housing body having a passage through the same, a valve seat at the entrant end of said passage, a tubular skeleton valve located within said body and having a screw connection therewith anad cooperating with said seat to close said passage, a quill projecting into said body, said quill and said valve having engaging portions, said quill having a flange, and a quick-acting coupling member cooperating with said flange and with said housing body, said cou-

pling member and said body having engaging portions held against disengagement by the pressure of fluid



passing through said housing body and said quill when said valve is unseated said quill being free to swivel within the coupling member.

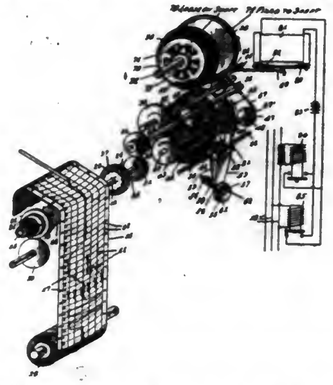
1,817,431. CONTROL APPARATUS. NIELS K. ANDERSEN, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 16, 1927. Serial No. 184,232. 10 Claims. (Cl. 175—375.)



6. A circuit controller comprising an electromagnet having an actuating coil, a secondary coil, and an armature actuated by the actuating coil, a source of current, and an auxiliary contactor for controlling the flow of said current to the actuating coil, said auxiliary contactor having a plurality of coils therefor, one of said coils being in circuit relation with said source, manual means for completing said circuit to close the auxiliary contactor, another of said coils on said auxiliary contactor being connected responsive to the current induced in said secondary coil, and disposed to maintain the auxiliary contactor closed until a substantially constant current value has been reached in said actuating coil, means in circuit relation with the exciting coil of the auxiliary contactor and operated by said armature for interrupting the circuit to said exciting coil when said armature is actuated, means for locking the armature, and magnetic means manually controlled for releasing said armature, and at the same time interrupting the circuit from the secondary coil to the auxiliary contactor coil which is in series relation therewith.

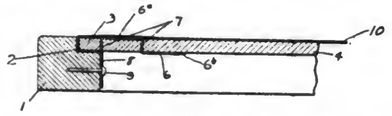
1,817,432. METER. DONALD J. ANGUS, Indianapolis, Ind. Filed Mar. 12, 1827. Serial No. 174,806. 5 Claims. (Cl. 234—5.5.)

1. In a graphic meter having a chart, a making device for the chart, and a low-speed driving mechanism for normally driving the chart, the combination of a high-speed driving mechanism for driving the chart at high speed, said high-speed driving-mechanism being normally at rest and including a device in which energy is stored, and means controlled by the occurrence of an emergency



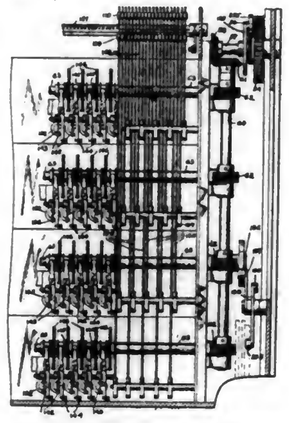
for starting said high-speed driving mechanism into operation to utilize its stored energy to drive the chart at high speed.

1,817,433. TABLE TOP. WARREN S. BELLOWS, East Orange, N. J. Filed Oct. 1, 1926. Serial No. 138,823. 4 Claims. (Cl. 45—31.)



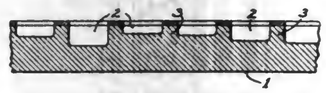
1. A table top construction, a top frame having a rabbeted inner edge, a top member of light-weight material adapted to fit into said frame, a plurality of metal straps, each strap extending along the upper and lower surfaces of said top member and extending through two holes therein and providing a projection having a perforation therein for securing the top member in the frame and means for securing the said projections to the frame.

1,817,434. TABULATING MACHINE. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Aug. 20, 1925. Serial No. 51,276. 25 Claims. (Cl. 235—60.)



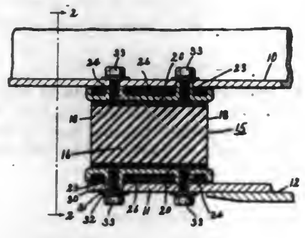
1. In a record controlled accounting machine, an accumulator comprising a plurality of entry retaining accumulator elements one for each denominational order on each of a plurality of shafts, the elements on each shaft being in staggered relationship to the elements on the other shafts.

1,817,435. INTAGLIO PRINTING METHOD. LEO FREUDER, Coney Island, N. Y., assignor to Hydrographic Products Company, Inc., New York, N. Y., a Corporation of New York. Filed June 3, 1925. Serial No. 34,539. 9 Claims. (Cl. 101—170.)



1. The method of making an intaglio printing surface which consists in applying a light exposed film having the desired impression and a fine-lined screen photographically reproduced thereon to the surface of a metal support, etching the surface to form the desired impression in intaglio and a screen composed of intersecting line guides of substantially uniform width in relief thereon, covering the intaglio portions with a water-repellant ink, cleansing the screen lines to render the same susceptible to electroplating and then galvanizing such screen lines without galvanizing the balance of such surface.

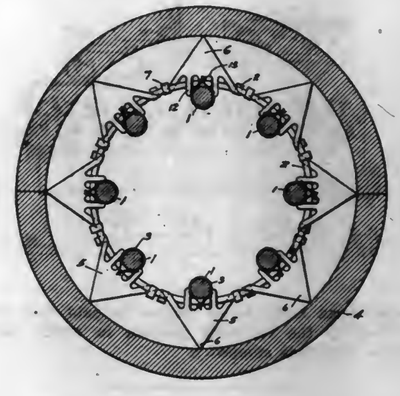
1,817,436. RUBBER SHACKLE. HARVEY D. GREER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 3, 1926. Serial No. 146,045. 5 Claims. (Cl. 267—30.)



1. In combination with a leaf spring aand frame of a vehicle, a shackle interposed between said spring and frame and comprising: an elastic rubber block extending longitudinally with said spring and having a flexible web of rubberized fabric wrapped about the lateral sides thereof and molded thereto, and means for clamping the lower portion of said flexible web to said spring and other means for clamping the upper portion of said web to said frame.

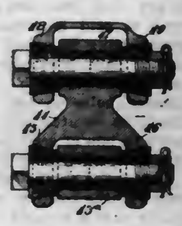
1,817,437. SPACER. EMIL E. HAWKINSON, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 9, 1927. Serial No. 218,378. 4 Claims. (Cl. 72—76.)

4. A spacer for supporting a reinforcing frame in a mold comprising a single flat triangular member, one of the corners of which rests on the mold, and having a plurality of lugs at the opposite edge for gripping one



member of the reinforcing frame, and other lugs adapted to hold said spacer perpendicular to another member of said frame.

1,817,438. SPRING CONNECTION. RAYMOND HENRY, Rock Island, Ill., and FRED E. BRADFIELD, Davenport, Iowa, assignors, by mesne assignments, to O-N Spring Shackle Company, Davenport, Iowa, a Corporation of Iowa. Filed Oct. 20, 1926. Serial No. 142,859. 21 Claims. (Cl. 267—54.)

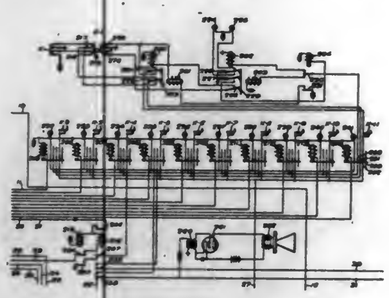


1. A connection of the type described comprising a member having a cylindrical bearing, a bolt extending through said bearing, a bushing interposed between said bolt and said bearing consisting of an elastic tubular member adapted to be expanded into tight engagement with the surface of the bolt and the inner face of the bearing, one end of said tubular member comprising an enlarged head portion, and means co-acting with said bolt to so expand said tubular member, said means comprising arms a fixed distance apart mounted on the end portions of the bolt, the enlarged head portion of said tubular member engaging in an opening in one of said arms.

1,817,439. SUPERVISORY CONTROL. ROBERT C. HUMMEL, Everett, Wash., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 31, 1926, Serial No. 98,656. Renewed Apr. 15, 1929. 19 Claims. (Cl. 177—353.)

3. In a supervisory control system, a first station, a second station, a distributor at each of said stations, means for operating said distributors in synchronism to a plurality of selecting positions sequentially, means for bringing said distributors, to a stop at any desired selecting position, a code-sending device, means responsive to the

stopping of said distributors, at a position for causing said device to transmit a selecting code combination of



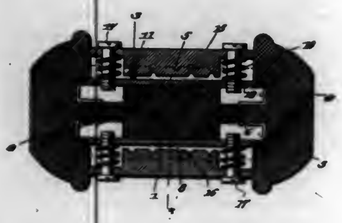
impulses from said second station to said first station individual to the selecting position in which the distributors have been stopped.

1,817,440. BUCKLE. CLIFFORD G. KING, Providence, R. I. Filed Dec. 20, 1930. Serial No. 503,695. 4 Claims. (Cl. 24—163.)



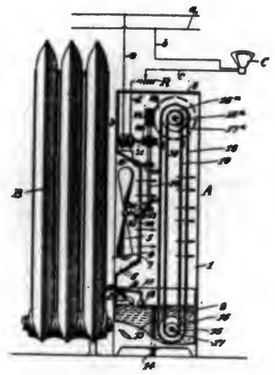
1. A buckle comprising a buckle-frame and a tongue for removably and adjustably attaching said buckle to a strap, said tongue being U-shaped and comprising a portion extending longitudinally of said strap when in position of attachment and two end-portions substantially at right angles to said longitudinal portion, the inner end-portion terminating in means for pivotally attaching said tongue to said buckle-frame, said tongue being constructed and arranged to be threaded through two longitudinally-spaced holes in the end of the strap to which said buckle is to be attached, one of said end-portions being disposed in one of said holes and the other in the next adjacent hole when said tongue is in position of attachment, and means on the outer end-portion of said tongue for preventing the removal of said strap from said tongue by a pull on said strap in the direction of the length of said tongue.

1,817,441. ELECTRICAL RECEPTACLE. THOMAS J. MADIGAN, Brooklyn, N. Y. Filed Dec. 12, 1928. Serial No. 325,592. 8 Claims. (Cl. 173—330.)



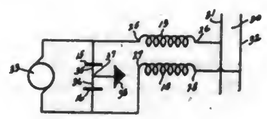
1. An electrical receptacle including a body of insulating material, a bus bar mounted on the body and provided with means for receiving the terminals of a plurality of branch conductors, and a clamping bar carried by the bus bar arranged within and cooperating therewith to simultaneously grip a plurality of the branch conductors.

1,817,442. HUMIDIFIER. JAMES W. MARTIN, Jr., Tuckahoe, N. Y. Filed May 26, 1926. Serial No. 111,709. 4 Claims. (Cl. 261—80.)



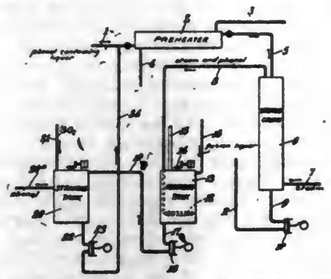
1. A humidifying apparatus adapted to be placed in inductive relation to a draft producing air heater and including a casing, a fan for moving air through the casing, a water reservoir in the lower portion of said casing, a plurality of separate belts of absorbent material arranged to afford free paths for flow of air between them and means for supporting them for vertical travel upward from and downward into water in said reservoir and in the path of said draft from the fan, said supporting means, including cooperating rotary supports for said belts, at least one of which is positively rotated; and means for operating said fan and said belts at widely different but interdependent speeds, including a rotary electric motor, a shaft driven thereby through a reducing gear, gearing between the shaft and the fan designed for proper speed of the fan, and a worm on the shaft cooperating with the worm gear to drive said belts at correspondingly reduced speed.

1,817,443. RADIO APPLIANCE. ORIN E. MARVEL, Dayton, Ohio, assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 6, 1927. Serial No. 189,313. 5 Claims. (Cl. 178—44.)



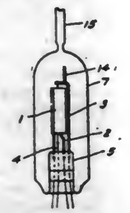
F. An electrical appliance for use in shielding undesired electrical oscillations from an electrical apparatus comprising electrical condensers for by-passing undesirable oscillations, and a pair of windings arranged with their coils closely adjacent one another, the windings being adapted to be connected to a power supply line and to an electrical apparatus so that one winding supplies current from one side of the line with the current flow through an individual turn in an opposite direction at any instant to the current flowing in a closely adjacent turn of the other winding.

1,817,444. PROCESS OF RECOVERING PHENOL FROM LIQUORS CONTAINING THE SAME. CARL L. MASTERS, Nitro, W. Va., assignor, by mesne assignments, to Elko Chemical Company, a Corporation of West Virginia. Filed June 4, 1927. Serial No. 196,454. 7 Claims. (Cl. 260—154.)



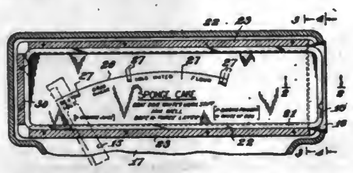
1. In the process of recovering a phenol from an acid solution of the same, the steps which comprise steam distilling said solution, passing said distillate without condensation into a substantially boiling aqueous solution of an alkaline fusion product of an organic alkali metal sulphonate and an alkali metal hydroxide.

1,817,445. VACUUM TUBE AND METHOD OF MANUFACTURE. ERNEST YEOMAN ROBINSON, Lynn, England, assignor to Associated Electrical Industries Limited, a British Company. Filed Dec. 29, 1925, Serial No. 78,124, and in Great Britain Dec. 31, 1924. 1 Claim. (Cl. 250—27.5.)



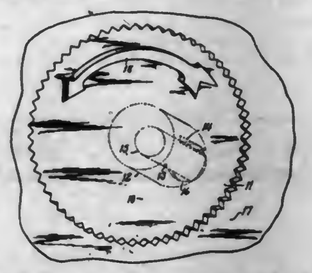
The method of introducing caesium into a vacuum tube of glass susceptible to attack by caesium when hot which comprises introduing calcium and chloride of caesium (in a metallic container) into the unexhausted tube in proximity to an electrode, exhausting the tube and then heating the electrodes of the tube and thereby heating said chloride.

1,817,446. SCALE AND CHART THEREFOR. JOSEPH E. ROGERS, Chicago, Ill., assignor to Dayton Scale Company, Dayton, Ohio. Original application filed Apr. 8, 1925, Serial No. 21,576. Divided and this application filed Apr. 28, 1926. Serial No. 105,329. 2 Claims. (Cl. 283—1.)



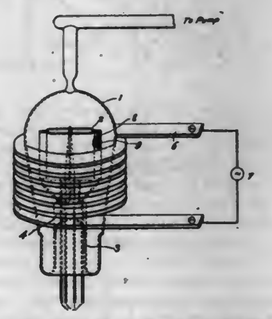
1. A mixing direction chart for use in mixing substances upon a weighing scale comprising a plurality of unequal weight fields adapted to be successively scanned by an index line of the scale in a single mixing operation, said fields having delineating weight graduations and commodity or substance designations upon said fields to indicate the commodity or substance represented thereby.

1,817,447. DIRECTION INDICATING TURNBUTTON FOR CLOCKS, ETC. JOHN O. SIMPSON, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Nov. 19, 1930. Serial No. 496,787. 1 Claim. (Cl. 116—114.)



The combination with an arbor; of a reflecting-surface adjacent to the said arbor; a direction-indicating turnbutton mounted upon the said arbor and consisting of a relatively-thin and wide disk provided with a hub and having a cut-out portion in the form of a direction-indicating character extending completely through the said disk from its front to its rear face; the said direction-indicating turn-button being mounted upon the said arbor in a position in front of the said reflecting-surface so that the light from the latter will assist in causing the said cut-out portion of the turn-button to stand out in clear relief.

1,817,448. SPACE CHARGE DEVICE. DAYTON ULREY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 26, 1925. Serial No. 11,722. 1 Claim. (Cl. 250—27.5.)

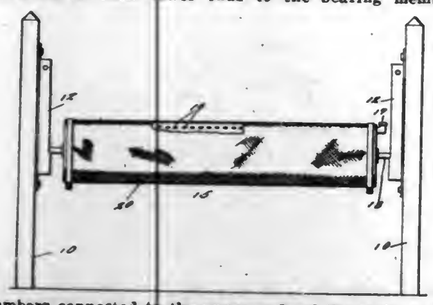


The method of introducing a vapor of metallic caesium into a space charge device which comprises attaching to a metallic electrode therein a portion of "misch-metal", depositing thereon cæsium chloride from alcoholic solution, evacuating undesired vapors therefrom, and heating to initiate a chemical reaction between the "misch-metal" and the cæsium chloride, whereby free cæsium metal is liberated and volatilized, and a compound of the "misch-metal" and chlorine is formed.

1,817,449. STOCK OILER. HARRY N. VAUGHAN, Villa Park, Ill. Refiled for abandoned application Serial No. 691,445, filed Feb. 8, 1924. This application filed Jan. 17, 1930. Serial No. 421,563. 1 Claim. (Cl. 119—157.)

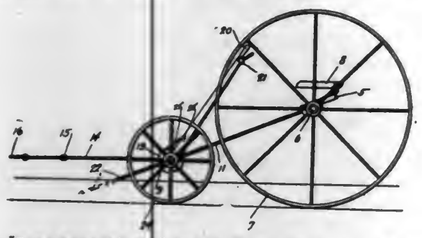
Apparatus of the class described including tubular guides for attachment to spaced supporting posts, each guide having a longitudinal slot extending thereinto from its upper end, a barrel for holding a treating liquid, there being apertures in the barrel, a wrapping of absorbent material mounted on the barrel and closing the opening, split ring clamps embracing the barrel for detachably securing the absorbent material to the barrel,

a shaft extending axially through the barrel and having its end portions insertible downwardly into the slot in the guides, bearing members engaged by the ends of the shaft and insertible downwardly into the guides, springs attached at their lower ends to the bearing members,



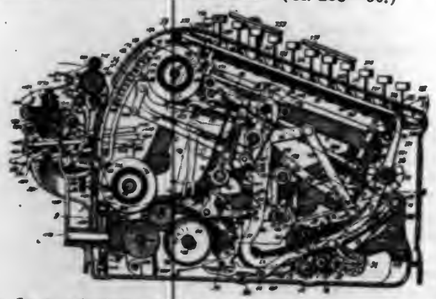
members connected to the upper ends of the springs, said members and the springs being insertible downwardly into the guides, and means for anchoring said members in the guides, thereby to hold the spring under compression to resist movement of the shaft toward the open ends of the slots in the guides.

1,817,450. QUACK GRASS DESTROYER. JOHN N. WATKINS, Iowa City, Iowa. Filed May 8, 1930. Serial No. 450,762. 3 Claims. (Cl. 56—380.)



3. In an apparatus of the class described, a cross member terminating in stub axles, wheels journaled on the axles, rods extending forwardly from the member, bearings on the forward ends of the rods, a shaft journaled in said bearings, wheels journaled on the ends of said shaft, a plurality of tines extending through the shaft and having their central portions anchored thereto, a ratchet on the central portion of said shaft, a lever on the central portion of the shaft having a detent structure for cooperation with the ratchet, and a member pivotally mounted on said lever and engageable with the ratchet for imparting rotative movement to said shaft when said lever is rocked.

1,817,451. CALCULATING MACHINE. WILLIAM S. GUBELMANN, Buffalo, N. Y. Filed Sept. 19, 1912. Serial No. 721,141. 975 Claims. (Cl. 235—60.)



1. In a calculating machine, the combination of a plurality of segmental actuating members each having gear racks on its opposite sides; a plurality of sets of accumulator gear wheels, all of the wheels of any set being arranged on the same side of said segmental actuating members, corresponding wheels of the sets being arranged on opposite sides of said segmental actuating members; and means for moving either of said sets of accumulator gear wheels into engagement with the respective gear rack of said segmental actuating member.

76. In a calculating machine, the combination of a plurality of movable gear segments, a plurality of accumulator gear wheels adapted to engage said segments, a plurality of subtracting gear wheels adapted to engage said segments, and carrying mechanism common to both the accumulator and the subtracting wheels.

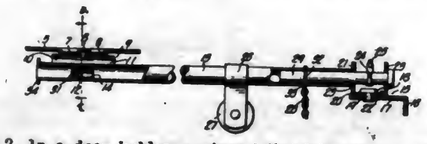
128. In a calculating machine, the combination of a plurality of accumulators; a plurality of actuators, an actuator for each of said accumulators; a plurality of stop devices comprising a stop device for each of said actuators for controlling excursions thereof; a plurality of rows of keys, a row of keys for each of said stop devices for limiting the movements of the respective stop devices; means whereby said keys may be locked in controlling position when moved thereto; means whereby the set keys may be returned to normal and reset for controlling a subsequent operation during an operation of the machine they are first set to control and without affecting the setting of the stops; and means for returning said stops to normal position after said keys are reset and for thereafter permitting said stops to move according to the resetting of the keys.

425. In a calculating machine, the combination of an accumulating mechanism, an operating mechanism therefor, a paper carriage, a plurality of type arranged side by side and adapted to print parallel columns of numbers, a plurality of keys, and means for controlling the movement of the carriage and the operation of the operating mechanism by the depression of either of said column selecting keys.

546. In a calculating machine, the combination of a plurality of accumulating devices, means for dividing said accumulating devices into a plurality of independent groups on which separate additions may be effected simultaneously, an indicator associated with the group of accumulating devices at the right of said division and adapted to denote when numbers have been added on said last mentioned accumulating device in excess of its capacity, and means for rendering said dividing means and indicator operative and inoperative.

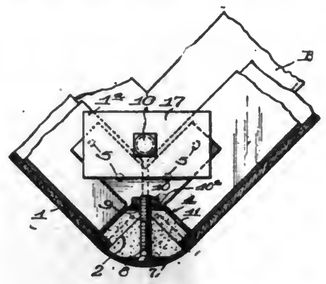
604. In a calculating machine, the combination of a plurality of sets of main accumulating devices for simultaneously and independently accumulating a plurality of column of numbers, a plurality of sets of printing devices associated with said accumulating devices whereby said numbers may be printed at the same time that they are accumulated, means whereby the printing of the numbers of one of said columns may be made inoperative, a plurality of sets of auxiliary accumulating devices, total printing and clearing devices, and means whereby the totals of the several columns may be simultaneously printed, cleared, and transferred from the main accumulating devices to the auxiliary accumulating devices.

1,817,452. DOOR HOLDER. JOSEPH E. HAGSTROM, Kansas City, Mo. Filed June 17, 1929. Serial No. 371,406. 4 Claims. (Cl. 292—262.)



2. In a door holder, a pivotal lintel bearing, a pivotal door bearing, a rod rotatably mounted in the bearings and slidable in one of the bearings, a weighted arm fixed to the rod, and means including a notched portion of the rod for latching the rod against sliding movement.

1,817,453. FURNITURE TOP CONSTRUCTION. DAVID E. HUNTER, Muskegon, Mich., assignor to Shaw-Walker Company, Muskegon, Mich., a Corporation of Michigan. Filed July 20, 1929. Serial No. 379,678. 14 Claims. (Cl. 45—31.)



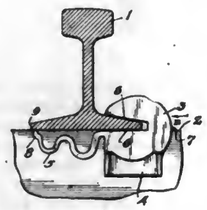
3. A top for furniture comprising a core of sheet metal having its marginal portions shaped to form edges of substantial depth and its corners cut away to provide corner openings, a layer of covering material applied over said core, caps fitting over the corner openings of said core flush with the covering material, a fastening member extending diagonally from the central portion of each cap, and an anchor member mounted at each corner of said core and engaged by said fastening member.

1,817,454. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,718. 9 Claims. (Cl. 42—75.)



1. In a repeating firearm, a magazine, a forearm slidable on said magazine, stops on the magazine for limiting the forward movement of said forearm, a barrel, a barrel lug joining the forward end of the magazine with the barrel, a plate integral with the barrel, said plate and lug having intermeshing teeth and notches, and spring clamping-arms integral with said lug snugly embracing the barrel to hold said teeth and notches in mesh.

1,817,455. RAILWAY RAIL ANCHOR OR ANTICREEPER. ALOYSIUS S. MCDONNELL, Chicago, Ill. Filed Apr. 27, 1929. Serial No. 358,453. 2 Claims. Cl. 238—330.)

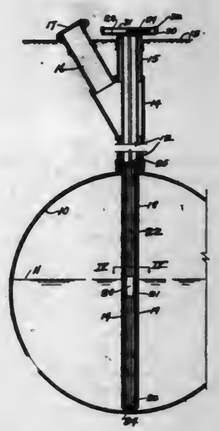


1. A rail anchor comprising a massive metallic rigid two jawed portion, formed with a jaw opening to fit smoothly and closely around a part of the rail flange on one side, a depending light pressure plate portion integral with and offset forwardly from the line of the jaw portion but having a substantially central transverse location with reference to the said jaw opening, and extending downward to abut a stationary part of the road bed, a resilient arm member attached to the jaw and pressure plate portion extending transversely to the opposite edge of the rail flange and having an upwardly extending hook to engage this edge, said resilient arm member being constructed to initially have an upward tendency against the rail flange.

1,817,456. STABILIZATION OF ORGANIC NITRATES. RUSSELL MCGILL, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 3, 1930. Serial No. 459,119. 6 Claims. (Cl. 23—250.)

1. The method of stabilizing organic nitrates comprising adding thereto a substance containing the ethylene oxide structure having a boiling point so sufficiently high that it will remain in the compound.

1,817,457. OIL TANK GAUGE. JAMES B. MCNEIL, Raleigh, Tenn. Filed Apr. 16, 1930. Serial No. 444,660. 1 Claim. (Cl. 73—82.)



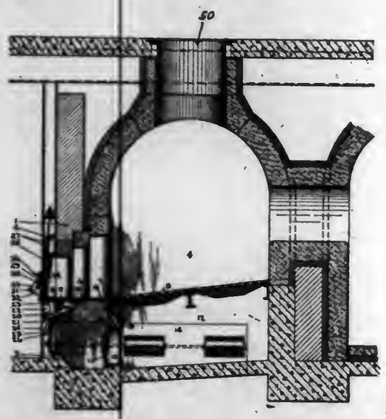
In a tank gauge, a dial, a pipe carrying said dial and extending vertically downward therefrom to the bottom of said tank, said pipe being open at its lower end so as to establish communication between said pipe and tank opposite disposed guides secured within said pipe and substantially co-extensive with said tank diameter, extending upward from the bottom of said tank, a pointer co-operating with said dial, a tube carrying said pointer, and having inherent stiffness, extending vertically downward from said pointer to the bottom of said tank, and within said pipe, bearings for said tube at the bottom of said tank, and at the top thereof, said upper bearing being disposed within said pipe and supported on the upper end of said guides, said tube having a groove substantially accomplishing a complete spiral therearound between said bearings, a float disposed around said tube, a pin projecting inward from said float into said groove, pins projecting oppositely outward from said float, and co-acting with said guides to prevent rotation of said float, said pins being disposed adjacent the bottom of said float.

1,817,458. PROCESS FOR THE PRODUCTION OF FIRE LIGHTERS FOR COAL OR OTHER FUEL. ERICH BERNHARD MÜNCHOW, Planegg, Germany. Filed Mar. 5, 1930, Serial No. 433,495, and in Germany Nov. 23, 1928. 1 Claim. (Cl. 44—41.)

A process for the manufacture of coal or fire lighters, consisting in dipping for a certain determined period a raw product, consisting of a well dried peat from younger

open layers, such as peat moss, sphagnum, in a mixture, composed of naphthalene, nitrate of potash, magnesium and formaldehyde, the dried peat, owing to its capillarity, becoming impregnated by absorption of the mixture.

1,817,459. FURNACE. EDGAR BOYD KAY, Washington, D. C.; Florence Means Kay executrix of said Edgar Boyd Kay, deceased. Filed Sept. 1, 1928. Serial No. 303,534. 5 Claims. (Cl. 110—12.)



1. In an incinerator or the like, provided with a wall, a grate, a fire chamber arranged above the grate and having a doorway arranged in said wall, said chamber having an opening in its top through which material to be incinerated is deposited on the grate, a main stoking door normally, closing said doorway, an ash pit arranged below the grate, a movable dead plate arranged between the grate and main stoking door, said grate being inclined downwardly toward said dead plate, a second pit arranged below the dead plate, a partition segregating the ash pit from the second pit along the line where the front end of the grate meets the dead plate, registering doorways for the ash pit and second pit arranged respectively in said partition and said wall, doors normally closing said doorways, and means for operating the dead plate to discharge materials from the latter into the second pit.

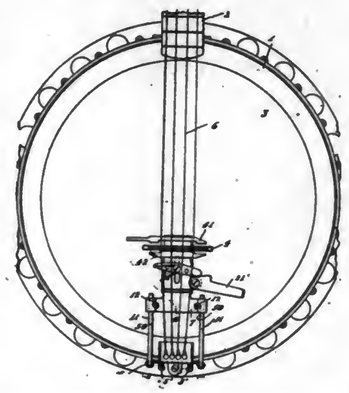
1,817,460. SHADE AND CURTAIN FIXTURE. JOSEPH OWSIAK, New Britain, Conn. Filed Aug. 7, 1929. Serial No. 394,116. 5 Claims. (Cl. 156—24.)



1. A curtain fixture comprising, in combination a base plate having a polygonal raised portion adapted to be permanently secured to a window frame, and a curtain bracket having a corresponding polygonal recess adapted for interfitting engagement in a plurality of different angular positions with the cooperating polygonal raised portion on the base plate.

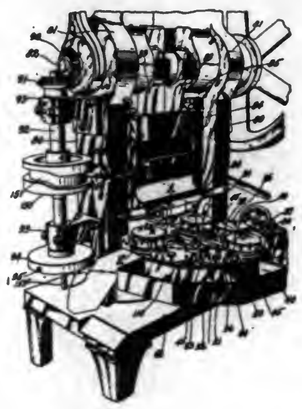
1,817,461. TAILPIECE MUTE FOR STRINGED MUSICAL INSTRUMENTS. ROBERT R. PAGE, New York, N. Y. Filed June 19, 1929. Serial No. 371,982. 9 Claims. (Cl. 84—273.)

1. In a muting device for a stringed musical instrument, a tail piece, a base plate at the inner end thereof, connected thereto and supported thereby out of contact with the body of the instrument, a pair of mute carrier plates, slidably mounted on said base plate, each of said carrier plates having thereon a bridge gripping member at one end



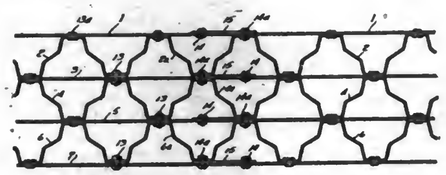
thereof, and means on said base plate for causing said carrier plates with said members thereon to slide in opposite directions on said base plate, thereby moving said members towards or away from each other and into and out of contact with the bridge of said instrument.

1,817,462. ASSEMBLING MACHINE. ALVA W. PHELPS and NORMAN L. PENN, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,546. 7 Claims. (Cl. 29—84.)



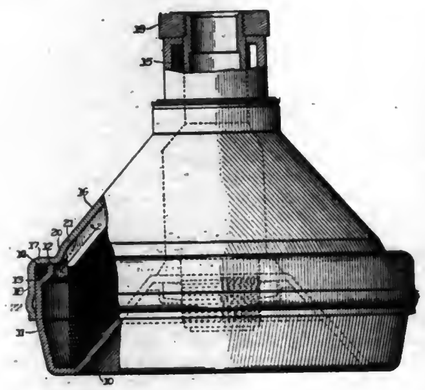
1. Apparatus for assembling parts one of which is provided with recesses into which other parts are pressed, comprising in combination, a work holder having vertically extending recesses located to correspond with the recesses of the recessed part, said work holder recesses receiving and locating the parts to be pressed into the recesses of the recessed part, said work holder having means for supporting the recessed part with its recesses in alignment respectively with the work holder recesses and means for yieldingly supporting the recessed part above the other parts held by the work holder, and means for moving the recessed part toward the work holder in order to cause the other parts to be pressed into the recesses of the recessed part.

1,817,463. CONTINUOUS GRATING STRUCTURE. PAUL LEON PRICE, Mount Vernon, N. Y., assignor to Irving Iron Works Company, a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,671. 9 Claims. (Cl. 189—82).



7. A continuous grating structure suitable for flooring and the like purposes, which said structure comprises, in combination, a plurality of standardized grating units with their adjacent ends interleaved, each unit comprising a series of straight, parallel bars of uniform thickness, with intervening strips each crimped to a uniform depth throughout the major portion of its length but having an end portion crimped to a depth less than the standard crimps by an amount equal to the thickness of a straight bar; whereby said interleaving and fastening together of the ends of said unit has been effected without distortion thereof or of the fastening means.

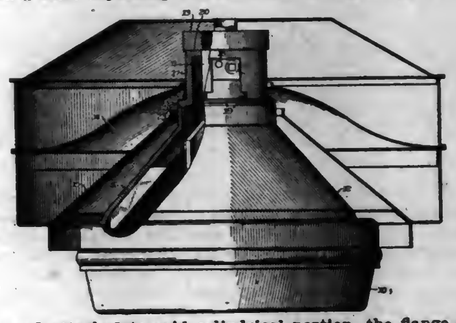
1,817,464. SEPARATOR. PARKE B. SHEE, Oak Park, Ill. assignor to Sears, Roebuck and Co., Chicago, Ill., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,787. 3 Claims. (Cl. 233—29.)



1. In a centrifugal separator, a bowl assembly comprising, in combination, a bowl having a rim, a stem projecting centrally upward from the bottom of said bowl, a cover having a conical section and a flange extending radially outward therefrom seated on the rim of said bowl, and a nut threaded to said stem and clamping said cover against the rim of the bowl, said cover having a rib formed by bending inward to a diameter less than the diameter of the rim of the bowl the end of the conical section adjoining said flange to stiffen said cover and to cause said flange to bear tightly against the rim of the bowl when clamped by said nut.

1,817,465. SEPARATOR. PARKE B. SHEE, Oak Park, Ill., assignor to Sears, Roebuck and Co., Chicago, Ill., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,788. 2 Claims. (Cl. 235—46.)

1. In a bowl assembly of a centrifugal separator, a bowl cover constructed in two pieces, one piece comprising a relatively thin conical section made of drawn metal and having a cylindrical portion at its upper end, the other piece comprising a cylindrical section made of thicker turned metal and having an outlet and a transverse flange abutting against the cylindrical portion of said first piece, and a skirt depending therefrom and fitting snugly with-



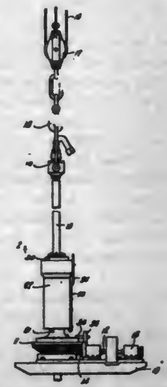
in and attached to said cylindrical portion, the flange of said second piece having a pair of relatively wide sharp-edged shoulders cut therein below said outlet from which liquid tending to run down the side of said cover will be thrown off by the centrifugal force.

1,817,466. TICKET FILE. KURT SEIFERT and ERNST SACHSE, Magdeburg, Germany. Filed Dec. 26, 1929, Serial No. 416,698, and in Germany Jan. 9, 1929. 5 Claims. (Cl. 129—23.)



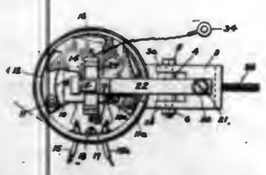
1. A ticket file, comprising in combination an upwardly projecting filing pin, a vertical rod at some distance from said filing pin bent at the upper end to form a horizontal arm extending above the point of the filing pin, and a clip composed of two plates, oscillatably suspended from said horizontal arm adapted to cover the point of said filing pin.

1,817,467. FEED FOR WELL DRILLING TOOLS. WALTER N. THOMPSON, Huntington Beach, Calif. Filed Nov. 3, 1930. Serial No. 492,959. 19 Claims. (Cl. 255—22.)



1. A feed for well drilling tools, including a stationary piston, a cylinder slidable relative to the piston, and slips mounted on the cylinder for engaging a drilling tool.

1,817,468. RELAY MECHANISM. ARLEIGH N. VAN NOSTRAND, Flushing, N. Y., assignor to Telautograph Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 4, 1929. Serial No. 390,269. 8 Claims. (Cl. 200—91.)



1. A relay comprising an electromagnet, a magnetic diaphragm adapted to be vibrated by the electromagnet, said diaphragm having notches providing peripheral radial tongues, a loose contact circuit controlling device, and an operative connection between the diaphragm and loose contact device whereby diaphragm vibrations are imparted to said device.

1,817,469. RETAINING BAR FOR LOOM SPOOLS. ROBERT E. VICKERMAN, Philadelphia, Pa. Filed Apr. 14, 1930. Serial No. 444,275. 6 Claims. (Cl. 28—55.5.)



1. A tuft yarn retaining bar consisting of a bar formed by two oppositely disposed strips in spaced relation and interconnected along one edge thereof, said bar having yarn receiving slits in the interconnected portion and strips whereby each strand of yarn is held at two places.

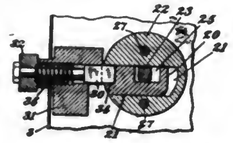
1,817,470. FUEL BURNING APPARATUS AND METHOD. HENRY ADAMS, Plainfield, N. J. Filed Sept. 28, 1923. Serial No. 665,454. 26 Claims. (Cl. 158—74.)



3. A fuel burner comprising projectors for fluid under pressure disposed in parallelism and having flaring interiors of greatest diameter at their discharge ends, and a fuel pipe disposed between the projectors provided with discharge channels each of which terminates in alinement with the flaring interior side of the adjacent projector at the end of the projector and is spaced away slightly from the end of the projector for discharging fuel into and substantially at right angles to the path of the fluid discharged from the projector, the fluid from the projector being discharged in advance of discharge of the fuel from the fuel pipe.

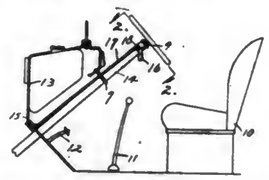
20. A process comprising, projecting substantially parallel laterally confined separated streams of high pressure fluid; laterally progressively expanding the confined streams; discharging each stream; injecting liquid fuel transversely into the streams near their discharge whereby to atomize the fuel and to mix it with the fluid and cause it to be carried along by the stream; introducing air to, and causing combustion of, the mixture of each stream near the point of mixture; combining the burning streams into a single stream; introducing air to the streams at the point of their combination; and supplying air to said single stream beyond the point of combination.

1,817,471. TOWEL CABINET. JOSEPH H. ADDLER, Brooklyn, N. Y., assignor to Pulliclean Manufacturing Corporation, Bridgeport, Conn., a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,138. 8 Claims. (Cl. 312—38.)



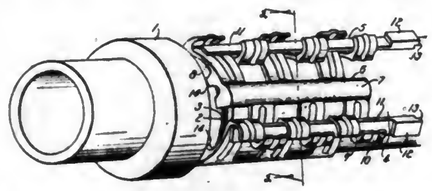
1. In a towel cabinet, the combination of a towel feed-controlling roller, a stop device, and a slidably mounted bolt carried by said roller adapted to be projected from its support during rotation of the roller into position for engagement with said stop at one side thereof, the said stop device and the bolt having end faces positioned opposite each other when the bolt is in engagement with the stop device and the latter being slidably mounted for movement in a direction to shift the bolt to stop releasing position.

1,817,472. MEANS FOR ACTUATING THE ELECTRIC STARTERS OF AUTOMOBILES AND CONCURRENTLY RETARDING THE IGNITION SPARKS IN THE ENGINES THEREOF. ALBERT H. ALKIRE, Des Moines, Iowa. Filed Aug. 12, 1929. Serial No. 385,427. 2 Claims. (Cl. 123—179.)



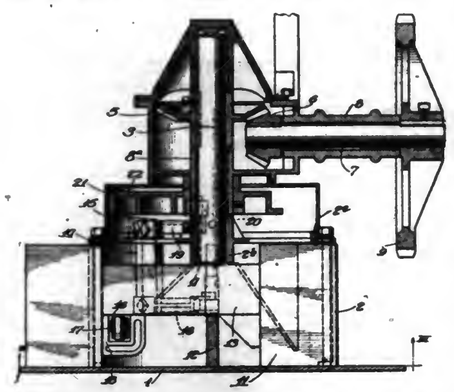
1. In combination for concurrently actuating the electric starter and retarding the ignition spark of an internal combustion engine, a handle hinged to the steering wheel post of an automobile, an extension of said handle for moving to the retarding position the spark lever, a rod substantially parallel to said steering wheel post and moved by said handle, said rod having at its lower end a bent portion for pressing down the starter button when the rod is moved down by said handle.

1,817,473. HOSE CLAMP. HENRY H. BAILEY and JACK LEE THOMAS, Oklahoma City, Okla., assignors to Mechanical Royalties Corporation, Oklahoma City, Okla., a Corporation of Oklahoma. Filed Oct. 31, 1930. Serial No. 492,468. 5 Claims. (Cl. 24—19.)



5. A hose clamp including cooperating sections, each section having a rigid longitudinal spine, ribs extending in staggered relation from opposite sides of the spine and having longitudinal indentations, hooks on the outer ends of the ribs, the hooks of one section being interposed between the hooks of an adjacent section to form a longitudinal groove, and wedge members slidable in said grooves for urging the sections into contracted relation with each other.

1,817,474. FEEDER FOR BUCKET LOADERS. HARRY H. BARBER, Aurora, Ill., assignor to Barber-Greene Company, a Corporation of Illinois. Filed Oct. 7, 1929. Serial No. 397,912. 8 Claims. (Cl. 198—9.)



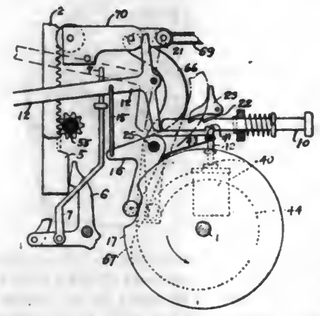
3. A bucket loading device comprising a rotatable disk, a drum secured upon said disk, said drum having a pair of alined slots, a material advancing element slidably extending through said alined slots and means for periodically reciprocating said element.

1,817,475. CLOSURE FOR BRACELETS AND THE LIKE. EMIL BECKER, Pforzheim, Germany. Filed Sept. 11, 1929, Serial No. 391,893, and in Germany July 8, 1929. 2 Claims. (Cl. 224—4.)



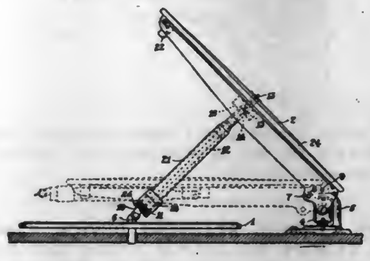
1. A closure for bracelets, comprising in combination with a central casing, two band sides hingedly connected each to said central casing, a rack at the outer end of each band side, a pinion with which said racks mesh, and a flat tubular housing composed of several elements hingedly connected with one another.

1,817,476. TOTALIZING DEVICE. FREDERICK G. L. BOYER, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Apr. 1, 1922. Serial No. 548,744. 18 Claims. (Cl. 235—58.)



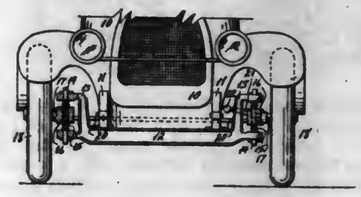
1. In combination a computing mechanism; a totalizer for accumulating the results of successive computations performed by the mechanism; and means controlled by said computing mechanism for automatically operating said totalizer to register the result of one computation during the operation for making the succeeding computation, upon said computing machine.

1,817,477. TALKING MACHINE. HORACE LEOPOLD TUCKER BUCKLE, Iver Heath, England, assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Oct. 17, 1924, Serial No. 744,244, and in Great Britain Oct. 23, 1923. 11 Claims. (Cl. 274—16.)



1. A talking machine comprising a support, a diaphragm, a diaphragm carrier pivoted on the support about a horizontal axis and carrying said diaphragm, a transmission member hinged upon said carrier, and an oscillating stylus holder mounted on the free end of said transmission member.

1,817,478. VEHICLE. GILES H. COOK, Des Moines, Iowa. Filed Oct. 16, 1929. Serial No. 399,933. 6 Claims. (Cl. 280—87.)

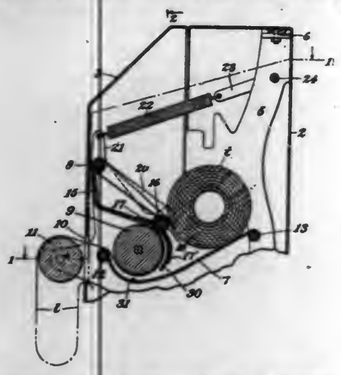


1. The combination with a vehicle having front and rear axles, steerable wheels supporting the ends of said front axle and non-steerable wheels supporting the ends of said rear axle, of a vehicle body fixed to said front axle and link-connected for oscillation relative to said rear axle, manually-operable means for the control of said steerable wheels, and control means operatively connected with said body supporting means and manually-operable steering means whereby said front axle may be tilted to automatically oscillate said vehicle body to the inside of a turn when said steerable wheels are actuated to turn said vehicle.

1,817,479. TOWEL CABINET. HERBERT W. CROWSON, New York, N. Y., assignor to Pulliclean Manufacturing Corporation, Bridgeport, Conn., a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,214. 7 Claims. (Cl. 318—88.)

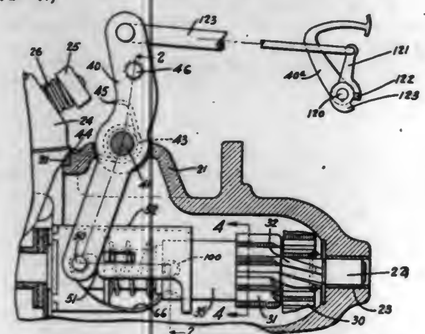
1. In a towel cabinet, the combination with a feed roller, of a towel shelf at one side of said roller inclined down-

wardly towards the same whereby a supported roll of towelling will gravitate towards the roller, and a pivoted



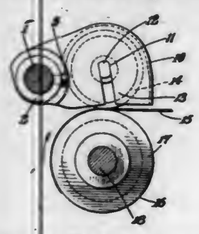
tension device having a part thereof interposed between the roller and the roll of towelling to be forced by the latter against said roller.

1,817,480. ENGINE STARTING DEVICE. JOHN B. DYER, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,845. 9 Claims. (Cl. 74—7.)



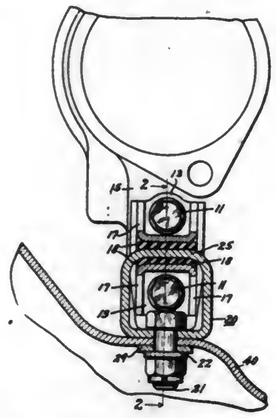
1. Engine starting apparatus comprising in combination, a pinion movable into mesh with the gear of an engine to be started; manually operable means adapted to move the pinion into enmeshment with the gear; a latch adapted to be moved out of its normal position to engage the manually operable means for retaining it in inoperative position; and an electromagnet for moving and retaining said latch out of its normal position while the engine is self-operating.

1,817,481. GUARDED CUTTER. WILLIAM FAIRCHILD, Albany, N. Y., assignor to A. P. W. Paper Co., Albany, N. Y., a Corporation of New York. Filed July 13, 1929. Serial No. 377,965. 6 Claims. (Cl. 164—70.)



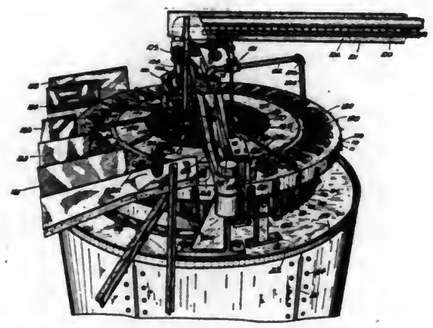
1. In combination a disc-shaped rotary cutter, an integral guard enclosing the exposed portion thereof, a shaft on which the guard is supported, located beyond the periphery of the cutter, said shaft having a spring thereon connected to the guard for exerting torsional force thereon and adjustable sleeves secured to said shaft for determining the relative position of the spring and cutter.

1,817,482. RESILIENT MOUNTING BRACKET. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 30, 1929. Serial No. 389,558. 3 Claims. (Cl. 248—14.2.)



1. A metal-isolating mounting unit suitable for mounting a part upon a second part and preventing transmission of vibration therebetween, comprising: a horizontally disposed flat U-shaped bracket rigid with one of said parts, an endless one piece stirrup fixed to said other part and having a flat portion passing through said flat bracket, and resilient non-metallic material compressed under a considerable initial compression upon all sides of said flat portion and isolating said flat portion from said bracket member so as to absorb relative vibrations between said two parts in any direction.

1,817,483. CASTING MACHINE. LOUIS C. GOAD and FRANK D. WALSMITH, Muncie, Ind., assignors to Delco-Remy Corporation, Muncie, Ind., a Corporation of Delaware. Filed Oct. 12, 1929. Serial No. 399,171. 10 Claims. (Cl. 22—77.)



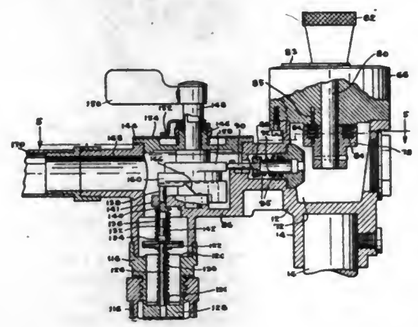
1. A casting machine comprising, in combination, a turntable conveyor, blocks having mold cavities detachably supported by the conveyor, the walls of the blocks being in good thermal contact with the walls of the conveyor, and means for circulating a cooling medium through the conveyor in close proximity to said blocks.

1,817,484. GRATE. TADEUSZ GOEBEL, Lwow, Poland. Filed Dec. 3, 1928, Serial No. 323,406, and in Germany Dec. 12, 1927. 4 Claims. (Cl. 126—163.)



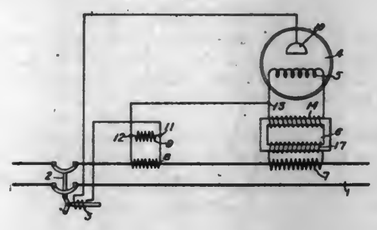
1. A furnace grate comprising in combination, a plurality of transversely arranged grate bars, each consisting of an upright web and an inclined web extending throughout the length of the bar, arranged at an obtuse angle to each other and provided with air passages; each bar being provided with transverse ribs having projections contacting with adjacent bars; supporting members extending longitudinally of the grate and provided with pockets opening laterally and upward, and adapted to receive the ends of said upright webs for supporting the bars and formed to permit a limited rocking motion of the bars therein; the bars being arranged so that their inclined webs form a fuel supporting surface; a vertically adjustable member extending transversely of the grate adjacent one of said bars and engaging the inclined web thereof, and means for supporting said member in different vertical positions, thereby to hold the grate bars with their inclined webs at different inclinations.

1,817,485. ANÆSTHETIZING APPARATUS. JAY A. HEIDBRINK, Minneapolis, Minn. Filed June 5, 1928. Serial No. 283,015. 2 Claims. (Cl. 128—203.)



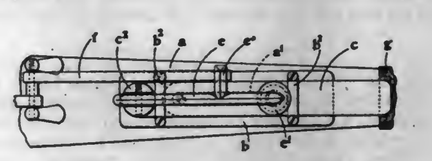
1. An anæsthetizing apparatus having a mixing chamber, means for supplying thereto from independent sources of supply a plurality of gases under pressure, an inhaler, a hollow member interposed between said mixing chamber and said inhaler, a single rotatable cam device in said hollow member, a valve tensioned to close the passageway between said mixing chamber and hollow member, passageways connecting said sources of gas supply directly with said hollow member, valves tensioned to close said passageways respectively, said cam device having peripheral cam surfaces arranged to open separately any one of the aforesaid valves, a gas bag connected with said hollow member by a passageways, and a valve tensioned to open said last mentioned passageway, said cam device having end cam surfaces arranged to close said last mentioned valve and also to permit it to have an open position for the open position of each of the aforesaid valves.

1,817,486. ELECTRICAL PROTECTIVE DEVICE. EDGAR A. HESTER, Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 6, 1919. Serial No. 336,070. 4 Claims. (Cl. 175—294.)



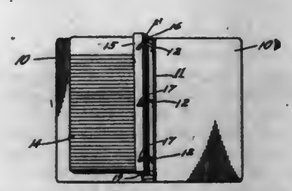
1. In an electric circuit, the combination with a circuit interrupter and a trip coil therefor, of a hot-cathode valve, a transformer having a saturable core member connected between the cathode of the valve and the circuit and a series transformer connected in series with the valve and the trip coil.

1,817,487. REED INSTRUMENT AND MORE ESPECIALLY A SAXOPHONE. JOHN HEYWORTH, Blackpool, PERCIVAL JAMES PACKMAN, Highbury, London, and JOSEPH LESLIE MOLD, Acton, London, England, assignors of one-fourth to William Manning, London, England. Filed Aug. 20, 1928, Serial No. 300,866, and in Great Britain Mar. 3, 1928. 17 Claims. (Cl. 84—385.)



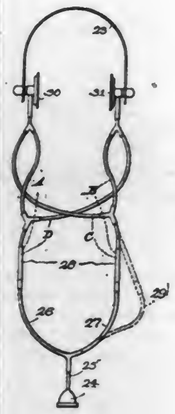
8. In reed instruments, more especially saxophones, an adjustable octave vent, pad and operating mechanism therefor, and means connecting the said adjustable elements with the mouthpiece of the instrument so that movement of the mouthpiece results in proportional movement of the octave vent pad and mechanism therefor, substantially as hereinbefore described.

1,817,488. DEVICE FOR SECURING TOGETHER THE BINDING EDGES OF LOOSE LEAF FILLER SHEETS. CLARENCE B. IRVING, Kansas City, Mo., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Jan. 14, 1929. Serial No. 332,447. 4 Claims. (Cl. 129—1.)



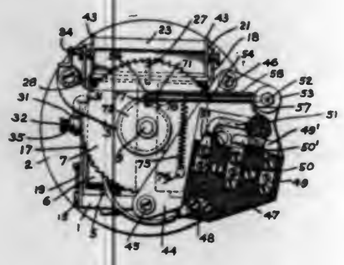
2. In a loose leaf binder having ring hooks, a pair of metal plates having flanged ends adapted to be mounted upon said ring hooks and means for securing said ends together in different positions.

1,817,489. SOUND TRANSMISSION. W. BARTLETT JONES, Chicago, Ill. Filed Dec. 5, 1928. Serial No. 323,886. 11 Claims. (Cl. 181—24.)



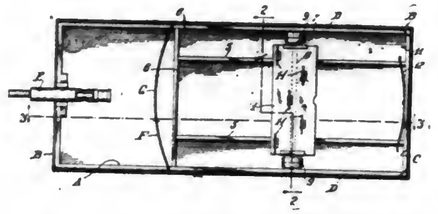
1. The method of transmitting an original sound to human ears which comprises, converting a wave form corresponding to said sound into two similar portions, delaying one portion relative to the other portion, recombining the out-of-phase wave forms, converting the resulting wave form into two portions, and presenting the divided portions as sound separately to each ear.

1,817,490. SYNCHRONIZING MECHANISM FOR SECONDARY CLOCKS. CLINTON E. LARRABEE, Binghamton, N. Y., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Apr. 3, 1929. Serial No. 352,284. 7 Claims. (Cl. 58—26.)



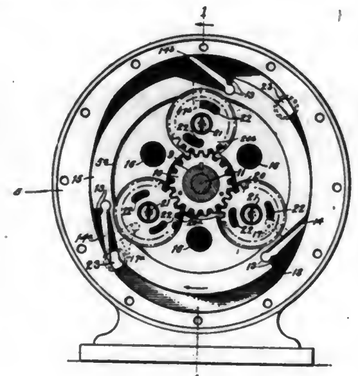
1. In a secondary clock, a driving magnet controlled by an actuating circuit, a driving shaft carrying the hands of the clock on its one end and a pair of stepped cams on its opposite end, said shaft being actuated by said magnet, a pivotally mounted rod arranged parallelly to the plane of said cams, a switching element, pivotally supported by said rod and connecting said driving magnet with different lines of said actuating circuit, said switching element having wing portions on opposite sides of the axis of said rod, each wing portion riding upon an associated stepped cam to pivot said switching element into different switching positions by the steps of said cams.

1,817,491. MECHANICAL TOY. ARTHUR S. LITTLEFIELD, Winnetka, Ill., assignor to Littlefield Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 20, 1928. Serial No. 255,513. 4 Claims. (Cl. 273—101.)



1. A mechanical toy including tiltable rails, a gravity actuated platform equipped with a rotatable shaft riding on said rails, a portion of said platform contacting with said rails to retard travel thereof, and balance wheels on said shaft adapted to govern speed of travel of the latter.

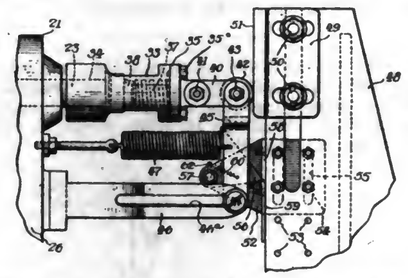
1,817,492. ROTARY ENGINE. ALFRED MARCUM, Louisville, Ky. Filed Dec. 7, 1928. Serial No. 324,477. 4 Claims. (Cl. 121—96.)



1. A rotary engine including a casing having an inlet port and an exhaust port therein, a rotor journalled in said casing and having abutments to rotate therewith and to receive fluid pressure for causing rotation of the rotor, said casing and rotor combining to form a pressure chamber across which said abutment extends during a part of each cycle of the rotor, said rotor having feeding ports to open into said pressure chamber, fluid-controlling members in the casing and journalled excentrically to the journal of the rotor and rotatable bodily with the rotor and operable upon their axes for opening and closing the feeding ports of the rotor, and means stationary within the casing and cooperative with the rotor for actuating said fluid controlling members on their axes.

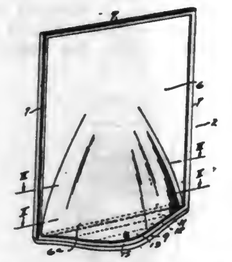
1,817,493. TURNING MACHINE. CARL LAWRENCE MATTISON, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed Dec. 10, 1928. Serial No. 324,831. 5 Claims. (Cl. 142—17.)

1. A machine of the character described comprising, in combination, a shiftable carriage, a spindle mounted thereon for axial movement, and spindle-actuating means operated by the movement of said carriage to move said spindle from a work engaging position to a work releasing position and return, said means comprising a stationary clamping cam, means cushioning the force exerted by said cam on said spindle, a spindle-retracting cam, and a



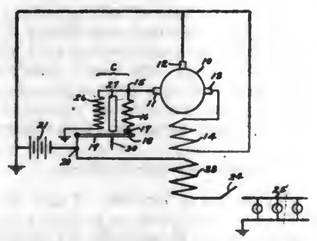
spring effecting the returning movement of said spindle after release by said retracting cam, said retracting cam being movable to permit the return passage of said spindle into re-engagement with said first mentioned cam.

1,817,494. VENTILATING WINDOW PANE. WARREN R. MCMANN, New York, N. Y., assignor of one-half to William Henderson, New York, N. Y. Filed July 28, 1928. Serial No. 295,933. 5 Claims. (Cl. 98—96.)



1. A window pane of a size to fill one entire space in a window frame, comprising a sheet of window glass or like transparent material with at least two edges lying in the same plane and having a crowned or bulged area tapering down to an unbulged portion of the pane from an offset edge one end of said pane, thereby providing a ventilation aperture, combined with means to control the passage of air through said aperture formed by the offset edge of said pane.

1,817,495. GENERATOR. LAURENCE MERTON PERKINS, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 27, 1928. Serial No. 322,277. 7 Claims. (Cl. 171—223.)

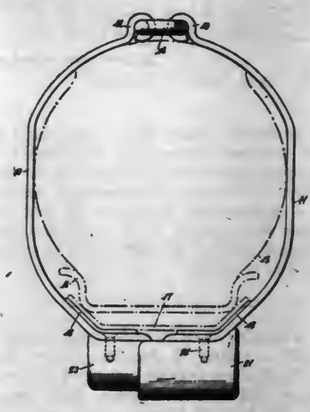


1. A variable speed generator comprising a rotary armature, with two main brushes connected to a load, of which one main brush is on neutral, the other main brush is shifted more than 30 electrical degrees off neutral in the direction of rotation of said armature, a third brush on the neutral opposite said first main brush, a shunt field winding connected across the third brush and said other main brush, a series winding connected in series with the load said fields being cumulative and means for disconnecting one of said field windings when reducing the load.

1,817,496. SEALING COMPOUND. ARLIN W. SCHORGER, Madison, Wis., assignor, by mesne assignments, to Burgess Battery Co., Madison, Wis., a Corporation of Wisconsin. Filed Jan. 4, 1928. Serial No. 244,556. 4 Claims. (Cl. 106—8.)

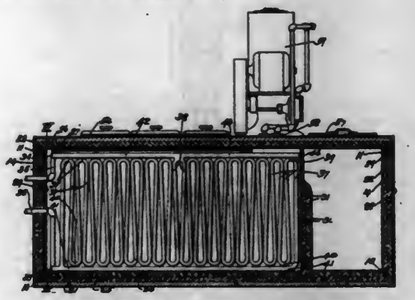
1. A sealing compound comprising rosin and a filler and having a melting point of at least 80° C., and containing less than five percent of ground mica.

1,817,497. BAND LOCK. FREDERICK A. SMITH and CHARLES H. NEHLS, Indianapolis, Ind., assignors, by mesne assignments, to Oakes Products Corporation, a Corporation of Michigan. Filed Dec. 14, 1928. Serial No. 326,094. 8 Claims. (Cl. 70—90.)



1. A band lock of the character described, comprising in combination, a pair of strap members having their ends pivoted to a link, a pad carried by the free end of one of said members containing a bolt and locking mechanism, a pad carried by the free end of the other of said members adapted to receive said bolt, means in said last named pad coacting with the bolt adapted to retain the free ends of the members in locked position, and means actuated by said locking mechanism for releasing said means.

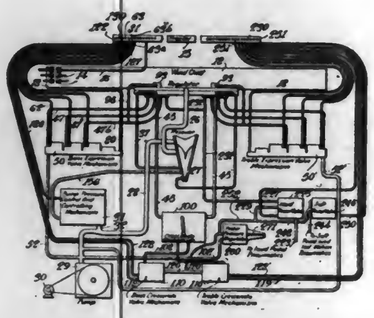
1,817,498. ICE CREAM MAKING UNIT. WILLIAM G. SMITH, Memphis, Tenn. Filed Feb. 27, 1928. Serial No. 257,236. 3 Claims. (Cl. 62—126.)



2. An expansion coil for refrigeration purposes, comprising a continuous coil having vertically disposed

legs, a feeder header connected to the first and last of said legs and a discharge header connected to the center pair of said legs.

1,817,499. AUTOMATIC MUSICAL INSTRUMENT. CHARLES F. STODDARD, New York, N. Y., assignor, by mesne assignments, to American Piano Corporation, East Rochester, N. Y., a Corporation of Delaware. Original application filed June 18, 1926, Serial No. 116,787. Divided and this application filed July 12, 1928. Serial No. 292,216. 5 Claims. (Cl. 84—34.)

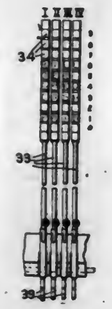


1. In an automatic piano having the usual strings, in combination, hammer actions, and a plurality of striker pneumatics connected thereto, a regulator for maintaining at said player pneumatics a substantially constant degree of exhaust, a damper rail, means to lift said damper rail to permit free vibration of the strings, and means to reduce the exhaust applied to said striker pneumatics when said damper rail is lifted.

1,817,500. TREATING METALS AND COMPOSITIONS THEREFOR. JAMES C. VIGNOS, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 14, 1928. Serial No. 246,917. 9 Claims. (Cl. 148—8.)

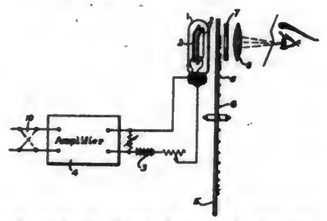
1. A process of pickling iron and steel products which comprises subjecting the metal to be pickled to the action of a sulfuric acid solution containing a small proportion of an aromatic disulfid compound.

1,817,501. PRINTING MECHANISM FOR ACCOUNTING MACHINES. HERMANN ADALBERT WEINLICH, Berlin, Germany, assignor to the Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Mar. 6, 1928. Serial No. 259,412. 14 Claims. (Cl. 101—93.)



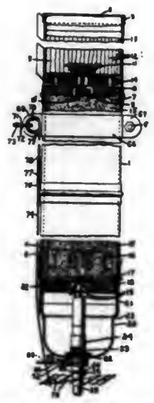
1. In a machine of the class described comprising in combination, a plurality of type carrying members having a different series of type which in the same position represent words, and a single column controlling means adapted to control for each operation the same differential movements to bring different characters of a plurality of type carrying members at the printing line.

1,817,502. TELEVISION APPARATUS. VLADIMIR K. ZWORYKIN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 15, 1929. Serial No. 340,272. 7 Claims. (Cl. 178—6.)



1. As an article of manufacture, a scanning device for view-transmission systems comprising a generally light-permeable element having a plurality of opaque regions.

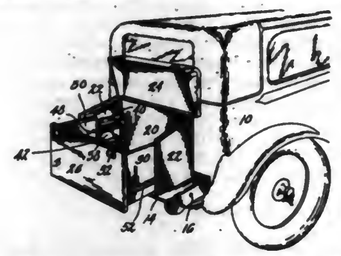
1,817,503. AERIAL FLARE. ROBERT J. ANDERSON, Whitman, Mass., assignor to National Fireworks, Inc., West Hanover, Mass., a Corporation of Massachusetts. Filed Feb. 6, 1929. Serial No. 338,003. 5 Claims. (Cl. 102—24.)



1. An aerial flare comprising a candle, a parachute connected thereto, a removable casing, enclosing said candle and parachute, having a head provided with candle-igniting means comprising a chambered stem containing a percussion cap, a spring actuated plunger having a firing pin, means normally locking the plunger in retracted position against the tension of said spring, a propeller rotatable by air pressure during the falling of the flare having a screw threaded hub engaging said plunger and movable by its rotation axially away from the end of said stem, means operable by a predetermined axial movement of the hub of said propeller to release said locking means and thereby cause actuation of said igniting mechanism.

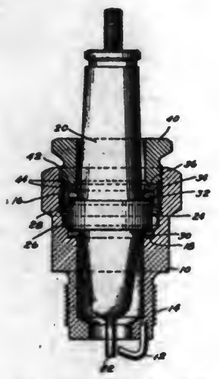
1,817,504. EXTENSIBLE TRUNK. JAMES FRANK BELLINGER, La Fayette, Ind., assignor, by mesne assignments, to Rush Manufacturing Corporation, La Fayette, Ind., a Corporation of Indiana. Filed Jan. 14, 1929. Serial No. 332,263. 3 Claims. (Cl. 224—29.)

1. An extensible trunk structure comprising a stationary section, a movable section and means for slidably mounting one relative to the other, such means comprising a plate, a guide channel formed therein adjacent the top edge thereof and being associated with the upper edge of said stationary section, said plate having an angular guide formed on its lower edge and said movable



section having a guide flange cooperating therewith, a guide block longitudinally slidable in said guide channel, a slot in the web of said guide channel and means of connection between said guide block and the movable section, said means of connection extending through said slot.

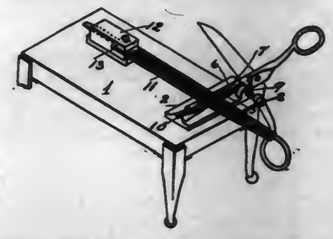
1,817,505. SPARK PLUG. GEORGE H. E. BERTHOLD, East Orange, N. J., assignor to The Rajah Company, Bloomfield, N. J., a Corporation of New Jersey. Filed Feb. 9, 1928. Serial No. 252,997. 2 Claims. (Cl. 123—169.)



1. A spark plug comprising an insulating core formed with a central part of wider diameter adapted to be engaged in a shell, a shell having a complementary recess to receive said wider part and a narrower bore to receive one end of the core, the bore and the recess being respectively wider than the prescribed diameters of the end and central part of the core by an amount at least sufficient to provide unobstructed clearance for any commonly occurring irregularity in such cores, relatively soft packing rings above and below said central part of the core, a relatively hard and substantially rigid bearing ring having its upper surface in a plane substantially normal to the axis of the core and fitting over one of said gaskets, means associated with said ring to resist radial extrusion of said gasket, said ring having radial clearance from the part of the core over which it is positioned sufficient to accommodate any commonly occuring irregularity thereof, and means for holding said parts tightly pressed together said means bearing upon the plane surface of said ring so as to permit lateral adjustment therebetween.

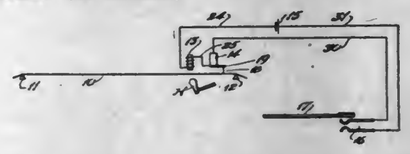
1,817,506. SHARPENER FOR SHEARS AND SCISSORS BLADES. WILLIAM W. BRISBEN, New Philadelphia, Ohio. Filed Sept. 23, 1927. Serial No. 221,446. 1 Claim. (Cl. 76—822.)

In a sharpening device for the blades of shears or scissors, a blade holder comprising a horizontal plate having a lug at one end and a longitudinal groove therein, said groove having inclined sides against which the inner side and back edge of said blade rests, the side against which the back edge of said blade rests being curved upwardly at



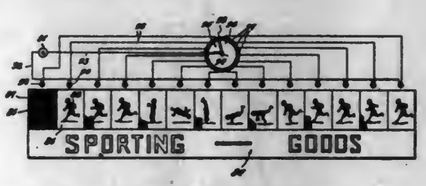
its outer end to conform to the shape of the back edge of the outer end of said blade and to provide a complementary support for said outer end, and a pointed set screw in said lug to engage the outer side of said blade.

1,817,507. SOSTENUTO PIANO. SIMON COOPER, Brooklyn, N. Y. Filed Apr. 14, 1928. Serial No. 269,963. 19 Claims. (Cl. 84—261.)



1. In an electric sostenuto piano, a piano string, a source of electric energy, an electro-magnet disposed close to the piano string in circuit with the source of electric energy, a current varying unit in series with the source of energy and electro-magnet, said unit comprising a lower and an upper electrode and comminuted conducting material confined between them, and means controlled by the vibration of the string and connecting the string and unit to actuate the latter as the string vibrates, said means being composed of a material of low resiliency.

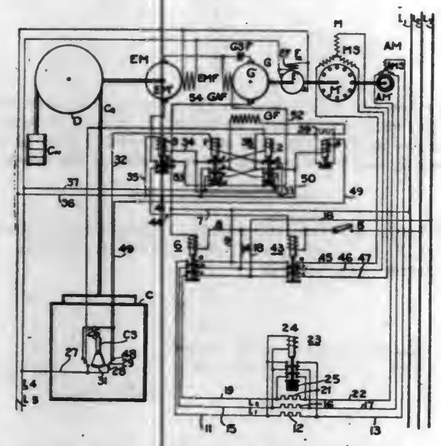
1,817,508. DISPLAY APPARATUS. RICHARD M. CRAIG, San Antonio, Tex., assignor, by mesne assignments, to Thomas W. Menefee, San Antonio, Tex. Original application filed Dec. 29, 1925, Serial No. 78,248. Divided and this application filed Jan. 7, 1929. Serial No. 330,932. 1 Claim. (Cl. 88—16.)



Means for displaying the effect of continuous motion comprising a display surface bearing a series of background areas alternately of dark and light neutral color, the said surface bearing also a series of representations of an image representing different positions of movement thereof, each image representation being located within a respective one of said background areas, the image representations in all of said areas being of a common distinctive pigment color, and means for successively individually displaying said representations under individual sources of spectral light rays, the rays from the sources which display the image representations upon the dark neutral background areas corresponding in color to the

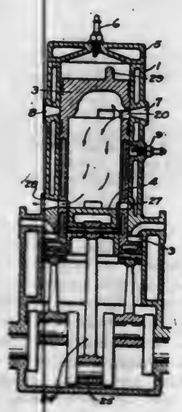
pigment color in which said representations are depicted, and the rays from the sources by which the other image representations are displayed being of a color substantially complementary to the color in which said representations are depicted.

1,817,509. ELEVATOR CONTROL SYSTEM. WILLIAM F. EAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 25, 1928, Serial No. 249,274. Renewed Dec. 17, 1930. 14 Claims. (Cl. 172—152.)



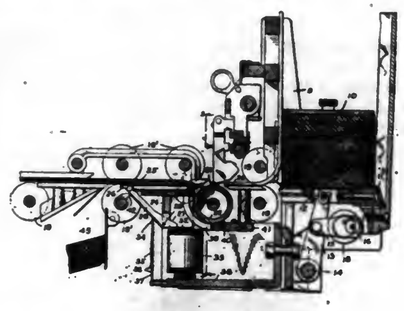
2. In an elevator control system, in combination, an elevator, a motor for operating the elevator, control means for starting and stopping said elevator motor, a generator for supplying power to said elevator motor, a main drive of sufficient power to operate said generator when the elevator power to operate said generator when the elevator motor is fully loaded, an auxiliary drive of less power for operating the generator when said elevator motor is idle, and means operably responsive to actuation of said control means to start said elevator motor for starting said main drive.

1,817,510. TWO CYCLE GAS ENGINE. WILLIAM E. EWART, Seattle, Wash. Filed Nov. 3, 1927, Serial No. 230,735. Renewed Oct. 6, 1930. 5 Claims. (Cl. 123—50.)



5. In a device of the class described, a cylinder, a movable cylinder forming a movable piston within the said former cylinder, an inner movable piston within the said movable cylinder, said pistons and cylinders forming two explosion chambers, said stationary cylinder having a common intake port for both cylinders and two exhaust ports, and said movable cylinder having one intake and one exhaust port, both corresponding with the ports of the stationary cylinder, a skirt around the lower end of the said movable cylinder forming another piston in another cylinder formed in an enlarged portion in the lower end of the said former cylinder, suitable means for connecting the said pistons to a common crankshaft with the inner piston connection to the crankshaft approximately 150 degrees from that of the said movable cylinder, suitable intake and exhaust ports, and means for igniting the gases in the said cylinder.

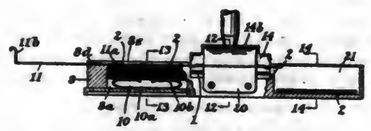
1,817,511. CARD SORTING MACHINE. EUGENE A. FORD, Scarsdale, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed May 4, 1928. Serial No. 274,990. 12 Claims. (Cl. 209—110.)



1. In a machine for sorting cards into different card receiving pockets, guide blades leading to said pockets, said blades terminating in tapered parallel card entrance ends, said ends being located in separate groups laterally spaced from each other, and the entrance ends in each group being superimposed and longitudinally spaced from each other.

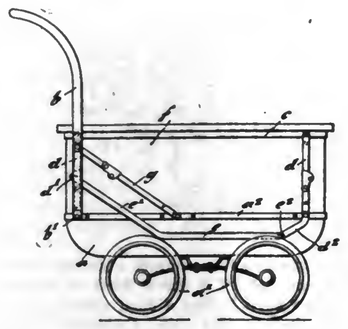
4. In a card sorting machine, a plurality of guide blades having their card entrance ends adjacent each other, a plate on which said ends rest, a pair of links pivoted at one of their ends to the said plate, said links being effectively parallel to each other and having the same effective length whereby movement of one link will effect a corresponding movement of the other link and a movement of the said plate parallel to itself, and a magnet for controlling said links.

1,817,512. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Jan. 15, 1927. Serial No. 161,302. 27 Claims. (Cl. 30—12.)



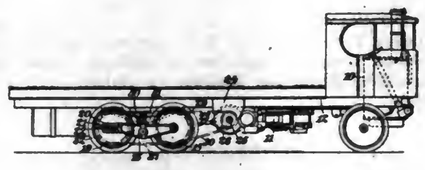
1. A safety razor comprising a blade holder, a magazine for blades, means to detachably retain the magazine in cooperative relation to the blade holder for inserting a blade into the holder from the magazine, the blade holder being provided with a movable member having stops to engage the edge of the blade for locating the latter in shaving position in the holder, and means to retain the stops against the blade for shaving.

1,817,513. PERAMBULATOR OR THE LIKE. FREDERICK HAGGER HEADLEY, Birmingham, England. Filed Apr. 17, 1930, Serial No. 445,026, and in Great Britain Aug. 6, 1929. 6 Claims. (Cl. 280—86.)



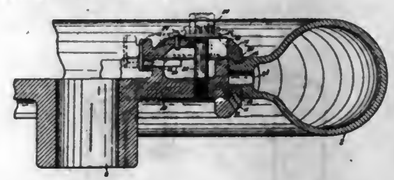
1. A perambulator or the like embodying therein, a wheel carrying lower frame, a handle pivoted to said frame, an upper frame, a pair of folding brace-providing links at each side of the perambulator connecting the same end portions of both frames together, and means connecting the handle with the links at one end of both frames and operable in the swinging movement of said handle to cause a movement of the upper frame relative to the lower frame.

1,817,514. MOTOR ROAD VEHICLE. ARTHUR CYRIL HUTT, Shrewsbury, England, assignor to The "Sentinel" Waggon Works Limited, London, England, a British Company. Filed Apr. 9, 1928, Serial No. 268,582, and in Great Britain Apr. 14, 1927. 9 Claims. (Cl. 180—22.)



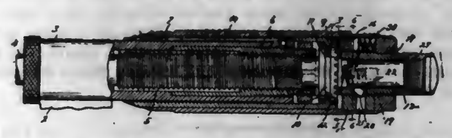
3. A motor road vehicle having at least six road wheels whereof four are driven wheels, and having in combination two trunnion frames, one at each side of the vehicle, horizontal axles for the four driven wheels which preclude individual swivelling of the said wheels about vertical axes, means for carrying said axles two in each trunnion frame, means for pivotally mounting each trunning frame about an axis lying transversely of the vehicle so as to be free to move longitudinally of the vehicle relatively to the chassis, radius rods of adjustable length for anchoring the trunnion frames and their pivotal mounting to the chassis, springs interposed between said pivotal mounting and the chassis, which springs are carried by the pivotal mounting and are free to move longitudinally of the vehicle with the pivotal mounting and relatively to the chassis, and chain driving means coupling the motor unit to the said driven road wheels.

1,817,515. COLLAPSIBLE CORE. FRANK L. JOHNSON, Akron, Ohio. Filed Aug. 5, 1929. Serial No. 383,512. 8 Claims. (Cl. 164—9.)



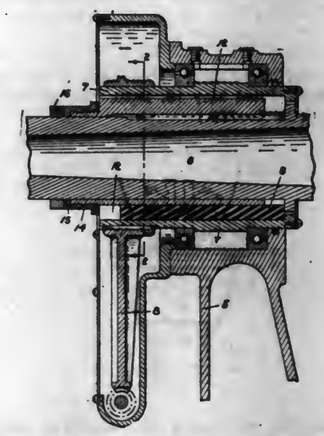
4. A core comprising a central supporting plate, a sectional core body separable therefrom, the plate having an outer core register, and means movable parallel with the axis of the core body to draw the section radially inwardly and against the register.

1,817,516. MICROMETER CONSTRUCTION. OSCAR V. KARLSSON, Detroit, Mich. Filed Jan. 3, 1927. Serial No. 158,756. 14 Claims. (Cl. 33—166.)



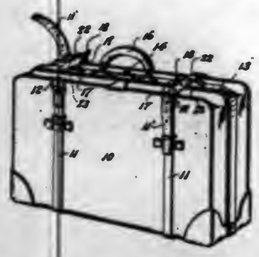
11. In a micrometer, the combination of a housing, a spindle movable within said housing, a sleeve surrounding said housing, means for normally clutching said sleeve and spindle whereby the same may be adjusted to obtain certain fractional measurements, and means for obtaining a vernier reading of the micrometer while the spindle is held stationary when the said sleeve and spindle are unclutched.

1,817,517. INSULATED DRIVING CONNECTION. WALTER E. KROTEE, Philadelphia, Pa. Filed Sept. 27, 1929. Serial No. 395,660. 3 Claims. (Cl. 64—100.) Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



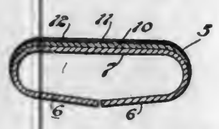
1. A bearing including a support, a driving sleeve mounted in the support and formed internally with longitudinally extending fins, a driven member within the sleeve, a thimble splined on said member and formed externally with longitudinally extending fins, the fins on the sleeve and thimble being alternately arranged and reversely disposed with respect to each other to form wedgeways, an insulating member in each wedge-way and a nut seated on the driven member and threaded to the thimble.

1,817,518. FASTENER DEVICE FOR LUGGAGE. SAMUEL LACHER, New York, N. Y. Filed Dec. 22, 1928. Serial No. 327,852. 4 Claims. (Cl. 190—59.)



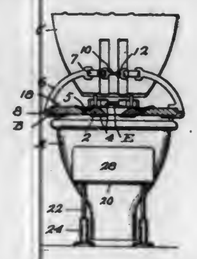
1. In an article of luggage having exterior strap and buckle members to embrace the same, a manipulatable fastener means to secure the article in closed condition, said fastener means having a catch portion movable outwardly of said particle to release said fastener means, and means provided on said catch portion to pass and retain a portion of said strap in assembled relation to said fastener means catch portion whereby said strap, when secured in buckled condition, traverses, guards and holds said fastener means catch portion against accidental outward displacement and release from its normal fastened condition.

1,817,519. MESH FABRIC. SAHATIEL G. MANDALIAN, North Attleboro, Mass. Filed Oct. 26, 1927. Serial No. 228,865. 4 Claims. (Cl. 91—68.)



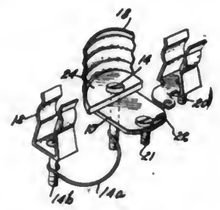
2. As an improved article of manufacture, a metallic mesh fabric comprising links, a base layer of pyroxylin base lacquer enamel, a secondary layer of high grade clear lacquer upon the first layer, and a layer of pearl essence upon the second layer.

1,817,520. TOILET SEAT. CAMPBELL A. MEATH, Neodesha, Kans. Filed May 19, 1930. Serial No. 453,741. 1 Claim. (Cl. 4—289.)



In combination with main and auxiliary toilet seats, a guard consisting of two pairs of oppositely disposed arms extending upwardly and inwardly over said seats and terminating at their upper ends in loops, a strap extending through the loops of each pair of arms, means for detachably connecting the ends of one strap to the ends of the companion strap to form a loop spaced above the seats, hinge means connecting the lower ends of the arms to the main seat in such manner as to permit said arms to fold outwardly and downwardly below said main seat to inactive position when the ends of the straps are disconnected, and elements projecting inwardly from the arms and adapted to engage the upper surface of the main seat and limit the inward movement of said arms when the same are raised to active position.

1,817,521. FUSE BLOCK. JOSEPH MESSING, Detroit, Mich., assignor to Bull Dog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Filed Jan. 16, 1930. Serial No. 421,278. 26 Claims. (Cl. 200—133.)

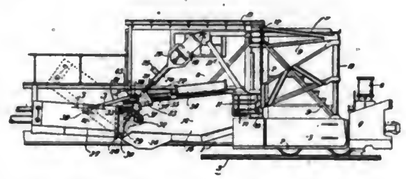


1. A fuse block having contact clips to receive a cartridge fuse and having a screw shell to receive a plug fuse, the screw shell having a shell contact and a center contact, the shell contact being connected to one of the clips, and the center contact being connected to the other one of the clips, the block being adapted to receive a plug fuse or a cartridge fuse, the shell and the clips lying in substantially the same plane, and the shell being slotted so that a cartridge fuse can lie therein, transversely.

1,817,522. MANUFACTURE OF PRINTING INKS. WILLIAM PERCY PRICE, London, England, assignor, by mesne assignments, to Horace Cory and Company, Limited, London, England, a Company of Great Britain. Filed Feb. 6, 1925, Serial No. 7,244, and in Great Britain Mar. 13, 1924. 9 Claims. (Cl. 134—35.)

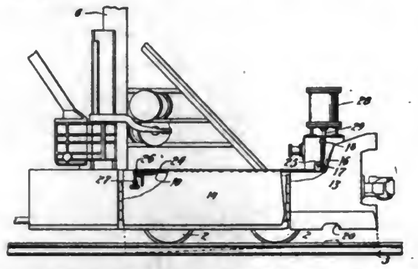
1. A method of manufacturing printing ink, characterized by the incorporation in such ink of an emulsion of the water-in-oil type formed with an aqueous solution of at least one deliquescent salt.

1,817,523. RAILROAD WAY CONSTRUCTION AND MAINTENANCE CAR. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Apr. 22, 1929. Serial No. 356,916. 4 Claims. (Cl. 37—105.)



1. The improvement herein described comprising in combination with a car, a wing pivotally connected at one end to the car, a second wing pivotally connected to the first wing for a swinging movement about a horizontal axis, a power device on the first wing and including a rod positively movable endwise in either direction and a rigid member having a pivotal connection at one end with the free end of said rod and having a pivotal connection at its other end with the rear side of said second wing near its top edge.

1,817,524. RAILROAD SPREADER. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed June 6, 1929. Serial No. 368,989. 5 Claims. (Cl. 37—104.)

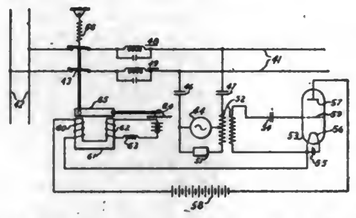


1. A railroad spreader embodying therein a car, a plow structure including a V shaped front plow and side wings connected thereto, a lifting bar connected directly to the front plow, means for imparting a raising and lowering movement to said bar, a lever pivoted at one end to the car and at the other end to the rear end of one of the side wings, and means connecting said lever and lifting bar.

1,817,525. PRODUCTION OF CHEMICAL WOOD PULP. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 12, 1929. Serial No. 346,504. 7 Claims. (Cl. 92—9.)

1. A step which comprises cooking raw cellulosic material in an ammoniated liquor containing ammonium sulphide at elevated temperature and under pressure to dissolve a portion of its cementitious content.

1,817,526. PROTECTIVE SYSTEM. REINHOLD RÜDENBERG, Berlin-Grunewald, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 5, 1929, Serial No. 404,968, and in Germany Nov. 9, 1928. 5 Claims. (Cl. 175—294.)

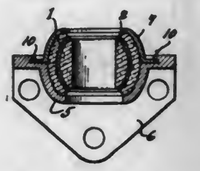


1. In a transmission system having a circuit-interrupter therein, the combination with controlling means for said interrupter, of a high-frequency alternator for continuously superposing a current on said system, rectifying means, transforming means so associated with said alternator and rectifying means that a high-frequency voltage is applied to said rectifying means only upon the occurrence of a short-circuit on said system, and means for electrically connecting the output of said rectifying means to said interrupter-controlling means.

1,817,527. ELECTROLYTIC SEPARATION OF COPPER. MAX SCHLOTTER, Berlin, Germany, assignor to Asociacion De Productores De Yodo De Chile, Valparaiso, Chile. Filed Sept. 28, 1929, Serial No. 396,003, and in Germany Oct. 29, 1928. 11 Claims. (Cl. 204—10.)

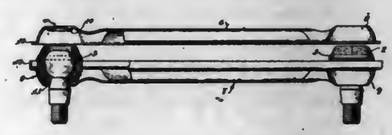
1. A method of separating copper which consists in electrolyzing an aqueous solution containing cuprous iodide.

1,817,528. SELF-LUBRICATING SELF-ALIGNING BEARING AND METHOD OF FORMING SAME. NEWTON SKILLMAN, Highland Park, Mich., assignor to O. & S. Bearing Co., Detroit, Mich., a Corporation of Michigan. Filed Apr. 19, 1928. Serial No. 271,378. 12 Claims. (Cl. 29—149.5.)



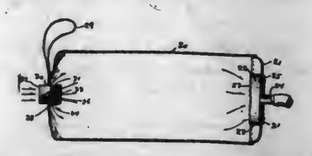
1. The method of forming self-aligning self-lubricating bearings, which comprises forming an outer bearing member in two halves, one half comprising a portion of the outer bearing and an attaching support as an integral unit, and the other half consisting of a stamped sheet metal portion, inserting an inner spherical bearing member and a single outer layer of lubricant impregnated compressible material within one half of said outer bearing member, and then bringing the two halves of said outer bearing member together to shape and compress said outer layer of lubricant impregnated material and lock the inner spherical member in adjustable position.

1,817,529. METHOD OF FORMING A PERMANENT CONNECTING LINK. NEWTON SKILLMAN, Detroit, Mich., assignor to O. & S. Bearing Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 2, 1930. Serial No. 479,399. 17 Claims. (Cl. 29—149.5.)



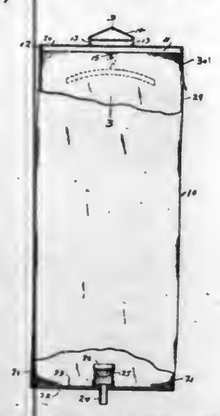
1. The method of forming self-aligning, self-lubricating bearings, which comprises forming an outer bearing member in two parts, temporarily positioning a layer of lubricant impregnated fibrous material around a spherical bearing member by means of an annular ring, inserting said spherical bearing member and temporarily positioned lubricant impregnated material within one of said parts whereby said lubricant impregnated material and bearing member part are correctly arranged, and then bringing the two parts of said outer bearing member together to shape and compress said lubricant impregnated material to form a permanent bushing around the spherical inner bearing.

1,817,530. MEANS FOR TREATING ARTICLES. ABRAHAM N. SPANEL, Rochester, N. Y. Filed July 26, 1927. Serial No. 208,532. 3 Claims. (Cl. 167—3.)



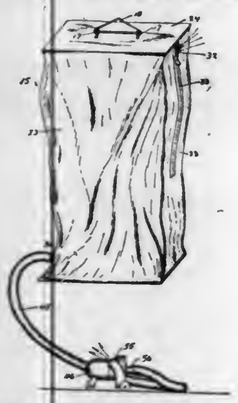
2. Means for treating articles, comprising a portable, flexible body having an opening through which articles to be treated may be inserted, and also having an outlet for connection with a suction device, and an odorator, comprising two interspaced perforated walls, in communication with the body and located at the inlet opening.

1,817,531. METHOD OF TREATING ARTICLES. ABRAHAM N. SPANEL, Rochester, N. Y. Filed Apr. 4, 1928, Serial No. 267,394. Renewed Aug. 20, 1929. 5 Claims. (Cl. 167—3.)



2. A method of treating articles comprising the placing of the articles in a portable collapsible receptacle, forcing air charged with a volatile substance through the receptacle, and then drawing air unimpregnated from the receptacle by suction.

1,817,532. TREATING MEANS FOR FABRICS. ABRAHAM N. SPANEL, Rochester, N. Y. Filed Apr. 18, 1928. Serial No. 271,001. 3 Claims. (Cl. 167—3.)



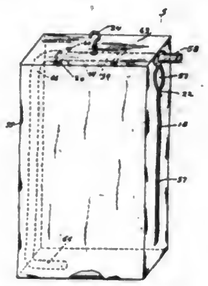
2. A portable, collapsible, treating device comprising a receptacle formed of flexible material adapted to receive articles to be treated, said receptacle being formed with an opening through which the articles to be treated may be inserted and also provided with an air inlet adapted to be connected to the blower side of a vacuum cleaner, and means for charging all of the air flowing toward and into the receptacle with a volatile substance.

1,817,533. TREATING MEANS FOR FABRICS. ABRAHAM N. SPANEL, Rochester, N. Y. Filed June 11, 1928. Serial No. 284,469. 3 Claims. (Cl. 167—3.)



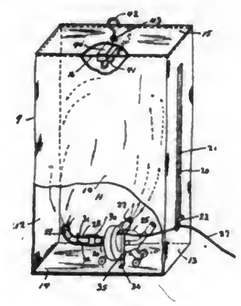
2. Means for treating articles, comprising a closed, flexible container provided with an opening through which articles to be treated may be inserted, means for closing the opening, connectors carried by the container and arranged at points remote from each other, means in communication with the container for charging the air with an insecticide, and means located outside the container and attached to the connectors for causing a recirculation of air through the container.

1,817,534. DEVICE FOR TREATING ARTICLES. ABRAHAM N. SPANEL, Rochester, N. Y. Filed July 19, 1928. Serial No. 293,996. 6 Claims. (Cl. 167—3.)



3. A device for treating articles comprising a container formed with a container opening through which articles to be treated may be inserted, an attachment sleeve carried by the container and disposed adjacent the container opening, a tube carried within the container and in communication with the attachment sleeve, and means for closing the container opening.

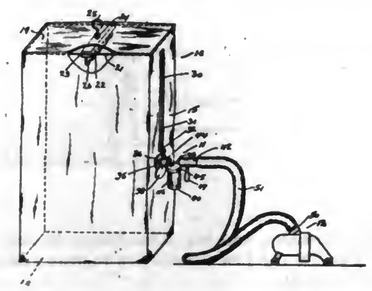
1,817,535. DISINFECTING AND AERATING DEVICE. ABRAHAM N. SPANEL, Rochester, N. Y. Filed July 30, 1928. Serial No. 296,353. 2 Claims. (Cl. 167—3.)



1. A disinfecting and aerating device, comprising a container having an opening through which articles to be treated may be inserted, a rigid top, a bottom, such top and bottom being connected by flexible walls, a vacuum cleaner disposed within the container for causing a recirculation of the air within the container, and an insecticide holder in communication with the vacuum cleaner, and in the path of all the air passing through the vacuum cleaner.

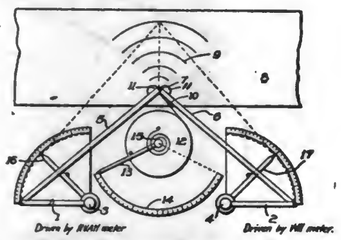
1,817,536. MEANS FOR FUMIGATING AND DISINFECTING ARTICLES. ABRAHAM N. SPANEL, Rochester, N. Y. Filed Aug. 31, 1928. Serial No. 303,186. 3 Claims. (Cl. 167—3.)

2. An apparatus for fumigating and disinfecting, comprising a closed flexible container having a container opening through which articles to be treated may be inserted, means for closing the container opening, the container also having a sprayer opening in one of the flexible walls of the container, a spraying device engageable with the sprayer opening and adapted to be moved in various di-



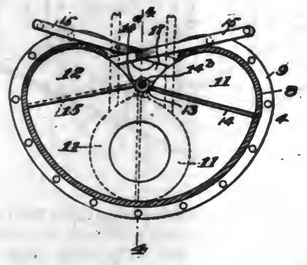
rections to spray an insecticide into the container, and means for supplying air under pressure to the spraying device to atomize the insecticide.

1,817,537. ELECTRICAL MEASURING INSTRUMENT. GEORGE SPERTI, Covington, Ky., assignor, by direct and mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Feb. 16, 1922, Serial No. 536,956. Divided and this application filed May 7, 1924. Serial No. 711,633. 7 Claims. (Cl. 234—5.5.)



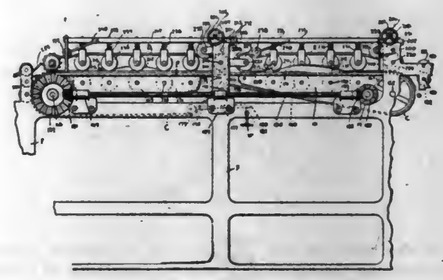
1. In combination, a chart, a stylus having a definite initial position and normally out of contact with the chart, means for periodically depressing the stylus into contact therewith and then restoring the same to its initial position, and means for actuating the stylus with respect to the chart in accordance with average power factor demand of an electrical circuit during the intervals between such depressions.

1,817,538. WATER GATE AND HOSE CONNECTION. FRANK MEAD VAN SICKLE, Trenton, N. J., assignor of one-third to Mary A. Van Sickle, Branchville, N. J. Filed May 17, 1929. Serial No. 363,957. 2 Claims. (Cl. 251—18.)



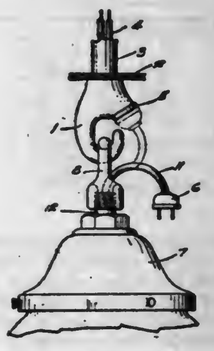
1. In a device of the class described, the combination of a heart-shape sectional casing, swinging valve sections provided with interlocking ears pivotally mounted in said heart-shape sectional casing, and manually operable angular handles crossed in one position of the valve extending into said sectional casing and connected to the outer edges of said valve sections below said ears.

1,817,539. ENVELOPE MACHINE. MATTHEW VIERENGEL, Brooklyn, N. Y. Filed May 4, 1929. Serial No. 360,348. 14 Claims. (Cl. 93—62.)



1. In combination with the side folding mechanism of an envelope machine, a moving, primary, endless belt adapted to convey an envelope blank, two auxiliary, endless belts in moving contact with the top face of said primary belt, means folding said blank, while said blank is engaged by pairs of said belts and means to operate said primary and auxiliary belts.

1,817,540. SUSPENSION DEVICE. OSCAR WERNER, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1928. Serial No. 316,055. 3 Claims. (Cl. 240—78.)



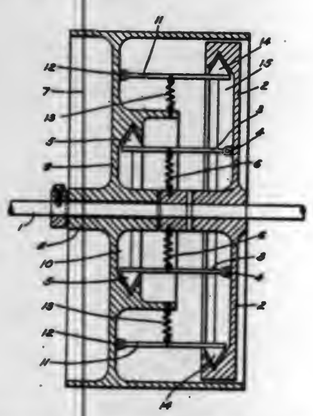
1. In a lighting fixture, a suspension means having a hook portion and a plug receptacle disposed on the hook adjacent to the opening of the hook, a lighting unit provided with an eye portion to engage the hook, and a plug-and-electrical-connector means electrically connected to the lighting unit and so disposed as to partly close the opening of the hook when connected in the plug receptacle.

1,817,541. METHOD OF HANDLING MEAT. JOHN CLIFTON AGAR, Chicago, Ill., assignor to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 2, 1928. Serial No. 316,716. 1 Claim. (Cl. 17—45.)



In the meat packing industry the systematic method of enhancing the appearance and marketability of carcass sides which consists in appreciably narrowing each side by forcibly occluding somewhat the chest wall, immediately after dressing and while hung vertically for setting and storage, and causing it to so remain.

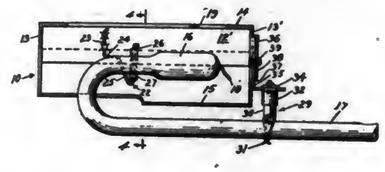
1,817,542. CENTRIFUGAL CLUTCH. JOSEPH BETHENOD and HUGUES GOUDET, Paris, France. Filed Apr. 22, 1927, Serial No. 185,770, and in France May 10, 1926. 3 Claims. (Cl. 192—105.)



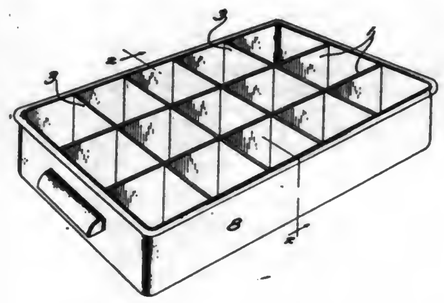
1. A centrifugal clutch for coupling a motor to its load comprising two sets of successively actuated members working in parallel, the action of one of which depends upon the speed of the driving motor and the action of the other of which depends upon the speed of the load driven by the said motor, the centrifugally actuated members being composed of elements of like clutch-face contour.

1,817,543. ELECTRODE BOX. FERDINAND A. CIRAOLO, Oakland, Calif., assignor of one-half to John S. Basher, Oakland, Calif. Filed Dec. 12, 1927. Serial No. 239,507. 3 Claims. (Cl. 247—1.)

3. A combined terminal box and support for an end of a luminescent tube, comprising a housing for mounting on a supporting wall, and hangers for the tube mounted on the housing and engaging the tube within and without the housing, the inner said hanger comprising a bracket operative to resiliently support the enclosed tube end portion gravitationally, and the outer hanger having means to rigidly secure the tube end portion thereat against lateral displacement.

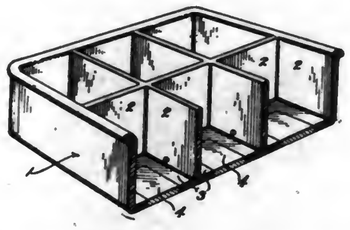


1,817,544. SHARP FREEZING CONTAINER. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Aug. 20, 1928. Serial No. 300,713. 3 Claims. (Cl. 62—108.5.)



1. A sharp freezing container of a type adapted to be positioned in heat-conducting relation with the lowside of a mechanical refrigerating system, comprising a container formed of metal, and a removable unitary grid structure formed of non-metallic flexible material and adapted to be positioned within said metallic container.

1,817,545. SHARP FREEZING CONTAINER. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Feb. 1, 1929. Serial No. 336,889. 8 Claims. (Cl. 62—108.5.)



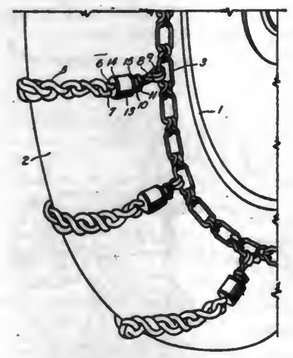
6. A tray for refrigerating apparatus having integrally formed partitions for dividing the tray into compartments, the greater portion of said walls being formed of a non-metallic flexible material and one of the walls of each compartment being fabricated to effect a relatively greater conductivity than the other walls.

1,817,546. CIGARETTE. ABRAHAM DEINSTEIN, Chicago, Ill. Filed July 9, 1930. Serial No. 466,667. 1 Claim. (Cl. 131—52.)



A cigarette comprising a casing having a filling of tobacco therein, closure means engaged on the ends of said casing to retain the tobacco therein, said closure means being constructed of substantially the same material as that of which the casing is constructed, one of said closure means serving as a tip for the cigarette while the opposite closure means reinforces the end of the cigarette and serves as a mouth-piece preventing tobacco from dropping out of the end of the cigarette into the mouth of a person smoking the same, said closure means having a plurality of spaced apertures communicating with the longitudinal axis of said casing.

1,817,547. TIRE CHAIN. ROY E. EDDY, Kansas City, Mo. Filed Sept. 8, 1930. Serial No. 480,462. 9 Claims. (Cl. 152—14.)



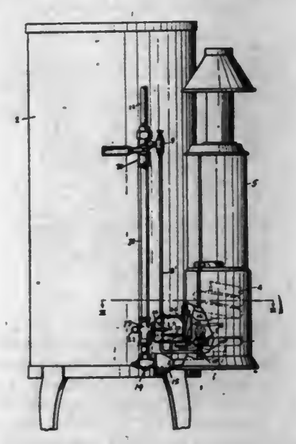
1. A tire chain including a pair of side chains and a cross member including a chain, loop members connected to said side chains, bolt connected to said cross chains and mounted in said loop members, and rollers on said bolts.

1,817,548. PROCESS OF PRODUCING PULP. JOSÉ MARTINEZ ESTAPÉ, Habana, Cuba. Filed Apr. 5, 1928, Serial No. 267,806, and in Cuba Jan. 18, 1928. 2 Claims. (Cl. 92—3.)

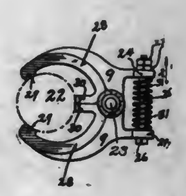
1. A process for producing pulp from the "reed" (*Caña brava*) and the "carrizo" plants comprising, crushing the stalks of said plants, boiling the resultant bagasse with water in the proportion of from 8½ to 10 parts of water to 1 part of bagasse by weight containing soda caustic and sodium sulphite in a receptacle under pressure treating the pulp with hydrochloric acid gas, separating from the pulp the gums contained in the bagasse, separating the liquor from the pulp, and crushing the separated pulp.

1,817,549. STORAGE AUTOMATIC WATER HEATER. VINCENT J. EVANS, Lakewood, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 14, 1928. Serial No. 269,952. 17 Claims. (Cl. 236—21.)

1. A storage automatic water heater comprising, a gas burner, water circulating elements positioned above said gas burner, a storage tank in communication with said circulating element, upper and lower coupling members for said circulating elements in communication with said tank, a thermostatic valve received in one of said coupling members, a second thermostatic valve adapted to be controlled thereby, a source of gas supply connected to said second thermostatic valve and leading therefrom to said gas burner whereby the opening and closing of said second thermostatic valve controls the gas supply to said burner.



1,817,550. MEANS FOR PREVENTING THE COLLAPSE OF CONTAINERS DURING VACUUMIZING, STERILIZING, AND SEALING. WILLIAM B. FENN, Port Washington, N. Y., assignor to Margaret F. Fenn, Port Washington, N. Y. Filed Feb. 19, 1929. Serial No. 341,126. 7 Claims. (Cl. 226—116.)

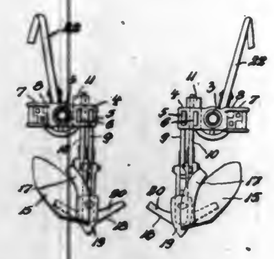


1. In the type of apparatus described, in combination with means for vacuumizing a container subject to collapse, of magnetic means adapted to prevent collapse of the container during the process of vacuumizing the latter.

1,817,551. CULTIVATOR. GENERAL FRANKLIN GALLOWAY, Fayette, Ala. Filed May 28, 1930. Serial No. 456,487. 5 Claims. (Cl. 97—149.)

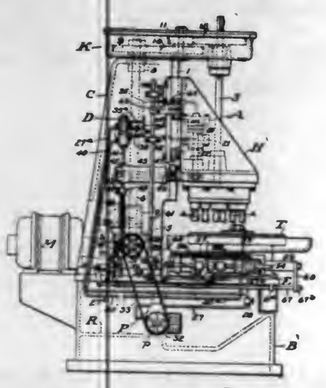
1. In a cultivator of the class described including a wheeled frame, spaced longitudinal and interchangeable beam members carried thereby, said beam members having a plurality of implement shank clamping members arranged transversely thereof, said clamping members being provided with spaced openings, socket attachments for said clamping members having shanks disposed in certain of said openings, said socket attachments having implement shank receiving openings, soil turning implements having shanks disposed in said last mentioned openings, said soil turning implements including a curved blade and a curved wing extending rearwardly and upwardly

in spaced relation thereto from the point thereof whereby to turn a relatively thin layer of top soil away from a row, and a plurality of sweeps having shanks disposed in certain others of said openings in substantial alignment in rear of said turning implements whereby to pull the exposed soil onto the row.



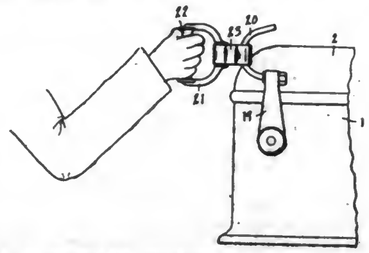
2. In a cultivator, the combination of a plow blade for turning a relatively thin layer of top soil away from a row, said blade having a rebent wing member forming a point on said blade of double thickness, and a sweep positioned in substantial alignment in rear of said plow blade to pull the exposed soil onto the row, said sweep comprising a tooth and a winged heel scraper associated therewith.

1,817,552. CONTINUOUS AUTOMATIC HYDRAULIC MACHINE. ROBERT M. GALLOWAY, Richmond, Ind., assignor to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana. Filed Dec. 23, 1927. Serial No. 242,059. 9 Claims. (Cl. 77—32.)



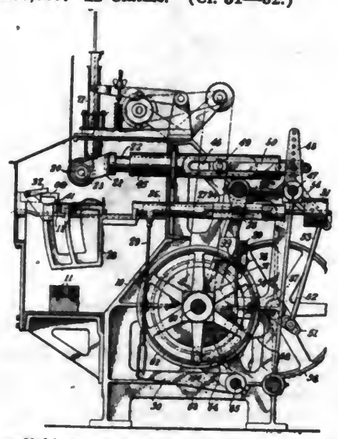
1. A continuously acting hydraulically operated machine tool combining a translatable head; a rotatable member; a hydraulic motor and mechanical connections for giving to said head advance and retractive movements; indexing mechanism for giving to said rotatable member step-by-step rotary movements; a hydraulic motor and mechanical connections for actuating said indexing mechanism; an oil reservoir; a pump; a conduit interconnecting said reservoir, pump, and both of said motors; a first valve controlling the flow of oil to the head-translating motor; a second valve controlling the flow of oil to the indexing motor; means actuated by the head in its retractive movement to actuate the index control valve to initiate an indexing movement of said member; means actuated by the movement of the index mechanism to actuate the head controlling valve to effect advance movement of the head; and means rendered effective by the advance movement of the head to actuate the head controlling valve to effect retractive movement of the head.

1,817,553. MASSAGING MACHINE. NORRIS E. GOODRICH, Battle Creek, Mich., assignor to Sanitarium Equipment Company, Battle Creek, Mich. Filed Apr. 27, 1928. Serial No. 273,246. 6 Claims. (Cl. 128—63.)



5. In a massaging machine, the combination of an oscillating arm provided with a curved rearwardly facing hook, and a hand piece having a shank non-rotatably secured to the hand piece and provided with an eye closely fitting and slidably engaging said hook, said shank being of sufficient rigidity to sustain end thrusts.

1,817,554. POLISHING MACHINE FOR SPOONS. DARWIN G. GRISWOLD, Wallingford, Conn., assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn., a Corporation of Connecticut. Filed July 12, 1929. Serial No. 377,669. 11 Claims. (Cl. 51—32.)



1. A polishing machine for spoons comprising in combination, a plurality of polishing wheels, a conveying belt for said spoons, automatic spoon holding and transferring means adapted to remove a spoon from said belt and hold said spoon in contact with a wheel and replace said spoon upon said belt, means to oscillate said holding and transferring means while in position holding a spoon against a wheel to polish the spoon from side to side, and means to move said wheels in a direction longitudinally of the spoons in said holding and transferring means while contacted by said spoons.

1,817,565. GAS SAVING DEVICE. FRANK C. GROHOSKI, South Chicago, Ill. Filed June 19, 1928. Serial No. 286,680. 3 Claims. (Cl. 48—180.)



1. A gas saving device of the class described, an explosive mixture conduit, means for admitting a gas there-

to, a valve within the conduit for controlling the flow of gas through the conduit and supported for tilting movement within the conduit, about an axis diametric to the conduit, a screen in the conduit above the valve, the conduit having an air inlet passageway communicating therewith and with the atmosphere, a rod mounted for rotative movement diametrically of the conduit above the said valve, a valve plate upon the rod extending along the wall of the conduit and adapted to cover and uncover the inner end of the passageway in the rocking movement of the rod, and a finger extending downwardly from the rod and having a weighted lower end resting upon the valve at one side of the axis thereof, the valve constituting a means for supporting the finger in an elevated position to maintain the valve plate upon the rod in a position closing the inner end of the passage in the closed position of the valve and the weighted finger constituting means for rocking the said rod to move the valve plate to position uncovering the passageway upon opening of the valve.

1,817,556. PROPELLER FOR AIRCRAFT. THOMAS F. HAMILTON, Milwaukee, Wis., assignor to The Hamilton Standard Propeller Corporation, West Homestead, Pa., a Corporation of Pennsylvania. Filed June 18, 1929. Serial No. 371,815. 1 Claim. (Cl. 170—159.)



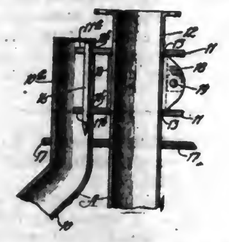
A hollow aeronautical propeller blade made of a single sheet of steel bent upon itself to form the leading edge of the blade at the end, one edge of the sheet being chamfered and welded to the inside of the other edge adjacent the trailing edge of the blade.

1,817,557. FOLDING BOAT. HANS HART, Munich, Germany. Filed May 11, 1929, Serial No. 362,230, and in Germany Sept. 19, 1928. 5 Claims. (Cl. 9—2.)



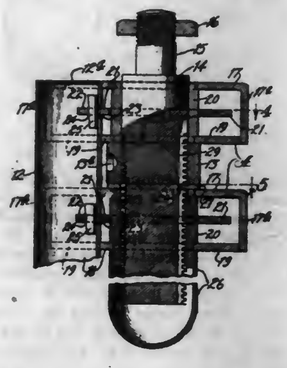
2. In a folding boat, a body element, a stem, a keel member connected to the stem for lateral swinging movement, and means adjustably engaging the keel member to said body element whereby to hold the keel member in laterally adjusted positions.

1,817,558. BASE FOR CHAIRS AND THE LIKE. EVAN C. HARTER, Sturgis, Mich. Filed Nov. 21, 1927. Serial No. 234,068. 6 Claims. (Cl. 155—134.)



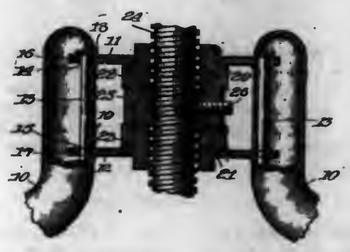
6. In a base for chairs and the like, a central vertical rod, spaced members having central openings adapted to receive said rod, hollow legs having openings in their side walls, portions of said members extending through said openings in said legs and being apertured, and clamping members extending into said apertures in said members and engaging the inner surfaces of said legs and clamping said legs against said members.

1,817,559. BASE FOR CHAIRS, STANDS, AND THE LIKE. EVAN C. HARTER, Sturgis, Mich. Filed Nov. 9, 1927. Serial No. 232,053. 7 Claims. (Cl. 155—93.)



5. In a base for chairs and the like, a central vertical rod, a vertical series of hollow frame-like members through which said rod extends, three or more legs having lateral openings, said members containing recesses into which said legs extend, members surrounding said rod and located in said first-named members and having outwardly extending projections containing openings and projecting through the openings in said legs, and clamping members in the openings in said projections and bearing at lateral edges thereof against said legs and firmly pressing said legs against said first-named members.

1,817,560. BASE FOR CHAIRS, TABLES, AND THE LIKE. EVAN C. HARTER, Sturgis, Mich. Filed Apr. 30, 1928. Serial No. 273,993. 3 Claims. (Cl. 155—93.)

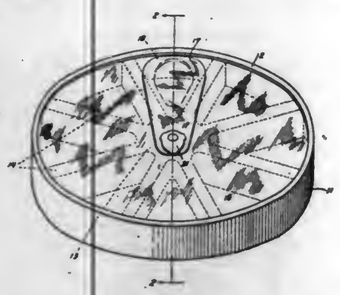


1. In a base for chairs and the like, two spaced horizontal plates, legs secured thereto, aligned openings in said plates, bushings in said openings, a load-supporting screw-threaded rod in said bushings, and an adjusting nut positioned between and rotatable relative to; said bushings and screwed on said rod.

1,817,561. LACQUER. IRVIN W. HUMPHREY, Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed June 10, 1926. Serial No. 115,127. 4 Claims. (Cl. 134—79.)

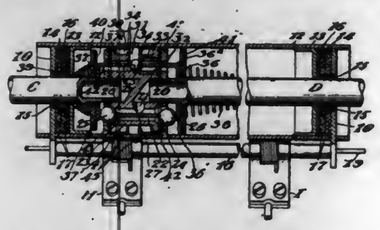
1. A lacquer including nitrocellulose, dipentene and a colloiding agent.

1,817,562. COMPARTMENT BOX. ALBERT P. HODGE, Winsted, Conn., assignor to William L. Gilbert Clock Company, Winsted, Conn., a Corporation of Connecticut. Filed Feb. 4, 1929. Serial No. 337,214. 3 Claims. (Cl. 206—1.)



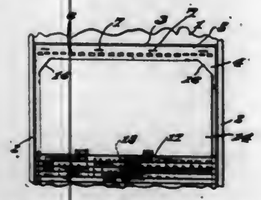
3. A compartment box comprising a receptacle open at its top, a spider fitting in the receptacle and providing separate compartments between the arms of spider, a transparent cover seated on the upper face of the spider for closing the top of the receptacle, said receptacle having an inturned flange at its upper edge adapted to overlap said transparent cover to loosely hold the same in position, said transparent cover having an opening therethrough at one side of the receptacle for access to the compartments, and a side carried by the cover for closing said opening.

1,817,563. AUTOMATIC WINDSHIELD CLEANER. HENRY HUEBER and JOHN R. OISHEI, Buffalo, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Oct. 14, 1925. Serial No. 62,437. 10 Claims. (Cl. 286—26.)



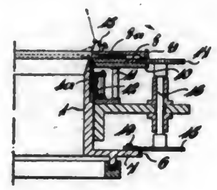
1. In a cylinder construction for fluid pressure motors, a cylinder having circumferentially arranged slots opening through its ends, disc-like end closure pieces for said cylinder, said end pieces having lugs engaging the slotted portions of said cylinder to be retained therein, and packing parts cooperating with said end pieces to close the ends of the cylinder.

1,817,564. INDEX AND SIGNAL. LE ROI E. HUTCHINGS, Buffalo, N. Y.; assignor to Remington Rand Inc., Tonawanda, N. Y. Filed Nov. 14, 1927. Serial No. 233,043. 20 Claims. (Cl. 129—16.7.)



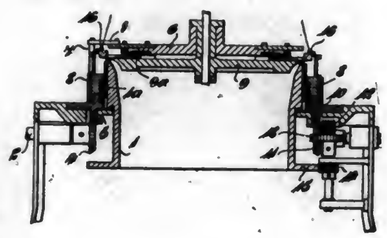
1. An index device, comprising a card having a slot in one edge portion, a sheath of transparent material enclosing the slotted edge of said card, and a signal strip slidably mounted in said sheath and extending through the slot in the card, the portion of the signal at each side of the card having signalling cooperation therewith.

1,817,565. CIRCULAR KNITTING MACHINE. THOMAS HENRY JONES, Woodthorpe, England. Filed June 17, 1929, Serial No. 371,561, and in Great Britain July 21, 1928. 4 Claims. (Cl. 66—26.)



1. A circular knitting machine comprising a plurality of sets of needles, stitch-forming cams associated with said needles, means for feeding yarn to said needles, means for effecting relative motion between the needles and the stitch cams, all of the needles operating to draw loops in the same direction, the number of needles in one set being different from that in another set and means for progressively varying the disposition of one set relatively to another during operation.

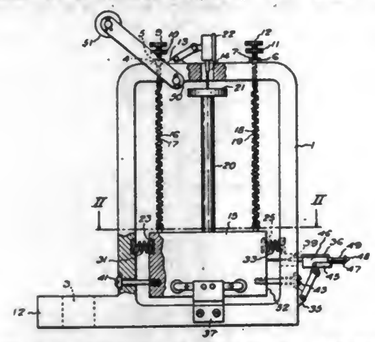
1,817,566. CIRCULAR KNITTING MACHINE. THOMAS HENRY JONES, Woodthorpe, England. Filed June 17, 1929, Serial No. 371,562, and in Great Britain July 21, 1928. 7 Claims. (Cl. 66—26.)



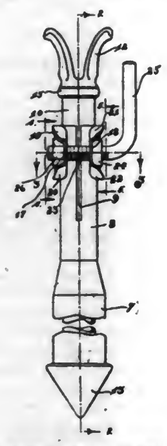
1. A circular knitting machine comprising a plurality of sets of needles, stitch-forming cams associated with said needles, means for feeding yarn to said needles, means for effective relative motion between the needles and the stitch cams, means whereby certain of the needles operate to draw loops in one direction and others of said needles operate to draw loops in an opposite direction, the number of needles in one set being different from that in another set, and means for progressively varying the disposition of one set relatively to another during operation.

1,817,567. VIBROMETER. GEORGE B. KARELITZ, Wilkinsburg, Pa. Filed Dec. 27, 1926. Serial No. 157,060. 7 Claims. (Cl. 73—51.)

7. In a means for measuring vibration in both a vertical and a horizontal plane, a supporting frame, a relatively heavy body, and elongated, vertically-yieldable, spring members in tension fastened to the frame and the body for yieldingly supporting it, the length and resilient characteristics of the spring member and the mass of the body being such that the body is permitted to swing freely as a pendulum at a natural frequency well below the frequencies to be measured in a horizontal plane and has a natural period of oscillation in a vertical direction well below the frequencies to be measured in a vertical plane.

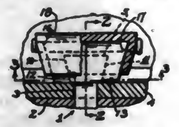


1,817,568. CLOTHES PROP. HILARY G. KNOTH, Detroit, Mich. Filed Feb. 7, 1927. Serial No. 166,321. 1 Claim. (Cl. 68—12.)



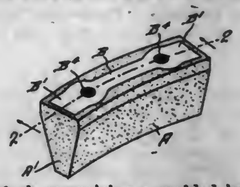
An adjustable clothes prop of the class described comprising a pair of telescoping tubes, the inner tube having on its lower end an enlargement; a line engaging member mounted on the upper end of said inner tube and provided with a portion projecting outwardly beyond the periphery of said inner tube; an engagement member mounted inwardly of the outer tube adjacent the lower end thereof, said enlarged portion on said lower end of said inner tube engaging said engagement member upon telescoping of said tubes and retaining said outwardly projecting portion of said line engaging member in spaced relation to the upper end of said outer tube said inner tube upon said engagement, extending inwardly of said outer tube substantially throughout its entire length.

1,817,569. DETACHABLE CLAMP-HEAD RAILROAD SPIKE. LEW KOEN, Wilkes-Barre, Pa. Filed Dec. 12, 1930. Serial No. 501,947. 5 Claims. (Cl. 238—338.)



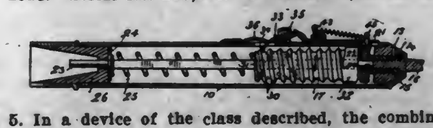
1. The combination with a railroad tie of a track rail seated thereon, a spike bedded in said tie and having the upper end thereof slotted, a head having one end thereof detachably seated in said slot and having the other end in clamping engagement with said track rail.

1,817,570. BRAKE SHOE. JOHN W. LATIMER, Lakewood, Ohio. Original application filed Apr. 15, 1929, Serial No. 355,131. Divided and this application filed June 10, 1930. Serial No. 460,217. 3 Claims. (Cl. 188—251.)



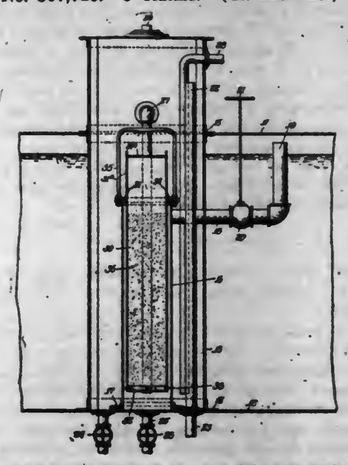
1. A brake block comprising a molded body of friction-creating material having a metal insert embedded therein, the said insert having ends substantially parallel with and located within the ends of said body and each provided at its extreme end with a projection, the said projections extending towards each other whereby the body is reinforced at its base and at its ends and is interlocked with said insert.

1,817,571. DENTAL TOOL. DUDLEY D. LEVY, New York, N. Y., assignor to Dudley Research Corporation, New York, N. Y., a Corporation of New York. Filed July 7, 1928. Serial No. 290,920. 5 Claims. (Cl. 32—26.)



5. In a device of the class described, the combination with a casing, of a tool holding member mounted in said casing, means for holding said tool holding member against rotation, an angular drive shaft mounted to rotate in said casing, said shaft having a round tip to engage said tool holding member, a hammer mounted on said drive shaft to rotate therewith, means for reciprocating said hammer member on said shaft to impart hammer blows on said tool holding member, and means to render said reciprocating means effective by applying pressure to the tool holding member.

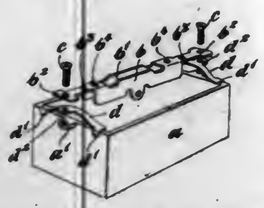
1,817,572. OIL FILTER AND SKIMMER. FRED H. LINLEY and FORD E. BOYD, Duluth, Minn. Filed Sept. 22, 1928. Serial No. 307,716. 8 Claims. (Cl. 210—45.)



1. An oil filter and skimmer comprising an outer casing, an inner casing closed at the bottom and open at the top

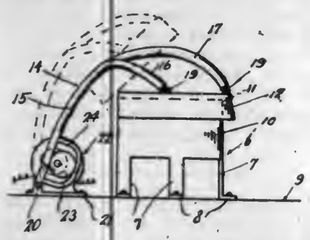
into the outer casing, a removable filter member fitted into the inner casing and closing said top opening, an inlet adapted to lead material to be treated into the outer casing and adjacent the bottom thereof and an outlet leading from the inner casing.

1,817,573. TERMINAL BOX MOUNTING FOR ELECTRIC SWITCHES. THOMAS RICHARD MARTIN, Tyseley, Birmingham, England. Filed Apr. 9, 1928. Serial No. 268,648. 4 Claims. (Cl. 200—168.)



1. A terminal box mounting for an electric switch, comprising a bridge member having apertures at its extremities, a box for accommodating the switch mechanism screws adapted to engage the apertures in the bridge member and threaded apertures in ends of said box, arcuate spring arms integral with the bridge member adapted to co-operate with the upper edges of the ends of the box, and means for connecting a cover plate to said bridge member.

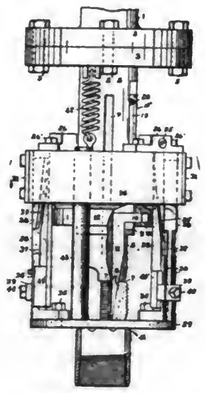
1,817,574. COLLAR PRESSING MACHINE. ALEX M. MCLENDON, Savannah, Ga., assignor of one-third to A. P. Soloman, jr., and one-third to A. L. Hildreth, Savannah, Ga. Filed June 26, 1930. Serial No. 463,987. 1 Claim. (Cl. 68—9.)



In a collar pressing machine of the class described, a motor including a stationary base, a stand supported adjacent said base and including a form, a pressing head co-operable with said form, a carrier comprising an arm pivotally attached at its lower end to said base, outwardly extending fingers on the upper end of the arm, springs connecting the extremity of each finger to the head, a frame carried by the pivoted end portion of the arm, and an eccentric cam on the motor shaft confined within said frame for swinging the arm and head toward and away from the stand.

1,817,575. TAP. GEORGE E. MILLER, Etna, Pa. Filed Dec. 16, 1929. Serial No. 414,370. 3 Claims. (Cl. 10—145.)

1. In a tapping device, a longitudinally movable body having a free end, a sleeve slidable on the body, laterally movable threading dies carried by the free end of the body, means carried by the sleeve for moving the dies outwardly when the sleeve moves toward the free end of the body and for moving the dies inwardly when the sleeve moves in the opposite direction, a means stationary during a threading operation, a wedge movable with the body and inclined inwardly and toward the free end of the body, a sliding block carried by the sleeve and engaging the wedge and causing the feed of the sleeve by the wedge, and means connected to the stationary means

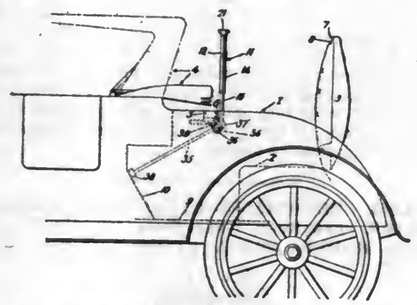


for moving the block gradually outwardly as the threading operation proceeds whereby the threads on the interior of the body threaded become tapered.

1,817,576. METHOD FOR TREATING ARTIFICIAL SILK OBTAINED FROM CENTRIFUGES. LEONHARD MONKEMEYER, Oberbruch, Kreis Heinsberg, Germany, assignor, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y. Filed Feb. 11, 1927, Serial No. 167,585, and in Germany Feb. 13, 1926. 1 Claim. (Cl. 118—69.)

A process for the treatment of artificial silk which comprises spinning a cake of thread having a plurality of concentric layers in a spinning receptacle, supplying an atomized washing liquid with the cake while in its spinning receptacle and supported by the outer walls of such receptacle, the inner walls of the cake remaining mechanically unsupported, and rotating the receptacle and the cake during such operation, eliminating the greatest part of the water not chemically combined by further rotating the receptacle with the cake, then reeling the thread and finally drying it in hanks.

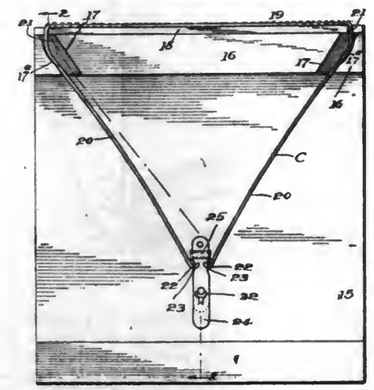
1,817,577. WINDSHIELD AND SUPPORT THEREFOR. THEODORE B. NISBET, Irvington, N. Y. Original application filed Oct. 23, 1926, Serial No. 143,627. Divided and this application filed Apr. 2, 1928. Serial No. 266,750. 1 Claim. (Cl. 296—85.)



In an automobile body having a rumble seat in a rumble seat compartment, the combination of a wind shield, wind shield supporting means pivoted to the wind shield near its lower edge, downwardly and forwardly inclined guides for said supporting means secured to said body adjacent to the forward edge of the opening

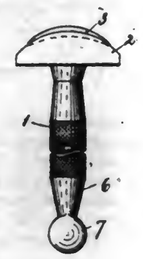
of the rumble seat compartment and at their lower ends, means for securing said supporting means in adjusted position along said guides, and means to engage the shield at its upper edge and hold it when the shield has been lowered along said guides, including a pivot fixed to said body at the front of the rumble seat opening, and a shield-engaging hook having a longitudinal slot receiving said pivot and permitting said hook to be shoved back when not in use.

1,817,578. LID FASTENING DEVICE FOR SHIPPING CASES. FRED D. PERRY, East Bakersfield, Calif. Filed Sept. 9, 1929. Serial No. 391,338. 3 Claims. (Cl. 292—247.)



1. In combination, a shipping case having a removable lid, recessed elements at opposite sides of the shipping case so disposed as to have portions of the lid bridging said recesses, clamping members extending through said recesses and having portions disposed at the outer side of the lid and spanning the latter, and means on the shipping case for actuating the clamping members to cause said portions to clamp the lid in closed position on the shipping case.

1,817,579. CORN REMOVING DEVICE. DANIEL PÉTARD, Nice, France. Filed May 11, 1928. Serial No. 276,842. 1 Claim. (Cl. 30—23.)



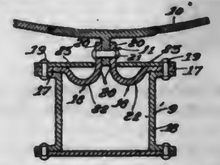
In a device of the class described, a guard frame comprising spaced side portions and end portions connecting the ends of said side portions, a blade supporting member integrated with the sides of said guard frame and spaced at its ends from the ends of said guard frame, a tongue at one end of said blade supporting member spaced from the sides of said guard frame and provided with a transversely convexed outer face disposed inwardly of the outer edges of the sides of the guard frame, and means for clamping a blade against the outer face of said blade supporting member.

1,817,580. METHOD OF MANUFACTURING TANK CARS. RAYMOND C. PIERCE, Bronxville, N. Y., assignor to General American Tank Car Corporation, Chicago, Ill., a Corporation of West Virginia. Filed Mar. 25, 1929. Serial No. 349,858. 4 Claims. (Cl. 29—148.2.)



1. The method of manufacturing anchor-equipped tanks which consists in forming an opening in the wall of the tank shell, positioning at said opening a member which is to form the anchor with portions thereof in lapped relation to the surrounding wall of said opening and forge-welding together said lapping portions of said shell and member.

1,817,581. TANK CAR. RAYMOND C. PIERCE, Bronxville, N. Y., assignor to General American Tank Car Corporation, Chicago, Ill., a Corporation of West Virginia. Original application filed Mar. 25, 1929, Serial No. 349,858. Divided and this application filed Jan. 28, 1930. Serial No. 424,014. 17 Claims. (Cl. 105—362.)



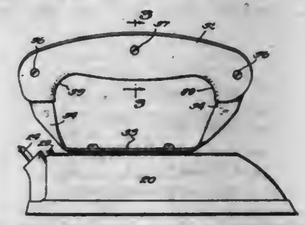
1. In a tank car, the combination with its underframe, of a tank having a depending structure integral therewith, and means for anchoring the tank to the underframe comprising plates secured to said underframe and having upwardly extending portions connected with said depending structure.

2. In a tank car, the combination with its underframe, of a tank having a depending structure integral therewith, and means for anchoring the tank to the underframe comprising plates having horizontal portions and upwardly extending portions, said plates being secured at their horizontal portions to said underframe and connected at their upwardly extending portions with said depending structure.

1,817,582. CLEANING COMPOSITION. SHERMAN W. PUTNAM and NOLAND POFFENBERGER, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 7, 1930. Serial No. 442,444. 12 Claims. (Cl. 87—6.)

1. A composition of matter consisting of a mixture of carbon tetrachloride and propylene dichloride.

1,817,583. SADIRON HANDLE. MICHAEL A. ROLLMAN, Mount Joy, Pa. Filed May 25, 1927. Serial No. 194,182. 4 Claims. (Cl. 68—26.)



1. A handle for sad irons consisting of a plate fastened to the top side of the iron and having a pair of

separated upstanding arms at each end, and a grasping-portion consisting of a plurality of separated plates made of heat-insulating material and having their ends clamped flatwise against the upper ends of said upstanding arms, the central plates lying between said arms.

1,817,584. ANCHORAGE DEVICE. HEYMAN ROSENBERG, New York, N. Y. Filed Feb. 11, 1928. Serial No. 253,755. 7 Claims. (Cl. 85—2.4.)



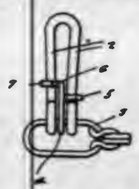
4. In anchorage means, the combination of an anchor-receiving plate, loops pendent therefrom having return terminal portions extending past the plate, legs outstanding laterally from said terminal portions, and an anchor extending between said terminal portions and having anchorage engagement with the plate and extending beyond the plate into anchorage engagement with said loops.

1,817,585. RUBBER BRUSH. MAX SAMUEL, Rostock, Germany. Filed Feb. 12, 1930, Serial No. 427,879, and in Germany Apr. 18, 1928. 5 Claims. (Cl. 15—188.)



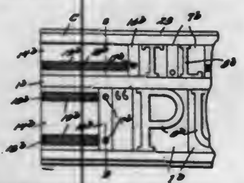
1. A brush consisting of an integral body of rubber and rubber teeth thereon in the form of three-sided upright prisms.

1,817,586. ANTISKID CHAIN. EARL Y. SCHAEFFER, Kutztown, Pa. Filed Oct. 18, 1930. Serial No. 489,639. 5 Claims. (Cl. 24—237.)



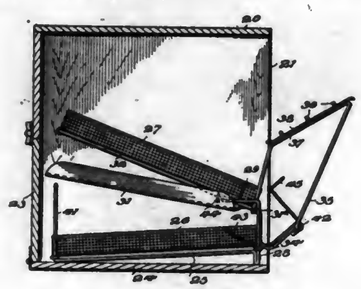
1. In an anti-skid chain of the character described, means for detachably connecting a cross chain to a side chain link comprising a pair of spaced, coextensive hooks connected to the cross chain and detachably engageable with the side chain link, and a substantially U-shaped keeper detachably mounted on the hooks between said hooks and engageable with the cross chain link in a manner to prevent detachment of the hooks therefrom, said keeper straddling one side of the link and having its bight portion substantially in transverse alignment with the hooks when in operative position.

1,817,587. PRINTING PLATE HOLDING MEANS. JULIUS SCHMUTZ, Louisville, Ky. Filed Sept. 3, 1929. Serial No. 390,086. 4 Claims. (Cl. 101—381.)



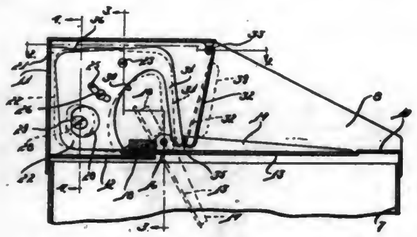
1. In a structure as above described, the combination with a holder, including a plurality of channels, each of said channels formed with guides and a groove in the bottom wall thereof, of a plurality of printing elements adapted to engage said channels and including lateral flanges adapted to seat in said guides; keepers formed with similar flanges adapted to seat in said guides and engage the free ends of the respective printing elements, and adjustable means carried by the keepers and engageable in said longitudinal grooves to lock said printing elements in said holder without affecting the contact surfaces of said channels and printing elements, whereby said elements are readily slidable in said channels irrespective of continued usage.

1,817,588. HEN'S NEST. LARKIN R. SHAFFER, Garland, Utah. Filed Mar. 11, 1930. Serial No. 434,886. 11 Claims. (Cl. 119—48.)



1. In a hen's nest, the combination of a compartment open at the front, a tray supported on the bottom of said compartment, a nest having a perforate bottom, said nest being tiltable on a horizontal axis above said tray to discharge eggs therefrom into said tray, and an imperforate plate interposed between the bottom of the nest and said tray.

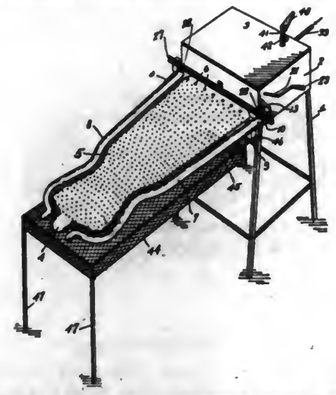
1,817,589. TRAP. WILLIAM I. SIMMONS, Novi, Mich. Filed Aug. 2, 1929. Serial No. 382,951. 5 Claims. (Cl. 43—70.)



1. In a trap of the class described, a swingable trap slide; a pivotally mounted engagement member for engaging said trap slide and preventing swinging movement of the same in one direction; resilient means engaging said engagement member for resisting movement of the same to inoperative position; and means for adjusting the tension of said resilient means.

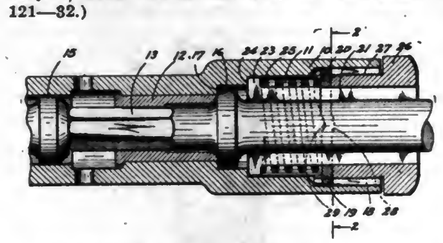
1,817,590. GARMENT STEAMING AND STRETCHING DEVICE. SAMUEL SIMON, Brooklyn, N. Y., assignor of one-half to Louis A. Pincus, Washington, D. C. Filed Oct. 16, 1929. Serial No. 400,004. 6 Claims. (Cl. 223—17.)

1. In a device of the class described, a support, a hollow form mounted thereon and provided with steam emitting passages, means for supplying steam to the interior of the hollow form, garment stretching wings arranged at the opposite sides of the form and adapted for movement toward or away from said form, means for actuating the movable wings simultaneously and guide means



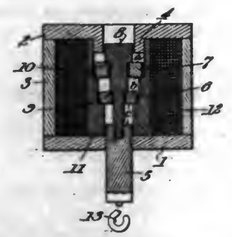
for said movable wings, said guide means including a track arranged on the support, and rollers carried by the inner ends of the wings for movement along said track.

1,817,591. TOOL RETAINER. ALFRED G. SLATCHER, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 1, 1929. Serial No. 375,168. 5 Claims. (Cl. 121—32.)



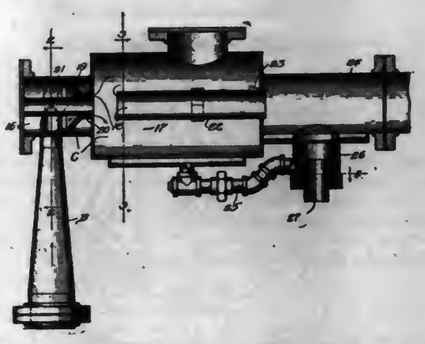
1. The combination with the head of a percussion tool, of a collared drill operable therein, a cap removably engaged in the head, a sleeve in the head and cap, a spring encircling the sleeve, a washer interposed between the spring and cap, means for preventing rotation of the washer, and cooperating means for interlocking the washer and cap.

1,817,592. ELECTROMAGNET. BORIS N. SOKOLOFF, Washington, D. C. Filed Apr. 8, 1929. Serial No. 353,528. 20 Claims. (Cl. 175—341.)



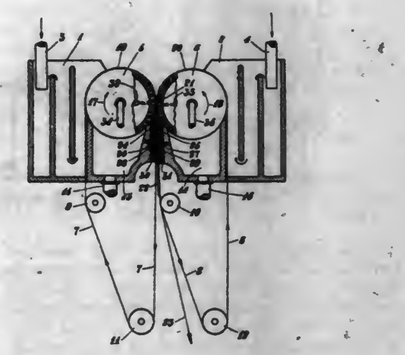
1. In an electromagnet, the combination with a solenoid, of a core, a movable auxiliary armature disposed in the path of substantially the entire flux established upon energization of said solenoid, a main armature normally having only a portion thereof within the path of substantially the entire flux said armatures being separated from each other and from said core by series air gaps when the solenoid is not energized, and connecting means of low permeability for causing the main armature to move into the flux path as the auxiliary armature is moved toward the core by the energization of the solenoid.

1,817,593. CENTRIFUGAL SEPARATOR. ERNEST W. THIELE, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Oct. 29, 1926. Serial No. 144,981. 6 Claims. (Cl. 183—88.)



1. A separator of the class described comprising means for causing droplets to coalesce from a fine liquid mist suspended in a vapor, and centrifugal means for separating said droplets from the vapor, comprising a centrifugal chamber provided with a tangential inlet pipe and having a tapered outlet portion delivering into an enlarged separating chamber.

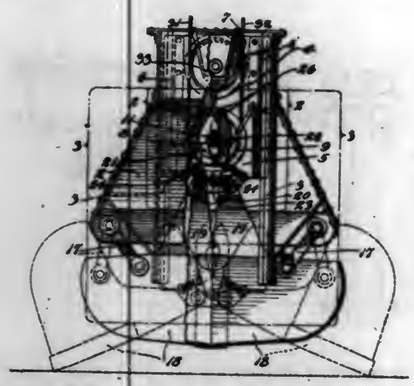
817,594. MACHINE FOR SEPARATING LIQUIDS FROM SOLID BODIES MIXED OR SUSPENDED THEREIN. RUDOLF ERNST WAGNER, Karlstad, and JOHAN DANIEL ULLGREN, Stocksund, Sweden, assignors to Aktiebolaget Karlstads Mekaniska Werkstad, Karlstad, Sweden, a Company of Sweden. Filed June 6, 1930, Serial No. 459,555, and in Sweden Mar. 30, 1929. 4 Claims. (Cl. 92—39.)



1. In a machine for separating liquids from solid bodies mixed or suspended therein, the combination of two pulp containers, two rotatably journalled perforated rollers, each such roller being associated with one of said pulp containers, a suction box for each of said rollers, two endless wire aprons, each of said aprons running over one of said rollers and forming a wall of one of said pulp containers, said rollers being adapted to press the webs of material collected on said wire aprons while

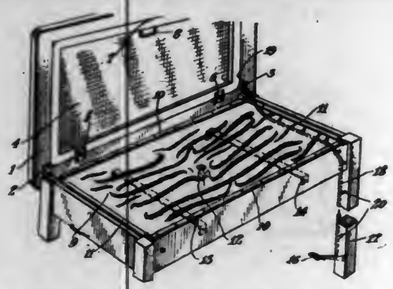
passing through said pulp containers against each other, and two packing plates, each packing plate having an edge bearing against the associate roller immediately beyond such pressing place taken in the direction of rotation of said rollers, said packing plates being adjustable at various distances from one another.

1,817,595. EXCAVATING BUCKET. LEE SYLVESTER WALLACE, Holt, Ala. Filed Aug. 1, 1929. Serial No. 382,715. 14 Claims. (Cl. 37—186.)



10. In apparatus of the class described, the combination, with a load carrier, a supporting frame therefor, and a cable for raising and lowering said carrier and frame of independent slides carried by the frame, means connecting one of the slides to the load, means for detachably connecting the two slides together to sustain the load carrier in load-carrying position, and means for detaching the said slides while the load carrier is in suspension, said means being operable by said cable.

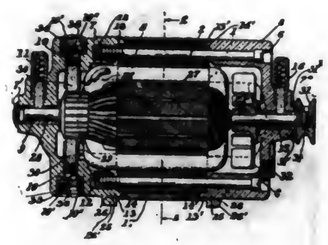
1,817,596. BATHING TABLE. THOMAS WHALEN, New York, N. Y. Filed Jan. 12, 1928. Serial No. 246,107. 1 Claim. (Cl. 4—175.)



In a bathing table of the kind described the combination of a table frame, a collapsible tub member mounted in the frame and means associated therewith adapted and arranged to permit said tub member to assume its full proportions as it is filled with water and to collapse said tub member as it is emptied.

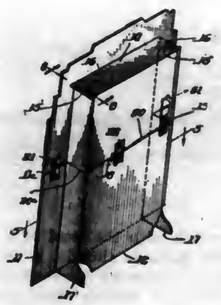
1,817,597. ELECTRIC MOTOR. HENRY L. ZABRISKIE, Westfield, and DANIEL H. CHASON, Elizabeth, N. J., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed June 29, 1929. Serial No. 374,779. 5 Claims. (Cl. 172—36.)

1. An electric motor having a laminated field-frame, end-covers of insulating material secured to the opposite ends of said field-frame, an armature journaled in said end-covers, a strip of thin sheet insulation surrounding



said field-frame between said end-covers, and a thin sheet-metal protecting casing strip secured around said insulation strip and insulated from said field-frame.

1,817,598. FOLDING DISPLAY. HENRY ZIEMMERMAN, Chicago, Ill., assignor to Chicago Cardboard Company, Chicago, Ill., a Corporation of Illinois. Filed July 11, 1930. Serial No. 467,174. 7 Claims. (Cl. 40—146.)



1. A display device comprising cardboard sheets attached together at the edges and one at the back of the other with transverse score lines adapting them to fold over together, a portion of the score line of one of the sheets being completely severed to allow the remaining folded portions of both sheets to assume the same straight line of folding.

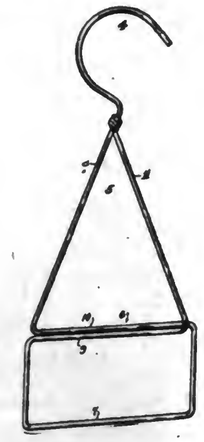
1,817,599. EMULSIFIABLE LUBRICANT. ELMER W. ADAMS, Hammond, and FRANCIS W. KITTRELL, Whiting, Ind., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Sept. 4, 1928. Serial No. 303,964. 11 Claims. (Cl. 87—9.)

1. An emulsifiable lubricating compound comprising tallow and the alkali metal soaps of oxidized hydrocarbons.

1,817,600. HANGER FOR ELONGATED ARTICLES. JOSEF MARTIN AHN, New York, N. Y. Filed Aug. 3, 1929. Serial No. 383,208. 1 Claim. (Cl. 223—61.)

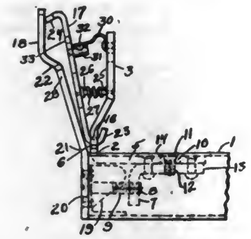
A hanger formed of wire bent to form suspension means at its upper end, a side frame member depending downwardly and outwardly therefrom, an upper cross-clamping member, a side member depending therefrom, a lower

cross-member, a side member rising therefrom, an upper cross-clamping member alongside the other cross-clamping



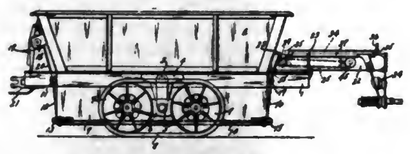
member, and a side frame member rising therefrom to a meeting with and fastening to the opposite side frame member.

1,817,601. TUFT FRAME FOR WEAVING TUFTED FABRICS. CLINTON ALVORD, Worcester, Mass., assignor to Worcester Loom Works, Worcester, Mass. Filed Aug. 2, 1929. Serial No. 382,854. 8 Claims. (Cl. 139—10.)



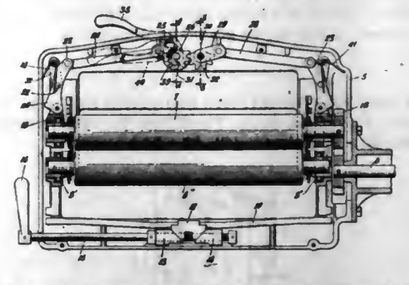
1. As an article of manufacture a chain engaging ear for a tuft frame imperforate above the portion thereof designed for its attachment to the body of the tuft frame, said imperforate feature serving to prevent accidental dis-engagement of the tuft frame from its conveyor chain.

1,817,602. DUMP WAGON DOOR OPERATING GEAR. GEORGE E. ARMINGTON, Cleveland, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed Nov. 21, 1930. Serial No. 497,173. 6 Claims. (Cl. 298—35.)



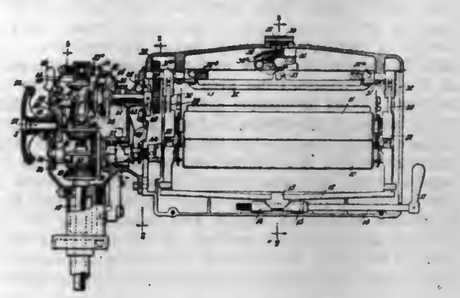
1. In a wagon of the class described and having a dumping door and a hollow draw-bar, hydraulic power-actuated means of piston and cylinder type and associated sheaves within the hollow of the drawbar, and a line connecting between said means and said door for operating the latter by the former said line passing over said sheaves.

1,817,603. WRINGER. THOMAS W. BEHAN, Binghamton, N. Y., assignor to Nineteen Hundred Corporation, a Corporation of New York. Filed Feb. 28, 1928. Serial No. 257,664. 5 Claims. (Cl. 68—32.)



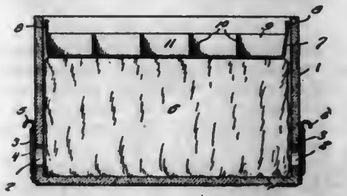
1. A wringer comprising a frame, a pair of rolls, bearings slidable vertically in opposite sides of the frame and in which one roll is mounted, toggle links pivoted to the top of the frame and to each bearing for moving the same vertically, horizontal toggle mechanism connected to both sets of toggle links, and a lever for actuating said horizontal toggle mechanism.

1,817,604. CLOTHES WRINGER. THOMAS W. BEHAN, Binghamton, N. Y., assignor to Nineteen Hundred Corporation, a Corporation of New York. Filed Feb. 28, 1928. Serial No. 257,665. 16 Claims. (Cl. 68—32.)



1. In a clothes wringer, a pair of rolls, means for normally exerting pressure and pressing said rolls together, trip controlled resilient means for quickly releasing said pressure, a power shaft for driving said rolls, and means adapted to be operated by said power shaft, at the will of the operator, for restoring said pressure.

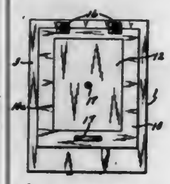
1,817,605. REFRIGERATING APPARATUS. JOSEPH S. BELT, Amarillo, and EDWARD M. LADD, Fort Worth, Tex. Filed May 14, 1929. Serial No. 362,980. 2 Claims. (Cl. 62—91.5.)



1. In a refrigerator, a refrigerating unit comprising an open-top heat-insulating container adapted to receive a block of refrigerant in the form of solid carbondioxide, openings in a plurality of sides of the container near the bottom thereof adjustable closure plates for said openings

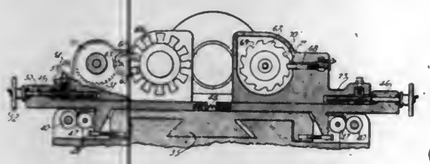
to regulate the escape of gases liberated by the refrigerant and the admission of air respectively from and into the container so as to control the refrigeration, and an ice pan slidably fitted within the container and adapted to rest upon the top of the refrigerant, said pan being further adapted to lower by gravity and remain in contact with the refrigerant as the latter gradually diminishes.

1,817,606. PHOTOGRAPHIC PRINTING DEVICE. FRANK BERN, Cleveland, Ohio. Filed June 30, 1930. Serial No. 464,857. 8 Claims. (Cl. 88—24.)



1. A photographic printing device for making bordered photographs by projection, comprising three masks, an outer border mask, an inner border mask, and an image mask; said outer border mask having a light-transmitting area and an opaque area, said light-transmitting area comprising an image-exposing portion and an inner-border-exposing portion, said opaque area, during the entire photographic printing operation, lying above and constituting the mask for the outer border portion of the printing paper sheet which is to receive the bordered photograph; said inner border mask being movable into and out of masking position relative to said outer border mask and having a light-transmitting image-exposing area corresponding in size and shape with the image-exposing portion of the light-transmitting area of the outer border mask and also having an opaque area, said opaque area, during the printing of the image part of the photographic printing operation, constituting the mask for the inner-border-exposing portion of the light-transmitting area of the outer border mask; and said image mask being movable into and out of masking position relatively to said outer border mask and having an opaque area constituting the mask for the image-exposing portion of the light-transmitting area of the outer border mask during the printing of the inner border part of the photographic printing operation.

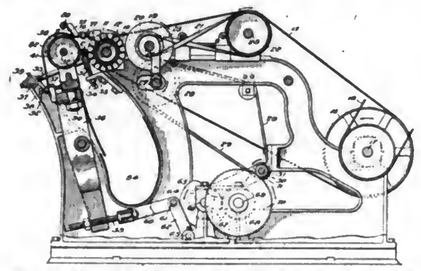
1,817,607. THREADING MACHINE. LOUIS H. BLOOD, Cincinnati, Ohio. Filed Jan. 4, 1930. Serial No. 418,459. 18 Claims. (Cl. 82—5.)



1. In a threading machine having a rotating work holder, a pair of indexable cutter heads reciprocably mounted on opposite sides of the work holder for independent movement toward and from the same, means to back out, index and return one cutter head, while the other cutter is in working position.

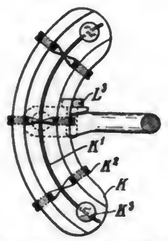
18. In a threading machine having a pair of indexable cutter heads on opposite sides of a work piece each head having a plurality of chasers circumferentially spaced thereabout and extending longitudinally thereof, said chasers being progressively stepped back from one end of the cutter head, means to continuously feed said heads longitudinally of the work piece, means to laterally reciprocate the cutter heads and means to index the same after each reciprocation to thereby cause successive engagement of the chasers of each cutter head with the work, said reciprocating means acting in cooperation with said feeding means to withdraw each chaser from the work when in substantially the same longitudinal cutting position with respect thereto.

1,817,608. BAR SIZING OR SHAVING MACHINE. SAMUEL C. BOND, Holly Oak, Del., assignor to The Henry P. Scott Company, a Corporation of Delaware, as trustee. Filed Mar. 11, 1929. Serial No. 346,060. 9 Claims. (Cl. 142—1.)



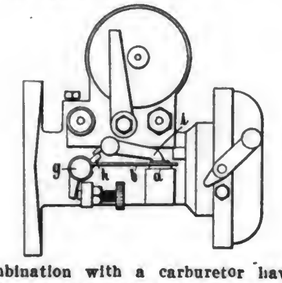
1. In a machine for cutting and sizing cork bars and the like, the combination of a rotatable roll having a plurality of spirally arranged cutting edges, a support for the bars, and a rotatable feed roll movable toward and from said support and cutting roll to press the bars against the cutting roll and rotate the bars in conjunction with said cutting roll.

1,817,609. CAM DEVICE. GREGORIO JOHN BOONZAIER, Harlesden, England. Filed Oct. 6, 1928, Serial No. 310,768, and in Great Britain Oct. 13, 1927. 4 Claims. (Cl. 74—1.)



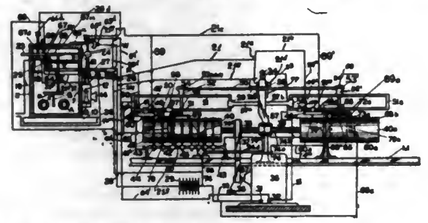
1. A cam device comprising a U-shaped base, a flexible strip carried between the arms of the U, and means mounted in the arms of said U-shaped base for adjusting the contour of said strip.

1,817,610. CARBURETOR. CLEMENT BROWN, Witton, Birmingham, England, assignor to Amalgamated Carburetters Limited, Birmingham, England. Filed Mar. 3, 1927, Serial No. 172,531, and in Great Britain May 25, 1926. 4 Claims. (Cl. 261—47.)



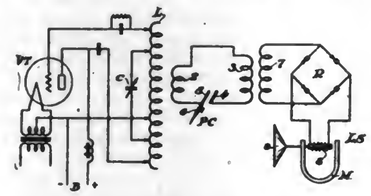
1. In combination with a carburetor having an air passage, said passage having a main air inlet, an auxiliary air inlet, and an air outlet; a throttle controlling said outlet and having a spindle, a lever secured to said spindle for movement by said spindle, a closure arranged on said lever and adapted to close said auxiliary air inlet when the spindle is turned in the required direction to open the throttle valve and to open said air inlet when said spindle is turned in the reverse direction and means coacting with, said lever to open or close said auxiliary air inlet on a very slight movement of the throttle.

1,817,611. TELEPHONE-PHONOGRAPHIC MEANS OF COMMUNICATION. GEORGE R. COOPER, Upper Darby Township, Delaware County, Pa. Filed Sept. 22, 1928. Serial No. 309,196. 1 Claim. (Cl. 179—6.)



In apparatus of the character described the combination with a telephone circuit, a motor mechanism controlled by the closing of said telephone circuit, a record carrier operated by said motor mechanism, a sound reproducing device coacting with a record on said carrier and connected in circuits with said telephone circuit, a second record carrier operated by said motor mechanism, a sound recording device cooperating with a record on said second named record carrier, said sound recording mechanism being in circuit with said telephone circuit, a magnetic mechanism controlled by said sound reproducing device for positioning said sound recording device in operative relation to a record on said second named record holder, an electromagnetic mechanism controlled by said telephone circuit for positioning said sound reproducing device in operative relation with a record on said first named record holder.

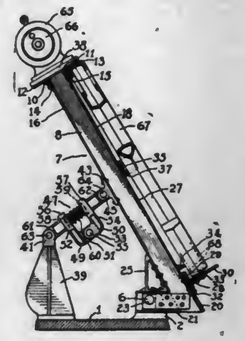
1,817,612. SOUND REPRODUCING SYSTEM. PALMER HUNT CRAIG, Cincinnati, Ohio, assignor to Invex Corporation, a Corporation of New York. Filed July 11, 1928. Serial No. 291,910. 9 Claims. (Cl. 179—100.4.)



1. A sound reproducing system comprising a source of current constant super-audible frequency and of sufficient energy to operate a loud-speaker, a sound record, means for modulating said current in accordance with the record, and means for rectifying said modulated current and operating said loud-speaker solely by the energy of said modulated current.

1,817,613. SHAKE-OUT APPARATUS. VERNON J. DAVIS, Buffalo, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 17, 1928. Serial No. 255,164. 11 Claims. (Cl. 259—72.)

1. A jolt machine for removing burnt core sand from hollow castings, comprising a frame having a face adapted to receive and to support a hollow casting containing a burnt core, means supporting said frame for reciprocation in a plane transverse to said face, means to hold the casting against movement longitudinally of said frame by force of gravity during reciprocation of said frame, and means to reciprocate said frame at a down-stroke velocity

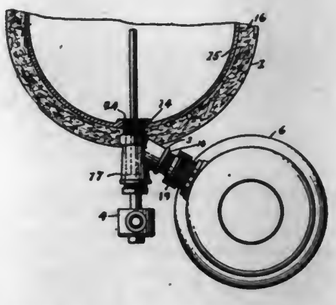


greater than the velocity of a falling body whereby said frame will permit the hollow casting carried thereby to fall by gravity during the down-stroke of the frame reciprocation and will sharply impact the freely falling casting upon the up-stroke of its reciprocation to break up the contained burnt core and lift the casting through the remainder of the frame up-stroke to complete a cycle.

1,817,614. MANUFACTURE OF ANHYDRIDES OF ALIPHATIC ACIDS. HENRY DREYFUS, London, England. Filed Dec. 27, 1927, Serial No. 242,977, and in Great Britain Feb. 8, 1927. 19 Claims. (Cl. 260—123.)

1. Process for the manufacture of an aliphatic anhydride which comprises subjecting the vapor of an aliphatic acid to pyrogenic decomposition in a heated reaction zone, permitting the reaction vapors to leave said heated reaction zone and thereafter passing the reaction vapors in contact with at least one water binding agent that has no deleterious effect upon the products of the process maintained at a temperature below that obtaining in the heated reaction zone.

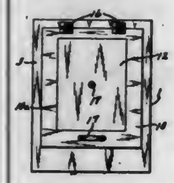
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3. In a water heater the combination of a storage tank having a tapped opening in the side thereof, a heater coil adapted for communication with the opening of said tank, and a Y fitting for effecting such communication, said fit-

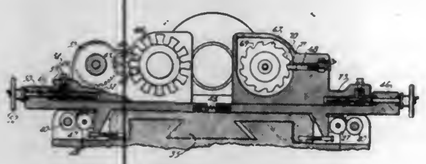
to regulate the escape of gases liberated by the refrigerant and the admission of air respectively from and into the container so as to control the refrigeration, and an ice pan slidably fitted within the container and adapted to rest upon the top of the refrigerant, said pan being further adapted to lower by gravity and remain in contact with the refrigerant as the latter gradually diminishes.

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1. A photographic printing device for making bordered photographs by projection, comprising three masks, an outer border mask, an inner border mask, and an image mask; said outer border mask having a light-transmitting area and an opaque area, said light-transmitting area comprising an image-exposing portion and an inner-border-exposing portion, said opaque area, during the entire photographic printing operation, lying above and constituting the mask for the outer border portion of the printing paper sheet which is to receive the bordered photograph; said inner border mask being movable into and out of masking position relative to said outer border mask and having a light-transmitting image-exposing area corresponding in size and shape with the image-exposing portion of the light-transmitting area of the outer border mask and also having an opaque area, said opaque area, during the printing of the image part of the photographic printing operation, constituting the mask for the inner-border-exposing portion of the light-transmitting area of the outer border mask; and said image mask being movable into and out of masking position relatively to said outer border mask and having an opaque area constituting the mask for the image-exposing portion of the light-transmitting area of the outer border mask during the printing of the inner border part of the photographic printing operation.

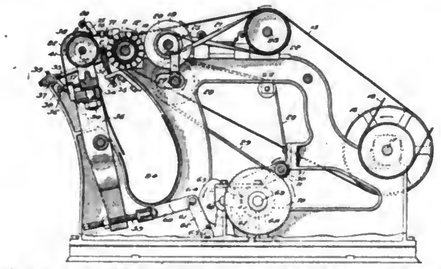
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1. In a threading machine having a rotating work holder, a pair of indexable cutter heads reciprocably mounted on opposite sides of the work holder for independent movement toward and from the same, means to back out, index and return one cutter head, while the other cutter is in working position.

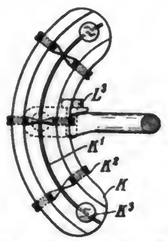
18. In a threading machine having a pair of indexable cutter heads on opposite sides of a work piece each head having a plurality of chasers circumferentially spaced thereabout and extending longitudinally thereof, said chasers being progressively stepped back from one end of the cutter head, means to continuously feed said heads longitudinally of the work piece, means to laterally reciprocate the cutter heads and means to index the same after each reciprocation to thereby cause successive engagement of the chasers of each cutter head with the work, said reciprocating means acting in cooperation with said feeding means to withdraw each chaser from the work when in substantially the same longitudinal cutting position with respect thereto.

1,817,608. BAR SIZING OR SHAVING MACHINE. SAMUEL C. BOND, Holly Oak, Del., assignor to The Henry P. Scott Company, a Corporation of Delaware, as trustee. Filed Mar. 11, 1929. Serial No. 346,060. 9 Claims. (Cl. 142—1.)



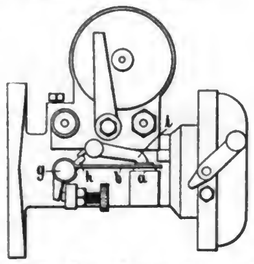
1. In a machine for cutting and sizing cork bars and the like, the combination of a rotatable roll having a plurality of spirally arranged cutting edges, a support for the bars, and a rotatable feed roll movable toward and from said support and cutting roll to press the bars against the cutting roll and rotate the bars in conjunction with said cutting roll.

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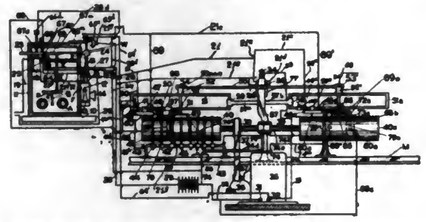
1. A cam device comprising a U-shaped base, a flexible strip carried between the arms of the U, and means mounted in the arms of said U-shaped base for adjusting the contour of said strip.

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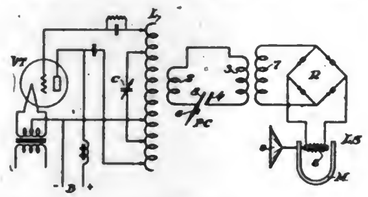
1. In combination with a carburetor having an air passage, said passage having a main air inlet, an auxiliary air inlet, and an air outlet; a throttle controlling said outlet and having a spindle, a lever secured to said spindle for movement by said spindle, a closure arranged on said lever and adapted to close said auxiliary air inlet when the spindle is turned in the required direction to open the throttle valve and to open said air inlet when said spindle is turned in the reverse direction and means coacting with, said lever to open or close said auxiliary air inlet on a very slight movement of the throttle.

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In apparatus of the character described the combination with a telephone circuit, a motor mechanism controlled by the closing of said telephone circuit, a record carrier operated by said motor mechanism, a sound reproducing device coacting with a record on said carrier and connected in circuits with said telephone circuit, a second record carrier operated by said motor mechanism, a sound recording device cooperating with a record on said second named record carrier, said sound recording mechanism being in circuit with said telephone circuit, a magnetic mechanism controlled by said sound reproducing device for positioning said sound recording device in operative relation to a record on said second named record holder, an electromagnetic mechanism controlled by said telephone circuit for positioning said sound reproducing device in operative relation with a record on said first named record holder.

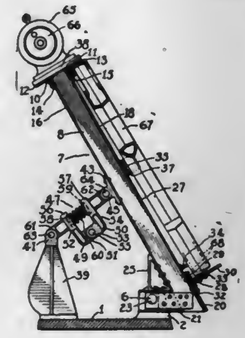
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1. A sound reproducing system comprising a source of current constant super-audible frequency and of sufficient energy to operate a loud-speaker, a sound record, means for modulating said current in accordance with the record, and means for rectifying said modulated current and operating said loud-speaker solely by the energy of said modulated current.

1,817,613. SHAKE-OUT APPARATUS. VERNON J. DAVIS, Buffalo, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 17, 1928. Serial No. 255,164. 11 Claims. (Cl. 259—72.)

1. A jolt machine for removing burnt core sand from hollow castings, comprising a frame having a face adapted to receive and to support a hollow casting containing a burnt core, means supporting said frame for reciprocation in a plane transverse to said face, means to hold the casting against movement longitudinally of said frame by force of gravity during reciprocation of said frame, and means to reciprocate said frame at a down-stroke velocity

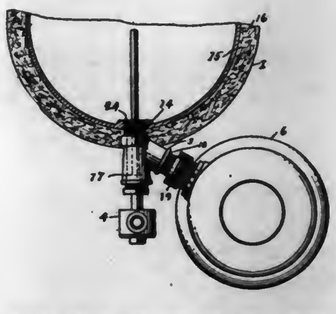


greater than the velocity of a falling body whereby said frame will permit the hollow casting carried thereby to fall by gravity during the down-stroke of the frame reciprocation and will sharply impact the freely falling casting upon the up-stroke of its reciprocation to break up the contained burnt core and lift the casting through the remainder of the frame up-stroke to complete a cycle.

1,817,614. MANUFACTURE OF ANHYDRIDES OF ALIPHATIC ACIDS. HENRY DREYFUS, London, England. Filed Dec. 27, 1927, Serial No. 242,977, and in Great Britain Feb. 8, 1927. 19 Claims. (Cl. 260—123.)

1. Process for the manufacture of an aliphatic anhydride which comprises subjecting the vapor of an aliphatic acid to pyrogenic decomposition in a heated reaction zone, permitting the reaction vapors to leave said heated reaction zone and thereafter passing the reaction vapors in contact with at least one water binding agent that has no deleterious effect upon the products of the process maintained at a temperature below that obtaining in the heated reaction zone.

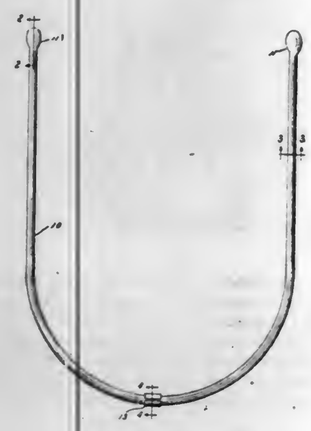
1,817,615. COUPLING MEMBER. ARTHUR FRIEDMAN, Cleveland, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 29, 1928. Serial No. 257,916. 5 Claims. (Cl. 122—250.)



3. In a water heater the combination of a storage tank having a tapped opening in the side thereof, a heater coil adapted for communication with the opening of said tank, and a Y fitting for effecting such communication, said fit-

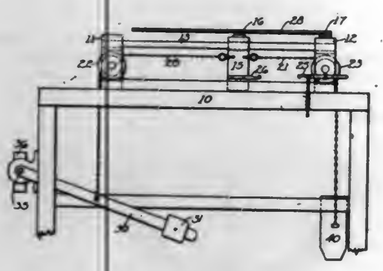
ting having a threaded branch for reception in the opening of said tank, a flanged branch opposite thereto for connection with the heater coil, a union nut for effecting such connection, and a third branch opposite to said first named branch for reception of a control device.

1,817,616. JUMPING ROPE. WILLIAM F. GOFF, Akron, Ohio. Filed May 24, 1929. Serial No. 365,639. 5 Claims. (Cl. 272—75.)



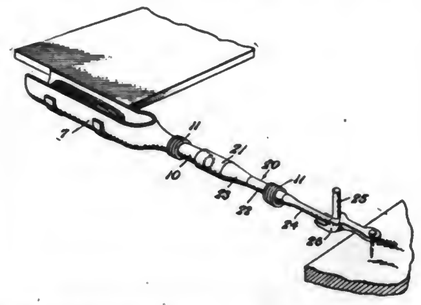
1. A jumping rope comprising a length of molded, flexible vulcanized rubber formed with integral rubber knobs on its ends, said knobs having cores of spongy rubber.

1,817,617. STRETCHING MACHINE FOR STOCKINGS. WILLIAM H. GOSCH, Reading, Pa., assignor to The Nolde and Horst Company, Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1929. Serial No. 351,927. 3 Claims. (Cl. 265—12.)



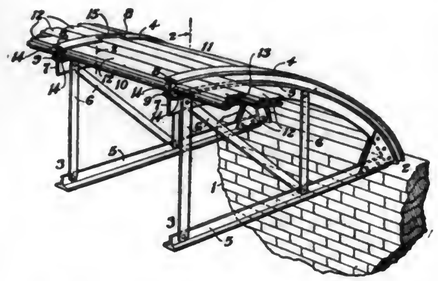
1. A stretching machine comprising a table-top having fixed end posts one of which carries a fixed fabric-form, a guide bar extending between said posts, a movable form carrier guided upon said bar, flexible connections to said movable carrier extending in reverse directions over guide pulleys at opposite end portions of the table, a weighted lever operatively attached to one of said flexible connections, a movement controlling check device for said lever, a carrier-returning lever operatively connected to the other flexible connection, and latching means for holding the returned carrier.

1,817,618. HANK BUNDLING MECHANISM. WILLIAM H. GOSCH, Reading, Pa., assignor to The Nolde and Horst Company, Reading, Pa., a Corporation of Pennsylvania. Filed June 26, 1930. Serial No. 463,998. 4 Claims. (Cl. 28—21.)



1. In combination with a hank-bundling trough having a discharge tube at one end thereof; a fastening band carrier guide attachment comprising a tubular end portion engageable upon said discharge tube and a projecting band-carrying portion forming in connection with said engaged end portion an exterior slide way to the discharge tube.

1,817,619. ROOF. DAVID GREENWALD, New York, N. Y. Filed Nov. 21, 1928. Serial No. 320,768. 1 Claim. (Cl. 108—1.)

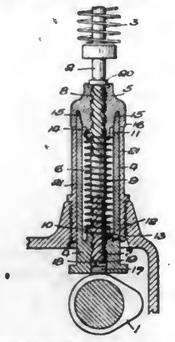


A roof having the combination of a series of arched trusses, the upper arched member of each of said trusses being integral in cross-sectional configuration, said upper member having a vertical web and a pair of horizontal webs projecting laterally from each side of said vertical web, said vertical web projecting below the lower of said horizontal webs for securing thereto the posts of said truss, a plurality of covering members extending transversely of said trusses having their terminals projecting between said horizontal webs, and said covering members being close to each other and constituting together with each other independently of said trusses a self sustaining arched structure making up the roof with said trusses acting to prevent dislocation of said covering members.

1,817,620. SELF ADJUSTING TAPPET. REGINALD HAROLD HAMILTON, St. Albans, New Zealand. Filed Jan. 8, 1931, Serial No. 507,320, and in New Zealand July 31, 1930. 7 Claims. (Cl. 123—90.)

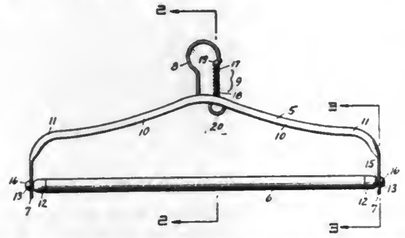
1. A tappet comprising a sleeve reciprocable longitudinally between a driving and a driven part, one end of said sleeve being actable upon by said driving part, a head adapted to seat upon the opposite end of said sleeve and frictionally engage therewith, a spindle disposed axially within said sleeve and through said head, said spindle being formed with a right-handed and a left-handed

thread tapped one into said sleeve and the other into said head, the end of said spindle projecting through said head being actable upon said driven part, and a spring inter-



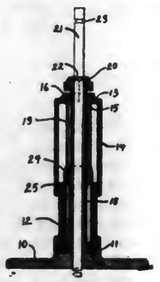
connecting said sleeve and said head and tending to turn such parts axially in the required opposite directions to screw said spindle outwardly through said sleeve.

1,817,621. GARMENT HANGER. MARTHA L. HARDING, Philadelphia, Pa. Filed Aug. 31, 1928. Serial No. 303,190. 1 Claim. (Cl. 223—62.)



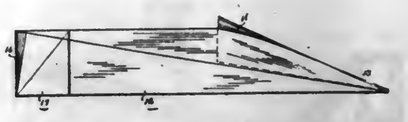
In a garment hanger, a hook for suspending the hanger from a support, a plunger consisting of a wire having a head at one end slidable in the hanger, a spring to bring said head into contact with the point of the hook and for holding the plunger across the opening of the hook and a loop in the wire at the end opposite the head for digital engagement.

1,817,622. MICROMETER DEPTH GAUGE. PETER N. HANSEN, Emerson, Nebr. Filed Apr. 23, 1928. Serial No. 272,218. 3 Claims. (Cl. 33—170).



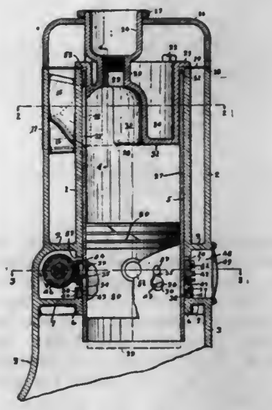
1. In a micrometer depth gauge a frame having an annular head, a tubular base portion and bars connecting the head with the base portion; a sleeve secured to the annular head and extending into the space intermediate the head and base, said sleeve having an internal thread, a screw engaged with said thread and extending through the sleeve, a thimble fixedly connected with said screw and extending about said sleeve, and a spindle carried by the screw and extending through the base portion of the frame.

1,817,623. COLLAPSIBLE HOUSE MOCCASIN. PAUL S. HERVEY, Des Moines, Iowa. Filed Mar. 25, 1929. Serial No. 349,854. 9 Claims. (Cl. 36—9.)



1. In a device of the class described, a base portion having a greater width at its forward end than it has at its rear end, a toe portion integrally formed on the forward end of said base portion and designed to be folded over upon said base portion, a side portion integrally formed on each side of said base portion designed to be folded over and upon said toe portion, means for securing said side portions to said toe portion, a heel portion integrally formed on the rear end of said base portion designed to be folded to a vertical position, a flap integrally formed on each side of said heel portion designed to be folded upon the outer surface or said two side portions, means for securing said flaps to said side portions, a re-enforcing portion integrally formed on the rear end of said heel portion and designed to be bent upon said heel portion, means for securing said re-enforcing portion to said heel portion, a flap integrally formed on each side of said re-enforcing portion designed to be bent onto the inner surface of said side portions respectively, and means for securing said last mentioned flaps to said side portions.

1,817,624. INTERNAL COMBUSTION ENGINE. FRANK R. HIGLEY, Cleveland Heights, Ohio. Filed Jan. 14, 1928. Serial No. 246,795. 17 Claims. (Cl. 123—190.)

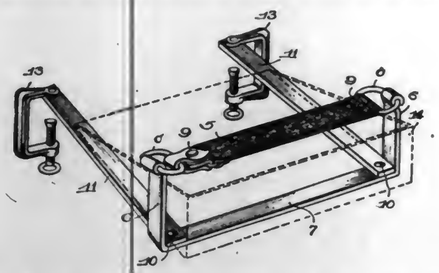


1. In an internal combustion engine, a cylinder having a pair of inlet ports adjacent the head end thereof, and an exhaust port therebetween, said cylinder ports being arranged adjacent the head end of said cylinder and grouped in a relatively small area, and a valve arranged for rotational movement in said cylinder and having ports equally spaced about the head end thereof, said inlet ports being spaced apart correspondingly with the valve port spacing.

1,817,625. HEADREST. CHARLES I. HOLMES, Chicago, Ill. Filed Apr. 16, 1930. Serial No. 444,661. 2 Claims. (Cl. 4—159.)

1. A head rest comprising a U-shaped bow or bracket, a flexible strap detachably secured under tension between the upper ends of the arms of said bow or bracket, lat-

erally extended arms pivoted at opposite ends of the base of said bow or bracket adapted to rest on the top of a wash



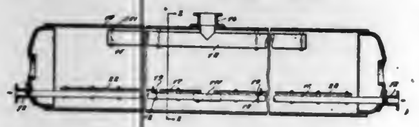
bowl fitting, and claims associated with the inner ends of said pivoted arms adapted to engage the rim of said wash bowl fitting.

1,817,626. BRAIDING CARRIER. HENRY JANSSEN, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Mar. 8, 1930. Serial No. 434,320. 4 Claims. (Cl. 96—15.)



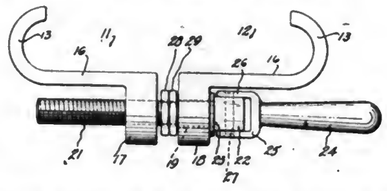
1. A braiding carrier comprising a base portion having fixed thereto a bobbin standard and a bobbin detent; a bobbin spool rotatively supported in determined axial position on said standard; an axially movable locking member in rotating engagement with said spool and normally positioned to engage said detent; and a thread-tensioning lever operative upon said member to disengagingly move it relative to the spool and permit rotation thereof with the latter.

1,817,627. FEED DEVICE. HOWARD J. KERR, Westfield, and CHARLES U. SAVOYE, Hackensack, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Mar. 12, 1927. Serial No. 174,890. 4 Claims. (Cl. 122—428.)



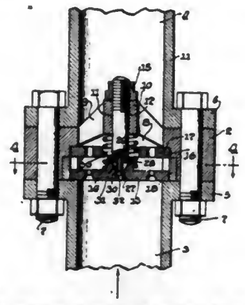
1. In combination, a drum, a steam outlet therefor, a feed pipe located near the bottom and below the normal water level of said drum and extending longitudinally thereof, said feed pipe being provided with a multiplicity of perforations spaced along said feed pipe, a feed connection for supplying feed water to said feed pipe, and a baffle plate located above said feed pipe and against which the feed water impinges to prevent its contacting with the drum sheet.

1,817,628. CHAIN CLAMP. EMIL KESSLER and CHARLES H. JAMES, Brooklyn, N. Y. Filed Sept. 19, 1928. Serial No. 306,833. 1 Claim. (Cl. 254—67.)



A device of the character described, including a plurality of hooks having elongated shanks extending toward each other along a substantially straight line, said shanks terminating in hubs which in the collapsed position of the device are in relatively close proximity to each other, said hubs having alined openings, a screw in said openings coacting with the hubs to move said hooks relatively of each other, the axis of the screw being substantially parallel to the shanks, and means for turning the screw, the length of the screw and said means being in the said collapsed position substantially equal to the length of the hooks and shanks, the axis of the screw being in relative proximity to said shanks, and said means being pivotally connected to the screw to move into a position at an angle therewith or to lie along the axis of the screw in the collapsed position of the device.

1,817,629. ENGINE GOVERNOR. EMIL R. KLEMM, Chicago, Ill., assignor, by mesne assignments, to Emil R. Klemm, jr., Chicago, Ill. Filed Apr. 20, 1928. Serial No. 271,492. 4 Claims. (Cl. 137—152.)



1. A device of the kind described, a casing, a passage in said casing, a plurality of apertured members for controlling the flow of fluid through said passage, one of said members being movable relative to the other to vary the distance between said apertures to control said flow, said movement being caused by the flow of fluid through said passage, one of said members being adjustable to vary the relative alignment of said apertures in said members, and a spring-pressed valve in said first-mentioned movable member, said valve opening in the direction of the flow of fluid.

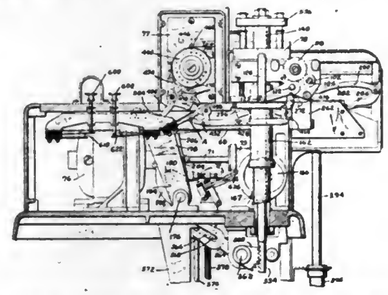
1,817,630. PICTURE SCREEN. JAY CLEIS KROESEN, Belleville, N. J. Filed Apr. 7, 1928. Serial No. 268,089. 7 Claims. (Cl. 88—16.2.)

4. In a motion picture screen, means associated with said screen for receiving a projected image and a plurality of variously located vibrating means for imparting sound frequency vibrations to said screen whereby the entire screen assembly is employed for the reception



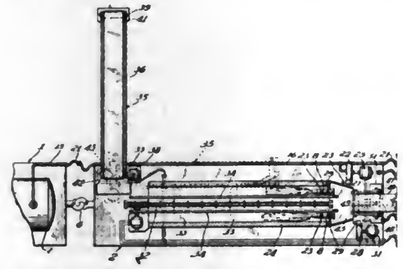
of an image and selected portions thereof are employed for the propagation of sound waves to cause said sound waves to appear to emanate from appropriate portions of the picture.

1,817,631. DUPLICATING GANG PUNCH. CLAIR D. LAKE and RALPH E. PAGE, Binghamton, N. Y., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Oct. 21, 1925. Serial No. 63,830. 27 Claims. (Cl. 164—114.)



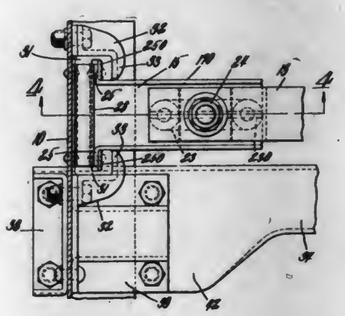
1. In a card punching machine, means for feeding a card into punching position, a reciprocable means for removing the card therefrom and moving it to a discharge position said removing means including gripping devices with means for positively closing the same when in card receiving position and for holding the same closed during its movement from receiving to discharge position and means for reopening the same when it reaches discharge position.

1,817,632. PORTABLE FACTORY. DAVID H. LENTZ, Joliet, Ill. Filed Nov. 7, 1930. Serial No. 494,039. 14 Claims. (Cl. 104—2.)



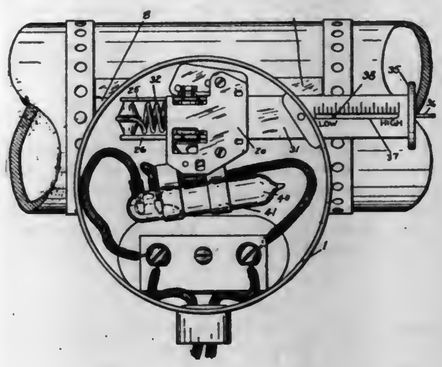
1. In combination with a plurality of connected railway cars, a bar reforming plant comprising a furnace on one car for heating the bars to be reformed, bar reforming means on a second car, a conveyor for moving bars from said furnace to said reforming means, mountings for said conveyor comprising means on one car pivotally supporting one end of the conveyor and means on the other car supporting the other end of said conveyor for pivotal and rectilinear movement, whereby the conveyor may automatically adjust itself for curvature of the railroad track and slack between the cars.

1,817,633. VEHICLE FRAME CONSTRUCTION. RALPH M. LOVEJOY, Boston, Mass. Filed Jan. 27, 1928, Serial No. 249,886. Renewed Jan. 31, 1931. 9 Claims. (Cl. 180—64.)



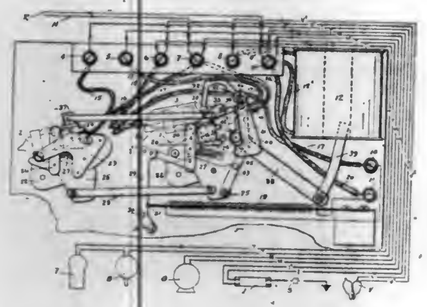
1. In a vehicle having a pair of side frame members, a motor, and frame-supporting springs, means for connecting the rear portion of the motor to the frame members to be supported thereby, means for securing an end of each of said springs to a side frame member at a point adjacent to said motor-supporting means, and a stiffening member extending transversely of the vehicle from one side frame to the other, each end of said stiffening member being rigidly secured between one of said frames and the spring secured thereto.

1,817,634. PRESSURE ACTUATED SWITCH OPERATING DEVICE. IRA E. MCCABE, Chicago, Ill. Filed Apr. 26, 1928. Serial No. 272,886. 10 Claims. (Cl. 200—140.)



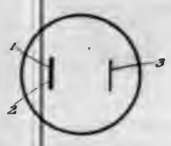
1. A pressure actuated switch operating device, comprising an actuating mechanism including a temperature responsive expansible and contractible element contained within a casing and a switch operating mechanism contained within a separate casing, means for attaching the two casings to each other and forming a transmission connection between the actuating and operating mechanisms, and means for clamping the actuating casing upon a fluid container including means preventing the removal of the expansible and contractible element when the device is in clamped position.

1,817,635. CONTROL FOR ELECTRICALLY OPERATED LIQUID FUEL BURNING DEVICES. IRA E. MCCABE, Chicago, Ill. Filed Oct. 10, 1928. Serial No. 311,437. 18 Claims. (Cl. 158—28.)



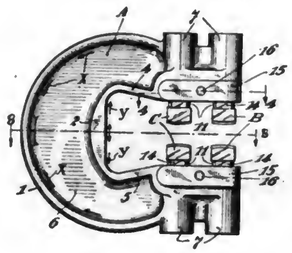
1. In a control for an electrically-operated liquid fuel heating system including a fuel feeding motor, a control switch and a normally open safety switch responsive to combustion conditions, the combination with a normally open motor circuit switch and a normally closed actuating circuit switch, of a switch operating mechanism including a solenoid in circuit with the safety switch, means actuated upon closing of the control switch to operate the switch mechanism to close the motor switch and open the actuating switch, said mechanism co-operating with the solenoid, upon establishment of combustion, to lock the motor switch closed and the actuating switch open; co-operating with the solenoid, upon initial failure of combustion, to lock the actuating switch in open position and permit the mechanism to return the motor switch to open position and then leave the motor switch open until the actuating switch is manually released; co-operating with the solenoid, upon failure of combustion after it has been established, to permit the motor switch to open and close the actuating switch; and co-operating with the solenoid, upon momentary cessation of electric current after combustion has been established and upon current resumption before the safety switch has normally opened, to permit the motor switch to open, the actuating switch to close and thereafter lock the motor switch open until the safety switch normally opens, whereupon the motor switch is released and the switch operating mechanism is permitted to automatically repeat the cycle of operation first set forth.

1,817,636. ELECTRON EMISSIVE MATERIALS. FRIEDRICH MEYER and HANS-JOACHIM SPANNER, Berlin-Halensee, Germany, assignors, by mesne assignments, to Electrons, Inc., a Corporation of Delaware. Filed June 6, 1927, Serial No. 196,996, and in Germany June 9, 1926. 14 Claims. (Cl. 250—27.5.)



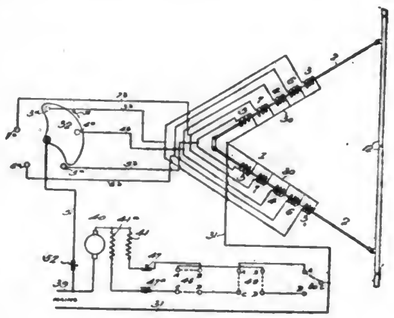
1. In an electron tube containing a gaseous medium, in combination, an incandescent cathode for discharge devices comprising a core and an emitting substance thereon at least the surface of which is exposed to ionic bombardment, said substance comprising a salt of an alkaline earth metal, said salt having as a component a compound capable of forming by chemical conversion an amphoteric compound which is less acid than titanic acid.

1,817,637. SNAP THREAD GAUGE. PAUL V. MILLER, Woonsocket, R. I., assignor to The Taft-Peirce Manufacturing Company, Woonsocket, R. I., a Corporation of Rhode Island. Filed Nov. 12, 1927. Serial No. 232,753. 5 Claims. (Cl. 33—199.)



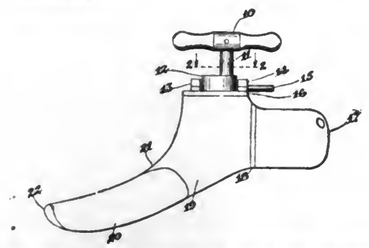
1. A snap gauge comprising a main frame provided with a circular opening to receive a gauge head member, a gauge head provided with a cylindrical stem adapted to fit said opening, said cylindrical stem having a flattened face parallel to its axis, said gauge frame being cut away adjacent said opening to expose a portion of one side thereof, the exposed portion being slightly wider than the thickness of the said stem back of the flattened face whereby said stem may be rotated and removed sidewise from said opening, and a clamping plate adapted to set in the cut away portion of said main frame and to bear against the flattened face on said gauge head to clamp said gauge head firmly in said main frame.

1,817,638. POWER MECHANISM. HOWARD I. MORRIS, Lakewood, Ohio, assignor to The Yoder-Morris Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 3, 1928. Serial No. 258,874. 19 Claims. (Cl. 172—240.)



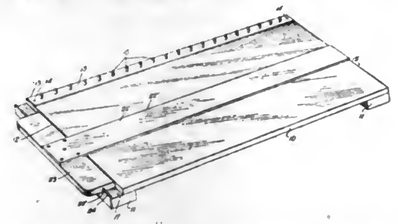
3. In a power applying and controlling mechanism including a solenoid having a plurality of separate windings adapted to be sequentially energized, the combination with a circuit controller for sequentially connecting said units to a common energizing circuit in a sequence dependent upon the direction of movement of said circuit controller, means for operating said circuit controller in either direction comprising an electric motor having separate sets of field windings, one set being connected reversely with respect to the other set, and circuit controlling means for energizing said electric motor and selecting either field winding for initiating the operation of the circuit controller in either direction.

1,817,639. SHOE LAST. ISADORE MOSKOW, Clayton, Mo. Filed Apr. 5, 1929. Serial No. 352,684. 18 Claims. (Cl. 12—128.3.)



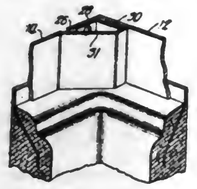
1. In a variably dimensionable shoe last having an adjustable heel block, actuating means for said heel block including a drive element and a driven element, and a swingable eccentric mount for said drive element whereby same can be disengaged from said driven element.

1,817,640. RECORD SHEET HOLDER FOR FACILITATING DISTRIBUTION OF ACCOUNTS. NEAL EBERHART NEWMANN, St. Louis, Mo., and FREDERICK ADOLPH NIEMANN, Chicago, Ill., assignors to Felt & Tarrant Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1929. Serial No. 359,310. 3 Claims. (Cl. 120—33.)



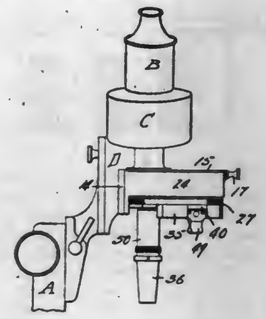
1. A record sheet holder, comprising a backing support for a multiplicity of strips of paper having columns of numerical data, means associated with said backing support for engaging the ends of said strips of paper to hold them in predetermined desired position and in shingled relationship on said backing support, and a line guide extending across said multiplicity of strips positioned upon said support to facilitate lateral reading and extension of items across said multiplicity of strips.

1,817,641. SHOWER COMPARTMENT. GUSTAF ALBIN NILSON, Chicago, Ill. Filed June 18, 1928. Serial No. 286,290. 3 Claims. (Cl. 189—36.)



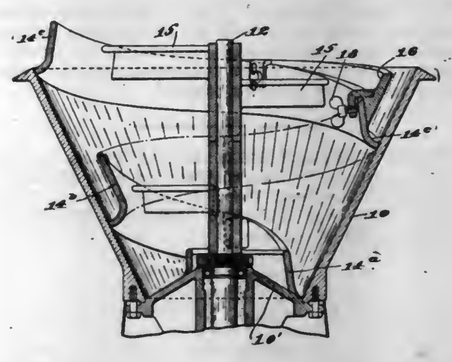
1. A compartment structure for shower baths and the like having two wall portions meeting at an angle said wall portions consisting of metal plates, one of said plates having a pocket formed thereon adjacent the apex of and within the angle between the two plates; the other of said plates having a sealing portion extending across the corner between the plates and concealing the pocket from the interior of the compartment and having a flange extending into said pocket and held by the pocket walls.

1,817,642. OBJECTIVE MOUNTING FOR MICROSCOPES HARVEY N. OTT, Buffalo, N. Y., assignor to Spencer Lens Company, Buffalo, N. Y. Filed July 5, 1928. Serial No. 290,370. 2 Claims. (Cl. 88—39.)



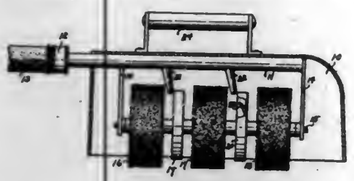
1. In a microscope having a body tube, an objective support mounted in operative relation to said body tube, objective holders adapted to be secured to said support, said support having a face terminating at one end thereof in an undercut downwardly extending projection, said objective holders each having a face adapted to seat against said face of the objective support and a portion adapted to seat against said projection to correctly position said objective holder on said support, said holders also being provided with downwardly and inwardly inclined faces at the sides thereof opposite to the portions thereof adapted to seat against said projections, and a spring on said objective support adapted to engage said inclined face to yieldingly urge an objective holder upwardly toward said support and into seating relation to said projections.

1,817,643. FORMING MACHINE FOR PLASTIC MATERIAL. GUNTHER H. PETRI, Brookline, Mass. Filed July 18, 1924. Serial No. 726,743. 3 Claims. (Cl. 107—9.)



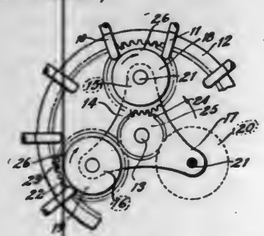
1. A forming machine for plastic material comprising a molding table combined with a race, which table and race are elements together constituting a complete and continuous support for receiving and molding the material, said elements being fixed in position relative to each other, and one of them rotating steadily relative to the other, the table being conical about a fixed vertical axis and the race being an upstanding wall, spiral and helical about the same axis and set close to the surface of the table to make therewith a material-receiving trough; the said race having a portion of its working face set at a gradually changing distance from the co-operating surface of table; gradually approaching and thereby applying steady skin drawing engagement to the material which is being molded while gradually changing the compressive molding pressure thereon.

1,817,644. WATER POWERED ROTATING CLEANING BRUSH. OTIS A. POPE, Ames, Iowa. Filed Oct. 21, 1929. Serial No. 401,135. 1 Claim. (Cl. 15—24.)



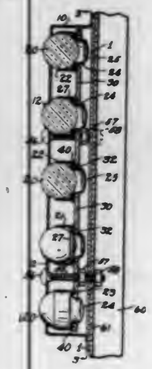
In a device of the class described, a housing open at its bottom, a shaft rotatably mounted in said housing, a plurality of wheel brushes on said shaft and extending below the bottom of said housing, a disk on said shaft between each pair of said brushes and secured to said brushes against relative rotation, radial vanes formed in the side of each of said disks, a peripheral flange on the marginal edge of each of said disks extending at a right angle to the body of said disk and to the vane side of said disk for guiding water through said vanes, and a nozzle adjacent the inner side of each of said disks.

1,817,645. TIMING GEARING. GUY R. POYER, Wichita, Kans. Filed Feb. 21, 1930. Serial No. 430,264. 10 Claims. (Cl. 123—90.)



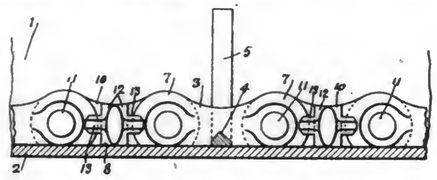
1. A timing gearing for internal combustion engines comprising a carrier rotatable about a common axis and revolving valve lifter actuators mounted on the carrier in spaced relation, said lifters comprising planetary gears having valve lifter engaging portions.

1,817,646. HIGHWAY SIGN. PAUL A. PREUS, St. Paul, Minn., assignor to Western Stamping & Manufacturing Company, Cleveland, Ohio, a Corporation of Minnesota. Filed Apr. 16, 1930. Serial No. 444,673. 12 Claims. (Cl. 40—130.)



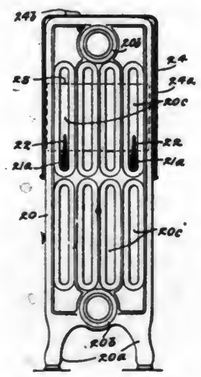
12. In a sign of the character described, the combination of a front plate, having openings, reflecting units positioned behind the front plate and registering with the openings therein, said reflecting units having reduced shanks and shoulders caused by said reduction, and means for holding the units in place, including sinuous washers surrounding the shanks and adapted to act upon the shoulders thereof and a back plate against which the washers bear.

1,817,647. CONVEYER. ARNOLD REDLER, Flour Mills, Sharpness Docks, England. Filed Oct. 21, 1929, Serial No. 401,169, and in Great Britain Oct. 31, 1928. 9 Claims. (Cl. 198—168.)



1. In a conveyer chain, a plurality of chain units, means connecting two successive units to form them into a chain formation, and co-engaging means on the ends of said units and intermediate the ends of said connecting means to hold them in engagement with each other as long as they are in substantial alignment.

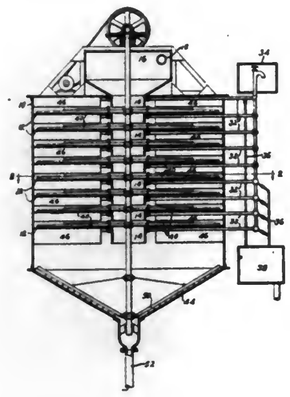
1,817,648. HUMIDIFYING DEVICE. EDWARD C. ROSENOW, Rochester, Minn. Filed Oct. 1, 1928. Serial No. 309,449. 4 Claims. (Cl. 299—33.)



1. A humidifier having in combination, a receptacle adapted to contain liquid and comprising spaced, longitudinally extending, narrow portions, absorbent sheets respectively disposed in said portions and extending lengthwise therein, having their lower portions disposed in said liquid, and a plurality of absorbent sheets engaging and supported by said first mentioned sheets and extending transversely therebetween above said receptacle.

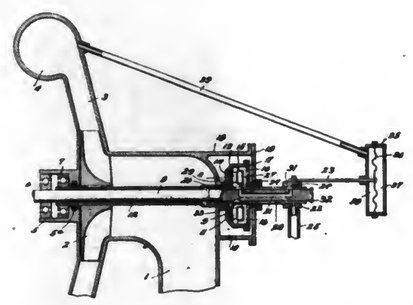
1,817,649. SETTLING APPARATUS. HORACE S. RUMSEY, St. Louis, Mo. Filed Jan. 19, 1928. Serial No. 247,978. 2 Claims. (Cl. 210—55.)

1. An apparatus for separating comminuted particles from a liquid in which they are suspended, comprising in combination, a cylindrical outer wall, a plurality of substantially horizontal transverse partitions therein terminating flush with the outer wall and having alined central openings providing a vertically disposed inlet passageway communicating directly with the spaces above the horizontal partitions in a direction transversely of the apparatus, moving means for advancing the comminuted particles which settle on each of the horizontal partitions toward elongated openings formed in the partitions, the openings being arranged to extend radially of the cylindrical outer wall and being in the path of movement of the



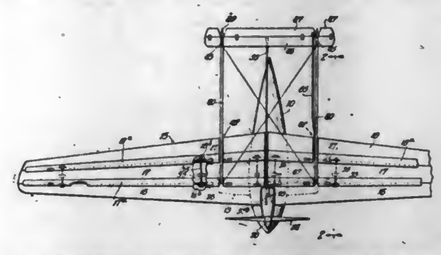
major portion of said moving means, and discharge means for clarified liquid comprising pipes extended circumferentially of the horizontal transverse partitions.

1,817,650. VARIABLE SPEED SUPERCHARGER DRIVE. EARLE A. RYDER, West Hartford, Conn., assignor to The Pratt & Whitney Aircraft Company, Hartford, Conn. Filed Jan. 31, 1927. Serial No. 165,019. 8 Claims. (Cl. 192—85.)



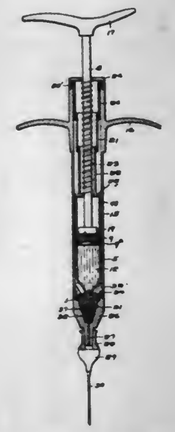
1. In combination, in a power transmission train, a rotatable drive shaft, a driven shaft comprised of a sleeve mounted concentrically of said drive shaft and rotatable with respect thereto, said sleeve terminating in an enlarged cylindrical chamber, a cover for said chamber provided with a plurality of vanes mounted on the inner side thereof, a cup-shaped bushing mounted centrally of said cover, a rotor within said chamber mounted on said shaft slidable longitudinally thereof but non-rotatable with respect thereto, vanes on said rotor slidable into and out of said bushing, passages for conducting a body of biscous fluid to said chamber, and means for sliding said rotor longitudinally of said shaft to vary the amount of fluid admitted to said chamber.

1,817,651. AIRPLANE AND METHOD OF CONTROL. RUDOLPH W. SCHROEDER, Glencoe, Ill. Filed July 16, 1928. Serial No. 293,219. 42 Claims. (Cl. 249—29.)



1. An airplane provided with a wing comprising articulated sections, a fuselage rigidly formed with one of said sections, and a tail structure movable with another of said sections relative to the wing section to which said fuselage is attached.

1,817,652. HYPODERMIC SYRINGE. ARTHUR ERVIN SMITH, Los Angeles, Calif. Filed May 18, 1925, Serial No. 31,030. Renewed Sept. 23, 1926. 1 Claim. (Cl. 128—218.)



A syringe of the character described comprising a barrel, having a sight opening formed therein, a cap adapted to be screwed into the lower end thereof, said cap having a tapering recess formed therein, a conical rubber packing element seated in said recess, a discharge tube extending through said packing element and permanently united with the cap and having a closed upper end with lateral openings therebelow, said packing element having a conical recess formed in its upper face adapted to receive the broken off nose of an ampule, a plunger rod, a spring surrounding said plunger rod, a handle for operating the plunger rod, a removable cap on the barrel, a plurality of telescopic elements surrounding the plunger rod, said spring bearing between said cap and the lowermost of said telescopic elements and a head carried by the lowermost telescopic elements adapted to engage the rear end of an ampule to force its nose into engagement with the tapered recess of the rubber packing element.

1,817,653. AIRCRAFT SHEET METAL SEAM. HERBERT V. THADEN, Detroit, Mich., assignor to General Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 26, 1926. Serial No. 150,699. 3 Claims. (Cl. 189—37.)

1. A seam for aircraft sheet metal edge union having an open end accommodating the release and insertion of a

clamp, comprising a stiff rib with an open end permitting the release or insertion of a clamping member and having oppositely facing grooves substantially in the plane of the metal sheets, a C clamp of relatively heavy metal adapted to have its edges bent into the grooves from opposite directions and the recess in said grooves for the reception of the bent edges of the metal sheets, whereby



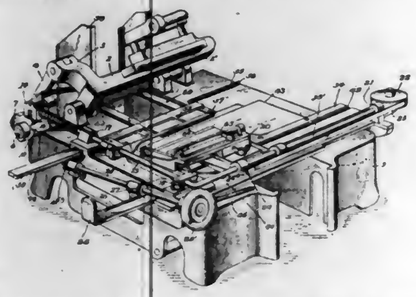
the forceful contracting of the C clamp upon deformation causes cooperative engagement of its edges into the two grooves with forced pressure upon the entire sheet edges to lock them into engagement with the rib and whereby the C clamp may be longitudinally removed to release the sheet members in the seam without distortion or fracture of the sheet metal edges.

1,817,654. ADJUSTABLE SEAL FOR HYDRAULIC TURBINE GATES AND THE LIKE. ROGER V. TERRY, Hilton Village, Va., assignor to Newport News Shipbuilding and Dry Dock Company, a Corporation of Virginia. Filed Aug. 27, 1930. Serial No. 478,141. 4 Claims. (Cl. 253—122.)



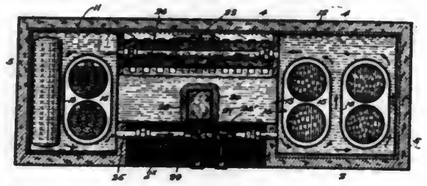
1. In an hydraulic turbine or similar device having gates of the pivoted type and having bearings entering the crown plate, the improvement providing means for adjusting the clearance at the ends of the gates, which comprises a non-resilient ring on the crown plate through which the adjacent bearings of said gates pass, resilient devices for forcing said ring outward and adjustable retaining members engaging said ring to hold the same in position and to determine the amount of clearance between said gates and said ring.

1,817,655. PRINTING MACHINE. HERBERT L. THOMPSON, Elgin, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed July 23, 1928. Serial No. 294,824. 18 Claims. (Cl. 101—57.)



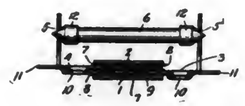
1. A printing machine comprising a base, a stamper arm, an impression platen on the stamper arm, a movable carriage carrying a card to be printed and operated by the stamper arm, and selective means co-operating with the carriage for selectively repositioning the card in printing position at each operation of the stamper arm, said means comprising interchangeable stops supported on the base and adapted to engage and position the carriage.

1,817,656. STORING AND DISPENSING APPARATUS. THEODORE L. VALERIUS, Fort Atkinson, Wis., assignor to Valerius Corporation, Jefferson, Wis., a Corporation of Wisconsin. Filed Apr. 24, 1928. Serial No. 272,530. 3 Claims. (Cl. 62—101.)



1. In apparatus of the class described, the combination of a casing having a plurality of compartments, certain of said compartments containing a temperature changing medium, means in one of the last mentioned compartments for maintaining the medium at a desired temperature, a thermo-siphonic system connecting said medium containing compartments, and means connected with said thermo-siphonic system for refrigerating another of said compartments, the last said means comprising a closed drum in said compartment connected at one side to said system by a pipe serving as the inlet and outlet for said drum.

1,817,657. ELECTRICAL CONDENSER. CHARLES E. VAWTER, Philadelphia, Pa., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 21, 1925. Serial No. 17,376. 8 Claims. (Cl. 250—16.)

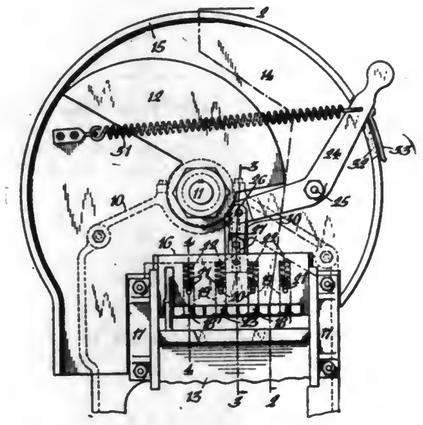


1. An electrical condenser comprising at least two overlapping elements of different polarity, said elements each projecting from the opposite ends of the body of the condenser to a material extent, each element being bent sidewise exterior to said body, and being shaped at its extremities to engage an electrical resistance member to be mounted on the condenser, each element having a lug cut out of its bent portion to connect with one extremity of an electrical circuit, a clamp encircling the overlapping elements and hold them in operative relation, and insulation between said elements and said clamp, said elements also being perforated adjacent the lugs to enable the condenser to be held in operative position.

1,817,658. MEAT SLICING MACHINE. ADRIAN C. VAN HOOYDONK, Buffalo, N. Y., assignor to John E. Smith's Sons Company, Buffalo, N. Y., a Corporation of New York. Filed June 20, 1929. Serial No. 372,354. 5 Claims. (Cl. 146—113.)

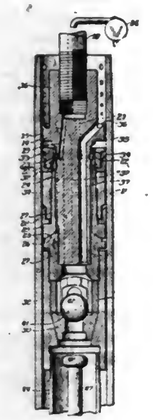
1. In a slicing machine of the character described, the combination of a table for supporting the article to be

sliced, a cutter, a cross-head arranged over the table for movement toward and from the same, pendant plungers mounted on said cross-head and provided at their lower



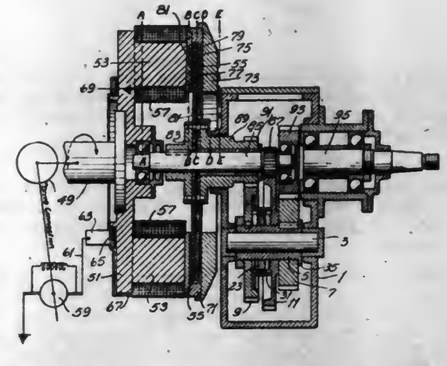
ends with gripping shoes having their front edges upwardly curved and arranged to engage the article to hold it in place on the table, and means for yieldingly resisting upward movement of said plungers.

1,817,659. PUMP. IRA A. WEAVER, Springfield, Ill. Original application filed Mar. 31, 1927, Serial No. 179,830. Divided and this application filed Oct. 8, 1927. Serial No. 224,806. 9 Claims. (Cl. 103—204.)



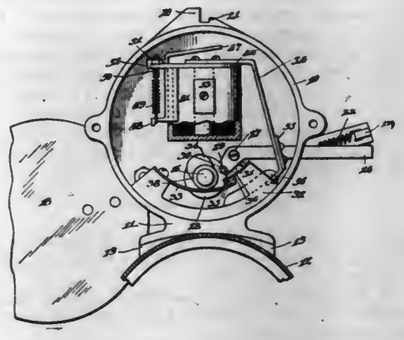
1. In a pump, the combination of a cylinder, a reciprocatory plunger in said cylinder having its intermediate section with a working fit in said cylinder and its upper and lower end portions of reduced diameter, and means to force a sealing fluid between said closely fitting portion of said plunger and its smaller end portions at a pressure greater than that of the fluid which the plunger pumps.

1,817,660. TRANSMISSION. ANTHONY WINTHER, Kenosha, Wis., and MARTIN PHILLIP WINTHER, Waukegan, Ill., assignors to The Winther Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 6, 1929. Serial No. 405,095. 16 Claims. (Cl. 172—284.)



1. In a power translator, a prime mover, a driven member, a rotatable electro-magnet driven by the prime mover, said magnet having a flux-permeated air gap, a plurality of short-circuited inductors adapted to move in said gap and separate trains of gears connecting each of said inductors to said driven member.

1,817,661. SAFETY DEVICE FOR MOTION PICTURE PROJECTING MACHINES. JOHN FRANCIS ADAMS and THOMAS T. ALLEN, Philadelphia, Pa., assignors to Sentry Safety Control Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 31, 1927. Serial No. 230,062. 8 Claims. (Cl. 88—17.)



1. A safety device for motion picture projecting machines including a dowser, means including a notched disc engaged by a trigger for holding the dowser out of light obstructing position, an electromagnet, an armature hinged on the magnet, a trip secured to the armature and adapted to strike the dowser-holding means to release the same, electrical contacts, means associated with the dowser for separating the contacts when the dowser falls.

1,817,662. COLLAR HOLDER. JAMES F. ALLISON, Providence, R. I., assignor to Freeman-Daughaday Company, a Corporation of Massachusetts. Filed Nov. 21, 1930. Serial No. 497,148. 12 Claims. (Cl. 24—81.)

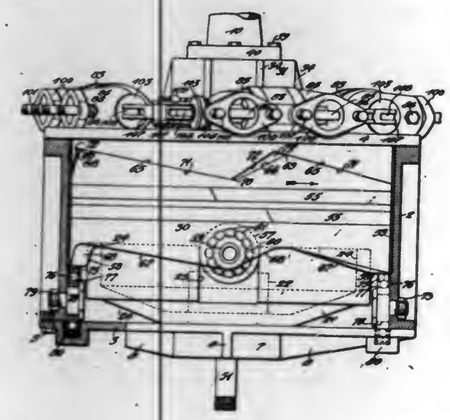
12. A collar holder comprising a pair of members offset at their center portions, means for securing said offset

portions in contiguous relation and providing oppositely extending pairs of jaws, a pivotally mounted roll in one jaw of each pair for contact with the opposite jaw, whereby



rolling contact is provided with the fabric inserted thereinto, said roll being corrugated on its surface, and said opposite jaw of each pair being arcuately recessed to receive said roll.

1,817,663. ROTARY INTERNAL COMBUSTION ENGINE. PERCY J. ASHWORTH, Cranston, R. I. Filed Apr. 19, 1929. Serial No. 356,516. 20 Claims. (Cl. 123—8.)



1. A rotary motor comprising a casing having inner and outer concentric walls forming an annular raceway with steps on its interior, a ring-like rotor rotatable in said raceway and provided with annularly disposed steps cooperating with those in the raceway of the casing to open and close combustion-chambers during the rotation of the rotor, means for introducing a charge of fuel into the combustion-chambers, and means to explode the charge to apply a propulsive force against the steps on the rotor to rotate the latter.

1,817,664. DENTIFRICE. BERNARD B. BADANES, Woodside, N. Y. Filed Oct. 26, 1928. Serial No. 315,352. 2 Claims. (Cl. 167—93.)

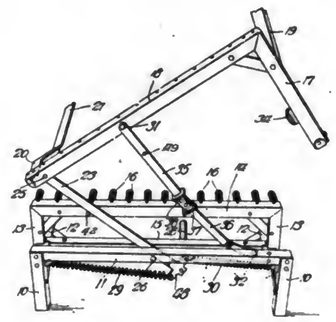
1. A dentifrice containing a water soluble inorganic magnesium salt not exceeding 1 per cent and adapted to remove freshly formed tartar.

1,817,665. BEATER AND AERATOR. THOMAS L. BAILEY, Melrose, Mass. Filed May 8, 1926. Serial No. 107,609. 5 Claims. (Cl. 261—84.)



1. A device of the class described comprising a tube inclined to the horizontal, a shaft arranged axially within said tube, caps closing the ends of said tube and in which said shaft is journaled, heating elements carried by said shaft within said tube, the lower one of said caps being perforated, and a fan fixed to said shaft adjacent to said perforated cap and acting as said shaft is rotated to draw air through the perforations and blow it into said tube, said tube having an opening inwardly of said fan for the introduction of material to be beaten, and an opening adjacent to the opposite end of the escape of beaten material.

1,817,666. EXTENSIBLE BEDSTEAD. MATTHEW F. BAYER, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed May 31, 1927. Serial No. 195,223. 1 Claim. (Cl. 5—22.)

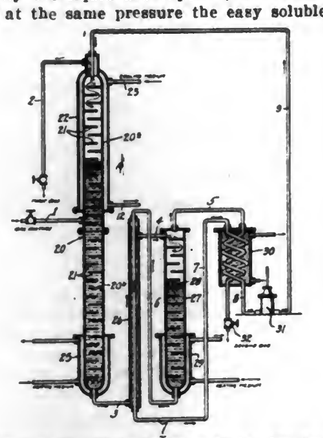


In an extensible bedstead, the combination of a stationary bed section, a movable bed section normally superposed in spaced relation over said stationary bed section so as to provide space therebetween for storing bedding or the like, means for supporting one side of said movable section in said normal spaced relation over the stationary section, an extensible link structure having its opposite ends pivotally connected to said stationary and movable sections respectively, for supporting the other side of said movable section in said normally spaced relation, said extensible link structure comprising a pair of relatively longitudinally slidable members, one of which is provided with a notch and the other a detent adapted to engage said notch when the link is extended, thereby to lock the link in extended position, said link when extended being effective to cause said movable section to assume a position above the stationary section with one side elevated above its normal position, thereby facilitating insertion of bedding or the like in the storage space between said sections, said extensible link structure being provided with means whereby the link structure may be caused to collapse as an incident to manipulation of said movable section, thereby to permit said movable section to be lowered to normal position.

1,817,667. METHOD OF SEPARATING MIXTURES OF GASES AND OF GASES WITH VAPORS. HERMAN BLAU, Munich, Germany. Filed Sept. 22, 1927, Serial No. 221,351, and in Germany Oct. 4, 1926. 4 Claims. (Cl. 183—115.)

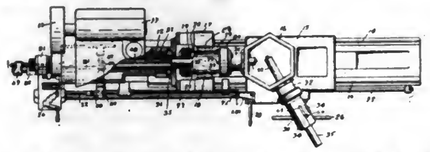
1. Continuous method of separating gas mixtures by absorption in liquids consisting in circulating the liquid in a closed circuit above atmospheric pressure freely through the separator system, supplying the mixture at the same pressure in counter current to a descending stream of absorption liquid, whereby the mixture constituents of high solubility are entirely absorbed, in permitting the enriched liquid stream to descend beyond the point of mixture supply, and in gradually heating said stream at the same pressure on said further descent to a temperature at which the portions of the difficultly soluble constituents,

absorbed by the liquid are expelled, and in subsequently expelling at the same pressure the easy soluble constitu-



ents from the liquid in a separately descending liquid stream heated at its lower portion to the expulsion temperature of the constituents whose expulsion is desired.

1,817,668. COUPLING BORING AND THREADING MACHINE. FRED H. BOGART, Cleveland, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 20, 1926. Serial No. 89,518. 17 Claims. (Cl. 82—14.)

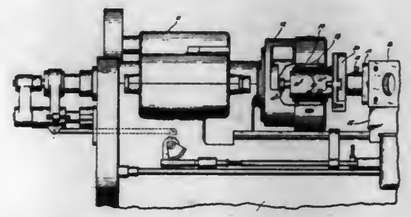


1. In a machine of the character described, a work holder and a tool holder one movable relative to the other, the tool holder being provided with a tool head having a pair of cutting tools, a pair of slides carrying the same and slidingly supported by the head in parallel planes so as to overlap each other, and a cam member carried by the head and arranged between the overlapping portions of the slides and adapted to move the same laterally for feeding purposes on the occurrence of relative longitudinal movement between the head and cam member during the cutting operation.

16. In a device for simultaneously cutting oppositely tapered halves of a pipe coupling, a cutter head adapted to be applied to the tool holding member of a machine tool, said cutter head having a longitudinal opening and having two guideways extending laterally from the opening, a cam bar exending through the opening and adapted to be moved relative to the head lengthwise of the opening during the cutting operation, a pair of slides mounted in said guideways, the outer portions of the slides adapted to be provided with cutters and the inner portions of the slides being in camming relation with the cam bar so that on the occurrence of relative axial movement between the head and bar one slide will be fed inwardly and the other will be fed outwardly, and means for adjusting the outer cutter holding portions of the slides relative to the inner cam engaging portions of the slides.

1,817,669. LOADING DEVICE FOR MACHINE TOOLS. FRED H. BOGART, Cleveland Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 9, 1928. Serial No. 268 443. 21 Claims. (Cl. 29—60.)

1. A machine tool having a loading device with provision for gripping a work piece midway between its ends whereby the work piece may rock while being held by the gripping means, a work holder adapted to receive the work piece from the loading device and having two sets of gripping means for gripping the work piece adjacent its ends, and means for causing a relative movement between the loading device and work holder to present a work piece to the latter.

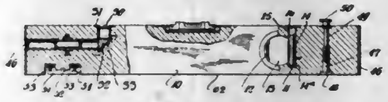


11. In a device for loading hollow members in a chuck or the like, a central supporting member, a member slidable axially thereon and provided with radially movable jaws for engaging the interior of the hollow member and with abutments adapted to be engaged by the end of the hollow member to move the slidable member in a direction axially of the support, said support having cam means for camming the jaws outwardly when the sliding member is so moved, and means for retracting the jaws when said slidable member is moved on the support in the opposite direction to that stated.

1,817,670. LOCAL ANÆSTHETIC. HARVEY C. BRILL, Cambridge, Mass. Filed Oct. 1, 1928. Serial No. 309,603. 3 Claims. (Cl. 260—103.)

3. The process of making a local anæsthetic similar to cocaine yet devoid of the narcotic action of cocaine, said process, comprising, reacting beta-normal butyl ethyl aminoethanol and cinnamoyl chloride to form a hydro chloride of the cinnamic ester of beta-normal butyl ethyl aminoethanol.

1,817,671. TRANSIT LEVEL. WALTER BRUNSTETTER and JESSE R. BRUNSTETTER, Metuchen, N. J. Filed Mar. 16, 1929. Serial No. 347,493. 8 Claims. (Cl. 88—2.2.)

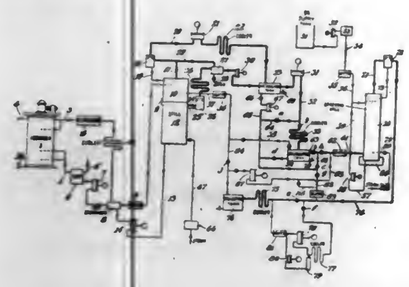


1. In a device of the class described, a beam, a prismatic lens system in said beam adapted to sight a point distant from said beam to align said point with said beam, said beam having a bore therein, an objective lens at one end of said bore, a prism at the opposite end of said bore, means for sighting through said prism and objective lens, a movable variable lens, a tube slidable in said bore carrying said objective lens, a cylinder housed in said bore housing said tube and having slots therein, and means mounted on said tube slidable in said slots for adjusting the position of said variable lens with respect to said prism and objective lens.

1,817,672. PROCESS AND APPARATUS FOR PRODUCING LIGHT HYDROCARBONS. HORACE BUTLER, West Chester, Pa., assignor to Research Process Company, a Corporation of Delaware. Filed Dec. 27, 1926. Serial No. 157,014. 6 Claims. (Cl. 196—66.)

1. In the production of gasoline the process comprising withdrawing light hydrocarbons from natural gas by absorption, compressing and cooling said hydrocarbons, introducing uncondensed vapors of said cooling operation

into a zone wherein petroleum products are being cracked in liquid phase, and cooling the vapors coming from the cracking operation.



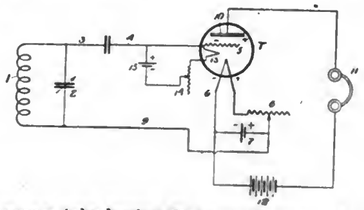
6. Apparatus for the production of gasoline comprising an absorber for natural gas means for distilling absorbed hydrocarbons of the natural gas from the absorbing medium of said absorber, means for compressing and cooling vapors of said still, means for recirculating to said distilling and compressing and cooling means, uncondensed vapors from said compressing and cooling means, a cracking chamber for petroleum products, means for introducing into said cracking chamber remaining hydrocarbons from said compressing and cooling means, means for cooling the vapors of said cracking chamber and means for recirculating to said cracking chamber uncondensed vapors of said last named cooling means.

1,817,673. SIRUP PUMP. WILLIAM C. BUTTNER, Chicago, Ill., assignor to The Bastian-Blessing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 22, 1929. Serial No. 401,395. 6 Claims. (Cl. 225—35.)



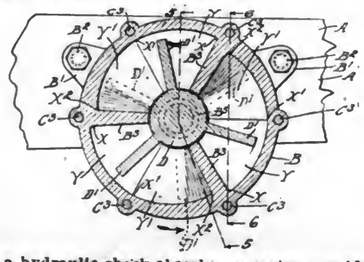
1. A sirup pump comprising a tube adapted to be mounted in the neck of a receptacle and having a closed upper end and a valved lower end, a pump cylinder slidably mounted on the upper end portion of the tube outside of the receptacle, a piston within the cylinder and mounted on the upper end of the tube, there being an opening in the tube communicating with the chamber in the cylinder and an opening in the piston, a valve within the chamber for the opening in the piston, a cap on the cylinder, a spring between the piston and the cap, said cap adapted to receive pressure for sliding the cylinder on the tube against the tension of the spring and the spring operating to return the cylinder to initial position when the pressure is removed, and a discharge spout for the cylinder.

1,817,674. VACUUM TUBE. JAMES V. CAPICOTTO, Brooklyn, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed June 10, 1924. Serial No. 719,118. 7 Claims. (Cl. 250—27.)



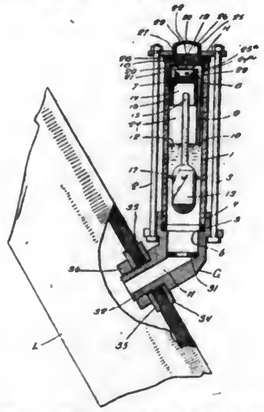
7. A vacuum tube having filament, plate and grid electrodes, an additional filament within the tube for causing the removal of excessive negative charges tending to accumulate on the grid and thereby block the tube, a source of current supply for said additional filament, the filament being connected to one end only of said grid.

1,817,675. SHOCK ABSORBING DEVICE. CHARLES H. CHAPIN, Chicago, Ill. Filed Dec. 12, 1928. Serial No. 325,556. 9 Claims. (Cl. 188—89.)



1. In a hydraulic shock absorber, a casing provided with a chamber and forming a stator, a rotor adapted to be rotated with relation to the casing, the rotor including an imperforate paddle, the chamber within which such paddle is positioned being of constant width and depth throughout a portion of its size and of progressively decreasing width and depth throughout a portion of its size whereby the resistance to motion of the paddle within the chamber is at first constant and subsequently progressively increasing.

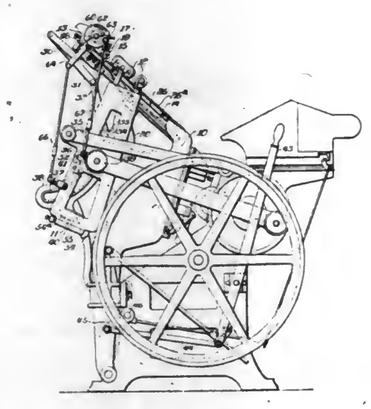
1,817,676. INDICATOR FOR COOLING SYSTEMS OF AUTOMOBILES. HOWARD E. CHRISTIE and KIBBEY W. COUSE, Bronx, N. Y. Filed Sept. 23, 1926. Serial No. 137,278. 11 Claims. (Cl. 265—45.)



1. An indicator device for a cooling system of the type set forth, said indicator device comprising a transparent

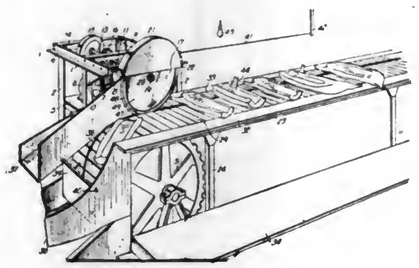
tube adapted to contain a quantity of liquid, a hydrometer device arranged within said tube to float in said liquid, means to create an artificial liquid level within said tube for the operation of the hydrometer device, said liquid level being subject to undesirable variation, and said indicating device comprising also a manually operable air pump formed as a part thereof by which to correct said variation at will, said air pump having an opening to the atmosphere and being manually operable to pump air through said opening into the device for thereby forcing down said liquid level.

1,817,677. INK DISTRIBUTING MECHANISM FOR PRINTING PRESSES. ARTHUR J. DAANE, Chicago, Ill., assignor to The Acme Printing Appliance Co., Chicago, Ill. Filed June 25, 1924. Serial No. 722,235. 18 Claims. (Cl. 101—335.)



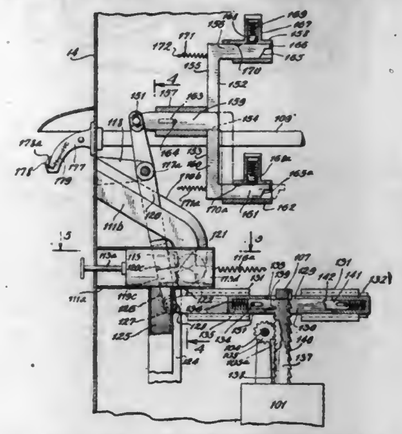
1. In an ink distributing mechanism for printing presses, the combination of rollers which co-operate with an ink fountain having a rotatable ink roller, said rollers being movable from the fountain to adjacent the opposite end of a plate and back to the fountain while in contact with the plate to distribute ink upon the plate, and means having an elongated closed track for actuating said first mentioned rollers in one direction over the plate, said means providing means for moving said first mentioned rollers in the opposite direction over the plate, and having means preventing co-operation of said fountain roller and distributing rollers.

1,817,678. MEAT CUTTING DEVICE. CLIFFORD A. DUNSETH, Kansas City, Mo. Filed Mar. 7, 1927. Serial No. 173,441. 4 Claims. (Cl. 146—81.)



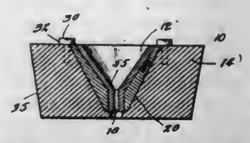
1. In apparatus of the character described, a conveyor table comprising fixed spaced shelves and a conveyor movable between the shelves for moving a carcass over the surfaces of the shelves, a frame erected at one side of the table and at the delivery end of the conveyor, a severing member, and overhanging bearings mounted on the frame for supporting the severing member over the conveyor to act on the carcass.

1,817,679. SERVICE STATION. SAM I. ESSES and EDWARD I. ESSES, New York, N. Y. Filed Mar. 12, 1929. Serial No. 346,289. 12 Claims. (Cl. 194—69.)



1. In apparatus of the character described, a liquid pump, an elongated member associated with said pump adapted to be lifted upon operating the pump for dispensing liquid therefrom, said member being formed with two sets of ratchet teeth, the teeth of one set being disposed oppositely to the teeth of the other set, a slidably mounted member having a pair of spring pressed pawls mounted thereon and slidably connected thereto by pin and slot connections, each of said pawls being adapted to coact with one of said sets of teeth respectively.

1,817,680. DIE OF THE EXTRUDING AND WIRE DRAWING TYPE AND PROCESS OF MAKING THE SAME. JOHN T. PRATT, New York, N. Y.; Harold I. Pratt and Ruth Baker Pratt, executors of said John T. Pratt, deceased. Filed Nov. 28, 1925. Serial No. 72,020. 8 Claims. (Cl. 76—107.)

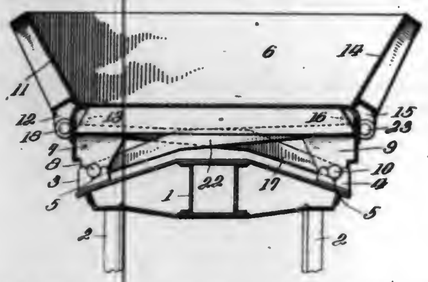


2. A process of forming a die of the type having a relatively small aperture or recess and difficult to form by deposition of a hard metal on a foundation metal, comprising depositing chromium upon a matrix or counterpart having the shape of the working face of the die, and building up a shell thereon, and electrodepositing iron on the back of said shell to form a backing.

1,817,681. DUMP VEHICLE. HENRY FORT FLOWERS, Findlay, Ohio. Filed Nov. 10, 1927. Serial No. 232,340. 5 Claims. (Cl. 105—276.)

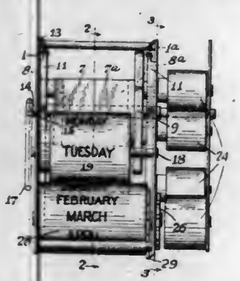
1. A dump vehicle comprising an under frame, a body tiltable about fulcrums at opposite sides of the under frame, a down-folding door at each side of said body pivotally supported thereby, and door controlling means for each door including links free of connection with the

body and pivotally connected to the door at a line at one side of its pivotal axis and extending across the under frame and connected thereto substantially at the opposite side fulcrum line for the body whereby said



links during transit positively hold said doors closed, and during dumping open and close the door at the side of dumping and maintain the door at the opposite side closed.

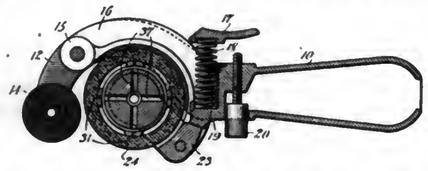
1,817,682. COMBINED CALENDAR AND MONEY BOX, SAVINGS BANK, OR OTHER COLLECTION BOX. EINAR KRISTIAN GADE, Chiswick, London, England, assignor to Gnomist & British Novelties Limited, London, England. Filed Aug. 28, 1929, Serial No. 389,060, and in Great Britain July 27, 1929. 3 Claims. (Cl. 40—112.)



1. A calendar comprising an apertured casing, a plurality of rotary members in said casing, one of said rotary members carrying inscriptions corresponding with the names of the days of the week, and another of said rotary members being located adjacent to the first-mentioned rotary member, a perforated endless band bearing numerals 1 to 31 corresponding with the days of the month associated with the second-mentioned rotary member, teeth associated with the second-mentioned rotary member adapted to engage the perforations in the endless band, means adapted to be manually operated to rotate both of the said rotary members in step, means adapted to establish a driving connection between the first-mentioned means and the said rotary members whereby by manual operation of the former the simultaneous rotation of the latter may be secured, a clutch for establishing and interrupting a driving connection between the rotary member bearing the names of the days of the week and the second-mentioned rotary member, and an independent manually operated element associated with the clutch adapted to actuate the same to establish and interrupt the driving connection between the member bearing the names of the days of the week and the second-mentioned member only when the numerals 28 to 31 are exposed to view.

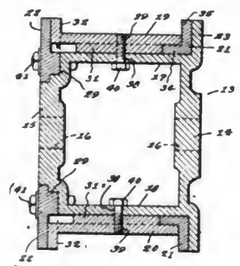
1,817,683. STENCIL ROLLER. ADOLPH GEIGER, Elizabeth, N. J. Filed Aug. 25, 1928. Serial No. 302,089. 6 Claims. (Cl. 91—62.5.)

1. In a device of the character described, a frame including a handle, bifurcated arms associated with said frame, a stenciling roller rotatably mounted in fixed relation to said arms, an inking roller rotatably mounted in pivotal relation to said arms, whereby said stenciling



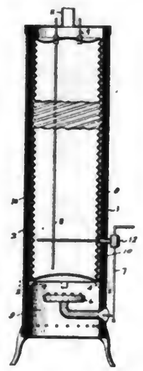
roller and said inking roller may be caused to contact during the operation of the device, and resilient means normally urging said pivoted roller away from said fixed roller.

1,817,684. CROSSHEAD. SALVATORE GIUSTINIANI, New York, N. Y. Filed Oct. 19, 1929. Serial No. 400,994. 3 Claims. (Cl. 308—3.)



1. A cross-head comprising a main body portion having side walls and connecting bridge portions, each of said bridge portions having a side flange, said bridge portions each having canals disposed at right angles to each other, a fillet presenting a flanged portion adapted to abut the flange of one of said bridge portions and further having a base portion adapted to be removably seated in one of said canals, a gib having a flange and including lugs adapted to seat in said canals at right angles to said fillet and a retaining plate carried by said body portion and adapted to permit the removal of said gib without disconnecting the cross-head from its guides.

1,817,685. WATER HEATING TANK. WILLIAM A. GRAHAM, Houston, Tex., assignor to Peoples Finance & Thrift Co., Houston, Tex. Filed Mar. 26, 1929. Serial No. 350,109. 1 Claim. (Cl. 122—17.)

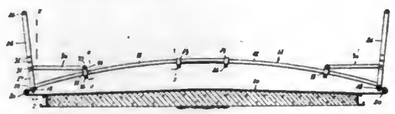


In combination, a tank for heating and storing water having a substantially unobstructed central portion adapted to permit of direct vertical movement of water therein, a relatively large number of spiral corrugations formed in the wall of the tank, an outer shell adapted to cooperate with said corrugations to form a relatively large number of separated spiral flues, the major proportion of the walls of which are formed by the walls of the tank, and a burner positioned below said tank whereby the products of combustion will pass upward and through said flues and around said tank to heat the same.

1,817,686. PROCESS FOR THE MANUFACTURE OF PHYSIOLOGICALLY ACTIVE SUBSTANCES FROM FEMALE INTERNAL SECRETORY SEX ORGANS. MAX HARTMANN, Basel, Switzerland, assignor to The Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Nov. 28, 1925, Serial No. 72,038, and in Switzerland Dec. 5, 1924. 2 Claims. (Cl. 167—74.)

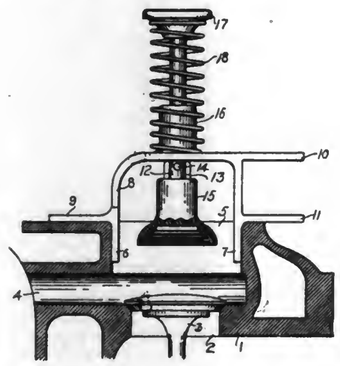
1. A process for purifying by saponification physiologically active substances from female internal secretory sex organs comprising treating an impure extract of said organs containing fatty acids with a solid adsorbent of the class of charcoal and kieselguhr impregnated with an inorganic alkaline compound to saponify the fatty acids, said treatment taking place in such an organic solvent wherein the alkaline compound and the soaps formed are insoluble, evaporating off said organic solvent and extracting with a neutral aliphatic organic solvent, which will remove the physiologically active substances without dissolving the soaps or the alkaline compound.

1,817,687. BELTING DEVICE. JOSEPH WILLIAM HELTZEL, Warren, Ohio, assignor to The Heltzel Steel Form and Iron Company, Warren, Ohio, a Corporation of Ohio. Filed Aug. 7, 1929. Serial No. 384,078. 12 Claims. (Cl. 94—39.)



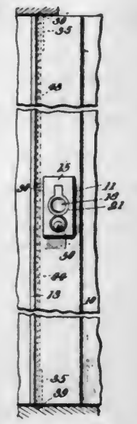
1. A belting device comprising a bow, belt spools carried thereby at its opposite ends, and a belt connected to spools.

1,817,688. VACUUM VALVE GRINDING TOOL. DONALD E. HICKS, Lansing, Mich. Filed June 15, 1929. Serial No. 371,176. 1 Claim. (Cl. 51—29.)



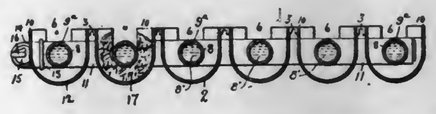
In a valve grinder, a supporting member, in combination with a reciprocating and revoluble rod passing through the top of said member, a spring arranged to lift the rod, a vacuum cup attached to the lower end of the rod, the said supporting member having oppositely arranged vertical legs and horizontal plates projecting from the said member, the said plates being provided with bolt holes, one of the said plates projecting from one side of the said member and a plurality of the said plates projecting from the other side of the said member in spaced relation.

1,817,689. LOCKING DEVICE FOR DOORS. WILLIAM T. HORMES, Catonsville, Md. Filed Oct. 14, 1927. Serial No. 226,206. 8 Claims. (Cl. 70—74.)



1. The combination with a door having a recess in one of its stiles and a portion of the edge of said stile provided with a longitudinally disposed angular portion, and removable cover strips of angular cross section cooperating with said angular portion to provide guide-ways, of a carrier plate covering said recess and provided with a slidably mounted operating member extending into the recess, locking detents located at the top and the bottom of said stiles adjacent the ends of said guide-ways, links located in said guide-ways and independently connecting said detents with said arm so that they may move in unison therewith, a spring acting to retain said operating member in a predetermined normal position so as to hold said detents in a normal locking position, and an actuator engaging said operating member, said actuator being so connected that the door will first be unlocked and then moved to open position by a continued pull upon said actuator in one direction.

1,817,690. BAKING PAN. MARYAN J. HUBERT, Easthampton, Mass. Filed Aug. 28, 1930. Serial No. 478,457. 11 Claims. (Cl. 53—6.)

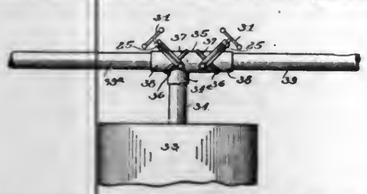


1. In a baking pan, means whereby rolls may be baked already split, said means consisting of a coil, said coil being a water coil, said pan being formed in sections, a portion of said coil seating within each of said sections.

1,817,691. DETACHABLE PIPE SECTIONS. JENS N. JACOBSEN, Alameda, Calif., assignor to The Pfauder Company, Rochester, N. Y., a Corporation of New York. Filed July 5, 1927. Serial No. 203,581. 3 Claims. (Cl. 137—75.)

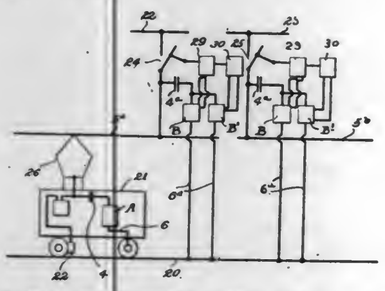
1. In apparatus of the class described, the combination with a pair of aligned pipe sections and a transversely

extending pipe section, of a head connecting said sections including angularly disposed branches, said head having an opening through which a cleaning tool may be inserted into both branches when one of the sections is de-



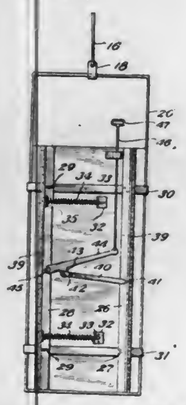
tached by moving the tool in paths coaxial with said branches, said head having a seat for one of the alined sections surrounding said opening at the point of intersection of the alined and transversely extending pipe sections.

1,817,692. ELECTRIC TRAMWAY, RAILWAY, AND LIKE SYSTEM. ULRICH KLOSS, ALBERT PETERS, and KURT KRÜGER, Berlin, Germany. Filed Oct. 23, 1930, Serial No. 490,736, and in Germany Sept. 3, 1929. 2 Claims. (Cl. 191—8.)



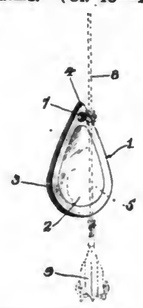
1. In an electric railway, power circuit conductors, adapted to supply electric energy for the operation of electric cars, means for transmitting currents of different characteristics over said conductors, a plurality of selective means operated in response to the transmission of currents of different characteristics for controlling the supply of energy to the power circuit conductors.

1,817,693. SILO ELEVATOR. IRVIN K. KREIDER, Lancaster, Pa. Filed May 14, 1928. Serial No. 277,474. 1 Claim. (Cl. 187—93.)



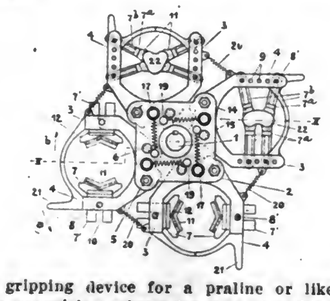
In a device of the class described, a frame, means for counter balancing the frame, a stationary guiding element carried by the frame, a movable guiding element carried by the frame, this guiding element constituting a rail effective along one edge thereof as a brake, resilient means bearing on the movable element and tending to force it outwardly, and a plurality of pivotally connected levers, one of which is pivotally connected with the stationary guiding element, the other lever being pivotally connected with the movable guiding element, means for pivoting the levers together at a point between the ends of the lever connected with the movable element and operable for shifting said movable element inwardly and outwardly with reference to the stationary guiding element, while maintaining parallel relation therewith.

1,817,694. LUMINOUS FISHING SPOON. ALBERT F. J. LAFKY, Salem, Oreg. Filed Sept. 21, 1929. Serial No. 394,270. 2 Claims. (Cl. 43—44.)



1. A fishing spoon comprising, a relatively thin transparent element having a film of luminous material deposited on a side face thereof, a transparent element conforming in size and shape with the first named transparent element positioned against the face of the latter having a film of luminous material thereon, and means for securing said elements together.

1,817,695. GRIPPING DEVICE FOR PRALINE AND LIKE WRAPPING MACHINES. OTTO LAUENSTEIN, Wernigerode, Germany. Filed Mar. 14, 1928, Serial No. 261,634, and in Germany Mar. 19, 1927. 9 Claims. (Cl. 93—2.)

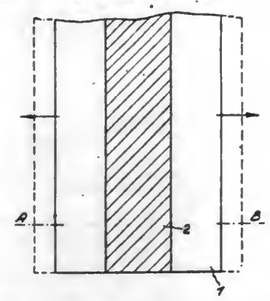


1. A gripping device for a praline or like wrapping machine comprising gripper tongs, a plurality of gripping jaws on one of said tongs adjustable relatively to each other and to said tongs, and means for securing said jaws to said tongs in any position of adjustment thereon.

1,817,696. PLASTER BANDAGE WITH WOUND OR HEALING PAD. JOHANNES LOHMANN, Fahr-on-the-Rhine, Germany, assignor to the Firm Lohmann Aktiengesellschaft, Fahr-Wollendorf, Germany. Filed Oct. 7, 1930, Serial No. 487,030, and in Germany Apr. 26, 1929. 1 Claim. (Cl. 128—268.)

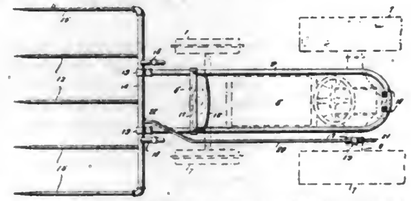
An adhesive plaster bandage comprising, in combination, a pad longitudinally coextensive with said bandage and adapted to be medicated, a supporting web to which said pad is adapted to be secured, said web being wider

than said pad, whereby lateral securing strip portions are provided on either side thereof, a layer of adhesive material applied to one surface of said web, and said web



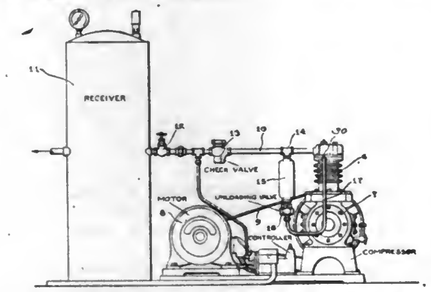
being elastic only in a direction transversely of said bandage, whereby it may be applied longitudinally of a wound and serve to draw said wound together.

1,817,697. POWER BRUSH RAKE. FRANK MAHRE, Yakima, Wash., assignor of one-half to Fred J. Mahre, Yakima, Wash. Filed Oct. 25, 1927. Serial No. 228,516. 1 Claim. (Cl. 56—27.)



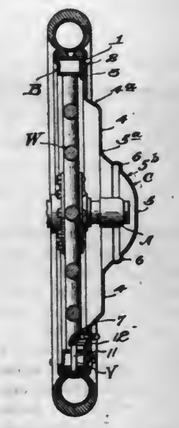
In combination, a horizontal U-shaped, tubular, supporting frame, said frame being connected to a tractor by means of U-bolts fastened to the draw bar of said tractor, means for supporting the forward end of said frame from said tractor by a yoke girdling the radiator of the tractor and a hanger depending from said tractor radiator; a transverse, horizontal tube connected to the frame and oscillatory vertically therewith, said tube having rake members and also having fixed thereon a lever, said lever being held in position by seats formed in a standard, said standard being yoked with the rear axle of the tractor; and upstanding movable guard members on said transverse horizontal tube to protect the radiator of the tractor.

1,817,698. UNLOADING DEVICE. JAMES O. MCMILLAN, Wichita, Kans. Filed May 15, 1929. Serial No. 363,214. 13 Claims. (Cl. 230—27.)



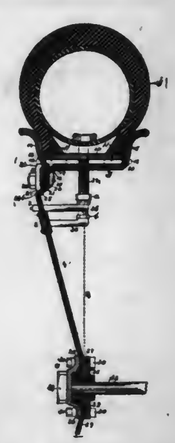
1. In mechanism of the character described, in combination, a compressor having a discharge line, a conduit connecting said line to the cylinder of the compressor, and an unloading valve interposed in said conduit and functioning due to pressure change in the compressor cylinder to unload the compressor and discharge line.

1,817,699. WHEEL CONSTRUCTION. BASIL MEIGS, Washington, D. C. Filed Jan. 2, 1926. Serial No. 78,937. 3 Claims. (Cl. 301—37.)



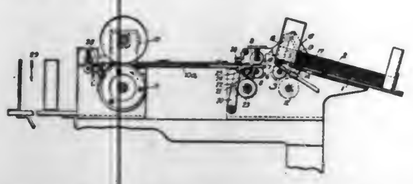
1. A wheel construction including in combination with the wheel having a felloe and mounted on an axle, a cover member having an attaching flange portion at its peripheral edge including an outwardly offset compressible stiffening bead adapted to be engaged by a rim lug to hold the same to the felloe.

1,817,700. MEANS LOCKING PNEUMATIC TIRES ON WHEELS. PHILIP M. MILLER, Brooklyn, N. Y. Filed May 26, 1924. Serial No. 716,072. 11 Claims. (Cl. 152—21.)



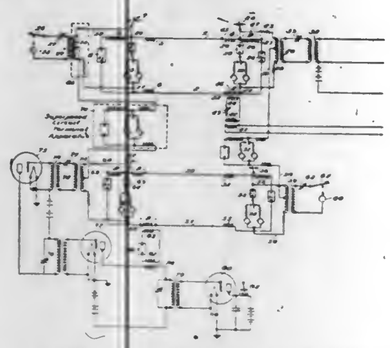
1. The combination with a vehicle wheel provided with an integral transverse member having an apertured tire flange and a removable apertured tire flange mounted thereon, and an intermediate tire base having spaced projections, each entering an aperture of the flanges, of a bearing on the outer side of the integral transverse member vertically extending to and terminating in a side bearing, a plurality of apertures in the last bearing, the removable tire flange engaging with the said bearings, a plurality of apertured clamps engaging the projections of the tire base and side of the removable flange on one hand, and the apertures in the side bearing on the other hand, and fixed bolts in the wheel passing through the removable flange and clamps, and nuts on the bolts drawing the parts together.

1,817,701. MECHANISM FOR FEEDING AND SEVERING CARDBOARD AND LIKE SHEETS. WALTER EVERETT MOLINS, London, England. Filed Nov. 14, 1928, Serial No. 319,270, and in Great Britain Dec. 5, 1927. 1 Claim. (Cl. 271—2.)



In a blank feeding device, the combination with means for supporting the side edges only of a stack of blanks, of means for engaging the face of the lowermost blank of a stack of blanks to bow the central portion of the same outwardly, means having a portion thereof movable between the said blank and the stack to convey the blank away from the stack, said last named means comprising a conveyor roller and a device consisting of a reciprocable wedge shaped member and a roller mounted on said member for thrusting the blank into engagement with said conveyor roller, and means including a pair of reciprocating spaced elements adapted to receive each blank from said conveyor roller and deliver the same to apparatus for performing an operation on the blank, said spaced elements engaging the rear edge of the blank on opposite sides thereof.

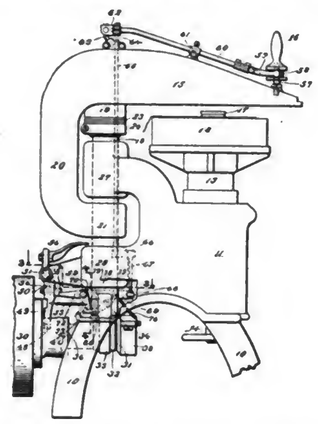
1,817,702. COMBINING ALTERNATING CURRENT CHANNELS WITH SUPERPOSED TELEGRAPH CIRCUITS. RONALD V. MORGENSTERN, Irvington, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,481. 16 Claims. (Cl. 178—51.)



1. In a signaling system, a line circuit comprising a pair of conductors, a source of D. C. voltage connected across terminals of said line to apply direct current signals thereto, an inductive shunt connected across said terminals with a superposed circuit connected to the electrical midpoint of said shunt and a source of A. C. voltage connected to apply A. C. signal currents to said line circuit at said terminals.

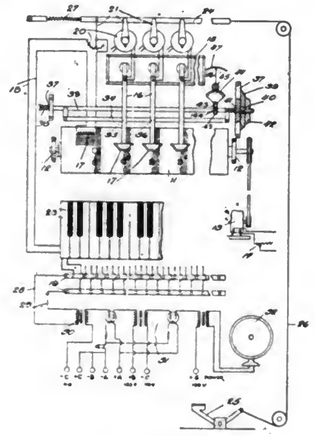
1,817,703. PRESS OPERATING MECHANISM. JOHN ROGER OLIVER, Medfield, Mass., assignor to Reece Shoe Machinery Company, Boston, Mass., a Corporation of Maine. Filed June 23, 1927. Serial No. 200,904. 7 Claims. (Cl. 192—82.)

1. In a control mechanism for clicking or other power presses of the class having a reciprocable post carrying a presser, power means for moving the post down and up comprising a clutch, a clutch shifter for putting the clutch into and out of operation for causing the descent and rise of the presser, and having a tendency toward inoperative position wherein it renders the clutch operative, and control means for the clutch shifter comprising a latch normally holding the shifter operative and there-



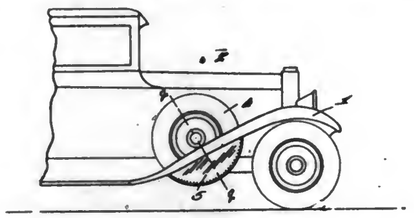
fore the clutch inoperative, such latch having a tendency toward latching position, a releaser for throwing the latch having a trip engaging the latch, and means actuated by the descent or rise of the post for restoring the shifter to operative position and for throwing the trip to permit the latch to re-engage the shifter.

1,817,704. MUSICAL INSTRUMENT. OLIVER M. OSBORNE, Madison, Wis. Filed July 25, 1928. Serial No. 295,213. 9 Claims. (Cl. 274—18.)



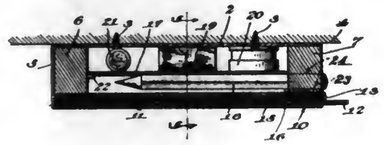
1. A device for reproducing tones of any one of a plurality of instruments comprising a plurality of series of tone records the records of each series being produced by different instruments, a plurality of electrical pick-up devices, means for effecting relative movement between said records and said pick-up devices, electrically operated translating means, a keyboard, and a switch carried by each key of said keyboard, each switch controlling the connection of one pick-up device to the translating means said "pick-up" devices being constantly actively associated with said tone records during the reproduction of the tones of any one instrument.

1,817,705. ATTACHMENT FOR AUTO FENDERS. JAMES W. OUTTERSIDE, Detroit, Mich. Filed Aug. 23, 1929. Serial No. 387,992. 1 Claim. (Cl. 280—152.)



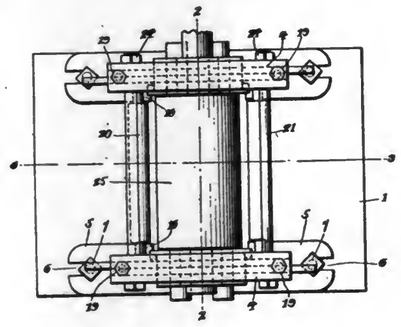
A fender for an automobile having a well for the reception of a spare wheel, and an apron welded or formed with the upper and outer edge of the well, spaced and depending from, extending slightly below and concealing the well and said fender, being shaped to correspond with the outer contour of the well and having its lower edge formed with an inwardly directed bead and a reinforcing wire in such bead.

1,817,706. COMBINED REGISTER AND FIRST AID KIT. JOSEPH L. PEAVEY, Meridian, Miss. Filed July 20, 1929. Serial No. 379,835. 12 Claims. (Cl. 281—44.)



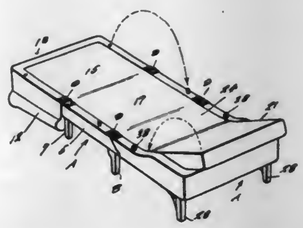
1. An accessory comprising a box having walls with flanges at the top and bottom, a closure loosely inserted in the box a distance from the flanges, and separate and independent cards inserted between the closure and the flanges pressing on the closure to prevent rattling and enabling the closure to be used as a writing table.

1,817,707. SHEET ROLLING AND FINISHING MACHINE. THOMAS E. REES, Canton, Ohio. Filed Feb. 4, 1931. Serial No. 513,427. 4 Claims. (Cl. 29—17.)



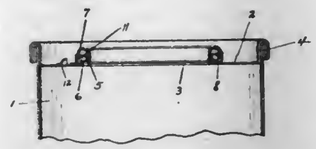
4. A machine for the purpose set forth comprising a pair of lengthwise opposed lower rolls, an upwardly movable upper roll disposed centrally with respect to and of materially greater diameter than said lower rolls, a pair of supports for said lower rolls, a pair of spaced, opposed upwardly movable bearing elements seated on said upper roll, means carried by said supports for varying the upward movement of said elements and upper roll, said supports having spaced opposed mortises, said elements having offset parts slidably mounted in said mortises, and a pair of idler rolls journaled in said supports, said idler rolls having their axes disposed in a plane above the plane containing the axes of the lower rolls and spaced laterally from the latter adjacent to, spaced from and position above said lower rolls.

1,817,708. COMBINED CHAIR AND BED. PAUL PINTOW, Brooklyn, N. Y. Filed June 1, 1929. Serial No. 367,696. 2 Claims. (Cl. 155—49.)



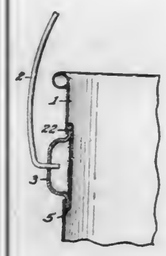
2. In an article of furniture of the class described, a chair comprising a main frame and having supporting legs therefor, a cushion member disposed within said frame, a complemental seat frame hingedly associated with one end of said main frame and adapted to be folded in a horizontal position, a cushion in said last mentioned frame, and said last mentioned frame having arm portions adapted to provide a support for the frame when in a horizontal position, a back frame hinged to the opposite end of said main frame and adapted to be disposed in a horizontal position, foldable supporting members associated with said back frame, said back frame being formed to constitute a pocket and having a cushion member mounted for pivotal movement therein, said cushion having one end thereof adapted for disposition upon one end of said back frame when said frame is disposed in a horizontal position to provide a head rest, and suitable cushion means associated with said last mentioned cushion and with said main seat cushion to provide a continuing cushion for the chair when said members are disposed in said horizontal position.

1,817,709. NONREFILLABLE CONTAINER. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Apr. 3, 1929. Serial No. 352,218. 3 Claims. (Cl. 220—61.)



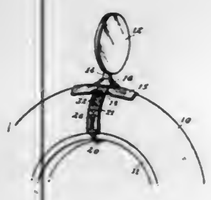
1. A container comprising a head having therein a circular opening defined by an upstanding neck flange which is turned outwardly to form a terminal bead, a bendable ring including an upright body portion and an inwardly directed base flange, said body portion being disposed in encircling spaced relation to said bead and said base portion being immovably held between said bead and the head, and a sheet metal cover receivable within the embrace of said neck flange and having an outwardly turned annular rim for seating in embracing overlying relation to said bead, said ring having its upper edge portion adapted to be bent inwardly into overlying holding relation to said cover rim.

1,817,710. METHOD OF ATTACHING BAIL EARS TO PAILS. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed May 1, 1930. Serial No. 448,892. 6 Claims. (Cl. 113—116.)



1. The method of applying a sheet metal bail ear to a sheet metal wall, which consists in forming in the wall a circular inwardly pressed imperforate seat, placing on said seat a bail ear having an annular flared skirt, and then depressing said bail ear with respect to said seat whereby said skirt is flattened into annular flange form and is caused to expand the circumferential defining wall of said seat to form a flange-embracing fold which occupies seated relation to the adjacent ear-encircling portion of the sheet metal wall.

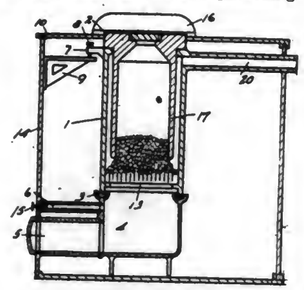
1,817,711. DEVICE FOR SUPPORTING ARTICLES ON TIRES OR THE LIKE. ABRAHAM W. ROSEN, New York, N. Y. Original application filed Mar. 22, 1928, Serial No. 263,748, now Patent No. 1,765,099, dated June 17, 1930. Divided and this application filed Nov. 8, 1928. Serial No. 318,091. 2 Claims. (Cl. 45—97.)



1. A rear vision mirror for automobiles, including a base having an apertured rigid, metallic body curved to conform with the tread portion of a vehicle tire, said base including a tire-wall-embracing extension comprising a longitudinally-bendable metallic band, said band being received through the apertures of the body and being bent adjacent the apertures of said body to set said band to retain it assembled with said base the band being rigid transversely to form shoulders at its side edges for engaging a tire, a mirror support rising from said body, and securing means associated with the extremities of said band to underlie a tire-supporting rim to retain the mirror on a tire.

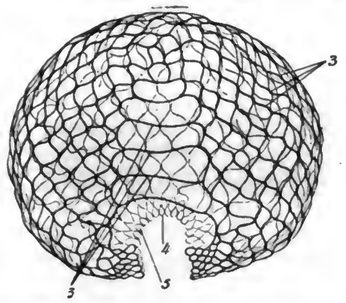
1,817,712. COOKING STOVE. JOHAN GEORG SCHEER, Lidingo, Sweden, assignor to Svenska Aktiebolaget Gasaccumulator, Stockholm-Lidingo, Sweden. Filed Sept. 18, 1929, Serial No. 393,473, and in Sweden Oct. 11, 1928. 10 Claims. (Cl. 126—211.)

1. A cooking stove comprising a cooking plate combined with a storer for solid fuel, a fire tube surrounding said storer to form a combustion chamber and to support the said cooking plate, means for exhausting the combustion gases from said chamber, means providing for the free



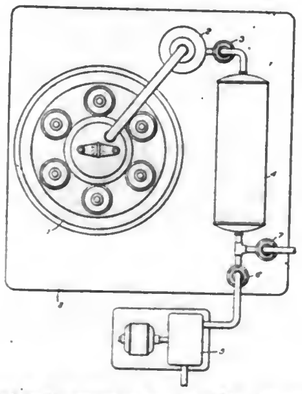
expansion of said fire tube without substantial alteration of the position of the cooking plate relative to the stove plate and means for supporting the fire tube.

1,817,713. HAIR NET. LEO SEIDNER, Rockville Center, N. Y., assignor to The Glemby Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 14, 1931. Serial No. 522,542. 4 Claims. (Cl. 132—49.)



2. A hair net comprising a body portion having a central opening, the major part of said body portion consisting of a plurality of rows of meshes, and the section of said body portion which is positioned over the forehead, when the net is on the head, comprising a plurality of rows of meshes larger than the first named meshes.

1,817,714. METAL TANK RECTIFIER. EROL B. SHAND, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 18, 1925. Serial No. 16,402. 8 Claims. (Cl. 250—27.5.)

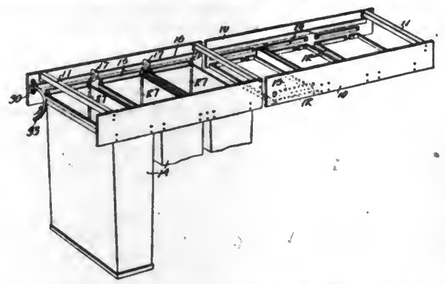


1. A metal-tank mercury-arc rectifier having internal surfaces, a valve for permitting the removal of gases from

the interior of said rectifier, said rectifier interior surfaces being substantially free from occluded oxygen and water vapor, and gas within said rectifier which does not substantially affect the interior surfaces of said rectifier, said gas being at a pressure greater than that of the outer atmosphere.

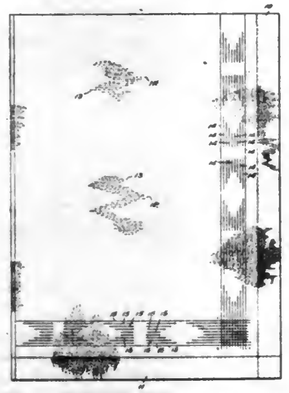
3. The method of handling and shipping a metal-tank electrical apparatus during a period of inactivity after said apparatus has been initially treated, including drying, which comprises filling said apparatus with dry nitrogen at a pressure above the surrounding atmosphere, temporarily sealing the apparatus, said apparatus being subject to a slight diffusion of gas, shipping it, and subsequently, at the close of said period of inactivity, causing nitrogen to be removed from said apparatus at the place of installation of said apparatus.

1,817,715. CAN GRID. NORMAN M. SMALL and LEON BUEHLER, Jr., Waynesboro, Pa., assignors to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Original application filed Oct. 6, 1925, Serial No. 60,896. Divided and this application filed Sept. 6, 1928. Serial No. 304,278. 8 Claims. (Cl. 62—159.)



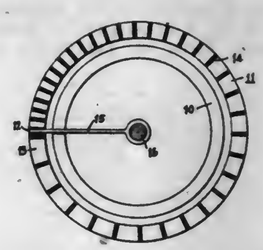
1. A can grid comprising means for holding a set of cans including a member extending alongside the set of cans, a header rectangular in section lying against said member, a plurality of fittings straddling the header, means for securing the fittings to said member, means for supplying air to the header, pipes extending from the fittings into the cans, passages leading through a wall of the header and through the fittings to said pipes, and pressure reducing means in said passages, substantially as set forth.

1,817,716. CURTAIN. JESSE STAM, Boston, Mass., assignor to Fairclough & Gold, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1930. Serial No. 499,651. 12 Claims. (Cl. 139—416.)



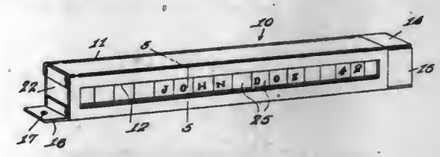
8. A curtain comprising a woven fabric having a hem along one of its longitudinal edges and a hem along one of the transverse edges, said fabric comprising a set of main, warp threads extending throughout the length of the curtain, a set of main, weft threads extending throughout the width of the curtain, a set of relatively heavy, extra, warp threads between said main warp threads, adjacent a longitudinal edge and terminating short of said transverse hem, and a set of relatively heavy, extra, weft threads between said main, weft threads, adjacent a transverse edge and terminating short of said longitudinal hem.

1,817,717. ROTARY DISTRIBUTOR. ROBERT STEENECK, New York, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1930. Serial No. 439,140. 12 Claims. (Cl. 178—531.)



1. A rotary distributor comprising a solid ring and a segmented ring, a line wire connected to said solid ring, a signal transmitter associated wtih said segmented ring, and a brush arranged to bridge said rings, the segments of said segmented ring being of progressively increasing lengths over at least a portion of said ring, and spaced apart equal distances which are short compared with the length of the segments, whereby when said brush traverses said rings signals of progressively increasing periods are transmitted to said line in continuous succession.

1,817,718. RURAL MAIL BOX. JOHN S. SWANLUND, Rockford, Ill. Filed Apr. 29, 1929. Serial No. 358,975. 2 Claims. (Cl. 40—140.)

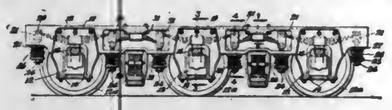


1. A name indicating device for a mail box, comprising an elongated housing member adapted to be mounted upon the top of a mail box and having its sides formed with longitudinally extending openings, flaps bent inwardly upon one another and normally closing the ends of the housing, an inner member slidably removably mounted within said housing and formed in its sides with openings registering with said first named openings, a spacing member extending longitudinally of the inner member at its center and defining separate compartments between the outer sides thereof and the inner sides of the side walls, and a plurality of blocks arranged in edge to edge relation within each of said compartments and bearing letters and figures adapted to be arranged to spell out a name and number.

1,817,719. CAR TRUCK. LOUIS TARTAGLIA, Albany, N. Y. Filed Sept. 13, 1930. Serial No. 481,666. 9 Claims. (Cl. 105—195.)

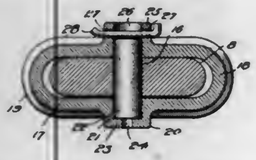
1. In a car truck, the combination of a truck frame having axle boxes for three axles and having vertical

guides in which said axle boxes are mounted, a spring being mounted upon each of the end axle boxes and connected with the truck frame, said middle axle box having a long



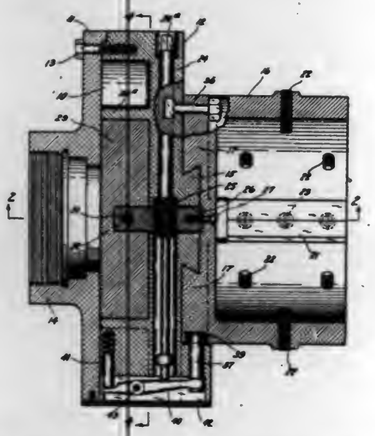
horizontal member mounted thereon symmetrically over its axle and connected to the springs of said end axle boxes, and means for adjusting said horizontal member to control its horizontality.

1,817,720. RETAINING DEVICE. DONALD L. TOWNSEND, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Oct. 25, 1926. Serial No. 144,093. 7 Claims. (Cl. 85—7.)



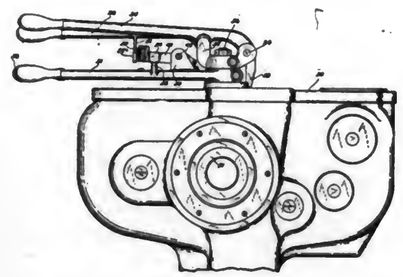
1. A retainer adapted for use with draft keys comprising a looped member fitting over an end of a key, said looped member being formed substantially U shape in cross section for increasing the rigidity thereof and provided with a pocket in the lower section and an aperture in the upper section of said member for receiving a pin to connect said member with the draft key, a headless pin insertable through said aperture and held at its lower end in said pocket, said aperture being bounded by an upstanding collar and means extending through perforations in said collar and above said pin for preventing loss thereof.

1,817,721. CHUCK. JOHN J. N. VAN HAMERSVELD, Cleveland Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 9, 1928. Serial No. 268,392. 22 Claims. (Cl. 279—6.)



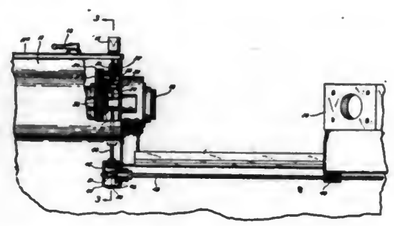
1. A chuck having a supporting portion, a work holding portion, a counterweight, both movable laterally with respect to the axis of the supporting portion, and means for simultaneously shifting the work holding portion and counterweight.

1,817,722. INDICATING DEVICE. JOHN J. N. VAN HAMERSVELD, Cleveland Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 9, 1929. Serial No. 405,947. 11 Claims. (Cl. 116—116.)



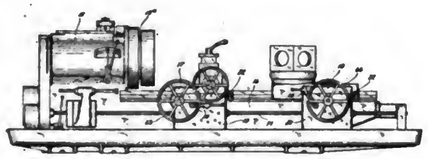
1. An indicator associated with the members for controlling a part of a machine, comprising separate indicating members carried by the control member and cooperating with one another to directly indicate the rate of movement of the controlled part.

1,817,723. INDICATOR. JOHN J. N. VAN HAMERSVELD, Cleveland Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 23, 1929. Serial No. 409,411. 25 Claims. (Cl. 116—116.)



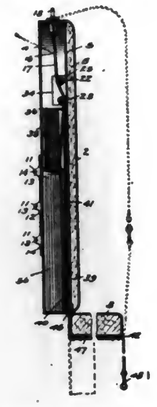
1. An indicator having two movable indicating members operatively associated respectively with two actuated parts of a machine and cooperating with each other to give an indication of the rate of movement of one part with reference to the rate of movement of another part.

1,817,724. INDICATING DEVICE. JOHN J. N. VAN HAMERSVELD, Cleveland Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 10, 1930. Serial No. 443,162. 34 Claims. (Cl. 116—116.)



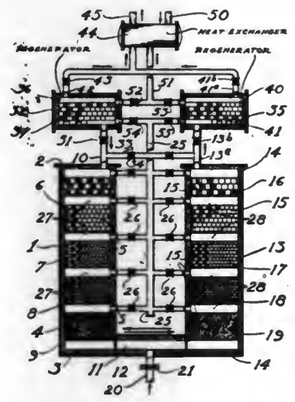
1. In combination, a device for indicating the rate of movement of a part of a machine, and means for actuating said part at various rate of movement, said device including a member indicating the rate of movement of said part and capable of a linear movement, said linear movement of said member controlling said means.

1,817,725. COMBINED SEAT AND CUSHION PACK FOR PARACHUTES. JOHN W. VAN HORN, San Diego, Calif. Filed Dec. 10, 1930. Serial No. 501,367. 11 Claims. (Cl. 244—21.)



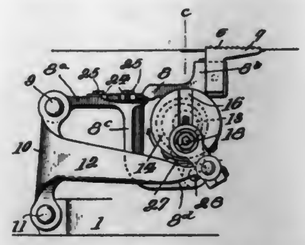
1. In a parachute pack a housing, a roller in the housing, a parachute in the housing, a harness strap attached to said parachute and engaging said roller, yieldable means tending to retain said strap in said housing but permitting withdrawal of a part thereof from the housing.

1,817,726. METHOD FOR PRODUCING HYDROGEN AND APPARATUS THEREFOR. MICHAEL K. VINTHER, Newark, N. J. Filed Aug. 6, 1929. Serial No. 383,948. 7 Claims. (Cl. 23—212.)



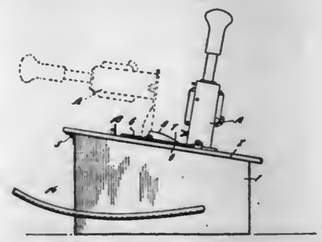
1. The process of repetitiously producing a gas, consisting predominantly of hydrogen, which comprises contacting a hydrocarbon with a first bone of refractory material maintained at a temperature producing hydrogen by thermal decomposition of said hydrocarbon, and producing deposition of carbon in said first zone, discontinuing the supply of hydrocarbon, contacting the said first zone with air producing a combustible gas, supplying said combustible gas to a second zone of refractory material, adding air to said second zone to complete combustion of said combustible gas, discontinuing the supply of air to said first and second zones, and contacting a hydrocarbon gas with said second zone of refractory material, producing hydrogen by thermal decomposition and deposition of carbon in said second zone.

1,817,727. FEEDING MECHANISM FOR SEWING MACHINES. AUGUST J. WOHLPART, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 11, 1927. Serial No. 160,432. 2 Claims. (Cl. 112—215.)



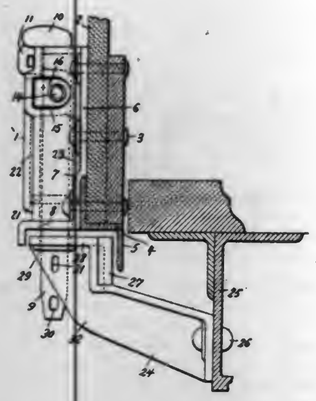
1. A feeding mechanism for sewing machines comprising a main shaft, a feed bar, a feed dog carried by said feed bar, a feed rocker to which said feed bar is pivoted, means actuated by the main shaft for oscillating said feed rocker, an eccentric on said main shaft for raising and lowering said feed bar, an eccentric strap cooperating with said eccentric, an arm carried by said feed bar and projecting beneath said eccentric to which said eccentric strap is connected, said eccentric strap being disposed so as to move its lower end from one side of a vertical line passing through the center of the shaft to the other side thereof, and means for rotating said main shaft so that the center of the eccentric moves in a direction opposed to the feed when the feed dog is in engagement with the material and moving in the direction of feed to feed the same.

1,817,728. FILM NUMBERING MACHINE. PERCY C. ARMITAGE, Pomona, Calif., assignor of one-half to Paul W. Newcomer, Pomona, Calif. Filed Mar. 7, 1928. Serial No. 259,884. 2 Claims. (Cl. 95—1.1.)



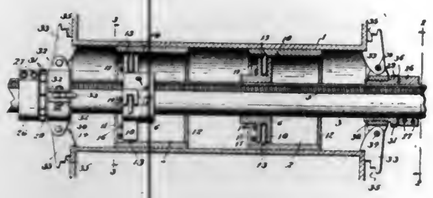
1. A device of the class described comprising a casing, a cover hinged thereto and having a window therein, a hinge having one leaf fastened to the top of the cover, the other leaf having a hole therein for exposing the window when the leaf is resting upon the cover, an automatic numbering device connected with the said leaf, means for holding the leaf with the numbering device thereon in upright position, said numbering device being arranged over the hole in the leaf with its operable number arranged over the window when the parts are in operative position, spring fingers on the cover for holding the flap of an envelope over the window and under the numbering devices so that when the device is actuated, a number will be printed on that part of the flap which is over the window, a ruby lamp in the casing, a white lamp in the casing, circuit for the lamps and a switch for closing the circuit of the white lamp so that the rays of light therefrom will pass through the window and through the numbered portion of the flap and photograph the number on a portion of a film which is pressed against the flap, the handle of the switch passing through the cover.

1,817,729. CAR DOOR FASTENER. DONALD S. BARROWS, Rochester, N. Y. Filed Dec. 29, 1926, Serial No. 157,716. Renewed Dec. 10, 1930. 7 Claims. (Cl. 292—150.)



1. A fastener comprising a housing adapted to be secured to the bottom of a car door, intermediate the corners thereof, having a normally upright passage therethrough and a transverse aperture intersecting said passage, a bracket adapted to be secured to an adjacent sill of the car and having a portion lying outside the lower edge of said door to limit transverse motion thereof, and a substantially horizontal extension beyond said portion and provided with an opening therein adapted to register with said passage, a fastening bolt adapted to occupy said passage and opening and having a transverse aperture therethrough and a rivet adapted to be passed through the transverse aperture in the housing and bolt and headed over to prevent withdrawal of said bolt.

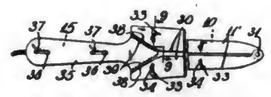
1,817,730. BORING MACHINE. ROBERT C. BECKMAN, Olean, N. Y. Filed Aug. 13, 1929. Serial No. 385,577. 1 Claim. (Cl. 77—2.)



In means for the purpose set forth, the combination of a boring bar, a jack screw rotatably mounted thereon, an abutment on the bar for the outer end of the screw, a collar encircling and threaded upon the screw, and anchor plates pivoted upon the collar and arranged to engage the ends of a valve chamber whereby rotation of the screw about the boring bar will effect endwise movement of the collar and cause the anchor plates to bind upon the valve chamber.

1,817,731. ELECTRIC NECKTIE RESTORER. DAVID M. BENFORD, New York, N. Y. Filed Oct. 28, 1930. Serial No. 491,704. 4 Claims. (Cl. 219—19.)

4. An electric necktie restorer, comprising a flat heat conducting element having diverging sides from the front to the rear and for engaging within a four-in-hand necktie through an open end, heating means within said element for providing heat to restore the necktie into a smooth flattened condition, a handle for supporting said element at its rear end, and means for changing the angle of inclination of the diverging sides for adjustments of different ties of different designs in which the angles



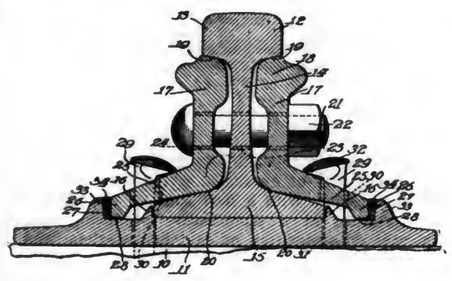
of the sides vary, comprising heat conducting sheet sections in intimate contact with the bottom of said heat conducting element and pivotally mounted at the front ends, and a movable section engageable between the rear ends of the latter mentioned sections to pivot the sections outwards.

1,817,732. TUBE CONTAINER. STEPHEN BORUSS, Budapest, Hungary. Filed May 3, 1929, Serial No. 360,159, and in Hungary May 4, 1928. 1 Claim. (Cl. 221—60.)



In a tube container, in combination, a tube body consisting of "cellophan", a metal strip pressed upon one fold up end of said tube, a cylindrical part fastened to the other end of said tube ending in a pipe provided with a screw-thread and a head adapted to be screwed upon said pipe.

1,817,733. RAIL JOINT. JOHN BRUNNER, Chicago, Ill. Filed Sept. 11, 1929. Serial No. 391,786. 2 Claims. (Cl. 238—164.)



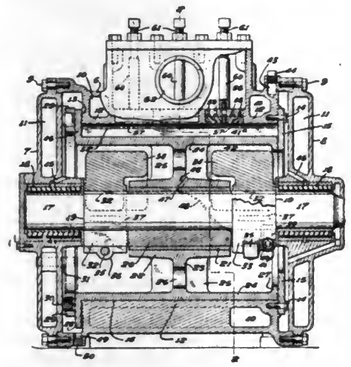
1. A rail joint comprising a tie plate, a rail seating on said tie plate, projections from said tie plate preventing lateral movement of said rail, splice bars including inclined faces drawn into engagement with the head and base of said rail by being bolted thereto and welded joints between the toes of said splice bars and said tie plate.

1,817,734. MIRROR FOR RETINOSCOPES. JOHN RICHARD BUELOW, Winslow, Ill. Filed May 1, 1928. Serial No. 274,291. 3 Claims. (Cl. 88—20.)



3. A mirror for retinoscopes made in the form of a single prism and having a reflecting material on one face, said reflecting material having a peephole therein.

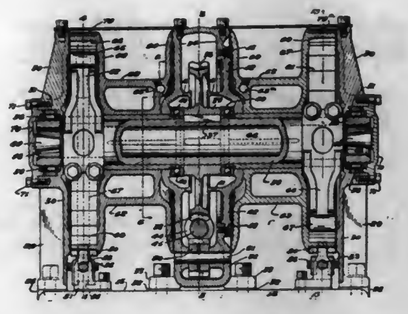
1,817,735. ROTARY COMPRESSOR. OMAR E. CLARK, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Apr. 16, 1928. Serial No. 270,447. 13 Claims. (Cl. 230—149.)



9. In a rotary compressor, the combination with a casing having a rotor chamber, end heads closing the chamber, and abutment walls inside and spaced from the end heads, of a shaft journaled in the end heads, a hollow rotor eccentrically mounted on the shaft and having end portions rotatably bearing against the side faces of the abutment walls, said rotor having a peripheral wall dividing the rotor chamber into an outer compression chamber and an inner lubricant chamber and said rotatable portions closing the said inner and outer chambers against communication, and means whereby lubricant is supplied to the inner chamber.

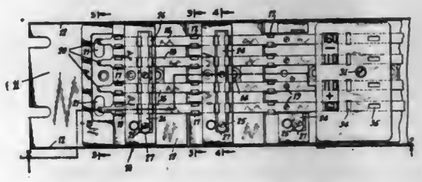
1,817,736. HOIST. OMAR E. CLARK, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed May 14, 1928. Serial No. 277,625. 8 Claims. (Cl. 254—185.)

1. In a hoist, the combination with a reversibly rotatable driving shaft and separately rotatable drums, of an automatic clutch mounted on the driving shaft and connecting it and one drum when the shaft is rotated in one direction, another and separate automatic clutch also mounted on the driving shaft and connecting it with



the other drum when the shaft is rotated in the opposite direction, and means mounted solely on the shaft for automatically shifting said clutches upon the reversal of the motion of the shaft.

1,817,737. POTENTIAL DISTRIBUTING BLOCK. EUGENE A. DEMONET, Brooklyn, N. Y., and PRESTON S. COPENHAVER, Bayonne, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 19, 1930. Serial No. 469,129. 14 Claims. (Cl. 178—75.)



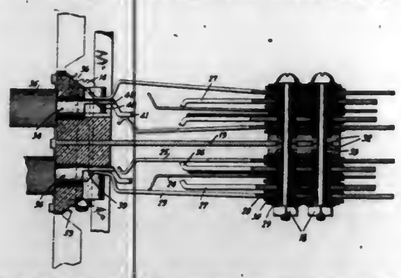
1. A potential distributing block comprising an insulating block having a number of bus bars extending longitudinally therealong, a plurality of cross bus bars extending transversely across said longitudinal bus bars and insulated therefrom, corresponding terminal clips secured to said longitudinal and cross bus bars, and insulating cover means for said bus bars having apertures in line with said clips, whereby means may be inserted through said cover means to connect any of said longitudinal bus bars to any of said cross bus bars.

9. A potential distributing block comprising a base, an insulating block secured thereto, a plurality of bus bars extending longitudinally of said block, a plurality of cross bus bars extending transversely of said longitudinal bus bars at intervals and insulated therefrom, a cover for said bus bars having apertures therein and a resistance unit having terminals insertable through said apertures into contact with said bus bars to join desired of said cross and longitudinal bus bars through said resistance.

1,817,738. JACK PANEL UNIT. EUGENE A. DEMONET, Brooklyn, N. Y., and PRESTON S. COPENHAVER, Bayonne, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 19, 1930. Serial No. 469,131. 12 Claims. (Cl. 170—75.)

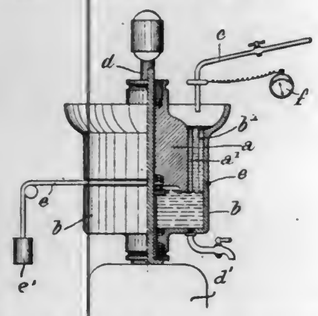
2. A jack panel unit comprising a metallic base plate having apertures along one side thereof, a plurality of jacks positioned along each side of said plate, insulating

means intermediate said jacks and plate, having a portion extending into said apertures, means passing through



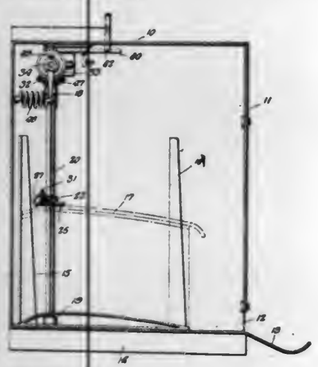
said jacks and insulating means for securing the jacks to the plate, and a panel member mounted on said plate having openings in alignment with said jacks.

1,817,739. APPARATUS FOR DETERMINING THE FRICTIONAL QUALITIES OF A LIQUID. JEAN GEORGES DINTILHAC, Paris, France, assignor to The Society "Yacco. S. A. F.," Paris, France, a French Society. Filed July 31, 1928, Serial No. 296,592, and in Belgium Feb. 3, 1928. 2 Claims. (Cl. 265—11.)



1. In an apparatus of the class described, the combination of a pair of rotatable elements having surfaces out of contact with one another, each of said elements having a plurality of protruding portions formed thereon adapted to "take hold" of a liquid in contact therewith, means for rotating one of said elements, and means for exerting a braking action on the other element.

1,817,740. VENDING MACHINE. MILTON DUNN, Aberdeen, Idaho. Filed Jan. 9, 1929. Serial No. 331,234. 2 Claims. (Cl. 312—51.)

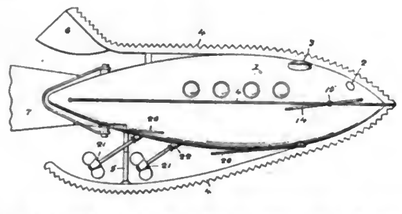


1. In a vending machine, a housing having a discharge opening therein, means within the housing to support articles in stacked formation, spaced vertically disposed rock shafts within the housing, a horizontally disposed ejector plate, gravity movable arms operatively connecting the rock shafts and plate to move the latter when the shafts are operated, ejector fingers carried by the plate and having one of their ends extending below said plate to engage the topmost article to be ejected, means to adjust the fingers to regulate the degree of the extended ends in accordance with the thickness of said article, and means to operate the rock shafts.

1,817,741. TREATMENT OF MATERIALS MADE WITH OR CONTAINING CELLULOSE DERIVATIVES. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Mar. 25, 1927, Serial No. 178,504, and in Great Britain Oct. 23, 1926. 13 Claims. (Cl. 8—13.)

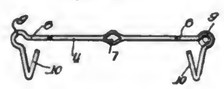
6. Process for loading materials comprising cellulose acetate, comprising treating the materials with a loading metal solution containing loading metal at least partly in the form of thiocyanate.

1,817,742. SUBMARINE. PABLO ESCOBEDO, East St. Louis, Ill., assignor of one-half to California Sitton, East St. Louis, Ill. Filed May 4, 1929. Serial No. 360,533. 2 Claims. (Cl. 114—16.)



1. In a submarine, a hollow elliptical body, a motor, a shaft extending longitudinally within the body and driven by the motor, tubular bearing members mounted in the bottom of the body in inclined position and one in advance of another, a shaft journalled in each bearing member and extending below the same, a propeller upon the lower end of each of said shafts, a pinion upon the upper end of each of said shafts, a shaft mounted in advance of each of the propeller shafts with its axis at right angles to the axis of the respective propeller shaft, a crown gear splined upon each of the last mentioned shafts meshing with the respective one of said pinions, pinions upon the first mentioned shaft to mesh each with a respective one of the crown gears, each crown gear having a hub, a bearing plate engaging the hub of each crown gear and tiltable to effect movement of the respective crown gear into engagement with the respective pinions, and means operable to tilt the said bearing plates.

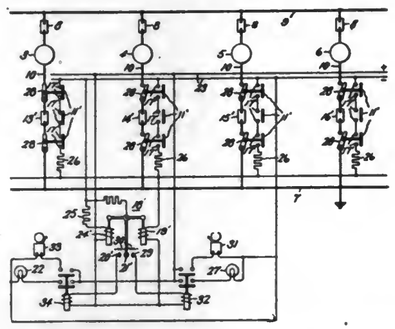
1,817,743. ROOF AND SHINGLE SECURING MEANS. CARROLL C. FIGGE, Chicago, Ill. Filed July 9, 1925. Serial No. 42,343. 2 Claims. (Cl. 108—33.)



1. A positioning and holding device for shingles in adjacent courses comprising a portion of a continuous strip formed with an intermediate base adapted to contact with the upper face of one shingle, opposite upwardly extending offsets for positioning and engaging over the edges of adjacent shingles in the next uppermost course, bent hooks at the extremities of the offsets to

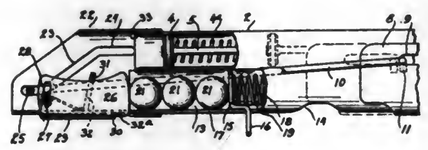
position the extremity of a shingle in the next uppermost course, and pointed tips bendable over the edge of the uppermost shingle to engage the surface thereof and hold the tip down by compression.

1,817,744. INDICATING SYSTEM. ALFRED C. FINNEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 21, 1926. Serial No. 110,807. 3 Claims. (Cl. 177—311.)



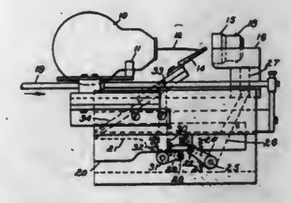
3. In combination, a plurality of alternating current dynamo electric machines each having a neutral point, a bus, means for connecting the neutral points to said bus and indicating means including a movable member, restraining means for moving said member to one position when the connecting means are in a position to connect none of said machines to said bus, electromagnetic means opposing said restraining means for moving said member to another position and means for controlling the energization of said electromagnetic means to cause the movement of said member to an intermediate position when the connecting means are in position to connect only one of said machines to the bus and to said other position only when the connecting means are in position to connect more than one of said machines to the bus and indicating devices connected to be controlled by said member to give one indication when the member is moved to said one position and a different indication when the member is moved to said other position.

1,817,745. REPEATING AIR GUN. VICTOR H. FORSMAN, Detroit, ARNOLD J. DECKER, and ARTHUR W. EDWARDS, Wyandotte, Mich., assignors to All-Metal Products Company, Wyandotte, Mich., a Corporation of Delaware. Filed Dec. 10, 1928. Serial No. 324,880. 17 Claims. (Cl. 124—11.)



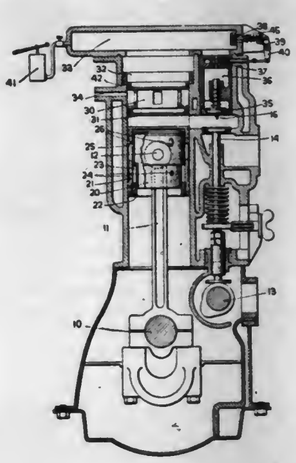
1. A repeating air gun, comprising a barrel, cocking means, a pellet magazine, means for feeding the pellets into the outlet end of the barrel with movement lengthwise of the barrel, and means operatively connecting the cocking means and the feeding means to actuate the feeding means upon actuation of the cocking means.

1,817,746. BASING APPARATUS. HENRICUS GOOSKENS and JOHANNES MARINUS VAN DER POEL, Eindhoven, Netherlands, assignors to General Electric Company, a Corporation of New York. Filed Feb. 20, 1930, Serial No. 430,079, and in the Netherlands, Mar. 23, 1929. 3 Claims. (Cl. 176—3.)



1. An apparatus for inserting lead wires in bases comprising a bulb holder, a base holder, an intermediate wire guide, actuating means for causing said base holder and bulb holder to approach each other to cause said guide to enter said base, means for subsequently withdrawing said guide and means whereby said withdrawing means is brought into operation by the operation of said actuating means.

1,817,747. INTERNAL COMBUSTION ENGINE. RALPH V. L. HARTLEY, South Orange, N. J. Filed Jan. 3, 1927. Serial No. 158,449. 9 Claims. (Cl. 123—78.)

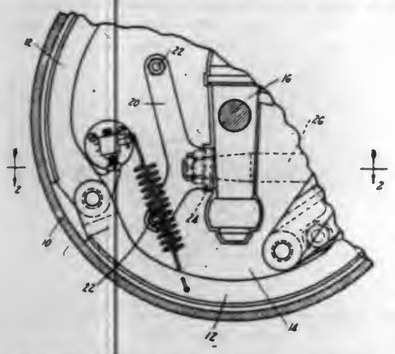


1. In an internal combustion engine in combination with a cylinder, a piston structure therein having a single operating connection to a crank means comprising air pockets which are sealed off and opened by the action of the piston structure associated with the said piston structure for automatically changing the volume ratio swept by said piston from one ratio to another upon compression and expansion strokes.

1,817,748. SUPPORT FOR BRAKE BACKING PLATES. ERIK J. HIRVONEN, Pontiac, Mich., and WALLACE W. TUTTLE, deceased, Putnam, Conn., by Henry A. Tuttle, administrator, Upton, Mass., assignors, by mesne assignments, to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Apr. 26, 1923, Serial No. 634,855. Divided and this application filed Sept. 29, 1927. Serial No. 222,898. 10 Claims. (Cl. 188—2.)

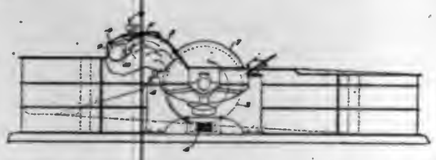
1. A brake including a drum with a backing plate at the open side of the drum, the backing plate having an attaching portion in combination with a front wheel

knuckle formed with a socket, a steering arm seated in said socket and passing through the attaching portion



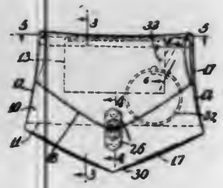
of the backing plate, and a nut threaded on the end of the steering arm and securing both the backing plate and the steering arm to the knuckle.

1,817,749. BEATER ENGINE. WILLIAM V. KNOLL, Dayton, Ohio, assignor to Midwest-Fulton Machine Company, Dayton, Ohio, a Corporation of Ohio. Filed June 28, 1928. Serial No. 288,858. 21 Claims. (Cl. 92—24.)



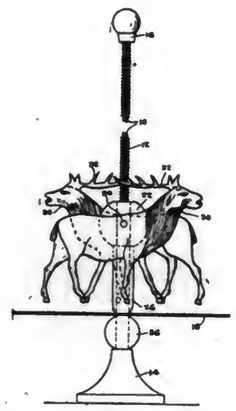
1. The combination with a beater engine including a beater roll and a backfall, of a conveyor trough located in spaced relation with the roll and beyond the backfall, said trough being located within the range of a portion of the pulp discharged by centrifugal influence from the periphery of the roll, and a deflector plate overhanging the path of discharged pulp and adjustable from above into intercepting relation with the centrifugally actuated pulp stream, a portion of which is received in the trough and conducted thereby beyond the beater engine.

1,817,750. POCKETBOOK MUFF. LOUIS LIPSCHUTZ and MICHAEL B. LIPSCHUTZ New York, N. Y. Filed Mar. 8, 1930. Serial No. 434,303. 3 Claims. (Cl. 2—66.)



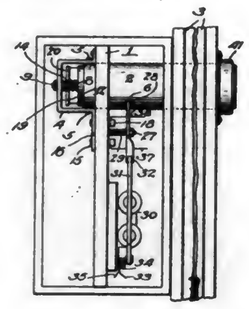
1. A pocket muff, comprising a muff having a horizontal passage extending from end to end for one's hands and pockets comprising a pocket adjacent said passage and accessible thru one of the sides of said muff, means for closing said pocket, and a pocket outside of said muff consisting of an element attached along its edges on the sides of the muff and including a flap extending over the entrance to the first pocket, means for holding said flaps closed, the material between the horizontal passage and the first pocket being formed with an opening for the purpose described, and means for holding said opening closed.

1,817,751. TOY. SIDNEY L. LONG, Minneapolis, Minn. Filed Jan. 13, 1930. Serial No. 420,438. 6 Claims. (Cl. 46—40.)



1. A toy comprising a standard surrounded by a helix, a lower rider mounted on said helix and adapted to gravitate from top to bottom thereof with a compound motion, an upper rider mounted on said helix, spacer means between said riders whereby said upper rider is supported above said lower rider, pivot members carried by said upper rider, and objects mounted on said pivot members, said objects having projections so disposed as to be struck successively by said lower rider to thereby give a swinging motion to said objects.

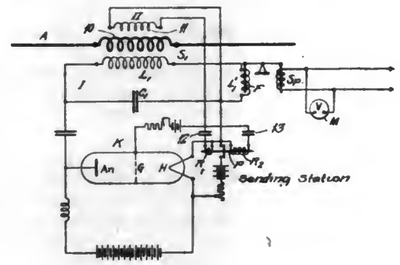
1,817,752. ELECTRICALLY OPERATED KEY CONTAINER. WILLIAM H. LOYTE, Swampscott, Mass. Refile for abandoned application Serial No. 261,116, filed Mar. 12, 1928. This application filed Jan. 20, 1930. Serial No. 422,242. 2 Claims. (Cl. 177—355.)



2. In a device of the class described, a plate, a tube open at both ends, mounted on the plate and long enough to project from the plate through the door casing of a building to the outside of the building, a bracket mounted on the plate and means for fastening the tube to the bracket, a lateral slot in the tube, a pin projecting laterally into a tube, a core within the tube and movably mounted on a post, a helical spring mounted on the post and normally exerting pressure on the bracket and core, a tube closed at one end and movably mounted in the first mentioned tube and having its open end projecting into the first mentioned tube and in contact with the core therein, a lateral slot near the open end of the inner tube, a longitudinal slot extending from the open end of the inner tube and diametrically opposite said lateral slot, a latch pivotally mounted on a post, so that an end of the latch

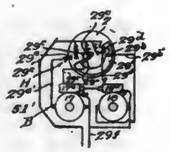
may enter the lateral slots in the tubes, a spring on the post and normally exerting pressure on the latch so as to hold the locking end thereof normally in the slots in the tubes, an electric relay, means for exerting pressure on the latch and withdrawing its locking end from the slots when the relay is electrically operated, and wires connecting contact studs on the relay with the electric circuit which operates a fire sprinkler system, as described.

1,817,753. SYSTEM FOR TRANSMITTING MOTION. WILHELM LÜHR, Halle, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 8, 1923, Serial No. 644,219, and in Germany June 21, 1922. 4 Claims. (Cl. 177—351.)



1. A system for transmitting motion comprising a cathode tube connected to operate as an oscillator, means for varying the frequency of the oscillations of said tube, receiving means responsive to the frequency of said oscillations, a switch in the heating circuit of said tube, operating coils for actuating said switch to open and closed positions respectively, said coils being connected in resonant circuits, and remotely disposed means for producing oscillations of different frequencies to selectively energize said coils so as to connect and disconnect the heating circuit of said tube as desired.

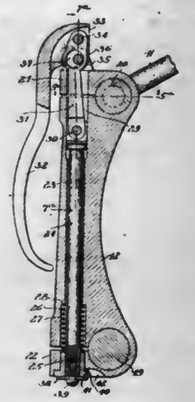
1,817,754. TRAFFIC SIGNALING SYSTEM. ALEXANDER J. MASSEY, Los Angeles, Calif. Filed June 25, 1923. Serial No. 647,666. 5 Claims. (Cl. 172—239.)



1. In combination, a pair of motors, a common load for the motors, and means for alternately connecting the motors to the load, including a circuit controller, separate from the load, and means for imparting motion thereto from the motors.

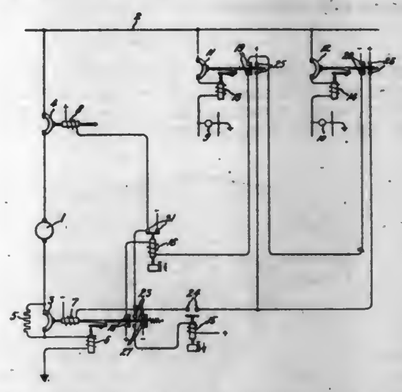
1,817,755. HEADREST. ADAM J. MAY, Rochester, N. Y., assignor to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y., a Corporation of Delaware. Filed Dec. 29, 1928. Serial No. 329,294. 19 Claims. (Cl. 155—177.)

1. In a head rest supporting structure, the combination of a pair of supporting members, one of which is arranged to swing relative to the other and having a part for holding it in fixed relation thereon and means on one of said members for operating said holding part comprising a toggle arrangement including relatively movable parts and a hand controlled element for effecting operation and release of the holding part, said element being



pivoted at one point upon said last mentioned member and pivotally receiving at a different point one of said relatively movable parts.

1,817,756. CONTROL SYSTEM. JACOB W. MCNAIRY, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 21, 1928. Serial No. 320,928. 9 Claims. (Cl. 175—294.)

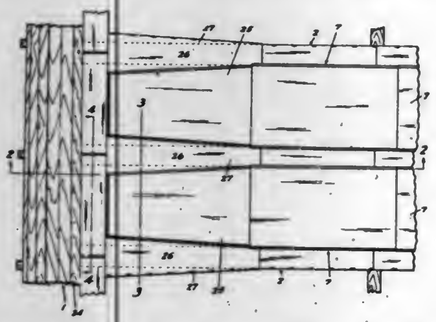


1. In combination, a source of current, a bus, a circuit breaker between said source and bus, current limiting means arranged to be inserted between said source and bus when said circuit breaker is open, a second circuit breaker between said source and bus, a feeder, a circuit breaker between said bus and feeder, means responsive to a fault on said feeder for opening said first mentioned circuit breaker and said feeder circuit breaker and for subsequently reclosing said first mentioned circuit breaker, and means responsive to a fault on said bus for effecting the opening of both of said circuit breakers between said source and bus.

1,817,757. APPARATUS FOR FORMING CONCRETE FLOORS. JOHN J. MORGAN, Columbus, Ohio. Filed Feb. 11, 1929. Serial No. 339,039. 6 Claims. (Cl. 25—131.5.)

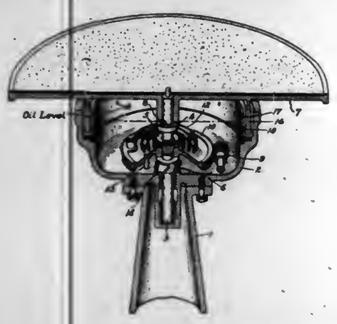
5. In apparatus of the character described, a framework, a plurality of parallel longitudinally extending transversely spaced metallic soffits supported horizontally by said framework, a plurality of metallic spacing de-

vices extending transversely between said soffits and adjacent said framework, said spacing members being of substantially U-shaped configuration and having the ends thereof provided with extensions arranged to overlap the walls of said soffit, the vertical walls of said spacing devices having the ends thereof engaged with the side adjoining walls of a pair of soffits, and metallic filler plates slidably received on said soffits adjacent said spacing members, said filler plates being adjustable longitudinally



of said soffits and having their top walls extending longitudinally of and resting upon the top walls of said soffits and their vertical downwardly directed side walls in converging relationship with the side walls of said soffits, the inner ends of the side walls of each of said filler plates being adjacent the opposite side walls of one of said soffits, the outer ends of said side walls being spaced equi-distant from the side walls of said soffit and engaging said framework.

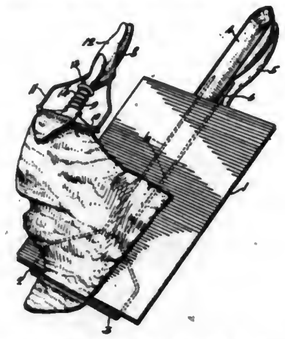
1,817,758. PHONOGRAPH APPARATUS. EDWARD W. MCSHEEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 20, 1929. Serial No. 408,590. 2 Claims. (Cl. 74—6.)



1. Phonograph apparatus comprising an enclosing casing having a portion forming an upwardly opening circular trough containing a viscous liquid, a shaft journalled in said casing, a turntable resting on said shaft having an integral downwardly extending concentric damping ring arranged to rotate in said trough, a driving gear on said shaft, and a spring connecting the driving gear and the shaft.

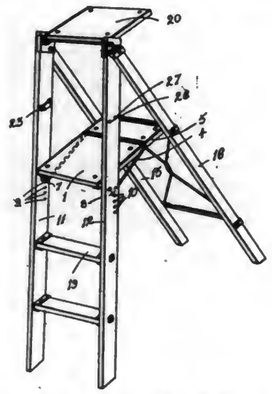
1,817,759. DIAPER WASHER. REBECCA O'CONNOR, Newark, Ohio. Filed Feb. 2, 1928. Serial No. 251,436. 9 Claims. (Cl. 68—29.)

1. In a washing device of the character described, a pallet having a clamping means adjacent to one end thereof, a handle projecting beyond the opposite end, and a separable clamping element normally positioned adjacent to the end of the pallet opposite the first mentioned clamping means having a handle portion extending beyond the



pallet and registering with the handle of the pallet whereby the handle of the clamping element and that of the pallet may be simultaneously grasped.

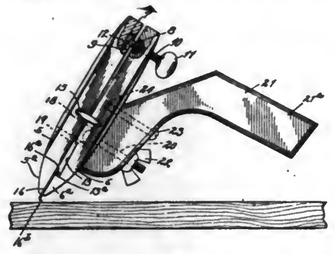
1,817,760. ADJUSTABLE AUTOMATIC FOLDING PLATFORM FOR STEP-LADDERS. SPENCER M. PETERS and ARTHUR B. ROCHESTER, Springfield, Ill.; said Rochester assignor to said Peters. Filed Mar. 27, 1929. Serial No. 350,336. 1 Claim. (Cl. 228—17.)



In a ladder construction of the character described the combination with a pivoted ladder member and supporting leg members pivotally connected at the top and a series of steps on said ladder member terminating short of the pivot ends; a bracket on said leg members, an adjustable automatic folding platform pivotally mounted on said bracket on said leg members and extending between the stiles of said ladder member folding up therewith when not in use and resting at the free end thereof in a horizontal plane on one of said steps when in operative position; a U bar extending pivotally through said platform between its pivoted end and free end and pivotally and detachably engaging said stiles of the ladder member; said last named stiles having aligned adjustment holes adapted to provide means for adjusting the pivotal relation of said ladder member and leg members when in normal use while still holding said platform in a horizontal position.

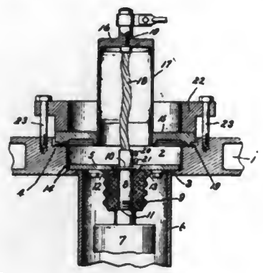
1,817,761. SCRAPER. WILLIAM POTTER, New York, N. Y. Filed Oct. 27, 1930. Serial No. 491,397. 4 Claims. (Cl. 145—47.)

1. A scraper comprising relative movable jaw members, a blade detachably supported within and between said jaw members, said blade having offset and curved side edges terminating in two continuous arc-shaped cutting edges, one of said jaw members being recessed adjacent the blade supporting end thereof to receive one of the cutting edges in clamping said blade within and between said jaw members with the other cutting edge dis-



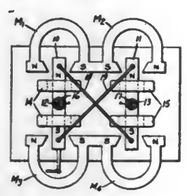
posed outwardly thereof, and the width of said recess being greater than the transverse dimensions of the blade whereby the entire blade may be placed in said recess between adjacent faces of said jaw members when not in use.

1,817,762. SEAL FOR MERCURY ARC RECTIFIERS. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 28, 1925. Serial No. 12,440. 8 Claims. (Cl. 250—27.5.)



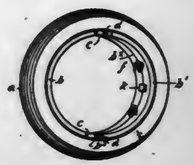
1. In a combination, a vapor electric device provided with an opening, an electrode, means for supporting said electrode, sealing means for said opening, said sealing means including a vitreous sleeve interposed between a pair of metal members, and a flexible cable extending between one of said metal members and said electrode.

1,817,763. MOBILE TORQUE DEVICE. ELLISON S. PURINGTON, Gloucester, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 7, 1930. Serial No. 434,068. 4 Claims. (Cl. 175—339.)



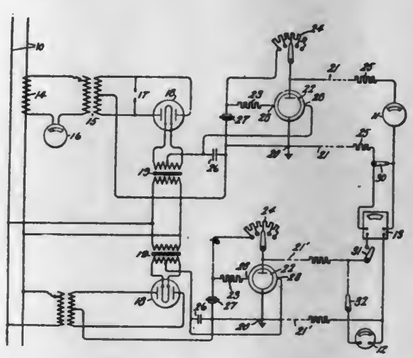
1. An electrical torque producing device comprising field forming means including magnetic members providing a plurality of spaced-apart poles, a plurality of balanced pivoted armatures mounted for movement in the field set up by said poles, a plurality of windings for effecting rotary movement of said armatures in opposite directions in said field, and means mechanically interconnecting said armatures to compensate the inertia effect thereof upon extraneous rotary movement of the device.

1,817,764. TIRE RIM. GEORGE CAIRD RAMSAY, Kingswood, Australia. Filed July 30, 1929, Serial No. 382,104, and in Australia Oct. 5, 1928. 1 Claim. (Cl. 301—35.)



A tire rim comprising a main part and a separable minor part, the minor part having dowels at its ends and the main part having sockets receiving the dowels, securing means intermediate the dowels comprising a slotted stud on the main part and a slotted stud on the minor part, a plate having apertures therein through which said studs are received, and a spring mounted on the plate by means of a stud thereon, said spring having legs adapted to fit into the slots of the first mentioned studs to prevent withdrawal of said studs from the apertures in said plate.

1,817,765. RECTIFIED CURRENT TELEMETERING SYSTEM. HAROLD B. REX, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 16, 1929. Serial No. 407,771. 9 Claims. (Cl. 171—95.)

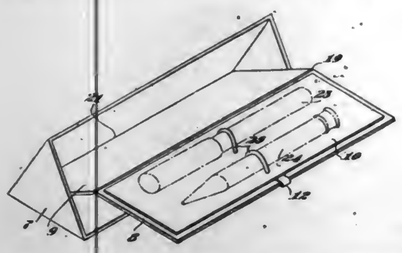


1. A telemetering system comprising a transformer supplied with alternating current, rectifying apparatus supplied by said transformer, a direct current measuring instrument, a circuit connected between the rectifying apparatus and instrument, means for protecting said circuit against voltages in excess of the normal rectified voltages comprising protective means connected across the circuit having characteristics permitting the initial passage of current only when the circuit voltage is in excess of the normal rectified voltages, and a protective resistance connected in said circuit between said protective means and rectifying apparatus.

1,817,766. DISPLAY BOX. RUSSELL I. RHODES, Jr., North Attleboro, Mass., assignor to The Mason Box Company, Attleboro Falls, Mass., a Corporation of Massachusetts. Filed Jan. 13, 1930. Serial No. 420,345. 6 Claims. (Cl. 206—44.)

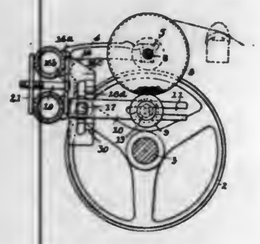
1. A container of the class described comprising a pair of complemental box elements, one of said elements constituting a reversible member movable to closed positions over an opening of the other box element with either of its sides alternatively exposed to view, and a hinge part

connected to one end of the reversible member and to the interior of the other box element, the hinge permanently interconnecting the box elements and being movable angularly of the container when the box elements



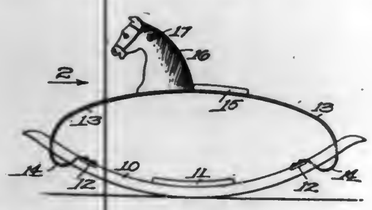
are swung relatively to each other to move the reversible member from one of said positions to the other, one side of the reversible member being adapted to display an article mounted thereon and said article being enclosed within the container when said member is reversed.

1,817,767. WINDING MACHINE. CHRISTIAN L. SAAL, Paterson, N. J. Filed Feb. 26, 1929. Serial No. 342,908. 1 Claim. (Cl. 242—39.)



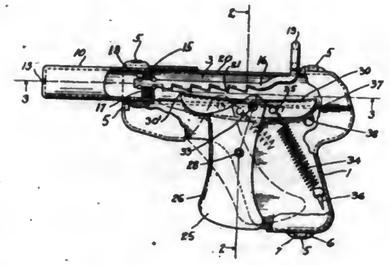
In a winding machine, an attachment for stopping rotation of a spool resting, with its axis horizontal, on a rotary driving member, including, in combination, a plate bent to substantially a right angle and having the wings formed both sides of its bend arranged in upright planes, one wing forming the supporting portion of the plate and the other having an upright slot, a flat strip bearing against the latter wing, means, penetrating the slot and strip, to secure the latter rigidly to the second wing, a bearing device secured to the second wing, and a spool-engaging roller journaled on the bearing device.

1,817,768. ROCKING HORSE. GRAFTON F. SARGENT, Fitchburg, Mass. Filed Jan. 31, 1930. Serial No. 424,906. 1 Claim. (Cl. 272—52.)



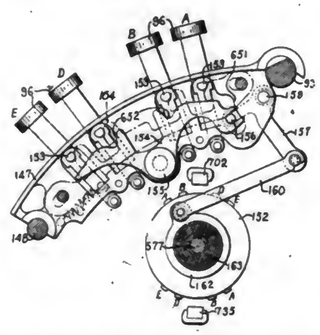
In a rocking horse, the combination of a pair of rockers, a pair of cleats near the front and rear ends connecting them together rigidly, a spring having an upper part extending downwardly at both ends under said rockers and then projecting upwardly and secured to said cleats, a seat mounted on the upper or convex portion of the spring and a handle rigidly mounted on the spring in front of the seat.

1,817,769. LIQUID GUN OR PISTOL. WILLIAM F. SCHMIDT, deceased, Detroit, Mich., by Selma Grill, administratrix, Detroit, Mich., assignor to All-Metal Products Co., Wyandotte, Mich., a Corporation of Delaware. Filed June 28, 1928. Serial No. 288,944. 9 Claims. (Cl. 42—56.)



3. A toy gun, comprising a gun structure provided with a hollow hand grip which is formed of spaced metal members, a trigger disposed in the hand grip and partly exposed for operation, said trigger having an aperture therein, and struck-in parts of the metal portions of the hand grip which are disposed in the aperture in the trigger to form a fulcrum for the trigger.

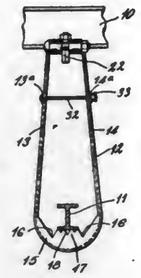
1,817,770. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Jan. 19, 1924, Serial No. 687,305. Divided and this application filed July 9, 1929. Serial No. 377,013. 2 Claims. (Cl. 235—2.)



2. In a machine of the class described, the combination with groups of spaced manipulative devices; and a settable element; of a shiftable member common to the respective groups of manipulative devices and operable thereby in one direction or the other to variable extents depending upon the manipulative device operated; means to connect the oppositely adjustable shiftable device and the settable element; and means to arrest the shiftable member at either of its extremes of travel, the shiftable member adapted to traverse a path which intersects the path of travel of certain of the manipulative devices and being recessed, the walls of which recesses are adapted to co-act with the associated manipulative devices to arrest the shiftable member at points intermediate its extremes of travel.

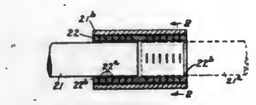
1,817,771. SNUBBER. HARRY E. SIPE, New York, N. Y. Filed July 1, 1927. Serial No. 202,817. 12 Claims. (Cl. 63.)

1. A snubber device for vehicles comprising a strap member extending between the axle and frame of the vehicle, means for supporting one end of said strap member, the other end of said strap member cooperating



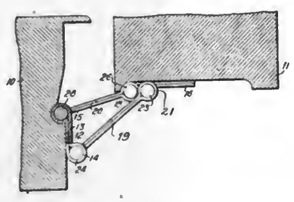
with a body of resilient material disposed between the strap member and one of said first named supports, and means for regulating the resiliency of the device.

1,817,772. TUBE AND PIPE COUPLING. HARRY E. SIPE, New York, N. Y. Filed Oct. 27, 1927. Serial No. 229,024. 10 Claims. (Cl. 247—25.)



1. A device for coupling the adjacent ends of electric conduit tubes and for completing the electric ground through said tubes comprising a metallic coupling sleeve, a coupling body of elastic material interposed between said tubes and said sleeve and involving metallic elements engaging the walls of said tubes and sleeve to complete the electric ground circuit therethrough, and said metallic elements being placed under compression in coupling the tubes together within said sleeve and coupling body to secure said tubes against displacement and to provide a sure ground connection.

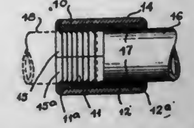
1,817,773. HINGE. HARRY E. SIPE, New York, N. Y. Filed Dec. 1, 1927. Serial No. 236,955. 4 Claims. (Cl. 16—163.)



1. A concealed hinge comprising two elongated butt members, one of said butt members having pintle bearings arranged and spaced longitudinally of one side edge thereof with the axis of one bearing offset with respect to the axis of the other bearing, the other butt having cylindrical bearings arranged at the opposite side edges thereof, elongated coupling links, each having bearings at the side edges thereof, the bearings of one link being coupled with one set of bearings on each of said butt members, and the bearings of the other link being coupled with the other set of bearings of said butt members by pintle pins.

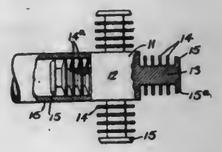
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1,817,774. TUBULAR COUPLING AND METHOD OF CONSTRUCTING THE SAME. HARRY E. SIPE, New York, N. Y. Filed May 2, 1928. Serial No. 274,390. 7 Claims. (Cl. 285—90.)



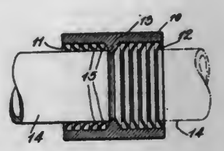
4. A pipe coupling of the class described comprising a coupling sleeve, a split tubular body of yielding material mounted within said sleeve and constituting a lining therefor, the inside diameter of said body being less than the outside diameter of the pipes to be coupled therewith, and one surface of said tubular body having a plurality of longitudinally spaced projecting members inclined in opposite directions at the opposite sides thereof and adapted to be flexed and to be placed under compression in the insertion of pipes into the opposite ends of said coupling in the operation of coupling said pipes.

1,817,775. METALLIC COUPLING DEVICE. HARRY E. SIPE, New York, N. Y. Filed June 20, 1928. Serial No. 286,926. 3 Claims. (Cl. 287—126.)



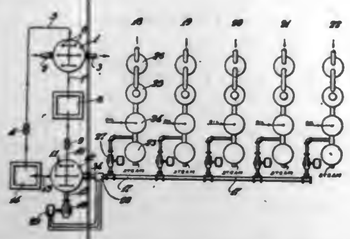
1. A coupling comprising a metallic pin member and a socket member, the pin having a forward guide portion of slightly less diameter than the internal diameter of the socket member and a plurality of spaced radial metallic fins on said pin situated inwardly from the guide portion and of normally greater diameter than the same and also of greater diameter than the internal diameter of the socket member, the pin adapted to be forcibly inserted into the socket member whereby the fins are flexed slightly to cause a substantial radial pressure against the inner wall of the socket member and thus resist outward movement, the guide portion forming a transverse support against the inner wall of the socket member to resist force tending to break the joint laterally.

1,817,776. COUPLING. HARRY E. SIPE, New York, N. Y. Filed Oct. 23, 1928. Serial No. 314,443. 3 Claims. (Cl. 285—163.)



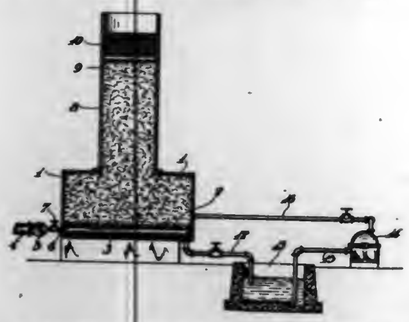
3. A coupling of the class described comprising a tubular body member, the bore of which is provided with inwardly projecting and longitudinally spaced, annular, flexible, metallic ribs having an inside diameter less than the outside diameter of a body to be connected to said coupling whereby when said coupling is forced onto said body, said ribs will yield inwardly with respect to the coupling to secure said body against displacement from the coupling, and said ribs being circumferentially continuous to form a seal between the coupling and said body.

1,817,777. GAS MANUFACTURING PROCESS AND APPARATUS. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Pennsylvania. Filed Aug. 5, 1926. Serial No. 127,287. 4 Claims. (Cl. 48—80.)



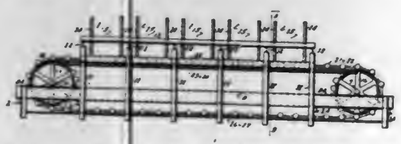
4. Apparatus for making carburetted water-gas comprising in combination, a water-gas generator adapted to contain a bed of solid incandescent fuel, a carburetter, an actifier, means for passing air through a fouled alkaline absorbent solution containing hydrogen sulphide in said actifier, means for delivering thereby fouled air from said actifier to the generator and carburetter to heat the same, means for introducing steam to said generator and oil to said carburetter, and means for co-ordinating passing of said air and said solution.

1,817,778. PROCESS FOR PURIFYING AIR CONTAINING HYDROGEN SULPHIDE. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed May 18, 1927. Serial No. 192,209. 2 Claims. (Cl. 23—4.)



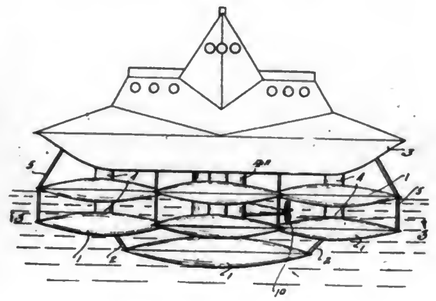
1. A process of treating air to remove hydrogen sulphide therefrom, which process comprises passing air containing hydrogen sulphide through a relatively deep layer of thick foam containing a suspension of a metallic compound in an alkaline solution which is adapted to react with the said hydrogen sulphide and remove it from the air, and maintaining the said compound in the said layer of foam while continuing the passage of hydrogen sulphide-containing air therethrough at a relatively low pressure.

1,817,779. VENEER SLICER. EMMET G. STACK, Marshfield, Oreg. Filed Feb. 7, 1929. Serial No. 338,275. 10 Claims. (Cl. 144—162.)



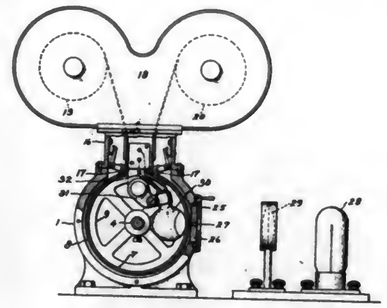
1. A veneer slicer having a traveling slicing arrangement comprising a horizontal, sectional-top, endless bed with one or more knives spaced between sections of said bed and forming a part of the top therewith, the top faces of said sections of bed following a knife being on the same plane as the top face of the knife, and the top faces of said sections of the bed preceding a knife being adjustable to a plane below the knife for the purpose of gauging the thickness of veneers it is desired to cut.

1,817,780. CONSTRUCTION IN WATER CRAFT. HENRY K. STACK, Portland, Oreg. Filed Oct. 24, 1929. Serial No. 402,175. 1 Claim. (Cl. 114—61.)



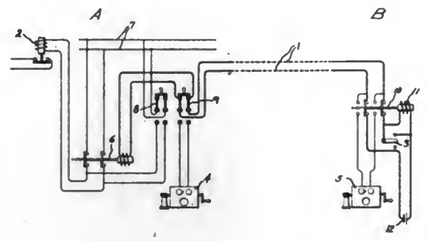
A watercraft comprising a hull, a main pontoon disposed centrally under the hull, pairs of pontoons of smaller dimension disposed intermediate between the hull and the main pontoon, said pontoons being in different planes and arranged so that the greatest vertical resistance is centrally of the watercraft, an engine carrying strut disposed immediately above the main pontoon and secured to the underside of the hull and adapted for, intercommunicating between the hull and the main pontoon, and a plurality of struts connecting the pontoons with each other and with the hull for maintaining the structure rigidly together.

1,817,781. SOUND REPRODUCING APPARATUS. OSCAR STEINER, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed July 5, 1927, Serial No. 203,358. Renewed Oct. 16, 1929. 8 Claims. (Cl. 179—1003.)



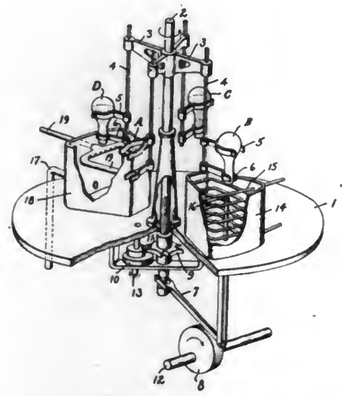
1. In apparatus for reproducing sound from a film record, a rotatable drum for supporting a record film having a circumferential opening therein adapted to be bridged by the film, said drum having means for securing together in fixed relation the parts thereof on opposite sides of said opening, and a photo-electric cell arranged to receive light passing through said opening and the film bridging the same.

1,817,782. SIGNALING SYSTEM. MICHIWO TANIGUCHI, Ebaragun, Tokyo-Fu, Japan, assignor to General Electric Company, a Corporation of New York. Filed Feb. 1, 1929, Serial No. 336,902, and in Japan Apr. 19, 1928. 6 Claims. (Cl. 177—352.)



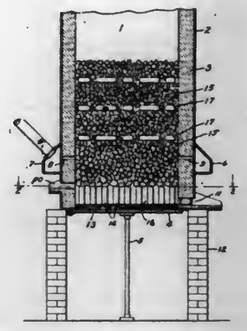
1. In combination, a dispatcher's station, a remote station, a line joining said stations, a control device in each station, a signal device in each station, switching means in each station for connecting said line alternately to the control devices and signal devices in the respective stations, and means responsive to operation of said switching means in one station to connect the line to the signal device in said one station and for operating the switching means in the other station over said line to connect the line to the signal device in said other station.

1,817,783. METHOD AND APPARATUS FOR INSIDE COATING BULBS. KEIJI TSUYUKI, Tokyo, Japan, assignor to General Electric Company, a Corporation of New York. Filed Sept. 30, 1927, Serial No. 223,147, and in Japan Oct. 30, 1926. 4 Claims. (Cl. 91—68.)



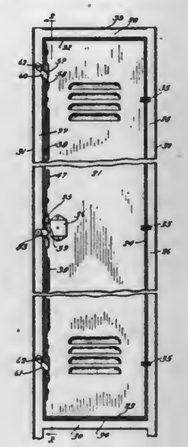
1. The method of temporarily coating a portion of the inside surface of a hollow glass article having one opening which consists in submerging the opening of the article to a pre-determined depth in a static pool of molten liquid coating material, venting the article through said opening to permit the molten material to rise in said article and thereby wet a pre-determined portion of its inner surface, cooling said article to convert the adherent material on the wetted surface into a solid protective coating and subsequently removing said coating.

1,817,784. APPARATUS FOR PRODUCING LOW CARBON IRON. IRVING R. VALENTINE, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 28, 1928. Serial No. 322,531. 3 Claims. (Cl. 266—25.)



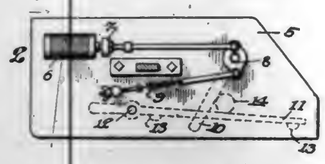
1. A cupola melting furnace employing solid carbonaceous fuel to melt the charge, said furnace comprising a hearth, refractory means mounted on said hearth and adapted to support said carbonaceous fuel out of contact with the molten metal, and means for supplying a blast of air to said carbonaceous fuel.

1,817,785. LOCKER. WALTER N. VANCE, Chicago Heights, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Sept. 14, 1928. Serial No. 306,064. 15 Claims. (Cl. 70—14.)



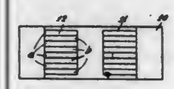
1. The combination with a door frame, of a locker door, a bar movable relatively to the door and adapted by movement in one direction to effect an opening movement of the door and by movement in the reverse direction to permit locking of the door, bar keepers mounted on the door frame for cooperation with said bar and engaging the latter on the closing movement of the door to shift the bar into position permitting locking of the door and to promote outward movement of the door on release of the bar for movement in the reverse direction, and a door-locking mechanism including a locking bolt movable into position for retaining the bar in shifting position and adapted when released to release the bar for movement tending to open the door.

1,817,786. TARGET THROWING DEVICE. EDWARD VAN ANTWERP, White Bear Lake, Minn. Filed July 1, 1929. Serial No. 375,135. 4 Claims. (Cl. 124—8.)



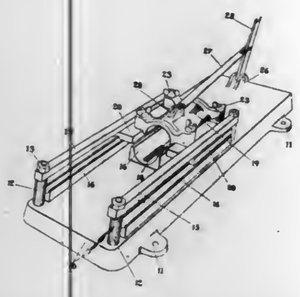
2. In a target throwing trap, energized electromagnetic means operating a discharge arm, said arm returnable to loading position by a flexible element substantially as described.

1,817,787. MAGNET SYSTEM FOR CONVERTING ELECTRICAL INTO MECHANICAL ENERGY OR INVERSELY. ROELOF VERMEULEN and AREND THOMAS VAN URK, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 1, 1929, Serial No. 404,169, and in the Netherlands Nov. 13, 1928. 4 Claims. (Cl. 175—339.)



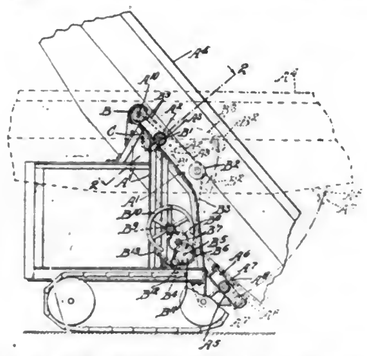
1. A pole piece for a magnet system for the interconversion of electrical and mechanical energy comprising laminations of different alloy compositions.

1,817,788. PRINTING MACHINE FOR GOLF BALLS AND THE LIKE. HERMAN WISNER VORBECK, Grand Junction, Colo. Filed Apr. 30, 1929. Serial No. 359,240. 3 Claims. (Cl. 101—39.)



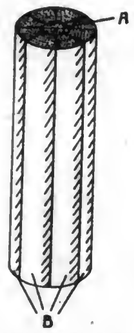
1. In combination, a base provided with a groove adapted to receive a ball for rolling movement, the bottom of said groove being provided with a slit for receiving and supporting a line of type, a grooved carriage having a spring pressed portion for compressing the ball against the type at a uniform pressure, means for adjustably varying the pressure of said carriage against the ball, spring means opposing the pressure of said carriage against the ball, and means for moving said carriage over said base in a lengthwise direction of the groove thereon to roll the ball over the line of type.

1,817,789. CONTROL MECHANISM FOR CRAWLER LOADER BOOMS. FERDINAND F. WAECHTER and LOUIS F. SNYDER, Philadelphia, Pa., assignors to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 25, 1928. Serial No. 249,231. 22 Claims. (Cl. 37—190.)



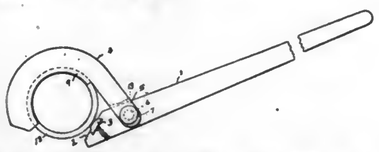
1. In a material handling device, an inclined track, a boom pivotally and longitudinally movable therealong, means for moving the boom upwardly along a track and for angularly displacing it, said means being operative to angularly displace the boom only when it is in its extreme downward position.

1,817,790. ANCHORING PLUG. EDWIN JAMES WHIFFEN, Mount Vernon, N. Y. Filed Mar. 18, 1929. Serial No. 348,049. 2 Claims. (Cl. 72—105.)



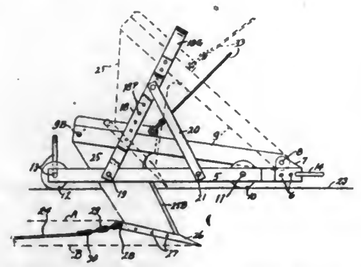
1. A plug, made of stranded fibrous material and a cement, and having a solid core less firm than the outer portion.

1,817,791. TOOL JOINT TONG. TODD P. WILLIAMS, Houston, Tex. Filed Apr. 15, 1929. Serial No. 355,341. 2 Claims. (Cl. 81—98.)



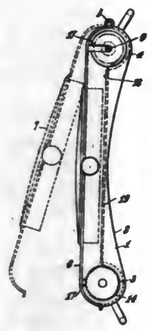
1. A tong for application to a pipe whose sections are connected by an enlarged coupling, said tong including a handle, an engaging jaw at one end thereof, a clamp pivoted to the handle and formed with an arcuate engaging face, an inwardly extending projection carried by said clamp adjacent said face and provided to rest on the upper end of said coupling when the tong is applied to the pipe, means for limiting the movement of the handle relative to said engaging face so that the maximum opening between said jaw and face is less than the diameter of said coupling which will prevent the passage of said coupling through said opening.

1,817,792. CABLE LAYER. CLEMENT A. YARES, St. Paul, Minn. Filed June 26, 1929. Serial No. 373,904. 1 Claim. (Cl. 111—5.)



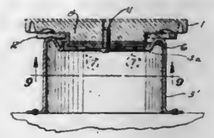
In a cable layer of the class described having a main wheel supported elongated frame with draft means at its front central part, a plow beam pivotally secured in proximity to said draft means and oscillatable in a vertical plane within said frame, an auxiliary frame mounted upright on the main frame intermediate its ends and an inverted U-shaped guide in said auxiliary frame in which the plow beam is guided; said plow comprising a soil shearing plate fixed in the beam and extending downwardly therefrom, the front edge of said plate comprising a cutting edge, a subsoil path cutter for a cable comprising a forwardly directed tapered bar fixed to the lower edge portion of said shearing plate and extending rearwardly of the said plate and means on said rear end for connecting a cable thereto, and said beam guide of the upright auxiliary plane provided with pairs of horizontally registering holes in its arms arranged linearly in each arm, and a gage pin insertible in said holes at selective heights and above the plow beam for the purpose described.

1,817,793. MEMORANDUM DEVICE. OSCAR AEBI and ROGER DINICHERT, Murten, Switzerland. Filed May 6, 1930, Serial No. 450,302, and in Switzerland July 13, 1929. 2 Claims. (Cl. 281—9.)



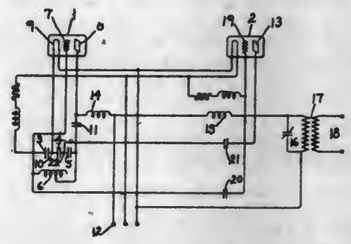
1. A memorandum device of the character described, comprising a hollow body portion provided with sides and inwardly curved back, rollers mounted between the sides for carrying a note band, a platen disposed in said body midway between the back and front to support the note band between the rollers, and a cover mounted to close over the front of the body to provide space for the reception of a watch.

1,817,794. FASTENING FOR HUB CAPS, RADIATOR CAPS, AND GASOLINE TANK CAPS. DWIGHT M. ANDERSON and ARTHUR W. MCNEISH, East Cleveland, Ohio. Filed Sept. 21, 1929. Serial No. 394,336. 4 Claims. (Cl. 220—40.)



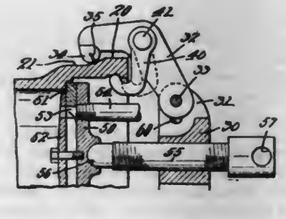
1. The combination with a neck having a recessed flange, of a cap fitting upon the neck and having flat springs pivoted thereto and adapted to be entered through the recesses and slidable outwardly to engagement behind the flange by turning the cap.

1,817,795. AMPLIFYING SYSTEM. PAUL D. ANDREWS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 11, 1928. Serial No. 269,147. 6 Claims. (Cl. 179—171.)



1. The combination in an amplifying system of an electron discharge grid control amplifier, an oscillation generator having an oscillation circuit comprising an inductance and a plurality of series connected capacities connected between a control grid and an anode, a connection from the grid of the amplifier to a point in said oscillation circuit and a connection from the anode of the amplifier through a coupling capacity to a point in said oscillation circuit separated from the first point by a pair of said capacities.

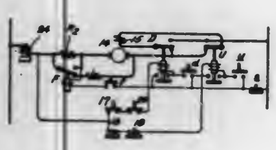
1,817,796. PIPE CLOSING DEVICE. ASHLEY M. ARNOTT, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 18, 1929. Serial No. 415,010. 4 Claims. (Cl. 137—76.)



1. A pipe closing device comprising a frame, a plurality of clamping arms pivoted in spaced relation on said

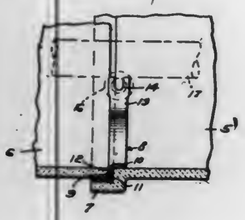
frame and engaging an outer surface of said pipe, dogs pivoted to said arms and engaging an inner surface of said pipe, a closure for said pipe, and means on said frame for seating said closure against an end surface of said pipe.

1,817,797. MOTOR CONTROL. ISAAC F. BAKER, East Orange, N. J., assignor to General Electric Company, a Corporation of New York. Filed July 27, 1927. Serial No. 208,874. 4 Claims. (Cl. 172—179.)



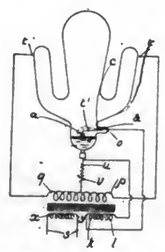
1. In a system of motor control, an electric motor, and controlling means therefor including a pair of directional switches, means including a pair of separately operable manually-operable controlling switches and connections controlled thereby for effecting operation of the motor in either direction when the corresponding one of said controlling switches is momentarily operated and the stopping of the motor when the other controlling switch is subsequently operated, and switching means for controlling the stopping of said motor at the will of the operator, said switching means being connected so that the motor after being stopped by the subsequent operation of said other switch cannot be restarted until said switching means is operated.

1,817,798. PIPE SUPPORT. LOUIS L. BARR, Greenville, S. C., assignor to L. L. Barr Co., Greenville, S. C., a Partnership composed of Louis L. Barr, James M. Russell, and Julius M. Barr. Filed Dec. 12, 1929. Serial No. 413,634. 2 Claims. (Cl. 137—75.)



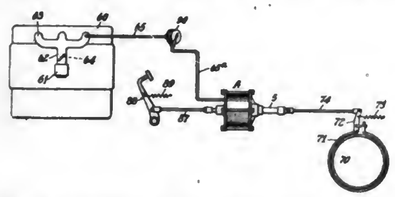
1. A device for supporting pipes or the like in underground conduits comprising a generally U-shaped supporting member which is substantially L-shaped in cross section to afford horizontal and vertical flanges extending throughout substantially its entire length, the vertical flange being adapted to engage between the ends of adjacent conduit sections and the horizontal flange being adapted to engage the inner wall of one conduit section and offset laterally from the meeting ends of the conduit sections, said horizontal flange having generally vertical slots formed in its upper ends, a rod inserted within said slots and held thereby so that its ends are offset laterally from the meeting ends of the conduit and a roller carried by the rod.

1,817,799. RECTIFIER AND LIKE DEVICE BASED UPON THE USE OF MERCURY VAPOR. ANDRÉ BECQ, Paris, France, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Mar. 5, 1926, Serial No. 92,529, and in France Mar. 14, 1925. 6 Claims. (Cl. 175—354.)



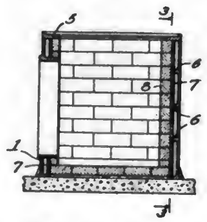
1. In a mercury vapor rectifier, the combination of a two-metal thermostatic support fixed only at one of its ends, an auxiliary arc starting electrode fixed to the other end of said support and auxiliary arc-starting circuit means to supply heating currents to said support.

1,817,800. BRAKE MECHANISM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Jan. 20, 1927. Serial No. 162,233. 7 Claims. (Cl. 188—152.)



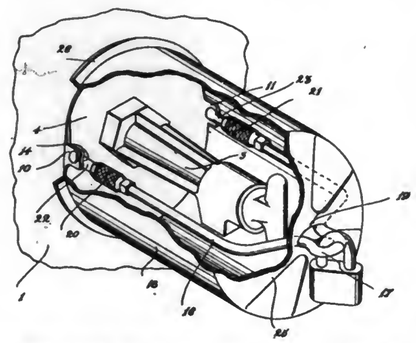
4. In an automotive vehicle, the combination with an actuator operable upon differentials of fluid pressure and including a cylinder and a piston therein, controlling valve mechanism, means normally acting to hold said valve mechanism in position to submerge the piston in vacuum when in normal position, and means acting independently of the valve mechanism for submerging the piston in higher pressure when said piston is in normal position, together with means for operating the valve mechanism and causing the same to coact with said independently acting means to maintain the piston submerged in atmosphere when the valve mechanism is operated.

1,817,801. COMBUSTION CHAMBER. GEORGE A. BRYAN, Peru, Ind., assignor to Bryan Steam Corporation, a Corporation of New Mexico. Filed June 11, 1929. Serial No. 369,982. 2 Claims. (Cl. 110—86.)



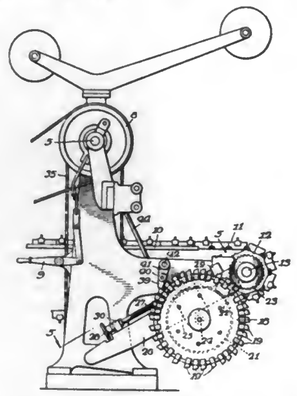
1. A combustion chamber adapted to co-operate with a steam generating unit comprising an inner heat refractory lining, a heat insulating lining in contact with the outer surface of said heat refractory lining, and an outer wall consisting of a plurality of flat metal plates secured together and having spacing cleats on their inner surfaces and an inwardly extending flange at their upper edges said flange extending over the upper edges of the heat insulating and heat refractory linings.

1,817,802. FAUCET LOCK AND COVER. EARL E. COOPER, Decatur, Ill., assignor to Chambers, Bering, Quinlan Co., Decatur, Ill., a Corporation. Filed May 11, 1929. Serial No. 362,307. 9 Claims. (Cl. 70—125.)



1. A faucet lock and cover for container faucets, comprising in combination a collar engaged by a faucet on the container, a yoke pivoted to said collar and a slotted cover engaging the yoke and collar; said yoke having an end loop extending through said slot in the cover to receive a padlock through the loop outside the cover.

1,817,803. STAPLING MACHINE. EDWARD CRAIG, St. Joseph, Mich., assignor to Saranac Automatic Machine Corporation, Benton Harbor, Mich., a Corporation of Delaware. Filed Jan. 23, 1928. Serial No. 248,586. 13 Claims. (Cl. 1—8.3.)

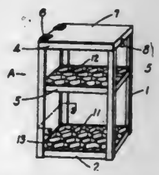


1. In stapling machinery, a plurality of staplers, an overhead actuating shaft therefor, in combination with work feeding means for intermittently feeding the work under the staplers, a continuously operating friction driving connection for communicating power and motion to said feeding means, driven from the overhead stapler actuating shaft, and motion-converting mechanism between said friction driving connection and said work feeding means, said mechanism having means operative to convert the continuous motion of said driving means into intermittent motion of said feeding means.

1,817,804. PROCESS FOR THE PURIFICATION OF BENZENOID HYDROCARBON OILS. PAUL DAMM, Hindenburg, Germany, assignor to The Koppers Company, a Corporation of Delaware. Filed Aug. 30, 1930, Serial No. 479,084, and in Germany July 16, 1926. 10 Claims. (Cl. 196—40.)

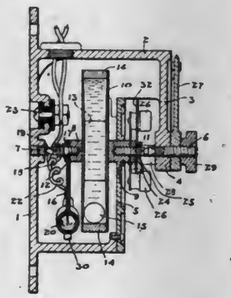
2. The process of refining a benzenoid hydrocarbon oil which comprises agitating the oil with sulphuric acid of from 60° to 65.5° Baumé to effect the conversion of materials originally present in the oil as impurities to products of higher boiling points, and then freeing the resultant products of conversion from the acid while in contact with the oil in such manner that substantially all of said products of conversion re-dissolve in the oil in unobjectionable form.

1,817,805. METALLIC CRATE. ARTHUR E. DAVENPORT, Maywood, Ill. Filed Apr. 5, 1929. Serial No. 352,810. 3 Claims. (Cl. 220—21.)



1. In a metallic shipping crate, a frame structure, spacing means rigidly mounted in a horizontal plane within said frame structure for maintaining in spaced relationship a plurality of vertically disposed substantially cylindrical bottles which are adapted to be contained within the crate, said spacing means being formed to comprise a plurality of thin, relatively flat angularly bent metallic strips relatively joined to provide bottle receiving pockets, each having a plurality of angular side walls, the said pockets being separated by a single thickness of resilient metal, the angular formation of the walls of said pockets being such that bottles positioned in adjoining pockets engage with the common wall between said pockets at points spaced longitudinally of said common wall, whereby said wall is permitted to flex between the bottle engaging portions thereof in response to handling forces.

1,817,806. TIME CONTROLLED ELECTRIC SWITCH. RUDOLF D. DELAMERE, Toronto, Ontario, Canada, assignor to Delamere and Williams, Toronto, Canada. Filed June 28, 1928. Serial No. 289,056. 12 Claims. (Cl. 200—33.)



2. A time controlled electric switch, comprising a pivotal member, an electric contact member carried by said pivotal member, a fluid filled tube mounted diametrically on said pivotal member and adjustable relative to said contact member in a direction circumferentially of said pivotal member and having a constricted central portion with diverging outer end portions and a weight of slightly

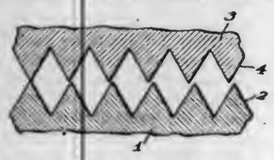
smaller diameter than the central constricted portion adapted on the setting of said tube to move rapidly inward from the end in the diverging portion and to move slowly on reaching the constricted central portion said weight effecting the tilting and return of the cylindrical member and said electric contact member on reaching the opposite diverging end portion.

1,817,807. ELECTRIC SWITCH. FRANK C. DE REAMER, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Aug. 16, 1929. Serial No. 386,471. 5 Claims. (Cl. 200—68.)



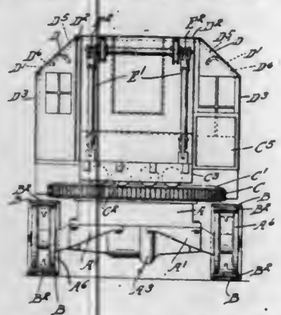
1. In a switch, the combination of a base containing cross cavities, contacts adjacent a side wall of one of the cavities, a contact member in said cavity, an actuating spring therefor, a rocking actuator located in the other cavity which as it moves back and forth over the member permits the spring to snap the member to its respective positions, and a cover for the base which also forms a pivotal support for the actuator and holds the spring under compression.

1,817,808. METHOD OF MAKING TIGHT THREADED JOINTS. GEORGE M. EATON, Pittsburgh, Pa., assignor to Spang Chalfant & Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1930. Serial No. 496,949. 6 Claims. (Cl. 29—148.)



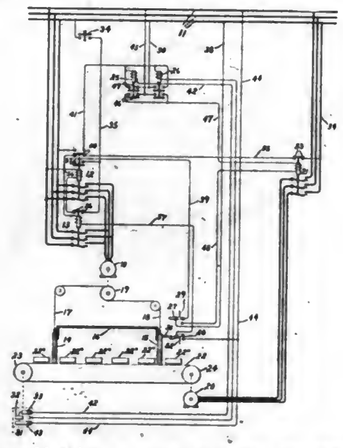
1. The method of making a drill pipe for oil wells comprising the steps of cutting external screw threads on the end of a piece of pipe, cutting internal threads in the end of a tool joint of pitch somewhat less than the pitch of the threads on the pipe, heating the tool joint to expand the threads therein to substantially the pitch of the threads on the pipe, screwing the tool joint on the pipe with low torque to avoid damaging the threads, and cooling the tool joint to shrink it into firm engagement with the pipe.

1,817,809. EXCAVATING MACHINE. ASGER EILERSGAARD, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 13, 1928. Serial No. 246,429. 5 Claims. (Cl. 296—1.)



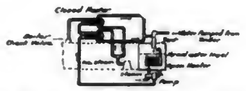
1. In a portable machine, a working platform, a cab supported upon and enclosing it having generally vertical walls and a generally horizontal top, the top and the walls adjacent the upper longitudinal corners of the cab comprising separate panels, one panel hinged to the top, the other hinged to the wall and means for holding the panels in intersecting relation to form the corners of the cab, means for disconnecting the panels and rotating them inwardly to bring the roof panel into parallelism with and overlying the wall panel to provide a continuous closure for the cab when in the collapsed position.

1,817,810. MOTOR CONTROL SYSTEM. ROGER F. EMERSON, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1929. Serial No. 355,884. 14 Claims. (Cl. 263—8.)



1. In combination, a motor arranged for operation in both directions of rotation, a second motor arranged for operation only in one direction of rotation, and interlocking control circuits for said motors for effecting operation of said second motor only between respective operations of said first motor, first in a given direction and then in the reverse direction.

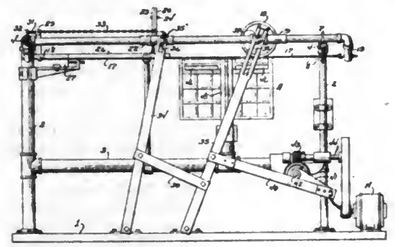
1,817,811. FEED-WATER HEATING SYSTEM FOR LOCOMOTIVES. GEORGE H. EMERSON, Baltimore, Md. Filed July 17, 1926. Serial No. 123,185. 8 Claims. (Cl. 122—441.)



1. A locomotive feed-water casing; means for supplying preheated feed water thereto; steam operated means for propelling the feed water from said casing; and a tubular condenser positioned in the feed water contained in said casing, said condenser having an inlet opening connected to receive the exhaust steam from said propelling means and also provided with an outlet positioned to discharge into said casing.

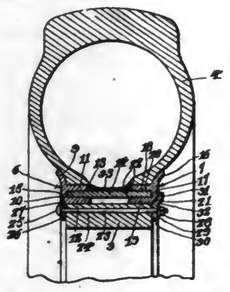
1,817,812. PRINTING MACHINE. FRANK E. FOWLER, Athens, Ga. Filed Nov. 19, 1930. Serial No. 496,759. 5 Claims. (Cl. 101—212.)

1. A device of the class described comprising a supporting frame, a channel shaped pan supported by the frame, a tank at one end of the pan, a brush slidably supported in the frame and entering the tank at the end of its rearward movement and passing from the tank over the pan to apply liquid to the bottom of the pan, a printing roller slidably supported in the frame and moving over the pan at the rear part of its backward movement and at the forward part of its forward movement, means for sliding the brush carrying member and the printing roller, means for rotating the roller during its sliding movement, and



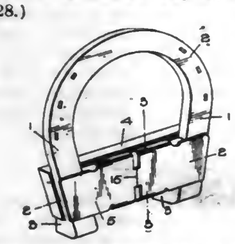
means for supporting an object to be printed in the frame where it will be contacted by the printing roller after the same leaves the pan.

1,817,813. DEMOUNTABLE RIM. DOUGLAS B. GENTRY, Crozet, Va. Filed June 5, 1930. Serial No. 459,273. 1 Claim. (Cl. 152—21.)



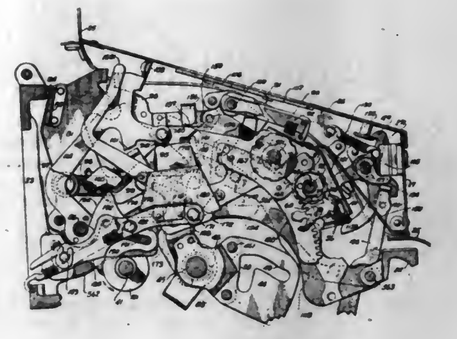
A demountable sectional tire retaining rim formed of a pair of oppositely disposed, circular, spaced opposed like parts of channel shaped contour in transverse cross section adapted to encompass and having their radially inwardly facing surfaces directly seating against a felly of a wheel and with the open ends of the channels provided by said parts facing each other, said parts projecting laterally beyond the sides of a felly, each of said parts having a tire retaining flange on the channel base and being beveled at the radial inwardly portion of the latter to provide for the abutting and overlapping of the bases of the channels by clamping means carried by the felly to retain the rim in position, and an annulus having one side extending into and permanently secured in one of said channels and its other side extending into and detachably engaging in the other of said channels, said annulus of a width corresponding to the width of that of the felly and permanently spaced from the latter by said parts.

1,817,814. HORSESHOE. BERTRAM PARROTT GRAY, Birmingham, England. Filed Mar. 27, 1930, Serial No. 439,396, and in Great Britain May 29, 1929. 11 Claims. (Cl. 168—28.)



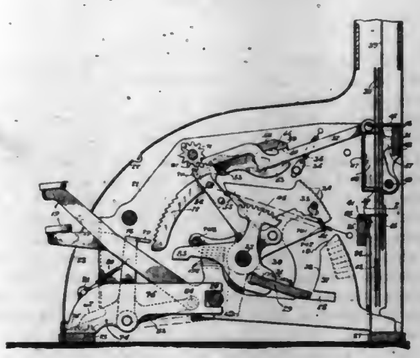
9. In combination, a horseshoe having downwardly projecting heel pieces, a wearing pad extending entirely across the heel part of the shoe in advance of and abutting against said heel pieces, and a resilient plate attached to the upper surface of said pad and extending transversely between the heel ends of said shoe.

1,817,815. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Aug. 25, 1924. Serial No. 733,999. 36 Claims. (Cl. 235—130.)



1. In a cash register, the combination with a printing totalizer comprising a plurality of totalizer elements, a movable printing frame movable over the totalizer elements for effecting printing impressions therefrom, a guard attached to the printer frame normally shielding the totalizer elements while said elements are not protected by said printing frame, and a cam carried by the guard for controlling the resetting of the totalizer when the printing frame is in its normal position.

1,817,816. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Dec. 19, 1927. Serial No. 241,046. 15 Claims. (Cl. 235—25.)



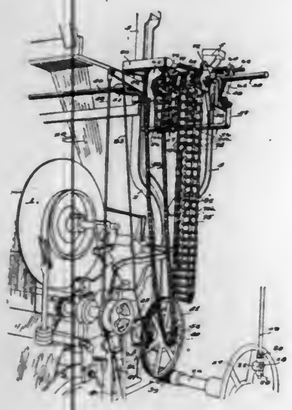
1. In a cash register, the combination of an indicator having a stem, said stem being provided with two oppositely disposed projections, and a coil spring carried by said projections.

1,817,817. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Original application filed Apr. 13, 1927, Serial No. 183,392. Divided and this application filed Nov. 15, 1928. Serial No. 319,469. 13 Claims. (Cl. 235—26.)



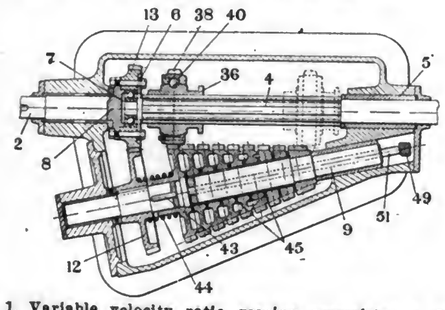
1. In a cash register, the combination with a group of keys, a series of key stops adapted to prevent the depression of more than one key in the group, each key stop being formed with a T-shaped end, supporting means upon which a portion of said T-shaped ends is adapted to rest, thereby permitting free suspension of said key stops.

1,817,818. JACQUARD TYPE LOOM. ERNEST HALL, Fairfax, Ala. Filed Jan. 6, 1930. Serial No. 418,924. 7 Claims. (Cl. 139—325.)



1. In a Jacquard loom, a needle board, a continuous chain of pattern cards comprising complete series of opposite end border pattern cards and an interposed single weave unit set of intermediate body pattern cards, a card cylinder over which said chain of cards is trained and which is movable toward and from the needle board and is rotatable step by step to present successive cards to said needle board, means for reciprocating said cylinder toward and from the needle board, means selectively positioned to engage and impart step by step rotatory movement to said cylinder in reverse directions during the reciprocations thereof, and controlling mechanism therefor, controlling pattern mechanism coordinated with said card chain and including a sprocket gear driven in timed relation to the loom lay, a chain trained thereover and movable thereby, a second and independently rotatable sprocket gear and a multiplier pattern chain trained thereover, means for imparting step by step movement of the second sprocket gear and its multiplier chain in determinate ratio to the movement of the primary chain and means carried by said multiplier pattern chain and positioned thereon in coordination with said card chain and operative at coordinated points in the weaving cycle, for positioning said cylinder rotating means to effect continuous step by step rotation of the cylinder in one direction to draw a series of end border pattern cards thereover and present successive cards of said series to the needle board in continuity to the extent of said series of border cards and until said single weave unit set of cards passes to said cylinder, for then automatically positioning said cylinder rotating means to effect step by step rotatory movement of the cylinder in alternately reverse directions successively to present to the needle board, by reversal, successive cards of the body weave unit set in repetition for the duration of the full intermediate body pattern weave, and at the end of said body weave, and operative automatically to position said cylinder rotating means to resume continued step by step rotation of the cylinder in the first named direction to draw the cards of the next succeeding border pattern series thereover for successive presentation of the needle board.

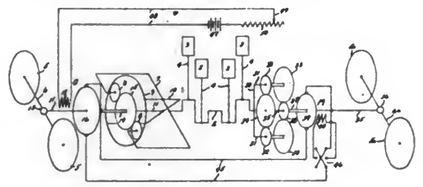
1,817,819. VARIABLE VELOCITY RATIO GEARING. FRANCIS JEREMIAH HEALEY, London, England. Filed Apr. 7, 1930, Serial No. 442,353, and in Great Britain Apr. 11, 1929. 8 Claims. (Cl. 74—58.)



1. Variable velocity ratio gearing comprising a driving shaft and a driven shaft arranged in line, a pinion on said driving shaft, a hollow lay shaft, a toothed wheel on said hollow lay shaft engaging said pinion, on said lay shaft a plurality of conical toothed wheels of different diameters each having teeth such as are formed on a conical blank by a gear shaper adapted to generate spur wheels by the employment of a rack or cylindrcal cutter in which the conical blank is set up in the shaper at an inclination with respect to the direction of reciprocation of the cutter equal to one half of the angle at the vertex of the cone, a one way clutch between each of said conical toothed wheels and its adjacent wheel, a rod extending into the hollow lay shaft, means on said rod engaging the largest of the conical toothed wheels thereon, a spur pinion on said driven shaft adapted to engage any of the said conical toothed wheels, a permanent driving connection between said largest conical toothed wheel, and the hollow lay shaft, a screw threaded spindle provided with means engaging said spur pinion, means for rotating the screw threaded spindle, a cam on the screw threaded spindle, a plunger actuated by said cam, a two armed pivoted lever, one of the arms of said lever engaging the plunger and the other of said arms engaging the rod within the hollow lay shaft adapted on rotation of the screw threaded spindle to be oscillated, and to advance the rod in the hollow lay shaft thereby moving said largest conical toothed wheel axially along said hollow lay shaft, and interrupting the driving connection between said driving and driven shafts.

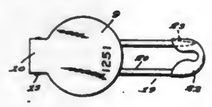
1,817,820. POWER TRANSMISSION MEANS. FRANK R. HIGLEY, Cleveland Heights, Ohio. Filed May 31, 1930. Serial No. 458,135. 21 Claims. (Cl. 180—49.)

4. In combination with engine means, differential means having a pair of differentially related output elements and an input element in driven relation with said engine means, generator means in driven relation with one of said output elements, a second differential means having an output element and a pair of input elements, with one of its



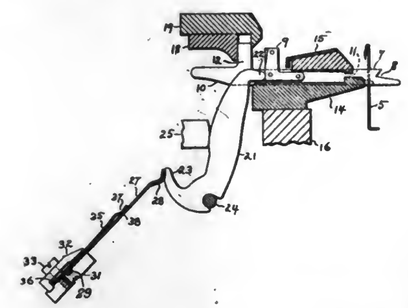
said input elements in driven relation with said engine means, motor means in driving relation with the other of said pair of input elements, means providing driving association of said generator means with said motor means, and means for controlling the generator output.

1,817,821. LAUNDRY DEVICE. HENRY HIRSCH, Jersey City, N. J. Filed Oct. 18, 1930. Serial No. 489,677. 3 Claims. (Cl. 40—195.)



1. A device of the character described embodying a receptacle having a side opening and adapted to removably contain an apertured disc-like member, said receptacle also presenting an open end portion, a spring-tensioned closure member for said open end portion and a post positioned within said receptacle and adapted to be inserted in the aperture of said disc-like member after the closure member is opened by said disc-like member.

1,817,822. KNITTING MACHINE. ALFRED HOFMANN, Palisade, N. J. Filed June 12, 1930. Serial No. 460,643. 10 Claims. (Cl. 66—110.)



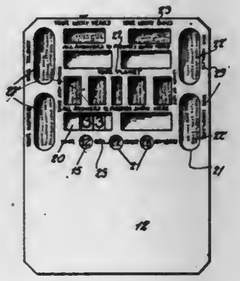
5. In a knitting machine of the kind referred to, in combination with the series of sinker jacks, the series of long-shank jack springs, one for each jack, arranged to apply resilient pressure upon the jacks, and thereby upon the sinkers, and a supporting bar holding the butt ends of all the jack springs, a longitudinal contact member, arranged to contact upon the shanks of all the springs, at a point between their held and free ends, to modify and render uniform the yielding resistance of the jacks and sinkers.

1,817,823. MEDICAL MOXA HEATER. KINITSU ITO, Imaise, Japan. Filed Feb. 7, 1930. Serial No. 426,613. 2 Claims. (Cl. 128—254.)



1. A moxa heater comprising an external tube open at one end and formed with a disc at the other end, having an aperture in its central portion and a telescopically slidable moxa stick holder, formed with spring plates adapted to contact with and press against the interior surface of the external tube, and having spring tongues adapted to hold an adjustable moxa stick, the aperture in the disc being in alignment with the axis of said stick.

1,817,824. MAGIC CARDS AND PLANETARY CALCULATOR. GEORGE JAKOPEC and JOSIP SAMU, Chicago, Ill. Filed Dec. 31, 1929. Serial No. 417,742. 2 Claims. (Cl. 273—161.)



1. In a device of the kind described, a plurality of sheets adapted to be superimposed and including a base sheet having blocks of numbers arranged in rows at each end with the numbers at one end inverted with respect to the numbers at the other end, eliminating sheets having openings arranged to expose selected numbers in said blocks, certain of the eliminating sheets having numbers beside certain of said number exposing openings, a reading sheet having openings therein at one end corresponding in size and position to the blocks of numbers at each end of the base sheet and calculated planetary inscriptions on the reading sheet whereby fortunes may be told to persons according to their age.

1,817,825. CHAIN HOOK. GUSTAF JOHNSON, Duluth, Minn. Filed Jan. 2, 1931. Serial No. 506,091. 2 Claims. (Cl. 24—237.)

1. A substantially S-shaped chain hook, the loops of which are elongated in parallelism, one being shorter than

the other, and further characterized by the shorter loop being permanently and slidably adjustably attached to



one end of the chain and the free arcuate end of the hook terminating substantially in a plane with the axis of the shorter bight.

1,817,826. METHOD OF MAKING GOBLETS AND SIMILAR ARTICLES. WILSON EARL KEE, Philadelphia, Pa. Filed Apr. 17, 1930. Serial No. 445,054. 6 Claims. (Cl. 49—84.)



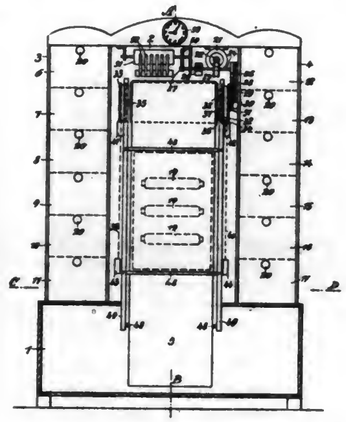
4. The herein described method of making a goblet consisting in laterally enlarging a portion of a glass tube to provide a bowl and stem, in heating an annular portion of the stem near the bowl and in subjecting such portion to an inward pressure through the medium of the flame directed thereagainst at an angle to its axis and inclined in the direction of the bowl and in subjecting such portion to a transverse strain acting in the direction of the axis of the stem and away from the bowl, to separate the stem from the bowl and provide walls closing the bowl and stem, in melting out the wall of the bowl through the medium of the flame, in fusing the stem and its wall to the bowl, and in flanging the stem outwardly to provide a base.

1,817,827. LIGHTING PLANT FOR AIR-PORT LANDING PLACES. VÁCLAV KOLÁŘ, Modrany, near Prague, Czechoslovakia, assignor to the Firm Ceskomoravska-Kolben-Danek Company Limited, Prague, Czechoslovakia. Filed Aug. 27, 1930, Serial No. 478,179, and in Czechoslovakia Jan. 9, 1930. 8 Claims. (Cl. 240—1.2.)



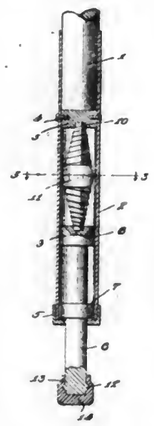
1. Illuminating plant for the landing places of air ports, comprising a plurality of radiation units marking the boundary of the landing place, and a source of light adapted to direct beams of light towards the said radiation units, each radiation unit comprising a refracting prism, a mirror system adapter to receive a broad beam of light from the source of light and make it converge to a focus, and a second mirror located in the neighbourhood of the said focus and adapted to deflect the light diverging therefrom towards the refracting prism.

1,817,828. ADVERTISING APPARATUS. WILHELM KUCZORRA, Berlin, Germany. Filed May 29, 1930, Serial No. 457,297, and in Germany Feb. 1, 1928. 6 Claims. (Cl. 40—101.)



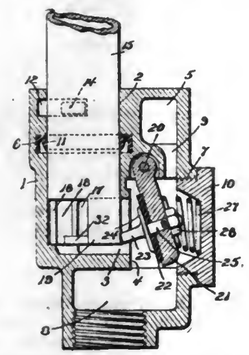
1. An advertising apparatus, comprising, in combination with a casing and with mirrors which are transparent when being illuminated from behind, an advertising band and means for moving it in intervals, showchambers provided in said casing; lamps for illuminating said band from behind and for illuminating the interior of said chambers; switching means so designed that the said band and the said chambers are illuminated alternately in such a succession that the band is illuminated after a number of chambers has been illuminated, and means for continuing and repeating this succession, said mirrors being arranged in front of a definite portion of the said band and in front of the said chambers.

1,817,829. CRUTCH ATTACHMENT. WILLIAM H. LANNING, Tuckahoe, N. Y. Filed Mar. 7, 1930. Serial No. 434,058. 1 Claim. (Cl. 135—50.)



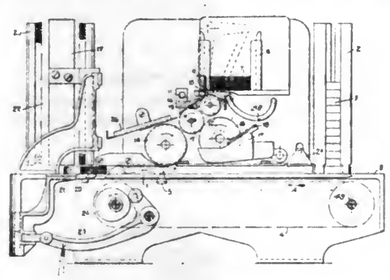
In a device for the purpose set forth, a sleeve designed to receive the end of a stick or crutch therein, a disc fixed in the sleeve against which the end of the crutch or stick contacts, a cap nut screwed on the outer end of the sleeve, a plunger having a portion received in the sleeve and movable through the cap nut, a shoulder on the plunger to contact with the cap nut to limit the outward movement of said plunger, a head on the inner end of the plunger, said head and said disc having alining depressions and a compression helicovolute spring having its ends received in said depressions.

1,817,830. QUICK COUPLING VALVE DEVICE. WILLIAM J. MCJANNET, Seattle, Wash., assignor to Economy Irrigation Company, Inc., Seattle, Wash., a Corporation of Washington. Filed Aug. 13, 1930. Serial No. 475,035. 10 Claims. (Cl. 284—19.)



1. In a valve device, a casing having an inlet chamber and an outlet chamber and a valve controlled passage separating said chambers, said passage having a valve seat, a fluid pressure seated valve mounted in said casing to engage said seat, and a quill insertible into said outlet chamber and means operable on rotation of said quill for unseating said valve to open said passage, the axis of said valve seat lying transversely with respect to the axis of said quill.

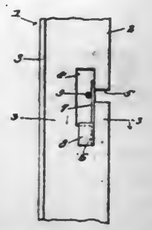
1,817,831. MACHINE FOR SEALING CONTAINERS. WALTER EVERETT MOLINS and JOHN WALKER CHALMERS, Deptford, London, England. Filed July 23, 1928, Serial No. 294,845, and in Great Britain Aug. 10, 1927. 9 Claims. (Cl. 216—55.)



1. In a machine for applying bands to packets, the combination with a gumming roller, of means for delivering bands to said roller, means for receiving the gummed bands from the roller and presenting the same to a packet, and separate means for preventing the delivery of more than one band nt a time to said last named means.

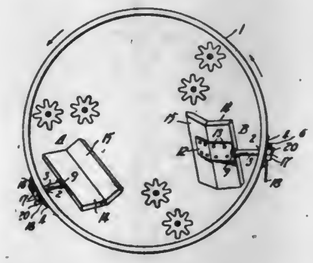
1,817,832. FENCE POST. HARRY NIELSEN, Askov, Minn. Filed May 14, 1931. Serial No. 537,402. 5 Claims. (Cl. 256—56.)

1. A fence post of the character described having an opening therein for the reception of a fence wire and further having a slot therein for the passage of the wire into the opening from one side of the post, said post still further having a slit communicating with the opening, and a keeper mounted on the post for retaining a wire in the opening, said keeper comprising a resilient tongue having



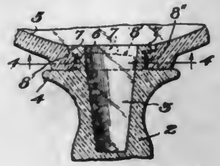
an end portion disposed in the slit, and integral flanges on said one end portion of the tongue disposed on opposite sides of the post for retaining the tongue in position.

1,817,833. CHURN. JOSEPH O'CONNELL and HAROLD HAMILTON KERR, Kensington, Victoria, Australia. Filed Dec. 17, 1927, Serial No. 240,890, and in Australia Jan. 24, 1927. 3 Claims. (Cl. 31—33.)



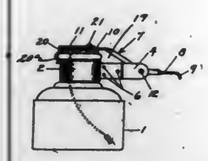
2. In a churn, the combination of a horizontal rotary drum, butter working members mounted in the drum adjacent the periphery thereof and extending parallel to the axis of the drum, and a straight shallow troughlike butter receiving plate mounted in the drum near each end thereof in fixed relation to the working members and inclined in opposite directions relative to said axis, whereby said plates upon rotation of the drums receive butter from said members and move it longitudinally in opposite directions.

1,817,834. CANDLE HOLDER. WILBER L. ORME, Cambridge, Ohio. Filed Jan. 27, 1931. Serial No. 511,582. 5 Claims. (Cl. 67—23.)



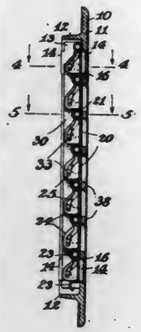
2. A candle holder composed of a member having a candle receiving socket, an outwardly extending sconce seat carried by the member in encircling relation to the socket, said socket having a tubular extension projecting above the seat, a sconce having an open center to receive the extension, one of said two last named elements having a series of radial lugs and the other having complementary latching projections formed to have dual wedging engagement with the lugs whereby upon relative rotation of the extension and sconce the latter will be forced against the seat and also wedged against lateral movement.

1,817,835. ATTACHMENT FOR DRAFTSMEN'S INK BOTTLES. JAMES R. PARRISH, Nashville, Tenn. Filed July 10, 1930. Serial No. 467,082. 10 Claims. (Cl. 120—57.)



1. In a device of the character described, a resilient bottle gripping element, an arm oscillatably supported by said element, a cap carried by said arm and adapted to be positioned over the mouth of the bottle when the arm is oscillated to one direction, and an ink dipping arm carried by the cap for extension into the bottle.

1,817,836. REGISTER. JOSEPH V. PETRELLI, New Rochelle, N. Y. Filed Nov. 25, 1929. Serial No. 409,464. 5 Claims. (Cl. 98—107.)



1. A register or analogous appliance comprising a cast metal frame including a flange surrounding an aperture, and slat supporting strips of sheet metal lying against the flange at opposite sides of the aperture and provided with ears, the frame having socket formations into which the ears are bent to retain the strips in place.

1,817,837. FASTENING DEVICE. NOEL J. POUX, Meadville, Pa., assignor to Lion Fastener Inc., Meadville, Pa., a Corporation of Delaware. Filed July 11, 1929. Serial No. 377,357. 3 Claims. (Cl. 24—205.)



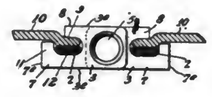
1. A separable fastener comprising stringers, each stringer comprising a web, and a rib along the edge of said web and only on one side of the web, said rib comprising a cord and a pocket having a wall extending from the web and surrounding the cord and a line of stitches through the wall of the pocket and the web parallel to the edge and interlocking members secured on said stringers along said rib.

1,817,838. SEPARABLE FASTENER. NOEL J. POUX, Meadville, Pa., assignor to Lion Fastener Inc., Meadville, Pa., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 392,784. 1 Claim. (Cl. 24—205.)



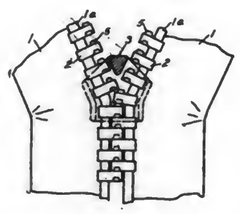
A separable fastener comprising opposing series of interlocking members adapted to swing successively into locking position, a side of each member having a semi-hexagonally-shaped cavity and a projection semi-hexagonally shaped in section, the cavity opening through the edge of the member and the cavity receiving a projection and the projection extending into a cavity of an opposing member.

1,817,839. SEPARABLE FASTENER. NOEL J. POUX, Meadville, Pa., assignor to Lion Fastener Inc., Meadville, Pa., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 392,785. 25 Claims. (Cl. 24—205.)



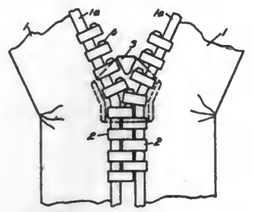
1. A separable fastener comprising stringers; interlocking members secured to the stringers, the strips formed on the faces of the stringers by said members in interlocking relation being narrower at one side of the stringers than the other, and a slider having confining plates connected by a separator between which the members pass, the plate engaging the narrower strip formed by said members being narrower than the opposing plate.

1,817,840. SEPARABLE FASTENER. NOEL J. POUX, Meadville, Pa., assignor to Lion Fastener Inc., Meadville, Pa., a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,179. 6 Claims. (Cl. 24—205.)



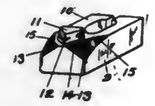
1. A separable fastener comprising opposing series of interlocking members adapted to be swung into interlocking position, each member having a three-sided projection on one face and a three-sided recess on the opposite face, the recesses being adapted to receive the projections, the three side walls of the projections confronting the three side walls of the recesses receiving the projections.

1,817,841. SEPARABLE FASTENER. NOEL J. POUX, Meadville, Pa., assignor to Lion Fastener Inc., Meadville, Pa., a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,180. 5 Claims. (Cl. 24—205.)



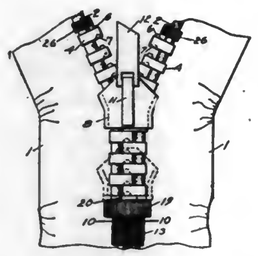
1. A separable fastener comprising opposing series of interlocking members adapted to swing into interlocking position, each member having a three-sided projection and a three-sided recess adapted to receive a similar projection of an opposing series the three side walls of the projection confronting the three side walls of the recess receiving the projection, said members of the opposing series having their projections and recesses arranged in the same relation to the free ends of the members, the members of both series being interchangeable.

1,817,842. SEPARABLE FASTENER. NOEL J. POUX, VIRGIL H. HALL, and PATRICK H. CROWE, Meadville, Pa., assignors to Lion Fastener, Inc., Meadville, Pa., a Corporation of Delaware. Filed Oct. 17, 1929. Serial No. 400,403. 9 Claims. (Cl. 24—205.)



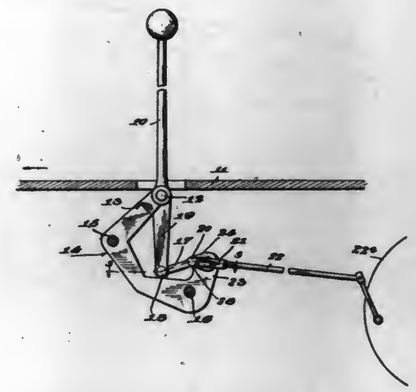
1. A separable fastener having a series of interlocking members, each member of the series having a straight-sided projection with a narrow nose toward the free end of the member and a socket receiving a projection of an adjacent member, the members each being beveled at each side of the nose of the projection.

1,817,843. SEPARABLE FASTENER. NOEL J. POUX, Meadville, Pa., assignor to Lion Fastener Inc., Meadville, Pa., a Corporation of Delaware. Filed June 6, 1930. Serial No. 459,456. 15 Claims. (Cl. 24—205.)



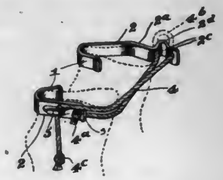
11. In a separable fastener, the combination of stringers having opposing interlocking members on the stringers adapted to swing into and out of locking engagement; a slider operating the members; and a stop for the slider formed of a mass of stitching in the stringers.

1,817,844. BRAKE OPERATING MECHANISM. WATSON PURCELL, Coleman, Tex. Filed Aug. 26, 1930. Serial No. 477,886. 8 Claims. (Cl. 74—39.)



1. In a brake operating mechanism, a hand lever, a knuckle lever, a link connecting one end of said hand lever and said knuckle lever, a brake, and an actuating rod for said brake being pivotally connected to said knuckle lever, the pivotal point of the brake actuating rod and knuckle lever being moved to a position past the dead center of the fulcrum point of said knuckle lever when the brakes are in set position.

1,817,845. COW HOPPLE. JOHN REICHERT, Racine, Wis. Filed May 24, 1928. Serial No. 280,294. 7 Claims. (Cl. 119—128.)



1. A hopple including a near leg hook; a far leg hook having openings therein; and an elongated rope anchored at an end to the near hook and extending therefrom to and returning from the far hook, said rope extending through said openings in the far hook and thereby forming a return bend in said rope confined to said far hook with a running fit, whereby longitudinal pull on the free return length of the rope will draw the animal's legs on which the hooks are fitted toward each other with a block and tackle action, said near hook having means for quick attachment and release of the return rope length free end.

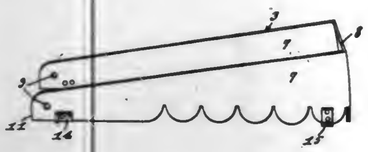
1,817,846. STORAGE BATTERY. WILLARD L. REINHARDT, East Cleveland, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed June 18, 1928. Serial No. 286,495. 9 Claims. (Cl. 136—26.)

1. A lead-acid type of storage battery plate having an expander composed chiefly of humic acid incorporated therein.

1,817,847. FOLDING METALLIC AWNING. FRANCIS J. RICHARDSON, New Orleans, La. Filed Sept. 27, 1930. Serial No. 484,872. 2 Claims. (Cl. 156—43.)

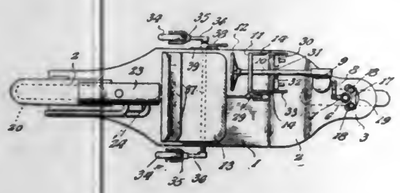
1. An awning comprising a plurality of metallic sections pivotally connected for telescopic relation with each

other, means rigidly mounting one of the end sections, a stop carried by the other end section, and the intermedi-



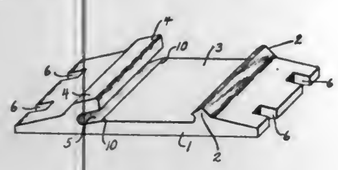
ate sections having cut away portions to form shoulders to be engaged by the stop for collapsing the sections one within the other.

1,817,848. MOTOR VEHICLE. WALTER G. ROGERS, Leavenworth, Kans. Filed Mar. 12, 1930. Serial No. 435,339. 2 Claims. (Cl. 180—30.)



1. A motor vehicle comprising a platform, a traction wheel at the rear of said platform, a mud guard for the rear wheel, a front wheel, forks for the front wheel pivotally carried by said platform, steering mechanism carried by said platform and operatively connected with said forks, a driver's seat resting upon said platform intermediate the length thereof with its back spaced forwardly from the rear wheel, a motor upon said platform between the seat and rear wheel, a fuel tank disposed over said motor longitudinally of the platform with its rear end supporting upon the rear mud guard, a support for the front end of the fuel tank carried by the back of said seat, and motor controls extending upwardly through the platform in front of said seat.

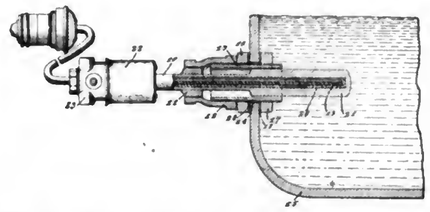
1,817,849. RAIL TIE PLATE. ALFRED F. SCHUPP, Joliet, Ill. Filed Apr. 23, 1930. Serial No. 446,650. 1 Claim. (Cl. 238—304.)



A rail tie plate including a flat bed for the base of the rail, a shoulder on one side of said bed having a groove adapted to receive one flange of the rail, a downwardly inclined surface on one side of said bed extending parallel to said groove and defining a fulcrum at the juncture of said surface with said bed, and a ledge overhanging said inclined surface and forming with said surface a slot adapted to receive the other flange of the rail.

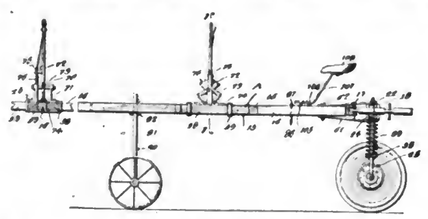
1,817,850. HEATER. ALFONS P. SCHWALBACH, Elderon, Wis. Filed Feb. 8, 1930. Serial No. 435,623. 1 Claim. (Cl. 219—38.)

A heater for the crank cases of motor vehicles comprising a tubular member having an interior heating coil and extended for an appreciable portion of its length within said crank case, a boss carried at an appropriate point in the length of the tubular member without the crank case, a reducer fitting carried by the boss, an adaptor sleeve telescopically associated with the tubular member and adjustably connected with the adjacent end



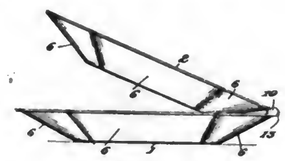
of the reducer fitting, jam nuts arranged at intervals upon the adaptor sleeve having contacting engagement with opposite sides of the crank case wall circumferentially of the opening therein, and said tubular member being substantially enlarged from a point across the opening in the wall of the crank case and inwardly therefrom.

1,817,851. SPRING TOOTH AND SPRING DISK HARROW. WILLIAM M. SHELTON, Orchid, Va. Filed Feb. 25, 1930. Serial No. 431,207. 13 Claims. Cl. 55—30.)



1. A harrow comprising a main beam, a clevis carried by the rear end of the beam, a tubular pole detachably connected with the clevis, laterally extending harrow beams swivelly mounted on the pole, bracing means interposed between said harrow beams and said main beam and implement carrying arms connected with the harrow beam.

1,817,852. DISPLAY BOX FOR WATCHES. EDWARD C. SLOAN, Geneva, Ill., assignor to Elgin National Watch Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 11, 1930. Serial No. 481,263. 3 Claims. (Cl. 206—44.)

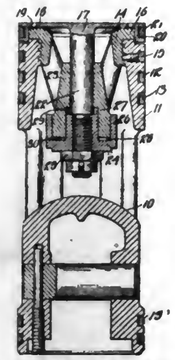


1. A display box or case comprising two tray shaped members having oppositely beveled or inclined outer ends and a universal hinged connection therefor at two adjacent points to permit of one of said members to be adjusted in two display positions.

1,817,853. VALVED PISTON. NORMAN M. SMALL, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Sept. 22, 1930. Serial No. 483,691. 6 Claims. (Cl. 230—221.)

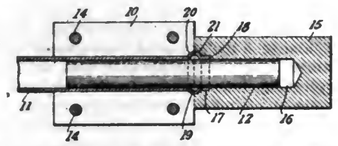
1. A valved piston comprising a piston head, a valve seat attached thereto and having axial fluid inlet ports

therethrough, a valve on said seat having a depending portion fitting about the periphery of said valve seat, said valve having a sealing ring engageable with the cylinder



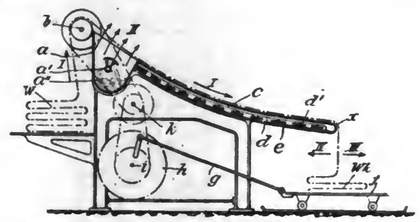
walls to cause the valve to be moved from and to fluid closing position upon movement of the piston, substantially as set forth.

1,817,854. PROCESS OF PRODUCING COUPLING FLANGES. JOHN SORENSEN, Ravenna, Ohio. Filed June 11, 1929. Serial No. 370,083. 2 Claims. (Cl. 153—79.)



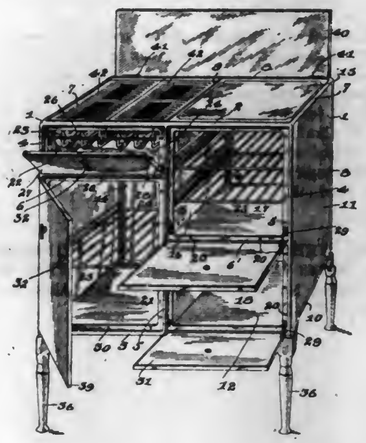
2. The process of producing a coupling flange on a soft metal pipe which comprises placing in the end of the pipe to be flanged a plug of a diameter substantially that of the interior of the pipe, fastening the pipe and the plug in a die, with the part of the pipe to be flanged protruding and with the plug protruding from such part, confining the protruding portion of the pipe against outward deformation at a point spaced from the die, forcing the confined portion of the pipe longitudinally with respect to the plug toward the die, to bulge out the portion of the pipe between the confined portion and the die, and confining the bulged out portion to shape the flange.

1,817,855. METHOD OF AND APPARATUS FOR SHRINKING CLOTH OR CLOTH GOODS. MAX SPUHR, Werden-on-the-Ruhr, Germany. Filed Sept. 28, 1929, Serial No. 395,911, and in Germany Oct. 3, 1928. 2 Claims. (Cl. 26—48.)



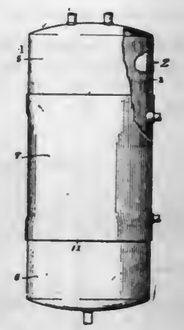
1. Apparatus for shrinking cloth, cloth goods or the like, including a steam box having an inclined opening at one end of the top thereof, a feeding roller at the upper end of the inclined opening of the steam box, an inclined heating and shrinking plate carried with the top at the lower edge of the inclined opening of the steam box, and the edges forming the opening of the steam box aligning with the upper surface of the shrinking plate and being curved so as to form a concave face.

1,817,856. CABINET GAS STOVE AND RANGE. JACOB TELLER, Chicago, Ill., assignor to Teller Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed Feb. 12, 1930. Serial No. 427,805. 5 Claims. (Cl. 126—39.)



1. In a gas range, a skeleton frame having a front section including a plurality of vertical and horizontal elements defining a number of compartment openings, and providing a plurality of door frames for said compartments, each of said elements formed of flanged structural metal embodying a forwardly extending thin flange and perpendicular oppositely disposed rear flanges and doors for said openings, adapted to seat within said frames, said doors being co-extensive in thickness with the width of said forwardly extending thin flange, and adapted to rest when closed against the said perpendicular flanges, whereby the outer faces of said doors are flush with the outer face of said skeleton frame.

1,817,857. STEEL JACKETED COPPER BOILER. ALBERT H. TRAGESER and LOUIS HASSINGER, New York, N. Y. Filed Oct. 20, 1928. Serial No. 313,770. 4 Claims. (Cl. 220—66.)

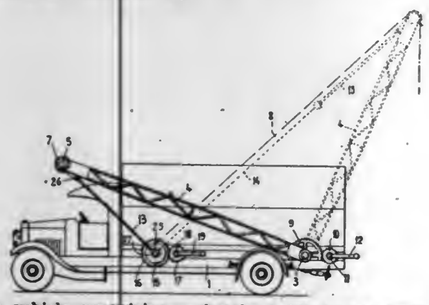


1. A steel jacketed copper boiler, comprising a copper boiler and a steel jacket therefor, said steel jacket being formed of a plurality of pieces welded together and the boiler being formed of a plurality of copper pieces welded together, the line of welding of the copper boiler being out of alignment with the line of welding of the steel jacket, the walls of said steel jacket being uninterrupted whereby the jacket will provide an even support over the entire surface of said copper boiler including the ends thereof.

1,817,858. METHOD OF PRODUCING ALKALI METAL PHOSPHATES BY CONVERTING FERROPHOSPHORUS WITH ALKALI METAL SULPHATES. FRITZ ULLMANN and JOSEPH BRESLAUER, Geneva, and EGIL LIE, Chevres, near Geneva, Switzerland. Filed July 20, 1929, Serial No. 379,876, and in Germany July 24, 1928. 6 Claims. (Cl. 23—106.)

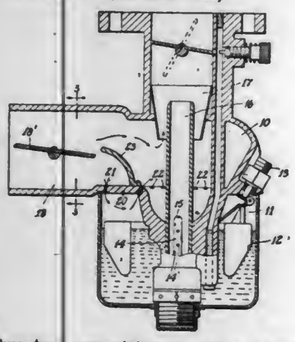
1. A method of producing alkali metal phosphate from ferro-phosphorus, comprising heating ferro-phosphorus with alkali metal sulphate in the presence of a carbonaceous reducing agent in the proportion of approximately one part by weight of ferro-phosphorus, approximately two parts by weight of alkali metal sulphate, and approximately .06 part by weight of such reducing agent until reaction takes place, and separating alkali metal phosphate from the resulting product.

1,817,859. VEHICLE WITH LOAD LIFTING MEANS. CARLO COHEN-VENEZIAN, Turin, Italy. Filed May 21, 1930, Serial No. 454,438, and in Italy May 28, 1929. 1 Claim. (Cl. 212—8.)



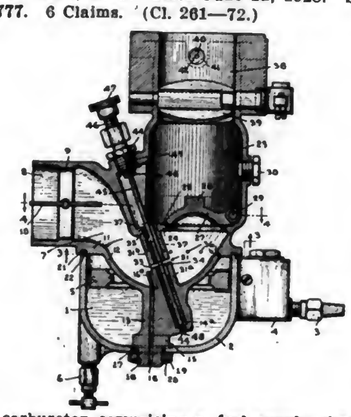
A vehicle comprising a chassis, a transverse shaft rotatable in said chassis adjacent one end of the same, arms having one end solid with said shaft, means interconnecting the free ends of said arms, means for actuating said shaft to oscillate said arms from and to a position along said vehicle chassis to and from a position overhanging said vehicle chassis end, structs having one end pivoted on said interconnected arms and their other end releasably anchored on said vehicle chassis, extensible means connecting the last named ends of said struts with said vehicle chassis, and load lifting means provided on said vehicle and cooperating with said interconnected arms.

1,817,860. CARBURETOR. GEORGE WAHNISH, New York, N. Y., assignor of one-fourth to Charles M. Bleecker, New York, N. Y. Filed Nov. 30, 1926. Serial No. 151,667. 7 Claims. (Cl. 261—72.)



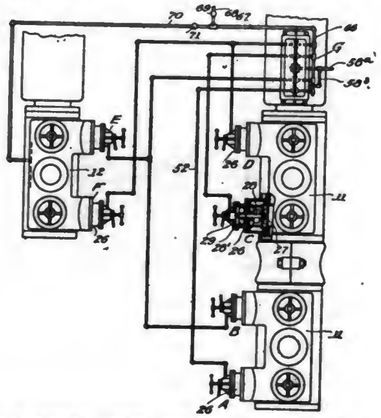
1. A carburetor, comprising a casing affording a carbureting chamber and air supply duct thereto, a fuel chamber associated with said carbureting chamber, and means for delivering fuel therefrom into said carbureting chamber, permanently unobstructed communications being provided between the said air duct and fuel chamber and between the latter and the carbureting chamber whereby air is diverted through the vapor space at the fuel chamber so that a mixture of fuel and air will be delivered to said carbureting chamber for mingling with the raw liquid fuel delivered from the fuel chamber.

1,817,861. CARBURETOR. GEORGE WAHNISH, New York, N. Y., assignor of one-fourth to Charles M. Bleecker, New York, N. Y. Filed June 12, 1928. Serial No. 284,777. 6 Claims. (Cl. 261—72.)



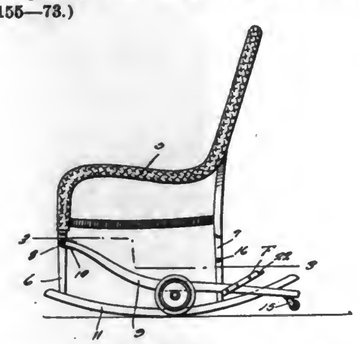
1. A carburetor comprising a fuel supply chamber, an air inlet chamber adjacent said fuel supply chamber, a mixing chamber communicating with said air inlet chamber, an aspirating tube communicating at one end with said fuel supply chamber and discharging at the other end into said mixing chamber, a flap valve between said air inlet chamber and said mixing chamber, a needle valve controlling the entry of fuel from the fuel supply chamber to the aspirating tube, passages communicating with the upper portion of the fuel supply chamber and the air inlet chamber, additional passages connecting the upper portion of the fuel supply chamber directly with the mixing chamber, a fuel-air mixture outlet communicating with said mixing chamber, a throttle valve closing the passage between the mixing chamber and fuel-air outlet, and a passage in the fuel-air outlet communicating with the atmosphere.

1,817,862. UNLOADING SYSTEM FOR AIR AND GAS COMPRESSORS. CHARLES WAINWRIGHT, Erie, Pa. Filed May 24, 1929. Serial No. 365,751. 8 Claims. (Cl. 230—26.)



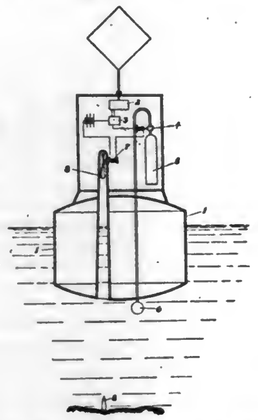
1. In a plural stage compressor the combination of communicating high and low pressure cylinders, a receiver, an intercooler, and means operable upon a predetermined pressure within the receiver to provide continuous communication between the low pressure cylinders and intercooler.

1,817,863. CHAIR. GREEN W. WALKER, Hardin, Mo. Filed Sept. 16, 1929. Serial No. 392,928. 2 Claims. (Cl. 155—73.)



1. A wheeled attachment for rocker chairs comprising a pair of bars adapted to be rockably engaged at one end with a rung of the chair connecting the front legs of the chair, said bars respectively curving downwardly and extending rearwardly of the chair, a wheel journalled on each of the bars intermediate the ends of the bars, casters swivelly mounted on the free ends of said bars, prop members pivotally engaged with the bars adjacent the free ends of the bars, said prop members at their upper free ends provided with extensions capable of engaging a rung connecting the rear legs of the chair when said wheels and casters are in ground engaging position whereby to support the rocker above the round on said wheeled attachments.

1,817,864. MEANS FOR TAKING SOUNDINGS AT REMOTE POINTS. ERNST WILCKENS, Berlin, Germany. Filed May 26, 1928, Serial No. 280,946, and in Germany June 7, 1927. 3 Claims. (Cl. 181—0.5.)



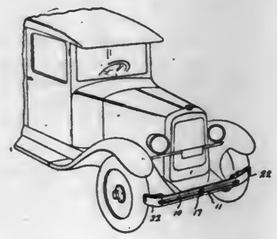
1. Means for sounding the depth of water from a remote point comprising a sounding station situated in the vicinity of the place where the sounding is to be determined, signal means in said sounding station controlled from the remote point, a plummet adapted to be released automatically upon the operation of said signal means, whereby when said plummet strikes the ground a second acoustic signal is transmitted subsequent to said first signal and the depth of the water can be calculated.

1,817,865. METALLURGY OF ORES OR MATERIALS CONTAINING TIN. EDGAR ARTHUR ASHCROFT, Waye House, near Ashburton, England. Filed May 7, 1928, Serial No. 275,971, and in Great Britain Apr. 5, 1928. 6 Claims. (Cl. 23—98.)

1. In the treatment of tin-bearing materials, the step of reducing and chlorinating the tin content of such materials by means of iron powder and a metal chloride.

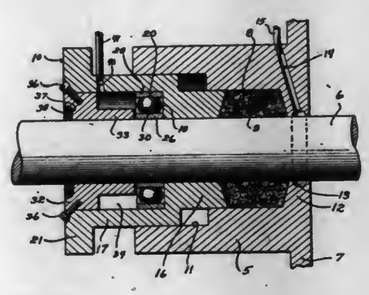
3. In the treatment of tin bearing materials the steps of adding iron oxide and carbon to the tin bearing material, producing iron in situ by reducing said iron oxide with said carbon and then reducing and chlorinating the tin content of the tin bearing material by means of said iron and a metal chloride.

1,817,866. AUTOMOBILE BUMPER. WILLIAM R. ATKINSON, Winfield, N. Y., assignor of one-third to Joseph A. Brown, Winfield, N. Y. Filed June 20, 1930. Serial No. 462,643. 3 Claims. (Cl. 293—55.)



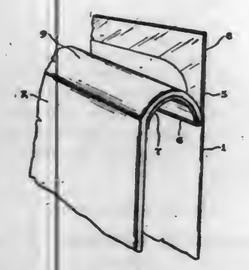
1. An automobile bumper including a central portion and extension portions hingedly mounted on each end thereof, the ends of said central portion and said extension portions having hinge eyes, a bracket member for mounting each extension portion, said bracket member including a back portion and shoulder portions, said shoulder portions having a plurality of holes, two of said holes being threaded, a plurality of bolts, nuts for said bolts, said bolts adapted to pass through the holes in said bracket member and through said hinge eyes in said central and extension portions, said threaded holes coacting with said nuts to lock said bolts, and a spring member engaged by one of said bolts and adapted to urge said extension member in a predetermined backward position.

1,817,867. STUFFING BOX AND GLAND. MARTIN C. BAILEY, Treece, Kans. Filed Mar. 10, 1930. Serial No. 434,647. 6 Claims. (Cl. 308—187.)



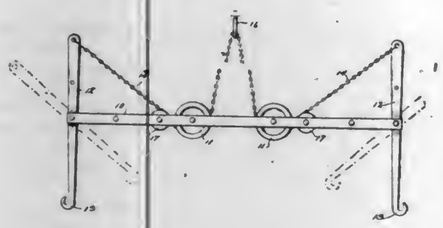
1. A stuffing box for rotary shafts comprising a box body thru which the shaft extends, a packing about the shaft, a stuffing gland for the packing, and anti-friction bearing means between the shaft and gland and carried by the gland in its movement longitudinally of the shaft.

1,817,868. OPEN MOUTH BAG. GUSTAVE A. BAUMAN, Burlingame, Calif. Filed Mar. 10, 1930. Serial No. 434,761. 6 Claims. (Cl. 229—62.)



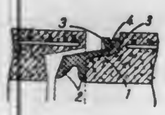
1. A bag of the class described, comprising front and rear walls and gussets connecting the walls at the edges thereof, said gussets being cut downward to form flaps constituting extensions of the front and rear walls, one of said extensions being foldable inward and downward to lie against the opposite wall and extend over the gussets and confine the upper folded ends.

1,817,869. BUTCHER'S GAMBREL. JAMES OSCAR BENTON, Guthrie, Iowa. Refile of application Serial No. 276,090, filed May 8, 1928. This application filed July 10, 1930. Serial No. 467,107. 2 Claims. (Cl. 17—44.)



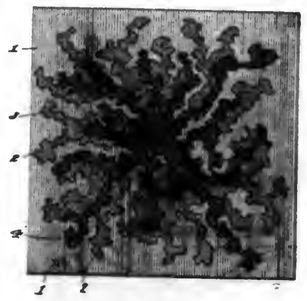
1. A butcher's gambrel of the character described comprising a cross bar having a pair of pulleys disposed one on each side of the middle thereof, and a pair of guide pulleys exterior to the first named pulleys, levers pivoted to the ends of the cross bar and having hooks at their lower ends, a single chain having its ends connected to said levers remote from the hooks, passed over the second named pulleys and beneath the first named pulleys, and extending upward in a bight above the middle of the cross bar.

1,817,870. JOINT FOR PIPES. LÉON BILLÉ, Nogent-sur-Marne, France. Filed Mar. 12, 1927, Serial No. 174,862, and in France Mar. 24, 1926. 2 Claims. (Cl. 288—1.)



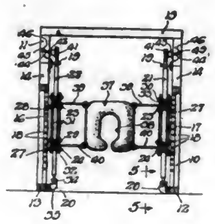
1. A packing of the class described comprising a flexible ring member, said ring having an annular bead on each end, and outer peripheral faces, each of said beads having a circumferential medial groove formed therein, said grooves dividing the heads of said ring to provide channel shaped peripheral edges therefor.

1,817,871. DEVICE UTILIZABLE FOR CAMOUFLAGE AND THE LIKE. EDGAR WILLIAM BRANDT, Paris, France. Filed Sept. 14, 1929, Serial No. 392,710, and in France Sept. 14, 1928. 6 Claims. (Cl. 41—10.)



1. A screen adapted for camouflage and like uses, comprising zones of various opacity and so disposed that the opacity is diminishing towards the outline of said screen.

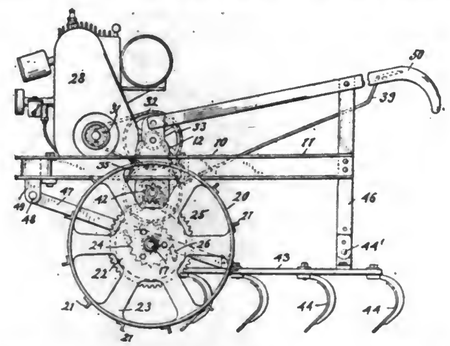
1,817,872. TESTING DEVICE. LAWRENCE L. BRAY, Fond Du Lac, Wis. Filed June 28, 1929. Serial No. 374,565. 3 Claims. (Cl. 265—22.)



3. A testing machine adapted to test the bucking strength of football players, comprising a supporting frame including spaced apart uprights having graduations thereon, a bucking harness disposed between said uprights, rotatably and vertically mounted rod members carried by said uprights, cables wound upon said rod members including portions connected to said harness whereby to support said harness between said uprights, yieldable means for urging said rotatable rod members in one direction, worm gears on said rotatable rod members; gear segments mounted on said uprights and meshing with said worm gears, and pointer arms pivotally mounted on said uprights and adapted to be moved in one direction by said gear segments, said pointer arms being adapted to register with said calibrations on said uprights, whereby when force is exerted on said bucking harness said gear segments will move said pointers to indicate the maximum force extended on said harness.

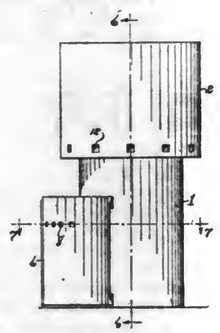
1,817,873. POWER DRIVEN IMPLEMENT. OWEN J. BREADY, Cleveland, Ohio. Filed Mar. 2, 1929. Serial No. 344,005. 5 Claims. (Cl. 180—19.)

1. In a power driven implement the combination of a frame, a motor mounted on said frame, brackets attached to said frame intermediate its ends, shafts carried by said brackets, gears rotatable on said shafts, means connecting said motor and said gears for rotating the latter,



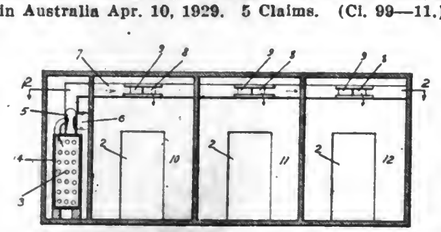
wheels rotatable on said shafts for supporting and driving the implement, and ratchet mechanism operatively connecting said gears and said wheels.

1,817,874. STEEL GUARD CAGE. JOHN C. BRILES, Ottawa, Kans. Filed May 31, 1930. Serial No. 458,600. 4 Claims. (Cl. 89—36.)



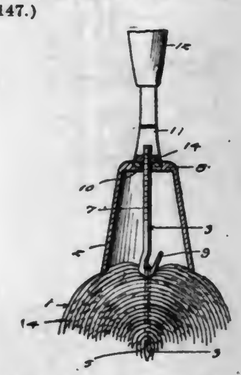
1. A guard cage comprising a cylindrical member provided with a rack for firearms and with openings, pivoted shutters for closing the openings, said member, adjacent its bottom being provided with a segmental opening, a segmental door for closing the opening, latching means for the door and segmental wing shields pivotally secured in the cage at the opposite sides of the door opening and provided each with a series of apertures.

1,817,875. RIPENING OF BANANAS. ROBERT JOSEPH BROADBENT, Maroubra Junction, New South Wales, Australia. Filed May 29, 1929, Serial No. 367,028, and in Australia Apr. 10, 1929. 5 Claims. (Cl. 99—11.)



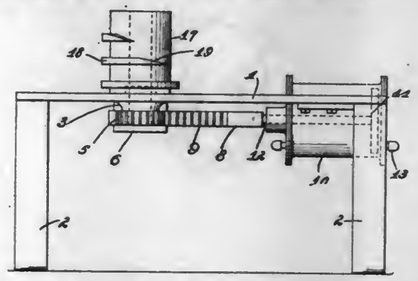
1. A method of ripening bananas which comprises first subjecting the fruit to air of moderate temperature for a period sufficient to bring it to approximately the same temperature, then to air of slightly increased temperature and of high humidity for a period sufficient to cause it to commence to turn yellow, and finally to air of still further slightly increased temperature and of high humidity for the period required to sufficiently ripen it, characterized in that the required respective temperatures are maintained by air currents of appropriate temperature and volume.

1,817,876. MOP. JACOB GEORGE BUTLER, Covington, Ky. Filed May 29, 1930. Serial No. 457,393. 1 Claim. (Cl. 15—147.)



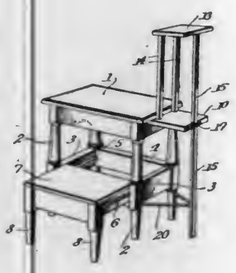
A mop comprising a hollow head having an upper end wall and open at its lower end, said wall being provided with a central opening and provided in its upper side with a transverse groove, a cloth having its upper end portion arranged in the head, a handle, a yoke of triangular formation having its base bar positioned in said groove and having its side bars secured to the lower end of the handle, said base bar having an opening registering with said first opening, a bolt engaging the mop and passing through said openings, and a nut mounted upon the bolt and contacting with the upper side of said base bar.

1,817,877. SPRING CONDITIONING DEVICE. EDWARD D. CAWLEY, Augusta, Ga. Filed Aug. 27, 1930. Serial No. 478,248. 1 Claim. (Cl. 140—89.)



A device of the class described comprising a table, a pair of upright shafts rotatably arranged in the table, gears at the lower ends of the shafts, a yoke-shaped member slidably supported below the table top and having teeth on the outer edges of its limbs for meshing with the teeth of the gears, a cylinder supported by the table, a piston therein, a rod connecting the piston with the yoke shaped member, means for introducing compressed fluid into the cylinder to move the piston forwardly, a die removably arranged on each shaft and having flanges thereon extending over a part of its circumference, the forward end of each flange being beveled and said end being located in advance of the end of the flange above it, with the flanges of one die alternately arranged with respect to those of the other die, and an upright member removably supported by the table between the dies and over which the spring to be reconditioned is placed.

1,817,878. ARTICLE OF FURNITURE. JOSEPH H. CLEMENTS, Jr., Schenectady, N. Y., assignor to Peckham, Wolf & Co., Schenectady, N. Y., a Corporation of New York. Filed Nov. 2, 1929. Serial No. 404,353. 8 Claims. (Cl. 155—42.)



1. A combined seat and step-ladder comprising a main body including a top and suitable legs, an auxiliary body including a step-tread member, connected with the main body and bodily movable to and from a position beneath the top of the main body, a stand arranged at one end of the main body and consisting of a top and a plurality of uprights depending from said top, and independent of the legs of the main body, one of said uprights being detachably connected to the main body and another extending to the floor on which the main body stands, and a brace detachably connecting the last said upright with two of the legs of the main body.

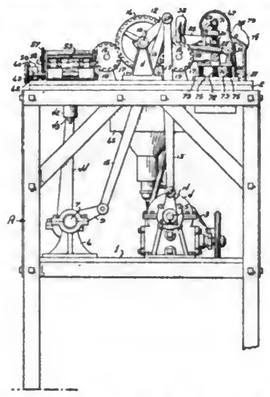
1,817,879. PLUG. MARTIN J. DE MASK, Pittsfield, Mass. Filed July 24, 1929. Serial No. 380,712. 2 Claims. (Cl. 173—361.)



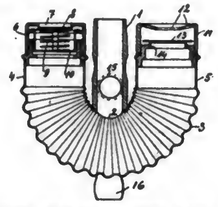
1. A plug comprising a body of insulation conforming at one side to the outline of a plug receiving conduit and having contact prongs projecting from said side, side elements secured upon the body at opposite sides thereof and projecting therefrom to embrace a conduit, and a cross element adapted to pass over the conduit and be secured to the ends of said side elements whereby to retain the plug on the conduit.

1,817,880. AUTOMATIC CUTTING, STAMPING, AND PHOTOPRINTING MACHINE. ROBERTO DE SILVA and MILLARD E. LONG, San Antonio, Tex., assignors to Carl D. Newton, San Antonio, Tex. Filed Nov. 8, 1930. Serial No. 494,382. 7 Claims. (Cl. 95—73.)

1. An apparatus of the class described comprising means for feeding a strip, means for cutting the strip into sheets, printing means, a receptacle, means for conveying the sheets from the cutting means to the printing means, means for conveying the sheets from the printing means to the receptacle and means for operating the before mentioned means.



1,817,881. OXYGEN BREATHING IMPLEMENT, PARTICULARLY FOR AERONAUTS. OTTO HEINRICH DRÄGER, Lubeck, Germany. Filed Feb. 5, 1929, Serial No. 337,691, and in Germany Feb. 21, 1928. 5 Claims. (Cl. 128—140.)



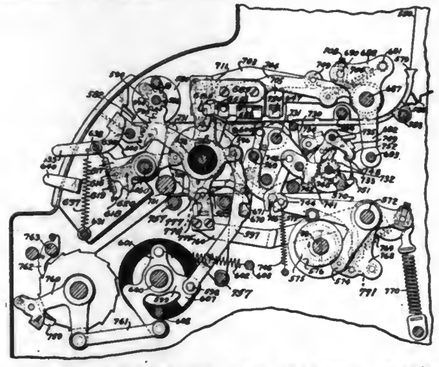
1. In an oxygen breathing apparatus, a breathing conduit, a substantially U-shaped tube having its ends extending upwards, an inhaling valve positioned in one end of said U-shaped tube, an exhaling valve being positioned in the other end of the U-shaped tube, the aforesaid breathing conduit connecting with said U-shaped tube at a point thereon below said valves.

1,817,882. TOY. CREED C. ELLIOTTE, University of Richmond, Va. Filed Oct. 9, 1930. Serial No. 487,571. 2 Claims. (Cl. 272—85.)



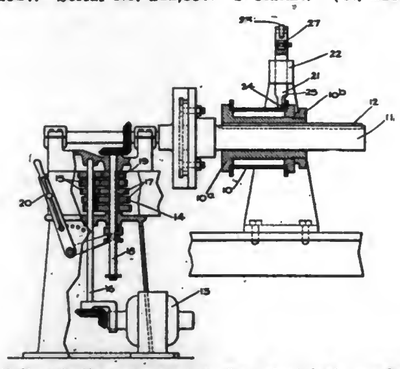
1. In a toy, a handle, a transversely channel-shaped bar secured along opposite sides of the handle and extending beyond one end thereof to provide a fork, a wheel journaled within the fork, crank arms extending from opposite sides of and fast with the wheel, cylinders positioned within the inner ends of the channel bars upon opposite sides of the handle, means to rigidly secure the cylinders in position, a slide operating within each of the channel bars, a piston rod pivotally secured to each slide and extending into each cylinder, a piston located within each cylinder and connected to each rod, and pitmen connecting the slides and crank arms.

1,817,883. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Dec. 21, 1922. Serial No. 608,281. 26 Claims. (Cl. 235—3.)



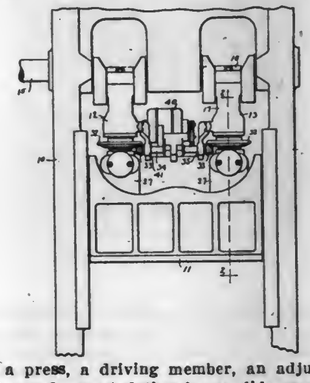
1. In a machine of the class described, capable of entering items and taking totals thereof, a single set of printing wheels for printing both the items and the totals, a plurality of impression hammers for making an impression on record material from said printing wheels, means for disabling certain hammers when taking item impressions, and means to actuate the disabling means to release the disabled hammers when taking total impressions.

1,817,884. COIL WINDING APPARATUS. JACOB J. VIENNEAU, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1927. Serial No. 211,357. 8 Claims. (Cl. 242—9.)



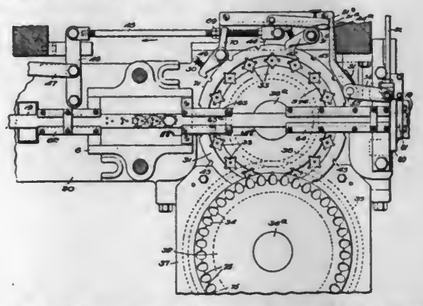
1. Coil winding apparatus for electrical conductors and the like comprising a spool, means for rotating said spool and for feeding said conductor thereto, a member for applying a pressure to compact the turns radially as they are wound on said spool, said member and said spool being relatively movable axially of said spool, a flange on said member engaging the side of the conductor so as to compact the turns axially and relatively displace said member and said spool as the turns are wound on, and means reversibly supporting said member so that said member can be reversed at the end of each layer to wind on a new layer.

1,817,885. PRESS. ARTHUR A. BYERLEIN, Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Apr. 26, 1929. Serial No. 358,308. 8 Claims. (Cl. 113—38.)



1. In a press, a driving member, an adjustable length connecting rod operated thereby, a slide operated by said rod, said rod comprising a screw part operably connected to the end of the rod operated by the driving member, and means pivotally connected to said slide in threaded engagement with said part and in which said part is axially movable, said screw extending past the pivotal connection.

1,817,886. FASTENER FORMING AND ASSEMBLING MACHINE. MOSES F. CARR, Lexington, Mass., assignor by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 29, 1927. Serial No. 222,918. 15 Claims. (Cl. 79—3.)

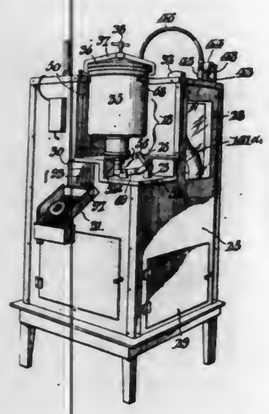


1. In a machine for assembling snap fastener socket elements each of which includes a casing and a spring, a rotary spring-carrying table having a bore for receiving a spring, a casing-carrying device, spring-positioning means operable axially into and out of said bore thereby accurately to position a spring therein and transfer means independent of said spring-positioning means and operable to move said spring from its carrying table to a casing carried by the casing-carrying mechanism.

1,817,887. COOKING APPARATUS. HERBERT T. HUNTER, Catonsville, Md., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 12, 1929. Serial No. 385,158. 16 Claims. (Cl. 53—7.)

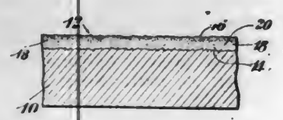
1. In cooking apparatus of the character described, a receptacle for hot cooking liquor; forming means in-

cluding a dough magazine and associated die mechanism for releasing raw articles to be cooked to drop into the liquor; and an enclosure over the receptacle to confine the



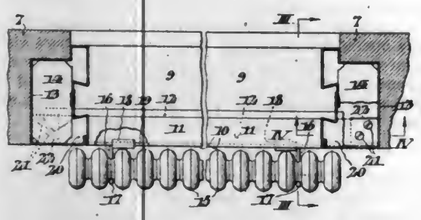
fumes rising from the liquor, said enclosure being laterally recessed at the exterior to afford a niche for the forming means aforesaid with provision for free circulation of air about the dough magazine.

1,817,888. PROTECTIVE COATING (ALBORIZING). RUSSELL EDMUND LOWE, New York, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 15 1927. Serial No. 219,660. 7 Claims. (Cl. 91—70.1.)



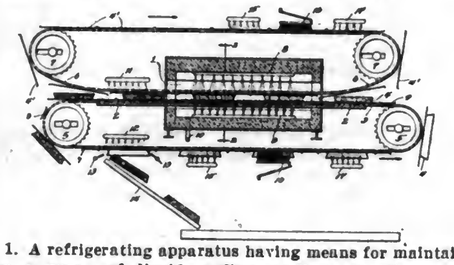
2. The method of forming a protective coating on a ferrous article comprising covering the surface of said article to be coated with a uniform deposit containing between .05 oz. and 1.25 oz. of divided aluminum per square foot of said surface, said deposit containing also anhydrous borax, and alloying said aluminum with said surface by heating under conditions deterent to the oxidation of said aluminum.

1,817,889. RADIATOR MOUNTING. LAWRENCE T. WARD, Philadelphia, Pa., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1929. Serial No. 400,470. 3 Claims. (Cl. 248—17.)



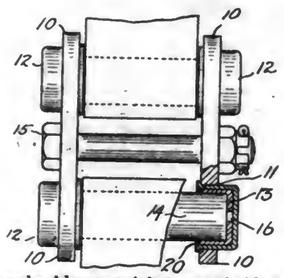
1. The combination with a window frame, of a separate transverse radiator suspension bar below the window sill attached to the jambs of said frame.

1,817,890. REFRIGERATING APPARATUS AND METHOD OF REFRIGERATING FOOD PRODUCTS. CLARENCE BIRDSEYE, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Dover, Del., a Corporation of Delaware. Filed July 1, 1925. Serial No. 40,726. 15 Claims. (Cl. 62—104.)



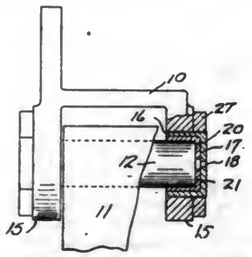
1. A refrigerating apparatus having means for maintaining a spray of liquid cooling medium, together with means for conveying matter in containers within the range of the spray, said means providing a shield beneath said containers and a shield above said containers, both of said shields being of greater size than said containers for preventing access of the spray directly to said containers.

1,817,891. SPRING SHACKLE. CARL CLAUS, Plainfield, N. J., assignor to Bound Brook Oil-Less Bearing Company, Bound Brook, N. J., a Company of New Jersey. Filed Jan. 5, 1928. Serial No. 244,722. 2 Claims. (Cl. 267—54.)



1. A spring shackle comprising spaced side members, said members being provided with through openings in their ends and an opening through the intermediate portion, cup shaped sockets provided with flanged rim, press fitted into the holes in the ends of the side members, cylindrical cross pins of uniform diameter throughout, self-lubricating bushings interposed between the ends of the pins and the sockets and having a flat end that contacts with the end of the pin and the bottom of the sockets.

1,817,892. SPRING SHACKLE. CARL CLAUS, Plainfield, N. J., assignor to Bound Brook Oil-Less Bearing Company, Bound Brook, N. J., a Company of New Jersey. Filed Jan. 5, 1928. Serial No. 244,723. 2 Claims. (Cl. 267—54.)



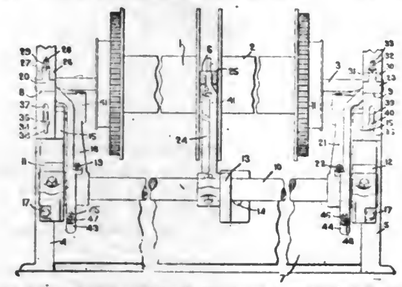
1. A spring shackle comprising a non-rotating vehicle frame having aligned bearing recesses therein spaced apart

from each other, said frame having lateral passages therein communicating with the recesses, said bearing recesses screw threaded, screw threaded socket members adapted for lateral adjustment within the recesses, a slot cut through the end of the socket member, means to hold the sockets in adjusted position, cross pins adapted to pass through the lateral passages for alignment within the recesses, and porous cup shaped bushings interposed between the pins and the screw threaded sockets, said bushing completely covering the ends of the pins and filling the sockets.

1,817,893. NON-INFLAMMABLE LIQUID. GEORGE O. CURME, Jr., White Plains, N. Y., assignor to Carbide and Carbon Chemicals Corporation, a Corporation of New York. Filed Apr. 30, 1927. Serial No. 188,051. 3 Claims. (Cl. 23—13.)

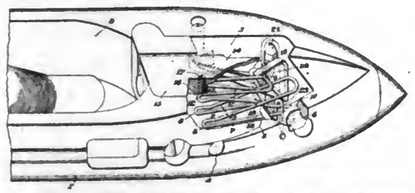
1. A non-inflammable liquid freezing below —23° C. and containing a preponderating proportion of a mixture of carbon tetrachloride and ethylene dichloride.

1,817,894. BEAM HOIST FOR LOOMS. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Nov. 11, 1929. Serial No. 406,187. 5 Claims. (Cl. 139—97.)



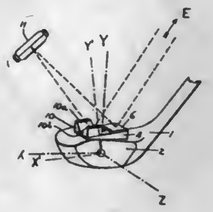
1. A beam hoist and lock for looms comprising a rocker journaled in the loom sides and extending transversely therebetween, a plurality of beam supporting arms rigid with said rocker having bearings at their upper ends to receive the beam shaft, said arms being movable by rotation of said rocker to shift said bearings from operative position rearwardly to a convenient beam receiving position.

1,817,895. SELF-THREADING SHUTTLE. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 29, 1930. Serial No. 485,118. 6 Claims. (Cl. 139—215.)



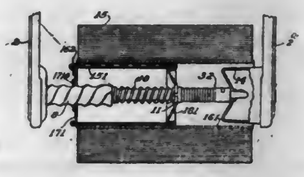
1. In a self-threading shuttle having a forwardly extending thread passage and a side delivery eye connecting therewith, in combination a pair of weft engaging tensioning members pivoted at their forward ends and having rearwardly extending portions provided with thread engaging loops and crossing arms to form a thread receiving notch, means normally acting to yieldingly move the loops of said tensioning members apart, and a stop disposed above the looped end of the upper tensioning member for limiting the upward movement of the crossing arm of said member and its inclination to the crossing arm of the other member to facilitate the passage of the thread into the loops of the two members during threading.

1,817,896. GOLF CLUB AND HOME PRACTICING DEVICE. JAMES BLACKLOCK HENDERSON, Blackheath, England. Filed Feb. 17, 1927, Serial No. 168,973, and in Great Britain Oct. 18, 1926. 8 Claims. (Cl. 273—77.)



1. The combination with a golf club, of appliances for practicing the game of golf comprising two reflectors attached to the golf club and each arranged to reflect in a predetermined direction towards the eye of a play-analyzing person a beam from an external source of light when the club is correctly oriented adjacent to the ball.

1,817,897. ROLL PAPER. GEORGE T. JOHNSON, White Plains, N. Y., assignor to The George T. Johnson Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 19, 1930. Serial No. 429,761. 9 Claims. (Cl. 242—55.2.)



1. In combination, a core, a roll of web material wound thereupon, and a roll-mounting comprising a drum fitting within the central opening of said core after the completion of the roll-winding operation, the said drum having a nut-element constituting a female screw adapted to cooperate with a quick-threaded portion of a supporting spindle of a dispensing fixture of the class described, and having also a centering-element having a hole acting as a bearing for the drum upon such supporting spindle, and means engaging the interior surface of the core with the nut-element and preventing relative rotation of the core with respect to the nut-element.

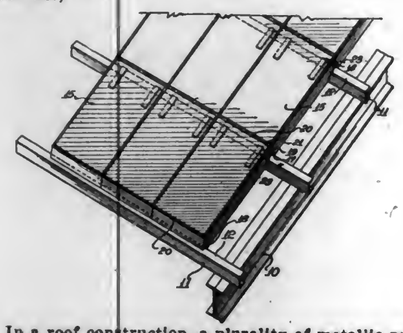
1,817,898. PREPARATION OF ESTERS. JEROME MARTIN and IGNACE J. KRCHMA, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed May 16, 1928. Serial No. 278,333. 22 Claims. (Cl. 260—106.)

1. In the process of preparing esters from primary alcohols having more than one carbon atom, the step which comprises using as the catalyst compositions comprising initially a metal uranyl carbonate and silver carbonate.

1,817,899. PREPARATION OF ESTERS. JEROME MARTIN and IGNACE J. KRCHMA, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed May 16, 1928. Serial No. 278,334. 23 Claims. (Cl. 260—106.)

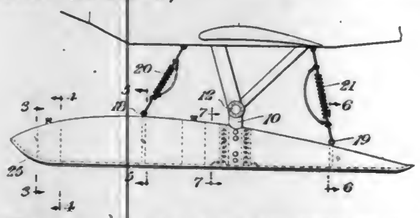
1. The process of preparing esters from primary alcohols which comprises passing said alcohols in the vapor form, at pressures from 1 to 200 atmospheres, and temperatures from 200° C. to 450° C., over compositions comprising initially barium uranyl carbonate, silver carbonate, copper carbonate, and aluminium hydroxide.

1,817,900. ROOF CONSTRUCTION. HERBERT W. REEL, Hinsdale, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1929. Serial No. 367,171. 3 Claims. (Cl. 108—10.)



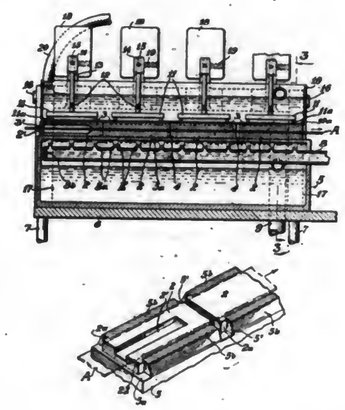
1. In a roof construction, a plurality of metallic purlins arranged at an angle to the horizontal, outstanding flanges on said purlins, precast slabs supported by said purlins, clips of a length less than the length of such slab and embedded in the upper ends of said slabs said clip being adapted to engage the flange of a purlin so as to secure said slab to said purlin, beveled edges formed upon the lower end of the adjacent tile adapted to interlock with a similar beveled edge upon the upper edge of the adjoining tile to form an interlocking connection to prevent the displacement of said tiles from said purlins.

1,817,901. SKID. ALEXANDER PROCOFIEFF-SEVERSKY, New York, N. Y., assignor, by mesne assignments, to Seversky Aircraft Corporation, a Corporation of Delaware. Filed Mar. 26, 1927. Serial No. 178,533. 6 Claims. (Cl. 244—2.)



6. The combination with a skid and means for conveying lubricant to the ground engaging surface thereof of means for controlling the flow of lubricant automatically or manually.

1,817,902. METAL TREATING APPARATUS. CONRAD SCHUMACHER, Lynbrook, N. Y., assignor to Autostrop Patents Corporation, Dover, Del., a Corporation of Delaware. Orgiinal application filed May 3, 1927, Serial No. 188,427. Divided and this application filed Jan. 16, 1930. Serial No. 421,125. 9 Claims. (Cl. 266—3.)



2. An apparatus of the character described comprising means to heat a strip of metal to a desired temperature, a pair of chilling plates to receive the heated strip therebetween, said plates having opposing surfaces to engage a portion of the strip and having recesses to keep adjacent portions of the strip out of contact with the plates for a desired distance to initially chill one portion of the strip before chilling another portion thereof, and means to propel the strip between the chilling plates.

4. An apparatus of the character described comprising means to heat a metal strip, a plurality of pairs of chilling plates for the passage of the strip therebetween, a chilling box supporting said plates, means to supply the box with fluid for cooling the plates, a cooling tank supported by the plates, means to supply the tank with cooling fluid, said cooling tank having a flexible bottom extending over all of the plates, weighted members over the respective pairs of chilling plates operative separately upon said flexible bottom for pressing the upper chilling plates against the strip between said plates, and means to propel the strip between the chilling plates.

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Patents	1,064—No.	1,817,903 to No.	1,818,966, inclusive.
Total	1,491		

Interference Notice

U. S. PATENT OFFICE, *Washington, July 17, 1931.*

Road-O-Graph Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Wilbur B. Tucker, 324 South Holmes street, Lansing, Mich., for registration of a trade-mark and trade-mark registered May 21, 1929, No. 256,583, to Road-O-Graph Co., Chamber of Commerce Bldg., Broadway at Twelfth street, Los Angeles, Calif., and a notice of such declaration sent by registered mail to said Road-O-Graph Co. at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Road-O-Graph Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, July 24, 1931.*

Fred J. Coad and Wilfred G. Greuling, their assigns or legal representatives, take notice:

An interference having been declared by this Office between a joint application for patent of Fred J. Coad and Wilfred G. Greuling, 3082 East Grand Boulevard, Detroit, Mich., and the applications of Porter Bakken, Grenera, N. Dak., Hoy H. Bray, 2054 Twelfth Street, Cuyahoga Falls, Ohio, and others, and counsel for Coad and Greuling having stated that he is not aware of the present whereabouts of said Coad and Greuling, notice is hereby given that unless said Coad and Greuling, their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, July 15, 1931.*

James D. Waterman, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of George M. Wolff, of 835 Crescent Place, Chicago, Ill., to effect the cancellation of the trade-mark registration of James D. Waterman, of 2624 San Pablo Ave., Oakland, Calif., No. 90,491, dated February 25, 1913, and the notice of such proceeding sent by registered mail to the said James D. Waterman at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said James D. Waterman, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, July 23, 1931.*

Electromatic System Company, its assigns or legal representatives, take notice:

A cancellation proceeding has been instituted by this Office upon the application of the Williams Oil-O-Matic Heating Corporation, 207 East Washington Street, Bloomington, Ill., to effect the cancellation of the trade-mark registration of Clarence B. Strouse, of Chicago, Ill., No. 126,582, dated September 16, 1919, which registration, the assignment records of the Office show, has been transferred to the Electromatic System Company, Portland, Me. The notice of such proceeding sent by registered mail to the Electromatic System Company, at the said address having been returned by the post office as undeliverable, notice is hereby given that unless the Electromatic System Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business July 25, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 91,767; Trade-Mark Division, 1,059. Oldest new case, Nov. 25, 1930; oldest amended, Nov. 20, 1930. The dates given are 1931 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action: New	Oldest new application awaiting office action: Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Mar. 14	Mar. 25	771
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Jan. 27	Jan. 28	1,470
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Mar. 17	Apr. 16	855
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Feb. 25	Mar. 4	761
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Feb. 4	Feb. 4	721
318	6. LEWERS, A. M., Carbon Chemistry	†Dec. 31	†Dec. 26	2,046
106	7. JARBOE, C. G., Optics; Photography	Jan. 5	Jan. 6	2,026
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Jan. 5	Jan. 5	1,591
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Feb. 12	Feb. 9	1,344
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 19	Mar. 19	1,039
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Feb. 28	Feb. 28	779
380	12. HENRY, C. C., Machine Elements	†Dec. 2	Jan. 30	1,255
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Feb. 2	Feb. 5	1,138
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal-Working, Assembling, and Blanks and Processes.	Feb. 2	Mar. 2	1,127
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Jan. 4	Jan. 4	2,556
242*	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 13	Apr. 3	802
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	†Dec. 26	†Dec. 30	1,502
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Jan. 26	Jan. 29	1,100
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	†Dec. 8	†Dec. 6	2,007
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Mar. 13	Mar. 14	891
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Feb. 4	Mar. 26	968
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Mar. 13	Apr. 6	742
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	†Nov. 28	†Nov. 20	1,054
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Jan. 31	Jan. 28	987
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Jan. 27	Jan. 26	1,547
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Jan. 30	Feb. 7	968
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Feb. 2	Feb. 3	1,102
225	28. BENSON, A. R., Internal-Combustion Engines	Jan. 27	Jan. 26	1,645
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Mar. 16	Apr. 10	573
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 2	May 4	887
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	†Nov. 25	†Nov. 25	2,663
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Feb. 26	Feb. 25	1,308
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Jan. 26	Jan. 26	2,406
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Mar. 19	Mar. 23	856
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 6	May 1	867
224*	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	†Dec. 11	†Dec. 5	2,262
145	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Jan. 20	Jan. 24	1,458
220	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 11	Apr. 18	578
262*	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Feb. 5	Feb. 18	1,570
125	40. OBERLIN, J. J., Bottles and Jars; Receptacles	†Dec. 26	Jan. 13	3,025
223*	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Mar. 2	Mar. 7	729
124*	42. CUTTING, H. O., Electric Signaling	Jan. 15	Jan. 12	1,403
253	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Jan. 26	Jan. 26	1,581
379	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	†Nov. 28	†Dec. 2	2,192
233	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	†Dec. 26	†Dec. 26	2,086
264	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Feb. 8	Feb. 19	1,163
212*	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Jan. 27	Jan. 28	2,153
239	48. ROEPKE, O. B., Electricity, General Applications	Jan. 27	Jan. 27	1,102
322	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Feb. 25	Feb. 26	1,411
240*	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	†Dec. 19	†Dec. 22	2,470
144	51. BACKUS, C. D., Radiant Energy, Wave Transmission	†Dec. 9	†Dec. 9	2,174
201*	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Feb. 10	Feb. 11	1,464
241*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Mar. 16	Mar. 20	736
102	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	†Dec. 5	†Dec. 5	2,781
309	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	June 16	June 16	188
257*	{Designs	July 8	July 13	290
270*	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	†Dec. 24	†Dec. 27	1,738
315	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Jan. 29	Feb. 27	785
213*	58. DOWELL, E. F., Abrading; Typewriting	†Dec. 31	†Dec. 31	1,497
269	59. RICHARD, V. L., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Feb. 10	Feb. 14	1,697
245*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	†Dec. 26	†Dec. 26	1,886
300	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	†Dec. 3	†Dec. 9	2,077
163	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	†Nov. 28	†Dec. 1	2,595
	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	†Dec. 8	†Dec. 15	2,322
	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND.—{Trade-Marks	June 26	July 13	992
	{Labels and Prints	June 27	July 13	67

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Phelps and Carter

No. 2,613. Decided March 2, 1931

1. Patents—Claims—Construction.

"The rule is that in construing the words of a claim where the language is susceptible of more than one construction, the disclosure of the specification must be resorted to to ascertain the proper construction."

2. Same—Same—Same.

Claims for repair and reenforcing device for grooved side rails for window screens construed as "for a repair device and also as a claim for a reenforcing device independent of its use for repair."

3. Patentability—Repair and Reenforcing Device for Grooved Side Rails of Wooden Window Screens.

A claim for a repair and reenforcing device for grooved side rails of wooden window screens *Held* unpatentable over the prior art.

Graham, *P. J., dissenting.*

Appeal from the Patent Office. Affirmed.

Messrs. Fay, Oberlin & Fay and *Mr. W. J. Wesseler* for Phelps and Carter.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Lenroot, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, rejecting, for want of patentability over the prior art, the following claim:

A repair and reinforcing device for grooved side rails of standard wooden window screens, comprising a thin sheet metal liner of channel shape and provided with a re-entrant groove to fit the groove of the side rail, the parallel sides of said channel member overlying and shielding the sides of the side rail and being secured to the solid portion thereof inwardly of the bottom of the groove in the side rail.

The references cited are Steiner, 826,384, July 17, 1906; Watson, 1,098,857, June 2, 1914; Hartley, 417,179, December 10, 1889; Reitz, 834,407, October 30, 1906; Wagner, 1,558,728, October 27, 1925.

The claim is, as will be noted, for a repair and reenforcing device for grooved side rails of standard window screen frames. The specification discloses a channel strip having a re-entrant part adapted to fit over the side rail of the screen frame, with the re-entrant part extending into the groove in the side rail so as to form a metal lining for the groove to receive the tongue on the window frame; the strip, when applied to the side rail, is securely fastened thereto inwardly of the bottom of the groove in the side rail.

The object of the invention is stated in the specification to be:

The invention relates to window screens shields and guides, and has for its object to provide a device of this character which may be easily and quickly applied to the vertical side rails of a window screen, and to the inner face of a window frame, and comprising a metallic strip having a longitudinally disposed U-shaped bend therein forming a tongue, and which strip is secured to the window frame, for instance between the parting strip and outside strip, or between the parting strip and the inside strip.

A further object is to provide the side rails of the window screen with a metallic channeled member having a centrally disposed U-shaped bend extending into a channel in the side of the screen frame and in which the U-shaped member carried by the window frame strip is slidably mounted. * * *

The specification further states:

It will be seen that the channeled member 9 entirely encases the outer edge of the bar 5, thereby preventing breaking of the flanges of the bar and at the same time rigidly braces the same and prevents water from rotting these parts. It will also be seen that the sliding engagement of the members 7 and 8 will insure a smooth uniform movement of the screen as it is moved upwardly and downwardly, and by extending the channeled member 9 to opposite sides of the screen a smooth sliding surface is provided for engagement with adjacent parts which will reduce the friction to a minimum and will insure an easy sliding of the screen.

From the above it will be seen that a binding and a guide is provided for a window screen which is simple in construction, may be easily and quickly applied to any part of the window frame opening either between the strips thereof or outside thereof, and the device may be cheaply manufactured and sold.

[1] The first question before us is the proper construction of the phrase "A repair and reenforcing device." Appellants in their brief and upon oral argument contend that, inasmuch as no repair devices have been heretofore available of the type involved, there is invention in appellants' device in that it affords a quick and inexpensive repair for broken screens which renders them better and more serviceable than when they were new. From the fact that appellants' counsel urges as one ground of inapplicability of the references cited that the devices there disclosed were intended to be applied to new screens and not for the repair of old ones, we assume that his position is that the words "repair and reenforcing device" should not be construed as meaning a repair device and also, independently, a reenforcing device, but that said phrase means a repair device that is at the same time and in the same use a reenforcing device. The rule is that in construing the words of a claim where the language is susceptible of more than one construction, the disclosure of the specification must be resorted to to ascertain the proper construction.

[2] Upon examination of the specification, we find that there is no mention anywhere in it of the device being a repair device, but on the contrary, the fair construction of the language of the specification is that the device was intended to be used as a reenforcing device to be placed upon new screens, it being referred to in the specification as:

* * * *preventing breaking of the flanges of the bar and at the same time rigidly braces the same and prevents water from rotting these parts.* It will also be seen that the sliding engagement of the members 7 and 8 will insure a smooth uniform movement of the screen as it is moved upwardly and downwardly, and by extending the channeled member 9 to opposite sides of the screen a smooth sliding surface is provided for engagement with adjacent parts which will reduce the friction to a minimum and will insure an easy sliding of the screen. (Italics ours.)

We must therefore construe the claim in issue as one for a repair device and also as a claim for a reenforcing device independent of its use for repair.

The Steiner reference relates to an adjustable sliding window screen and discloses a screen having side bars and a sheet of wire fabric secured to the frame formed by the bars. A channeled strip is attached to each side rail of the frame, said channeled strip having a projecting rib or bead to engage in the groove of a guide strip to be nailed to the window frame. At each end of said channeled strip flanges are provided which are integral with the side strips and are bent inwardly at angles to said sides so that one of the flanges will overlap the other; the flanges are secured to each other and tongues are secured to the flanges by means of rivets; the tongues are attached to the frame by means of screws or nails inserted through the tongues and into the frame of the screen. Steiner shows an alternative construction of a re-entrant groove in the channeled strip that would enter a groove in the side rail of the screen if the side rail were provided with such a groove. Steiner's specification states:

The strips or runners 4 are preferably detached from the frame of the screen when the screen is offered for sale.
• • •

The only difference between the device of appellants and that of Steiner, as shown in his alternative form, is the said flanges and tongues, which appellants do not have, and the method of fastening the device to the screen. It is true that it is clear from Steiner's disclosure that he had in mind only a device that would make the screen adjustable to a window opening, and did not have in mind either a reenforcing or a repair device. The fact is, however, that the alternative form of Steiner's device would fit into the groove of the side rail of a screen exactly as does appellants' device, and would serve the same purpose. The question is, therefore, would there be any invention in using the device shown by Steiner for reenforcing or repairing purposes.

The Examiner in his statement appearing in the record makes the following observation:

• • • A person who made and applied strips as shown by Steiner to pre-existing conventional screen frames and who happened to let beading 5', Fig. 3, project into the existing groove, (and this is shown by Watson), would infringe the claim and render himself liable to being sued for same.

[3] There seems to be no escape from this conclusion and we feel compelled to hold that there is no invention in applying Steiner's device as shown in his alternative form to the grooved side rail of a screen for the purpose of reenforcing the same; and this is probably true if used for the purpose of repair, although in view of our construction of the claim it is unnecessary for us so to decide. Clearly the method disclosed by appellants of fastening the device to the side rail of the screen does not constitute invention. We are clear that the Steiner reference anticipates appellants' claim.

In view of the foregoing it is unnecessary for us to discuss the other references.

Appellants state that there were introduced into the record affidavits showing a large commercial use of their alleged invention, and this is urged upon us as evidence of patentability. The record does not contain any such affidavits and they are not before us. However, if such affidavits were in the record, the rule is well settled that successful commercial use can be considered as evidence of patentability only when the question of patentability is in doubt. *In re Ackenbach*, 18 C. C. P. A. (Patents) —, 45 F.(2d) 437, 403 O. G. 789. We have no such doubt and therefore such affidavits would constitute no evidence of patentability.

The decision of the Board of Appeals is affirmed.

Affirmed.

GRAHAM, *P. J.*:

I dissent. I do not think the Steiner reference is an anticipation.

U. S. Court of Customs and Patent Appeals

HEDENSKOOG *v.* BACKUS

No. 2,642. Decided March 25, 1931

1. PRIORITY—REDUCTION TO PRACTICE.

An invention in pin-setting machines for bowling alleys *Held* reduced to practice by a machine which was complete to the extent that it had all the operable parts for setting one or possibly two pins thereof, although it never was completed so as to set the full complement of pins.

2. SAME—SAME.

Evidence reviewed and *Held* to establish that B, who was the first to conceive the invention, was also the first to reduce it to practice and did not abandon or conceal the invention.

APPEAL from the Patent Office. Affirmed.

Mr. Wm. O. Belt for Hedenskoog.

Mr. Henry E. Stauffer for Backus.

BLAND, *J.*:

This is an interference case in which appeal is taken from the decision of the Board of Appeals of the United States Patent Office, reversing the decision of the Examiner of Interferences, and awarding priority of invention of the subject matter in issue to appellee.

The application relates to apparatus for automatically setting ten pins on the beds of bowling alleys and includes a frame which is elevated about two feet above the bed of the alley and into which the pins are placed by an attendant. The frame is then caused to descend and set the pins on the alley in correct position. The pins are then released and the frame automatically moves upward to its original position.

Five counts were under consideration by the Examiner of Interferences and the Board of Appeals, and priority in counts 1 and 3 was awarded to Hedenskoog on the ground that the counts did not read on the Backus construction. No appeal was taken by Backus. The counts in issue in which priority was awarded to Backus by the Board of Appeals are three in number and follow:

2. A pin-setting machine for bowling alleys, comprising a frame movable toward and from the alley bed, bottom rests carried by the frame, slides for receiving the pins and directing the bottoms thereof onto said bottom rests, and means for depositing the pins on the alley bed.

4. A pin-setting machine for bowling alleys, comprising a frame suspended for vertical movement above the alley bed and having pockets therein for receiving pins to be positioned, and setting means carried by said frame for engaging said pins bodily at points remote from the greatest diameter of their body portions, said pin-engaging means being further adapted to position said pins on said alley bed.

5. A frame for receiving pins and positioning the same on a bowling alley, comprising a plurality of pin-receiving pockets, pin-engaging and positioning means mounted on said frame, means for normally holding said pin-engaging means out of engagement with said pins, and means carried by said frame for actuating said pin-engaging means to engage the pins and position the same upon the alley bed, said holding means being automatically actuated to disengage said pin-engaging means after the pins have been positioned.

The counts are taken from the Hedenskoog patent which had been inadvertently issued, because the Backus application involved herein was copending with the Hedenskoog application.

The subject matter of the counts at issue, according to the decision of the board, was disclosed by Backus in a machine built in 1920. The Examiner of Interferences found that the 1920 Backus structure was a full conception but not a reduction to practice of the subject matter of the counts and held that Backus was not diligent from the date of his conception during the period from 1920 to the time when Hedenskoog entered the field, and found that the 1920 structure was an abandoned experiment.

The Board of Appeals in a well-considered and well-written decision, deserving of special mention, held that the 1920 structure was not only sufficient evidence of conception but was a reduction to practice of the subject matter of the counts and found that it was not an abandoned experiment. Having found that Backus was the first to conceive and the first to reduce to practice and that he had not concealed his invention, he was held to be entitled to priority.

Appellant here contends that the Board erred in finding that the 1920 structure was a reduction to practice and not an abandoned experiment. While there are various minor questions discussed other than the question of reduction to practice by the construction of the 1920 machine, we think it is correct to say that the sole controlling issue in the case at bar is whether or not appellee's 1920 machine was a reduction to practice or an abandoned experiment. Concerning this issue the Board of Appeals said:

The Examiner of Interferences seems to have been influenced somewhat by Backus' subsequent actions, or lack of action, in his holding that the 1920 device was merely an experiment and an abandoned one. We do not consider the subsequent actions on that point as particularly important. If the device was reduced to practice it is immaterial what was done afterward if it was not concealed, and the inventor was not stirred to activity by his opponent entering the field. We do not consider it necessary to discuss the question of concealment as we find no substantial evidence showing this fact nor is there any evidence that Backus was stirred into activity by Hedenskoog; however it will not be amiss to refer briefly to the actions of Backus between 1920 and 1926. The evidence clearly shows that the party Backus was suffering under severe physical disability—that it was substantially impossible for him to go into the shop and construct the machine himself. It would appear that it was necessary for him to rely upon others to work out the mechanical details when he had devised the general means and described the manner in which he desired them to function. Various witnesses have testified that this matter was more or less constantly in Backus' mind and that he was attempting to get others to make an improved model of the 1920 machine. It is shown that he advertised and made other efforts to secure a proper mechanic, and that during part of the period he was waiting for others, of whose skill he had knowledge, to reach a point where they would have time and opportunity to take up the work for him. We consider that this shows that while his efforts were not very effective still he had no idea of abandoning the invention and was striving to have it converted into a commercially successful form.

The facts and the law as affecting this issue are so aptly and correctly expressed in the opinion of the Board of Appeals that an extended statement of facts and discussion of applicable law is deemed unnecessary.

The 1920 structure was later dismantled and parts of it were used in making a new machine in 1926. For the purposes of prosecuting the interference, appellee has reconstructed the 1920 machine and has brought the same before the patent tribunals and this court as "Backus Exhibit No. 5 operative illustration of 1920 machine." The 1926 machine is also before us as Exhibit No. 6.

[1] The 1920 machine after construction was operated to set pins in the presence of witnesses who testified that the machine made a great deal of noise but that it operated to set the pins. Backus testified that he was satisfied with the operation except as to the noise and that he determined to work out a means for eliminating the same. This machine was never placed on a bowling alley, but its operable parts and mode of operation, according to the testimony, were, with the exception of the foot or tripping device, which was located under the frame, substantially the same as those of the 1926 device. The projecting member which struck the floor and actuated the mechanism was later located in a different position and this fact is clearly immaterial to the issue here. The 1920 structure was not a complete machine. It was complete to the extent that all the operable parts for setting one or possibly two pins, in accordance with the terms of the counts at issue, were present. No attempt was ever made to complete this particular machine so that it would set the full complement of pins. The Board held that the evidence showed that the machine was operative, and we agree with this finding.

The main contention of appellant here is that the 1920 machine, not being complete so as to properly set a full complement of pins, and later being dismantled and nothing further having been done to the machine until after appellant's application had been filed, must be looked upon as an abandoned experiment. Concerning this issue the Board of Appeals properly said:

The record shows that after Backus constructed, or had constructed for him, the machine in 1920 it was more or less dismantled and moved around from one portion of the building to another without anything further being done to it until long after the application was filed. The evidence clearly shows that Backus realized that the machine was not satisfactory, and from this state of facts strong presumption arises that it was an experiment. An examination of the record, however, we consider shows a different state of facts. In the first place we should note that the counts of the issue, in some respects, are rather broad; certainly counts 2, 4 and 5 are. It has been contended by Hedenskoog that inasmuch as the reconstructed 1920 model contains parts that were not present in the original machine that the reconstruction is of no value; however we consider that the evidence clearly shows that the portions of the apparatus which are covered by the elements of the counts were present in the apparatus of

1920. Another contention of Hedenskoog is that it is admitted by Backus that the full complement of pins was not manipulated in the earlier machine, or, for that matter, in the reconstructed model, and he contends that therefore the 1920 apparatus does not cover the subject-matter of the counts. We do not consider this contention sound. In some machines if parts were missing and it would not be possible to be sure how the machine would operate with the missing elements, a contention of this nature might be justified. In this instance, however, each unit of the machine functioned in the same manner as the other units. Pin setting machines of this general nature are old, and in our opinion, when one unit functions properly we consider it sufficient proof to show that the entire set would operate when the duplicate units are in place.

To the foregoing correct statement of the facts and law might be added that the Board's conclusion in this respect is in entire harmony with the decided cases.

If appellee actually conceived and reduced to practice his invention in 1920, he is the first inventor. His subsequent acts are material only, under the circumstances of this case, as bearing upon the question of whether or not his work was experimental only and later abandoned. The board concluded that while Backus' conduct subsequent to his 1920 activities was strongly presumptive that his activities were experimental only, an examination of the record and a weighing of the evidence therein contained necessarily brought about a different conclusion. The evidence relied upon is quoted above.

In *Smith* v. *Brooks*, 24 App. D. C. 75, 1904 C. D. 672, substantially the same facts and the same legal questions were before the Court of Appeals of the District of Columbia and the gist of the decision is well summed up in the first part of the syllabus which is as follows:

A delay of 2 years and 8 months after an alleged reduction to practice raises a strong presumption that what was done amounted to a mere abandoned experiment; but such presumption may be overcome by satisfactory proof that the machine was successfully operated.

Appellant seems to base his right to priority mainly upon the proposition that the tests of appellee's 1920 structure showed that it was admittedly an unsatisfactory machine from a commercial standpoint.

Agreeable to the finding of the Board we conclude that, as affects the counts in this case and the issue as presented, the noisy character of the machine which rendered it commercially unsatisfactory is not a sufficient basis to justify a conclusion that the 1920 machine was not a reduction to practice. The machine was demonstrably proven to operate in setting the pins in the manner called for in the counts. The necessary details of improvement in order to make it commercially desirable are matters with which we are not concerned. The 1926 machine was constructed upon the same broad principle which characterized the 1920 machine and in its construction was the detail structure for making the 1920 machine commercially desirable. As far as the issues in this case are concerned, the two structures are identical. On this subject the Board of Appeals properly said:

In our opinion the pin setting machine built in 1920 is proven to meet the counts of the issue and to have been operative and a reduction to practice. It is true that the 1920 model was not satisfactory to Backus but he realized, as disclosed by his testimony and by the supporting witnesses, what the trouble was. The projecting member that struck the floor to actuate the mechanism was noisy and he realized that this would prevent the commercial success of the apparatus and decided that it would be necessary to actuate the mechanism from overhead means. We do not consider that the question of commercial success enters into that of reduction to practice. There is nothing in the counts of the issue that specifies whether the device is actuated from the floor or overhead. The contention that the earlier machine may not have accurately spotted the pins we do not consider as entitled to any weight as in our opinion this was simply a matter of mechanical accuracy and anyone competent to build machines of this nature would perfect the parts until they functioned properly and in the manner intended.

The Board of Appeals agreed with the Examiner to the extent that if the 1920 operations were to be regarded only as evidence of conception and not of reduction to practice, Backus was not diligent. Since we agree with the Board that the 1920 structure was a complete reduction to practice, we do not find it necessary to discuss the diligence of Backus.

Appellant has argued at length here that this court should apply the rule laid down in *Vanore* v. *Improta*, 58 App. D. C. 130, 25 F.(2d) 918, in which is found the following:

As against the inventor who is guilty of inexcusable delay in asserting his priority according to law, all the equities and presumptions are in favor of the inventor who, though later in conception, first files his application for a patent. An inventor may have a reasonable excuse for not promptly applying for a patent; but, if he has none, and unreasonably delays in taking the necessary steps to secure a patent, the courts are warranted in presuming that his claim of reduction to practice was nothing better than an abandoned experiment. *Mason* v. *Hepburn*, 13 App. D. C. 86, 94, 95; * * *

It will be noticed there that the court concluded that by reason of the delay the original alleged invention should be regarded as an abandoned experiment and cited *Mason* v. *Hepburn*, 13 App. D. C. 86, 84 O. G. 147. As was observed with reference to *Smith* v. *Brooks*, supra, this rule does not apply when the record shows that it was not an abandoned experiment. While the exact question presented here was not before this court in *Townsend* v. *Smith*, 17 C. C. P. A. (Patents) 647, 36 F.(2d) 292, 391 O. G. 753, and *Miller* v. *Hayman*, 18 C. C. P. A. (Patents) , 46 F.(2d) 188, 405 O. G. 549, the facts and the reasoning in the cases are quite analogous and may be relied upon as supporting our conclusions herein reached.

Appellant also relies upon the doctrine laid down in *Mason* v. *Hepburn*, supra, in which is found the following statement of the law:

Considering, then, this paramount interest of the public in its bearing upon the question as presented here, we think it imperatively demands that a subsequent inventor of a new and useful manufacture or improvement who has diligently pursued his labors to the procurement of a patent in good faith and without any knowledge of the preceding discoveries of another shall, as against that other, *who has deliberately concealed the knowledge of his invention from the public*, be regarded as the real inventor and as such entitled to his reward. [Italics ours.]

It will there be observed that the court found that there was a deliberate concealment. There is no such contention here.

[2] Appellee being the first to conceive and the first to reduce to practice, and the record as a whole being devoid of any fact or circumstance barring him from a patent, he was properly awarded priority and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE STIRLING

No. 2,820. Decided March 25, 1931.

1. PATENTABILITY—INVENTION.
"Invention contemplates the exercise of the imaginative faculties directed to the accomplishment of an end which the mental faculties have conceived. The article, or the process, at least to a degree, must have an existence in the brain before, or at the time of, being embodied in a product or described in a process."

2. SAME.
"It may be further said that the law is well established that a patent will issue only for something which one skilled in the art can reproduce."

3. PATENTABILITY—DESIGNS.
A design for wall paper *Held* unpatentable as lacking in invention.

APPEAL from the Patent Office. Affirmed.

Mr. John Boyle, jr., and *Mr. Wm. D. Shoemaker* for Stirling.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

Appellant is seeking patent on a design for cover paper, its principal use, as we understand it, being for the covering of walls—that is wall paper.

The application was denied by the Examiner whose decision was affirmed by the Board of Appeals of the Patent Office. From the latter decision the appeal was taken to this court.

The design is described in the specification as follows, reference being had to the drawing:

The view is a plan of a sheet of paper, showing my new design.
The black on the drawing represents streaks and blotches of one color on a background of another color represented by the stippled portions on the drawing, while the white on the drawing represents further streaks and blotches of a third color intermingled with the first mentioned streaks and blotches. The particular colors are immaterial.

The claim is for "the ornamental design for cover paper as shown and described".

There were three grounds of rejection which are tersely stated in the brief of the Solicitor for the Patent Office.

First: Lack of patentable invention under the ruling in—*Harmon Paper Co.* v. *Prager et al.*, 286 F. R. 267; *Harmon Paper Co.* v. *Kimberly*, 289 F. R. 501.
Second: The design is dependent upon the process of making the design.
Third: The design is an imitation of marble.

The first and second grounds appear to us to be somewhat closely interrelated.

In the decision of the Board of Appeals there is a quotation from the brief which appellant filed before the Board, describing the process by which the design was produced. It reads as follows:

A piece of paper which was crinkled to a very great extent so that innumerable creases extended in every direction and of different sizes was the starting point for the development of this production. In the creases of this crinkled paper a dark ink was spread and the surface of the paper rubbed off so that the ink remained in the creases. It was found, however, that the streaks and blotches produced in the crinkled paper by filling the creases with ink were not sufficiently numerous to produce a design which would be pleasing to the eye. Consequently the next step was to multiply these in such a way that they would become numerous and at the same time the arrangement thereof would be maintained. This was done by successively photographing the paper on the same plate and moving the photographed sheet through an appropriate angle to obtain the results desired. Subsequently the results of this photographing process were transferred by well known methods to an engraved intaglio roll for printing. Even then it was found desirable to do the printing by means of an offset roll.

Before us it is insisted, on appellant's behalf, that it is well settled in design patent law that "the method of producing a design has no bearing upon the patentability of a design itself"; that the statements explanatory of the methods whereby appellant's design was produced were made in accordance with a custom prevailing in the Patent Office of making statements (we assume both formal and informal) in presenting technical features of applications "for the sole purpose of enlightening the Examiner" upon the "question of whether or not invention was involved", and appellant's brief before this court says:

These facts are before the court not as a part of the application and therefore not a part of the pronouncements of the applicant himself, but only as opinions expressed by applicant's attorney and by the tribunals of the Patent Office it is desired to point out that in deciding the patentability of th's invention they should not be taken into account *except as they might have a bearing on the question of whether or not invention was involved.* (Italics ours.)

It is thus conceded that it is proper for the court to consider the method of production as described in the language quoted, supra, from the opinion of the Board of Appeals as coming from appellant's brief before that tribunal, but only for the purpose of determining whether the design itself constituted invention. We have looked to it for that purpose only so far as the instant case is concerned.

It is quite well known to those conversant with the patent laws that there has never been any abstract, legal definition of invention which has been accepted as definitely fixing a complete and satisfactory rule by which applications, whether for mechanical, process or design patents, may be tested. The question, "What is invention in the legal or patentable sense", remains without any fully comprehensive answer. It is, however, universally recognized that certain fundamental elements must be present to constitute invention and that, in the absence of these, no patentable right accrues to a producer.

[1] The word, "invention", as used in the statute, implies that the product thereof, or the method or process by which the product is created, must be the result of a preformed idea embracing the article, or the method, as a definite conception of the mind. It is not necessary that this prior conception shall be all comprehensive and embrace all details, but there must be, to constitute patentable invention, a preexisting idea of the end and purpose it is desired and proposed to accomplish. The invention contemplates the exercise of the imaginative faculties directed to the accom-

plishment of an end which the mental faculties have conceived. The article, or the process, at least to a degree, must have an existence in the brain before, or at the time of, being embodied in a product or described in a process.

When this principle is applied to appellant's wall paper design it seems obvious that, whatever may be the patentable status of the process by which he created it, the *design itself* is not the result of a definitely preformed conception in his mind of what it would be or is. The lines, streaks, blotches and stippled portions of the design and their fixation with reference to each other, as they appear therein, were not the children of his brain, but resulted haphazardly from certain movements or operations purely mechanical in their nature. The design itself was not thought out; it never existed in appellant's mind; his imagination foreshadowed something, no doubt, but that something was wholly indefinite, nebulous, uncertain. His intellect did not create the design; his brain may have invented the process, but it did not invent the product. Therefore, invention is lacking and hence he has no patentable rights, under the statute, upon this application.

[2] It may be further said that the law is well established that a patent will issue only for something which one skilled in the art can reproduce. An exact reproduction of appellant's design, except by photographing the design itself, would, we apprehend, be a virtual impossibility. Were the precise process by which he evolved it used, there is not even a remote probability that the result would be or could be identical.

In our reasoning in this case we see nothing inconsistent with that of the Supreme Court of the United States in *Gorham Company* v. *White*, 81 U. S. 511, so strongly relied upon by appellant here, nor with that of the Circuit Court of Appeals of the Third Circuit in *Braddock Glass Company, Ltd.*, v. *Macbeth*, 70 O. G. 1799, 1895 C. D. 271, 64 Fed. 118, 12 C. C. A. 70, also cited by appellant.

From a careful study of the opinions in those cases it is obvious that the issue here involved was not present in them. Indeed it does not appear to us to have been even remotely suggested in either case.

In the *Gorham Co.* v. *White* case the issue was as to an alleged infringement of a design patent for table-spoons and forks, the validity of the patent not being questioned.

In the course of the prevailing opinion the Supreme Court said:

> It is the appearance itself, therefore, no matter by what agency caused, that constitutes mainly, if not entirely, the contribution to the public which the law deems worthy of recompense. The appearance may be the result of peculiarity of configuration, or of ornament alone, or of both conjointly, but, in whatever way produced, it is the new thing, or product, which the patent law regards. To speak of the invention as a combination or process, or to treat it as such, is to overlook its peculiarities. As the acts of Congress embrace only designs applied, or to be applied, they must refer to finished products of invention rather than to the process of finishing them, or to the agencies by which they are developed.

The question of *invention* was not involved in the foregoing case. The question was as to similarity of appearance—sameness of effect upon the eye.

The matter reached the court with invention conceded. The court had only to deal with the issues existing *after* and *beyond* invention, and the language of the court must be studied upon that basis.

When, therefore, the court spoke of the "*appearance* * * * in whatever way produced" manifestly it was not considering, or thinking of, how the article was made, or whether the design was originally a conception of the mind, but whether the alleged infringer by "some peculiarity of configuration, or of ornament alone, or of both conjointly" had produced an article which so resembled the finished product of the patentee's invention as to infringe same. (Italics ours.)

The same issue of resemblance was involved in *Braddock Glass Co.* v. *Macbeth*, supra, the suit being for alleged infringement of a design patent for lamp chimney tops. We do not think the question of *invention* was in the mind of the court when it said:

> It has been made plainly obvious to us, and seems to be fully recognized by the trade, that the appearance of the patented design is very different from that of any other which had previously existed; and, this being so, the method of its production is irrelevant.

Obviously this means the method of the *production of the appearance*—that is, it refers to the form and configuration of the lamp chimney, and the matter of the mental conception, or inventive principle, involved in producing that appearance was not under consideration. The same thing was true when the court continued:

> The novelty of a design is to be tested, not by investigation of the means employed for its creation, but by occular comparison of the design itself with the prior designs which are alleged to be substantially the same, and when tried by this test the novelty of the design covered by the patent in suit is made quite apparent.

Byram v. *Friedberger*, 87 Fed. 559, 82 O. G. 1420, 1898 C. D. 380, goes no further than the other cases cited, supra.

The particular language quoted in the brief for appellant from the Byram case is:

> The subject for consideration is not the process of creation, but the effect produced upon the eye by the things created.

In all these cases the courts were dealing with the question of *appearance* and the *form, configuration*, etc., by which that *appearance* was produced. In none of them did the court find it necessary to consider the question of whether a mental conception of the design preceded or existed at the time of its physical production. This latter question is the one with which we are confronted, because the mental concept is an indispensable element of invention.

> The mental faculties employed in the inventive act are the creative not the imitative faculties. *An invention is the product of original thought. It involves the spontaneous conception of some idea not previously present to the mind of the inventor.* Industry in exploring the discoveries and acquiring the ideas of others; wise judgment in selecting and combining them; mechanical skill in applying them to practical results; none of these are creation, none of these enter into the inventive act. *Only when the mind of the inventor originates an idea new to himself, if not to all the world, does he call into exercise his own inventive skill, and perform the mental portion of the inventive act.* (Italics ours). Robinson on Patents, Vol. I, p. 116.
>
> An invention is the result of an inventive act; it consists in *conceiving* an idea and *reducing it to practice*. An invention is the product of original thought; it is a concept, a thing evolved from the mind. It involves the spontaneous conception or "happy thought" of some idea not previously present to the mind of the inventor; it is the creation of something which did not exist before. Such is the *mental part* of the inventive act. (Italics ours). Walker on Patents, Lotsch Revision, 6th Ed., 66.

Of the design which appellant has offered for patent he had no mental concept; it did not originate in his brain; it required no mental act to conceive or produce it. Its production was mechanical, not the result of thought, but of the form which the crinkles in the paper chanced to take when the paper was manipulated by the hand.

Looking to the process of production, solely to see whether there was invention in the design, manifestly there was none.

We agree with counsel for appellant that the cases of *Harmon Paper Co.* v. *Prager et al.*, 286 Fed. 267, and *Harmon Paper Co.* v. *Kimberly Clark Co.*, 289 Fed. 501, presented a different state of facts from those here shown, and that for that reason these cases are not controlling in the instant case upon the grounds of rejection applied by us. The issue as to whether there was invention present, by reason of the method used in production, did not there arise in the manner in which it has arisen in the case at bar.

[3] Under the view which we take of the issue there is no necessity of our discussing the third ground, mentioned in both briefs, that "the design is an imitation of marble." The rejection for lack of invention was without error and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BAGER ET AL.

No. 2,635. Decided March 25, 1931

1. PATENTABILITY—ANTICIPATION—ACCIDENTAL SHOWING.
   The rule established by the authorities is that an accidental showing in a prior patent does not anticipate a later invention where the thing shown was not essential to the first invention, was not designed, adapted, or used to perform the function which it performs in the second, was neither intended nor appreciated by the patentee and the patent contains no suggestion of the way in which the result sought is accomplished in the second invention.
2. SAME—SAME—SAME.
   If the accidental showing of the B. patent of the position of the sheave clearly suggests to those skilled in the art, the way in which the result sought is accomplished by appellants, it is immaterial whether B.'s showing of the position of his sheave was accidental or intentional.
3. SAME—SAME—DRAWINGS ALONE MAY BE SUFFICIENT.
   "The law requires that for a thing to be patentable to an alleged inventor it must not have been 'described in any printed publication in this or any foreign country for more than two years prior to his application'. Description for the purposes of anticipation can be by drawings alone as well as by words. *Jockmus* v. *Leviton*, 28 F.(2d) 812."
4. SAME—POWER SHOVEL.
   Claims for a power shovel *Held* unpatentable in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Hoar & Ruhloff and *Mr. Roger Sherman* for Bager et al.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming a decision of the Examiner, rejecting all of the claims of appellants, nine in number. Claim 5 of the application is illustrative of the claims in issue and reads as follows:

> 5. In a power shovel, the combination of a boom, a dipper-handle capable of swinging movement in a substantially vertical plane, a dipper supported by the handle, a padlock-sheave for hoisting the dipper and located behind the rear wall of the dipper and entirely below the upper edge of the dipper backwardly extended, a pivot for the padlock-sheave, means carried by the handle for supporting said pivot, a sheave at the outer end of the boom, and a multiple-reach hoist cable passing over the sheave at the outer end of the boom and around the padlock-sheave.

The references are Burke, 1,529,392, March 10, 1925; Johnson, 1,391,737, September 27, 1921.

The alleged invention in issue is described in the decision of the Board of Appeals as follows:

> The claims are directed to the location of the padlock-sheave in an otherwise old construction of power shovel mounting having the usual dipper handle, handle-end casing, and dipper. By locating the padlock-sheave below the upper edge of the dipper and behind the wall thereof, applicants claim they obtain greater digging range with a shorter boom, all of which is of especial advantage in tunnel work.

With regard to the references, the Board said:

> The patent to Johnson discloses substantially the type of dipper and dipper handle set forth in the claims but this reference is not relied upon to disclose the padlock-sheave mounted in the particular place with respect to the dipper which applicants state constitutes their invention.
>
> The patent to Burke does disclose the handle-end casting with the padlock-sheave mounted just above the end of the dipper handle in a position where a greater digging range with a shorter boom would be secured. It is not denied that most of the claims fail to define from the construction disclosed in this patent to Burke. Applicants press the view, however, and in support thereof have presented two affidavits of experts in this art, that the particular disclosure of Burke is impractical, due to the unwieldy part of the dipper shown attached to the handle, and that the showing of the location of the padlock-sheave is accidental, and, therefore, the reference should be withdrawn. It is suggested on behalf of the applicants that a draftsman may have placed the padlock-sheave in the particular location shown. Certain decisions are cited by the applicants in support of their view that this reference does not anticipate the invention here claimed.
>
> It is deemed immaterial whether the draftsman of his own initiative located the sheave in the position shown in the Burke patent or whether he was directed to so locate it by Burke. The sole question is whether one skilled in the art seeing the disclosure of the Burke patent would understand that the sheave was to be located in the position there shown and whether, were such a construction built and operated, the advantages claimed to result from such location of the sheave would be secured. As we regard the Burke disclosure it is sufficient to anticipate the location of the sheave claimed by the applicants. If their construction has any advantages over that disclosed by Burke such construction is not recited in the claims.
> * * *

Appellants' principal contention is that the showing by Burke in his drawing of the location of his sheave, relied upon by the Board as anticipating appellants' claims, was accidental, and that an accidental showing is, as a matter of law, no anticipation. They further contend that there is no analogy between Burke's device and that of appellants.

An affidavit of one Burke, the patentee of the Burke reference, is found in the record, but there is nothing in the record to show that it was offered in evidence or considered by the tribunals of the Patent

Office in their determination of the case. The statute requires this court to review decisions of the Patent Office *on the evidence produced before the Patent Office tribunals.*

Upon oral argument it was stated by appellants' counsel, and admitted by the Solicitor for the Patent Office, that said affidavit was in fact offered in support of a motion for rehearing before the Board of Appeals.

However, from an examination of the Burke specification, we find that he makes no reference to the *positioning* of the sheave in question shown upon his drawing, and we think the positioning of said sheave was, as claimed by appellants, accidental.

The Board of Appeals, as heretofore shown, held that it was immaterial whether the draftsman of his own initiative located the sheave as shown in the Burke patent or whether he was directed so to locate it by Burke, and that the only question was whether one skilled in the art, seeing the drawing of the Burke patent, would conclude that the sheave was to be located in the position there shown, and whether, were such a construction built and operated, the advantages here claimed to result from such location would be secured.

We think the Board has correctly stated the law applicable to the question here involved.

Appellants insist that an accidental showing cannot, as a matter of law, be held to be an anticipation. In support of such contention, they cite the decision of this court in the case of *In re Daniel*, 17 C. C. P. A. (Patents) 605, 34 F.(2d) 995, 389 O. G. 270, and in the supplemental brief of their counsel, the following statement appears, referring to the opinion in said case:

> * * * Your Honors have now stated:
> "an accidental showing with no claim based thereon in in the patent issued does not constitute an anticipation or disclosure which should preclude favorable action on appellant's claim covering this point."

The complete paragraph in said opinion from which the foregoing quotation was taken reads as follows:

> *Appellant has furnished us with numerous references* to adjudicated cases to fortify his insistance that an accidental showing with no claim based thereon in the patent issued does not constitute an anticipation or disclosure, which should preclude favorable action on appellant's claim covering this point. (Italics not quoted.)

What this court did hold in the *Daniel* case is disclosed in the following quotation from the opinion. After reciting the facts and discussing the authorities, the court, speaking through Judge Garrett, said:

> We are of opinion, therefore, and hold that so far as that part of Figure 5 in the Dawson Reissue No. 14,375, showing the overhanging arm 11 and the ears and guide roller or pulley therein is concerned, it was an accidental showing of such a nature, *under all the facts of the case*, that it can not be held to be anticipation of the later application of appellant Daniel, and there does not appear to be any conflict between the claims of Daniel in the instant case and that portion of Figure 5 in Dawson reissue which relates to the locking of the pintle. (Italics not quoted.)

[1] As to whether an accidental showing in a drawing is or is not an anticipation of a later invention depends generally upon the facts in each particular case. Without reviewing the authorities cited by the respective parties hereto, it is sufficient to say that they appear to establish the rule that an accidental showing in a prior patent does not anticipate a later invention where the thing so shown is not essential to the first invention, and was not designed, adapted or used to perform the function which it performs in the second invention, and was neither intended nor appreciated by the patentee, and when the first patent contains no suggestion of the way in which the result sought is accomplished by the second inventor. *Brill* v. *Third Ave. R. Co.*, 103 F. 289; *Edison Electric Light Co.* v. *Novelty Incandescent Lamp Co.*, 167 F. 977; *A. R. Mosler & Co.* v. *Lurie*, 209 F. 364; *Munising Paper Co., Limited* v. *American Sulphite Pulp Co.*, 228 F. 700.

[2] We may assume for the purposes of this case that the position of Burke's sheave was not essential to his invention, and was not designed or used to perform the function which it performs in appellants' construction; but nevertheless, if the accidental showing of Burke of the position of his sheave clearly suggests to one skilled in the art the way in which the result sought is accomplished by appellants, it is immaterial, as held by the Board of Appeals, whether Burke's showing of the position of his sheave was accidental or intentional.

[3] The law requires that for a thing to be patentable to an alleged inventor, it must not have been "described in any printed publication in this or any foreign country for more than two years prior to his application." Description for the purposes of anticipation can be by drawings alone as well as by words. *Jockmus* v. *Leviton*, 28 F. (2d) 812.

[4] We think that the drawing of Burke clearly suggests that by positioning the padlock-sheave behind the rear wall of the dipper and below the top of that wall, all of the advantages claimed by appellants by reason of the position of the sheave would be secured.

While it is true that appellants' device has a multiple-reach hoist cable, and that of Burke does not, we do not regard this as material. We think that any person skilled in the art, realizing the desirability of permitting the bucket to be raised to the extreme height permitted by the boom, would, after seeing Burke's drawing, position the sheave as appellants have done, and therefore we conclude that appellants' disclosure, in view of the Burke reference, does not constitute invention.

We may add that, even without the Burke reference, it would be difficult for us to find invention in positioning the sheave as appellants have done, for the reason that if it was desirable to raise the bucket to the extreme possible height permitted by the boom, it is apparent that the position of the sheave in the old construction of power shovels, as shown by the Johnson reference, would prevent it, and it would seem that it would not require any exercise of the inventive faculty to overcome the difficulty by lowering the position of the sheave, as appellants have done.

We are not unmindful of the earnest contention of appellants' counsel that although this may seem obvious now, after the problem has been solved, it was not obvious to those skilled in the art, and that the problem existed for many years before it was solved by this alleged invention. Neither are we unmindful of the fact that a very simple change in construction may involve invention of the highest order. Nevertheless, we are inclined to think that in all probability the desirability of allowing the dipper to be raised to the height of the boom, thus permitting better results in tunnel work, was not realized for many years by those skilled in the art, but that, when realized, it was obvious that by changing the conventional position of the sheave, as appellants did, the desired result would be accomplished, and this required only mechanical skill.

Having found that there was no invention in appellants' position of the sheave, as disclosed in their application, we are clear that none of the elements of appellants' claims, either singly or in combination, constitute invention, for the reasons stated in the Examiner's statement found in the record.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,027,570, J. R. Sheldon, Comforter filling machine; 1,370,411, F. Contrado et al., Mattress filling machine, D. C. Mass., Doc. E 2665, *Triangle Kapok Machine Corp.* v. *Fraser Bedding Co.* Consent decree dismissing bill Nov. 15, 1926. Doc. E 2666, *Triangle Kapok Machine Corp.* v. *Lawrence Mattress Co.* Injunction Mar. 7, 1927.

1,082,331. (See 1,082,463.)

1,082,463, Hopkins and Fellows, Wrapping machine; 1,082,331, same, Automatic feeding and cutting mechanism for plastic material; D. C. Mass., Doc. E 2154, *Ideal Wrapping Machine Co.* v. *The George Close Co.* Consent decree for plaintiff June 25, 1930.

1,111,583, P. E. Holt, Traction belt for tractors; 1,258,601, E. F. Norelius, Track chain; 1,317,653, same, Trailer wagon; 1,258,602, W. Turnbull, Tractor; 1,304,416, same, Traction engine; 1,336,871, same, Track support for chain track tractor; 1,344,363, same, Tractor frame suspension; 1,379,323, same, Self laying track vehicle; 1,309,972, same, One-piece tractor frame and transmission unit; 1,258,603, 1,258,604, B. Holt, Traction engine; 1,282,328, F. Tschuby, Classifying apparatus for use in the distillation of benzol homologues; 1,356,679, E. E. Wickersham, Traction engine; 1,479,349, same, Tractor driving sprocket; 1,705,802, C. L. Best, Method of providing track shoes; 1,744,516, W. H. Whitacre, Crawler tractor, filed June 4, 1931, D. C. Nev. (Carson City), Doc. G–115, *Caterpillar Tractor Co. et al.* v. *International Harvester Co. et al.*

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,313,094, I. Langmuir, System for amplifying variable currents; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct current potentials, filed June 8, 1931, D. C., S. D. N. Y., Doc. E 60/125, *Radio Corp. of America et al.* v. *The Poughkeepsie Gold Seal Electrical Corp.*

1,175,261, 1,256,899, A. G. Heggem, Stuffing box, appeal filed May 29, 1931, C. C. A., 10th Cir., Doc. 490, *Skinner Bros. Belting Co.* v. *Oil Well Improvements Co.*

1,194,568. (See 1,865,803.) 1,195,632. (See 1,173,079.)

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit; 1,465,332, same, Vacuum tube amplifier, filed June 8, 1931, D. C., S. D. N. Y., Doc. E 60/124, *Radio Corp. of America et al.* v. *The Poughkeepsie Gold Seal Electrical Corp.*

1,251,377. (See 1,173,079.)

1,256,491, W. E. Urschel, Process for snipping string beans; 1,256,492, 1,336,991, same, Apparatus for snipping string beans, filed May 26, 1931, D. C. Md., Doc. E 1896, *Chisholm Ryder Co., Inc.*, v. *B. I. Buck.*

1,256,492. (See 1,256,491.) 1,256,899. (See 1,175,261.)

1,258,601. (See 1,111,583.) 1,258,602. (See 1,111,583.)

1,258,603. (See 1,111,583.) 1,258,604. (See 1,111,583.)

1,270,559, 1,281,219, S. Simpson, Clutch facing; 1,414,383, F. C. Stanley, Friction facing; 1,417,778, same, Process of making friction facings; 1,578,929, same, Clutch facing and process of making, D. C. Mass., Doc. E 2691, *The Raybestos Co.* v. *Multibestos Co.* Consent decree dismissing bill and counterclaim Dec. 15, 1927.

1,279,936, Re. 15,755, R. H. Taylor, Inflated ball, D. C. Mass., Doc. E 2690, *The Seamless Rubber Co., Inc.*, v. *Stall & Dean Mfg. Co., Inc.* Decree affirmed Mar. 7, 1928.

1,281,219. (See 1,270,559.) 1,282,328. (See 1,111,583.)

1,304,416. (See 1,111,583.)

1,306,116, 1,383,229, W. B. Moses, Ignition apparatus; 1,375,658, C. F. Gilchrist, Dynamo electric machine and brush holder device; 1,443,073, 1,520,237, same, Dynamo electric machine; 1,490,104, same, Brush holder; 1,735,112, same, Switch; 1,482,204, Schwarzmann and Rosner, Timer distributer; 1,517,281, L. B. Ehrlich, Dynamo; 1,676,185, 1,703,319, Gilchrist and Patterson, Combined timer and distributer; 1,609,888, P. F. Wollenweber, Ignition device, filed Mar. 27, 1931, D. C., E. D. N. Y., Doc. 5436, *The Electric Auto Lite Co.* v. *P. & D. Mfg. Co., Inc., et al.*

1,309,972. (See 1,111,583.) 1,313,094. (See 1,173,079.)

1,317,653. (See 1,111,583.) 1,336,871. (See 1,111,583.)

1,336,991. (See 1,256,491.)

1,337,333, H. S. Simpson, Foundry mixer; 1,615,525, same, Automatic device for operating and closing discharge door on mixers; 1,771,398, A. C. Christensen, Door operating mechanism for mixing machines, D. C., S. D. Ohio (Dayton), Doc. E 296, *National Engineering Co. et al.* v. *The International Clay Machinery Co. et al.* Patents held valid May 27, 1931.

1,341,957, E. C. Wilson, Hoist; 1,498,141, same, Well elevator; 1,368,779, V. W. Zilen, Elevator for casing or piping; 1,468,589, 1,490,445, W. W. Wilson, Elevator; 1,486,471, C. E. Wilcox, Well pipe elevator, D. C., N. D. Tex. (Amarillo), Doc. —, *Byron Jackson Co.* v. *Western Supply Co. et al.* Patents held valid and infringed; dismissed as to Western Supply Co. June 1, 1931.

1,344,363. (See 1,111,583.) 1,356,679. (See 1,111,583.)

1,365,803, 1,194,568, F. W. Storch, Envelope sealing machine, D. C. Mass., Doc. E 2663, *Standard Mailing Machines Co.* v. *Pitney-Bowes Postage Meter Co.* Dismissed June 28, 1926.

1,368,779. (See 1,341,957.) 1,370,411. (See 1,027,570.)

1,375,658. (See 1,306,116.) 1,379,323. (See 1,111,583.)

1,383,229. (See 1,306,116.) 1,391,887. (See 1,434,655.)

1,403,475. (See 1,231,764.) 1,414,383. (See 1,270,559.)

1,417,778. (See 1,270,559.)

1,424,651, E. Fulda, Wire reel; 1,451,835, Lachiman and Fulda, Reel, filed Mar. 30, 1931, D. C., E. D. N. Y., Doc. 5442, *Universal Electric Welding Co.* v. *E. J. Schaub.*

1,434,655, 1,434,657, W. A. Garratt, Sounding device; 1,391,887, same, Pneumatic horn, filed Mar. 12, 1931, D. C., E. D. N. Y., Doc. 5411, *Trico Products Corp.* v. *E. A. Laboratories, Inc.*

1,434,657. (See 1,434,655.) 1,443,073. (See 1,306,116.)

1,451,835. (See 1,424,651.)

1,460,606, 1,507,624, K. Ripper, Process for manufacturing condensation products; 1,625,283, same, Process for manufacturing homogeneous glasslike condensation products of urea and formaldehyde; 1,687,312, same, Process for manufacturing urea-formaldehyde condensation prod-

ucts; 1,762,456, same, Making condensation products of urea and aldehyde, filed Apr. 23, 1931, D. C., E. D. N. Y., Doc. 5472, *Polkopas, Ltd., et al.* v. *Alden Corp.*

1,465,332. (See 1,231,764.) 1,468,589. (See 1,341,957.)

1,472,484, H. Mayer et al., Dumping wagon; Re. 17,130, G. W. Berry, Tilting mechanism for dumping bodies, filed Apr. 25, 1931, D. C., E. D. N. Y., Doc. 5476, *The Commercial Shearing & Stamping Co.* v. *Wood Hydraulic Hoist & Body Co.*

1,479,349. (See 1,111,583.) 1,482,204. (See 1,306,116.)

1,486,471. (See 1,341,957.)

1,489,944, M. Kasser, Machine for processing eggs; 1,798,608, same, Egg loader and unloader machine; 1,509,477, same, Egg carrier, filed June 1, 1931, D. C., N. D. Calif. (San Francisco), Doc. 2900-S, *Kasser Egg Process Co.* v. *Nye & Nissen.*

1,490,104. (See 1,306,116.)

1,490,174, P. Kennedy, Baseball glove; 1,631,735, Kennedy and Kennedy, same, filed May 29, 1931, D. C., S. D. N. Y., Doc. E 60/95, *Ken-Wel Sporting Goods Co., Inc.*, v. *A. Silverman (Peerless Sporting Goods Co.).*

1,490,445. (See 1,341,957.) 1,498,141. (See 1,341,957.)

1,507,624. (See 1,460,606.) 1,509,477. (See 1,489,944.)

1,517,281. (See 1,306,116.) 1,520,237. (See 1,306,116.)

1,539,810, R. T. Gillette, Welding electrode; 1,552,184, N. H. Adams, Metal composition and method of manufacture, D. C., S. D. N. Y., Doc. E 50/132, *General Electric Co. et al.* v. *Fansteel Products Co. Inc.* Consent decree for plaintiff June 1, 1931.

1,552,184. (See 1,539,810.)

1,564,378, H. Stein, Bleached and dyed furs; 1,573,200, same, Process of bleaching and dyeing furs, filed May 19, 1931, D. C., E. D. N. Y., Doc. 5504, *Steinfur Patents Corp.* v. *Moos Fur Dyeing Corp. et al.*

1,573,200. (See 1,564,378.) 1,578,929. (See 1,270,559.)

1,615,525. (See 1,337,333.)

1,620,661, Re. 17,915, L. L. Jones, Radio frequency amplifying system; 1,673,287, same, Electron discharge tube amplifier system; 1,713,130, same, Method of and means for controlling energy feed back in electron discharge device; 1,732,937, same, Transformer and coil system; 1,770,524, same, Amplifying system; 1,770,525, same, Radio receiving apparatus; 1,779,881, same, Amplifier; 1,788,197, same, Radio frequency circuit; 1,791,030, same, Radio receiving system; 1,696,263, C. E. Bonine, Radio apparatus; Re. 17,194, G. H. Whittingham, Tuning device, filed Apr. 13, 1931, D. C., E. D. N. Y., Doc. 5454, *Technidyne Corp. et al.* v. *McPhilbin-Keaton, Inc.*

1,625,283. (See 1,460,606.) 1,631,735. (See 1,490,174.)

1,656,128, F. F. Taylor, Toy vehicle; Des. 76,829, same, Child's vehicle; 1,661,411, P. Crosley, jr., Baby walker; 1,793,848, D. W. Gill, Child's vehicle, filed June 1, 1931, D. C., S. D. Ohio, W. Div., Doc. 746, *The F. F. Taylor Co.* v. *L. Wise (Leo's Hole In The Wall) et al.*

1,658,353, Ronning and Ronning, Combination traction implement; 1,658,354, same, Earth working attachment for tractors; 1,706,256, same, Tractor grader combination, D. C., N. D. Ohio, E. Div., Doc. 3426, *Patents Holding Corp. et al.* v. *The Galion Iron Works & Mfg. Co.* Dismissed without prejudice June 9, 1931.

1,658,354. (See 1,658,353.) 1,661,411. (See 1,656,128.)

1,669,888. (See 1,306,116.) 1,673,287. (See 1,620,661.)

1,676,185. (See 1,306,116.) 1,687,312. (See 1,460,606.)

1,696,263. (See 1,620,661.) 1,703,319. (See 1,306,116.)

1,705,802. (See 1,111,583.) 1,706,256. (See 1,658,353.)

1,713,130. (See 1,620,661.) 1,732,937. (See 1,620,661.)

1,735,112. (See 1,306,116.)

1,742,830, Seaman and Braf, Piping and method of forming same; 1,756,036, same, Sewing machine, filed May 15, 1931, D. C., E. D. N. Y., Doc. 5500, *C. Seaman* v. *Williamsbridge Mills, Inc.*

1,744,516. (See 1,111,583.) 1,756,036. (See 1,742,830.)

1,762,456. (See 1,460,606.) 1,770,524. (See 1,620,661.)

1,770,525. (See 1,620,661.) 1,771,398. (See 1,337,333.)

1,779,881. (See 1,620,661.) 1,788,197. (See 1,620,661.)

1,791,030. (See 1,620,661.) 1,793,848. (See 1,656,128.)

1,798,608. (See 1,489,944.)

Re. 15,641, J. H. Emery, Artificial fruit and method of producing same, filed Apr. 21, 1931, D. C., E. D. N. Y. Doc. 5470. *J. H. Emery* v. *J. G. McCrary Co.*

Re. 15,755. (See 1,279,936.) Re. 17,130. (See 1,472,484.)

Re. 17,194. (See 1,620,661.) Re. 17,915. (See 1,620,661.)

Des. 76,829. (See 1,656,128.)

Adjudicated Patents

(C. C. A. N. Y.) Lilienfeld patent, No. 1,122,011, for process and apparatus for producing Roentgen rays, claims 7 and 8, *Held* not infringed. *Chemical Foundation* v. *General Electric Co.*, 49 F.(2d) 697.

(C. C. A. Ohio.) Claude patent, No. 1,125,476, for system of illuminating by luminescent tubes, claim 1, *Held* valid and infringed. *Sun Ray Gas Corporation* v. *Bellows-Claude Neon Co.*, 49 F.(2d) 886.

(D. C. Pa.) Mobley patent, No. 1,664,988, for sound reproducer, *Held* invalid. *Mobley* v. *J. A. Fischer Co.*, 49 F.(2d) 920.

(C. C. A. Ohio.) Hinshaw reissue patent, No. 16,157, for trailer truck, claims 2, 5, 7, 8, and 10, *Held* invalid. *Ohio Galvanizing & Mfg. Co.* v. *Mercury Mfg. Co.*, 49 F.(2d) 895.

Disclaimer

1,700,469.—*Roy D. Conway*, Basking Ridge, N. J. TELEPHONE SYSTEM. Patent dated January 29, 1929. Disclaimer filed July 13, 1931, by the assignee, *Western Electric Company, Incorporated.*

Hereby enters this disclaimer to the said claims of said Letters Patent which are in the following words to wit:

"2. In a telephone exchange system, calling lines and various types of called lines, automatic switching mechanism for interconnecting calling and called lines, an operator's position with signals thereat, means for automatically intercepting the connection for the called line and extending it to said operator's position, and means after such a connection is extended to operate said signals to indicate the type of the called for line."

"17. In a telephone exchange system, calling lines and classified called lines, means for extending connections between said lines, an operator's position with signals thereat, means for automatically extending said lines to said position in lieu of called lines and means to operate said signals to indicate the classification of the called lines."

1,690,206.—*Arthur Raynsford*, New York, N. Y. TELEPHONE SYSTEM. Patent dated November 6, 1928. Disclaimer filed July 11, 1931, by the assignee, *Western Electric Company, Incorporated.*

Hereby enters this disclaimer to the said claims of said Letters Patent which are in the following words to wit:

"5. In a telephone system, calling lines arranged in groups according to the class of service to which they are entitled, link circuits individual to each group, control devices common to all groups for controlling the automatic establishment of connections, means responsive to the initiation of a call by one of said lines to cause one of the corresponding link circuits to associate a control device with said line, means on said calling line to set upon said control device a registration of the number of the wanted line, and means in said link circuit to set up in said control device a registration of the class of the calling line."

"8. In a telephone system, calling lines arranged in groups according to the class of service to which they are entitled, link circuits individual to each group, control devices common to all groups, said control devices being associated with calling lines through the intermediation of said link circuits, a plurality of relays in each of said control devices, and means in said link circuits for variably operating said relays to record the class of the calling line."

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 11, 1931

[VOL. 409. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 316,131. A. H. NIRENBERG TRADING CORPORATION, New York, N. Y. Filed June 22, 1931.



The word "Quality" is disclaimed apart from the mark as shown.

For Dyed Animal Pelts.

Claims use since May 1, 1931.

Ser. No. 316,534. A. C. LAWRENCE LEATHER COMPANY, Peabody, Mass. Filed July 1, 1931.

JACK-HI

For Shearlings or Wool Pelts.

Claims use since Mar. 2, 1931.

Ser. No. 316,538. MOUNTAIN STATES COAL COMPANY, Cincinnati, Ohio. Filed July 1, 1931.

Grey Goose

For Coal.

Claims use since Jan. 1, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 314,011. PARFUMERIE ROGER ET GALLET, SOCIÉTÉ ANONYME, Paris, France. Filed Apr. 30, 1931.

FEU-FOLLET

For Toilet Soaps.

Claims use since Oct. 25, 1930.

Ser. No. 315,728. CHAMPION & BARBER, INC., doing business as Cee-Bee Products, Los Angeles, Calif. Filed June 12, 1931.

Cee-Bee

For Detergent Cleaning Compounds in Cake, Flake, Paste, Pulverized, and Liquid Form.

Claims use since June 3, 1931.

Ser. No. 315,945. OLIVER A. SWANSON, doing business as New England Chemical Associates, New York, N. Y. Filed June 16, 1931.

NECHEMAS

The 100% Cleaner

No claim is made to the words "The 100% Cleaner" apart from the mark shown on the drawing.

For Chemical Cleaning Preparation in Powdered Form for Silver, Metal, and Wood Surfaces and for Laundry and General Home Use.

Claims use since Mar. 16, 1931.

Ser. No. 316,486. HAT NU CORPORATION, Washington, D. C. Filed June 30, 1931.



For Felt Hat Cleaning Powder.

Claims use since Jan. 26, 1929.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 302,665. FRANK H. BALDWIN, Ticonderoga, N. Y. Filed June 21, 1930.

BALDWINS



Applicant disclaims the right to the exclusive use of the words "Baldwins" and "Brand" apart from the trademark as shown in the drawing.

For Preparation for the Treatment of Eczema.

Claims use since Apr. 1, 1930.

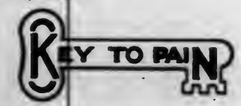
Ser. No. 303,280. GUSTAVE GLATZER, New York, N. Y. Filed July 9, 1930.

SPHINX

For Mascara and Eye Shadow Cream.

Claims use since Mar. 1, 1930.

Ser. No. 304,620. HUBERT R. LOONEY, Portland, Oreg. Filed Aug. 14, 1930.



For Medicinal Preparation for External Use in the Treatment of Rheumatism.

Claims use since May 20, 1930.

Ser. No. 311,013. RALPH HERMAN LANGE, doing business as K-Mol Laboratories, Chicago, Ill. Filed Feb. 11, 1931.

K-Mol

For Mouth Wash.

Claims use since Dec. 1, 1929.

Ser. No. 311,310. THE HUGHES CHEMICAL COMPANY, Cleveland, Ohio. Filed Feb. 20, 1931.

Ger-San

For Chemical Disinfectant and Germicide.

Claims use since Feb. 6, 1931.

Ser. No. 312,027. PACATÁ HAIR REMEDY, San Francisco, Calif., ass'gnor to Rafael R. Jaramillo, San Francisco, Calif. Filed Mar. 10, 1931.

PACATÁ

For Liquid Tonic for the Treatment of the Hair.

Claims use since Nov. 18, 1926.

Ser. No. 312,291. CHEMISCHE FABRIK FLÖRSHEIM DR. H. NOERDLINGER A. G., Florsheim-on-the-Main, Germany. Filed Mar. 19, 1931.

Balnacid

For Preparations for External Use in the Treatment of Diseases or Disorders of the Skin.

Claims use since Dec. 11, 1913.

Ser. No. 313,589. COOK & LEARY, Brooklyn, N. Y. Filed Apr. 21, 1931.

MUNDA BALM

Applicant disclaims the word "Balm" appearing on the drawing apart from the other features of the mark.

For Preparation for the Treatment, Relief, and Healing of Burns, and Face and Hand Cream.

Claims use since Feb. 1, 1931.

Ser. No. 313,878. WORCESTER BLEACHING WATER CO., Worcester, Mass. Filed Apr. 27, 1931.

TWIN ♡♡ HEART

For Bleaching Water.

Claims use since Feb. 28, 1931.

Ser. No. 314,010. PARFUMERIE ROGER ET GALLET, SOCIÉTÉ ANONYME, Paris, France. Filed Apr. 30, 1931.

FEU-FOLLET

For Perfumery—Namely, Extracts, Toilet Waters, and Toilet Preparations for Scenting, Beautifying, and Preserving the Skin and Hair.

Claims use since Oct. 25, 1930.

Ser. No. 314,397. IRENE D. COTÉ, New York, N. Y. Filed May 11, 1931.



For Cold Creams, Vanishing Creams, Depilatories, Hair Growers, Hair Tonics, Hair Dyes, Hair Color Resterers, Hair Dressings, Eyelash and Eyebrow Preparations, Skin Astringents, Face Powder, Talcum Powder, Perfumes, Toilet Waters, Bath Salts, Reducing Preparations, Rouges for Face, Rouges for Lips, Shampoos, Sachets, Mud Packs, Lemon Packs, Finger Nail Polishes, Cuticle Cream Lotion, Cuticle Remover and Hand Lotion, Tooth Paste, Tooth Cream, Tooth Powder, Acne Preparation, Scalp Ointments, Preparations for Treating the Scalp, a Liquid Preparation for Removing Finger Nail Polish, Nail White, Deodorants, Lip Sticks, Powder Compacts, Liquid Skin Enamels, Liquid Face Powders, Pomades, and Face Creams.

Claims use since June 1, 1923.

Ser. No. 315,062. THE PETER CORPORATION, New York, N. Y. Filed May 26, 1931.

SUNSHINE

For Cleansing Cream.

Claims use since May 11, 1931.

CLASS 7

Cordage

Ser. No. 314,937. WHITLOCK CORDAGE CO., New York, N. Y. Filed May 22, 1931.

DURAFLEX

For Rope and More Particularly Rope Made of Fibre Such as Manilla and Intended for All Purposes for Which Such Rope is Ordinarily Used, Including Marine, Oil Drilling, Construction, and Transmission.

Claims use since May 13, 1931.

Ser. No. 315,218. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed May 29, 1931.



The words "Brand" and "Patina" are disclaimed apart from the mark shown.

For Wire Cables, Wire Cord, Wire Rope, Wire for Making Cables, All Said Goods Being Non-Electric.

Claims use since Dec. 16, 1929.

Ser. No. 315,553. PAGE STEEL AND WIRE COMPANY, Adrian, Mich., and Bridgeport, Conn. Filed June 8, 1931. Under 10-year proviso.

PAGE

For Steel and Iron Strands for Cable and Rope.

Claims use since July 1, 1883.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 316,477. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky. Filed June 30, 1931.

TARGET

For Cigarette Paper and Cigarette Booklets.

Claims use since Feb. 25, 1931.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 316,514. VULCAN MATCH CO., INC., New York, N. Y. Filed June 30, 1931.

TALLY-HO



For Matches.

Claims use since June 23, 1931.

CLASS 10

Fertilizers

Ser. No. 316,093. N. S. KOOS & SON CO., Kenosha, Wis. Filed June 20, 1931.



No claim is made to the words "Plant Food" apart from the mark as shown on the drawing.
For Lawn and Plant Food.
Claims use since Apr. 15, 1931.

CLASS 11

Inks and Inking Materials

Ser. No. 316,158. JOHN MCCABE, doing business as John McCabe & Co., New York, N. Y. Filed June 23, 1931.

High Point

For Carbon Paper, Typewriter Ribbons, Writing Inks, and Ink for Pads.
Claims use since Nov. 6, 1930.

Ser. No. 316,327. THE INTERNATIONAL PRINTING INK CORPORATION, New York, N. Y. Filed June 26, 1931.

SYNCHRO INK

Exclusive right to the use of the word "Ink" apart from the mark as shown is disclaimed.
For Process Printing Inks.
Claims use since June 4, 1931.

CLASS 12

Construction Materials

Ser. No. 314,285. JACKSON LUMBER COMPANY, Lockhart, Ala. Filed May 7, 1931.

DIXIE

For Poles and Piling.
Claims use since Apr. 15, 1931.

Ser. No. 315,310. LEWIS W. HARRINGTON, New York, N. Y. Filed June 2, 1931.



For Outlets for Cast Metal Drains for Roofs and Floors.
Claims use since Apr. 17, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 278,053. MONOCRAFT PRODUCTS COMPANY, Brooklyn, N. Y., assignor to Monocraft Products Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 16, 1929.

MONOCRAFT

For Escutcheon Plates Bearing the Initials or Other Insignia Identifying the Owner, Designed for Application to Automobile Bodies, Suit Cases, Golf Bags, Purses, Cigarette Cases, Lighters, and Other Articles of Manufacture, Said Escutcheon Plates Being of Metal or Other Suitable Material.
Claims use since May 19, 1927.

Ser. No. 314,891. ALBERT A. BRESSLER, New York, N. Y. Filed May 22, 1931.

UNISHELF

For Brackets Used in Connection with Displays for Supporting Merchandise.
Claims use since May 10, 1930.

Ser. No. 316,092. JEFFERSON UNION COMPANY, INC., New York and Lockport, N. Y., and Lexington, Mass. Filed June 20, 1931.

JUMBO

For Metal Pipe Fittings.
Claims use since July 1, 1930.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 316,346. UDDEHOLM COMPANY OF AMERICA, INC., New York, N. Y. Filed June 26, 1931.

TRI-MO

For Tool Steel.
Claims use since Aug. 14, 1930.

Ser. No. 316,347. UDDEHOLM COMPANY OF AMERICA, INC., New York, N. Y. Filed June 26, 1931.

TRI-VAN

For Tool Steel.
Claims use since Jan. 24, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 310,178. KOPPERS PRODUCTS COMPANY, Pittsburgh, Pa. Filed Jan. 20, 1931.

KOPRIME

For Ready-Mixed Paints.
Claims use since Dec. 19, 1930.

Ser. No. 314,726. J. A. TUMBLER LABORATORIES, doing business as Ray-Glo Chemical Company, Baltimore, Md. Filed May 18, 1931.

RAY-GLO

For Polish for Automobiles and Furniture.
Claims use since May 1, 1931.

Ser. No. 314,936. THE WATSON-STANDARD CO., Pittsburgh, Pa. Filed May 22, 1931.

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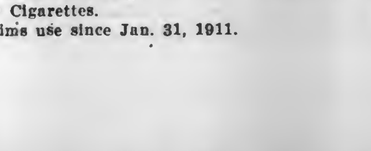
The lining appearing on the drawing is for shading purposes only.
For Varnishes and Paint Enamels.
Claims use since July 1, 1930.

Ser. No. 315,466. MAUTZ PAINT & GLASS CO., Green Bay and Madison, Wis. Filed June 5, 1931.



No claim is made to the word "Good" apart from the mark shown in the drawing.
For Ready Mixed Paint, Varnish, Paint Enamel, Varnish and Wood Stain, Turpentine, Auto Top and Seat Dressing, Lacquer, Lacquer Thinners, Putty, Paint and Varnish Remover, Bronze and Aluminum Powders, Prepared Shellac, Linseed Oil, Japan Dryer, and Floor Wax.
Claims use since Oct. 7, 1922.

Ser. No. 315,787. CHEVROLET MOTOR COMPANY, Detroit, Mich. Filed June 13, 1931.



The lining appearing on the drawing is intended for shading purposes and not to indicate color.
For Combined Automobile Body Polish and Cleaner in Liquid Form.
Claims use since May 9, 1931.

Ser. No. 316,597. LAVERN P. JONES, doing business as Liquilox Company, Burbank, Calif. Filed July 3, 1931.

LIQUILOX

For Paints in Dry, Paste, and Ready-Mixed Form.
Claims use since on or about May 28, 1931.

CLASS 17

Tobacco Products

Ser. No. 315,337. A. BATSCHARI CIGARETTENFABRIK A. G., Baden-Baden, Germany. Filed June 3, 1931.



No claim is made to the word "Cigarettes" which appears on the drawing.
For Cigarettes.
Claims use since Jan. 31, 1911.

Ser. No. 315,987. BROWARD CIGAR COMPANY, Pompano, Fla. Filed June 18, 1931.

Booker T. Washington



The trade-mark consists of the portrait of Booker T. Washington, deceased.
For Cigars.
Claims use since Mar. 15, 1931.

Ser. No. 316,371. MUNSON STEAMSHIP LINE, New York, N. Y. Filed June 27, 1931.

MUNSEAL

For Cigars.
Claims use since Jan. 1, 1925.

Ser. No. 316,479. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky. Filed June 30, 1931.

WHEAT BREAD

For Smoking and Chewing Tobacco.
Claims use since Sept. 27, 1906.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 312,785. CLYDE B. ROBINETTE, Cleveland, Ohio. Filed Mar. 31, 1931.



For Amusement Game—Namely, a Table Board Golf or Backgammon Game Played with Dice, Indicia, or Cards.
Claims use since Oct. 29, 1930.

Ser. No. 315,140. J. CLOYD HARLACKER, Providence, R. I. Filed May 28, 1931.

Bob White

For Golf Balls.
Claims use since Apr. 18, 1931.

Ser. No. 316,059. EDWIN W. TARBOX, Findlay, Ohio. Filed June 19, 1931.

PULMOTOR
MINNOW BUCKET

The words "Minnow Bucket" are disclaimed apart from the other features of the mark shown in the drawing.
For Minnow Buckets.
Claims use since Mar. 1, 1931.

Ser. No. 316,154. THE GEM CLAY FORMING COMPANY, Sebring, Ohio. Filed June 23, 1931.

COLOR
CULTURE

For Miniature Theatres, Figures Therefor, and Materials for Coloring the Same.
Claims use since June 8, 1931.

Ser. No. 316,664. JULIUS SCHOENBERG, New York, N. Y. Filed July 6, 1931.

EMPIRE

For Golf Balls, Golf Clubs, Golf Bags, Tennis Rackets.
Claims use since Jan. 25, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 309,569. THE PROSPECT FIRE ENGINE COMPANY, Prospect, Ohio. Filed Jan. 2, 1931.

MASTER FIRE FIGHTER

For Fire Fighting Apparatus—Namely, Fire Truck Chassis, Pumpers, Boosters and Hose Combinations, Tanks, and Fire Fighting Machines.
Claims use since June, 1923.

Ser. No. 315,081. AUTOMATIC CANTEEN COMPANY, Chicago, Ill. Filed May 27, 1931.

The
CANTEEN

For Vending Machines.
Claims use since Sept. 15, 1929.

Ser. No. 315,287. UCAB DISTRIBUTING CORPORATION, INC., Camden, N. J. Filed June 1, 1931.

THE UCAB

For Compressed Air Bundlers.
Claims use since Sept. 3, 1924.

Ser. No. 315,846. KNAPP-MONARCH COMPANY, Belleville, Ill. Filed June 15, 1931.

VEG-E-GRATER

Applicant disclaims exclusive use of the word "Grater" forming a part of the trade-mark.
For Vegetable Graters and Choppers.
Claims use since May 1, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 315,558. PIONEER INSTRUMENT COMPANY, INCORPORATED, Brooklyn, N. Y. Filed June 8, 1931.

PIONEER

Applicant claims ownership of registration No. 213,616.
For Oil Gauges.
Claims use since May 5, 1931.

Ser. No. 315,770. JOHNSON-WILLIAMS, LTD., Palo Alto, Calif. Filed June 12, 1931.

J-W

For Scientific Instruments, Particularly Flame Arresters, Gas Analysis Cells; Recording Instruments, particularly Recorders of the Hydrocarbon Gas Content or Nearness to Explosibility of Gaseous Mixtures; Indicating Instruments, Particularly Indicators of the Nearness to Explosibility of Gaseous Mixtures, Indicators of Hydrocarbon Content; Engineering Instruments, Particularly Those for the Examination of Gases with Respect to the Explosibility Thereof; Control Instruments, Particularly for the Control of Gas Composition; Combustible Gas Indicators for Use in the Examination of Gases and the Indication of the Combustible Gas Content, Such as Galvanometers, Millivoltmeters, and Milliammeters; and Gas Analyzing Equipment for Examining a Gas for Hydrocarbon Content or Explosibility.
Claims use since June, 1927.

CLASS 27

Horological Instruments

Ser. No. 315,012. PORTNER-HARRIS CO. INC., Chicago, Ill. Filed May 25, 1931.

Century Of Progress

For Clocks, Including Electric Clocks, and Parts Thereof, and Watches.
Claims use since May 5, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 314,005. MARVEL WINDOW CLEANER INCORPORATED, Cleveland, Ohio. Filed Apr. 30, 1931.

MARVEL

For Window Cleaning Devices in the Nature of Hand-Operated Squeegees.
Claims use since January, 1928.

CLASS 32

Furniture and Upholstery

Ser. No. 315,242. BRIGGS MANUFACTURING COMPANY, Detroit, Mich. Filed June 1, 1931.

Springflex

For Household and Office Chairs.
Claims use since May 29, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 310,708. THE MALLEABLE STEEL RANGE MFG. CO., South Bend, Ind. Filed Feb. 2, 1931.

YARD BOY
SPARK-PROOF
INCINERATOR

The words "Spark-Proof Incinerator" are disclaimed apart from the mark as shown.
For Rubbish Incinerator.
Claims use since Dec. 30, 1929.

Ser. No. 313,721. THE UNIVERSAL PIPE AND RADIATOR COMPANY, New York, N. Y. Filed Apr. 23, 1931.

SILVER KING

For Heating and Cooling Radiators.
Claims use since Mar. 4, 1931.

Ser. No. 314,700. LENNOX FURNACE COMPANY, Marshalltown, Iowa. Filed May 18, 1931.

Aire-Flo

For Furnaces Using Fuels Such as Coal, Oil, Gas, Wood, Coke, and such Manufactured Fuels as may be Burned in Ordinary Coal Grates.
Claims use since May 7, 1931.

Ser. No. 316,312. BASTIAN-MORLEY CO., La Porte, Ind. Filed June 26, 1931.

PUBLIX

For Gas Water Heaters.
Claims use since Apr. 25, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 293,320. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Dec. 6, 1929.

ZEPPELIN

For Pneumatic and Cushion Tires Constructed Wholly or Partly of Rubber for Use on Motor Cars, Motor Trucks, Motorcycles, Bicycles, Lighter-Than-Air Craft, Heavier-Than-Air Craft of All Types and Description, Treads, Tire Shoes and Inner Tubes Therefor, Rubber Non-Skid Devices for Said Tires, Inside Tire Protectors, Outside Tire Protectors, Portable Tire and Tube Repair Outfits, and Repair Patches and Bandages Therefor.
Claim use since Nov. 26, 1929.

CLASS 37

Paper and Stationery

Ser. No. 315,581. THE STANDARD REGISTER COMPANY, Dayton, Ohio. Filed June 5, 1931.

"ZIPTAB"

For Manifolding Assemblies Comprising Separable Alternating Sheets of Record and Carbon Material in Zigzag Folded Pocket or Roll Form.
Claims use since May 17, 1930.

Ser. No. 315,711. WATERFALLS PAPER MILLS, New York, N. Y. Filed June 11, 1931.

FACILITY INDEX

No claim being made to the exclusive use of the word "Index" apart from the mark as shown in the drawing.
For Bond and Writing Paper.
Claims use since Apr. 29, 1931.

Ser. No. 315,834. EMPIRE LITHOGRAPHING CO. INC., New York, N. Y. Filed June 15, 1931.

LAD'N' LASSIE

For Writing Tablets.
Claims use since May 28, 1931.

Ser. No. 316,071. SPRINGFIELD PHOTO MOUNT COMPANY, Sprinfield, Mass. Filed June 17, 1931.

Bond Street Linen

Applicant disclaims an exclusive right to the word "Linen" apart from the mark shown in the drawing.
For Writing and Printing Paper and Mailing Envelopes.
Claims use since May 1, 1931.

Ser. No. 316,090. PAUL FULTON, Burlington, Iowa. Filed June 20, 1931.

Mayflower

For Wall Paper.
Claims use since May 20, 1931.

Ser. No. 316,256. BUTLER PAPER CORPORATIONS, Chicago, Ill. Filed June 25, 1931.

BRIGADIER

For Book Paper, Cover Paper, Document Paper, Bristol, Cardboard, Bond Paper, Writing Paper, Ledger Paper, and Paper Intended for the making of Envelopes.
Claims use since June 30, 1926.

Ser. No. 316,277. THE MEAD CORPORATION, Dayton, Ohio. Filed June 25, 1931.

PARAPRINT

For Printing Paper.
Claims use since Jan. 3, 1931.

Ser. No. 316,317. COURTNEY CAMPBELL, doing business as The Educational Press, New York, N. Y. Filed June 26, 1931.

BOOK SHELF

For Scrap Books.
Claims use since June 5, 1931.

Ser. No. 316,318. HENRY L. CARSCADIN, doing business as The John Henry Co., Chicago, Ill. Filed June 26, 1931.

DAILY HOT SHOTS
TRADE MARK

DAILY
HOT
SHOTS

The words "Trade Mark" appearing on the drawing are disclaimed.
For Memorandum Booklets for Salesmen.
Claims use since June 8, 1931.

Ser. No. 316,399. AMERICAN LEAD PENCIL COMPANY, New York, N. Y. Filed June 29, 1931.

UTILITY

For Lead Pencils and Pen Holders.
Claims use since 1898.

Ser. No. 316,507. RIEGEL PAPER CORPORATION, Riegelsville, N. J. and New York, N. Y. Filed June 30, 1931.

CERTIFINE

For Tympan Paper and Bristol Board.
Claims use since June 1, 1931.

CLASS 38

Prints and Publications

Ser. No. 312,538. SUN DIET HEALTH SERVICE, INC., East Aurora, N. Y. Filed Mar. 25, 1931.

SUN-DIET HEALTH SERVICE

For Periodicals, Now Issued Semi-Monthly; Books, Menus Sold As a Part of a Health Service, Food Charts, Recipes, and Printed Advice or Information Relating to Health of Humans.
Claims use since Oct. 1, 1927.

Ser. No. 315,332. ROGERS-KELLOGG-STILLSON COMPANY, New York, N. Y. Filed June 2, 1931.

INTENSITONE

For Lithographed Printed Matter—Namely, Booklets, Folders, and Prints Sold to the Trade as Such.
Claims use since July, 1930.

Ser. No. 315,336. CHARLES H. MATSON, doing business as Fisherman's News, New York, N. Y. Filed June 2, 1931.

FISHERMAN'S NEWS

For Monthly Magazine.
Claims use since Dec. 24, 1930.

Ser. No. 316,227. THE TRAVEL GUILD, INC., Chicago, Ill. Filed June 24, 1931.

The TRAVEL GUILD HOUSE PARTY TOURS

For Publications Relating to Travel Issued at Irregular Intervals.
Claims use since 1928.

CLASS 39

Clothing

Ser. No. 285,020. DOUBLE EAGLE GARMENT CO., Waco, Tex. Filed July 16, 1931.



No claim is made to the word "Brand" apart from the mark as shown.
For Work Clothes—Namely, Service Coats, Overalls, Jumpers, Work Pants.
Claims use since Apr. 1, 1929.

Ser. No. 312,282. JULIUS FLEISH, St. Louis, Mo. Filed Mar. 18, 1931.

Tailor Made



HOUSE DRESSES
ST. LOUIS. MO.

Applicant disclaims all protection for the words "Tailor Made", "House Dresses", and the geographic term "St. Louis, Mo.," apart from the mark as shown on the drawing.
For Wash Dresses for Women and Misses.
Claims use since November, 1930.

Ser. No. 312,556. MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Mar. 26, 1931.

BALJAMA

For Sleeping Garments and Women's and Children's Knitted Underwear.
Claims use since Mar. 11, 1931.

Ser. No. 314,657. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed May 16, 1931.

STRONG RELIABLE

S R

Applicant disclaims exclusive rights to the word "Strong" and "Reliable" except when they appear in the precise relationship disclosed by the drawing.
For Cloth Waistbands for Men's, Young Men's, and Youths' Long Trousers, Work Pants, and Breeches, and Boys' Knickers and Breeches.
Claims use since September, 1930.

Ser. No. 314,984. ALFRED DECKER & COHN, INC., Chicago, Ill. Filed May 25, 1931.

Hudderton

For Men's Coats, Overcoats, Topcoats, and Raincoats.
Claims use since first part of 1915.

Ser. No. 315,540. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J. Filed June 8, 1931.

Ortho-Flex

For Shoes Made of Leather, Fabric, Rubber, and Combinations Thereof; Stockings, Rubbers, Raincoats, Apparel Belts, Slippers, and Gloves Made of Leather, Fabric, and Combinations Thereof for Men, Women, and Children.
Claims use since Aug. 1, 1920.

Ser. No. 315,605. PRINCESS ROYAL HOSIERY MILLS, INC., Reading, Pa. Filed June 9, 1931.

Sir Hedgard

For Hosiery.
Claims use since May 16, 1931.

Ser. No. 315,791. DARTMOOR COAT CO., INC., New York, N. Y. Filed June 13, 1931.

KAM-O-WOOL

No claim is made to the word "Wool" apart from the mark shown on the drawing.
For Ladies' and Men's Sport Coats, Camel Hair Coats, Tweed Coats, Leather Coats, and Rain Coats.
Claims use since June 1, 1931.

Ser. No. 315,857. CHARLES S. MERTON & CO., New York, N. Y., and East Rutherford, N. J. Filed June 15, 1931.



No claim is made to the exclusive use of the words "New York" apart from the mark as shown in the drawing.
For Coats, Vests, Trousers, Under, Dress, Negligee and Work Shirts; Collars, Neckties, Union Suits, Drawers, Night Shirts, Leggings, Spats, Puttees, Garters, Smoking Jackets, Apparel Belts and Overcoats, for Men and Boys; Sweaters, Bathing Suits, Under Shirts, Drawers, Shoes Made of Leather, Rubber, Fabric and/or Any Combination Thereof, Hosiery, Bathrobes, Pajamas, Lounging Robes, Athletic Suits for Men, Women, and Children; Brassières, Corsets, Combinations—Namely, Corset and/or Girdle and Brassière Combinations, Chemises, Step-ins of the Nature of Drawers, Bloomers, Panties, Under Skirts, Outer Skirts, Shirt Waists, Dresses, Suits, Hats, Coats, Caps, Scarfs, Shawls, Nightgowns, for Women and Children.
Claims use since July 1, 1905, on hats; August, 1923, on caps, scarfs, coats; Sept. 9, 1930, on remainder of goods.

Ser. No. 315,858. CHARLES S. MERTON & CO., New York, N. Y., and East Rutherford, N. J. Filed June 15, 1931.



For Coats, Vests, Trousers, Under, Dress, Negligee and Work Shirts; Collars, Neckties, Union Suits, Drawers, Night Shirts, Leggings, Spats, Puttees, Garters, Smoking Jackets, Apparel Belts and Overcoats for Men and Boys; Sweaters, Bathing Suits, Under Shirts, Drawers, Shoes Made of Leather, Rubber, Fabric and/or Any Combinations Thereof, Hosiery, Bathrobes, Pajamas, Lounging Robes, Athletic Suits for Men, Women, and Children; Brassières, Corsets, Combinations—Namely, Corsets and/or Girdle and Brassière Combinations, Chemises, Stepins of the Nature of Drawers, Bloomers, Panties, Under Skirts, Outer Skirts, Shirt Waists, Dresses, Suits, Coats, Hats, Caps, Scarfs, Shawls, Nightgowns, for Women and Children.
Claims use since July 1, 1905, on hats; August, 1923, on caps, scarfs, and coats; Sept. 9, 1930, on remainder of goods.

Ser. No. 315,994. ELDER MANUFACTURING COMPANY, St. Louis, Mo. Filed June 18, 1931.

Abbeyvale

For Men's and Boys' Dress and Negligee Shirts and Boys' and Children's Waists and Blouses.
Claims use since Oct. 13, 1925.

Ser. No. 315,996. ELDER MANUFACTURING COMPANY, St. Louis, Mo. Filed June 18, 1931.

Kingscourt

For Men's and Boys' Dress and Negligee Shirts and Boys' and Children's Waists and Blouses.
Claims use since May 26, 1930.

Ser. No. 316,001. ELDER MANUFACTURING COMPANY, St. Louis, Mo. Filed June 18, 1931.

ROYALSPUN

For Men's and Boys' Dress and Negligee Shirts, Boys' and Children's Waists and Blouses.
Claims use since Aug. 28, 1930.

Ser. No. 316,037. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed June 19, 1931.

CEM-PRO

For Boots and Shoes of Leather, Rubber, or Fabric or Any Combinations Thereof.
Claims use since May 8, 1931.

Ser. No. 316,104. I. SCHNEIERSON & SONS, INC., New York, N. Y. Filed June 20, 1931.

TAFFERAY

For Ladies' Chemises, Princess Slips, Bloomers, Step-Ins, Nightgowns, Pajamas, and Step-In Drawers of a Textile Fabric.
Claims use since July 10, 1929.

Ser. No. 316,194. CLAUDE H. DANIELS, Boston, Mass. Filed June 24, 1931.

Safe-Way

For Men's, Women's, and Children's Boots, Shoes, and Slippers Made Wholly or in Part of Leather, Rubber, Canvas, or Textile Materials.
Claims use since May 27, 1931.

Ser. No. 316,216. THE PIONEER SHOE MANUFACTURING COMPANY, Kansas City, Mo. Filed June 24, 1931.

PLAY-KICKS

For Shoes Made of Leather, Fabric, and Combinations of Leather and Fabric.
Claims use since July 1, 1929.

Ser. No. 316,261. FEIN & GLASS, INC., Reading, Pa. Filed June 25, 1931.

STURDEZE

For Shoes of Leather, Cloth, Rubber, Fabric, and/or Any Combination Thereof, for Men, Women, and Children.
Claims use since Nov. 1, 1930.

Ser. No. 316,295. MELVILLE SHOE CORPORATION, New York, N. Y. Filed June 25, 1931.

Courdaye

For Shoes of Leather, Rubber or Fabric, or of Combinations of Those Materials.
Claims use since May 21, 1931.

Ser. No. 316,297. PRINCESS ROYAL HOSIERY MILLS, INC., Reading, Pa. Filed June 25, 1931.

Lacegard

For Hosiery.
Claims use since Apr. 13, 1931.

Ser. No. 316,826. I. S. UNDERGARMENT CO. INC., New York, N. Y. Filed June 26, 1931.

StyleMaid

For Ladies' Chemises, Princess Slips, Bloomers, Step-Ins, Nightgowns, Pajamas, and Step-In Drawers of a Textile Fabric.
Claims use since July 10, 1930.

Ser. No. 316,379. ROSEDALE KNITTING CO. INC., Laureldale, Pa. Filed June 27, 1931.

HAMPDENDALE

For Hosiery.
Claims use since May 28, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 313,485. BEIM, IVLER & BREITER, New York, N. Y. Filed Apr. 18, 1931.

THE "B-I-B" REGISTERED

Applicant disclaims the right to the exclusive use of the term "Registered" which appears on the drawing.
For Combs, Ric-Rac Braid, Safety Pins, and Ribbon Cut in Lengths.
Claims use since May 15, 1915.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 306,668. FALK SHERMAN, New York, N. Y. Filed Oct. 11, 1930.



For Cotton Sheets, Sheeting, Pillow-Cases, and Quilt Covers.
Claims use since Sept. 11, 1930.

Ser. No. 315,441. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed June 5, 1931.

BOULEVARD

For Textile Blankets.
Claims use since December, 1925.

Ser. No. 315,442. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed June 5, 1931.

VOGUE HANDKERCHIEFS

No claim is made to the words "Vogue" and "Handkerchiefs" apart from the mark shown in the drawing.
For Handkerchiefs.
Claims use since May 10, 1931.

Ser. No. 315,537. HOWLETT & HOCKMEYER CO., INC., New York, N. Y. Filed June 8, 1931.

Roi-de-Roi

For Textile Fabrics—Namely, Corduroys and Velveteens, All in the Piece.
Claims use since May 4, 1931.

Ser. No. 315,682. GENERAL SILK CORPORATION, New York, N. Y. Filed June 11, 1931.

CREPE GENERA

No claim is made to the word "Crepe" apart from the mark as shown.
For Silk in the Piece.
Claims use since June 2, 1931.

Ser. No. 315,794. EMPIRE SILK COMPANY, New York, N. Y. Filed June 13, 1931.

Loomcraft Superior

No claim being made to the exclusive use of the word "Superior," apart from the mark as shown in the drawing.
For Silk Piece Goods.
Claims use since May 15, 1931.

Ser. No. 316,027. AMOSKEAG MANUFACTURING COMPANY, Manchester, N. H. Filed June 19, 1931.

LULLABY

For Textile Diapers.
Claims use since Jan. 16, 1930.

Ser. No. 316,409. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

DOENESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

Ser. No. 316,410. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

ESTERNESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

Ser. No. 316,412. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

GLENESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

Ser. No. 316,413. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

LUCENESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

Ser. No. 316,414. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

MOLINESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

Ser. No. 316,415. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

RAVENESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

Ser. No. 316,418. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

TREMONESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 314,962. ROBERT J. PIERCE, INC., New York, N. Y. Filed May 23, 1931.

SANILACTIC

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since May 20, 1931.

Ser. No. 315,403. TOM W. GRACE COMPANY, Dallas, Tex. Filed June 4, 1931.

PERFECTOS

For Rubber Goods—Namely, Fountain Syringes, Hot Water Bottles, Catheters, Finger Cots; Venereal Cots—i. e., Cots, Bags, or Pouches Made of Rubber or Like Material, Which are Manufactured, Sold, and Used for the Purpose of Protecting the User Against Transmission of Infectious Venereal Diseases, Either from Himself to Another or from Another to Himself.
Claims use since Apr. 15, 1919.

Ser. No. 315,637. WILLIAM H. HORN & BROTHER, INCORPORATED, Philadelphia, Pa. Filed June 10, 1931.

"EASON"

For Metallic Devices for Facilitating the Application of Elastic Hosiery.
Claims use since May 28, 1931.

Ser. No. 315,959. AMERICAN YVETTE COMPANY, INC., New York, N. Y. Filed June 17, 1931.

MODYNE

For Permanent Waving Pads.
Claims use since June 1, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 314,120. P. G. RUEHLMAN, Cincinnati, Ohio. Filed May 2, 1931.

"RYO"

For Dry Herb Flavoring Preparation for Soft Drinks.
Claims use since Apr. 23, 1931.

Ser. No. 316,655. SAMUEL HOUSTON MCNUTT, Jr., doing business as Golden Pond Ginger Ale Co., Paducah, Ky. Filed July 6, 1931.

GoldenPond

For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks, Sirups and Extracts for Making the Same.
Claims use since Mar. 11, 1931.

Ser. No. 316,663. ROBERT ARNOLD REID, doing business as Ankle Deep Products Company of America, David City, Nebr. Filed July 6, 1931.

Vitamo Dr.

For Non-Alcoholic, Non-Cereal, Maltless Beverage Sold as a Soft Drink, Sirup and Extract for Making the Same.
Claims use since Jan. 1, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 302,014. OSCAR PORGES, Binghamton, N. Y. Filed May 31, 1930.

O-ROLL-O

For Frozen Confections.
Claims use since Nov. 1, 1929.

Ser. No. 302,471. PERIS MANUFACTURING CO., INC., Florin, Pa. Filed June 16, 1930.

HOME TOWN

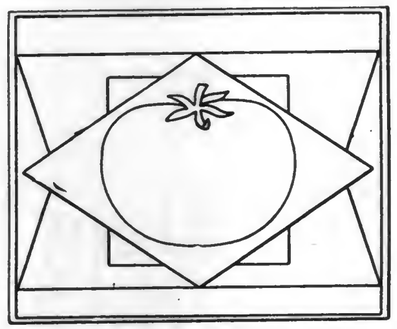
For Peanuts Salted in the Shell and Peanuts Roasted Not Salted in the Shell.
Claims use since 1926.

Ser. No. 302,861. THE A. J. LEHMAN COMPANY, Cincinnati, Ohio. Filed June 26, 1930.

TAM

For Tomato Juice Food Drink.
Claims use since June 12, 1930.

Ser. No. 302,862. THE A. J. LEHMAN COMPANY, Cincinnati, Ohio. Filed June 26, 1930.



The representation of a tomato and the outline of a label per se are disclaimed except in the association shown.
For Tomato Juice Food Drink.
Claims use since June 12, 1930.

Ser. No. 309,135. JOHN C. LEHNE, doing business as John C. Lehne Sales Company, New York, N. Y. Filed Dec. 18, 1930.



Betty Lee

No claim is made to the exclusive right to the name "Betty Lee" apart from the mark as shown in the drawing. The portrait forming a part of the mark is fanciful.
For Flavoring Compounds for Foods and Food Syrups.
Claims use since June 14, 1930.

Ser. No. 310,829. THE INDIAN RIVER FISHERIES, Sebastian, Fla. Filed Feb. 7, 1931.

INDIAN RIVER
FLORIDA FRESH & FROZEN FISH
FISHERIES

The representations of the fish and the words "Florida Fresh & Frozen Fish" are disclaimed except in the association and arrangement shown.
For Fish and Fish Meats.
Claims use since Nov. 12, 1930.

Ser. No. 311,890. ROBERT C. SHADDICK, doing business as Woods Mince Meat Co., Baltimore, Md. Filed Mar. 7, 1931.

WOOD'S



Old South

For Mince Meat.
Claims use since Apr. 2, 1930.

Ser. No. 312,345. JENNIE A. JOHNSON, Spokane, Wash., assignor to Taylor and Johnson, Spokane, Wash., a Partnership consisting of Jesse E. Taylor, Spokane, Wash., and Jennie A. Johnson, Cutbank, Mont. Filed Mar. 20, 1931.



For Flour Compound, Particularly for Making Pancakes, Waffles, Muffins, and the Like.
Claims use since Jan. 12, 1931.

Ser. No. 313,240. INTERNATIONAL FRUIT CORPORATION, Orlando, Fla. Filed Apr. 11, 1931.

RIVER BIRD

For Fresh Citrus Fruits.
Claims use since 1930.

Ser. No. 314,810. JOHN F. JELKE COMPANY, Chicago, Ill. Filed May 20, 1931.

GOOD LUCK

For Oleomargarine.
Claims use since November, 1890.

Ser. No. 315,182. BEATRICE CREAMERY COMPANY, Chicago, Ill. Filed May 29, 1931.

"Smooth-freeze"

Meadow Gold

No claim is made herein to the words "Smooth Freeze" apart from the mark shown.
For Ice Cream.
Claims use since May 1, 1931.

Ser. No. 315,561. THE ROBINSON MILLING COMPANY, Salina, Kans. Filed June 8, 1931.



For Wheat Flour.
Claims use since Oct. 31, 1928.

Ser. No. 315,564. A. SCHILLING & CO., San Francisco, Calif. Filed June 8, 1931. Under 10-year proviso.

Schilling

For Tea and Coffee.
Claims use since 1881.

Ser. No. 315,574. STANDARD CHEESE CORPORATION, Pleasanton, Calif. Filed June 8, 1931.



The word "American" is disclaimed apart from the mark as shown in the drawing.
For Cheese.
Claims use since Aug. 1, 1930.

Ser. No. 315,630. WILLIAM O. CHAPMAN, Washington, D. C. Filed June 10, 1931.

SNOW-WHIP

No claim is made to the word "Whip" apart from the mark as shown in the drawing.
For Frozen Confection.
Claims use since June 6, 1931.

Ser. No. 315,752. LOS ANGELES BREWING CO., Los Angeles, Calif. Filed June 12, 1931.

CONQUISTADOR

For Malt Syrup.
Claims use since May 1, 1931.

Ser. No. 315,795. FISHER FLOURING MILLS COMPANY, Seattle, Wash. Filed June 13, 1931.

SPUN WHITE

No claim is made to the word "White" alone.
For Wheat Flour.
Claims use since Mar. 25, 1931.

Ser. No. 315,905. EXETER CITRUS ASSOCIATION, Exeter, Calif. Filed June 16, 1931.

SURPASS

For Fresh Citrus Fruits.
Claims use since Apr. 30, 1931.

Ser. No. 315,924. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed June 16, 1931.

Popsicle

For Frozen Confections.
Claims use since May 28, 1923.

Ser. No. 316,074. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed June 18, 1931.

POPSICLE

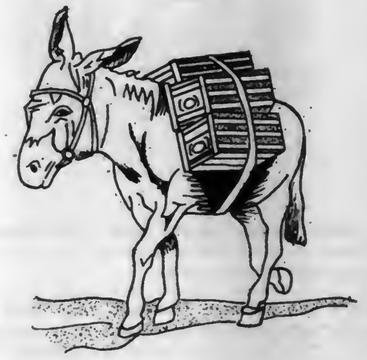
For Non-Alcoholic, Maltless Syrups Used in the Preparation of Frozen Confections.
Claims use since May 28, 1923.

Ser. No. 316,120. CALIFORNIA-HAWAIIAN MILLING COMPANY, San Francisco, Calif. Filed June 22, 1931.

VITA-GREENS

No claim is made to the word "Greens" apart from the mark as shown.
For Dehydrated Alfalfa Leaf Meal and Dehydrated Alfalfa Meal.
Claims use since Apr. 24, 1931.

Ser. No. 316,148. THOS. G. CHUNG CO., Chualar, Calif. Filed June 23, 1931.



For Fresh Vegetables.
Claims use since September, 1923.

Ser. No. 316,167. THE C. M. PITT & SONS CO., Baltimore, Md. Filed June 23, 1931.

FRUITTIES

For Cakes.
Claims use since May 5, 1931.

Ser. No. 316,181. AMERICAN CHICLE COMPANY, Long Island City, N. Y. Filed June 24, 1931.

Chewlets

For Chewing Gum.
Claims use since May 28, 1931.

Ser. No. 316,185. BOWEY'S, INC., Chicago, Ill. Filed June 24, 1931.

BANANA SENSATION

Applicant disclaims use of the word "Banana" apart from the trade-mark as shown and only claims its use in connection with the word "Sensation."
For Combination of Bananas, Other Canned Fruits, Flavors and Colors for Use in Flavoring Ice Cream, Sherbets, and Ices, as Topping on What is Known as Ice Cream Sundaes, and Mixed with Ice Cream and Carbonated Water in What is Known as Ice Cream Sodas, for Special Flavor.
Claims use since July, 1928.

Ser. No. 316,248. BOWEY'S, INC., Chicago, Ill. Filed June 25, 1931.



No claim is made for the words "Not Cocoa" except when used in connection with fanciful figure of East Indian, as shown on trade-mark.

For Hot Chocolate Powder, a Combination of Liquor Chocolate and Flavored Sweetened Skim Milk, Used to Make Hot and Cold Beverages and as an Ingredient or Flavor in chocolate Custards, Cakes, Puddings, Frostings, Pies, Icings, and Syrups.

Claims use since August, 1928.

Ser. No. 316,296. PARKER PRODUCTS CO., Needham Heights, Mass. Filed June 25, 1931.

Delham

For Sandwich Spread.
Claims use since Mar. 23, 1931.

Ser. No. 316,424. DOUGHERTY GRAPE GROWERS ASSOCIATION, Acampo, Calif. Filed June 29, 1931.

PALMATEER

For Fresh Grapes.
Claims use since September, 1927.

Ser. No. 316,483. EMPIRE MALT PRODUCTS CO., Los Angeles, Calif., and Brooklyn, N. Y.. Filed June 30, 1931.

DUBLIN DOWNS

For Malt Syrup.
Claims use since April, 1931.

Ser. No. 316,489. HUBBARD MILLING COMPANY, Mankato, Minn. Filed June 30, 1931.

ARDEE

For Wheat Flour.
Claims use since Jan. 1, 1910.

Ser. No. 316,506. REYNOLDS & CO., New York, N. Y. Filed June 30, 1931.



For Cheese.
Claims use since January, 1930.

Ser. No. 316,529. REX B. CLARK, Norco, Calif. Filed July 1, 1931.



For Canned Fruit.
Claims use since Mar. 26, 1931.

Ser. No. 316,589. GOLDBLATT BROS., INC., Chicago, Ill. Filed July 3, 1931.

Auf Wiedersehen

For Malt Syrup for Food Purposes.
Claims use since Mar. 20, 1931.

Ser. No. 316,601. DENNIS W. LEARY, Walnut Grove, Calif. Filed July 3, 1931.

BIG GAME

For Fresh Deciduous Fruits—Namely, Pears.
Claims use since on or about May 18, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 316,136. DAVID SILNUTZER, doing business as Bavarian Liquid Malt Company, Philadelphia, Pa. Filed June 22, 1931.



No claim is made to the words "Phila., Pa."

For Malt Beverages Containing Less Than One-Half of One Per Cent of Alcohol, by Volume.

Claims use since Oct. 15, 1930.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 296,781. THE GEO. T. STAGG CO., Frankfort, Ky., assignor to Old Quaker Company, New York, N. Y., a Corporation of Maryland. Filed Mar. 3, 1930.

URE

For Whiskey.
Claims use since Jan. 27, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

AUGUST 11, 1931

285,817. TEXTILE PADDING FOR LAUNDRY MACHINES AND THE LIKE. EGAN COTTON MILLS, Atlanta, Ga.
Filed January 21, 1931. Serial No. 310,217. PUBLISHED MAY 26, 1931. Class 42.

285,818. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed February 12, 1931. Serial No. 310,979. PUBLISHED MAY 26, 1931. Class 42.

285,819. ETHYL ALCOHOL. ROSSVILLE COMMERCIAL ALCOHOL CORPORATION, Lawrenceburg, Ind.
Filed February 18, 1931. Serial No. 311,204. PUBLISHED MAY 26, 1931. Class 49.

285,820. SHEET METAL ARTICLES. DES MOINES STEEL TANK COMPANY, Des Moines, Iowa.
Filed February 24, 1931. Serial No. 311,409. PUBLISHED JUNE 2, 1931. Class 50.

285,821. COPPER IRON CULVERT STOCK. GRANITE CITY STEEL COMPANY, Granite City, Ill., and Wilmington, Del.
Filed February 26, 1931. Serial No. 311,582. PUBLISHED JUNE 2, 1931. Class 14.

285,822. COPPER STEEL CULVERT STOCK. GRANITE CITY STEEL COMPANY, Granite City, Ill., and Wilmington, Del.
Filed February 26, 1931. Serial No. 311,583. PUBLISHED JUNE 2, 1931. Class 14.

285,823. RAYON PIECE GOODS. COLONIAL MILLS INC., New York, N. Y.
Filed March 23, 1931. Serial No. 312,416. PUBLISHED MAY 26, 1931. Class 42.

285,824. TEXTILE RUGS. THE DAYTON COMPANY, Minneapolis, Minn.
Filed March 26, 1931. Serial No. 312,553. PUBLISHED JUNE 2, 1931. Class 42.

285,825. MARQUISETTE, MUSLIN, SCRIM, AND DRAPERY CURTAINS. NEW ENGLAND CURTAIN COMPANY, INC., Fitchburg, Mass.
Filed March 28, 1931. Serial No. 312,662. PUBLISHED MAY 26, 1931. Class 42.

285,826. A WOVEN FABRIC MADE FROM WOOL. COHEN, GOLDMAN & CO. INC., New York, N. Y.
Filed April 2, 1931. Serial No. 312,886. PUBLISHED JUNE 2, 1931. Class 42.

285,827. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic N. J.
Filed April 3, 1931. Serial No. 312,909. PUBLISHED MAY 26, 1931. Class 42.

285,828. PLANOGRAPHIC PLATES. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio.
Filed April 4, 1931. Serial No. 312,938. PUBLISHED JUNE 2, 1931. Class 50.

285,829. RUG CUSHIONS, PADDINGS, AND CARPET-CUSHIONS OF HAIR FELT. H. C. LOUGHRAN, Newark, N. J.
Filed April 6, 1931. Serial No. 312,992. PUBLISHED MAY 26, 1931. Class 50.

285,830. PORTABLE POULTRY FEEDERS, PORTABLE POULTRY WATERERS, PORTABLE HOG FEEDERS, AND PORTABLE HOG WATERERS. W. A. MCCOLLOUGH & SONS, INC., Webster City, Iowa.
Filed April 6, 1931. Serial No. 312,994. PUBLISHED JUNE 2, 1931. Class 50.

285,831. CLOCKS, WRIST-WATCHES, AND PLATINUM, GOLD AND SILVER WATCHES. HARRY ROTH, New York, N. Y.
Filed April 15, 1931. Serial No. 313,389. PUBLISHED MAY 26, 1931. Class 27.

285,832. CLOCKS AND WATCHES. WESTERN CLOCK COMPANY, Peru, Ill.
Filed April 15, 1931. Serial No. 313,401. PUBLISHED MAY 26, 1931. Class 27.

285,833. WRITING INKS, TYPEWRITER RIBBONS, AND CARBON PAPER. THE CARTER'S INK COMPANY, Cambridge, Mass.
Filed April 16, 1931. Serial No. 313,419. PUBLISHED MAY 26, 1931. Class 11.

285,834. TOOTH BRUSHES. PYCOPE INCORPORATED, Joplin, Mo.
Filed April 22, 1931. Serial No. 313,673. PUBLISHED JUNE 2, 1931. Class 29.

285,835. TEA. JOSEPH TETLEY & CO., INC., New York, N. Y.
Filed April 9, 1931. Serial No. 313,159. PUBLISHED JUNE 2, 1931. Class 46.

285,836. BACON. JACOB E. DECKER & SONS, Mason City, Iowa.
Filed April 8, 1931. Serial No. 313,165. PUBLISHED JUNE 2, 1931. Class 46.

285,837. COFFEE. MORTON MANUFACTURING CORPORATION, also doing business as Blair Laboratories, Lynchburg, Va.
Filed April 11, 1931. Serial No. 313,253. PUBLISHED JUNE 2, 1931. Class 46.

285,838. CANNED GRAPEFRUIT CUT INTO INDIVIDUAL MINIATURE PORTIONS. FLORIDAGOLD CITRUS CORPORATION, Winter Haven, Fla.
Filed April 13, 1931. Serial No. 313,290. PUBLISHED JUNE 2, 1931. Class 46.

285,839. FRESH VEGETABLES. SANTA MARIA PRODUCE CO., Guadalupe, Calif.
Filed April 14, 1931. Serial No. 313,352. PUBLISHED MAY 26, 1931. Class 46.

285,840. HEALTH FOODS MADE FROM FRUITS PRESERVED IN HERMETICALLY SEALED CONTAINERS. Louis G. DIEKER, doing business as The Duryana Company, Los Angeles, Calif.
Filed April 13, 1931. Serial No. 313,460. PUBLISHED MAY 26, 1931. Class 46.

285,841. CANDY BARS. AUTOMATIC CANTEEN COMPANY, Chicago, Ill.
Filed April 20, 1931. Serial No. 313,531. PUBLISHED MAY 26, 1931. Class 46.

285,842. COFFEE. STEELE-WEDELES COMPANY, Chicago, Ill.
Filed April 20, 1931. Serial No. 313,566. PUBLISHED JUNE 2, 1931. Class 46.

285,843. CANNED CORN. PRINCEVILLE CANNING CO., Princeville, Ill.
Filed April 22, 1931. Serial No. 313,671. PUBLISHED JUNE 2, 1931. Class 46.

285,844. CANNED CORN. PRINCEVILLE CANNING CO., Princeville, Ill.
Filed April 22, 1931. Serial No. 313,672. PUBLISHED JUNE 2, 1931. Class 46.

285,845. MEAT PRODUCTS—NAMELY, SMOKED, BOILED, AND FRIED HAMS; BRATWURST, BRAUNSCHWEIGER, LEBERWURST, BLUTWURST, METTWURST, KNACKWURST, BAUERNWURST, CERVELATWURST, SCHWARTENMAGEN, SALAMI, SULZE, AND FRANKFURTER. JOHN MELCHNER, New York, N. Y.
Filed February 3, 1931. Serial No. 310,689. PUBLISHED JUNE 2, 1931. Class 46.

285,846. FRESH FRUITS AND VEGETABLES. S. J. SLIGH & COMPANY, Orlando, Fla.
Filed February 26, 1931. Serial No. 311,492. PUBLISHED JUNE 2, 1931. Class 46.

285,847. TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed March 18, 1931. Serial No. 312,273. PUBLISHED MAY 26, 1931. Class 46.

285,848. DRIED DATES IN THEIR NATURAL STATE. THE HILLS BROTHERS COMPANY, New York, N. Y.
Filed March 20, 1931. Serial No. 312,342. PUBLISHED MAY 26, 1931. Class 46.

285,849. CANNED SALMON. ALASKA PACIFIC SALMON CORPORATION, Seattle, Wash.
Filed March 21, 1931. Serial No. 312,356. PUBLISHED MAY 12, 1931. Class 46.

285,850. COFFEE. KELLOGG COMPANY, Battle Creek, Mich.
Filed March 23, 1931. Serial No. 312,434. PUBLISHED JUNE 2, 1931. Class 46.

285,851. CANDIED POPCORN. JOFFE BROTHERS, New York and Brooklyn, N. Y.
Filed March 31, 1931. Serial No. 312,783. PUBLISHED MAY 26, 1931. Class 46.

285,852. CANDY. HELEN T. BROOK, INC., Brooklyn, N. Y.
Filed April 1, 1931. Serial No. 312,792. PUBLISHED JUNE 2, 1931. Class 46.

285,853. CANNED PINEAPPLE. HAWAIIAN PINEAPPLE COMPANY, LTD., San Francisco, Calif. and Honolulu, Territory of Hawaii.
Filed April 3, 1931. Serial No. 312,911. PUBLISHED JUNE 2, 1931. Class 46.

285,854. DRIED BEANS. STROHMEYER & ARPE COMPANY, New York, N. Y.
Filed April 7, 1931. Serial No. 313,063. PUBLISHED MAY 26, 1931. Class 46.

285,855. CANDY. J. B. CHAMBERS, doing business as Chambers Candy Co., Griffin, Ga.
Filed April 8, 1931. Serial No. 313,074. PUBLISHED MAY 26, 1931. Class 46.

285,856. HAIR NETS. SAMUEL D. FROHLICH, New York, N. Y.
Filed April 8, 1931. Serial No. 313,081. PUBLISHED MAY 26, 1931. Class 42.

285;857. TOYS, MORE PARTICULARLY GAME BOARDS AND THE LIKE PLAYED WITH PIECES. ADOLPH F. RIETZEL, Charlestown, R. I.
Filed January 7, 1931. Serial No. 309,700. PUBLISHED MAY 26, 1931. Class 22.

285,858. TABLE BOARD GAMES PLAYED WITH PIECES, CHECKER MEN, AND CHESS MEN; TOYS—NAMELY, DOLLS, ANIMALS, FIGURES, BALLS, DICE, MADE FROM COMPOSITION. GAESS & HOLLANDER, Long Island City, N. Y.
Filed January 14, 1931. Serial No. 309,970. PUBLISHED JUNE 2, 1931. Class 22.

285,859. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France.
Filed January 26, 1931. Serial No. 310,388. PUBLISHED MAY 26, 1931. Class 45.

285,860. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. PABST CORPORATION, Milwaukee, Wis.
Filed January 26, 1931. Serial No. 310,405. PUBLISHED MAY 26, 1931. Class 48.

285,861. PLAY GROUND AND GAME APPARATUS CONSISTING OF TENNIS TABLES AND TOPS THEREFOR, GYMNASIUM SETS, SAND BOXES, SHUFFLE BOARDS, TEETER BOARDS, AND SWINGS. NORMAN R. SNELL, doing business as N. R. Snell Lumber Company, Cleveland, Ohio.
Filed February 7, 1931. Serial No. 310,840. PUBLISHED MAY 26, 1931. Class 22.

285,862. SAFETY BATHING FLOATS. MARION L. LUDWICK, Los Angeles, Calif.
Filed March 3, 1931. Serial No. 311,690. PUBLISHED JUNE 2, 1931. Class 22.

285,863. CARBONATED, NONALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACT USED IN MAKING THE SAME. CLICQUOT CLUB COMPANY, Millis, Mass.
Filed March 23, 1931. Serial No. 312,414. PUBLISHED MAY 26, 1931. Class 45.

285,864. FLAKED CORN PRODUCT USED IN THE MANUFACTURE OF NON-ALCOHOLIC MALT BEVERAGES. CHAS. A. KRAUSE MILLING CO., Milwaukee, Wis.
Filed March 23, 1931. Serial No. 312,436. PUBLISHED MAY 26, 1931. Class 48.

285,865. GOLF CLUBS. A. G. SPALDING & BROS., New York, N. Y.
Filed April 1, 1931. Serial No. 312,818. PUBLISHED MAY 26, 1931. Class 22.

285,866. WIRE ROPE. WRIGHTS' ROPES LTD., Birmingham, England.
Filed April 8, 1931. Serial No. 313,102. PUBLISHED JUNE 2, 1931. Class 7.

285,867. BILLIARD TABLES, CUES, AND BALLS. MAX LANGENHAUN, Arnstadt, Germany.
Filed April 11, 1931. Serial No. 313,247. PUBLISHED JUNE 2, 1931. Class 22.

285,868. GINGER ALE BLENDED WITH FRUIT FLAVORS. THE LOMAX COMPANY, Chicago, Ill.
Filed April 11, 1931. Serial No. 313,248. PUBLISHED MAY 26, 1931. Class 45.

285,869. PAPER CAPS FOR TOY FIRE ARMS. THE KILGORE MFG. COMPANY, Westerville, Ohio.
Filed April 13, 1931. Serial No. 313,298. PUBLISHED JUNE 2, 1931. Class 9.

285,870. GOLF BALLS. U. S. GOLF BALL CORPORATION, Chicago, Ill.
Filed April 18, 1931. Serial No. 313,515. PUBLISHED MAY 26, 1931. Class 22.

285,871. GAMES PLAYED WITH CARDS. HERBERT STELLMACHER, doing business as The Alpha Game Company, Dallas, Tex.
Filed April 20, 1931. Serial No. 313,567. PUBLISHED MAY 26, 1931. Class 22.

285,872. DOLLS. WALT DISNEY PRODUCTIONS, LTD., Hollywood, Calif.
Filed April 21, 1931. Serial No. 313,591. PUBLISHED MAY 26, 1931. Class 22.

285,873. NON-ALCOHOLIC, NON-CEREAL MALTLESS BEVERAGES SOLD AS SOFT DRINKS, SIRUPS AND EXTRACTS FOR MAKING THE SAME. ALEX A. COHEN, doing business as Alco Advertising & Supply Co., Providence, R. I.
Filed April 25, 1931. Serial No. 313,769. PUBLISHED JUNE 2, 1931. Class 45.

285,874. ARTIFICIAL BAIT FOR FISH. ARTHUR FORSELIUS, doing business as Arrowhead Manufacturing Co., Ely, Minn.
Filed April 27, 1931. Serial No. 313,845. PUBLISHED JUNE 2, 1931. Class 22.

285,875. ARTIFICIAL BAIT FOR FISH. ARTHUR FORSELIUS, doing business as Arrowhead Manufacturing Co., Ely, Minn.
Filed April 27, 1931. Serial No. 313,846. PUBLISHED JUNE 2, 1931. Class 22.

285,876. SANDALS, MOCCASINS, AND PLAY OXFORDS OF LEATHER FOR MEN, WOMEN, AND CHILDREN. LYONS & COMPANY, New York, N. Y.
Filed March 14, 1931. Serial No. 312,156. PUBLISHED MAY 26, 1931. Class 39.

285,877. CERTAIN NAMED WEARING APPAREL. CO-OPERATIVE CENTRAL EXCHANGE, Superior, Wis.
Filed March 16, 1931. Serial No. 312,174. PUBLISHED MAY 26, 1931. Class 39.

285,878. PAINT, FLOOR ENAMEL, VARNISHES. GOLD COAST PAINT COMPANY, San Francisco, Calif.
Filed April 13, 1931. Serial No. 313,291. PUBLISHED MAY 26, 1931. Class 16.

285,879. INFANTS' SHOES OF LEATHER, FABRIC, OR COMBINATIONS OF SUCH MATERIALS. ETTELBRICK SHOE CO. INC., Greenup, Ill.
Filed March 19, 1931. Serial No. 312,295. PUBLISHED MAY 26, 1931. Class 39.

285,880. HAIR ORNAMENT IN THE NATURE OF A CLASP, WHICH DRESSES BOBBED HAIR INTO A MODISH CURL. DU PONT VISCOLOID COMPANY, New York, N. Y.
Filed March 20, 1931. Serial No. 312,335. PUBLISHED MAY 26, 1931. Class 40.

285,881. BUILDING STONE AS IT COMES FROM THE QUARRY. VICTOR OOLITIC STONE COMPANY, Bloomington, Ind.
Filed March 21, 1931. Serial No. 312,396. PUBLISHED MAY 26, 1931. Class 1.

285,882. AUTO AND FURNITURE POLISHES AND FLOOR AND AUTOMOBILE WAXES. CHARLES F. KELLOM & CO. INC., Holmesburg, Philadelphia, Pa.
Filed March 25, 1931. Serial No. 312,520. PUBLISHED JUNE 2, 1931. Class 16.

285,883. COAL. THE PHILADELPHIA AND READING COAL AND IRON COMPANY, Philadelphia, Pa.
Filed March 28, 1931. Serial No. 312,670. PUBLISHED JUNE 2, 1931. Class 1.

285,884. CANNED MEAT AND CEREALS FOR DOGS AND ALL CARNIVOROUS ANIMALS. CHAPPEL BROS., INC., Rockford, Ill.
Filed March 30, 1931. Serial No. 312,603. PUBLISHED MAY 26, 1931. Class 46.

285,885. LIQUID WAX FOR ALL TYPES OF FLOORS. THE DAVIES-YOUNG SOAP COMPANY, Dayton, Ohio.
Filed April 1, 1931. Serial No. 312,796. PUBLISHED JUNE 2, 1931. Class 16.

285,886. PAINT COMPRISING ALUMINUM POWDER, ETC. GENERAL PAINT CORPORATION, San Francisco, Calif.
Filed April 1, 1931. Serial No. 312,798. PUBLISHED MAY 26, 1931. Class 16.

285,887. ADHESIVE LIQUID CEMENT. LIQUID CEMENT CO., San Diego, Calif.
Filed April 2, 1931. Serial No. 312,850. PUBLISHED MAY 26, 1931. Class 5.

285,888. OIL VARNISH. MCCLOSKEY VARNISH CO., Philadelphia, Pa.
Filed April 7, 1931. Serial No. 313,045. PUBLISHED MAY 26, 1931. Class 16.

285,889. CHEESE. ALPINA KÄSE A. G., Burgdorf, Switzerland.
Filed April 10, 1931. Serial No. 313,171. PUBLISHED MAY 26, 1931. Class 46.

285,890. LUGGAGE—VIZ, GLADSTONE BAGS, CLUB BAGS, COAT CASES, AND OVERNIGHT CASES. S. DRESNER & SON, INC., Chicago, Ill.
Filed April 13, 1931. Serial No. 313,285. PUBLISHED MAY 26, 1931. Class 3.

285,891. GARDEN, FIELD, AND FLOWER SEED. CARLL & SON, Washington, D. C.
Filed April 14, 1931. Serial No. 313,329. PUBLISHED JUNE 2, 1931. Class 1.

285,892. SANDS. GEORGE F. PETTINOS, INCORPORATED, Philadelphia, Pa.
Filed April 15, 1931. Serial No. 313,387. PUBLISHED MAY 26, 1931. Class 1.

285,893. MILK AND CREAM. BEATRICE CREAMERY COMPANY, Chicago, Ill.
Filed April 16, 1931. Serial No. 313,417. PUBLISHED MAY 26, 1931. Class 46.

285,894. COAL. OLD BEN COAL CORPORATION, Chicago, Ill.
Filed April 21, 1931. Serial No. 313,608. PUBLISHED JUNE 2, 1931. Class 1.

285,895. LEATHER. CARL FREUDENBERG, INC., Boston, Mass.
Filed April 22, 1931. Serial No. 313,657. PUBLISHED JUNE 2, 1931. Class 1.

285,896. WAX FOR FLOORS, LINOLEUM, FURNITURE, AND AUTOMOBILES. THE DAVIES-YOUNG SOAP COMPANY, Dayton, Ohio.
Filed March 30, 1931. Serial No. 312,701. PUBLISHED JUNE 2, 1931. Class 16.

285,897. POLISH FOR PAINTED, VARNISHED, AND LACQUERED SURFACES. CARL V. CHERMENDY, doing business as Everglaze Products Co., Denver, Colo.
Filed February 13, 1931. Serial No. 311,026. PUBLISHED MAY 26, 1931. Class 16.

285,898. CERTAIN NAMED WEARING APPAREL. DÉJÀ, INC, New York, N. Y.
Filed February 17, 1931. Serial No. 311,129. PUBLISHED MAY 26, 1931. Class 39.

285,899. TOILET OR DRESSING CASES, OVERNIGHT BAGS, AND FITTED HAND BAGGAGE. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y.
Filed February 24, 1931. Serial No. 311,375. PUBLISHED JUNE 2, 1931. Class 3.

285,900. LIQUID FLOOR COATING, PRESERVATIVE AND POLISH. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis.
Filed March 9, 1931. Serial No. 311,923. PUBLISHED MAY 26, 1931. Class 16.

285,901. CERTAIN NAMED WEARING APPAREL. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed March 12, 1931. Serial No. 312,046. PUBLISHED MAY 26, 1931. Class 39.

285,902. PHOTOGRAPHIC PRINTS. NATHAN DERFLER, New York, N. Y.
Filed April 4, 1931. Serial No. 312,945. PUBLISHED MAY 26, 1931. Class 38.

285,903. LAUNDRY WASHING MACHINES. PEOPLE'S OUTFITTING COMPANY, Detroit, Mich.
Filed April 4, 1931. Serial No. 312,959. PUBLISHED JUNE 2, 1931. Class 24.

285,904. PLANOGRAPHIC PRINTS. AMERICAN MULTIGRAPH CO., Wilmington, Del. and Cleveland, Ohio.
Filed April 8, 1931. Serial No. 313,068. PUBLISHED MAY 26, 1931. Class 38.

285,905. FABRIC LUNCH BAGS. LEAH H. ROBINSON, Duluth, Minn.
Filed April 9, 1931. Serial No. 313,155. PUBLISHED JUNE 2, 1931. Class 2.

285,906. FILTERS FOR HOT AIR REGISTERS OF FURNACES. FRANK E. KELSEY, doing business as Health Heat Laboratories, Battle Creek, Mich.
Filed April 10, 1931. Serial No. 313,192. PUBLISHED JUNE 2, 1931. Class 34.

285,907. WEEKLY MAGAZINE. JEWELERS PUBLISHING CORPORATION, New York, N. Y.
Filed April 13, 1931. Serial No. 313,296. PUBLISHED MAY 26, 1931. Class 38.

285,908. GAS BURNERS. THE EMPIRE GAS BURNER CO., Easthampton, Mass.
Filed April 14, 1931. Serial No. 313,337. PUBLISHED JUNE 2, 1931. Class 34.

285,909. WIRE FENCING, INCLUDING FARM FENCE, POULTRY FENCE, INDUSTRIAL FENCE, AND ORNAMENTAL FENCE MADE OF WIRE AND IRON, AND GATES THEREFOR OF THE MATERIALS, AND BARBED WIRE AND NAILS. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio.
Filed April 17, 1931. Serial No. 313,466. PUBLISHED JUNE 2, 1931. Class 13.

285,910. COTTON COARSE AND FANCY WEAVE FABRICS FOR DRAPERY AND UPHOLSTERY PURPOSES. MOUNT VERNON-WOODBERRY MILLS, INC., Baltimore, Md.
Filed December 29, 1930. Serial No. 309,440. PUBLISHED MAY 26, 1931. Class 42.

285,911. CATALOGS ISSUED FROM TIME TO TIME RELATING TO HORTICULTURAL OR NURSERY PRODUCTS AND INCLUDING GENERAL INFORMATION OF INTEREST TO HORTICULTURISTS. KELLY BROTHERS NURSERIES, Dansville, N. Y.
Filed January 20, 1931. Serial No. 310,175. PUBLISHED MAY 26, 1931. Class 38.

285,912. MALT SYRUP. SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y.
Filed February 7, 1931. Serial No. 310,839. PUBLISHED MAY 26, 1931. Class 46.

285,913. PREPARATION FOR THE DESTRUCTION OF RATS AND MICE. R R R CHEMICAL COMPANY, Rader, Tenn.
Filed February 27, 1931. Serial No. 311,535. PUBLISHED MAY 5, 1931. Class 6.

285,914. FOUNTAIN PENS. THE CONKLIN PEN COMPANY, Toledo, Ohio.
Filed February 24, 1931. Serial No. 311,367. PUBLISHED MAY 26, 1931. Class 37.

285,915. FOUNTAIN PENS. THE CONKLIN PEN COMPANY, Toledo, Ohio.
Filed February 24, 1931. Serial No. 311,368. PUBLISHED MAY 26, 1931. Class 37.

285,916. FLAVORED POWDERED PREPARATIONS FOR MAKING PUDDINGS, CUSTARDS, AND FILLINGS AND DRESSINGS FOR CAKES AND PASTRY. BRECHET & RICHTER COMPANY, Minneapolis, Minn.
Filed February 28, 1931. Serial No. 311,556. PUBLISHED MAY 26, 1931. Class 46.

285,917. WHEAT BREAKFAST FOOD. THE WHEATENA CORPORATION, Rahway, N. J.
Filed February 28, 1931. Serial No. 311,579. PUBLISHED JUNE 2, 1931. Class 46.

285,918. WRITING PAPER. KNIGHTS OF PETER CLAVER, Mobile, Ala.
Filed March 2, 1931. Serial No. 311,612. PUBLISHED MAY 26, 1931. Class 37.

285,919. BREAD. S. B. THOMAS, INC., Long Island City, N. Y.
Filed March 4, 1931. Serial No. 311,762. PUBLISHED JUNE 2, 1931. Class 46.

285,920. MONTHLY PUBLICATION. ZONTA INTERNATIONAL, Chicago, Ill.
Filed March 19, 1931. Serial No. 312,320. PUBLISHED MAY 26, 1931. Class 38.

285,921. MONTHLY MAGAZINE. NATIONAL ASSOCIATION OF LETTER CARRIERS, Washington, D. C.
Filed April 2, 1931. Serial No. 312,853. PUBLISHED MAY 26, 1931. Class 38.

285,922. CLEANSING CREAM, FACE CREAM, AND COLD CREAM. THE PETER CORPORATION, Lowell, Mass.
Filed March 18, 1931. Serial No. 312,328. PUBLISHED MAY 19, 1931. Class 6.

285,923. DEPILATORIES. JEAN JORDEAU, INC., South Orange, N. J.
Filed March 28, 1931. Serial No. 312,433. PUBLISHED MAY 19, 1931. Class 6.

285,924. CONDIMENTAL SAUCES. JULIA WISE, New York, N. Y.
Filed March 26, 1931. Serial No. 312,583. PUBLISHED MAY 26, 1931. Class 46.

285,925. MATERIAL MADE PRINCIPALLY FROM DOLOMITE OR LIME FOR COATING MOLDS FOR CASTING PIG IRON. THE MOORES LIME COMPANY, Springfield, Ohio.
Filed March 30, 1931. Serial No. 312,716. PUBLISHED MAY 26, 1931. Class 1.

285,926. FROZEN CONFECTIONS. RED WING CORPORATION, Dayton, Ohio.
Filed March 31, 1931. Serial No. 312,773. PUBLISHED MAY 26, 1931. Class 46.

285,927. RICE, BARLEY, DRIED PEAS, BEANS, AND LENTILS, COFFEE AND SPICES, RICE FLAKES, AND RICE FLOUR. SOUTHERN RICE SALES COMPANY, INC., New York, N. Y.
Filed March 31, 1931. Serial No. 312,776. PUBLISHED MAY 26, 1931. Class 46.

285,928. COMIC STRIPS PRINTED AND PUBLISHED PERIODICALLY IN VARIOUS NEWSPAPERS. THE MCNAUGHT SYNDICATE, INC., New York, N. Y.
Filed March 31, 1931. Serial No. 312,784. PUBLISHED MAY 26, 1931. Class 38.

285,929. MALT EXTRACTS. L. E. SILBERMAN, doing business as Colonial Products Company, Des Moines, Iowa.
Filed March 30, 1931. Serial No. 312,739. PUBLISHED MAY 26, 1931. Class 46.

285,930. GLASS BOTTLES. HEMINGRAY GLASS COMPANY, Muncie, Ind.
Filed April 3, 1931. Serial No. 312,912. PUBLISHED MAY 26, 1931. Class 33.

285,931. DEPOSIT BOOKS FOR A SAVINGS PLAN INVOLVING THE MONTHLY PURCHASE OF INVESTMENT TRUST SECURITIES SOLD TO THE TRADE AS SUCH. GLENN S. RALSTON, Rockford, Ill.
Filed April 3, 1931. Serial No. 312,927. PUBLISHED MAY 26, 1931. Class 37.

285,932. PAPERS—NAMELY, WRAPPING PAPERS, TOILET PAPERS, TOWELS, AND NAPKINS. BEECHER PECK & LEWIS, Detroit, Mich.
Filed April 4, 1931. Serial No. 312,942. PUBLISHED MAY 26, 1931. Class 37.

285,933. ICE CREAM, SHERBETS, ICES, AND FROZEN CONFECTIONS. THE WOOD GROCERY CO., doing business as Caro-Maid Ice Cream Co., Dillon, S. C.
Filed April 4, 1931. Serial No. 312,969. PUBLISHED MAY 26, 1931. Class 46.

285,934. TOILET TISSUE AND FACIAL TISSUE. MODERN TISSUES CORPORATION, New York, N. Y.
Filed April 7, 1931. Serial No. 313,049. PUBLISHED MAY 26, 1931. Class 37.

285,935. TOILET TISSUE AND FACIAL TISSUE. MODERN TISSUES CORPORATION, New York, N. Y.
Filed April 7, 1931. Serial No. 313,050. PUBLISHED MAY 26, 1931. Class 37.

285,936. COMPRESSED FOOD FOR DOG, PUPPY, FOX, RACCOON, SABLE, AND ALL CARNIVOROUS AND FUR BEARING ANIMALS. NOWAK MILLING CORPORATION, Hammond, Ind.
Filed April 8, 1931. Serial No. 313,091. PUBLISHED JUNE 2, 1931. Class 46.

285,937. BATHROOM TISSUE. SCHWABACHER BROS. & CO., INCORPORATED, Seattle, Wash.
Filed April 8, 1931. Serial No. 313,097. PUBLISHED MAY 26, 1931. Class 37.

285,938. POWDERED SKIM MILK AND POWDERED CREAM. DAIRY CORPORATION OF AMERICA, Chicago, Ill.
Filed April 11, 1931. Serial No. 313,234. PUBLISHED MAY 26, 1931. Class 46.

285,939. TOILET PAPER, PAPER TOWELS, AND NAPKINS. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis.
Filed April 14, 1931. Serial No. 313,341. PUBLISHED MAY 26, 1931. Class 37.

285,940. SULPHITE MANILLA PAPERS. PORT HURON SULPHITE & PAPER COMPANY, Port Huron, Mich.
Filed April 9, 1931. Serial No. 313,152. PUBLISHED MAY 26, 1931. Class 37.

285,941. ROQUEFORT CHEESE. BERNARD M. DOUGLAS, New York, N. Y.
Filed April 24, 1931. Serial No. 313,730. PUBLISHED JUNE 2, 1931. Class 46.

285,942. CANNED PEAS. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn.
Filed April 10, 1930. Serial No. 298,647. PUBLISHED MAY 26, 1931. Class 46.

285,943. CANNED PEAS. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn.
Filed April 10, 1930. Serial No. 298,645. PUBLISHED MAY 26, 1931. Class 46.

285,944. FILLED TAFFY CANDY. YOUNG'S CANDY PRODUCTS CO., INC., Philadelphia, Pa.
Filed April 9, 1930. Serial No. 298,609. PUBLISHED MAY 26, 1931. Class 46.

285,945. GAMES PLAYED WITH CARDS AND DICE. MILTON BRADLEY COMPANY, Springfield, Mass.
Filed April 5, 1930. Serial No. 298,426. PUBLISHED MAY 19, 1931. Class 22.

285,946. BOOKS, PAMPHLETS, POSTERS, ETC. CARROLL SMITH, Boston, Mass.
Filed April 4, 1930. Serial No. 298,416. PUBLISHED MAY 26, 1931. Class 38.

285,947. DANCING TOE TAPS, HEEL PLATES, AND TOE AND FOOT SUPPORTERS. ALBERT L. SOTHEN, doing business as Reliance Distributing Co., Chicago, Ill.
Filed March 3, 1930. Serial No. 296,780. PUBLISHED JUNE 2, 1931. Class 13.

285,948. PYROPHORIC CIGARETTE LIGHTERS. ALFRED FIELD, Seattle, Wash.
Filed February 5, 1930. Serial No. 295,610. PUBLISHED MAY 26, 1931. Class 34.

285,949. DEVICE FOR MARKING AND IDENTIFYING LAUNDRY. H. KOHNSTAMM & CO., INC., New York, N. Y.
Filed January 7, 1930. Serial No. 294,477. PUBLISHED JUNE 2, 1931. Class 24.

285,950. IRONING BOARDS. PETRI BROS., Nashville, Tenn.
Filed January 31, 1930. Serial No. 295,439. PUBLISHED JUNE 2, 1931. Class 24.

285,951. CANNED VEGETABLES. GRECO CANNING COMPANY, INC., San Jose, Calif.
Filed January 6, 1930. Serial No. 294,424. PUBLISHED JULY 1, 1930. Class 46.

285,952. COFFEE AND CANNED VEGETABLES. W. A. BAUER CO., Norristown, Pa.
Filed December 27, 1929. Serial No. 294,106. PUBLISHED JUNE 2, 1931. Class 46.

285,953. TOY WAGONS, CARTS, AND THE LIKE. JOHN ROLAND MUHN, Auburn, Ind.
Filed December 20, 1929. Serial No. 293,930. PUBLISHED MAY 26, 1931. Class 22.

285,954. INSECTICIDE. SAM M. HILL, doing business as Hill's Mfg. Co., Galveston, Tex.
Filed July 26, 1929. Serial No. 287,703. PUBLISHED MAY 19, 1931. Class 6.

285,955. CERTAIN NAMED WEARING APPAREL. NORTHERN JOBBING COMPANY, Chicago, Ill., New York, N. Y., St. Paul, Minn.
Filed July 24, 1929. Serial No. 287,586. PUBLISHED MAY 26, 1931. Class 39.

285,956. HOROLOGICAL INSTRUMENTS, NOT INCLUDING WATCH SPRINGS. ED. HEUER & CO. JULES JÜRGENSEN WATCH CO., Bienne, Switzerland.
Filed February 25, 1929. Serial No. 279,851. PUBLISHED JUNE 2, 1931. Class 27.

285,957. DISPLAY REFRIGERATORS, AIR CONDITIONING AND COOLING DEVICES FOR COUNTER DISPLAY SHOW CASES, AND STORAGE COOLERS. CIR-CUL-AIR REFR'G. CORP., St. Louis, Mo.
Filed April 22, 1929. Serial No. 282,772. PUBLISHED MAY 26, 1931. Class 31.

285,958. FISH AND SEAFOODS. NEW ENGLAND FISH COMPANY, Seattle, Wash.
Filed May 21, 1929. Serial No. 284,415. PUBLISHED MAY 19, 1931. Class 46.

285,959. PRINTING, STAMPING, AND STENCILING INKS. CHARLES ZIMMER, doing business as Cooper Stamp Works, New York, N. Y.
Filed April 9, 1928. Serial No. 264,564. PUBLISHED MAY 26, 1931. Class 11.

285,960. OIL HEATING AND REFINING APPARATUS AND STEAM GENERATING APPARATUS. FOSTER WHEELER CORPORATION, New York, N. Y.
Filed March 7, 1930. Serial No. 296,963. PUBLISHED NOVEMBER 18, 1930. Class 34.

285,961. METAL TUBES AND PIPES AND EXPANSION JOINTS. FOSTER WHEELER CORPORATION, New York, N. Y.
Filed May 10, 1930. Serial No. 300,266. PUBLISHED NOVEMBER 4, 1930. Class 13.

285,962. HARDWARE AND PLUMBING SUPPLIES—NAMELY, FLUSHING VALVES, WATER FAUCETS, WATER SPRINKLERS, PET-COCKS, BALL COCKS, CHECK VALVES, AND VALVES FOR TANKS AND TROUGHS. WASHERLESS VALVE CO. LTD., San Francisco, Calif.
Filed April 1, 1931. Serial 312,822. PUBLISHED JUNE 2, 1931. Class 13.

285,963. HEAT-TREATING CONTAINERS. MICHIANA PRODUCTS CORPORATION, Michigan City, Ind.
Filed March 26, 1931. Serial No. 312,566. PUBLISHED MAY 26, 1931. Class 34.

285,964. GLASS COFFEE BREWER. HILL-SHAW COMPANY, Chicago, Ill.
Filed March 14, 1931. Serial No. 312,214. PUBLISHED MAY 26, 1931. Class 13.

285,965. HUMIDIFIERS AND HUMIDIFYING SYSTEMS USED IN CONNECTION WITH AND AS A PART OF HEATNG AND VENTILATING PLANTS OR SYSTEMS AND FOR TREATMENT OF HYGROSCOPIC MATERIALS. PARKS-CRAMER COMPANY, Fitchburg, Mass.
Filed March 6, 1931. Serial No. 311,845. PUBLISHED MAY 26, 1931. Class 34.

285,966. BULLETINS AND ADVERTISING COPY ISSUED FROM TIME TO TIME FOR A SAVING PLAN INVOLVING THE MONTHLY PURCHASE OF INVESTMENT TRUST SECURITIES SOLD TO THE TRADE AS SUCH. GLENN S. RALSTON, Rockford, Ill.
Filed March 4, 1931. Serial No. 311,750. PUBLISHED MAY 26, 1931. Class 38.

285,967. FOOTBALL GAME BOARD. MUNICIPAL SERVICE CORPORATION, Los Angeles, Calif.
Filed October 20, 1930. Serial No. 306,958. PUBLISHED MAY 26, 1931. Class 22.

285,968. WINES. SOCIETE CHAMPAGNE DELAMOTTE PERE & FILS, (SOCIETE A RESPONSABILITEE LIMITEE), Le Mesnil-sur-Oger, France.
Filed December 3, 1930. Serial No. 308,559. PUBLISHED JUNE 2, 1931. Class 47.

285,969. STEEL ROPES, CABLES, AND STRANDS. BRITISH ROPES, LIMITED, London, England.
Filed November 28, 1930. Serial No. 308,353. PUBLISHED JUNE 2, 1931. Class 7.

285,970. WHISKEY. THE FRANKFORT DISTILLERY, INC., Louisville, Ky.
Filed October 20, 1930. Serial No. 306,947. PUBLISHED JUNE 2, 1931. Class 49.

285,971. WOOLEN AND HAIR PIECE GOODS, SILK PIECE GOODS, ARTIFICIAL SILK PIECE GOODS, AND COTTON PIECE GOODS. LISTER & COMPANY, LIMITED, Bradford, England.
Filed November 10, 1930. Serial No. 307,721. PUBLISHED MAY 26, 1931. Class 42.

285,972. GUARDS FOR AUTOMOBILE RADIATORS. STANDARD COMMERCIAL BODY CORPORATION, New York, N. Y.
Filed October 31, 1930. Serial No. 307,484. PUBLISHED JUNE 2, 1931. Class 19.

285,973. CERTAIN NAMED SHEET GLASS. LIBBEY-OWENS-FORD GLASS COMPANY, Toledo, Ohio.
Filed October 27, 1930. Serial No. 307,209. PUBLISHED MAY 5, 1931. Class 33.

285,974. WRITING PAPER, LETTER HEADS, INVOICES, AND STATEMENTS. THE KLINGSTEDT BROTHERS COMPANY, Canton, Ohio.
Filed October 7, 1930. Serial No. 306,518. PUBLISHED MAY 26, 1931. Class 37.

285,975. CHECKS SUCH AS BANK CHECKS. THE KLINGSTEDT BROTHERS COMPANY, Canton, Ohio.
Filed October 7, 1930. Serial No. 306,517. PUBLISHED MAY 26, 1931. Class 37.

285,976. ALUMINUM KITCHEN AND SERVING UTENSILS. LEYSE ALUMINUM COMPANY, Kewaunee, Wis.
Filed September 12, 1930. Serial No. 305,617. PUBLISHED JUNE 2, 1931. Class 13.

285,977. VEHICLE RADIATOR CAPS, CRANK HOLE COVERS, ETC. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn.
Filed September 9, 1930. Serial No. 305,496. PUBLISHED MAY 26, 1931. Class 19.

285,978. TRAFFIC MARKERS. NATIONAL TRAFFIC PRODUCTS, INC., Detroit, Mich.
Filed July 7, 1930. Serial No. 303,202. PUBLISHED MAY 26, 1931. Class 50.

285,979. RABBITS FOR BREEDING PURPOSES. LEHIGH PACKING CO. INC., Allentown, Pa.
Filed December 8, 1930. Serial No. 308,738. PUBLISHED MAY 26, 1931. Class 1.

285,980. CANDY BARS. DANTE CANDY COMPANY, Chicago, Ill.
Filed November 8, 1930. Serial No. 307,656. PUBLISHED JUNE 2, 1931. Class 46.

285,981. CANDY. NYAL COMPANY, Detroit, Mich.
Filed October 20, 1930. Serial No. 306,960. PUBLISHED MAY 19, 1931. Class 46.

285,982. LARD MADE FROM PORK FAT. MEZÖGAZDASÁGI TERMÉNY ES TERMÉKFORGALMI INTÉZET, Budapest, Hungary.
Filed October 14, 1930. Serial No. 306,740. PUBLISHED JUNE 2, 1931. Class 46.

285,983. CANNED PEAS. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn.
Filed April 10, 1930. Serial No. 298,646. PUBLISHED MAY 26, 1931. Class 46.

285,984. CANNED PEAS. FRANCIS H. LEGGETT & COMPANY, New York, N. Y.
Filed April 19, 1930. Serial No. 299,139. PUBLISHED MAY 26, 1931. Class 46.

285,985. CANNED FRUITS, VEGETABLES, FISH, ETC. JOSEPH DOMKO, doing business as Joseph Domko & Co., Chicago, Ill.
Filed April 24, 1930. Serial No. 299,379. PUBLISHED AUGUST 5, 1930. Class 46.

285,986. FUR TRIMMINGS SUCH AS BANDINGS, FUR STRIPS, AND UNFINISHED COLLARS INTENDED FOR USE IN FINISHING GARMENTS. B. POMERANZ & SON, New York, N. Y.
Filed May 3, 1930. Serial No. 299,928. PUBLISHED MAY 26, 1931. Class 40.

285,987. BUILDING STONE AS IT COMES FROM THE QUARRY. INDIANA LIMESTONE COMPANY, Bedford, Ind., and New York, N. Y.
Filed May 28, 1930. Serial No. 301,453. PUBLISHED JUNE 2, 1931. Class 1.

285,988. BUILDING STONE AS IT COMES FROM THE QUARRY. INDIANA LIMESTONE COMPANY, Bedford, Ind., and New York, N. Y.
Filed May 28, 1930. Serial No. 301,456. PUBLISHED JUNE 2, 1931. Class 1.

285,989. PREPARED AND COOKED FOWL. HEN HOUSES, INC., Minneapolis, Minn.
Filed August 1, 1930. Serial No. 304,101. PUBLISHED JUNE 2, 1931. Class 46.

285,990. WOMEN'S, MISSES' AND CHILDREN'S HATS. GROSS MILLINERY CO., INC., Trenton, N. J.
Filed August 13, 1930. Serial No. 304,554. PUBLISHED MAY 26, 1931. Class 39.

285,991. CANDY. PURESWEET CONFECTIONS, INC., Tulsa, Okla.
Filed September 18, 1930. Serial No. 305,827. PUBLISHED MAY 19, 1931. Class 46.

285,992. LADIES' HATS. CHARLES A. GERBER, New York, N. Y.
Filed September 20, 1930. Serial No. 305,902. PUBLISHED MAY 26, 1931. Class 39.

285,993. PUMPING AND COMPRESSING APPARATUS AND PARTS THEREOF. CHICAGO PNEUMATIC TOOL COMPANY, New York, N. Y.
Filed December 23, 1930. Serial No. 309,262. PUBLISHED MAY 26, 1931. Class 23.

285,994. PLASTIC FIRE BRICK MATERIAL USED FOR PATCHING FURNACE WALLS AND BUILDING OF SOLID MONOLITHIC LININGS. NORTH AMERICAN REFRACTORIES COMPANY, Cleveland, Ohio.
Filed January 6, 1931. Serial No. 309,651. PUBLISHED JUNE 2, 1931. Class 12.

285,995. APPARATUS FOR GRINDING CYLINDRICAL SURFACES, SUCH AS THE CYLINDERS OF ENGINES, PUMPS, WRIST PIN HOLES IN PISTONS, ETC. THE KEYSTONE MFG. CO., Buffalo, N. Y.
Filed February 19, 1931. Serial No. 311,241. PUBLISHED MAY 26, 1931. Class 23.

285,996. PLASTER BASE. TRUSCON STEEL COMPANY, Youngstown, Ohio.
Filed February 21, 1931. Serial No. 311,350. PUBLISHED MAY 26, 1931. Class 12.

285,997. COLOR MIXING APPARATUS COMPRISING PEDESTAL, MEASURING GRADUATES, TEST PLATES, ETC. SEWALL PAINT & VARNISH COMPANY, Kansas City, Mo.
Filed February 28, 1931. Serial No. 311,573. PUBLISHED MAY 26, 1931. Class 26.

285,998. TABLES, BOOKCASES, SHELVING, RACKS, CABINETS, HOUSEHOLD AND OFFICE CHAIRS, DESKS, TEA CARTS, BIRD HOUSES, BENCHES, TRELLISES, CRADLES, AND COUCH-HAMMOCKS. CECIL C. FISHER, doing business as Cyco Manufacturing Co., Des Moines, Iowa.
Filed March 7, 1931. Serial No. 311,870. PUBLISHED MAY 26, 1931. Class 32.

285,999. ROTARY PRINTING PRESSES. THE BELL PUNCH AND PRINTING COMPANY LIMITED, Uxbridge, Middlesex, England.
Filed March 11, 1931. Serial No. 311,993. PUBLISHED MAY 26, 1931. Class 28.

286,000. WRIST BANDS FOR WATCHES. HAMMEL, RIGLANDER-PENNANT CORPORATION, New York, N. Y.
Filed March 18, 1931. Serial No. 312,259. PUBLISHED MAY 26, 1931. Class 40.

286,001. SPECTACLE-GLASSES. OPTISCHE WERKE G. RODENSTOCK, Munich, Germany.
Filed March 12, 1931. Serial No. 312,060. PUBLISHED JUNE 2, 1931. Class 26.

286,002. JUVENILE FURNITURE—NAMELY, CHAIRS AND TABLES. SOUTH BEND TOY MFG. CO., South Bend, Ind.
Filed March 16, 1931. Serial No. 312,204. PUBLISHED JUNE 2, 1931. Class 32.

286,003. PORTABLE TWO-HAND CUTTING-OFF METAL-WORKING TOOLS AND PARTS THEREOF. H. K. PORTER, INC., Everett, Mass.
Filed March 19, 1931. Serial No. 312,310. PUBLISHED JUNE 2, 1931. Class 23.

286,004. TYPEWRITING MACHINES AND PARTS THEREOF. L C SMITH & CORONA TYPEWRITERS INC., New York, N. Y.
Filed March 21, 1931. Serial No. 312,391. PUBLISHED MAY 26, 1931. Class 23.

286,005. SAWS OF ALL KINDS, MACHINE KNIVES OF ALL KINDS, AND FILES. THE SAW & KNIFE SPECIALTY CO., INC., Cleveland, Ohio.
Filed April 2, 1931. Serial No. 312,863. PUBLISHED JUNE 2, 1931. Class 23.

286,006. PORTABLE HAND FIRE EXTINGUISHING APPARATUS. FIREMASTER COMPANY, New York, N. Y.
Filed April 8, 1931. Serial No. 313,080. PUBLISHED MAY 26, 1931. Class 23.

286,007. KNITTING TOOL FOR INDIVIDUAL USE. IMPORTED & DOMESTIC NOVELTY CO., New York, N. Y.
Filed April 9, 1931. Serial No. 313,134. PUBLISHED JUNE 2, 1931. Class 23.

286,008. VALVE SPRINGS FOR INTERNAL COMBUSTION ENGINES. CHICAGO COIL SPRING CO., Chicago, Ill.
Filed April 11, 1931. Serial No. 313,233. PUBLISHED JUNE 2, 1931. Class 23.

286,009. FLUID METERS. BUILDERS IRON FOUNDRY, Providence, R. I.
Filed April 13, 1931. Serial No. 313,280. PUBLISHED MAY 26, 1931. Class 26.

286,010. FILING CABINETS. CYCLOFILE CORPORATION, Rochester, N. Y.
Filed April 15, 1931. Serial No. 313,363. PUBLISHED MAY 26, 1931. Class 32.

286,011. CENTRIFUGAL MACHINES. THE SHARPLES SPECIALTY COMPANY, Philadelphia, Pa.
Filed April 18, 1931. Serial No. 313,518. PUBLISHED MAY 26, 1931. Class 23.

286,012. APPARATUS FOR SUBJECTING GASES TO CENTRIFUGAL ACTION. WESTERN PRECIPITATION COMPANY, Los Angeles, Calif.
Filed January 28, 1931. Serial No. 310,499. PUBLISHED MAY 19, 1931. Class 23.

286,013. SANITARY BELTS. SANI-GARD PRODUCTS, LTD., Los Angeles, Calif.
Filed April 22, 1931. Serial No. 313,676. PUBLISHED JUNE 2, 1931. Class 44.

286,014. SANITARY PAD-HOLDERS. SANI-GARD PRODUCTS, LTD., Los Angeles, Calif.
Filed April 22, 1931. Serial No. 313,677. PUBLISHED JUNE 2, 1931. Class 44.

286,015. ELECTRICAL VIBRATOR AND MASSAGE MACHINE FOR THE EARS. LAWRENCE D. ELLIS, doing business as Ellis Machine and Tool Company, Toledo, Ohio.
Filed April 25, 1931. Serial No. 313,775. PUBLISHED JUNE 2, 1931. Class 44.

286,016. CLEANING, CLEANSING, AND DETERGENT MATERIALS ADAPTED FOR KITCHEN AND FAMILY USE. THE J. B. FORD COMPANY, Wyandotte, Mich.
Filed April 22, 1931. Serial No. 313,655. PUBLISHED JUNE 2, 1931. Class 4.

286,017. TOILET SOAP. THOMAS HEDLEY & COMPANY, LIMITED, Newcastle-on-Tyne, England.
Filed April 20, 1931. Serial No. 313,542. PUBLISHED JUNE 2, 1931. Class 4.

286,018. AUTO TOP DRESSING. FIDELITY MANUFACTURING CO., INC., doing business as Airite Mfg. Co., Zionsville, Pa.
Filed April 15, 1931. Serial No. 313,365. PUBLISHED MAY 26, 1931. Class 4.

286,019. WATERPROOFING DRESSING FOR SHOES AND LIKE ARTICLES OF LEATHER. LOUISE M. KERR, Buffalo, N. Y.
Filed April 9, 1931. Serial No. 313,136. PUBLISHED MAY 26, 1931. Class 4.

286,020. ELASTIC HOSIERY. HORN SURGICAL COMPANY, Philadelphia, Pa.
Filed April 3, 1931. Serial No. 312,917. PUBLISHED MAY 26, 1931. Class 44.

286,021. CATAMENIAL APPLIANCES. JOHN B. SNYDER, doing business as The Fem-Pac Company, New York, N. Y.
Filed April 2, 1931. Serial No. 312,867. PUBLISHED MAY 26, 1931. Class 44.

286,022. LEATHER DRESSINGS AND POLISHES FOR SHOES. WILLIAM T. VASSILATOS, doing business as The Crystal Shoe Polish Manufacturing Co., Chicago, Ill.
Filed March 31, 1931. Serial No. 312,780. PUBLISHED JUNE 2, 1931. Class 4.

286,023. BANDAGES AND ABDOMINAL BINDERS OR SUPPORTS. GROUT & COMPANY, LIMITED, Norfolk, England.
Filed March 28, 1931. Serial No. 312,644. PUBLISHED JUNE 2, 1931. Class 44.

286,024. CLEANSING COMPOUND ESPECIALLY USEFUL FOR INDUSTRIAL CLEANING PURPOSES. PHILADELPHIA QUARTZ COMPANY, Philadelphia, Pa.
Filed March 27, 1931. Serial No. 312,624. PUBLISHED JUNE 2, 1931. Class 4.

286,025. COMPOUNDS FOR ALL SCOURING PURPOSES. E. F. HOUGHTON & Co., Philadelphia, Pa.
Filed March 27, 1931. Serial No. 312,605. PUBLISHED JUNE 2, 1931. Class 4.

286,026. SHAVING CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed March 26, 1931. Serial No. 312,547. PUBLISHED JUNE 2, 1931. Class 4.

286,027. DENTAL ALLOY. RESEARCH PRODUCTS CORPORATION, New York, N. Y.
Filed March 25, 1931. Serial No. 312,530. PUBLISHED JUNE 2, 1931. Class 44.

286,028. TOILET SOAP. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,437. PUBLISHED MAY 26, 1931. Class 4.

286,029. NATURAL ABRASIVES OF FLINT, ABRASIVE PAPERS AND CLOTHS. ABRASIVE PRODUCTS, INC., Boston, Mass.
Filed March 18, 1931. Serial No. 312,252. PUBLISHED MAY 26, 1931. Class 4.

286,030. NATURAL AND ARTIFICIAL ABRASIVES; AND ABRASIVE PAPERS AND CLOTHS. ABRASIVE PRODUCTS, INC., Boston, Mass.
Filed March 18, 1931. Serial No. 312,250. PUBLISHED MAY 26, 1931. Class 4.

286,031. PROPHYLACTIC RUBBER AND MEMBRANOUS ARTICLES. JULIUS SCHMID, New York, N. Y.
Filed March 3, 1931. Serial No. 311,812. PUBLISHED MAY 26, 1931. Class 44.

286,032. PROPHYLACTIC RUBBER AND MEMBRANOUS ARTICLES. JULIUS SCHMID, New York, N. Y.
Filed March 3, 1931. Serial No. 311,811. PUBLISHED MAY 26, 1931. Class 44.

286,033. POLISHED BLOCKS OR SLABS OF GRANITE, ETC. ROCK OF AGES CORPORATION, Burlington, Vt.
Filed April 13, 1931. Serial No. 313,358. PUBLISHED JUNE 2, 1931. Class 12.

286,034. SLIDE-RULES AND SCALES THEREFOR. ALBERT E. PENNICUICK, Hayward, Calif.
Filed March 24, 1931. Serial No. 312,491. PUBLISHED JUNE 2, 1931. Class 26.

286,035. DRAWING BOARDS, TRIANGLES, AND T SQUARES, SOLD IN COMBINATION OR SEPARATELY. EMPIRE MANUFACTURING COMPANY, New York, N. Y.
Filed April 13, 1931. Serial No. 313,287. PUBLISHED JUNE 2, 1931. Class 26.

286,036. PERSPECTIVE DRAWING CHARTS. CALIBRON PRODUCTS, INC., East Orange, N. J.
Filed April 24, 1931. Serial No. 313,820. PUBLISHED JUNE 2, 1931. Class 26.

286,037. OPHTHALMIC LENSES. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed April 27, 1931. Serial No. 313,828. PUBLISHED JUNE 2, 1931. Class 26.

286,038. AUTOMATIC COIN CONTROLLED TIME REGISTERING ELECTRIC SWITCHES. METERICE, INCORPORATED, Los Angeles, Calif.
Filed April 24, 1931. Serial No. 313,746. PUBLISHED JUNE 2, 1931. Class 26.

286,039. CHEMICAL HEATERS, USED FOR THERAPEUTIC PURPOSES. THE KENDALL COMPANY, Boston, Mass., and Chicago, Ill.
Filed February 28, 1931. Serial No. 311,547. PUBLISHED JUNE 2, 1931. Class 44.

286,040. RUBBER NURSING NIPPLES. JULIUS SCHMID, New York, N. Y.
Filed February 18, 1931. Serial No. 311,217. PUBLISHED MAY 26, 1931. Class 44.

286,041. TOILET SOAP. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,429. PUBLISHED JUNE 2, 1931. Class 4.

286,042. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. L. E. SHUNK LATEX PRODUCTS, INC., Akron, Ohio.
Filed January 20, 1931. Serial No. 310,192. PUBLISHED MAY 26, 1931. Class 44.

286,043. SAND-PAPER. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass.
Filed January 10, 1931. Serial No. 309,815. PUBLISHED MAY 26, 1931. Class 4.

286,044. A POWDERED CLEANSER PREPARATION. CHARLES M. DEERING, doing business as Salta Products, Worcester, Mass.
Filed January 10, 1931. Serial No. 309,809. PUBLISHED MAY 26, 1931. Class 4.

286,045. NON-SAPONACEOUS, BEARD-SOFTENING PREPARATIONS USEFUL AS AN AID BOTH DURING AND AFTER SHAVING. FLORA HOLMES SHOEMAKER, doing business as The Frostilla Company, Elmira, N. Y.
Filed October 31, 1930. Serial No. 307,432. PUBLISHED JUNE 2, 1931. Class 4.

286,046. BUILDING CEMENT. UNIVERSAL ATLAS CEMENT COMPANY, Chicago, Ill.
Filed September 12, 1930. Serial No. 305,636. PUBLISHED JUNE 2, 1931. Class 12.

286,047. BUILDING CEMENT. UNIVERSAL ATLAS CEMENT COMPANY, Chicago, Ill.
Filed September 12, 1930. Serial No. 305,637. PUBLISHED JUNE 2, 1931. Class 12.

286,048. QUARTZITE FOR RUBBLE AND BUILDING STONE AND FOR ROOFING AND SIDE WALLS, FLOORS, FLAGGING, BENCHES, AND LIKE USES READY FOR USE. CRAB ORCHARD STONE CO., INC., Nashville, Tenn.
Filed July 26, 1930. Serial No. 303,838. PUBLISHED JUNE 2, 1931. Class 12.

286,049. VEGETABLE PEELING MACHINES AND SLICING MACHINES. JOSIAH ANSTICE & CO. INC., Rochester, N. Y.
Filed July 10, 1930. Serial No. 303,312. PUBLISHED MAY 26, 1931. Class 23.

286,050. MINERAL SOAP CONTAINING TRI-SODIUM PHOSPHATE. GUY E. BRIGNALL, doing business as Lite Soap Company, Aurora, Ill.
Filed May 12, 1930. Serial No. 300,323. PUBLISHED MAY 26, 1931. Class 4.

286,051. ICE SHAVING MACHINES. SNOKO INC., San Francisco, Calif.
Filed May 2, 1930. Serial No. 299,867. PUBLISHED MAY 26, 1931. Class 23.

286,052. PIGMENTS FOR USE IN CONNECTION WITH PLASTIC WALL TEXTURE MATERIAL. BINNEY & SMITH CO., New York, N. Y.
Filed March 14, 1930. Serial No. 297,294. PUBLISHED MAY 13, 1930. Class 12.

286,053. BREAD, ROLLS, FRIED CAKES, DOUGHNUTS, CAKES, PIES, CANDY, AND CHOCOLATE ICE-CREAM BARS. REIERSON'S INC., Mitchell, S. Dak.
Filed October 26, 1929. Serial No. 291,637. PUBLISHED OCTOBER 28, 1930. Class 46.

286,054. AUTOMATIC WEIGHING SCALES. DAYTON SCALE COMPANY, Dayton, Ohio.
Filed June 17, 1929. Serial No. 285,661. PUBLISHED JUNE 2, 1931. Class 26.

286,055. THERMOMETERS. DORFMANN BROS., Corona, N. Y.
Filed May 23, 1929. Serial No. 284,525. PUBLISHED JUNE 2, 1931. Class 26.

286,056. METALLIC WALLS, WALL PLATES, WALL BRACKETS, ROOFS, ETC. HUGO JUNKERS, Dessau, Germany.
Filed February 26, 1929. Serial No. 279,924. PUBLISHED MAY 26, 1931. Class 12.

286,057. BUILDING PAPER, INSULATING PAPER, ETC. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed November 10, 1928. Serial No. 275,125. PUBLISHED MAY 26, 1931. Class 12.

286,058. PLASTER. GRAND RAPIDS PLASTER COMPANY, Grand Rapids, Mich.
Filed October 8, 1930. Serial No. 306,530. PUBLISHED JUNE 2, 1931. Class 12.

286,059. WASHING PREPARATION FOR SILK AND RAYON FABRICS. THE B-Y COMPANY, Providence, R. I.
Filed October 9, 1930. Serial No. 306,554. PUBLISHED JUNE 2, 1931. Class 4.

286,060. OBJECTIVES. CARL ZEISS, Jena, Germany.
Filed October 21, 1930. Serial No. 307,019. PUBLISHED MAY 26, 1931. Class 26.

286,061. LOCOMOTIVE FRAMES, ROLL SHELLS, GRINDING RINGS, SHAFTING, RINGS FOR REDUCTION GEARS, TURBINE BUCKET WHEELS, HIGH PRESSURE CYLINDERS, STEEL ROLLS, CRANK SHAFTS, AND FORGED CYLINDERS. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa.
Filed October 7, 1930. Serial No. 306,501. PUBLISHED JUNE 2, 1931. Class 23.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

286,062. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) WALTER ROY COCHRAN, doing business as Just-Rite Laboratories No. 1, El Dorado Springs, Mo. Filed Oct. 24, 1930. Serial No. 307,148.

JUST-RITE

For Washing Compounds and Cleansers for Fabrics and for General Cleaning Purposes.
Claims use since May 20, 1929.

286,063. (CLASS 2. RECEPTACLES.) THE BAUER PAPER BOX COMPANY, Cincinnati, Ohio. Filed Sept. 11, 1930. Serial No. 305,597.

Snap-Wrap

For Paper Boxes.
Claims use since June 10, 1930.

286,064. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATHAN WAXLER, doing business as Waxler's Feed Store, Altoona, Pa. Filed Aug. 13, 1930. Serial No. 304,596.

WAXLERS

For Malt Syrup.
Claims use since June 25, 1930.

286,065. (CLASS 37. PAPER AND STATIONERY.) THE S. K. SMITH COMPANY, Chicago, Ill. Filed Aug. 7, 1930. Serial No. 304,352.

SMITH-CRAFTED

For Artificial Leather Products—Namely, Book and Program Covers.
Claims use since February, 1928.

286,066. (CLASS 45. BEVERAGES, NONALCOHOLIC.) ORRIS H. HALVORSON, doing business as O. H. Halverson, Waukesha, Wis. Filed June 28, 1930. Serial No. 302,944.

Lem-En-Coke

For Non-Alcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since June 5, 1930.

286,067. (CLASS 45. BEVERAGES, NONALCOHOLIC.) THE J. F. GIERING BOTTLING CO., Youngstown, Ohio. Filed June 26, 1930. Serial No. 302,857.

BRONX
Orange Dry

For An Orange Juice Beverage.
Claims use since Apr. 5, 1930.

286,068. (CLASS 18. HARDWARE, PLUMBING, AND STEAM-FITTING SUPPLIES.) THE COLORADO FUEL AND IRON COMPANY, Denver, Colo. Filed June 9, 1930. Serial No. 302,271.

COLORADO Ornamental

For Wire Fence.
Claims use since Mar. 24, 1930.

286,069. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) SMITH, KIRKPATRICK & CO. INC., New York, N. Y. Filed May 31, 1930. Serial No. 302,064.

CAMBRIDGE

For Radio Receiving Sets and Parts Thereof and Assembled Audio Amplifying Units and Parts Thereof.
Claims use since May 15, 1930.

286,070. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PUREX CORPORATION, LTD., Los Angeles, Calif. Filed May 31, 1930. Serial No. 302,018.

QuickWhite

For Bleach and Water Softener.
Claims use since May 24, 1930.

286,071. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ARIZONA CANNERIES, INCORPORATED, Casa Grande, Ariz. Filed May 31, 1930. Serial No. 301,777.

ARIZONA

For Canned Figs.
Claims use since May 15, 1930.

286,072. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CALIFORNIA MEDICINAL WINE CO., Los Angeles, Calif. Filed May 29, 1930. Serial No. 301,571.

HEALTH FROM CALIFORNIA

For Medicinal and Pharmaceutical Preparations—Namely, Sore Throat Gargle, Antiseptic Solution.
Claims use since May 27, 1930.

286,073. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHN PARCELL, New York, N. Y. Filed May 3, 1930. Serial No. 299,926.



For a Combination Orange Food Drink.
Claims use since Feb. 15, 1930.

286,074. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SEGAL SAFETY RAZOR CORPORATION, New York, N. Y. Filed May 1, 1930. Serial No. 299,800.

SEGAL

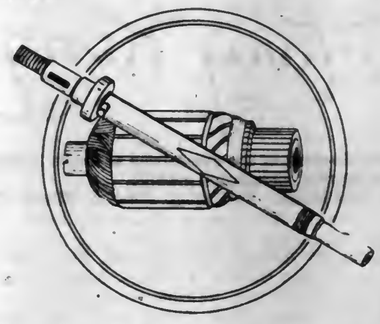
For Razor Blades, Razors, and Mechanical Stropping Devices.
Claims use since Apr. 7, 1930.

286,075. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MADISON-KIPP CORPORATION, Madison, Wis. Filed Apr. 25, 1930. Serial No. 299,450.

Kipp

For Pressure-Fluid Operated Grinding, Cutting, Buffing, Cleaning and Polishing Tools, Parts, Replacements, and Accessories, Including Cutters, Mounted Wire Brushes, Wire Brush Holders, Abrasive Sleeve Holders, Abrasive Tubes, Mounted Tips, Mounted Grinding Wheels, Mounted Points, Mounted Smoothing Stones, Felt Buffing Tips, Tool Post Adapters, Grinding Wheel Guards, Diamond Point Wheel Dressers, Oil Guns, Grinding Hoods, Tool Holders, and Tool Set Holders.
Claims use since Feb. 8, 1930.

286,076. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) UNIVERSAL ARMATURE CORPORATION, Cambridge, Mass. Filed Mar. 26, 1930. Serial No. 297,945.



The representation of the goods is disclaimed apart from the mark as shown.
For Armatures and Armature Parts.
Claims use since Oct. 21, 1929.

286,077. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MADAM WHITE COMPANY, Minneapolis, Minn. Filed Mar. 18, 1930. Serial No. 297,256.

MADAM WHITE

For Foundation Creams, Night Creams, Lemon Cleansing Creams, Clay Packs, Astringents, Face Powders, Lip Sticks, and Rouges.
Claims use since August, 1925.

286,078. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SAMUEL COHN, Chicago, Ill. Filed Feb. 12, 1930. Serial No. 295,925.

TEA GARGLE

SAMUEL COHN

For Throat Gargles.
Claims use since Jan. 1, 1930.

286,079. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) JOHNS-MANVILLE CORPORATION, New York, N. Y. Filed July 11, 1929. Serial No. 286,938.

Asbestos
Ebony

For Composition for Electrical Insulation Composed of Asbestos Fiber, Hydraulic Cement, and an Asphaltic or Bituminous Impregnant.
Claims use since Feb. 1, 1907.

286,080. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE J. R. WATKINS COMPANY, Winona, Minn. Filed May 22, 1929. Serial No. 284,512.

Mary King

The trade-mark of the application is in the handwriting of E. H. Beynon, permission granted.

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refresning Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eyedrops, Hand Lotions, Skin Lotions, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch-Hazel, Peroxide, Petroleum Jellies, Witch-Hazel Salves, Camphor Creams, Foot Powders, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.

Claims use since Jan. 25, 1929.

286,081. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) STANDARD MOTOR TRUCK COMPANY, Detroit, Mich. Filed May 20, 1930. Serial No. 300,893.

Fisher-Standard

For Motor Trucks and Chassis.

Claims use since May 5, 1930.

286,082. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) UNITED ELASTIC CORPORATION, Easthampton, Mass. Filed Nov. 29, 1930. Serial No. 308,463.

LONG LIFE

Color is not an essential feature of the trade-mark.

For Elastic Fabrics.

Claims use since 1919.

286,083. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) L. V. MYLES, INC., New York, N. Y. Filed Nov. 17, 1930. Serial No. 307,984.

BELT-ON

For Sanitary Pads.

Claims use since Apr. 10, 1930.

286,084. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) CHICAGO MUSICAL INSTRUMENT COMPANY, Chicago, Ill. Filed Nov. 17, 1930. Serial No. 307,965.

CELLINI

For Accordions.

Claims use since June 1, 1930.

286,085. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) KEUFFEL & ESSER CO., Hoboken, N. J. Filed June 25, 1931. Serial No. 316,271.

LOG LOG VECTOR

For Slide Rules.

Claims use since Dec. 20, 1929.

286,086. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) HENRY DATTELBAUM, doing business as Dattelbaum Bros., New York, N. Y. Filed June 5, 1931. Serial No. 315,445.

DATTELBAUM
DE-SINGEING
PROCESS ON
MINKS & SABLES

For Mink and Sable Furs That Have Been Treated with a De-Singeing Process.

Claims use since Apr. 23, 1927.

286,087. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MEYER H. ABELSON, Wilkes-Barre, Pa. Filed June 2, 1931. Serial No. 315,297.

STRATFORD

For Candy.

Claims use since 1916.

286,088. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) RICHARD A. BERGMAN, Chicago, Ill. Filed May 28, 1931. Serial No. 315,129.

BERGMAN

For Ready-Mixed Paints, Paint Enamels, Varnishes, Lacquers, and Kalsomine.

Claims use since February, 1923.

286,089. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) EDGAR M. ALLINA, doing business as A. Allin & Son, Chicago, Ill. Filed May 28, 1931. Serial No. 315,124.

ALLIN'S

For Ready-Mixed Paints, Paint Enamels, Varnishes, Lacquers, Kalsomine.

Claims use since February, 1925.

286,090. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACK POLIN, doing business as Packard Food Products Co., Brooklyn, N. Y. Filed May 25, 1931. Serial No. 315,011.

Packard

For Chocolate Milk Preparation, a Malted Milk Preparation, and a Chocolate Malted Milk Preparation Used for Making Food Beverages.

Claims use since April, 1928.

286,091. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) H. CHIRON COMPANY, INC., New York, N. Y. Filed May 22, 1931. Serial No. 314,894.

Vibrator

For Reeds for Saxophones, Clarinets, and Similar Musical Instruments.

Claims use since Oct. 14, 1925.

286,092. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FAVREAU & COLLETTE, Spencer, Mass. Filed May 11, 1931. Serial No. 314,404.

MATHIEU'S
COUGH SYRUP
SIROP
DE
MATHIEU

For Syrup for Coughs Due to Colds or for Temporary Hoarseness.

Claims use since Mar. 1, 1930.

286,093. (CLASS 37. PAPER AND STATIONERY.) RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931. Serial No. 313,635.

Lafayette

For Lead Pencils.

Claims use since December, 1914.

286,094. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) PIONEER PAPER STOCK COMPANY, Minneapolis, Minn. Filed Apr. 18, 1931. Serial No. 313,507.

WHYTEKLOTHS

For Wiping Cloths, Towels, Dish Cloths, Sugar Liners, All of Which Are Made Out of Woven Cloth.

Claims use since Apr. 1, 1930.

286,095. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANCIS T. MEIK, Salt Lake City, Utah. Filed Mar. 14, 1931. Serial No. 312,158.

STOP
A
RUN

For Stocking and Cloth Menders and Run Stopping Comprising a Solution of Rayon in Acetone.

Claims use since April, 1928.

286,096. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) ASBESTOS MANUFACTURING COMPANY, Huntington, Ind. Filed Mar. 9, 1931. Serial No. 311,910.

FULMOLD

For Asbestos Brake Lining and Clutch Facings.

Claims use since Feb. 1, 1921.

286,097. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) E-Z WALK CORPORATION, New York, N. Y. Filed Mar. 7, 1931. Serial No. 311,867.

PAINEEZER

For Arch Supports.

Claims use since July 1, 1916.

286,098. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) McLAREN-CONSOLIDATED CONE CORPORATION, Dayton, Ohio. Filed Jan. 24, 1931. Serial No. 310,345.

HONI-KRUST

For Bakery Products—Namely, Ice Cream Cones. Claims use since Jan. 1, 1928.

286,099. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ALAMO NOVELTY COMPANY, San Antonio, Tex. Filed Dec. 18, 1930. Serial No. 309,106.

TEN-BALL

For Table Games in Which the Player Drops Five Cents in a Slot and Gets Ten Balls With Which to Play the Game. Claims use since Apr. 1, 1930.

TRADE-MARK REGISTRATIONS RENEWED

37,298. PERFUMED LOZENGES. Registered November 12, 1901. THO. KERFOOT & CO., Ashton-under-Lyne, England. Renewed November 12, 1931, to Thomas Kerfoot & Co., Limited, Bardsley, England, a Corporation of Great Britain, assignee.

37,415. STICKY FLY PAPER. Registered December 3, 1901. The O. & W. THUM COMPANY, Grand Rapids, Mich., a Corporation of Michigan. Renewed December 3, 1931.

37,530. FOUNTAIN PENS. Registered December 31, 1901. L. E. WATERMAN COMPANY, New York, N. Y., a Corporation of New York. Renewed December 31, 1931.

82,834. BEER. Registered July 25, 1911. GABRIEL SEDLMAYR, Brauerei zum Spaten. Renewed July 25, 1931, to Gabriel u. Jos. Sedlmayr Spaten-Franziskaner-Leistbräu Aktiengesellschaft München, Munich, Germany, a Corporation of Germany, assignee.

82,898. PERFUMERY, AND OTHER TOILET PREPARATIONS. Registered August 1, 1911. H. ET G. KLOTZ ET CIE, Paris, France, and New York, N. Y. Renewed August 1, 1931, to Pinaud Inc., New York, N. Y., a Corporation of New York, assignee.

83,014. BACON. Registered August 8, 1911. T. M. SINCLAIR & CO., LIMITED, Cedar Rapids, Iowa, a Corporation of Iowa. Renewed August 8, 1931.

83,081. ELECTRIC WALL AND KNIFE SWITCHES, PANELBOARDS, SWITCHBOARDS, FUSE-BLOCKS, AND CUT-OUT BOXES. Registered August 15, 1911. METROPOLITAN ELECTRIC MFG. CO., New York, N. Y. Renewed August 15, 1931, to Metropolitan Electric Mfg. Co., Long Island City, N. Y., a Corporation of New Jersey.

83,090. HOSIERY. Registered August 15, 1911. PARAMOUNT KNITTING COMPANY. Renewed August 15, 1931, to Bear Brand Hosiery Co., Chicago, Ill., a Corporation of Illinois, assignee.

83,091. HOSIERY. Registered August 15, 1911. PARAMOUNT KNITTING COMPANY. Renewed August 15, 1931, to Bear Brand Hosiery Co., Chicago, Ill., a Corporation of Illinois, assignee.

83,188. BREATHING APPARATUS FOR USE IN MINES AND OTHER PLACES WHERE THE AIR IS IRRESPIRABLE. Registered August 22, 1911. SIEBE, GORMAN & COMPANY LTD., London, England, a Corporation of Great Britain. Renewed August 22, 1931.

83,246. CHEMICAL FIRE-ENGINES. Registered August 29, 1911. BERNARD J. GOLDSTEIN. Renewed August 29, 1931, to Louis H. Carlough, doing business as The Safety Fire Extinguisher Co., New York, N. Y., assignee.

83,283. HAMS, SHOULDERS, BACON, AND PICNICS. Registered August 29, 1911. T. M. SINCLAIR & CO., LIMITED, Cedar Rapids, Iowa, a Corporation of Iowa. Renewed August 29, 1931.

83,495. A REMEDY FOR DISEASES OF THE MOUTH AND THROAT. Registered September 19, 1911. HARRY H. INK. Renewed September 19, 1931, to The Tonsiline Company, Canton, Ohio, a Corporation of Ohio, assignee.

83,520. HAMS, SHOULDERS, ROLLS, BACON, BOILED HAMS, AND LARD. Registered September 19, 1911. T. M. SINCLAIR & CO., LIMITED, Cedar Rapids, Iowa, a Corporation of Iowa. Renewed September 19, 1931.

83,532. A NON-INTOXICATING CARBONATED TONIC BEVERAGE. Registered September 19, 1911. LAMARTINE W. WINKLESS, Jr., San Jose, Calif. Renewed September 19, 1931.

83,951. CERTAIN FOODS. Registered October 24, 1911. T. M. SINCLAIR & CO., LIMITED, Cedar Rapids, Iowa, a Corporation of Iowa. Renewed October 24, 1931.

83,861. HAMS, SHOULDERS, AND BACON. Registered October 17, 1911. T. M. SINCLAIR & CO., LIMITED, Cedar Rapids, Iowa, a Corporation of Iowa. Renewed October 17, 1931.

84,158. MAGNESITE. Registered November 14, 1911. AMERICAN REFRACTORIES COMPANY, Chicago, Ill. Renewed November 14, 1931, to American-Austrian Magnesite Corporation, Pittsburgh, Pa., a Corporation of Delaware, successor.

84,308. SEEDS FOR AGRICULTURAL AND HORTICULTURAL PURPOSES. Registered November 28, 1911. JAMES CARTER & Co. Renewed November 28, 1931, to Carters Tested Seeds Limited, London, England, a Corporation of Great Britain, assignee.

84,501. WOMEN'S, MISSES', AND CHILDREN'S CLOTHING. Registered December 19, 1911. R. LOWENBAUM MANUFACTURING COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed December 19, 1931.

84,540. SAUSAGE, PICNICS, AND CHICKENS. Registered December 19, 1911. T. M. SINCLAIR & CO., LIMITED, Cedar Rapids, Iowa, a Corporation of Iowa. Renewed December 19, 1931.

84,635. ELECTRIC MOTORS AND GENERATORS, ELECTRIC DYNAMOS FOR GAS-ENGINES AND ELECTRIC TOOL-MOTORS. Registered December 26, 1911. THE IDEAL ELECTRIC & MANUFACTURING CO., Mansfield, Ohio, a Corporation of Ohio. Renewed December 26, 1931.

84,669. PORTABLE TIERING-MACHINES. Registered December 26, 1911. NEW YORK REVOLVING PORTABLE ELEVATOR CO., Jersey City, N. J., a Corporation of New Jersey. Renewed December 26, 1931.

84,673. CERTAIN MACHINERY AND TOOLS FOR LEATHER GOODS. Registered December 26, 1911. THE PEERLESS MACHINERY COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed December 26, 1931.

84,705. CERTAIN SOFT DRINKS AND NATURAL AERATED WATER. Registered December 26, 1911. WATER DELIVERY COMPANY. Renewed December 26, 1931, to Polar Water Company, Pittsburgh, Pa., a Corporation of Pennsylvania, by change of name.

LABELS

REGISTERED AUGUST 11, 1931

39,523.—*Title:* PENN CITY MOTOR OIL. For Motor Oil. THE B. B. OIL COMPANY, Philadelphia, Pa. Published July 7, 1931.

39,524.—*Title:* ATLAS MOTOR OIL. For Motor Oil. THE B. B. OIL COMPANY, Philadelphia, Pa. Published July 7, 1931.

39,525.—*Title:* PENN NATIONAL MOTOR OIL. For Motor Oil. THE B. B. OIL COMPANY, Philadelphia, Pa. Published July 9, 1931.

39,526.—*Title:* SWIM IN THE SUIT 'JOHNNY' WEISSMULLER DEVELOPED. For Bathing Suits. THE B. V. D. COMPANY, INC., New York, N. Y. Published May 22, 1931.

39,527.—*Title:* BENNETT'S CHIEF VALVE OIL. For Valve Oil for Lubricating Valve Stems, Valve Guides, Etc. PERCY HOWARD BENNETT, Seattle, Wash. Published June 5, 1931.

39,528.—*Title:* MALT-O-MEAL. For a Wheat Cereal Flavored with Specially Prepared Caramel Malt. CAMPBELL CEREAL COMPANY, Northfield, Minn. Published May 1, 1931.

39,529.—*Title:* THRIFTEE. For Biscuits. CENTRAL WAXED PAPER COMPANY, Chicago, Ill. Published July 2, 1931.

39,530.—*Title:* DOOLEY'S ACE-HI LIQUID GLUE. For Liquid Glue. THE DOOLEY MANUFACTURING CO., INC., Philmont, N. Y. Published June 20, 1931.

39,531.—*Title:* BOND BAKERS WHOLE WHEAT BREAD. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published June 29, 1931.

39,532.—*Title:* W. AA. JOHNSON. For Adding Machines, Cash Registers and Typewriters. W. AA. JOHNSTON, Knoxville, Tenn. Published June 1, 1931.

39,533.—*Title:* LONE STAR. For Strawberry Preserves. KADANE-BROWN, INC., Dallas, Fort Worth and Houston, Tex. Published Apr. 28, 1931.

39,534.—*Title:* LONE STAR. For Grape Jellies. KADANE-BROWN, INC., Dallas, Fort Worth and Houston, Tex. Published Apr. 28, 1931.

39,535.—*Title:* KEMP'S GOLDE& GLOW POP CORN—FROM THE FAMOUS GOLDEN GLOW SHOPS—TO RENEW CRISPNESS HEAT IN OVEN FOR A FEW MINUTES—RIGHT OFF THE FIRE. For Pop Corn. E. F. KEMP, INC., Boston, Somerville, and Worcester, Mass. Published April 24, 1931.

39,536.—*Title:* JEWEL. For Coffee. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published June 25, 1931.

39,537.—*Title:* COUNTRY CLUB. For Salmon. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Published June 10, 1931.

39,538.—*Title:* LUCKY 7. For Salami. A. MAGGIOLI & COMPANY, Boston, Mass. Published June 3, 1931.

39,539.—*Title:* CASTENE. For Tooth Powder. HAROLD WALKER MCINTYRE, Sweetwater, Tex. Published May 23, 1931.

39,540.—*Title:* NESTLE COMBINATION HOT OIL TREATMENT AND SHAMPOO—1½ FLUID OZ. For Preparation for Treatment of the Human Hair. THE NESTLE-LEMUR COMPANY, New York, N. Y. Published May 28, 1931.

39,541.—*Title:* NESTLE COMBINATION HOT OIL TREATMENT AND SAMPOOO. For Preparation for the Treatment of Human Hair. THE NESTLE-LEMUR COMPANY, New York, N. Y. Published May 28, 1931.

39,542.—*Title:* PUFFLES. For Confections. THE PUFFLES MANUFACTURING COMPANY, Dundee, Ill. Published August 6, 1930.

39,543.—*Title:* REMRANDCO. For Typewriter Ribbons. REMINGTON RAND INC., Buffalo, N. Y. Published March 10, 1931.

39,544.—*Title:* PARAGON. For Typewriter Ribbons. REMINGTON RAND INC., Buffalo, N. Y. Published March 10, 1931.

39,545.—*Title:* NUTS CHOCOLATE COVERED. For Chocolate Covered Nuts. F. J. SCHLEICHER PAPER BOX CO., St. Louis, Mo. Published June 1, 1931.

39,546.—*Title:* RITZ. For Cigars. A. H. SONNENBERG, New York, N. Y. Published March 23, 1931.

39,547.—*Title:* BEST BY A LONG STRETCH. For Overall Elastic. SOUTHERN WEBBING MILLS, INC., Greensboro, N. C. Published May 11, 1931.

39,548.—*Title:* ARMORED RUBBER THREADS. For Overall Elastic. SOUTHERN WEBBING MILLS, INC., Greensboro, N. C. Published May 11, 1931.

39,549.—*Title:* CHASE AND SANBORN'S SEAL BRAND GREEN TEA. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 12, 1931.

39,550.—*Title:* FLEISCHMANN'S IRRADIATED PURE DRY YEAST. For Yeast Especially Prepared for Stock and Poultry. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 10, 1931.

39,551.—*Title:* RE UMBERTO. For Olive Oil. STROHMEYER & ARPE COMPANY, New York, N. Y. Published April 13, 1931.

39,552.—*Title:* PAN ROLLS. For Rolls. WAXIDE PAPER COMPANY, Kansas City, Mo. Published February 15, 1931.

39,553.—*Title:* BETTY ANNE. For Bread. WAXIDE PAPER COMPANY, Kansas City, Mo. Published April 17, 1931.

39,554.—*Title:* QUALITY. For Bread. WAXIDE PAPER COMPANY, Kansas City, Mo. Published December 4, 1929.

39,555.—*Title:* SANDWICH BUNS. For Buns. WAXIDE PAPER COMPANY, Kansas City, Mo. Published December 5, 1930.

39,556.—*Title:* GOLDEN KRUST. For Bread. WAXIDE PAPER COMPANY, Kansas City, Mo. Published June 5, 1931.

39,557.—*Title:* SONNY BOY. For Butter. M. WILDSTEIN, Philadelphia, Pa. Published April 28, 1931.

PRINTS

REGISTERED AUGUST 11, 1931

13,334.—*Title:* SOLVE THE SONG SCENES. For Pianos. THE CABLE COMPANY, Chicago, Ill. Published July 13, 1931.

13,335.—*Title:* BOWLENE. For a Preparation for Cleaning and Deodorizing Closet Bowls. THE CLIMALENE COMPANY, Canton, Ohio. Published March 5, 1931.

13,336.—*Title:* ANXIOUS YOUNG MOTHERS. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published July 15, 1931.

13,337.—*Title:* BORIZE. For Boring Machines. THE HEALD MACHINE COMPANY, Worcester, Mass. Published July 2, 1931.

13,338.—*Title:* ELECTRIC MANTEL CLOCK. For Electric Clocks. MERCHANTS ADVERTISING COMPANY, Adrian, Mich. Published December 9, 1930.

13,339.—*Title:* SUNBURN? UNGUENTINE GOES AS DEEP AS THE BURN. For the Surgical Ointment, Unguentine. THE NORWICH PHARMACAL COMPANY, Norwich, N. Y. Published March 30, 1931.

13,340.—*Title:* ON YOUR WAY HOME. For Motor Oil. QUAKER STATE OIL REFINING CO., Oil City, Pa. Published May 1, 1931.

13,341.—*Title:* CONVENIENT STORAGE. For Motor Oil. QUAKER STATE OIL REFINING CO., Oil City, Pa. Published May 1, 1931.

13,342.—*Title:* PROMPT SERVICE JUST AROUND THE CORNER. For Motor Oil. QUAKER STATE OIL REFINING CO., Oil City, Pa. Published May 1, 1931.

13,343.—*Title:* READY TO GO. For Motor Oil. QUAKER STATE OIL REFINING CO., Oil City, Pa. Published May 1, 1931.

13,344.—*Title:* A REMINDER. For Motor Oils. QUAKER STATE OIL REFINING CO., Oil City, Pa. Published May 1, 1931.

13,345.—*Title:* 7 DAYS AGO. For Motor Oils. QUAKER STATE OIL REFINING CO., Oil City, Pa. Published May 1, 1931.

13,346.—*Title:* WHERE PERFORMANCE DEPENDS UPON PRECISION . . . For Antifriction Bearings. S. K. F. INDUSTRIES, INC., New York, N. Y. Published May 4, 1931.

13,347.—*Title:* BEST BY A LONG STRETCH. For Overall Elastic. SOUTHERN WEBBING MILLS, INC., Greensboro, N. C. Published April 24, 1931.

13,348.—*Title:* ARMORED RUBBER THREADS. For Overall Elastic. SOUTHERN WEBBING MILLS, INC., Greensboro, N. C. Published April 24, 1931.

13,349.—*Title:* QUALITY WANTS. For Prints and Publications. THOMAS D. TAYLOR, Philadelphia, Pa. Published June 26, 1931.

REISSUES

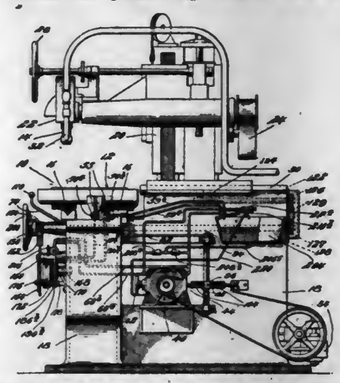
AUGUST 11, 1931

18,148. THERMAL DECOMPOSITION OF HYDROCARBONS. GEORGE O. CURME, Jr., White Plains, N. Y., assignor to Carbide and Carbon Chemicals Corporation, a Corporation of New York. Original No. 1,646,349, dated Oct. 18, 1927, Serial No. 79,896, filed Jan. 7, 1926. Application for reissue filed May 1, 1931. Serial No. 534,438. 8 Claims. (Cl. 260—170.)

1. The process which comprises thermally decomposing hydrocarbons particularly in gaseous or vapor form while the latter are in contact with an alloy consisting predominantly of chromium and iron under such conditions that contact of commercial iron with the decomposing hydrocarbon would give rise to seriously interfering deposition of carbon.

18,149. FLUID PRESSURE ACTUATED GRINDING MACHINE. FRANK E. STRATTON, Cranston, R. I., assignor to Diamond Machine Company, Providence, R. I., a Corporation of Rhode Island. Original No. 1,725,489, dated Aug. 20, 1929, Serial No. 88,805, filed Feb. 17, 1926. Application for reissue filed May 31, 1930. Serial No. 458,765. 15 Claims. (Cl. 51—92.)

13. In a grinding machine, the combination of a work carriage, a carriage for rotating tool, a pump having means to reverse the flow therefrom, liquid actuated means actuated by reversal of liquid flow from said pump to effect a reciprocating movement of one of said carriages relative to said other carriage to bring the work on one carriage in operative relation with the tool of the other carriage, including two operable piston faces, cylinder means and pipe lines connecting said cylinder means to said pump, whereby the volume of liquid in said system may be kept constant, each piston face being connected to said reciprocating carriage by means of a rod through a form of connection permitting tension only in said rod

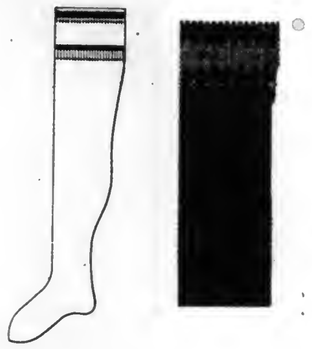


by means of a rod through a form of connection permitting tension only in said rod to pull it alternately in opposite directions, and means actuated by the reciprocating carriage at the end of each stroke to automatically reverse the direction of liquid flow from said pump to change the direction of travel of said reciprocating carriage.

DESIGNS

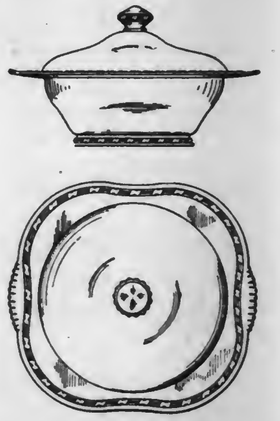
AUGUST 11, 1931

84,801. STOCKING. GEORGE F. ABERLE, Philadelphia, Pa., assignor to H. C. Aberle Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 8, 1931. Serial No. 40,131. Term of patent 3½ years.



The ornamental design for a stocking, substantially as shown and described.

84,802. COVERED DISH OR SIMILAR ARTICLE. LUCIEN ANDUZE, Limoges, France, assignor to Herman C. Kupper, Inc., New York, N. Y., a Corporation of New York. Filed June 6, 1931. Serial No. 40,100. Term of patent 7 years.



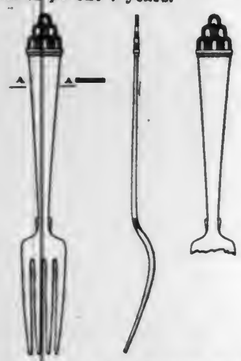
The ornamental design for a covered dish or similar article as shown.

84,803. RUBBER HEEL. ALEXANDER C. BAIN, Hudson, Mass., assignor to Firestone Footwear Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 11, 1931. Serial No. 38,611. Term of patent 14 years.



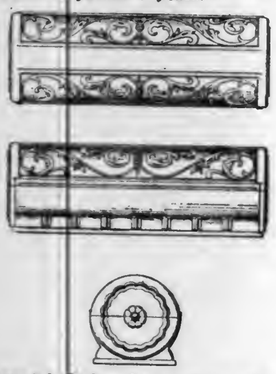
The ornamental design for a rubber heel as shown.

84,804. FORK OR SIMILAR ARTICLE. PERCY B. BALL, Attleboro, Mass., assignor to The Watson Company, Attleboro, Mass. Filed Apr. 30, 1931. Serial No. 39,660. Term of patent 7 years.



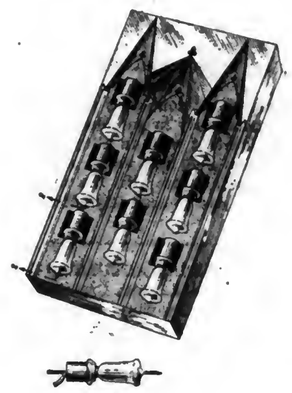
The ornamental design for a fork or similar article substantially as shown.

84,805. PAPER ROLL CONTAINER. JEROME E. BAUM, New York, N. Y. Filed June 10, 1931. Serial No. 40,162. Term of patent 7 years.



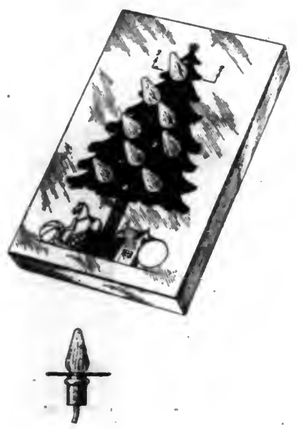
The ornamental design for a paper roll container as shown.

84,806. COMBINED CHRISTMAS TREE LIGHTING SET AND DISPLAY RECEPTACLE THEREFOR OR THE LIKE ARTICLE. ABRAHAM L. BUSCHMAN, New York, N. Y. Filed May 26, 1931. Serial No. 39,971. Term of patent 14 years.



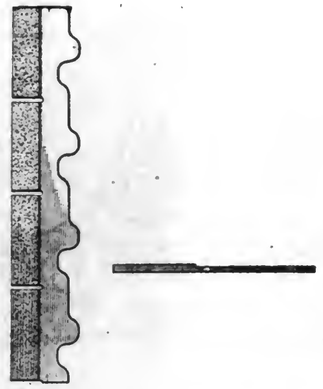
The ornamental design for a combined Christmas tree lighting set and display receptacle therefor or the like article, substantially as shown.

84,807. COMBINED CHRISTMAS TREE LIGHTING SET AND DISPLAY RECEPTACLE THEREFOR OR THE LIKE ARTICLE. ABRAHAM L. BUSCHMAN, New York, N. Y. Filed May 26, 1931. Serial No. 39,972. Term of patent 7 years.



The ornamental design for a combined Christmas tree lighting set and display receptacle therefor or the like article, substantially as shown.

84,808. SIDING STRIP. LLOYD E. CALKINS, Joliet, Ill., assignor to The Ruberoid Co., Bound Brook, N. J., a Corporation of New Jersey. Filed June 11, 1931. Serial No. 40,167. Term of patent 14 years.



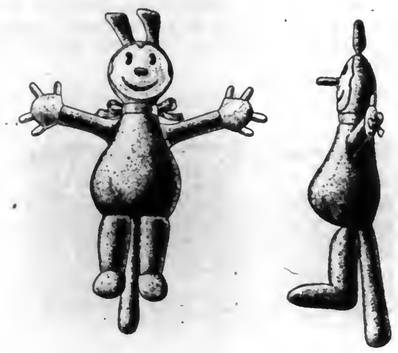
The ornamental design for a siding strip, substantially as shown.

84,809. ELECTRIC WALL PLUG. PIERRE J. CHÉRON, Stratford, Conn. Filed Apr. 1, 1931. Serial No. 39,319. Term of patent 3½ years.



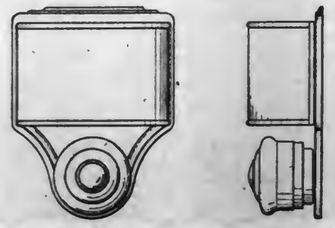
The ornamental design for an electric wall plug as shown.

84,810. DOLL OR SIMILAR ARTICLE. ISIDOR COWEN, New York, N. Y. Filed June 29, 1931. Serial No. 40,364. Term of patent 7 years.



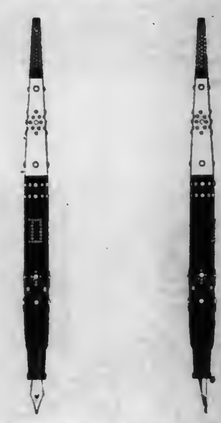
The ornamental design for a doll or similar article, substantially as shown.

84,811. COMBINATION ASH RECEIVER AND ELECTRIC LIGHTER. RUDOLPH DE BOER, Grand Rapids, Mich., assignor to Grand Rapids Metalcraft Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed Dec. 20, 1930. Serial No. 38,038. Term of patent 7 years.



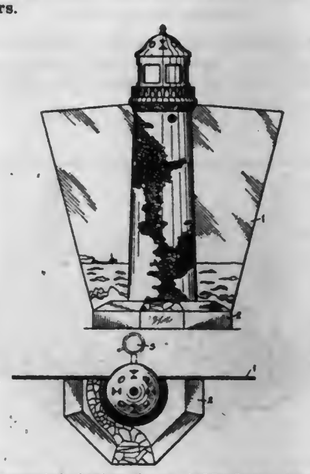
The ornamental design for a combination ash receiver and electric lighter, substantially as shown.

84,812. PENHOLDER OR SIMILAR ARTICLE. FRANK DI IONNO, Millburn, N. J. Filed June 3, 1931. Serial No. 40,072. Term of patent 7 years.



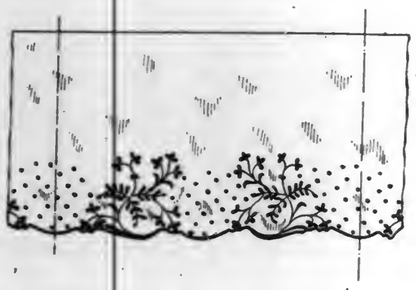
The ornamental design for a penholder or similar article, as shown.

84,813. TABLE LAMP. OTTO R. FANDREY, Toledo, Ohio. Filed June 19, 1931. Serial No. 40,273. Term of patent 3½ years.



The ornamental design for a table lamp as shown and described.

84,814. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,369. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,815. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,370. Term of patent 3½ years.



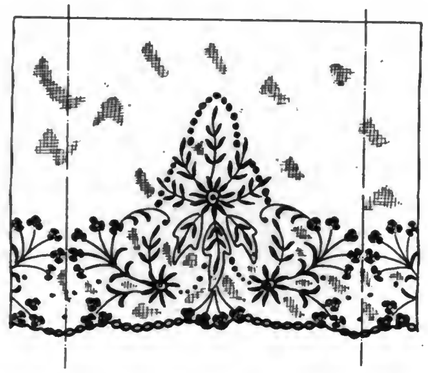
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,816. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,371. Term of patent 3½ years.



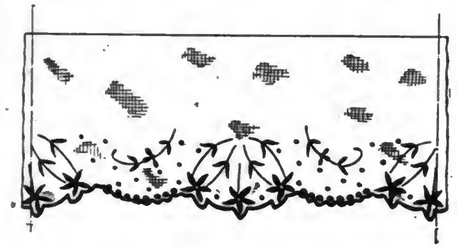
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,817. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,372. Term of patent 3½ years.



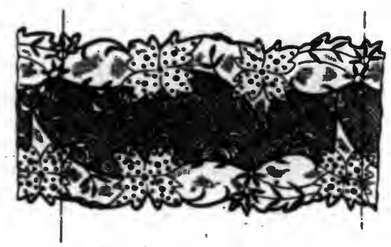
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,818. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,373. Term of patent 3½ years.



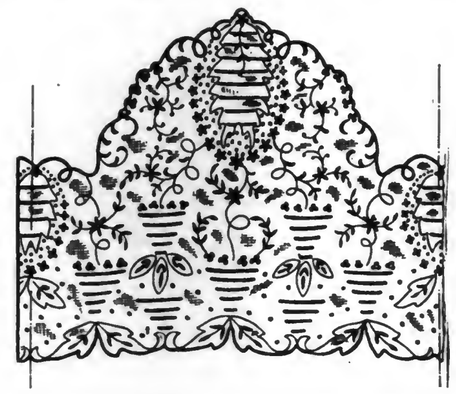
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,819. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,374. Term of patent 3½ years.



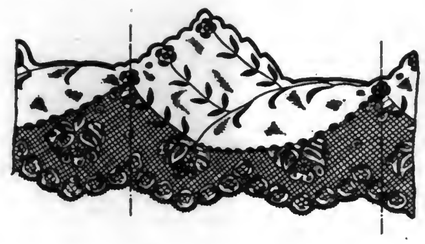
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,820. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,375. Term of patent 3½ years.



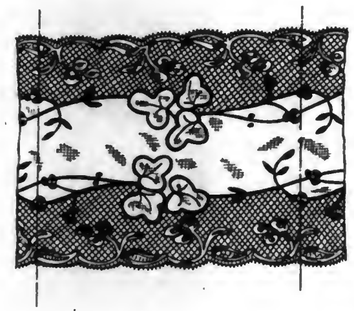
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,821. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,376. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,822. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,377. Term of patent 3½ years.



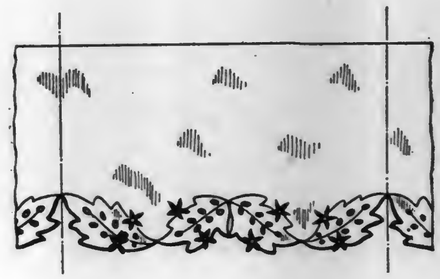
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,823. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,378. Term of patent 3½ years.



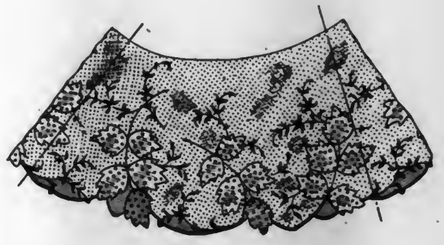
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,824. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,379. Term of patent 3½ years.



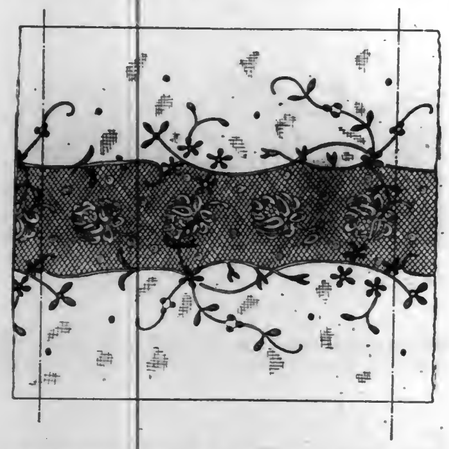
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,825. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,380. Term of patent 3½ years.



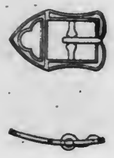
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,826. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 29, 1931. Serial No. 40,381. Term of patent 3½ years.



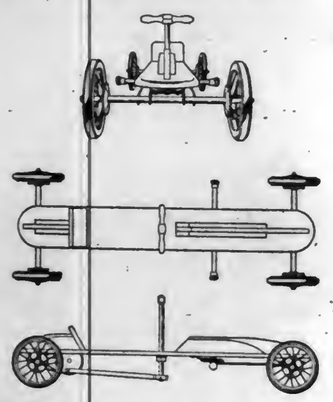
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,827. BUCKLE. JOHN B. FREYSINGER, New Britain, Conn., assignor to North & Judd Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed June 5, 1931. Serial No. 40,095. Term of patent 3½ years.



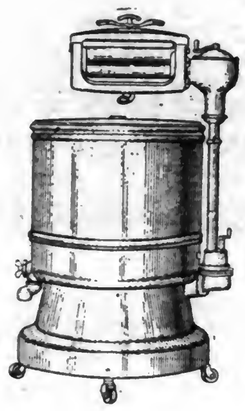
The ornamental design for a buckle, as shown.

84,828. CHILD'S VEHICLE. DONALD W. GILL, Cincinnati, Ohio, assignor to The Frank F. Taylor Company, Norwood, Ohio, a Corporation of Ohio. Filed Apr. 10, 1931. Serial No. 39,430. Term of patent 3½ years.



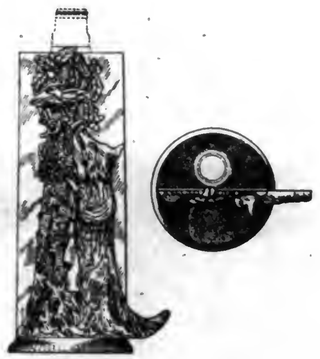
The ornamental design for a child's vehicle, as shown and described.

84,829. COMBINED WASHING MACHINE CASING AND WRINGER. JOHN T. HUME, Chicago, Ill., assignor to Electric Household Utilities Corporation, Cicero, Ill., a Corporation of Illinois. Filed Mar. 14, 1931. Serial No. 39,080. Term of patent 14 years.



The ornamental design for a combined washing machine casing and wringer as shown.

84,830. ELECTRIC LAMP. RICHARD S. JOHNSON, York, Pa. Filed May 19, 1931. Serial No. 39,906. Term of patent 3½ years.



The ornamental design for an electric lamp as shown.

84,831. AIR CONDITIONER STAND. THOMAS J. KEHOE, Perrysburg, Ohio. Filed Apr. 18, 1931. Serial No. 39,548. Term of patent 7 years.



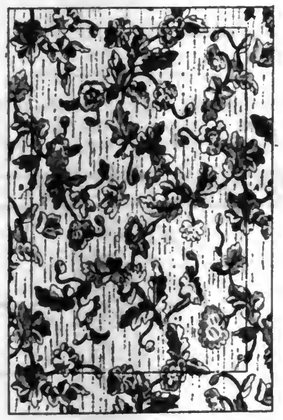
The ornamental design for an air conditioner stand, substantially as shown.

84,832. SHOE BUCKLE. CLIFFORD G. KING, Barrington, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 22, 1931. Serial No. 39,590. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

84,833. CARPET. HENRY C. LA COUTURE, Hudson County, N. J., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Feb. 18, 1931. Serial No. 38,717. Term of patent 7 years.



The ornamental design for a carpet substantially as shown and described.

84,834. HEATER. HENRY LANGE, Quincy, Ill. Filed May 28, 1931. Serial No. 40,020. Term of patent 14 years.



The ornamental design for a heater, as shown.

84,835. FLASK. FRANK J. LE CLAIR, Attleboro, Mass. Filed June 4, 1931. Serial No. 40,082. Term of patent 3½ years.



The ornamental design for a flask, substantially as shown.

84,836. MATTRESS TICKING OR THE LIKE. CHARLES LOFMAN, Riverside, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed May 4, 1931. Serial No. 39,694. Term of patent 3½ years.



The ornamental design for a mattress ticking, or the like, as shown.

84,837. CLOCK CASE. GEORGE M. LONG, Boston, Mass., assignor to Warren Telechron Company, a Corporation of Maine. Filed June 12, 1931. Serial No. 40,172. Term of patent 14 years.



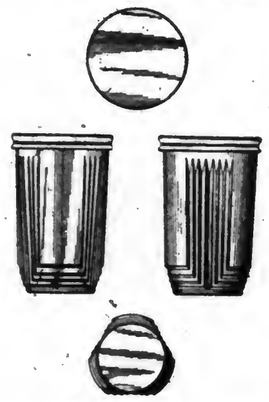
The ornamental design for a clock case as shown.

84,838. CLOCK CASE. GEORGE M. LONG, Boston, Mass., assignor to Warren Telechron Company, a Corporation of Maine. Filed June 12, 1931. Serial No. 40,173. Term of patent 14 years.



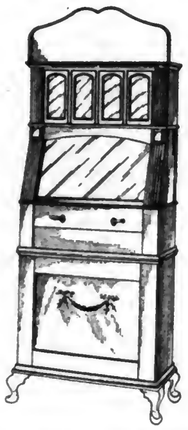
The ornamental design for a clock case as shown.

84,839. FOOD PRODUCT CONTAINER. FRANK J. McDONOUGH, Chicago, Ill., assignor to Glaser, Crandell Co., Chicago, Ill., a Corporation of Illinois. Filed June 12, 1931. Serial No. 40,176. Term of patent 14 years.



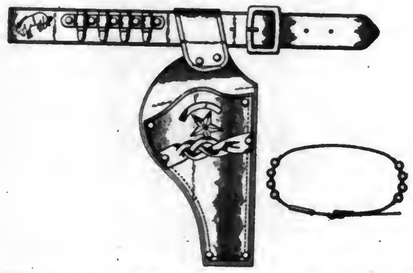
The ornamental design for a food product container as shown.

84,840. AMUSEMENT MACHINE CABINET. JOHN F. MEYER, Pasadena, Calif. Filed June 3, 1931. Serial No. 40,069. Term of patent 14 years.



The ornamental design for an amusement machine cabinet as shown.

84,841. COMBINED TOY PISTOL HOLSTER AND BELT. ERIK J. MORDT, Evanston, Ill. Filed June 5, 1931. Serial No. 40,090. Term of patent 14 years.



The ornamental design for a combined toy pistol holster and belt, as shown.

84,842. BURIAL CASKET. WILLIAM OSTWALD, Chicago, Ill., assignor to Central Metallic Casket Co., Chicago, Ill., a Corporation of Illinois. Filed June 22, 1931. Serial No. 40,292. Term of patent 14 years.



The ornamental design for a burial casket as shown.

84,843. BURIAL CASKET. WILLIAM OSTWALD, Chicago, Ill., assignor to Central Metallic Casket Co., Chicago, Ill., a Corporation of Illinois. Filed June 22, 1931. Serial No. 40,293. Term of patent 14 years.



The ornamental design for a burial casket as shown.

84,844. BURIAL CASKET. WILLIAM OSTWALD, Chicago, Ill., assignor to Central Metallic Casket Co., Chicago, Ill., a Corporation of Illinois. Filed June 22, 1931. Serial No. 40,294. Term of patent 14 years.



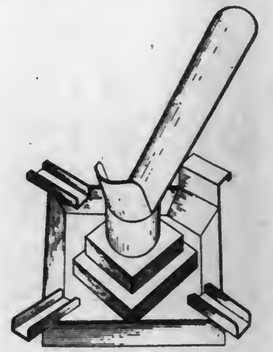
The ornamental design for a burial casket as shown.

84,845. BUCKLE. WALTER S. PAINTER, Middlebury, Conn., assignor to Pioneer Suspender Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 4, 1931. Serial No. 38,548. Term of patent 3½ years.



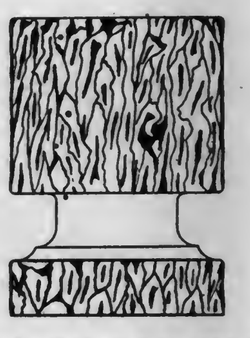
The ornamental design for a buckle, as shown and described.

84,846. ASH TRAY. FRED M. PANNEBOT, Hyde Park, Mass. Filed Mar. 4, 1931. Serial No. 38,922. Term of patent 3½ years.



The ornamental design for an ash tray as shown.

84,847. JARDINIERE. DAVID H. ROSS, Boston, Mass. Filed May 27, 1931. Serial No. 40,002. Term of patent 14 years.



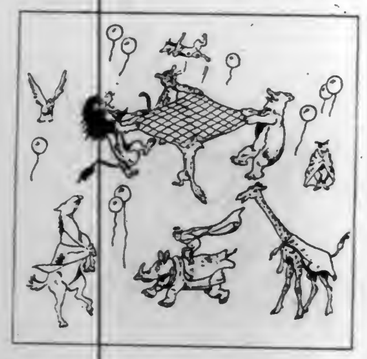
The ornamental design for a jardiniere as shown and described.

84,848. AUTOMOBILE RADIATOR BAR. ROBERT C. RUSSELL, Dallas, Tex. Filed Aug. 28, 1930. Serial No. 36,815. Term of patent 7 years.



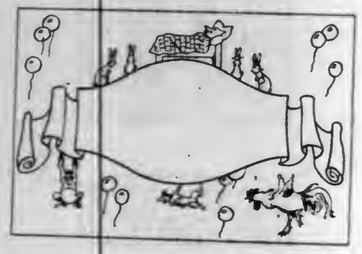
The ornamental design for an automobile radiator bar, as shown and described.

84,849. BLANKET. ANTONIO F. SARG, New York, N. Y., assignor to Pepperell Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed May 26, 1931. Serial No. 39,981. Term of patent 14 years.



The ornamental design for a blanket as shown.

84,850. BOX COVER PAPER OR THE LIKE. ANTONIO F. SARG, New York, N. Y., assignor to Pepperell Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed May 26, 1931. Serial No. 39,982. Term of patent 14 years.



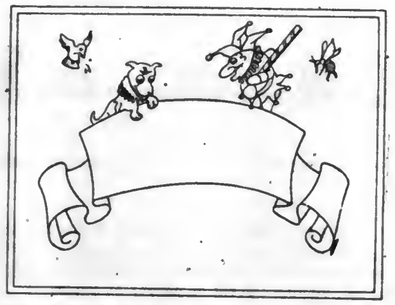
The ornamental design for box cover paper or the like as shown.

84,851. BLANKET. ANTONIO F. SARG, New York, N. Y., assignor to Pepperell Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed May 26, 1931. Serial No. 39,983. Term of patent 14 years.



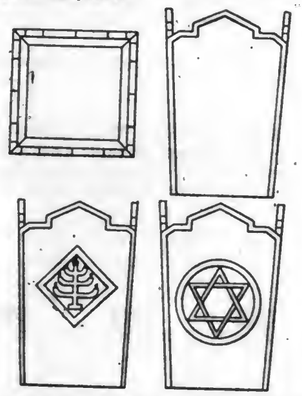
The ornamental design for a blanket as shown.

84,852. BOX COVER PAPER OR THE LIKE. ANTONIO F. SARG, New York, N. Y., assignor to Pepperell Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed May 26, 1931. Serial No. 39,984. Term of patent 14 years.



The ornamental design for box cover paper or the like as shown.

84,853. LAMP RECEPTACLE. WILLIAM SAYMON, Brooklyn, N. Y. Filed Apr. 21, 1931. Serial No. 39,583. Term of patent 14 years.



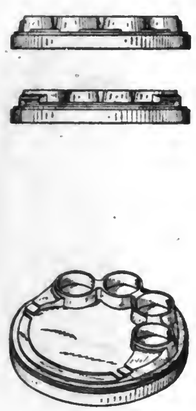
The ornamental design for a lamp receptacle, as shown.

84,854. LAMP. WILLIAM H. SHLESINGER, Brooklyn, N. Y. Filed May 27, 1931. Serial No. 40,008. Term of patent 3½ years.



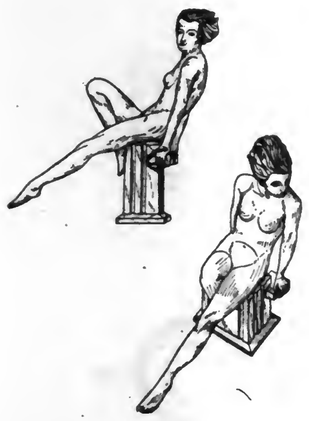
The ornamental design for a lamp as shown and described.

84,855. TABLE LAMP BASE OR ARTICLE OF SIMILAR NATURE. CHARLES SHULMAN, New York, N. Y. Filed Nov. 25, 1930. Serial No. 37,784. Term of patent 3½ years.



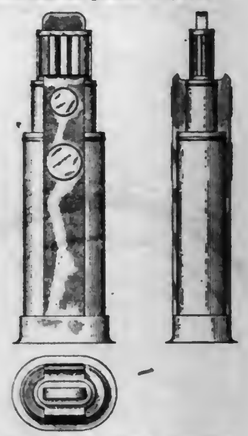
The ornamental design for a table lamp base or article of similar nature, as shown.

84,856. STATUETTE OR SIMILAR ARTICLE. CHARLES SHULMAN, New York, N. Y. Filed Nov. 25, 1930. Serial No. 37,785. Term of patent 3½ years.



The ornamental design for a statuette, or similar article as shown.

84,857. GASOLINE DISPENSER CASING. JOSEPH SINEL, New York, N. Y. Filed May 28, 1931. Serial No. 40,019. Term of patent 7 years.



The ornamental design for a gasoline dispenser casing, substantially as shown.

84,858. SHOE. LEON W. STETSON, West Newton, Mass. Filed May 22, 1931. Serial No. 39,929. Term of patent 14 years.



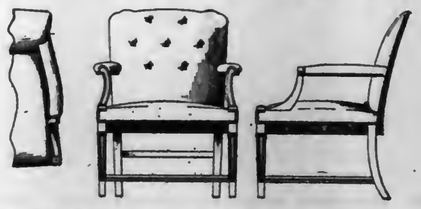
The ornamental design for a shoe as shown and described.

84,859. VIBRATING STOOL. DARWIN E. STEVENS and CHARLES E. BROWN, Duluth, Minn. Filed May 14, 1931. Serial No. 39,858. Term of patent 7 years.



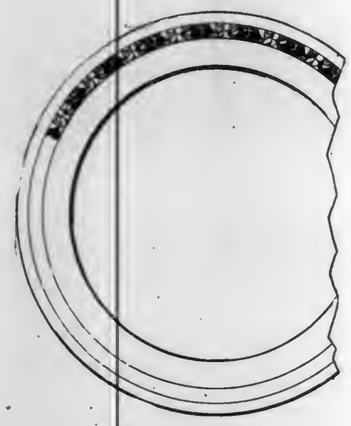
The ornamental design for a vibrating stool as shown.

84,860. CHAIR. WILLIAM D. TUCKER, Grand Rapids, Mich., assignor to Century Furniture Company, Grand Rapids, Mich., a Corporation of Michigan. Filed June 1, 1931. Serial No. 40,050. Term of patent 7 years.



The ornamental design for a chair, as shown.

84,861. PLATE OR SIMILAR ARTICLE. HARRY J. WAIN, New Brighton, Pa., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed May 25, 1931. Serial No. 39,960. Term of patent 3½ years.



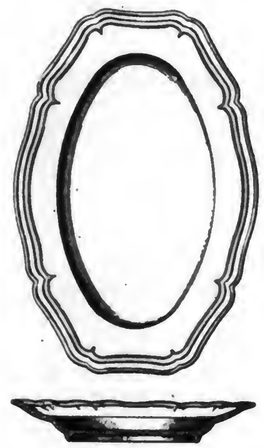
The ornamental design for a plate or similar article, as shown and described.

84,862. COLLAR HOLDER. FRANCIS J. WAKEFIELD, Attleboro, Mass., assignor to Taunton Pearl Works, Inc., a Corporation of Massachusetts. Filed June 3, 1931. Serial No. 40,067. Term of patent 14 years.



The ornamental design for a collar holder, substantially as shown.

84,863. PLATTER OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1931. Serial No. 40,121. Term of patent 14 years.



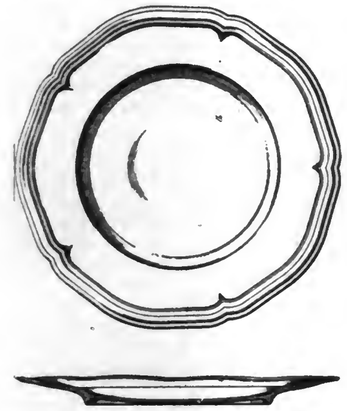
The ornamental design for a platter or similar article as shown.

84,864. CUP OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1931. Serial No. 40,122. Term of patent 14 years.



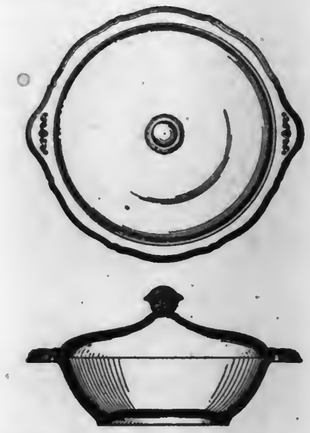
The ornamental design for a cup or similar article as shown.

84,865. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1931. Serial No. 40,125. Term of patents 14 years.



The ornamental design for a plate or similar article as shown.

84,866. CASSEROLE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1931. Serial No. 40,130. Term of patent 14 years.

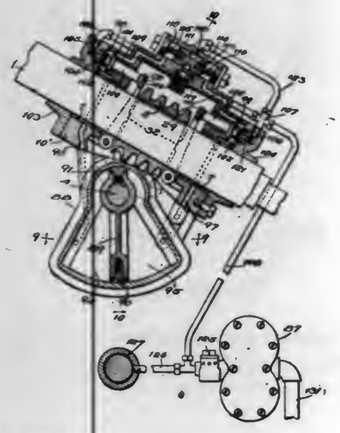


The ornamental design for a casserole or similar article as shown.

PATENTS

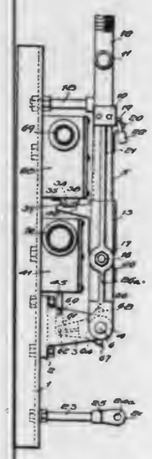
GRANTED AUGUST 11, 1931

1,817,903. STEERING DEVICE. BURTON S. AIKMAN, Milwaukee, Wis., assignor of one-half to R. P. Tell, Milwaukee, Wis. Filed Nov. 28, 1927. Serial No. 236,311. 13 Claims. (Cl. 180—79.2.)



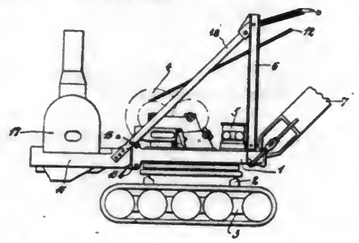
1. In a power operated steering mechanism, a worm shaft, a worm having limited axial motion thereupon, a gear sector engaged by the worm, steering means connected to the sector, a fluid pressure motor connected to said sector and a valve controlling the motor and actuated by operation of said worm.

1,817,904. SWITCH OPERATING MECHANISM. ALFRED ALSAKER and ERIC NORDHEM, Chicago, Ill., assignors to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 29, 1927. Serial No. 187,670. 11 Claims. (Cl. 200—48.)



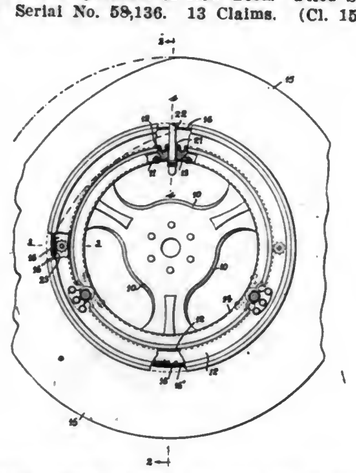
11. In a switch operating means, a support, a handle structure pivotally mounted on the support, an operating rod pivotally connected to the handle structure eccentric to the pivot axis thereof, stop means limiting the movement of the rod in the switch closing direction, a latch for locking the rod against movement, and an electromagnet on the support and located between the support and the operating rod, said electromagnet having means normally disposed for engagement with the latch member when the winding of the electromagnet is deenergized and moved out of position for freeing the same when the winding is energized.

1,817,905. EXCAVATING MACHINERY. WILLIAM M. BAGER and WERNER LEHMAN, South Milwaukee, Wis., assignors to Bucyrus-Erie Company, South Milwaukee, Wis., a Corporation of Delaware. Original application filed Jan. 4, 1926, Serial No. 79,162. Divided and this application filed Mar. 22, 1927. Serial No. 177,397. 2 Claims. (Cl. 212—28.)



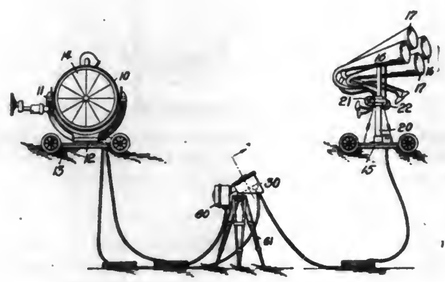
1. In a machine of the class described, the combination of: a propelling base; a turntable base proper mounted thereon; and a separable extension base to said turntable base, attached thereto and supported thereby; the means for attachment including two junctures, each of which consists wholly in two vertical plates projecting from one of the parts to be joined, one vertical plate projecting from the other of said parts, and placed between said first mentioned two plates, a horizontal hole through the top of each set of plates, a horizontal hole through the bottom of each set of plates, and pins through each hole for securing the plates together.

1,817,906. WHEEL RIM. FREDERICK WILLIAM BAKER, Stourbridge, England, assignor to Trinity Wheel Corporation, a Corporation of New York. Filed Sept. 23, 1925. Serial No. 58,136. 13 Claims. (Cl. 152—20.)



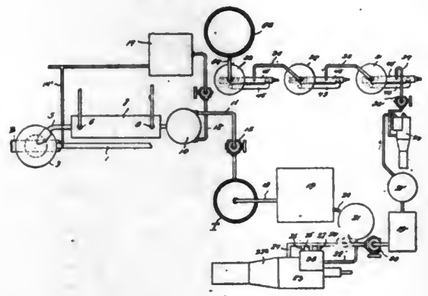
1. A wheel rim having a circumferentially extensible and contractible tire bed supported by and between the rim flanges.

1,817,907. POSITION COMPARATOR. PRESTON R. BASSETT, Rockville Center, and CHESTER B. MILLS, Brooklyn, N. Y., assignors, by mesne assignments, to The Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 13, 1926, Serial No. 101,844. Renewed Dec. 27, 1930. 18 Claims. (Cl. 240—1.)



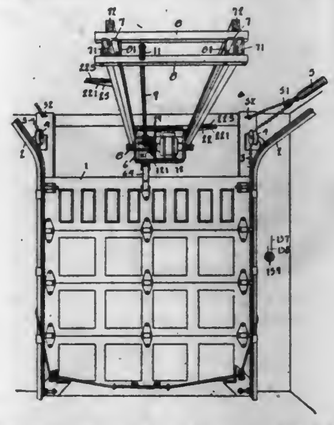
1. In combination, a searchlight, means for detecting the direction of an object, a comparator comprising means for indicating the position of the searchlight and cooperating means for indicating the position of said detecting means whereby the relative position of said searchlight and detecting means is also shown, and means whereby said searchlight and said detecting means control the respective indicating means.

1,817,908. PROCESS OF AND MEANS FOR SEPARATING AND UTILIZING CONSTITUENTS OF NATURAL GAS. JOSEPH S. BELT, Amarillo, Tex. Filed May 21, 1929. Serial No. 364,890. 7 Claims. (Cl. 183—115.)



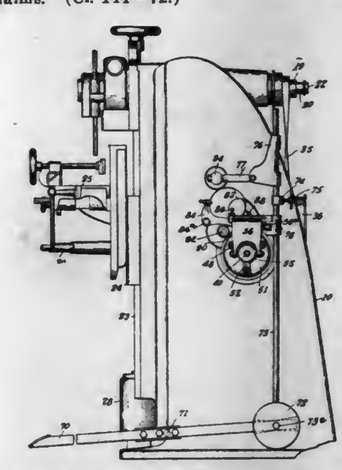
1. In the process of separating and utilizing constituents of natural gas, the improved steps which consists in first burning the natural gas with oxygen in an air-tight chamber to produce flue gases in which the hydrocarbon compounds in the natural gas have been converted to carbon dioxide and water vapor, then condensing and removing the water vapor from the flue gases, and then solidifying and removing the carbon dioxide from the flue gases to recover the inert gases therefrom.

1,817,909. ELECTRIC DOOR CONTROL. HERBERT CADY BLODGETT, Hartford City, Ind.; assignor to Overhead Door Corporation, Hartford City, Ind. Filed Mar. 16, 1928. Serial No. 262,309. 18 Claims. (Cl. 268—59.)



17. The combination with a reciprocating door, of an auxiliary track means, a carriage with runners slidable on said track, yielding traction means, a motor carried by the carriage geared to the yieldable traction means, and a friction drive therefor.

1,817,910. MORTISING MACHINE. ROBERT S. BROWN, New Britain, Conn., assignor to The New Britain Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 11, 1928. Serial No. 305,177. 28 Claims. (Cl. 144—72.)

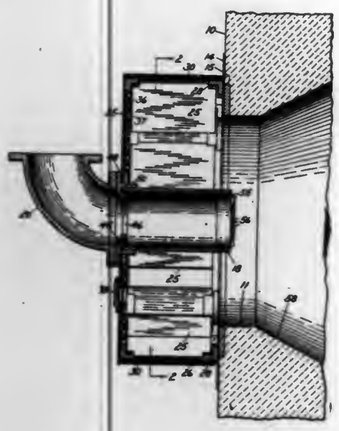


1. A mortiser comprising in combination, a base, a cutter mounted thereon, a work support movably mounted on said base, a power-driven machine-feed mechanism for said support, means to automatically and positively lock the support in a position with the cutter engaged with the work, and means to release the support for movement from the cutter by gravity.

1,817,911. PULVERIZED FUEL BURNER. L. V. ANDREWS and OLLISON CRAIG, Worcester, Mass., assignors to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed May 19, 1927. Serial No. 192,035. 3 Claims. (Cl. 110—28.)

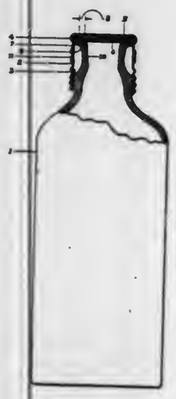
2. A burner for pulverized fuel comprising a central imperforate fuel pipe mounted adjacent to a furnace and

arranged to discharge into said furnace a stream of pulverized fuel and primary air, means including a series of deflectors arranged uniformly around the pipe to direct a whirling stream of secndary air into the furnace, an annular orifice plate mounted within the pipe and spaced



from its discharge end to present a narrow deflecting surface in the path of any segregated fuel traveling along the pipe wall, and a spreading device adjacent to the discharge end of the pipe and arranged to whirl the fuel stream and throw it outwardly into the secondary air.

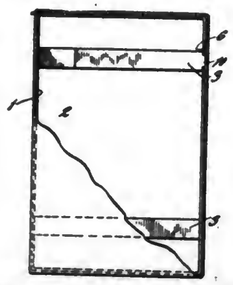
1,817,912. BOTTLE. JACOB W. BEHRENDT, San Francisco, Calif. Filed May 5, 1930. Serial No. 449,765. 4 Claims. (Cl. 215—31.)



1. A bottle having a pouring neck and an outwardly directed pouring lip around its upper end, threads around the neck at a point spaced below the pouring lip, a relatively long unthreaded portion between the lip and the threads, said unthreaded portion being curved inwardly to smaller diameter to form a balancing neck.

1,817,913. BOX STRUCTURE. STANLEY L. BELLEMERE, Reading, Pa. Filed Feb. 28, 1929. Serial No. 343,403. 2 Claims. (Cl. 206—72.)

1. A box structure comprising a box body having aligned slots in the parallel side walls thereof, merchandise retainers in the form of strips of greater length than the width of said box body each having tongues at the ends thereof of a width less than the width of the strip to de-



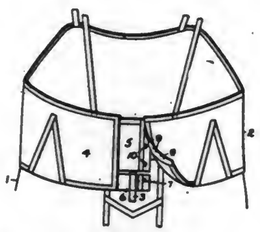
fine a pair of shoulders adapted to have abutting relation with the inner surface of the box body when the tongues are inserted in the said slots to flex said strip.

1,817,914. FLOOR CONSTRUCTION. KARL P. BILLNER, New York, N. Y., assignor to The Aerocrete Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Feb. 7, 1930. Serial No. 426,519. 4 Claims. (Cl. 72—71.)



1. In a flat ceiling floor construction of the type described the combination of light structural steel beams spaced relatively close together and supported at their ends and a monolithic filling of porous concrete entirely embedding said beams and of a thickness sufficiently great with respect to the spacing of said beams as to give the desired load bearing capacity without reinforcement.

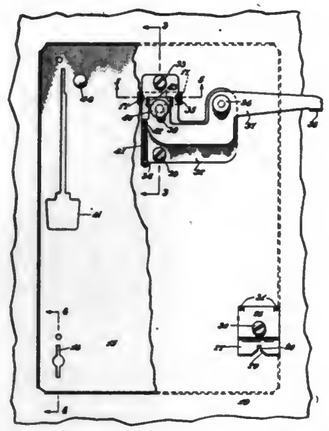
1,817,915. GARMENT. DAVID BLAIR, Chicago, Ill. Filed May 24, 1930. Serial No. 455,440. 2 Claims. (Cl. 2—30.)



1. In a garment the combination of an upper body encircling member, two sections one above the other and extending from one end of the body encircling member, securing means at the free ends of both extending sections to cooperate with securing means on the opposite end of the body encircling member for detachably securing the same together, a lower body encircling member and a loop secured to the upper portion of said lower member, the lower extension on the upper body encircling member being adapted to be extended through the loop.

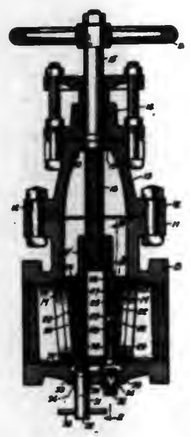
1,817,916. ATTACHMENT FOR CALCULATING MACHINES. EDWIN F. BRITTEN, Jr., Maplewood, and LEE R. BROWN, East Orange, N. J., assignors to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,541. 6 Claims. (Cl. 248—16.5.)

1. Securing means for a calculating machine having a base plate formed with an aperture, comprising a supporting member and means secured to said member and including locking and guiding elements adapted to enter



said aperture and to cooperate with said base plate for securing the same to said member and for preventing lateral shifting of said base plate relative to said member.

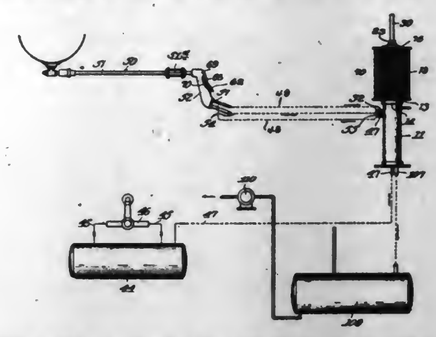
1,817,917. VALVE. CARL W. CARPENTER, Santa Barbara, Calif. Filed Mar. 3, 1930. Serial No. 432,962. 5 Claims. (Cl. 251—36.)



2. A valve comprising a body having a seat, a valve element mounted in the body for co-action with the seat and having a seat engaging member, means for mounting said member on the valve element for rotation in a plane parallel to the seat for grinding co-action with the latter, the valve body having an opening, the seat engaging member having teeth, an instrument insertable through said opening into the valve body and having teeth engageable with the teeth of said member for co-action therewith in rotating the member, and a closure for the opening.

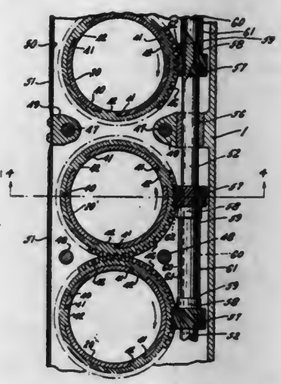
1,817,918. RECEPTACLE EVACUATING APPARATUS. HERMAN J. ENOBRECHT, Chicago, Ill. Filed Mar. 7, 1925. Serial No. 13,819. 18 Claims. (Cl. 184—1.5.)

1. The combination with an oil receptacle, such as the crank-case of an automobile, having a check-valve-equipped discharge outlet opening below the normal oil level in the receptacle, of a pipe device, means for detachably con-



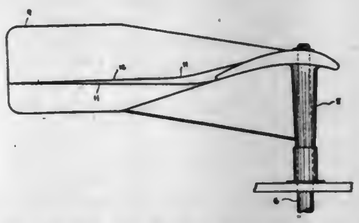
necting said pipe device to said discharge outlet, means for automatically opening said valve, and means for exerting suction in said pipe-device.

1,817,919. INTERNAL COMBUSTION ENGINE. FRANK R. HIGLEY, Cleveland Heights, Ohio. Original application filed Nov. 4, 1927, Serial No. 231,025. Divided and this application filed Jan. 17, 1930. Serial No. 421,390. 6 Claims. (Cl. 123—190.)



1. In an internal combustion engine having a ported cylinder, a sleeve valve arranged for control of the cylinder ports, and a valve actuating member positioned about and in driving relation with said valve, said cylinder having a lateral opening adapted to allow removal of said actuating member dependent upon disconnection of said valve therefrom.

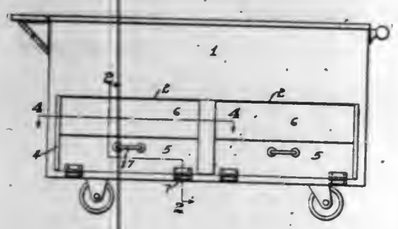
1,817,920. AEROFOIL FOR AEROSHIPS. SAMUEL E. HITT, Elyria, Ohio. Filed Feb. 11, 1929. Serial No. 339,231. 3 Claims. (Cl. 114—665.)



3. In an aeroship or similar craft provided with a mast, and an aerofoil journaled upon the mast; the aerofoil comprising a generally horizontal wing member extending

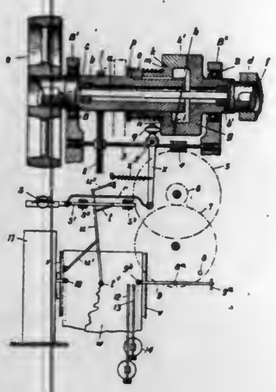
transversely of the mast, a tail extending transversely of the wing member in one direction from the wing member and in the general plane of that member, a rudder extending in the axial plane of the mast, and two mast-journaling means coaxial with the mast, the said journaling means being respectively arranged for resisting upward and downward thrusts.

1,817,921. DOUBLE DOOR STRUCTURE. JOSEPH KNAGGS, Toledo, Ohio, assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 24, 1931. Serial No. 510,853. 6 Claims. (Cl. 268—74.)



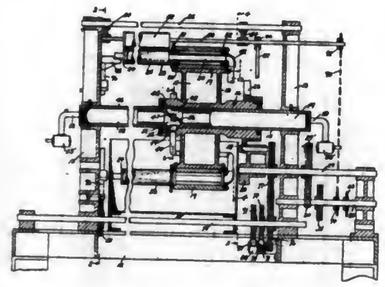
1. The combination with a door casing, of two door members mounted in the casing, one above the other, the lower member being hinged and the upper member being orbitally mounted for opening and closing movements in a vertical plane, and means connecting the doors for causing them to have opposed closing and opening movements in unison.

1,817,922. OUTPUT METER FOR WORKING CONTROL. MAX KURREIN, Charlottenburg, Germany. Filed Mar. 26, 1925, Serial No. 18,536, and in Germany Mar. 29, 1924. 3 Claims. (Cl. 265—4.)



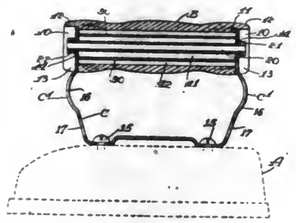
1. A torsional dynamometer for measuring and indicating the work and performance of machines, comprising a driving shaft; a driven shaft connected with the machine to be measured; a measuring torsion spring arranged concentrically to and connected at its ends with said shafts respectively; two members mounted on and adapted to be rotated by the two shafts respectively and being axially movable relatively to each other independently of said shafts; helical surfaces on said members adapted to move them apart when angularly moved against each other; means for pressing said members against each other; and means cooperating with said members for recording their axial movement.

1,817,923. TUBE-FORMING APPARATUS. WILLIAM G. JOHNSON, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed May 4, 1928. Serial No. 275,130. 8 Claims. (Cl. 92—57.)



3. The method of forming conduit or tubing from pulp fibres which consists in immersing a perforated mandrel in a solution of pulp fibres and causing a coating of pulp fibres to be deposited thereon by the application of suction pressure to the mandrel, removing the pulp-coated mandrel from the solution and maintaining the suction pressure to shrink the fibres about the mandrel, compacting and interlocking the fibres by applying pressure thereto while still under suction pressure, then relieving the suction and subjecting the compacted tube to further pressure on its outer surface to loosen the same from the mandrel, and then removing the tube from the mandrel.

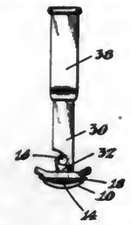
1,817,924. HANDLE FOR LAUNDRY IRONS. CARL T. MADSEN, Oak Park, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1927. Serial No. 176,596. 4 Claims. (Cl. 68—26.)



1 A laundry iron handle comprising a tubular handpiece and standards adapted to be secured to the body and extending upwardly from the body terminating with their upper ends spaced apart to admit and embrace the handpiece endwise between them; a tubular spacing member of exterior diameter less than the interior diameter of the handpiece extending longitudinally through the handpiece annularly spaced therefrom, and a tie bolt of less diameter than the cavity of the spacing member extending through the cavity of said spacing member and protruding therefrom and from the handpiece at opposite ends for receiving means for clamping the standards against the opposite ends of the spacing member.

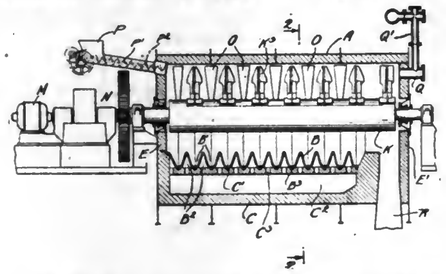
1,817,925. SAFETY RAZOR. GROSVENOR D. MARCY, Newton Highlands, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,559. 4 Claims. (Cl. 30—12.)

1. A safety razor having blade shaping members, a stud projecting from one member through the other and having a cross pin, and a quick-detachable handle having square ended spaced hooks shaped to embrace the stud and engage both the cross pin and the face of the adja-



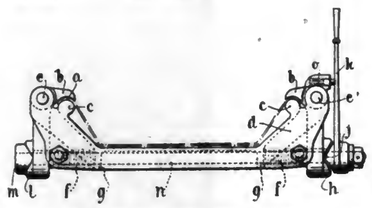
cent blade-shaping member and movable with a camming action to clamp said blade shaping members together in reaching a position of stability.

1,817,926. DISTILLATION OF PITCH INTO COKE. CHARLES V. MCINTIRE, East Orange, N. J., assignor to Consolidation Coal Products Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 3, 1928. Serial No. 251,526. 3 Claims. (Cl. 202—28.)



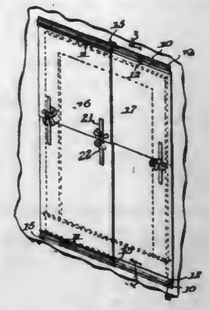
1. The method of producing coke from a semi-liquid hydrocarbonaceous material which comprises continuously passing the material to be coked horizontally through a closed distillation chamber partially filled with previous portions of the material, externally heating said chamber to volatilize a substantial portion of the volatile constituents of the material therein, continuously agitating the material to present fresh portions thereof to the heated chamber wall, and moving the material through the chamber at a rate sufficient to carbonize the portion of the material not wholly devolatilized in the chamber.

1,817,927. SHAKER CONVEYER. TAGE GEORG NYBORG, Worcester, England, assignor of one-half to Mark Frederick Higgins, Worcester, England. Filed Sept. 23, 1929, Serial No. 394,432, and in Great Britain Nov. 14, 1928. 11 Claims. (Cl. 198—220.)



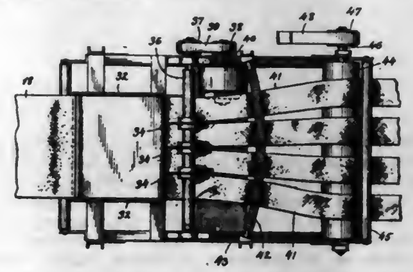
6. In a shaker conveyer, a pair of spaced fixed jaws, a movable jaw for each fixed jaw, each movable jaw having a cam arm, means engaging each arm to press the movable jaw against its fixed jaw, and a shaft having a pair of cams thereon, one for each cam arm, and engaging the cam thereon so that when the shaft is moved the arms are operated to release the movable jaws from the fixed jaws.

1,817,928. WOODWORK PROTECTOR. MARTIN PANITZSCH, Forest Park, Ill. Filed Sept. 21, 1929. Serial No. 394,284. 2 Claims. (Cl. 91—65.)



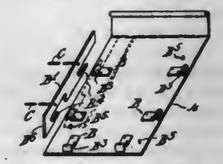
1. In a device of the character described, the combination of a set of shields arranged to overlap each other, a second set of shields arranged to overlap said first mentioned set, means provided at the ends of said device for telescopically connecting each set of shields, and tie tapes provided for securing the free ends of the shields together.

1,817,929. FABRIC SLITTING AND STRIP EDGING APPARATUS. FRED B. PFEIFFER, Akron, Ohio, assignor to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Filed Apr. 2, 1929. Serial No. 351,914. 2 Claims. (Cl. 154—1.)



1. In combination, a fabric slitter having power-driven in-feed and out-feed rollers, a rubber calender having a fabric roller, and means for coordinating the surface speeds of said rollers to feed the fabric substantially without stretching tension through the slitter and calender.

1,817,930. DOCUMENT FILING DEVICE. GEORGE ARTHUR PHILLIPS, Middle Park, Victoria, Australia. Filed Oct. 2, 1929, Serial No. 396,022, and in Australia Oct. 11, 1928. 3 Claims. (Cl. 129—8.)

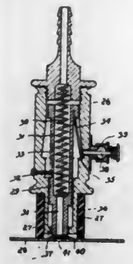


1. In loose sheet holders, a base, sheet-filling devices, and hinged means of connection of the devices with the base, comprising hinge sockets on the base and hinge pins carried by the filing devices, whereby the latter swing in an arc away from the base to re-position the sheets as in opening a book, the said pins being disconnectible from and reconnectible to said sockets, the sockets being located at a plurality of edges of said base to enable location of the filing devices at any of said edges.

1,817,931. PROCESS FOR THE TREATMENT OF CONDENSATION PRODUCTS OF CARBAMIDE OR ITS DERIVATIVES WITH ALDEHYDES. KURT RIPPER, Vienna, Austria, assignor, by mesne assignments, to Pollopas Limited, Nottingham, England, a Company of England. Filed Sept. 22, 1925, Serial No. 57,942, and in Austria Oct. 1, 1924. 14 Claims. (Cl. 260—3.)

1. A process of treating solid and semi-solid amorphous condensation products of urea and formaldehyde which comprises treating such products with a solvent of the class composed of formalin, mineral acids, and acid forming materials, in such amounts as to dissolve the said condensation products.

1,817,932. MEANS FOR USE IN THE EVACUATION AND SEALING OF CONTAINERS FOR PERISHABLE PRODUCTS. DAVID ROBERTSON, Wellington, New Zealand, assignor to Vacuum Products (N. Z.) Limited, Wellington, New Zealand, a Company of New Zealand. Filed Jan. 25, 1929. Serial No. 334,903. 1 Claim. (Cl. 226—82.)



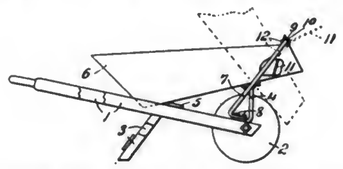
An apparatus for evacuating closed receptacles comprising a nozzle provided with a central bore and having means for connection to an air exhausting device, a ferrule mounted in one end of the nozzle in concentric relation to the bore of the nozzle and being arranged to be pressed into air-tight contact around an aperture in the receptacle to be evacuated, a hollow plunger slidably positioned within the bore and communicating with the nozzle and adapted to hold by suction a loose disk in an elevated position over the aperture in the receptacle, resilient means for normally projecting the plunger to a position in which one end extends beyond the ferrule, means for latching the plunger in retracted position against the thrust of the resilient means, and means to release the latch to cause the plunger to be projected forwardly by the resilient means.

1,817,933. BITUMINOUS PRODUCT. EDGAR S. ROSS, Pittsburgh, Pa., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed June 26, 1924. Serial No. 722,596. 13 Claims. (Cl. 94—18.)

1. An article of manufacture adapted to absorb vibrations and stresses or strains, comprising a body having considerable resiliency and a relatively high resistance to flow under pressure, composed of a mechanical mixture of asphaltic bitumen, rubber and fibrous material having the characteristics produced by preforming such mixture under pressure, the bitumen and rubber forming the major portion of the mixture.

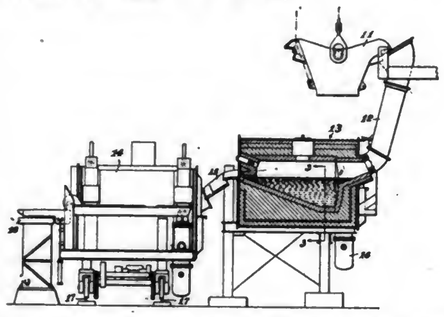
1,817,934. WHEELBARROW. HERBERT SAHLER, Kansas City, Mo. Filed Apr. 7, 1930. Serial No. 442,176. 3 Claims. (Cl. 298—3.)

1. The combination with a wheelbarrow having handle bars and a receptacle having an open front end and pivoted on said handle bars so as to swing from a carrying position to a forwardly and downwardly tilted dumping position, of a closure, a support carried by said handle bars pivotally supporting said closure so that it may be swung to and from a downwardly and rearwardly in-



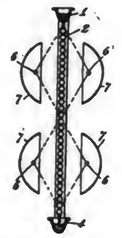
clined position with its lower edge resting on the bottom of said receptacle so as to close said open end, when said receptacle is swung from the dumping to the carrying position, and means on said closure adapted to engage said support for retaining said closure in said inclined position when said receptacle is in the dumping position.

1,817,935. PYROMETALLURGICAL COPPER REFINING. HARRY H. STOUT, Clifton, Ariz., assignor to Copper Deoxidation Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 15, 1928. Serial No. 299,666. 9 Claims. (Cl. 75—62.)



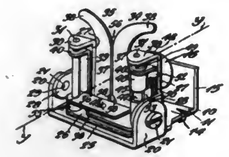
1. The process of fire refining copper which includes chemically reducing previously oxidized molten copper without applying heat to the copper after the start of the reducing step.

1,817,936. METHOD OF IRRADIATING MILK SOLIDS WITH ULTRA-VIOLET RAYS AND THE PRODUCT OF SUCH METHOD. GEORGE C. SUPPLEE, Bainbridge, N. Y., assignor, by mesne assignments, to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed June 2, 1926. Serial No. 113,268. 3 Claims. (Cl. 99—11.)



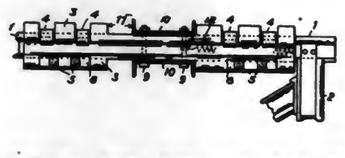
1. The improvement in the art of irradiating milk which comprises agitating the particles thereof and spraying them with ultra-violet rays of such intensity that at least 75% of the total anti-rachitic properties which can be produced in the milk are produced before a disagreeable odor or flavor is imparted to the milk, and ceasing such spraying before the milk acquires such odor or flavor.

1,817,937. YARN-CLEANER AND SLUB-CATCHER. GEORGE N. TAYLOR, East Providence, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 11, 1927. Serial No. 225,547. 5 Claims. (Cl. 28—64.)



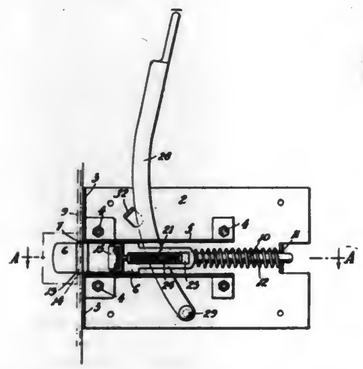
1. In a device of the type specified, the combination of a base-member having upstanding ears, a cradle having ears at its sides, screws extending through the ears on the base-member and cradle to adjustably secure the latter at different angles of inclination with respect to the vertical, a pair of pivot-pins supported in opposite parallel relationship on the cradle, arms pivoted on said pins and extending therefrom in overlying relationship, and blades at the ends of the arms projecting upwardly therefrom in substantially the same plane with their adjacent edges forming a slit through which the yarn draws whereby to clean it of slubs, lint, and other foreign matter.

1,817,938. SHIFTABLE BUFFER STOP. HEINRICH PÖSENTRUP, Munster, Germany. Filed June 17, 1929, Serial No. 371,517, and in Germany June 21, 1928. 8 Claims. (Cl. 104—259.)



1. A shiftable buffer stop, comprising longitudinal girders arranged one at each side of the track and two transverse girders one on and the other under said longitudinal girders at the height of the buffers on the waggons.

1,817,939. LATCH. SAMUEL JOSEPH PURNELL, Herne Hill, Geelong, Victoria, Australia. Filed Aug. 20, 1929, Serial No. 387,197, and in Australia Mar. 27, 1929. 4 Claims. (Cl. 292—164.)



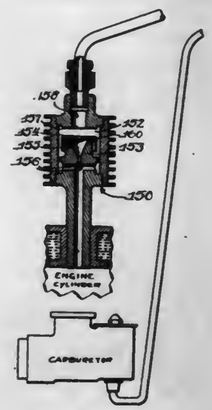
1. An improved latch comprising in combination, a base plate, a housing supported by said base plate, a recessed bolt slidable in said housing, a roller fitted in the recess of said bolt in rolling contact with the side of the bolt and its housing, and a yoke in which the roller is mounted, said yoke having a rearwardly extending shank acted upon by a spring.

1,817,940. PROCESS FOR THE TREATMENT OF CONDENSATION PRODUCTS OF CARBAMIDE OR ITS DERIVATIVES WITH ALDEHYDES. KURT RIPPER, Vienna, Austria, assignor, by mesne assignments to Pollopas Limited, Nottingham, England, a Limited Company of England. Original application filed Sept. 22, 1925, Serial No. 57,942, and in Austria Oct. 1, 1924. Divided and this application filed Sept. 23, 1926. Serial No. 137,387. 13 Claims. (Cl. 260—3.)

1. A process for the treatment of solid condensation products of a urea with formaldehyde consisting in that the condensation products are brought to a fine state of division and incorporated with an amount of organic solvent insufficient to dissolve the condensation product, and that the resulting product is then molded by the application of heat and pressure.

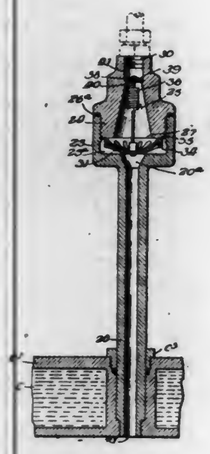
11. A molding composition consisting of a dried powdery precipitate soluble in organic solvents as well as in aqueous ones, obtained on cooling solutions in solvents having acid properties of the solid condensation products resulting from the reaction of a urea and formaldehyde, which precipitate is incorporated with an amount of organic solvent insufficient to dissolve the condensation product.

1,817,941. APPARATUS FOR CONTROLLING THE TRANSMISSION OF FLUCTUATING FLUID PRESSURE. EDWARD A. ROCKWELL, New York, N. Y., assignor to Stewart-Warner Corporation, a Corporation of Virginia. Filed Feb. 24, 1926. Serial No. 90,229. 16 Claims. (Cl. 251—127.)



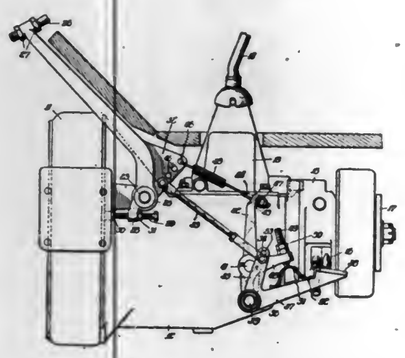
16. A valve device for regulating delivery of fluid pressure from a source of intermittent pressure to an apparatus for utilizing pressure consisting of a valve body having an inlet from the pressure source and an outlet to the apparatus, a valve movably mounted in said body, restrictedly exposed at one side to the fluid pressure from the inlet and movable thereby for seating at the outlet, the body having a flow passage from the inlet unrestrictedly communicating the pressure around the valve to the outlet connection before the valve is seated at the outlet, whereby the time required for the movement of the valve to its seated position at the outlet will be dependent upon the pressure at the pressure source and the pressure transmitted through the outlet will be limited to a predetermined amount.

1,817,942. FLUID PRESSURE TRAPPING DEVICE. EDWARD A. ROCKWELL, Long Island City, N. Y., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Original application filed Feb. 24, 1926, Serial No. 90,229. Divided and this application filed Dec. 7, 1927. Serial No. 238,454. 22 Claims. (Cl. 123—198.)



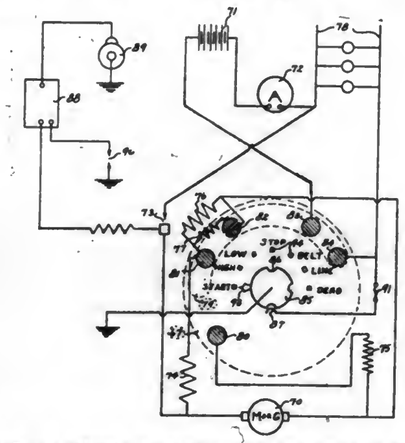
1. The method which comprises doing work by means of suction taken off from a cylinder of an internal combustion engine during a short portion of a relatively high stage of the suction, independently of the operation of the suction for drawing the fuel charge into the cylinder.

1,817,943. BRAKE OPERATING MECHANISM. EDWARD A. ROCKWELL, Chicago, Ill. Filed May 25, 1929. Serial No. 365,836. 10 Claims. (Cl. 74—81.)



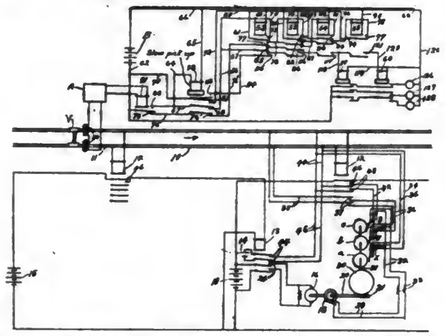
7. A brake mechanism comprising a pivoted brake pedal, a pivoted sub-lever, a pivoted brake applying lever, the pivot of said brake applying lever being carried on an arm of said sub-lever by a pivot of said sub-lever, a positive link connection between said brake pedal and said brake applying lever and a resilient member between said sub-lever and said brake pedal.

1,817,944. POWER PLANT. ADOLPH ROSNER, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1927. Serial No. 240,524. 17 Claims. (Cl. 290—35.)



1. In an electric generating plant including an internal combustion engine, a dynamo, a storage battery, a carburetor, a throttle, a starting-choke, a switch, arranged for selectively establishing circuits between the dynamo and battery, a speed-responsive member adapted normally to position the throttle, choke and switch.

1,817,945. AUTOMATIC TRAIN CONTROL SYSTEMS. EDWARD C. SASNETT, Washington, D. C., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 9, 1928. Serial No. 245,377. 18 Claims. (Cl. 246—63.)

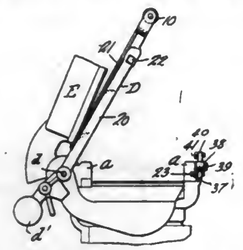


1. An automatic train control system comprising in combination, a track divided into blocks, means for intermittently connecting a source of alternating current across the track rails at the exit end of a block under clear traffic conditions and for intermittently connecting said source across the rails at the exit end of the block and also across the rails at an intermediate point of the block under caution conditions the connection of the source at said intermediate point occurring asynchronously with the connection at the exit end, and a vehicle having train control mechanism responsive to the current impulses flowing in the track rails.

1,817,946. LOCKING MECHANISM FOR CAKE FORMER END GATES. FOREST C. SIMON, Piqua, Ohio, assignor to The French Oil Mill Machinery Company, Piqua, Ohio. Filed Aug. 23, 1929. Serial No. 387,926. 6 Claims. (Cl. 100—51.)

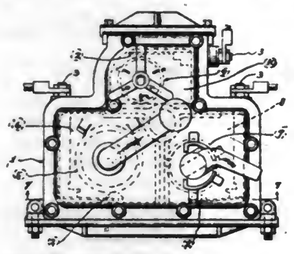
1. In a cake molding machine, the combination with a cake mold, an end gate movable to an operative position

for closing an end of said mold, and a reciprocating charge box which moves over said cake mold to deposit therein a charge to be formed into a cake, of locking means with



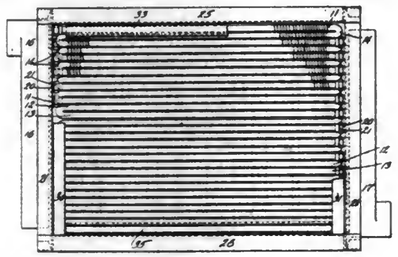
which said end gate directly engages and by which it is automatically locked when said end gate is moved to said mold closing position, and said locking means being actuated directly by said charge box to unlock said end gate.

1,817,947. CONTROLLER. WILLIAM W. SLOANE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 14, 1927. Serial No. 167,928. 19 Claims. (Cl. 200—5.)



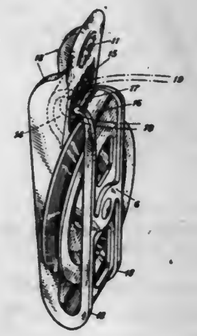
1. In combination with an explosion proof electric locomotive controller, a plurality of contact drums, each being completely enclosed, one of said drums controlling a resistance, another of said drums controlling a reversing means for said locomotive, a third drum affording means for selectively connecting the locomotive circuit to one or another source of current supply, and an explosion proof interlocking connection between said drums to prevent movement of said reversing and switching drum while said resistance drum is in a position to close the circuit.

1,817,948. HEAT EXCHANGE DEVICE. MILTON S. SMITH, Maplewood, N. J., assignor to Carrier Construction Company, Inc., Newark, N. J. Filed Nov. 16, 1929. Serial No. 407,758. 16 Claims. (Cl. 257—149.)



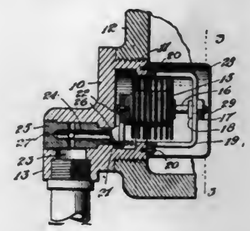
3. A heat exchange device comprising spaced radiating tubes arranged in a plurality of rows one behind another and with the tubes in one row communicating end to end with the tubes in another row, a fluid supply header connecting with corresponding ends of the several tubes in one row only, and a fluid discharge header connecting with corresponding ends of the several tubes in another row only, whereby fluid can flow from said supply header in multiple through the tubes in each row and in succession through the tubes in said different rows to the discharger header, said rows of tubes being disposed with reference to the direction of flow of a medium externally over the tubes so that said medium contacts in succession with the first and following rows of tubes.

1,817,949. SNATCH BLOCK. TEMPLE C. SMITH, Westfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 24, 1930. Serial No. 455,301. 5 Claims. (Cl. 254—193.)



1. A snatch-block including a frame having two side members, one of which has a pocket and the other of which has a hook portion spaced from the pocket forming a throat-way, and a sheave rotatably mounted between said members, said sheave being positioned directly under the hook portion so that it lies in a plane at one side of said throat-way.

1,817,950. VAPOR TRAP. LESLIE STADELHOFER, Newark, N. J. Filed Sept. 25, 1929. Serial No. 395,006. 4 Claims. (Cl. 236—56.)

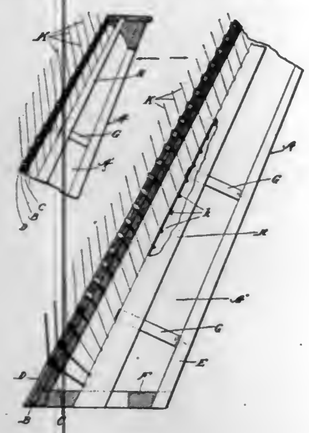


1. A vapor trap comprising a casing having an inlet, a thermostatic member on said inlet end and a valve supported by the member, a screw passing into the casing and operable from the outside and having a passage therethrough, the screw having its end formed to provide a valve seat for the valve, the casing having an outlet communicating with the passage in the screw.

1,817,951. HARP. EMIL O. STARKE, Chicago, Ill. Filed Aug. 5, 1929. Serial No. 383,569. 3 Claims. (Cl. 84—264.)

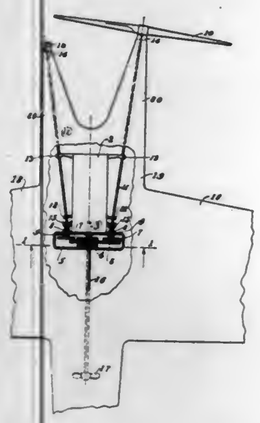
2. In a harp, a base, a pillar, a neck for the action mechanism for the strings, an acoustic chamber having a sounding board, eyelets arranged in said sounding board

through which pass the strings to a tapered metal V-shaped string anchor tail-piece in a zig-zag course, ter-



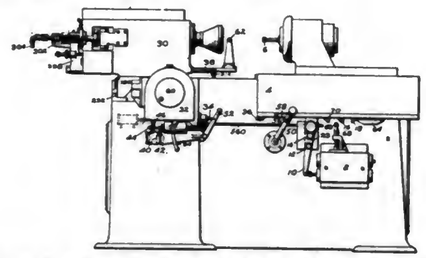
minating within the acoustic chamber for preventing the warping of the sounding board when the strings are in tensional tune, as set forth.

1,817,952. PROPELLING DEVICE FOR AIRCRAFT AND THE LIKE. WILLIAM STELZER, Chicago, Ill., assignor to American Propeller Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 25, 1929. Serial No. 394,987. 2 Claims. (Cl. 244—2.)



1. In a device for the propulsion of aircraft in combination, an engine having a drive shaft, a drive crank actuated by said drive shaft, a water propeller shaft axially aligned and connected to said drive shaft, means for rotatably supporting said water propeller shaft, a water propeller connected to said water propeller shaft, a pair of propeller cranks arranged parallel to said drive shaft, a frame adapted to receive the crank pins of said propeller cranks and said drive crank to transmit power from said drive crank to said propeller cranks, a pair of propeller shafts actuated by said propeller cranks, universal joints intermediate said propeller cranks and said propeller shafts, an air propeller mounted to each of said propeller shafts, and means for rotatably supporting said propeller shafts and the journals of said propeller cranks.

1,817,953. GRINDING MACHINE. CLARENCE C. STEVENS, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed June 15, 1927. Serial No. 198,953. 22 Claims. (Cl. 51—50.)



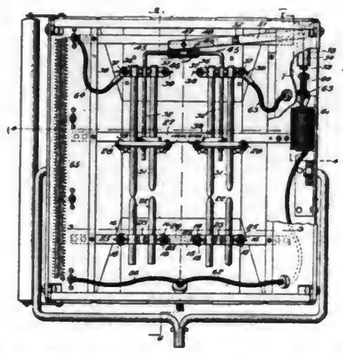
1. In a machine of the character described, in combination, a work-holder, means for rotating said work-holder, a tool for operating on a work-piece on the holder, a size testing member for engaging the work-piece, fluid pressure means for controlling the operation of said holder to grip the work-piece, a valve for controlling the fluid pressure means, a spring tending to operate the valve, a latch for the valve, and mechanism controlled by the size testing member for releasing the latch for causing the fluid pressure means to stop the work holder and release the work-piece; substantially as described.

1,817,954. CURTAIN HANGER. CHARLES W. THOWBRIDGE, Monmouth, Ill., assignor of one-half to Renalt J. Barnes and Verne F. Barnes, Monmouth, Ill. Filed May 14, 1930. Serial No. 452,349. 1 Claim. (Cl. 156—19.)



A curtain hanger comprising an intermediate channeled hanger section, end hanger sections telescopically fitting the intermediate section, spaced abutments in the channel of the intermediate section, an abutment upon the inner end of each end section engageable, with respective ones of the first mentioned abutments, the intermediate section having a longitudinal groove in its inner side, and a projection upon each of the end sections engaging slidably in said groove, and means at the outer ends of the end sections for engagement with a supporting means.

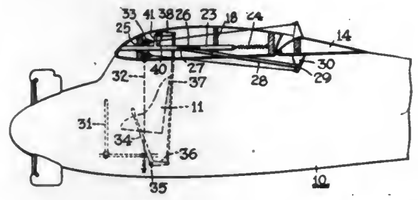
1,817,955. ARC LAMP. JAMES H. WAGENHORST, Jackson, Mich. Filed Mar. 4, 1926. Serial No. 92,201. 11 Claims. (Cl. 176—58.)



1. In an arc lamp, the combination of two pairs of stationary electrodes, two pairs of movable electrodes,

two electrode holders, each holder being fastened to the movable electrodes of one pair, two clutches, one co-acting with one electrode of each pair of movable electrodes, a yoke having vertical legs to which said clutches are respectively connected, a pivoted lever from one arm of which said yoke is suspended, and means for rocking said lever to feed said movable electrodes with respect to the stationary electrodes.

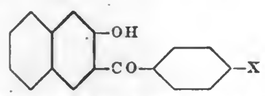
1,817,956. AEROPLANE WING. WILLIAM WAIT, Jr., Garden City, N. Y., assignor to Curtiss Aeroplane & Motor Company, a Corporation of New York. Filed July 1, 1927. Serial No. 202,780. 6 Claims. (Cl. 244—29.)



1. The combination, in an aeroplane, of a supporting surface, a nose flap mounted at each outer end of said supporting surface, a trailing edge aileron mounted at each outer end of said supporting surface, said ailerons being so related to said supporting surface as to provide therein, should either aileron be deflected upwardly, an open slot at or near the leading edge of said upwardly deflected aileron, a control device operable to simultaneously oppositely deflect said ailerons, and a connection extending between each said aileron and its associated nose flap to shift the latter upon a downward deflection of either aileron to produce thereby within the supporting surface at or near the leading edge thereof an open slot.

1,817,957. 2.3 HYDROXYNAPHTHYL-ARYLKETONES. ARTHUR ZITSCHER, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 16, 1927, Serial No. 240,635, and in Germany Jan. 3, 1927. 2 Claims. (Cl. 260—64-D. K.)

1. As new compounds 2.3-hydroxynaphthyl-arylketones of the general formula:



wherein, X means an alkyl or alkyloxy group, which compounds are yellow crystalline substances.

1,817,958. DISPERSION. FRITHJOF ZWILGMEYER, Buffalo, N. Y., assignor to National Aniline & Chemical Company Inc., New York, N. Y., a Corporation of New York. Filed Aug. 21, 1926. Serial No. 130,626. 10 Claims. (Cl. 260—128.)

1. A process for dispersing a substance which comprises mixing the substance in a fluid state with a dispersing agent and a dispersion medium, and causing impingement of a narrow stream of the resulting mixture.

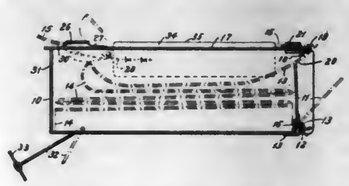
1,817,959. ACROBATIC TOY. HARVEY LYNN BLOXOM, Fort Dodge, Iowa. Filed Apr. 17, 1930. Serial No. 445,074. 7 Claims. (Cl. 46—40.)

1. A light elastic figure toy having a body equipped with a rigidly attached light head and provided with limbs extended laterally therefrom and normally so held, and weights carried by some of said limbs and suitably posi-



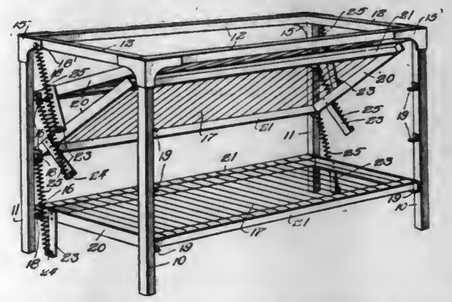
tioned to locate the center of gravity away from said body and cause the figure to perform acrobatic stunts when dropped to the floor or thrown up into the air.

1,817,960. PORTABLE AUTOGRAPHIC REGISTER. EDWARD KIRBY BOTTLE, Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Ontario. Filed Apr. 22, 1925. Serial No. 24,937. 11 Claims. (Cl. 282—12.)



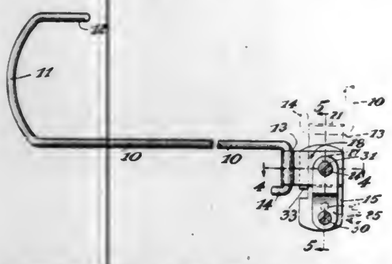
1. In a device of the character described, in combination, a casing having a compartment for storing a record strip, a writing table over which said strip may be fed and positioned for entry of a record thereon, a strip positioning detent over which the strip passes when fed forwardly to said writing table, said strip being weakened on transverse lines against bending resistance and engaging said detent at said weakened lines to vary the resistance to strip feed, so as to assist in positioning the strip in writing position upon said writing table, and a closure for said compartment coacting with said strip to guide and position it relatively to said detent during strip feed.

1,817,961. BREAD RACK. BOHUMIL BOUDA, Clinton, Iowa, assignor to The Collis Company, Clinton, Iowa, a Corporation of Iowa. Filed Feb. 10, 1930. Serial No. 427,188. 4 Claims. (Cl. 211—150.)



1. A rack comprising a frame, a plurality of shelves pivotally mounted therein in superimposed and spaced relation, means continuously applying an upward force on each shelf in its horizontal position and adapted to apply a force upon the shelf at a greater distance from its support when tilted to an upward position.

1,817,962. ADJUSTABLE CURTAIN HOLDER. FRED BREUER, Chicago, Ill. Filed Oct. 17, 1930. Serial No. 489,285. 10 Claims. (Cl. 156—33.)



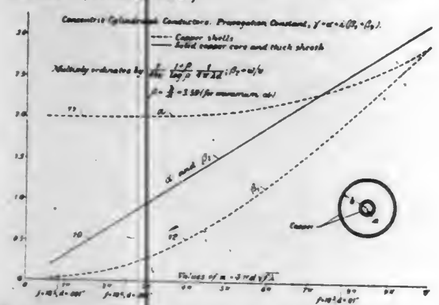
8. A curtain holder of the character described, comprising a plate, means for attaching the plate to a window consisting of spaced openings and screw members passing through said openings, a clamping member having a back piece with an opening therein through which one of said screw members passes, side pieces being integrally connected with the back piece, said side pieces having offset portions with aligned openings, a curtain-retaining arm having a flattened extremity disposed between said offset portions and having an opening in alignment with said openings in said offset portions, and a bolt passing through said aligned openings.

1,817,963. COLOR PHOTOGRAPHY. JOHN G. CAPSTAFF, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 4, 1928. Serial No. 282,706. 2 Claims. (Cl. 95—2.)



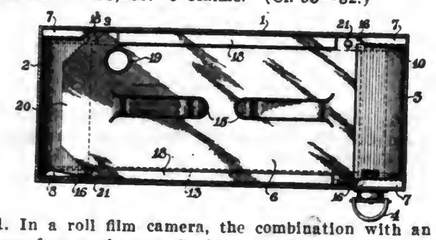
2. A film sheet for natural color photography comprising a light transmitting support of a cellulosic compound having formed in one surface thereof minute lenticular elements, a panchromatic emulsion on the other surface, and a dye absorbing light of all colors carried directly by the film support, said dye being unaffected by the photographic baths.

1,817,964. CONCENTRIC CONDUCTOR TRANSMISSION SYSTEM. JOHN R. CARSON, New Hope, Pa., and SALLIE P. MEAD, New York, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed May 23, 1929. Serial No. 365,515. 9 Claims. (Cl. 178—44.)



7. In a conducting system for the communication of intelligence, at least three cylindrical conductors concentrically arranged, the inner and intermediate conductors being connected to form one transmission circuit, and the intermediate and third conductors forming another and independent transmission circuit.

1,817,965. MEANS FOR HOLDING FILM FLAT IN ROLL-FILM CAMERAS. JOHN CHRISTIE, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 458,265. 9 Claims. (Cl. 95—32.)



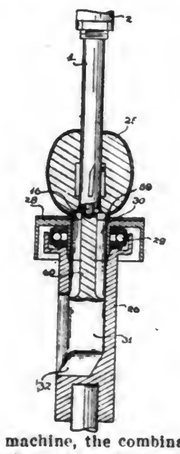
1. In a roll film camera, the combination with an exposure frame, of means for holding a film flat thereagainst including a pressure plate comprising a flat plate, springs carried by the plate adapted to press said plate against said exposure frame, raised edges on the plate adapted to limit the movement of the plate toward the frame and cooperating parts on the camera and plate for limiting the movement of the plate relative to the camera.

1,817,966. SAFETY RAZOR. JACQUES G. COLEMAN, Woodmere, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed June 19, 1930. Serial No. 462,267. 13 Claims. (Cl. 30—12.)



1. A safety razor, comprising a guard member, a handle thereon, two blade backing elements pivotally mounted upon said guard member to meet in the longitudinal center line of the latter, a blade adapted to be clamped between said guard member and said blade backing elements, said blade having positioning stud receiving apertures, two positioning studs adjacent the free longitudinal edge of each of said blade backing elements adapted to enter said blade apertures, and means mounted on said handle for locking said blade backing elements in blade clamping position.

1,817,967. METHOD AND APPARATUS FOR CORING FRUIT. BURTON C. COONS, Rochester, N. Y., assignor to Coons Machinery Corporation, Gates, N. Y. Filed Aug. 8, 1929. Serial No. 384,388. 5 Claims. (Cl. 146—52.)



2. In a coring machine, the combination with a tubular corer for passing into one end of a fruit, of a cutter engaging the opposite end of the fruit, and means for operating the corer and the cutter to cause the cutter to penetrate the fruit to a point where the end of the corer is nearer but in spaced relation to the opposite end of the fruit, and to cause the cutter to produce a shorter cut to cut out an area in the skin at such end of greater diameter of the corer.

1,817,968. PREPARATION OF ADSORBENTS. ROY CROSS, Kansas City, Mo., assignor to Cross Development Corporation, a Corporation of Delaware. Original application filed Dec. 22, 1921, Serial No. 524,290. Divided and this application filed Nov. 10, 1923. Serial No. 674,043. 5 Claims. (Cl. 252—2.)

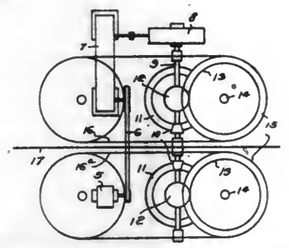
1. A process for the revivification and treatment of bentonite for use in refining oil, comprising passing dry chlorine gas in contact therewith at temperatures sufficiently high to effect a combination of the chlorine and alumina constituents.

5. A process for revivifying and modifying the character of spent bentonite resulting from the treatment of oils with bentonite, which comprises driving off adsorbed volatile carbonaceous substances retained in the spent bentonite, and thereafter treating the bentonite with chlorine gas.

1,817,969. METHOD OF TREATING PETROLEUM HYDROCARBONS. ROY CROSS, Kansas City, Mo., assignor to Cross Development Corporation, a Corporation of Delaware. Filed Aug. 28, 1924. Serial No. 734,735. 7 Claims. (Cl. 196—147.)

5. A method of treating hydrocarbon oil of low viscosity which consists in intimately and rapidly contacting the oil with sulphuric acid and limiting the contacting period to prevent polymerization, subjecting the mixture to a refrigerating action during the acid contacting period, and contacting the acid treated oil with an adsorptive material and separating the refined oil and treating materials.

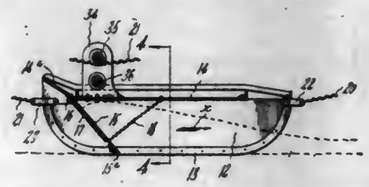
1,817,970. DRIVING MEANS FOR CONVEYER CHAINS. JAMES STARR DA COSTA, Merchantville, N. J., assignor of one-half to Jervis B. Webb, Detroit, Mich. Filed Nov. 26, 1929. Serial No. 409,930. 14 Claims. (Cl. 104—178.)



1. The combination with a main conveyer chain to be driven, of a pair of caterpillar drive chains, one upon each side of the main conveyer chain, each caterpillar drive chain having lugs complementally engaging and driving the main chain.

1,817,971. EXCAVATING AND CONVEYING APPARATUS. WILLIAM H. DANCE, Cambridge, Mass. Filed Dec. 4, 1930. Serial No. 499,918. 3 Claims. (Cl. 37—147.)

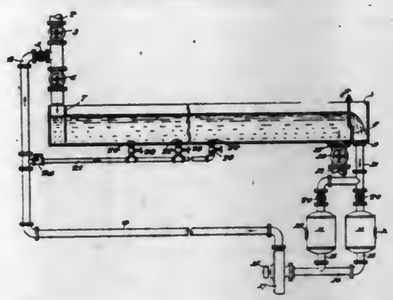
1. An inverted scraping bucket comprising in combination, a body portion composed of spaced apart side members arranged in parallel planes and provided with runners formed to move in material to be excavated and conveyed, and a top member fixed to the upper portions of the side members and arranged in a plane at right angles to the planes of the side members, the side and top member defining a material receiving space which is open at the bottom and ends of the bucket; a scraper portion extending across the space between said side members and hinged to the body portion at the rear end of the top member, said scraper portion being adapted to extend at an incline from the top member to the runners, and swing from a load collecting to a load releasing position; and flexible tethers connecting the scraper portion with the body portion, the arrangement being such that when the bucket is running forward the tethers are under tension and cause the scraper portion to project forward at an incline under the top member and cooperate with the body portion in accumulating a load, and when the bucket is running backward the scraper portion swings forward and upward toward the top member and the bucket moves away from the load.



1,817,972. METHOD OF PRODUCING FIBROUS THREADS. JOAQUIN JULIO DE LA ROZA, Sr., Brooklyn, N. Y., assignor to Bagasse Products Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 9, 1926. Serial No. 147,392. 9 Claims. (Cl. 92—10.)

1. A method of treating sugar cane to produce fibrous threads useful in the textile industry, which includes treating the fibrous part of the cane with a hot dilute acid solution and with a cold dilute alkali solution.

1,817,973. APPARATUS FOR REMOVING CARBON AND THE LIKE FROM CELLULOSE. JOAQUIN JULIO DE LA ROZA, Sr., Tuinucu, Cuba. Filed Oct. 9, 1929. Serial No. 398,385. 6 Claims. (Cl. 92—1.)

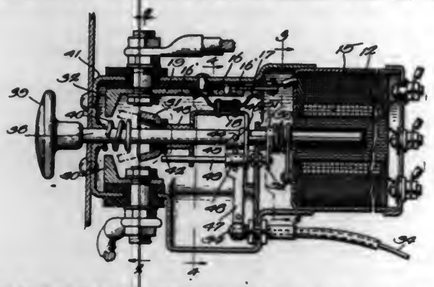


1. Apparatus for the purpose described comprising, a duct, means for supplying the mixture of cellulose, water and liquid lighter than water to one part of the duct, and means at another part of the duct for separately drawing off the said liquid with carbon and the like and the water with cellulose freed from carbon and the like.

1,817,974. INTERNAL COMBUSTION ENGINE POWER PLANT. HARRY A. DOUGLAS, Bronson, Mich. Filed June 14, 1929. Serial No. 370,866. 4 Claims. (Cl. 123—179.)

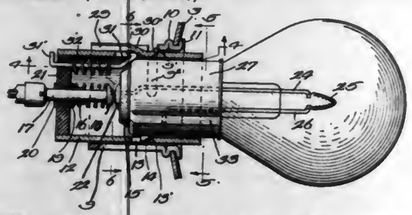
1. The combination with an internal combustion engine having an electrical ignition circuit whose terminals are spaced apart, a motor in driving relation with the shaft of the engine to start the latter, a motor circuit whose terminals are spaced apart, a switch element carrier and switch elements mounted thereon movable in one di-

rection to successively and directly electrically connect the terminals of the ignition and motor circuits, an operator, and means normally connected with the oper-



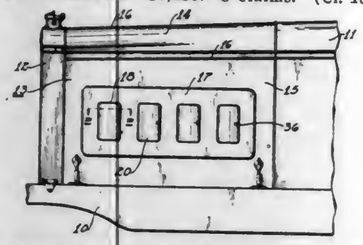
ator and engageable with said switch element carrier to impart circuit closing movement to the carrier from the operator.

1,817,975. ELECTRIC LAMP. HARRY A. DOUGLAS, Bronson, Mich. Filed Oct. 23, 1929. Serial No. 401,723. 15 Claims. (Cl. 176—32.)



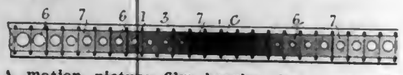
1. The combination with a lamp socket; of an incandescent lamp having its base received in said socket and which base is smaller in cross section than the bore of the socket; and a spring pressed wedging element interposed between adjacent side portions of the lamp base and socket to force the lamp base against a side of the socket.

1,817,976. MOTOR VEHICLE. HARRY C. ELLIOTT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 29, 1927. Serial No. 187,439. 8 Claims. (Cl. 180—69.)



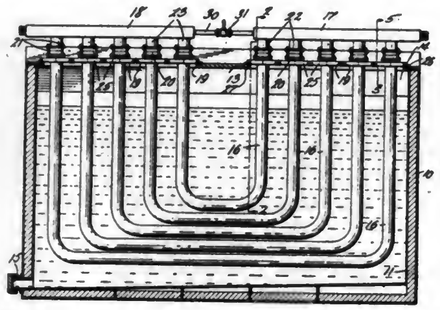
1. In a ventilator, a panel having an opening, a cover for the opening, a hinge for the cover, guides upon one leaf of the hinge, a stop upon the other leaf of the hinge intermediate the guides and retaining means between the stop and the guides.

1,817,977. MOTION PICTURE FILM. PAUL FAVOUR, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 1, 1928. Serial No. 258,289. 7 Claims. (Cl. 88—19.5.)



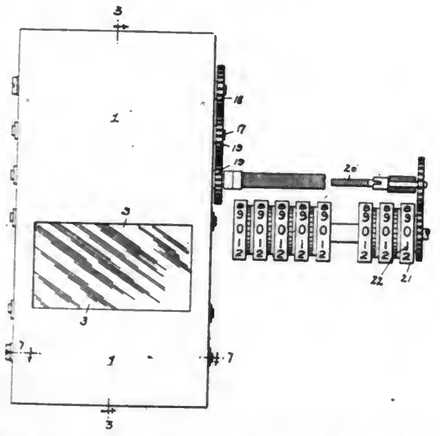
1. A motion picture film bearing two consecutive series of image containing areas, the density of the images of each one of said series being substantially uniform, and an applied light retarding layer overlying the junction of said two series and a continuous portion of each of said series adjacent the junction, said layer varying in the total light transmission of areas corresponding to the image areas, and in the vicinity of said junction being opaque over its full width.

1,817,978. LIQUID STORAGE OR TEMPERING APPARATUS. HARVEY FELDMEIER, Little Falls, N. Y., assignor to Cherry-Burrell Corporation, Little Falls, N. Y. Filed June 10, 1929. Serial No. 369,699. 10 Claims. (Cl. 257—199.)



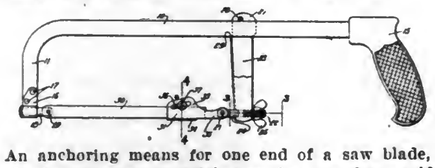
3. The combination of a tank adapted to contain liquid, a tempering device for the liquid comprising tubes disposed within the tank and having their ends extending out of the tank, and means located externally of the tank and joined to the opposite ends of said tubes for permitting the flow of a tempering medium through said tubes, said tubes being detachably joined to said means so as to permit the tubes to be individually disconnected from said means at said joints, said joints and holes through which the tubes extend out of the tank being located above the highest level of the liquid in the tank, and said tubes when disconnected from said means being adapted to be removed through said holes in the tank.

1,817,979. AUTOMATIC TOURIST LOG. WILLIAM H. FITCH, Fort Worth, Tex. Filed June 24, 1930. Serial No. 463,500. 4 Claims. (Cl. 40—42.)



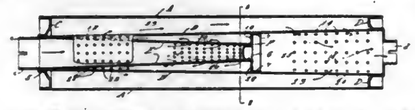
1. A route log for automobiles, in which the automobile is provided with a speedometer, and comprising a casing having a window in one face thereof, a roll journaled in the casing around which a log sheet is wound, rolls in the casing adjacent to the top and bottom of the window guiding the log sheet, said log sheet having equidistantly spaced apertures throughout its length adjacent the edges thereof, a toothed wheel in the casing having its teeth engaging the apertures, a roll in the casing on which the log sheet is to be wound, a shaft freely journaled through the roll, a coil spring between the shaft and the roll, and a flexible shaft connected with an element in the speedometer for rotating the toothed wheel in timed relation with the speed of the automobile.

1,817,980. SAFE FRAME. HAROLD S. FORSBERG, Stratford, and JOHN DONNELLY, Branford, Conn.; said Donnelly assignor to said Forsberg. Filed Mar. 12, 1930. Serial No. 435,109. 1 Claim. (Cl. 145—33.)



An anchoring means for one end of a saw blade, said anchoring means comprising a leg member, said leg member formed of a single piece of sheet metal longitudinally folded to provide a member substantially U-shaped in transverse section and comprising a pair of parallel arms and a bight portion connecting said arms, said bight portion perforated near its lower end, a bolt extending transversely of said member between the parallel arms and through said perforation, means on said bolt to which a saw blade may be connected, means for drawing the bolt through said member, and the arms and perforation of said member co-operating to prevent turning of the bolt in the member.

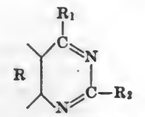
1,817,981. MUFFLER. LUCIEN L. HAAS, Buffalo, N. Y., assignor to Buffalo Pressed Steel Co., Buffalo, N. Y. Filed Sept. 13, 1929. Serial No. 392,331. 8 Claims. (Cl. 137—160.)



1. A muffler including a tapered shell arranged to receive gases at the larger end thereof and having an opening near the other end thereof to discharge gases, a second tapering shell surrounding said first mentioned shell and having its taper extending in the opposite direction and having discharge openings near the end thereof of smaller diameter, whereby the gases successively pass from one shell into another and from a portion of greater cross sectional area to a portion of lesser cross sectional area in each shell.

1,817,982. NEW CONDENSATION PRODUCTS OF THE DIAZINE SERIES. WINFRID HENTRICH and MAX HARDTMANN, Wiesdorf-on-the-Rhine, and RUDOLF KNOCHE, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 21, 1928, Serial No. 263,585, and in Germany Mar. 31, 1927. 5 Claims. (Cl. 260—32.)

2. As new products, the compounds of the probable general formula:



wherein R stands for a benzene nucleus substituted by a substituent of the group consisting of NO_2, CH_3 and Cl and R_1 and R_2 represent substituents of the group consisting of NH_2, the substituted amino group, OH, O.aralkyl, O.aryl, SH, S.alkyl, S.aralkyl, S.aryl, $SO_3.OH$, $SO_2.alkyl$, $SO_2.aralkyl$, and $SO_2.aryl$, said compounds being generally greyish to yellow-brownish powders and, when containing an acid group, being soluble in water with a generally yellowish coloration.

1,817,983. HEAT ABSTRACTION. CLARK C. HERITAGE, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed July 30, 1925. Serial No. 47,124. 11 Claims. (Cl. 260—50.)

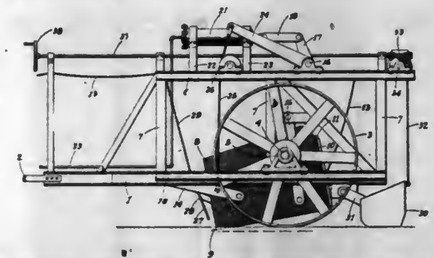
1. In the manufacture of indophenol and related compounds, the step which comprises mixing a system containing sulfuric acid of 84 to 91 per cent. concentration, and including sulfuric acid in the solid phase, with a system containing sulfuric acid of 95 to 100 per cent. concentration, and including sulfuric acid in the solid phase, one of said systems containing a carbazol compound and the other of said systems containing a nitrosophenol compound.

1,817,984. ARC EXTINGUISHING DEVICE. ALEXANDER M. JACKSON, Evanston, Ill., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Dec. 30, 1920. Serial No. 157,911. 11 Claims. (Cl. 175—30.)



9. Means for extinguishing an arc which may occur between spaced terminals, comprising a supporting member of conducting material mounted upon one terminal, a container of insulating material carried by said supporting member and having end closures, a fusible conductor electrically and mechanically connected with said supporting member and extending through and projecting beyond the container, a filling of fire extinguishing material within the container surrounding said conductor, and means at one end adapted to become discolored or destroyed in the event of an arc, said means comprising a paper disk through which the conductor extends.

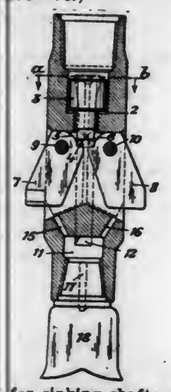
1,817,985. POWER LIFT SCRAPER. TOBIAS H. JAMISON, Oakdale, Calif., assignor of one-half to Martin Joseph Ruddy, Modesto, Calif. Filed Oct. 31, 1930. Serial No. 492,481. 1 Claim. (Cl. 37—129.)



A scraper comprising a wheel-supported frame which includes main side beams, a bowl between the beams, means flexibly connecting the bowl to the frame including draft bars pivoted on the beams and on the sides of the bowl, cables secured to the bars and projecting upwardly therefrom, a transverse shaft mounted on the frame above the bowl, radial arms secured to and projecting from the shaft and to the outer ends of which the cables are con-

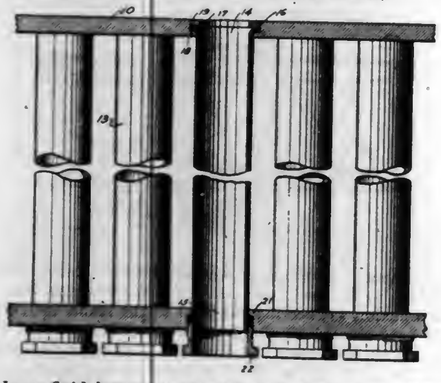
nected, another radial arm secured to and upstanding from the shaft, a hydraulic cylinder mounted in a horizontal position on the frame beyond the last named radial arm and whose axial line is substantially on a level with the outer end of said last named arm, a piston slidable in the cylinder, a piston rod connected to the piston and projecting toward said last named arm from one end of the cylinder, and links connecting the arm with the outer end of the rod.

1,817,986. BORING APPLIANCE. MATHIEU ALKUNOWITSCH KAPELUCHNIKOFF, Baku, Russia. Filed Mar. 6, 1931, Serial No. 520,662, and in Germany Mar. 3, 1930. 2 Claims. (Cl. 255—76.)



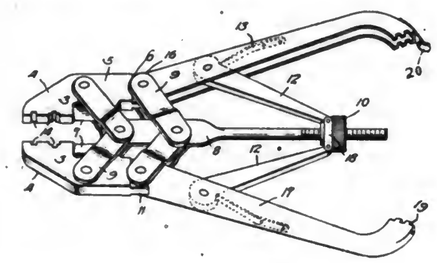
1. A boring tool for sinking shafts comprising, in combination, a cutter head having a cross-shaped cross section for the greater part of its length, a piston movable in a chamber provided in said cutter head, a chisel located at the lower end of said cutter head and expansible boring tools pivoted to said cutter head below said chamber, said piston having at its lower end a square-shaped portion cooperating with cam faces of said expansible boring tools, an annular passage being provided in said cutter head controlled by said piston and connected by straight longitudinal passages to a second chamber provided in said cutter head below said boring tools, said second chamber communicating by passages in said cutter head with recesses in said cutter head for the reception of said boring tools in inoperative position and with said chisel at the lower end of said cutter head.

1,817,987. AIR HEATER AND METHOD OF MAKING THE SAME. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 17, 1927. Serial No. 192,148. 1 Claim. (Cl. 285—56.)



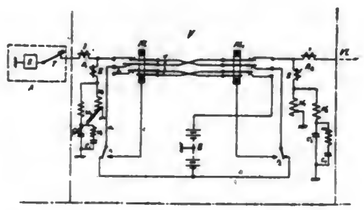
In a fluid heater, a tube sheet having a counterbored opening therethrough, a metal tube formed with an outwardly extending flange seated in said counterbore, a coating of enamel on at least one surface of the tube and terminating on said flange, whereby a joint between the metal and the coating is formed on the flange, and a packing ring in the counterbore holding said flange on its seat and thereby covering said joint.

1,817,988. COMBINED PLIERS AND WRENCH. EMAL KLAMT, Howells, Nebr. Filed July 5, 1929. Serial No. 376,168. 3 Claims. (Cl. 81—46.)



1. A combined plier wrench comprising a pair of jaws; a plurality of toggle links pivotally connected to the jaw-bodies at the beginning of the jaws proper and to the handle ends of the jaw bodies to maintain the jaws in a parallel relation in respect to each other, a draw-strap bolt which is connected to the center connecting pivots of the jaw connecting toggle links, a round nut which is grooved at one end threaded on said bolt, a pair of free end handles pivoted one to each jaw body handle end, and a pair of push rods connected into the groove of the nut and pivotally connected to the handles.

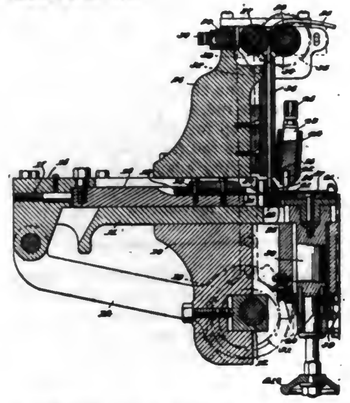
1,817,989. CONNECTION FOR TELEGRAPH PLANTS. WILHELM KRUSE, Wilhelmshagen, near Berlin, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed June 29, 1929, Serial No. 374,898, and in Germany July 5, 1928. 8 Claims. (Cl. 178—71.)



1. In a telegraph system and in combination, a central station, a plurality of telegraph lines variously equipped for more than one type of operation and terminating at said central station, a connecting cord, means at said central station whereby signals may be automatically exchanged between any pair of said lines with the aid of said connecting cord.

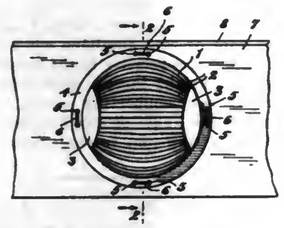
1,817,990. FASTENER MAKING MACHINE. HAROLD LAMB, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Dec. 21, 1929. Serial No. 415,730. 6 Claims. (Cl. 29—34.)

1. A method of forming a fastener element comprising feeding a wire of special cross-section, slicing a blank from the end of said wire and leaving a burr on such blank, placing the blank in a forming die with the burr against a forming surface of the die, and pressing said blank into said die to form an interlocking projection and simultaneously absorb said burr.



4. In a machine for forming fastener elements, a stationary cutting die, means for feeding a wire of special cross section downwardly from the upper side of said cutting die, a cutting knife cooperating with said cutting die for slicing blanks from the end of said wire, a forming die with an upwardly facing recess for receiving said blank, and a vertically reciprocating punch adapted when depressed to press said blank into the die and form an interlocking projection.

1,817,991. NONSLIP DEVICE FOR GARMENTS. JOSEPH H. LANGROCK, New Haven, Conn. Filed Mar. 5, 1930. Serial No. 433,230. 6 Claims. (Cl. 241—7.)



1. A device of the class described comprising a circular cup-shaped collapsible shell having an externally roughened surface and means adjacent to the peripheral edge for attaching it to a garment.

1,817,992. UREA DERIVATIVE OF THE 1.3-BUTYLENE-GLYCOL AND PROCESS OF PREPARING THEM. RICHARD LEOPOLD, Frankfort-on-the-Main-Hochst, and MAX PAQUIN, Koenigstein I/Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 7, 1929, Serial No. 405,533, and in Germany Nov. 16, 1928. 5 Claims. (Cl. 260—106.)

1. The process which comprises causing urea to react at a temperature of between 100° C. and 200° C. with a molecular excess of 1.2-butylene-glycol.

1,817,993. METHOD OF CONCENTRATING AQUEOUS SOLUTIONS OF VOLATILE SUBSTANCES. FRANK E. LICHTENTHAELER, Newton Highlands, Mass. Filed May 19, 1925. Serial No. 31,342. 8 Claims. (Cl. 202—57.)

1. The method of concentrating aqueous solutions of volatile substances which consists in mixing therewith a quantity of an anhydrous hydrate forming salt chemically non-reactive with the volatile substance to take up the water, allowing the salt to crystallize from the solution, separating the volatile substance from the hydrated salt by subjecting the mixture to a current of inert gas at a temperature insufficient to cause decomposition of the salt, and recovering the volatile substance from the inert gas.

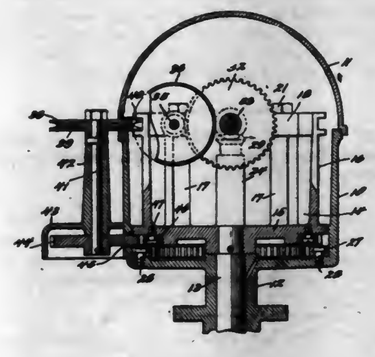
1,817,994. PROCESS OF MAKING CELLULOSE NITRO ACETATE. LUDWIG LOCK, Dormagen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 12, 1929, Serial No. 392,257, and in Germany Sept. 19, 1929. 4 Claims. (Cl. 260—101.)

1. The process which comprises acetylating cellulose between about 50 and 100° C. by means of acetic acid and acetic anhydride in the presence of a small amount of mineral acid and of a salt of nitric acid with a weak base.

1,817,995. PROCESS FOR THE PRODUCTION OF VAT DYESTUFFS. ARTHUR LÜTTRINGHAUS, Mannheim, and PAUL NAWIASKY and ARTUR KRAUSE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 22, 1927, Serial No. 207,812, and in Germany Aug. 17, 1926. 4 Claims. (Cl. 260—45.)

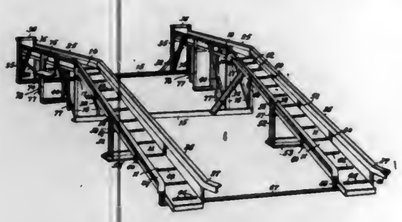
1. A process for the manufacture of practically insoluble condensation products of high melting point having the character of vat dyestuffs which comprises heating an anthrone containing a further nucleus attached to the meso- and 1-positions, at least to the latter by means of a nitrogen atom, and halogenated in the 2-position, with copper, care being taken that in the case of pyrazolanthrones the initial material is acylated on the nitrogen atom of the pyrazol ring.

1,817,996. CUT-OFF MECHANISM FOR TUBE MACHINES. LEWIS C. MALTBY, Washington, D. C.; assignor to Stone Straw Corporation, Washington, D. C., a Corporation of Delaware. Filed May 21, 1930. Serial No. 454,366. 7 Claims. (Cl. 164—61.)



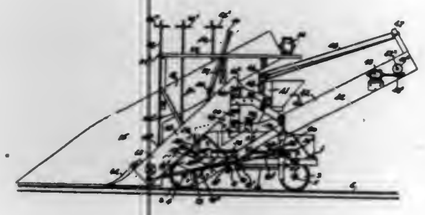
1. Cut-off mechanism for tube machines comprising in combination, drive gearing, a rotary knife actuated by said gearing and adapted to be periodically projected outwardly into the path of a tube to be cut thereby, a rotatable circular guide, the periphery of which is grooved for the reception of a tube to be cut, said guide being radially slotted through said peripheral groove to permit passage of the knife therethrough at periodic intervals in its actuation, and gearing for simultaneously actuating said rotary guide and knife.

1,817,997. SERVICE RUNWAY. ROBERT E. MANLEY, York, Pa., assignor to Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed Sept. 2, 1925. Serial No. 54,103. 5 Claims. (Cl. 254—88.)



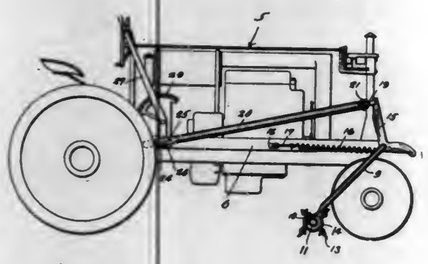
1. In a service runway, a pair of trusses, a pair of tracks having their ends supported by said trusses, a guide rail for each track, a pair of diagonals each secured at its upper end to one of said guide rails and at its lower end to the adjacent truss and a stirrup supported by said rail and diagonal and supporting said track between the trusses.

1,817,998. SNOW PLOW. JOHN W. MCCALLUM and ALEC S. MUSCOVITCH, Winnipeg, Manitoba, Canada. Filed Nov. 7, 1929, Serial No. 405,482, and in Canada July 29, 1929. 11 Claims. (Cl. 37—28.)



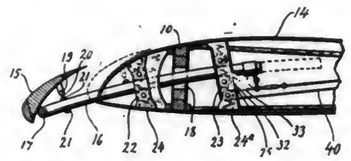
3. In combination, a portable platform and a forwardly disposed inclined plow carried thereby, said plow embodying an elevating plate and an endless driven conveyor underlying the same, said plate having a portion thereof which can be opened to expose the conveyor.

1,817,999. STALK CUTTER. WILLIAM J. MICHALKA, Cameron, Tex. Filed Jan. 2, 1931. Serial No. 506,223. 1 Claim. (Cl. 97—47.)



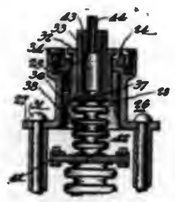
In a device of the class described, a supporting rod, means for pivotally mounting the supporting rod at the forward end of a tractor, said rod having right angled end portions, a cylinder pivotally mounted at the free ends of the right angled end portions, blades carried by the cylinder, a bell crank lever secured to the rod, one arm of the bell crank lever being curved, a coiled spring connected with the curved arm of the bell crank lever and adapted to normally urge the rod in one direction, an operating lever, a tubular bar connected with the lever, a rod extending into one end of the tubular bar, a coiled spring surrounding the rod, a cap on one end of the tubular bar and acting as a stop for one end of the coiled spring, means on one end of the rod for engaging the opposite end of the spring, said spring adapted to restrict movement of the rod within the tubular bearing, and means for securing the lever against movement.

1,818,000. AEROFOIL OPERATING MECHANISM. HOWARD R. MOLES, Garden City, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 437,003. 4 Claims. (Cl. 244—12.)



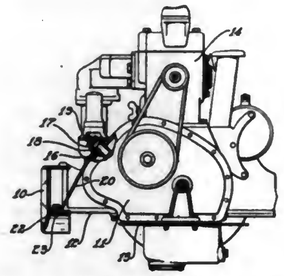
2. In an airplane, a main wing, an auxiliary wing, means for slidably supporting said auxiliary wing upon said main wing for movement away from anad toward said main wing whereby a slot may be opened and closed adjacent to the leading edge of the combined aerofoil, means for moving the nose of said auxiliary wing both relative to the main wing and also relative to the supporting means to vary the relative height thereof with reference to the main wing and to said supporting means, and separate means for varying the angle of the auxiliary wing with respect to the main wing and to said supporting means.

1,818,001. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 6, 1925. Serial No. 67,228. 12 Claims. (Cl. 73—54.)



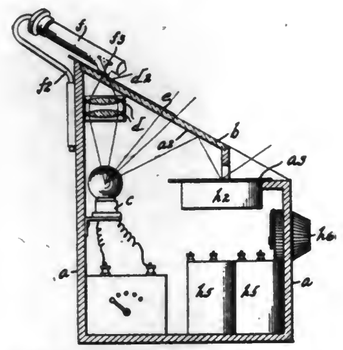
1. In a motor vehicle having a supporting frame and a fuel tank, the combination of a hydrostatic pressure responsive device comprising expansible chambers of different capacities, a plate between the chambers having an aperture connecting the chambers, said device being connected between the frame and the tank, pressure transmitting means connected to one of the chambers at one end, and a remote indicating means connected to the other end of the transmitting means.

1,818,002. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 26, 1927. Serial No. 178,560. 7 Claims. (Cl. 180—64.)



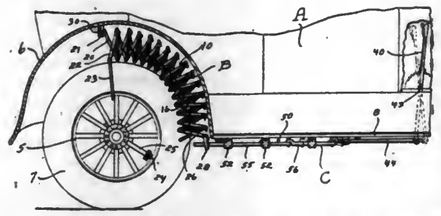
1. In a motor vehicle, the combination with a chassis frame and the crankcase of an internal combustion engine supported thereby, of an inspection plug in the wall of a crankcase and a bracket connecting the inspection plug to the frame.

1,818,003. PROCESS AND APPARATUS TO BE USED IN PRINTING PHOTOGRAPHS FROM NEGATIVES. JOSEPH W. MYERS, Jackson, Mich. Filed Dec. 19, 1927. Serial No. 241,031. 7 Claims. (Cl. 88—14.)



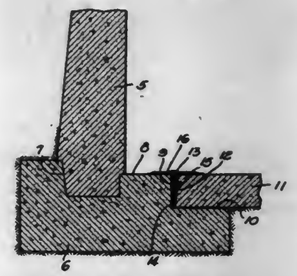
1. A process to be used in printing from exposed negatives, consisting in observing the point of the image upon the negative that is most permeable to light, measuring the light-permeability of the negative at said point, and exposing the negative for a time proportional to said permeability to a grade of paper proper for said negative.

1,818,004. CHAIN APPLYING AND REMOVING EQUIPMENT. ARTHUR G. NELSEN, Willmar, Minn. Filed Nov. 20, 1929. Serial No. 408,613. 10 Claims. (Cl. 152—14.)



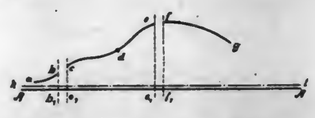
1. In combination with a motor vehicle having a running board, a wheel in alignment at the rear end of the running board and a fender above the wheel, an anti-skid device including lazy tong side structures, spring means acting to normally extend the structures from an arcuate to a circular formation, a holder depending from the lower side of the fender above the wheel and adapted to releasably receive the rear portion of the anti-skid device for holding the same out of contact with the wheel, a pair of longitudinally movable grip rods supported beneath the running board to project beyond the rear end thereof, and means carried by the forward end of each lazy tong structure for engagement by the grip rods when projected for releasably supporting the forward end of the anti-skid device out of contact with the wheel.

1,818,005. CONCRETE STORAGE RESERVOIR. EUGENE R. ODEN, North Hollywood, Calif. Filed May 31, 1930. Serial No. 458,474. 2 Claims. (Cl. 72—13.)



1. In concrete reservoir construction, a footing provided with a stepped portion to receive a concrete floor slab, an elastic waterproof joint-forming material interposed between the vertical face of the stepped portion and the adjacent face of the slab, and a waterproof elastic membrane extending over the joint and secured to the upper faces of the footing and the slab, respectively, one edge of the membrane occupying a position in spaced relation to a line drawn vertically through the frame and representing one face of a wall or column.

1,818,006. METHOD OF MAKING AND PLAYING PHONOGRAPH OR SOUND RECORDS. HEINRICH OHAGEN, Breslau, Germany. Filed Apr. 2, 1928, Serial No. 266,747, and in Germany Apr. 6, 1927. 2 Claims. (Cl. 274—46.)

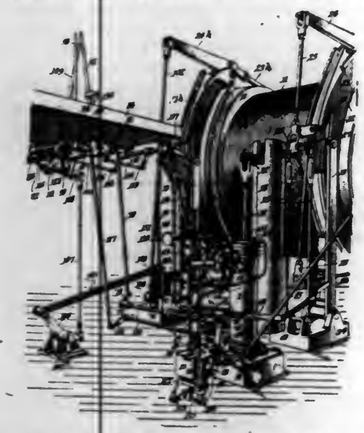


1. A method for eliminating intraneous noises from the reproduction of sounds on talking machines, consisting in the production of the record at a higher tone volume so that the softest piano of the composition rendered is louder than the intraneous noises, and in damping the volume of sound when producing a second record so that the intraneous noises become inaudible.

1,818,007. SAFETY DEVICE FOR HOIST BRAKES. MORTEN SMITH-PETERSEN, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 28, 1928. Serial No. 250,248. 15 Claims. (Cl. 188—105.)

1. The combination of a rotary drum; braking means therefor; a brake actuating device operable by manual force; a brake actuating device operable by mechanical power; a manually operable controller for the second named actuating device; automatic means uncontrolled

by the manually operable controller and operable to cause the second named actuating device to apply the brakes; manually operable releasing means for actuating the second named actuating device to release the brakes after

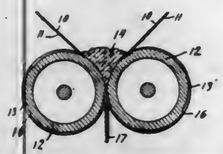


actuation by said automatic means; and means controlled by the position of the first named actuating device, and serving to render said releasing means inoperative when said first named actuating device is in brake releasing position.

1,818,008. MANUFACTURING PROCESS. CARL CLIFFORD RITTER and HARRY M. WILLIAMS, Dayton, Ohio, assignors to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 27, 1929. Serial No. 410,267. 9 Claims. (Cl. 91—70.1.)

1. The process of tinning the inner surface of a copper tube which comprises slushing the said surface with a flux containing finely divided tin suspended therein, removing the excess of flux, heating the so treated tube to a temperature sufficient to melt the finely divided tin, slowly rotating the tubing during the heating operation and removing the excess flux from the tubing substantially in the manner described.

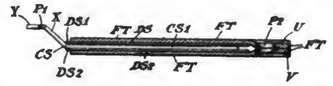
1,818,009. METHOD OF MAKING ROOFING PRODUCTS. THOMAS ROBINSON, New York, N. Y., assignor to Lancaster Asphalt, Inc., New York, N. Y., a Corporation of Delaware. Filed June 14, 1929. Serial No. 370,973. 8 Claims. (Cl. 154—2.)



7. In a method of making roofing elements containing plastic material and having a grit surfacing, the steps of applying molding pressure to the material to form a succession of connected elements, and forcing the grit into the body of the elements along boundaries of individual elements to weaken the connection, whereby ready separation of the elements is permitted.

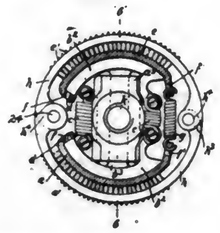
1,818,010. ELECTRICAL CONDENSER AND METHOD OF MANUFACTURING THE SAME. VICTOR E. ROSEN, Waltham Highlands, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Filed Feb. 3, 1923. Serial No. 616,640. 10 Claims. (Cl. 175—41.)

10. A capacitor comprising a tube, an armature within said tube, sheets of insulating material between the armature and tube, the tube being bent to clamp the insulating material against the armature, and being deformed



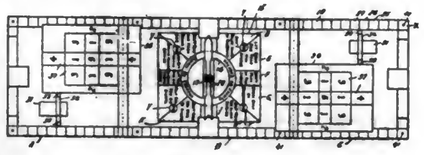
adjacent one end between the end of the armature to constitute an abutment for the insulating material and the armature.

1,818,011. ROUGHENING TOOL FOR THE WORKING OF LEATHER. ERICH SACHSE, Pegau, and OTTO MICHALK, Freital, Germany. Filed Mar. 28, 1929, Serial No. 350,520, and in Germany May 5, 1928. 8 Claims. (Cl. 69—1.)



1. A roughening tool for the working of leather, comprising a rotatable support, rows of radially adjustable roughening spikes, means for holding them in operative position on said support, lamellæ positioned between said rows of spikes, and means for adjusting the spikes to vary the effective length of said spikes.

1,818,012. GAME. HAROLD W. SMITH, Freeport, N. Y. Filed Jan. 15, 1929, Serial No. 332,636. Renewed Dec. 22, 1930. 7 Claims. (Cl. 273—135.)

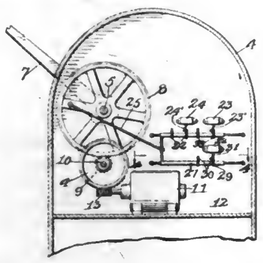


1. A traffic game apparatus comprising a board having a central space bearing a plurality of separately located legends, imparting traffic and safety information, a rotatable pointer adapted to indicate any one of said legends, and a single path around the board having a plurality of consecutively arranged spaces, certain of said consecutively arranged spaces bearing legends corresponding to the legends in the central space, and a scoring section on said board having a plurality of numerals of different denominations thereon, said central space being used during one phase of the game and said scoring section being used during another phase of continued play.

1,818,013. RAILROAD CROSSING GATE. WILLIAM M. SMITH, Hartland, Wis., assignor of one-half to Christopher H. Oman, North Lake, Wis. Filed Oct. 17, 1929. Serial No. 400,389. 2 Claims. (Cl. 246—129.)

1. In a railway crossing gate, a supporting shaft, an arm carried thereby, a gear carried by the shaft, an electric motor having operative connection with the gear, a rod having one end eccentrically connected to the gear, a reciprocating yoke including spaced members connected

to the other end of the rod, spaced fingers carried by the spaced members of the yoke, and control switches lo-



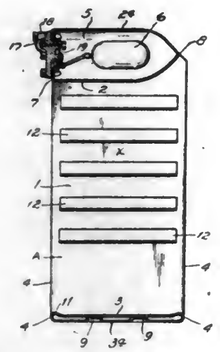
cated adjacent the yoke whereby the spaced fingers will engage the switch arms during the movement of the yoke for controlling the movement of the motor.

1,818,014. FLOOR STRUCTURE. WILLIAM EDWARD SNAMAN, Pittsburgh, Pa. Filed Feb. 28, 1929. Serial No. 343,494. 3 Claims. (Cl. 94—3.)



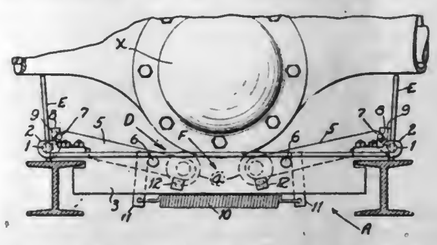
1. In a block floor structure, spacing elements for the floor blocks, each of said spacing elements having a wide base and a comparatively narrow flat top, the side walls of each of said spacing elements being sloped and converging toward and terminating adjacent to the top thereof, each of said side walls being formed with a recess adapted for the engagement of adjacent spacing elements.

1,818,015. COOLING UNIT FOR REFRIGERATING SYSTEMS. EDWIN H. STEEDMAN, St. Louis, Mo. Filed Feb. 6, 1928. Serial No. 252,299. 2 Claims. (Cl. 62—126.)



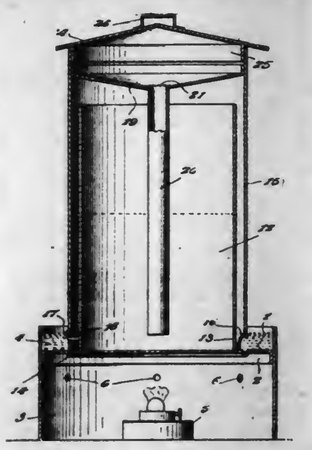
1. A cooling unit for refrigerating systems, composed of two shells arranged one within the other in spaced relation and provided with co-acting portions which form hollow side walls that contain a refrigerating medium and which surround a center space in which articles or materials may be placed, the hollow wall at the top of said space serving as a float chamber, the hollow wall at the bottom of said space serving as a cold plate for abstracting heat rapidly from a flat bottom receptacle positioned in said space, and the hollow walls at the sides of said space serving as circulating passageways which connect the cold plate with the float chamber.

1,818,016. SAFETY MECHANISM FOR AUTOMOBILE LIFTS. EDWIN H. STEEDMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed May 5, 1930. Serial No. 449,846. 19 Claims. (Cl. 254—89.)



1. An automobile lift, comprising a means that is adapted to engage the chassis of an automobile and move the chassis upwardly into an elevated position, members combined with said means for preventing the chassis from tilting, and means for shifting said anti-tilting members into and out of an active position.

1,818,017. WATER FOUNTAIN FOR POULTRY. RAYMOND K. STEVENS, Sidney, Iowa. Filed Apr. 17, 1929. Serial No. 355,948. 2 Claims. (Cl. 119—73.)

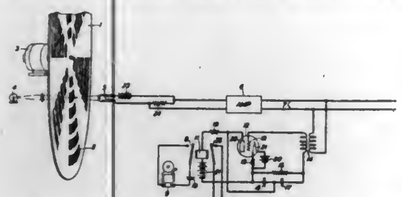


1. A fountain comprising a reservoir, a trough about said reservoir having an upstanding outer annular wall, the reservoir having an outlet near its lower end communicating with the trough below the plane of the upper edge of the outer wall thereof, a jacket about said reservoir formed with a water passage in its walls at its lower end and extending above the reservoir, the bottom of the trough being formed with an annular recess extending about the reservoir and receiving the lower end of said jacket to retain the jacket in spaced relation to the reservoir and a funnel in the upper portion of said jacket having a discharge neck extending downwardly and into the reservoir terminating in spaced relation to the bottom of the reservoir.

1,818,018. CONTROL CIRCUIT. CLOSMAN P. STOCKER, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 11, 1930. Serial No. 467,282. 11 Claims. (Cl. 175—320.)

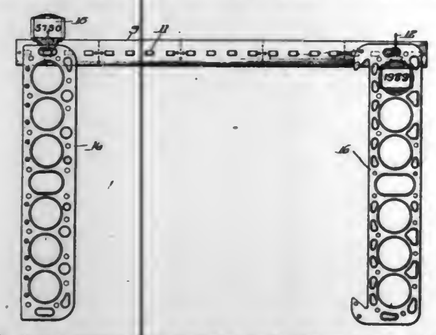
10. The combination with a current-operated element and a condenser-resistance combination for timing the

operation of said element, of a three-electrode space discharge device having greater resistance to direct current when no signals are applied to its input circuit than when signals are present, and having its space path effectively in shunt with said condenser-resistance combination and in-



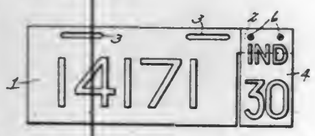
cluded in series with an external resistance and the energizing circuit of said element, the potential of the control electrode of said discharge device being in part determined by its circuit connection with a point on said resistance condenser combination.

1,818,019. TAG HOLDER. EDWIN A. SUTCLIFFE, Oak Park, Ill., assignor to Victor Manufacturing & Gasket Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1930. Serial No. 418,047. 8 Claims. (Cl. 40—19.5.)



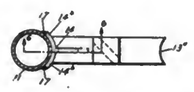
1. A tag holder comprising a body having a shank and an opening therein to enable the holder to be mounted in upright position or to be hung in inverted position, tag retaining means on the body to overlap opposite edges of a tag inserted therebetween, and shoulders on the body extended across the line of movement of the tag in the insertion thereof and engageable with opposite edges of the tag after disposal thereof between the flanges and the shoulders to retain the tag in the holder in either position thereof.

1,818,020. LICENSE TAG. ALBERT L. THOMAS, South Bend, Ind. Filed Mar. 8, 1930. Serial No. 434,278. 4 Claims. (Cl. 40—63.)



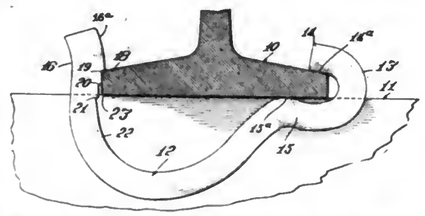
1. In a license tag, the combination of a main plate having a relatively narrow extension in line with the upper longitudinal edge thereof, a supplemental smaller plate dependent from and adapted to be detachably carried by said extension, said smaller plate and extension having apertures formed therein, and a fastening device received by said apertures for securing the plates together, said apertures being located in said parts so as to control the relative placement thereof and hold the same in spaced relation for the major portion of their adjacent edges.

1,818,021. SPACING AND SUPPORTING MEANS. ROBERT P. THOMPSON, Piermont, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Mar. 26, 1929. Serial No. 349,964. 10 Claims. (Cl. 122—476.)



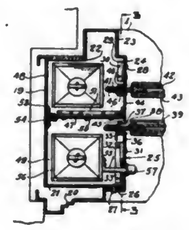
1. A spacer of the class described comprising a body of weldable metal of substantially T-shaped section, and a block of non-weldable heat-resistant metal cast around the longitudinal web of said body and covering the major portion of one face of the transverse web thereof.

1,818,022. RAIL ANCHOR. HAROLD G. WARR, Park Ridge, Ill., assignor to The P & M Company, Chicago, Ill., a Corporation of Illinois. Filed June 13, 1929. Serial No. 370,608. 16 Claims. (Cl. 238—330.)



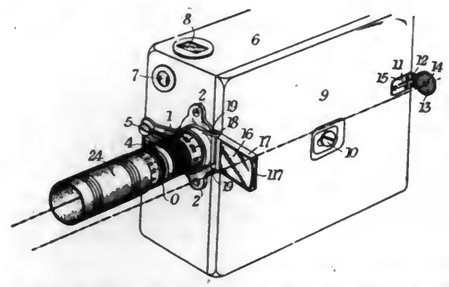
7. A rail anchor comprising an under rail portion provided at one end with a hook shaped jaw adapted on vertical movement of the under rail portion to clamp the base flange of the rail, the other end of said under rail portion being provided with a series of locking shoulders for engagement over the upper corner of a rail base flange and a series of flat bearing surfaces for engagement with the vertical edge surface of said flange and adapted to be flexed outwardly during said vertical movement to engage said shoulders successively with said corner portion of said base.

1,818,023. AUTOMATIC CLOSING DEVICE FOR WINDOWS. LORING WASHBURN, Greenwich, Conn., assignor to S. H. Pomeroy Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 2, 1929. Serial No. 396,824. 2 Claims. (Cl. 189—74.)



1. In a window the combination of upper and lower sashes, upper and lower sash weights, chains connecting the sash weights with the sashes, respectively, the chain of the lower sash being separable, and a lost motion connector connected to each lower sash weight adapted to so engage the corresponding upper sash weight as to impose its weight thereon when the lower sash weight is released, said lost motion connector being adapted to permit the lower sash weight to drop substantially below the level of the upper sash weight before causing the weight of the lower sash weight to be imposed upon said upper sash weight.

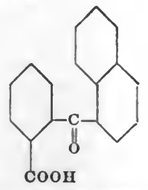
1,818,024. OPTICAL EQUIPMENT FOR CAMERAS. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 29, 1928. Serial No. 265,790. 8 Claims. (Cl. 88—1.)



1. In a camera, the combination with an objective having scales located thereon, of a lens hood slidably mounted thereon, said lens hood being movable to an operative position extending beyond the objective and exposing said scales, and being movable to an inoperative position surrounding said objective and obscuring said scales.

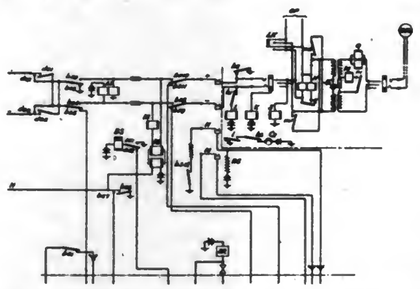
1,818,025. ANTHRACENE DERIVATIVES AND PROCESS OF PREPARING THEM. ARTHUR WOLFRAM and EMIL HAUSDÖRFER, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 22, 1928, Serial No. 328,066, and in Germany Dec. 30, 1927. 11 Claims. (Cl. 260—61.)

5. The process, which comprises treating a compound of the following formula:



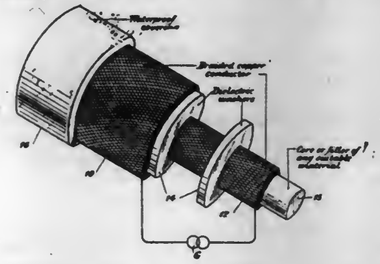
with aluminium chloride in the presence of a melting agent at a temperature of about from 80° C. to 120° C. and further condensing the so formed condensation product in a melt of a caustic alkali at a temperature of about from 230° C. to 260° C.

1,818,026. TELEPHONE SYSTEM. ESMOND P. G. WRIGHT, Croydon, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 20, 1929, Serial No. 393,872, and in Great Britain Dec. 20, 1928. 11 Claims. (Cl. 179—6.)



1. In a telephone system, a selection control device, an operator's position, means for recording the elements of a telephone designation in said device, means for generating voice current signals, means under control of said recording means and said generating means for transmitting voice current signals to said operator's position, and means for translating one or more of the recorded elements into voice current signals, the verbal equivalents of which are different from the verbal equivalents of the recorded elements.

1,818,027. CONCENTRIC CONDUCTOR SYSTEM. HERMAN A. AFFEL, Ridgewood, and ESTILL I. GREEN, East Orange, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed May 23, 1929. Serial No. 365,524. 6 Claims. (Cl. 173—265.)



1. In a conducting system for the communication of intelligence, two concentric conductors, each conductor being in the form of a shell of conductive material comprising a plurality of insulated wires so interwoven that each wire is passed back and forth toward and from the center of the shell, and insulating means for separating the conductors electrically and for maintaining them in concentric relation, said insulating means being so formed that the dielectric between adjacent surfaces of the conductors will be principally gaseous.

1,818,028. NASAL INHALER. ALBERT M. ALLEN, St. Louis County, Mo. Filed Dec. 31, 1928. Serial No. 329,382. 2 Claims. (Cl. 128—198.)

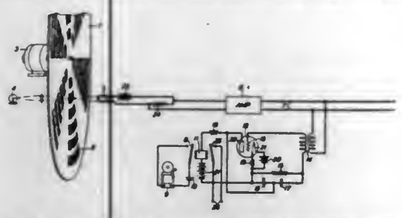


1. A nasal inhaler comprising a pair of spaced tubes adapted to lie against the sides of the nose, a bridge member connecting the tubes and adapted to engage the nose, each tube having an upwardly bent extremity insertable in the nostril, and an air pervious cartridge in the upper part of each tube, each tube having an air intake adjacent to the cartridge, a discharge valve for the exhalation products disposed in the lower part of each tube, a coiled spring adapted to hold each valve on its seat, the tension of the spring being such that the valve will readily open under the pressure of the exhalation products within the tube.

1,818,029. WATER THROWING APPARATUS FOR WASHING MACHINES. GEORGE P. ANSTISS, Oak Park, Ill., assignor to G. S. Blakeslee & Co., Cicero, Ill., a Corporation of Illinois. Original application filed Dec. 17, 1925, Serial No. 76,031. Divided and this application filed Mar. 19, 1928. Serial No. 262,792. 1 Claim. (Cl. 259—109.)

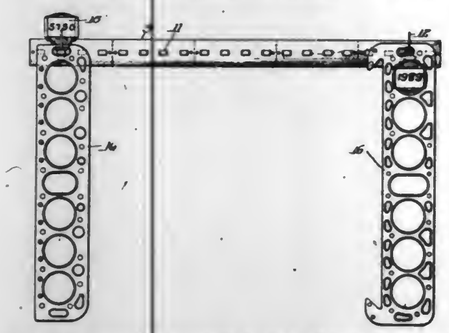
A water throwing apparatus for washing machines comprising a rotary disc-like support, and plates provided with outwardly extending channels secured to said support at

operation of said element, of a three-electrode space discharge device having greater resistance to direct current when no signals are applied to its input circuit than when signals are present, and having its space path effectively in shunt with said condenser-resistance combination and in-



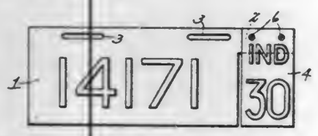
cluded in series with an external resistance and the energizing circuit of said element, the potential of the control electrode of said discharge device being in part determined by its circuit connection with a point on said resistance condenser combination.

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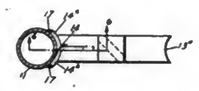
1. A tag holder comprising a body having a shank and an opening therein to enable the holder to be mounted in upright position or to be hung in inverted position, tag retaining means on the body to overlap opposite edges of a tag inserted therebetween, and shoulders on the body extended across the line of movement of the tag in the insertion thereof and engageable with opposite edges of the tag after disposal thereof between the flanges and the shoulders to retain the tag in the holder in either position thereof.

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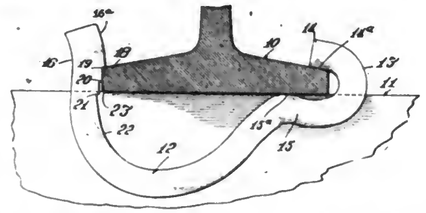
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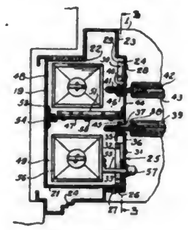
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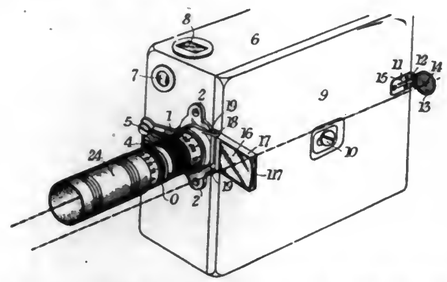
7. A rail anchor comprising an under rail portion provided at one end with a hook shaped jaw adapted on vertical movement of the under rail portion to clamp the base flange of the rail, the other end of said under rail portion being provided with a series of locking shoulders for engagement over the upper corner of a rail base flange and a series of flat bearing surfaces for engagement with the vertical edge surface of said flange and adapted to be flexed outwardly during said vertical movement to engage said shoulders successively with said corner portion of said base.

1,818,023. AUTOMATIC CLOSING DEVICE FOR WINDOWS. LORING WASHBURN, Greenwich, Conn., assignor to S. H. Pomeroy Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 2, 1929. Serial No. 396,824. 2 Claims. (Cl. 189—74.)



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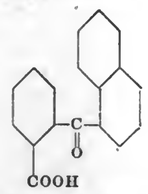
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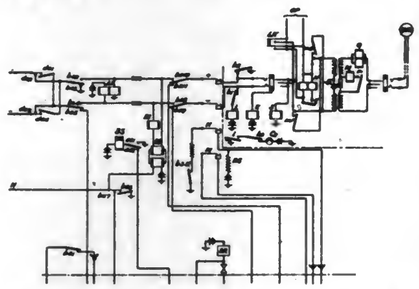
1,818,025. ANTHRACENE DERIVATIVES AND PROCESS OF PREPARING THEM. ARTHUR WOLFRAM and EMIL HAUSDÖRFER, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 22, 1928, Serial No. 328,066, and in Germany Dec. 30, 1927. 11 Claims. (Cl. 260—61.)

5. The process, which comprises treating a compound of the following formula:



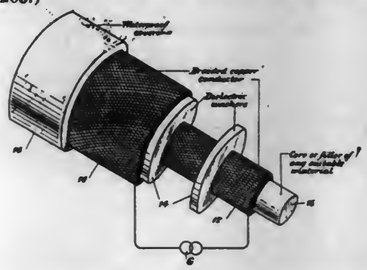
with aluminium chloride in the presence of a melting agent at a temperature of about from 80° C. to 120° C. and further condensing the so formed condensation product in a melt of a caustic alkali at a temperature of about from 230° C. to 260° C.

1,818,026. TELEPHONE SYSTEM. ESMOND P. G. WRIGHT, Croydon, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 20, 1929, Serial No. 393,872, and in Great Britain Dec. 20, 1928. 11 Claims. (Cl. 179—6.)



1. In a telephone system, a selection control device, an operator's position, means for recording the elements of a telephone designation in said device, means for generating voice current signals, means under control of said recording means and said generating means for transmitting voice current signals to said operator's position, and means for translating one or more of the recorded elements into voice current signals, the verbal equivalents of which are different from the verbal equivalents of the recorded elements.

1,818,027. CONCENTRIC CONDUCTOR SYSTEM. HERMAN A. AFFEL, Ridgewood, and ESTILL I. GREEN, East Orange, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed May 23, 1929. Serial No. 365,524. 6 Claims. (Cl. 178—265.)



1. In a conducting system for the communication of intelligence, two concentric conductors, each conductor being in the form of a shell of conductive material comprising a plurality of insulated wires so interwoven that each wire is passed back and forth toward and from the center of the shell, and insulating means for separating the conductors electrically and for maintaining them in concentric relation, said insulating means being so formed that the dielectric between adjacent surfaces of the conductors will be principally gaseous.

1,818,028. NASAL INHALER. ALBERT M. ALLEN, St. Louis County, Mo. Filed Dec. 31, 1928. Serial No. 329,382. 2 Claims. (Cl. 128—198.)

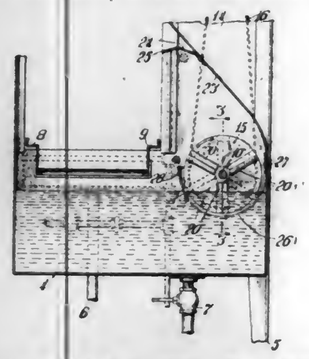


1. A nasal inhaler comprising a pair of spaced tubes adapted to lie against the sides of the nose, a bridge member connecting the tubes and adapted to engage the nose, each tube having an upwardly bent extremity insertable in the nostril, and an air pervious cartridge in the upper part of each tube, each tube having an air intake adjacent to the cartridge, a discharge valve for the exhalation products disposed in the lower part of each tube, a coiled spring adapted to hold each valve on its seat, the tension of the spring being such that the valve will readily open under the pressure of the exhalation products within the tube.

1,818,029. WATER THROWING APPARATUS FOR WASHING MACHINES. GEORGE P. ANSTISS, Oak Park, Ill., assignor to G. S. Blakeslee & Co., Cicero, Ill., a Corporation of Illinois. Original application filed Dec. 17, 1925, Serial No. 76,031. Divided and this application filed Mar. 19, 1928. Serial No. 262,792. 1 Claim. (Cl. 259—109.)

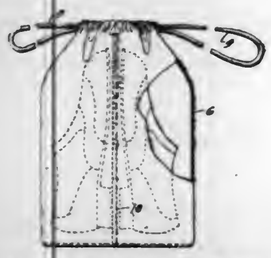
A water throwing apparatus for washing machines comprising a rotary disc-like support, and plates provided with outwardly extending channels secured to said support at

opposite sides thereof with the bottoms of the channels lying parallel with said disc-like support, the plates at one side of the support being staggered with relation to



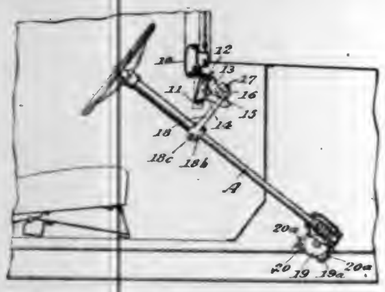
those at the opposite side thereof, said channels being open at their outer ends and being arranged with their outer ends in advance of their inner ends as the support rotates.

1,818,030. SHOE BAG. WILLIAM PERCY ARNOLD, North Abington, Mass., assignor to M. N. Arnold Shoe Company, North Abington, Mass., a Corporation of Massachusetts. Filed Nov. 11, 1930. Serial No. 494,904. 6 Claims. (Cl. 150—1.)



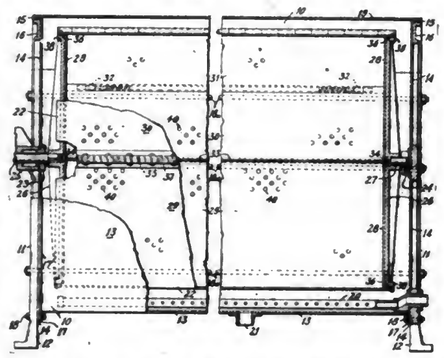
1. A shoe bag or the like comprising a body portion of flexible material, a transverse partition attached to one side of the body and detachably connected to its opposite side for dividing the receptacle into a pair of compartments opening at the mouth of the bag, and means for constricting the mouth of the bag over said partition to enclose the contents of both compartments.

1,818,031. STEERING COLUMN SUPPORT. STUART G. BAITS, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 22, 1929. Serial No. 334,265. 2 Claims. (Cl. 280—87.)



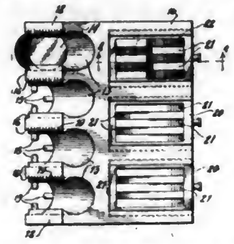
1. In a device for adjustably supporting a steering column from the dash of a vehicle having a hanger member for supporting the steering column, the combination therewith of means for adjustably supporting the upper end of the hanger member comprising a support carried by the dash and having a plurality of spaced notches adapted to receive the upper end portion of said hanger, and a clamping member adjustably secured on said support adapted to hold the upper end portion of said hanger in any one of said notches.

1,818,032. DYEING MACHINE CONSTRUCTION. WILLIAM E. H. BELL, Glenside, Pa., assignor, by mesne assignments, to H. W. Butterworth & Sons Company, a Corporation of Pennsylvania. Filed Feb. 14, 1924. Serial No. 692,729. 3 Claims. (Cl. 8—18.)



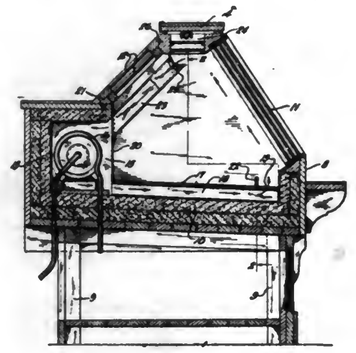
1. In an apparatus of the character described, a rotatable receiving drum having an interior receiving compartment and walls formed by sheet metal plates, the ends of the drum being formed of a plurality of plates having adjacent edges flanged outwardly and secured together to provide transverse self-sustaining drum rigidifying frame members extending through the center of rotation of the drum, and a drum-supporting trunnion plate secured to a drum end, said trunnion plate extending transversely of and transecting the adjacent transverse rigidifying frame member and having a load carrying hub part channeled for the reception of said rigidifying frame member whereby stresses between the drum and trunnion plate are transmitted through said frame member.

1,818,033. HOLDING DEVICE FOR CHIPS OR COUNTERS USED IN GAMES AND THE LIKE. ROBERT S. BLAIR, Stamford, Conn. Filed Jan. 2, 1923. Serial No. 610,190. 6 Claims. (Cl. 133—6.)



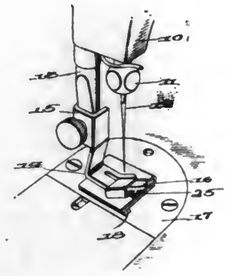
1. In a device of the general nature of that herein described, in combination, a supporting base having a plurality of upwardly extending recesses at its side, means adapted to hold in each of said recesses against outward edgewise movement a stack of chips, said recesses being shaped to hold the chips of each stack in positions inclined with respect to the axis of the stack thereby to expose the outer portions of their surfaces, and yielding means adapted to permit the simultaneous removal of a plurality of chips from each of said stacks.

1,818,034. CIRCULATORY SYSTEM FOR REFRIGERATED COUNTERS. JAYSON K. BOND, Milwaukee, Wis. Filed Feb. 28, 1929. Serial No. 343,356. 4 Claims. (Cl. 62—89.5.)



1. In a refrigerated display counter, an angular duct therewithin and opening into the interior of the counter at its lower forward portion, a cooling medium within a portion of said duct, a pair of separated flues entering said duct remote from its open end portion and extending upwardly within said counter, and a trough connecting the upper portions of said flues.

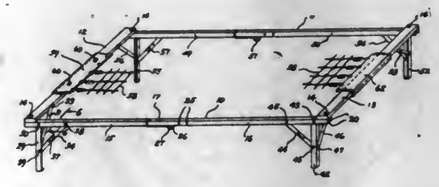
1,818,035. HEMSTITCHING ATTACHMENT. ALBERT BLAKE BRIGGS and SARAH E. BRIGGS, Springfield, Mass., assignors to The Perfect Hemstitcher Manufacturing Co., Inc., Springfield, Mass., a Corporation of Massachusetts. Filed May 29, 1931. Serial No. 540,991. 11 Claims. (Cl. 112—179.)



1. An attachment for sewing machines having a presser foot, comprising a body member formed with a ply spacer thereon, and a thread slot extending from said spacer along the normal line of feed of the work, a work guide adjacent said slot and a loop portion located in a plane above said spacer and connected to said guide and shaped to fit a prong of said presser foot.

1,818,036. FOLDABLE BED. NEWTON N. BROWN, Racine, Wis., assignor to Gold Medal Camp Furniture Co., Racine, Wis., a Corporation of Wisconsin. Filed June 21, 1926. Serial No. 117,333. 2 Claims. (Cl. 5—112.)

1. A foldable bed comprising end rails, side rails, each side rail comprising a pair of channel sections, the adjacent ends of the channel section of each side rail being pivotally connected together about a horizontal axis, the remote ends of the channel sections of each side rail being directly engaged with and pivotally connected to the end rails about a vertical axis, the sections of each side rail being foldable up against each other about their horizontal axes and being foldable down between the end rails about their vertical axes, foldable legs and braces connected to the side rails and adapted to be positioned within the channels thereof when the bed is folded up,

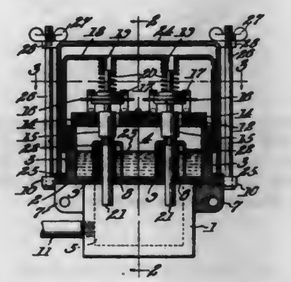


the openings of the channels confronting when the side rails are folded up whereby to maintain the folded legs and braces within the channel, the end rails serving to maintain the engaging relation of the channel sections and the retention of the folded legs and braces therein when the bed is folded up.

1,818,037. VAT DYESTUFFS. WALTER BRUCK and FRITZ HELWERT, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 5, 1927, Serial No. 237,981, and in Germany Dec. 6, 1926. 15 Claims. (Cl. 260—29.)

1. The process for the production of halogenation products of 8.8'-dihydroxy-1.2.1'.2'-dinaphthazines containing more than 4 atoms of halogen in their molecule, which comprises subjecting a 8.8'-dihydroxy-1.2.1'.2'-dinaphthazine to a vigorous halogenation.

1,818,038. VAPORPROOF SWITCH CASING. EARL L. BUKER, Great Falls, Mont. Filed Dec. 17, 1928. Serial No. 326,642. 6 Claims. (Cl. 200—168.)

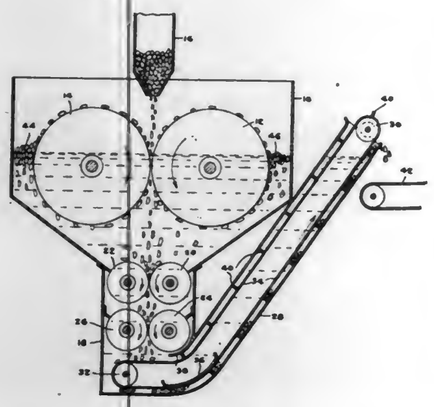


1. In a vapor-proof electric switch, a main casing forming a substantially rectangular compartment having an open end, an insulating base secured to the open end of said casing, stationary contacts mounted on said base, a switch operator comprising a contact and extending through said base, a channel-shaped strap secured to the side walls of said casing and projecting upwardly over said base, and guiding means for the switch operator secured to said strap.

1,818,039. PROCESS OF TREATING FIBROUS MATERIAL PRELIMINARY TO MAKING PULP. JOHN S. BUSCH, Cloquet, Minn. Filed Dec. 31, 1928. Serial No. 329,505. 2 Claims. (Cl. 92—1.)

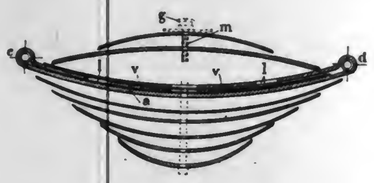
1. The process of treating fibrous material preliminary to making pulp which consists in providing chips of the material, feeding said chips downwardly between a pair

of horizontal crushing rolls which are submerged for more than half their diameter in a liquid, and repeating



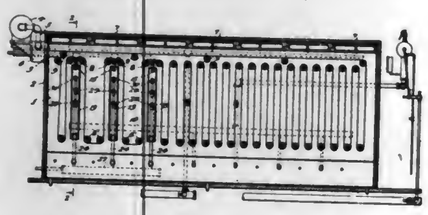
the crushing action of the rolls by flotation and inward movement of the chips toward the space between the rolls until the chips sink in the liquid.

1,818,040. SPRING. PAUL ADOLPHE CARTERET, Neuilly-sur-Seine, France. Filed Oct. 27, 1927, Serial No. 229,077, and in France Oct. 28, 1926. 3 Claims. (Cl. 267—47.)



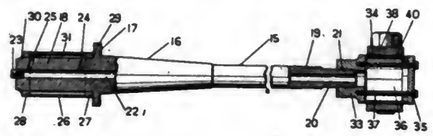
1. A spring comprising leaves occupying the whole length of said spring, a holding bolt fixed to said leaves, other leaves connected with the ends of said first-mentioned leaves and means permitting said other leaves to move with respect to said holding bolt.

1,818,041. APPARATUS FOR TREATING AND AGING FABRICS. EDWARD S. CHAPIN, Pawtucket, R. I., assignor to The Deltex Company, a Corporation of Massachusetts. Filed June 18, 1930. Serial No. 462,048. 10 Claims. (Cl. 8—15.)



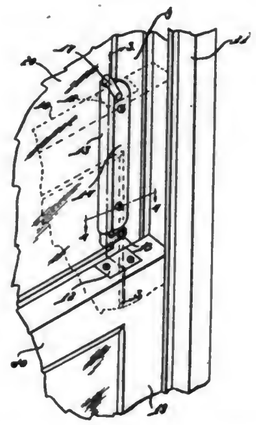
1. In combination with an apparatus for treating or aging fabric which includes an aging box or chamber, two series of rolls over which the fabric is adapted to pass, to form spaces between the runs thereof, an apron of porous material, located in a zone between the runs of fabric formed by said rolls, and means for introducing vapors of an evaporable liquid within the interior of said apron.

1,818,042. LATHE. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 28, 1928. Serial No. 322,333. 8 Claims. (Cl. 279—2.)



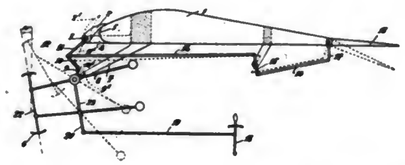
1. An arbor comprising interconnected chambers adapted to be filled with fluid and means for compressing one of the chambers to expand the other.

1,818,043. WINDOW LOCK. WILLIAM F. COADY and Sylvester Coady, Detroit, Mich. Filed Feb. 11, 1929. Serial No. 338,970. 3 Claims. (Cl. 292—202.)



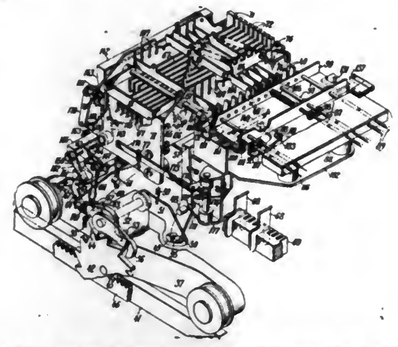
1. A window lock of the class described comprising: a supporting member; a rod swingably mounted on said supporting member, the opposite ends of said rod being angularly turned and extending at an angularity to each other less than a right angle.

1,818,044. CONTROLLING DEVICE FOR AIRCRAFT. LOUIS CONSTANTIN, Paris, France. Filed Apr. 19, 1929, Serial No. 356,504, and in France May 5, 1928. 6 Claims. (Cl. 244—29.)



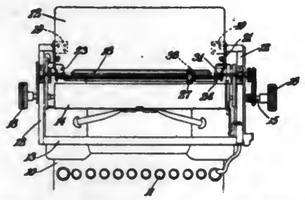
1. In aircraft the combination of a wing, stabilizing means carried by said wing, two vanes symmetrically disposed with respect to a plane intersecting the chord of said wing, rigid means interconnecting said vanes, two pivots symmetrically disposed with respect to the said plane, connecting means articulated at one end to said pivots and at the other end to said rigid means interconnecting said vanes, balancing elements on said connecting means whereby the assembly formed by said vanes, said rigid means, and said connecting means, is balanced indiscriminately about said pivots, and means operatively associated with one of said connecting means for actuating said stabilizing means.

1,818,045. COMBINED TYPEWRITING AND CARD-PERFORATING MACHINE. FRANK K. DAVIS, Silver Spring, Md., and CHARLES C. TAYLOR, Washington, D. C., assignors to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 27, 1928. Serial No. 265,073. 67 Claims. (Cl. 164—113.)



53. In a keyboard-controlled card-perforating machine, the combination with a set of punches, a set of punch-selectors, a carriage, a set of denominational tabulating selectors, a pre-settable set of stationary tabulating stops to engage said tabulating selectors to stop said carriage, and a keyboard, of selector-actuating trains, and means for engaging said trains with one set of selectors or the other under the control of said keyboard.

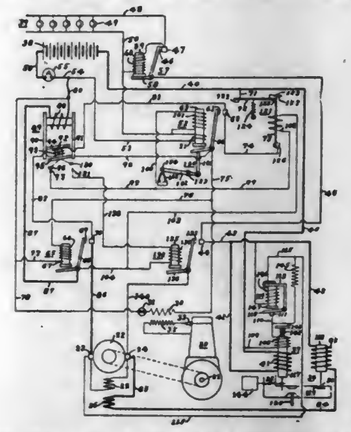
1,818,046. PAPER PERFORATING DEVICE FOR TYPEWRITERS. GENNARO DE PAMPHILIS, New York, N. Y. Filed Mar. 28, 1929. Serial No. 350,506. 6 Claims. (Cl. 164—100.)



1. The combination with a typewriting machine of the cylindrical platen type having a manually operable twirling knob and paper table, of one or more perforating rolls, and gear driven means actuated by rotation of said knob to rotate said rolls thereby to perforate paper passed over said table adjacent the platen.

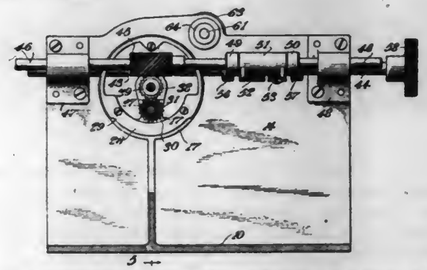
1,818,047. ELECTRICAL APPARATUS. ERNEST DICKEY and FRANK F. STARR, Dayton, Ohio, assignors to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 28, 1929. Serial No. 343,367. 7 Claims. (Cl. 290—40.)

2. An electrical generating system comprising in combination a prime mover, a throttle for said prime mover, a storage battery, electrical apparatus operatively connected with the prime mover, a circuit between the battery and electrical apparatus, and an electromagnet for



controlling said throttle, said electromagnet including a shunt winding connected across the battery tending to open said throttle.

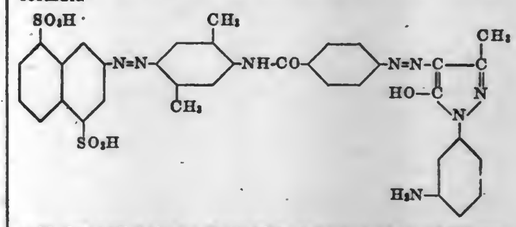
1,818,048. MECHANICAL SYSTEM. AUGUSTO DINA, Jersey City, N. Y., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 31, 1929. Serial No. 389,837. 16 Claims. (Cl. 74—41.)



1. In a mechanical movement, a system of elements having extra-system and inter-system cyclic relations and comprising two load shafts, a rotor, mechanism interconnecting said shafts and movable with the rotor, and means actuated by and movable proportionate to the movement of the rotor to cause extra-system cyclical adjustment of one shaft without disturbing the inter-system cyclical relations.

1,818,049. NEW AZODYESTUFF. KARL DOBMAIER, Wiesdorf, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 9, 1928, Serial No. 298,619, and in Germany Aug. 19, 1927. 1 Claim. (Cl. 260—81.)

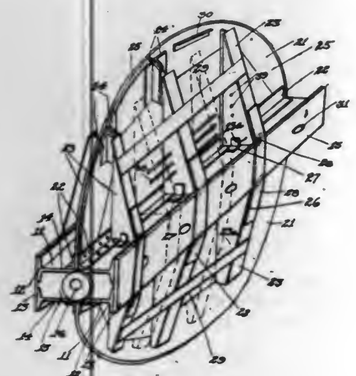
The azo dyestuff having in its free form the probable formula



said dyestuff being a yellowish brown powder difficultly soluble in the usual organic solvents, easily soluble in

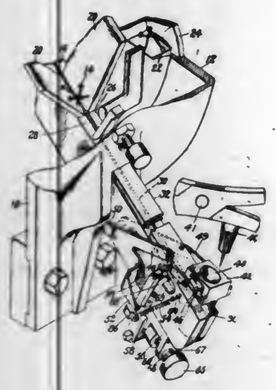
water in form of its alkali metal salts, dyeing cotton a clear yellow shade and being capable of being diazotized and developed with coupling components.

1,818,050. VALVE CONSTRUCTION. EDWIN A. DOW, Worcester, Mass. Filed Aug. 21, 1928. Serial No. 301,004. 16 Claims. (Cl. 251—11.)



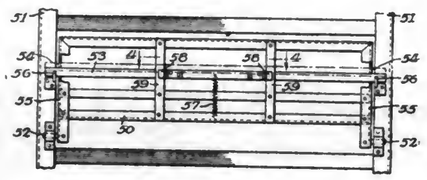
5. A valve construction comprising semi-circular disk portions extending from opposite sides of and at right angles to a central box-like structure and bracing members located in the angles between said disk portions and said box-like structure and secured to said disk portions and said box-like structure respectively, said bracing members being triangular in form to resist deflection of the edges of said disk portions.

1,818,051. DEVICE FOR SUPPLYING FASTENINGS. RENÉ E. DUPLESSIS, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 5, 1928. Serial No. 310,555. 9 Claims. (Cl. 1—49.5.)



1. A positioning device for guiding a portable magnetic implement into fastening receiving position relative to a raceway, having, in combination, a movable implement guide, means for determining the path of travel of the guide, and means for returning the guide to normal position.

1,818,052. COMPARTMENT LOCK FOR POULTRY CARS. ISRAEL V. EDGERTON, Chicago, Ill., assignor to Palace Poultry Car Company, Chicago, Ill., a Corporation of Illinois. Original application filed Sept. 27, 1924, Serial No. 740,249. Divided and this application filed Jan. 9, 1929. Serial No. 331,249. 2 Claims. (Cl. 292—259.)



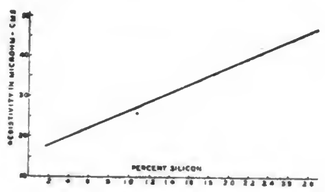
1. An automatic latch mechanism for a vertically swinging gate, comprising a horizontal latch bar bodily slidable vertically on the gate and having its end portions projecting beyond the corresponding ends of the gate, and a pair of fixed catch members formed with beveled free ends over which the ends of the latch bar ride as the gate is closed and with shoulders behind said beveled ends automatically engaging with and retaining said ends of the latch bar when the gate is closed.

1,818,053. DUPLEX AUTOMATIC AIR VENT VALVE. JOSEPH ELGER, Chicago, Ill. Filed Nov. 5, 1928. Serial No. 317,402. 1 Claim. (Cl. 137—122.)



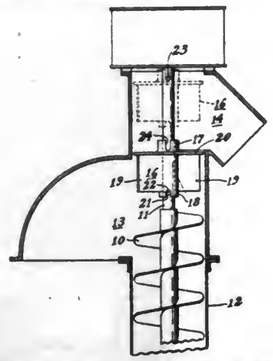
A unitary duplex vent valve structure including; a threaded plug adapted to be screwed into the standard threaded opening of the end section of a radiator, said plug having an aperture therethrough; a float-controlled air valve carried by said plug on one side thereof; and a float controlled valve carried by said plug on the opposite side thereof, each of said valves being adapted to permit air to escape therethrough and prevent the escape of water.

1,818,054. MAGNETIC MATERIAL. GUSTAF W. ELMEN, Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Jan. 12, 1927, Serial No. 160,569. Divided and this application filed June 20, 1930. Serial No. 462,558. 4 Claims. (Cl. 175—21.)



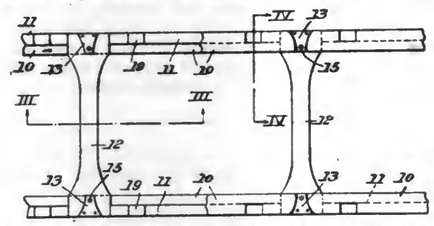
1. An iron-nickel alloy containing about 33% to 48% of nickel, 0.3% to 3% of silicon, and the remainder iron.

1,818,055. SCREW CONVEYER. THOMAS ELLIOTT, Birmingham, Ala., assignor to Continental Gin Company, a Corporation of Delaware. Filed May 9, 1930. Serial No. 451,128. 7 Claims. (Cl. 198—213.)



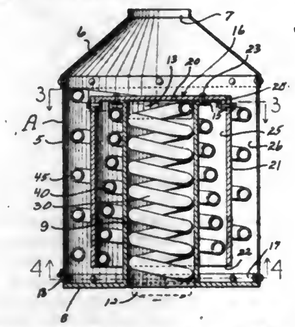
1. In a screw conveyer apparatus, a casing having a side discharge opening and beyond same an overflow opening, and a biased overflow valve normally interposed between said openings and movable responsive to abnormal pressure of material in said casing to permit the discharge of same through said overflow opening.

1,818,056. WALL OR CRIB STRUCTURE. JAMES H. FERGUSON, Jr., Wilkinsburg, Pa. Filed May 5, 1928. Serial No. 275,323. 4 Claims. (Cl. 61—47.)



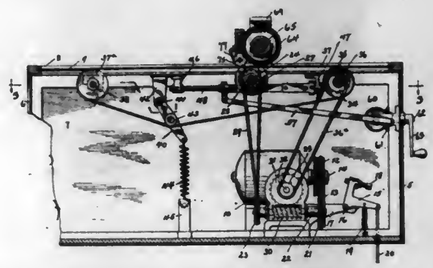
1. Cribbing structure composed of a plurality of header bars, each of which is provided with a lug of generally keystone shape upon its outer end, and stretcher bars having their ends formed complementally to said lugs and having inter-locking engagement therewith, the inter-engaging surfaces of said lugs and bars being curved, with the curvature of the ends of the bars of shorter radius than the curvatures of the lugs.

1,818,057. WATER HEATER. PETER H. FERRIER, Jr., Brookfield, Ill. Filed Aug. 15, 1928. Serial No. 299,724. 4 Claims. (Cl. 122—250.)



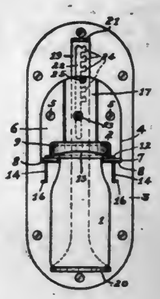
1. A water heater comprising a vertically disposed casing having an outlet opening at its upper end, a base plate closing the lower end of the casing and having an axially disposed tubular extension projecting upwardly in the casing to form a central heating chamber, said extension having side openings at its upper end, a hood supported on the upper end of the tubular extension and having a depending sleeve forming annular heating chambers having communication between one another beneath the lower end of the sleeve, a heating coil arranged in each of said heating chambers for connection at their upper ends with a common outlet terminal and connected at their lower ends with a common inlet terminal, and a burner arranged beneath the coil provided in the central heating chamber.

1,818,058. FUR OR PELT CUTTING MACHINE. ISAAC FRIEDMAN, Brooklyn, N. Y. Filed Nov. 3, 1928. Serial No. 317,085. 14 Claims. (Cl. 164—61.)



1. A machine of the class described comprising power operating mechanism a series of endless belts driven by said mechanism, a plurality of rotary cutting elements located between said belts and a series of freely rotatable brushes in advance of the cutting elements for maintaining a piece of material on the said belts.

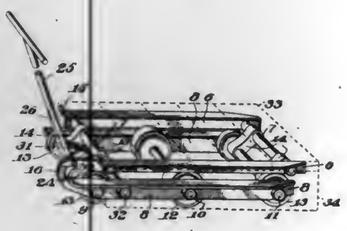
1,818,059. MILK BOTTLE HOLDER. JOSEPH G. GAVLAK, Monongahela, Pa. Filed May 25, 1929. Serial No. 366,022. 1 Claim. (Cl. 248—65.)



In combination, a bottle holder of the character described comprising a suspension bracket formed to provide a yoke adapted for engaging the bottle, a retaining cap pivotally connected to said yoke and shiftable relatively to the latter for securing said bottle in said yoke and for effecting the release of the bottle from the latter, a resilient element engaging said yoke and said retaining cap for normally maintaining the latter in the securing position, the outer ends of said yoke being disposed upwardly, a pair of guide arms carried by said retaining cap and extending through said yoke for maintaining the

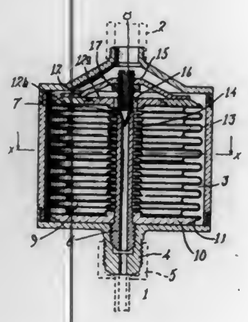
proper alignment of said retaining cap on the latter, a stop lug carried by the lower end of each of said pair of guide arms and engaging said yoke for limiting the releasing movement of said retaining cap, a forwardly inclining lip carried by the forward side of said retaining cap to facilitate the manipulation of the latter, and a supporting element connected with said suspension bracket and vertically adjustable relatively to the latter.

1,818,060. WAREHOUSE TRUCK. WILLIAM HOLMAN, Manly, near Sydney, New South Wales, Australia. Filed Sept. 1, 1928, Serial No. 303,581, and in Australia Oct. 25, 1927. 2 Claims. (Cl. 254—10.)



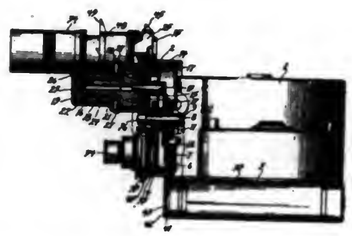
1. A lifting truck comprising an under frame including forward and rear transverse axles, wheels mounted upon said axles, longitudinal side frame members mounted on said axles adjacent said wheels, the longitudinal frame members being formed from angle irons and being bent arcuate in shape at the forward end thereof, an upper frame, links uniting said under and upper frames, a pin on the forward end of said upper frame, and a latch on the arcuate portion of the longitudinal members of said under frame adapted to engage the pin on said upper frame in the elevated position of the upper frame.

1,818,061. AUTOMATIC EXPANSION VALVE FOR ARTIFICIAL REFRIGERATING SYSTEMS. CLARENCE M. HOLLEY, Detroit, Mich., assignor, by mesne assignments, to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Aug. 26, 1918, Serial No. 251,583. Renewed Aug. 29, 1924. 10 Claims. (Cl. 50—21.)



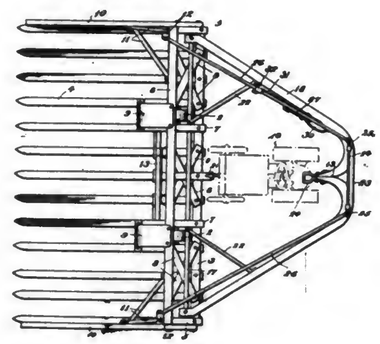
2. In a refrigerating apparatus of the described character, the combination of a valve chamber having communication with the refrigerant circulatory system, a valve controlling such communication, and a gas filled hermetically sealed collapsible chamber arranged within the valve chamber and operatively and rigidly connected with the valve and adapted to actuate same.

1,818,062. PHOTOGRAPHIC CAMERA. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed June 9, 1928. Serial No. 284,206. 11 Claims. (Cl. 95—45.)



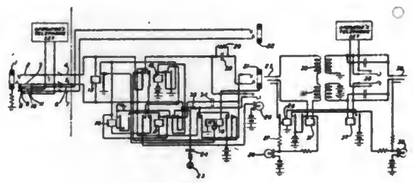
1. The combination with a photographic camera, of a stud on the camera and projecting exteriorly thereof, a bored lens carrying member revolubly carried on the projecting portion of said stud and removable over the outer end thereof, radially disposed and operable pins on said carrying member for releasably retaining said carrying member on said stud, and spring means for maintaining said pins in retaining position and adapted for the manual movement of said pins into releasing position.

1,818,063. RAKE. BIRD C. HUFFMAN, Tryon, Nebr. Filed Mar. 13, 1929. Serial No. 346,685. 1 Claim. (Cl. 56—397.)



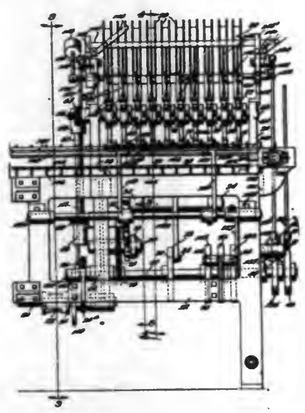
The combination with a sweep rake, of a draft frame comprising rearwardly converging side bars having their front ends pivotally connected with the rake and their rear ends defining forwardly curved terminals extending toward each other and meeting in tapered extremities, and a bracket fitted to and secured upon and projecting forwardly from said tapered terminals to be coupled to a tractor.

1,818,064. TELEPHONE SYSTEM. HERBERT B. JOHNSON, Flushing, N. Y., and ERICH VON NOSTITZ, Westfield, N. J.; said Johnson assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York, and said von Nostitz assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 11, 1930. Serial No. 481,168. 9 Claims. (Cl. 179—51.)



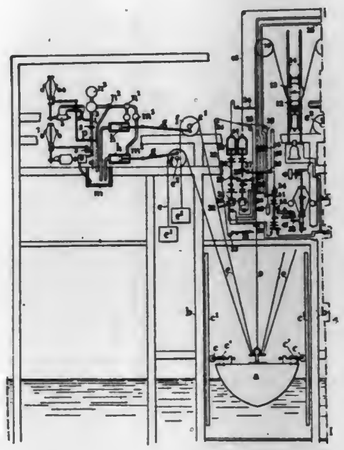
1. An established telephone connection, comprising a source of talking current and a supervisory device, a trunk circuit including a holding relay responsive to said source of talking current, a break point in said trunk beyond said holding relay, a bridge circuit across said trunk beyond said break point, another source of talking current and a supervisory device inductively coupled with said bridge circuit, and means controlled by said second supervisory device for controlling said break point for in turn controlling said first supervisory device.

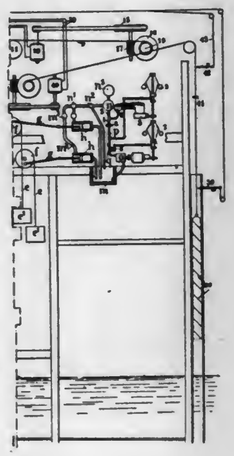
1,818,065. PACKAGE ASSEMBLING MACHINE. RUEL ANDERSON JONES, Covington, Ky., assignor to R. A. Jones & Company, Inc., Covington, Ky., a Corporation of Kentucky. Filed June 26, 1929. Serial No. 373,815. 27 Claims. (Cl. 270—58.)



1. In a machine of the class described, a package magazine having a plurality of channels, a transfer device having a plurality of carriers corresponding in number to the channels, means for cooperatively moving said magazine and transfer device to dispose a package from each channel on the adjacent carrier of the transfer device, a conveyor mounted relative to said transfer device, means for moving said transfer device and said conveyor in synchronized intermittent motion, and means for releasing the packages from said transfer device into said conveyor, said intermittent motion and release means causing the packages to be progressively stacked in the advancing conveyor.

1,818,066. SYSTEM FOR RECOVERING THE ENERGY OF THE MOVEMENTS OF THE SEA. JULES JOUY, Epernay, France. Filed July 6, 1929, Serial No. 376,343, and in France June 4, 1929. 8 Claims. (Cl. 253—10.)



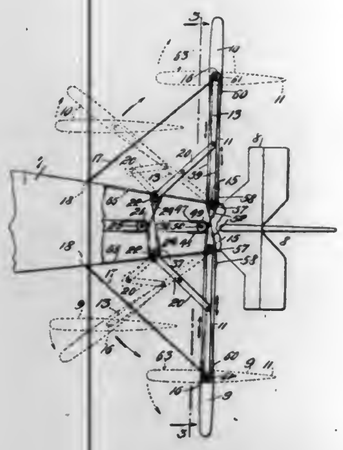


1. A device for transforming the energy of sea waves comprising a float adapted to be raised by said waves, a hoisting means for said float and automatic means operating said hoisting means upon excessive displacement of said float.

1,818,067. AEROPLANE. FREDERIC F. KOOKOGEY, New York, N. Y. Filed Oct. 28, 1929. Serial No. 402,869. 5 Claims. (Cl. 244—29.)

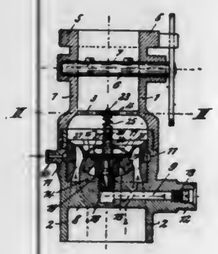
1. The combination with an aeroplane fuselage having laterally projecting rudder members at its rear end, of a braking device located forward of the rudder members and comprising two brake planes located one on each side of the fuselage and having an inoperative position substantially parallel with the sides of the fuselage, and an extreme operative position at right angles to the axis of the fuselage with the inner ends of the planes spaced from the sides of

the fuselage a distance substantially equal to the amount the rudder members project laterally from the fuselage,



means for supporting the brake planes, and means under the control of the operator for moving the brake planes into and out of operative position.

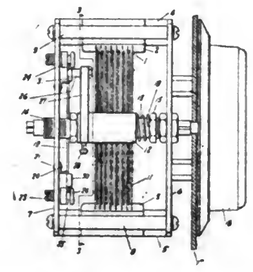
1,818,068. FLOATLESS CARBURETOR. MAX KREHER, Freiberg, Germany, assignor to Curt Ludwig, Annaberg, Germany. Filed Dec. 10, 1928, Serial No. 324,995, and in Germany Sept. 8, 1928. 4 Claims. (Cl. 261—18.)



1. A floatless carburetor, comprising in combination with the casing, a transverse bar in said casing having a boring forming a benzine channel, a bearing brass in said transverse bar, a rose-like head on said bearing brass for finely distributing the benzine, a screw for clamping said head on said bearing brass and having a central boring forming a passage for the benzine, a seat in the boring of said screw, a regulating needle in said boring bearing on said seat, a shutting off plate having apertures in its bottom loosely mounted on said regulating needle, and a three armed blade spring coupling said plate with said needle so that they are adjusted together in dependence of each other.

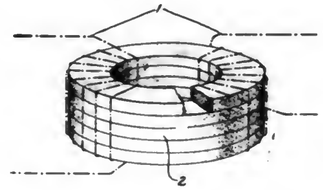
1,818,069. ELECTRICAL CONDENSER. GEORGE L. LANG, South Orange, N. J. Filed May 17, 1926. Serial No. 109,518. 8 Claims. (Cl. 175—41.5.)

1. In an electrical condenser having a group of stator plates and a cooperating group of rotor plates with means for rotatably adjusting the angular position between the stator and rotor plates and means independently adjustable



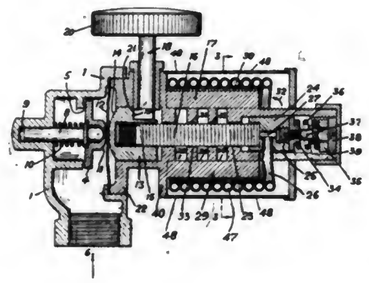
at different points at will for varying automatically the lateral position of one group of said plates with respect to the other for the purpose described.

1,818,070. MAGNETIC BODY. HUBBEL LATHROP, Greenwich, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1930. Serial No. 459,564. 8 Claims. (Cl. 175—21.)



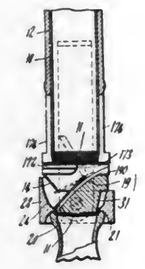
1. A magnetic body consisting of finely divided nickel-iron alloy and an insulating and binding material comprising sodium silicate of high silica to soda ratio and talc only between the alloy particles.

1,818,071. THERMOSTATIC CONTROL DEVICE FOR VALVES. JAMES J. LAWLER, Mount Vernon, N. Y., assignor to Direct Control Valve Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 20, 1928. Serial No. 313,661. 21 Claims. (Cl. 236—42.)



1. Valve controlling apparatus including, in combination, a valve, an expansible and contractile valve controlling cell filled with expansible and contractile thermo-responsive fluid and operatively connected with said valve, a heat conductive, radiator block in lateral proximity to said cell for radiation of heat to said cell, a heating fluid chamber of heat conductive material and communicating with said valve, said block being of massive construction and adapted to absorb and store a large quantity of heat adjacent said cell, and being in heat conductive contact with said fluid chamber.

1,818,072. CAPPING BOTTLES. EUGENE R. LEIGHTON, North Andover, Mass., assignor to Jennie E. Leighton, North Andover, Mass. Filed Oct. 23, 1928. Serial No. 314,416. 2 Claims. (Cl. 226—92.)



1. A device of the class described comprising a support for a stack of milk bottle caps, and means for taking the lowermost cap from the stack, inverting it, and fixing it in the mouth of a milk bottle, said means including longitudinally convex spaced ribs with which one face of said cap engages and along which it is moved during a portion of its inversion.

1,818,073. PROCESS OF TREATING OILS AND PRODUCT THEREOF. JAMES SCOTT LONG, Bethlehem, Pa., assignor of one-third to Lehigh University, a Corporation of Pennsylvania, and one-third to Archer-Daniels-Midland Company, a Corporation of Delaware, and William O. Goodrich Company, a Corporation of Wisconsin. Filed Mar. 8, 1929. Serial No. 345,579. 28 Claims. (Cl. 87—12.)

1. The process which comprises subjecting a drying or semi-drying oil material to the action of impinging rays of electrons.

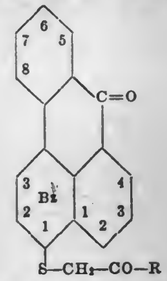
2. The process which comprises subjecting a drying or semi-drying oil material to the action of impinging cathode rays.

1,818,074. CONDENSATION PRODUCTS OF THE BENZANTHRONE SERIES. ARTHUR LUETTRINGHAUS, Mannheim, HEINRICH NERESHEIMER, Ludwigshafen-on-the-Rhine, and HANS JOSEF EMMER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1928, Serial No. 323,561, and in Germany Dec. 8, 1927. 10 Claims. (Cl. 260—61.)

10. A process for the production of condensation products of the benzanthrone series which comprises treating a mixture of a benzanthrone with free 2-position and a compound of the general formula $X—CH_2—R$ in which R stands for hydrogen or a hydrocarbon radicle which may be substituted and X stands for the nitrile group, NC—, the acid amide group, $NH_2—CO$, or the acyl group, R'—CO, in the latter group R' standing for a hydrocarbon radicle which may be substituted, with an alkaline condensing agent.

1,818,075. CONDENSATION PRODUCTS AND VAT DYESTUFFS OF THE BENZANTHRONE SERIES. ARTHUR LUETTRINGHAUS, Mannheim, HEINRICH NERESHEIMER, Ludwigshafen-on-the-Rhine, and WILLY EICHHOLZ, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1928, Serial No. 323,562, and in Germany Dec. 8, 1927. 8 Claims. (Cl. 260—53.)

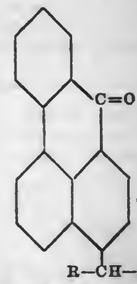
1. A process for the production of condensation products of the benzanthrone series, which comprises treating a derivative of benzanthrone of the general formula:—



in which R stands for an alkyl or aryl group which may be substituted, and in which the 2-position must be unoccupied, with an alkaline condensing agent.

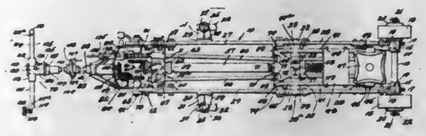
1,818,076. DERIVATIVES OF BENZANTHRONE. ARTHUR LUETTRINGHAUS, Mannheim, HEINRICH NERESHEIMER, Ludwigshafen-on-the-Rhine, and HANS JOSEF EMMER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware Filed Dec. 7, 1928, Serial No. 324,576, and in Germany Mar. 9, 1928. 7 Claims. (Cl. 260—61B.)

4. A process for the production of 2-alkyl-benzanthrones, which comprises treating a condensation product of a benzanthrone and a ketone corresponding to the general formula:



in which R stands for hydrogen or an alkyl group and R' stands for a hydrocarbon radicle which may be substituted, with an alkaline saponifying agent.

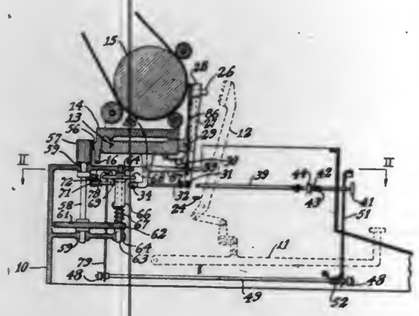
1,818,077. MECHANICAL JACK. ROBERT E. MANLEY and FREDERICK T. FLINCHBAUGH, York, Pa., assignors to The Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed Dec. 3, 1928. Serial No. 323,440. 20 Claims. (Cl. 254—6.)



1. In a lifting jack, the combination with a frame, a lifting member pivotally mounted on the frame, and a rotatable member connected with the lifting member for

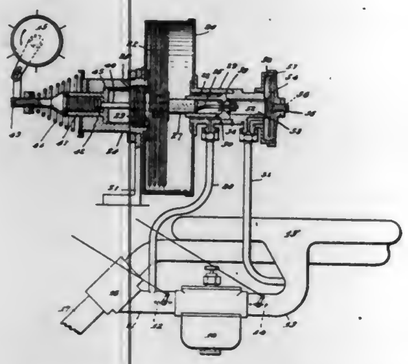
elevating and lowering it, of an actuating lever pivotally connected with the frame, means carried by the lever for operating the rotatable member with a step by step movement by an oscillating movement of the lever, and rotatable means carried by the lever operable to turn the rotatable member to facilitate a rapid movement of the lifting member.

1,818,078. UNDERSCORING APPARATUS FOR TYPEWRITERS. ROY H. MANLY, Birmingham, Ala. Filed Nov. 9, 1929. Serial No. 405,883. 8 Claims. (Cl. 197—113.)



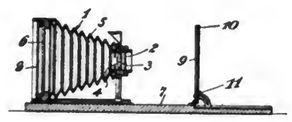
1. In a typewriter, type bars, a platen carriage movable in one direction upon operation of the type bars and manually movable in the opposite direction, a platen, a type bar guide in front of the platen, an underscoring type bar pivotally supported in front of the platen and having its striking end disposed in the type bar guide, the lower end of said underscoring type bar depending below the carriage, power actuated means operable in response to movement of the platen carriage upon operation of the type bars for striking the lower end of said underscoring type bar, and means for automatically disengaging the power actuated means upon a reverse movement of the carriage.

1,818,079. AUTOMATIC SPARK CONTROL. HAROLD W. MEADE, Yeddo, Ind. Filed Jan. 5, 1929. Serial No. 330,456. 19 Claims. (Cl. 123—117.)



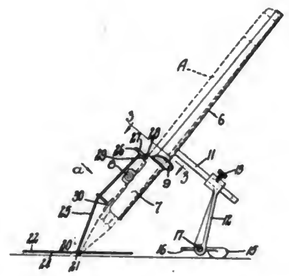
1. In combination with an internal combustion engine having a timer adjustable to control the degree of spark advance, said engine also having a carburetor provided with the usual throttle, a conduit forming a by-pass around said throttle, a valve for regulating flow through said by-pass, and pressure-responsive means responsive to the pressure at a point between said valve and the inlet opening of said by-pass, said pressure-responsive means being operatively connected to said timer to advance the spark as the pressure to which said pressure-responsive means is subjected decreases, said valve being connected to said pressure-responsive means so that it will operate to decrease flow through said by-pass as said pressure-responsive means responds to a decreased pressure.

1,818,080. PRINT. OSBORN MAITLAND MILLER, New York, N. Y. Filed July 10, 1928. Serial No. 291,672. 11 Claims. (Cl. 95—5.1.)



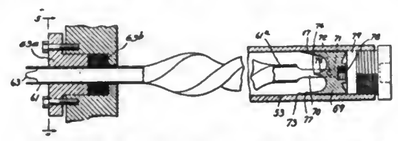
1. The process of making accurately graded half tone tints on a print which consists in making a photographic copy of the drawing, successively altering the surface of successive areas on said copy, successively photographing on a single plate the copy after each alteration to build up and add to a latent image of the successive alterations, and preparing from the developed latent images a half-tone printing plate.

1,818,081. POSITIONING DEVICE FOR WRITING IMPLEMENTS. JAMES T. MINGOS, Boston, Mass. Filed Feb. 18, 1930. Serial No. 429,241. 10 Claims. (Cl. 120—107.)



1. A device of the character described having, in combination, a holder for a writing implement, means to clamp said holder to said implement, and means to position the holder to vary the inclination of the implement with relation to a writing surface.

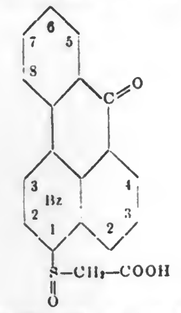
1,818,082. APPARATUS FOR HEAT EXCHANGING. GEORGE T. MOTT, Pearl River, N. Y. Filed Aug. 10, 1928. Serial No. 298,789. 5 Claims. (Cl. 257—238.)



1. A return flow element including in combination, an outer tube having a closed end, and an inner tube encased within and communicating with the outer tube, one of said tubes being twisted to afford a tortuous passage therethru including a straight flow passage.

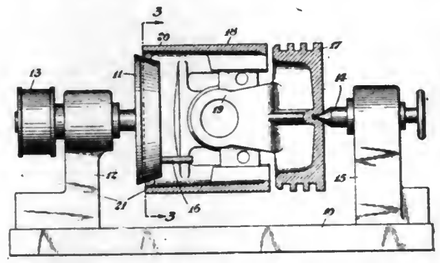
1,818,083. CONDENSATION PRODUCTS OF THE BENZANTHRONE SERIES. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, OTTO BRAUNSDORF, Hochst-on-the-Main, and ALFRED EHRHARDT, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1928, Serial No. 323,559, and in Germany Dec. 29, 1927. 6 Claims. (Cl. 260—53.)

1. A process for the production of condensation products of the benzanthrone series which comprises treating a compound probably corresponding to the formula:



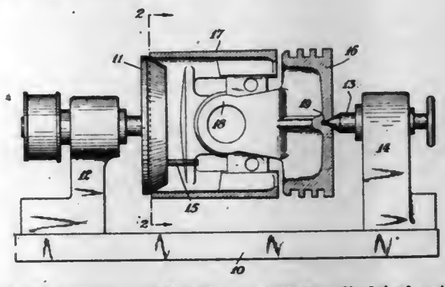
in which the 2-position must be free and the caboxylic group may be substituted by such other groups as are capable of being saponified to a carboxylic group, with an alkaline condensing agent and converting the condensation product into a vat dyestuff by means of a mild oxidizing agent.

1,818,084. METHOD OF GRINDING. ADOLPH L. NELSON, Detroit, Mich., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Filed May 3, 1928. Serial No. 274,716. 5 Claims. (Cl. 51—278.)



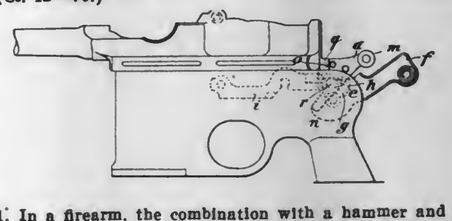
1. The method of finishing a hollow, cylindrical article which comprises supporting the interior of an open end in such a way as to support the wall of the article more firmly along one diameter of the article than along a second diameter at right angles to the first diameter, and then grinding the exterior of the article.

1,818,085. OVAL GRINDING. ADOLPH L. NELSON, Detroit, Mich., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Filed May 5, 1928. Serial No. 275,317. 4 Claims. (Cl. 51—278.)



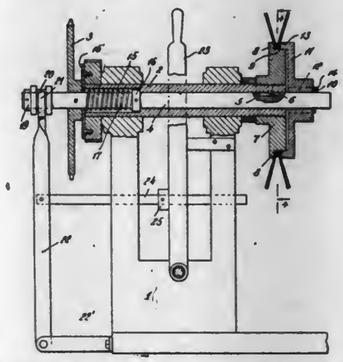
1. The method of finishing a hollow cylindrical article which comprises expanding an end of the article into oval exterior shape, grinding the exterior surface of the expanded cylinder into truly cylindrical shape, and then releasing the expanded end to permit the exterior circumference thereof to assume an oval shape.

1,818,086. SAFETY DEVICE FOR FIREARMS. JOSEF NICKL, Oberndorf, Germany, assignor to Mauser-Werke A. G., Oberndorf, A. N., Germany, a Joint-Stock Company of Germany. Filed Sept. 11, 1930, Serial No. 481,257, and in Germany Sept. 24, 1929. 8 Claims. (Cl. 42—70.)



1. In a firearm, the combination with a hammer and a sear, of a safety lever having means for guiding the said sear so as to allow of cocking the hammer even when the firearm is in "safe" condition and means for locking the hammer when released to fly forward, prior to striking upon the firing pin.

1,818,087. APPARATUS FOR MAKING ROTARY BRUSHES. LAURITS HENRIK NIELSEN, Kolding, Denmark, assignor to Newark Brush Company, a Corporation of New Jersey. Filed Feb. 28, 1930. Serial No. 432,251. 19 Claims. (Cl. 300—2.)



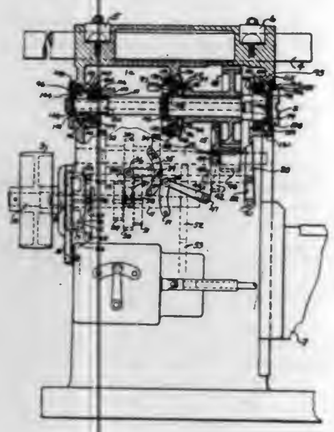
1. In a machine for making rotary brushes, the combination of a rotary support, a head fast on the support,

said head including a circumferential flange and a cylindrical extension, a second head mounted on the support, said head fitting over said extension and cooperating with the flange and extension to define a groove, means for driving the support, and means for producing a relative movement of the second head and the support to release said head therefrom.

1,818,088. BRAKE ELEMENT. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 6, 1928. Serial No. 310,932. 9 Claims. (Cl. 188—250.)

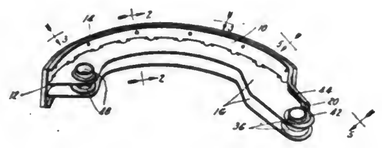
1. A process of making brake linings comprising attaching a woven fibrous material to the brake element, subjecting the lining to elevated temperatures and subsequently impregnating the lining.

1,818,089. MILLING MACHINE TRANSMISSION. FRED A. PARSONS, Milwaukee, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed May 9, 1930. Serial No. 450,914. 9 Claims. (Cl. 90—11.)



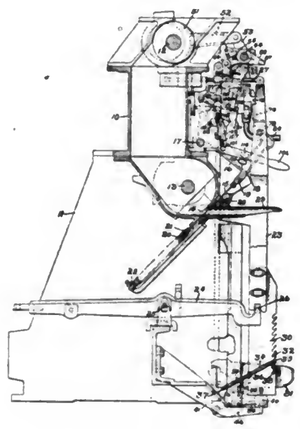
9. In a milling machine, the combination of a hollow column having a front and rear wall, a horizontal tool spindle rotatably supported from said column and having a front end exposed outside said front wall and providing an arbor socket, a knee slidably guided on said front wall for vertical movement, a saddle slidably guided on said knee for movement transverse to said knee movement, a work table slidably guided on said saddle for movement in a direction transverse to said saddle movement and transverse to the axis of said spindle, a cutter arbor seated in said socket for co-axial rotation from said spindle and extending over said table, a support for the end of said arbor over said table including an overarm device adjustably supported from said column for movement in a direction parallel with the axis of said spindle and arbor, bearings for said spindle and arbor including a front spindle bearing associated with said front wall, a rear spindle bearing associated with said rear wall, an intermediate spindle bearing approximately centrally between said front and rear walls and an arbor bearing supported from said overarm device, said spindle bearings being adapted to fix the axial position of said spindle and arbor in either direction, a cutter fixed on said arbor at a point between said front spindle bearing and said arbor bearing, and a transmission for driving said cutter including a rate changer within said hollow column and adapted to actuate said spindle at a point between said front and intermediate bearings.

1,818,090. BRAKE SHOE AND METHOD OF MAKING SAME. JOHN W. PETERSON, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 10, 1927. Serial No. 160,016. 18 Claims. (Cl. 29—152.)



1. A brake shoe comprising, in combination, an arcuate band formed with openings surrounding by depressions, and a strengthening web having projections extending through the openings and welded down into the depressions.

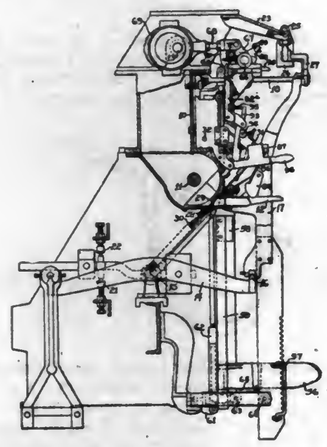
1,818,091. AUTOMATIC CEMENT PACKING MACHINE. WILLIAM R. PETERSON, Chicago, Ill., assignor, by mesne assignments, to Bates Valve Bag Corporation, Chicago, Ill., a Corporation of New Jersey. Filed July 20, 1927. Serial No. 207,152. 16 Claims. (Cl. 249—60.)



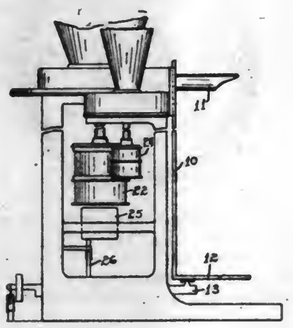
1. Apparatus for filling valve bags comprising a filling spout adapted to enter the valve of a bag, mechanical means for forcing the bag from the spout when filled, and means controlling the operation of said mechanical means by the weight of material in the bag.

1,818,092. APPARATUS FOR FILLING AND WEIGHING BAGS. WILLIAM R. PETERSON, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Aug. 8, 1927. Serial No. 211,371. 14 Claims. (Cl. 249—60.)

1. In filling and weighing apparatus, a scale beam, a container-support pivotally mounted on the beam, a feeding device for filling material into a container on said support, a link above and parallel with the beam for maintaining the support in correct vertical position, said position being such as to constantly exert an endwise pull on the link, and knife-edge pivotal connections at each end of the link arranged to be held in tight engagement by said endwise pull.



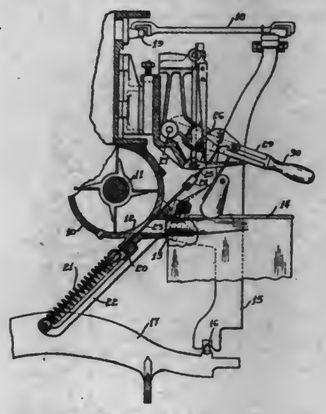
1,818,093. FEEDING DEVICE FOR VALVE BAGS. WILLIAM R. PETERSON, Chicago, Ill., assignor to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1929. Serial No. 403,297. 4 Claims. (Cl. 249—60.)



1. In apparatus for filling packages, a frame adapted to support the package to be filled and carrying a spout adapted to deliver material to the package, means providing a main delivery orifice and a supplemental delivery orifice beneath the main orifice, and a weighing device supporting the frame with its spout in registry with the main orifice when a package on the frame is empty, and adapted to yield to weight in the package and lower the frame to register the spout with the supplemental orifice.

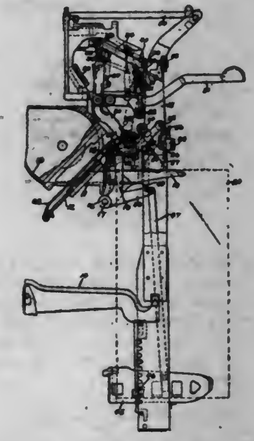
1,818,094. SHUT-OFF DEVICE FOR BAG FILLING MACHINES. WILLIAM R. PETERSON, Chicago, Ill., assignor to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1929. Serial No. 403,299. 3 Claims. (Cl. 249—60.)

1. Apparatus for filling bags comprising a filling device having a discharge opening through which material is discharged into a bag, a gate for said opening, a spring constantly tending to close said gate, a bracket adjustable with respect to said opening, a lever fulcrumed on said bracket and connected to said gate, an arm on said lever,



a latch fulcrumed on the bracket and adapted to engage said arm and hold the lever in gate-opening position, and means for releasing said latch when a bag is filled.

1,818,095. VALVE BAG FILLING MACHINE. WILLIAM R. PETERSON, Chicago, Ill., assignor to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1929. Serial No. 403,300. 5 Claims. (Cl. 265—60.)

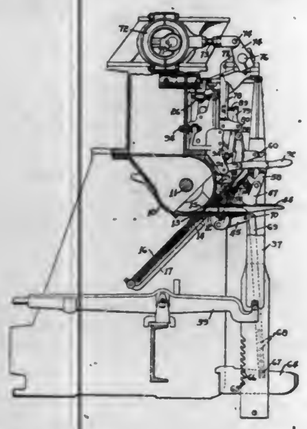


1. In a device for filling valve bags, a spout adapted to enter the valve of a bag, a clamp adapted to lock the valve upon the spout, pivotal means upon which the spout is mounted, and a latch adapted normally to maintain the spout in horizontal position, said latch being adapted to engage and release said clamp when the latch is moved to release the spout.

1,818,096. BAG FILLING AND DISCHARGING APPARATUS. WILLIAM R. PETERSON and NEILL E. DORRINGTON, Chicago, Ill., assignors to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1929. Serial No. 411,422. 4 Claims. (Cl. 249—60.)

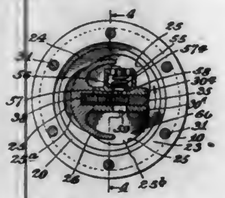
1. In apparatus for filling and discharging valve bags, a discharging device having a discharge orifice, a gate con-

trolling the orifice, said orifice being approximately horizontal and the gate closing by moving upward and outward across said orifice, means for opening and closing the gate, a lever connected with the gate, a latch adapted to engage an arm on said lever and hold the gate open, a



frame having a spout thereon adapted to enter the valve of a bag, weighing means upon which said frame is mounted, and a lug on said frame in position to engage the latch when the frame is in its raised position and to release the latch when the frame is lowered.

1,818,097. PUMP. JOSEPH V. PETRELLI, New Rochelle, N. Y. Filed Sept. 28, 1929. Serial No. 395,832. 13 Claims. (Cl. 103—121.)



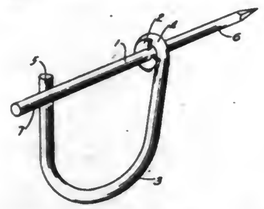
1. A pump comprising a casing, a rotor having impeller formations, non-rotary guide structure, a vane slidably mounted in the guide structure and cooperating with the impeller formations, a sealing element also supported by the guide structure, and means located in the guide structure and urging the vane to reciprocate in contact with the impeller formations.

1,818,098. HYDRAULIC HONING AND LAPPING MACHINE. THOMAS F. QUIGLEY, Cleveland, Ohio, assignor to Micromatic Hone Corporation, a Corporation of Michigan. Filed Feb. 23, 1928. Serial No. 256,244. 19 Claims. (Cl. 51—184.3.)



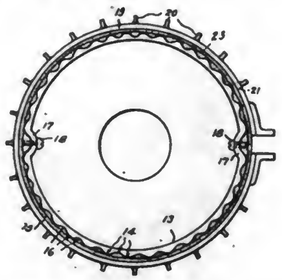
1. In a honing or lapping tool of the class described, in combination, a head, a plurality of abrading members carried by said head expanding elements cooperative with opposite ends of the abrading members, and means connecting these elements for separate movement to maintain the expanding elements in positions positively holding the abrading members to their work, said means allowing the expanding members to move relative to each other during the abrading operations.

1,818,099. DRIVE RING. JOHN A. RAPELJE, Boonton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1928. Serial No. 289,243. 4 Claims. (Cl. 248—36.)



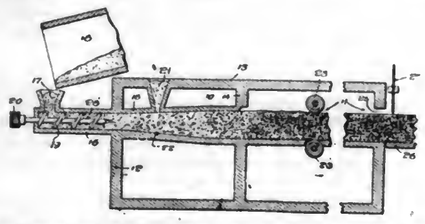
1. A drive ring comprising a single piece of wire bent to form a substantially U-shaped member, one leg of which is straight, the other having an eyelet formed thereon, and means extending through said eyelet for securing the drive ring to a supporting surface, said securing means extending from the eyelet portion to said straight leg portion to substantially close the top of said U-shaped member.

1,818,100. FRICTION BRAKE. BENJAMIN F. SHIELDS, Seattle, Wash. Filed Nov. 28, 1927. Serial No. 236,313. 14 Claims. (Cl. 188—218.)



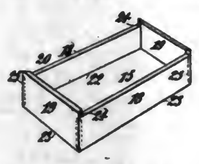
1. In a brake of the external band type, a rotatable drum, an endless one piece molded brake lining arranged to extend entirely around said drum and interfitting corrugations on the interior of the lining and the exterior of the drum to prevent relative rotation between the lining and the drum.

1,818,101. METHOD OF EXTRUDING A BLOATED CLAY PRODUCT. KEMPER SLIDELL, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed Nov. 29, 1929. Serial No. 410,419. 22 Claims. (Cl. 25—156.)



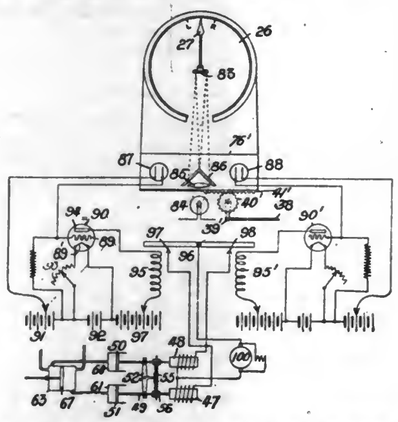
1. The method of producing cellular material which consists in feeding granular earthy material into a heat zone maintained at a bloating temperature, and in confining the material while in granular form and while in the heat zone, in order to effect fusion and bloating of the material while subjected to confinement, the bloated material being extruded from the zone of confinement under pressure due to expansion of the material.

1,818,102. BOX AND METHOD OF MAKING THE SAME. GEORGE C. SNYDER, Long Island City, N. Y., assignor to The Guardian Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 7, 1928. Serial No. 304,424. 7 Claims. (Cl. 229—30.)



1. A box blank, of laminated sheet material having a rectangular main body, and flaps extending from the four side boundaries of the main body, the blank having grooves which define such boundaries, the side walls of the respective grooves being at substantially right angles to each other and the grooves meeting at the spaces between the flaps, said groove side walls being spaced away from each other, at their closest points, and the inner side walls of such grooves being extended along the side edges of the flaps to provide correspondingly beveled edges.

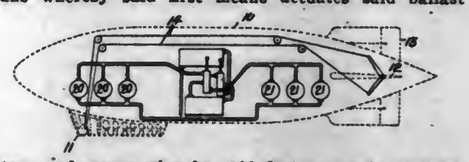
1,818,103. AUTOMATIC PILOT. ELMER A. SPERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 3, 1926. Serial No. 99,678. 6 Claims. (Cl. 172—282.)



1. In an automatic steering device for dirigible craft, a controller responsive to course deviation, comprising a light, a bi-angle mirror, follow-up means for shifting said bi-angle mirror, a photo-electric valve on either side thereof, and a power multiplying system actuated by said valves for controlling the rudder.

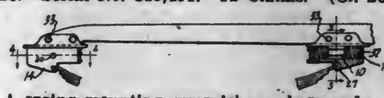
1,818,104. MEANS FOR CONTROLLING DIRIGIBLE AIRCRAFT. ELMER A. SPERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 22, 1928. Serial No. 321,128. 10 Claims. (Cl. 244—6.)

5. In combination with a dirigible aircraft having a horizontal rudder, a ballast system disposed about an athwartship axis, means responsive to tilting of the craft, means whereby said first means actuates said ballast



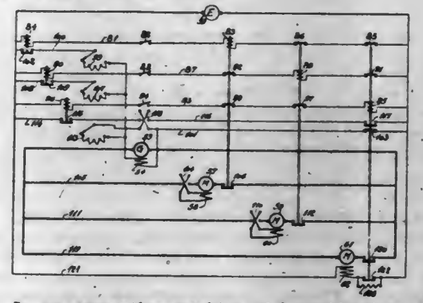
system, and means whereby said first means is rendered effective when said horizontal rudder is rendered ineffective due to insufficient speed of the craft.

1,818,105. SPRING MOUNTING FOR MOTOR VEHICLES. EDWARD R. SPIEGEL, Dallas, Tex., assignor of thirty-four per cent to John W. Miller and fifteen per cent to Jack A. Schley, Dallas, Tex. Filed Nov. 15, 1928. Serial No. 319,491. 11 Claims. (Cl. 267—29.)



1. A spring mounting comprising a hanger for stationary attachment to the frame of a motor vehicle, a casing slidable on the hanger, means for attaching the end of a vehicle spring to the casing, and means interposed between the hanger and the casing and adjustable for taking up the wear therebetween.

1,818,106. EXCAVATING MACHINERY. PAUL S. STEVENS, South Milwaukee, Wis., assignor to Bucyrus-Erie Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 26, 1926. Serial No. 104,633. 14 Claims. (Cl. 172—239.)



1. In an excavating machine, the combination of: a generator; means for driving said generator; a plurality of motors; a controller for each motor, said controller being characterized by the fact that it is adapted to connect electrically its motor to the generator, to vary the field of he generator, and to reverse its motor, and interlocking means whereby, when one motor is being actuated, it is rendered impossible to couple any other motor to the generator.

1,818,107. HIGH FREQUENCY COIL FOR ELECTRIC INDUCTION FURNACES. GEORGE EDWARD TAYLOR, London, England, assignor to Ajax Electrothermic Corporation, Trenton, N. J., a Corporation of New Jersey. Filed July 5, 1928, Serial No. 290,400, and in Great Britain Dec. 7, 1927. 2 Claims. (Cl. 13—27.)

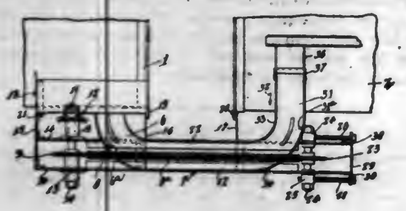


1. In an electric inductor furnace, an inductor coil comprising in each turn a tubular member flattened in one part to provide a solid radially inner conducting portion and a radially exterior hollow part to receive a cooling liquid.

1,818,108. PROCESS OF MANUFACTURING CELLULOID-LIKE MASSES. MAX JOSEPH THEUMANN, Lyon, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed July 8, 1926, Serial No. 120,536, and in Germany July 14, 1925. 2 Claims. (Cl. 134—79.)

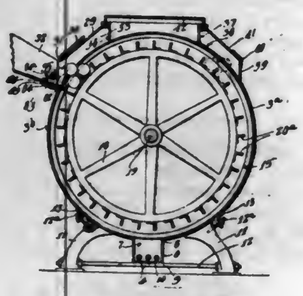
1. A process for the preparation of a celluloid-like mass from an acetone-soluble acetyl cellulose practically insoluble in ethyl acetate, which consists in treating the acetyl cellulose with a solvent mixture containing 33 to 48 parts by weight of acetone, 32 to 52 parts by weight of benzol and 14 to 20 parts by weight of an alcohol, the relative proportions by weight of acetyl cellulose and solvent mixture being approximately 75 and 50.

1,818,109. COMBINED COOKER AND COOLER CAN TRANSFER MEANS—NON-AGITATING TYPE. ALBERT R. THOMPSON, San Jose, Calif., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif., a Corporation of California. Filed Apr. 18, 1928. Serial No. 271,071. 5 Claims. (Cl. 126—272.)



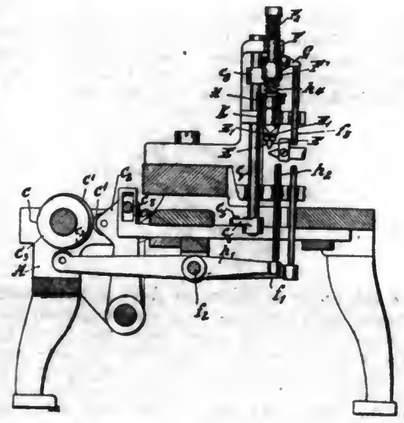
1. In a device of the class described the combination of a pair of treating chambers, means for transferring cans from one chamber to the other, including a relatively short driven conveyor over which the cans travel from one chamber to the other and during which transfer the cans are reversed end for end in traveling from one chamber to the other.

1,818,110. COMBINED COOKER AND COOLER. ALBERT R. THOMPSON, San Jose, Calif., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif., a Corporation of California. Original application filed Apr. 18, 1928, Serial No. 271,070. Divided and this application filed Jan. 7, 1929. Serial No. 330,805. 5 Claims. (Cl. 220—5.)



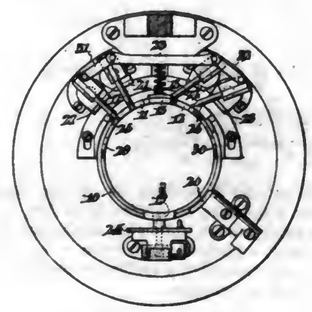
5. In a device of the class described, the combination of a shell of substantially cylindrical form, the shell being formed of two half sections and provided with double bends at their lowermost parts to provide a substantially rectangular chamber, and means for securing the adjacent longitudinal edges together in fluid tight relation.

1,818,111. MANUFACTURE OF WIRE CHAIN. RICHARD WIRTH, Frankfort-on-the-Main, and WILHELM BITTROLF, Pforzheim, Germany, assignors to Ernst Gideon Bek, Pforzheim, Germany. Filed Dec. 23, 1925, Serial No. 77,169, and in Germany Dec. 27, 1924. 5 Claims. (Cl. 59—16.)



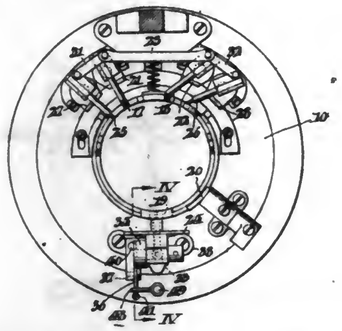
1. In a machine for making wire chain, in combination, link forming implements, means to feed link blanks toward said implements, a tool for grasping, raising and turning the last made link to position it across the path through which the link blanks are projected, said tool comprising a pincers-like arrangement of fingers, the fingers moving toward each other entering the link aperture and supporting the topmost link at the top and by the inner surface thereof, and while supporting said link, raising the link and turning it at an angle of substantially 90 degrees so that the link is positioned across the path through which the link blanks are projected said tool moving perpendicular to the plane in which the link is formed.

1,818,112. NEEDLE CONTROL MECHANISM FOR KNITTING MACHINES. WALTER D. BUTZ, Norristown, Pa., assignor of one-half to Louis N. D. Williams, Elkins Park, Pa. Filed Feb. 1, 1929. Serial No. 336,686. 13 Claims. (Cl. 66—48.)



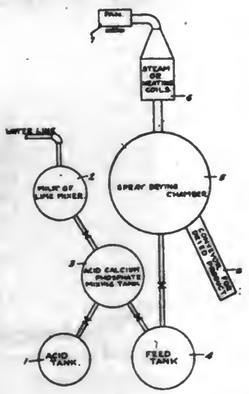
1. The combination with knitting machines equipped with a series of needles and instrumentalities for removing and adding end needles to fashion the web incidental to reciprocatory knitting, of auxiliary needle control mechanism embodying means subject to governance by the end needles to select needles alternately at a predetermined distance from opposite end needles for special action during knitting of current courses of the fabric.

1,818,113. NEEDLE CONTROL MECHANISM FOR KNITTING MACHINES. WALTER D. BUTZ, Norristown, Pa., assignor of one-half to Louis N. D. Williams, Elkins Park, Pa. Filed May 20, 1929. Serial No. 364,370. 10 Claims. (Cl. 66—48.)



1. The combination with a knitting machine equipped with a series of needles and instrumentalities for removing end needles successively from action to narrow the fabric incidental to reciprocatory knitting; of concurrently-operative mechanism including means to select needles at a predetermined distance from the end needles of the series for special action during knitting of current courses of the narrowing.

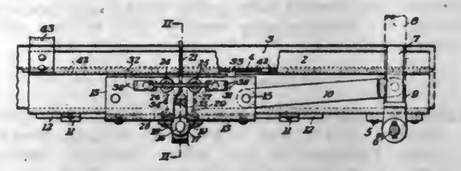
1,818,114. METHOD FOR THE PRODUCTION OF DRIED ACID CALCIUM PHOSPHATE. JOHN N. CAROTHERS, Anniston, Ala., and PAUL LOGUE, St. Louis, Mo., assignors, by mesne assignments, to Swann Research, Inc., Birmingham, Ala., a Corporation of Alabama. Filed June 11, 1926. Serial No. 115,191. 5 Claims. (Cl. 23—109.)



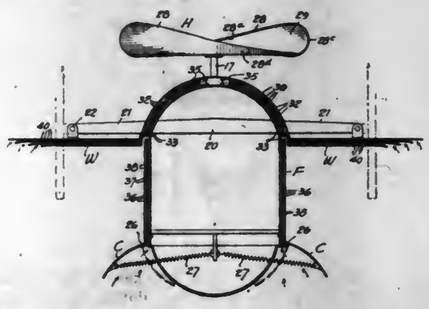
1. In the herein-described method of obtaining spray dried acid calcium phosphate, the step which consists in mixing phosphoric acid and lime to produce a suspension of acid calcium phosphate until said suspension contains approximately 5% excess lime over the theoretical requirement to produce mono calcium phosphate.

1,818,115. CONVEYER. CLARENCE R. CLAGHORN, Baltimore, Md. Filed Oct. 19, 1926. Serial No. 142,608. 23 Claims. (Cl. 198—220.)

3. A conveyer comprising a fixed trough, a movable trough mounted for longitudinal movement thereon, a lever connected to said fixed trough, a link connected to said lever, a frame connected to said link and longitudinally movable with respect to said fixed trough, and means operably associated with said frame for engaging said movable trough to move it relatively to said fixed trough longitudinally in either direction upon operation of said lever.



1,818,116. AEROPLANE. HARRY CORDY, Los Angeles, Calif. Filed Dec. 17, 1929. Serial No. 414,741. 16 Claims. (Cl. 244—15.)

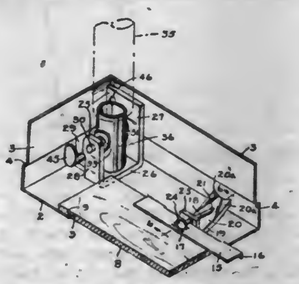


1. A fuselage for aeroplanes, the top and side walls of which are constructed of a plurality of partitions spaced apart to define air passages with entrance ends at the lower edges of the walls.

1,818,117. WORKING SUBSTANCE FOR PRODUCING HEAT TRANSFORMING EFFECTS. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 23, 1927. Serial No. 170,427. 4 Claims. (Cl. 252—5.)

1. A non-flammable volatile liquid having a boiling point below 65° C. comprising an inflammable halogenated hydrocarbon together with a sufficient quantity of a related halogenated hydrocarbon of higher halogen content to render the composition non-flammable.

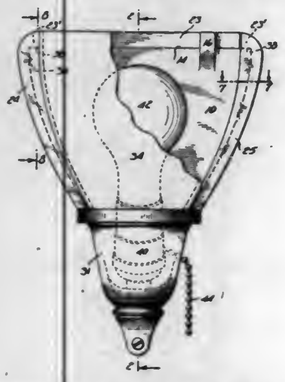
1,818,118. FOLDING TABLE. WILLIAM L. DEMING, Salem, Ohio. Filed Apr. 8, 1927. Serial No. 181,933. 2 Claims. (Cl. 45—11.)



1. In a folding table, a top having a depending flange at its edge, a U-shaped bracket secured to the top, a tubular leg-supporting member, a leg having a shank

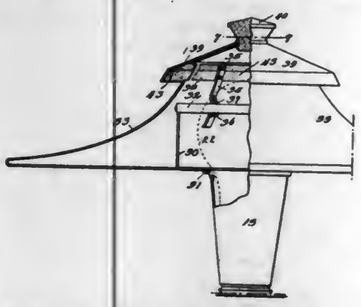
fitting within the leg supporting member, a pin supported by the bracket and extending through the leg-supporting member and leg shank, and for locking them together and pivoting them to the bracket and means for locking the leg-supporting member with the leg either folded or extended.

1,818,119. LIGHTING FIXTURE WALL BRACKET. LEROY C. DOANE and HERMAN H. WOLTER, Meriden, Conn., assignors to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Apr. 23, 1927. Serial No. 186,001. 9 Claims. (Cl. 240—78.)



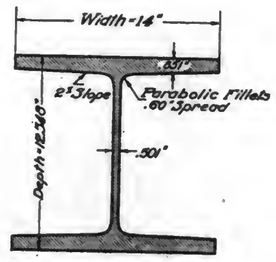
1. In a lighting fixture wall bracket, a front plate having a cross bar at the upper end, downwardly extending converging side members carried at the ends of the cross bar, and a forwardly extending upwardly and rearwardly opening, lamp socket pocket carried at the lower ends of the side members, a back wall plate having upwardly extending members to removably receive the cross bar on the front plate, the cross bar resting on the upper edge of the back plate, and a lamp socket housed in the pocket and supported from one of the plates.

1,818,120. LIGHTING APPLIANCE. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed July 7, 1928. Serial No. 290,897. 10 Claims. (Cl. 240—81.)



3. A lighting appliance having a single centrally located lamp bulb, an opaque shade about the lamp, the shade having window openings, a shade cover spaced outside the openings and adapted to redirect light received through the openings onto the outside of the shade, a shade support adjacent the lamp bulb, and quick detachable means for releasing the shade from the shade support, said means being adapted to support the shade about a depending lamp to provide upward illumination or to support the shade about an upright lamp to provide downward illumination.

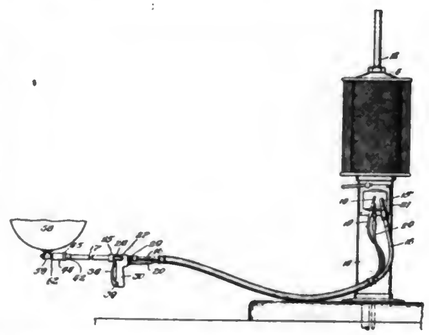
1,818,121. ROLLED H-SECTION. JAMES H. EDWARDS, Passaic, N. J., and ROBERT A. MARBLE, Ben Avon, Pa., assignors to United States Steel Corporation, New York, N. Y., a Corporation of New Jersey. Original application filed May 15, 1925, Serial No. 30,493. Divided and this application filed Sept. 24, 1929. Serial No. 394,764. 3 Claims. (Cl. 189—37.)



Weight of H Section (including Fillets)=100 lbs. per linear foot.
Area " " " (excluding Fillets)=29.402 square inches.
Section Modulus about Horizontal Axis=138.37 inches.³
Radius of Gyration about Vertical Axis=3.58 Inches.

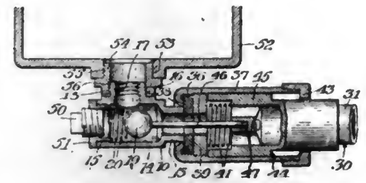
3. A rolled steel section of substantially or approximately H-shape in cross-section having substantially the following dimensions, depth 12.348 inches, width 14 inches, web .501 inch thick, the flanges having a thickness of .851 inch, the section weighing 100 pounds per linear foot.

1,818,122. RECEPTACLE-EVACUATING APPARATUS. HERMAN J. ENGBRECHT, Kansas City, Mo., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed May 5, 1925, Serial No. 32,745. Renewed Nov. 5, 1930. 2 Claims. (Cl. 184—1.5.)



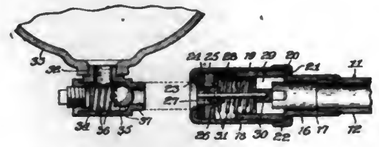
1. Apparatus for evacuating the crank cases of automobiles through lower drain outlets thereof comprising an extension pipe device comprising a head having a straight-way passage therethrough for the liquid to be drained from the crank case and a rigid pipe having an inlet at one end at which it is adapted to releasably communicate with said outlets, said rigid pipe being connected at its opposite end with said head and communicating with one end of said passage, a flexible hose line in communication with the other end of said passage, means for producing suction in said pipe, said extension pipe device being of such length that it extends from such an outlet to which it is applied, substantially to the side edge of the automobile, said head having a hand grip and means on said grip for controlling said suction-producing means.

1,818,123. ADAPTER FOR THE DRAIN OUTLETS OF CRANK CASES. HERMAN J. ENGBRECHT, Kansas City, Mo., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Original application filed Mar. 7, 1925, Serial No. 13,819. Divided and this application filed Aug. 11, 1926, Serial No. 128,583. Renewed Nov. 5, 1930. 10 Claims. (Cl. 184—1.5.)



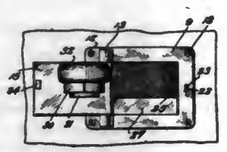
1. In an adapter for application to the drain-outlet of an automobile engine crank-case, a body having a hollow boss, said body also having an opening therethrough disposed at substantially a right angle to said boss, said boss and the portion of said adapter at one end of said opening being adapted to have solid rain plugs applied thereto and also adapted for connection with said drain-outlet.

1,818,124. DRAIN PIPE DEVICE. HERMAN J. ENGBRECHT, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Original application filed May 25, 1925, Serial No. 32,745. Divided and this application filed Nov. 6, 1926. Serial No. 146,767. 8 Claims. (Cl. 284—18.)



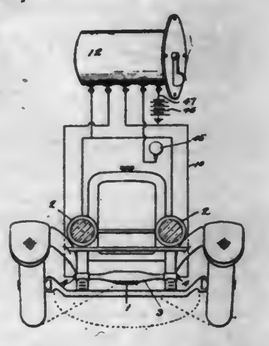
1. A pipe device comprising a pipe, a pin carried by, and movable with, said pipe, a sleeve surrounding, and slidable along, said pipe and having a seat portion, said sleeve being adapted to guidingly engage the outlet end of a valved discharge outlet and said seat portion to engage said outlet and make a joint therewith, whereby said pin, following the engagement of said seat portion with said outlet, moves inwardly with the pipe to open said valve, a spring for holding said sleeve in forwardly projecting position, and stop means comprising cooperating parts on said pipe and sleeve for limiting outward movement of said sleeve on said pipe under the action of said spring, said pin being spaced from said sleeve in the open condition of said valve.

1,818,125. SMOKER'S APPLIANCE. ROBERT CAMPBELL EVE, Atlanta, Ga. Filed Dec. 19, 1929. Serial No. 415,276. 4 Claims. (Cl. 206—19.5.)



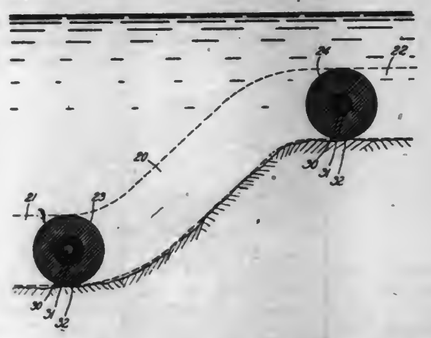
4. A smoker's appliance including a casing and a door therefor, a cigarette and cigar extinguisher mounted on the door and movable into and out of the casing when the door is closed and opened, and a tray located in the casing for the reception of cigars and cigarettes which have been extinguished by the extinguisher.

1,818,126. AUTOMOBILE ANTIGLARE LIGHTING SYSTEM. ERNEST GERMAIN, Montreal, Quebec, Canada. Filed May 18, 1927. Serial No. 192,392. 5 Claims. (Cl. 240—7.1.)



5. In combination with an automobile having forwardly projecting headlights, a lamp for reducing the glare from said headlights, horizontally supported through its opposed ends between the forwardly projecting portions of the underframe of said automobile, and extending abreast of said headlights and adapted to direct its rays of light over the base of each wheel and parallel with the road-bed whereby to oppose the rays emanating from said forwardly projected headlights.

1,818,127. SUBMARINE CABLE INSULATION. JOHN JOSEPH GILBERT, Port Washington, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 29, 1926. Serial No. 105,390. 13 Claims. (Cl. 173—264.)

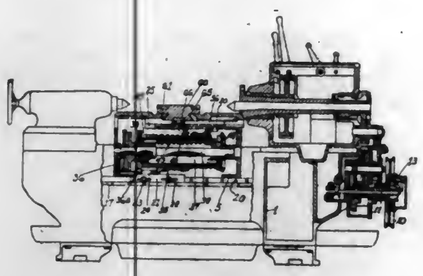


1. A non-loaded submarine telephone or telegraph cable comprising a conductor and an insulating material closely surrounding said conductor, said insulating material having a decreasing leakance with increasing pressure.

1,818,128. AUTOMATIC LATHE. WILLIAM F. GROENE, Cincinnati, Ohio, assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio, a Corporation of Delaware. Filed Aug. 12, 1926. Serial No. 128,818. 15 Claims. (Cl. 82—2.)

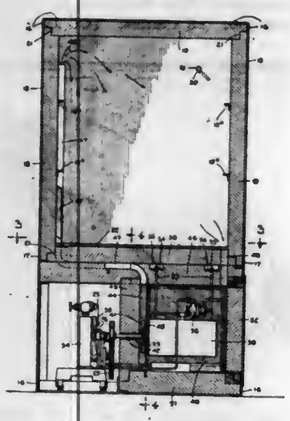
1. In a lathe, a frame, a carriage movable thereon, a cam element on the carriage, means for driving said cam element, a form bar plate mounted to slide under influence

of the cam element in the direction of movement of the carriage, a cross slide on the carriage, and a form bar on the plate engaging said cross slide.



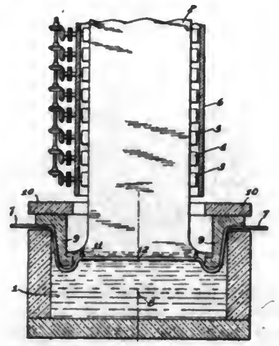
10. In a lathe, a frame, a carriage movable thereon, a cross slide on the carriage, a cam drum on the carriage, means for driving said drum, independent of the position of the carriage on the frame, a cam on the drum for effecting the movement of the cross slide, and means on the drum for coupling and uncoupling it from the driving means, comprising a driving connector movable lengthwise of the drum, and having pivotal connection with a rocking head, a gear engageable by a tool, and having a socket to engage said head to rock it, and thus move the connector out of driving position, and a stud on the drum engaging said gear when same has been moved sufficiently to rock the head.

1,818,129. REFRIGERATING CABINET. WILLIAM F. GRUPE, Rutherford, N. J., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed June 13, 1927. Serial No. 198,673. 2 Claims. (Cl. 217—17.)



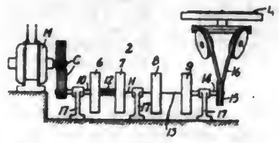
1. A refrigerating cabinet including walls of cork, each wall being molded substantially to finished contour and having crust-like exterior surfaces materialily denser than its interior to provide a nonporous air sealing surface while preserving a relatively less dense interior having relatively higher insulating properties than the denser exterior, supports interior of the cabinet attached to and supported by the relatively denser portions of said walls, and a frame supporting said walls, the frame being disposed wholly exteriorly of the cabinet whereby the supports are enclosed in and supported by the cork insulation independently of the framework supporting the walls.

1,818,130. APPARATUS FOR MAKING GLASS SHEETS. HOWARD L. HALBACH, Clarksburg, W. Va., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Dec. 14, 1927. Serial No. 239,953. 4 Claims. (Cl. 49—17.)



1. In combination with apparatus arranged to draw a glass sheet from a pool of molten glass, means for chilling the glass below the line of generation of the sheet comprising a fluid cooled pipe extending across the bath beneath the line of generation of the sheet, and edge holding means comprising a pair of upwardly extending members carried by the pipe and terminating at the points where the edges of the sheet are drawn from the molten body.

1,818,131. MECHANICAL TRANSMISSION SYSTEM. HENRY C. HARRISON, Port Washington, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1925. Serial No. 78,502. 3 Claims. (Cl. 74—6.)

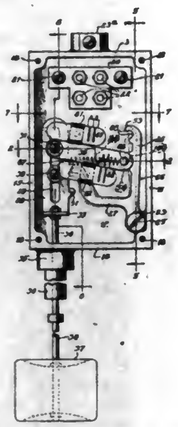


2. In a mechanical transmission system comprising a driving motor and a driven mechanism, speed control means, comprising means for converting part of the motor energy into vibration energy of frequency dependent on the motor speed, a vibratory mechanical device tuned to resonate at a frequency close to the vibration frequency corresponding to the normal motor speed, and means for impressing the vibratory energy upon said device, whereby said device operates as a controlling load on said motor, varying sharply in response to changes in the motor speed, and in combination therewith a vibration filter connected between said resonant device and said driven mechanism to prevent the transmission of the said vibratory energy to said driven mechanism.

1,818,132. SWITCH. SIEGFRIED HELD, Chicago, Ill. Filed July 25, 1929. Serial No. 380,871. 3 Claims. (Cl. 200—70.)

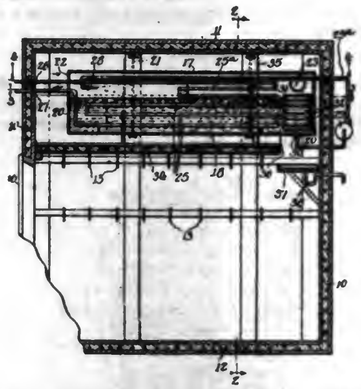
1. In a switch of the character described, the combination of a slide, means for moving the same up and down, a swinging arm having one end pivoted adjacent to the slide, a bell crank shaped retaining member, a pivotal connection between the corner portion of the bell crank member and a stationary part, one arm of said member extending towards the slide, and the other arm of said member extending substantially parallel to the slide, an arresting pin on the swinging end of the arm, upper and lower stops on the parallel arm of the bell crank

member in position to be contacted by said arresting pin, said parallel arm being provided with retaining notches facing the arresting pin in position to retain the same against swinging movement when the bell crank arm swings over towards the slide, the slide being suitably



formed to engage the other arm of the bell crank member at the limits of slide movement, a toggle spring connecting the slide with the swinging arm, and suitable switch elements connected to the swinging arm, substantially as described.

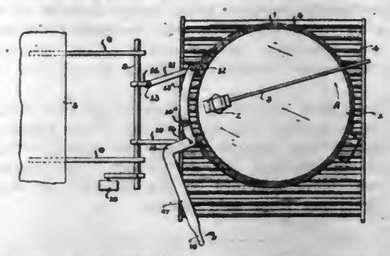
1,818,133. REFRIGERATING SYSTEM. GEORGE HILGER, Chicago, Ill. Filed Apr. 13, 1927. Serial No. 183,249. 6 Claims. (Cl. 62—104.)



2. A refrigeration system having, in combination with a room to be cooled, an enclosed spray refrigerating unit mounted in the upper portion of said room, said unit having an inlet through which warm air is drawn to be cooled and an outlet through which cooled air is discharged, and a baffle member for directing air currents along said spray unit, said baffle member underlying and embracing the sides of said unit and having that portion thereof underlying said outlet opening removed to facilitate the flow of cold air from said baffle member.

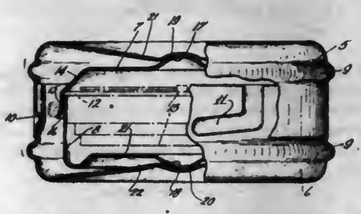
1,818,134. DRUM GRIPPER. CHARLES L. HOOPER and ROBERT F. SUTHERLAND, Rochester, N. Y., assignors to Vacuum Oil Company, New York, N. Y., a Corporation of New York. Filed June 30, 1927. Serial No. 202,734. 5 Claims. (Cl. 81—3.3.)

1. A drum gripper comprising a support for a drum to be gripped, a split ring for gripping the drum on the support, a rock shaft, an arm rigid with the rock shaft and with one end of the split ring, a link pivotally connected with the other end of the split ring and with



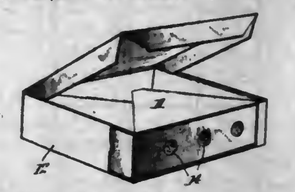
the rock shaft to permit said ring and to move toward and from the other end, and means for effecting the expansion and contraction of the ring.

1,818,135. CONTAINER. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 26, 1927. Serial No. 222,005. 10 Claims. (Cl. 606—18.)



10. A double container, comprising inner and outer receptacles with telescoping edges and resilient top and bottom sides, and with corresponding mutually engaging projections and depressions in their tops and bottoms to permit a limited tilting movement of the receptacles.

1,818,136. FUMIGANT MATERIAL AND METHOD OF FUMIGATION. HARRY W. HOUGHTON, Glen Echo, Md., assignor to Safety Fumigant Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 5, 1928. Serial No. 259,327. 9 Claims. (Cl. 167—35.)



9. A fumigant having germicidal properties produced by the simultaneous generation of hydrocyanic acid gas, cyanogen chloride and another cyanogen halide by the action of dilute hydrochloric acid upon an inert mixture containing an alkali metal chlorate, an alkali metal cyanide and another alkali metal halide.

1,818,137. APPARATUS FOR AND METHOD OF LAUNCHING, LANDING, AND MOORING DIRIGIBLES. LEVI S. HOWLAND, Oakland, Calif. Filed Sept. 26, 1927. Serial No. 222,022. 18 Claims. (Cl. 244—2.)

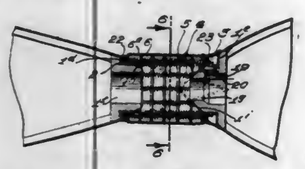


5. In an apparatus of the class described, a hangar having laterally and vertically spaced apart tracks ex-

tending longitudinally therein and connected to a single track at one end, said single track extending from said hangar a considerable distance, and a plurality of sets of independently operable power units adapted to travel together on the single track and separately on the laterally and vertically spaced apart tracks within the hangar, and cable means connecting all of said power units.

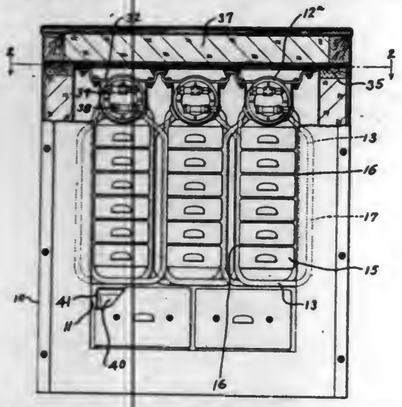
10. The herein described method of landing dirigibles consisting in approaching an open end of the hangar, mechanically drawing the same downwardly and directing the same into the hangar, and automatically anchoring the same from common points on the dirigible in laterally radial directions from said points.

1,818,138. DIRIGIBLE COUPLING MEANS. LEVI S. HOWLAND, Oakland, Calif. Filed Sept. 26, 1927. Serial No. 222,023. 14 Claims. (Cl. 244—3.)



14. In dirigible construction, a pair of dirigibles, and a unitary longitudinally contractible and expandable, axially distortable and twistable resilient annular coupling means readily detachably connecting the stern end of the hull of one dirigible to the bow end of the hull of the other.

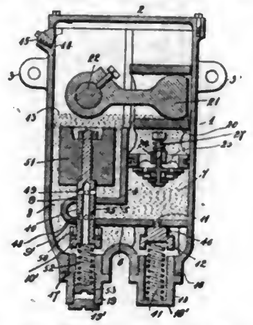
1,818,139. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 243,989. 14 Claims. (Cl. 62—126.)



13. Refrigerating apparatus comprising in combination a cabinet and a plurality of refrigerating elements disposed side by side in the cabinet; each of said elements including a freezing compartment and each including a plurality of ducts for circulating refrigerant, certain ducts of one of said elements being in contact with a compartment of another of said elements.

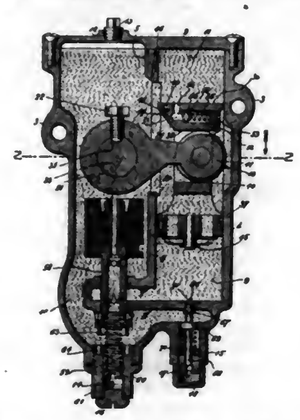
1,818,140. SHOCK ABSORBER. JAMES S. LANG, Boston, Mass.; Old Colony Trust Company, Boston, Mass., executor of James S. Lang, deceased. Filed Oct. 1, 1927. Serial No. 223,401. 4 Claims. (Cl. 188—88.)

1. A fluid check shock absorber for controlling the movement of relatively movable parts, comprising an element attachable to one of said parts and having a compression chamber and a secondary chamber outside the compression chamber with a controllable outlet out of the compression chamber into the secondary chamber with a valve-seat adjacent said outlet, a piston attachable to the other of said parts reciprocable in the compression chamber, means permitting of the circulation of a contained fluid from the secondary chamber back into the compression chamber, an inertio valve controlling said outlet, said valve presenting separate determinate lines of cut-off between it and its seat dependent upon the extent of relative closing movement



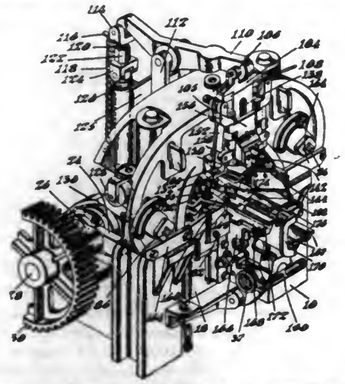
of the valve and including a primary line of cut-off and a secondary line of cut-off, said valve co-operating with the seat along its primary line of cut-off to effect a partial closure of said outlet as the valve tends to close, said valve co-operating with its seat within the space between its primary line of cut-off and its secondary line of cut-off to effect a further closure of said outlet gradually increasing as approach is made to said secondary line of cut-off, and said valve co-operating with its seat along said secondary line of cut-off to effect a complete closure of said outlet, and means for yieldingly supporting said valve in a normal open position.

1,818,141. SHOCK ABSORBER. JAMES S. LANG, Boston, Mass.; Old Colony Trust Company, executor of James S. Lang, deceased. Filed Dec. 19, 1927. Serial No. 240,975. 11 Claims. (Cl. 188—89.)



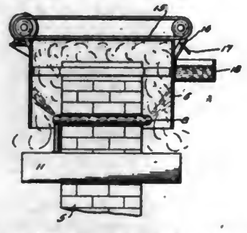
1. In a fluid check shock absorber having a fluid-containing casing and a piston reciprocable within the casing, means for forming a compression chamber within the casing above the piston and within which oil contained within the casing may be compressed upon the lifting of the piston, said compression chamber being provided with a port extending from the upper end of said chamber downward and terminating at a point below the normal level of oil contained within the casing outside the compression chamber.

1,818,142. MACHINE FOR OPERATING ON HEELS. THOMAS LUND, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 20, 1928. Serial No. 313,881. 46 Claims. (Cl. 12—42.)



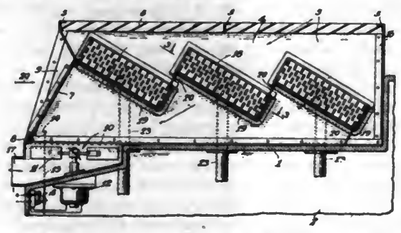
1. A machine for compressing and breasting heels, including a stationary head, a reciprocatory breasting knife mounted therein, heel compressing dies movable toward the head to compress the heel and simultaneously to carry it into range of the breasting knife, and means for operating the breasting knife while the heel is maintained in substantially its compressing position.

1,818,143. SMOKE SEPARATOR. HARRY C. LYONS, Mount Vernon, N. Y. Filed June 14, 1928. Serial No. 285,243. 4 Claims. (Cl. 183—8.)



4. In a smoke separator, a shield closed at the top and sides and open at the bottom thereof, to protect a current of smoke issuing from a chimney or the like against side winds, means to collect solid particles from the smoke protected by said shield, and means for spraying a liquid into the current of smoke to separate further solid matter from the gaseous portion of the smoke.

1,818,144. COOLING RADIATOR FOR INTERNAL COMBUSTION ENGINES. DANIEL T. MACLEOD, Milwaukee, Wis., assignor to Perfex Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 7, 1928. Serial No. 291,086. 9 Claims. (Cl. 257—125.)



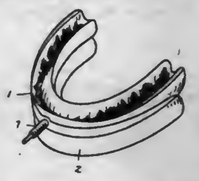
6. In a cooling system of the class described for a railway car, a housing structure at the upper part of one end of the car and having openings at its ends and at its top, a plurality of radiator sections arranged in said housing and means cooperating with said radiator sections to constrain them to parallel draft operation under the influence of the travel windage of the car.

1,818,145. RAILWAY TIE. DONALD B. MACNEIR, New York, N. Y. Original application filed Sept. 28, 1929, Serial No. 395,918. Divided and this application filed June 7, 1930. Serial No. 459,661. 9 Claims. (Cl. 238—115.)



1. A rail fastening device, comprising a fixed U-shaped member, a cushioning block supported between the legs of said member, the upper ends of said legs projecting above said block and being provided with ratchet teeth, and clamping clips carried by said legs of said U-shaped member and having ratchet teeth engaging said former ratchet teeth, said clips being adapted to engage the base of a rail.

1,818,146. GUM MASSAGING DEVICE. JOHN A. MAKER, Duluth, Minn. Filed Feb. 2, 1925. Serial No. 6,404. 1 Claim. (Cl. 128—67.)



A device of the character described comprising a pair of U-shaped exercising cups having flat cooperatively engageable faces, and a U-shaped vibrating plate for engagement intermediate of the cups.

1,818,147. FIRE EXTINGUISHING APPARATUS. DANIEL MAPES, Mamaroneck, N. Y., assignor to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed July 19, 1928. Serial No. 293,828. 2 Claims. (Cl. 169—2.)

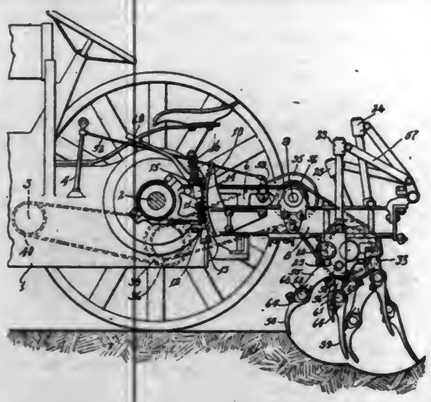


1. The combination with a tank to contain an inflammable and oxidizable liquid, a supply and delivery pipe freely vented at its delivery end for delivering fire extinguishing medium within the body of the liquid in the tank, and a stop interposed in the pipe in close proximity to the liquid in the pipe for minimizing the quantity of air in the pipe in contact with the liquid and readily yieldable under the pressure of the fire extinguishing medium.

1,818,148. SPADING DEVICE. OSCAR AKE MATSON, Chicago, Ill. Filed July 29, 1927. Serial No. 209,351. 6 Claims. (Cl. 97—36.)

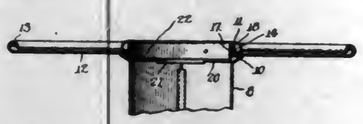
1. The combination with a tractor having a gear shift lever adapted to be moved into an operative position from neutral position, of a spading unit, a drive shaft, said

spading unit operatively connected to said drive shaft, means operatively connecting said drive shaft with said



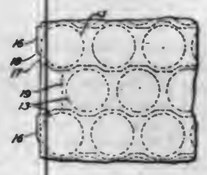
tractor, and means for automatically moving said gear shift lever into neutral position when said spading unit strikes an obstacle.

1,818,149. SPOOL OR REEL. WALLACE C. MILLS, Rockford, Ill., assignor to J. L. Clark Manufacturing Company, Rockford, Ill., a Corporation of Illinois. Filed July 7, 1928. Serial No. 291,073. 8 Claims. (Cl. 242—123.)



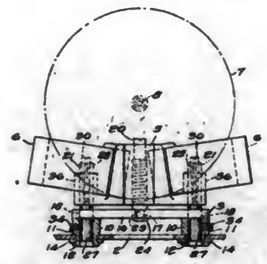
1. A spool comprising a core, a head to be secured upon one end thereof, means providing a seat for the head to hold it against inward movement relative to the core, and an annulus having a portion adapted to be inserted into the end of the core in interengaging relation therewith, so as to be held against relative longitudinal movement, said annulus further having a portion curled around the end of the core and engaging with said head to hold it upon its seat.

1,818,150. ART OF CUTTING CIRCULAR AND OTHER NONRECTANGULAR BLANKS FROM SHEET METAL. JOHN H. MURCH, East Orange, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed June 16, 1924. Serial No. 720,248. 5 Claims. (Cl. 164—17.)



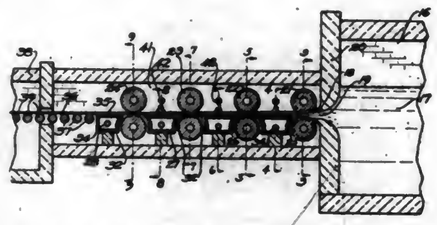
1. A method of forming non-rectangular sheet metal articles from a sheet of material, which comprises, cutting the sheet into strips from which a number of said articles may be cut and formed, and as an incident to the cutting operation forming notches in an end of the sheet whereby each strip is formed with an accurate end edge for subsequent feeding, and then feeding the strip through a strip feed press by engagement with the said end edge thereof.

1,818,151. INDUCTION METER DEVICE. WALTER G. MYLIUS, Summit, and BERT G. LA BAR, Union, N. J., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 18, 1930. Serial No. 445,808. 8 Claims. (Cl. 171—84.)



1. In an induction-meter device, a magnet structure for co-operation with a movable meter element, a main support, an auxiliary support removably associated with the main support in definite relation thereto and supporting the magnet structure, and means for adjusting the magnet structure relative to said movable element by moving the magnet structure relative to the auxiliary support.

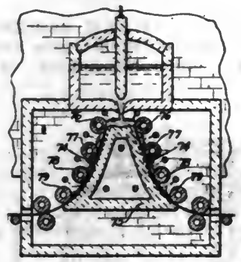
1,818,152. PROCESS AND APPPARATUS FOR FORMING SHEET GLASS. WILLIAM E. NOBBE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 19, 1928. Serial No. 247,855. 8 Claims. (Cl. 49—33.)



1. In sheet glass forming apparatus, the combination with a furnace containing a mass of molten glass and provided with an outlet through which a stream of molten glass issues, of means for directing the stream in a substantially horizontal path and reducing the same through successive stages to sheet form, including a plurality of pairs of sheet forming rolls, said rolls being constructed to reduce the thickness of the stream first at its center and to then subsequently reduce the end portions to the same thickness, and means for supporting the stream of glass between adjacent pairs of forming rolls to prevent sagging of the thinner portions of the stream with respect to the thicker portions thereof.

1,818,153. PROCESS AND APPARATUS FOR FORMING SHEET GLASS. WILLIAM E. NOBBE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 21, 1928. Serial No. 248,375. 21 Claims. (Cl. 49—34.)

15. In apparatus for forming sheet glass, the combination with means containing a source of molten glass and from which a single molten stream is adapted to flow, of a forming slab positioned adjacent said means and having a trough in its upper end for receiving the stream therefrom, said slab being also provided with substantially vertical downwardly diverging side faces whereby the glass within the trough will overflow therefrom in two individual streams down the diverging side faces of said slab, and a plurality of rotatable members mounted opposite each face of the slab and cooperating therewith for gradually reducing the stream through successive stages to a sheet of substantially predetermined thickness, the uppermost member tapering from its center towards its opposite ends and the succeeding lower members gradually approaching



cylindrical form, each side face of said slab being bowed transversely with varying degrees of curvature from top to bottom thereof, so that the cross section curvature of said face of the slab substantially inversely coincides with the longitudinal contour of the opposed rotatable members.

1,818,154. APPARATUS FOR THE MANUFACTURE OF SHEET OR PLATE GLASS. WILLIAM E. NOBBE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 13, 1929. Serial No. 362,605. 6 Claims. (Cl. 49—14.)



1. In apparatus of the character described, a table for receiving and supporting a newly formed sheet of glass thereupon, said table comprising a bottom, a stationary bed freely supported upon said bottom and having a plurality of spaced parallel transversely extending recesses in its upper surface, rotatable rolls disposed within said recesses, means for driving the rolls in unison, means carried by the bottom and engaging the undersurface of the bed for raising and lowering the same with respect to said rolls, and means also carried by the bottom and engaging the bed for guiding said bed in its vertical movements and for preventing lateral movement thereof.

1,818,155. IMPREGNATION OF FILTERS. NICHOLAS E. OGLESBY and ROBERT S. BROWN, Edgewood, Md., assignors to Harry A. Kuhn, Edgewood Arsenal, Md. Filed Oct. 28, 1926. Serial No. 144,813. 14 Claims. (Cl. 252—2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A process for increasing the efficiency of porous filtering material comprising impregnating the material with solid carbonaceous particles in colloidal suspension.

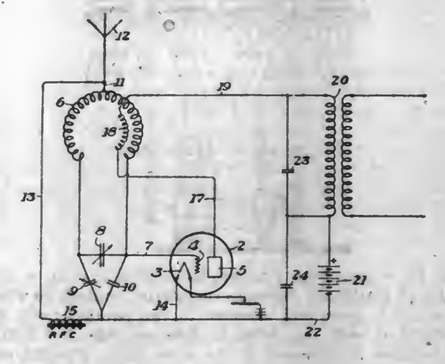
5. A process for producing an improved filter comprising generating a gaseous suspension of solid particles, cooling the gaseous suspension and impregnating a porous material with said particles by passing the gaseous suspension therethrough.

1,818,156. DESIGNATION STRIP. HENRY W. O'NEILL, Elmhurst, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 19, 1928. Serial No. 320,888. 3 Claims. (Cl. 40—10.)



2. A designation strip comprising a base of opaque material having a spaced plurality of small apertures cut therein, a light diffusing surfacing material applied thereto and a sheet of transparent coloring material placed between said opaque material and said surfacing material.

1,818,157. RADIO RECEIVING CIRCUITS. MAURICE M. PHILLIPS, Pittsburgh, Pa. Filed Apr. 17, 1929. Serial No. 355,949. 4 Claims. (Cl. 250—20.)

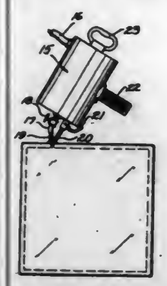


1. In a radio receiving circuit, an oscillator detector tube having a cathode, a grid and a plate, a neutralized inductance in the grid circuit of the tube, an antenna connected to the midpoint of said inductance, and a shunt circuit connecting the midpoint of the inductance and the cathode of the tube and having a radio frequency choke therein.

1,818,158. REMOVAL OF MONOCYCLIC AROMATIC HYDROCARBONS FROM GASES. MATHIAS PIER, Heidelberg, WALTER BOESLER, Ludwigshafen-on-the-Rhine, and AUGUST EISENHUT, Heidelberg, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 13, 1926, Serial No. 129,097, and in Germany Sept. 1, 1925. 2 Claims. (Cl. 260—165.)

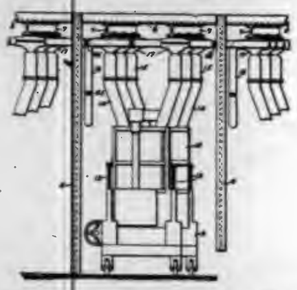
1. The process of removing a monocyclic aromatic hydrocarbon from a gas containing the same which comprises washing the gas with a normally liquid fraction from the destructive hydrogenation of a distillable carbonaceous material selected from the class consisting of coal, tars, mineral oils and the distillation products thereof, said fraction having a substantially lower volatility than the monocyclic aromatic hydrocarbon to be removed.

1,818,159. LAMINATED GLASS. JAMES W. H. RANDALL, New York, N. Y., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 24, 1928. Serial No. 256,585. 6 Claims. (Cl. 49—81.)



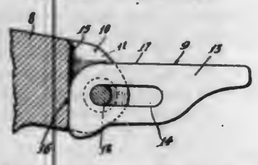
2. A device for sealing laminated glass comprising a temperature control receptacle for containing the sealing material, an outlet therefor, and a heated wire onto which the sealing material flows.

1,818,160. CURRENT DISTRIBUTING APPARATUS. KARL C. RANDALL, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 3, 1928. Serial No. 258,865. 3 Claims. (Cl. 175—298.)



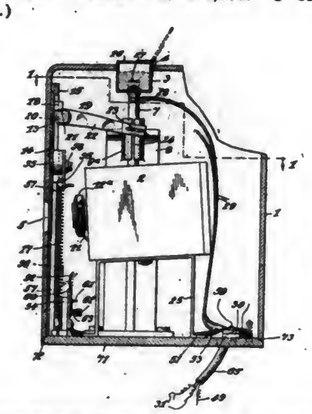
3. In a polyphase current-distributing system, a plurality of stationary disconnecting-switch contact members arranged in pairs and mounted in two parallel rows, the contacts of each pair being in different rows and having connections all disposed in the same plane, straight parallel-disposed buses one for each connection of each row of contact members, disposed in the plane of the said connections and at an angle to a line connecting a pair of contact members, whereby one set of buses may extend past the connections of another set of buses without interference.

1,818,161. TRUNNION CONNECTION. JAMES P. RATIGAN, Los Angeles, Calif. Filed Oct. 3, 1928. Serial No. 310,118. 4 Claims. (Cl. 85—3.)



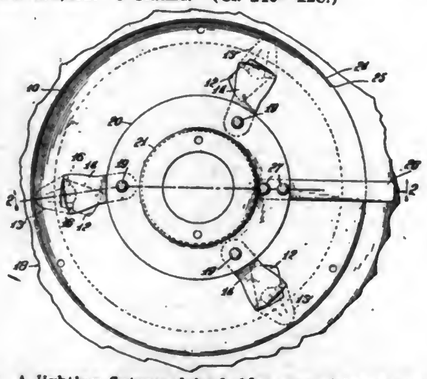
2. A trunnion connection comprising a trunnion, a latch member, cooperating means on the trunnion and latch member slidably and rotatably connecting the latch member with the trunnion, an eye to receive the trunnion removable therefrom over the latch member when the latch member is in one position, cooperating means on the trunnion and latch member cooperating with the first mentioned means to hold the latch member in position to retain the eye on the trunnion when the latch member is turned and slid from said position into another position, and a means on the latch member cooperating with the first mentioned means and with a portion of the second mentioned means to hold the latch member in the first mentioned position.

1,818,162. BURGLAR ALARM SYSTEM. HAROLD V. ROBBINS and JAMES O'CONNELL, New York, N. Y. Filed Nov. 2, 1928. Serial No. 316,654. 8 Claims. (Cl. 67—29.)



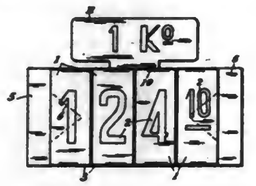
3. In photographic apparatus, a casing having an aperture, a movable flash pan in the casing but projecting outside of it, a camera in the casing aligned with the aperture, a slidable shutter, a catch to hold the shutter in position to close the aperture, and a notched lever controlled by the flash pan to release the catch upon movement of the flash pan to enable the shutter to uncover the aperture.

1,818,163. LIGHTING FIXTURE GLOBE HOLDER. ERIC T. SAMUELSON, Chicago, Ill., assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 471,991. 6 Claims. (Cl. 240—128.)



1. A lighting fixture globe holder comprising a stationary supporting plate provided with transversely arranged slots; globe engaging members disposed through said slots and adapted to move lengthwise of the slots; and a ring rotatably mounted on said plate with the upper ends of said members pivotally secured thereto intermediate of the axis of the ring and the inner ends of said slots whereby the members are caused to move toward the outer ends of the slots when said ring is rotated in one direction and toward the inner ends of the slots when said means is rotated in the opposite direction.

1,818,164. DISPLAY TICKET FOR MARKING AND PRICING OF GOODS. JOHANN OSKAR EMIL SCHECK, Zurich, Switzerland. Filed Dec. 14, 1929, Serial No. 414,180, and in Switzerland Sept. 2, 1929. 4 Claims. (Cl. 40—5.)

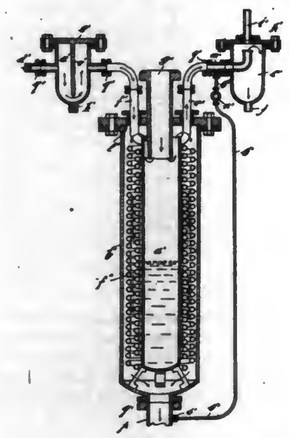


1. A display ticket for marking and pricing goods, comprising in combination slidable and interchangeable script plates each having a bent-over portion at the top and at the bottom, a backing slipped in said bent-over portions of said script plates, and at least one spring support engaging between said bent-over portions.

1,818,165. PROCESS OF TRANSFORMING OXIDS OF CARBON INTO ORGANIC COMPOUNDS, PARTICULARLY METHANOL. OTTO SCHMIDT and JOHANNES UPER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 29, 1924, Serial No. 709,759½, and in Germany Apr. 30, 1923. 2 Claims. (Cl. 260—156.)

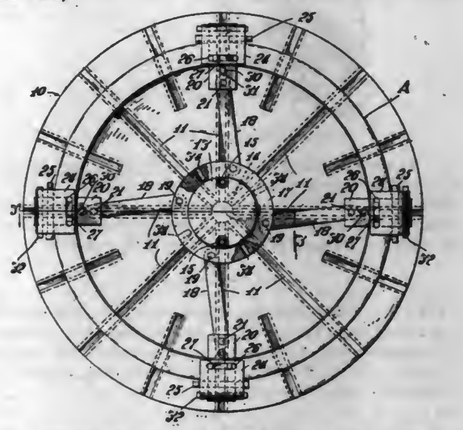
1. The process of converting oxids of carbon into organic compounds, particularly methanol, which comprises passing an oxid of carbon with hydrogen at an elevated temperature and pressure over a contact mass containing about ten parts of copper to one part of zinc.

1,818,166. REFRIGERATING MACHINE. JACQUES SCHNEIDER, Antwerp, Belgium. Filed Feb. 21, 1930, Serial No. 430,855, and in Belgium Apr. 4, 1929. 2 Claims. (Cl. 62—115.)



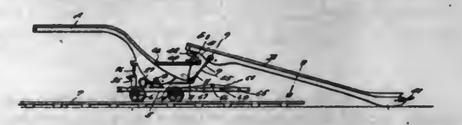
1. In a refrigerating device of the compression type, a cold economizer comprising: a cylindrical casing inserted in the suction pipe of the compressor, a coil arranged inside the casing, one end of the coil being connected with the delivery pipe of the condenser and the other end being connected with the regulating valve of the machine, an inlet and an outlet for the cold vapours flowing from the evaporator to the compressor, the arrangement being such that the heat exchange between the cold vapours flowing around and the insufficiently condensed vapours flowing inside said coil liquefies the latter, and a tank placed inside the casing in such a way that the cold vapours pass through part of it on their way to the space surrounding the coil and allow the drops of liquid which they still retain to fall on the bottom of the tank, whereby the liquid mass accumulating on said bottom will evaporate when the refrigerating device is restarted and thus prevent superheating of the compressor.

1,818,167. CHUCK FOR MACHINE TOOLS. EDWARD SEARS and CARL F. WAGNER, Deer Lodge, Mont. Filed Jan. 20, 1930. Serial No. 421,917. 2 Claims. (Cl. 82—40.)



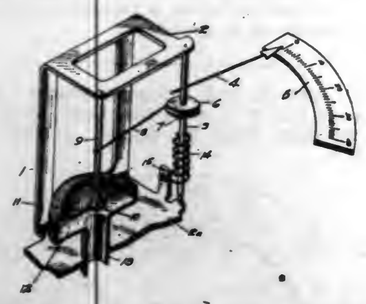
1. A device for holding a locomotive or car wheel tire comprising an annular table provided with a central opening and with radially disposed slots intermediate of said opening and the perimeter of the table; a member provided with a depending hub which is adapted to extend into the central opening of the table; means for holding said member against rotation; a second member rotatably disposed about the first member; chuck elements disposed at diametrically opposite points on said table and provided with tire receiving surfaces; hook-shaped jaw members pivotally secured at their lower ends on the chuck elements so as to swing vertically with the free ends provided with vertical openings; vertically disposed tire clamp elements eccentrically mounted on said openings in the jaw members so as to have increasing clamping action on the tires as the clamp elements are caused to move rotatably; radially disposed connecting bars pivotally secured at their respective ends to said second mentioned member and said chuck elements; and means disposed through the chuck elements and engaging in the radial slots of the table whereby the chuck elements may be locked in adjusted position.

1,818,168. COAL LOADER. PLEASANT E. SMITH, Herrin, Ill., assignor of one-third to Le Roy B. House, Herrin, Ill. Filed Dec. 27, 1929. Serial No. 416,858. 8 Claims. (Cl. 198—95.)



5. In a loading device of the character described, a pair of conveyors, means for rockably mounting one of said conveyors, a track, means for pivotally mounting said track adjacent one end of said one conveyor, carriages carried by the other of said conveyors ridable on said track.

1,818,169. DEFLECTING MECHANISM. LOUIS STALDER, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1927. Serial No. 234,412. 6 Claims. (Cl. 73—110.)



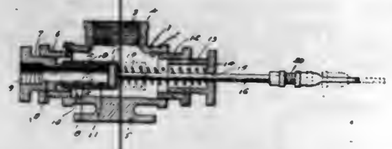
1. The combination with a deflecting member, of means for biasing said member in one direction, and means for restraining said biasing means, said second named means comprising a diaphragm and a resilient member both responsive to changes in a condition of a quantity.

1,818,170. DEFLECTING MECHANISM. LOUIS STALDER, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1927. Serial No. 234,413. 14 Claims. (Cl. 73—110.)



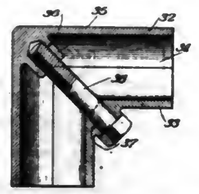
1. The combination with a deflecting member biased to a predetermined position, and a vane of magnetizable material movable therewith, of a magnetized member coacting with said vane, and a diaphragm by which said magnetized member is carried.

1,818,171. PUMP. WILLIAM E. STEVENSON, Pittsburgh, Pa. Filed May 18, 1929. Serial No. 364,076. 2 Claims. (Cl. 103—153.)



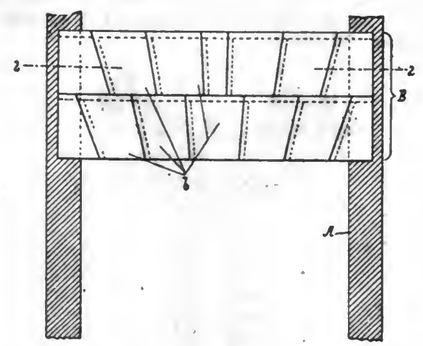
1. A device of the character described, comprising a casing, a cylinder mounted within the casing and having the inner end thereof open, an apertured sleeve slidably engaging said cylinder, said sleeve having one end thereof closed, a rod secured to the closed end of the sleeve, means for holding said rod concentrically of said cylinder, and a spring loosely positioned about said rod and engaging the closed end of said sleeve whereby to constantly urge said sleeve in one direction.

1,818,172. RAILING FITTING. THOMAS G. SUTHERLAND, Chicago, Ill. Filed July 28, 1928. Serial No. 295,872. 2 Claims. (Cl. 287—54.)



1. A coupling for rails, rods, or the like, said coupling comprising two separable complementary parts, each part having angularly disposed half-socket portions, said half-socket portions of one part cooperating with the half-socket portions of the other part when the parts are in assembled relation, to form complete sockets adapted to receive a plurality of rails, means to hold said parts in assembled relation, said coupling being so divided that the contacting edges of one of the half-socket portions of each part are in a different plane than that of the contacting edges of another portion of the same part, said means to hold the parts comprising a bolt entered through one of the parts and engaging the other part, said bolt being positioned in a plane bisecting the angle between at least two angularly disposed sockets at their junction.

1,818,173. APPARATUS FOR THE FUSION ELECTROLYSIS OF METALLIC CHLORIDES. ROBERT SUCHY, KARL STAIB, and WILHELM MOSCHEL, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 15, 1928, Serial No. 326,330, and in Germany Dec. 23, 1927. 3 Claims. (Cl. 204—19.)

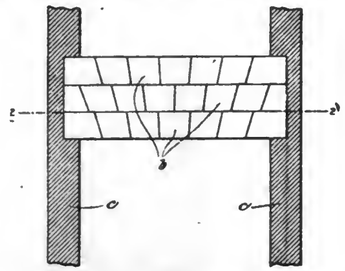


1. In an apparatus for the fusion electrolysis of metallic chlorides, a partition for separating the products of electrolysis comprising a plurality of wedge-shaped plates of non-conductive ceramic material of dense structure, said plates being fitted together so as to form a substantially continuous surface of said partition.

1,818,174. PARTITION FOR SEPARATING THE PRODUCTS OF FUSION ELECTROLYSIS OF METALLIC CHLORIDES. ROBERT SUCHY, KARL STAIB, and WILHELM MOSCHEL, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 11, 1930, Serial No. 427,441, and in Germany Dec. 23, 1927. 3 Claims. (Cl. 204—19.)

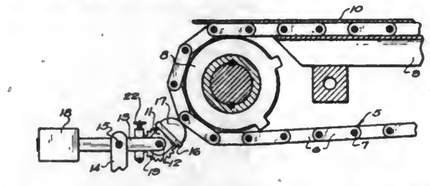
1. A partition for separating the products of fusion electrolysis of metallic chlorides comprising a base plate

of porous refractory material, and a surface layer on said base plate consisting of a plurality of plates of



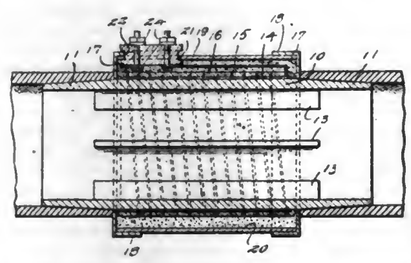
non-conductive ceramic material of dense structure, said plates being fitted together and mounted on said base plate by means of a suitable binder.

1,818,175. MEANS FOR TREATING GLASS APPARATUS. HERBERT THOMAS, Charleston, W. Va., assignor to The Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 24, 1928. Serial No. 301,890. 7 Claims. (Cl. 49—17.)



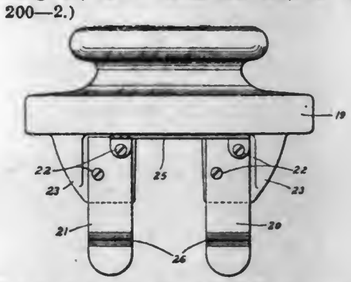
3. The combination with a circulatory glass supporting table, of means for applying a protective medium thereto including a holder arranged transversely of the table, a shaft carrying said holder, arms within which the opposite ends of said shaft are journaled, said arms being pivoted intermediate their ends, protective medium applying means carried by said holder, counterweights carried at the outer ends of said arms to hold said last named means in engagement with said table, a worm gear keyed to the shaft, and a worm screw mounted upon one of said arms and meshing with said gear and adapted upon rotation thereof to effect adjustment of the holder about the axis of said shaft to bring new protective medium applying surfaces into contact with said table.

1,818,176. ELECTRICAL HEATER. OTTO D. THORSNESS, and DEWEY R. TOWER, Lake Preston, S. Dak., assignors to Electric Heating Devices, Inc., Lake Preston, S. Dak., a Corporation of South Dakota. Filed Feb. 19, 1929. Serial No. 341,117. 2 Claims. (Cl. 219—38.)



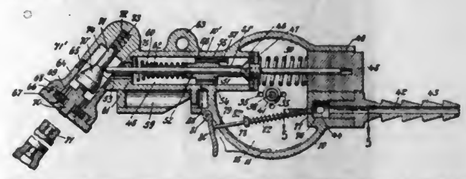
1. In a heater of the type described, a metallic tube having tapering opposite end portions whereby to permit mounting of the tube in a flexible conduit, an electrical heating element surrounding the tube and secured against shifting movement thereon, a casing surrounding the tube and sealed at its ends thereto, said casing having the walls thereof in spaced relation to the electrical heating element and having the opposite ends thereof spaced inwardly of the opposite ends of the tube, and a filling of heat and electrical insulating within the casing about the heating element, the inner wall of said tube having inwardly projecting radiation ribs.

1,818,177. JUNCTION BOX. JOHN R. TOWNSEND, Lake Bluff, Ill., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1928. Serial No. 302,944. 2 Claims. (Cl. 200—2.)



1. A cable terminal comprising a body portion and a cap, said body portion being disposed to provide a plurality of wells and ledges in each of the wells, contacts fastened in the ledges and extending downwardly into said wells, said cap being provided with a longitudinally disposed depending insulating portion, a plurality of pairs of downwardly extending contact members fastened to the insulating portion and bars of conducting material connecting corresponding contact members.

1,818,178. TIRE INFLATION DEVICE. SIDNEY M. WEISBERG, Brooklyn, N. Y., assignor to Nathan Chirelstein, Newark, N. J. Filed May 7, 1930. Serial No. 450,521. 3 Claims. (Cl. 152—11.5.)

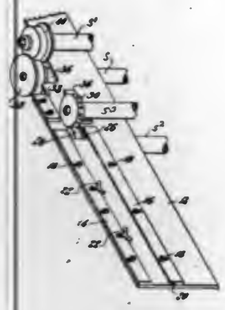


1. A construction for inflating a vehicle tire, a casing having an expansion-chamber for air, reducing-valve mechanism governing the admission of air to said chamber, a nozzle having an outlet, said casing having a passage leading from said expansion-chamber to said out-let, an opening in one side of said passage leading to the atmosphere, a piston located in said passage and normally closing said opening, a spring interposed between said piston and an end wall of said passage, said piston having a restricted opening therethrough of less area than that through the valve of the vehicle tire; said piston also having a check-valve controlled passage, said check-valve being normally closed but adapted to open when the air pressure is greater on the inlet side of the piston than on the outlet side thereof.

1,818,179. ELECTROPLATING. LEON R. WESTBROOK, Cleveland Heights, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Feb. 23, 1928. Serial No. 256,493. 11 Claims. (Cl. 204—1.)

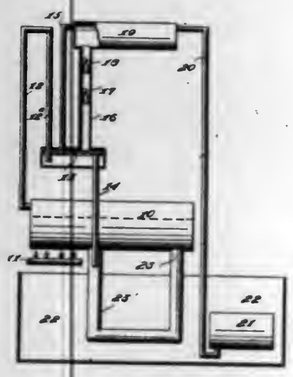
1. An electroplating bath comprising an aqueous solution containing a cadmium compound, a cyanide, a brightening agent, and an acidic naphthalene compound capable of coupling with a diazo compound.

1,818,180. GASKET-SHAPING DEVICE. LEROY A. WESTON and LAWRENCE O. WESTON, Adams, Mass. Filed May 22, 1929. Serial No. 365,077. 5 Claims. (Cl. 153—3.)



4. A device for shaping metallic gaskets from metal strips, comprising a pair of rolls adapted to receive the strip therebetween, said rolls having centrally disposed contacting surfaces and angular contacting surfaces on both sides of the central contacting surfaces, said contacting surfaces being adapted to receive the strip therebetween, means for rotating said rolls for feeding the strip therethrough to form flanges on the opposite edges of the strip, and adjustable means having two spaced curved surfaces adjacent said rolls for imparting any desired curvature to the strip after the same has passed through the rolls.

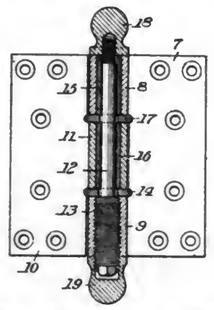
1,818,181. REFRIGERATION APPARATUS. HENRY E. WILLSIE, New York, N. Y., assignor to The Union Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 13, 1926. Serial No. 141,414. 9 Claims. (Cl. 62—120.5.)



1. In the combination of a still-absorber, evaporator and condenser connected together, a drain pipe connecting to the bottom of the evaporator adapted to drain liquid from the evaporator toward the still-absorber, a check valve in said drain pipe, and automatic means for opening said check valve during the heating of the still-absorber.

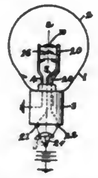
1,818,182. FRICTION HINGES. HARRY E. WOERNLE, Pittsburgh, Pa., assignor to McKinney Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 10, 1927. Serial No. 190,196. 1 Claim. (Cl. 16—140.)

A friction hinge comprising a butt having a pair of knuckles, an opposed butt having a knuckle interengaged between the pair of knuckles and having substantially smooth longitudinal extremities, and a pintle traversing said knuckles and having an enlarged section in threaded engagement with one of the pair of knuckles with said



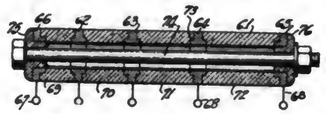
enlarged portion in thrust-exerting relation to one of the smooth longitudinal extremities of the interengaged knuckle.

1,818,183. VEHICLE LAMP. WILLIAM H. WOOD, South Euclid, Ohio. Filed May 18, 1925. Serial No. 30,987. 4 Claims. (Cl. 176—26.)



3. A lamp bulb for the purpose described comprising a globe and a base having a common axis, and filaments located in and defining a plane which intersects said axis obliquely, one of said filaments constituting a light source substantially intersected by said axis, and other filaments constituting laterally spaced light sources, located in adjacent quadrants about said axis.

1,818,184. ELECTRICAL RESISTANCE COMPOSITION. LINCOLN T. WORK, Yonkers, ELMER S. IMES, New York, and EDWARD A. EVERETT, Long Island City, N. Y.; said Work and said Imes assignors to said Everett. Filed June 14, 1929. Serial No. 371,044. 4 Claims. (Cl. 201—76.)

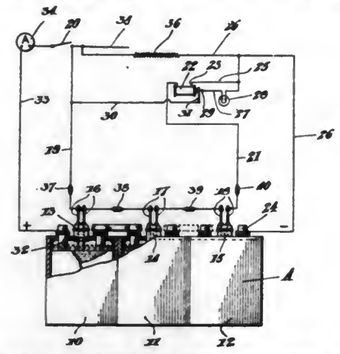


1. An electrical resistance material comprising a mixtur of 50 grams Portland cement, 10 grams mineral black and 16½ cc. water which has been moulded under pressure and seasoned by the application of additional moisture.

1,818,185. INDICATOR FOR STORAGE BATTERIES. GORDON YULL, Sudbury, Ontario, Canada. Filed Apr. 18, 1927. Serial No. 184,814. 1 Claim. (Cl. 177—311.)

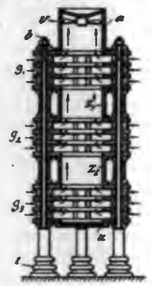
An indicator for storage batteries comprising in combination, a storage battery, a principal circuit deriving its current from the storage battery, a switch in said principal circuit, insulated, spaced apart, electrodes extending to a desired depth into the electrolyte in the battery, a second circuit in parallel with the principal circuit, said electrodes connected in series in said second circuit, an electro-magnet in series in said second circuit, the energizing of said second circuit controlled by the aforesaid

switch, an armature operatively associated with the electro-magnet, an alarm circuit in parallel with the second circuit and with the principal circuit, said armature in series in said alarm circuit, an alarm in series in said



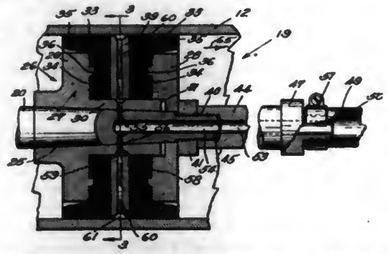
alarm circuit, the armature normally closing the alarm circuit when the electro-magnet is de-energized and operative to open the alarm circuit when the magnet is energized, the electrolyte in the battery forming part of the second circuit.

1,818,186. CHOKE COIL. MARCEL ZÜHLKE, Berlin-Weissensee, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 4, 1930, Serial No. 479,614, and in Germany Sept. 4, 1929. 6 Claims. (Cl. 175—359.)



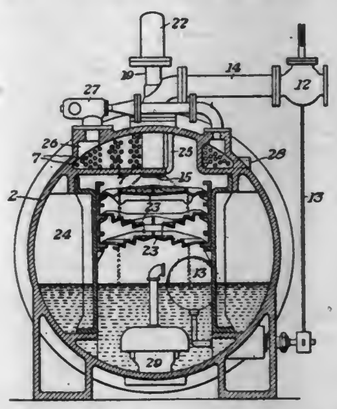
1. A choke coil, consisting of several flat sectional coils with an opening in the middle and arranged the one above the other at a certain distance from one another, means for supporting said sectional coils leaving room between these coils for a cooling medium to pass, and a closing piece, preferably of insulating material, fastened to the bottom sectional coil and closing the opening of this coil.

1,818,187. DEVICE FOR WASHING PISTON-PACKERS AND LINERS. WALTER C. BAILEY, Norwalk, Calif. Filed Aug. 29, 1928. Serial No. 302,842. 13 Claims. (Cl. 103—204.)



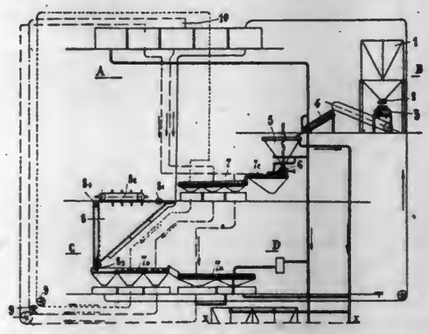
1. In a pump-piston, the combination of: a piston rod; a body supported on said piston rod; a pair of packing-members carried by said body, and adapted to be alternately forced against the cylinder in which the piston operates; a disc carried by said body between said packing-members, said disc having passages for delivering washing-fluid to the periphery of the piston, between said packing-members; and a rod connected to said piston rod for delivering washing-fluid to said disc.

1,818,188. LIQUID TREATING APPARATUS. HUGO BERGQUIST, Swissvale, Pa., assignor to Elliott Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Mar. 29, 1922, Serial No. 547,868. Divided and this application filed June 15, 1927. Serial No. 198,912. 11 Claims. (Cl. 183—2.5.)



2. In a liquid treating apparatus, a container having a series of units enclosed therein, means for passing liquid in series through such units and delivering it to said container and causing a partial evaporation thereof, means for automatically controlling the supply of liquid, at least one of said units constituting a condenser, and means cooperating with said condenser for effecting the withdrawal of non-condensible gases from said container.

1,818,189. TREATMENT OR PURIFICATION OF COAL. MAURICE BERTRAND, St. Nicolas Lez Liege, Belgium, assignor to Societe Anonyme D'Ougree Marihaye, Ougree, Belgium. Filed Nov. 21, 1927, Serial No. 234,892, and in France Aug. 9, 1927. 6 Claims. (Cl. 209—173.)



1. A process of preparing coals for separation according to specific gravity, comprising the steps of wetting the coal with water; then subjecting the coal to a plurality of successive impregnating treatments with liquids of increasing densities; draining the coal between successive impregnations; and then subjecting the coal to the action of a separating liquid of the same kind as the

impregnating liquids and having a density appropriate to the separation to be effected, the last impregnating liquid used having a density approaching as closely as possible that of said separating liquid.

1,818,190. LITHOPONE AND METHOD OF PREPARING SAME. JAMES ELIOT BOOGE, Hillside, N. J., assignor, by mesne assignments, to The Grasselli Chemical Company, a Corporation of Delaware. Filed Sept. 3, 1927. Serial No. 217,031. 2 Claims. (Cl. 134—78.)

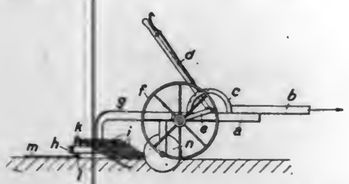
1. In the manufacture of lithopone, the step of imparting to the lithopone the property of producing a quick-drying paint when mixed with a vehicle such as bodied oil and the like, which comprises adding to the calcined lithopone a sufficient amount of a zinc solution to bring the total amount of basic zinc compounds of the finished lithopone, calculated as zinc oxide, up to a predetermined figure, and thereafter precipitating the zinc as a basic zinc compound by the addition of a basic substance in such quantity that the final product, when subjected to a precision alkalinity test with methyl orange as an indicator, requires from 1 to 15 cubic centimeters of N/50 sulphuric acid for titration to a faint pink color of 100 cubic centimeters of a clear filtrate obtained from a mixture of a 50 gram sample of said final product with 250 cubic centimeters of distilled water agitated for 5 minutes at a temperature between 65–75° F.

1,818,191. ELECTRIC HEATING APPLIANCE. JOHN A. BOYER, Niagara Falls, N. Y., assignor to Globar Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Aug. 19, 1929. Serial No. 386,998. 9 Claims. (Cl. 201—63.)



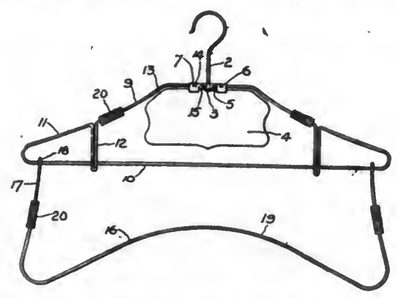
6. In an electric heating device, the combination of a rigid resistor, and terminal members having contact surfaces of an aluminum base alloy containing some aluminum in the free state and having an incipient melting point substantially the same as the melting point of pure aluminum and a temperature of complete melting at least 300° C. above the melting point of pure aluminum.

1,818,192. POTATO DIGGING MACHINE. HERMANN BRÜSSOW, Barnimuscunow, Germany, assignor of one-half to Hermann Wolfgramm and one-half to Carl Bergmann, Milwaukee, Wis. Filed Apr. 17, 1930, Serial No. 445,150, and in Germany May 2, 1929. 3 Claims. (Cl. 55—54.)



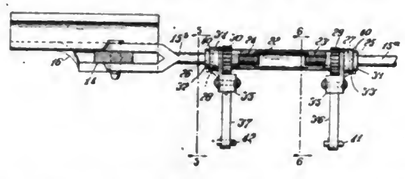
1. A potato digging machine, comprising in combination a machine frame vertically adjustable in height, a beam rigidly connected with said frame at an angle to the direction of travel, and parallel tines mounted on said frame forming together an inclined plane having points at the lower ends adapted to engage in the soil the upper ends of said tines being preferably bent semicircularly projecting above the upper edge of said beam.

1,818,193. GARMENT HANGER. PAUL JACK BURDE, Vancouver, British Columbia, Canada. Filed Oct. 27, 1928. Serial No. 315,458. 1 Claim. (Cl. 223—62.)



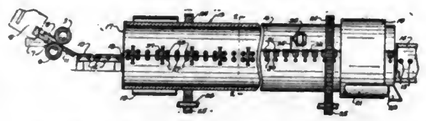
A garment hanger comprising a hook, a shoulder portion extending outwardly and downwardly from the hook and supporting a horizontal rail in a plane below the shoulder portion, and a pair of tongues formed integrally with the shoulder portion extending downwardly into resilient contact with the rail.

1,818,194. SLACK ADJUSTER FOR CAR BRAKES. RICHARD W. BURNETT, Chicago, Ill. Filed Apr. 13, 1929. Serial No. 354,883. 9 Claims. (Cl. 188—202.)



1. A slack adjuster for brake rigging comprising a body member provided with a threaded portion for engagement with a rod of the brake rigging, a bearing member operable about the body, and a lever pivoted on said bearing member adapted, when moved about its pivotal axis in one direction, to grip the body.

1,818,195. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. CARROLL CONE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 11, 1930. Serial No. 460,405. 20 Claims. (Cl. 49—3.)



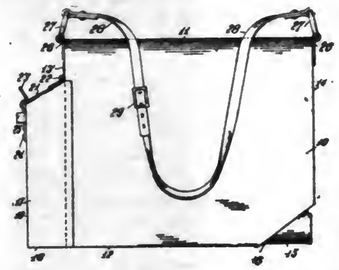
1. The process of producing sheet glass, which consists in first forming the sheet, carrying the sheet forwardly as it is formed in a generally horizontal direction and to a predetermined location, turning the sheet upside down, and then passing the sheet forwardly into and through an annealing zone.

10. In sheet glass apparatus, means for receiving a newly formed sheet of glass from sheet forming mechanism and delivering it into an annealing leer including conveying means for receiving the sheet thereupon from the sheet forming mechanism, a second conveying means for delivering the sheet into the annealing leer, and means for rotating the first conveying means to turn the sheet upside down and bring it to rest upon said second conveying means.

1,818,196. METHOD OF COATING SUBSTANCES. HUGH S. COOPER and MENAHEM MERLUB-SOBEL, Cleveland, Ohio, assignors to Kemet Laboratories, Inc., a Corporation of New York. Filed Sept. 20, 1927. Serial No. 220,831. 13 Claims. (Cl. 250—27.5.)

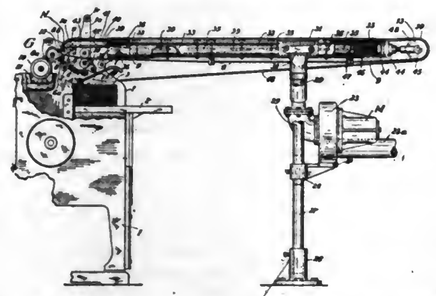
1. Process of coating substances with at least one of the metals from the group consisting of the alkali metals and the alkaline earth metals which comprises treating the metal with substantially anhydrous liquid ammonia, applying the resulting metal solution to the substance to be coated, and driving off the ammonia to leave a coating containing the metal.

1,818,197. TORPEDO AND FUSEE CONTAINER. ARTHUR O. CRANDELL, Newton, Kans. Filed Dec. 6, 1930. Serial No. 500,513. 6 Claims. (Cl. 246—488.)



1. A container of the character described comprising two flat side and end walls and a top and a bottom wall all secured together in weather-proof relation and formed to provide a narrow chamber of greater vertical depth and of length just sufficient to hold fusees disposed lengthwise between the end walls, in superposed relation, one of the lower corners of the containers being formed with a diagonally cut-away portion to provide an opening through which the fusees are endwisely inserted and endwise withdrawal of the lowermost fusees permitted.

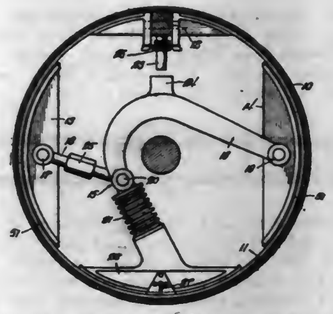
1,818,198. WRAPPER-GUMMING AND DELIVERY SYSTEM. STANLEY H. DAVIS, Toledo, Ohio, assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 13, 1926. Serial No. 122,096. 25 Claims. (Cl. 91—50.)



6. In the art of applying wrapper or label sheets to boxes or the like, the method which comprises advancing a sheet, progressively applying an adhesive coating in a direction from its advance toward its rear edge, and before completion of the application of the adhesive coating transferring the advance end of the sheet to a conveying surface, and at the same time applying suction to the opposite face of the sheet to hold it against the conveying surface.

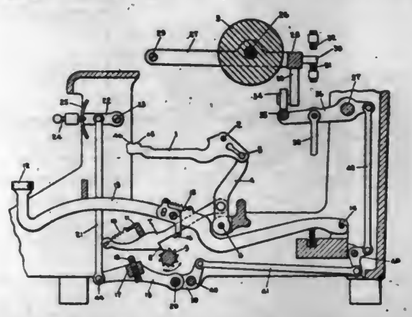
25. In a system for transporting gummed wrapper or label sheets, including, a sheet-gumming roll, a suction chamber having a perforated end adjacent said roll, a porous conveying member passing over said end of said suction chamber, means for producing sub-atmospheric pressure in said suction chamber, whereby advance edges of sheets are held against said conveyor member as soon as they emerge from said roll, and means for supporting said conveyor member beyond the other end of said suction chamber to permit removal of the coated sheets from the conveyor member beyond said other end without hindrance from suction.

1,818,199. BRAKE. ADIEL Y. DODGE, South Bend, Ind., and WILLARD L. POLLARD, Evanston, Ill., assignors to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1924. Serial No. 702,765. 17 Claims. (Cl. 188—152.)



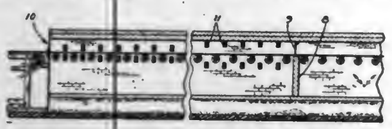
6. A brake comprising, in combination, a drum, an expansible friction device within the drum, a fluid pressure actuator mounted on the central part of the friction device, and means operated by the actuator and engaging a plurality of spaced parts of said device spaced from and movable independently of said central part to expand it.

1,818,200. TYPEWRITING MACHINE. FARNUM F. DORSEY, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Apr. 8, 1929. Serial No. 353,639. 3 Claims. (Cl. 197—17.)



1. In a typewriter, the combination, with type mechanism, case-shift mechanism, and with power mechanism comprising a power-driven rotary toothed member, an actuator connected with the type mechanism and adapted to engage and be moved by said toothed member, key-controlled means for initiating the engagement of said actuator with the toothed member, and a trip member for disengaging the actuator from the toothed member, of means connecting the case-shift mechanism and said trip member and acting, in consequence of a case-shift movement, to change the position of the trip member so as to change the period of engagement of the actuator with the toothed member.

1,818,201. ANNEALING LEER. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 15, 1926. Serial No. 148,405. 6 Claims. (Cl. 49—47.)



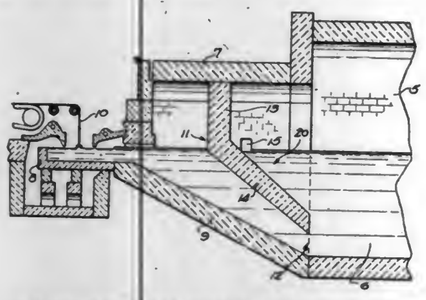
2. In sheet glass apparatus, an annealing leer, means for passing a sheet of glass therethrough, and a plurality of heat absorbing members arranged in the leer and on both sides of the sheet, said members being mounted progressively closer to the sheet as the exit end of the leer is approached.

1,818,202. APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 3, 1927. Serial No. 196,215. 6 Claims. (Cl. 49—54.)



2. A continuous tank furnace including a melting chamber, a refining chamber adjoining and in direct communication with said melting chamber, a cooling chamber, adjoining and in direct communication with said refining chamber, a working receptacle adjoining and in direct communication with said cooling chamber, all of said chambers together with said working receptacle containing molten glass and being of the same width throughout, and heating means within the melting chamber for directing a flame upon the surface of the molten glass therein.

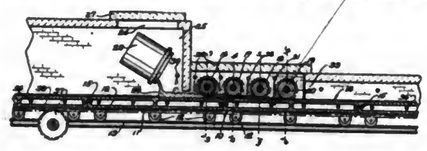
1,818,203. METHOD AND APPARATUS FOR PRODUCING MOLTEN GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 27, 1927. Serial No. 208,694. 8 Claims. (Cl. 49—54.)



1. In a continuous tank furnace, a melting tank containing a mass of molten glass, a cooling chamber in communication with the said melting tank, means for causing the lowermost stratum of molten glass within the melting tank to flow through the cooling chamber, and means for causing the uppermost stratum or surface glass to flow exteriorly of said melting tank.

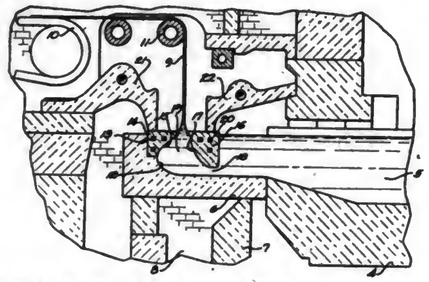
1,818,204. PROCESS AND APPARATUS FOR FORMING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 20, 1928. Serial No. 248,028. 17 Claims. (Cl. 49—34.)

1. In the process of forming sheet glass, those steps which consist in depositing a mass of molten glass upon a movable support and moving said support to bring the molten glass under a plurality of forming rolls to subject the same to a series of successive rolling operations where-



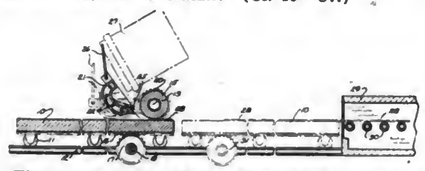
in the glass is reduced first at its center and the end portions then subsequently reduced gradually through successive stages to the same thickness to form a sheet of substantially predetermined thickness and width.

1,818,205. SHEET GLASS DRAWING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 21, 1928. Serial No. 287,143. 1 Claim. (Cl. 49—17.)



In sheet glass drawing apparatus, a receptacle containing a mass of molten glass, a member cooperating with said receptacle for segregating a pool of molten glass from said mass, means for drawing a sheet upwardly from said pool, and lip tiles positioned above the receptacle at opposite sides of the sheet, the lower end of one lip tile resting upon the receptacle and the lower end of the other lip tile resting upon the member cooperating therewith.

1,818,206. PROCESS FOR THE PRODUCTION OF PLATE GLASS BLANKS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 20, 1928. Serial No. 294,073. 3 Claims. (Cl. 49—87.)

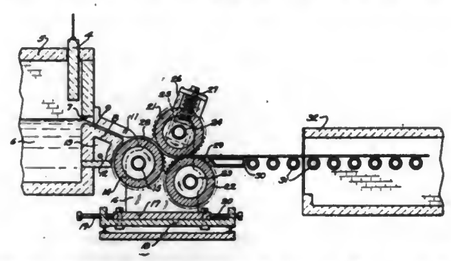


1. The process of producing sheet glass or plate glass blanks, consisting in first melting and refining molten glass in a portable pot, in teeming the molten glass from the pot into a stationary receptacle by moving the said pot from one end of the receptacle to the other during the pouring of the molten glass thereinto, tilting the receptacle to cause the molten glass to flow therefrom in a relatively wide stream onto a table, and in reducing the stream of glass to sheet form as it is received upon said table.

1,818,207. PROCESS OF AND APPARATUS FOR FORMING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 26, 1928. Serial No. 295,367. 5 Claims. (Cl. 49—33.)

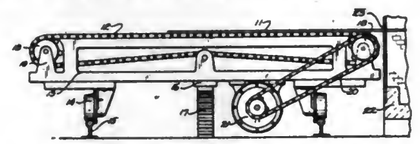
4. In apparatus for the manufacture of sheet glass, a furnace having an outlet through which is adapted to flow

a relatively thick narrow stream of molten glass, a table for receiving the stream of glass from the furnace and causing a widening thereof, a roll for receiving the thus widened stream from the table, said roll tapering from its



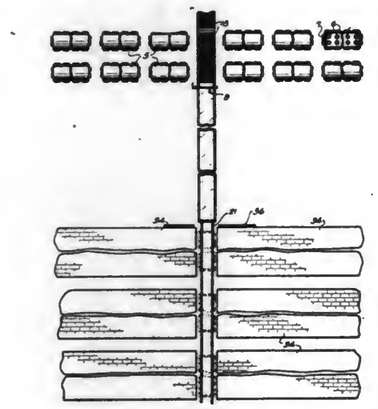
center towards its opposite ends, and a pair of forming rolls for receiving the stream from the first roll and reducing it to a sheet of substantially predetermined dimensions.

1,818,208. APPARATUS FOR FORMING AND ANNEALING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 2, 1928. Serial No. 297,016. 8 Claims. (Cl. 49—3.)



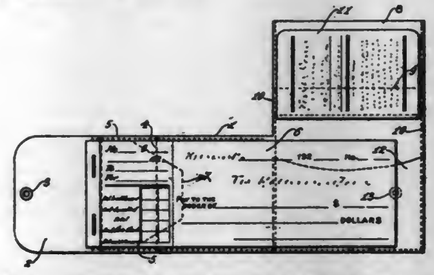
8. In apparatus for the production of sheet glass, means for forming the sheet, an annealing leer, a truck, an endless conveyor carried by the truck and arranged transversely thereof, means for moving the truck and conveyor forwardly as a unit during the laying of the sheet thereupon for carrying the sheet to a position adjacent the annealing leer, and separate means for driving the conveyor in a direction at right angles to its first direction of movement to deliver the sheet therefrom into the annealing leer.

1,818,209. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 13, 1929. Serial No. 362,477. 3 Claims. (Cl. 49—3.)



1. A system for producing sheet glass, comprising a track, annealing leers arranged on each side of the track, a plurality of conveyor means adapted to be reciprocated upon said track, a sheet forming mechanism positioned over the track and adapted to deposit the sheet formed on the conveyor as it moves therebeneath, said sheet being produced at a relatively high rate of speed, said sheet also being divided into sections, each of said conveyor means being provided with transversely movable means, and means for operating the transversely movable means both to the right and left whereby the sheets can be transferred to the leers on either side of the track as desired.

1,818,210. CHECK BOOK COVER. GEORGE DUEBELBEIS, Kirkwood, Mo. Filed Feb. 8, 1929. Serial No. 338,401. 4 Claims. (Cl. 281—17.)



3. A combined check pad and bank book cover, comprising, an elongated flexible back adapted to receive a check pad and having means near one end thereof for securing the pad thereto, and an extension projecting laterally from said back near the other end thereof and foldable toward said back, and having means to receive a bank book, said means being open on a side adjacent the fold line of said exterior for engaging the back cover of the bank book.

1,818,211. FURNITURE CASTER. THOMAS P. DUNCAN, Jr., Newport News, Va. Filed Aug. 8, 1929. Serial No. 384,325. 1 Claim. (Cl. 45—137.)



A caster of the character described, comprising a plate body having an aperture formed therethrough, integral penetrating prongs carried by the body at the edge thereof for engagement with a chair leg, and a rope having a normal diameter substantially the same as the plate aperture and formed of twisted strands of fibrous material, said rope being secured in said aperture by having one end frayed out to form a floor surface engaging tuft and by further having the other end frayed out and adapted to be positioned and be gripped between the plate and the furniture leg when the plate is attached thereto to secure the tuft against displacement.

1,818,212. EGG WHITE PROCESS. ALBERT K. EPSTEIN and BENJAMIN R. HARRIS, Chicago, Ill. Filed Aug. 8, 1929. Serial No. 384,469. 2 Claims. (Cl. 99—5.)

1. A process for drying egg whites which includes the steps of ripening liquid egg whites to a point at which they are substantially neutral or slightly acid to phenolphthalein, but arresting the ripening action before the egg whites become acid to litmus.

1,818,213. EGG WHITE PROCESS. ALBERT K. EPSTEIN and BENJAMIN R. HARRIS, Chicago, Ill. Filed Aug. 8, 1929. Serial No. 384,470. 4 Claims. (Cl. 99—5.)

1. A process for producing improved dried egg whites which includes introducing fermentable carbohydrate material into liquid egg whites, ripening the resulting product and finally extracting the moisture therefrom.

1,818,214. EGG WHITE PROCESS. ALBERT K. EPSTEIN and BENJAMIN R. HARRIS, Chicago, Ill. Filed Aug. 8, 1929. Serial No. 384,471. 5 Claims. (Cl. 99—5.)

1. A process for producing dried egg whites which includes selecting liquid egg whites, inoculating the same with a culture of acid forming organisms, and ripening the same to a point where the product will be acid to phenolphthalein but alkaline to litmus.

1,818,215. EGG WHITE PRODUCT AND PROCESS. ALBERT K. EPSTEIN and BENJAMIN R. HARRIS, Chicago, Ill. Filed Aug. 8, 1929. Serial No. 384,472. 5 Claims. (Cl. 99—5.)

1. The process of manufacturing a concentrated liquid egg white which consists in drying egg whites, and dissolving the dried product in natural liquid egg white.

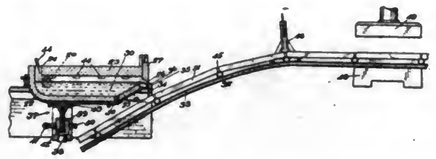
5. As a new article of manufacture, a liquid egg white product consisting of an intimate mixture of natural egg white of normal moisture content and discrete particles of dried egg white, the said product containing an increased percentage of egg white solids and possessing at least as good beating qualities as fresh liquid egg whites.

1,818,216. FOUNTAIN PEN. OSCAR FEDERBUSCH, Arnold, Pa., assignor of twenty-five per cent to Maurice H. Claster and twenty-five per cent to Louis Claster, Arnold, Pa. Filed July 17, 1929. Serial No. 379,000. 7 Claims. (Cl. 120—47.)



1. A fountain pen having a tube secured in the outer end of the barrel thereof, an annulus at the outer end of said tube, a second tube having a flange engaging said annulus, a spirally slotted sleeve within the tubes and fixed to the second tube, said first-mentioned tube having its inner end provide with a non-circular opening, a non-circular stem received through the opening and having means thereon engaging the spiral slot in said sleeve, and a plunger secured to the inner end of the stem.

1,818,217. METHOD AND APPARATUS FOR FLOWING SHEET GLASS. ENOCH T. FERNGREN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 19, 1925. Serial No. 3,260. 6 Claims. (Cl. 49—3.)

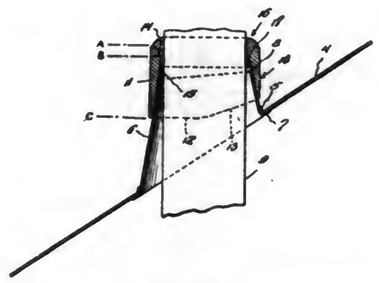


1. In sheet glass apparatus, a tank furnace containing a mass of molten glass, a pot, means for controlling a flow of glass from the furnace into said pot, means for movoing the pot in a definite horizontal path away from the furnace, means for keeping the glass in said pot at the proper temperature, a plurality of molds hingedly associated and movable past said pot, means for tilting said pot for flowing a ribbon of glass therefrom upon the molds as they are moved past said pot, a plunger for pressing all of the glass in each mold simultaneously, and a cutter blade arranged transversely of the molds and adapted to be moved into contact with said ribbon of glass for severing the same between adjacent mold sections, said cutter being shaped in a manner to cut the sheet from both edges toward the center.

1,818,218. RECONDITIONING OILS. JAMES G. FORD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1927. Serial No. 211,266. 1 Claim. (Cl. 196—16.)

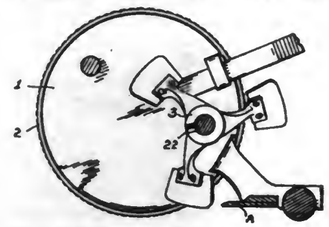
In the process of refining mineral oils that have been used in transformers or other oil-filled apparatus, the step which comprises treating the oil with from two to four percent of fuming sulphuric acid mixed with fuller's earth, agitating the mixture and removing the water, oxidized hydrocarbon products and residual sulphuric acid after they have separated from the oil.

1,818,219. ROOF FLANGE. SAMUEL GOODMAN and MAX GOODMAN, Boston, Mass. Filed Jan. 23, 1929. Serial No. 334,435. 1 Claim. (Cl. 285—81.)



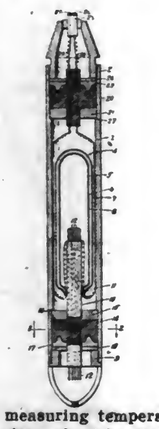
In a flashing of the class described, a frusto-conical nipple, an attaching base therefor, an open-ended cylindrical annulus fitting telescopically over said nipple and having an internal upper chamfer, and a lower oppositely extending bevel defining an internal circumferential anchoring rib, and the calking collar fitting into said annulus and cooperable with said chamfer and rib, approximately one-half of the lower edge portion of said annulus being obliquely cut with respect to the longitudinal axis.

1,818,220. LAWN MOWER. CHESTER A. GRATIOT, Portland, Oreg. assignor to Eversharp Lawn Mower Company, Reno, Nev., a Corporation. Filed May 6, 1930. Serial No. 450,124. 4 Claims. (Cl. 56—294.)



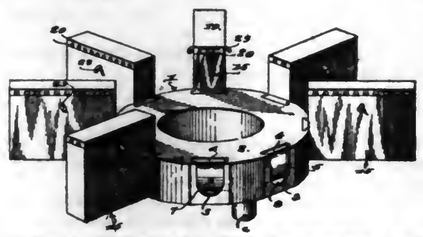
1. In lawn mowers, the combination with a stationary blade of a cutterhead comprising, a shaft upon which are mounted a series of knife carriers fitted with flat flexible blades disposed in planes inclined to the axis of rotation wherein the said flexible blades are formed with cutting edges disposed at a greater distance from the axis of rotation than the said stationary knife with which they make contact.

1,818,221. MEANS FOR MEASURING TEMPERATURE IN BOREHOLES. FREDERICK W. HUBER, Riverside, Calif. Filed May 1, 1929. Serial No. 359,584. 3 Claims. (Cl. 73—32.)



2. Apparatus for measuring temperature in bore holes, etc., comprising a casing, a heat insulated receptacle therein containing a body of material whose fusion temperature is below the temperature to be measured, thermo-electric means mounted on said casing and having junctions in heat transmitting relation with said body of material and junctions exposed outside of the casing, and cable means connected to the casing and having conductors connected to said thermo-electric means.

1,818,222. GAS BURNER. PAUL C. HUGHES, Tulsa, Okla. Filed Mar. 21, 1929. Serial No. 348,903. 4 Claims. (Cl. 158—104.)



1. A burner of the class described comprising a burner body, in the form of a hollow casing open to the atmosphere, a gas supply pipe mounted in said casing having outlet apertures arranged at intervals, said casing having openings positioned opposite said aperture, mixing tubes having T-shaped heads to be detachably mounted in said casing openings, and having bores arranged opposite the discharge apertures of the gas pipe, and a burner unit connected with each mixing tube.

1,818,223. MAGAZINE FEED FOR CONE WINDERS. RALPH CURTIS JORDAN, Columbus, Ga. Filed Jan. 17, 1929. Serial No. 333,123. 4 Claims. (Cl. 242—130.)



1. The method of winding and uniting the yarn on a plurality of bobbins which consists in supporting the bobbins to rotate about coplaner axes which meet in a point and arranging the bobbins with the top end of each bobbin, below the bobbin nearest said point, closely adjacent to the bottom end of the next bobbin nearer to said point.

1,818,224. GATE APPARATUS. CHARLES KASIK, Reedpoint, Mont. Filed Mar. 25, 1930. Serial No. 438,788. 5 Claims. (Cl. 39—30.)

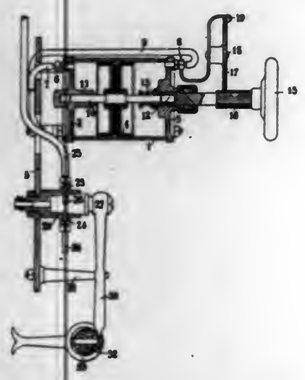


1. An apparatus of the class described comprising an upstanding member, a sleeve rotating thereon, a gate carried by said sleeve, a gear rotatably supported by the member and operatively engaged with the sleeve for rotating the sleeve and gate upon rotation of the gear, a rock arm positioned adjacent to the gear, said rock arm and gear having coacting means for rotating the gear upon movement of the rock arm in one direction, and means for automatically moving the rock arm in the opposite direction, said movement of the rock arm in the second direction being independent of the gear.

1,818,225. APPARATUS FOR SUCCESSIVELY DISTRIBUTING VARIABLE AND ADJUSTABLE QUANTITIES OF ANY LIQUIDS. JEAN KIENER, St.-Die, France, assignor to Societe Anonyme Etablissements Jules Marchal, St.-Die, Vosges, France. Filed June 26, 1929, Serial No. 373,850, and in France July 5, 1928. 3 Claims. (Cl. 21—103.)

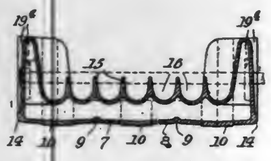
1. An apparatus for successively distributing variable and adjustable quantities of liquids under pressure, comprising: a cylinder, two heads closing this cylinder in a fluid-tight manner, a piston freely movable in this cylinder, —means for adjusting and limiting the length of the stroke of this piston,—an orifice in each cylinder head and a conduit connected to each orifice,—a conduit for admitting

the liquid to be distributed under pressure,—a conduit for the distribution of this liquid,—a cock casing perforated with four openings spaced about 90° apart adapted to receive the four above conduits,—a plug angularly moving in this cock, two ports provided in this plug and adapted to simultaneously put the liquid inlet conduit in communication with one of the conduits connected to one of the cylinder heads, and the liquid distributing conduit



with the other conduit connected to the other cylinder head,—means for controlling from a distance the plug of the said four-way cock, and successively bringing it in two predetermined positons for reversing the distribution of the liquid into the cylinder; said adjusting and limiting means comprising a fixed abutment for the piston on one of said heads and an axially movable abutment for the piston threaded in the other of said heads.

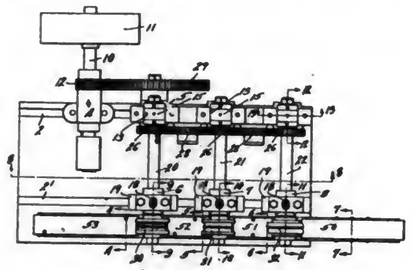
1,818,226. RADIATOR. THOMAS E. LANDVOIGT, Westmont, Pa., assignor to National Radiator Corporation, Johnstown, Pa., a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,273. 6 Claims. (Cl. 257—151.)



3. A radiator section comprising a hollow body having hollow wings at each end thereof and a hollow panel portion between the wings, the space in the wings and the space in the panel being continuous to permit the flow of fluid therethrough, the front surface of the body extending substantially in a single plane, the rear face of the panel portion between the wings having heat dissipating projections thereon.

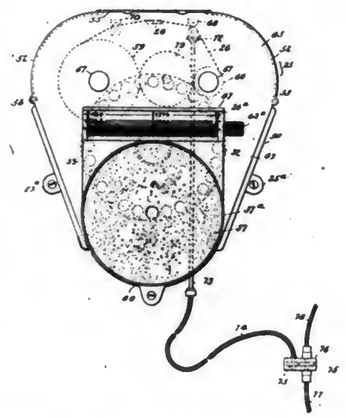
1,818,227. MACHINE FOR PRODUCING CHANNEL STRIPS. EDWARD W. LIVENSPARGER, Cleveland Heights, Ohio. Filed June 14, 1928. Serial No. 285,481. 2 Claims. (Cl. 154—1.)

1. In a machine of the class described, a base, a pair of spaced journal blocks mounted thereon, one for sliding movement the other for pivotal movement, a shaft bearing in said journal blocks, a forming roll on said shaft and spaced from said pivoted block, a forming roll mounted for cooperation with said first named roll, a gear on said shaft adjacent said pivoted block, a gear on said base for driving said second named roll and meshing



with said first named gear in the plane of said block movement, and means for adjusting said sliding block to adjust the clearance between said rolls.

1,818,228. AUTOMATIC TRAVEL GUIDE. NELSON C. LUND, Bound Brook, N. J. Filed Jan. 10, 1928. Serial No. 245,786. 9 Claims. (Cl. 40—52.)



1. In a travel guide apparatus for vehicles, a control tape moved by the vehicle at a speed proportional to the speed of travel of the latter, a visible signalling mechanism adapted to be observed by the driver of the vehicle, and means controlled by the tape for rendering the signal mechanism operative, the signalling means including a signal carrier, means for moving the carrier, a screen, and means for projecting the signals in magnified form upon the screen.

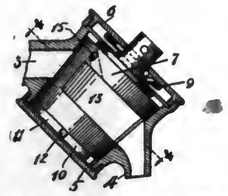
1,818,229. ELECTROPLATING. GEORGE LUTZ, Rocky River, and Leon R. Westbrook, Cleveland Heights, Ohio, assignors, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Feb. 23, 1928. Serial No. 256,476. 9 Claims. (Cl. 204—1.)

1. An alkyl-naphthalene sulfonic acid as an addition agent to an electroplating bath.

1,818,230. MEASURING VALVE. HARRY C. LYONS, Mount Vernon, N. Y. Filed Nov. 7, 1929. Serial No. 405,370. 3 Claims. (Cl. 221—106.)

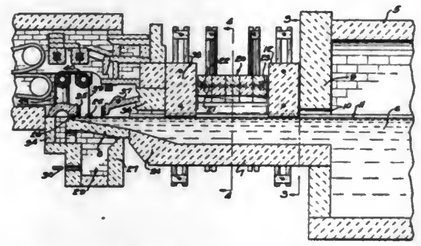
1. In a measuring valve, a valve housing, a valve mounted therein and having measuring chambers in opposite sides thereof, said valve being rotatable to two different operative positions, an opening in the outer end of the

housing for permitting the valve to be inserted and removed, a cap for said opening, an inlet projecting angularly from the side wall of the valve housing, the projection of the bore of said inlet passing through the opening in said housing through which the valve is inserted and



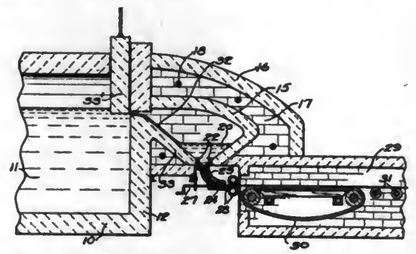
removed, a discharge nozzle on the opposite side of said housing, the passage through the nozzle and the passage through the inlet registering alternately with the measuring chambers in said valve as said valve is rotated from one to another of its operative positions.

1,818,231. SHEET GLASS APPARATUS. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 11, 1926. Serial No. 93,849. 2 Claims. (Cl. 49—54.)



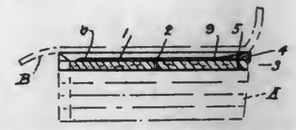
2. In sheet glass apparatus, a tank furnace containing a mass of molten glass, a draw pot communicating therewith for receiving the molten glass therefrom and having a closed outer end, a lip tile disposed above the molten glass and having its front end supported on the closed end of the draw pot, means for supporting the outer end of the lip tile and cooperating with said lip tile to form a tunnel therebeneath, a heating chamber disposed beneath the draw pot and in communication with the said tunnel, means for heating said chamber, a stack also in communication with said tunnel for drawing the exhaust gases therefrom, and temperature control means positioned beneath the lip tile and partially immersed within the molten glass.

1,818,232. SHEET FORMING MECHANISM. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 18, 1926. Serial No. 95,577. 17 Claims. (Cl. 49—17.)



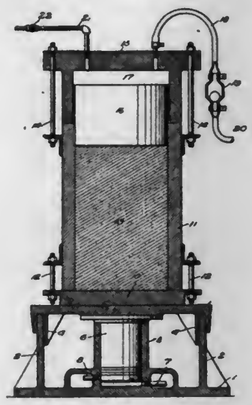
1. In sheet glass apparatus, a receptacle containing a mass of molten glass, means for causing a flow of glass to pass therefrom under the head pressure of the glass in said receptacle, and a pair of substantially parallel curved members for reducing the flow to sheet form.

1,818,233. SHOE HEEL. MICHAEL Q. MANCINI, Bethesda, Md. Filed May 20, 1929. Serial No. 364,402. 1 Claim. (Cl. 36—34.)



In a shoe comprising the usual upper materials, a heel structure attached thereto, comprising a heel having an upper lift on which is positioned a metal thrust plate having arms of graduating sizes extending therefrom, said arms having their edges beveled, and a beveled rand on said upper lift and covering the outer ends of said arms.

1,818,234. MOLDING GRANULAR MIXTURES. SEMMEON M. MCANULTY, Niagara Falls, N. Y., assignor to Republic Carbon Company, Niagara Falls, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 390,949. 7 Claims. (Cl. 25—41.)



1. A machine for molding by jolting, comprising a mold, means for jolting the mold, a follower operating against the material in the mold, and means for applying fluid pressure to the follower.

1,818,235. LAMINATED GLASS. WILLARD C. MCDANIEL, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 23, 1928. Serial No. 294,802. 7 Claims. (Cl. 49—81.)



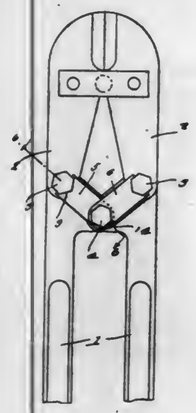
2. The process of producing laminated glass, consisting in forming a sandwich from the laminations to be joined, arranging a compressible member on each side of the sandwich, applying "stickers" at the edges of the sandwich and compressible members to prevent slippage between the laminations, and then applying pressure to the assembly thus formed to obtain a bond between the laminations.

1,818,236. INGOT MOLD. THOMAS MCNALLY, Massillon, Ohio. Filed Mar. 18, 1927. Serial No. 176,403. 2 Claims. (Cl. 22—139.)



1. A breakable plug for ingot molds having a packing receiving portion provided thereon, and a packing cooperating with said portion and providing a yieldable seat for said plug.

1,818,237. BOLT CUTTER. CHARLES A. MEDEAN, Jr., Inglewood, Calif. Filed June 23, 1930. Serial No. 463,259. 2 Claims. (Cl. 81—199.)



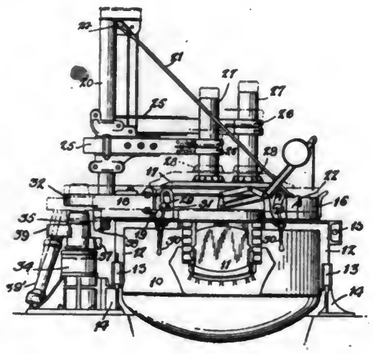
1. A bolt cutter comprising a pair of cutting blades, operating handles therefor, bolts pivotally connecting the said blades to said handles, a pair of locking plates, a bolt passing through said locking plates and said handles, said plates respectively provided with a notch for receiving one of the first mentioned pivot bolts.

1,818,238. PROPELLER FOR HELICOPTEROUS AIRCRAFT. JEAN MELLANDER, Brussels, Belgium. Filed Nov. 23, 1925, Serial No. 70,983, and in Belgium Nov. 28, 1924. 3 Claims. (Cl. 244—19.)



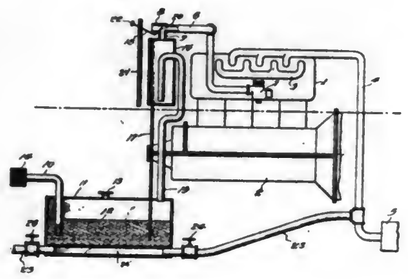
1. Propellers for helicopters comprising a shaft, a mounting on said shaft comprising radial arms for carrying the blades, blades mounted movable to oscillate on axes transverse to said arms and means for controlling the radial inclination of the blades.

1,818,239. ELECTRIC FURNACE. WILLIAM E. MOORE, Pittsburgh, Pa., assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Filed Sept. 25, 1929. Serial No. 395,058. 13 Claims. (Cl. 13—1.)



1. An electric furnace comprising a tilting shell, a roof detachably secured thereto, and means arranged independently of said tilting shell and roof for swinging the roof away from the furnace shell.

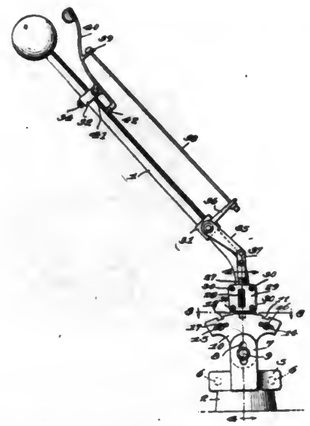
1,818,240. PROCESS FOR IMPROVING FUEL AND AIR MIXTURES FOR INTERNAL COMBUSTION ENGINES. JACQUE C. MORRELL, Oak Park, Ill. Filed Aug. 25, 1927. Serial No. 215,270. 6 Claims. (Cl. 123—198.)



1. A process of the character described, which comprises subjecting regulated quantities of air to direct contact with a non-aqueous compound in non-solid state possessing anti-knock properties to cause said air to carry entrained therein quantities of such compound, then mixing said air containing said entrained compound with motor fuel to produce a combustible vapor and subsequently passing said vapor to the cylinders of an internal combustion engine during normal operation thereof.

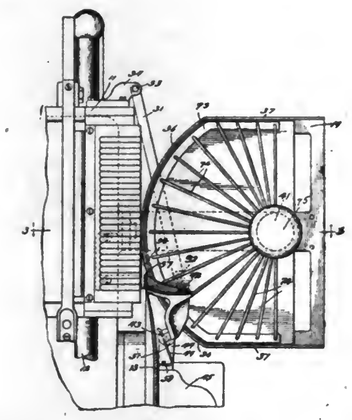
1,818,241. GEAR SHIFT LEVER LOCK. EMMONS C. MOULTON, Pasadena, Calif. Filed Mar. 10, 1930. Serial No. 434,665. 7 Claims. (Cl. 74—39.)

5. The combination with a gear shift lever of a segmental member having an arcuate shaped upper edge with longitudinally spaced recesses therein, arms connected to one face of the segmental member and extending laterally therefrom, each of the arms having a rib on its upper face extending at right angles to the arc of the upper edge of the member, and means carried by the lever



and adapted to be engaged in the recesses of the member or with the ribs of the arms for holding the lever in any of its gear engaging positions.

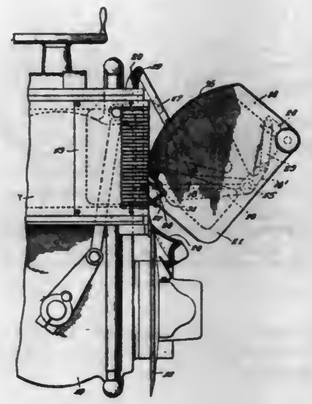
1,818,242. SLICE RECEIVER AND COLLECTOR. JOSEPH FOLK, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Feb. 23, 1929. Serial No. 341,869. 24 Claims. (Cl. 146—94.)



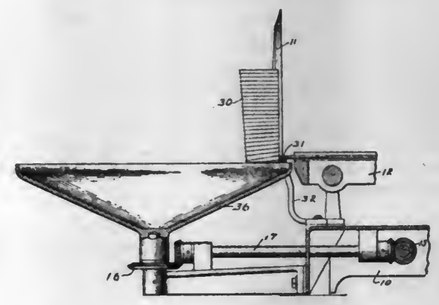
1. The combination with a slicing machine having a slicing knife, of a receiver movable past said knife for receiving slices formed by said machine, said receiver having spaced ribs thereon for engaging the slices as they they being severed and substantially preventing curling thereof as the slices are moved away from the knife by said receiver.

1,818,243. SLICE COLLECTING DEVICE FOR SLICING MACHINES. EDWARD M. STILES, Burlington, Iowa, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Apr. 16, 1927, Serial No. 184,193. Renewed Dec. 5, 1930. 20 Claims. (Cl. 146—94.)

1. In a slicing machine, a slicing knife and a work support movable relative to each other for presenting material to said knife to sever slices therefrom, a slice receiver, and means for engaging the side of each slice opposite the slicing knife as the slice is severed to assist in depositing said slice smoothly on said slice receiver, said means being actuated by said machine to move out of contact with the slice before it is severed.



1,818,244. ASSEMBLING DEVICE FOR SLICING MACHINES. JOSEPH FOLK, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Sept. 9, 1926, Serial No. 134,353. Renewed Jan. 10, 1931. 19 Claims. (Cl. 146—94.)

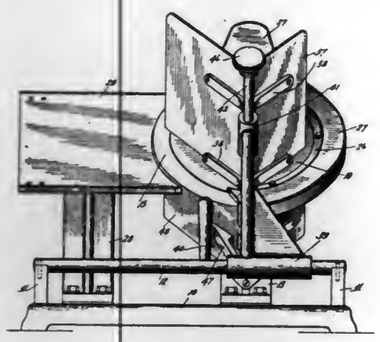


1. The combination with a slicing machine having a slicing knife, of a continuously rotating slice receiver adjacent said knife, having a portion thereof arranged to return periodically into position to receive slices broad side down as they are formed so that the slices will be deposited, one upon another, at said portion of said receiver.

1,818,245. SLICING MACHINE. JOSEPH FOLK, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Oct. 16, 1926. Serial No. 141,901. 20 Claims. (Cl. 146—94.)

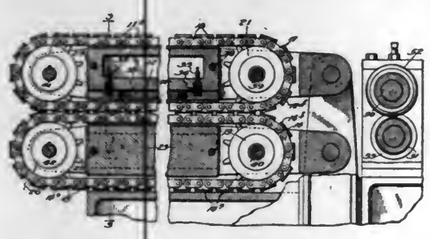
1. The combination with a slicing machine having a slicing knife, of a work support mounted at one side of the cutting plane of said knife, and movable along the face of said knife a slice receiver mounted at the opposite side of the cutting plane of said knife and connected with said work support to move bodily therewith in a plane substantially parallel to the path of movement of said work support, means for feeding work

in said work support toward the cutting plane of said knife, means for directing slices as they are formed onto



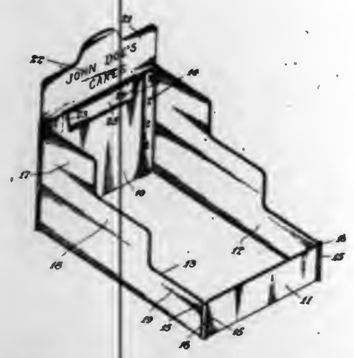
said slice receiver, and means for feeding said receiver relative to said knife to accommodate additional slices as they are deposited on said receiver.

1,818,246. MACHINE FOR EXPANDING METAL. WILLIAM W. GALBREATH, Warren, Ohio. Filed Apr. 18, 1929. Serial No. 354,885. 11 Claims. (Cl. 164—6.6.)



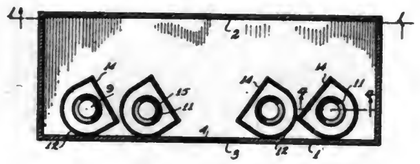
1. A machine for expanding slitted and ribbed metal including; a plurality of diverging pairs of chains, both chains of each pair moving parallel to each other and adapted to grasp the ribs of the metal therebetween; and means for driving said chains to cause the same to move forwardly and diverge from each other while carrying the metal therebetween.

1,818,247. DISPLAY DEVICE. PHILIP H. GRENNAN, Detroit, Mich. Filed Sept. 27, 1930. Serial No. 484,736. 7 Claims. (Cl. 206—45.)



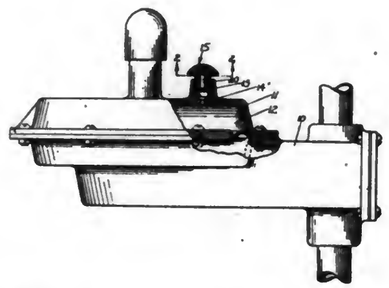
1. A display device comprising a single strip of relatively stiff material bent to form a substantially rectangular frame having an unobstructed interior, and means securing the opposite ends of said strip of material together to hold said frame closed, said strip of material being cut intermediate its ends to form stepped sides for said frame.

1,818,248. DISPLAY DEVICE. FRANK GRITT, Indianapolis, Ind., assignor, by mesne assignments, to Gritt Inc., Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 8, 1930. Serial No. 487,250. 2 Claims. (Cl. 40—40.)



1. A device of the class described comprising a rear opaque panel having a substantially flat front face bearing a skeletonized pictorial representation of a moving object, means located in front of said panel for projecting intermittent light rays, a mirror for reflecting said rays upon said skeletonized pictorial representation to effect illusory motion of said object, and a front panel located in front of said means and said mirror, said front panel having a window through which said rear pictorial representation is visible, said front panel bearing a pictorial representation of an object in complementary relation to said rear representation.

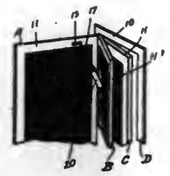
1,818,249. MUSHROOM VENT PLUG. JACOB C. GROBLE, Anderson, Ind., assignor to Groble Gas Regulator Co., Anderson, Ind., a Corporation of Indiana. Filed Sept. 25, 1929. Serial No. 394,972. 1 Claim. (Cl. 137—21.)



A vent plug for a gas pressure regulator, said plug consisting of a body having a reduced stem portion terminating at one end in an enlarged mushroom-shaped head portion defining on the lower side thereof an outwardly and downwardly inclined annular lip, said body having a central passage in the stem portion terminating within the head, and a plurality of downwardly and outwardly inclined relatively small side passages extending from the central passage through the stem arranged to open under said lip, said lip and side passages arranged cooperating to prevent the blocking of the vent by mud daubers and the like.

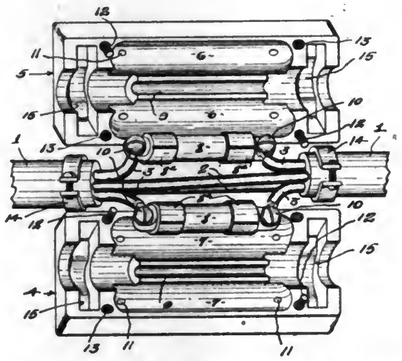
1,818,250. CHECK CONSTRUCTION. PHILIP J. HARRAH and CHESTER P. HARRAH, Bloomfield, Ind. Filed June 28, 1929. Serial No. 374,461. 2 Claims. (Cl. 16—84.)

1. The combination with two swingingly connected members, of a check construction connected at one end to one member and at its other end to the other member and including a liquid containing cylinder, a piston therein, a rod supporting the same and extending beyond the cylinder, a restricted communication through the piston and bumper spring interposed between the piston and



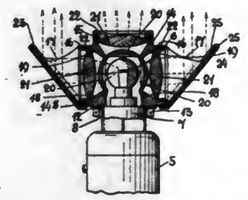
the end of the cylinder opposite the rod supporting end and effective near the end of the piston travel for cushioning the same, said cylinder being but partially filled with liquid for relatively free movement of the piston through the air containing portion of the cylinder.

1,818,251. PORTABLE CABLE FUSE CUT-OUT. HAROLD P. HASTINGS, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Oct. 21, 1929. Serial No. 401,808. 6 Claims. (Cl. 200—133.)



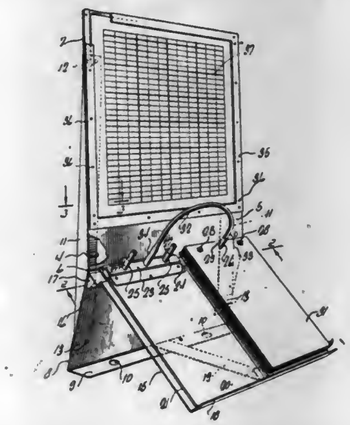
1. A fuse cut out for a cable having a plurality of wires, said cut out comprising a casing formed of complemental sections, each of said sections having a recess extending longitudinally and central of the section and being open at both ends for receiving a continuous run of the wire of the cable, a second recess extending parallel and to one side of the first recess and being closed at its ends for receiving a fuse element for connection to another wire of the cable, a transverse recess adjacent each end of the section for receiving a cable clamp and means for detachably holding the sections together.

1,818,252. LIGHTING FIXTURE. HENRY HEINE, Chicago, Ill. Filed Dec. 6, 1928. Serial No. 324,156. 1 Claim. (Cl. 240—10.6.)



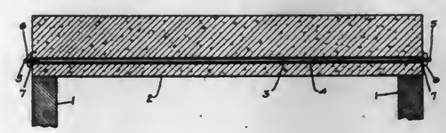
In an electric pocket torch the combination of a battery box having a neck at one of its ends, a clamping ring adapted to be removably fastened about said neck, a flange on said clamping ring, an electric bulb, a socket formed on the end of the neck and adapted to receive the bulb, a body having a bottom portion with a hole therein permitting the bulb to extend into the body, a plurality of screws extending through the flange of the clamp ring and into the bottom of the body for removably holding the body in position on the battery box, and a plurality of lenses and reflectors cooperating with each other arranged in the body so as to surround the bulb, when the bulb is held in position by the screws.

1,818,253. BOOKKEEPING DEVICE. OTTO L. HERMANN, St. Louis, Mo., assignor, by mesne assignments, to Buxton & Skinner Printing and Stationery Co., St. Louis, Mo., a Corporation of Missouri. Filed Sept. 14, 1929. Serial No. 392,593. 4 Claims. (Cl. 129—1.)



3. A device of the character described, comprising an upright mounting member, an inclined member connected therewith and serving to maintain the upright member in its upright position, a chart mounted on the upright member, and the inclined member being adapted to support a record book in a position facilitating the comparison of records therein with the chart.

1,818,254. METHOD AND MEANS FOR TYING CONCRETE. WILLIAM S. HEWETT, Minneapolis, Minn. Filed Sept. 10, 1927. Serial No. 218,822. 5 Claims. (Cl. 72—71.)

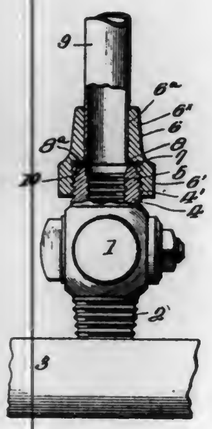


1. A method of tying concrete which consists in coating the tying element with a substance which will prevent bonding and then pouring the concrete about the element.

1,818,255. PIPE COUPLING. OTTO G. HITCHCOCK, Erie, Pa., assignor to Hays Manufacturing Co., Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 28, 1928. Serial No. 257,734. 2 Claims. (Cl. 285—124.)

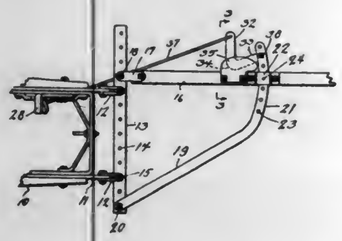
1. In combination, a standard corporation stop having an externally threaded outlet, the extremity of which is provided with an annular convex surface substantially semi-circular in cross section, an internally threaded nut

engaging the threads of the stop and provided with a tubular extension, said nut being provided intermediate its ends with an internal annular convex surface merging into a substantially right angled shoulder arranged oppo-



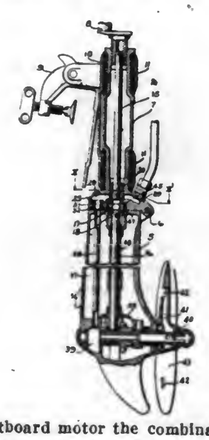
site to the convexed extremity of the stop and a soft metal tubing extending through the tubular extension of the nut and having an annular substantially right angled flange clamped between said shoulder and said semi-circular extremity.

1,818,256. TRACTOR HITCH. FRED W. HOESING, St. Helena, Nebr. Filed Jan. 2, 1930. Serial No. 418,133. 9 Claims. (Cl. 280—33.10.)



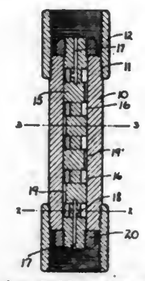
1. In a tractor hitch, a trailing body, a draft beam secured to the body, a draft tongue pivotally connected to the beam, a shift bar pivotally connected to the beam at a point spaced from the tongue connection, and provided with a portion slidably connected to the tongue intermediate its ends, for movement transversely thereof, a shift lever pivoted to the body substantially in line with the tongue, for relative longitudinal movement of the tongue, means to secure the lever in any of several adjusted positions, and means connecting the lever to the shift bar portion near the intersection of the bar portion and the tongue, to convert movement of the lever into movement of the shift bar portion transversely of the tongue.

1,818,257. OUTBOARD MOTOR. FINN T. IRGENS, Wauwatosa, Wis., assignor to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed Mar. 14, 1931. Serial No. 522,747. 10 Claims. (Cl. 115—17.)



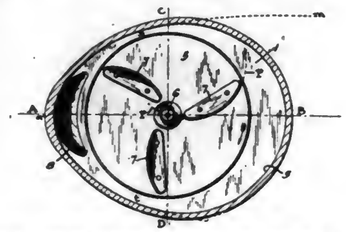
1. In an outboard motor the combination with hingedly connected upper and lower units having registering water conduits, of annular cushion means compressed in the aligned position of said units and adapted to seal the joint between said conduits.

1,818,258. GAUGE STABILIZER. JAMES D. ISAACKS, Houston, Tex. Filed June 18, 1928. Serial No. 286,138. 3 Claims. (Cl. 73—31.)



3. A stabilizer for fluid pressure gauges comprising a tubular body, a core fitting closely therein, said core having a plurality of spaced recesses in its outer surface forming chambers within said tubular body, there being constricted passages formed in the outer surface of said core, said passages being formed alternately upon opposite sides of said core to provide a tortuous fluid channel, and constricted passages from the endmost of said chambers to the outside in the manner described.

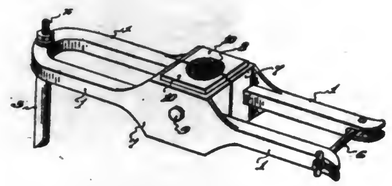
1,818,259. PUMP. EDWIN JUELSON, Chicago, Ill. Filed Nov. 24, 1928. Serial No. 321,617. 9 Claims. (Cl. 230—133.)



1. A centrifugal pump for aeriform fluids of the type having a fan and a casing, characterized by the casing

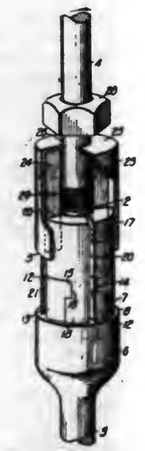
being of oblong shape and having two chambers one at each side of the fan and in the same plane therewith, and a single outlet opening which communicates with one of said chambers.

1,818,260. AUTOMATIC BACK TWIST TOOL FOR WIRE LINES. EDWARD A. KLIEWER, Ranger, Tex. Filed Sept. 23, 1929. Serial No. 394,435. 4 Claims. (Cl. 255—5.)



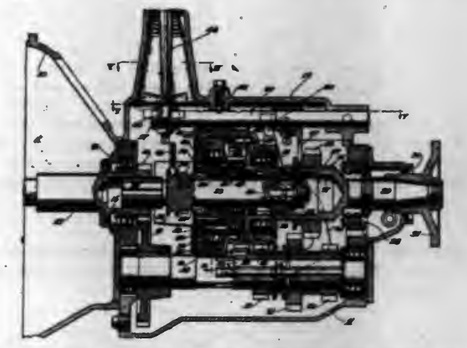
1. In a back twist tool for cables, a rigid vertical post, substantially horizontally disposed arms having openings therethrough to receive the upper end of the post whereby said arms are pivoted on the post, complementary blocks carried by said arms said blocks having cable engaging spiral grooves of uniform pitch formed to conform with the lay of the preformed cable to impart twisting motion to a cable forced therethrough, means to lock the arms in operative position and means connected to the opposite ends of the arms to prevent rotation of the arms relative to the post.

1,818,261. COUPLING. DICK H. KOCH and IRA T. SLATON, Coffeyville, Kans. Filed Oct. 14, 1927. Serial No. 226,123. 4 Claims. (Cl. 287—103.)



4. In combination with separate rod sections having cooperative interlockable joint members, a sleeve slidable over the members and having a rib movable into joint latching position, a flange on one end of the sleeve, one section having an upset threaded portion, and a nut slidable on said rod section, into engagement with said threaded portion to engage said flange and anchor the sleeve in joint latching position.

1,818,262. FOUR SPEED TRANSMISSION. ROBERT LAPSLEY, Detroit, Mich., assignor to Norge Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 13, 1928. Serial No. 299,170. 14 Claims. (Cl. 74—89.)



1. In a transmission, an operating lever, low speed gear means, intermediate speed gear means, a high speed connection, a reverse gear means, an emergency low speed gear means, and means associated with the operating lever for normally locking the same from operative engagement with the emergency low speed gear means.

1,818,263. JELLY PREPARATION AND PROCESS OF MAKING THE SAME. ALBERT LEO, Chicago, Ill. Filed Dec. 22, 1928, Serial No. 328,069. Renewed May 18, 1931. 6 Claims. (Cl. 99—11.)

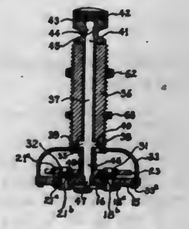
2. A jelly preparation, comprising a mixture in granular form of sugar, a fruit acid and pectin, the sugar and acid each being enveloped by a coating of pectin over the individual, separate particles thereof.

1,818,264. PNEUMATIC TOY GUN. WILLIAM J. MCCANS, Lakewood, Ohio. Filed Aug. 27, 1930. Serial No. 478,043. 4 Claims. (Cl. 46—46.)



1. A gun of the kind described, having a barrel, and an operating lever arranged to hold a piece of paper against the rear end of the barrel, the lever having an opening in line with that of the barrel, the lever having a guard projecting behind said opening.

1,818,265. ELECTRIC SWITCH. GEORGE J. MEUER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,021. 10 Claims. (Cl. 200—1.)



1. In an electric switch, in combination, an externally threaded hollow metal bushing, an actuating shaft com-

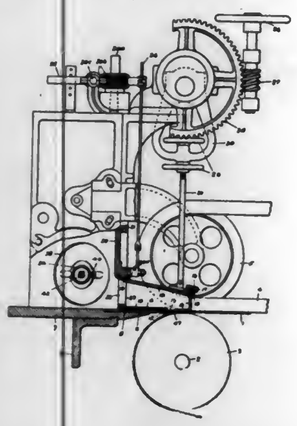
prising a flat punched sheet metal member having one end penetrating said bushing and projecting upwardly therebeyond, a metal knob having a hollow shank to receive the upper end of said shaft, said shank and said shaft end being jointly swaged to permanently interlock the same against movement relatively to each other, said shank being adapted to bear against one end of said bushing, said shaft having an integral lateral projection adjacent to the other end of said bushing to bear against the latter, a contactor slidably mounted upon the lower end of said shaft and interlocked with the latter for rotation thereby, a coiled compression spring interposed between said lateral projection and said contactor, and an insulating base supported in spaced relation to said bushing and adapted to retain said contactor in assembled relation to said shaft.

1,818,266. BOX COVER. ARLOW W. MINER, Sioux City, Iowa. Filed Nov. 19, 1928. Serial No. 320,328. 2 Claims. (Cl. 229—45.)



1. In a box cover of paper or the like, for a box having a top reinforced band, a central sheet provided with opposed tabs, adapted to be bent at substantially right angles to the central sheet and tongues formed integrally with the tabs and adapted to be received under said reinforcing band at opposed points of the box to retain the cover in place, said tongues being struck from the material of the tabs, and arranged with their free ends extending upwardly.

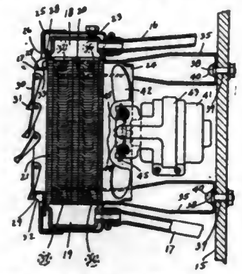
1,818,267. PAPER MACHINE. NICKOLAS J. NIKS, Chillicothe, Ohio. Filed July 24, 1929. Serial No. 380,549. 37 Claims. (Cl. 92—44.)



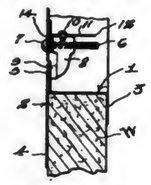
1. In a paper machine, the combination of a wire and a flexible slice having a free edge.

1,818,268. HEATING APPARATUS FOR VEHICLES. QUINTIN G. NOBLITT, Indianapolis, Ind. Filed Aug. 17, 1929. Serial No. 386,619. 6 Claims. (Cl. 257—137.)

1. In a heater having a heating element and means for directing a stream of air to be heated over said heating element, the combination of a frame member having an aperture through which said stream of air is adapted to be passed, a plurality of individually manually operable dampers mounted in said frame and arranged in said aperture adapted to deflect said air stream and to control the volume thereof, and means for selectively positioning said frame member whereby said air stream may be selectively deflected in one of a plurality of directions.

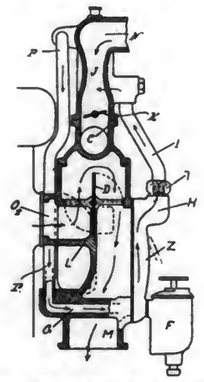


1,818,269. WALL COVER PLATE AND MOUNTING THEREFOR. EDWIN A. OLLEY, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,820. 2 Claims. (Cl. 72—98.)



2. The combination of a mounting comprising a body in the form of a marginal frame forming the facing for the edge of a wall exposed at the opening in the wall in which the mounting is placed, the mounting having a laterally extending flange at the inner side of the wall for lapping and securement to the wall, a cover plate for closing the opening confined by the mounting, said plate having means selfcontained therewith for coacting with the mounting for securing the cover plate in position, the cover plate having an outwardly extending marginal flange opposed to the flange of the mounting and forming a channel for receiving the margin of the wall in which the mounting is placed.

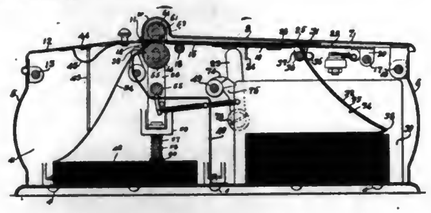
1,818,270. HOT SPOT MANIFOLD. HENRY B. PETIT, Detroit, Mich., assignor to George M. Holley, Detroit, Mich. Filed May 27, 1927, Serial No. 194,667. Renewed May 22, 1930. 6 Claims. (Cl. 123—122.)



1. A vaporizer, comprising an exhaust manifold, an outlet therefrom, an opening therein adjacent said outlet, a

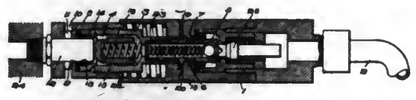
cover therefor, a vaporizing element located in said cover, means for admitting fuel to said element, an inlet manifold located above said exhaust manifold, a mixing chamber discharging into said inlet manifold, a passage connecting said vaporizing element with said mixing chamber, a wall common to said inlet and exhaust manifolds, a partition in said exhaust manifold adapted to unite all the exhaust gas into one stream, a valve in said exhaust manifold, said valve being located so as to cooperate with said partition so as to direct all the exhaust gases against the said hot spot when in one position, and, in another position, to divert all the exhaust gases away from said hot spot, but in neither position to interfere with the free flow of the exhaust gases over said vaporizing element.

1,818,271. AUTOGRAPHIC REGISTER. FRANK E. PFEIFFER, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 23, 1929. Serial No. 416,037. 9 Claims. (Cl. 282—16.)



1. In an autographic register having a plurality of superimposed sheets passing over a writing table, a writing table comprised of a stationary portion and a reciprocating portion, and means to move the reciprocating portion against the sheets passing thereover to align them on a predetermined line.

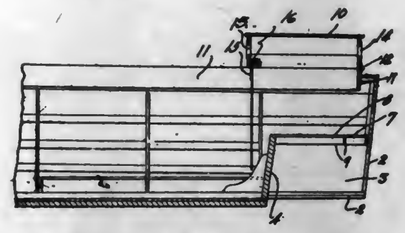
1,818,272. ADAPTER FOR LUBRICATING APPARATUS. WALTER H. PIERCE, Watertown, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 20, 1929. Serial No. 364,516. 13 Claims. (Cl. 285—2.)



1. In combination with the discharge nozzle of a lubricant-dispensing device, an adapter having a male part at one end cooperating with the female part of the nozzle to secure the adapter to the nozzle, lubricant nipple-engaging means at the other end for engagement with a nipple of a type differing from the type adapted to be engaged by the said nozzle, said nozzle having an end face having means cooperating with means presented by an end face of the adapter to lock the adapter and nozzle against accidental relative rotation and axially movable means operable to permit disengagement of the interlocking means presented at the two faces to permit disengagement of the adapter from the nozzle.

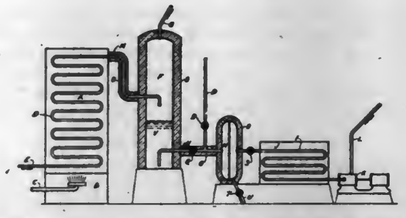
1,818,273. OUTBOARD MOTOR BOAT. RUSSELL J. POULIOT, Detroit, Mich., assignor, by mesne assignments, to Dee Wite, Incorporated, Detroit, Mich., a Corporation of Michigan. Filed June 14, 1929. Serial No. 370,779. 10 Claims. (Cl. 115—17.)

1. In an outboard motor boat having a stern and provided with an aperture through the bottom at the stern, the aperture also opening through the stern of the boat from the bottom and terminating at a point above the water line, a transom extending across the boat forward of the aperture and forming a water tight compartment forward of the transom the upper edge of the transom extending slightly above the top of the aperture in the stern, a pair of partitions on opposite sides of the aperture and extending between the transom and the stern and



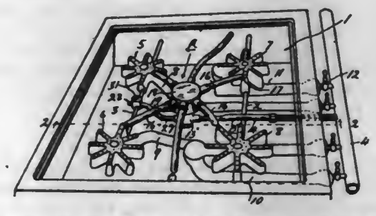
from the bottom of the boat to a point above the water line, the transom and partitions forming a water tight well and the portion of the transom between the partitions providing a mounting for an outboard motor, and a hatch hingedly mounted on the boat and covering the portion of the boat between the transom and the stern.

1,818,274. HOT FILTRATION OF DECOLORIZED OILS. PAUL W. PRUTZMAN, Los Angeles, Calif. Filed Apr. 20, 1927. Serial No. 185,262. 5 Claims. (Cl. 196—147.)



1. The continuous method of decolorizing mineral lubricating oil with solid adsorbent decolorant, comprising applying to a flow stream of the oil the following steps in the order stated: heating a mixture of said oil and said decolorant to a temperature, not less than 350° F. but below substantial cracking temperatures, at which vapors are evolved; separating said vapors and any accompanying steam from said mixture while substantially preventing reduction of the temperature of said mixture, other than that due to evolution of vapors therefrom; separating the spent decolorant from said devaporized mixture by filtration without material further lowering of said temperature; cooling the separated oil as a step succeeding the last said separation, and artificially cooling the separated spent decolorant prior to the exposure of same to atmospheric air.

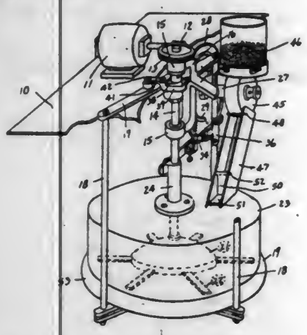
1,818,275. ADJUSTABLE SUPPORT FOR GAS LIGHTERS AND THE LIKE. EARL W. ROBERTS, Detroit, Mich., assignor to Roberts Brass Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 28, 1929. Serial No. 403,055. 1 Claim. (Cl. 158—115.)



The combination with a pair of spaced rods for supporting gas burners, a gas lighter for the burners, and a gas

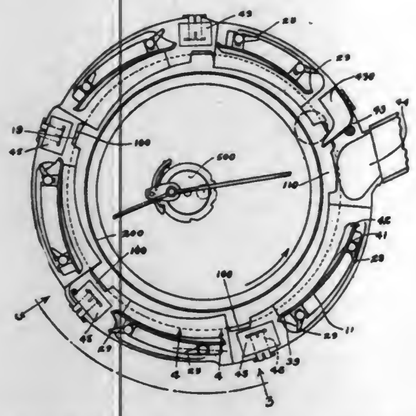
manifold, of a support for the gas lighter including a block slidable longitudinally of one of said rods, a rod projecting from said lighter and adjustable transversely of said block, and a gas supply pipe projecting from said lighter and connected to said manifold.

1,818,276. POP CORN MACHINE. GEORGE H. ROSSEBO and FRANK HOKE, Indianapolis, Ind., assignors to The Holcomb & Hoke Mfg. Co., Indianapolis, Ind., a Corporation. Filed May 10, 1930. Serial No. 451,285. 4 Claims. (Cl. 53—4.)



1. In a corn-popping machine, the combination of a circular popping plate having a downwardly- and outwardly-extending flange, and a cover member having its lower edge of the proper diameter to engage said flange, said lower edge being sharpened to provide a cutting edge for destroying kernels of corn which may cling to said flange.

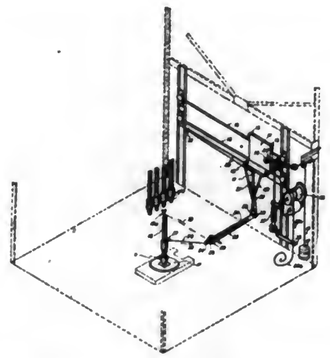
1,818,277. BALLER. SIGMUND SCHIFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 10, 1928. Serial No. 324,813. 9 Claims. (Cl. 107—9.)



2. In a device of the class described a ring like base having a series of inclined faces extending about one side thereof, a clamping device mounted adjacent each end of each of said faces, and a series of upstanding kneading plate members disposed on said faces and having slots therein for receiving the clamping means.

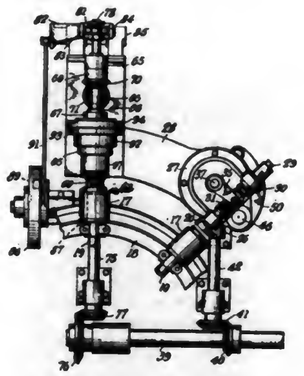
1,818,278. PIPE RACKING DEVICE. ROBERT W. SILER, Willowbrook, Calif. Filed Sept. 26, 1930. Serial No. 484,696. 6 Claims. (Cl. 214—1.)

1. A device for racking stands of drill pipe in a derrick, comprising: rails horizontally supported along one side of said derrick; a carriage traveling on said rails; means for drawing said carriage toward the inner end of said rails; an arm projecting from said carriage into said derrick; a winding drum and means for actuating the drum; an idler pulley attached to said arm; an idler pulley attached to said derrick near the outer end of said



rails; an idler pulley attached to said carriage; a pipe hook and a line attached thereto, said line being passed over said pulleys and around said drum in such manner that the winding of said line about said drum will draw said hook toward first said idler pulley and will tend to draw said carriage toward the outer end of said rails.

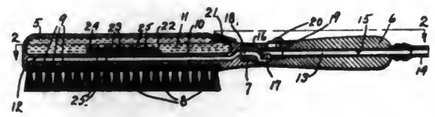
1,818,279. PAPER CUP MACHINE. CHARLES F. SMITH, Brooklyn, N. Y., assignor to Lily-Tulip Cup Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 12, 1930. Serial No. 427,687. 18 Claims. (Cl. 93—49.)



2. In a paper cup machine embodying a number of working stations, means at one station comprising a compound die for preliminarily turning inwardly the rims of paper cups by a two-step operation, and cooperatively associated means at a second station for folding down by a two-step operation the rims inturned at the previous station.

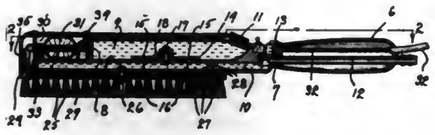
11. In a paper cup machine, the combination with a continuously rotating axially movable wheel adapted to enter a paper cup and roll upon and fold down the turned in rim of the cup, of a set of jaws adapted to follow the wheel into the cup and iron the folded down rim at and adjacent its outer margin.

1,818,280. FOUNTAIN BRUSH. MARK SOSS, Spokane, Wash. Filed Jan. 27, 1930. Serial No. 423,649. 1 Claim. (Cl. 15—138.)



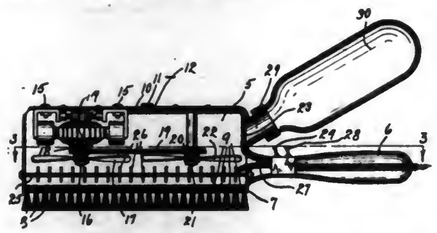
The combination in a brush having a hollow rigid head and a perforated partition therein forming an upper soap reservoir and a lower water distributing chamber, means for supplying water to the chamber, said means comprising a slidable thumb actuated valve disposed on the brush handle, a slidable perforated valve plate arranged in the soap reservoir, the perforations of said valve being arranged to be brought into registration with the corresponding perforations in said perforated partition, and actuating means for said perforated valve comprising a slidable thumb actuated button arranged on one of the vertical sides of said brush.

1,818,281. VIBRATOR FOUNTAIN BRUSH. MARK SOSS, Spokane, Wash. Filed May 10, 1930. Serial No. 451,313. 1 Claim. (Cl. 15—129.)



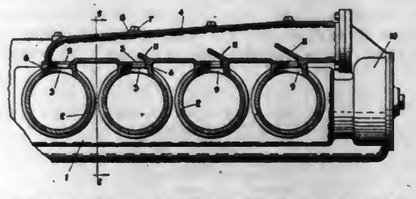
A vibrator fountain brush having in combination a hollow brush body, a horizontal partition dividing said body into an upper and a lower compartment, a brush back bristle member pivotally connected to the underside of the brush body, a hollow handle, valve controlled means for supplying a stream of water to the lower compartment through the handle, means for supplying the upper compartment with cleansing and tonic solution, perforated disc plate valve means for passage of the solution from the upper to the lower compartment, means extending exteriorly of the brush body for operating said disc valve, means for passage of the liquid mixture from the lower compartment to the brush bristles, a vertical partition for one end portion of the upper compartment forming a sub-chamber, an electromagnet mounted within said chamber, a pivoted armature arranged to be vibrated by said electromagnet, and a link arm connection between said armature and the brush back bristle member whereby pivotal movement is imparted to said brush back member.

1,818,282. DRYING AND CLEANING BRUSH. MARK SOSS, Spokane, Wash. Filed July 21, 1930. Serial No. 469,357. 2 Claims. (Cl. 15—7.)



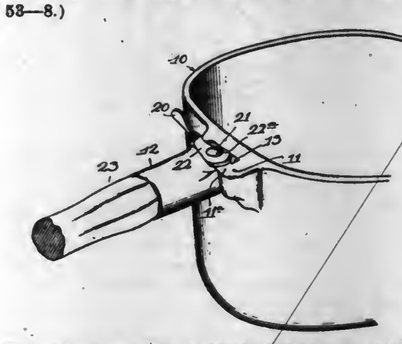
1. A drying and cleaning brush having in combination a brush casing comprising a perforated top wall, an outlet for said casing, a dust separator connected to said outlet, a valve plate slidably mounted within the casing whereby said perforations may be opened and closed, a perforated bristle carrying member for the bottom of the casing, a reversible motor mounted within the top portion of the casing, and one or more fans mounted within the casing and arranged to be driven by said motor.

1,818,283. ENGINE INLET MANIFOLD. OWEN H. SPENCER, Indianapolis, Ind. Filed May 3, 1929. Serial No. 360,271. 3 Claims. (Cl. 123—52.)



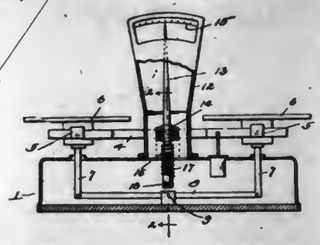
1. A manifold having ports and baffles cooperating with certain of said ports for regulating the passage of air or fuel thru said ports, said baffles decreasing in length from the entrance end of the manifold to the opposite end thereof the baffles being inclined away from the direction of travel of the medium passing through the manifold.

1,818,284. DETACHABLE HANDLE FOR COOKING UTENSILS. PERCY W. STEPHENS, Chicago, Ill. Filed Jan. 12, 1929. Serial No. 331,986. 1 Claim. (Cl. 53—8.)



In combination with a vessel having a tapered attaching socket member, a detachable handle provided with an end portion adapted to fit in the larger end of said socket member, a pivot pin yieldably mounted for limited longitudinal movement on said handle, and a lever on said pivot pin movable into and out of engagement with said socket member at its smaller end.

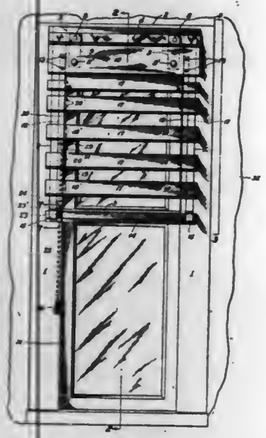
1,818,285. SCALE. GUSTAF A. SUNDELL, Columbus, Ohio, assignor to Nathan A. Hallwood, Columbus, Ohio. Filed Mar. 12, 1927. Serial No. 174,725. 6 Claims. (Cl. 265—59.)



1. In a scale, a base, an even balance beam pivotally mounted upon said base, an indicator tower arising from

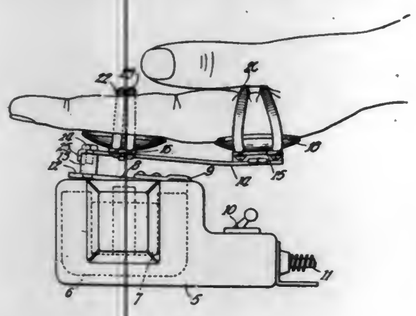
said base, an indicating arm secured to said beam at a position in alignment with the pivotal axis thereof and arranged to oscillate in unison with said beam, a coil spring arranged within said base, a connection between the upper end of said spring and the lower part of said beam, and an adjustable connection between the lower part of said spring and said base, said adjustable connection permitting the tension of said spring to be varied.

1,818,286. AWNING SHUTTER. GEORGE IRA VAIL, Cleveland Heights, Ohio; The Guardian Trust Company executor of said George Ira Vail, deceased. Filed Nov. 26, 1929. Serial No. 409,943. 2 Claims. (Cl. 156—17.)



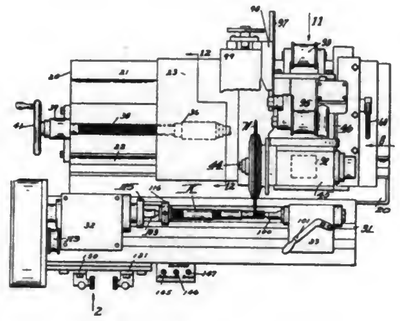
1. An operating unit for awning shutters comprising, a longitudinal metal frame member, a series of spaced blade levers pivotally mounted upon said frame member intermediate their ends, each of said levers comprising metal straps mounted so as to present upper and lower edge portions at their inner ends and twisted intermediate their ends so as to present outer horizontal blade-supporting side portions, and a tie-bar pivotally secured to the inner ends of said levers.

1,818,287. VIBRATOR ATTACHMENT. LEO J. WAHL, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a Corporation of Illinois. Filed Dec. 11, 1930. Serial No. 501,549. 8 Claims. (Cl. 128—41.)



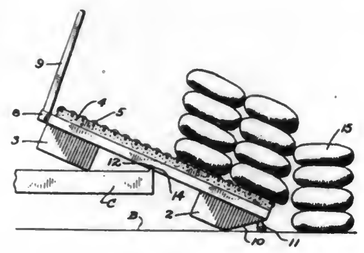
2. In an electric vibrator having a vibrating armature provided with a mounting stud, a hand holding device comprising a relatively stiff support having yieldable padding means on one side thereof and having flexible securing elements extending over said padding means whereby to receive a portion of the hand and hold it against the padding means, and means for fixing said support to said stud.

1,818,288. GRINDING MACHINE. ERNEST A. WALKER, Worcester, Mass., assignor, by mesne assignments, to John Bath, Worcester, Mass. Filed Nov. 15, 1928. Serial No. 319,614. 16 Claims. (Cl. 51—50.)



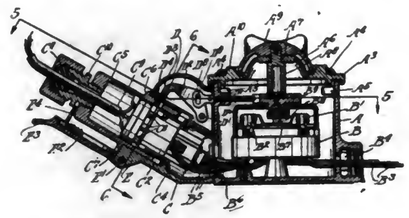
1. In a grinding machine, a grinding wheel, means to support the grinding wheel and work to rotate on substantially parallel axes, means to adjust the wheel toward and from the work, means to move the wheel axially over an extended range of adjustment relative to the work, and additional means to move the work and work supporting means axially of the wheel over a limited range of operative movement, relative to the wheel, and means to limit said range of operative movement.

1,818,289. GRAVITY DISCHARGING PLATFORM. CHARLES WHITE, San Francisco, Calif. Filed Mar. 25, 1929. Serial No. 349,561. 3 Claims. (Cl. 214—65.)



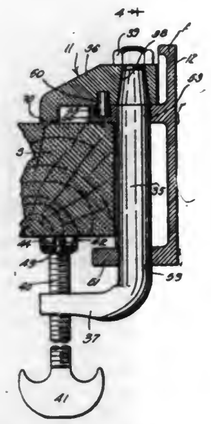
1. A freight receiving and unloading device comprising a platform provided with an anti-friction surface upon which freight is adapted to be loaded, supports secured to the under side of the platform to maintain the platform elevated with relation to a floor surface, said supports being inclined at one end to permit the platform to be tilted so that the freight will be unloaded by sliding down and off the anti-friction surface of the platform, said platform having a slot formed in its lower surface to provide a shoulder which is adapted to be engaged to permit the platform to be pulled rearwardly while the load is sliding off.

1,818,290. COMBINED SWITCH AND TERMINAL BLOCK. WILLIAM A. WULLE, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Mar. 6, 1929. Serial No. 344,613. 8 Claims. (Cl. 200—50.)



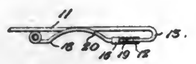
1. In combination a switch, a socket and a removable plug, and means associated with them for preventing withdrawal of the plug when the switch is in the "on" position, means for preventing turning of the switch into the "on" position when the plug is out, and means for preventing insertion of the plug when the switch is "on."

1,818,291. VISE. WALTER A. ABEGG, Los Angeles, Calif. Filed Feb. 16, 1929. Serial No. 340,531. 5 Claims. (Cl. 81—32.)



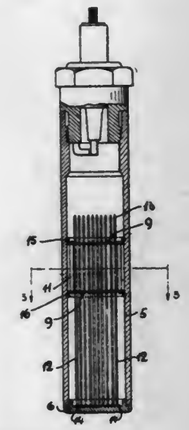
1. A tool of the character described including, two jaws, and means for operating the jaws including a screw projecting from one jaw, a nut for the screw rotatably carried by the other jaw and having a flange engaging one side of the jaw, and a tubular extension fixed on the nut receiving the screw and engaging the other side of the jaw.

1,818,292. CLASP FOR NECKTIES. LAWRENCE E. BAER, Attleboro, Mass., assignor to The Baer & Wilde Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1931. Serial No. 522,839. 3 Claims. (Cl. 24—255.)



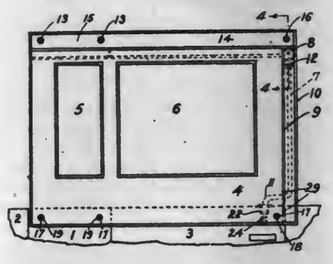
1. A clasp for neckties or the like, comprising front and rear jaw members, the front member having a rearwardly bent end providing a resilient loop and the rear member comprising a length of wire doubled upon itself to furnish an end finger, and a connecting sleeve embracing within its opposite extremities the said end of the front jaw and the finger of the rear jaw.

1,818,293. SPARK PLUG CLEANER. VALENTIN BIALAS, Chicago, Ill. Filed June 25, 1930. Serial No. 463,727. 1 Claim. (Cl. 15—104.)



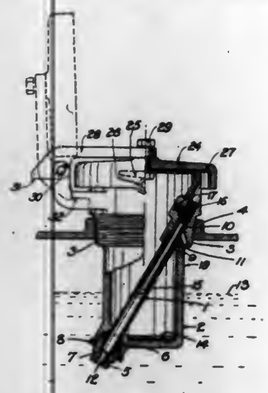
In a device of the class described a cylindrical body, a bottom on one end thereof forming a container with said body adapted to receive a cleaning fluid, means on the open end of the body for firmly but removably holding a spark plug, so that the anode and kathode extend into the body, a cage constructed of a pair of perforated discs, each disc having a plurality of ears extending radially of said disc, and held spaced from each other, by means of pins having shoulders adjacent their ends, means for holding said cage rotatably and removably inside the body, and a plurality of wire rods extending through the perforations of said discs, and adapted to be moved axially therein.

1,818,294. AUTOMOBILE INCLOSURE. GEORGE E. BISHOP, Cleveland, Ohio. Filed Jan. 18, 1924. Serial No. 686,956. 4 Claims. (Cl. 296—139.)



1. In automobile inclosures of the fabric collapsible type adapted to be mounted upon the automobile door, the combination with suitable curtain fabric formed with a pocket, of a two piece supporting rod contained within the pocket, the lower rod section being formed with an offset, the upper rod section being formed with an enlarged head connected to the fabric so as to strengthen the latter and to prevent perforation of the fabric at the top of said rod section, means holding together the adjacent ends of said rod sections to maintain the latter relatively rigid in the direction of their length, said means allowing for the turning of the lower rod section relative to the upper section, means for supporting the hinge side of the curtain, and fabric tensioning means consisting of button elements secured to the fabric and adapted to cooperate with complementary button elements upon the automobile door.

1,818,295. TANK TRUCK GAUGE. CHARLES F. H. BOHNHARDT, Lynwood, Calif. Filed June 18, 1928. Serial No. 286,261. 5 Claims. (Cl. 73—54.)



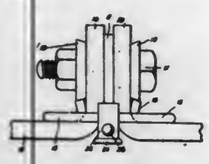
1. A liquid level indicator for a closed tank, comprising: a cup adapted to project downwardly into the closed tank, said cup being liquid tight except at its upper end; a transparent tube obliquely traversing said cup and communicating with the space within said tank and without said cup; there being an opening in the bottom of said cup cooperating with said tube to admit liquid into said tube; means for nonleakably sealing said tube into the walls of said cup; a solid body projecting downwardly within said tube for contacting with the surface of liquid rising within said tube; light reflecting means in said cup; and means for closing the upper end of said cup.

1,818,296. FIBER OR PAPER FORK. ANDREAS BOTHE, Oreland, Pa. Filed Apr. 3, 1928. Serial No. 266,905. 1 Claim. (Cl. 30—22.)



A fork constructed of fibrous material having a tine supporting head of arch form transversely and longitudinally and whereof the face of the handle and the faces of the tines are channeled, the channel of the handle stopping short of the tine channels for the purpose and with the result of defining an intermediate intact arch, whereby the article is afforded the necessary resilience to return to its original shape after applied twist or like stress and the necessary strength to resist collapse even when wetted to the point of saturation.

1,818,297. BELT CLAMP. GLENN H. BOWLUS, Alhambra, Calif. Filed Mar. 25, 1930. Serial No. 438,749. 6 Claims. (Cl. 24—37.)



1. A clamp for joining the ends of a power-transmitting belt to form an endless band, comprising: a metal plate having a slot adapted to receive the upturned ends of said belt and having its lower corners rounded; a spacing bar adapted to be placed between the upturned ends of said belt, and a plurality of clamping bars and of bolts cooperating to draw said belt firmly against said spacing bar.

1,818,298. RESILIENT HARD SURFACED FLOOR. OLIVER S. BOWMAN, Colorado Springs, Colo. Filed Dec. 13, 1929. Serial No. 413,774. 4 Claims. (Cl. 20—7.)



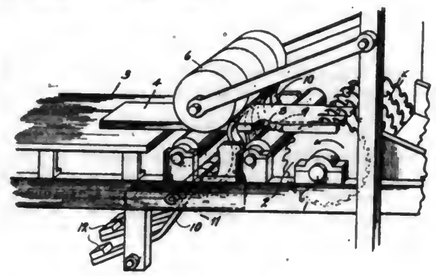
1. A yielding, hard surfaced floor comprising a rigid support having a supporting surface of extended area, a plurality of springs on the supporting surface, a flexible base supported on the springs and movable towards and away from the supporting surface, anchoring means and separators secured to the upper surface of the base, and a cementitious floor moulded in place so as to embed therein the anchoring means and the separators whereby the separate sections thus formed can be moved relative to the others when the base is bent due to the application of a weight thereto.

1,818,299. FLOOR CONSTRUCTION. OLIVER S. BOWMAN, Colorado Springs, Colo. Filed Apr. 7, 1930. Serial No. 442,218. 7 Claims. (Cl. 72—70.)



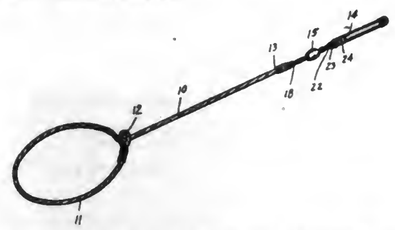
1. A floor construction comprising parallel floor joists, elongated pans extending transversely of the joists and supported thereon, the sides of the adjacent pans being placed adjacent each other with their edges extending upwardly and notched separator strips extending transversely of the pans.

1,818,300. SAFETY DEVICE. MICHAEL P. BURSOWS, Tacoma, Wash. Filed Dec. 17, 1929. Serial No. 414,652. 3 Claims. (Cl. 143—157.)



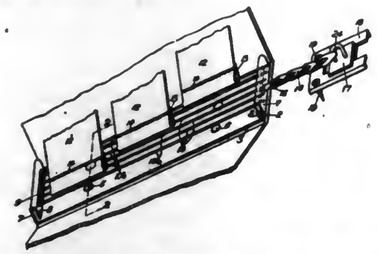
1. In a bolting machine, or the like, a series of saws in spaced relation on a driven shaft, a feed table, a set of feed rolls between which slabs may be fed from the table to the saws, a cross shaft beneath the table, a series of fingers pivotally and yieldably supported by the cross shaft in side by side relation with their upper end portions extended across the path of the slab between the saws and feed rolls and together forming a protective shield; said fingers being yieldable downwardly for passage of the slabs to the saws.

1,818,301. TOY LARIAT. READ B. CANADAY, Anderson, Ind. Filed Mar. 14, 1930. Serial No. 435,677. 1 Claim. (Cl. 119—153.)



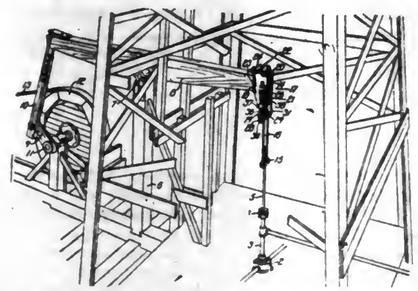
In a toy lariat, a freely flexible rope having a slip noose at one end, a relatively stiff handle member, and a swivel connecting the opposite end of said rope with one end of said handle, whereby free rotation of said rope end at its juncture with the handle will be permitted.

1,818,302. INDEX BINDER. ANTONE J. CARDOZA, Oakland, Calif. Filed Dec. 11, 1929. Serial No. 413,284. 3 Claims. (Cl. 129—38.)



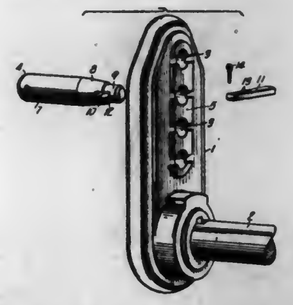
1. In a binder of the character described, the combination with a binder cover of a back plate attached to said cover and having upwardly and reversely bent terminal portions, said reversely bent terminal portions each being provided with an elongated slot parallel with the plane of the back plate, a plurality of loosely mounted spring rods extending between said terminal portions and extending into the slots thereof in side by side relationship, and a flexible index sheet mounted on one of said rods so as to have yieldable frictional engagement therewith and adapted to slide longitudinally on the rod and providing an ovoidal loop through which the rod extends, one portion of the ovoidal loop being adapted to extend between the bound portions of publications mounted on the said rods.

1,818,303. POLISH ROD HANGER. LA RUE B. CHEVALIER, Iola, Kans. Filed June 10, 1929. Serial No. 369,638. 6 Claims. (Cl. 255—11.)



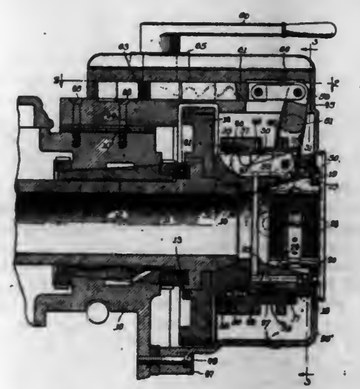
1. In combination with a walking beam, a rigid head suspended from said beam, a jointed hanger unit including an upper section pivotally mounted on said head and a lower section adapted for coupling to a polish rod, and a stop on the head spaced from the beam and engageable by said upper section to limit inward movement of said section during upward travel of the beam.

1,818,304. WRIST PIN. LA RUE B. CHEVALIER, Iola, Kans. Filed Sept. 26, 1929. Serial No. 395,867. 1 Claim. (Cl. 74—38.)



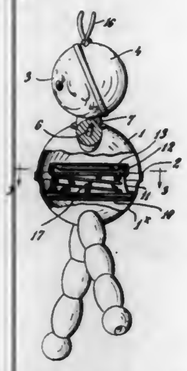
In a device of the character described, a crank provided with a series of tapered openings forming pin receiving seats, a boss extending longitudinally of the crank and having cross grooves intersecting said tapered openings, a wrist pin adapted to be selectively received in any one of said seats and having a cylindrical bearing portion and an anchoring portion tapering from the periphery of the bearing portion to be received in the selected seat and having a slot of sufficient depth to extend above and below said grooves, a tapered key received in the slot and adapted to engage the end of the slot projecting above the groove intersecting the selected seat to draw the tapered portion of the pin in wedging contact with the seat and a reduced extension on the pin projecting from the boss to aid in removal of the pin.

1,818,305. COLLET CHUCK. GEORGE M. CLASS, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a Corporation of Wisconsin. Filed Dec. 16, 1929. Serial No. 414,263. 7 Claims. (Cl. 279—55.)



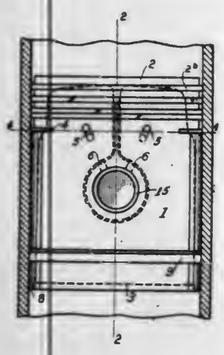
1. In a chuck of the type described, the combination of a hollow chuck body, a self-expanding collet mounted in said body, a collet-clamping ring encircling said collet, said collet and clamping ring being formed with tapered engaging surfaces, a group of levers pivoted in said chuck body each having an arm articulated with said clamping ring, and a sliding member on said chuck body adapted to rock said levers in both directions.

1,818,306. VOICE DOLL RATTLE. MARY COHN, New York, N. Y. Filed Dec. 3, 1930. Serial No. 499,616. 1 Claim. (Cl. 46—46.)



A doll rattle comprising a body member, a head member and arm and leg members, the body member enclosing a light fabric bellows normally held distended by a light spring, a relatively light apertured weight disposed above the spring and having a passageway for air, and a reed-holding member disposed above the apertured weight, the spring being sufficient in its action to hold the bellows distended during rotation of the body but insufficient to resist the inertia of the apertured weight when the body is reciprocated.

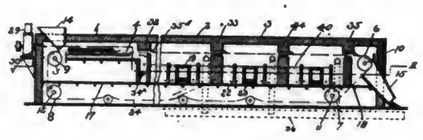
1,818,307. PISTON. MARTIN B. COVERT, Indianapolis, Ind., assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 7, 1921. Serial No. 442,989. 10 Claims. (Cl. 74—108.)



1. In an internal combustion engine piston a circular head disc having a ring flange depending therefrom and a substantially cylindrical skirt the said skirt having longitudinal portions of different thicknesses, the said head being connected to the thinner longitudinal portions and separated from the thicker longitudinal portions by narrow air gaps of greater circumferential length than the said thicker portions, the thinner portions being relieved exteriorly throughout their entire length, and a rib extending across the said head disc and integral with the said head and thinner skirt portions.

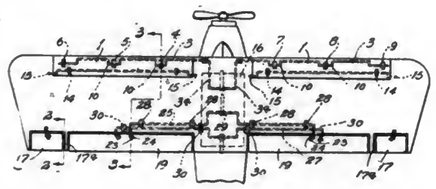
1,818,308. APPARATUS FOR TREATING SOLID MATERIALS. WILLIAM A. DARRAH, Chicago, Ill. Filed Feb. 24, 1925. Serial No. 11,262. 11 Claims. (Cl. 202—117.)

1. An apparatus for heat treating solid materials which consists of an elongated housing, containing a preheating chamber and a heating chamber, means separating said preheating chamber from said heating chamber, an endless longitudinally extending conveying device for carrying said material within said housing, a muffled combustion chamber arranged transversely of said conveying



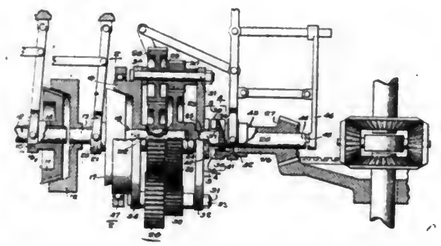
device and spaced therefrom to supply radiant heat to said materials on said conveying device, and a duct connecting said muffled combustion chamber to said preheating chamber to direct the products of combustion from said muffled combustion chamber to said preheating chamber.

1,818,309. AEROPLANE. JEAN F. DE VILLARD, East St. Louis, Ill., assignor of one-tenth to Abraham Rogul, East St. Louis, Ill. Filed May 14, 1930. Serial No. 452,365. 4 Claims. (Cl. 244—29.)



3. An improvement in aeroplanes of the class described, comprising a plurality of movable flaps flexibly joined to the leading edge of an aeroplane wing, means for controlling the movement of said flaps, a plurality of movable flaps rotatably joined to the trailing edge of an aeroplane wing between the ailerons and fuselage of an aeroplane, ailerons having a plain, flat member transversely joined to them at right angles thereto and depending therefrom.

1,818,310. DIFFERENTIAL SPEED POWER TRANSMISSION DEVICE. SCOTT J. DOW, Jr., Hinsdale, Ill. Filed Feb. 15, 1930. Serial No. 428,601. 3 Claims. (Cl. 74—34.)



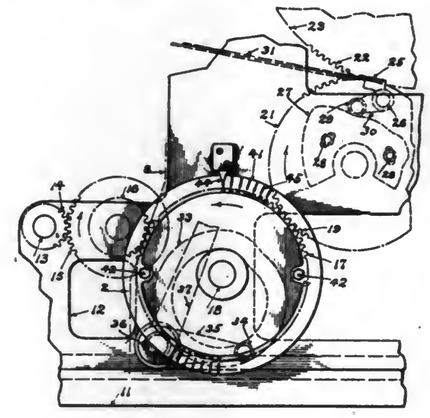
1. In a power transmission assembly, the combination of a driving shaft, an intermediate shaft and a tubular driven shaft in aligned relation, clutch elements for engaging the driving and intermediate shafts, a cage rotatably mounted upon the intermediate shaft, clutch elements for engaging said cage to the intermediate shaft, a driving center pinion fixedly mounted upon the intermediate shaft, a driven center pinion having a different diameter and freely mounted upon the intermediate shaft, orbital

gear elements differing in diameter and carried by the cage and meshing respectively with the driving and driven center pinions, a stem secured to the driven center pinion and extending through the tubular driven shaft, means for locking and unlocking said stem to prevent or permit rotation thereof, means for clutching the driven tubular shaft either to the cage or to the stem, and means for either locking the cage against reverse rotation, or unlocking the same to permit such rotation.

1,818,311. PRODUCTION OF ANTHRAQUINONE DERIVATIVES. HUGH ALBERT EDWARD DRESCHER, WILLIAM SMITH, and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Dec. 20, 1927, Serial No. 241,449, and in Great Britain July 21, 1925. 3 Claims. (Cl. 260—60P.)

1. In the process of separating a mixture of 1-bromo-2-amino-3-chlor-anthraquinone and 1 amino 2 chlor 4 bromo anthraquinone, the steps which comprise dissolving the mixture in approximately 96% sulphuric acid and adding water thereto in an amount sufficient to precipitate the 1-bromo-2-amino-3-chlor-anthraquinone but insufficient to precipitate appreciable quantities of the 1-amino-2-chlor-4-bromo-anthraquinone.

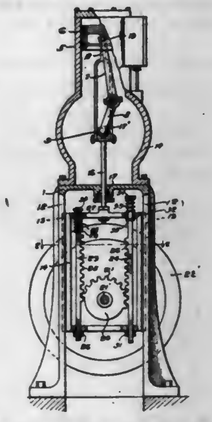
1,818,312. TIMING MECHANISM FOR PRINTING MACHINES. WILLIAM K. ECKHARD, Dunellen, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,701. 9 Claims. (Cl. 116—114.)



1. In a sheet fed printing machine, means for indicating the proper setting for cams that engage coacting mechanism which operate elements of the machine in a definite timed sequence, including, an index in fixed position, and a cooperating timing plate rotating in synchronism with the printing cylinder; said timing plate having indicating marks thereon, so placed as to be in alignment with the index at positions in the revolution of the plate, that correspond to definite positions of said elements during their operation.

1,818,313. POWER TRANSMITTING DEVICE. WALTER W. EVERTS, San Antonio, Tex., assignor to Everts-Ellington Company, San Antonio, Tex., a Corporation of Texas. Filed May 27, 1930. Serial No. 456,183. 8 Claims. (Cl. 74—14.)

1. In a power transmitting device, a reciprocatory support, a rotary mutilated pinion having teeth, racks carried by the support and arranged upon opposite sides of the mutilated pinion and having teeth to engage the teeth



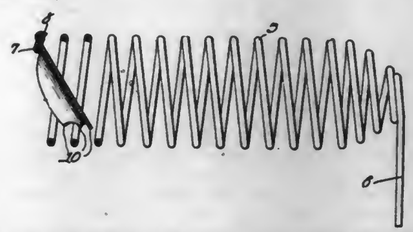
of the pinion, and means whereby each rack is positively moved by the support in one direction and is movable in an opposite direction with relation to the support.

1,818,314. MEASURING VALVE FOR LUBRICATING SYSTEMS. ALBERT J. FARMER, Detroit, Mich. Filed Oct. 15, 1928. Serial No. 312,581. 1 Claim. (Cl. 184—7).



A valve for connection in a pressure lubricating system including a body formed with a measuring chamber having an inlet at one end and a wall at its opposite end formed with an outlet passage, a piston valve in said chamber normally closing the inlet and arranged to permit the passage of lubricant under pressure past said piston during a portion only of the forward movement of said piston, means carried by said piston to close said outlet at the end of the forward stroke of the piston, a spring to impart a return movement to the piston, a separate valvular member normally closing said outlet and moved by lubricant pressure in said chamber to open said outlet, and a spring normally holding said member seated, said valvular member and said piston valve being independently movable, one by direct line pressure and the other by lubricant pressure in said chamber created by movement of said piston and wherein said valvular member is provided with a cylindrical portion to enter and fill said outlet passage and of extended length to provide for extended movement of said member in opening said outlet.

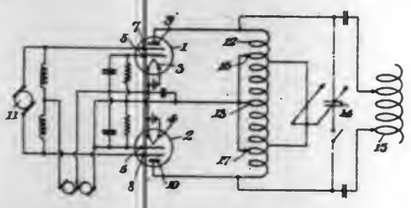
1,818,315. TRAP. FREDERICK W. FRENCH, Oakland, Calif. Filed Jan. 11, 1930. Serial No. 420,195. 1 Claim. (Cl. 43—66.)



A trap comprising a body portion constructed of a length of wire spirally formed, a loop formed at one end of the

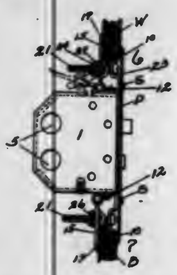
body portion, a door having a tongue, said tongue being extended through the loop and bent around one side of the loop to pivotally support the door, and said oor engaging one side of the loop to hold the door in a predetermined position.

1,818,316. INDUCTANCE SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,984. 8 Claims. (Cl. 171—242.)



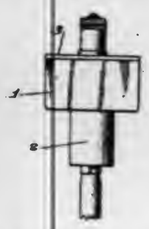
1. An inductance system comprising in combination a helix, a plurality of contact elements associated with said helix, a connection from the electrical center of said helix to said contacts and means for simultaneously moving said contact elements in opposite directions and equi-distant from said electrical center.

1,818,317. OUTLET BOX. FRANK E. GILMORE, Spokane, Wash., assignor of one-half to Charles H. Fancher, jr., Spokane, Wash. Filed July 31, 1929. Serial No. 382,310. 4 Claims. (Cl. 247—21.)



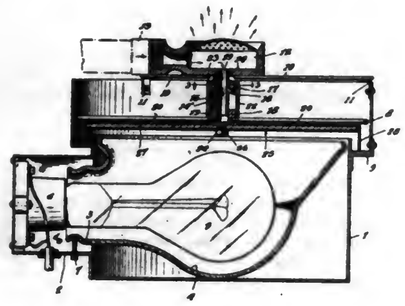
1. The combination with an outlet box of a clamp device comprising a jaw fixed to the box, a rear jaw hinged to the fixed jaw, and screw tension means for clamping said jaws on a support.

1,818,318. COMBINED VIBRATORY INTERRUPTER AND TRANSFORMER. ARTHUR L. GODDARD, Madison, Wis., assignor to Kenneth G. Rennie, Chicago, Ill. Filed Mar. 19, 1928. Serial No. 262,619. 3 Claims. (Cl. 175—357.)



1. A combined portable transformer and vibratory interrupter comprising a casing having a cylindrical part and a box-like part, a transformer in said cylindrical part, an induction coil and condenser in said box-like part, electrical connections between said several elements, line terminals fixed to said casing and connected in circuit with said elements, a lid for said casing having a socket engaging plug on the exterior thereof and carrying strip conductors on the underside thereof, said conductors being electrically connected to said plug, said strip conductors arranged to engage said line terminals in said casing when said lid is in place, a single member for securing said lid in place, and a tool connection in circuit with the secondary circuit of the transformer.

1,818,319. ELECTRIC FOUNTAIN. HENRY OBAN GOOD, Brownwood, Tex. Filed Aug. 7, 1929. Serial No. 384,177. 4 Claims. (Cl. 299—4.)



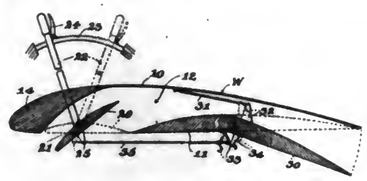
3. A fountain of the class described comprising a casing, an illuminating element mounted therein, a spraying head supported above the casing, a rotary color screen disposed above the illuminating element, and means for supporting the screen on the spraying head and simultaneously conducting water from the spraying head for rotating the color screen.

1,818,320. UNFOLDING CONSTRUCTION FOR BROODERS AND OTHER INCLOSURES. ROBERT A. GORAUCH, Gambier, Ohio, assignor to The Congor Mfg. Company, Gambier, Ohio, a Corporation of Ohio. Filed Nov. 10, 1927. Serial No. 232,262. 5 Claims. (Cl. 229—41.)



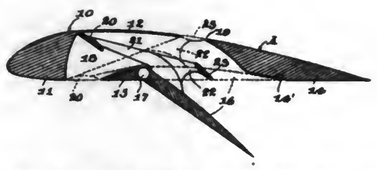
5. A device of the character set forth comprising a metallic bottom wall, U-shaped channel members embracing substantially the entire edge portions of said wall, and peripheral walls disposed in sidewise relation to the bottom wall and having their bottom edges disposed within said channel members whereby the peripheral walls may be positioned at a relatively wide angle to the bottom wall by bending the edge portions of the bottom wall downwardly.

1,818,321. AIRPLANE. RANDOLPH F. HALL, Ithaca, N. Y. Filed Apr. 5, 1928. Serial No. 267,625. 21 Claims. (Cl. 244—29.)



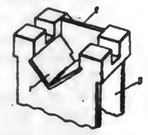
1. In a high lift wing, an automatically operated flap member for increasing the camber and lift of the wing, and means for releasably retaining the flap in camber increasing position.

1,818,322. AIRPLANE. RANDOLPH F. HALL, Ithaca, N. Y. Filed Oct. 12, 1928. Serial No. 312,087. 20 Claims. (Cl. 244—29.)



1. In an airplane wing, a balanced flap unit pivotally mounted at the under side of the wing, said unit embodying a flap member and a balance member therefor, and in normal position forming a portion of the wing under surface and said unit swingable from normal position to operative position with the flap member extended downwardly from the under side of the wing.

1,818,323. BEARING. MERVIL HALLEAD, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed May 7, 1928. Serial No. 275,596. 6 Claims. (Cl. 308—2.)



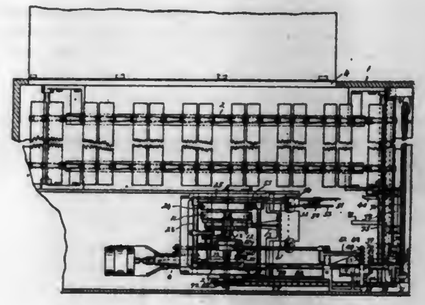
1. A bearing comprising a main supporting surface, a thrust supporting surface and a carrier die-cast around the supporting surface structure.

1,818,324. MEANS AND METHOD FOR MOUNTING STONES AND THE LIKE. SAMUEL ARTHUR HAMIN, Providence, R. I., assignor to Fray Jewelery Company, Providence, R. I. Filed Mar. 14, 1929. Serial No. 346,962. 2 Claims. (Cl. 63—28.)



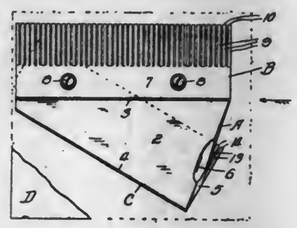
1. In a mounting for jewelry, a setting adapted to carry a central stone and provided with a central stone gripping portion and an inwardly directed shoulder therebeneath, a bezel comprising any inwardly inclined wall, and an outwardly inclined wall providing a plurality of stone seats, the setting being provided with an inwardly inclined wall depending from said shoulder and seating against the inwardly inclined wall of the bezel, the wall of the setting terminating in means to grip the inwardly inclined wall of the bezel, the inner edges of the stones carried by said seats fitting under the shoulder, and a base in which said setting and bezel are laid and provided with means to clamp the stones carried by said seats against the shoulder.

1,818,325. ICE VENDING MACHINE. ALBERT HAPPEL, Toledo, Ohio, assignor, by mesne assignments, to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Dec. 15, 1924. Serial No. 756,132. 24 Claims. (Cl. 125—23.)



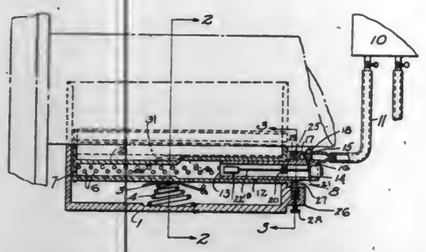
1. In an ice vending machine, the combination with means for intermittently advancing an ice cake having a longitudinal score and a series of transverse scores, cam operated severing means registering with the advanced transverse score for severing a section from said ice cake, means substantially registering with the longitudinal score of the severed section and actuated after the first severing operation for dividing the severed section into smaller sections, and means for delivering successively the smaller sections.

1,818,326. GRAINING COMB OR BRUSH. ALBERT HANRATTY, Collinsville, Ill. Filed Mar. 31, 1930. Serial No. 440,600. 8 Claims. (Cl. 41—5.5.)



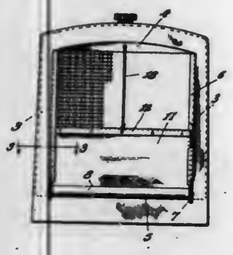
1. In a graining device, the combination with a holder, of a pair of metallic combs having resilient teeth, the teeth of the comb applied to the rear face of the holder having their graining edges disposed in a plane substantially parallel with the upper face of the holder and the teeth of the comb applied to the front face of the holder having their graining edges at an angle to the graining edges of the teeth of the first mentioned comb.

1,818,327. DRIVING BOX LUBRICATOR. JAMES J. HENNESSY, New York, N. Y. Filed Apr. 7, 1927. Serial No. 181,682. 12 Claims. (Cl. 308—87.)



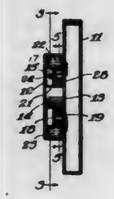
7. In a journal lubricator, a cellar, a sub-cellar elevated above the bottom of said cellar and movable horizontally into and out of said cellar, and a supply conduit terminal member horizontally movable into and out of said sub-cellar.

1,818,328. WINTER FRONT FOR AUTOMOBILE RADIATORS. ISAAC C. HESS, Fern, Pa. Filed Jan. 23, 1930. Serial No. 422,899. 2 Claims. (Cl. 257—132.)



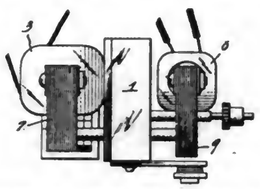
1. A device of the class described including, in combination with a radiator having a shell provided with a lower front plate, a frame having side rails clamped by the shell, said side rails being provided with guide channels, mounting plates carried by said side rails at their lower ends, said mounting plates being notched to accommodate the upper margin of the lower plate of the shell, a roller supported by the mounting plates, and a curtain wound about said roller and being movable in the guide channels.

1,818,329. ATTACHMENT FOR BELTS. CARL HORIX, Chicago, Ill. Filed Nov. 9, 1927. Serial No. 232,004. 4 Claims. (Cl. 242—109.)



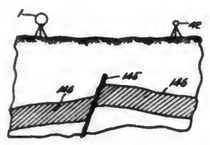
1. In a watch chain support, the combination with a casing having a means thereon for attaching said casing to the belt of a user thereof, of a reel rotatably mounted in said housing, a chain wound thereon, said reel comprising two substantially symmetrical parts rigidly fastened together, one of said parts differing from the other by having a portion forming a hub which is rotatably mounted on a pintle in said casing.

1,818,330. SELF-STARTING SYNCHRONOUS MOTOR. PAUL P. HORNI, Newark, N. J. Filed Dec. 24, 1927. Serial No. 242,447. 3 Claims. (Cl. 172—120.)



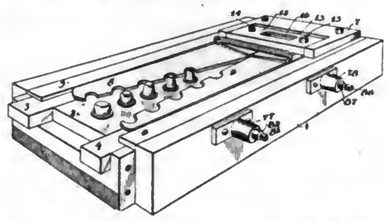
1. The combination comprising a means of producing a rotating magnetic field, a self-starting rotor turnable in said field, a separate means for producing a rotary magnetic field, an induction rotor connected to said self-starting rotor and having a tendency to turn in such separate field in the reverse direction to the self-starting rotor, the torque of the rotor in the separate field being adjusted to act as a brake on the other rotor and hold it at a definite speed.

1,818,331. METHOD FOR DETERMINING THE CHARACTER OF ORE BODIES. JOHN J. JAKOSKY, Los Angeles, Calif., assignor to The Radiore Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 21, 1928. Serial No. 301,059. 1 Claim. (Cl. 175—182.)



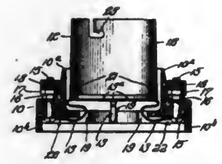
The method of determining the location of a fault or break in an ore body which comprises inducing current flow in said ore body by causing the same to cut by a primary electromagnetic field, noting the effect at points removed from the source of said electromagnetic field in a direction lengthwise of the ore body of the secondary electromagnetic field produced by such induced current flow, causing the primary electromagnetic field to have at different times a relatively low frequency and a relatively high frequency, varying the position of the source of the primary field and the point of noting the effect of the secondary field and noting in each case the relative effect of the secondary field for each frequency of primary field, and thus locating a position such that if the source of the primary field and the point of noting the effect of the secondary field are at the same side of such position the secondary field is of noticeable intensity at both high and low frequency, while if said source and point are at opposite sides of such position the secondary field at low frequency is either not noticeable or is of much less intensity than at high frequency.

1,818,332. THIMBLE MAKING MACHINE. EDWIN F. JOHNSON, St. Paul, Minn. Filed Apr. 27, 1928. Serial No. 273,341. 4 Claims. (Cl. 113—38.)



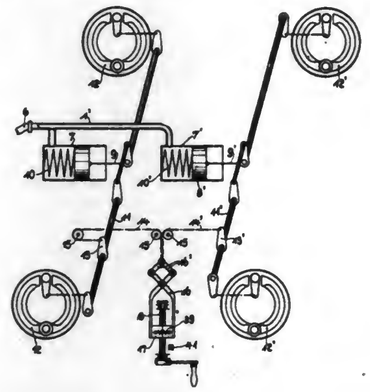
1. A thimble forming mechanism comprising a stationary die support, a movable die support, a pair of spaced guide members slidably mounted on said stationary die support, a pair of pivoted cooperating jaws carried by said guide members, a downwardly and rearwardly inclined arm carried by said movable die support and engaging the guide members and jaws to open and close the latter for successively feeding blanks between said die supports, and means for feeding blanks to said jaws.

1,818,333. SOCKET. JOHN JUERGENS, Chicago, Ill., assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 26, 1925. Serial No. 77,795. 17 Claims. (Cl. 173—328.)



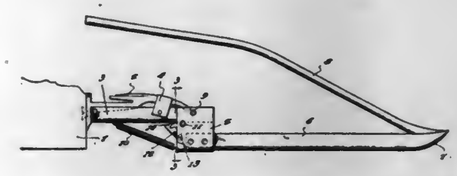
1. A shock absorbing socket construction for thermionic repeaters, comprising a wiring base, a receptacle member for receiving a repeater, and means for supplying current from said wiring base to said repeater and for yieldingly supporting said receptacle member on said wiring base comprising a plurality of sheet metal members, each sheet metal member having an intermediate portion secured adjacent the periphery of said receptacle member and an inwardly extending portion forming a contact for engaging an electrode of the repeater and a cantilever spring portion extending from said intermediate portion and secured to said wiring base.

1,818,334. BRAKE MECHANISM. AUGUST KAZENMAIER and ALFONS STRAUSS, Stuttgart, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed June 3, 1929, Serial No. 368,108, and in Germany Sept. 3, 1928. 13 Claims. (Cl. 188—167.)



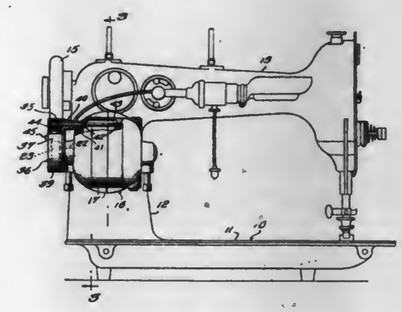
1. Brake mechanism for vehicles comprising brakes on a vehicle, at least one servo cylinder on said vehicle, a servo piston within said cylinder and connected to said brakes, pumping means adapted to be connected to said cylinder to move the piston in the brake releasing direction, means for storing up energy on movement of the piston in the brake releasing direction and for giving up said energy on disconnection of the pumping means from the cylinder to force the piston in the opposite direction to apply the brakes, and manual means which are detachably connected to said piston for moving the piston against the resistance of said storing means into a brake release position, and which are adapted to be automatically disconnected from the piston on further movement of the piston in the brake releasing direction under the influence of said pumping means.

1,818,335. GRAIN SAVER. WILLIAM I. KENISON, Solomon, Kans. Filed Apr. 24, 1929. Serial No. 357,784. 3 Claims. (Cl. 56—312.)



1. A device for the purpose set forth comprising an attaching arm, a saddle pivoted to and depending from the front end of the attaching arm, a guard arm secured in and extending forwardly from the saddle, a lifting rod extending upwardly and rearwardly from the guard arm, a stop pin in the saddle below the attaching arm, and a contractile spring attached to and extending between the rear end of the saddle and the attaching arm.

1,818,336. DRIVE GEAR FOR SEWING MACHINES. RALPH S. KELSO, Rockford, Ill., assignor to The Free Sewing Machine Company, Rockford, Ill., a Corporation of Illinois. Filed Nov. 29, 1929. Serial No. 410,562. 10 Claims. (Cl. 74—26.)

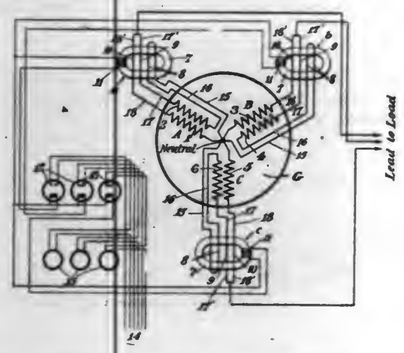


1. The combination with a sewing machine including a rotatable element having a transversely curved peripheral surface, of a motor having a drive shaft, a cylindrical driving member mounted on said shaft, a substantially cylindrical resilient frictional driving connection arranged between and contacting with said driving member and said rotatable element, and resilient means normally urging said driving member toward said driving connection and said rotatable element.

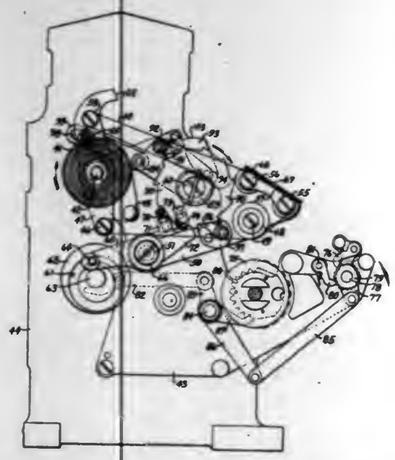
1,818,337. ELECTRICAL PROTECTIVE SYSTEM. GORDON KRIBS, Niagara Falls, Ontario, Canada. Filed Jan. 20, 1928. Serial No. 248,182. 5 Claims. (Cl. 175—294.)

1. In an electrical protective system, a plurality of parallel connected windings adapted to be protected, a core member, a winding on said core member supplied with current from one end of said parallel connected windings, another winding on said core member supplied with current from the opposite end of said windings, said core windings being balanced to produce zero flux in said

core under normal conditions of operation and to produce a flux in said core member under abnormal conditions of operation, and means for operating protective apparatus when said first named core windings produce a flux in said core.



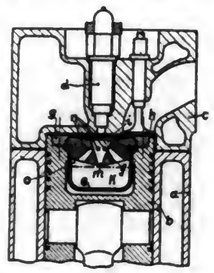
1,818,338. CASH REGISTER. WILHELM KROPFF, Berlin-Charlottenburg, Germany, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Mar. 5, 1928, Serial No. 259,284, and in Germany Mar. 26, 1927. 14 Claims. (Cl. 101—96.)



1. In a machine of the class described, the combination with a printing unit, impression means therefor, and operating means for said impression means, of means actuated by said impression means to advance the record material upon which the impression is made step by step, and means actuated by said record material advancing means to shift the record material to and from the printing line.

1,818,339. INTERNAL COMBUSTION ENGINE. FRANZ LANG, Munich, Germany, assignor to Acro Aktiengesellschaft, Kuessnacht am Rigi, Switzerland. Filed Apr. 19, 1929, Serial No. 356,423, and in Germany June 28, 1928. 7 Claims. (Cl. 123—33.)

1. An internal combustion engine comprising in combination a cylinder forming a main compression chamber an element having a truncated conical opening, the narrow end of which lies remote from said main compression space, an auxiliary compression chamber on the opposite of said narrow end of said truncated conical space communicating with said truncated space by auxiliary passages in said element at an angle to the sides



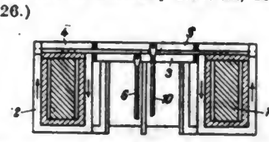
of the conical space therein and an injection nozzle adapted to project fuel through part of said main compression chamber into said conical space.

1,818,340. POWDER BOX. HENRY GUIDO LEMOINE, Perriers-sur-Andelle, France. Filed Jan. 16, 1930, Serial No. 421,243, and in France Feb. 2, 1929. 2 Claims. (Cl. 132—82.)



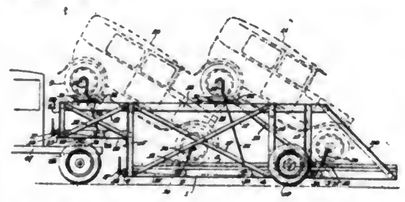
1. In a toilet powder box comprising a powder containing the upper wall of which forms a support for the puff and is provided with holes to allow the passage of the powder to the puff, powder projecting means constituted by the bottom of the container the latter being in the shape of a flexible diaphragm which may be deformed by finger pressure on the external surface of said bottom.

1,818,341. DEVICE FOR ANNEALING METAL RINGS. FRANZ LINNHOFF, Eberswalde, Germany, assignor to the Firm: Hirsch, Kupfer- and Messingwerke Akt.-Ges., Finow/Mark, Germany. Filed Nov. 18, 1929, Serial No. 408,099, and in Germany Nov. 24, 1928. 8 Claims. (Cl. 13—26.)



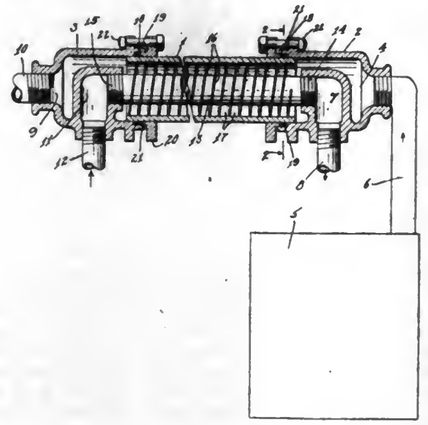
1. In a device for annealing metal rings an induction coil forming the winding of a ring armature the core of which being formed by the annealing material.

1,818,342. SYSTEM OF AUTOMOBILE LOADING AND TRANSPORTATION. JOHN E. MCCREA, Detroit, Mich., assignor to Dealers Motor Transport Inc., Detroit, Mich., a Corporation of Michigan. Filed Dec. 15, 1926, Serial No. 154,881. Renewed Jan. 5, 1931. 6 Claims. (Cl. 280—33.1.)



3. A trailer for transporting automobiles comprising a frame, rear wheels journalled on said frame, and overhanging front end attached to said frame, said overhanging end being adapted for connection to a tractor, channel rails carried by the frame, cradles attached to the frame above the rails whereby an automobile may be supported at an inclination to the horizontal with its rear wheels in said cradles and its front wheels resting in the channel rails.

1,818,343. AIR COOLING DEVICE. ROLLO O. MONROE, South Bend, Ind., assignor to Smith-Monroe Company, South Bend, Ind., a Corporation of Indiana. Filed June 4, 1928. Serial No. 282,784. 3 Claims. (Cl. 257—246.)



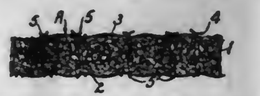
1. A device of the type described comprising an outer casing, a head portion disposed upon each end of said outer casing, said head portions having annular flanges spaced away from said outer casing, packing rings disposed concentric with said outer casing and beneath said flanges, glands disposed concentric with said outer casing and having projections adapted to extend beneath said flanges and in engagement with said packing rings, means for moving said glands toward said head portions for compressing said packing rings whereby said head portions may be secured to said outer casing, an inner casing disposed in said outer casing, portions integral with said head portions for forming liquid passageways and for receiving the ends of said inner casings, a spiral partition disposed in said outer casing for forming a spiral passageway therethrough and around said inner casing whereby compressed air may pass therethrough, and means for directing a cooling liquid through said inner casing and said liquid passageways for cooling the compressed air passing through said spiral passageway.

1,818,344. HOT PAN HOLDER. WILLIAM MATHEW MOORE, Little Rock, Ark. Filed Aug. 18, 1930. Serial No. 476,160. 1 Claim. (Cl. 294—29.)



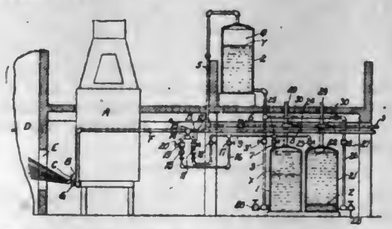
A device for handling hot pans comprising a pair of pivotally connected cross handles, each of said handles including spaced handle bars diverging toward the forward ends, the handle bars of one handle being provided with depending hooks, for engaging over the upper edge of the pan to be lifted, a transversely extending brace rod connected to the forward end of the handle bars of the other handle, a forwardly projecting flat supporting plate connected to said bar for engaging under the pan to be lifted, and steadying arms and strips carried by the handle bars of both handles for engaging the outer face of the pan to be lifted.

1,818,345. INSULATING STRUCTURE. OLIVER F. MOTTWEILER and DANIEL C. DRILL, Alexandria, Ind., assignors to General Insulating and Manufacturing Company, Alexandria, Ind., a Corporation of Indiana. Filed Nov. 25, 1927. Serial No. 235,553. 3 Claims. (Cl. 154—44.)



1. An insulating structure adapted for use in flat condition comprising a body portion formed of insulating material, layers of wire mesh arranged in contact with opposite surfaces of said body portion, and non-metallic anchor members extended through said body portion for tying said layers of wire mesh together, an edge of one of said layers of wire mesh being located inwardly a slight distance from the corresponding edge of said body portion.

1,818,346. METHODS OF AND APPARATUS FOR TREATING INSULATING MATERIALS. OLIVER F. MOTTWEILER and DANIEL C. DRILL, Alexandria, Ind., assignors to General Insulating and Manufacturing Company, Alexandria, Ind., a Corporation of Indiana. Filed Nov. 25, 1927. Serial No. 235,555. 6 Claims. (Cl. 49—77.5.)



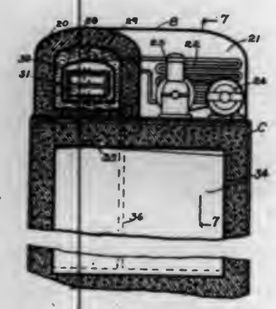
1. The herein described method of making insulating material which comprises reducing the substance from which said insulating material is formed to a molten condition, and directing forcibly against a stream of said molten substance a blast of fluid having commingled therewith a solution comprising amounts of oil and a stiffening agent.

1,818,347. LUBRICATING SYSTEM. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 9, 1926. Serial No. 140,517. 5 Claims. (Cl. 184—7.)



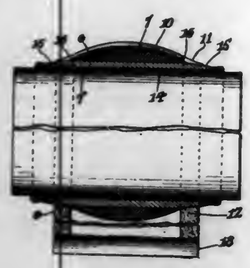
1. In a central lubricating system, a lubricant cup, means for supplying lubricant to said cup under pressure and for reducing the pressure subsequent to said cups being filled, valvular means for preventing direct passage of lubricant through said cup, piston means in said cup having a flexible washer permitting passage of lubricant thereby into said cup but preventing return, and a second piston slidable relative to said piston means to permit filling of said cup and for forcing lubricant from said cup subsequent to opening said valvular means.

1,818,348. REFRIGERATING APPARATUS. IRA L. NICKERSON, Sound Beach, Conn., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 30, 1926. Serial No. 138,595. 6 Claims. (Cl. 62—116.)



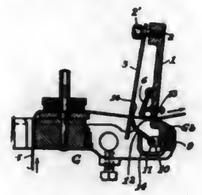
2. The combination with a cabinet providing an insulated refrigerating compartment and a hollow container presenting an extended surface area but of small cubical content within said compartment, of a portable refrigerating unit arranged to be placed upon said cabinet, said unit having an insulated compartment for the freezing of liquids, a brine tank substantially filling said last-named compartment and providing a chamber for liquids to be frozen, self-contained mechanically operated refrigerating apparatus of the closed cycle type including an evaporator element in thermal contact with said tank to extract heat from the latter, and detachable means for connecting said tank to said container and arranged to effect circulation of the brine by gravity so as to utilize the brine to extract heat from said cabinet compartment, said detachable means permitting the entire removal of said unit or an exchange of units without disturbing the interior of said cabinet.

1,818,349. METHOD OF MANUFACTURING INNER TUBES FOR PNEUMATIC TIRES. ARTHUR W. OTT, Dubuque, Iowa. Filed Feb. 21, 1930. Serial No. 430,409. 3 Claims. (Cl. 154—15.)



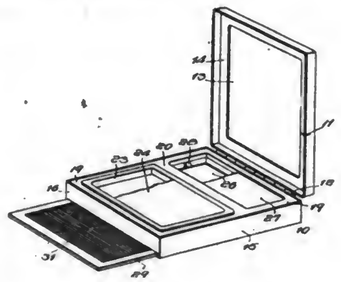
1. A method of manufacturing puncture-proof inner tubes consisting of forming a vulcanized inner tube with a thickened tread portion, stretching said tube on a flat face drum, applying a healing composition to the thickened tread portion, positioning a pad of vulcanized rubber of uniform elasticity throughout and of the same thickness as the thickened tread portion over the composition in a manner to project marginal portions of the pad beyond the composition, and vulcanizing the projecting portions of the pad to said tread portion.

1,818,350. SLUB CATCHER FOR WINDING MACHINES. ALPHONSE R. PERRIN, Westbrook, Me., assignor to Dana Warp Mills, Westbrook, Me., a Corporation of Maine. Filed May 29, 1930. Serial No. 457,258. 4 Claims. (Cl. 28—64.)



1. A slub catcher adaptable for use on yarn guides for winding machines, comprising two pivotally mounted, co-acting jaws, a plurality of steps forming an interrupted surface on the adjacent and engaging faces of said jaws, the steps on the face of one jaw interlocking with those on the other when the two jaws are brought into contacting relation, relatively, a tongue extending from the face of one jaw and adapted to overlap the other to restrict its outward swinging movement, and a feeler-finger, having a yarn slot therein, pivotally suspended from a point above said jaws and adapted, when engaged by a slub, to force said jaws into contact with opposite sides, respectively, of the strand of yarn and hold it against further longitudinal movement through said guide.

1,818,351. VANITY CASE. SOPHIE PORANSKI, Elmhurst, N. Y. Filed Feb. 12, 1930. Serial No. 427,782. 4 Claims. (Cl. 132—83.)

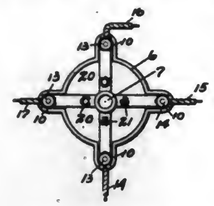


4. In a device of the kind described, a container, a closed powder receptacle positioned in said container with its bottom wall in spaced relation to the bottom wall of the container, a plate slidably movable in the container in close contact with the bottom wall of said receptacle, means permitting a limited reciprocal movement of the plate, the bottom wall of the receptacle having an opening so positioned as to be constantly closed by the plate throughout its reciprocal movement, and a plurality of serrations on that portion of the plate closing said opening when the plate is retracted, said serrations being outside of the container when the plate is extended.

1,818,352. OUTLET BOX AND PLUG. OREN R. RANDLES, Spokane, Wash. Filed Oct. 9, 1929. Serial No. 398,451. 3 Claims. (Cl. 173—330.)

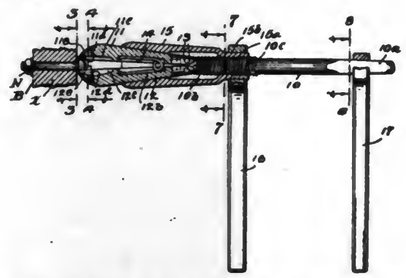
1. The combination with a box having an attaching plate, of a plug-receiver having an attaching boss and

secured to the plate, a plurality of conductor arms secured to the plug receiver and provided with sockets to receive posts, terminal screws securing the outer ends



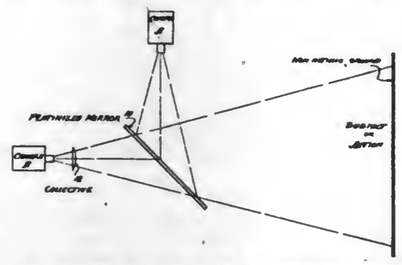
of the arms to the receiver, and co-acting means on the post and on the inner ends of the arms to insure stationary engagement between the arms and post.

1,818,353. TOOL FOR GRASPING BOLTS AND MACHINE PARTS. MARTIN O. ROLSTAD, Sisseton, S. Dak., assignor of one-half to Oscar Bornes, Minneapolis, Minn. Filed Oct. 7, 1929. Serial No. 397,920. 2 Claims. (Cl. 81—13.)



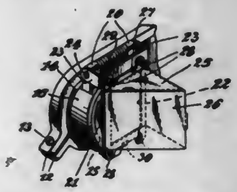
1. A tool for engaging and holding the round head of a bolt, comprising a straight shank having an outer end which may be struck to drive the tool longitudinally, a pair of opposed jaws pivoted to one end of said shank and extending substantially longitudinally therefrom, means interposed between said jaws for urging said jaws apart, a socket member surrounding the inner ends of said jaws and a portion of said shank, said socket member having engagement with said shank and being longitudinally adjustable thereon to clamp said jaws, said jaws being longitudinally curved and having longitudinally extending biting edges for gripping the round head of a bolt or other machine part, said jaws having pointed extremities adapted to be driven into material adjacent a bolt head.

1,818,354. COMPOSITE PHOTOGRAPHIC METHOD AND APPARATUS. ROY J. POMEROY, Los Angeles, Calif., assignor of one-half to Paramount Publix Corporation, a Corporation of New York. Filed Dec. 19, 1925. Serial No. 76,424. 6 Claims. (Cl. 88—16.)



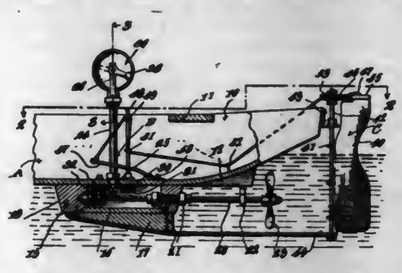
1. The process of producing a composite photograph that includes illuminating the subject before a non-actinic ground, simultaneously exposing two films to said subject and by light splitting causing said two films to be exposed to identic images of the subject, regulating the proportional amount of light thrown upon the two films so that one film is relatively over exposed, developing said over-exposed film to form thereon a substantially opaque mask image of the subject, masking the other film with said mask image, and by exposure to the desired background, combining the subject image of the second mentioned film with an image of the background.

1,818,355. MOTION PICTURE MACHINE. WILLIAM C. READEKER, New York, N. Y. Filed Jan. 8, 1926. Serial No. 79,919. 5 Claims. (Cl. 88—24.)



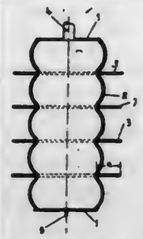
1. In combination with a casing for motion picture apparatus having a plurality of angularly related walls each provided with an opening therein through which the pictures or images are adapted to be projected, a lens holder, means for mounting said lens holder for rotative adjustment in coaxial relation with one of said openings, a deflector pivotally mounted upon the lens holder and movable with respect thereto into intersecting relation with the light rays projected through the lens, said lens holder adapted to be adjusted with the deflector in the latter position to deflect the light rays through a selected opening in one of the other walls of the casing, and means for normally sustaining said deflector yieldingly in an inoperative position on the lens holder to permit of the projection of the light rays through said first named opening.

1,818,356. BOAT. CONSTANTINOS G. RENTOS, Brooklyn, N. Y., assignor of one-third to Soterios Nicholson, Washington, D. C. Filed Dec. 7, 1928, Serial No. 324,394. Renewed Feb. 4, 1931. 2 Claims. (Cl. 115—24.)



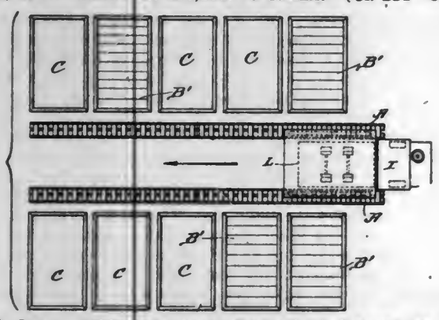
1. The combination with a boat, of a propelling mechanism therefor comprising a casing adapted to be secured to the exterior of a boat at the bottom thereof, a cylindrical housing extending into the boat having communication with the casing, a propeller shaft rotatably supported by the housing and extending rearwardly therefrom, a propeller on said shaft, a drive shaft rotatably mounted within the housing, a U-shaped head supported by the housing, and a shaft rotatably supported by each arm of the head, the shafts being rotatable one relative to the other, the inner end of one shaft being rotatably received within the inner end of the other shaft, hand cranks secured to the last mentioned shaft for rotation therewith, a pinion on the drive shaft, and relatively large gears secured to the inner ends of the shafts carried by the arms meshing with the opposite sides of the pinion.

1,818,357. PNEUMATIC SPRING. CARLO RIGOTTI, Turin, Italy. Filed Feb. 27, 1928, Serial No. 257,507, and in Italy Mar. 31, 1927. 2 Claims. (Cl. 267—35.)



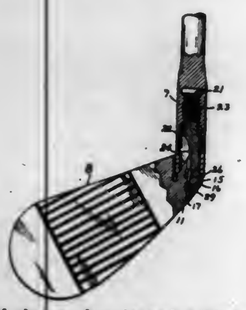
1. A pneumatic spring for motor vehicles and the like, comprising a flexible tube filled with pressure air, and a plurality of annular plates spaced apart on said tube, the width of the plates being such that each tube portion when said tube is completely compressed, is fully supported between two adjacent annular plates.

1,818,358. CONVEYER METHOD AND APPARATUS. ROBERT T. ROMINE, Mount Clemens, Mich. Filed July 3, 1926. Serial No. 120,303. 9 Claims. (Cl. 214—38.)



1. In a portable conveyer apparatus for industrial plants, the combination of parallel conveyer ways each comprising sections of antifriction surfaces, and a portable platform having legs spaced to travel on said ways, said ways having therebetween a supporting surface for a lift truck and above said surface an unobstructed area to permit the insertion therebetween and operation of the load elevating platform of a lift truck, the platform having a portion adapted to be engaged by a lift truck elevating platform, and when supported on said surfaces having said portion disposed at a height to be engaged and disengaged by said lifting platform in a horizontal plane intermediate the range of lift of the latter.

1,818,359. ADJUSTABLE GOLF CLUB. STEPHEN SAMARAS and LOUIS RAVIZZA, Oakland, Calif. Filed Nov. 10, 1927. Serial No. 232,249. 2 Claims. (Cl. 273—79.)

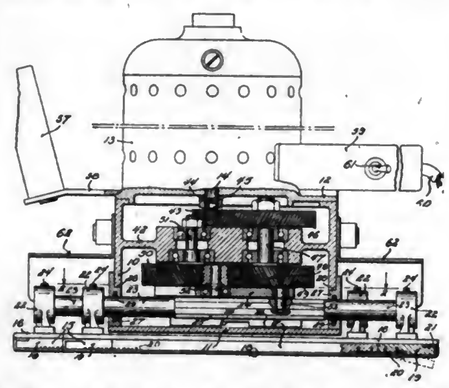


1. In a golf club, a ferrule and a blade pivotally and adjustably related and having cooperating portions thereof frictionally engageable, means operative to urge said portions apart, and a member simultaneously and similarly engageable with said portions and projectable thereagainst for forcibly engaging the portions against the resistance of said first means.

1,818,360. RESIN SOLUTION AND METHOD OF PREPARING SAME. JOHN H. SCHMIDT, Bloomfield, N. J., assignor to Bakelite Corporation, New York, N. Y., a Corporation of Delaware. Filed May 7, 1927. Serial No. 189,743. 2 Claims. Cl. 134—26.)

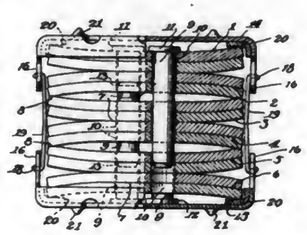
1. Process of preparing a resin solution comprising effecting a reaction between thiourea and an anhydrous methylene containing hardening agent in the presence of a solvent comprising at least one substance of the group consisting of ethyl lactate and the monoethyl ether of ethylene glycol, said hardening agent proportioned to yield a resin of the reactive type.

1,818,361. SURFACE DRESSING MACHINE. JOSEPH L. SCHWABE, Jr., Milwaukee, Wis. Filed May 31, 1928. Serial No. 281,751. 8 Claims. (Cl. 51—170.)



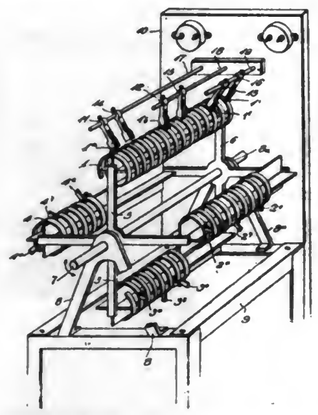
1. A portable surface dressing machine comprising a lubricant retainer casing, a plurality of bars mounted for lengthwise reciprocation through opposite walls of said casing, means enclosed in said casing for reciprocating said bars simultaneously in opposite directions, and a plurality of shoes below said casing carried and guided by the projecting ends of said bars.

1,818,362. SPRING RETAINING MEANS. THOMAS H. SYMINGTON, Baltimore, Md., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Aug. 9, 1926. Serial No. 128,317. 18 Claims. (Cl. 267—3.)



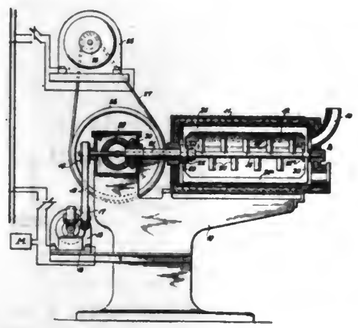
1. In a spring assembly, a series of groups of plate springs, and guide and centering means therefor passing partly therethrough at a plurality of points spaced from the center whereby to prevent relative rotation of the springs.

1,818,363. INDUCTANCE SYSTEM. ARTHUR M. TROGNER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 25, 1929. Serial No. 335,110. 5 Claims. (Cl. 171—242.)



1. In an inductance system, a plurality of helical single layer inductor elements, a rotatable frame provided with a plurality of supporting arms, each of said arms carrying one of said inductor elements, inductor connectors attached to each of said inductor elements at separate points thereof, a plurality of stationary contactors, and supporting rods for carrying said stationary contactors, said stationary contactors being adapted and positioned to engage said inductor connectors as said frame is rotated, whereby the inductance connected between said stationary contactors may be varied.

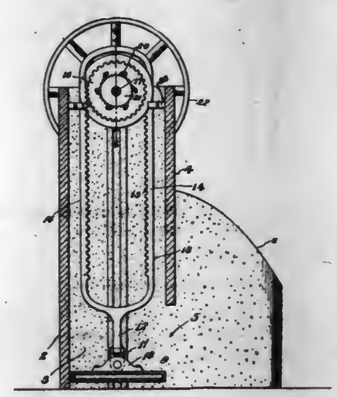
1,818,364. METHOD OF PREPARING ICE CREAM. GROVER D. TURNBOW, Davis, Calif., assignor of one-half to Chester Earl Gray, Oakland, Calif. Filed Nov. 13, 1926. Serial No. 148,283. 7 Claims. (Cl. 62—174.)



1. The method of preparing ice cream comprising the separately performed steps of reducing the temperature of the mixture to a point where the water content thereof is partially frozen and agitating said mixture to incorporate air therein, the step of incorporating air being substantially and entirely performed subsequently to the other.

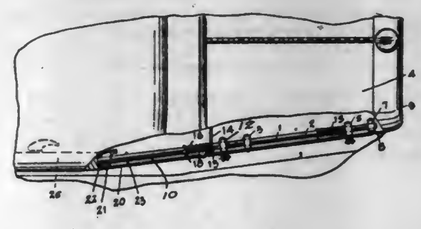
1,818,365. WAVE MOTOR. JOHN J. USHER, St. Helens, Oreg. Filed July 28, 1928. Serial No. 295,942. 1 Claim. (Cl. 253—10.)

A wave motor comprising a housing open at the top and bottom and including front, back and side walls, the front wall terminating some distance from the lower ends of the back and side walls, and the latter having flared extensions, a float in the housing, guide means between the ends of the float and the side walls, a shaft mounted in bearings at the top of the side walls, pairs of gear wheels loose on opposite end portions of the shaft and connected thereto by reverse ratchet mechanism, a yoke



for each pair of gear wheels having a lower extension, and having its bars offset and toothed and in mesh with the respective gear wheels of a pair, guides on the front and back walls of the housing to coact with the bars of the yokes, and links pivotally connecting the extensions of the yokes with the float to provide a universal joint to admit of an unequal movement of the float without binding.

1,818,366. AUTOMATIC HOOD LOCK. FRANK VARGO, Toledo, Ohio, assignor of one-half to Hilda Y. Roth, Toledo, Ohio. Filed June 23, 1930. Serial No. 462,989. 3 Claims. (Cl. 292—177.)

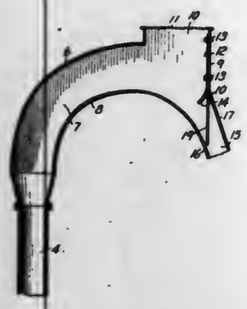


1. In combination with a hood cover, a locking bar slidably supported on the hood cover, a key bar slidably supported on the hood cover and located to make contact with the end of the sliding bar, a socket adapted to receive an end of the locking bar, an elastic means for moving both bars relative to the socket.

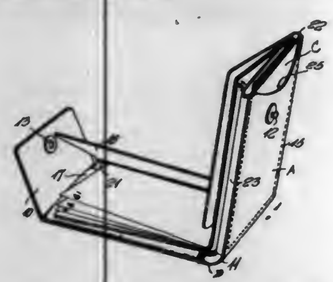
1,818,367. GRAIN CLEANER. HALBERT C. WALLACE, Kansas City, Mo. Filed Jan. 31, 1927. Serial No. 164,713. 3 Claims. (Cl. 209—142.)

1. In a grain cleaning device, a conduit including a curved portion and having a vertical wall to receive grain carried by air currents through said curved portion, said conduit also having an upwardly opening air outlet adjacent said vertical wall, a grain discharge throat including

a downward outwardly inclined extension of said vertical wall, and a baffle supported by said vertical wall and having its lower end curved inwardly across said throat to divert said air currents into a curved path for departure through said air outlet.

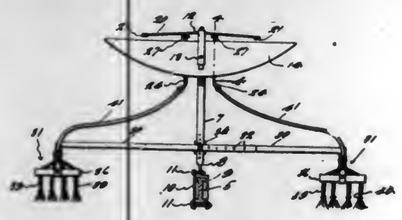


1,818,368. BILL FOLD. CHARLES WALLERSTEDT, St. Louis, Mo. Filed Apr. 27, 1929. Serial No. 358,573. 2 Claims. (Cl. 150—38.)



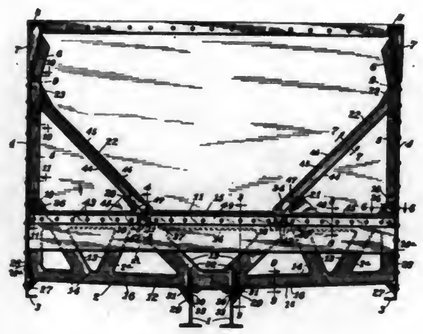
1. A billfold comprising a strip of material sufficiently longer than the bill to be enfolded to provide a flap at one end folded inwardly, flap members extending transversely across the strip and spaced apart to provide a hinge extending laterally beyond the marginal edges of the strip and secured along the edges of the strip providing pockets between the strip and the flap members.

1,818,369. POISON DISPENSER FOR CULTIVATOR PLOWS. BURKE WATSON and WILLIAM SHAFTER JACKSON, Sumter, S. C. Filed Feb. 17, 1930. Serial No. 429,128. 2 Claims. (Cl. 299—30.)



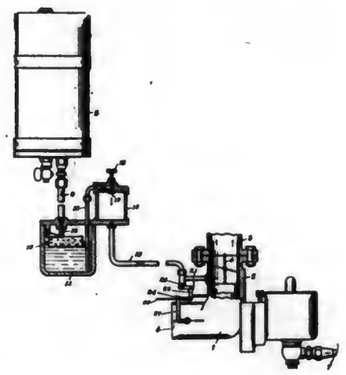
1. A poison applicator of the class described comprising a vehicle carried reservoir, a vehicle carried trough having an opening in its bottom, an upright on the trough, a horizontal supporting member connected with the upright, a plurality of strands having their upper ends connected with the supporting member and passing through the hole in the trough, and a tube leading from the reservoir into the upper end of the group of strands.

1,818,370. CROSS BEARER. WILLIAM E. WINE, Toledo, Ohio. Filed Apr. 27, 1929. Serial No. 358,717. 81 Claims. (Cl. 105—230.)



1. A cross bearer for railway hopper cars of integral formation and provided with arms adapted to be locked to side stakes of the car, the upper member of the cross bearer adapted to receive the upper edges of hopper sheets for supporting the latter.

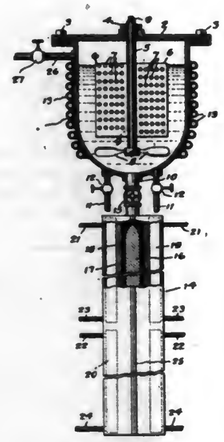
1,818,371. CHARGE FORMING DEVICE. CARL EMIL WITTE, San Francisco, Calif. Filed Oct. 26, 1827. Serial No. 228,011. 3 Claims. (Cl. 123—25.)



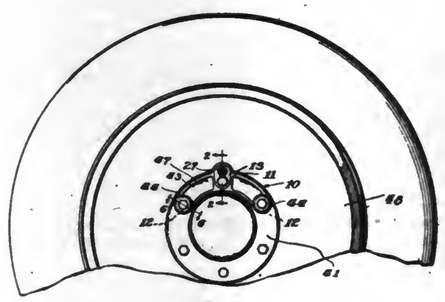
1. In an internal combustion engine, a carburetting device, an air intake for said carburetor, a water vessel, a pipe connection between the vessel and the intake allowing the suction of the engine to draw on the water in the vessel, a choker associated with the carburetor, a valve in the pipe connection and a common control for the valve and the choker.

1,818,372. APPARATUS FOR PRODUCING RUBBER HAVING AIR CELLS. STEFANO BATTILANI, New York, N. Y. Filed Sept. 28, 1926. Serial No. 138,154. 1 Claim. (Cl. 18—2.)

An apparatus for producing rubber impregnated with cells containing air at more that atmospheric pressure, comprising an air tight container, valved pipes for admitting compressed air, means for bringing the contents of the container to a liquid state, perforated baffles for agitating the mixture while the compressed air is being admitted, and means for forcing the mixture from the container.



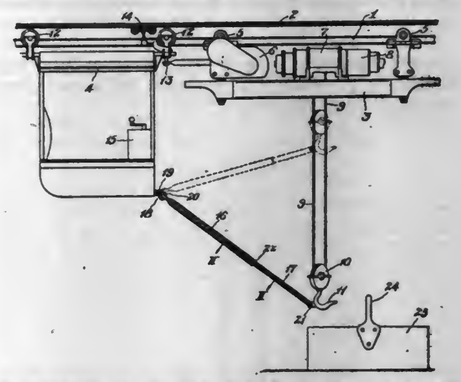
1,818,373. THEFT PREVENTING DEVICE. FREDERICK E. BEACH, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed May 25, 1928. Serial No. 280,423. 11 Claims. (Cl. 70—122.)



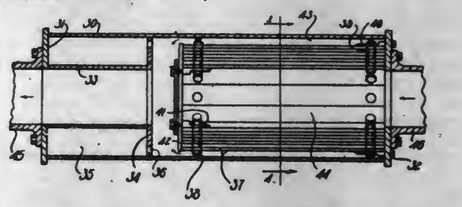
1. In a spare wheel theft preventing device, the combination of a carrier with a spare wheel, said carrier having a plurality of attaching studs for supporting said wheel, securing means carried by certain of said studs for securing said wheel, an arm carried by one of said studs, said arm having a depression for embracing one of said securing means, and a locking device carried by said latter stud for locking said wheel and arm on said carrier.

1,818,374. OVERHEAD TRAVELING CARRIER. EARL T. BENNINGTON, Cleveland Heights, Ohio, assignor to the Cleveland Crane & Engineering Company, Wickliffe, Ohio, a Corporation of Ohio. Filed Jan. 15, 1927. Serial No. 161,381. 1 Claim. (Cl. 212—71.)

A carrier adapted to travel along an overhead trackway and comprising flexibly coupled sections, hoisting means on one of the sections including a hoist cable, a load engaging hook suspended by said cable, and steadying means connecting the other of said carrier sections and said hook for yieldably resisting lateral swinging movements of said hook, said steadying means comprising an arm composed of telescopic sections yieldingly held against relative endwise movement by frictional engagement with each other, said arm being pivotally connected to the hook and to the carrier section.

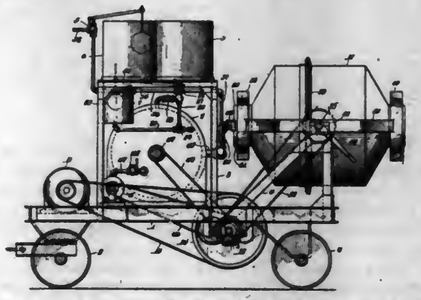


1,818,375. SILENCER. ROLAND B. BOURNE, Hartford, Conn., assignor, by mesne assignments, to The Maxim Silencer Company, Hartford, Conn., a Corporation of Connecticut. Filed May 2, 1928. Serial No. 274,644. 2 Claims. (Cl. 137—160.)



1. A silencer comprising a cylindrical casing, a transverse partition therein having a series of holes adjacent its periphery, a pipe extending through said partition and one end of the casing whereby an annular chamber opening only through said holes is formed, multiple spiral passageways located within a chamber formed at the other side of the partition, said passageways extending from a central space to points within said second chamber, and a communication from the central space for the passage of gas.

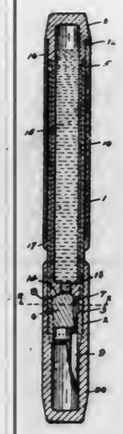
1,818,376. CELLULAR CONCRETE MACHINE. HARRY E. BROOKBY, Evanston, Ill., and FRED J. GOUGH, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1927. Serial No. 199,149. 8 Claims. (Cl. 83—73.)



1. In a machine of the class described, the combination of foam whipping means, mixing means in driving oper-

ative relation with said whipping means for mixing said foam with a cementitious material and means for blowing the foam from said whipping means to said mixing means.

1,818,377. FOUNTAIN PEN. LLOYD A. BROOKE, Washington, D. C. Filed Aug. 22, 1929. Serial No. 387,710. 2 Claims. (Cl. 120—47.)



1. A fountain pen, comprising a main barrel open at both ends and having a threaded exterior flange at its upper end, a feed plug fitting the other end and having a valve seat on its inner end and a feed duct opening in said seat, a tubular plunger exteriorly threaded and closed at its upper end slidably mounted and in closely fitted engagement in said barrel and having a valve on its lower end cooperating with said seat to open and close the feed duct, and an exterior sleeve interiorly threaded at its upper end to engage the threads on the barrel and the plunger, said sleeve having means at its lower end to limit the outward movement of the plunger.

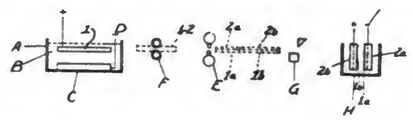
1,818,378. GOLF BAG. THOMAS WILLIAM BYRNE, Dorchester, Mass. Filed Jan. 9, 1928. Serial No. 245,281. 1 Claim. (Cl. 150—1.5.)



A golf bag including a body permanently closed at one end and having an open mouth portion flat on one side and arched on the other, and a pocket within the body at the mouth thereof and having one side against the flat side of the body and its opposite side extending across the mouth in spaced relation to the flat side of said mouth, the last mentioned side of the body being inclined inwardly of the body from the mouth towards the flat side, said pocket opening in the same direction as the mouth.

1,818,379. PROCESS FOR THE MANUFACTURE OF METALLIC SHEETS. JOHN R. CAIN, Washington, D. C., and GIBSON YUNGBLUT, Dayton, Ky., assignors to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Dec. 2, 1927. Serial No. 237,295. 8 Claims. (Cl. 204—1.)

1. That process of forming an electrodeposited metallic object, which consists in plating the object onto a cathode, elongating the cathode to at least twice its original length, severing the cathode to form an article of the desired shape, and plating the cathode metal from said object back onto the remainder of the original cathode, thus forming a new cathode having original thickness of



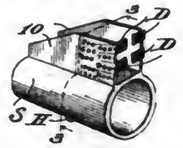
the cathode metal and half of the plated thickness of the same metal as the metallic object, and then plating on the new cathode with the metal of the object to form a new blank for elongating, for the purpose described.

1,818,380. ADVERTISING DEVICE. RAYMOND CARTIER, Lausanne, Switzerland. Filed Dec. 6, 1929, Serial No. 412,226, and in Switzerland Dec. 11, 1928. 2 Claims. (Cl. 40—130.)



1. In an electric advertising device the combination of a metal plate provided with a number of holes adapted to receive electric light bulbs, tongues struck from the material of the plate and bent backwards along the edges of the holes in the plate substantially at right angles to the plate to form a resilient sleeve extending rearwardly from each hole and adapted to resiliently engage the cap of the electric bulb, a resilient cushioning member positioned in the rear of said metal plate, and a metallic grating covering the face of the cushioning member opposite the metal plate, said cushioning member being in such spaced relationship to the metal plate that the caps of the electric bulbs inserted through said holes make contact with the grating.

1,818,381. GUN SIGHT. WILLIAM A. CARUTH, Los Angeles, Calif. Filed Feb. 10, 1927. Serial No. 167,180. 8 Claims. (Cl. 33—51.)

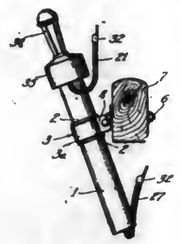


1. A front sight for fire arms, comprising pairs of lugs spaced apart so as to form between them a single vertical and a plurality of horizontally disposed sight openings that intersect the vertical sight opening and the upper and lower edges of which lugs constitute horizontally disposed sight edges.

1,818,382. PRIMARY CUT-OUT. NICHOLAS J. CONRAD, Wilmette, Ill., assignor, by mesne assignments, to Schweitzer & Conrad, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 1, 1927. Serial No. 209,662. 11 Claims. (Cl. 200—117.)

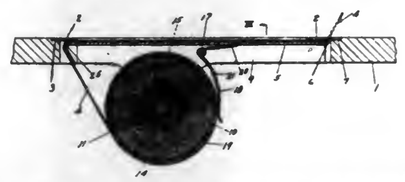
5. In a primary cut-out, a housing, contact clips mounted within the housing in spaced relation and each including a base ring and a plurality of resilient contact fingers

secured to the ring concentric therewith and forming cylindrical contact clips, the fingers being provided in their outer faces with aligned grooves, a tension coil spring mounted in the groove of the fingers of each clip, and a plug member insertible into the clips, and having spaced contact members co-operating with said clips, the convolutions



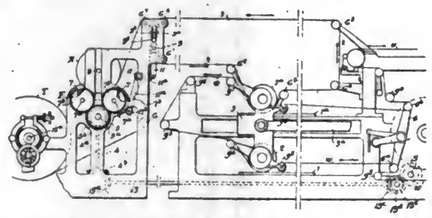
at one end of the spring being reduced in diameter and threaded into and permanently secured to the other end of the spring, the annular spring resulting being of uniform exterior diameter and co-operating with the surrounding wall of the housing to limit spreading apart of the fingers.

1,818,383. WRITING DEVICE. CHARLES ERNEST COWDIN, Portland, Oreg., assignor to Cowdin Company, a Corporation of Oregon. Filed Nov. 12, 1929. Serial No. 406,694. 8 Claims. (Cl. 281—12.)



1. In combination with a table top having an opening therein, a frame substantially flush with the top surface of the table and extending inwardly into said opening, a revoluble member beneath said frame, a strip of paper carried by said revoluble member, a platen beneath said frame, the end of the platen overlapping the adjacent ends of the frame, said strip of paper arranged to pass between the frame and platen below the top surface of the table, and means for deflecting the paper upwardly at a point beyond the end of the frame.

1,818,384. RUNNING TYMPAN ATTACHMENT. PAUL F. COX, Chicago, Ill., assignor to Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1930. Serial No. 457,084. 3 Claims. (Cl. 101—417.)



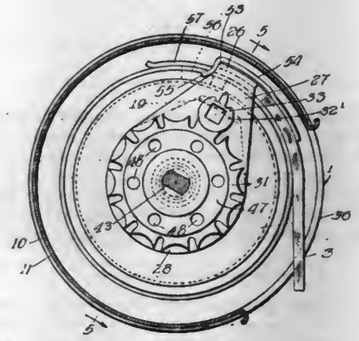
1. Tympan web handling mechanism; for use on traveling cylinder web printing presses wherein a portion of the web is stopped during the taking of an impression and then forwarded more rapidly; comprising a tympan supply roll, a pair of tympan rewinding rolls mounted in a frame adjacent one end of the press, reciprocable bars mounted in said frame, a pair of looping rollers mounted in said bars, a pivoted lever for operating said bars, a cam connected with one of the rewinding rolls for operating said lever, and guides for directing the tympan from said supply roll to and over one of said looping rollers thence to and between the press cylinder and the web to prevent offset on the cylinder, thence back to and over the other looping roller and to the rewinding roll; with means for operating the said rewinding rolls and the cam actuating the looping rollers to intermittently shift the tympan past the cylinder.

1,818,385. WRENCH. FRANCIS A. DEVEREAUX, Anoka, Minn., assignor to Bertrand P. Murphy, Anoka, Minn. Filed Aug. 10, 1929. Serial No. 384,961. 4 Claims. (Cl. 81—165.)



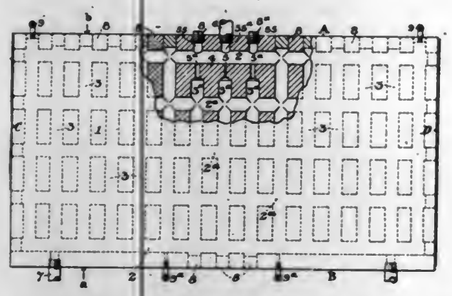
1. A wrench comprising a stationary member having a handle shank, a bearing portion at one end of said shank, and a fixed jaw secured to said bearing portion, a movable member having a movable jaw and a bearing portion fitting against the bearing portion of said stationary member and movable thereacross, means for confining the movement of said movable member across the bearing portion of said stationary member in a direction extending diagonally relative to said shank, said movable member having a guideway therein extending diagonally relative to said shank and in an opposite direction than the direction of movement of said movable member across the bearing portion of said stationary member, a member having a portion fitting within said guideway and means for moving said last mentioned member substantially longitudinally of said shank to slide said movable member on said stationary member and vary the spacing between said two jaws.

1,818,386. SHOCK ABSORBER. JOHN A. DIENNER, Evanston, Ill., assignor to Stromberg Research Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 27, 1927. Serial No. 242,784. 15 Claims. (Cl. 267—10.)



1. In a rebound controller, the combination of a relatively stationary drum, a relatively movable shoe, a coil retrieving spring connected to said shoe, a spring anchor for holding one end of the spring, and means in the spring connection for adjusting the tension of the spring comprising a Geneva gear and a Geneva pinion.

1,818,387. STEAM PLATEN. RICHARD W. DINZL, Margate City, N. J., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 23, 1928. Serial No. 294,880. 15 Claims. (Cl. 257—257.)



1. A heating platen comprising a thin-walled metal plate having passages extending in both directions through the body of the same substantially at right angles to each other; certain of said passages extending in one direction passing through both marginal edges of the plate, while the other cross passages are arranged in groups; the passages of one group extending from one marginal side or edge at right angles to the passages which pass through two marginal edges of the plate and the passages of the other group extending from the opposite marginal side or edge at right angles to the passages which pass through two marginal edges of the plate and said last-named cross passages being partially baffled by an apertured wall between the internal ends of the same and one of the passages which opens through two edges of the plate adjacent a marginal side or edge of the same, in combination with means including inlet and outlet connections for closing the open ends of said several passages.

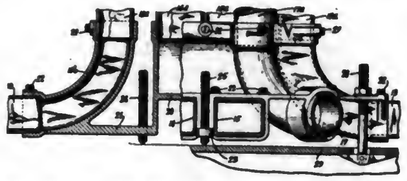
1,818,388. CLEANING DEVICE. LOUIS L. FARLEY, Los Angeles, Calif. Filed Nov. 27, 1928. Serial No. 322,157. 5 Claims. (Cl. 15—127.)



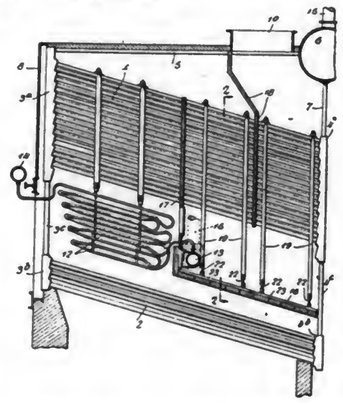
1. A cleansing device comprising a hollow head having perforations in the upper face thereof, a conduit having a portion extending downwards therefrom and a portion extending angularly upwards from the lower end of the first mentioned portion, there being a passageway through said conduit to the interior of said head, and means for connecting said conduit to a source of water under pressure.

1,818,389. WALL BOX BASE FOR CONDUIT SYSTEMS. JAMES M. G. FULLMAN, Sewickley, Pa., and GEORGE A. LUTZ, Plainfield, N. J., assignors to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,114. 12 Claims. (Cl. 247—27.)

1. A wall box base for connecting a plurality of vertical conduit runs with a plurality of runs of horizontally disposed conduits and for providing a separate and distinct passage connection between each vertical conduit and each cooperating horizontal conduit, said base comprising an integral casting with a plurality of distinctively separate curved passages formed integrally therein into which both the vertical and horizontal runs of conduit may be connected.

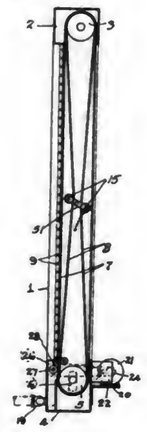


1,818,390. BOILER. CHARLES W. GORDON, Pleasantville, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Nov. 19, 1929. Serial No. 408,210. 6 Claims. (Cl. 122—478.)



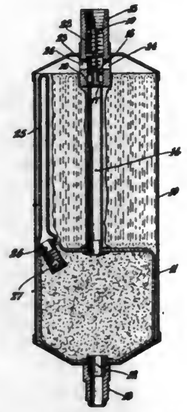
1. In a boiler having two vertically spaced banks of horizontal tubes, the combination with said banks, of a baffle between and parallel to them and spaced from both of them, and supports for said baffle hung from tubes in the upper bank.

1,818,391. SELF CLEANING FILTER. OSCAR V. GREENE, Cleveland, Ohio. Filed May 4, 1929. Serial No. 360,412. 6 Claims. (Cl. 183—57.)



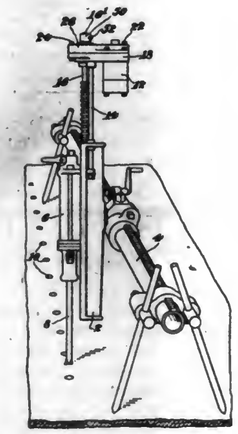
1. In a filter, the combination of a frame, having spaced rolls, an endless filter belt mounted in said frame over said rolls, a casing at one end of said frame, and having a vacuum cleaning nozzle opening adjacent the belt, means for holding the belt against said casing at the top and bottom of said nozzle opening, other means in said casing for jarring said screen at said opening, and means for moving said belt past said opening.

1,818,392. LUBRICATING SYSTEM. EDMUND E. HANS, Detroit, Mich. Filed Oct. 20, 1928. Serial No. 313,739. 14 Claims. (Cl. 210—134.)



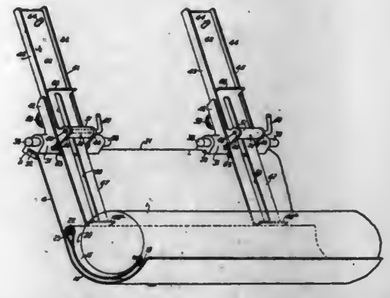
1. In combination, a filter having an inlet and an outlet, a bypass between said inlet and outlet, and valve means in said bypass operable to prevent flow through said bypass over a definite pressure range and to permit flow through said bypass at pressures above or below said range.

1,818,393. FEEDING DEVICE FOR ROCK DRILLS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 2, 1930. Serial No. 449,225. 3 Claims. (Cl. 255—45.)



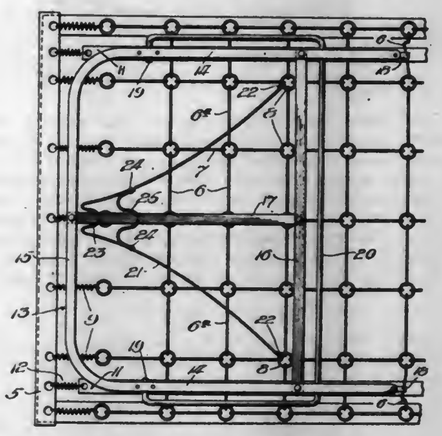
1. In a feeding device for rock drills, the combination of a motor and a rock drill shell, a rock drill slidable in the shell, a feed screw for the rock drill, driving means for transmitting movement of the motor to the feed screw, a casing for the driving means, a driven member supported in the casing and spaced from the feed screw, and means on the feed screw cooperating with said driven member to form a clutch, said clutch being maintained in engagement by the weight of the rock drill.

1,818,394. TYPEWRITING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Mar. 4, 1927. Serial No. 172,684. 27 Claims. (Cl. 197—127.)



1. In a typewriting machine, the combination of a cylindrical platen, a support, a two-part stop-carrying member mounted on said support, the two parts of said member being mounted for relative bodily adjustment one on the other in a line feed direction, one of said parts being flexible and carrying a paper end-stop, the flexibility of the flexible part enabling it to bend to a curved condition which conforms generally to the curvature of the platen, and means for holding said flexible part in place around the platen in such curved condition.

1,818,395. HEADREST FOR BEDS. GENE HERZ, Chicago, Ill., assignor to Herz Bed Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 10, 1926. Serial No. 101,023. 10 Claims. Cl. 5—72.

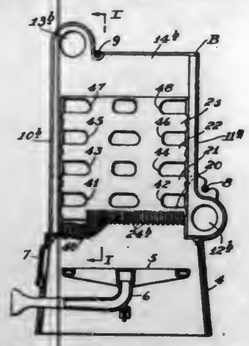


1. In a bed, the combination of a spring structure, a head-rest pivoted thereon, a supporting device for the head-rest, and a retaining device formed of a single piece bent to provide arms joined together at one end by a hook portion, said arms being mounted on the spring structure independently of said rest, said hook being adapted to be engaged by said supporting device to hold the head-rest in elevated position.

1,818,396. SECTIONAL BOILER. CHARLES HOWARD HOOK, Pittsburgh, and NATHAN L. MERCUR, McKeesport, Pa.; said Mercur assignor to said Hook. Filed Jan. 28, 1928. Serial No. 250,183. 12 Claims. (Cl. 122—210.)

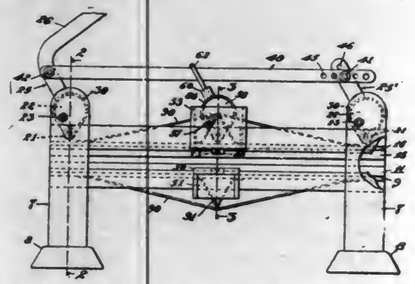
9. A water heater section of the transverse tube type, comprising a pair of upright end conduits having an upper

enlarged transverse dome conduit and two or more lower transverse tubes of substantially uniform cross-sectional area throughout their length connected therebetween and a



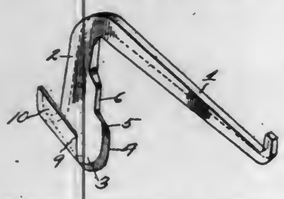
plurality of flattened Venturi tubes having upwardly diverging walls connected between said dome conduit and the adjacent transverse tubes.

1,818,397. SHINGLE CUTTER. MARTIN C. HURST, Los Angeles, Calif. Filed Aug. 15, 1927. Serial No. 212,972. 4 Claims. (Cl. 164—57.)



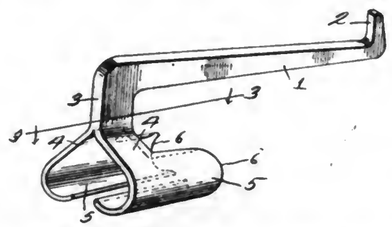
1. A cutting device, comprising a cutting tool, a carrier therefor, an anti-friction roller pivotally mounted on said carrier, a cam to act upon said roller to impart a cutting movement to said tool, and a stirrup mounted on said carrier and embracing said cam to cause the receding movement of said cam to retract said tool, the stirrup being provided with an elongated opening for receiving the pivot of the anti-friction roller so that the stirrup is prevented from moving the roller before the cam engages the latter.

1,818,398. HACK. JERE O. HUNFORD, Perry, Fla. Filed Nov. 26, 1928. Serial No. 321,945. 1 Claim. (Cl. 47—13.)



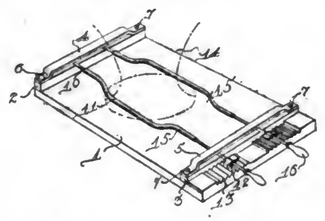
A bill streak cutter comprising a body member, an angularly disposed shank carried by the body member, said shank terminating in a bill streak cutter U-shaped in vertical transverse cross section, one end of said bill streak cutter terminating beyond one edge of the shank and in a cutting edge, said last named edge of the shank having step shaped blunt profile forming means whereby the cutting of a bill streak a depth greater than the depth of the cutting edge is prevented.

1,818,399. PULLER. JERE O. HUNFORD, Perry, Fla. Filed May 20, 1929. Serial No. 364,630. 2 Claims. (Cl. 47—13.)



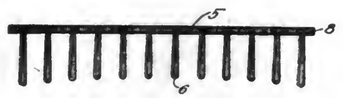
1, A streak puller comprising an elongated handle member, a right angularly disposed arm at one end of the handle member, said arm terminating in diverging arms extending outwardly from opposite sides thereof, said diverging arms terminating in longitudinally disposed cutter members segmentally shaped in vertical transverse cross section, said arms and cutter members being in spaced relation.

1,818,400. BASKET HOLDER. CLIFFORD J. JAMES and JOHN JAMES, Detroit, Mich. Filed July 9, 1930. Serial No. 466,677. 4 Claims. (Cl. 248—41.)



1, A receptacle support comprising a base board, receptacle engaging rods having one end pivoted relative to said board, a pawl carried by the opposite ends of said rods, and ratchet teeth mounted upon the opposite end of said board and adapted to be engaged by the pawl upon the rods to secure the rods in an adjusted position.

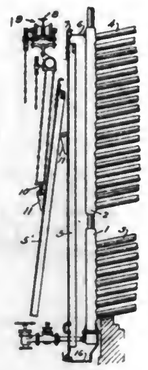
1,818,401. WATER WAVING COMB. ANNA JANDA, Chicago, Ill. Filed Aug. 21, 1930. Serial No. 476,869. 6 Claims. (Cl. 132—31.)



1. A continuous water-waving comb comprising a length of wire forming the foundation of the back, a substantially continuous bend of the said length doubled in contact upon itself, and loops periodically extended from said doubled length and in transverse directions to constitute the teeth of the comb.

1,818,402. BOILER DOOR. WILLIAM A. JONES, West New Brighton, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed July 12, 1923, Serial No. 651,021. Divided and this application filed Jan. 10, 1928. Serial No. 245,650. 6 Claims. (Cl. 122—494.)

1. In a boiler casing, a substantially vertical door adapted to cover an opening in the casing, a lintel above the opening, hooks on the top of the door to engage the lintel to support the door and having limited horizontal move-



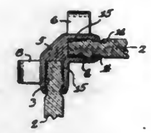
ment thereon away from the casing, and clamps around the edges of the door to hold the same in contact with the frame of the opening.

1,818,403. CARRIER FOR CATALYSTS AND THE LIKE. ALFRED JOSEPH, Enghein, France, assignor to Compagnie Internationale pour la Fabrication des Essences et Petroles, Paris, France, a Limited Joint Stock Company of France. Filed Jan. 17, 1929, Serial No. 333,242, and in France Jan. 23, 1928. 7 Claims. (Cl. 23—233.)

1. A product for forming a carrier for catalytic and purifying material comprising a mixture of plastic clay, Mexican mazut, and a finely divided organic filler.

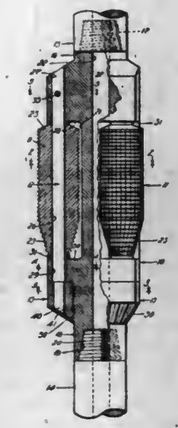
3. A method of manufacturing a carrier for catalysts and purifying agents which consists in mixing a plastic material with a finely divided organic filler, molding said mixture, baking said mixture in a reducing flame whereby said filler is carbonized, and then baking said mixture in an oxidizing flame.

1,818,404. CORNER SUPPORT FOR GLASS RIMS. JACOB M. KAUFMAN, Detroit, Mich., assignor to American Show Case & Mfg. Co., Detroit, Mich., a Corporation of Michigan. Filed July 11, 1929. Serial No. 377,577. 2 Claims. (Cl. 312—140.)



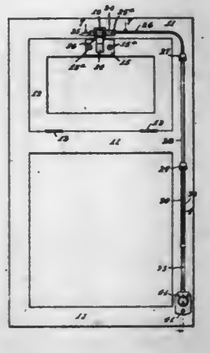
1. A corner support for glass rims comprising a pair of channel members united with their backs at an angle to each other, both free edges of each channel member being bent inwardly, whereby to restrict the mouths of said channel members, and an angular leg extending from said channel members and adapted to engage the edge of a table top, in combination with a glass plate having one end received in one of said channel members and having grooves in opposite faces at said end and positioned to receive the bent edges of the receiving channel member.

1,818,405. WELL REAMER. VAN J. KUBIN, Brea, and PERRY FUNDERBURK, Fullerton, Calif., assignors to Chicksan Oil Tool Co., Limited, a Corporation of Nevada. Filed Feb. 7, 1929. Serial No. 338,083. 3 Claims. (Cl. 255—73.)



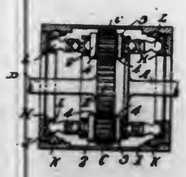
1. A well reamer including a body having an enlarged portion with longitudinal side recesses, cutters, pins carried by the body supporting the cutters in the recesses, the pins having polygonal parts, a locking member screw-threaded on the body, the member having polygonal openings receiving said parts of the pins.

1,818,406. TRANSOM OR WINDOW CONTROL MEANS. FREDERICK W. KUCKLINSKY, Montclair, N. J. Filed Oct. 31, 1929. Serial No. 403,875. 5 Claims. (Cl. 268—112.)



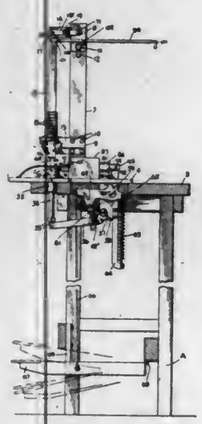
1. In a transom controlling mechanism a frame, a pivotal connection for said transom on said frame, a flexible member, terminating at one end thereof at a part on said transom, a handle, connected to said member at the other end thereof and a support for said handle, pivotally connected thereto and slidably connected to said frame, whereby the end of said member at said transom may be moved by the motion of said support with said handle, thereby causing said member to turn said transom on its pivot, and the pivotal connection of said handle to said support allowing said handle to be normally placed in a plane substantially parallel to said frame for the purpose as specified.

1,818,407. PROGRESSIVE CHANGE-SPEED AND REVERSING DEVICE. RENÉ JEAN LAILLÉ, La Rochelle, France. Filed Dec. 20, 1929, Serial No. 415,501, and in France Dec. 22, 1928. 7 Claims. (Cl. 74—54.)



1. In an apparatus of the type described, having a stationary casing, a driving shaft, an actuated shaft, a frame connected to said driving shaft and rotatable therewith and a plurality of means slidably mounted in the said frame, the combination of rotatably adjustable controlling means pivotally mounted on said stationary casing about an axis at right angles to said shaft, means adapted to freely rotate with respect to said controlling means and operatively engaging said slidable means for slidably reciprocating in a continuous manner the slidable means in the said frame, a plurality of pinions operatively connected to and actuated in rotation by the said slidable means, and means for imparting to the said actuated shaft the movement of rotation of said pinions.

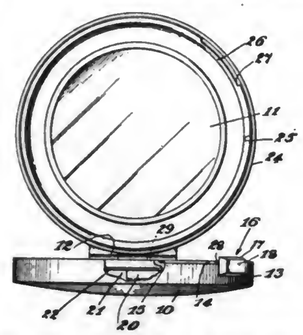
1,818,408. LAUNDRY TAGGING MACHINE. EDWIN LANE, New York, N. Y., assignor to Carolyn Laundry, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1926. Serial No. 131,865. 21 Claims. (Cl. 153—1.)



1. In a machine of the class described a tag supplying magazine, devices located adjacent thereto and including movable jaws for supporting individual tags supplied from the magazine, tag receiving means movable into position to open the jaws and to receive individual tags therefrom, and tag applying mechanism associated with the tag receiving means for applying a tag held by said receiving means to an article to be identified.

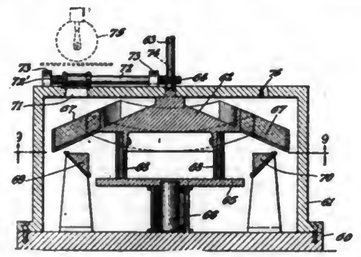
1,818,409. VANITY CASE. HARRY LEBERMAN, New York, N. Y., assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed July 17, 1929. Serial No. 378,840. 6 Claims. (Cl. 292—190.)

1. In a receptacle, embodying a body with a side wall and a hinged lid with a lip, a separate retaining member disposed within the body and forming a guide-way space between itself and the side wall, and a finger-piece, adapted to be interlocked with said lip, slidably fitting



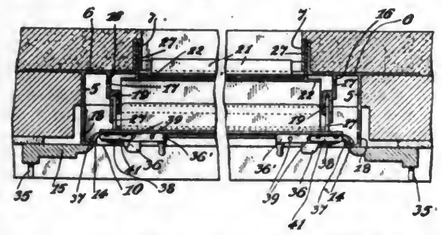
said side wall and provided with prongs disposed in said guide-way space between said retaining member and said side wall.

1,818,410. OPTICAL APPARATUS. JACOB F. LEVENTHAL, New York, N. Y., assignor to The First National Bank of Chattanooga, trustee, Chattanooga, Tenn. Filed Feb. 7, 1927, Serial No. 166,288. Renewed Jan. 6, 1931. 9 Claims. (Cl. 88—16.8.)



1. An optical apparatus comprising rotatable plano-parallel light-refracting means so mounted as to displace a beam of light in a single direction proportionately to the sine of the angle of rotation of said means, rotatable plano parallel light-refracting means so mounted as to displace a beam of light in a single direction proportionately to the tangent of the angle of rotation of said second means, means for synchronously rotating both of said refracting means and means for directing a beam of light through both of said refracting means, said refracting means being so correlated that the resultant displacement per degree of rotation of said means is substantially uniform at least over a limited range.

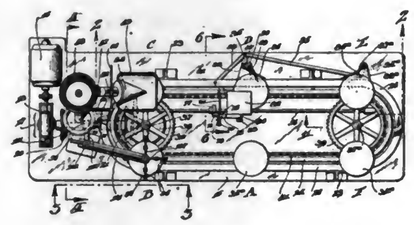
1,818,411. WINDOW CONSTRUCTION. MAX ALFRED LISCHICK, New York, N. Y. Filed Oct. 28, 1929. Serial No. 402,867. 5 Claims. (Cl. 189—72.)



1. In window construction, a metal frame mounted in the building wall and provided at each side of the window opening with laterally spaced vertically extending guide

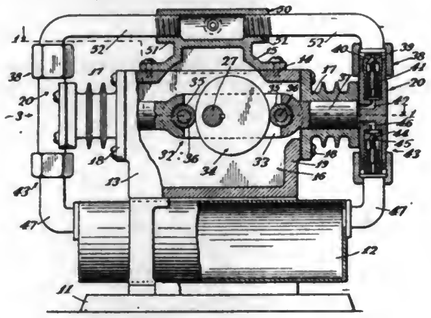
channels opening toward the inner side of the frame, metal window sash frames, each having vertically extending flanges disposed at right angles to the plane of the sash and slidably engaged in corresponding window frame channels at opposite sides of the window opening and removable therefrom to permit the sashes to be removed from and replaced in the window frame, and means carried by each sash cooperating with parts of the window frame to lock the sashes against sliding movement and effect a substantially air tight connection between the flanges thereof and said guide channels.

1,818,412. CAKE ICING MACHINE. JOHN R. LITTY and TRUED B. LUNDIN, Philadelphia, Pa. Filed May 14, 1927. Serial No. 191,341. 29 Claims. (Cl. 91—2.)



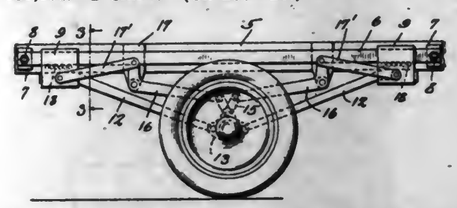
1. A cake coating machine including a frame; a hopper on the frame, a rotatable table, for receiving a cake and movable along a path in the frame for bringing the table under the hopper; a roller for feeding material from the hopper onto the cake; and means for intermittently rotating the roller; the rotation of said roller being timed to the movement of the table in its path so that said rotation occurs when and only when the table is positioned under the hopper.

1,818,413. COMPRESSOR. SAMUEL W. LUITWIELER, Los Angeles, Calif. Filed Mar. 21, 1928. Serial No. 263,351. 7 Claims. (Cl. 230—185.)



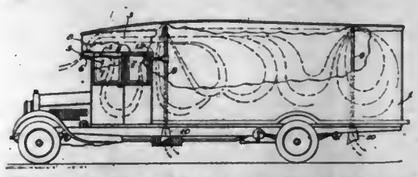
1. A compressor comprising in combination a body structure with a cam chamber therein, said structure having a cover at the top forming a closure for the cam chamber, a cam mounted on a rotatable shaft, said shaft being journaled in the said structure, a pair of cylinders connected to the structure at opposite ends of the said chamber, a piston yoke having piston plungers, the plungers operating in the said cylinders, the yoke extending across the said chamber, means interacting between the cam and the piston yoke, and intake and discharge valves connected to each cylinder remote from the piston chamber.

1,818,414. SHOCK ABSORBER. JAMES W. MARSEY, Leavenworth, Kans. Filed Aug. 31, 1929. Serial No. 389,804. 1 Claim. (Cl. 267—20.)



In combination with the chassis and axle of a motor vehicle, a shock absorbing device comprising a track bar secured to the side of a vehicle, slides having openings to receive the bar, and having their lower sides cut away, rods having one of their respective ends pivotally mounted within the cut away sides of the slides, a collar mounted on the axle of the vehicle, said rods being connected with the collar, bell crank levers connected with the chassis, links connecting the bell crank levers to the slides, links connecting the bell crank levers and the collar, flanges extending downwardly from the chassis, and coiled springs held between the slides and the flanges to restrict movement of the slides.

1,818,415. TRUCK BODY VENTILATOR. WILLIAM G. MAYER, Pittsburgh, Pa. Filed July 13, 1928. Serial No. 292,472. 4 Claims. (Cl. 98—2.)



1. The combination with an automotive vehicle provided with separate closed body and cab compartments, of a conduit disposed forwardly of said body for introducing air into said compartments, an exhaust conduit disposed within and leading from said body compartment and provided at its outer end with an exhaust funnel member turned rearwardly of the vehicle, and connections between said cab and said exhaust conduit, whereby motion of the vehicle causes positive introduction and circulation of fresh air in said compartments.

1,818,416. BUILDING WALL. CHARLES W. MEARA, San Mateo, Calif. Filed Oct. 20, 1928. Serial No. 313,779. 3 Claims. (Cl. 72—44.)

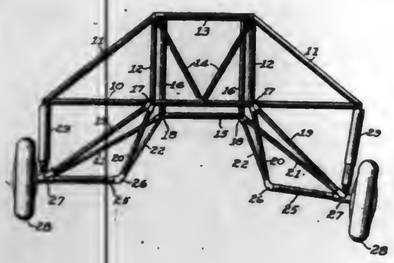


1. A building wall comprising two series of concrete blocks having openings therethrough and forming a double wall, vertical reinforcing rods passing through said openings, a brace engaging a reinforcing rod of one wall and extending obliquely to engage a reinforcing rod of the second wall, and a second diagonal brace fixed to the first brace and engaging reinforcing rods in juxtaposition to those engaged by the first brace.

1,818,417. LANDING GEAR. LESSITER C. MILBURN, Wickliffe, Ohio, assignor to The Glenn L. Martin Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 5, 1927. Serial No. 231,263. 4 Claims. (Cl. 244—2.)

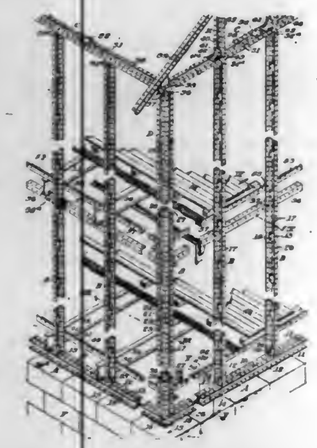
1. In combination with the structure of an airplane, an axle, a ground wheel mounted on one end thereof, an axle

carrier rigidly connected with the axle and hinged to said framework at separated points positioned on a line extending longitudinally of the plane, said carrier together with the axle and the line of the hinge forming a tetrahedron



the forward triangular portion of which lies in a plane perpendicular to said structure, whereby the axle is laterally and perpendicularly braced at both ends, and means connecting said axle adjacent the wheel with said structure.

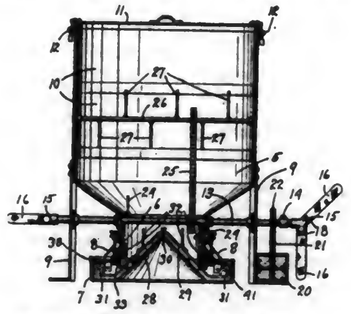
1,818,418. STEEL FRAME HOUSE CONSTRUCTION. EMMOR H. MILLARD, Edgeworth, Pa., assignor, by mesne assignments, to McClintic-Marshall Corporation, Bethlehem, Pa., a Corporation of Pennsylvania. Filed Feb. 4, 1928. Serial No. 251,852. 14 Claims. (Cl. 189—1.)



1. In a steel framing primarily for small buildings such as dwellings and the like wherein rigidity and ease of jointing are the primary objects, a steel framework element consisting of two channel members having their webs opposed and in relatively close relation, the flanges of said members having a multiplicity of bolt holes, an angle clip, means securing said clip to the channel members and passing through certain of said holes, one of the angles of the clip serving as a means for attachment of a framework element thereto.

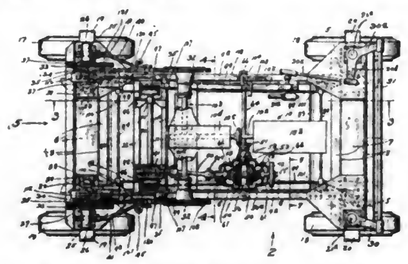
1,818,419. PIG FEEDING AND OILING DEVICE. OSCAR MILLER, Spokane, Wash. Filed May 13, 1930. Serial No. 452,007. 4 Claims. (Cl. 119—53.)

1. A pig feeding and oiling device having in combination a feed container, a depending hopper for said container, a feed trough secured to and in spaced relation with the bottom discharge end of the hopper, a hollow oil containing shaft journaled through the hopper, a forked pipe member connected to each exterior end of the hollow shaft in communication therewith, said forked members having perfora-



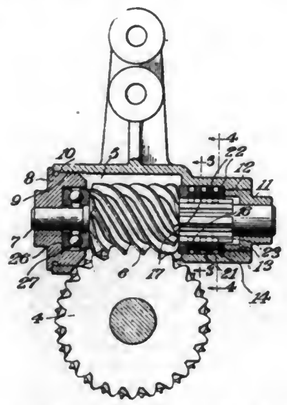
tions in the ends of their arms, and fabric coverings for the forked pipe members adapted to be saturated by the oil therein.

1,818,420. LUMBER CARRIER. RALPH B. MOORE, Portland, Oreg. Filed Dec. 7, 1925. Serial No. 73,858. 7 Claims. (Cl. 254—144.)



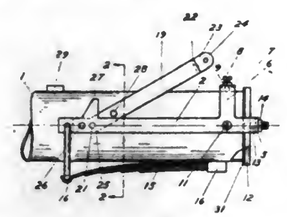
1. In a carrier, a frame adapted to straddle a load, means for engaging and lifting said load, the latter comprising shoes extending substantially the entire length of said frame, and vertical slides pivotally connected thereto, said lifting means also including a yieldable element connected to said slides, whereby either end of said lifting shoes may be lifted without injuring the load lifting mechanism.

1,818,421. CLUTCH MECHANISM. PORTER S. MORGAN, Darien, Conn. Filed July 26, 1927. Serial No. 208,459. 9 Claims. (Cl. 74—53.)



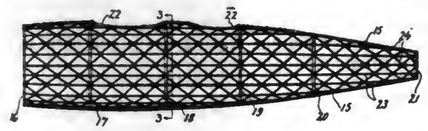
1. In a mechanism of the class described, a worm gear, a worm meshing therewith, a shaft carrying said worm, a bearing to take endwise thrust of said shaft in one direction without substantial frictional resistance, and means to resist relative rotation of said worm gear and worm when said shaft is thrust endwise in an opposite direction, said means comprising a plurality of axially slidable disks.

1,818,422. NOZZLE MECHANISM. ARMAND V. MOTSINGER, Edgewood Arsenal, Edgewood, Md. Filed Jan. 17, 1929. Serial No. 333,193. 6 Claims. (Cl. 251—19.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



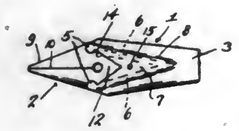
1. A nozzle comprising a valve having a closure, a saddle slidably mounted on the nozzle for carrying the closure, a plurality of levers fulcrumed on the nozzle, each of said levers pivotally connected to the saddle, lugs formed upon said saddle, pins seated in the levers adapted to engage the lugs on the saddle so as to swing the saddle about the pivots connecting it to the levers, a cross piece mounted on the top of the nozzle to limit the movement of said levers, and means connected to said saddle and to the nozzle for normally maintaining the closure over the discharge end of the nozzle.

1,818,423. METAL FRAMED STRUCTURE FOR AEROPLANES. HARVEY C. MUMMERT, Hammondsport, N. Y. Filed May 20, 1929. Serial No. 364,347. 4 Claims. (Cl. 244—30.)



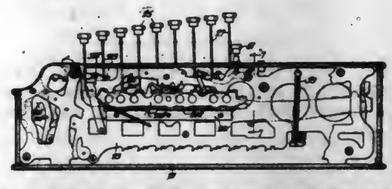
1. A metal framed structure for an aeroplane wing, fuselage or the like comprising a skeleton frame, and attached thereto a net work of load sustaining surface longitudinals and diagonals rigidly fastened directly one to another and to said skeleton frame.

1,818,424. INTERCHANGEABLE NIB SECTION AND HOLDER THEREFOR. JOSEPH W. NEAL, Columbus, Ga. Filed Mar. 3, 1931. Serial No. 519,814. 4 Claims. (Cl. 120—109.)



1. A writing pen comprising in combination a nib section and a holder section, said nib section having an integral longitudinally tapering shank, and said holder section provided with a pair of grooves extending inwardly from one end of said holder and converging at their inner ends, said grooves being adapted to accommodate the edges of said shank.

1,818,425. CALCULATING MACHINE. FREDERICK A. NIEMANN, Chicago, Ill., assignor to Felt & Tarrant Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 9, 1927. Serial No. 218,399. 25 Claims. (Cl. 235—130.)



1. In a multiple-order key-driven calculating machine, in combination: a column actuator, a denominational series of keys, a normally-inoperative locking bar arranged along the series, spring means for operating said bar to lock the keys, and means for releasing said bar when one of the series is struck, embracing, co-operating members controlled respectively by the bar and the column actuator.

1,818,426. TOY AIRPLANE. FRED A. NORCROSS, Nelson, British Columbia, Canada. Filed May 26, 1930. Serial No. 455,654. 5 Claims. (Cl. 46—50.)



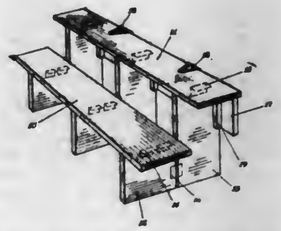
1. In a toy airplane, a hollow fuselage having slotted portions therein, a wing disposed in the slotted portions and extending entirely through the fuselage, and strips secured to the wing and the fuselage for holding the former relative to the latter and for sealing exposed parts of the slotted portions.

1,818,427. APPARATUS FOR LOADING MINE CARS. JAMES A. PAISLEY, Cleveland, Ohio, assignor to The Valley Camp Coal Company, Cleveland, Ohio, a Corporation of Pennsylvania. Filed Nov. 17, 1928. Serial No. 320,097. 8 Claims. (Cl. 198—188.)



1. In an apparatus for loading cars with granular material, a longitudinally arranged conveyor comprising a channel iron frame, idlers, and an endless belt traveling over said idlers and supported by the frame, a wedge-shaped plow mounted for longitudinal movement over the frame of the conveyor, and means controllable at will by an operator from a single position of operation for locating the plow at any selected point on the conveyor, whereby underlying cars may be successively loaded.

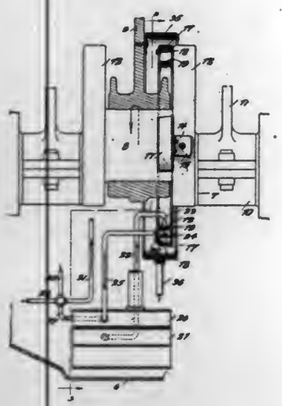
1,818,428. COLLAPSIBLE CHORUS STAND. MAGNUS PAYSEN, Hebron, Nebr. Filed Aug. 2, 1930. Serial No. 472,621. 4 Claims. (Cl. 211—142.)



1. A chorus stand comprising a pair of platforms each having a support hingedly secured thereto; said sup-

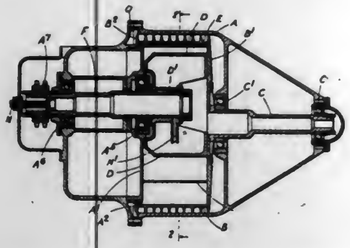
ports being foldable into parallelism with said platforms, each pair of said supports being in edge to edge relation and in a common plane when said chorus stand is set up, and hinge connections between the members of a pair of said supports whereby the members of the pair of supports are foldable on each other in parallel planes.

1,818,429. OIL PURIFYING SYSTEM FOR INTERNAL COMBUSTION ENGINES. RALPH RAGAN, Atlanta, Ga. Filed Nov. 16, 1925. Serial No. 69,518. 12 Claims. (Cl. 184—6).



10. In an internal combustion engine, the combination with the lubricating system, of a plurality of rings adapted to be rotated by the engine, such rings intercommunicating, means for introducing oil to one of the rings, and means for removing oil from another of the rings.

1,818,430. ROTARY BLOWER, PUMP, OR FLUID PRESSURE ENGINE. HARRY RALPH RICARDO, London, England. Filed Jan. 28, 1930, Serial No. 424,049, and in Great Britain Feb. 18, 1929. 7 Claims. (Cl. 103—121.)

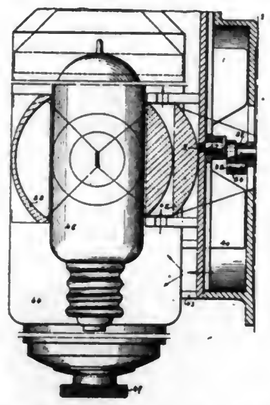


1. A rotary compressor including in combination a rotatable drum, at least one end of which is open, a fixed end plate having an unbroken circumferential edge lying within and adjacent to the inner surface of the open end of the drum so that the end of the drum extends freely beyond the end plate, the end plate being provided with inlet and outlet ports the outer edges of which are displaced radially inwards from its unbroken circumferential edge, a rotor eccentrically mounted within the drum, a series of vanes carried by the rotor and bearing against the inner circumferential surface of the drum, and means for supplying lubricant to the interior of the drum, whereby a film of lubricant is constantly maintained on the inner periphery of the drum and can flow slowly out between the end plate and the drum and escape from the free end of the drum as it is renewed from within.

1,818,431. QUENCHING OILS. HUGH RODMAN, Oakmont, Pa., assignor to Rodman Chemical Company, Verona, Pa., a Corporation of Pennsylvania. Filed May 16, 1929. Serial No. 363,716. 5 Claims. (Cl. 148—29.)

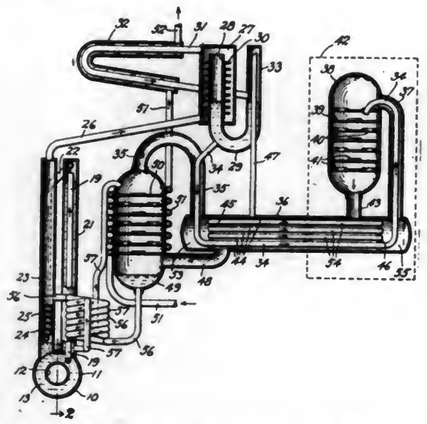
1. A quenching oil comprising a low-viscosity mineral oil combined with a lesser amount of the non-liquid residuum resulting from distillation of a mineral oil.

1,818,432. CINEMATOGRAPHIC PROJECTING APPARATUS. GEORGES ROUILLER and JEAN MARION, Paris, France. Filed June 13, 1928, Serial No. 284,999, and in France July 5, 1927. 2 Claims. (Cl. 88—17.)



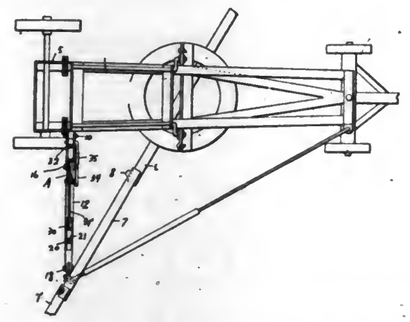
1. In a cinematograph projection apparatus, an obturator having equidistant vanes and a central axis of rotation, fan blades on the vanes, a lantern, a casing enclosing the obturator and discharging into the lantern, a pin on the obturator excentric to said axis, a driving shaft for the obturator, a crank on the shaft, a link connecting the crank and pin, means to feed a film, means to frame a picture on the film, said film feeding means and framing means connected with the shaft to maintain the synchronism of the film feeding means and obturator during framing.

1,818,433. REFRIGERATION. ERIC HERBERT RYDEN, New York, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 6, 1927. Serial No. 238,220. 5 Claims. (Cl. 62—119.5.)



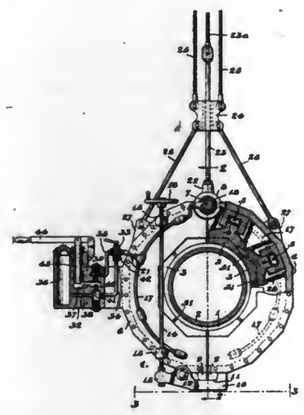
1. Refrigerating apparatus comprising a generator having a plurality of heated chambers, a receiver, an analyzer, an absorber, means to raise liquid from one of said chambers to said receiver, another of said chambers being connected to said analyzer to supply vapor thereto, means to introduce absorption liquid into said analyzer, a condenser for liquefying vapor expelled in the generator, a connection between said analyzer and said condenser, the parts being so connected that all vapor passing to the condenser from the chambers and the receiver is forced to pass through the analyzer in counter flow to and in direct contact with absorption liquid passing therethrough, and means for conveying liquid by gravity from said receiver to the upper part of said absorber.

1,818,434. SLOPER ATTACHMENT FOR ROAD GRADING MACHINES. CARL B. SCHEFFOLD, Marquis, Saskatchewan, Canada. Filed Feb. 24, 1931. Serial No. 517,950. 4 Claims. (Cl. 37—156.)



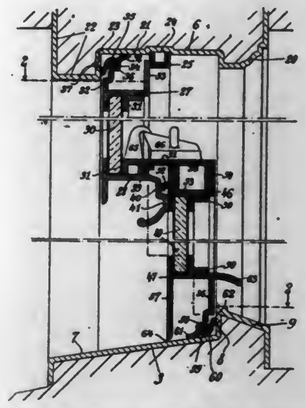
1. In combination with a road grader having a main frame and a road working blade, a supplemental blade pivotally connected to one end of the road working blade for movement in a vertical plane, a rocker on the main frame, a bar pivotally mounted intermediate its ends in the rocker, said blade being pivotally attached to an intermediate portion of the supplemental blade, means for breaking the joint between the rocker and arm to permit the raising of the supplemental blade.

1,818,435. APPARATUS FOR JOINING PIPES. FRANK H. SMITH, Philadelphia, Pa., and HENRY A. STRINGFELLOW, Akron, Ohio. Filed Feb. 20, 1929. Serial No. 341,333. 18 Claims. (Cl. 153—48.)



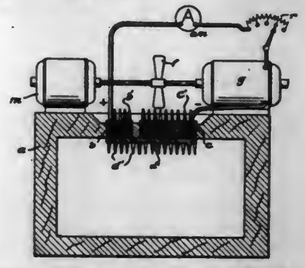
1. Apparatus of the character described comprising a ring composed of two substantially semi-circular sections, a pivot connecting an end of one section to an end of the other, a plurality of fluid pressure cylinders carried by each section, radially disposed pistons in said cylinders each having laterally elongated work engaging heads at their inner ends, means for supplying fluid under pressure to said cylinders, hoisting means connected to said ring for swinging the sections to open position free of the work, and releasable locking means for securing the free ends of the sections together.

1,818,436. WINDOW. IRA STIGLITZ, Brooklyn, N. Y., assignor to Superb Bronze & Iron Co. Inc., a Corporation of New York. Filed Dec. 6, 1930. Serial No. 500,477. 15 Claims. (Cl. 189—65.)



1. In a window structure of the character described, a window jamb, a window sash in movable relation thereto and means on said sash in pivotal relation to the sash providing tight contact between the said jamb and one edge of the sash when the latter is closed.

1,818,437. METHOD OF AND APPARATUS FOR ELECTRIC REFRIGERATION. HARVE R. STUART, Springfield, Ohio. Filed June 28, 1926. Serial No. 118,871. 4 Claims. (Cl. 62—170.)

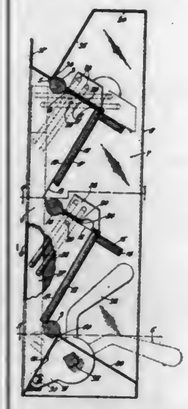


1. A thermo-electric element for refrigerating purposes consisting of two dissimilar metals of low resistance, with means comprising an electric and heat conducting plate at one side for absorbing heat and projections at the other side for dissipating heat, and a source of direct electric current of low voltage and high amperage, the positive pole of said current being supplied to the metal having the lowest thermo-electric capacity and the negative pole to the one having the highest thermo-electric capacity.

1,818,438. WINDOW. MICHAEL J. TRACY, St. Louis County, Mo. Filed Mar. 14, 1930. Serial No. 435,689. 14 Claims. (Cl. 189—64.)

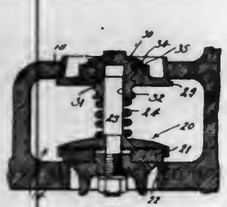
1. A window comprising a rigid window frame, a series of downwardly and outwardly inclined window panes rig-

idly mounted in said frame, series of spaced bars rigid with said frame adjacent to the upper and lower edges respectively of said panes, a series of closures for the



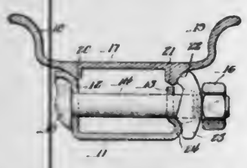
spaces between said bars, mechanism for moving said closures to and from positions to close the spaces between said bars, and a device for operating said mechanism.

1,818,439. VALVE CHAMBER CONSTRUCTION. BERTRAM C. TRAVIS, Los Angeles, Calif., assignor of one-half to Pacific Copper and Brass Works, Incorporated, Los Angeles, Calif., a Corporation of California. Filed May 29, 1928. Serial No. 281,472. 8 Claims. (Cl. 251—144.)



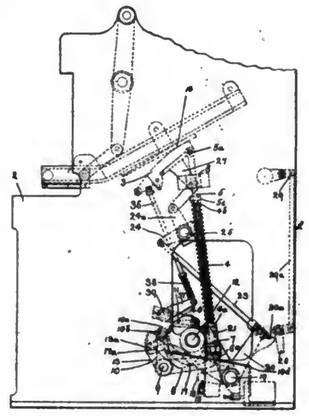
1. A pump valve chamber having a fluid passage through one wall and an opening in one wall, the opening being inwardly divergent and elliptical in cross sectional configuration, a valve controlling flow through said passage and adapted to be passed through said opening, the valve having a stem, and a tapered elliptical plug proportioned to pass through the opening and to seat outwardly in the opening to close it, the plug having guiding engagement with the stem when seated in the opening.

1,818,440. RIM MOUNTING. ANDREW S. VAN HALTEREN, East Lansing, Mich., assignor, by mesne assignments, to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Feb. 14, 1927. Serial No. 167,878. 1 Claim. (Cl. 301—24.)



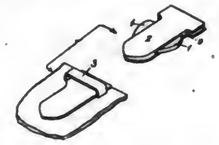
In a rim mounting, the combination with a fixed rim or felly providing a rear rim seat and at its front a forwardly and outwardly facing convex bearing surface, and a demountable rim adapted to seat at the rear on the felly and having at its front a forwardly and inwardly facing concave bearing surface, of a rim positioning and securing member having adjacent its inner extremity a concave bearing surface and at its outer extremity a convex bearing surface for engagement respectively with the bearing surfaces of the felly and rim, the inner concave bearing surface being on a flatter arc than the cooperating convex bearing surface, said rim positioning and securing member provided with a transverse tapering slot, and a bolt member connecting with the felly and lying in the slot and having an adjustable bearing on the rim-securing member at the smaller end of the tapering slot to rock the said member in a radial wheel plane while progressively forcing the rim to the rear and radially for positioning and tightening the same.

1,818,441. WIPING AND SCRAPING MECHANISM OF INTAGLIO MACHINES. FRED WAITE, Inglewood, Otley, England. Filed Dec. 19, 1928, Serial No. 327,061, and in Great Britain Dec. 20, 1927. 6 Claims. (Cl. 101—163.)



1. In wiping mechanism for printing machines, means for removing the excess of ink from the printing surface, a wiping member, supporting rods pivotally connected to the leading and rear edges of said member, a spring for acting up each of said rods, levers for pressing upon said springs, shafts upon which the levers are fixed, other levers fixed on said shafts, a cam for actuating the lever and its shaft for effecting pressure on the rear edge of the wiping member, an engaging member operating in connection with the lever fixed upon the shaft for pressing upon the leading edge of the wiping member, a lever loosely mounted upon said shaft and arranged to actuate the engaging member operating with the lever fixed upon the said shaft, and a cam for actuating the loosely mounted lever.

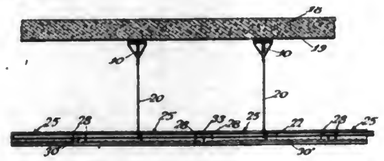
1,818,442. FASTENING. HARRY ALPHONSE WIDMER, London, England, assignor to Tuck-Tite Lock & Fastener Company Limited, London, England, a Company of Great Britain and Ireland. Filed Nov. 10, 1928, Serial No. 318,509, and in Great Britain Oct. 13, 1928. 5 Claims. (Cl. 70—2.)



1. A flat spring fastening of the character described comprising a bridge mounted on one member of the article

to be fastened, a pointed metal tab mounted on the other member of the article to be fastened and adapted to engage said bridge, a pair of opposite outwardly curving engaging members pivoted at one end near the pointed end of the tab casing and having their free ends disposed within said casing and an independent spring adapted to project said opposite outwardly curving engaging members through slots in the side walls of the tab casing.

1,818,443. SECTIONAL FIREPROOF CEILING STRUCTURE. WILLIAM H. WILSON, Los Angeles, Calif. Filed July 16, 1928. Serial No. 293,066. 5 Claims. (Cl. 72—68.)



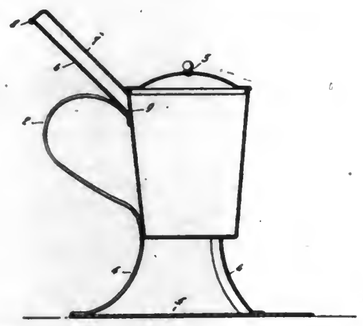
1. A ceiling construction comprising a floor construction including a plurality of joists, rails suspended from said joists, and a plurality of pre-cast ceiling sections suspended from said rails, each section containing a plurality of rods whose ends project from the sections and are formed into hooks engaging over said rails for suspending the sections therefrom.

1,818,444. COTTON PICKING NEEDLE. LOUIS E. WIRTH, Pittsburgh, Pa., assignor to Cotton Harvester Corporation of America, a Corporation of Delaware. Filed Dec. 16, 1929. Serial No. 414,500. 5 Claims. (Cl. 56—50.)



1. A picking needle assembly for a cotton harvesting machine comprising a shaft, a needle arranged to extend into said shaft, a member for mutually engaging said shaft and said needle, a movable member slidable on the shaft for locking said engaging member in position to interconnect the needle and the shaft, and means for maintaining the locking member in locking position.

1,818,445. STERILIZER. JOHN L. ARCHER, Cairo, Nebr. Filed June 30, 1930. Serial No. 464,966. 4 Claims. (Cl. 167—3.)



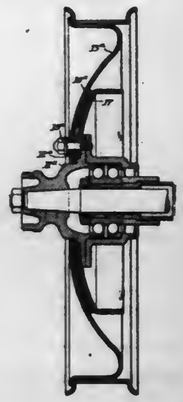
3. In a device of the kind described, a flat base, legs rising from peripherally and uniformly spaced positions on said base, a cup like receptacle supported on said legs, a drain tray projecting outwardly and upwardly from the upper wall of said cup at an angle of 45°, a support for said drain tray comprising a curved handle attached to one side of the cup and abutting the lower end of said tray, a cover for said tray hinged at its outer end, the lower end of said drain tray communicating with a drain hole through the wall of the cup adjacent the upper end of the handle.

1,818,446. REHEATER. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Jan. 28, 1930. Serial No. 423,966. 7 Claims. (Cl. 257—230).



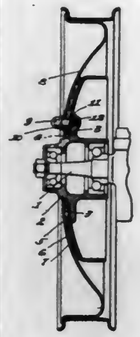
1. A heat exchange apparatus comprising a shell, a partition in said shell defining a portion of the wall surface of a pass through the shell, a plurality of elements for conveying a heating fluid located in said pass, the inlet portions of said elements being disposed adjacent to said partition.

1,818,447. DISK WHEEL HUB ASSEMBLY. EARLE KING BAKER, Chicago, Ill., assignor, by mesne assignments, to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed July 2, 1921. Serial No. 482,098. 5 Claims. (Cl. 301—9.)



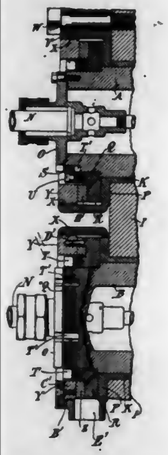
3. In a disk wheel, the combination with the hub and disk body, of a rear support for the disk, the bearing portion of the support faced wtih a sound deadening substance.

1,818,448. AUTOMOBILE WHEEL. ERLE K. BAKER, Chicago, Ill., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Feb. 4, 1924. Serial No. 690,383. 4 Claims. (Cl. 301—63.)



3. A demountable wheel construction embodying therein a wheel disk composed of a single sheet of metal the major body portion of which is formed as the segment of a sphere, a hub having an integral flange, a brake drum carried by the flange and disposed rearwardly of the disk to form a rear support therefor and having a front face conforming to the rear face of the disk.

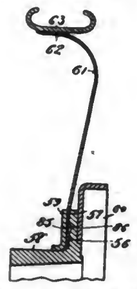
1,818,449. THRUST BEARING. FERNLEY H. BANBURY, Ansonia, Conn., assignor to Farrel-Birmingham Company, Incorporated, Ansonia, Conn., a Corporation of Connecticut. Filed Oct. 12, 1927. Serial No. 225,780. 7 Claims. (Cl. 308—163.)



1. In a thrust bearing for a shaft or the like, a threaded thrust collar, a part upon which it screws to adjust the bearing, said part and collar having one a plurality of means for interlocking with the other, and the other having at least two of such means, so spaced as to provide a vernier adjustment between the two.

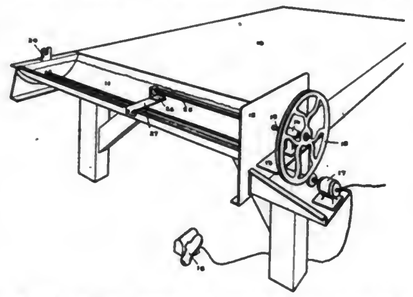
1,818,450. DISK WHEEL. WILLIAM BARBER, Brooklyn, N. Y., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Sept. 28, 1921. Serial No. 503,729. 6 Claims. (Cl. 301—63.)

1. The combination with a hub having a flange and clamping bolts of a sheet metal disk wheel including a single sheet metal disk having a central hub opening and a plurality of bolt holes therethrough, a plurality of projections independent of the bolt holes pressed in said disk and adapted to seat in depressions in the face of



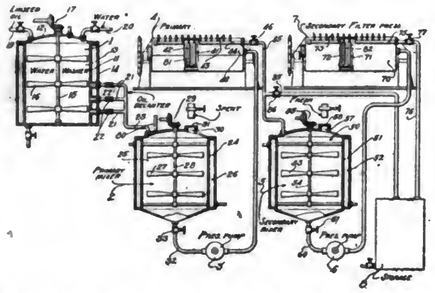
said hub flange, said bolt holes and projections being located in proximity to the central hub opening to lock the disk upon the hub under pressure provided by the bolts in the assembly.

1,818,451. POSTER ROLLING AND MOISTENING MACHINE. AZARIAH M. BATES, Downs, Kans. Filed Aug. 30, 1928. Serial No. 303,049. 1 Claim. (Cl. 91—46.)



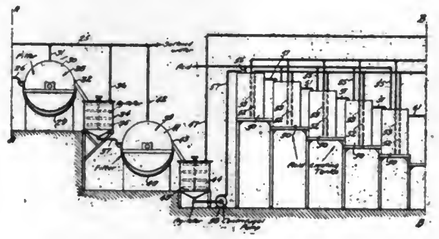
In a device for preparing posters for application to billboards, a table for supporting the posters in flat condition and in superposed relation, a water trough at the forward extremity of said table, and a reel above said water trough, said reel including a rotatable shaft and a member slidable thereon, said member having a flange secured thereto at one extremity thereof and having means at the other extremity thereof for releasably engaging said shaft to prevent relative axial movement thereof, said flange being adapted to embrace said shaft.

1,818,452. PROCESS OF PURIFYING VEGETABLE OIL. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, a Corporation of California. Filed Jan. 18, 1926. Serial No. 81,996. 2 Claims. (Cl. 87—12.)



1. A process of treating a vegetable oil which comprises: agitating said oil with about 10 per cent of water at a temperature of about 42° C.; discontinuing the agitation and allowing the heavy matter to settle out of said oil; decanting the partially purified oil from above said heavy matter; primarily agitating said partially purified oil with a partially spent acid-activated clay; filtering said clay from said oil; secondarily agitating the oil after said oil has been freed from said clay, with a virgin acid-activated clay; and filtering the contaminated virgin clay from said oil.

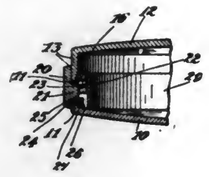
1,818,453. PROCESS OF MAKING CHEMICALLY TREATED ACTIVATED ADSORBENT MATERIAL. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, a Corporation of California. Filed Aug. 30, 1927. Serial No. 216,350. 20 Claims. (Cl. 252—2.)



1. A method of preparing an activated adsorbent clay comprising: subjecting the raw clay to the action of the atmosphere; treating said clay with sulphuric acid to render soluble certain impurities thereof; and washing said clay with softened water to remove said impurities and any uncombined acid.

19. A method of preparing an activated adsorbent earth comprising: dividing the raw earth into lumps of walnut size or smaller; exposing them to the weathering action of the sun and open atmosphere for thirty days or longer; then treating said earth with sulphuric acid to change the microstructure thereof and to render soluble certain bases therein, and then washing said treated earth with water sufficiently to remove substantially entirely said solubilized bases and any uncombined acid.

1,818,454. VANITY CASE. CHARLES BERGER, Maplewood, N. J., assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed Aug. 1, 1929. Serial No. 382,689. 5 Claims. (Cl. 292—190.)



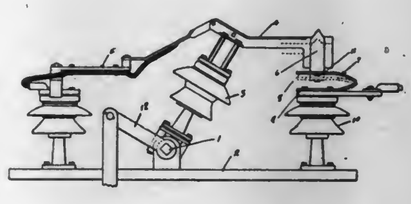
1. In a device of the character described, embodying a body and a lid closure provided each with a flange and hinge connected for opening and closing movement, the flange of the body provided with a horizontal slot slideway and a recess communicating with said slideway, a finger piece with a part slidable in said slideway, and a hook member on the lid closure flange adapted to pass through said recess into said slidway where, on movement of the finger piece in one direction to be engaged by said part for securing the lid closure in closed position, and, on movement of the finger piece in the opposite direction, to be disengaged by said part for releasing the lid closure for opening movement, said finger piece being of dimension along the outer face of the body flange to cover said slideway irrespective of the position of the finger piece, said slideway and recess being hidden from view.

1,818,455. DEEP WELL OIL TURBINE PUMP. GEORGE E. BIGELOW, Southgate, Calif., assignor of one-half to Pacific Pump Works, Huntington Park, Calif., a Corporation of California. Filed Apr. 19, 1928. Serial No. 271,213. 15 Claims. (Cl. 103—5.)



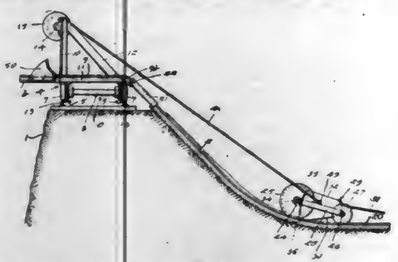
1. In a deep well pump the combination of: a shell; a fluid motor mounted in said shell, there being a fluid passage therebetween; a discharge pipe extending upward from said motor for pumped and motor discharge fluids; a pump secured adjacent said motor and operatively connected therewith; and a member providing an outlet port for the discharge of pumped fluid communicating between said fluid passage and said discharge pipe, and providing a port for directing the flow of the motor operating fluid into said motor.

1,818,456. ELECTRIC SWITCH. AUGUSTUS J. BOWIE, San Francisco, Calif. Filed Aug. 24, 1927. Serial No. 215,152. 14 Claims. (Cl. 200—48.)



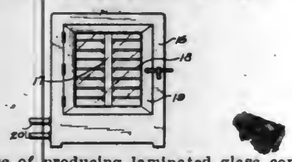
1. In an electric switch a pair of relatively movable contact members comprising a blade and a clip, operating means for causing said contact members to engage one another in full contact, means yieldingly supporting said clips which means will after initial contact engagement of the said members and during operation of said operating means permit bodily movement of the yieldably supported clips while maintaining said members in full contact.

1,818,457. SUBGRADING MACHINE. ROBERT W. BRIGGS and JOE N. SUMMERS, Pharr, Tex. Filed May 3, 1930. Serial No. 449,480. 4 Claims. (Cl. 214—103.)



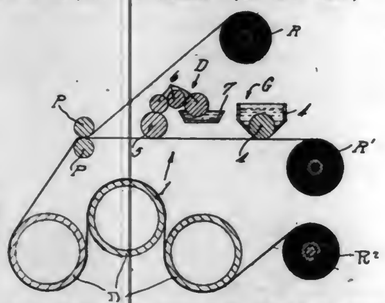
1. A grading machine, comprising a truck, rails extending across the truck, grade setting rails alined with said first rails, a truck movable along the rails, a scraper carried by said second truck, and hauling means carried by said first truck and connected to said second truck.

1,818,458. LAMINATED GLASS AND PROCESS OF PRODUCING THE SAME. WILBUR F. BROWN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 9, 1927. Serial No. 238,784. 9 Claims. (Cl. 49—81.)



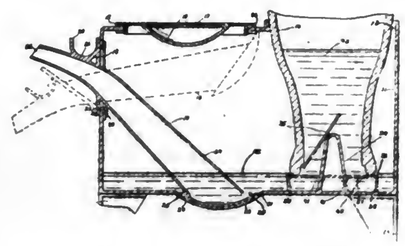
1. The process of producing laminated glass consisting in humidifying a sheet of non-brittle material, then interposing the humidified sheet between two glass sheets, and uniting the same.

1,818,459. LAMINATED ORNAMENTAL PAPER. CASSIUS M. BRYAN, West Springfield, Mass., assignor to Strathmore Paper Company, Mitteneague, Mass., a Corporation of Massachusetts. Filed June 18, 1928. Serial No. 286,438. 4 Claims. (Cl. 101—219.)



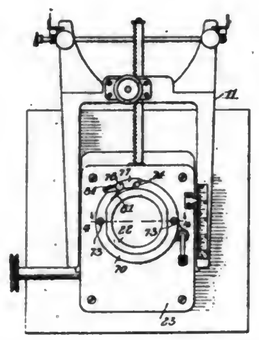
2. An apparatus for producing laminated paper with designs between the plies thereof comprising, means for simultaneously unwinding webs of paper from separate rolls so that said webs may travel one above the other in a spaced relation, coacting pressure rolls for receiving the webs in superposed relation therebetween and for pressing them together, a roll for winding up the superposed webs, a design applying roll and an adhesive applying roll for simultaneously applying designs and adhesive to an inner face of a web while a web is travelling therepast, the said rolls being disposed between said pressure rolls and the rolls from which the webs are unwound and drying rolls for engaging the superposed webs after they have been pressed by the pressure rolls.

1,818,460. MEASURING DISPENSER. CHARLES BURKART, Classon Point, N. Y. Filed Feb. 15, 1929. Serial No. 340,054. 9 Claims. (Cl. 221—97.)



1. In combination with a measuring device for dispensing liquids from a container, a substantially closed housing, a dispensing cup rockably hinged into the wall of said housing and comprising a liquid receiving compartment on the inside of said housing and liquid dispensing means on the outside of said housing adapted to dispense measured, predetermined quantities of liquid from within said housing, and a stand for said container within said housing removably supported on the bottom thereof.

1,818,461. PHOTOGRAPHIC CAMERA. ARTHUR W. CAPS, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 20, 1928. Serial No. 255,786. 8 Claims. (Cl. 95—11.)

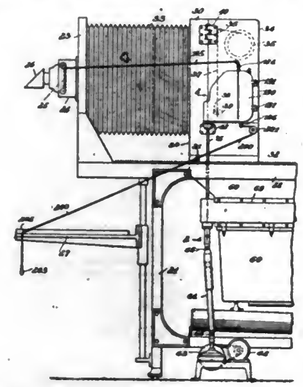


1. In a photographic copying machine, the combination of a lens board member, a lens tube member associated therewith, means for securing said lens tube member on said lens board member, and cooperating latch means comprising a stud on one of said members, an abutment on said stud, and a latch on the other of said members for engaging said abutment to hold said members in cooperating relation to each other while said securing means is being manipulated.

1,818,462. PHOTOGRAPHIC APPARATUS. ARTHUR W. CAPS, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Nov. 6, 1928. Serial No. 317,554. 19 Claims. (Cl. 88—24.)

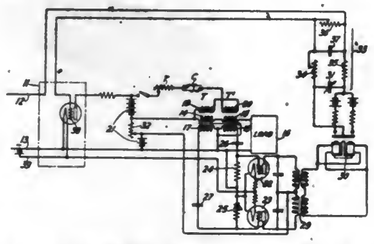
19. A commercial copying camera comprising a frame, a copyholder projecting forwardly therefrom, a camera having a lens in position to receive light rays from objects placed on said copyholder, sensitised sheet feeding devices, a sheet severing element, a source of power, a control

member arranged to be connected to said source of power and effective when so connected to operate the camera shutter, actuate said feeding devices, and operate said severing element automatically, said control member being



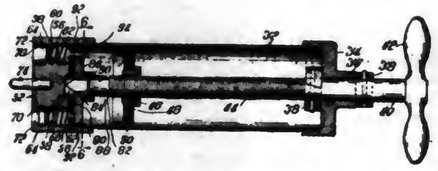
located at a point removed from said copyholder, and means including an operating member adjacent said copyholder and easily accessible to an operator stationed thereat, for connecting said control member to said source of power to expose, feed, and sever a sheet automatically.

1,818,463. ZERO CORRECTING CIRCUIT. AUSTEN M. CURTIS, East Orange, and EVERETT T. BURTON, Millburn, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 15, 1928. Serial No. 306,123. 21 Claims. (Cl. 178—63.)



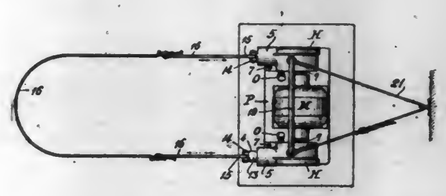
1. A wave amplifying system comprising an amplifier proper such as a thermionic amplifier, impulse coil means comprising primary and secondary windings connected in the output circuit thereof functioning to produce in the secondary windings impulses of current only as the amplified waves have maxima exceeding a predetermined value, and relay mechanism operated by the impulses produced in said secondary windings.

1,818,464. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 11, 1925. Serial No. 22,489. 28 Claims. (Cl. 184—7.)



1. A portable lubricant gun comprising a body having a plurality of ports each adapted for quick detachable connection with a conduit, individual conduit sealing means in each port, a rotatable shaft in said body, a lubricant compressing element moved longitudinally by rotating said shaft, and a distributor rotating with said shaft for connecting the compressed lubricant with each of said ports seriatim.

1,818,465. MASSAGE APPARATUS. JAY GRANT DE REMER, Greenwich, Conn., assignor, by mesne assignments, to J. G. de Remer Research Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 14, 1927. Serial No. 219,387. 12 Claims. (Cl. 128—63.)

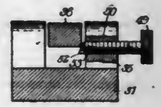


5. A massage machine having means for supporting the same to permit oscillation of the machine when at work and comprising a base, a massage belt, an electric motor on the base in the vertical median plane of the stretches of said belt and belt-connector means driven by the motor shaft for reciprocating both ends of said belt, the total weight of such machine being within the limit of manual portability and being correlated with the belt-reciprocating speed thereof to produce a moment of inertia so related to the massage resistance that the belt reciprocates and the machine oscillates through an appreciable angle when at work.

1,818,466. TEXTILE MATERIAL CONTAINING ORGANIC ESTERS OF CELLULOSE AND METHOD OF PREPARING THE SAME. CAMILLE DREYFUS and WILLIAM R. BLUME, New York, N. Y., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed July 18, 1928. Serial No. 293,781. 18 Claims. (Cl. 8—20.)

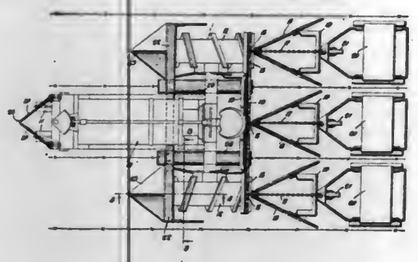
1. Method of increasing the safe ironing point of a textile material containing organic esters of cellulose comprising both partially saponifying the organic esters of cellulose and weighting the textile material.

1,818,467. CUTTER. WILLIAM J. DRUCKER, Chicago, Ill. Filed Sept. 19, 1927. Serial No. 220,330. 6 Claims. (Cl. 143—47.)



2. In a cutting device, the combination of a cutting member, a support disposed adjacent thereto, a guard movable along said support normally disposed to render the cutting edge of said member ineffective, and means for moving said guard transversely of the plane of said cutting member to thereby render the cutting edge of said member effective.

1,818,468. TRACTOR ATTACHMENT. ADAM FICKENSCHER, Moorefield, Nebr. Filed Dec. 9, 1929. Serial No. 412,804. 4 Claims. (Cl. 97—192.)



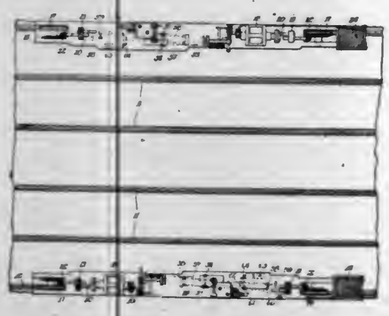
1. An attachment for a tractor including means for separating and lifting corn stalks of adjacent rows, means for holding the stalks out of the path of the traction wheels of the tractor, and means for guiding the stalks to the holding means.

1,818,469. MUFFLER FOR ENGINES. ALFRED T. FLOYD, Jr., Little Rock, Ark., assignor of forty-nine per cent to Elmer R. Scott, Little Rock, Ark. Filed Jan. 6, 1930. Serial No. 418,844. 10 Claims. (Cl. 137—160.)



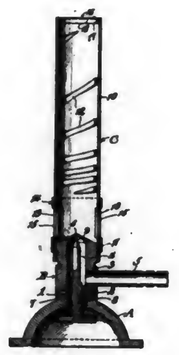
1. In combination, in an engine exhaust muffler, a cylindrical body, an imperforated equalizing chamber extending longitudinally of and within said body and spaced therefrom, baffles between the body and said chamber, an expansion chamber at the forward end of said body, a second expansion chamber adjacent the first named expansion chamber, and a perforated cylindrical open ended jet nozzle, extending from the first expansion chamber into the second expansion chamber.

1,818,470. ORE DOCK. ARTHUR M. FRAZEE, Duluth, Minn. Filed Mar. 31, 1927. Serial No. 179,875. 8 Claims. (Cl. 214—44.)



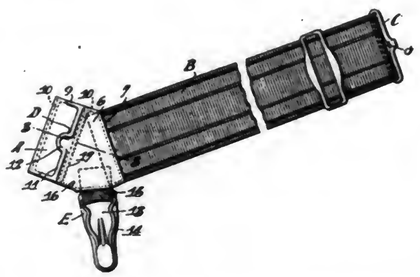
1. Ore dock mechanism comprising apparatus adapted to travel on said dock, an operator's cage carried by said apparatus and a fixed cage for carrying a trainman carried by the lower portion of said apparatus.

1,818,471. BURNER. HARRY A. GEAUQUE, Galesburg, Ill. Filed Jan. 15, 1930. Serial No. 420,897. 7 Claims. (Cl. 158—118.)



1. A mixing tube for a burner, comprising a barrel having an inlet end and an outlet end, and a helix in the barrel and arranged coaxially therewith, the pitch of said helix increasing from the inlet end of said tube to the outlet end thereof.

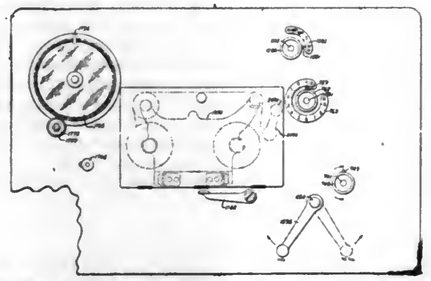
1,818,472. GARTERS. GEORGE B. GLIDDEN, Dighton, Mass., assignor to George Frost Company, Boston, Mass. Filed Dec. 6, 1930. Serial No. 500,620. 1 Claim. (Cl. 241—6.)



In a garter, the combination with a pad formed of a single piece of material centrally folded to form resultant opposed leaves; hose supporting means including a leg-encircling band and a hanger disposed between the leaves of the pad; the leaves of the pad, band and hanger being secured together by stitches; and band fastening means comprising a hook member and an eye member, one of said members being attached to the free end of the band, the other member including a rectangular frame disposed within the leaves of the pad between the fold line and the anchored end of the band, and an intermediate cross bar disposed exteriorly of the pad and forming the connecting element of the member.

1,818,473. AUDITING MACHINE. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Sept. 7, 1926. Serial No. 134,025. 160 Claims. (Cl. 235—58.)

2. In a machine of the class described, the combination of a record strip, feeding means for said strip, a plurality of totalizers, means for entering amounts into said totalizers, amount entering operating means, strip feed operating means, disabling means controlled by said strip for disabling the amount entering operating means, and means for determining the effectivity of said disabling means.



49. In a machine of the class described, the combination of a record, an analyzer, feeding mechanism for said record, operating means for said analyzer, a differential device for determining the time of operation of said feeding mechanism and said operating means, electromagnetic devices for controlling said differential device, and means cooperating with said record for energizing said electromagnetic devices.

79. In a machine of the class described, record material having data thereon, an analyzer for analyzing said data, means for feeding said record to the analyzer in one direction or reverse, and a manipulative device for controlling the direction of feed, said analyzer adapted to analyze the data while the record material is being fed in the either direction.

97. In a machine of the class described, the combination of a movable frame, a plurality of members on said frame adapted to move therewith, a means cooperating with each of said members adapted to be moved into the path thereof for causing relative movement between said members and said movable frame, a plurality of slides for preventing said means from moving into the path of the said members, electromagnetic devices for moving said slides for selectively releasing said means, and a perforated record for determining which of said electromagnetic devices will be energized.

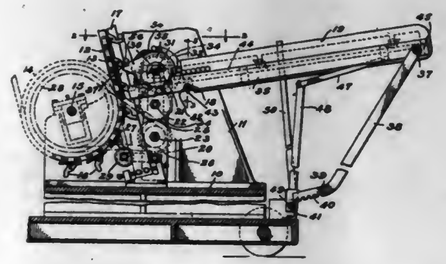
127. In a machine of the class described, the combination of a plurality of totalizers, an electrical switch comprising a plurality of notched disks for selecting said totalizers for clearing, and means for adjusting said disks to select one or more of said totalizers for clearing.

1,818,474. GAFF HOOK. ACHILLES C. GOUGH, Pocatello, Idaho. Filed Aug. 10, 1928. Serial No. 298,777. 11 Claims. (Cl. 43—5.)



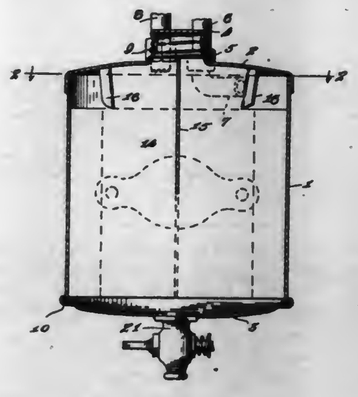
1. A gaff hook comprising a pair of pivotally connected staff sections, a double grip handle formed on one section, a hook carried by the other section and located a proper distance from the point of pivotal connection for said sections to position the hook between said grips when the sections are folded, and means positioned between and spacing the elements of the double grip for releasably securing the hook to the staff when in its folded position.

1,818,475. LOADING AND UNLOADING DEVICE. DAVID E. GRAY, Corning, N. Y., assignor to Corning Glass Works, New York, N. Y., a Corporation of New York. Filed Nov. 15, 1927. Serial No. 233,474. 9 Claims. (Cl. 198—26.)



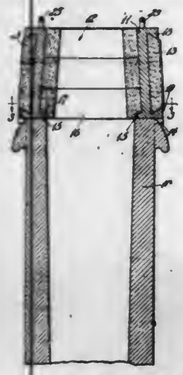
1. A feeder which includes an article holding magazine having means for elevating one portion of each article above the plane of the rest of the article whereby the articles will arrange themselves in parallel planes.

1,818,476. OIL PURIFIER. JOHN L. GREEN, El Dorado, Ark. Filed May 31, 1930. Serial No. 458,604. 3 Claims. (Cl. 210—58.)



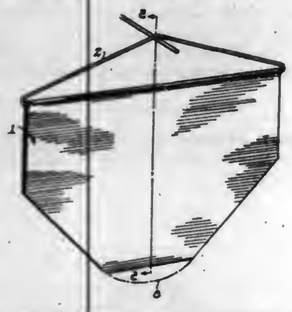
1. An oil cleanser and purifier comprising a casing having an oil inlet pipe and an oil outlet pipe in the top thereof, baffle plates of different lengths in the casing, the longer baffle plates having their ends provided with angular deflecting flanges, an angle nozzle in the casing connected to the oil inlet pipe for directing the oil against the flanges and to cause the oil to circulate around and between the baffle plates to precipitate the impurities therefrom into the casing before the oil passes through the outlet pipe.

1,818,477. HOT TOP FOR INGOT MOLDS. WILLIAM H. HAWS, Johnstown, Pa., assignor of one-half to William W. Hoffman, Johnstown, Pa. Filed Oct. 2, 1930. Serial No. 485,979. 5 Claims. (Cl. 22—147.)



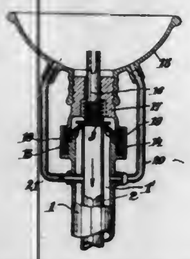
1. A hot top for ingot molds comprising, in combination, a metal frame having means for supporting inner and outer linings; an inner lining of refractory material; and an outer lining of refractory material.

1,818,478. PYROTECHNIC DISPLAY DEVICE. THOMAS GABRIEL HITT, Seattle, Wash. Filed Mar. 11, 1930. Serial No. 434,979. 6 Claims. (Cl. 102—20.)



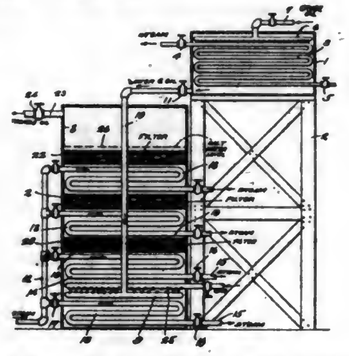
1. A pyrotechnic display device comprising a laminated combustible sheet including an intermediate layer, adapted to be vertically suspended, said intermediate layer being more actively combustible than the outer layers, whereby the latter restrict the emanation of the combusting products of the intermediate layer to a plane substantially embracing the edges of the sheet.

1,818,479. MASSAGE APPARATUS. FRANZ HOCHMAYR, Vienna, Austria, assignor of one-half to Karl Weintogl, Vienna, Austria. Filed Feb. 25, 1930. Serial No. 431,260, and in Germany Dec. 27, 1929. 2 Claims. (Cl. 128—65.)



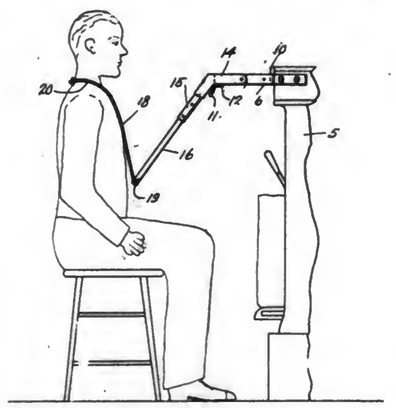
1. Massage apparatus operated by pressure fluid comprising in combination two pipes arranged one within the other, the space between both pipes serving for the supply of the pressure fluid while the inner pipe constitutes the fluid-discharge passage, a wall bridging said space at the forward end of said pipes, perforations in said bridging wall, a diaphragm covering the forward end of said pipes and resting on said bridging wall, a nut screwed to the forward end of the pipes, means securing the diaphragm to said nut, a screw-cap with a centrally disposed bore secured to said nut, a beater-shaft passing through said bore and resting on said diaphragm, a cup-shaped member secured to said screw-cap, and means permitting the circulation of the pressure fluid through said cup-shaped member for cooling the part of the body treated at the time.

1,818,480. METHOD OF AND APPARATUS FOR TREATING CRUDE OIL. HERMAN HOPPE, Borger, Tex. Filed May 24, 1929. Serial No. 365,768. 2 Claims. (Cl. 196—5.)



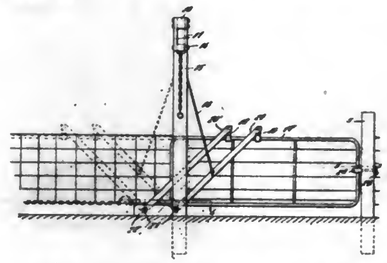
1. The herein described method of separating crude oil from salt water mixed therewith, which consists in spraying the oil upon a surface heated to a sufficient temperature to explode the globules of oil and water, thereafter delivering the mixture of oil and salt water into the bottom portion of a body of heated salt water through which the crude oil will rise to be drawn off from the surface, spraying gas into the water and oil to agitate them, and then filtering the oil as it passes through the body of salt water.

1,818,481. DUST SHIELD FOR CEMENT PACKERS. ELRA E. HOWARD, Concrete, Wash. Filed July 22, 1929. Serial No. 380,057. 3 Claims. (Cl. 226—67.)



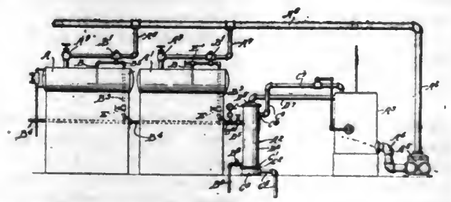
1. An apparatus of the class described comprising a pair of angle bars, a shield plate across the angle bars, a pair of angular brackets pivotally connected to the angle bars and having downwardly and outwardly inclined portions, a frame mounted between said portions, a transparent panel in said frame, said shield plate having an obliquely depending flange at its edge adjacent the frame engageable with said frame in a manner to limit the downward swinging movement thereof and at its opposite edge with an upstanding right angularly disposed flange and a flexible apron secured to the frame having means for suspending the same and said frame from the neck of an operator.

1,818,482. GATE. JOHN A. HUNT, Miami, Manitoba, Canada. Filed June 4, 1930. Serial No. 459,134. 1 Claim. (Cl. 39—94.)



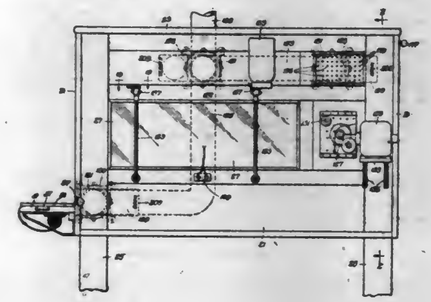
In a gate structure of the type embodying a pair of transversely spaced uprights on a line with and spaced from a gate post, a longitudinally movable gate between the uprights and levers on the uprights having links connected at each side of the gate to the middle portion of pairs of bars pivoted at their upper ends to the gate and at their lower ends to a support disposed between the lower end portions of the uprights, pivot brackets for pivoting said upper ends of the bars to the top of the gate comprising each a standard rising from the top of the gate carrying at its upper end a transverse axle projected at each side outwardly of the gate and adapted to pivotally carry and retain said bars at its outer ends, said bars being maintained at said outer ends of the axle by spacers on the axle between the standard and the said bars, said support for the lower ends of the bars comprising a pair of spaced elongated blocks each secured at one end to the inside of said lower end portion of an upright by a bolt extending through said uprights and the blocks, said bolt carrying on its intermediate portion the lower ends of a pair of said bars spaced from the blocks and from each other by spacers on said bolt, and another bolt through the other ends of the blocks carrying likewise on its intermediate portion the lower ends of another pair of said bars and spacers for maintaining said other pair of bars in spaced relation to each other and to the blocks, said blocks being disposed to project from the side of the uprights opposite the gate post.

1,818,483. APPARATUS FOR CONTINUOUS BLOW DOWN FOR BOILERS. LOUIS D. KENSIG, Western Springs, Ill., assignor to National Aluminate Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 9, 1928. Serial No. 298,422. 4 Claims. (Cl. 122—1.)



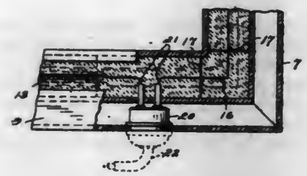
1. In combination, a boiler, a feed water pipe, and a blow off pipe for the boiler, a valve adapted to control the rate of flow through the blow off pipe, a member in the feed water pipe so interposed in the path of the feed water as to be displaced according to the rate of flow of the feed water, said member being so directly connected to the valve in the blow off pipe as to control the rate of flow of the blow off water.

1,818,484. DEVELOPING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Co., Chicago, Ill., a Corporation of Delaware. Filed Dec. 20, 1928. Serial No. 327,242. 14 Claims. (Cl. 95—90.5.)



1. A developing apparatus for light sensitive material comprising a cabinet, having an opening for the insertion of light sensitive material into the cabinet, means for creating an atmosphere of a developing medium within the cabinet, an impervious sheathing covering the inner surface of the cabinet walls and means comprising a compressed gasket of resilient material arranged in the seams of the cabinet whereby to prevent the escape of the developing gas therethrough.

1,818,485. MEANS FOR SEALING BURIAL CASES. BERNICE E. LAMBERT, Columbus, Ohio. Filed Dec. 20, 1928. Serial No. 327,455. 3 Claims. (Cl. 27—17.)

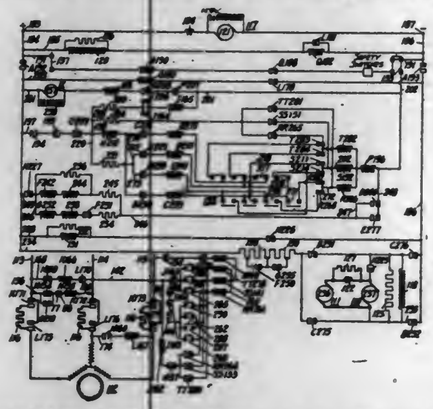


1. In a receptacle of the class described, a base having a continuous groove in its upper surface, a cover provided with a continuous depending web adapted to enter said groove, a sealing compound in the groove arranged to embed said web, upright spacers positioned within said groove throughout its length, and an electric heating element supported by said spacers.

1,818,486. CONTROL SYSTEM. DAVID L. LINDQUIST, Hartsdale, N. Y., and GEORGE N. CRABBE, Cresskill, N. J., assignors to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 12, 1925. Serial No. 36,048. 17 Claims. (Cl. 172—152.)

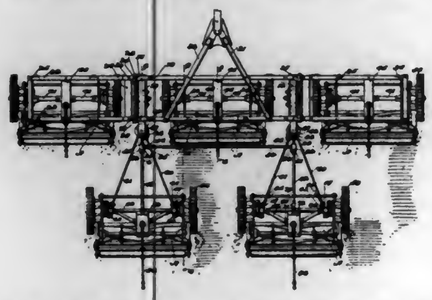
1. In a control system, a motor having a field winding, a generator for supplying current to said winding, means for driving the generator, means operable to start and stop said driving means, and means for preventing the starting

of the motor so long as the current in the field winding is below a predetermined value regardless of the time



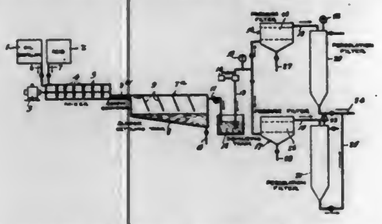
which elapses between the operation of the start and stop means to stop said driving means and the operation of the start and stop means to again start said driving means.

1,818,487. GANG MOWER. HARRY R. LONTZ, Richmond, Ind., assignor to F. & N. Lawn Mower Company, Richmond, Ind., a Corporation of Indiana. Filed Feb. 6, 1929. Serial No. 337,947. 29 Claims. (Cl. 56—7.)



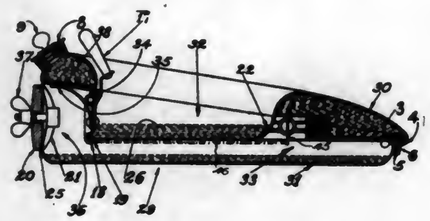
1. In a gang mower having a plurality of mowing units, the combination of a front frame for sustaining the draft of certain of said mowing units, a plurality of separate towed mowing units each independently connected to said frame for pivotal movement about right angularly disposed axes, and an equalizing member independent of said frame and pivotally interconnecting said towed units.

1,818,488. PROCESS FOR REFINING HYDROCARBON OIL. ARTHUR L. LYMAN, Berkeley, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Oct. 6, 1926. Serial No. 139,837. 6 Claims. (Cl. 196—147.)



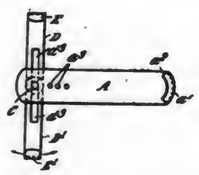
3. A process of refining hydrocarbon lubricating oil which requires the use of about 1 to 1½ pounds of 66° Baumé sulfuric acid for the removal of impurities, which comprises adding to the oil in a single step such sulfuric acid in an amount equivalent to between one pound and one and one-half pounds 66° Baumé acid per gallon of oil, thereby forming an acid sludge of granular form, then settling out the major portion of the acid sludge formed, and thereafter passing the oil through a bed of clay sufficient to remove substantially all of the remaining sludge in the clay, and then passing the oil through a separate decolorizing operation wherein the oil is treated with a decolorizing clay.

1,818,489. COMBINATION BEDPAN AND FOUNTAIN SYRINGE. ANNIE N. MABAY, Jamaica, Long Island, N. Y., assignor of one-half to Hannah Delle Blaeker, New York, N. Y. Filed June 3, 1929. Serial No. 368,040. 12 Claims. (Cl. 4—118.)



8. In a device of the class described, a fountain syringe having an injection nozzle and means for regulating the outflow of liquid in combination with a bedpan having upper and lower faces, the upper face covering a portion of the lower face, said fountain syringe being superimposed on the said upper face and attached to the bedpan and forming a portable combination fountain syringe and bedpan unit.

1,818,490. SOLE STRAIGHTENER. ALISTER DUNCAN MACGILLIVRAY, Santo Domingo, Dominican Republic. Filed Feb. 8, 1930, Serial No. 426,893, and in Great Britain Jan. 15, 1930. 5 Claims. (Cl. 12—29.1.)

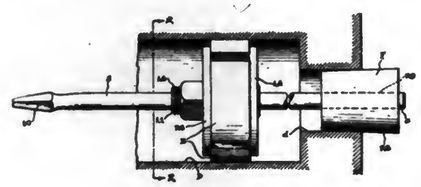


1. In a sole straightener, a metal body adapted to be attached outside the sole, means at one end of said body to engage over the front of the sole, a stud at the other end of said body, a plurality of longitudinally slotted arms embracing said stud and each adapted to swing on said stud into a position transverse to said body, said arms also being adapted to be collapsed into positions in alignment with each other and with said body and each of said arms being provided with means to engage the edges of the sole.

1,818,491. CYLINDER LAPPING TOOL. JOHN G. MCFADDEN, Camp Holabird, Md. Filed Jan. 25, 1929. Serial No. 334,988. 3 Claims. (Cl. 51—184.2.)

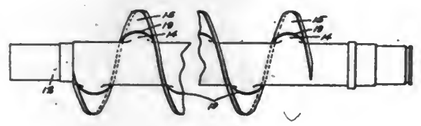
1. A tool of the types described comprising a shank, a sleeve positioned upon the shank, radially extending guiding pins offset in angular relation to each other passing through the sleeve and the shank, a stationary washer

secured to the sleeve, a second washer adjustable axially of the sleeve, segmental sections positioned between said washers and guided by said pins, means for yieldably forc-



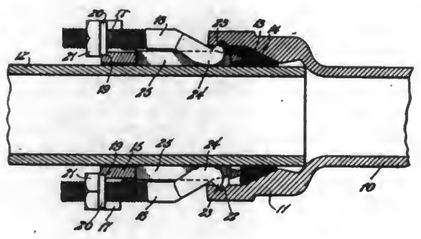
ing the segments radially of said shank, and means for moving the washers toward each other to retain the segments in any desired adjusted position.

1,818,492. METHOD OF MAKING CONVEYER AND ELEVATOR SCREWS. FRANK R. MCFARLAND, Cumberland, Md. Filed June 8, 1928. Serial No. 283,777. 13 Claims. (Cl. 29—148.)



11. The method of reclaiming elevator and conveyer screws, which consists in cutting off the worn flights down to stub flights, securing one end of a malleable metal strip to a helically grooved rotating mandrel, winding said strip in the groove of the mandrel while simultaneously guiding and bending said strip into shape, so as to produce a helically formed full flight of the same pitch and internal diameter conforming to the external diameter of the stub flight of the stem, fitting said full flight on the stub flight of the stem, and welding the same thereto.

1,818,493. PIPE COUPLING. ARTHUR T. MCWANE, Birmingham, Ala. Filed Sept. 24, 1929. Serial No. 394,757. 7 Claims. (Cl. 285—135.)



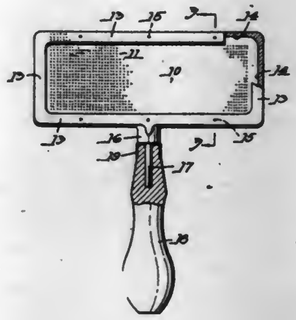
1. A coupling for bell and spigot pipes and fittings of the character described comprising, in combination, a substantially cylindrical gland adapted to be slipped on the spigot and inserted in the bell; a bolting flange on said gland presenting bolt-receiving notches; packing material in the bell; and a plurality of anchor bolts adapted to be inserted in the mouth of the bell and interlocked therewith, said bolts having rounded heel portions on which they may be swung upon the spigot into said bolt-receiving notches.

1,818,494. LIGHTNING ROD POINT CONNECTION. LAWRENCE M. MERSHIMER, New Castle, Pa. Filed July 26, 1930. Serial No. 471,063. 1 Claim. (Cl. 173—31.)



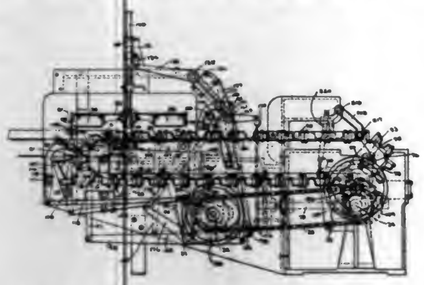
A lightning rod point connection comprising a plate having attaching means, said plate having an opening therethrough, a shank, a second shank carried by an end portion of the first named shank and extending through the opening in the plate, and means coacting with the second shank and plate for clamping the first named shank in desired selective angle with respect to the plate, said first named shank being adapted to carry a lightning rod point.

1,818,495. HAND CARD. HERBERT MIDGLEY, Worcester, Mass. Filed Jan. 4, 1928. Serial No. 244,517. 1 Claim. (Cl. 119—93.)



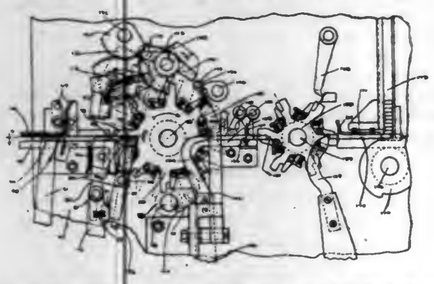
As an article of manufacture, a hand brush comprising a flat back having integral flanges permanently located in a plane parallel with the back and spaced therefrom to provide recesses all around the edge of the back extending outwardly from the inner edges of the flanges and a piece of card clothing having its edges free of wires and inserted in said recesses, the flanges having integral unbendable teeth on the inner side thereof permanently projecting outwardly slightly to permit of the backing of the card clothing being pushed under them and to resist the detachment thereof, and an integral projection on the backing for receiving the handle.

1,818,496. PACKAGING MACHINE. MICHAEL J. MILMOE, Chicago, Ill., assignor to F. B. Redington Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 13, 1926. Serial No. 94,438. 54 Claims. (Cl. 93—7.)



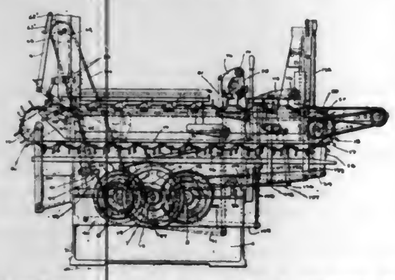
1. In a wrapping machine, a conveyer for delivering a line of articles to said machine, means for supporting wrappers for receiving a plurality of said articles, and means for delivering sections of said line of articles including a plurality thereof from said conveyer to a position adjacent said wrappers.

1,818,497. WRAPPING AND SEALING MACHINE. MICHAEL J. MILMOE, Chicago, Ill., assignor to F. B. Redington Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 28, 1926, Serial No. 144,725. Renewed Dec. 12, 1930. 50 Claims. (Cl. 93—7.)



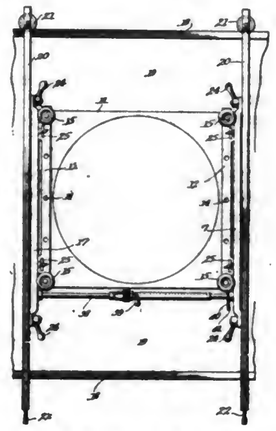
1. In a wrapping machine, a pair of guideways disposed side by side, means for supplying articles to said guideways, a rotary member having pockets therein movable into and out of alinement with said guideways to receive articles from said guideways, means for discharging the articles from said pockets in alinement with each other, and means for placing a wrapper about the alined articles.

1,818,498. WRAPPING AND SEALING MACHINE. MICHAEL J. MILMOE, Chicago, Ill., assignor to F. B. Redington Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 25, 1927, Serial No. 170,853. Renewed Dec. 12, 1930. 37 Claims. (Cl. 93—7.)



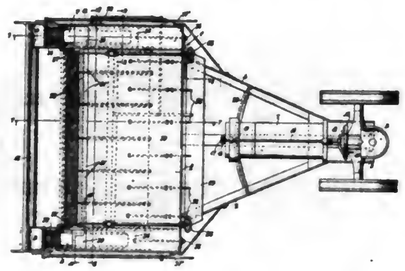
1. A wrapping machine comprising a conveyor having a pocket therein provided with a projection at one side thereof, a second projection spaced away from said first-named projection, means for positioning a wrapper in said pocket, and means for folding a portion of said wrapper to bring the edge thereof between said projections, said folded portion being retained between said projections after said wrapper has been positioned in said pocket.

1,818,499. HOLDER FOR PROJECTION APPARATUS. ALBERT B. MUELLER, Chicago, Ill., assignor to Postergraph, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 31, 1929. Serial No. 389,821. 20 Claims. (Cl. 88—24.)



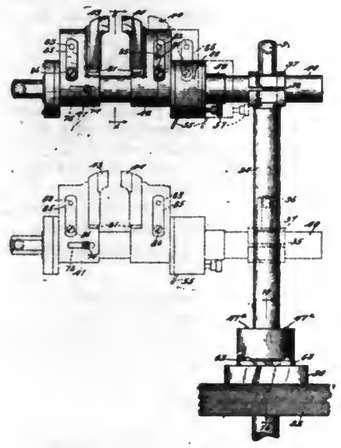
5. A holder for a screen or filter having a mounting, frame members and means for removably securing said mounting thereto, supports for said frame members and means for securing them in adjusted position, and sliding members engaging said frame members and supports and movable lengthwise thereof for providing relative movement between them normal to the plane of said screen or filter.

1,818,500. ROAD SPREADING MACHINE. ALMA N. NICKERSON, New Bedford, Mass., assignor, by mesne assignments, to Highway Service, Incorporated, New Bedford, Mass., a Corporation of Massachusetts. Original application filed Oct. 11, 1927, Serial No. 225,574. Divided and this application filed June 9, 1928. Serial No. 284,076. 1 Claim. (Cl. 280—33.13.)



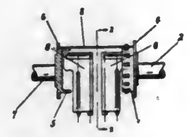
A road building machine of the character described, comprising a wheeled hopper, having a rearwardly extending frame consisting of side sills convergingly disposed, and pivotally secured at their rear ends to the rear axle of a tractor, said tractor being adapted to push the wheeled hopper, means for changing the relative angular positions of the tractor and the side frames of the hopper, said means comprising an arcuately shaped rack bar positioned between the converging sills of the hopper, a steering mechanism located in proximity to the driver of the tractor and including a pinion located beneath the front end of the tractor and operably connected with the rack bar and adapted to move the tractor to different angular positions whereby to steer the hopper in any predetermined course of travel.

1,818,501. UNIVERSAL VISE. EUGENE A. ODIN, Chicago, Ill. Filed July 9, 1927. Serial No. 204,564. 9 Claims. (Cl. 81—41.)



1. In a vise, the combination with a supporting rod, of a clamping-jaw support carried thereby and having a cylindrical bore therethrough and a supporting flange below the bore, a clamping jaw having a cylindrical stem adapted to fit in the bore and a plurality of faces in definite angular relation to each other adapted to co-operate one at a time with the flange on the clamping-jaw support, an abutment carried by the supporting rod and opposing the clamping jaw, and means for moving the clamping-jaw support and abutment relatively to each other.

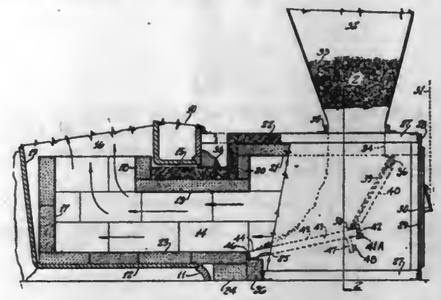
1,818,502. SOUND REPRODUCING APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1929. Serial No. 393,030. 1 Claim. (Cl. 179—100.3.)



In sound reproducing apparatus, the combination of a rotatable sprocket adapted to support a traveling film along one edge thereof, an idler roller mounted for free rotation in axial alignment with said sprocket and adapted to support the film at its opposite edge, said sprocket and roller having flanges for preventing lateral displacement of the film, and a photo-electric cell disposed between the sprocket and roller and in close proximity to said film.

1,818,503. SAWDUST BURNER. ANTON PFAU, Portland, Oreg. Filed Feb. 7, 1929. Serial No. 338,109. 1 Claim. (Cl. 110—29.)

A sawdust burner consisting of a combustion chamber disposed on the exterior of a furnace in combination with an auxiliary upwardly discharging combustion chamber mounted in the interior of a furnace, a connecting passageway joining said combustion chambers, a fuel hopper adapted to discharge fuel into said first mentioned combustion chamber, an inclined apron mounted under said



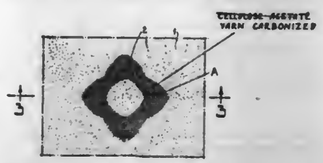
hopper, a plurality of longitudinally sloping grate bars having their upper ends under the lower end of said apron and their lower ends resting on the bottom of said passageway, and draft controlling means in said first mentioned combustion chamber whereby air may be admitted to the under side of said grate bars.

1,818,504. METHOD OF HANDLING AND SEPARATING SHEET MATERIALS. FRED B. PFEIFFER, Akron, and JOHN W. WHITE, Barberton, Ohio, assignors to Seiberling Rubber Company, a Corporation of Delaware. Filed June 15, 1927. Serial No. 199,113. 9 Claims. (Cl. 242—55.)



9. Steps in the method of treating sheet materials, which consist in unwinding adhering sheets from a stock roll, separating the sheets as they are unwound to break the adhesion between the sheets and rewinding them together without causing the sheets to adhere.

1,818,505. PROCESS OF TREATING FABRICS. GEORGE RIVAT, Paterson, N. J., and CAMILLE DREYFUS, New York, N. Y., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Dec. 16, 1927. Serial No. 240,615. 12 Claims. (Cl. 41—41.)

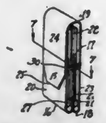


1. Process comprising treating fabric containing cellulose acetate with a mineral acidic material and a solvent or swelling agent for the cellulose acetate, heating the material to an elevated temperature and removing the cellulose acetate affected thereby.

1,818,506. REFRACTORY AND METHOD OF MAKING THE SAME. DONALD W. ROSS and JAMES M. LAMBIE, Washington, Pa. Substitute for application Serial No. 292,022, filed July 11, 1928. This application filed Jan. 3, 1929. Serial No. 330,133. 35 Claims. (Cl. 25—156.)

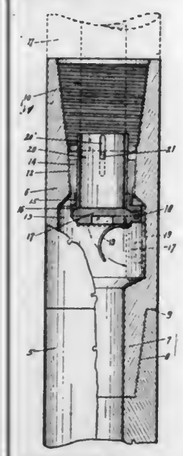
1. The method of making refractories which consists of mixing silica-alumina materials, molding and firing to the point where the mass contains at least 40% glass, the fired product containing not less than a total of 70% silica, nor more than a total of 6% of fluxes other than alumina.

1,818,507. MATCH HOLDER. HILTON W. ROSE, Portland, Oreg., assignor of one-half to Pauline Bondurant, Portland, Oreg. Filed Aug. 15, 1928. Serial No. 299,688. 9 Claims. (Cl. 206—29.)



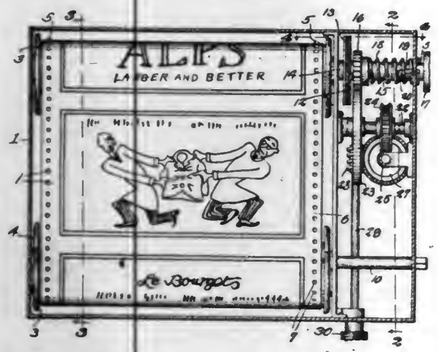
1. A match holder having abrasive surfaces formed in the inner sides thereof and elastic stitches passing through said holder for urging said abrasive surfaces toward each other between the outer edges of the holder.

1,818,508. DRILL STEM. BERNARD H. SCOTT, Glendale, Calif. Filed May 25, 1929. Serial No. 366,072. 12 Claims. (Cl. 284—18.)



1. A pipe joint member having a recess offset in its side from the passageway therethrough, a valve for closing said passageway and movable outwardly into said recess to open said passageway, a member in said joint adapted to be moved to engage and open said valve, said member holding said valve back in said recess, said member being adapted to be engaged and moved by the connection of another joint member thereto, and means normally operating to move said valve out of said recess to closed position when released by said member.

1,818,509. CHANGEABLE SIGN. JOSEPH D. SELF, Waynesville, N. C. Filed Dec. 2, 1929. Serial No. 411,110. 1 Claim. (Cl. 40—42.)

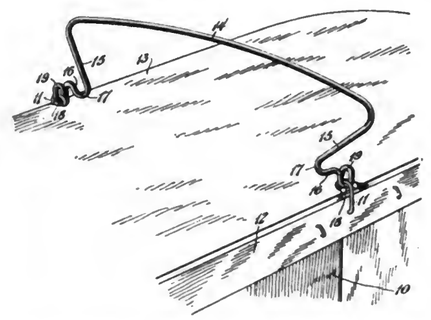


A changeable sign including a housing having a window, toothed rolls in the housing, a take-up spool back of one of the rolls, a rewind spool back of the other roll, a web secured at its ends to the respective spools and supported by the rolls across the window, there being regularly spaced matter on the web for display through the window, a slip-belt connection between the take-up spool and one of the rolls for driving the spool, drive mechanism including a segmental gear, a shiftable gear rotatable with the belt actuating roll mounted for intermittent actuation by the segmental gear, means extending outside of the housing for moving the shiftable gear out of position for engagement by the segmental gear, means for holding the shiftable gear in engaged position and means for rotating the rewind spool when the gear is disengaged and at any desired speed, said means being independent of the driving mechanism.

1,818,510. MANUFACTURE OF DYESTUFFS AND INTERMEDIATES. ROBERT FRASER THOMSON and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Aug. 31, 1927, Serial No. 216,700, and in Great Britain Sept. 24, 1926. 5 Claims. (Cl. 260—61.)

1. The process which consists in the condensation with material selected from the group consisting of ethylene and tri-methylene glycols of dibenzanthrones halogenated at least to the dichlor stage.

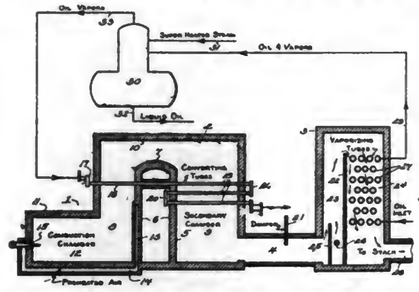
1,818,511. BASKET HANDLE. FRANK B. TOWNSEND, Penn Yan, N. Y., assignor of one-half to John E. McMath, Penn Yan, N. Y. Filed Oct. 22, 1929. Serial No. 401,450. 5 Claims. (Cl. 217—125.)



1. In combination with a fruit basket having a pair of handle-receiving eyes on opposite sides thereof and extending transversely above the upper edges of the basket rim, a wire handle presenting U-shaped eye-engaging hooks lying in planes at right angles to the planes of said eyes and adapted to be freely inserted in said eyes; and terminal hook members above said eye-engaging hooks arranged to engage one side of said eyes when said handle is swung downwardly in either direction and displaced longitudinally of the basket.

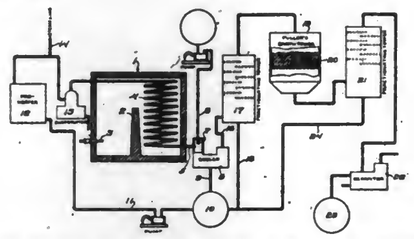
1,818,512. OIL VAPORIZER AND CONVERTER. CORNELIUS B. WATSON and AUDLEY E. HARNSBERGER, Chicago, Ill., assignors to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Feb. 21, 1928. Serial No. 256,044. 4 Claims. (Cl. 196—116.)

3. In an oil heater, a furnace including a setting, a bridge wall situated within said setting dividing the latter into primary and secondary chambers, a burner situated within said setting to effect substantially upward movement of the furnace gases through the primary chamber and downward movement of such gases in the secondary chamber, there being a gas outlet provided in communicating relationship with the lower part of the secondary chamber, a horizontal row of heat absorbing tubes arranged openly in the primary chamber, said tubes being spaced from the roof of said chamber and supported by the upper portion of said bridge wall, a communicating second bank of tubes arranged in said secondary chamber,



and means for effecting travel of the oil and oil vapor through the bank of tubes in the secondary chamber in a direction substantially parallel or concurrent with the flow of furnace gases through the secondary chamber.

1,818,513. PROCESS OF CRACKING OIL VAPORS INTO VAPOR PHASE. JOSEPH B. WEAVER and CARY R. WAGNER, Chicago, Ill., assignors to The Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 17, 1928. Serial No. 255,142. 1 Claim. (Cl. 196—63.)



The method of treating cracked low boiling petroleum oils containing high percentages of unsaturated compounds to remove therefrom only excessive undesirable unsaturated compounds which produce gums and discoloration on standing, the steps which comprise: introducing vapors of such cracked oils admixed with steam into a confined polymerizing zone, bringing the mixture of oil and water vapor during the passage thereof through said zone into intimate contact with a finely divided solid adsorbent catalyst, the steam being present in such proportion as to cause polymerization of approximately one-fourth of the total unsaturates which would be polymerized without the presence of steam, the remaining unsaturates being unpolymerized and thus present in desirable increased amount over that originally present in the oil vapors charged to the polymerizing zone, removing the material from the polymerizing zone, and separating the treated oil as vapors from the high boiling oils produced in the polymerizing zone and containing the aforesaid undesirable compounds.

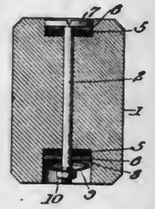
1,818,514. ELECTRICIAN'S BELT CLIP TAPE REEL. JOHN EDWARD WHITAKER, West Monroe, La. Filed Aug. 1, 1028. Serial No. 296,726. 1 Claim. (Cl. 242—84.8.)

In a device of the class described, a support comprising a plate-like body provided with holes, and a tongue connected to the end of the body and cooperating with the body to form a belt-receiving hook; a hollow cylindrical shaft abutting at its inner end against the body and provided with projections extended through the holes and turned over to hold the shaft on the body, the turned-over portions of the projections being located at the free end of the tongue, to aid in holding a belt in the hook, and a tubular reel journaled on the shaft and provided at its outer end with a disk-like head, the shaft being longitudinally slit at its outer end, to form latches which lie in a common circumference with the wall of the tubular



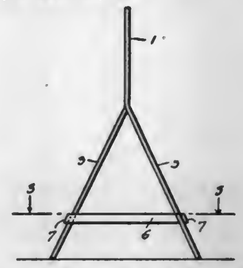
shaft and parallel to the axis of the shaft, thereby permitting the reel to rotate on the shaft, the latches being provided at their outer ends with oppositely-extended retaining fingers which overlap the head of the reel and hold the reel on the shaft rotatably.

1,818,515. BRUSH. EDWARD A. WILLIFORD, Lakewood, Ohio, assignor to National Carbon Co., Inc., a Corporation of New York. Filed May 21, 1928. Serial No 279,589. 7 Claims. (Cl. 171—326.)



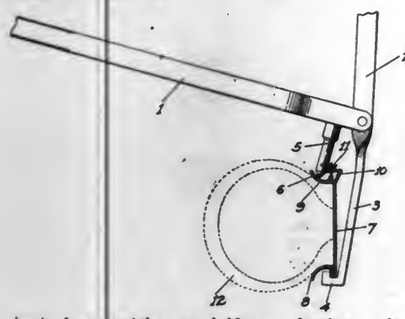
1. The combination with a brush having an elongated bore therethrough and an enlarged portion at the end of the bore having walls parallel to the bore, of means for connecting a conductor which comprises a bolt member in the bore, a conductor member around the bolt in the enlarged portion of the bore, a perforated flat member adapted to confine the conductor material in said enlarged portion of the bore and a cup-shaped spring element having a circular bearing surface on a portion only of the contacting surface of the washer whereby the washer tends to be deformed and to wedge the confined conductor material when the spring element is compressed.

1,818,516. HORSE OR TRESTLE. GAIL A. WILLIS, Rawlins, Wyo. Filed Feb. 20, 1930. Serial No. 430,087. 4 Claims. (Cl. 304—5.)



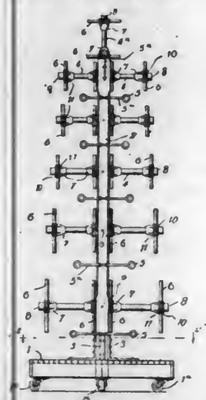
1. A horse or trestle, comprising a laminated sheet metal beam, laminated sheet metal legs formed integrally with the ends of the beam, the upper edges of the beam layers being flanged outwardly in opposite directions to provide a broad flat load supporting surface and the lower ends of the layers of the legs being flanged outwardly in opposite directions to provide feet, the legs being arranged in pairs and the legs of each pair being arranged in downwardly divergent relation, and a brace for the legs of each pair.

1,818,517. RIM TOOL. HERBERT J. WOOCK, Lodi, Calif., assignor to Super Mold Corporation, Reno, Nev., a Corporation. Filed Jan. 8, 1930. Serial No. 419,393. 1 Claim. (Cl. 157—6.)



A rim-tool comprising a rigid arm having a handle-extension projecting from one end thereof and rigid therewith, a hook element on one end of the arm to engage one side of the rim and facing the other end of the arm, a rigid lever pivoted at one end on the arm at a distance on the latter from the hook greater than the width of a rim and projecting from the hook side of the arm, and an element to engage the other side of the rim rigid with and depending from the lever toward the hook.

1,818,518. ROPE DISPLAY STAND. JACOB CLEMMONS YOUNG, Beaumont, Tex., assignor of thirty-five one-hundredths to Edward Taylor Miller, Beaumont, Tex. Filed May 5, 1928, Serial No. 275,400. Renewed Jan. 29, 1931. 5 Claims. (Cl. 242—85.)



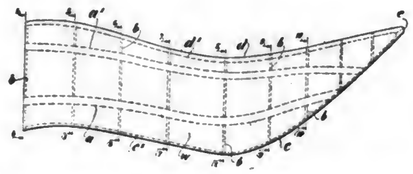
3. A rack including a spindle, article supporting means thereon and a holder consisting of a top and a spring clip fixed thereto, the latter frictionally engaging the inner walls of the spindle, and the top slipping loosely thereover and abutting the supporting means.

1,818,519. AEROFOIL CONSTRUCTION. LEWIS G. Young, Bronxville, N. Y. Filed June 21, 1929. Serial No. 372,650. 1 Claim. (Cl. 244—31.)



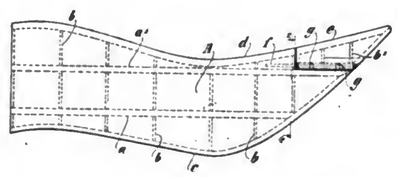
In an aeroplane, a unitary spar internally disposed in the wing, said spar being laterally straight and being alternately raised above and depressed below a given horizontal plane, the portion adjacent the fuselage being raised with respect to the fuselage.

1,818,520. AEROFOIL CONSTRUCTION. LEWIS G. YOUNG, Bronxville, N. Y. Filed June 21, 1929. Serial No. 372,651. 2 Claims. (Cl. 244—31.)



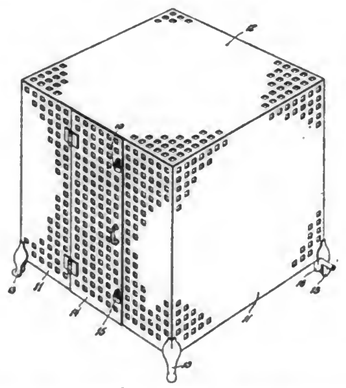
1. In a wing, a spar which is curved toward and away from the leading edge and which is formed with a dihedral angle between its ends and approximately midway of the wing span and in the plane of the wing.

1,818,521. AEROFOIL CONSTRUCTION. LEWIS G. YOUNG, Bronxville, N. Y. Filed June 21, 1929. Serial No. 372,652. 1 Claim. (Cl. 244—29.)



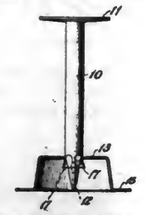
In a wing having a dihedral angle between its ends and tapering generally in longitudinal dimension to a point, an aileron comprising the wing tip and hinged to the wing with provision for movement in a plane perpendicular to the wing, said aileron conforming to the tapering shape of the wing.

1,818,522. METAL CELL. DAVID FRANKLIN YOUNGBLOOD, San Antonio, Tex. Filed Sept. 9, 1929. Serial No. 391,486. 4 Claims. (Cl. 189—5.)



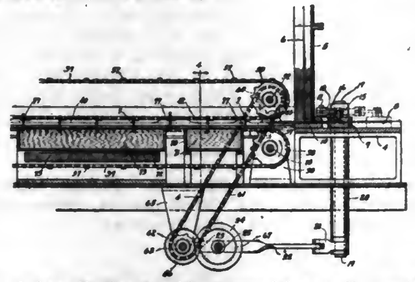
1. A cell for confining insane prisoners having thin readily yieldable sheet metal walls and a resilient door so as to yield when the prisoner jumps or strikes against them without injuring the prisoner.

1,818,523. WIRE FASTENER. WILLIAM H. F. ZIEDRICH, San Bruno, Calif. Filed May 17, 1929. Serial No. 363,925. 5 Claims. (Cl. 72—118.)



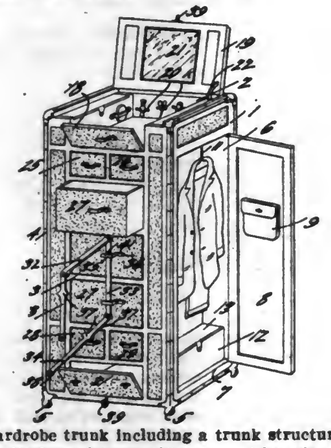
1. In combination with a furring nail, a soft sheet metal spacer button having a deformable head positively secured to and interlocked with the tapered end of the nail so that the nail point lies substantially flush with the base of the button.

1,818,524. KEY DIPPING MACHINE. GEORGE A. BARDET and GEORGE V. BARDET, Berkeley, Calif., assignors to M. J. B. Co., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 6, 1928. Serial No. 252,357. 8 Claims. (Cl. 91—12.6.)



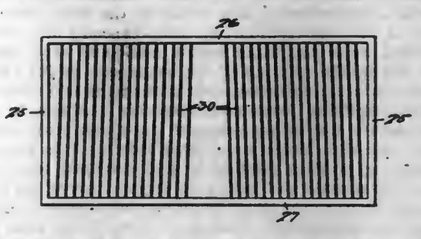
1. A key dipping machine comprising a dip container, a key guide extended across said container and having a longitudinal base slot, a key containing magazine, a feed slide operable to deliver keys from the magazine into the guideway with their shank portions alined with and directly above the slot to fall of their own weight to a suspended position within the slot; and a conveyer having means for engaging the upper ends of the keys operable to advance the keys along the guide across the container to cause their lower ends only to contact with the dip.

1,818,525. WARDROBE TRUNK. JOSÉ NICOLÁS ANGULO Y PÉREZ, Habana, Cuba. Filed July 17, 1929. Serial No. 378,990. 5 Claims. (Cl. 190—13.)



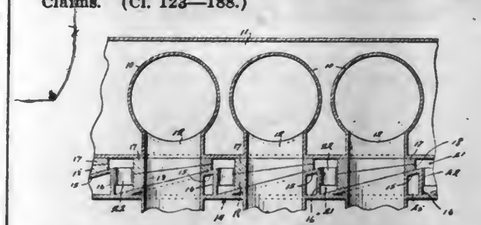
1. A wardrobe trunk including a trunk structure having the side walls formed to provide garment hanging compartments and storage compartments above the garment hanging compartments, outwardly opening doors for the garment hanging compartments, independent doors for the storage compartments, a single top door covering the top of the trunk and closing the space between the storage compartments and bearing on the doors for the storage compartments, the trunk having a partition in line with the bottoms of the storage compartments to provide a compartment in said space between said storage compartments, a hinged closure for the front of said compartment, the space below the compartment and between the garment hanging compartments being formed for the reception of a plurality of drawers, the lowermost portion of said space being formed as a storage space, an outwardly opening hinged closure for said storage space, a locking bar having locking cooperation with the top door and the bottom of the trunk, said locking bar overlying and locking all drawers and closures throughout the height of the trunk between the side walls, said locking bar being formed in pivotally connected sections, and keepers formed on the parts to be locked beneath which the locking bar engages.

1,818,526. MECHANISM FOR EVENING AND TENSIONING YARN. FRED BAKER, Fitchburg, Mass., assignor to Fitchburg Weaving Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Jan. 14, 1930. Serial No. 420,771. 5 Claims. (Cl. 28—54.)



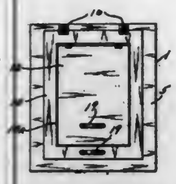
1. In an evening and tensioning mechanism, a yarn creel, an evening reed having sets of oppositely inclined parallel dents, a guide roll, and means to draw the yarn strand from the creel through said reed and into engagement with said guide roll.

1,818,527. SLIDING VALVE FOR INTERNAL COMBUSTION ENGINES. GEORGE E. BECKER, Bremerton, Wash. Filed July 18, 1929. Serial No. 379,267. 3 Claims. (Cl. 123—188.)



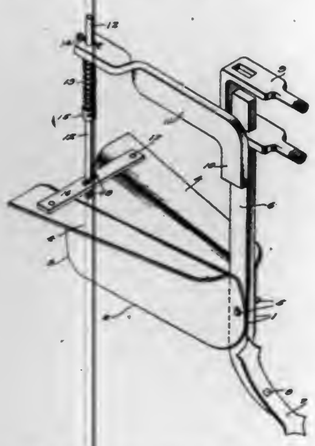
1. In an engine, a cylinder having an inlet and an exhaust port, a valve casing extending down parallel to the axis of the cylinder and water jacketed, a pair of reciprocating sliding transversely wedge-shaped valves disposed within said valve casing and narrower than the casing to thereby provide an oil receiving space on each lateral edge of the valve, and each valve having an inlet port and an exhaust port, means for differentially reciprocating said valves, and springs disposed within the oil receiving spaces and bearing against the lateral edges of the valves to thereby urge the valves into wedging engagement with each other and the valve casing, the oil space having means whereby it may be filled with oil and the valve seats having oil grooves extending transversely of the valves and opening upon said oil spaces.

1,818,528. PHOTOGRAPHIC PRINTING DEVICE. FRANK BERN, Cleveland, Ohio. Filed June 30, 1930. Serial No. 464,558. 4 Claims. (Cl. 88—24.)



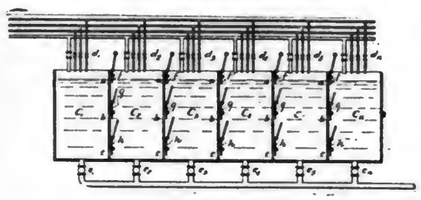
1. A photographic printing device for making bordered photographs by projection, comprising a combined outer and inner border mask, an inner border mask, and an image mask; said combined outer and inner border mask having an outer opaque area, an inner light-transmitting image-exposing area and an intermediate area, said intermediate area being made up of opaque portions and light-transmitting inner-border-exposing portions and said opaque area, during the entire printing operation, lying above and constituting the mask for the outer border part of the printing sheet which receives the bordered photograph; said inner border mask being movable into and out of making position relative to said combined outer and inner border mask and having a light-transmitting image-exposing area and an opaque area, said light-transmitting image-exposing area being of the same size and shape as the light-transmitting image-exposing area of the combined outer and inner border mask and said opaque area, during the printing of the image part of the photographic printing operation, constituting the mask for the light-transmitting inner-border-exposing portions of the intermediate area of the combined outer and inner border mask; and said image mask being movable into and out of masking position relative to said combined outer and inner border mask and having an opaque area of the same size and shape as the image-exposing area of said combined outer and inner border mask and hence, of the same size and shape as the image-exposing area of the inner border mask, said opaque area constituting the mask for the inner light-transmitting image-exposing area of the combined outer and inner border mask during the printing of the inner border part of the photographic printing operation.

1,818,529. SOIL CORRUGATOR. ANDREW J. BOCKWITZ, Twin Falls, Idaho, assignor of one-half to Grafton H. Self, Twin Falls, Idaho. Filed Feb. 28, 1927. Serial No. 171,547. 4 Claims. (Cl. 97—225.)



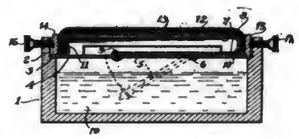
1. In combination, soil opening means, and a soil corrugator pivotally attached at its front end to the said soil opening means, said corrugator comprising a metal plate bent upon itself to form a rounded bottom, with vertical sides diverging towards the rear and having their upper portions turned outward to form horizontal flanges.

1,818,530. METHOD OF MANUFACTURING YEAST. ARNE BOYE, Stockholm, Sweden. Filed Oct. 13, 1927, Serial No. 226,048, and in Sweden, Oct. 26, 1926. 6 Claims. (Cl. 195—20.)



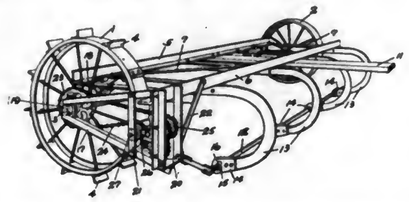
1. In an air-fermentation method of manufacturing yeast involving establishing and maintaining a plurality of yeast-fermentation batches in which the yeast is maintained at different stages of propagation and continuously passing wort serially through said batches, the steps which consist in continuously supplying to each batch separately substances required for the propagation of the yeast and continuously withdrawing liquid and yeast from said batches and recovering the yeast from the liquid.

1,818,531. FOUNTAIN INK PAD. CLAUDE HERBERT BRIGHT, Memphis, Tenn. Filed Apr. 24, 1928. Serial No. 272,525. 8 Claims. (Cl. 91—54.5.)



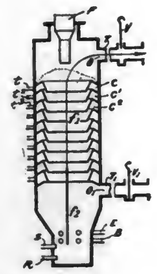
2. A fountain ink pad comprising a casing adapted to contain a liquid, a partition in said casing above said liquid, a pad mounted on said partition, means for engaging both said pad and partition to hold same in assembled relation in said casing, and means hingedly connected to said partition to feed liquid from said casing to said pad.

1,818,532. ROTARY ROD WEEDER. CLAUDE C. CALKINS, Spokane, Wash. Filed Feb. 10, 1930. Serial No. 427,117. 3 Claims. (Cl. 97—42.)



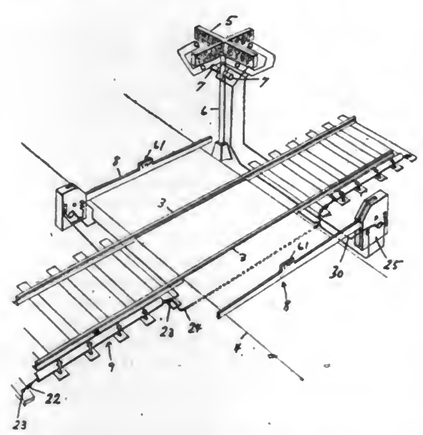
1. The combination with an axle and wheels journaled thereon, of a main frame including a cross bar projecting laterally of one of the wheels, an upright yoke located outside said wheel rigid with said bar and depending therefrom, a bearing block on the axle outside the wheel, and a pair of diverging struts fixed to the block with their diverged ends rigid with the cross bar and yoke.

1,818,533. METHOD FOR OBTAINING VARIOUS GASES AND RECOVERING BY-PRODUCTS. LOUIS CHAVANNE, Paris, France. Filed Jan. 30, 1926, Serial No. 85,050, and in Belgium Feb. 12, 1925. 9 Claims. (Cl. 202—9.)



1. A continuous low temperature distillation process, applied to a body of fuel moving through and in contact with a countercurrent of combustible heating gas, which comprises maintaining within said moving body of fuel an extended low temperature distillation zone of slow gradient, diverting gas flows from the peripheries of a series of adjacent narrow layers of said distillation zone, each of said flows carrying out of the corresponding layer vapors of one grade of primary hydrocarbon portions, each layer yielding a different grade, and collecting each grade of said vapors separately.

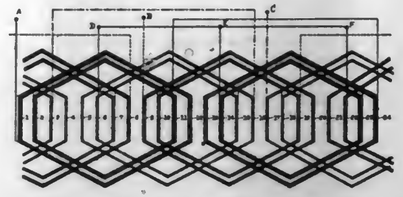
1,818,534. RAILROAD SAFETY CROSSING. WILFRED H. CONDON, Burlington, Vt., assignor of fifty per cent to George Collins, Burlington, Vt. Filed Apr. 27, 1929. Serial No. 358,725. 3 Claims. (Cl. 246—125.)



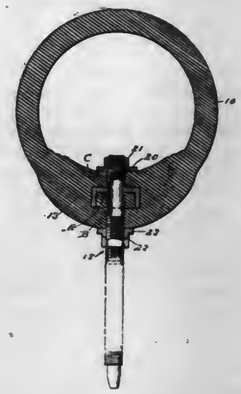
1. A latch of the character described comprising a solenoid, a trigger, a pivotal detent, and means whereby the solenoid core is adapted to operate the trigger to release the detent.

1,818,535. ELECTRICAL DRIVING OF SPINDLES FOR SPINNING, TWISTING, DOUBLING, WINDING, AND ANALOGOUS PROCESSES. ERNEST CECIL COPE, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed July 3, 1928, Serial No. 290,084, and in Great Britain July 16, 1927. 6 Claims. (Cl. 118—43.)

1. Apparatus for driving textile spindles at ultra high speeds, said apparatus comprising in combination a driving unit consisting of a polyphase high frequency generator, a driven unit consisting of at least one polyphase motor driven by said generator, at least one of said units having unbalanced windings, a plurality of textile spindles, and driving means adapted to be operative between the driven unit and the textile spindles.



1,818,536. VALVED INFLATABLE RUBBER FORMER. JESSE R. CROSSAN, Wadsworth, and JOSEPH E. MACKEL, Johnsons Corners, Ohio, assignor to Seiberling Rubber Company, a Corporation of Delaware. Filed Jan. 31, 1928, Serial No. 250,761. Renewed June 20, 1931. 13 Claims. (Cl. 152—12.)



1. An inflatable rubber article, comprising a hollow body of pliable rubber, a valve stem extending thru the wall of said body, and a cup-shaped anchor secured to said valve stem and embedded in the rubber wall.

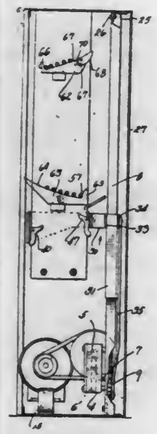
13. As a new article of manufacture, a valve stem having a cup-shaped anchor integral therewith, and clamping nuts adjustable on the stem at opposite sides of the anchor.

1,818,537. COTTON NEEDLE AND STRIPPER. ADOLPH CULLANDER, Belzoni, Miss., assignor to Enoch Haga and Adolph Cullander, a Copartnership operating as Cullander Machinery Co. Filed Feb. 10, 1931. Serial No. 514,878. 7 Claims. (Cl. 56—50.)



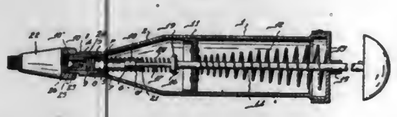
1. A cotton picker needle substantially polygonal in cross section and having the faces thereof fluted, and a stripper having a cylindrical body provided with means projecting longitudinally therefrom in opposite directions to engage said flutings for slidably supporting the said stripper on said needle.

1,818,538. ADVERTISING DEVICE. HARLOW M. DAVIS, Buffalo, N. Y. Filed Nov. 20, 1929. Serial No. 408,479. 6 Claims. (Cl. 40—36.)



1. In a device of the character described, a casing, means for sustaining two banks of cards therein, said casing having an open front adjacent the faces of the front cards of each blank, said front of the casing being provided with a pair of vertically grooved portions, a cover member for the casing having an opening the area of which is approximately equal to that of the two front cards of said banks to expose the advertising matter thereon to view, a pair of strips on the said cover member adapted for engagement with the grooved portions of the case permitting removal or insertion of the cover without disarrangement of the operative parts of the mechanism, and means for transferring the cards from one bank to the other.

1,818,539. GREASE GUN. PETER GRESSER, Detroit, Mich. Filed Aug. 31, 1929. Serial No. 389,626. 5 Claims. (Cl. 221—47.3.)



1. A grease gun comprising a cylinder having a grease containing chamber, a spring pressed piston, a plunger rod slidable through said piston, lugs on said plunger rod to prevent its withdrawal through said piston, a second cylinder and a second piston slidable therein, operating means for said second piston cooperating with said plunger rod, a hollow outlet member having a tapering portion supporting said second named cylinder and being engaged by the outlet end of the first named cylinder, ports in said tapered portion of the outlet member communicating with the grease containing chamber, a perforated cup shaped valve mounted in said hollow outlet member, a spring adapted to normally hold said valve in port closing position, a sleeve mounted in the opposite end of said outlet member having a spring pressed check valve mounted therein, and means for holding said sleeve in the discharge end of said hollow outlet member.

1,818,540. PILE FABRIC. CAMILLE DREYFUS, New York, N. Y. Filed Nov. 3, 1928. Serial No. 317,126. 2 Claims. (Cl. 139—391.)

1. Method of making pile fabric containing natural silk and yarns of organic esters of cellulose that is apt to become delustered when exposed to boiling water comprising degumming undyed natural silk to the desired extent and then weaving the undyed degummed silk together with said organic ester of cellulose yarn in such a manner as to form a pile fabric which need not be subjected to a degumming process, whereby finished fabric having the natural sheen or luster of the organic ester of cellulose yarn may be produced.

1,818,541. DYEING OR COLORING OF PRODUCTS MADE WITH CELLULOSE ACETATE. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Original application filed Sept. 25, 1923, Serial No. 664,781, and in Great Britain Jan. 27, 1923. Divided and this application filed Dec. 27, 1926. Serial No. 157,412. 8 Claims. (Cl. 8—5.)

1. Process for the dyeing of yarns, fabrics and other products containing cellulose acetate, comprising applying thereto an aqueous dispersion of a relatively water-insoluble unreduced indophenol coloring matter, the said dispersion being prepared by a method involving pretreating the coloring matter with a carbocyclic dispersing agent.

1,818,542. DYEING OR COLORING OF PRODUCTS MADE WITH CELLULOSE ACETATE. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Original application filed Sept. 25, 1923, Serial No. 664,781, and in Great Britain Jan. 27, 1923. Divided and this application filed Dec. 27, 1926. Serial No. 157,413. 8 Claims. (Cl. 8—5.)

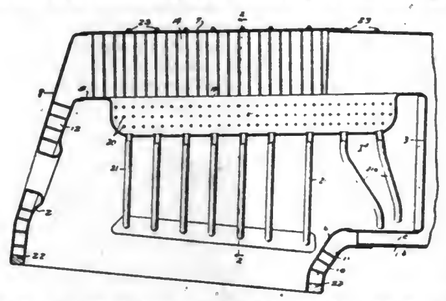
1. Process for the dyeing of yarns, fabrics and other products containing cellulose acetate, comprising applying thereto an aqueous dispersion of relatively water-insoluble unreduced indigoid coloring matter, the said dispersion being prepared by a method involving pretreating the coloring matter with a carbocyclic dispersing agent.

1,818,543. DYEING OR COLORING OF PRODUCTS MADE WITH CELLULOSE ACETATE. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Original application filed Sept. 25, 1923, Serial No. 664,781, and in Great Britain Jan. 27, 1923. Divided and this application filed Dec. 27, 1926. Serial No. 157,414. 16 Claims. (Cl. 8—5.)

1. Process for the dyeing of yarns, fabrics and other products containing cellulose acetate, comprising applying thereto an aqueous dispersion of a relatively water-insoluble coloring matter which is a basic derivative of the anthraquinone series, the said dispersion being prepared by a process involving pretreating the coloring matter with a carbocyclic dispersing agent.

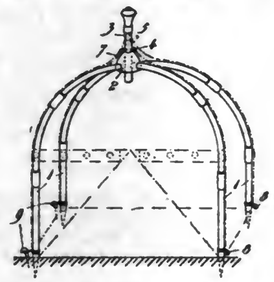
1,818,544. SIPHON GENERATOR AND CIRCULATOR FOR LOCOMOTIVE BOILERS. GEORGE H. EMERSON and WILLIAM B. WHITSITT, Baltimore, Md. Filed Dec. 4, 1930. Serial No. 500,122. 6 Claims. (Cl. 122—68.)

4. The combination with a locomotive boiler having a fire-box, a combustion chamber at the front thereof, a side water leg, and a barrel, of water steaming and circulating devices arranged at each side of the longitudinal center of the fire-box and each comprising a trough supported by the crown sheet of the fire-box and extending therefrom into the combustion chamber, said trough communicating at its top through the crown sheet with the water space of the boiler above the level of the crown sheet, a set of water tubes connecting each trough with the side water



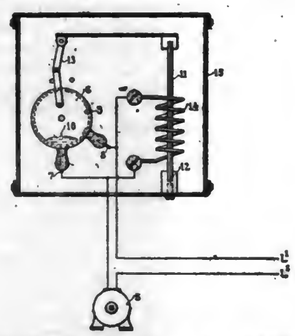
leg at the same side of the fire-box, and water tubes connecting that part of each trough disposed in the combustion chamber with the water space of the barrel.

1,818,545. TENT. BENGT GUSTAF ERIKSSON, Orebro, Sweden. Filed Apr. 8, 1930, Serial No. 442,587, and in Sweden Mar. 16, 1929. 3 Claims. (Cl. 135—1.)



1. A tent unit comprising a flexible frame made of resilient tent-ribs having their tops assembled and secured to a tie-block and their feet driven into the ground, a tent-covering having its base fixed around the base of said frame and its apex first loosely lying on said tie-block during the erecting of the tent, and stretching adjustable means for forcibly setting said apex aside from said tie block, hereby causing the ribs to bend and thus to exert a permanent elastic, self-adjusting stretching action upon said tent-covering.

1,818,546. THERMORESPONSIVE DEVICE AND METHOD OF IMPROVING THE ACTION THEREOF. CLARENCE T. EVANS, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer Inc., a Corporation of Delaware. Filed Sept. 11, 1922. Serial No. 587,683. 6 Claims. (Cl. 200—122.)

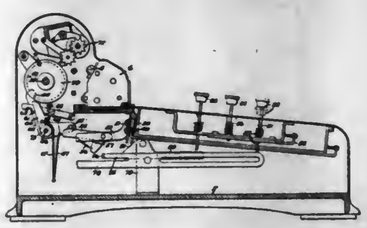


1. The combination with a circuit controlling device having a thermo-responsive operating element movable through a given range and adapted during final movement into an extreme position to effect operation of said device, said element having a relatively large temperature differential between the limits of said range of means subjecting said element to a given thermal influence to effect movement thereof through a predetermined part of its range without effecting operation of said device, whereby said element when subjected to the thermal influence of another controlling medium is movable into said extreme position upon a given slight variation in the temperature of such medium.

1,818,547. LACQUER FOR APPLICATION BY BRUSHING. HANS FINKELSTEIN, Uerdingen, Niederrhein, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 13, 1928, Serial No. 292,599, and in Germany Dec. 22, 1924. 4 Claims. (Cl. 134—79.)

1. A lacquer for application by brushing, comprising from 8 to 25 parts of collodion cotton which forms solutions of low viscosity and of which at least 15 per cent are soluble in 96 per cent ethyl alcohol, an artificial cyclic ketone resin, a mixture of from 80 to 20 parts of ethylene glycol monomethyl ether with from 20 to 80 parts of a solvent which corresponds to the general formula $HO\text{-}C_nH_{2n}\text{-}OR$ (in which R indicates an alkyl group with from 1 to 4 carbon atoms and n is 2, 3 or 4 and which contains at least 5 carbon atoms in its molecule and from 67 to 10 parts of a solvent, containing a substantial proportion of ethyl alcohol.

1,818,548. CALCULATING MACHINE. CARL M. F. FRIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed Aug. 19, 1924. Serial No. 732,945. 8 Claims. (Cl. 235—130.)

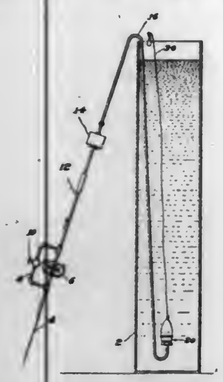


1. In a calculating machine, a counting mechanism actuator, means for introducing values into the actuator, a member for operating said actuator, said member being movable from neutral position through a circle and back to neutral position, a revolution counting mechanism rotatable in time with said member, a tens-carrying pin on said revolution counting mechanism, means for latching said member in neutral position, means operative by the introduction of a value into the actuator for releasing said latch, means for holding said latch in released position and means adapted to be operated by said tens-carrying pin for releasing said latch holding means.

1,818,549. APPARATUS AND METHOD FOR SPINNING FIBERS IN PRECIPITATING BATHS. ABRAHAM P. FURMAN, New London, Conn., assignor to Thames Silk Company, New London, Conn., a Corporation of Connecticut. Filed Mar. 21, 1929. Serial No. 348,881. 4 Claims. (Cl. 18—8.)

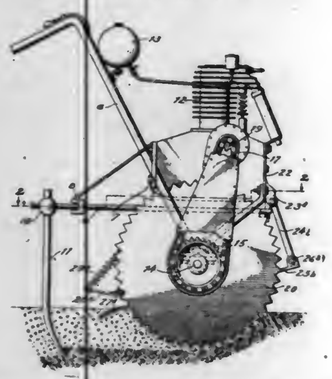
1. The steps in the process of spinning fibers in a precipitating bath which consists in immersing a spinneret

in said bath, maintaining the holes in the immersed spinneret clear of said precipitating bath, and then pass-



ing the liquid to be precipitated through said spinneret whereby to initiate in said bath the formation of attenuated fibers.

1,818,550. TRACTION DEVICE. HAROLD H. GLASIER, Los Angeles, Calif. Filed Dec. 24, 1928. Serial No. 328,235. 12 Claims. (Cl. 180—8.)

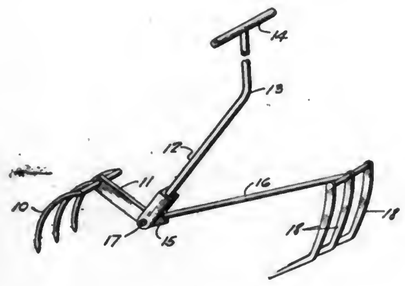


4. A traction device comprising a body to be moved along the ground, a limb pivotally secured on the body, a jointed knee in said limb, a gripping foot on said limb for penetrating the ground, a continuously rotative member for directly acting upon and intermittently swinging said limb downwardly and rearwardly toward straightening position, said limb being maintained crooked at its knee, said rotative member and limb having cog gearing means disposed over a segment of said member whereby to alternately move said limb toward straightening position and then to release the same, and ground wheels for supporting said body on the ground.

1,818,551. OSCILLATING SPADER. HAROLD H. GLASIER, Los Angeles, Calif. Filed Aug. 23, 1929. Serial No. 387,880. 11 Claims. (Cl. 97—58.)

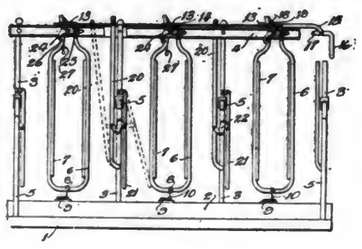
1. A mechanical spader comprising the combination of spading blades, cultivating shares spaced therefrom, a coupling link connecting said shares and blades and provided with an intermediate knuckle, the shares and blades facing one another, a handle connected to one of the arms of said link for buckling the latter and for operating said shares and blades in the manner of jaws.

10. A mechanical spader comprising the combination of: spading blades, an operating handle secured to said blades including a shank extending laterally of said blades and a stock ranging in the direction of said blades; cultivating shares, a lever arm fixed to said shares and extending laterally in relation thereto, said lever arm being pivotally connected to said handle at the juncture of said shank and stock to form a coupling link with a knuckle whereby oscillation of said handle will cause buckling of said link and movement of said blades and shares to and from each



other in the nature of jaws; a lock rod pivotally mounted on said lever arm, a catch on said stock to engage said rod and retain said link in buckled position with said blades and shares in near position, a trip rod for said catch having a foot for engagement with the ground, and resilient means tending to move said trip rod toward ground engagement position to trip said catch.

1,818,552. ANIMAL STALL. HERBERT H. GAUBB, Baraboo, Wis., assignor to Humane Stanchion Works, Baraboo, Wis., a Corporation of Wisconsin. Filed Feb. 27, 1929. Serial No. 343,077. 4 Claims. (Cl. 119—148.)

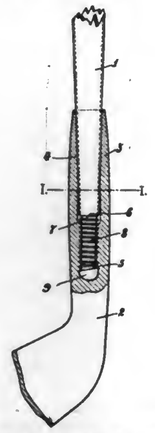


1. In an animal stall arrangement having a framework, stanchions, adapted to be opened and closed, secured thereto and means for controlling the opening and closing of the stanchions from a remote point, a locking device for maintaining one of the stanchions in closed position independent of said means, said device consisting of a hook secured to the framework at a point adjacent said stanchion and a bolt pivotally mounted on the framework and adapted to engage said hook.

1,818,553. HEAD FOR GOLF CLUBS. WILLIAM JAMES HADDEN, Glasgow, Scotland, assignor to Donaldson Manufacturing Company Limited, Glasgow, Scotland. Filed Nov. 30, 1928, Serial No. 322,845, and in Great Britain Oct. 23, 1928. 3 Claims. (Cl. 273—80.)

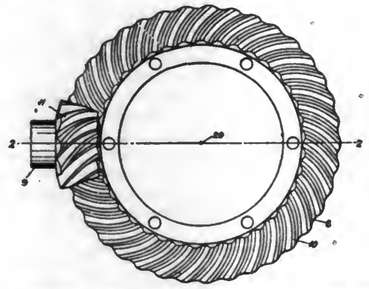
1. A head for golf clubs having a socket with an internally tapered part at the outer end of the socket, the taper being comparatively slight, a screw threaded part at the inner end of the socket, a cylindrical part in the inside of said socket between said tapered part and said screw

threaded part, said cylindrical part being of greater diameter than said threaded part and not smaller in diame-



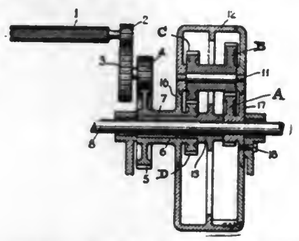
ter than the smallest diameter of the tapered part, and a clearance at the lower end of said socket of greater diameter than the screw threaded part of the socket.

1,818,554. GEAR. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed May 16, 1928. Serial No. 278,209. 6 Claims. (Cl. 74—41.)



1. A tapered gear having longitudinally curved teeth, the side faces of which from end to end of the teeth are of substantially constant pressure angle measured circumferentially of the gear.

1,818,555. DETACHING ROLL MOTION. SIGURD H. HELLAND, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Sept. 5, 1929. Serial No. 390,476. 5 Claims. (Cl. 19—118.)

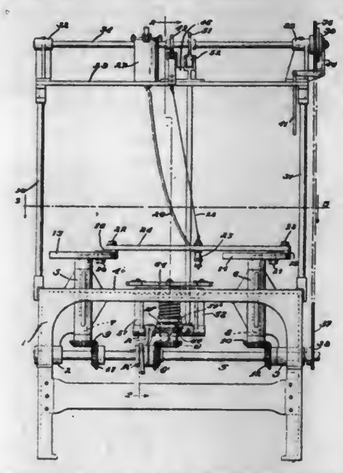


1. In a comber a detaching motion comprising an epicyclic gear system including two gear couples, each comprising a pair of intermeshing gears and one of the couples constituted of meshing eccentric gears correlated to the other gears to convert continuous unidirectional rotation into intermittent forward and backwar rotation.

1,818,556. METHOD FOR THE PURIFICATION OF IRON AND STEEL. MAX JÄGER, Bitterfeld, ERNST POKORNY, Leipzig, and GOTTHARD GOSSRAU, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 13, 1928, Serial No. 325,906, and in Germany Dec. 17, 1927. 4 Claims. (Cl. 75—49.)

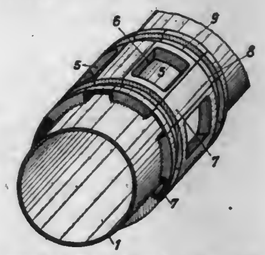
1. The improvement of the method for the purification of iron and steel in the molten state by the addition of cerium, consisting in lowering the melting-point of the cerium-reaction-products by adding vanadium together with cerium, thereby forming a slag, and separating the slag from the molten metal.

1,818,557. COVER LINING APPARATUS. CLYDE W. JOHNSON, Saugus, Mass., assignor to Dewey and Almy Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 12, 1928. Serial No. 312,190. 22 Claims. (Cl. 113—80.)



1. Apparatus for moving a distributing nozzle whereby to apply a lining compound to the marginal portion of a cover or cap, said apparatus comprising a nozzle-supporting means movable in a plane, a nozzle on the nozzle-supporting means, and means for imparting to said nozzle-supporting means a movement in an orbit substantially coincident with the contour of the cover to be lined.

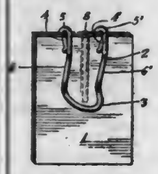
1,818,558. CONSTRUCTION OF ENGINE CYLINDERS. HUGO JUNKERS, Dessau, Germany. Filed Nov. 8, 1929, Serial No. 405,750, and in Germany Nov. 19, 1928. 5 Claims. (Cl. 123—173.)



1. Engine cylinder with a row of ports formed in the cylinder wall, the wall sections intermediate the ports of

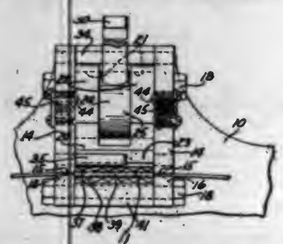
said row having the form of channels open towards the circumference of the cylinder, covers being mounted on said channel-sections so as to convert same into closed canals and liquid cooling chambers at both ends of and communicating with said canals.

1,818,559. REINFORCED MARKING TAG. EARL L. KINCH, Waterbury, Conn., assignor to The Waterbury Buckle Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 22, 1930. Serial No. 504,067. 3 Claims. (Cl. 40—23.)



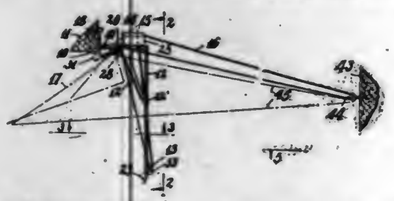
1. In a marking tag, a ticket proper and a substantially U-shaped clip having its free ends passing through the ticket from front to rear near an edge thereof, the free ends bent upwardly on the back of the ticket and the U-shaped portion bent upwardly on the face of the ticket whereby the clip is clinched to the ticket, and the U-shaped portions then bent downwardly over the edge of the ticket in contact with the back thereof, and a reinforcing wire within the ticket extending in the median line of the clip from the top edge of the ticket to a point substantially under the bottom of the U-portion of the clip.

1,818,560. DEVICE FOR JOINING ARTICLES. LESLIE FAWCETT LAMPLOUGH, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1928. Serial No. 323,596. 11 Claims. (Cl. 140—113.)



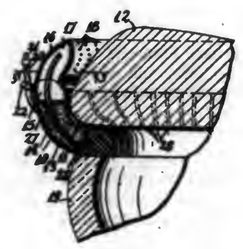
1. In a splicing device, a pair of jaws, means for effecting relative movements between the jaws, means for supporting a splicing sleeve between the jaws, means for initially deforming a portion of said splicing sleeve to assist in positioning therein members to be joined thereby and cooperating means upon the jaws for crimping the sleeve, the initial deforming and crimping means both being operative during a single uni-direction movement between the jaws.

1,818,561. ADJUSTABLE BRACKET FOR CLOTHES LINES. HENRY S. LEGGETT, Brooklyn, N. Y. Filed Apr. 17, 1930. Serial No. 444,985. 5 Claims. (Cl. 68—3.)



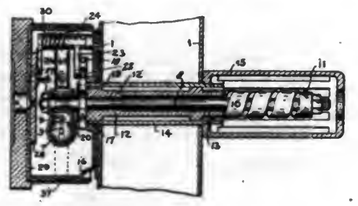
1. A washline support, comprising a bracket for attachment on a window frame, an arm having a free end pivotally supported on said bracket for swinging in a horizontal plane, means for holding said arm extended into said window or outside of said window, a pulley on the free end of said arm, another pulley on said arm and near its pivot, and hooks for supplying different tensions to a washline and supported on said arm and positioned on the side of said pivot opposite the free end of the said arm so that the continuous washline may extend over one of said hooks and over the first pulley and then over said second pulley and then over a pulley attached to a remote point and back to said hook, said bracket consisting of an angle member for attachment upon the corner of the window frame and supporting a rod having an offset end, said arm being pivotally supported upon said latter rod, and means for holding said arm extended into said window or outside of said window being mounted upon said offset end.

1,818,562. SANITARY TOILET SEAT BOWL SPRAY. HELEN B. LEVY and SARAH KAMINSKY, Brooklyn, N. Y. Filed Nov. 7, 1930. Serial No. 493,074. 5 Claims. (Cl. 4—283.)



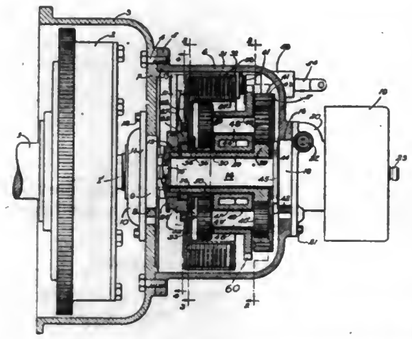
1. A sterilizer attachment for toilets, comprising a resilient hollow band for engaging on the edge of a toilet seat and having a bottom annular compartment for holding concentrated sterilizing fluid and an upper annular compartment for connection with the water flushing system of the toilet, and tubes extending from within said bottom annular compartment through said top annular compartment and into water passages communicating with said annular top compartment and discharging through openings directed against said toilet seat.

1,818,563. THERMOSTATIC DEVICE. WALTER C. LINDEMANN and EDWIN A. RUTENBER, Milwaukee, Wis., assignors to A. J. Lindemann & Hoverson Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 10, 1924. Serial No. 742,748. 7 Claims. (Cl. 200—139.)



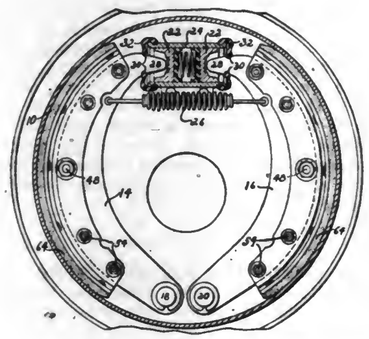
1. A thermostatic device for controlling an electric circuit comprising a heat operated element including a thermostatic metallic coil, a circuit closing device including a tiltable vessel, terminals and a fluent conductor therein, means intermediate said circuit closing device and said heat operated element for operating the former to break the circuit by the heat expansion of the latter and means for varying the point at which the said intermediate means will cause circuit breaking movement of said device without changing the relative positions of said device and said element.

1,818,564. POWER TRANSMISSION. KENNETH E. LYMAN, Rockford, Ill., assignor to Automatic Transmission Company, Rockford, Ill., a Corporation of Illinois. Filed Dec. 28, 1928. Serial No. 328,951. 11 Claims. (Cl. 74—34.)



1. In an automatic transmission, driving and driven elements, change speed gearing for connecting said elements and means for automatically changing the driving speed, comprising in combination, a drive transmitting gear mounted for planetating movement and through which the drive is transmitted from the driving element to the driven elemen, torque responsive resilient restraining means for influencing the rotation of said drive transmitting gear and a differential gear system connecting said resilient restraining means with said drive transmitting gear.

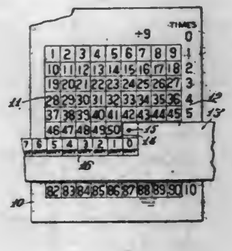
1,818,565. BRAKE SHOE. HOWARD E. MAYNARD, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 23, 1928. Serial No. 279,892. 11 Claims. (Cl. 188—250.)



1. A brake shoe comprising a pair of angle members each having a cylindrical flange and a radial flange, arranged back to back with the outer edges of the radial flanges spaced apart, a stiffening member in the space between said radial flanges and pivotally connected to said angle members, said angle members being movable relative to each other and to the stiffening member.

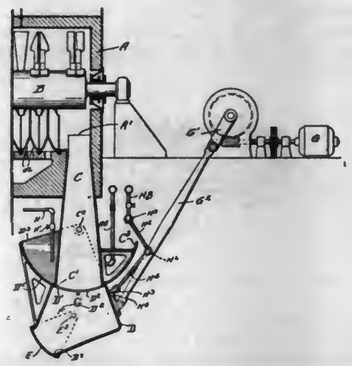
1,818,566. DEVICE FOR TEACHING DIVISION. JAMES E. McDADE, Chicago, Ill. Filed Jan. 2, 1930. Serial No. 417,851. 5 Claims. (Cl. 35—2.)

1. In a device for solving a problem in division, the combination of a leaf member having on one face a table comprising a plurality of numbers arranged serially in rows in equally spaced position in one direction and arranged in rows in the cross direction, with the largest numbers in said first named rows respectively successive multiples of a predetermined divisor, a finder having index means adapted readily to be placed over any selected number



of said table for indicating the quotient of the number next smaller than the selected number divided by said predetermined divisor, and a number displayed at a predetermined point with respect to the finder indicating said quotient.

1,818,567. RETORT DISCHARGING MEANS. CHARLES V. McINTIRE, East Orange, N. J., assignor to Consolidation Coal Products Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 3, 1925. Serial No. 47,827. 7 Claims. (Cl. 202—262.)

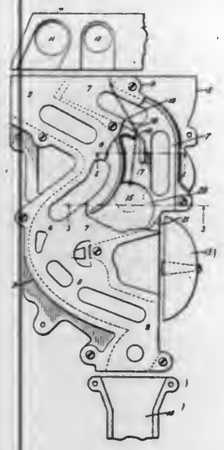


1. The combination with a retort structure having a discharge chute depending therefrom, of a hopper having an upper inlet opening and a lower valved outlet opening, a pivotal connection between said chute and hopper permitting movement of the latter into and out of the position in which the hopper inlet opening communicates with said chute, and said chute and hopper having cooperating provisions preventing communication between the atmosphere and the interiors of said chute and hopper through the inlet opening of the latter in all positions of the hopper.

1,818,568. COIN COLLECTION APPARATUS. JOHN M. MELICK, Cresskill, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Mar. 15, 1928, Serial No. 261,792. Divided and this application filed Feb. 6, 1929. Serial No. 337,768. 3 Claims. (Cl. 194—97.)

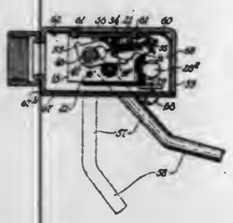
1. A trap in a coin chute comprising a channel through which a coin travels to operate a signal, comprising a flexible spring member extending into said channel, said member being adapted to permit the passage of a down-

wardly traveling coin and to prevent the withdrawal of said coin after it has passed said member and means comprising a rigid member adjacent said spring member



to prevent the wedging of said coin between said spring member and the wall of the coin chute on attempted withdrawal.

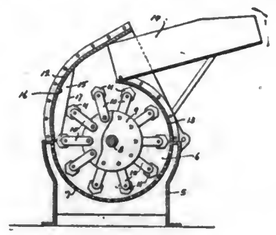
1,818,569. ELECTRIC SNAP SWITCH. GEORGE J. MEUER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 25, 1929. Serial No. 409,645. 10 Claims. (Cl. 200—67.)



1. In an electric snap switch, in combination, a metallic frame comprising a base portion and parallel sides integral therewith, a pair of flat punched insulating plates located exteriorly of said sides and rigidly secured thereto, identically shaped wiring terminal members located exteriorly of said plates, rivets penetrating the respective plates and terminal members to rigidly secure the latter to the former, said frame having perforations to provide insulating clearance for the rivet heads, right and left hand resilient contact members each having a perforated end to be clamped between one of said terminal members and its associated insulating plate, the forward ends of said contact members having contact portions inwardly offset toward each other, and said insulating plates having notches to receive the offset portions whereby said contact members are retained in substantial alinement with each other while permitting lateral flexure thereof.

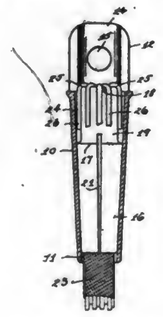
1,818,570. HAMMER MILL. JOHN MURSCH, Kenmore, N. Y., assignor to Buffalo Hammer Mill Corporation, Buffalo, N. Y., a Corporation of New York. Filed Nov. 8, 1929. Serial No. 405,676. 5 Claims. (Cl. 83—11.)

1. In a hammer mill having a plurality of sets of hammers, the combination with a back breaker plate of runners carried by the breaker plate, the working faces of the runners being arranged tangentially to the circular path of the hammers and being in interspaced relation



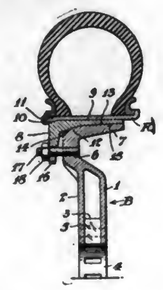
with each other, the runners having their working faces arranged in a plane, a portion of which is intersected by the path of travel of the hammers.

1,818,571. DEAD END CLAMP. LUTHER B. MYERS, Warren, Ohio. Filed Feb. 11, 1930. Serial No. 427,460. 3 Claims. (Cl. 24—136.)



3. A dead end clamp for wires or cables comprising an outer sleeve having a tapered passage therethrough, an exteriorly-tapered core to enter and wedge in the sleeve-passage said core also having a central passage to receive the wire end it is to engage,—the outer end of the core being reduced in diameter to provide a reduced neck at said end with a shoulder at the inner end of said neck and the body of the core having a longitudinal slot crossing the shoulder and extending through the neck to the outer end and also having another longitudinal slot which crosses the shoulder and extends through the body to the inner end of the latter.

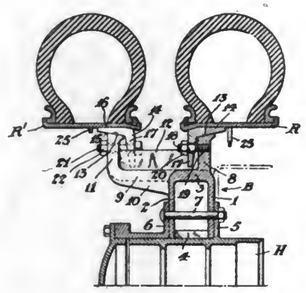
1,818,572. WHEEL AND RIM STRUCTURE. WILLIAM NELSON, Minneapolis, Minn. Filed May 11, 1928. Serial No. 276,869. 8 Claims. (Cl. 301—12.)



1. A wheel body comprising spaced rim-supporting segments, a rim, and clamps intermediate said segments and

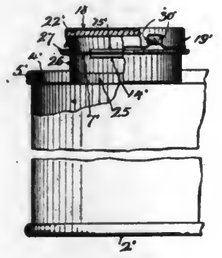
rim, the segments and clamps having generally conical engaging surfaces, the normal cone angle of the wheel segment surfaces being greater than that of the clamp surfaces to provide powerful clamping action and tensioning of the rim.

1,818,573. DUAL WHEEL. WILLIAM NELSON, Minneapolis, Minn. Filed May 15, 1928. Serial No. 277,882. 2 Claims. (Cl. 301—36.)



1. A wheel center consisting of an annular body portion, spokes radiating from said body adjacent one side thereof, brackets projecting from the opposite side of said body, spokes each extending radially of the body axis from the end of a respective bracket, said last spokes being staggered circumferentially of the body with respect to the first spokes, and ribs each extending from a respective first spoke to a respective second spoke and connecting the proximal edges of the respective pair of spokes.

1,818,574. CLOSURE FOR RECEPTACLES. ISIDOR NEWMAN, New York, N. Y. Filed Oct. 1, 1929. Serial No. 396,598. 2 Claims. (Cl. 220—24.)



1. A receptacle having a body and a top therefor, said top having a projecting flange or spout, a cover extending into said flange or spout and having an edge folded over the top edge of said flange or spout and bent outwardly, together with said flange or spout, to provide a frustoconical portion, and a removable cap adapted to close said flange or spout comprising a top portion having a depending flange, said latter flange being provided with a plurality of indentations adapted to snap over said frustoconical portion of said spout.

1,818,575. RUBBER-COATED FABRIC AND PROCESS OF MAKING IT. ARTHUR N. PARRETT, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 22, 1927. Serial No. 228,098. 4 Claims. (Cl. 91—70.)

1. The process of manufacturing rubber coated fabric which comprises applying a coat of rubber to fabric, embossing, applying a pigmented varnish containing oil and asphalt thereover, baking to vulcanize the rubber and dry the varnish, and souping, with a composition containing pyroxylin and a drying oil.

1,818,576. RUBBER COATED FABRIC AND PROCESS OF MAKING IT. ARTHUR N. PARRETT, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 7, 1930. Serial No. 426,707. 4 Claims. (Cl. 91—70.)

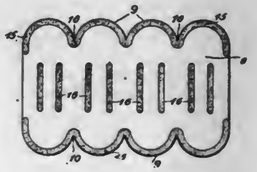
1. The process of manufacturing rubber coated fabric which comprises applying a coat of rubber to fabric, embossing, applying a pigmented asphalt varnish thereover, baking to vulcanize the rubber and dry the varnish, and souping with a composition containing pyroxylin, a pigment and a modified polyhydric alcohol-polybasic acid resin.

1,818,577. STRETCHER FOR NECKWEAR SKINS. ABRAHAM J. PASSMAN, New York, N. Y. Filed May 27, 1929. Serial No. 366,260. 3 Claims. (Cl. 149—21.)



1. A fur stretcher, comprising adjacent form elements slidably connected to allow slight lateral motion into spaced positions, and a spreader bar slidably mounted between the form elements and having tapered sides angularly spreading the form elements during the major portion of its slidable movement and having a sharp tapered point engageable against a corresponding tapered portion on adjacent sides of said form element and intermediate of the ends of the form elements moving the form elements into spaced positions during the remainder portion of its slidable movement.

1,818,578. FANCIFUL ORNAMENT AND METHOD OF MANUFACTURE. JOHN PEDERSEN, Racine, Wis. Filed Mar. 14, 1931. Serial No. 522,758. 12 Claims. (Cl. 41—13.)



1. The method of producing a fanciful ornament of flower-like shape from a blank of sheet material, com-

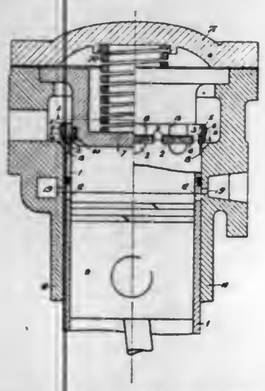
prising the steps of scalloping the blank to later form petal ends, longitudinally gathering the blank at its longitudinal center to cause its scalloped longitudinal edges to assume arcuate form and jointly form the peripheral edge of the ornament, and securing the gathered portions at the center of the blank to form the pistil of the flower-like ornament.

1,818,579. ELECTRODE. GEORGE PFLEIDERER, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 21, 1924, Serial No. 745,016, and in Germany Nov. 1, 1923. 10 Claims. (Cl. 204—4.)

3. The process of producing hydrogen which comprises electrolyzing an aqueous medium between electrodes at least one of which consists at least superficially of a sulphurized metal.

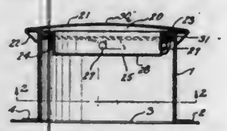
6. The process of producing hydrogen which comprises electrolyzing an aqueous medium between electrodes at least one of which consists at least superficially of a sulphurized metal which has been superficially desulphurized.

1,818,580. HIGH PRESSURE GAS COMPRESSOR. EDWIN PRESTAGE, London, England. Filed Mar. 12, 1930, Serial No. 435,246, and in Great Britain June 27, 1929. 10 Claims. (Cl. 230—179.)



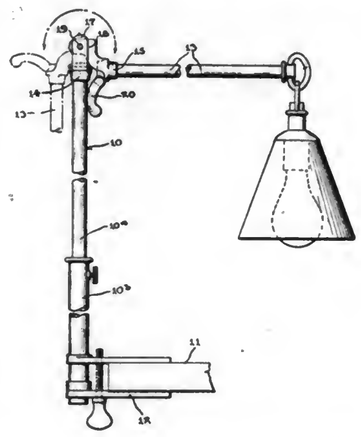
1. A high pressure air or gas compressor comprising a cylinder with fluid inlets spaced around its wall, a piston reciprocating in said cylinder, a cylinder head projecting into said cylinder with a receiving chamber surrounding said head above said cylinder, a sleeve valve reciprocating between said piston and cylinder head and the cylinder provided with inlet ports adapted to open to said fluid inlets and outlet ports adapted to open to said receiving chamber and a cover for the mouths of said outlet ports adapted to prevent a back rush of discharged fluid when the pressure in the cylinder is lower than the pressure in said receiving chamber.

1,818,581. NECK AND CLOSURE STRUCTURE. JAMES S. REID, Cleveland, Ohio, assignor, by mesne assignments, to the Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 19, 1928. Serial No. 293,819. 6 Claims. (Cl. 220—40.)



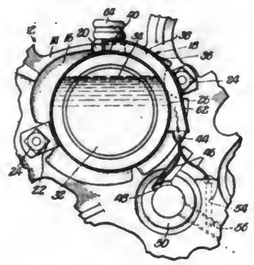
1. In a structure of the character described, a neck adapted to have its upper end closed by a detachable closure having opposed locking projections of rigid character, comprising a rigid tubular body member and a separate ring member mounted within the upper end portion thereof, said ring member being provided with a laterally extending flange portion having a pair of opposed inherently resilient axially movable sheared cam portions with which the locking projections of a closure are adapted to cooperate in effecting detachable connection of the closure to the neck.

1,818,582. FLEXIBLE LAMP BRACKET. MAX F. ROSACKER, Mount Penn, Pa. Filed Sept. 19, 1929. Serial No. 393,717. 1 Claim. (Cl. 240—52.)



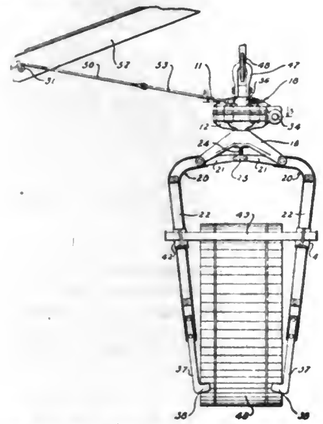
In a lamp bracket having a supporting pedestal and a vertically swingable lamp supporting arm from folded parallel position on one side to angular projected position on the other side of the pedestal, a pivotal connection for said arm comprising forked end extensions of said pedestal and arm forming spaced pivotal ears, pivot pins connecting the respective ears of each pair, the ears of one pair being offset to overhang the longitudinal axis of the other pair when said arm is swung into folded position, and a stop extension of said arm forked extension adapted to limit reverse swing of said arm to a substantially right angled projection from said supporting pedestal.

1,818,583. LAWN MOWER. ALVIN V. ROWE, Galesburg, Ill., assignor to Rowe Manufacturing Company, Galesburg, Ill., a Corporation of Illinois. Filed Nov. 26, 1928. Serial No. 321,802. 9 Claims. (Cl. 184—6.)



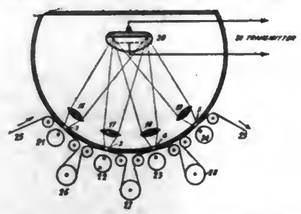
1. In combination with a lawn mower having bearings to be lubricated, a lubricating device of the class described comprising a casing carried by said lawn mower, said casing having a chamber for retaining a lubricant, and means operable only when the lawn mower is moved to a non-cutting position, to withdraw a quantity of lubricant from said chamber and direct the same into association with the bearings of said lawn mower only when the position of said lawn mower is varied.

1,818,584. LIFTING DEVICE. WILLIAM SCHROEDER, Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 11, 1930. Serial No. 420,065. 13 Claims. (Cl. 294—67.)



1. In an article lifting device, a suspended framework, a pair of opposing arms pivoted thereon and terminating in article engaging elements, means for causing a relative movement of the arms to engage the elements with the periphery of the article at a plurality of points below the center of gravity thereof, and a plurality of members interconnecting and freely slidable upon the arms for engaging the upper portion of the periphery of the article to prevent its displacement from the elements.

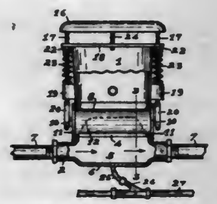
1,818,585. HIGH SPEED TELEGRAPHY SYSTEM. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft Für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed June 11, 1929, Serial No. 370,092, and in Germany June 8, 1928. 14 Claims. (Cl. 178—15.)



1. In a high speed telegraphy system, the method of transmission which comprises repeatedly transmitting each element of each signal at time separated intervals, and receiving and independently recording as received each signal to produce the sum total of the separately transmitted impulses for each of the transmitted elements.

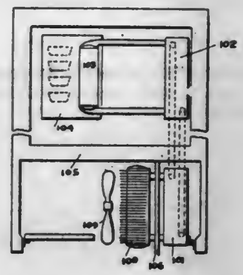
1,818,586. DRY CLOSET. CHARLES B. SCHUMACHER, Pittsburgh, Pa. Filed Jan. 10, 1930. Serial No. 419,834. 1 Claim. (Cl. 4—131.)

In combination, a dry closet of the character described comprising a valve casing including a passage chamber and adapted to being connected in the exhaust conduit for the products of combustion of an internal combustion engine, said passage chamber communicating with said exhaust conduit, a closet bowl mounted on said valve casing, said closet bowl being provided with an annular outwardly disposed flange formed integral with the upper end thereof, a vertically shiftable seat member disposed above said closet bowl, a cylindrical valve member formed with a pocket revolubly mounted in said valve casing and constituting a bottom for said closet bowl, said valve member being provided with a pair of trunnions projecting from said valve casing, a gear fixed to each of said trunnions, a pair of slide bearings carried by said closet bowl, a pair of supporting rods carrying said seat member and slidably extending through said flange and said slide bearings ob-



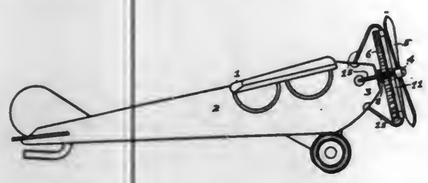
long gear links carried at the lower end of said pair of supporting rods and engaging said gears for actuating said valve member, a collar fixed to each of said pair of supporting rods below said flange, resilient elements mounted on said pair of supporting rods intermediate of and engaging said collars and said slide bearings for normally shifting said seat member to the elevated position and for rotating said valve member in a direction to open said pocket to said passage member, a pair of guide pins being fixed to and depending from said seat member and slidably extending through said flange for maintaining the horizontal plane of said seat member during the movements of the latter, the depression of said seat member actuating said valve member to open said pocket to said closet bowl.

1,818,587. REFRIGERATION. DONALD G. SMELLIE, Maywood, Ill., assignor to The Hoover Company, a Corporation of Ohio. Filed Feb. 21, 1927. Serial No. 169,765. 4 Claims. (Cl. 62—119.)



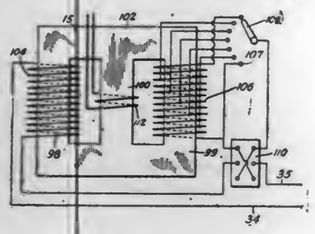
1. In a refrigerating system, the combination of a refrigerator enclosure and a series of absorption refrigerating units each having a heat absorbing station and a heat dissipating station, the initial absorbing station of the series being located within said enclosure and the final dissipating station being located outside of said enclosure, and each of the other absorbing stations being arranged in connection with a contemporary dissipating station to form an effective heat transferring unit and thereby creating a unitary refrigerating system.

1,818,588. AEROPLANE. WILLIAM SNEE and MORRIS BELL, West Elizabeth, Pa. Filed Sept. 27, 1929. Serial No. 395,494. 3 Claims. (Cl. 244—25.)



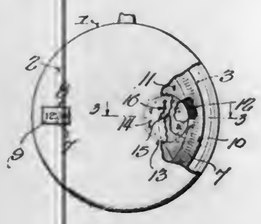
1. In an aeroplane including an engine shaft, a propeller fixed to the forward end of the engine shaft, a wind rotor mounted on the engine shaft and disposed rearwardly of said propeller, and a concentrator for directing air currents to said wind rotor to rotate the latter in a direction assisting in driving said propeller.

1,818,589. TRANSFORMER. GEORGE A. THORNTON, Schenectady, N. Y., and WOLCOTT REMINGTON, Swampscott, Mass., assignors, by mesne assignments, to Thomson-Gibb Electric Welding Company, a Corporation of Massachusetts. Original application filed Mar. 12, 1927, Serial No. 174,778. Divided and this application filed Jan. 28, 1928. Serial No. 250,096. 1 Claim. (Cl. 171—119.)



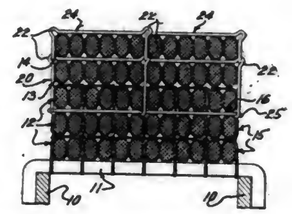
In an alternating current electric transformer, a magnetizable core comprising outer limbs, a bridge limb and yokes connecting said limbs in the formation of two complete closed flux paths, primary coils on said outer limbs, means for connecting said primary coils in series relations, a secondary coil on said bridge limb, and means for changing the polarity of one of said primary coils with respect to the other.

1,818,590. TIMEPIECE. STAFFORD TROTTMAN, Milwaukee, Wis. Filed Aug. 9, 1929. Serial No. 384,550. 2 Claims. (Cl. 58—126.)



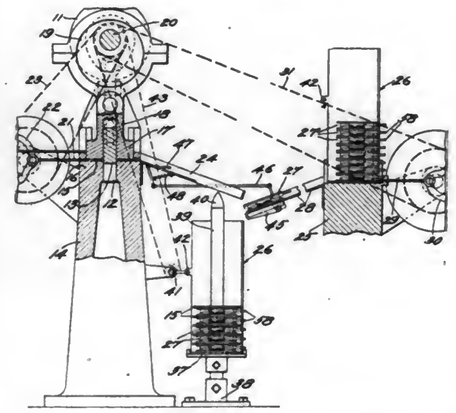
1. A time-piece comprising a case having a cover provided with an opening, a clock mechanism contained within said case, a dial driven by said clock mechanism, indicia contained on said dial indicating the hours and minutes of the day, and a magnifying lens for said opening to render one of the indicia visible at a time.

1,818,591. APPARATUS FOR SUPPORTING STRANDS. EDWARD PAUL TOURNIER, Elizabeth, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1929. Serial No. 344,833. 4 Claims. (Cl. 248—33.)



1. In an apparatus for attaching an additional strand to a group of previously supported strands, a foundation member designed to be inserted between contiguous previously supported strands, and means for embracing the additional strand and having a portion for engaging the foundation member, to firmly clamp the additional strand to the previously supported group.

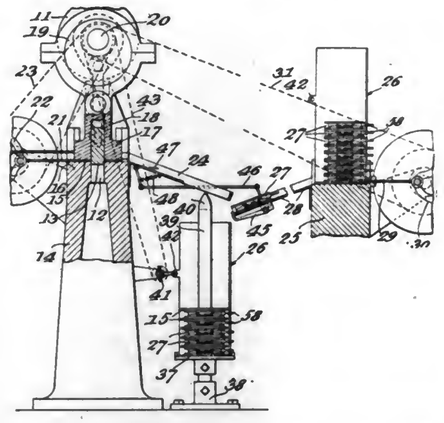
1,818,592. METHOD OF ASSEMBLING RADIATOR ELEMENTS. ARTHUR C. WALWORTH, Newton, Mass., assignor to The Vulcan Radiator Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 21, 1928. Serial No. 271,950. 10 Claims. (Cl. 29—84.)



1. The hereindescribed method of assembling fins or plates in spaced relation on radiator tubes and the like by the use of collapsible and expansible spacers, said method including expanding the spacers, forming a set or stack of alternating superposed plates and expanded spacers, holding said plates in the spaced relation determined by said spacers and while so held securing them to a radiator tube, collapsing the spacers, and withdrawing the collapsed spacers laterally from between the plates.

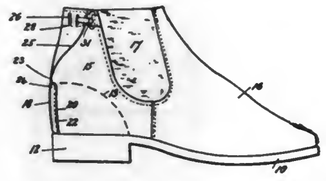
1,818,593. APPARATUS FOR ASSEMBLING RADIATOR ELEMENTS. ARTHUR C. WALWORTH, Newton, Mass., assignor to The Vulcan Radiator Company, Hartford, Conn., a Corporation of Connecticut. Original application filed Apr. 21, 1928, Serial No. 271,950. Divided and this application filed Nov. 20, 1929. Serial No. 408,450. 15 Claims. (Cl. 29—84.)

1. An apparatus for assembling perforated fins or plates in spaced relation on a radiator tube or the like, said apparatus comprising, in combination, means for feeding a succession of plates, separate means for feeding a succession of separate spacers, means for receiving said plates



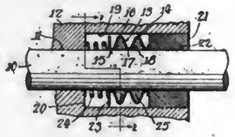
and spacers in superposed relation, and positive operating connections for said several feeding means adapted to cause said plates and spacers to be fed in alternation.

1,818,594. SHOE. JAMES E. WILLIAMS, Spring City, Pa., assignor to Robert Frank Williams, Spring City, Pa. Filed Apr. 7, 1930. Serial No. 442,829. 4 Claims. (Cl. 36—50.)



1. In a shoe, an upper, two quarters, elastic side portions secured between the quarters and the upper, an overlapping strip having one side portion secured to one quarter for its full length and having the lower part of its other side portion secured to the other quarter with its upper part forming a flap, said strip having an inclined outer edge and a notch at the outer side and lower part of the flap, and a fastening device secured to one quarter and engaging with the said flap and operating to contract the ankle portion of the shoe upon the ankle of the wearer.

1,818,595. FLUID-TIGHT PACKING. FRANK E. WILSEY, Chicago, Ill. Filed Feb. 13, 1928. Serial No. 253,822. 10 Claims. (Cl. 286—11.)

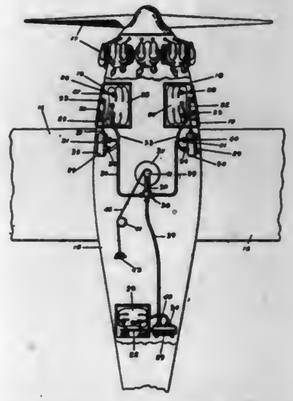


1. A fluid-tight packing comprising, in combination with a rotary shaft and a bearing for said shaft, a flexible resilient bellows disposed about said shaft and having a peripheral surface in bearing contact therewith, said bellows having a fixed fluid-tight connection with said bearing.

1,818,596. ELECTROMAGNETIC DEVICE. PAUL P. ZIMMERMAN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 13, 1930. Serial No. 481,811. 11 Claims. (Cl. 175—21.)

1. As a new article of manufacture particles of a magnetic material, and a material containing zirconium silicate, separating the particles.

1,818,597. AIRPLANE FLOTATION SYSTEM. HARRY W. ADAMS and FRANK M. SALISBURY, Dundalk, Md., assignors to The Glenn L. Martin Co., Baltimore, Md., a Corporation of Maryland. Filed July 20, 1929. Serial No. 379,776. 13 Claims. (Cl. 244—2.)



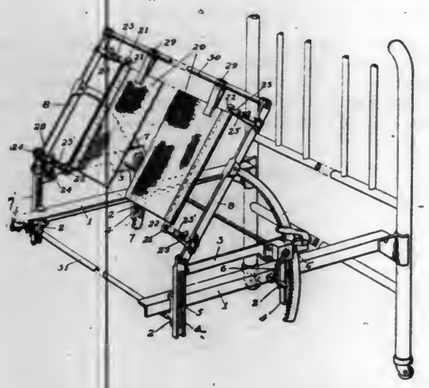
1. A cylinder-piston lock and transfer valve mechanism comprising a cylinder having an inlet port, an outlet port, a closure head on one end of said cylinder, a stuffing box head on the other end of said cylinder, a piston head within said cylinder, a piston rod extending through said stuffing box, one end of said rod attached to said piston head and the other end comprising a releasable locking member adapted to engage a relatively stationary lock member, whereby fluid pressure introduced into said cylinder through said inlet port will move said piston head past said outlet port thereby to release said locking members from each other and to transfer said pressure from said inlet port end of said cylinder to said outlet port thence to a flotation bag connected to said outlet port, whereby said pressure retains said piston head in position for return flow of said gas to said tank in response to temperature rise of said gas in said bag.

13. In an aircraft flotation system, a selective valve mechanism comprising a body member having a chamber, an inlet and a multiple number of outlets from said chamber, a rotatable disc valve having a hole therethru and located within said chamber, a rotatable shaft attached to said disc and extending through a wall of said chamber, a handle attached to said shaft, a compression spring adapted to restrain said disc to intimate contact with said wall of said chamber, said disc adapted by its position and rotation to selectively register said hole with either of said outlets or to close said outlets and whereby depression of said disc by manual pressure on said handle releases said disc from the wall of said chamber to simultaneously vent said chamber and said outlets to atmosphere through a passage normally closed by said disc.

1,818,598. HEADREST AND INVALID-RAISING MECHANISM FOR BEDSTEADS AND COTS. LEWIS R. BERRY, Portland, Me. Filed May 20, 1929. Serial No. 364,486. 1 Claim. (Cl. 5—72.)

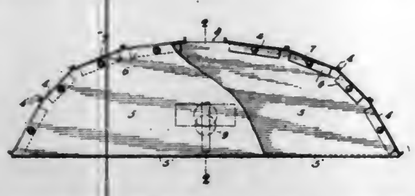
In a device of the character described, adapted to be attached to the side rails of a bedstead, the combination

of a side frame secured to each of said rails, a side bar pivotally connected to each of said side frames, a fabric sheet disposed interjacent said side bars, extensible straps securing said fabric sheet to said side bars at its two upper corners and one lower corner, a cleat pivotally mounted on one of said side frames, a cleat pivotally mounted on the adjacent one of said side bars—said cleats being spaced from the pivotal connection of said side



bar with said side frame, toward the head of the bed, a strap, one end of which is fixed in said first mentioned cleat and slidably secured in said second mentioned cleat, the other end of said strap extending inwardly and secured to said fabric sheet, and means to oscillate said side bars whereby on the upward and downward movement of said side bars the portion of said last mentioned strap lying between the said side bar and the said fabric sheet may be shortened and lengthened, respectively.

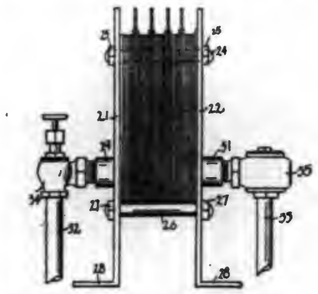
1,818,599. HOOD FOR THERAPEUTIC LAMPS. LESTER F. BIRD, Newark, N. J., assignor to Hanovia Chemical and Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed July 26, 1930. Serial No. 470,950. 1 Claim. (Cl. 240—103.)



In combination with a therapeutic mercury vapor arc lamp, a reflecting hood comprising a pair of end plates, and a plurality of plane reflecting surfaces attached to the end plates, and arcuately arranged, the plates on one side of the hood being inclined successively to the longitudinal free edge of the hood at angles of 49½°, 44° 25¼°, and 7°, and said plates having respectively widths of 1-25/32 inches, 3-9/32 inches, 1-57/64 inches and 23/32 inch, the plates on the other side of the hood being arranged in identically the same manner, the adjacent plates of each side being spaced apart, a distance of one inch, the light source being positioned on a line through the center of the hood at a distance of 2⅛ inches from the longitudinal free edge.

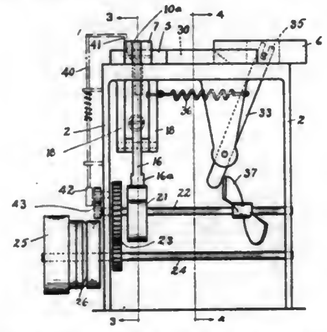
1,818,600. RADIATOR. BENJAMIN BLACKMORE, Cuyahoga Falls, Ohio. Filed June 7, 1929. Serial No. 369,150. 7 Claims. (Cl. 257—139.)

5. In a radiator, a radiator body composed of thin metal laminæ of the same thickness, certain of said laminæ having a greater area than others, said laminæ provided with communicating openings of like size and shape forming a radiator cavity, means for closing the



ends of said cavity and means to hold said members and laminæ in assembled relation, the laminæ of greater area being interspaced in said body in regularly recurring order.

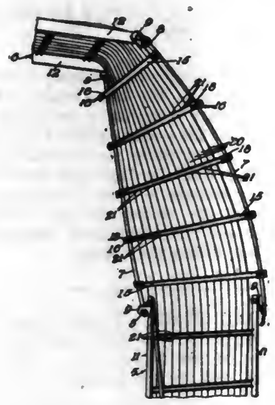
1,818,601. BIT-FORGING MACHINE. LOUIE BORTKEWICZ, Racoon, Pa. Filed July 30, 1929. Serial No. 382,214. 4 Claims. (Cl. 76—5.)



1. In cutter-bit forging apparatus including a machine bed supported on a frame and an anvil secured to the machine bed, and an opening through such machine bed for feeding a bit blank to the anvil, which anvil includes two faces both of which slope upwardly from said opening and extend angularly to each other, the combination of a bit-forming head which is movable relatively to the anvil to and from forging position against one of said anvil faces, a second bit-forming head which is movable relatively to the anvil to and from forging position against the other of said anvil faces, a head-operating arm for each bit-forming head, which operating arms project through said machine bed and are connected one to each of said bit-forming heads, said operating arms being each pivotally secured to the machine below said bed, yielding means for each operating arm normally urging each bit-forming head into position against said anvil, and means below said bed for periodically moving each of said operating arms alternately to store energy in its associated yielding means and for periodically and alternately releasing said arm to the energy of such yielding means.

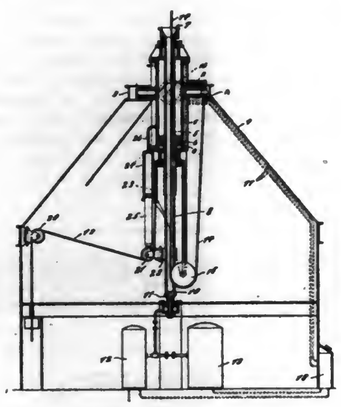
4. In a bit-forging machine including an anvil and means for feeding a bit blank thereto, the combination of a bit-forming head reciprocatory to and from forging position upon said anvil, a tappet rod, a point-tapping member associated with said rod, and means for reciprocating said rod and its associated tapping member during the forging of a cutter bit, whereby, the immediate point of the bit being forged is subjected to tapping blows which are effective to work the metal of said bit point and to remove such scale as forms on said point.

1,818,602. SUPPORT FOR STRAND MATERIAL. HEYWARD WIROMAN BOWLY, Summit, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 25, 1929. Serial No. 349,577. 6 Claims. (Cl. 248—34.)



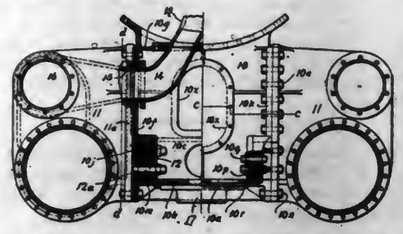
1. A framework for supporting a plurality of parallel strands extending in spiral formation from a rack in one plane to a rack in another plane, comprising a plurality of spaced rods conforming to the spiral formation of the strands and having threaded ends, means projecting from the racks in the different planes for receiving the threaded ends of the rods, and double nuts for securing the threaded ends of the rods to the projections.

1,818,603. AIRSHIP MOORING MAST GEAR. ARCHIBALD HALL-BROWN, Purley, and EDWIN WALTER JONES, Lincoln, England, assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed Nov. 26, 1927, Serial No. 235,850. Divided and this application filed May 12, 1930. Serial No. 451,609. 5 Claims. (Cl. 244—2.)



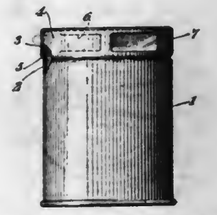
1. An airship mooring mast comprising a vertically disposed cylinder and a piston movably mounted therein, means on the piston rod projecting from the cylinder and adapted to receive a part on an airship, fluid pressure means adapted to exert pressure above said piston, means to center said mast, and means operable upon movement of said piston to actuated said centering means.

1,818,604. LOCOMOTIVE CYLINDER AND SUPPORTING STRUCTURE THEREFOR. ALFRED W. BRUCE, New York, N. Y. Filed May 7, 1929. Serial No. 361,038. 12 Claims. (Cl. 105—44.)



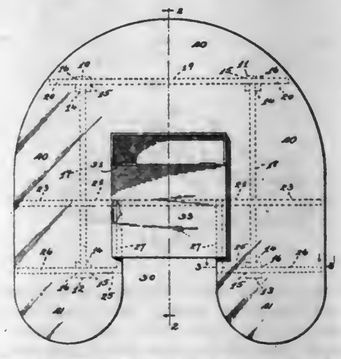
1. A one piece cast structure adapted to be interposed between and secured to, the main frame side members of a locomotive, comprising a cylinder saddle having cylinder engaging side walls each formed with a recess for the reception of a main frame side member; and a rear extension embodying a longitudinal flange at each side adapted to be bolted to one of the main frame side members, and a transverse member connecting and reinforcing the flanges, said extension being of a length and strength to take the place of a cross tie.

1,818,605. CONTAINER. ALFRED E. BRUNS, Huntington, N. Y., assignor, by mesne assignments, to Metal Package Corporation of New York, New York, N. Y., a Corporation of Delaware. Filed Dec. 29, 1928. Serial No. 329,180. 1 Claim. (Cl. 221—61.)



A container provided with an inverted bead adjacent its upper end to form a neck and having a weakened portion in said neck and a non-removable cover having its lower edge slidably interfitting with said inverted bead and provided with an opening adapted to be brought into registry with said weakened portion.

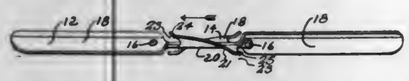
1,818,606. COMBINED DESK AND TABLE. WILLIAM L. BURKS, Pleasant Ridge, Va. Filed Jan. 11, 1929. Serial No. 331,787. 1 Claim. (Cl. 45—70.)



A combined desk and table for a group of children and a teacher, said table comprising a plurality of legs, a

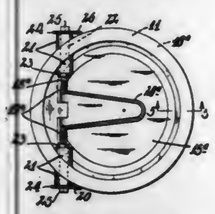
table-top sustained horizontally by said legs, said table top having a recess extending inwardly from one side toward the center thereof and having a flat working surface for children all the way around its marginal portion from one side of said recess to the opposite side thereof, and a desk seated on the table-top with its bottom elevated above the upper surface of the table top said desk extending over the recess in order to provide a higher elevated working surface under which the knees of the teacher may extend.

1,818,607. FAN. ELBA E. CAMPBELL, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 27, 1928. Serial No. 302,215. 6 Claims. (Cl. 170—159.)



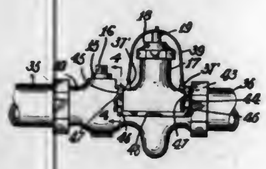
1. A fan having a plurality of blades each bent at an angle to the plane of the fan, the leading edge of each blade being bent at an angle to the plane of the fan greater than the angle between the plane of the blade and the plane of the fan, and the following edge of each blade being bent at an angle to lie in the plane of the fan.

1,818,608. SAFETY GAS TANK CAP. GEORGE C. CHAPKIN, Brooklyn, N. Y. Filed May 8, 1929. Serial No. 361,387. 5 Claims. (Cl. 220—35.)



1. A safety gas tank cap, comprising a cap arranged for attachment upon the inlet pipe of a gas tank and formed with an opening having a soft rubber washer secured along its sides, and a door spring pressed for closing the opening and having a top face flush with the top face of the cap, and means for adjusting the closing pressure of the door for insuring a flush meeting of the surfaces, said means including adjustable arbors connected with springs providing the closing pressure.

1,818,609. AUTOMATIC GAS HOSE SHUT OFF DEVICE. SAMUEL DICKSTEIN and LOUIS H. WEINSTEIN, New York, N. Y. Filed Apr. 10, 1929. Serial No. 353,930. 4 Claims. (Cl. 137—162.)



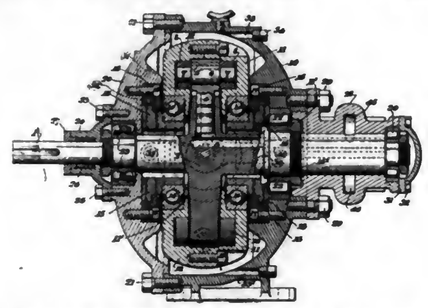
1. A device of the class described, comprising a valve body, an automatically closing valve therein, lugs projecting from the body, and a fuse strip extended over the valve stem for holding the valve in an open position, and universal joints connecting the ends of the strip with the lugs.

1,818,610. CLUTCH MEMBER. ERNEST E. EATON, Syracuse, N. Y., assignor to Brown-Lipe Gear Company, Syracuse, N. Y., a Corporation of New York. Filed May 31, 1928. Serial No. 281,847. 8 Claims. (Cl. 192—68.)



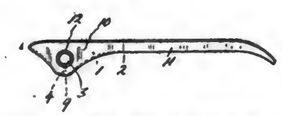
1. A friction clutch member comprising a hub, a friction plate concentric with the hub, means for connecting the hub and the plate to transmit the torque from one to the other comprising an element secured to the hub and rotatable therewith and lapping the margin of the plate and spaced apart therefrom, driving studs extending transversely through the lapping portions, outer metal sleeves fitting the holes in the margin of the plate through which the studs extend and bushings of yielding material around the studs and fitting the sleeves.

1,818,611. RADIAL PUMP. WALTER ERNST, Mount Gilead, Ohio, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed May 21, 1927. Serial No. 193,320. 6 Claims. (Cl. 103—161.)



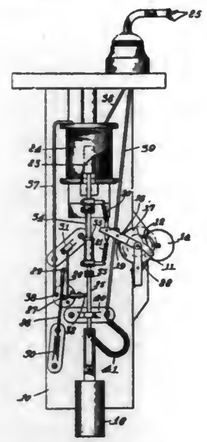
1. In a radial pump, the combination with a pump casing, of a shaft extending through the casing and projecting beyond one end thereof, spaced bearings carried by the casing and mounting the shaft for rotary movements therein, a hub on said shaft intermediate said bearings and provided with radial cylinders, reciprocable pistons in said cylinders, means engaging the outer ends of said pistons for guiding the latter, a valve casing removably secured to said pump casing and surrounding the projecting end of said shaft, said valve casing being provided with two separate valve chambers, located on opposite sides of the shaft and longitudinal passages in said shaft communicating at their inner ends with said cylinders and being adapted to communicate at their outer ends successively with the respect chambers in said casing during rotation of the shaft.

1,818,612. HANDLE. BURTON S. FLORADAY, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 15, 1930. Serial No. 502,593. 4 Claims. (Cl. 292—347.)



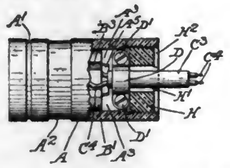
1. A handle comprising a body having a transverse shaft receiving socket and a one piece sheet metal member housing said body and having a portion forming a grip, said member having one side wall apertured in registration with said socket for the passage of the shaft and the other side wall solid.

1,818,613. CLOCK OPERATING MECHANISM. HARLEIGH GILLETTE, Chicago, Ill. Filed Nov. 15, 1929. Serial No. 407,488. 4 Claims. (Cl. 185—33.)



1. Clock operating mechanism, including; a rotary driven member; a reciprocable driving member; a driving connection between said members; a weight attached to the reciprocable member urging the same in one direction; a solenoid adapted to urge the reciprocable member in the other direction when energized; an elongated contact piece carried by the reciprocable member; a toggle lever mounted adjacent the reciprocable member; a part on the toggle lever adapted to be engaged by a part on the reciprocable member as the same is moved by the weight to snap one end of the toggle lever into engagement with the elongated contact piece on the reciprocable member; and an electric circuit through the solenoid adapted to be made by contact between said end of the toggle lever and said elongated contact piece carried by the reciprocable member.

1,818,614. LAMP SOCKET. GEORGE H. GLADE, Jr., Chicago, Ill. Filed July 18, 1927. Serial No. 206,514. 5 Claims. (Cl. 173—322.)

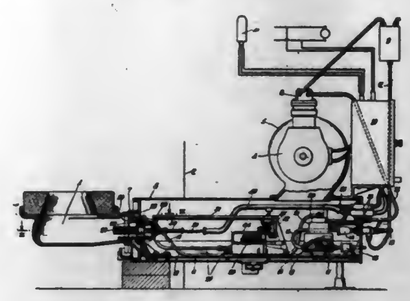


2. In combination in an electric light socket, a socket part and a containing part enclosing said socket part and having an open rear end, an adjustable closure for said containing part, a conduit extending within the containing part and containing a conductor adapted to be attached to said socket member, and an abutment removably attached about said conductor to be engaged and operatively positioned within the containing part by said adjustable closure member.

1,818,615. PROCESS OF ELIMINATING SULPHURETTED HYDROGEN FROM GASES. WILHELM GLUUD, Dortmund-Eving, Germany. Filed Aug. 7, 1928, Serial No. 298,136, and in Germany Aug. 16, 1927. 2 Claims. (Cl. 23—2.)

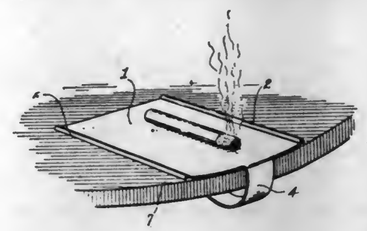
1. A process for eliminating sulphuretted hydrogen from hot gases, consisting in cooling the gases only to 150 to 300° C., and in passing said gases over alkalized hydrated iron oxide masses at this temperature.

1,818,616. OIL BURNER. JOHN GOOD, Garden City, N. Y., assignor to Good Inventions Co., New York, N. Y., a Corporation of New York. Filed July 27, 1926. Serial No. 125,138. 8 Claims. (Cl. 158—28.)



4. An oil burner comprising an oil spray nozzle, means for discharging oil therefrom initially under low pressure, to effect non-spray delivery, and subsequently under higher pressure, to effect delivery of the oil in spray form, and an igniter positioned to receive and ignite said initial non-spray delivery of oil.

1,818,617. SMOKER'S TABLE PROTECTOR. EDWARD JAMES GRINWALD, Seattle, Wash. Filed Mar. 18, 1929. Serial No. 347,931. 1 Claim. (Cl. 131—51.)

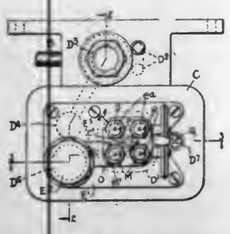


A device of the character described, comprising a flat plate applicable to a table top adjacent the edge thereof and provided along its opposite side edges with upwardly formed beads, the outer edges of which project slightly below the plane of the bottom of the plate; the outer edge of the plate being shaped to conform to the curvature of the edge of the table to which it is applied and having an attaching clip extending therefrom and bent downwardly and inwardly and adapted to yieldingly engage the underside of the table.

1,818,618. METHOD FOR THE PURIFICATION OF CARBOHYDRATES OBTAINED BY HYDROLYSIS OF CELLULOSE BY MEANS OF HYDROCHLORIC ACID. ERIK HÄGGLUND, Abo, Finland, assignor to the Firm Holzhydrolyse Aktiengesellschaft, Heidelberg, Germany. Filed Dec. 10, 1928, Serial No. 325,122, and in Germany Dec. 14, 1927. 1 Claim. (Cl. 127—37.)

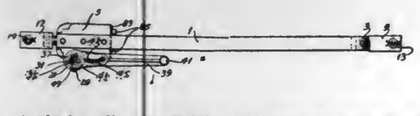
A method of treating carbohydrates which have been obtained by hydrolysis of cellulose with the aid of hydrochloric acid which comprises subjecting the carbohydrates in solution in admixture with an oxide of an alkaline earth metal to grinding, removing chloride containing liquid from the solid material, washing the separated solid material with fresh water, subjecting the washed solid material to reaction with carbonic acid under elevated pressure so as to decompose the saccharate and to liberate the carbohydrates, separating the sludge from the carbohydrate solution, and inverting the carbohydrate contained in the separated solution.

1,818,619. GAS ANALYSIS APPARATUS. THOMAS R. HARRISON, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 19, 1926. Serial No. 130,216. 12 Claims. (Cl. 73—51.)



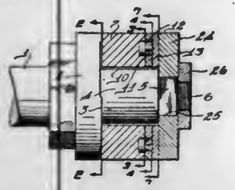
1. Gas analysis apparatus comprising gas cells and electrical resistance members therein, and an enclosing metallic structure formed with a gas cleaning and cooling space, gas cleaning provisions therein and connections for passing gas through said space into one of said cells.

1,818,620. SLACK PULLER. WALTER A. HEINRICH, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed May 3, 1926. Serial No. 106,286. 7 Claims. (Cl. 254—67.)



1. A slack puller comprising a frame, a housing joined thereto, a screw passing longitudinally and slidably therethrough, means for preventing rotation of the screw, a split nut associated with the housing adapted to fit said screw when closed, to feed the same into and out of said frame upon rotation of the nut, means for opening and closing said nut and means for driving the same, said driving means tending to hold the nut shut with a force which increases as the force exerted by the slack puller increases.

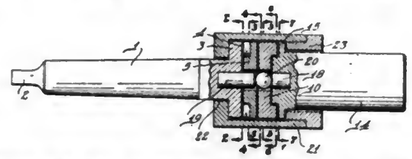
1,818,621. REAMER. ALBERT C. HOEH, Royal Oak, Mich. Filed Jan. 6, 1930. Serial No. 418,687. 6 Claims. (Cl. 279—16.)



1. A reamer comprising a shank, a reamer body loosely mounted on said shank, a disk fixedly mounted on said shank, a plurality of loosely mounted disks between said reamer body and said fixed disk, lugs mounted on said reamer body, fixed disk and certain of said loosely mounted disks and adapted to engage in perforations in said loosely mounted disks to provide a rotary driving connection permitting lateral movement of said reamer body relative to said shank.

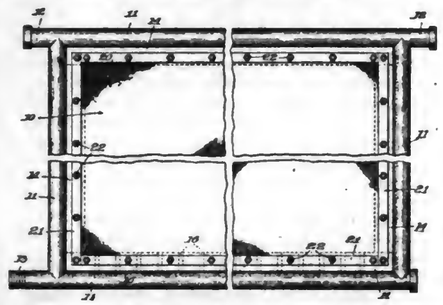
1,818,622. DRIVER FOR REAMERS AND THE LIKE. ALBERT C. HOEH, Royal Oak, Mich. Filed Jan. 6, 1930. Serial No. 418,688. 6 Claims. (Cl. 279—16.)

1. A driver comprising a shank having an enlarged head formed thereon, an adapter having an enlarged head formed thereon, an end thrust bearing between said adapter and said shank, loosely mounted disks between said heads, and a cup member provided with a nut adapted to draw said heads against said end thrust bearing, said heads and disks being provided with coinciding inter-



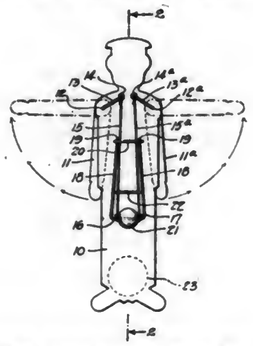
engaging lugs and recesses providing a rotary driving connection between said shank and adapter whereby the latter may be laterally displaced or angularly inclined relative to said shank.

1,818,623. FILTER PRESS LEAF. ROGER L. HOLCOMB, Chesterton, and EDWARD E. BARTELS, Hammond, Ind., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Apr. 13, 1928. Serial No. 269,804. 7 Claims. (Cl. 210—195.)



1. A filter press leaf comprising a solid frame, filtering media on either side of said frame, means for clamping said media to said frame including bolts passing through holes in said frame, and a conduit adjacent the exterior of a substantial portion of said frame and extending in substantially the same direction as that portion of the frame to which it is adjacent, the portion of said frame adjacent said conduit being provided with a plurality of passages extending therethrough and communicating with said conduit, said passages not coinciding with said bolt-holes and communicating with the interior of the frame and between the filter media thereon.

1,818,624. SIGNALING DEVICE FOR VEHICLES. MONTE E. HOVER, Venice, Calif., assignor of forty-eight per cent to Arthur Croxford, Salt Lake City, Utah. Filed Nov. 7, 1930. Serial No. 494,126. 3 Claims. (Cl. 116—37.)



1. A signaling device comprising a figure having arms, stub shafts journaled in the figure and to which the

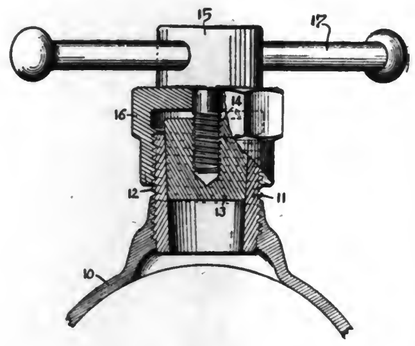
arms are secured, gears fixed to the stub shaft, a rock shaft journaled on the figure, other gears fixed to the rock shaft and meshing with the first mentioned gears, and a weighted member projecting from the rock shaft for actuating the latter to move the arms from lowered to raised position or vice versa according as the weighted member swings to one extreme position or another.

1,818,625. CONDUIT SECURING MEANS. JOSEPH H. HUNTER, Detroit, Mich., assignor, by mesne assignments, to General Cable Corporation, a Corporation of New Jersey. Filed Apr. 13, 1925. Serial No. 22,850. 2 Claims. (Cl. 248—36.)



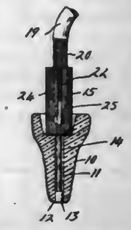
1. A securing device for a spirally corrugated conduit comprising a member having a curved portion adapted to embrace the conduit at a point intermediate its ends, the curved portion of said member being provided with corrugations providing for unobstructed threaded engagement between the member and the conduit, and means for securing said member to a support while maintaining said conduit in spaced relation to said support whereby said conduit may be rotated within said member for axial adjustment relative thereto.

1,818,626. PLUG EXTRACTOR. LEROY F. JOHNSTON, New York, N. Y., assignor to Waterbury Cable Service, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 15, 1929. Serial No. 386,211. 2 Claims. (Cl. 29—84.)



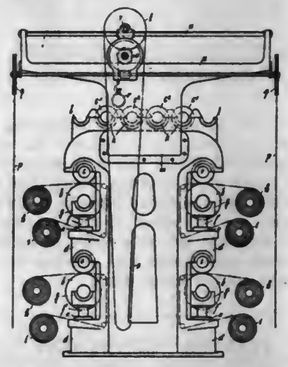
1. A plug extractor for a smooth tapered metallic plug with a threaded part when seated in a metallic nipple with a threaded end, the extractor comprising a cap for engaging the threaded end of the nipple, connecting means between the plug and the cap for engagement with the threaded part of the plug and seating on the top of the cap, means for restraining the connecting means from turning, and means for unscrewing the cap to withdraw the plug while the connecting means is restrained from turning.

1,818,627. INSTRUMENT FOR TREATING TEETH. ROBERT M. KERR, Detroit, Mich., assignor to Detroit Dental Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 21, 1929. Serial No. 338,971. 5 Claims. (Cl. 32—10.)



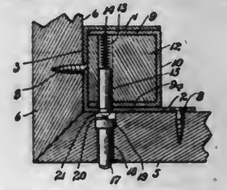
2. A dental instrument comprising a plugging tool having a threaded portion spaced from its free end, and a sleeve threadedly engageable with the threaded portion of said tool for regulating the operative length of the tool.

1,818,628. CALENDER WITH ROLL MAGAZINE. JOHANNES KLEINEWEFERS, Krefeld, Germany. Filed July 3, 1930, Serial No. 465,623, and in Germany May 16, 1929. 2 Claims. (Cl. 29—39.)



1. A calender with roll magazine, comprising in combination with the magazine spare rolls in said magazine and the side frames of the calender, a plurality of pairs of bearings open at the top arranged the one behind the other on said side frames adapted to receive said spare rolls, travelling crabs for exchanging the rolls, bracket like rail supports projecting laterally from said side frames, rails for said travelling crabs formed by the upper edges of said supports projecting outwardly beyond said frames, and roll grippers on said travelling crabs adapted to engage the journals of the rolls and to transport said roll freely between said rail supports.

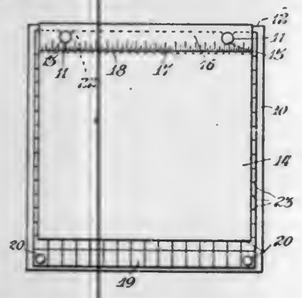
1,818,629. TABLE LEG. EDWARD L. KNAPP, Grand Rapids, Mich., assignor to National Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed July 11, 1927. Serial No. 204,698. 5 Claims. (Cl. 45—11.)



1. In combination with a table top having a depending border frame, a rigid member attached at each corner

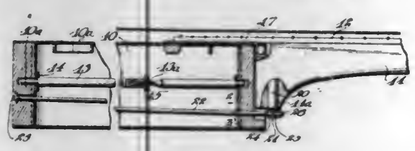
of the frame, a second member pivotally connected to the first member, a table leg attached to and extending from said second member, spring actuated locking means housed in the upper end of the said leg adapted to be projected at one end into an opening in the first member when the leg is turned to a position at right angles to the plane of the table top to thereby rigidly lock said leg against movement with respect to said tabel top, and means extending through said frame and manually operable from the outer side thereof engaging with said locking means to move the same to inoperative position and thereby release said leg so that it may be turned to lie against the under side of said table top.

1,818,630. SKETCHING DEVICE. NICHOLAS F. LAMBERTY, Chicago, Ill. Filed July 20, 1927. Serial No. 207,061. 1 Claim. (Cl. 281—3.)



A device of the class described comprising a flat base member; spaced binding posts adjacent one side thereof; a pad of superposed sheets bound together at one edge, the opposite edges of said sheets being free, there being perforations through the bound edges to fit over said binding posts; and a ruled sheet of heavy material secured to said base adjacent the free edges of said sheets, insertable between said sheets and notched at its inserted edge to engage said binding posts.

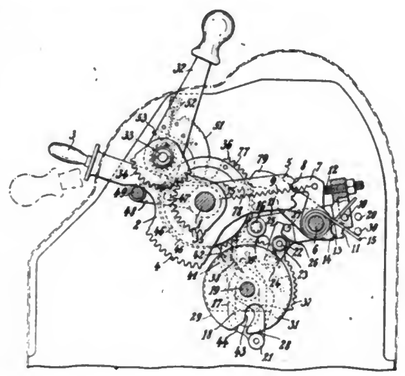
1,818,631. FRETTED INSTRUMENT ADJUSTING MEANS. AUGUST LARSON, Chicago, Ill. Filed May 29, 1930. Serial No. 457,367. 10 Claims. (Cl. 84—293.)



1. Adjusting means for the neck base of a musical stringed instrument relative to the body of the latter comprising, a bolt from the medial portion of the neck base threaded into the body wall to secure and adjustably space the neck from the body, the latter having medial and lateral facial cavities near the top, and medial and lateral screws directed from the upper part of the neck base to seat with their heads loosely in said cavities and constitute a pivot for the neck base during the adjusting action of said bolt.

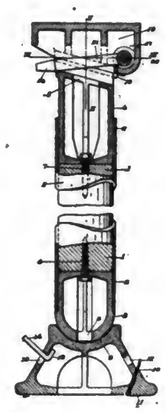
1,818,632. SETTING MECHANISM FOR CASH REGISTERS. KARL AUGUST LEHMANN and FRANZ RANGLACK, Essen, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Feb. 19, 1930, Serial No. 429,786, and in Germany May 7, 1929. 6 Claims. (Cl. 235—130.)

1. In a cash register, an amount setting member, locking means for rigidly locking said amount setting member, an extension on said locking means, a releasing member, a locking member connected to said releasing member said locking member engaging said extension to lock said locking means in an effective position, said locking member being moved from its locking position upon operation of said releasing member, a driving member operated during a machine operation, a disk connected to said driving



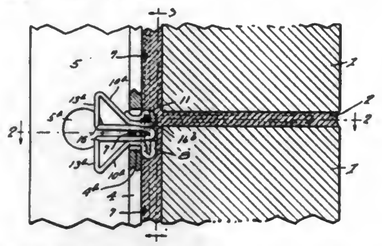
member, said disk engaging said extension during said machine operation, to lock said locking means in an effective position, a recess in said disk, said recess being located opposite said extension in the position of rest of the machine, said locking member being located in alignment with said recess during said position of rest to engage said extension and lock said locking means in an effective position.

1,818,633. MINE PROP. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 27, 1926. Serial No. 131,948. 11 Claims. (Cl. 248—2.)



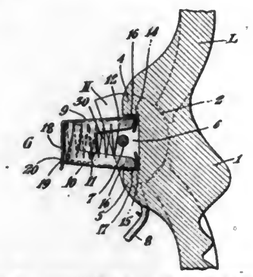
10. In a mine prop, the combination with a post having an inclined bearing surface; of a roof supporting cap supported upon said surface, and a latch pivoted to one of said elements and releasably engageable with the other to prevent accidental movement of said cap relative to said inclined surface.

1,818,634. BUILDING CONSTRUCTION. JAMES F. LOUCKS, Cleveland, Ohio, assignor to Detroit, Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed June 17, 1929. Serial No. 371,401. 9 Claims. (Cl. 72—118.)



8. Means for anchoring to a structural beam a backing for walls or partitions, the said means comprising an integral fastening device adapted to be applied to a part of the said backing and comprising a head member adapted to engage a portion of the backing, a shank member extending from said head member and a tongue member extending from the shank member and projecting beyond the head member, the tongue member being provided with a bending line intermediate its ends whereby, on driving such projecting end thereof into substantially the plane of the head member, the portion of the tongue member beyond the bending line will assume a position at an angle with respect to the other portion of the tongue member, thereby projecting a portion of the shank member into engagement with the said beam.

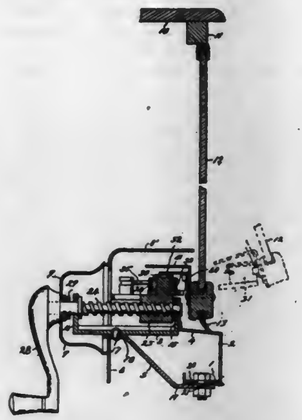
1,818,635. MOUNTING FOR DOLL EYES. SAMUEL MARCUS, Riverdale, and ALEXANDER KONOFF, New York, N. Y., assignors, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1928. Serial No. 265,539. 12 Claims. Cl. 46—40.)



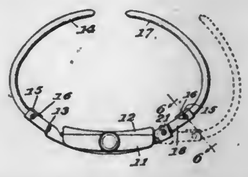
1. An eye set comprising a pair of eyes intended to rotatively engage within the eye sockets of a doll head, a cross rod upon which the eyes are mounted spaced apart, a gravity control for the eyes, and a separately formed attaching device, said attaching device comprising a pair of leg portions pivotally connected together and loosely straddling the cross rod in a position intermediate said pair of eyes, said legs having means to engage portions of a doll head for fixing the attaching device to the doll head by relative pivotal movement of the legs, and a spring arranged between said legs adapted for exerting a yielding pressure against the cross rod.

1,818,636. MEANS FOR SUPPORTING THE OPERATING MECHANISM FOR WINDSHIELDS. WILLIAM MARSHALL, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Original application filed June 20, 1927, Serial No. 200,090. Divided and this application filed Apr. 1, 1929. Serial No. 351,780. 5 Claims. (Cl. 296—84.)

1. In a means of the class described, the combination with a belt bar, of a bracket carried thereby having a plurality of flanges, certain of said flanges constituting bearings for a windshield actuating member, and an escutcheon plate secured to another flange of the plurality aforesaid and having means for receiving a portion of an operating member for the actuating member aforesaid.

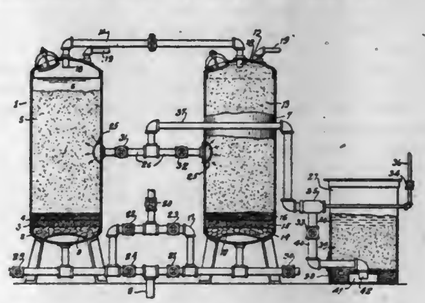


1,818,637. WRIST WATCH. SAMUEL MATHEZ, Brooklyn, N. Y., assignor to George P. Dike, Brookline, Mass. Filed Dec. 13, 1927. Serial No. 239,772. 6 Claims. (Cl. 224—4.)



1. In a wrist watch, a watch case, a fixed arm extension connected with said case, a movable arm extension having a hinge member connected with said case, a slotted plate connected with the watch case adjacent said hinge member, and latch members carried by said hinge member having portions adapted to engage the slotted plate when the parts are together to lock the movable arm extension.

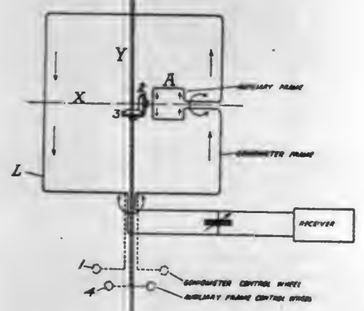
1,818,638. MULTIPLE FLOW BASE EXCHANGE WATER SOFTENER. CHESTER T. MCGILL, Elgin, Ill., assignor to Reiter Company, Elgin, Ill., a Corporation of Illinois. Filed Nov. 17, 1925, Serial No. 69,672. Renewed Nov. 2, 1929. 4 Claims. (Cl. 210—24.)



1. A base exchange water softener comprising a plurality of spaced tanks, filtering material in each of the

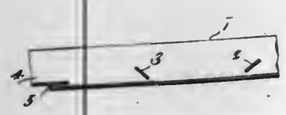
tanks, base exchange material supported on the filtering material, a connecting element establishing communication between each of the tanks at a point intermediate the upper surface of the base exchange material and the top of each of the tanks and adapted to carry the fine base exchange material from one tank to the other by the flow of liquid through the apparatus in either direction.

1,818,639. RADIO DIRECTION FINDING. ALEXANDER MEISSNER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Dec. 31, 1926, Serial No. 158,141, and in Germany Jan. 19, 1928. 3 Claims. (Cl. 250—11.)



2. A directional receiver including, a rotatable directional aerial, an auxiliary directional aerial adapted to be moved relative to said first named aerial to a position at which it predominantly responds to the vertical component of the received signal, and means for combining the energies in said aerials in phase opposition.

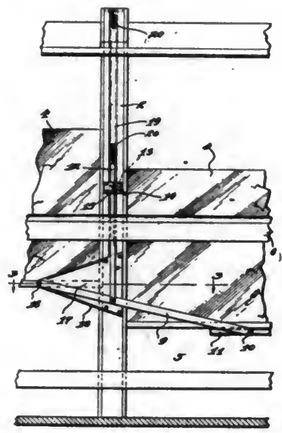
1,818,640. SEPARATION METHOD AND APPARATUS. BIANCA ADAMS MILLER, Ardmore, Pa. Filed Dec. 29, 1926. Serial No. 157,729. 2 Claims. (Cl. 209—458.)



1. The herein described method, which consists in mixing the material to be separated with a liquid concentrating medium, causing said material and liquid to flow in a form such that the bottom of the flow shall be converging, producing a successive batting so as to create stream reversals of pronounced difference in resistance said reversals acting in unison, and discharging the concentrate and waste through separate outlets at the tail end of the flow.

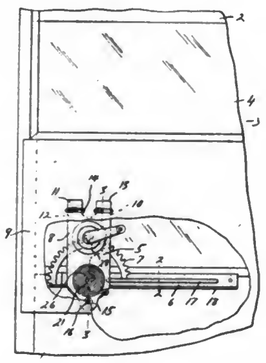
1,818,641. WINDOW REGULATOR. STANLEY W. NICHOLSON, Toledo, Ohio, assignor, by mesne assignments, to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 23, 1926. Serial No. 96,819. 8 Claims. (Cl. 268—126.)

1. In a vehicle having adjacent window openings and chambers for the openings and also windows for the openings movable into the chambers, a window regulator for actuating one of the windows including a pivotal lifter arm having a portion extending within a chamber and operatively connected to the window and a second portion



extending within an adjacent chamber, a pivotal mounting for said second portion within said last-mentioned chamber, and means for operating said lifter arm.

1,818,642. WINDOW REGULATOR. STANLEY W. NICHOLSON, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 5, 1926. Serial No. 99,926. 5 Claims. (Cl. 268—126.)

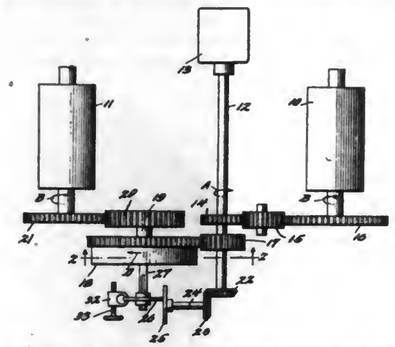


1. In a window regulator, the combination with a gear segment, of a pivotal lifter arm rigidly secured to said segment and means for reinforcing said arm against bending and twisting stresses and for locating said segment.

1,818,643. POWER TRANSMISSION MECHANISM. HENRY W. NIEMAN, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Mar. 22, 1930. Serial No. 438,144. 10 Claims. (Cl. 74—7.)

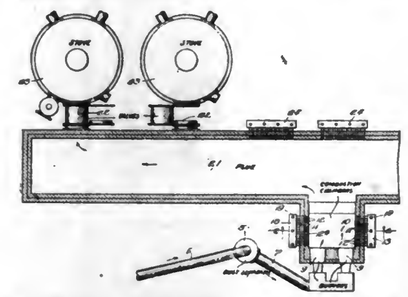
1. Mechanism of the class described, including, in combination, a power shaft, two driven shafts, a direct driving connection between the power shaft and one of the driven shafts, means connecting the power shaft and the other driven shaft including a drum connected to the power

shaft to be driven thereby, a work shaft, a control element, a friction band connecting the control element and work shaft and contacting with the drum, and means connecting



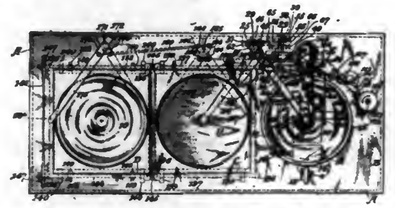
the power shaft and control element including a speed control device whereby the relative speeds of the power shaft and control element may be varied at the will of the operator.

1,818,644. MANUFACTURE OF PHOSPHORIC ACID AND PHOSPHATE COMPOUNDS. HARRY F. NOYES and ROTHE WEIGEL, Chicago Heights, Ill., assignors to Victor Chemical Works, a Corporation of Illinois. Filed June 9, 1926. Serial No. 114,708. 2 Claims. (Cl. 23—165.)



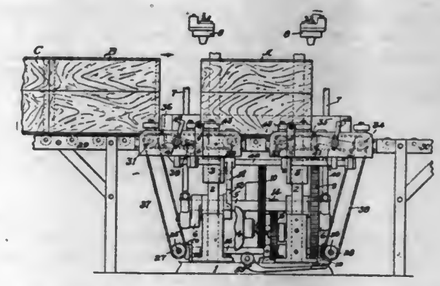
1. The method of producing oxidized products from phosphorus containing gases from volatilization furnaces and containing impurities derived therefrom which comprises burning such gases and effecting heat conductive contact between said gases and refractory surfaces in close proximity to the area of combustion and while the gases are carrying their full content of impurities, and cooling such refractory surfaces by passing water through closed passages therein, thereby forming sintered, slag-like masses including said impurities while permitting the phosphorus oxide to stay in suspension.

1,818,645. AUTOMATIC DISK RECORD PLAYER. JOSEPH A. O'NEILL, New York, N. Y. Filed June 17, 1925. Serial No. 37,667. 19 Claims. (Cl. 274—10.)



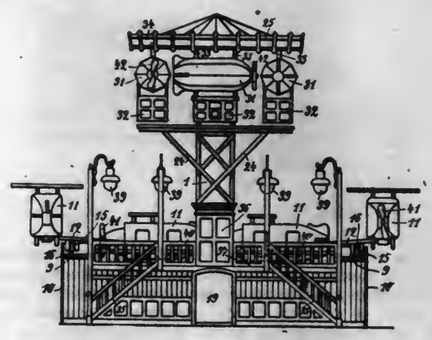
1. A phonograph mechanism having means for successively playing and interchanging disk records automatically including companion wells, superposed record supporting trays in said wells, means for simultaneously dropping the trays in one well and elevating them in the other, in combination with a record drum and a conveyor arm to transfer the records from and to the drum, and means for operating said mechanism.

1,818,646. STOP MECHANISM FOR BOX NAILING MACHINES. GEORGE D. PARKER, Riverside, Calif.; Clara B. Parker executrix of George D. Parker, deceased. Filed Sept. 25, 1929. Serial No. 394,983. 10 Claims. (Cl. 1—10.)



1. An apparatus for nailing covers to boxes comprising a nailing station including a series of nailing chucks, power operated roller means located under said chucks, a trackway along which boxes may move when engaged by said rollers, spaced stop means located in said trackway timed to engage adjacent boxes and space them along said trackway and hold them against movement during the nailing operation, and power means for operating said spaced stop means to release said adjacent boxes to permit their continued movement long said trackway and to then intercept the next two adjacent boxes moving along said trackway and intercept their movement during the cover nailing operation.

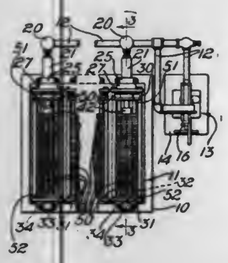
1,818,647. MERRY-GO-ROUND. KARL PRÖNNECKE, Quedlinburg, Germany. Filed Apr. 19, 1929, Serial No. 356,416, and in Germany Mar. 14, 1929. 1 Claim. (Cl. 272—28.)



An amusement vehicle of the type described, comprising in combination a supporting tower, a plurality of flying machines in the lower portion of said tower, two supporting frames for each of said flying machines, radial rods connected one to each of said frames, a ring around said supporting tower adapted to support the inner ends of said rods, a toothed rim fixed to said ring, means for rotating said ring and therefore said flying machines, a curve track arranged under said frames round said tower, a solid rubber wheel on each of said frames adapted to run on said track, a spring adapted to connect the two

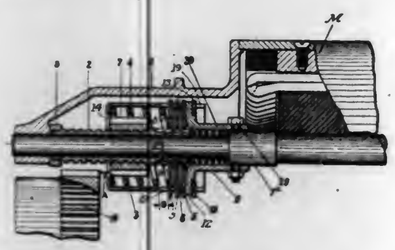
frames of each flying machine, pliable means adapted to connect and space the one from the other the two frames of one flying machine with those of the preceding and next following flying machine, a roof on the upper end of said supporting tower, a plurality of airships suspended from said roof around said supporting tower, a vertical axle in said tower supporting said roof, means for rotating said roof and therefore said airships in the opposite direction to that in which said flying machines, are rotated, a platform at the upper end of said tower adapted to afford access to said airships, and a staircase in the interior of said tower leading to said platform.

1,818,648. APPARATUS FOR PRESSING CONDENSERS. CHESTER ARTHUR PUADY, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 12, 1925. Serial No. 36,766. 6 Claims. (Cl. 100—50.)



6. In an apparatus for pressing condensers, a removable tray for supporting a plurality of condensers, means for applying pressure to the condensers supported in said tray, and means for permitting a rotation of the tray on the horizontal axis thereof while the pressure is maintained.

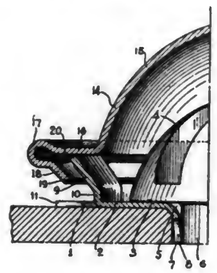
1,818,649. ENGINE STARTER. JULIUS H. RICHARDS, Torrington, Conn., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Oct. 18, 1923. Serial No. 669,202. 11 Claims. (Cl. 74—7.)



1. An engine starter drive including a rotatable shaft, a driving member mounted thereon for longitudinal movement thereon and for rotary movement therewith, a driving shaft, a friction clutch operatively connected with said two shafts, and a barrel enclosing the clutch and the driving member when the latter is in its normal position but permitting such driving member to move longitudinally outwardly.

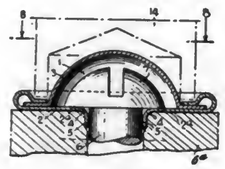
1,818,650. SEAL. OSCAR A. ROSS, New York, N. Y. Filed Apr. 4, 1927. Serial No. 180,798. 6 Claims. (Cl. 85—55.)

1. A two part seal arranged to be applied to the exposed portion of a removable fastener comprising in combination; a centrally orificed washer member through which the fastener protrudes forming the base of the seal arranged to be positioned as the fastener is secured in place, an upwardly extending concentric locking rim portion formed on the washer positioned between the orifice and the periphery thereof, a cap member arranged to form an enclosure for the exposed portion of the fastener, a downwardly extending locking rim portion formed



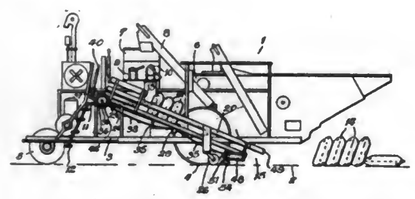
thereon arranged to surround the washer locking rim portion as the cap member is initially placed over the locking rim portion of the washer member and to be bent into interlocked relation between the washer locking rim portion and the upper surface of the washer when the cap member and the washer member are locked together with a tool.

1,818,651. SEAL. OSCAR A. ROSS, New York, N. Y. Filed Apr. 7, 1927. Serial No. 181,810. 4 Claims. (Cl. 85—55.)



1. An article of manufacture adapted to be applied to the exposed portion of a removable fastener which comprises:—an orificed washer member through which the fastener protrudes arranged to be positioned and form the base of the article as the fastener is secured in place, an upwardly and inwardly extending semi-formed locking rim member forming the peripheral portion thereof, a cap or seal member arranged to enclose the exposed portion of the fastener, and a semiformed locking rim member formed thereon as the peripheral portion thereof arranged to be surrounded by the washer locking rim member and be bent into interlocked relation therewith as the locking rim members are completely formed to effect a seal over the exposed portion of the fastener.

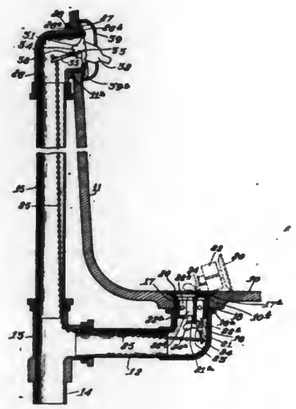
1,818,652. SACK CHUTE. HERMON COLE SCOTT, Pomeroy, Wash. Filed July 17, 1928. Serial No. 293,369. 1 Claim. (Cl. 214—65.)



In a sack chute the combination with a mobile apparatus, and a chute pivotally attached thereto, of means

to maintain the discharge end of said chute in fixed relation to the ground, during the travel of said apparatus, side boards attached to said chute, and positioned at a height above said chute approximating that of an erect sack, to provide guideway for the erect sacks of a load, and extended beyond the discharge end of the chute to provide a tail guide, said tail guide being disposed, with respect to the ground to maintain a height approximating that of a sack resting erect on the ground, a vertically adjustable extension member attached to the other side of said chute to support a sack transversely and erect, at the point and time of introduction into said chute, utilizing the first sack introduced, and laid down, as a buttress and means to forcibly and successively advance the loaded sacks, during the loading operation, a distance to permit loading successive sacks, one at a time, and to continue the advance of the entire load when completed, to deposit the load from the end of the chute, sack by sack, to the ground, maintaining the erect position of the sacks during discharge by means of the said tail guide.

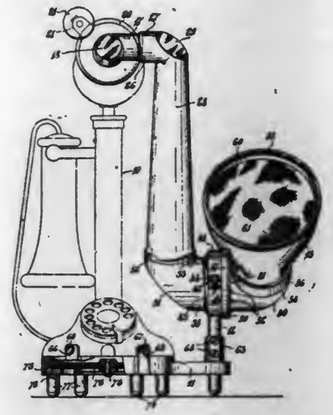
1,818,653. WASTE MECHANISM. HARRY S. STEEN, Chicago, Ill., assignor to The Chicago Faucet Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1930. Serial No. 437,217. 10 Claims. (Cl. 4—208.)



1. Waste mechanism of the character described, including; a seat member having a waste outlet sleeve with a valve seat at the upper end; a guide member frictionally held in said sleeve; a reciprocable valve adapted to seat on said seat or be raised therefrom, and provided with a stem slidably mounted in said guide member; a reciprocable control member located in a position remote from the valve; and a connection between said control member and said valve, including a flexible member, whereby movement of said control member will operate said valve.

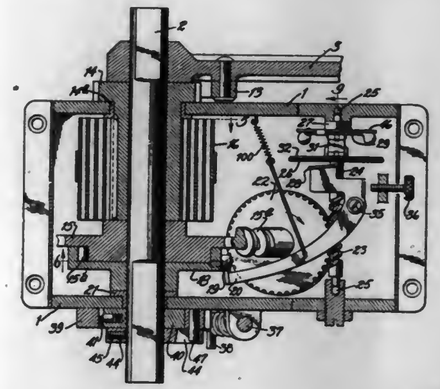
1,818,654. MOUTHPIECE ARRANGEMENT FOR USE WITH TELEPHONES AND THE LIKE. DOUGLAS STUART SPENS STEUART, Regent's Park, London, England. Filed May 24, 1930, Serial No. 455,419, and in Great Britain May 28, 1929. 15 Claims. (Cl. 179—187.)

15. An arrangement for enabling a wall or desk-type telephone to be used efficiently while enabling the user to speak at a distance, comprising an adaptor for fitting to the telephone and an enlarged mouthpiece having a long



passage extending to the adaptor and including a number of sound deflecting surfaces suitably arranged and designed for transmitting sound efficiently to the telephone.

1,818,655. DOORCHECK. BERNARD SUMMERFIELD, Chicago, Ill. Filed Sept. 29, 1928. Serial No. 309,251. 2 Claims. (Cl. 188—187.)

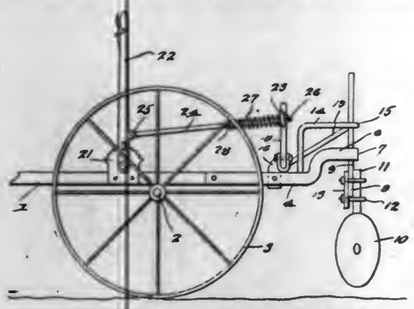


1. A device of the character described including a spring urged rotatable member; means for retarding rotation of said member including a rotatable governor member with a brake shoe in frictional contact therewith; and means controlled by rotation of the spring urged member for lessening the retarding action, said means including a cam carried by the rotatable member and a cam shoe riding on said cam, said cam shoe being rigidly connected with said brake shoe; and locking means for fixedly holding said spring urged rotatable member at a predetermined point.

1,818,656. PLANTER ATTACHMENT. JULIAN M. TAYLOR and ROBERT H. TAYLOR, Las Cruces, N. Mex. Filed May 21, 1930. Serial No. 454,345. 4 Claims. (Cl. 97—56.)

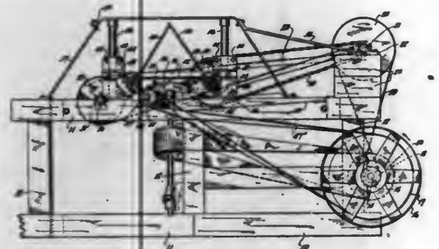
3. A planter attachment of the character described comprising a pair of bars mounted on the planter frame and projecting rearwardly therefrom, eyes on the free end of the bars, substantially L-shaped brackets mounted on the bars and having eyes on one end disposed in vertical alinement with the first-named eyes, bearing blocks mount-

ed on the planter frame, a shaft mounted for rocking movement in the bearing blocks, a pair of arms fixed to the shaft and extending rearwardly and upwardly therefrom, links pivotally suspended from the free end portions of the arms, a horizontally disposed transversely extending beam loosely mounted on the lower ends of the links,



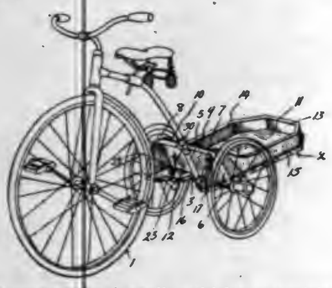
pairs of coacting disks adjustably mounted on the opposite end portions of the beam, upstanding guide rods on the beam extending slidably through the vertically alined eyes, and means for adjusting the disks vertically and for maintaining the same in yielding engagement with the ground.

1,818,657. BARKING APPARATUS. WALTER D. TALBOTT and LEVI BANNERMAN, Hopewell, Va., assignors of one-third to Frederick E. Hummel, Hopewell, Va. Filed Feb. 27, 1928. Serial No. 257,405. 13 Claims. (Cl. 144—208.)



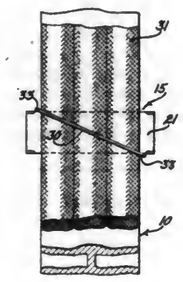
1. A barking apparatus comprising a frame, bark removing means mounted in said frame, and automatically operated eccentrically mounted rotatable roller means for feeding a length of material having bark to said bark removing means and for imparting a transverse rocking motion to said material as it is being fed, lengthwise through the apparatus.

1,818,658. JUVENILE VEHICLE ACCESSORY. CHARLES D. THOMPSON, Walkerville, Ontario, Canada. Filed Sept. 25, 1930. Serial No. 484,393. 13 Claims. (Cl. 208—45.)



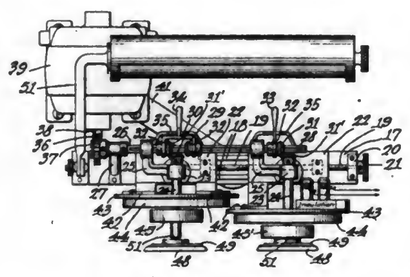
1. An accessory for juvenile vehicles comprising a platform having a portion adapted to rest upon an axle of the vehicle and having a slot in said portion for receiving another portion of the vehicle, and means on the platform for establishing a separable connection with the vehicle.

1,818,659. CLAMPING DEVICE. EDWARD PAUL TOURNIER, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 28, 1927. Serial No. 164,270. 5 Claims. (Cl. 248—32.)



1. In a device for attaching a strand to a support, a member having a unitary channel portion and a pair of oppositely disposed jaws for resiliently engaging the support, and means resting on opposite vertical sides of said channel portion for securing the strand thereto.

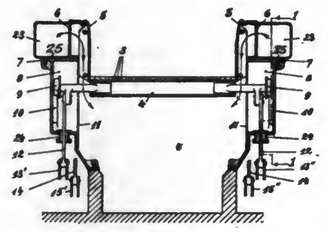
1,818,660. MEANS FOR TESTING AND EXERCISING THE OCULAR MUSCLES. WILLIAM MARSH UPDEGRAVE, Johnstown, Pa. Filed May 23, 1929. Serial No. 365,374. 4 Claims. (Cl. 88—20.)



1. In a device of the class described, a main support, laterally adjustable supporting members on the main support, said supporting members having a plurality of openings, charts to be viewed by a person having an eye test, pins extending from the charts and extending into the openings of the supporting members to adjustably support the charts, and means for rotating the supporting members to rotate the charts.

1,818,661. HEATING FURNACE. ALBERT WEIGEL, Munich, Germany, assignor to the Firm: Vesuvio Feuerungsbau-gesellchaft mit beschrankter Haftung, Munich, Germany. Filed May 19, 1927, Serial No. 192,702, and in Germany Sept. 27, 1926. 5 Claims. (Cl. 110—38.)

1. In a stepped grate in combination, a fire-box, a plurality of respectively stationary and reciprocatingly movable grate steps in parallelism with each other, and alternatingly disposed in the fire-box, side chambers in the fire-box walls, laterally bordering the grate steps and extending lengthwise of the fire-box, supporting means for

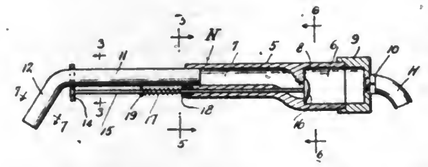


the grate steps extending into said side chambers, and means in said side chambers for actuating the movable grate steps.

1,818,662. MANUFACTURE OF PHOSPHORUS AND PHOSPHORUS COMPOUNDS BY VOLATILIZATION PROCESSES. ROTHE WEIGEL and HENRY W. EASTERWOOD, Nashville, Tenn., assignors to Victor Chemical Works, a Corporation of Illinois. Filed Mar. 18, 1929. Serial No. 348,115. 9 Claims. (Cl. 23—223.)

1. The method of producing phosphorus in a volatilization furnace which comprises commingling phosphorus-containing mineral and carbonaceous material and forming coherent briquettes thereof of constant average composition, charging such briquettes with additional separate silicious and carbonaceous material into the furnace to pass into the volatilization zone therein, and maintaining a temperature in said furnace to liberate phosphorous and form a molten slag.

1,818,663. GASOLINE DISPENSING NOZZLE. CARL G. ABBOTT, Haviland, Kans. Filed Mar. 5, 1930. Serial No. 433,419. 4 Claims. (Cl. 251—137.)

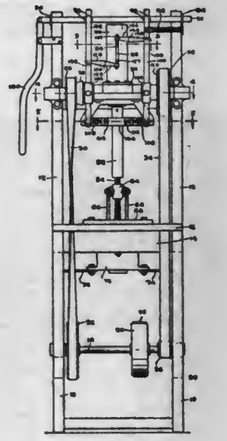


1. A nozzle structure of the class described comprising an elongated tubular body having one end portion reduced and offset to provide an offset and reduced bore, a valve seat shoulder formed at the entrance of the reduced bore, a valve seatable against the valve seat shoulder, and having a stem slidable longitudinally through one wall of the reduced end portion, spring means on the stem normally holding the valve closed, a pipe protruding from the end of the reduced portion, and means on the valve stem for opening the valve, said means comprising a disk having an eccentric hole therein to mount it slidably on the pipe.

1,818,664. REVERSING MECHANISM. HELMER ANDERSON, Minneapolis, Minn., assignor, by mesne assignments, to General Mills, Inc., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,520. 5 Claims. (Cl. 74—14.)

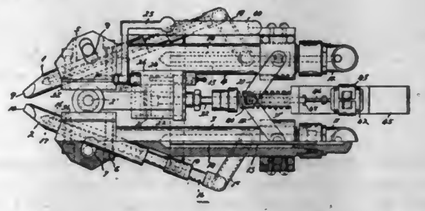
1. In a reversing mechanism, the combination of a plunger, a shaft, a screwthreaded rod slidably carried by said shaft and having said plunger attached to one end thereof, a fixed threaded member with which said rod is engaged, two clutches operating in alternation to rotate said shaft in opposite directions for reciprocating said plunger, means by which the plunger retracting clutch rotates said shaft faster than the plunger advancing

clutch does, a spring alternately placed under compression and tension, and connections between said spring



and clutches whereby the latter are alternately brought into operative position at the ends of the strokes of said plunger.

1,818,665. WELDING APPARATUS. JOSEPH A. BAKER, Roseville, Mich., assignor, by mesne assignments, to Chrysler Corporation, a Corporation of Delaware. Filed May 23, 1927. Serial No. 193,608. 11 Claims. (Cl. 219—4.)



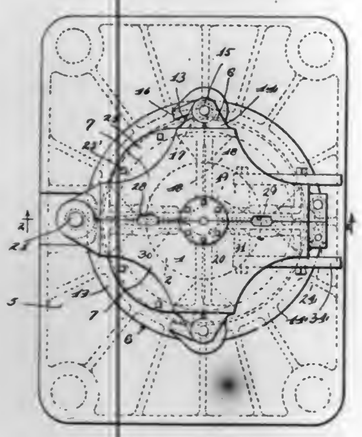
1. In a welding apparatus, a pair of welding electrodes arranged to co-operate with each other to effect a welding operation, movable supports for said electrodes, a primary switch disposed between said supports, actuating means for said supports extending therebetween, and actuating means for said switch including means operatively connected to said first mentioned actuating means.

1,818,666. FASTENING POINT FOR SHANK STIFFENERS. REINHARD E. BARTELS, Lynn, Mass.; IDA M. BARTELS and R. BURLEIGH BARTELS, executors of said Reinhard E. Bartels, deceased. Filed Nov. 24, 1926. Serial No. 150,559. 4 Claims. (Cl. 36—76.)



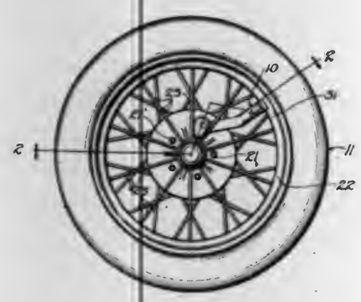
4. A shank stiffener comprising a longitudinally curved metal strip, said strip being laterally bent to form a longitudinal rib extending a portion of its length, and a fastening point welded to said rib intermediate the ends thereof.

1,818,667. MOLDING APPARATUS. ARTHUR T. BATEMAN and ANDREW IRVINE, Detroit, Mich., assignors to Bohn Aluminum & Brass Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 30, 1928. Serial No. 296,380. 9 Claims. (Cl. 22—136.)



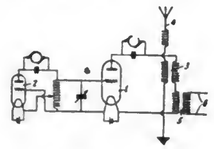
1. In a molding apparatus the combination of a pair of pivotal mold sections, and a mold section pivotally connected to each of said first mentioned sections, all of said sections having mold cavity forming faces in their inner portions and mold cavity forming faces in their end portions arranged to cooperate in the operative position of said sections in forming a mold cavity with a central portion and portions radiating therefrom.

1,818,668. THEFT PREVENTING DEVICE. FREDERICK E. BEACH and EDGAR G. PETERSEN, Chicago, Ill., assignors to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 9, 1928. Serial No. 298,499. 5 Claims. (Cl. 70—90.)



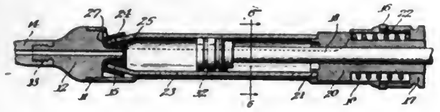
1. In a tire lock, the combination of a support with a wheel and pneumatic tire carried by said support, an auxiliary member carried by said support and having an arm embracing the valve stem of said tire, and locking means for securing said arm upon said support, said arm having shoulders adjacent said valve stem for engaging oppositely disposed shoulders upon a wheel part.

1,818,669. RADIO FREQUENCY TELEGRAPHY AND TELEPHONY SYSTEM. AUGUST BECKMANN, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 9, 1925, Serial No. 1,338, and in Germany Jan. 11, 1924. 4 Claims. (Cl. 250—6.)



1. In a communication system the combination of means for transmitting radio frequency oscillations by wireless in a directional manner to one group of stations and means for simultaneously transmitting at the same radio frequency by wire to another group of stations without the range of said directive transmission.

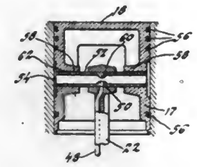
1,818,670. HYPODERMIC EQUIPMENT. WILLIAM H. H. BIXLER, Baltimore, Md. Filed Sept. 24, 1929. Serial No. 394,843. 6 Claims. (Cl. 128—218.)



1. A side-loading syringe of the removable cartridge-ampoule type comprising, in combination, a syringe body provided with a side opening adapted for the insertion and withdrawal of a cartridge-ampoule therethrough, an apertured needle-connection at one end of said body, and a spring-pressed retractable ampoule-follower at the other end thereof, said apertured needle-connection embodying an inwardly projecting nipple-member, a removable cartridge ampoule comprising a glass body having a piston member movable from the rear-end toward the forward end thereof and having a resilient closure member in the forward end thereof provided with a preformed aperture extending therethrough adapted to receive and closely embrace said nipple-member, said ampoule being of less overall length than the space between the inner end of said nipple-member and the ampoule-follower when the latter is retracted, whereby upon retraction of said follower-member an ampoule can be dropped from the side into said body without engagement over said nipple and thereafter be engaged therewith by movement of said follower, and means operable through said follower for moving said piston member of said cartridge-ampoule.

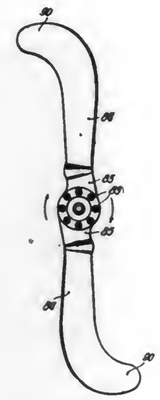
4. A cartridge ampoule comprising a glass body interiorly cylindrical throughout the greater part of its length and provided with a section interiorly substantially frusto-conical with its smaller base constituting an opening through the forward end of the body; a piston member interiorly movable from the rear-end toward the forward end of said body; and a closure for the forward end of said body comprising a resilient member consisting of a frusto-conical portion fitted to said interiorly frusto-conical body section and a flange portion extending outwardly about the smaller base of said frusto-conical portion for abutting the forward end of said glass body surrounding the opening therethrough, said resilient member having a substantially axial preformed aperture extending therethrough adapted to receive, tightly embrace and be expanded by either a closing-pin or a nipple-member associated with a hypodermic needle holder, said flange portion constituting both means to prevent said resilient member from being driven into the glass body when such closing-pin or nipple-member is being entered into said preformed aperture and means for abutting a supporting face when the ampoule is mounted in a discharging device to provide cushioned support therefor, and said inwardly expanding frusto-conical portion constituting means compressible against such nipple member and the frusto-conical section of said body under the influence of internal pressure in the ampoule when the same is being discharged to tightly seal the forward end thereof as well as means for preventing pulling out of said resilient member from said body when such closing-pin or nipple-member is being withdrawn from said preformed aperture.

1,818,671. PISTON LUBRICATION. CARL BREER, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 19, 1926. Serial No. 123,388. 4 Claims. (Cl. 184—18.)



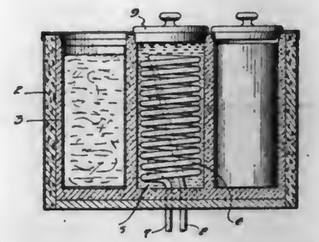
1. In a piston lubricating system of the class described comprising a piston having a skirt portion, wrist pin bearings carried by said skirt portion, a hollow wrist pin carried by said bearings, an annular depressed portion around the outer periphery of said skirt portion communicating with the ends of said hollow wrist pin and having a width greater than the diameter of said wrist pin for providing a lubricant well therebelow, and means for supplying lubricant under pressure to said hollow wrist pin.

1,818,672. WIND OPERATED POWER PLANT. HERBERT E. BUCKLEN, Elkhart, Ind., assignor to Herbert E. Bucklen Corporation, a Corporation of Indiana. Filed Mar. 10, 1928. Serial No. 260,727. 5 Claims. (Cl. 170—60.)



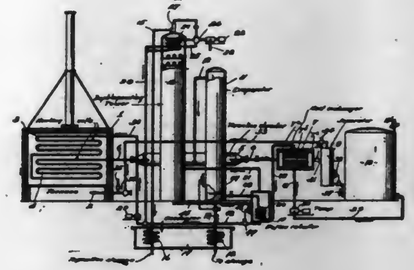
1. In impeller of the type herein described and adapted for extracting power from the wind at relatively high speed having a flexible blade secured at its inner end to a supporting shaft, said blade having a flag end extending from the main body of the blade at its outer end in a direction rearwardly with reference to the direction of rotation of blade and being adapted under wind pressure to change the pitch of the glade.

1,818,673. REFRIGERATING APPARATUS AND METHOD OF HEAT TRANSFER THEREIN. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Apr. 11, 1928. Serial No. 269,070. 8 Claims. (Cl. 62—95.)



2. An ice cream cabinet or similar structure comprising, one or more ice cream cans, a body of brine positioned centrally of said ice cream can or cans, means for conducting a volatile refrigerant immersed in said brine, and a heat conducting medium of a different nature positioned around said ice cream can or cans.

1,818,674. PROCESS AND APPARATUS FOR CONVERTING HYDROCARBONS. WALTER M. CROSS, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Mar. 11, 1925. Serial No. 14,642. 7 Claims. (Cl. 196—51.)

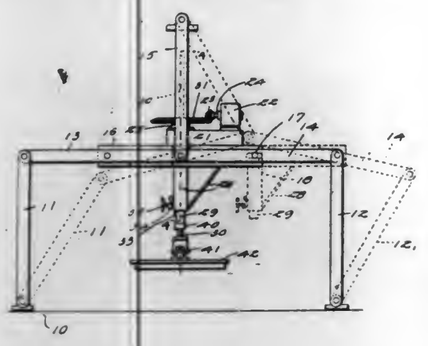


1. A process for converting hydrocarbons, comprising the steps of heating and digesting the oil at relatively high temperatures and pressures, withdrawing the cracked products while in a highly heated condition, cooling said cracked products in a heat exchanger stage and utilizing the heat given up in the heat exchanger stage to reheat the cooled products to a temperature sufficient to distill off the lighter constituents, passing said reheated products to stages of vaporization, dephlegmation and final condensation serially connected, utilizing a portion of the heat of the reheated oil to revaporize the oil constituents separated out during dephlegmation.

1,818,675. STONE POLISHER SUPPORT. CHARLES S. CUSHMAN, Barre, Vt. Filed Mar. 24, 1928. Serial No. 264,454. 8 Claims. (Cl. 51—56.)

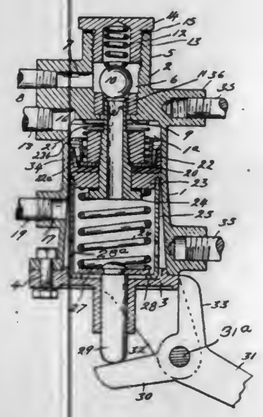
1. A tool support including a base, links pivotally connected with the base and extending upwardly therefrom, links pivotally connected to the base carried links at their outer ends and being pivotally connected together at their inner ends, a link connected with the pivotal connections

of the last-named links and having its other end connected with a support, and a link pivotally connected with



the intermediate portion of one of said connected links and having its other end slidably and pivotally connected with the other end of the last-named links.

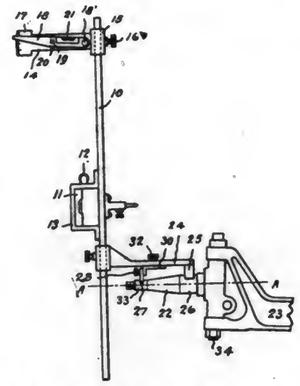
1,818,676. FLUID BRAKING VALVE. WADE DOTY, Jamestown, N. Y., assignor to International Air Brake Company, Salt Lake City, Utah, a Corporation of Utah. Filed Apr. 11, 1929. Serial No. 354,424. 5 Claims. (Cl. 303—54.)



1. A fluid braking control valve comprising a casing having a plurality of openings, a piston slidable in said casing exercising control of said openings, a spring bearing at one end against said piston, an abutment for the other end of said spring, movable toward the piston to compress said spring, a seat for said abutment rigidly carried by the piston, and means effective upon the piston through said abutment and spring to actuate the piston.

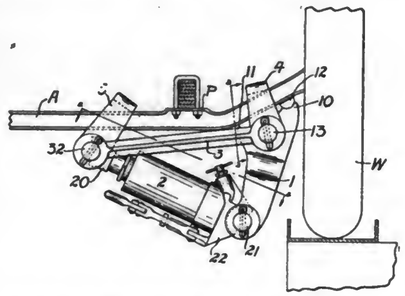
1,818,677. WHEEL GAUGE. CLAUDE C. BENNETT, Seattle, Wash., assignor to A. E. Feragen, Inc., Seattle, Wash., a Corporation of Washington. Filed Aug. 6, 1928. Serial No. 297,686. 7 Claims. (Cl. 33—203.)

1. In a gauge of the class described, a bar, means on the bar for engaging with a wheel bearing spindle to support the bar upright in a plane parallel to the plane in which a wheel would be supported by said bearing spin-



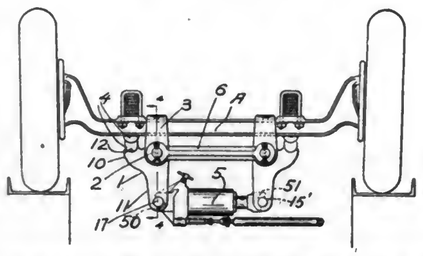
die, and means held on said bar in the plane of the spindle for gauging the inclination of the spindle's axis relative to the vertical.

1,818,678. AXLE PRESS. CLAUDE C. BENNETT, Seattle, Wash., assignor to A. E. Feragen, Inc., Seattle, Wash. a Corporation of Washington. Filed Jan. 28, 1930. Serial No. 423,927. 14 Claims. (Cl. 153—38.)



1. An axle press comprising, in combination, a jack, a lever having one arm adapted to bear against an axle to be bent, and to have its other arm engaged by one of the relatively movable parts of said jack, and a stress-transmitting member connecting the other relatively movable part of said jack and the pivot of said lever.

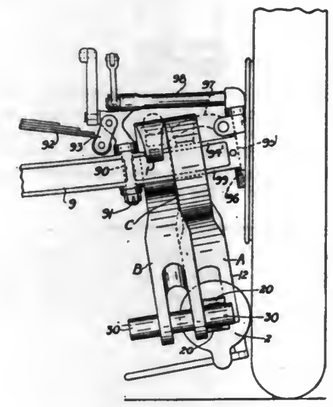
1,818,679. AXLE PRESS. CLAUDE C. BENNETT, Seattle, Wash., assignor to A. E. Feragen, Inc., Seattle, Wash., a Corporation of Washington. Filed June 25, 1930. Serial No. 463,601. 10 Claims. (Cl. 153—40.)



1. In an axle press, in combination, two levers, each having an arm extending laterally from its pivot and adapted

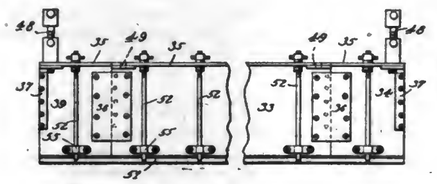
to bear beneath an axle to be bent, and a depending arm, means for supporting each lever in operative position beneath the axle, means for changing the separation between the depending arms, thereby to exert a bending stress through the lateral arms, and means to prevent a change in spacing between the respective pivots.

1,818,680. AXLE-TWISTING DEVICE. CLAUDE C. BENNETT, Seattle, Wash., assignor to A. E. Feragen, Inc., Seattle, Wash., a Corporation of Washington. Filed Oct. 22, 1930. Serial No. 490,455. 5 Claims. (Cl. 153—78.)



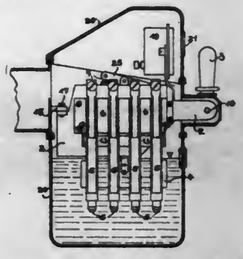
1. An axle-twisting device comprising a pair of complemental members each hooked at its upper end to engage over the edge of an upper flange of the axle, and its lower end lying at the same side of the axle and below such point of engagement, an intermediate portion engaging the edge of the lower flange at the opposite side of the axle, and a jack engaged with the two lower ends and operable to separate them to apply a twisting stress.

1,818,681. PAPER MAKING MACHINE. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Aug. 20, 1928. Serial No. 300,629. 11 Claims. (Cl. 92—44.)



1. In a paper making machine, a head box having single plate pond sides each connected together at one end by a tie rod and pivotally mounted at the opposite end to provide for deckle lift and being adjustable laterally to take care of changes in deckle widths, an inside slice and a main slice interposed between and mounted on said single side plates, the slices being variable in length corresponding with changes of deckle width, and means for adjusting the slices in the direction of travel of the wire.

1,818,682. AUTOMATIC SWITCH. ERNST BESAG, Baden-Baden, Germany. Filed Feb. 7, 1928, Serial No. 252,641, and in Germany Feb. 2, 1927. 5 Claims. (Cl. 200—116.)



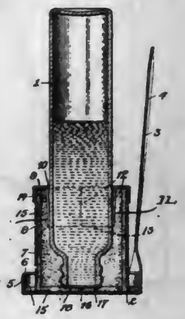
1. An automatic switch comprising a plurality of constructional parts forming connecting elements and switch elements, a locking mechanism, a pair of spaced plates between which the elements of the locking mechanism are mounted, and means for mounting all of said constructional parts upon said spaced plates.

1,818,683. BOOT AND SHOE. LEONHARD BISCHOFF, Offenbach-on-the-Main, Germany, assignor to Schuhfabrik Hassia Aktiengesellschaft, Offenbach-on-the-Main, Germany. Filed Dec. 12, 1929, Serial No. 413,671, and in Germany Dec. 13, 1928. 4 Claims. (Cl. 36—71.)



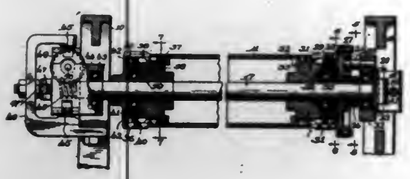
1. A shoe having a metatarsal support, fastening means for detachably securing such support to the inner sole of the shoe, means permitting said fastening means to move within limits relative to the lower surface of the support, and means for supporting said fastening means, said fastening means movable on said supporting means in any direction.

1,818,684. VAPORIZING DEVICE. IRVING BLECHMAN, New York, N. Y. Filed Sept. 20, 1930. Serial No. 483,330. 6 Claims. (Cl. 299—24.)



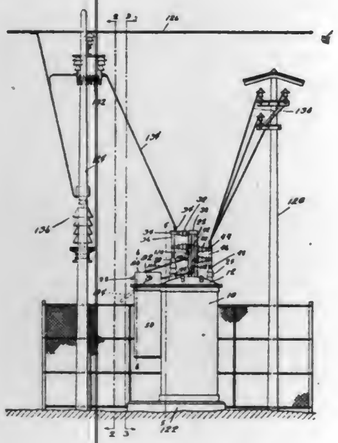
2. A vaporizing device comprising a support, an enclosed wall having openings therein secured to said support, a cover having a depending flange arranged to forcibly fit about the top of said wall, said cover having an opening and converging arcuate sectors formed about the said opening, absorbent material on the bottom of the support and about the interior of the circular wall and an inverted bottle having an opening in its top positioned in the opening in the cover and held in engagement with the absorbent material on the bottom of the base by the said converging sectors.

1,818,685. AUTOMATIC BELT ADJUSTER. HAROLD J. BRUNK, Chicago, Ill., assignor, by mesne assignments, to The C. F. Pease Company, a Corporation of Delaware. Filed Feb. 24, 1927. Serial No. 170,560. 11 Claims. (Cl. 74—51.)



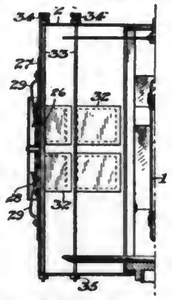
1. The combination with a frame, of a roller, a pivotal support for one end of said roller, adjustable longitudinally of said frame, a carrier for the other end of said roller, wheels thereon, a track associated with said frame, on which said rollers and carrier are permitted a limited movement longitudinally of said frame in either of two directions from mid-position, a belt traveling over and rotating said roller, means actuated by said belt upon deviation thereof from its normal position between the ends of said roller for moving said carrier along said track to shift the axis of rotation of said roller and cause said belt to travel in a direction opposite to said deviation movement, and means for stopping the travel of said carrier before it reaches the limit of said movement permitted it by said track.

1,818,686. SELF-CONTAINED RURAL SUBSTATION. GEORGE A. BURNHAM, Saugus, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 6, 1928. Serial No. 252,183. 14 Claims. (Cl. 175—298.)



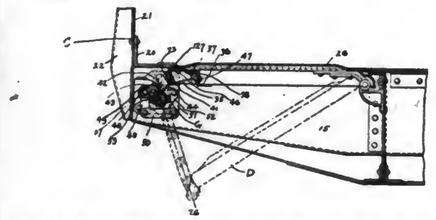
1. An outdoor substation adapted for direct connection to overhead distribution lines including a power transformer having an enclosing casing, a circuit breaker carried by said casing and connected with the windings of said transformer, and disconnecting switches carried by and disposed exteriorly of the transformer casing and connected with the transformer windings therein, the fixed terminals of said disconnecting switches also constituting exposed terminals for said overhead lines.

1,818,687. COLOR FADING CABINET AND FILTER. LEROY J. BUTTOLPH, East Orange, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed June 27, 1924. Serial No. 722,872. 9 Claims. (Cl. 88—14.)



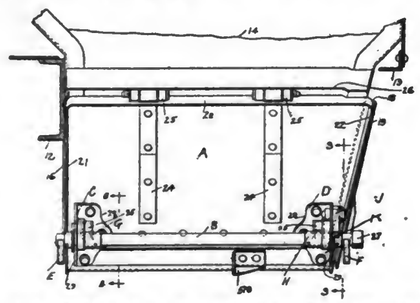
1. In a color fading and testing apparatus, in combination, a source of light, means for holding color samples for exposure to said source, and light filtering means carried by said holding means and positioned between the sample and the said light source adapted to stop rays capable of producing heat at the sample.

1,818,688. LOAD DISCHARGING CAR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1928. Serial No. 259,940. 17 Claims. (Cl. 105—301.)



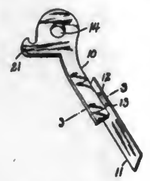
1. In a railway car, the combination with a car door; of a swinging operating shaft; a connection from the shaft to the door, said connection including: an end link pivotally attached to the door; and interengaging lugs between said end link and the shaft arranged to force the shaft away from the edge of the door when the shaft is rotated in an unwinding direction.

1,818,689. LOAD DISCHARGING CAR DOOR MECHANISM. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 19, 1928. Serial No. 271,146. 27 Claims (Cl. 105—308)



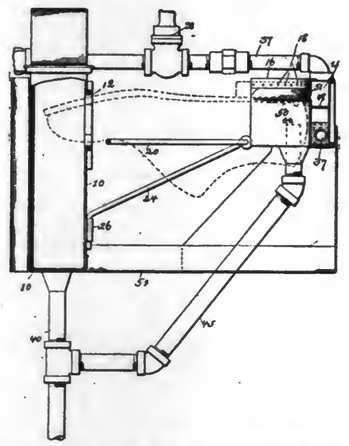
1. In a railway car, the combination with the body of a discharge door; a shouldered locking keeper carried by the car structure; a bodily displaceable shaft carried by and rotatable in means on said door providing slots, said shaft being adapted to normally gravitate bodily to a position in the lower portion of said slots when said door is open; means associated with the keeper for displacing said shaft from its normal position in the slots, said means including a bevel runway formed on the keeper and normally disposed in the path of the shaft as the door is moved to closed position, and means actuated by the rotation of said shaft for locking the door in closed position.

1,818,690. PAWL FOR RATCHET-MECHANI$MS. ELOF L. CARLSON, Bristol, Conn., assignor to The E. Ingraham Co., Bristol, Conn., a Corporation. Filed May 15, 1929. Serial No. 363,302. 2 Claims. (Cl. 74—16.)



1. A pawl having a struck-up sheet-metal body provided upon one edge with an integral rivet and a resilient pawl-tip consisting of a strip of sheet-metal located at right angle to the plane of the body and formed with an opening for the reception of the said rivet.

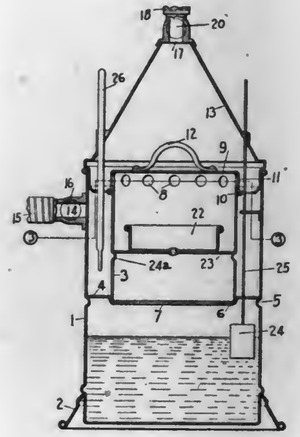
1,818,691. APPARATUS FOR MOISTENING SHOES. KNUTE E. CARLSON, Campello, Mass. Filed Dec. 13, 1929. Serial No. 413,784. 3 Claims. (Cl. 12—1.)



1. In apparatus of the character described, in combination, a support for a shoe, a steam chamber provided with a curved portion, an inlet for admitting steam to the steam chamber, an outlet for removing the water of condensation from the steam chamber, a plurality of small perforations in said curved portion through which the steam may pass to be directed against the shoe heel, and a perforated partition in the chamber located below said perforations for preventing the entrainment of water with the steam.

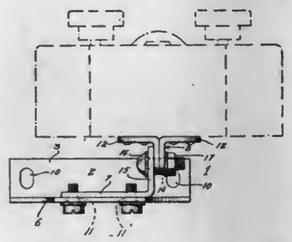
1,818,692. FUME GENERATING AND INHALING APPARATUS. JOHN F. CLASS, Dayton, Ohio. Filed Aug. 18, 1924. Serial No. 732,630. 1 Claim. (Cl. 128—192.)

In an apparatus of the character described, a receptacle adapted to contain water and to be subjected to heat to generate steam, a container supported within said receptacle above the level of said water and adapted to contain a fume generating substance, said container having openings near the upper end thereof, a closure fitting over the upper end of said container and having openings arranged to be moved into and out of registration with



the corresponding openings in said container by the movement of said closure, a structure supported above said receptacle and forming a mixing chamber to receive said steam and said fumes, and means for introducing air into said mixing chamber, said chamber having an outlet through which the mixture of fumes, steam and air may be discharged.

1,818,693. BRACKET FOR TUNERS. FRANK S. COE, Springfield, Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed May 8, 1930. Serial No. 450,691. 1 Claim. (Cl. 248—30.)



A bracket comprising an angled member, one flange of which is arranged to be attached to a supporting structure and the other flange of which is provided with spaced apertures, an intermediate angled member, one flange of which is arranged to lap the second named flange of the first named member and is provided with apertures coinciding with said first named apertures, elements passing through each of said apertures securing said members together, and a third member pivotally secured to the other flange of said intermediate member.

1,818,694. TWINE BALL. HERBERT A. CORBETT, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Oct. 28, 1927, Serial No. 229,405. Renewed Jan. 12, 1931. 6 Claims. (Cl. 242—159.)



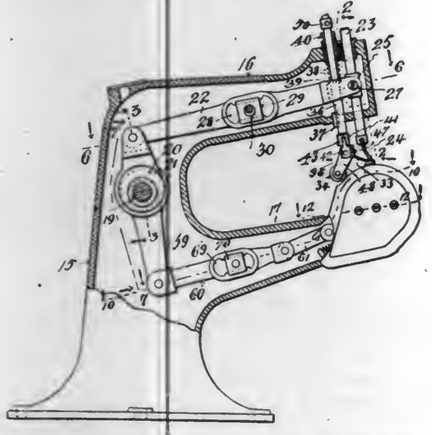
3. An article of manufacture comprising a ball of twine provided with an encircling band which is reinforced by longitudinally running strands to avoid cross-tearing of the band.

1,818,695. TIN WITH OPENING DEVICE. LUCIEN COUADE, St. Denis, France. Filed Mar. 26, 1928, Serial No. 264,588, and in France Dec. 1, 1927. 1 Claim. (Cl. 220—43.)



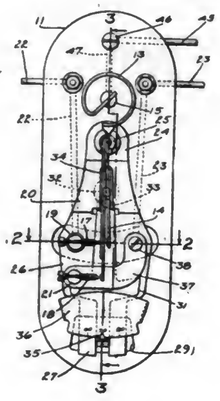
Improvements in sheet metal boxes, such as boxes for shoe cream, cleaning paste and the like, consisting of a lever-device, comprising in combination, an outer lever, the inner end of which has four slots, an inner lever, the inner end of which has four slots corresponding with the said four slots of the outer lever, the outer end of said inner lever bent at right angles in outward direction, and a clasp having four claws adapted to be folded over to securely connect said levers the one with the other and with the box.

1,818,696. FABRIC REPAIRING APPARATUS. ADOLPH L. DE LEEUW, Plainfield, N. J., assignor to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 16, 1929. Serial No. 340,488. 37 Claims. (Cl. 66—1.)



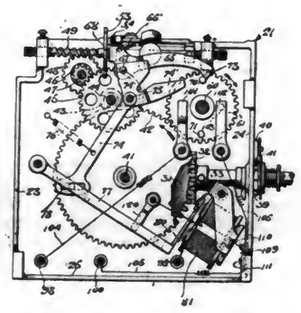
1. In a fabric repairing apparatus, a reciprocatory needle bar, an operating lever for reciprocating said bar, said bar having a planed portion with oppositely disposed tapered seats, a center plug for each seat carried by the lever to operatively engage said seats in said planed portion to effect pivotal connection between the lever and bar, and means to rock said lever.

1,818,697. THERMOSTATIC SWITCH. FREDERICK S. DENISON, Minneapolis, Minn., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Original application filed June 26, 1924, Serial No. 722,586. Divided and this application filed May 14, 1927. Serial No. 191,431. 19 Claims. (Cl. 200—138.)



1. A thermostatic circuit-controlling device comprising a base, two contacts mounted thereon, a thermostatic element, two spaced arms carried thereby, contacts on said arms, one of said arms being relatively flexible, a relatively stiff backing plate movable therewith, the other of said arms being relatively stiff, said flexible arm being apertured to permit a base contact to project therethrough without touching.

1,818,698. MOTOR FOR HEAT REGULATORS. ALLEN A. DICKE, Montclair, and CARL H. DICKE, Nutley, N. J. Filed Jan. 16, 1928. Serial No. 247,183. 14 Claims. (Cl. 185—9.)

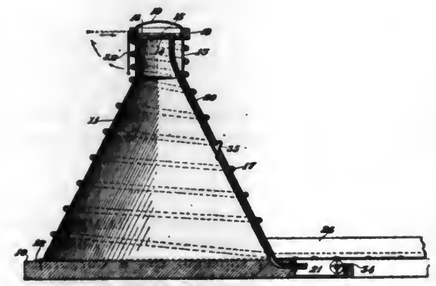


1. A device of the character described, comprising, in combination, an energy supplying device, means for adjusting a damper or the like, a speed governor, said adjusting means and governor being operated by said energy supplying device, and means whereby energy from the energy supplying device may be applied to arrest the motion of said governor and of said adjusting means.

1,818,699. TOILET PREPARATION. HENRY G. DUSENBURY, Essex Fells, and SAMUEL ISERMANN, Summit, N. J. Filed Sept. 14, 1928. Serial No. 306,093. 1 Claim. (Cl. 167—90.)

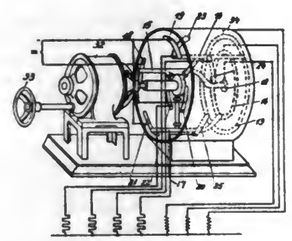
A toilet preparation for application to the face having for its principal ingredient a titanium salt of stearic acid.

1,818,700. GOLF UNIT. SAMUEL FELTYBERGER, Pittsburgh, Pa. Filed Nov. 7, 1930. Serial No. 494,106. 3 Claims. (Cl. 273—125.)



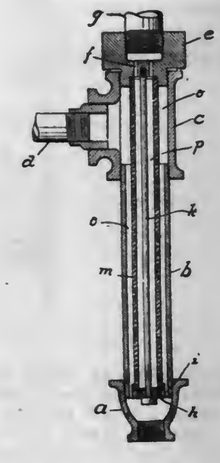
1. A game apparatus comprising a base having a frustoconically shaped support disposed upon the upper side thereof, a tubular member carried by and upstanding from the upper portion of the support, a disk arranged within the tubular member having a centrally disposed pocket in communication with a spirally arranged groove, a conduit spirally arranged upon the support and tubular member, having communication at one end with the spirally arranged groove, and manually operated means at the opposite end thereof for directing a game piece through the conduit.

1,818,701. RECTIFIER. FRANZ JOSEPH FISCHER, Dresden, Germany, assignor to the Firm Koch & Sterzel Aktiengesellschaft, Dresden, Germany. Filed Jan. 18, 1929, Serial No. 333,287, and in Germany Jan. 21, 1928. 5 Claims. (Cl. 175—364.)



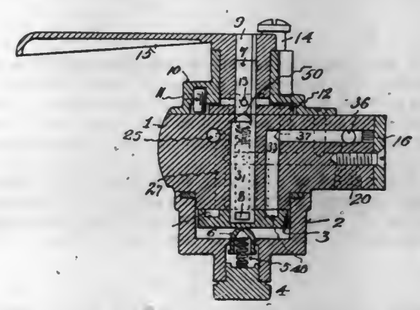
5. Rectifying device comprising a rotatably supported insulating cylinder, an end wall in said cylinder, a plurality of slip rings supported by said end wall, a source of polyphase voltage connected to said slip rings, an inner wall in said cylinder, contacting segments arranged on said inner wall in two rows in staggered relation, resistances connected to one row of said contacting segments and to said source of voltage, connections connecting each contacting segment of the second row with the next but one segment, direct current terminals connected to said second row of contacting segments, and a rotary contact in contact with each slip ring, and adapted to slide successively along said contacting segments, said rotary contacts being arranged within said cylinder.

1,818,702. PROCESS OF CAUSING A REACTION BETWEEN AN AQUEOUS REAGENT AND IMPURITIES IN OIL. ALAN E. FLOWERS, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed June 9, 1927. Serial No. 197,744. 3 Claims. (Cl. 196—15.)



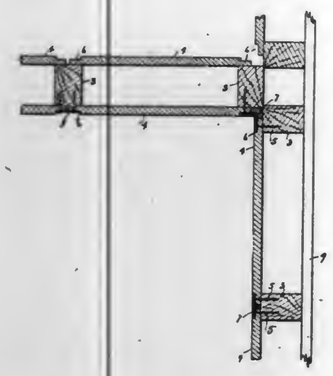
3. The method of causing a reaction between an aqueous reagent and the impurities in oil which comprises flowing the aqueous reagent and the oil respectively into chambers on opposite sides of a porous medium, maintaining a circulation of the oil into and out of its chamber along said porous medium in a stream that is narrow relative to the length and area of the surface of the stream in contact with said porous medium, substantially preventing outflow of the aqueous reagent from its chamber except through said porous medium and applying sufficient pressure to said aqueous medium to maintain a high rate of flow through said porous medium, the aqueous reagent thereby penetrating the oil of the flowing stream over an extended area of oil in a disseminated state but without producing substantial agitation.

1,818,703. UNIVERSAL CONTROL VALVE. PARIS R. FORMAN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Nov. 19, 1927. Serial No. 234,539. 6 Claims. (Cl. 251—87.)



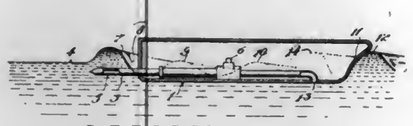
1. In a universal control valve the combination with a valve body having a plurality of ports and passages therein, and a valve having grooves for cooperation with said ports of interchangeable means for controlling and predetermining the various interconnections possible between said ports and passages.

1,818,704. WALL CONSTRUCTION. RALPH W. FRANTZ, Houston, Tex. Filed Sept. 29, 1927. Serial No. 222,716. 1 Claim. (Cl. 72—16.)



Wall construction including an upright studding, wall boards whose adjacent ends are spaced apart, said ends overlapping the studding, a filler in the joint between said adjacent ends, the outer sides of said adjacent ends being reduced in thickness to form a groove, a strip of foraminated material in the groove breaking the joint, nails driven through the margins of said foraminated material and through the corresponding ends of said boards and into said studding, forming a common securing means, for said boards and strips, said strip being spaced away from the opposing margins of said board, and a filling material filling said groove and enveloping said foraminated material therein, on both sides and whose surface is flush with the outer surface of the wall boards.

1,818,705. METHOD OF AND MEANS FOR PROPELLING SHIPS. FRAZER W. GAY, Newark, N. J. Filed Apr. 13, 1928. Serial No. 269,688. 4 Claims. (Cl. 115—11.)

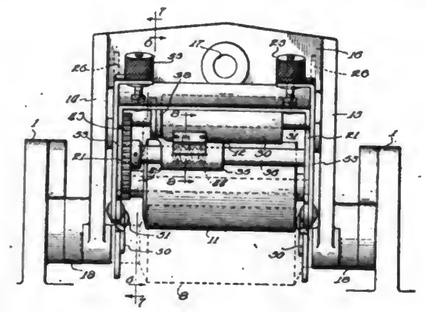


3. A ship's hull having entrance surfaces and means for producing a pressure wave at a point ahead of said entrance surfaces of said hull a distance proportional to the square of the speed of said hull so that said entrance surfaces take entrance in the trough following said pressure wave.

4. The method of propelling ships consisting in establishing a pressure wave at a point ahead of the hull and adjusting the distance of said wave in advance of the hull in proportion to the square of the speed of travel of the hull.

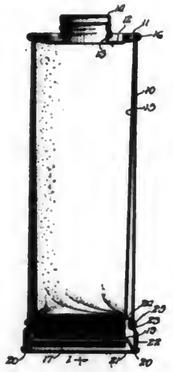
1,818,706. INKING MECHANISM FOR ADDRESSING MACHINES. PAUL A. GOLLNICK and FRANK W. BRODERICK, Chicago, Ill., assignors, by mesne assignments, to Selectograph Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 21, 1929. Serial No. 348,781. 9 Claims. (Cl. 101—348.)

1. A device of the class described comprising a supporting member, an ink applying element on said supporting member, a frame detachably secured to said member, and an ink transferring roller mounted on said frame in



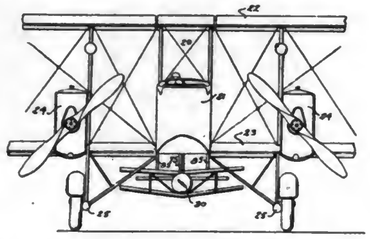
position to engage said ink applying element, said frame and transferring roller being removable as a unit from said supporting member.

1,818,707. CONTAINER. JAMES E. GRIMES, Chicago, Ill., assignor, by mesne assignments, to National Cantube Corporation Inc., Chicago, Ill., a Corporation of Delaware. Filed May 16, 1929. Serial No. 363,625. 4 Claims. (Cl. 221—60.)



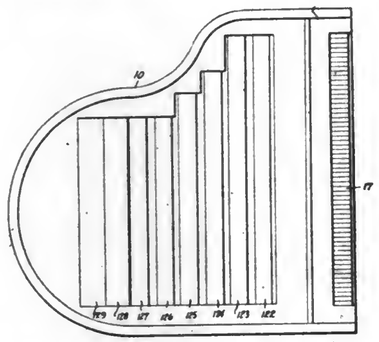
1. A container for plastic material consisting of a rigid casing, a flexible envelope therein housed being rigidly attached to the upper end of the casing and having a plurality of folds of material wherewith it is attached to the lower end of the casing, said lower end of the casing being freely rotatable.

1,818,708. RADIO DYNAMIC CONTROL OF GLIDING BODIES. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Nov. 15, 1922, Serial No. 601,088. Renewed Aug. 8, 1929. 12 Claims. (Cl. 244—1.)



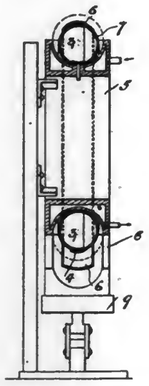
1. In combination, an aircraft, means for maintaining normally a predetermined angle of descent, and means for controlling said maintaining means operable by intermittent radio signals to hold the aircraft to substantially said predetermined angle of descent and by a continuous series of radio signals to increase the steepness of descent.

1,818,709. PIANO WITH TONE MODULATORS. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Dec. 11, 1928. Serial No. 325,282. 9 Claims. (Cl. 84—182.)



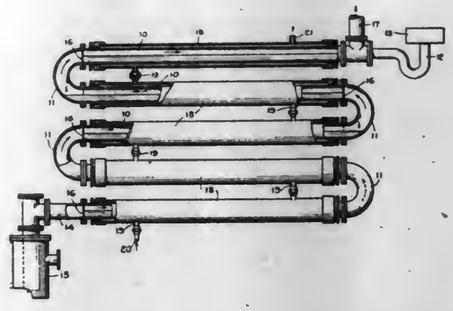
1. A modulating system for a musical instrument comprising a tone modulating control device, a plurality of tone reflectors arranged on different sides of said instrument for variably controlling the volume of sound emitted from the instrument in different directions, electrical means for independently operating said reflectors and means for successively operating said electrical means for closing or opening said reflectors.

1,818,710. AIR TUBE AND THE LIKE AND METHOD OF REENFORCING SAME. MATTHEW STEPHEN HANNON, Toronto, Ontario, Canada, assignor to Hannon Tire and Rubber Company Limited, Toronto, Canada. Filed Nov. 4, 1927. Serial No. 231,144. 2 Claims. (Cl. 154—14.)



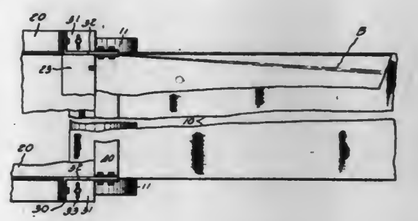
1. The method of simultaneously sealing and externally reinforcing air tubes and the like at the seam, which consists in forming an air tube from a strip of suitable curable material with the seam at the perimeter thereof; then partly inflating the tube; then placing a loop of treated curable material of greater diameter than said partly inflated tube on said tube so as to depend therebelow, and then enclosing said tube and said reinforcing strip within a vulcanizing device and immediately inflating said tube by air pressure to fit the cavity of said vulcanizing device and bring the tube into contact with said loop of material.

1,818,711. APPARATUS FOR CONCENTRATING NITRIC ACID. INGENUIN HECHENBLEIKNER, Charlotte, N. C., assignor, by mesne assignments, to Chemical Construction Corporation, a Corporation of Delaware. Filed Feb. 24, 1928. Serial No. 256,561. 11 Claims. (Cl. 23—274.)



1. An apparatus for separating nitric acid from an admixture of aqueous nitric acid and a dehydrating agent comprising a plurality of enclosed retort chambers, obstruction means to obstruct and to retain in each chamber a body of liquid which is shallow but of appreciable depth, means so connecting the chambers in cascade as to cause liquid flow in one direction while permitting gaseous or vapor flow in the reverse direction over the tops of the shallow bodies of liquid, means individual to each of said chambers for supplying a heating medium externally to said chambers, a feed inlet for the acid and dehydrating agent for the series of chambers, an outlet for the dehydrating agent associated with the last chamber of the series, and an exit duct for the nitric acid vapors associated with the first chamber of the series.

1,818,712. METHOD OF AND APPARATUS FOR MAKING PAPER. ADELBERT M. HINKSON, Madawaska, Me., assignor, by mesne assignments, to Paper Machinery Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 1, 1926. Serial No. 91,495. 5 Claims. (Cl. 92—44.)

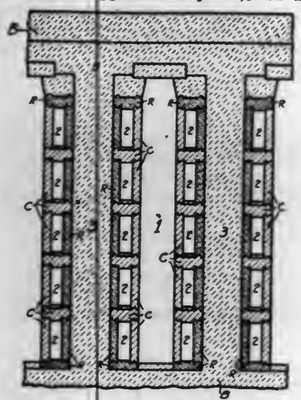


1. In the making of paper in apparatus having a forming wire, the method which consists in flowing paper forming stock upon said wire through an orifice and positively limiting lateral spread of stock upon said wire only within the zone adjacent the orifice.

1,818,713. COKE OVEN. CHARLES H. HUGHES, Hackensack, N. J., assignor to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed May 13, 1926. Serial No. 108,751. 15 Claims. (Cl. 202—223.)

1. In a by-product coke oven, a coking chamber and heating flues, a part of the walls of each of the heating flues being adjacent to the coking chamber, the walls adjacent to the coking chamber comprising a high heat-

transmitting material consisting of approximately 90% silicon carbide and approximately 10% of a refractory



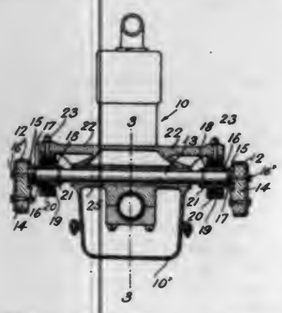
bonding material, and the opposite walls of said heating flues comprising a heat insulating material consisting substantially of zirconia.

1,818,714. INSULATING CLAMP. CHARLES B. JOHNSON, Chicago, Ill. Filed July 9, 1928. Serial No. 291,872. 6 Claims. (Cl. 132—36.1.)



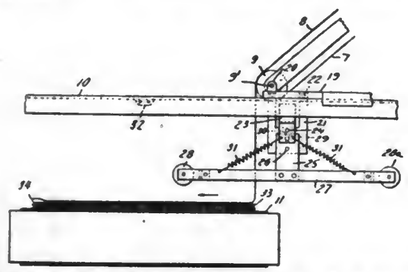
1. A clamp of the character and for the purposes specified comprising a pair of spaced plate-like superposed elements having aligned radial slots, and a third plate-like element swingingly mounted between said first aforesaid elements and adapted in one limiting position to open said slots and in its other limiting positon to close said slots, said elements having means to clamp unlike portions of material interiorly of their periphery and simultaneously to close the unoccupied portion of said slots, said third element being cut away at one side whereby to leave an open space between said pair of elements adjacent the material being clamped to permit free access of air to the clamped material.

1,818,715. CUSHION CONNECTION. WALTER C. KEYS, Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 15, 1928. Serial No. 299,860. 5 Claims. (Cl. 180—64.)



1. A combined non-metallic motor mounting and reinforcing means for the side rails of a vehicle frame, comprising in combination, cross members extending between and secured at their opposite ends to the side rails, the motor being provided with clearance openings through which the cross members extend, non-metallic yieldable means adapted to connect the motor at its opposite sides to the cross members and maintain the latter out of contact with the adjacent surfaces of the clearance openings, and means for sealing said openings.

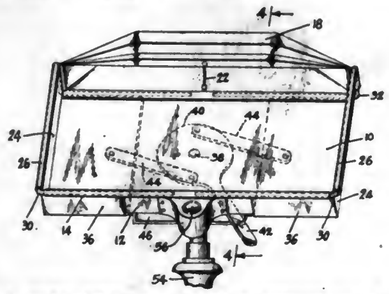
1,818,716. METHOD OF AND APPARATUS FOR MAKING MULTIPLY PAPER. MAX H. KLIEFOTH, Madison, Wis., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed Aug. 16, 1930. Serial No. 475,697. 14 Claims. (Cl. 92—39.)



1. In a machine of the class described, a reciprocating looping device for laying down a succession of overlapping folds of moist pulp web, reciprocating guides for said looping device, stationary guide supports for said guides, an edge-smoothing device for said folds, said edge-smoothing device comprising in combination, brackets depending from said guides, a frame supported pivotally upon said brackets, smoothing rolls mounted in the respective ends of said frame, actuating levers pivotally mounted upon said brackets, trip-blocks mounted upon said guide supports, said levers and said trip-blocks being adapted to cooperate with each other and with said frame to move a smoothing roll into contact with opposite looped edge portions of said folds with each successive reciprocating movement of said looping device, and coil springs fastened between said actuating levers and the end portions of said frame to move said smoothing rolls into the inoperative position, said smoothing contact being made while said roll is moving outwardly with respect to the fold.

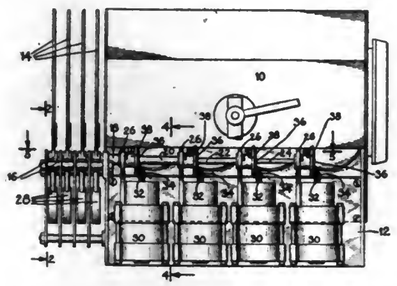
12. The method of making a fibrous sheet which comprises laying down a continuous series of overlapping folds of moist pulp web, smoothing and flattening the looped edges of said folds and pressing said moist webs into a coherent sheet.

1,818,717. MUSIC STAND. HERBERT A. KLIEGL, New York, N. Y., assignor to Kliegl Bros. Universal Electric Stage Lighting Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 6, 1928. Serial No. 304,189. 6 Claims. (Cl. 45—62.)



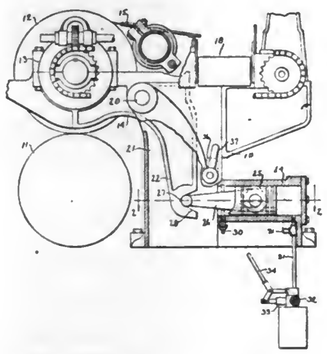
1. A music stand comprising in combination, a music rest and means comprising a lever manually operable at the front of the rest for changing the width thereof.

1,818,718. SYNCHRONOUS CONTROL OF COLOR SCREENS. HERBERT A. KLIEGL, New York, N. Y., assignor to Kliegl Bros. Universal Electric Stage Lighting Co., Inc., New York, N. Y., a Corporation of New York. Filed June 20, 1929. Serial No. 372,282. 10 Claims. (Cl. 240—31.)



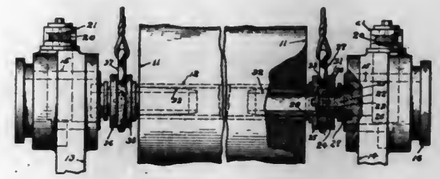
1. In apparatus of the class described, in combination, a spot light, a screen having operable and inoperable positions relatively to said spot light, a manually rotatable generator remote from said light, and a motor operatively connected to said screen, said motor and generator being electrically interconnected so that rotation of said generator through any arc will cause said motor to rotate through a certain arc, whereby said screen may be moved between its operable and inoperable positions at the will of the operator.

1,818,719. PAPER MAKING MACHINERY. HERMAN L. KUTTER, Hamilton, Ohio, assignor to The Black-Clawson Company, Hamilton, Ohio, a Corporation of Ohio. Filed Dec. 10, 1928. Serial No. 325,037. 5 Claims. (Cl. 92—49.)



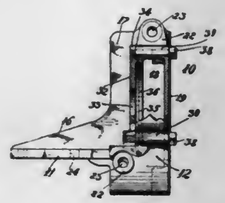
1. In a paper making machine of the class described, an adjustable roll, a second roll normally cooperating therewith, a main frame comprising opposite hollow frame side portions, and an adjustable frame having arms extending down into said side portions and pivoted on said main frame and supporting said adjustable roll above said second roll, the adjustable roll being held merely by the action of gravity against the second roll and a fluid pressure system for moving said adjustable frame upwardly away from said second roll, said fluid pressure system comprising a piston and cylinder for each of said arms, a manually operated fluid pressure generator, and a connection therefrom to but one end of each of said cylinders to supply equal pressure simultaneously to the two cylinders for raising both sides of the adjustable frame with equal force.

1,818,720. WEB ROLL LOADING MECHANISM FOR PRINTING PRESSES. FREDERICK LAMATSCH, Grantwood, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed June 26, 1928. Serial No. 288,389. 3 Claims. (Cl. 242—58.)



1. In a web supply mechanism for a printing press, a web roll having a tubular core, separate lifting members fitting within each end of the core, a hoisting mechanism, and supports having bearings adapted to engage the lifting members whereby the roll may be rotated about its axis; said lifting members each having a head portion formed to engage the end of the core and a circumferential groove to engage with a hook of a hoisting gear.

1,818,721. MAGNETO MOUNTING ATTACHMENT. GUSTAVE J. LANG, Longmeadow, and JOHN F. MARTIN, Springfield, Mass., assignors to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Jan. 24, 1930. Serial No. 423,227. 10 Claims. (Cl. 123—195.)



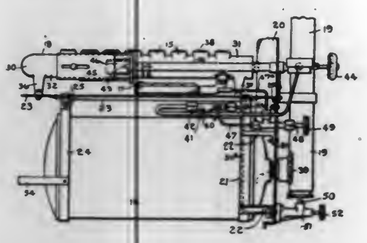
1. A mounting for a magneto comprising a base plate, a gear casing with an opening at one side on said base plate, the casing having an integral end with a concave edge substantially closing the front of the casing, and a removable perforated closure for the rear of the casing.

1,818,722. SIGNBOARD. GEORGE K. LEWIS, Chicago, Ill., assignor to Met-L-Wood Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 16, 1928. Serial No. 299,895. 6 Claims. (Cl. 40—125.)



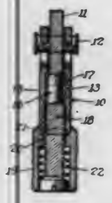
1. In a construction of the character described, the combination with a plurality of composite panels disposed edge to edge, each panel comprising a fibrous core and a metallic sheathing enclosing said core; of means for securing the meeting edges of said panels in edge to edge relation, said means being secured to said panels by split rivets, the shanks of said rivets extending through said means and one side of the body portions of said panels, and the split ends of said rivets being upset against the metallic veneer on the opposite side of said panels.

1,818,723. VAPOR STOVE. WALTER C. LINDEMANN, Milwaukee, Wis., assignor to A. J. Lindemann & Hoverson Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 14, 1927. Serial No. 226,074. 8 Claims. (Cl. 126—93.)



1. A fuel and combustion unit for heating or other stoves comprising a horizontally disposed liquid fuel tank, a multiple burner horizontally disposed above and spaced from said tank, an elongated vaporizing retort adjacent said burner, a manifold between said retort and burner and in communication with both, a vaporizer heating burner below said retort and conduits connecting said tank with said retort and said heating burner, and a vertically disposed supporting head on which all of said parts are rigidly supported in operative relation.

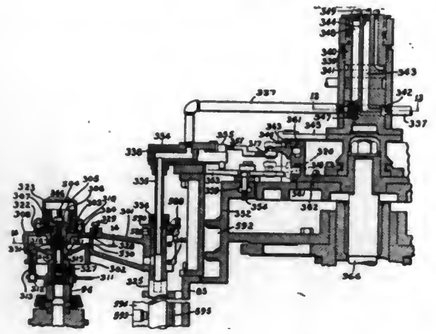
1,818,724. CIGAR OR CIGARETTE LIGHTER. JOSEPH J. LISS, Chicago, Ill. Filed Apr. 17, 1929. Serial No. 355,749. 5 Claims. (Cl. 67—7.1.)



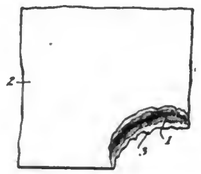
1. In a lighter of the flint ignition type, the combination of a member carried by the lighter and rotatably supporting a wheel, said member providing a guideway for receiving a piece of flint to be engaged by said wheel, a screw threading into said member axially of said guideway, a sleeve enclosing the headed end of said screw and having a non-circular opening through which a non-circular portion of said screw projects to permit of longitudinal movement of the sleeve relative to the screw but preventing relative rotational movement therebetween, means carried by the sleeve coacting with said member to lock the sleeve against rotation when engaging said member, and a spring acting between said sleeve and said screw to urge the sleeve into locking engagement with said member but permitting retraction of the sleeve whereby the screw may be turned by rotation of the sleeve to advance the flint toward said wheel.

1,818,725. GLASS BLOWING MACHINE. EDWARD H. LORENZ, West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original application filed Aug. 8, 1921, Serial No. 490,567. Divided and this application filed Feb. 11, 1928. Serial No. 253,689. 21 Claims. (Cl. 49—18.)

3. In a glass blowing machine, the combination of a turret carrying a mold, means for intermittently rotating the turret, a blowhead mounted on the turret to cooperate with the mold, a valve controlling the application of pressure by the blowhead to the mold, and automatic means effective to actuate the valve, the last named means being operable independently of the rotative periods of the turret.

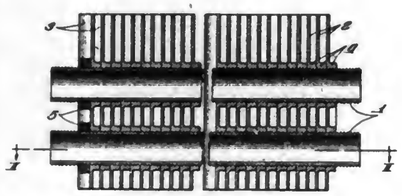


1,818,726. PAPER. JOSEPH A. LOWE, Fitchburg, Mass., assignor to Faluiah Paper Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Dec. 11, 1928. Serial No. 325,260. 3 Claims. (Cl. 154—46.)



1. A multi-ply paper comprising outer plies, an inner ply, and a colored adhesive with which the inner ply is impregnated, the adhesive connecting the outer plies and the color providing a hidden identification stratum.

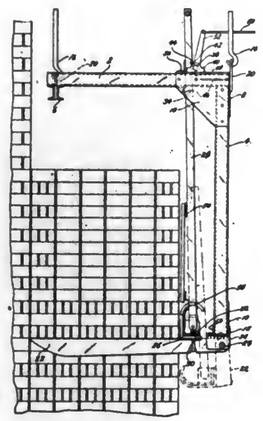
1,818,727. FIN RADIATOR. OSKAR R. LUDWIG, Gary, Ind. Filed Jan. 24, 1930. Serial No. 423,031. 7 Claims. (Cl. 257—263.)



1. A fin radiator comprising a plurality of fin units having threaded openings therein, a threaded steam chamber section threaded through said fins unit openings and adapted to be connected in a steam pipe line by ordinary pipe fittings, and means adjustably engaged on said section for holding the fin units locked in position.

1,818,728. BRICK HANDLING MECHANISM. ARLINGTON H. MALLERY, Poughkeepsie, and ERNEST M. HICKS, Kingston, N. Y. Filed Mar. 8, 1930. Serial No. 434,429. 12 Claims. (Cl. 294—63.)

1. A brick handling mechanism comprising in combination a frame, devices for supporting the bricks pivotally mounted on said frame, vertically extending supporting bars pivotally connected at their lower ends with said devices between the pivots of the devices and the free ends thereof for supporting the devices, and an abutment plate for preventing the bricks from passing between said bars.



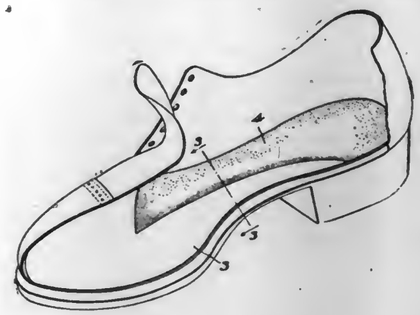
1,818,729. PROCESS OF DECORATING ARTICLES OF POTTERY AND THE LIKE. HEINRICH MARMORSTEIN, Chicago, Ill. Filed Nov. 1, 1929. Serial No. 404,181. 1 Claim. (Cl. 91—70.)



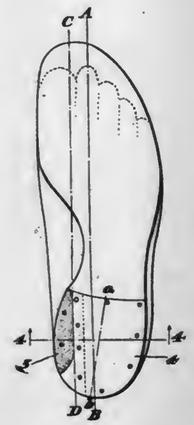
In a process of the class described the steps of covering an article having a dull glazed surface with a coat of so called liquid bright gold, drying said coat in the atmosphere, covering said gilded surface entirely with a coat of a solution consisting of Epsom salt dissolved in beer, drying said second coat in the atmosphere, burning the article in a kiln at liquid gold fire, leaving the article for about three hours in the kiln for cooling, and bathing the article in lukewarm water.

1,818,730. FOOTWEAR. NORMAN D. MATTISON, New York, N. Y. Filed Aug. 22, 1929. Serial No. 387,763. 4 Claims. (Cl. 36—71.)

1. An inner sole member for a shoe including a shank portion having a relatively long, narrow laterally level area for supporting the plantar surface of the outer longitudinal arch of the foot in a balanced position, and an area extending longitudinally of the shank between its inner edge and said supporting area and located at a lower level than said supporting area, said supporting area being substantially non-resilient throughout and effective to normally maintain the foot spaced from said second area.

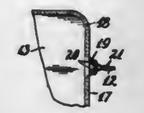


1,818,731. FOOTWEAR. NORMAN D. MATTISON, New York, N. Y. Filed Jan. 13, 1930. Serial No. 420,437. 4 Claims. (Cl. 36—35.)



1. A shoe heel formed of materials of relatively different firmness and resiliency, the weight supporting area of the heel being composed of the material of greater firmness and extending over the central and outer portions of the heel and across the curved rear end thereof, and the area to be disposed below the posterior aspect of the inner longitudinal arch of the foot being largely composed of resilient material of lesser firmness.

1,818,732. CAN COVER REMOVER. EVA MCCUTCHEON, Brooklyn, N. Y. Filed Jan. 29, 1930. Serial No. 424,150. 4 Claims. (Cl. 220—43.)



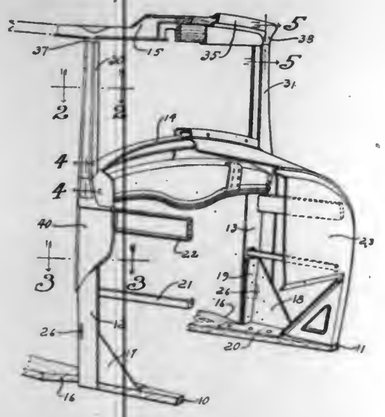
1. A can cover remover, comprising a prying member movably mounted upon the outer side of a container hav-

ing a cover and positioned with a portion extended beneath an edge of the cover and adapted upon being manually moved to pry the cover off from the container, and means for adjusting the amount of extension of the prying member beneath the edge of the cover.

1,818,733. METHOD FOR THE DIGESTION OF NITROCELLULOSE. MAHLON G. MILLIKEN, Parlin, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 23, 1928. Serial No. 256,140. 20 Claims. (Cl. 260—148.)

1. The method of digesting nitrated cellulose which includes passing nitrated cellulose and a non-solvent carrier liquid through a passage and applying heat to nitrated cellulose in the passage.

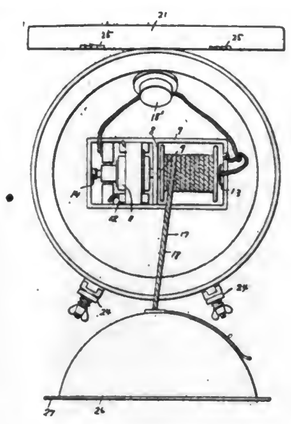
1,818,734. VEHICLE BODY CONSTRUCTION. MARVIN W. MOESTA, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed May 9, 1928. Serial No. 276,263. 6 Claims. (Cl. 296—28.)



1. A front upright frame member for a vehicle body composed of three metal stampings, comprising right and left pillar members extending from top to bottom of the body and a cowl bar extending between and connecting the intermediate portions of said pillar members, said pillar members each comprising an angular cross section portion below the cowl bar and a channel cross section portion thereabove, positioned with the open side of the angular portions presented inwardly and forwardly and with the channel portions presented inwardly, and the flanges in at least said intermediate portion, to which said cowl bar is secured, being wider than the corresponding elements of said channel portion.

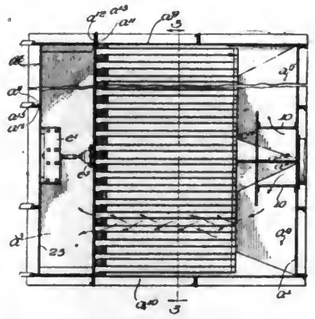
1,818,735. HEADLIGHT STRUCTURE. COLUMBUS ELTY MOORE, Keystone, W. Va. Filed Oct. 15, 1930. Serial No. 488,951. 1 Claim. (Cl. 240—1.18.)

A headlight of the class described comprising a casing having a hollow extension at its rear, a frame in said extension, an electric motor supported by the frame and having a shaft, a drum formed of non-conductive material with a bore at each end thereof, one of the bores receiving the motor shaft, a trunnion forming part in the other bore and projecting therefrom, terminal screws passing through the hubs of the drum, one of which engages the motor shaft, and the other the trunnion part, a reflector in the lamp housing, a lamp carried thereby, conductors connecting the lamp with the terminals on the drum, a



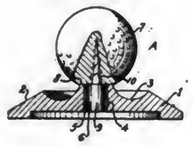
circuit having one part connected with the trunnion part and another part with the motor shaft, and a switch in said circuit.

1,818,736. DUST ARRESTER. RAYMOND H. MOORE, Harvey, Ill., assignor to Whiting Corporation, Harvey, Ill., a Corporation of Illinois. Filed Feb. 26, 1927. Serial No. 171,127. 14 Claims. (Cl. 183—58.)



1. In a dust arrester, the combination of a casing provided with an air-inlet and an air-outlet, a series of screen units each comprising a frame and fabric sides, a flanged bar at the top of the casing, blocks fixed in the upper front corners of the frames, bolts passing through the blocks and flange to secure removably the frames to said bar, and means for removably securing the lower front corners of the frame in the casing.

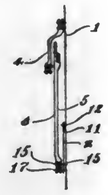
1,818,737. ORNAMENT FOR DESKS. BYRON W. MOSER, St. Louis, Mo. Filed Apr. 21, 1930. Serial No. 445,876. 3 Claims. (Cl. 120—82.)



1. An ornament of the class described comprising a base, a decorative element mounted on said base, said base being

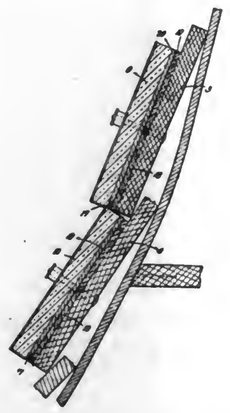
provided with an opening formed therein, an insert of compressible material located within said opening, said insert having a tapered opening formed therein, and a stem on said decorative element of substantially constant diameter throughout, said stem being driven into the tapered opening in said insert so as to frictionally secure the decorative element to the base.

1,818,738. PATCH POCKET. SAMUEL NEWMAN, Baltimore, Md., assignor to J. Schoeneman, Incorporated, Baltimore, Md., a Corporation of Maryland. Filed Dec. 17, 1929. Serial No. 414,622. 5 Claims. (Cl. 2—248.)



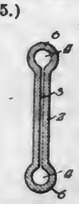
1. The method of constructing patch pockets for top coats or the like which consists in attaching a piece of lining material temporarily to the outside of the garment material in the position of the bottom portion of the pocket, stitching the inturned top edge of the lining material to the garment material, affixing the pocket patch in position with its bottom portion overlying the said lining, trimming the lining material to the size of the patch so that its edges are concealed thereby and stitching the edges of the patch and the lining material to the garment material by a line of stitching extending through the lining, the patch and the garment material.

1,818,739. ADVERTISING DEVICE. NORMAN BERNARD MACKENZIE O'BRIEN, Wimbledon, London, England. Filed Sept. 27, 1929, Serial No. 395,497, and in Great Britain Oct. 5, 1928. 7 Claims. (Cl. 40—130.)



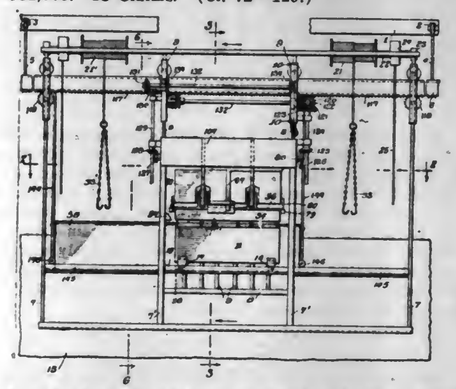
1. A reflector advertising device for advertising matter arranged in rows of words, letters, characters or figures, comprising a plurality of strips angularly disposed relatively to one another and in planes which bring the vision points of all the strips to a common focus, the upper side of each of the said strips being stepped backwards from the lower side of the next adjacent upper strip to reduce the maximum depth of the back piece.

1,818,740. COUNTER-EVAPORATOR. ROBERT GLENN OSBORN, Beloit, Wis., assignor to National Refrigeration Corporation, Beloit, Wis., a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,848. 4 Claims. (Cl. 62—95.)



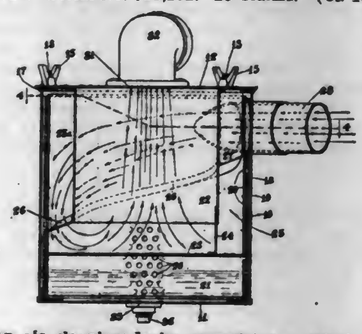
1. An evaporator comprising a pair of substantially parallel spaced longitudinally refrigerant chambers connected substantially throughout their lengths by a relatively thin web-like passage.

1,818,741. BRICK LAYING MACHINE. THOMAS PALATINI, Belmar, N. J. Filed July 25, 1929. Serial No. 381,003. 18 Claims. (Cl. 72—129.)



9. A brick-laying machine including a scaffold, means for supporting a plurality of layers of bricks temporarily on the scaffold, means for moving said bricks one layer at a time to a given point, mechanism for causing the bricks to be placed on top of a wall which is being built after said moving means have moved the bricks to said given point, means for intermittently raising said scaffold, and means for intermittently raising the bricks in said box, said last-mentioned means functioning simultaneously with but independently of the means for raising the scaffold.

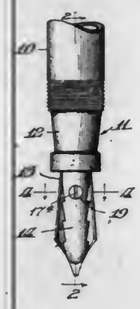
1,818,742. APPARATUS FOR CLEANING AIR. LOUIS A. PARADISE, Moline, Ill., assignor to Deere and Company, Moline, Ill., a Corporation of Illinois. Filed May 5, 1924. Serial No. 711,282. 25 Claims. (Cl. 183—21.)



1. An air cleaning device comprising a spiral air duct having a smooth metallic surface along which the air to

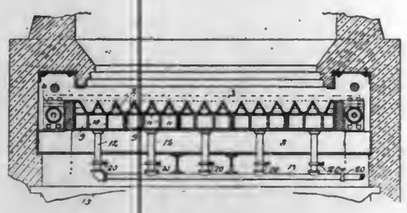
be cleaned flows in passing through said duct, and means disposed about the outer periphery on said duct for moistening said surface with a suitable liquid adapted to arrest and retain solid particles carried by the air.

1,818,743. ADJUSTABLE FEED FOR FOUNTAIN PENS. KENNETH S. PARKER, Janesville, Wis., assignor to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Filed Sept. 26, 1929. Serial No. 395,268. 5 Claims. (Cl. 120—50.)



1. In a fountain pen, a pen section including a nozzle member, a feed bar mounted in said nozzle having an open-sided ink feed channel along one side thereof, a nib mounted in said nozzle and embracing said feed bar so as to cover and form a side of said ink channel, said feed bar having an opening therein extending from said feed channel to its opposite side, a member rotatably mounted in said opening and having a projecting part extending into said channel to adjacent said nib for regulating the flow of ink through said channel.

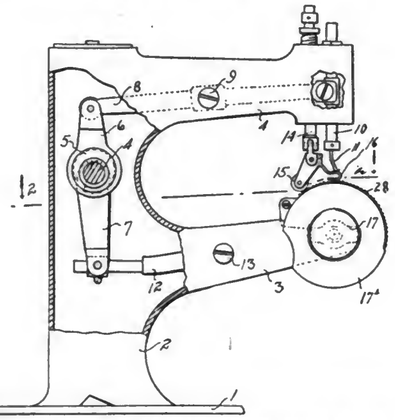
1,818,744. GRATE CONSTRUCTION. RICHARD B. PARKER, Skaneateles, N. Y., assignor to Samuel E. Darby, trustee, New York, N. Y. Filed Dec. 14, 1926. Serial No. 154,698. 5 Claims. (Cl. 158—12.)



1. In a grate structure for supporting a bed of solid fuel the combination with a plurality of hollow bars of V-cross section having openings in the walls and projections at the base thereof of a plurality of boxes, having openings therein, for supporting said bars, said projections being arranged to center the bars on the boxes and means for distributing a gas to said boxes, the gas flowing from said boxes and through said bars into the fuel bed.

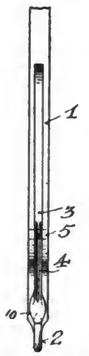
1,818,745. MACHINE FOR REPAIRING KNITTED FABRICS. ALEXANDER C. PARLINI, Woodside, N. Y., assignor to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 3, 1929. Serial No. 352,186. 9 Claims. (Cl. 66—1.)

1. In an apparatus of the type described the combination comprising a support, a feeding head rotatably mounted on said support, a vertically movable needle mounted on said support in operative relation with respect to said feeding head, means for actuating said needle and rotating said feeding head in one direction,



and means carried by the feeding head for engaging said feeding head to prevent any movement in the reverse direction.

1,818,746. METHOD OF MAKING NEEDLE LATCHES. ALEXANDER C. PARLINI, Woodside, N. Y., assignor to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed July 3, 1929. Serial No. 373,660. 3 Claims. (Cl. 163—5.)

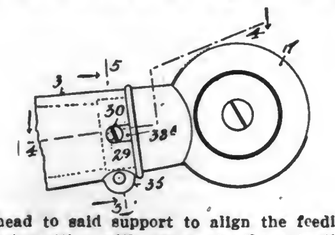


1. The method of forming latch members for knitting needles which comprises shaping a thin flat sheet of spring material having angularly extended arms disposed in the same plane, into a hooded nose with the arms in planes at right angles to said plane so that the arms extend from said hooded nose with the free ends resiliently diverging.

1,818,747. MACHINE FOR REPAIRING KNITTED FABRICS. ALEXANDER C. PARLINI, Woodside, N. Y., assignor to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 12, 1930. Serial No. 443,649. 6 Claims. (Cl. 66—1.)

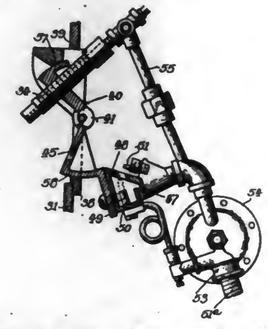
1. In an apparatus of the type described, the combination comprising a support having parallel extending hollow arms, a feeding head assembly having side portions with rotatable feeding means mounted therebetween, and an annular neck portion formed with a reduced extension, adapted to have a sliding fit with the end of one of said arms, a vertically movable needle mounted in one of the arms of said support, means in said support for actuating said needle and said feeder means in timed relation with each other, means for detachably securing the reduced

extension of said feeder head to one of said arms, means on said reduced extension for angularly adjusting said



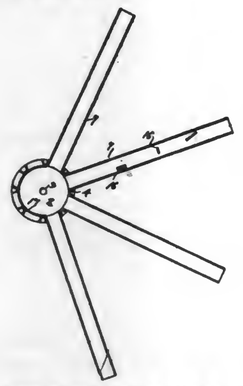
feeder head to said support to align the feeding means in correct position with respect to the actuating means therefor and with respect to said needle.

1,818,748. OIL BURNER. WILLIAM H. PASCOE, Chicago, Ill. Filed Mar. 20, 1929. Serial No. 348,470. 8 Claims. (Cl. 158—2.)



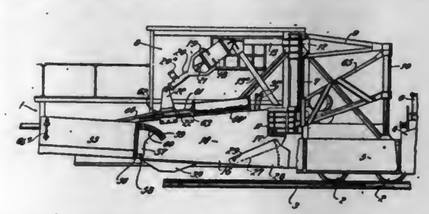
1. In an oil burner plant having walls defining a combustion chamber with an aperture in one of the side walls, the combination of a carrier movably mounted on said wall so as to substantially close said aperture, a nozzle mounted on said carrier and operable to spray fuel into the combustion chamber, means for feeding fuel under pressure to said nozzle, ignition means mounted on the outside of said carrier in fixed relation to said nozzle and operable to ignite fuel sprayed from the nozzle, means for securing said movable carrier on said wall in definite relation to said combustion chamber, and means operable by the pressure in said feeding means for controlling the operation of said ignition means.

1,818,749. GOLF GAME. ROBERT H. PITTLER, Los Angeles, Calif. Filed Aug. 27, 1930. Serial No. 478,003. 2 Claims. (Cl. 273—32.)



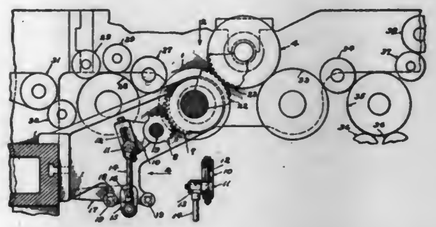
2. In a golf game apparatus, a central rosette having a ring of pairs of spaced bearing lugs, radiating channels attached to respective pairs of the lugs, and means to cover a gap between the lugs of a pair in the absence of a channel at the pair of lugs.

1,818,750. RAILWAY MAINTENANCE AND CONSTRUCTION CAR. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Apr. 22, 1929. Serial No. 356,915. 12 Claims. (Cl. 37—105.)



12. In combination with a spreader wing having a substantially horizontal bottom edge portion, a ditching blade mounted on the rear side of the wing and means providing a guide on said wing for said blade and in which it is capable of movement in a plane parallel with that of the wing and other than that at a right angle to its bottom edge.

1,818,751. LATE NEWS DEVICE FOR PRINTING MACHINES. CECIL GEORGE QUICK, Eltham, London, and THOMAS RICHARD BENNETT, Willesden, London, England, assignors to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Oct. 25, 1929, Serial No. 402,501, and in Great Britain Nov. 5, 1928. 5 Claims. (Cl. 101—247.)

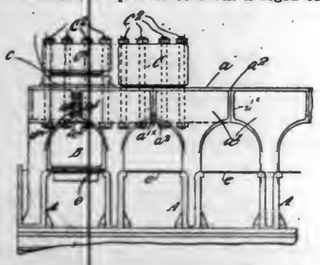


1. In a late news device for printing machines, an impression cylinder, a late news form cylinder, adapted to cooperate with said impression cylinder, means for connecting and disconnecting said form cylinder to and from a driving means therefor, means for moving said form cylinder and said impression cylinder relatively to one another into and out of impression relation, and means for rotating the late news form cylinder while it is disconnected from the driving means.

1,818,752. STRUCTURE OR FRAMING OF INTERNAL COMBUSTION ENGINES. WILLIAM FLOYD RABBIDGE, Ulverston, England, assignor to Vickers Limited, Westminster, England, a British Company. Filed Mar. 27, 1925, Serial No. 18,756, and in Great Britain Nov. 27, 1924. 4 Claims. (Cl. 121—194.)

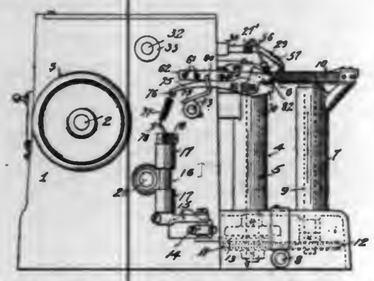
2. In a multi-cylinder internal combustion engine structure, a bedplate having bearings for the engine crank shaft, a plurality of vertical frame sections, each comprising two approximately vertical legs mounted on the said bedplate and having transverse extensions at their upper ends meeting in a longitudinal joint and spanning the said crank shaft bearings, and half-arched tops terminating the said legs, which tops of adjacent sections

meet in joints extending transversely to the shaft axis, means for connecting the section tops at the said joints whereby the sections cooperate to form a rigid entablature



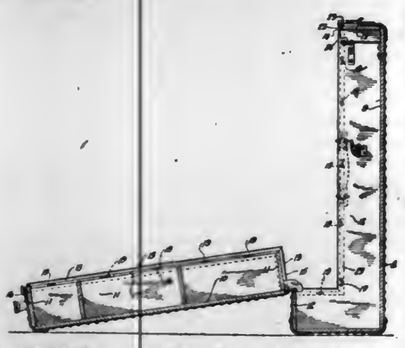
for the complete multi-cylinder engine, and cylinders passing through and supported upon the said rigid entablature.

1,818,753. END TRIMMING MECHANISM FOR CUP FEED OVERSEAMING MACHINES. PAUL D. REDCAY, Philadelphia, Pa., assignor to Gotham Silk Hosiery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 20, 1928. Serial No. 271,460. 16 Claims. (Cl. 112—252.)



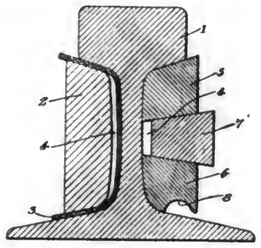
1. In an overseaming sewing machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism, in combination with means including a stationary cutting member and a movable cutting member for trimming the ends of the threads of the seam formed by the said needle and looper mechanisms, and means for operating the trimming device from the actuating means of the looper mechanism.

1,818,754. TRUNK AND SUITCASE VALANCE. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Sept. 13, 1928. Serial No. 305,758. 1 Claim. (Cl. 190—28.)



In a two-section container, the adjacent edge portions of the section walls being in juxtaposition when the sections are closed with respect to each other, grooved valance members mounted on the outer edge portions of the walls of one section, and tongue valance member mounted on the outer edge portions of the walls of the other of said sections, said tongue and groove valance members being inter-fitting, each valance member having spaced apart sides engaging opposite surfaces of the section wall and its outer side being considerably longer than the other, and headed, bendable metallic securing pins extended through only the long outer sides of the valance members, and the respective section walls and having their end portions bent over against the inner surface of the walls substantially flush with the short inner sides of the valance members.

1,818,755. RAIL FILLER. HOMER L. ROGERS, Hartwell, Ohio, assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed June 20, 1927. Serial No. 200,271. 1 Claim. (Cl. 238—9.)



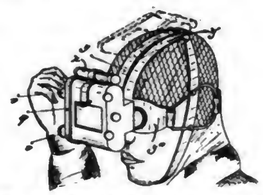
In a rail filler consisting of a plurality of members, a member adapted to contact with the underside of the ball of the rail, a member adapted to contact with the upper surface of the base of the rail and a member engaging with said members to hold said filler in position in the rail.

1,818,756. QUILTED BLANKET. LOUIS ROSENBAUM, New York, N. Y. Filed Jan. 30, 1929. Serial No. 336,085. 2 Claims. (Cl. 5—334.)



1. In a quilted blanket, an upper and a lower blanket each formed with a longitudinal pleat, elastic strips attached at their end on opposite sides of the folds forming said pleats for holding the pleats closed and the blankets in smaller operative sizes, very soft filler material disposed between the blankets in the vicinity of the pleats, and harder filler material disposed between the blankets at all other portions for substantially corresponding with the combined hardness of the pleated portions and soft filler material.

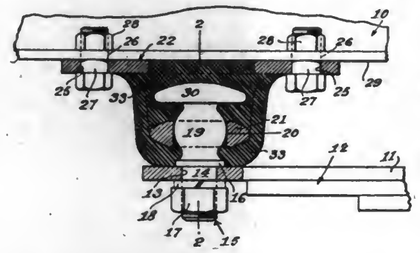
1,818,757. DEVICE FOR READING MAPS AND WRITINGS, LOOKING AT PICTURES, AND THE LIKE. SIEGFRIED SAMSON and ALFRED VOCKE, Cassel, Germany. Filed Jan. 18, 1929, Serial No. 333,393, and in Germany Nov. 2, 1928. 1 Claim. (Cl. 40—86.)



A device for reading maps and writings, looking at pictures and the like while driving a motor car or the like,

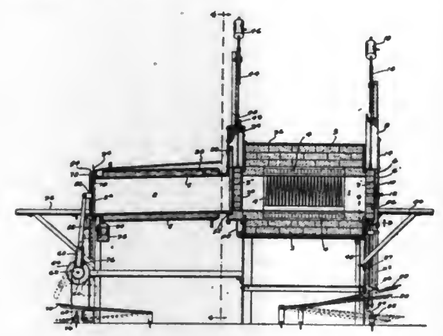
and comprising, in combination with means for attaching it to the driver's head in front of his eyes; a casing connected with said attaching means and having oppositely located openings in the line of vision of the driver; magnifying lenses in the openings located near the driver's eyes; a transparent plate in the opposite opening at the front of said casing; a piece of film-band arranged behind said transparent plate inside the casing; means for moving said film-band horizontally, as well as vertically; a picture band located inside the said casing between the film-band and said magnifying lenses; spools arranged in the top portion and in the bottom portion of the said casing and bearing said picture band which can be wound from any of said spools upon the other spool; means for moving the spools from outside the casing, substantially as set forth.

1,818,758. NONMETALLIC CONNECTION. CURT SAUBER, Cleveland, Ohio, assignor to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Jan. 7, 1928. Serial No. 245,140. 16 Claims. (Cl. 267—30.)



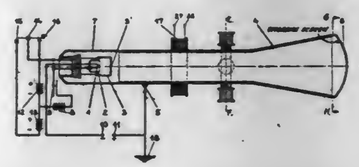
1. A combined insulating and vibration-dampening device for connecting relatively movable parts, comprising a member attached to one part, a member attached to another part, vibration-dampening material bonding said members together and forming an insulation between said members, the latter also including means for universally connecting them together at a point relatively close to one of said parts.

1,818,759. FURNACE. JEWETT F. SCHRUMN, Attleboro, Mass., assignor to Process Engineering and Equipment Corporation, Attleboro, Mass., a Corporation of Rhode Island. Filed May 8, 1930. Serial No. 450,847. 16 Claims. (Cl. 263—6.)



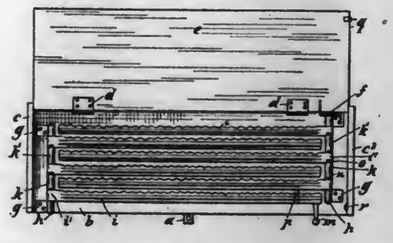
11. A special atmosphere furnace having in combination, a chamber; means for the admission of special atmosphere gas to said chamber; an exit door at one end of said chamber arranged to open downward; and means providing a flame at the top edge of said exit door whereby upon the door being opened the initial mixture of the special atmosphere gas and air is ignited, and can thereafter burn without explosion as the said door is further opened.

1,818,760. PROCESS AND APPARATUS FOR DRAWING ELECTRICAL PICTURES. PAUL SELÉNYI, Budapest, Hungary, assignor to Egyesult Izzolampa es Villamossagi Reszvenytarsasag, Ujpest, Hungary, a Corporation. Filed Jan. 18, 1929, Serial No. 333,462, and in Hungary and Austria Feb. 1, 1928. 10 Claims. (Cl. 234—1.5.)



1. A process for registering and permanently recording phenomena transformed into varying electrical forces, by means of cathode rays produced in a cathode ray tube, comprising producing, intensifying and focussing said cathode rays in a vacuum, intercepting said cathode rays by an electrical insulating medium, changing the form and intensity of the cathode rays corresponding to said electrical forces and retaining on said medium the charges imparted to it by said differentiated cathode rays by means of charged particles distributed on said insulating medium.

1,818,761. APPARATUS FOR DRYING CLOTHES, LAUNDRY, ETC. THEODOR SENDLER, Stettin, Germany. Filed Feb. 24, 1930, Serial No. 430,556, and in Germany Sept. 16, 1929. 7 Claims. (Cl. 312—113.)

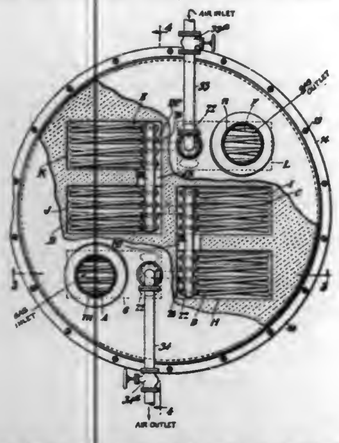


2. In a form of embodiment of a drying apparatus for laundry, a plurality of drying bars divided into two sets of superimposed bars, the bars of the one set being arranged in staggered relation to the bars of the other set, and each set pivotally mounted on a vertical shaft, means for causing conjoint movement of said bars, a box-like casing having an opening in the front in which the shafts are fixed and adapted to enclose the said bars, a folding lid to the said casing rendering the said bars invisible when the apparatus is not in use, and means for causing the lid to open automatically conjointly with the actuation of the said bars.

1,818,762. HEAT TRANSFERRING MEANS. NICHOLAS P. SETCHKIN, New York, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed June 23, 1926, Serial No. 117,942. Renewed Oct. 5, 1929. 12 Claims. (Cl. 257—230.)

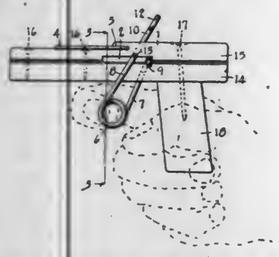
1. In combination, a body having a group of passages arranged side by side and a second similarly arranged group

disposed beside the first group, a partition separating the two groups, the passages being connected in series whereby



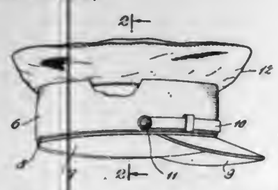
gases may flow through the passages in succession, and interconnected heat-transferring surfaces arranged in each of said passages.

1,818,763. TOY GUN. CYRUS C. SHIGLEY, Kalamazoo, Mich. Filed Jan. 13, 1930. Serial No. 420,414. 6 Claims. (Cl. 124—12.)



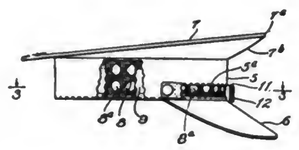
6. A toy gun comprising a longitudinally slotted barrel provided with a grip and with a projectile seat, a combined trigger and impeller consisting of a coiled spring having arms at the ends thereof, one of said arms being engaged with said barrel and constituting a supporting member, the other arm being angled and engaged in said slot and having a projectile engaging portion, and a keeper opening to said slot with which said impeller arm may be engaged.

1,818,764. CAP. WILLIAM I. SILVERSTEIN, Brooklyn, N. Y. Filed Dec. 13, 1929. Serial No. 413,702. 3 Claims. (Cl. 2—195.)



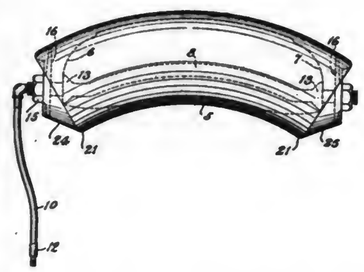
1. In a cap, a head encircling band, means adjacent the upper edge of said band for forming a relatively small annular recess opening outwardly at the upper edge of said band, a crown detachable with respect to said band, said crown including a depending wall member, the lower edge of which is provided with a non-extensible strip adapted to be arranged in said recess in coupling the crown with said band, said means involving a spring ring adapted to be arranged within the crown adjacent the non-extensible strip at the lower edge thereof, to retain said crown against accidental displacement from said band.

1,818,765. MILITARY CAP. WILLIAM I. SILVERSTEIN, Brooklyn, N. Y. Filed Feb. 4, 1930. Serial No. 425,730. 6 Claims. (Cl. 2—176.)



1. A cap of the class described, the head encircling band of which is provided at the front end thereof with an elongated and circumferentially arranged opening, the sweat band of the cap having an opening registering with the opening in said band, means attached to said head encircling band and arranged outwardly thereof and normally forming a closure for said opening, and said last named means comprising an extensible strap provided with means for adjusting the spacing of the strap from the body of the hat to permit varying amounts of air to be transmitted therethrough.

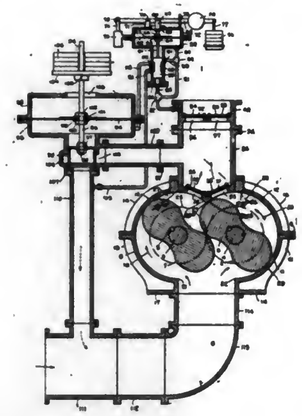
1,818,766. SECTIONAL REPAIR BAG. CLYDE J. SMITH, GEORGE K. MCNEILL, and CHESTER J. DOLDING, Detroit, Mich., assignors to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Aug. 27, 1927. Serial No. 215,812. 17 Claims. (Cl. 18—45.)



15. A sectional repair bag comprising an arcuate body portion closed at the ends and a reinforcing plate embedded in the material of each of said ends, a tie rod extending through said body and said plates and maintaining said plates in parallel relation, flanges on said rod opposite each of said plates, the rubber end wall of the bag being gripped between one of said flanges and the opposing plate, and nuts on the threaded end portions of said rod acting to force said plates toward the corresponding flanges, the portion of each of said plates opposite the nut being exposed to provide metal to metal contact.

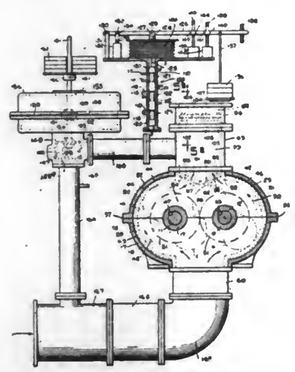
1,818,767. ROTARY BLOWER AND PUMP. EVERETT W. SWARTWOUT, White Plains, N. Y. Filed Sept. 13, 1927. Serial No. 219,225. 19 Claims. (Cl. 230—141.)

1. The combination of a casing having an inlet and a discharge, said inlet being free of any valve, means including impellers disposed within said casing for compressing a fluid, driving means for said impellers, valve means for said discharge, fluid passage means communicating at its one end with said discharge of said casing between said valve means and said impellers and at its opposite end with said inlet for controlling the discharge



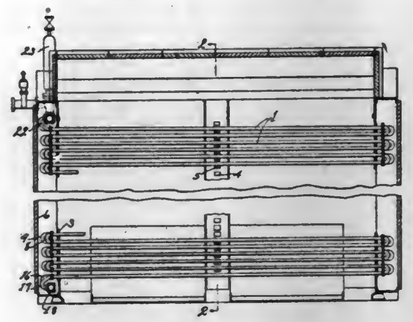
through said discharge valve means, said fluid passage means including a valve responsive to discharge and inlet pressures and movable solely to fully opened and fully closed positions, and means for moving said valve solely to fully opened and fully closed positions.

1,818,768. ROTARY BLOWER, PUMP, AND METER. EVERETT W. SWARTWOUT, White Plains, N. Y. Filed Sept. 28, 1927. Serial No. 222,455. 24 Claims. (Cl. 230—141.)



1. The combination of a casing comprising a cylinder having different compartments, compression means disposed within said compartments respectively, common driving means for said compression means, and capacity varying means for said compartments respectively, said capacity varying means including a pilot valve, a diaphragm, a valve controlled by said diaphragm, by-pass passage means leading from the delivery side of said compartments respectively to the suction side of said compartments respectively, said valve controlling the opening and closing of said by-pass passage means, a housing for said pilot valve, said housing being provided with ports, and passage means co-acting with said pilot valve for moving said diaphragm and said valve to opened and closed positions respectively responsive to variations of the delivery pressure of said compartments respectively.

1,818,769. ECONOMIZER. JAMES E. TRAINER and IVAR L. LANGVAND, Barberton, Ohio, assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 11, 1928. Serial No. 245,970. 21 Claims. (Cl. 257—255.)

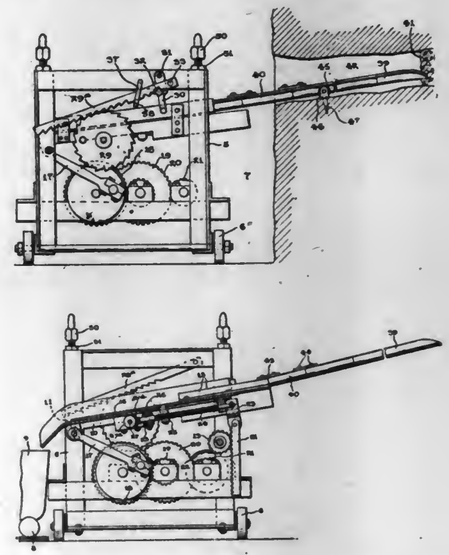


1. In an economizer, rows of tubes connected by return bends, said tubes passing through gas tight openings in the walls of said economizer with the outside surfaces of said tubes contacting with the edges of said openings, said tubes being free to move longitudinally with respect to the walls due to expansion and contraction.

1,818,770. PROCESS OF DISPERSING CARBON. WILLIAM F. TULEY, Nutley, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Nov. 9, 1929. Serial No. 406,174. 7 Claims. (Cl. 252—6.)

1. In the art of dispersing carbon the steps of: mixing finely divided carbon with a solution of an alkali sulphite in a polar dispersing medium.

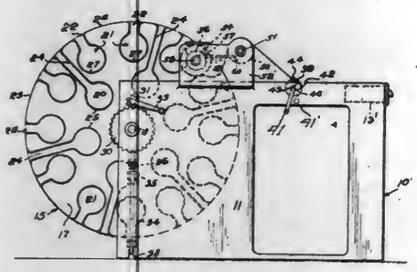
1,818,771. COAL MINING AND LOADING MACHINE. FRANK H. WEITZ, Duryea, Pa. Filed Sept. 29, 1930. Serial No. 485,235. 6 Claims. (Cl. 198—220.)



1. A mechanism of the character described, comprising a shovel section, a plurality of conveyer sections,

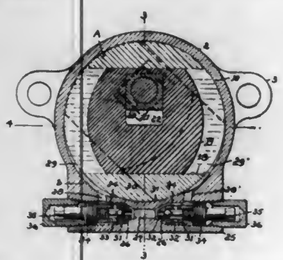
means for securing said sections together end to end, the innermost of said conveyer sections being mounted for reciprocatory movement, a guiding and supporting means for the last named conveyer section, means for imparting reciprocatory movement to said guiding and supporting means and consequently to the last named conveyer section, and means for adjusting the last named conveyer section longitudinally, with respect to said guiding means, during the reciprocation of the latter.

1,818,772. STAND FOR HOLDING ROLLED SHEET MATERIALS. WILLIAM J. WEEKS, Florence, S. C. Filed Apr. 30, 1929. Serial No. 359,363. 1 Claim. (Cl. 242—55.3.)



A stand for holding rolled sheet material, comprising a relatively low horizontal frame, a horizontal reel rotatably mounted upon the frame near one end thereof, said reel having inner and outer annular sets of pockets, said reel having slots in its periphery leading into the outer pockets and slots in its periphery leading to the inner pockets, the slots to the inner pockets extending between the outer pockets, corresponding ends of the pockets being closed and their opposite ends open, the open end of each outer and inner pocket being uncovered by the frame when such pocket is shifted to a position near the top of the frame so that the rolled sheet may be engaged by the hand inserted within such open end of the pocket, a driven horizontal roll, means to support the driven roll adjacent to the periphery of the reel and at an elevation substantially above the axis of rotation of the reel, said frame being provided outwardly of the side of the driven roll with openings, a winding roll, a shaft for the winding roll inserted within the openings, the winding roll being arranged at an elevation beneath the driven roll, and means to lock the reel against rotation when it is turned to bring a slot of a selected pocket near and wholly beneath the driven roll, the arrangement being such that the sheet from either an inner or outer pocket will engage the major portion of the periphery of the driven roll.

1,818,773. HYDRAULIC SHOCK ABSORBER. LE ROY A. WESTMAN and GLENN B. CARMAN, Cleveland, Ohio. Filed Jan. 19, 1929. Serial No. 333,660. 13 Claims. (Cl. 188—88.)

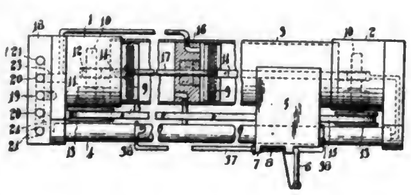


1. A shock absorber, comprising a liquid receptacle, a rotatable disk within said receptacle and axially aligned therewith, a stationary post eccentrically related to the axis of said disk, a liquid displacement piston operatively connected with said disk and post, and means for restraining the flow of the liquid displaced within said receptacle by the piston.

1,818,774. ZINC ALLOY. LELAND E. WEMPLE, Chicago, and FLOYD A. WARREN, Peru, Ill. Filed Jan. 21, 1931. Serial No. 510,321. 1 Claim. (Cl. 75—1.)

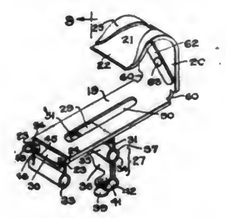
As a composition of matter an alloy characterized by the fact that it is of substantially greater hardness than zinc and capable of being mechanically worked, composed of zinc 100 parts, copper $\frac{1}{16}$ to 2¼ parts and antimony 1/100 to 2 parts.

1,818,775. WINDSHIELD WIPER. NORMAN WILLIAMS and HERMAN MITTERMEIER, Kitchener, Ontario, Canada. Filed Apr. 19, 1930. Serial No. 445,601. 7 Claims. (Cl. 74—14.)



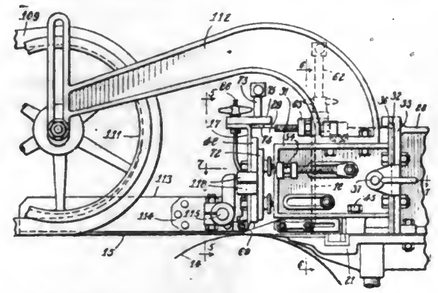
1. In a device for actuating a movable part, the combination of a cylinder, a piston rectilinearly-reciprocable therein; a spindle journalled at right angles to the axis of the cylinder and extending with a substantially airtight fit through its wall; means connected to the piston for rotating the spindle; a movable part; and means actuated by the spindle for moving the said part.

1,818,776. COMBINED VALANCE BOARD SUPPORT AND CURTAIN ROD BRACKET. JACOB M. WINTROB, Philadelphia, Pa. Filed Mar. 18, 1929. Serial No. 347,881. 11 Claims. (Cl. 156—13.)



4. In combination, a member arranged to support one end of a curtain rod, means for mounting said member upon a fixed support, means for positionably adjusting said member toward or away from said support, and means operatively associated with said members for limiting the longitudinal movement of the rod with respect thereto.

1,818,777. PAPER MAKING MACHINE. ALONZO ALDRICH and EARL E. BERRY, Beloit, Wis., assignors to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed May 26, 1927. Serial No. 194,304. 55 Claims. (Cl. 92—44.)

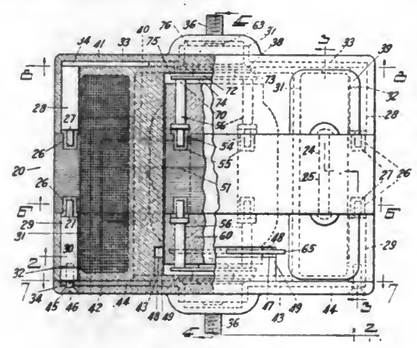


1. In a paper making machine, a headbox having pond sides adjustable sidewise and lengthwise with respect to the wire, and a slice carried by the pond sides.

1,818,778. PROCESS OF MANUFACTURING COLOR LAKES FROM PETROLEUM. GELLERT ALLEMAN, Swarthmore, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Original application filed Aug. 24, 1926, Serial No. 131,811. Divided and this application filed Mar. 26, 1927. Serial No. 178,820. 24 Claims. (Cl. 260—1.)

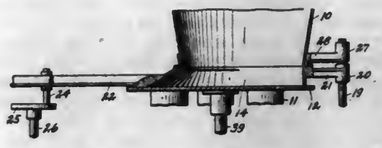
1. The process of manufacturing color lakes from petroleum which consists in producing a water-soluble soap by a treatment comprising substantially completely eliminating the mineral oil from, and substantially reducing the content of petroleum resins in, a petroleum-derived product containing soap, mineral oil and petroleum resins and adding to said soap a water-soluble dyestuff and a water solution of a water-soluble metal salt adapted to combine with the acid radical to form a water-insoluble soap.

1,818,779. OSCILLATING MOTOR. VINCENT G. APPLE, Dayton, Ohio. Filed Sept. 6, 1929. Serial No. 390,714. 8 Claims. (Cl. 175—340.)



1. In a dynamo electric machine, a structure comprising a magnetizable core, a winding on said core, a hollow housing of insulation having a cylindrical chamber closed by an end wall at each end, said core and winding being imbedded in said insulation, and two conductive members, one enclosed in each end wall, one end of said winding being electrically connected to one said conductive member and the other end to the other said conductive member, said conductive members having exposed contact surfaces in said end walls on the inside of said chamber.

1,818,780. CANNING MACHINE. CHARLES H. AYARS, Salem, N. J., assignor to Ayars Machine Company, Salem, N. J., a Corporation of New Jersey. Filed Mar. 5, 1929. Serial No. 344,329. 18 Claims. (Cl. 226—100.)



1. In a receptacle filling machine having measuring cups thereon, a member oscillating across the tops of the cups in series for smoothing off the material in the receptacles and having a progressively inclined compressing wall.

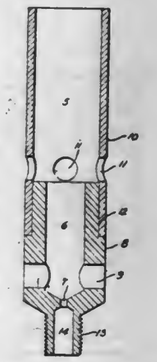
1,818,781. METHOD OF CARRYING OUT BIOCHEMICAL PROCESSES. STEFAN BAKONYI, Budapest, Hungary, assignor to Deutsche Hydrierwerke Aktiengesellschaft, Berlin-Charlottenburg, Germany. Filed Oct. 5, 1927, Serial No. 224,285, and in Germany June 19, 1927. 8 Claims. (Cl. 260—135.)

2. The method of carrying out a bacterial fermentation process which comprises developing a culture of mixed bacteria selectively destroying undesired bacteria by subjecting the mixture to a solution of the products to be produced by the fermentation process, developing a culture of the surviving bacteria, subjecting the bacteria of the new culture to the products to be produced by the fermentation process to destroy the undesired bacteria and using the surviving strain of bacteria for the fermentation of the material to be treated.

1,818,782. METHOD OF PRODUCING BUTANOL AND ACETONE BY FERMENTATION. STEFAN BAKONYI, Dessau, Germany. Filed Dec. 21, 1928, Serial No. 327,751, and in Germany Oct. 22, 1928. 13 Claims. (Cl. 260—135.)

2. The method of preparing bacteria of the butylobacter group which comprises subjecting raw material containing mixed bacteria to a sterile mash containing approximately 1 to 2% of butanol and incubating at a temperature approximately 37° C.

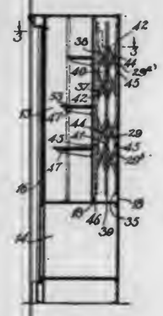
1,818,783. GAS BURNER. VILYNN O. BEAM, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Oct. 26, 1929. Serial No. 402,587. 3 Claims. (Cl. 158—106.)



1. A gas burner comprising means forming a relatively deep well, the diameter of which at its top and for a

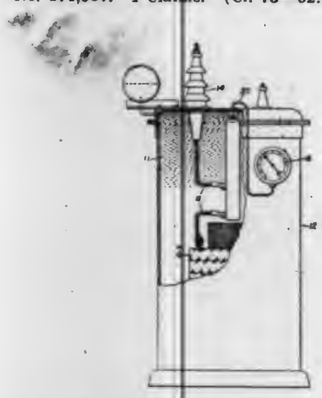
substantial distance down is greater than the diameter of the balance of the well, a gas jet orifice in the bottom of the well, lower air intake ports in the sides of said means adjacent the bottom of the well, upper air intake ports in the sides of said means where the two well portions meet, the relative areas of the gas jet orifice, the lower side air intake ports and the bore of the lower portion of the well being such that with gas issuing from said jet orifice under relatively high pressure, there will be formed a gas and air mixture, the rate of flame propagation of which will be less than the velocity thereof in said bore and the relative areas of the bore of the upper well portion and said upper air intake ports being such that the resultant mixture will have a velocity not materially in excess of the rate of flame propagation thereof.

1,818,784. DISPLAY CABINET. HARRY F. BEERS, Pelham, N. Y. Filed Dec. 18, 1929. Serial No. 414,904. 4 Claims. (Cl. 312—128.)



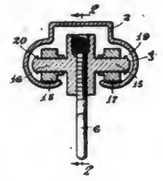
1. In a cabinet of the class described, the combination with the back wall thereof of a supplemental back wall member and means coupling said wall members together in such manner as to permit the movement of said supplemental wall member toward and from the back wall of the cabinet, said means comprising channel rails arranged vertically on the opposed faces of said wall members and links pivotally coupled to said rails and having ends movable relatively thereto for supporting and guiding the supplemental wall member in its movement.

1,818,785. TEMPERATURE INDICATOR FOR ELECTRICAL APPARATUS. LOUIS F. BLUME, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 11, 1930. Serial No. 474,537. 4 Claims. (Cl. 73—52.)



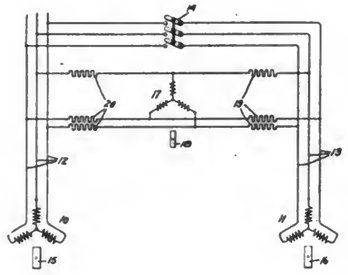
4. The combination with electrical apparatus immersed in an insulating liquid of a temperature indicator having a temperature responsive element, a resistance adapted to be heated in response to a current in said apparatus, and a tube of electrical and heat insulating material, said resistance and temperature responsive element being located at opposite ends of said tube, and said tube extending upwardly from said resistance to conduct liquid heated by the resistance to the temperature responsive element.

1,818,786. MASTER CARRIER FOR CURTAIN TRACKS. LESTER W. BOND, New York, N. Y., assignor to The Kroder Reubel Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 18, 1930. Serial No. 436,879. 6 Claims. (Cl. 156—20.)



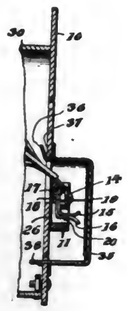
1. A master carrier of the character described, comprising a body, a cord-receiving passageway extending therethrough, a passageway intersecting the first mentioned passageway, said last mentioned passageway having an enlarged section and a reduced threaded section, a curtain-supporting screw member fitting into said threaded passageway and positioned to pinch the cord in said cord-receiving passageway and force part thereof into the enlarged passageway, and means extending from said body adapted to coact with a track for supporting the body while connected with a cord.

1,818,787. SYNCHRONOSCOPE. FRANCIS H. BOWMAN, Swampscott, Mass., EDWARD LYNCH, Rio De Janeiro, Brazil, and DAVID R. PRICE, Lynn, Mass., assignors to General Electric Company, a Corporation of New York. Filed Sept. 16, 1929. Serial No. 393,095. 4 Claims. (Cl. 172—245.)



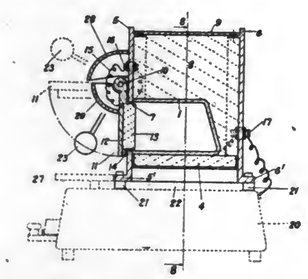
2. A synchronoscope having polyphase terminals, a polyphase line and circuit connections between said terminals and line including phase splitting means for reducing the number of necessary line connections to less than the number of polyphase terminals on the synchronoscope.

1,818,788. TELEPHONE APPARATUS. JOSEPH O. CADIEUX, Meriden, Conn., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn., a Corporation of Delaware. Filed June 19, 1930. Serial No. 462,265. 5 Claims. (Cl. 179—100.)



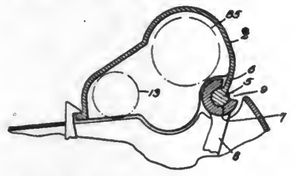
2. A telephone support comprising a wall plate having an opening for conductors, an insulating block mounted in the front of the plate and having terminals and connected contact jaws and a protector for the conductor terminals and jaws having means for detachably securing it to said support on said opening.

1,818,780. ELECTRIC FURNACE. HENRY GORDON CAMPBELL, Dundee, Scotland. Filed Oct. 9, 1929, Serial No. 398,513, and in Great Britain May 15, 1929. 1 Claim. (Cl. 219—35.)



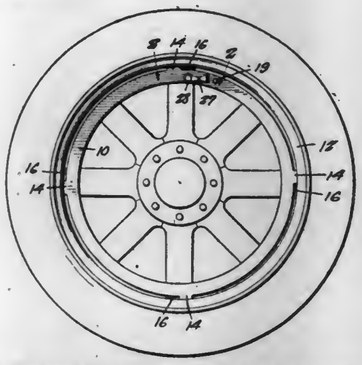
An electric furnace comprising a hoof-shaped muffle, electric heating means embedded in the top, bottom, side and end walls of said muffle, a hinged door controlling the mouth of said muffle, a slab of refractory material forming a lining for said door, adapted in the closed position of said door to project into the interior of said muffle, and electric heating means embedded in said slab in series with said first mentioned means.

1,818,790. CALCULATING MACHINE. GEORGE C. CHASE, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,189. 2 Claims. (Cl. 235—63.)



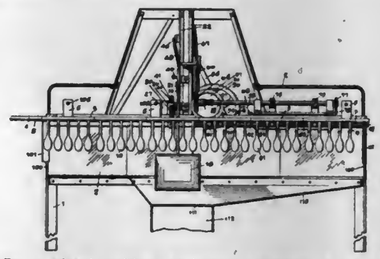
1. In a calculating machine, having selector mechanism including digital keys and selector members governed thereby, and an endwise shiftable pivoted carriage provided with totalizer wheels; the carriage support having means to support the carriage and to provide for pivotal movement thereof at any and all points in the carriage shift and so as not to limit the extent of the carriage shift.

1,818,791. RIM. CLIFFORD V. CONRAD, Portland, Oreg., assignor of one-half to Mike Ditchen, Portland, Oreg. Filed Oct. 29, 1930. Serial No. 492,041. 1 Claim. (Cl. 301—17.)



In a demountable rim, a felly having a circumferential flange, wedge-shaped lugs carried thereby, a rim adapted to be removably mounted upon the felly, lugs carried by the rim and having reversely inclined faces opposed to the felly flange and adapted to have one of said faces engage the felly lugs, a pivotally mounted locking dog carried by the felly, an inclined portion at the free end of the dog for engagement between an inclined face of one of the rim carried lugs and the flange of the felly to hold the rim in position, means to move the dog pivotally, and means to hold the dog moving means against operation.

1,818,792. SHEET RUBBER GOODS FORM STRIPPER. RICHARD H. COOVERT and LOUIE W. WILKINSON, Willard, Ohio. Filed Dec. 28, 1928. Serial No. 328,962. 8 Claims. (Cl. 18—2.)

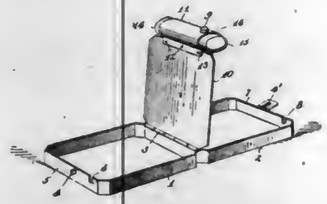


1. In a sheet rubber stripper machine, a plurality of forms having sheet rubber articles thereon, means for forcing a liquid between the sheet rubber articles and the forms for loosening the sheet material from the forms, a pair of elastic rubber pads, means for pressing the pads against the articles, means for moving the pads relative to the forms to draw the articles from the forms, and means for moving the forms between the pads and in a direction at right angles to the direction of movement of the pads.

1,818,793. VANITY CASE. CHARLES N. CORYELL, Larchmont, N. Y. Filed June 24, 1930. Serial No. 463,458. 3 Claims. (Cl. 132—83.)

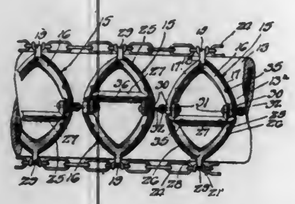
1. A vanity case, including a pair of hingedly connected sections, a mirror hingedly connected with said sections,

and a tubular holder secured to the outer end of said mirror, said holder having a slot, said holder being adapted to receive a lipstick casing provided with a pin, said pin extending through said slot, each of said sections



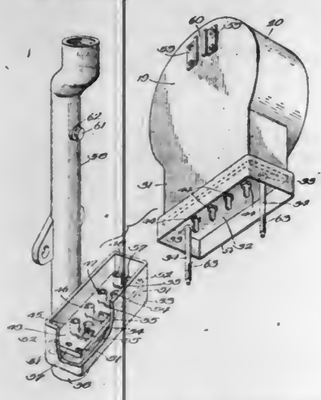
having a notch for accommodating said pin when the casings are closed, said pin acting as a handle to open said section and to swing the lipstick holder and the mirror from one section to another.

1,818,794. AUTOMOBILE TIRE CHAIN. AMIL L. DRAGER, Beloit, Wis. Filed Jan. 16, 1931. Serial No. 509,215. 5 Claims. (Cl. 152—14.)



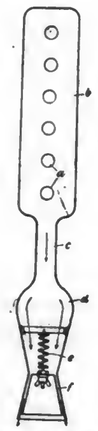
1. A tire chain comprising a plurality of link sections each including a substantially V-shaped element having reduced end portions, a substantially triangular shaped element including a bar having lugs thereon, means for pivotally connecting said elements including means extended through said lugs and said reduced end portions, said last named means including means for interconnecting said sections, and means for mounting said sections on a tire.

1,818,795. ELECTRICITY METER. ALBERT L. EMENS, La Fayette, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Filed Jan. 11, 1929. Serial No. 331,730. 1 Claim. (Cl. 247—2.)



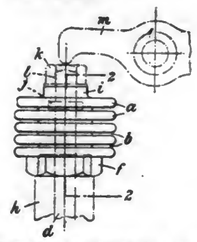
A support for an electricity meter comprising a tubular body portion open at both ends and having means at each of said ends for connection to a conductor conduit and an integral hollow lateral extension on the body, said extension being shaped to provide a connection casing directed longitudinally of the body and all of whose side walls are formed independently of the body, said connection casing having an open free end whose edge constitutes a seat for a meter.

1,818,796. INTERNAL-COMBUSTION ENGINE. FRANÇOIS FEYENS, Brussels, Belgium, assignor to Société Générale d'Etudes Industrielles, General Research Corporation, Societe Anonyme, Brussels, Belgium, a Company of Belgium. Filed Apr. 9, 1928, Serial No. 268,541, and in Belgium Apr. 15, 1927. 4 Claims. (Cl. 123—75.)



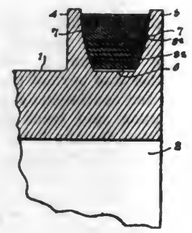
1. In combination with an internal combustion engine having an exhaust pipe leading from the engine cylinder, an exhaust chamber connected with said pipe and of greater capacity than that of the cylinder, an outlet chamber, a neck of reduced cross-sectional area connecting the exhaust chamber with the outlet chamber and constituting a primary medium for checking the outward flow of the exhaust gases, an outlet opening to the atmosphere from the outlet chamber, and an outwardly opening valve in said outlet operated by the pressure of the out-flowing gases and affording a restricted outlet passage constituting a secondary medium for checking the outward flow of the exhaust gases; whereby a counter pressure is created which is opposed to the discharge of the exhaust gases, which counter pressure may be controlled to prevent excessive exhaust discharge.

1,818,797. HERMETIC CLOSURE FOR JOINTS SUCH AS THOSE BETWEEN PUMP BODIES AND THEIR PLUNGERS. FRANÇOIS FEYENS, Brussels, Belgium, assignor to Société Générale d'Etudes Industrielles, General Research Corporation, Société Anonyme, Brussels, Belgium, a Company of Belgium. Filed May 31, 1928, Serial No. 281,828, and in Belgium June 3, 1927. 2 Claims. (Cl. 103—202.)



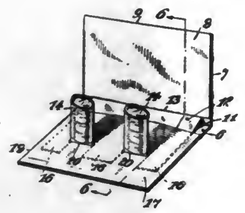
1. A combined seal and retracting spring for the pump plunger of a fuel injecting pump in which the plunger projects at one end beyond the end of the pump body and is moved inwardly on its power stroke, said combined seal and retracting spring comprising a one piece integral resilient casing formed with circumferentially extending external and internal grooves, and adapted to surround the projecting end of the plunger, said casing being provided at its outer extremity with a sleeve adapted to surround the projecting end of the plunger and to be clamped fluid tight thereto, and being provided at its inner extremity with a collar threaded interiorly to screw fluid tight on the end of the pump body; whereby the casing will act as a fluid tight seal between the plunger and pump body, and on being contracted on the power stroke of the plunger, the casing will by its expansion, act as the sole means for retracting the plunger.

1,818,798. PULLEY. ABRAHAM L. FREEDLANDER, Dayton, Ohio. Filed Apr. 11, 1928. Serial No. 269,179. 3 Claims. (Cl. 74—21.)



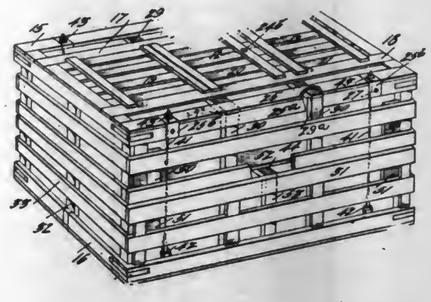
1. In combination, a V type longitudinally inextensible transversely deformable straight wall belt of vulcanized rubber and fabric, and a grooved pulley having concavely curved sides adapted to receive and support said belt so that the side walls of the belt conform to the cross section of the groove of the pulley.

1,818,799. DISPLAY DEVICE. IRA G. HAAS, Far Rockaway, N. Y., assignor to Sherwin, Haas & Co., New York, N. Y., a copartnership composed of Monroe R. Sherwin and Ira G. Haas. Filed Aug. 9, 1930. Serial No. 474,245. 3 Claims. (Cl. 40—126.)



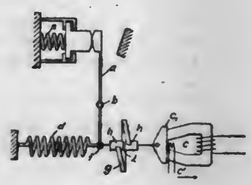
1. A display device of the character described comprising a base and a panel hingedly connected therewith, a part superimposed on the base provided with slots therein, and a part hingedly connected with said panel at a point in spaced relation to the hinged connection between the panel and said base and slidable between the base and said superposed part, said slidable part having hingedly connected portions projecting through said slots and movable to and from upright positions relative to said superimposed part in the folding movement of said panel to and from an upright position relative to the base.

1,818,800. SHIPPING CRATE. FRITZ P. HANSEN, Portola, Calif. Filed Sept. 13, 1929. Serial No. 392,445. 1 Claim. (Cl. 217—43.)



In a collapsible crate, top and bottom sections having peripheral flanges, side and end sections adapted to fit between the top and bottom sections in erected position, said top and bottom sections being adapted to engage flange to flange and enclose the remaining sections in knock down position, the top section and its flange being provided with pairs of apertures, one aperture of each pair being in the top adjacent the flange and the other aperture of each pair being in the top flange, each pair of apertures having their axes in the same vertical plane, rings secured to the bottom flange below respective pairs of apertures, bolts each selectively engageable in the apertures of a respective pair, and flexible elements each connecting a respective bolt and ring, said bolts being engaged in the top apertures with the crate erected to exert tension on the flexible elements and engaged in the flange apertures to pass through the rings in knock down position.

1,818,801. HIGH SPEED CIRCUIT INTERRUPTER. WILHELM HERDEN, Berlin-Hermsdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 18, 1930, Serial No. 421,826, and in Germany May 25, 1929. 3 Claims. (Cl. 200—87.)

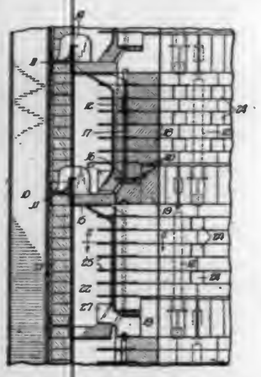


1. In combination, a movable switch member, a spring biasing the member to move in one direction, a relatively movable mass mounted for movement into impact with the switch member, a second spring connected between the member and said relatively movable mass for holding the member against movement by the first spring, and means for releasing the mass to be operated by said second spring into impact with the switch member and thereby accelerate the movement of the member by the first spring.

1,818,802. FURNACE WALL CONSTRUCTION. LOUIS H. HOSBEIN, Winnetka, Ill., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 29, 1926. Serial No. 151,801. 9 Claims. (Cl. 110—56.)

1. In furnace wall construction, the combination of wall refractories supported in groups, anchoring members

retaining the refractories of a group in association, and heat diffusing members bedded between juxtaposed re-



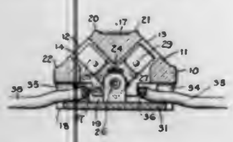
fractories, said heat diffusing members engaging said anchoring members and having portions exposed to air outside the wall.

1,818,803. BRUSH SHIFTING DEVICE FOR ALTERNATING CURRENT DYNAMO ELECTRIC MACHINES. JOHN I. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 27, 1929. Serial No. 410,197. 6 Claims. (Cl. 172—280.)



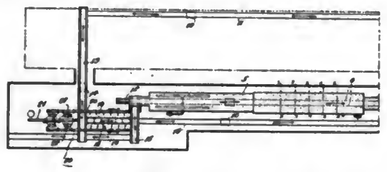
3. A brush shifting device for a commutator type dynamo electric machine, said device comprising two movable brush yokes, a driving link pivotally connected to each yoke, said connections being on opposite sides of the commutator, a common pivoted connection between the remaining ends of the driving links, means for moving the common pivoted connection toward and away from the center of the commutator, and means for guiding the common pivoted connection in such a manner that during a predetermined portion of its movement one brush yoke is stationary and the other brush yoke is moving.

1,818,804. ELECTRICAL OUTLET. WILLIAM HUPPERT, New York, N. Y. Filed Dec. 15, 1928. Serial No. 326,190. 8 Claims. (Cl. 173—334.)



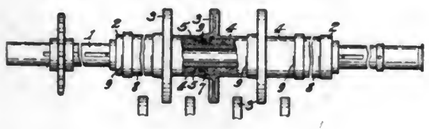
1. An outlet comprising an integral body of insulating material having a plurality of sets of channels opening at opposite lateral sides, the faces of said lateral sides being disposed at an angle to one another, contact members each having a plurality of terminal portions respectively extending into said channels for engagement therein with terminals of respective plugs, said insulating material being provided with lateral openings in its body portion respectively communicating with said angularly arranged channels for the accommodation of conductors, said body of insulating material having a single opening at its bottom, a closure of insulating material for said bottom opening, said body of insulating material further being provided with a perforation and a securing element extending through said perforation for mounting said body of insulating material and jointly holding said closure in position.

1,818,805. ARTICLE CONVEYER SYSTEM. CHARLES EDWARD JACQUART, South River, N. J., assignor to American Enameled Brick Corporation, New York, N. Y., a Corporation of New York. Filed July 10, 1929. Serial No. 377,097. 4 Claims. (Cl. 25—2.)



1. In combination with a brick firing kiln having a horizontally elongated chamber provided with a track extending therethrough between a charging entrance at one end of said chamber and beyond the opposite egress end thereof and means for continuously moving a line of brick carrying trucks upon said track through the kiln chamber; a loading station for the brick carrying trucks including a track to receive a plurality of the trucks and transfer tracks at the opposite ends of said receiving track extending at right angles thereto, endless brick conveyers at each side of said truck receiving track extending in parallel relation thereto and from which the brick are adapted to be removed and loaded upon the trucks positioned upon said receiving track, each of the latter tracks having a transfer truck thereon to receive the brick carrying trucks, and one of said transfer tracks extending from the truck receiving track into the charging entrance of the kiln whereby the loaded brick carrying trucks may be positioned upon the transfer truck on said track and successively positioned at one end of the line of trucks in the kiln chamber, as the loaded trucks therein are successively discharged from said chamber, and a track connected with the other of said transfer tracks for the return of empty brick carrying trucks to the loading station.

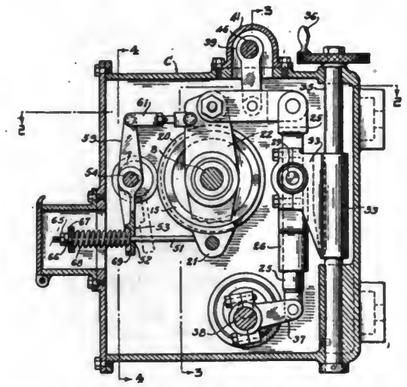
1,818,806. FURNACE CONVEYER. ARTHUR T. KATHNER, New Cumberland, W. Va. Filed Mar. 2, 1928. Serial No. 258,461. 20 Claims. (Cl. 263—6.)



4. A conveyer element comprising a disk having a sleeve-like hub, integral radial arms carried interiorly of said hub, said hub having a male end and a female end adapted to interfit with the non-corresponding ends of similarly shaped hubs, the female end having therein internal relatively spaced recesses and the male end having exteriorly thereof integral spaced lugs for fitting within the recess of an adjacent similarly shaped hub.

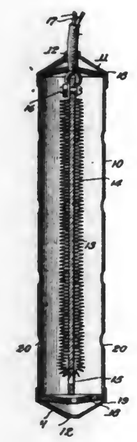
1,818,807. VARIABLE SPEED REDUCER. JOHN M. MANN, Philadelphia, Pa. Filed Feb. 12, 1930. Serial No. 427,977. 7 Claims. (Cl. 74—53.)

6. A variable speed transmission including a driven shaft provided with a drum, a coil grip wound around said drum, means for holding one end of said grip at a fixed radial distance from the axis of said drum and yield-



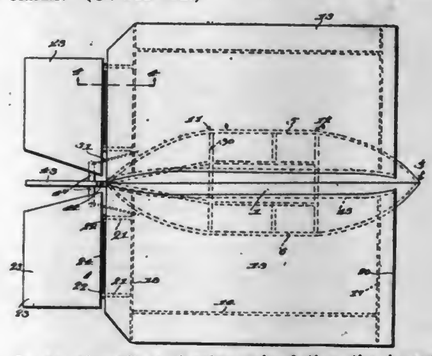
ing means connected to the other end of said coil grip to resist rotation of the coil grip as a whole in either direction around said drum.

1,818,808. ELECTRIC WATER HEATER. GEORGE T. MAX, Fort Worth, Tex., assignor to Rex Manufacturing Company, Fort Worth, Tex. Filed May 31, 1930. Serial No. 458,121. 2 Claims. (Cl. 219—41.)



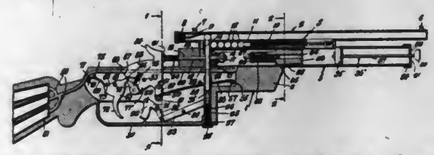
1. In a water heater, a casing having openings therein, tapered end closures for the casing, said closures having openings at their apices, an insulating panel extending centrally and longitudinally of the casing, a resistance element mounted upon the panel, compressible disks having openings therein and located at opposite ends of the casing for engagement by the ends of the panel to securely hold the panel in position, and conductor wires extending through one end of the casing and having electrical connection with the resistance element.

1,818,809. AIRCRAFT. LAWRENCE J. MCCARTHY, Ogdensburg, N. Y. Filed Jan. 16, 1930. Serial No. 421,[illegible]. 8 Claims. (Cl. 244—12.)



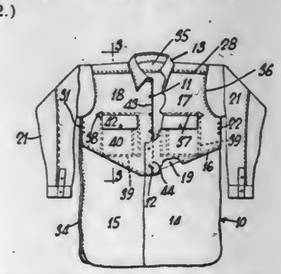
1. In an aircraft, a fuselage simulating the inverted hull of a boat and comprising bow and stern standards toward which the covered sides are sloped, the bottom of the fuselage being open.

1,818,810. AUTOMATIC AIR RIFLE. EARL H. MILLER, Sunnyside, Wash. Filed June 27, 1930. Serial No. 464,352. 7 Claims. (Cl. 124—8.)



1. A magazine air rifle comprising a stock, a barrel extending forwardly from the stock, a compressed air chamber located below the rear portion of the barrel, air cells in the stock, an air conducting tube leading from the air chamber to the said cells, an air pump including a cylinder extending forwardly from the air chamber, a piston working in said cylinder, a check valve between the pump cylinder, and air chamber, a valve casing having a passageway in communication with the inner end of the air chamber and the inner end of the barrel, a tubular shot container between the barrel and the air chamber, a shot feeding rod movable, at its upper end past the inner end of the shot container, a spring for moving the rod to effect delivery of one shot from the shot container to the inner end of the barrel, a valve for controlling the passage of compressed air from the air chamber to the said passageway, a hammer pivotally mounted for impact with the stem of the said valve to open the same and admit compressed air behind the shot delivered to the barrel, and a trigger for tripping said hammer.

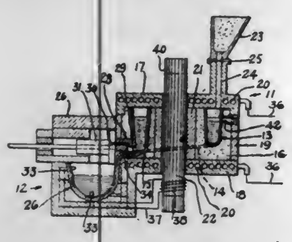
1,818,811. SHIRT. HENRY MILLER, Lincoln, Nebr. Filed Aug. 23, 1929. Serial No. 387,977. 1 Claim. (Cl. 2—122.)



A shirt comprising a back body portion, a pair of coacting single lower front portions having their lateral

edges secured to the lateral edges of the back body portion, an outer back ply having its lower edge secured to the back body portion and extending above the upper edge thereof to provide a shoulder extension, a pair of double top front plies having their upper edges secured to the shoulder extension, seams formed with the extension by rounding the edge thereof upwardly and formed with the inner front plies by rounding the upper edges thereof downwardly, said seams arranged at the point of connection of the extension with the double top front plies and having their rounded portions arranged in hooked formation with each other, the lateral edges of the double top front plies being secured to the back body and outer back ply, a collar secured to the extension and double top front plies, sleeves secured to the extension, double top front plies and back body portion respectively, said pair of co-acting single lower front portions having their upper edges secured to the double top front plies and said double top front plies having button and buttonholes along overlapping edges thereof.

1,818,812. ELECTRIC FURNACE. ALFRED MUSSO, East Orange, N. J., assignor of one-half to William P. Deppe, New York, N. Y. Filed Mar. 14, 1928. Serial No. 261,486. 12 Claims. (Cl. 113—5.)



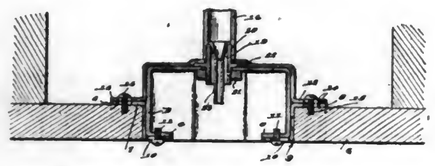
1. A device of the character described, including a melting hearth, a soaking trough, electrical heating means therefor, and other means communicating with the trough and the bottom of the hearth to permit metal to flow by gravity from the hearth to the trough, said other means being wholly encased by the hearth and the trough.

1,818,813. CHAIN HOOK. FRITZ NETZ, Odell, Nebr. Filed June 11, 1930. Serial No. 460,483. 1 Claim. (Cl. 24.230—5.)



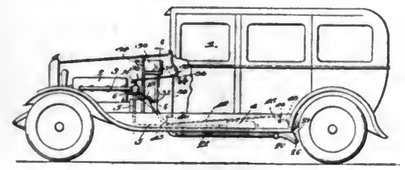
A chain hook including a shank integrally connected with a bill portion by a bow portion and said portions and shank formed of comparatively thin material, a reinforcing portion transversely rounded formed integral with the outer sides of said portions and shank and tapering toward the free end of the bill portion to permit the bill portion to be easily inserted in a chain link, said reinforcing portion having a slot adjacent the bow portion to reduce the weight of the device.

1,818,814. ELECTRICAL OUTLET BOX SUPPORT. GREELEY R. RIGGS and CHARLES F. SPREEN, Austin, Tex. Filed May 12, 1930. Serial No. 451,765. 4 Claims. (Cl. 247—21.)



4. In a support for mounting an outlet box within an opening in a wall sheeting, a pair of brackets to be arranged at opposite sides of said opening, each of said brackets comprising a web portion bridging the thickness of said sheeting, a laterally extending arm formed with one end of said web and engaged behind said sheeting, and an arm formed with the other end of each of said webs and extending into said opening for attachment to the outlet box, the arms at opposite ends of each web being substantially parallel.

1,818,815. SANDING DEVICE. BARNETT ROTHSTEIN, Wilkes-Barre, Pa. Filed Apr. 23, 1930. Serial No. 446,613. 3 Claims. (Cl. 291—3.)

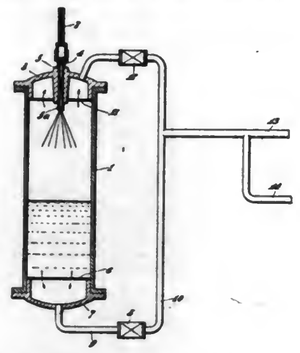


1. In combination with the exhaust outlet of the engine and a wheel of a freely maneuverable vehicle, a valve chamber in connection with the outlet having a pair of ports and a movable member with an opening registrable with either port, a sand reservoir having a discharge pipe and a branch communicating with one of the ports, a nozzle carried by the discharge pipe in advance of the wheel, a valve for the nozzle, and means for simultaneously opening the nozzle valve and moving the valve member to register its opening with the branch port for a discharge of exhaust gas into the discharge pipe.

1,818,816. PROCESS AND APPARATUS FOR OBTAINING DENSE CARBON DIOXIDE SNOW DIRECTLY FROM LIQUID CARBON DIOXIDE. HANS RUFENER and THEOPHIL EICHMANN, Bern-Liebefeld, Switzerland, assignors, by mesne assignments, to International Carbonic Engineering Company, Kennett Square, Pa., a Corporation of Delaware. Filed Dec. 18, 1928, Serial No. 326,898, and in Switzerland June 26, 1928. 16 Claims. (Cl. 62—121.)

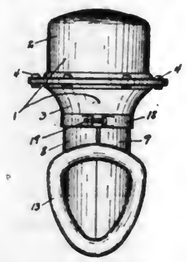
1. A process of obtaining dense, specifically heavy carbon dioxide ice from liquid carbon dioxide, including the steps of expanding the liquid carbon dioxide to a pressure that corresponds approximately to the triple point of

carbon dioxide, whereby snow and gases are produced, and in compelling gas to diffuse through the snow in order to



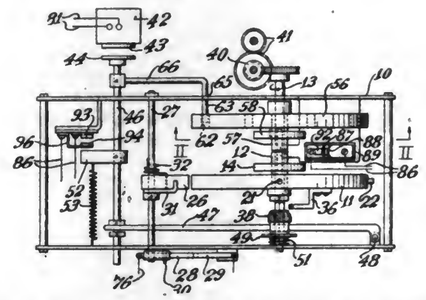
compress the snow in a single operation simultaneously with a further reduction of pressure to form the snow into a mass of higher density.

1,818,817. PROJECTOR FOR SIGNALING DEVICES. THEODORE J. SCOFIELD and GEORGE A. WHITE, Jackson, Mich., assignors to The Sparks-Withington Company, Jackson, Mich., a Corporation of Ohio. Filed Aug. 3, 1928. Serial No. 297,212. 2 Claims. (Cl. 181—27.)



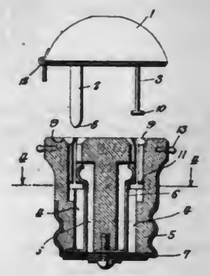
1. A projector for a signaling device comprising a throat piece consisting of opposed halves of an elbow pipe section joined at their edges, a collar secured in the upper end of the throat piece and having a portion extending outwardly therefrom, and a bell portion secured to the other end of the throat piece.

1,818,818. CIRCUIT RECLOSING DEVICE. MITCHELL J. SEALE, Birmingham, Ala. Filed Dec. 5, 1927. Serial No. 237,784. 6 Claims. (Cl. 175—294.)



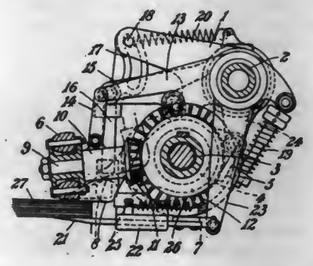
1. In electrically controlled mechanism for automatically effecting the operation of a circuit recloser associated with a circuit breaker successively a predetermined number of times starting from a normal position when the circuit breaker is closed the combination of a rotary control member in the mechanism, a reclosing circuit for said breaker, means for effecting successive energizations of said circuit during rotation of said member in one direction, driving means for said control member, means operable responsive to opening of the circuit breaker to connect said driving means to said member to rotate it in the direction to effect reclosing of the circuit breaker, resilient means operable upon closing of the circuit breaker to effect substantially instantaneous reverse rotation of the rotary member to its original position, and means to delay said reverse rotation a predetermined interval of time after the circuit breaker is closed.

1,818,819. PLUG SOCKET. JOHN SEARSUN, Cleveland, Ohio. Filed Feb. 28, 1930. Serial No. 432,150. 2 Claims. (Cl. 173—343.)



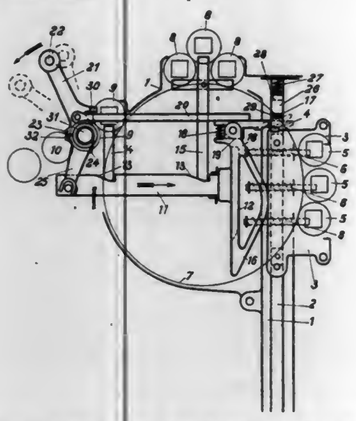
2. A device of the character set forth including plug and socket elements and said socket element having electrode bores, electrodes secured to the plug and received by said bores, means for securing one of the electrodes in its respective bore a hinge catch secured to the plug element and a lug carried by the socket element to be engaged by the hinge catch.

1,818,820. SHEET SEPARATING APPARATUS. JOHN SHUTTLEWORTH, Ashton-on-Mersey, and WILLIAM GOODIER MURPHY, Altrincham, England, assignors to Linotype and Machinery Limited, London, England, a British Company. Filed Nov. 7, 1930, Serial No. 493,948, and in Great Britain Nov. 15, 1929. 4 Claims. (Cl. 271—21.)



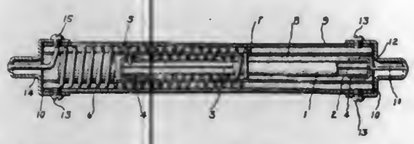
1. In apparatus for separating sheets from a pile, the combination with a combing wheel movable into and out of contact with the top sheet of the pile and adapted to form a buckle in said sheet, of a support for the part of the pile acted upon by the combing wheel, insertable into and withdrawable from the pile in a plate parallel with the top surface thereof.

1,818,821. PLATEN PRINTING PRESS. GEORG SPIESS, Leipzig, Germany. Filed June 12, 1929, Serial No. 370,311, and in Germany May 16, 1928. 5 Claims. (Cl. 101—362.)



1. Platen press inking mechanism having distributing rollers reciprocating together with inking rollers, and a throw-off device for said inking rollers, with a device automatically restraining said throw-off device from operation while the distributing roller is in operation.

1,818,822. RESISTOR FUSE. JOHN K. STAFFORD, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,857. 3 Claims. (Cl. 200—120.)



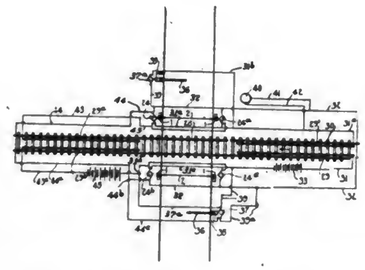
3. A resistor fuse comprising a tubular enclosed fuse, a cylinder of insulating material of substantially greater length than and surrounding said fuse in spaced relation, an insulating casing surrounding said cylinder in spaced relation, terminal caps enclosing and attached to the ends of said casing and to one of which the outer end of the fuse is attached, and a resistance wire connected to the inner end of said fuse wound about its enclosure for a part of its length, passed through the wall of the intermediate cylinder and wound back therein to the terminal cap opposite that to which the fuse is attached, and gas absorbent material filling the spaces between the enclosed fuse and said casing.

1,818,823. BRACE BIT EXTENSION. AUSTIN L. STOWELL, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 22, 1928. Serial No. 263,662. 8 Claims. (Cl. 279—90.)



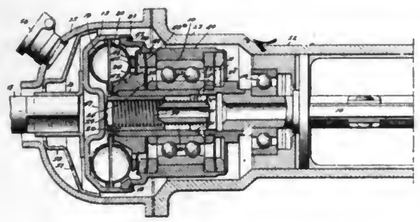
1. A bit brace extension including a shank having a socketed end, a non-rotatable shell surrounding said socketed end and having an internally threaded portion, a nut rotatably mounted on and fixed against longitudinal movement relative to said shank and adapted to be received by and to be entirely housed within said threaded portion of said shell, and a wrench element for turning said nut and adapted to be moved longitudinally on said shank.

1,818,824. YIELDING BARRIER FOR VEHICLES. JOSEPH B. STRAUSS, Chicago, Ill. Original application filed Aug. 12, 1922, Serial No. 581,339, now Patent No. 1,652,186, dated Dec. 13, 1927. Divided and this application filed Apr. 25, 1923. Serial No. 634,478. 4 Claims. (Cl. 246—129.)



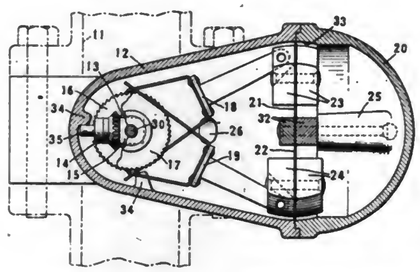
1. A yielding barrier for car crossing comprising an obstructing device at a distance from the crossing, said obstructing device being provided with separated posts and having a sliding connection at each end with said posts and adapted to be bodily lifted and lowered so as to move it to an operative or inoperative position, an upstanding device at a distance along the roadway in front of the obstructing device, an arm carried thereby and supported at one end thereon, flexible dependent strips connected at intervals along said arm, said arm adapted to be moved across the roadway when the obstructing device is lowered across the roadway so as to warn the operator of the approaching vehicle that the obstructing device is lowered and means directly actuated by the train for positively and conjointly moving both said obstructing device and arm to their operative and inoperative positions, the obstructing device moving downwardly past said arm when they are both moved to their operative positions.

1,818,825. HYDRAULIC TRANSMISSION. WARNER T. TABB, Mahwah, N. J., assignor to Elsemann Magneto Corporation, New York, N. Y., a Corporation of New York. Filed July 27, 1929. Serial No. 381,630. 14 Claims. (Cl. 264—13.)



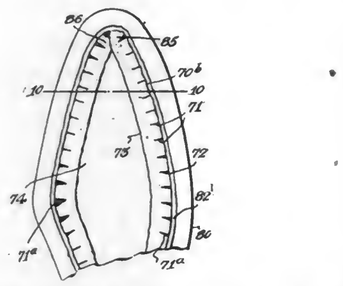
1. A speed regulator comprising a valve, means acting to keep the valve open, a cover surrounding said valve and said means, a speed-responsive transmission for closing the valve at predetermined speeds, said transmission comprising a pump impeller, a turbine impeller, an operating fluid between said impellers, and a housing turning with said pump impeller and surrounding said transmission, in combination with a hollow shaft connecting said valve, said means, and said turbine impeller, with which all are adapted to turn, a bearing between said shaft and said housing, said hollow shaft being adapted to permit passage of lubricant therethrough from said cover to said bearing.

1,818,826. SPEED RESPONSIVE CONTROL. WARNER T. TABB, Mahwah, N. J., assignor to The Elsemann Magneto Corporation, New York, N. Y., a Corporation of New York. Filed July 27, 1929. Serial No. 381,631. 18 Claims. (Cl. 264—1.)



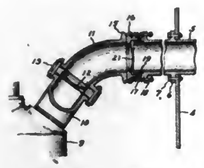
1. A speed responsive device comprising a vibrating element having a predetermined natural period of vibration, means for subjecting said element to the influence of gas pulsating with a frequency varying with the speed under concern to induce sympathetic vibration of said element, and means for utilizing the motion and energy of said element when vibrating at and near its natural period to cause the performance of the speed responsive function.

1,818,827. MEANS FOR FILLING SHOE-BOTTOM CAVITIES. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1927. Serial No: 212,018. 35 Claims. (Cl. 36—30.)



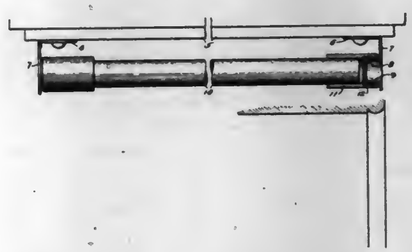
1. A shoe-filler piece adapted for filling a shoe bottom cavity comprising spreadable filler material of the kind containing comminuted solids mixed with a sticky binder, made in the form of a plastic strip as distinct from a sheet-like piece, having a width adapted when the strip is placed along the margin of the shoe bottom cavity to cover less than the area of the shoe bottom cavity.

1,818,828. ELECTRIC SWITCHING INSTALLATION. CARL THUMIM, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 2, 1928. Serial No. 274,664. 7 Claims. (Cl. 175—298.)



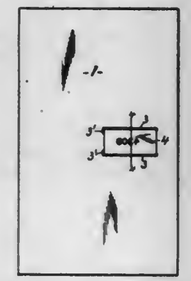
1. Switching apparatus comprising a plurality of switches each having a closed casing provided with a discharge passage, a discharge duct common to said switch casings having detachable connections with said discharge passages, and pressure relief means mounted in and normally closing each of said connections collapsible in response to predetermined pressure within a switch casing, said means including pressure resisting means normally closing said duct at any detachable connection when the corresponding switch casing connection is detached and preventing disharge from an affected switch casing through said duct into an unaffected switch casing.

1,818,829. ROD BRACKET. FRANK ULBRICH, Wallingford, Conn., assignor to H. L. Judd Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 9, 1931. Serial No. 507,655. 1 Claim. (Cl. 156—19.)



A bracket comprising, a sheet metal plate having an integral hollow cup-shaped boss struck from one side, the side walls of said boss being supported at both ends and being externally threaded to receive an internally threaded sleeve.

1,818,830. TYPE-CARD FOR PRINTING MACHINES. GEORGE VAN DUSEN, Syracuse, N. Y., assignor to Gaylord Brothers, Incorporated, Syracuse, N. Y., a Corporation of New York. Filed Sept. 1, 1930. Serial No. 479,122. 5 Claims. (Cl. 101—368.)

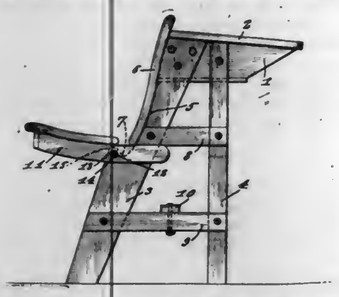


1. A card having an opening therethrough and slots along opposite sides of the opening, and a type-plate engaged in said slots and slidable therein to and from a position across said opening.

1,818,831. SCHOOL DESK AND SEAT. NED A. WAGERS, Appomattox, Va. Filed Mar. 7, 1930. Serial No. 434,042. 1 Claim. (Cl. 155—3.)

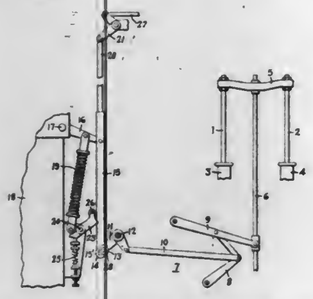
A school desk and seat comprising front and rear legs and the front legs disposed on an inclined plane and the rear legs disposed vertically to position the upper ends of the front and rear legs in close proximity to each other with the lower ends of the legs spaced a considerable distance to provide a firm supporting structure, a desk body connected to the upper ends of the legs, a seat back secured to the front legs and the latter having notches below the lower edge of the back to provide shoulders, arms pivoted

intermediate their ends to said shoulders, a seat secured to the arms forwardly of the pivots, upper and lower braces connecting the front and rear legs and the upper braces



engaged by the arms when in one position to support the seat in an operative position, and a strip forming a foot rest connecting the lower braces and cooperating therewith in firmly bracing the legs.

1,818,832. ELECTRIC SWITCH OPERATING MECHANISM. LUDWIG S. WALLE, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 10, 1930. Serial No. 494,513. 4 Claims. (Cl. 200—153.)



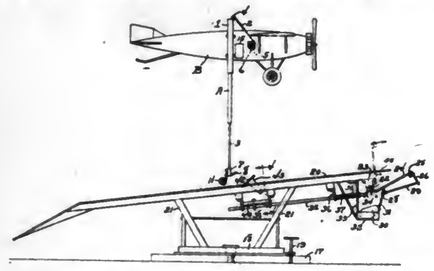
1. Electric switch operating mechanism comprising an operating member, electric switch actuating means, a lost motion connection between said member and actuating means, and a member having a fixed pivot adapted to engage said actuating means in the open circuit position thereof for preventing rebound thereof, said operating member operable through said lost motion connection to disengage said pivoted member in response to circuit closing movement thereof.

1,818,833. DOOR OPENING DEVICE. BENJAMIN F. ZEHNER, Ashland, Ohio. Filed Mar. 19, 1930. Serial No. 437,156. 1 Claim. (Cl. 268—35.)



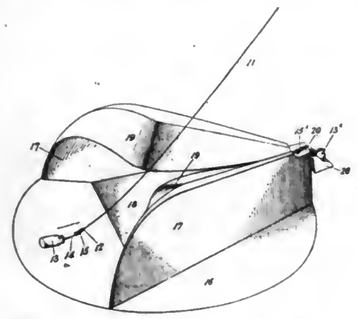
The combination with outwardly swinging hinged doors for a garage or the like, of a platform arranged beneath one of the doors and extending in opposite directions therefrom, pivoted depending links at the ends of the platform, elements to which the lower ends of the links are pivoted, spring means influencing the platform to normally sustain the same in horizontal position, a shaft journaled transversely below the platform having a cranked portion, a bearing on the under face of the platform for the cranked portion of the shaft, housings beneath the hinged edges of the doors, an upstanding lug in each housing, said shaft having its ends received in the housings and finding bearings through the lugs, a pair of facing gears loose on the shaft in each of the housings, each of said gears having lugs on the outer face thereof, pins on the shaft to contact with the opposite faces of the lugs on the respective pairs of gears, a gear overlying each pair of gears, in mesh therewith and journaled on the lugs, and said gears having upstanding plates which pass through the top of the housings, receive the doors therebetween and fixedly connected to said doors at the hinged edges thereof.

1,818,834. AIR MAIL CATCHER AND REFILLING DEVICE. HENRY ZIMMERMAN, St. Louis, Mo. Filed May 8, 1929. Serial No. 361,444. 4 Claims. (Cl. 258—1.)



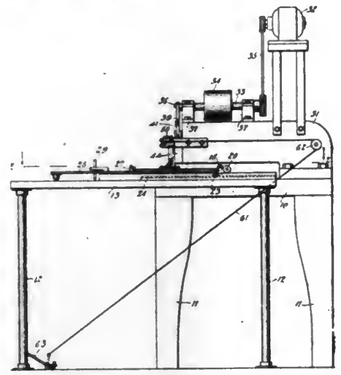
1. In combination with a plane, a telescopic member of tubular construction having the upper part thereof attached to the side of the plane, means within the plane whereby an occupant can raise and lower the other parts of the telescopic member, and a forwardly extending hook on the lower end of the bottom part of the telescopic member whereby the telescopic member can be used to catch articles while the plane flies over a support for said articles.

1,818,835. AIRPLANE PACKAGE TRANSFER APPARATUS. LYTLE S. ADAMS, Seattle, Wash., assignor to Airways Patent Corporation, a Corporation, of Delaware. Filed Sept. 14, 1928. Serial No. 305,970. 34 Claims. (Cl. 258—1.)



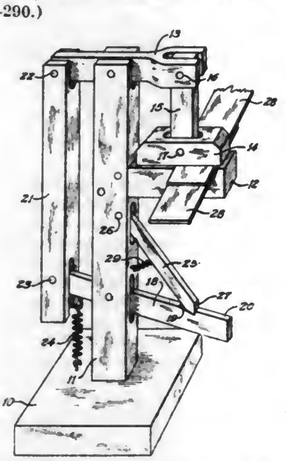
1. Ground apparatus for transferring articles to and from a moving airplane having a flexible suspending member suspended therefrom provided with a detachable connection having separable members, one member being attached to said flexible suspending member, and a carrier secured to the other member, said apparatus comprising a combined hopper and carrier support, and guide means for receiving a carrier from the plane and guiding the suspending member connected thereto to the carrier support, and means adjacent to the carrier support for detaching said carrier; and a second carrier connection member in line with the path of movement of the suspended connection member, whereby the latter will engage said second connection member and carry it away with its attached carrier.

1,818,836. STAMPING MACHINE. MAX ARNOLD, New York, N. Y. Filed Feb. 12, 1930. Serial No. 427,869. 7 Claims. (Cl. 164—47.)



1. In a device of the character described, a reciprocating head, a punch head slidably mounted thereon, rotatable means for controlling the position of said punch head with respect to said reciprocating head, and a flexible cable-controlled means for rotating said rotatable means to move said punch head with respect to said reciprocating head.

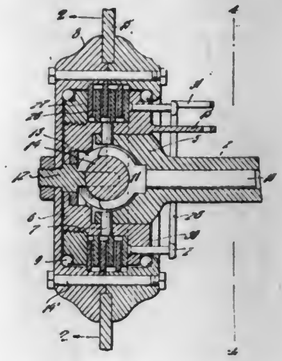
1,818,837. PRESS. HILAN OTTO BARKER, Chicago, Ill. Filed Mar. 10, 1930. Serial No. 434,759. 4 Claims. (Cl. 144—290.)



1. In a device of the character stated, a fixed clamping block, a movable clamping block, a rocker arm, means for operatively connecting said movable clamping block and said rocker arm, a lever including a pedal portion thereon, means for operatively connecting said lever with said rocker arm, a spring adapted to operate on said lever and through said rocker arm in a manner to urge said clamping blocks out of engaged position, an arm including a catch portion thereon adapted to engage the lever and thus retain said clamping blocks in engaged position against the action of said spring, a spring adapted to urge said arm into operative position, and means for supporting the aforementioned parts.

1,818,838. VEHICLE CHASSIS. CHARLEY E. BELT, Jenkins, Ky. Filed Dec. 14, 1925. Serial No. 75,391. 1 Claim. (Cl. 180—49.)

In a motor vehicle, a hollow axle having a forked end, a hub member having a recess therein to receive the forked end of the axle, an annular flange carried by one end of the hub member, the opposite end of said member being exteriorly threaded, a ring-like member threaded on the outer end of said hub and arranged in spaced confronting relation with said flange, said ring and flange being grooved, ball-bearings arranged in said groove, a wheel hub rotatably mounted on said bearings and including

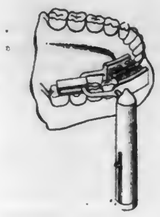


an integral outer plate closing the outer end of the hub, the inner end of the hub having an opening and formed with an inwardly directed flange to engage and maintain the adjacent bearings in place, said plate having a restricted central opening, a shaft journaled in said opening in the hub member and fastened to the front face of the wheel hub, a drive shaft extending through the hollow axle, and a universal joint connecting the respective axles.

1,818,839. PROCESS FOR MANUFACTURING ANHYDROUS ALUMINUM CHLORIDE. GEORGE FREDERICK BRINDLEY, New York, N. Y., assignor to Metal Chlorides Corporation, a Corporation of Delaware. Filed Sept. 22, 1927. Serial No. 221,406. 5 Claims. (Cl. 23—93.)

1. The process of manufacturing anhydrous aluminum chloride involving a mixture of sodium chloride and calcium chloride, heating the same to the melting point of such mixture; allowing the fused mass to react with anhydrous aluminum sulphate; collecting the fumes of aluminum chloride resulting from the interaction of the said chloride mixture and aluminum sulphate and condensing the same.

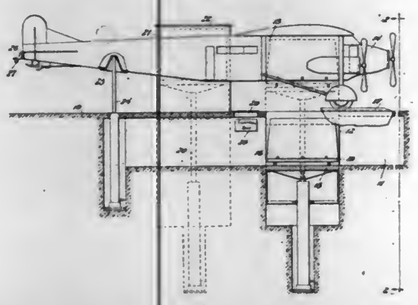
1,818,840. TOOTHBRUSH. THOMAS S. BUTLER, Chicago, Ill. Filed Mar. 11, 1929. Serial No. 346,150. 3 Claims. (Cl. 15—137.)



1. In a device of the class described, a bracket member having brush structures mounted at the outer ends thereof having the bristles extending toward each other, a handle member connected to said bracket member whereby vertical and horizontal movement may be imparted to said bracket member and said brush structures, said bracket member having a portion thereof disposed in a member having elongated openings formed therein whereby when said

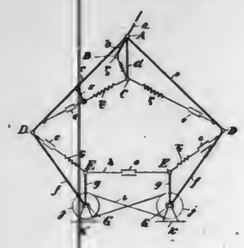
last named member is held stationary and said vertical movement is imparted to said bracket member said bracket member is pivoted about said stationary member and when said horizontal movement is imparted to said bracket member said bracket member is moved through said elongated slot.

1,818,841. EQUIPMENT FOR AIRPLANE LANDING FIELDS OR TERMINALS. ABNER F. CALLISON, New York, N. Y. Filed Feb. 19, 1929. Serial No. 341,064. 12 Claims. (Cl. 244—2.)



1. In a landing field, a subway for passengers and cargo: means to spot a plane above the subway; means to transfer the passengers and cargo from the subway to the fuselage of the plane; and means to engage the rear end of the plane and hold it in spotted position while the load is being transferred.

1,818,842. PANTOGRAPH CURRENT COLLECTOR FOR ELECTRIC VEHICLE. GYULA FISCHER DE TOVAROS, Budapest, Hungary. Filed Sept. 26, 1929, Serial No. 395,328, and in Hungary May 3, 1929. 6 Claims. (Cl. 191—65.)



1. A pantograph current collector for electric vehicles comprising springs, acting near the common joint of the upper and lower pantograph frames means being provided for causing the inclinable frame member which carries the collector to fold against the adjacent pantograph frame when the latter is brought to a horizontal position.

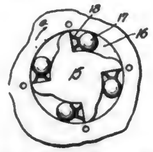
1,818,843. LEVEL. MELVIN DILL, Lynn, Mass., assignor to Harry A. Haley, Plymouth, Mass. Filed Feb. 1, 1930. Serial No. 425,279. 1 Claim. (Cl. 240—6.44.)

A level comprising a stock including companion sections having an opening and a slot and in communication with each other by a lamp chamber, means securing the sections of the stock together, bubble tubes in the opening, a lamp socket in the chamber, an electric lamp in the socket to furnish light to the tubes, a contact member having a semicircular-shaped portion secured to opposite walls of the slot adjacent one end of the latter and bearing against the socket and having the remaining portion offset to provide a movable contact member spaced from one of the side walls of the slot, an electrical source in the stock, conductors between the sections of the stock and connected to the source and one conductor secured



to the socket, and a stationary contact secured to the other conductor and the stock to be engaged by the movable contact member for completing the circuit to the lamp.

1,818,844. ONE-WAY CLUTCH. FLOYD V. DODGE and FRANK M. WYKERT, Grant, Nebr., assignors of one-third to Arney J. Karraker, Venango, Nebr. Filed Mar. 1, 1926. Serial No. 91,525. 1 Claim. (Cl. 192—45.)

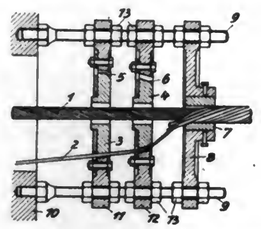


In a one-way clutch, a shaft, a gear rotatable thereon, and having, in one side, a cylindrical recess, the circumferential wall of which is concentric to the shaft and constitutes a clutch face, a clutch head within the recess engaged at one side by the inner wall of the recess, a plate secured to the other side of the gear and engaging the other side of the clutch head, the said clutch head having a peripheral series of cam portions each having a flat side, substantially radial to the axis of the clutch face and an arcuate side opposite the said flat side, the peripheral portions of the clutch head, between the flat side of each cam portion and the arcuate cam portion of the next adjacent cam portion being curved from the inner edge of said flat side, outwardly toward the circumferential wall of the recess in the gear and on an arc eccentric to the said wall, spherical balls arranged in the recess, each between the two adjacent ones of said cam portions, and a leaf spring comprising a concave intermediate portion, of substantially the same curvature as the balls, and diverging side portions extending from the ends of the intermediate portion and engaging against the inner and outer edges of the flat side of the respective cam portion and of a length to hold the respective ball in engagement with the respective arcuate cam portion and the circumferential wall of the recess.

1,818,845. METHOD OF AND MACHINE FOR STRANDING SPECIAL OR FIGURED WIRES. FERDINAND FESSL, Vienna, Austria, assignor to Felten & Guilleaume Fabrikelektrischer Kabel-Stahl- und Kupferwerke Aktiengesellschaft, Vienna, Austria, a Company of Austria. Filed Dec. 5, 1929, Serial No. 411,866, and in Austria Dec. 19, 1928. 8 Claims. (Cl. 117—16.)

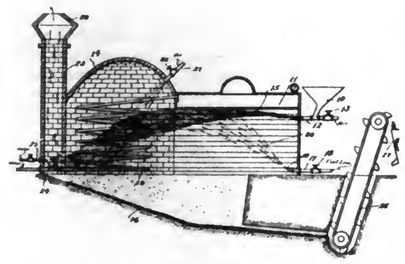
1. A method of stranding non-circular wires to form a cylindrical layer comprising the step of feeding the wires

into the stranding die at an angle greater than the stranding angle, the radial and the tangential components of the angle being such that the wires on entering the stranding



die undergo a distortion beyond the limits of elasticity whereby any tendency of the wires to untwist or unravel from their stranded position is at least partly eliminated.

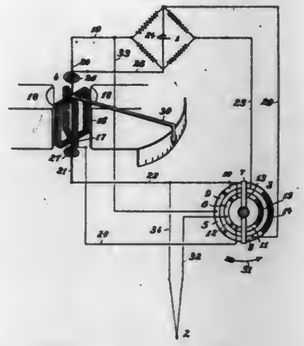
1,818,846. METHOD OF RECOVERING GOLD AND SILVER. STELLE A. GILES, Hutchinson, Kans. Filed Nov. 22, 1929. Serial No. 409,126. 1 Claim. (Cl. 75—64.)



A method of treating colloidal gold bearing shale for recovery of the gold comprising pulverizing the shale, blowing the pulverized shale into a furnace by an air blast, heating the air laden pulverized ore stream during passage through the furnace to a temperature of approximately 960° centigrade to loosen the gold from the gangue and to simultaneously remove by oxidation the limiting elements, such as sulphur, carbon, nitrogen, arsenic, phosphorus and the like, subjecting the ore stream to the chilling effect of a water coil near the end of its path through the furnace to prevent formation of slag and prevent the resealing of the gold, during the chilling step subjecting the ore stream to a reducing flame in which there is a deficiency of oxygen to free the flakes of gold from the oxides of said limiting elements, removing the product from the furnace by a water stream to produce a slime or pulp in which the gold is free, and recovering the gold by cyanide, chloride or amalgamation treatment.

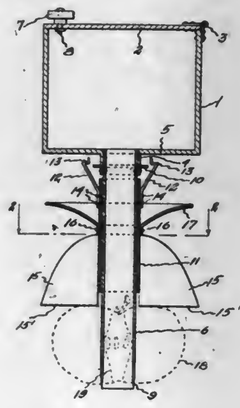
1,818,847. APPARATUS FOR MEASURING A PLURALITY OF VALUES. HEINZ GRÜSS, Berlin-Staaken, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 5, 1929, Serial No. 344,548, and in Germany Mar. 29, 1928. 4 Claims. (Cl. 175—183.)

1. Apparatus for the indication or registration of two groups of measuring values, the first group being produced by variations of electric resistances and the second group being produced by electromotive forces, comprising, in combination, a movable coil system, means for causing a mechanical directional force to operate upon said coil system, means for causing an electromagnetic directional force to operate upon said coil system, a switch for connecting the electric resistances of the first group and the electromotive forces of the second group one after the other



to said coil system, and mechanism for rendering said second mentioned means inoperative when an electromotive force of said second group is impressed on said coil system.

1,818,848. CORING AND SLICING DEVICE. ROBERT GUTZKE, Penticton, British Columbia, Canada. Filed June 3, 1929. Serial No. 368,018. 2 Claims. (Cl. 146—41.)



1. In a coring and slicing device, a tubular core cutter, a refuse receptacle attached to the upper end thereof, a collar secured to said core cutter, a tubular guide slidably mounted on said core cutter, a plurality of radially extending slicing knives attached to the lower portion of said tubular guide, a flared guard secured to said guide directly above said slicing knives, and a pair of diametrically disposed spring members attached to the upper end of said tubular guide and adapted to be caused to engage said collar.

1,818,849. NEGLIGÉE PYJAMA GARMENT. MITCHEL E. HADAD, Brooklyn, N. Y. Filed Mar. 12, 1931. Serial No. 522,069. 2 Claims. (Cl. 2—88.)

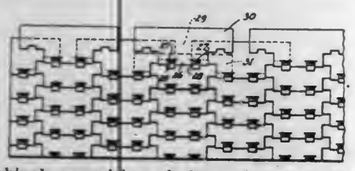
1. In a combination garment, a pair of pyjama trousers having an open front, an open front negligée blouse attached to the upper portion of said trousers, one side of said blouse front having a portion extending downwardly to substantially the bottom of said trousers and having its

confined edge attached to one side of the open front of the corresponding trousers leg and caught in the front seam



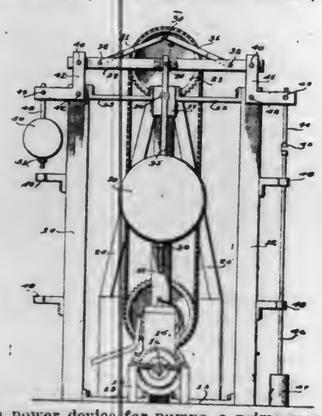
of the trousers to the crotch, and attached at the inner seam of the opposite trousers leg from the crotch to the bottom portion of the trousers.

1,818,850. COMPOSITION SHINGLE. NORMAN P. HARSHBERGER, Chicago, Ill., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 30, 1926. Serial No. 132,433. 7 Claims. (Cl. 108—7.)



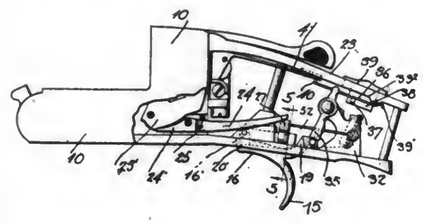
1. A shingle comprising a body portion, and a shank portion projecting angularly therefrom, one end of the body portion having an interior slit adjacent the edge, the corresponding edge of the shank having a lug projecting therefrom, the lug being adapted to enter the slit of another similar shingle, the said shank projecting from said body nearer one end of the body than the other and with one edge in line with the straight edge of the body, and the said slit being in the end of the body more remote from the shank.

1,818,851. PUMPING APPARATUS. HARLEY A. W. HOWCOTT, Baton Rouge, La. Filed Mar. 26, 1928. Serial No. 264,726. 15 Claims. (Cl. 74—14.)



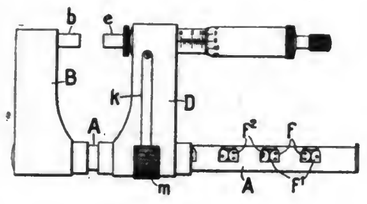
1. In a power device for pumps, a prime mover, a main frame spaced from said prime mover, an auxiliary frame interposed between said prime mover and said main frame, a power transmitting mechanism carried by said main frame and operably connected to said prime mover, and a power equalizing device carried by said auxiliary frame and operatively connected to said power transmitting mechanism.

1,818,852. SINGLE TRIGGER MECHANISM FOR DOUBLE BARRELED GUNS. HARRY E. HOWLAND, Ithaca, N. Y., assignor to Ithaca Gun Company, Ithaca, N. Y. Filed June 18, 1928. Serial No. 286,398. 1 Claim. (Cl. 42—42.)



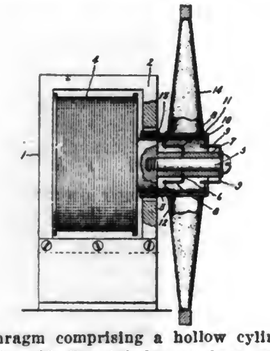
In a single trigger mechanism for double barrel guns, the combination with a trigger operating through the usual trigger opening, a stationary block to which said trigger is pivoted, a bar having a width to pass through said opening and being pivotally and independently mounted on the trigger pivot, said bar being formed with a transverse recess, a trip pivoted to said bar within said recess and having a lateral length to bridge the trigger opening, means for selectively adjusting said trip, a pair of sears operatively connected to the firing mechanism, and means for selectively effecting the operation of the sears through the pulling of the trigger.

1,818,853. MICROMETER CALIPERS. CAMILLE JORIOT, Lac-Ou-Villers, France. Filed Oct. 11, 1929, Serial No. 399,048, and in Switzerland Oct. 15, 1928. 4 Claims. (Cl. 33—165.)



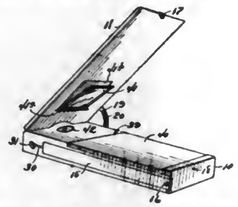
1. A wide range micrometer caliper comprising a beam having spaced lateral recesses, two measuring heads thereon, one of which is slidable and turnable on said beam, a micrometer screw carried by one of said heads, adjustable seat members within said recesses of the beam to determine the exact positions for the movable head, a connector on the latter to selectively engage the seat members in said recesses for setting purposes, and clamping means for clamping the movable head when it is adjusted by sliding movement to the desired measuring position and brought by turning into alignment with the other head.

1,818,854. DIAPHRAGM FOR LOUD SPEAKERS. WILLIAM K. KEARSLEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1926. Serial No. 138,982. 5 Claims. (Cl. 181—31.)



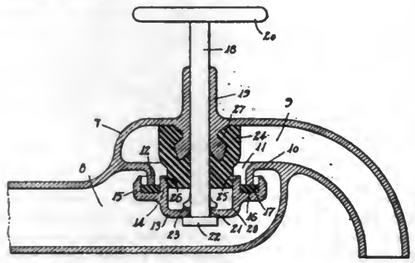
1. A diaphragm comprising a hollow cylindrical member and a series of hollow tubular members radially mounted thereon forming thereby a substantially continuous surface.

1,818,855. COMBINED FLASH LIGHT AND WRITING PAD. OTTO KROLDRUP, Colon, Cuba. Filed Sept. 20, 1929. Serial No. 393,996. 4 Claims. (Cl. 240—6.4.)



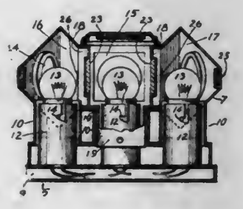
3. In a device of the character described a body member formed to support a writing surface and provided with a hinged cover, means for holding the cover closed, other means for limiting the opening movement of the cover, a mirror swingably mounted within a recess in the under side of the cover and movable out of said recess when the cover is opened, a plurality of cells mounted within the body, a reflector mounted within one end of the body, an incandescent lamp located within the reflector and electrically connected with one terminal of the cells, a switch device mounted on the body and interposed in circuit between the cells and the incandescent lamp, the body and the reflector being formed with registering openings adapted to permit light to pass onto said mirror and be reflected thereby onto the writing surface.

1,818,856. VALVE. JESSE D. LANGDON, Los Angeles, Calif., assignor to Langdon Engineering Corporation, Los Angeles, Calif. Filed Dec. 15, 1927. Serial No. 240,298. 2 Claims. (Cl. 251—136.)



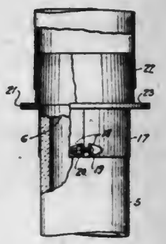
1. A valve comprising a casing, a stem slidable therein, a valve member movable with tue stem and having a chamber and a surrounding annular groove, a gasket in said groove, the casing having an annular valve seat to enter said groove for the contact of said gasket, and a packing and piston member of rubber or similar material mounted in the casing and having a portion to snugly enter said chamber during the closing movement of the valve member for retarding such closing movement.

1,818,857. AUTOMOBILE SIGNAL LAMP. EMILE A. LAURENT, Denver, Colo. Filed Feb. 14, 1928. Serial No. 254,264. 16 Claims. (Cl. 177—327.)



1. A signal lamp for motor vehicles, comprising a casing having a middle compartment provided with a glass covered opening, side compartments having converging front and rear walls, a glass covered opening in each of said walls, light pervious partitions separating the compartments, and means to mount a lamp in said middle compartment.

1,818,858. ADAPTABLE PIPE FITTING. EDWARD C. MCALEES, Los Angeles, Calif. Filed Oct. 30, 1926. Serial No. 145,209. 1 Claim. (Cl. 285—201.)

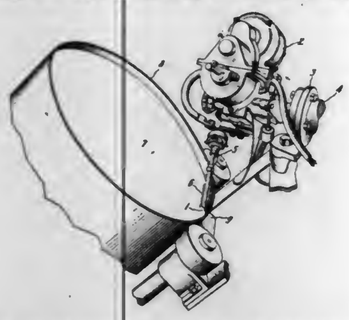


An adapter comprising a sleeve divided longitudinally so as to have overlapping ends whereby the sleeve may be accommodated to mounting on a pipe, adjustable means to fasten the ends of said sleeve together, said sleeve having a laterally turned flange radially slit to permit adjustment of the diameter of said sleeve, and a pipe section having a fixed outstanding flange U-shape in cross section interlocking with the slit flange to hold the sleeve and pipe section against separation.

1,818,859. AUTOMATIC ARC WELDING MACHINE. LEON D. MCILVIN, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 28, 1927. Serial No. 222,632. 6 Claims. (Cl. 219—8.)

6. A tank welding machine comprising an inclined roller mechanism adapted to support and rotate the tank being welded, and means for directing a source of heat along

the seam formed between the end of said tank and its projecting side wall comprising a member pivotally supported in the machine and having at its free end near the source of heat a guide member adapted to follow along said seam.

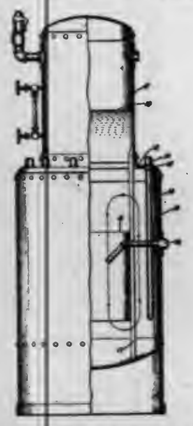


1,818,860. TYPEWRITING MACHINE. LEWIS C. MYERS, Freeport, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 7, 1929. Serial No. 405,336. 17 Claims. (Cl. 197—176.)



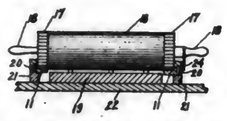
1. A tabulating mechanism for typewriting machines comprising a carriage, an escapement pinion, a tabular rack and a feed rack pivoted to the carriage to move in unison whereby the feed rack is moved into and out of engagement with the pinion, stops on the tabular rack, and means engageable with the tabular rack for swinging the feed rack out of engagement with the pinion to release the carriage therefrom and for cooperating with one of the tabular stops to limit the movement of the carriage.

1,818,861. ELECTRIC STEAM GENERATOR. ALBERT N. OTIS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 26, 1927. Serial No. 221,897. 9 Claims. (Cl. 219—38.)



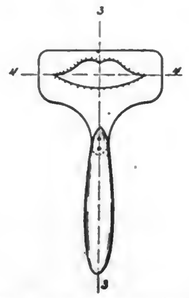
2. The combination with a boiler having an intermediate offset portion in its side walls arranged below the water level of the boiler, of a plurality of immersion heating units mounted on said portion extending into the interior of said boiler.

1,818,862. TRANSFERRING DEVICE. WEBB M. OUNGST, Fort Smith, Ark. Filed May 31, 1929. Serial No. 367,396. 3 Claims. (Cl. 101—252.)



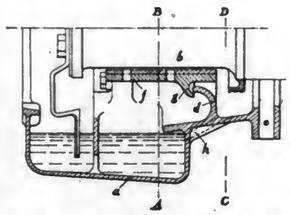
1. A device of the character described comprising a substantially rectangular frame, the opposed side members of which are of angle formation in cross section and formed with teeth to provide a track, a transfer roller, cog wheels arranged on the ends of the roller and movable over said track, handles projecting from the ends of the roller, and a pointer rotatably supported at one end of the roller for the purpose specified.

1,818,863. GAUGE FOR THE APPLICATION OF LIP ROUGE. JOSEPH A. PETNEL, Troy, N. Y. Filed Jan. 19, 1929. Serial No. 333,735. 3 Claims. (Cl. 132—1.)



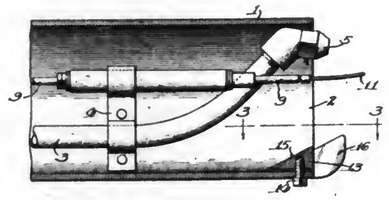
1. As a new article of manufacture, a plate of flexible material having an outer marginal portion, said material having an opening therein, an inner portion marginal to one part of the boundary edge of said opening for protecting the face of a user adjacent the top lip of a user, said edge being formed to define the top outline of a lip, and another inner portion marginal to another part of the boundary edge of said opening for protecting the face of a user adjacent the lower lip, said latter edge being formed to define the lower outline of a lip.

1,818,864. AXLE BOX FOR VEHICLES. WALTER PEYINGHAUS, Egge, near Volmarstein, Germany. Filed Dec. 5, 1930, Serial No. 500,354, and in Germany June 9, 1929. 3 Claims. (Cl. 308—80.)



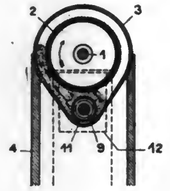
1. In a bearing box for vehicle axles, a bearing, a dust pocket, an oil collecting shell disposed below said bearing, a projection thereon curved in cross section, a transverse wall separating the shell and the pocket, said wall having a curved cross section and extending partly over the projection in overlapping relation.

1,818,865. BURNER. JOHN L. POOLE and HENRY J. G. RUDOLF, Galesburg, Ill., assignors to Winslow Boiler and Engineering Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 18, 1928. Serial No. 270,827. 6 Claims. (Cl. 158—76.)



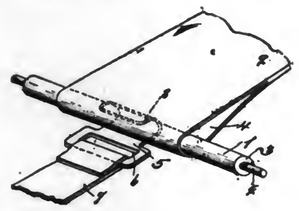
1. A burner comprising an air duct having an outlet, a nozzle at said outlet inclined downwardly and forwardly with respect to the axis of said duct to project particles of fuel in a downward and forward direction, the outlet of said nozzle being beyond the plane of the outlet of said duct, and a deflector at said outlet having a deflecting surface inclined upwardly and forwardly with respect to the axis of said duct for deflecting a part of the air stream upwardly and forwardly to produce a combustible mixture with said particles and form a relatively flat and wide flame, said deflector having a portion within and a portion without said duct outlet, and having a slot vertically beneath said nozzle outlet to permit passage of drippage.

1,818,866. APPARATUS FOR POLISHING GRAIN. JOSEF PROKOP, Pardubice, Czechoslovakia. Filed July 10, 1930, Serial No. 467,073, and in Czechoslovakia July 8, 1929. 2 Claims. (Cl. 83—30.)



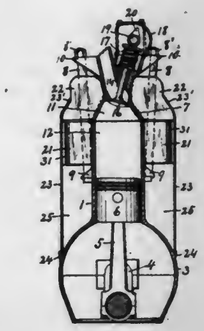
1. In apparatus for polishing or husking granular material the combination of a polishing or husking chamber having a smooth inner surface, a rotary cylinder therein having on its outer surface a plurality of projections, a rotary worm conveyor within the chamber and located below and parallel to the cylinder to convey granular material along the latter, means to feed granular material to one end of the conveyor, and an outlet at the other end of the conveyor, for the purpose described.

1,818,867. WELT HOOK AND ROD. ALBERT H. REDLES, Philadelphia, Pa. Filed Apr. 14, 1928. Serial No. 269,982. 1 Claim. (Cl. 66—149.)



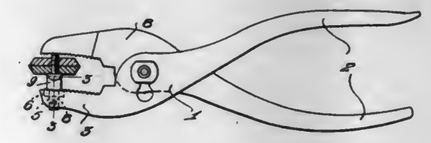
In a take-up mechanism for full-fashioned knitting machines, the combination with a welt rod comprising a metal core provided with a celluloid protecting shield which is adapted to engage through the hem of a hose, of a welt hook to be carred by a takeup strap of the machine, the welt hook being constructed of celluloid, and the hook end thereof adapted to engage partly about the exterior of the hem of the hose where it engages with the shield, whereby the hose may wrap around the welt rod and welt hook during the take-up action.

1,818,868. AIR COOLING SYSTEM FOR COMBUSTION ENGINES. GEORGE E. REED and JOHN W. REED, Syracuse, N. Y. Filed Dec. 27, 1927. Serial No. 242,596. 16 Claims. (Cl. 123—171.)



1. In an air-cooling system for an upright internal combustion engine having a cast metal cylinder, a plurality of vertically disposed sheet metal fins projecting outwardly from the opposite sides of the cylinder in parallel spaced relation and having their lower ends terminating in a plane above the lower end of the combustion chamber of the cylinder.

1,818,869. TOOL. EDMUND J. REEDE, Silverton, Oreg. Filed Apr. 1, 1929. Serial No. 351,785. 1 Claim. (Cl. 81—5.1.)

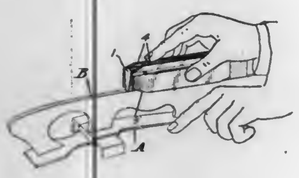


A tool comprising pivoted jaws having flat serrated opposing faces, handles for the jaws, one of said jaws having a rectangular shaped opening extending through the respective serrated face thereof and having in said last mentioned face a rectangular shaped recess about the opening, a shank having squared faces received in the opening, a head on the shank and seated in the recess and having converging walls to provide a thin edge to be received in the groove of a screw for connecting the blades of scissors and with the end of the screw in engagement with the serrated face of the other jaw, and a set screw carried by the jaw having the opening and engaging the shank.

1,818,870. SKATE SHARPENER. MAURICE A. RICE, Concord, N. H. Filed Oct. 20, 1928, Serial No. 313,867. Renewed Jan. 8, 1931. 2 Claims. (Cl. 51—205.)

2. A sharpener of the character described comprising a stone substantially wedge shape in cross section, plates loosely secured to said stone to allow swinging movement thereof and disposed upon opposite sides of the stone and

below the same, said plates having the greatest portion of the lower edges disposed below the small edge of said stone, the remaining portion of the lower edges being cut-away

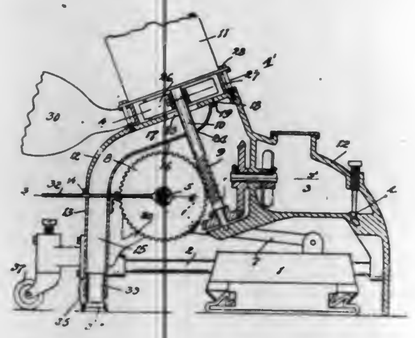


for disposing a corner of the stone below the plates, and said stone being of a length for disposing a portion thereof beyond one of the ends of said plates.

1,818,871. GAS PURIFICATION MATERIAL AND METHOD OF MAKING THE SAME. GILBERT E. SEIL, Conshohocken, Pa., assignor to E. J. Lavino and Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 18, 1928. Serial No. 326,896. 3 Claims. (Cl. 252—2.5.)

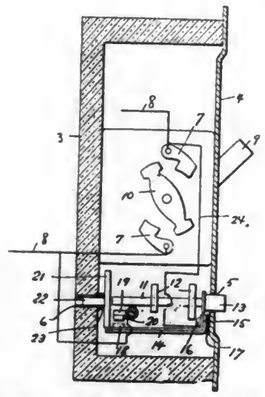
1. The method of preparing a material consisting principally of ferric oxide from an iron-bearing substance, which comprises heating a quantity of the said substance to a temperature ranging from approximately 760° C. to approximately 1200° C., quenching the substance in a liquid, grinding the said substance in the liquid, and subsequently filtering the mass to obtain the said material.

1,818,872. VACUUM CLEANER. EDMUND SPROSTON, Winnipeg, Manitoba, Canada. Filed Apr. 26, 1929, Serial No. 358,380, and in Canada Apr. 23, 1929. 3 Claims. (Cl. 15—4.)



1. In a floor treating machine, the combination with a closed casing provided rearwardly with a removable back plate, of a vertically extending main suction tube contained within the frame and totally carried by the back plate and provided with an extension forming with the rear wall of the casing an extension tube continuous with the main tube, said rear wall of the casing being provided with an air opening communicating with the upper end of the extension tube and a fan casing communicating through the opening with the extension tube.

1,818,873. RETARDED CIRCUIT BREAKER. CAREY P. SWEENY, College Station, Tex. Filed Apr. 22, 1929. Serial No. 357,062. 2 Claims. (Cl. 200—116.)



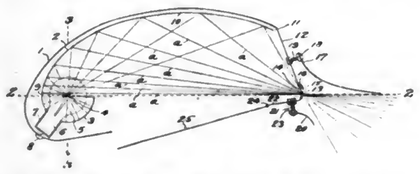
1. A circuit maker and breaker comprising a thermostatic element, a contact on said element, a manually reciprocatory rod, a follower, a stationary contact, said contacts being normally engaged, said follower being adapted to engage said thermostatic element to retain the latter spaced from the stationary contact.

1,818,874. METHOD OF MAKING EXPANSION JOINTS. GEORGE J. ULRICH, Modesto, Calif., assignor of three-fourths to Carl E. Ulrich and one-fourth to E. R. Hawke, Modesto, Calif. Filed Aug. 10, 1929. Serial No. 384,971. 2 Claims. (Cl. 154—45.5.)



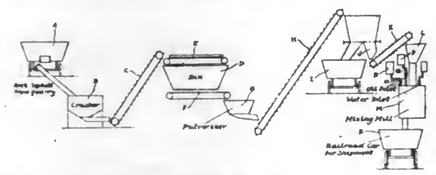
2. The method of preparing an expansion joint which consists in filling a preformed resilient porous mass of fibrous material in the form of fibre board with a mixture of asphaltum, oil and volatile material, wherein the volatile material predeminates and the amount of asphaltum and oil introduced is merely sufficient to coat and adhere the fibre together and not sufficient to occlude the inter-fibre spaces, and then evaporating the volatile material prior to placing the joint in situation, whereby to leave the fibre board as a final product in the form of a porous and resilient mass of fibres each coated with the asphaltum and oil.

1,818,875. HEADLIGHT. JOSEPH BRADFORD WARDWELL, Stamford, Conn. Filed Aug. 25, 1925, Serial No. 52,258. Renewed June 23, 1930. 12 Claims. (Cl. 240—41.35.)



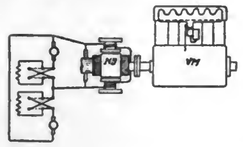
1. A road vehicle headlight comprising, in combination, a casing having therein a reflector formed with an ellipsoidal surface above a horizontal plane, means for supporting a source of concentrated light adjacent the focal point of said surface, an aperture at the end of said casing remote from said source, light-interrupting means immediately above said aperture, a visor like member in front of and above said aperture provided with a portion extending into proximity with said plane, said reflector formed to project a diverging beam of light with a substantially horizontal, flattened top portion passing immediately below said visor like member.

1,818,876. PAVING MATERIAL AND PROCESS OF MANUFACTURING THE SAME. RYALL L. WHITE, San Antonio, Tex. Filed Nov. 5, 1929. Serial No. 404,970. 2 Claims. (Cl. 106—31.)



1. Paving material comprising pulverized rock asphalt, sufficient flux oil having comparatively high Baumé gravity and low asphaltic content, but containing appreciable quantities of asphalt, to secure a preliminary fluxing and softening effect on the rock asphalt, a sufficient quantity of a second asphaltic flux oil sufficiently fluid at ordinary temperatures so that it can be thoroughly mixed cold with the rock asphalt, said second flux oil having a comparatively low Baumé gravity and high asphaltic content for the purpose of furnishing additional bitumen to give the necessary binding qualities to the material, and a sufficient quantity of water to render the adhesive qualities of the asphalt temporarily inactive.

1,818,877. ELECTRIC POWER TRANSMISSION WITH AUTOMATIC EFFICIENCY REGULATION FOR VEHICLES. OTTO ZADNIK, Vienna, Austria. Filed Mar. 24, 1927, Serial No. 178,099, and in Austria Apr. 2, 1926. 4 Claims. (Cl. 290—17.)

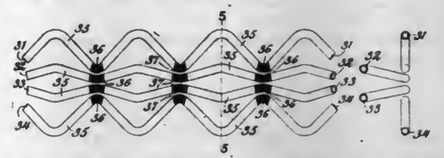


1. The combination with an internal combustion engine, of a self-excited electric generator coupled thereto, and a motor electrically connected with said generator, said generator being so designed that its magnetic circuit remains unsaturated throughout the speed range at which said generator may be driven by said internal combustion engine to drive said motor, whereby the generator operates upon the unstable part of its characteristic and while its power output remains constant the voltage which it generates varies in inverse proportion to the load current of said motor.

1,818,878. DYESTUFF PREPARATION AND PROCESS OF MAKING SAME. ADAM ARROGAST, Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed June 15, 1928, Serial No. 285,792, and in Switzerland June 24, 1927. 3 Claims. (Cl. 8—6.)

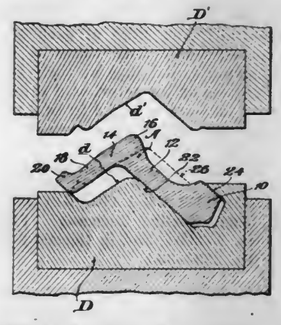
1. As new products dyestuff preparations, consisting in a mixture of 2 : 1- and 1 : 2-naphththio-indigoes to obtain a coloring matter yielding on the fibres brown tints of greater fullness and brightness than those which could be expected from the mixture of the components.

1,818,879. ILLUMINATED SIGN. WATKINS BENERMAN, El Paso, Tex. Filed June 12, 1929. Serial No. 370,329. 4 Claims. (Cl. 177—346.)



1. In an illuminated sign, the combination of a plurality of gas filled tubes arranged close together and extending in the same general direction, and each adapted to glow upon the passage of an electric current therethrough, each tube being of zig-zag shape and comprising a plurality of connected and substantially V-shaped sections, the respective sections of the tubes being substantially similar and arranged in transverse alignment and disposed in different positions and in substantially radial relation about a line extending longitudinally and substantially centrally of the sign.

1,818,880. METHOD OF FORMING A COMPROMISE RAIL JOINT BAR. DANIEL LAWRENCE BRAINE, Brooklyn, N. Y., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed June 5, 1929. Serial No. 368,606. 4 Claims. (Cl. 29—169.)



1. The method of making a step-joint rail splice bar which consists in subjecting a rail splice bar, having a head, a base and a connecting web, to pressure to reduce the fishing height of one end portion of the bar relative to the other end portion thereof, vertically and laterally offsetting the respective end portions of the bar relative to one another, and causing all displacement of the metal of the bar, incident to changing the fishing height of the aforesaid end portion of the bar to be directed toward the inner face of said end portion.

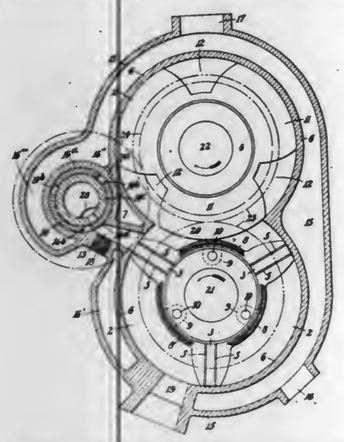
1,818,881. MANUFACTURE OF POTASSIUM. WERNER BUSCH, Cologne-Deutz, and ERICH NOACK, Wiesdorf, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 21, 1928, Serial No. 294,576, and in Germany Aug. 5, 1927. 2 Claims. (Cl. 75—183.)

1. In the process of manufacturing potassium the step which comprises heating potassium fluoride with metallic magnesium to a temperature above about 500° C. in the absence of water and under reduced pressure.

1,818,882. INTERNAL COMBUSTION ROTARY ENGINE. ALPHONSE DEMUYNCK, Brussels, Belgium. Filed June 2, 1927, Serial No. 196,078, and in Belgium June 5, 1926. 1 Claim. (Cl. 123—13.)

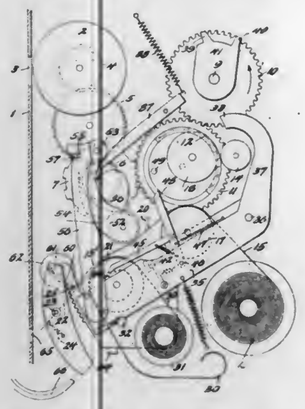
In an internal combustion engine of the rotary piston type, a rotary closing member having peripheral recesses,

a rotor having pistons arranged to engage in said recesses and also having recesses in its periphery between the bases of said pistons, the side walls of each recess being parallel, said rotor also having radial recesses in its ends which are midway between said side walls of said peripheral recesses, segments in said peripheral recesses of the rotor arranged to engage the periphery of the closing



member and movable radially with respect to the rotor and also tangentially, the sides of each segment being parallel and corresponding with those of said recesses, said segments having radial lugs at their ends arranged in said radial recesses of the rotor, said rotor having pivots by which said lugs are mounted in said radial grooves for slight radial and tangential movement of said segments.

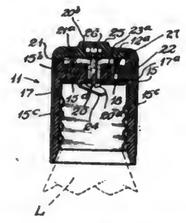
1,818,883. TAXIMETER OR FARE RECORDER. HEINRICH DÜNHÖLTER, Berlin, Germany. Filed Sept. 5, 1928, Serial No. 303,991, and in Germany July 3, 1928. 16 Claims. (Cl. 235—30.)



1. The combination with a taximeter having a fare indicator controlled by a manually-operated flag or its equivalent, of fare printing mechanism controlled by said indicator, and mechanism actuated by the operation of said flag to print a checking strip and a ticket strip in succession.

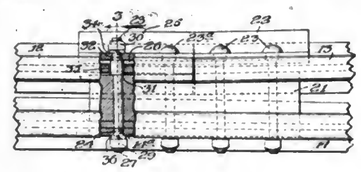
1,818,884. PORTABLE ELECTRIC LIGHTING OUTFIT. REUBEN ECKSTEIN, New York, N. Y. Filed Jan. 7, 1929. Serial No. 330,774. 2 Claims. (Cl. 173—340.)

1. In a lamp socket construction of the character described, a tubular insulating casing having a closed end wall, a contact shell mounted in the casing, an insulating washer engaging said shell with the end wall, a screw extending through said washer and end wall for securing the shell against displacement, a center contact secured by said screw, a cover member, said screw engaging said



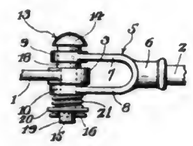
member for clamping the flexible conductor wires between the latter and the casing and bendable terminals integral with and extending from the center and shell contacts for engaging about and connecting with said conductor wires.

1,818,885. SPLIT-SWITCH STRUCTURE. AUGUST ENSTROM, Chicago, Ill., assignor to Pettibone Mulliken Company, Chicago, Ill., a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,625. 22 Claims. (Cl. 246—435.)



1. Point switch mechanism comprising a structure presenting spaced-apart portions forming a recess, a point-rail extending at its heel portion into said recess and swingable therein, and a bolt having a nut at one end and extending through said spaced-apart portions and loosely through said heel-portion, said bolt having a fixed shoulder thereon located at one side of one of said spaced-apart portions, said nut being located at the opposite side of said last-referred-to portion and when tightened drawing said shoulder into engagement with said last-referred-to portion.

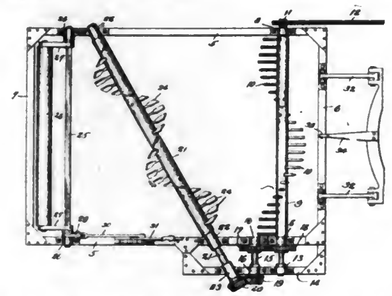
1,818,886. PIVOT JOINT. CARL I. ERICKSON, Glendale, Ariz. Filed Nov. 26, 1929. Serial No. 409,906. 1 Claim. (Cl. 287—97.)



In an anti-rattling joint adapted to pivotally connect two elements together, a yoke carried by one of the elements and adapted to have the other element interposed between the arms thereof, the arms of the yoke and the interposed element having aligned openings extending therethrough, the opening through one of the arms being of greater diameter than the openings through the other arm and the interposed element respectively, a pivot pin having a larger diameter portion extending through the larger of said openings and projecting from both ends of such larger opening, said pin further having a small diameter portion extending through the other openings, said portions providing an annular flat shoulder at the

inner end of the large diameter portion for abutment against one side face of said interposed element, an abutment on said smaller diameter portion, and a spring mounted on the small diameter portion of the pin between said abutment and one of said arms and in connection with said shoulder yieldingly maintaining said interposed element against one of the arms of the yoke.

1,818,887. ROAD MACHINE. JOHN GAIL FAIRLEY, Hattiesburg, Miss. Filed Oct. 29, 1929. Serial No. 403,267. 1 Claim. (Cl. 37—108.)

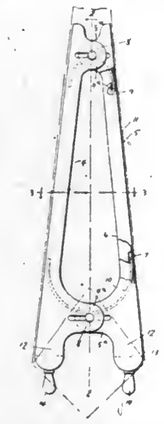


In a road machine, a frame, a shaft disposed transversely of the frame, spikes arranged helically on the shaft, a shaft disposed diagonally across the frame, one end of the diagonal shaft being disposed near one end of the first mentioned shaft, gearing for transmitting movement of the first mentioned shaft to the latter shaft, blades arranged helically around the last mentioned shaft, and means for transmitting movement to the first mentioned shaft.

1,818,888. PROCESS FOR PREPARING ACID-PROOF CEMENTING OR LINING COMPOSITIONS. KARL FRANK and KARL DIETZ, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 8, 1926, Serial No. 134,338, and in Germany Sept. 18, 1925. 3 Claims. (Cl. 106—8.)

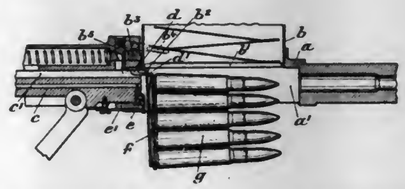
1. The process for preparing acid-proof compositions which comprises adding pulverized silicon to a water-glass cement.

1,818,889. NECKTIE PRESSING FORM. SAMUEL LOUIS GARFINKEL, Wichita, Kans. Filed June 5, 1930. Serial No. 459,283. 3 Claims. (Cl. 223—19.)



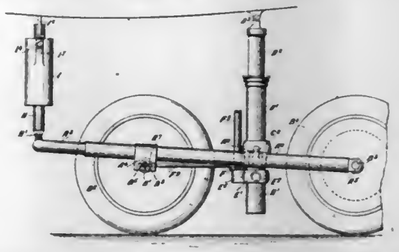
1. In a necktie pressing form of the class described, a substantially V-shaped open frame comprising a pair of companion sections of longitudinally elongated formation provided at their opposite ends with inturned telescopically connected end portions, said end portions being connected together through the medium of pin and slot joints, expansion springs located in the end portions of said sections to render the sections automatically expansible and contractable, and handles carried by the outer end portions of said sections.

1,818,890. AUTOMATIC FIREARM. KARL HEINEMANN, Dusseldorf, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed Nov. 27, 1929, Serial No. 410,201, and in Germany Sept. 27, 1929. 3 Claims. (Cl. 42—3.)



1. An automatic firearm comprising a casing having a recess therein; a breech block in the casing; a removable magazine associated with the casing; and means for automatically retaining the breech block in opened position when the magazine is empty, said recess being in front of the magazine mouth and being adapted for the insertion of a cartridge container so that ammunition can be supplied to the firearm either by changing the magazine or by filling the magazine in the firearm with cartridge containers.

1,818,891. UNDERCARRIAGE FOR AIRCRAFT. GEOFFREY TERENCE ROLAND HILL, Yeovil, England, assignor to Petters Limited, Yeovil, Somerset, England. Filed Jan. 9, 1931, Serial No. 507,736, and in Great Britain Jan. 15, 1930. 18 Claims. (Cl. 244—2.)

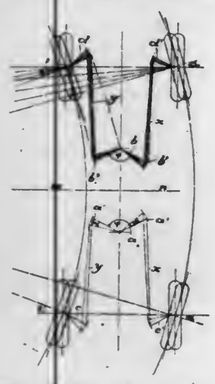


1. Undercarriage for aircraft comprising two wheels arranged in tandem, a longitudinal frame carrying said wheels, means adapted to permit angular adjustment of one of said wheels in said frame, means for angularly adjusting said adjustable wheel to steer said frame, and means for connecting said frame to the aircraft on a lateral axis located between said wheels, such axis being adapted to permit of a rocking movement of said frame.

1,818,892. STEERING GEAR FOR MOTOR DRIVEN VEHICLES. ALEXANDER ALBERT HOLLE, Paris, France, assignor to Societe Internationale Holverta, Societe Anonyme, Brussels, Belgium. Filed Nov. 9, 1927, Serial No. 232,171, and in Belgium Nov. 16, 1926. 4 Claims. (Cl. 180—45.)

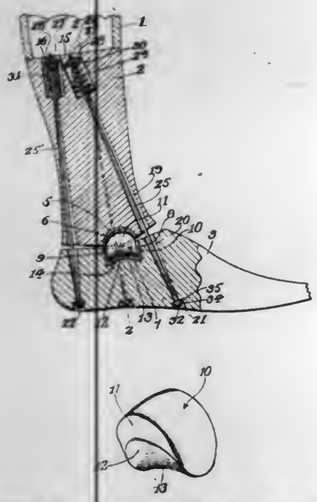
1. A steering mechanism for automobile vehicles, comprising four independent and steering wheels, a double armed lever for each pair of wheels, pivoted at the center at a point on the longitudinal axis of the chassis, a tubu-

lar push or pull rod for each wheel enclosing the transmission shaft and disposed approximately parallel to the chassis, connected with the wheel arm and also connected to the chassis, a steering rod articulated on the one hand to the steering lever of the wheel and on the other hand to an arm of one of said double armed levers, the said



steering rod being of the same length as the tubular push rod and being parallel to the latter in the middle position of the two rods, and hence eliminating substantially all reaction on the steering wheel, in the vertical displacements of the wheel and concelling involuntary brakeage.

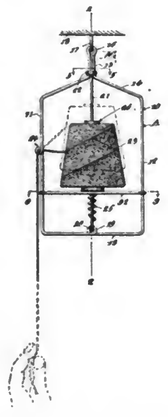
1,818,893. ARTIFICIAL LIMB. LYMAN LORRAINE HOY, Tillamook, Oreg. Filed Nov. 30, 1929. Serial No. 410,795. 3 Claims. (Cl. 3—6.)



2. An artificial limb comprising, a leg portion formed in its lower face with a recess having a top wall concave from front to rear, a foot portion formed in its upper face with a recess having a bottom wall concave from side to side, said bottom wall being convex from front to rear, an anti-friction lining for each of said recesses conforming in contour therewith, a block engaging said linings and conforming in contour therewith when said portions are in assembled relation, said block being movable in a lateral, vertical arc relative to one of said linings and being movable in a forward and rearward, vertical arc relative to the other of said linings, and resilient means for holding said portions in assembled relation.

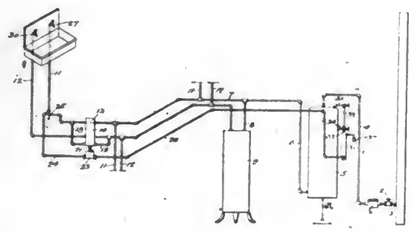
3. A rigid block for disposition between the leg and foot portions of an artificial limb, said block having a continuous front, top and rear face off convex contour and further having a pair of substantially vertical side faces merging into said continuous face, said block further having a bottom face extending between said side faces in a convex plane and further extending between the end portions of said continuous face in a concave plane.

1,818,894. TWINE HOLDER. ALMON E. HUMPHREY, Oklahoma City, Okla. Filed Oct. 24, 1929. Serial No. 402,239. 5 Claims. (Cl. 242—141.)



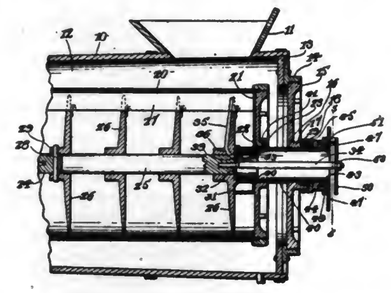
1. In a twine holder, a frame, a vertical shaft supported by the frame, a spiral on said shaft, a core slidably and rotatably mounted on the shaft for the reception of the twine, said core including a body having an axial bore for receiving the spiral, a closure cap for one end of the bore having an axial opening for snugly receiving the shaft, a guide collar on the shaft arranged in said bore, and a follower pin carried by the body engaging the convolutions of the spiral.

1,818,895. REACTION RELIEF DEVICE. OTTO H. KLOTZ, Philadelphia, Pa. Filed Aug. 4, 1930. Serial No. 473,011. 8 Claims. (Cl. 137—79.)



1. In a reaction relief device for water systems, the combination with a casing having a partition dividing the interior into two chambers communicating with each other at the top, of a port in each of said chambers adapting the device for connection with both the hot and cold water mains of said system.

1,818,896. DISCHARGE ATTACHMENT FOR FROZEN PRODUCT MACHINES. ELTON D. KOHR, York, Pa. Filed Dec. 23, 1929. Serial No. 416,182. 19 Claims. (Cl. 62—114.)



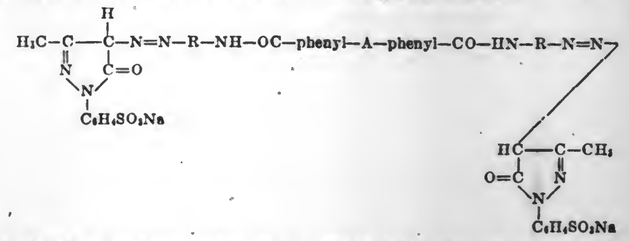
1. In a discharge attachment for frozen product machines of that type provided with a discharge spout, the combination of a stationary spreader adapted to be mounted in encompassing position with respect to the outlet end of the spout, and a stationary baffle arranged forwardly and in spaced relation with respect to said spreader and adapted to oppose in spaced relation such end.

1,818,897. METHOD OF PREPARING AND SEPARATING THE CELLULOSE MATERIAL, SUITABLE FOR PAPER-MANUFACTURING, FROM PLANT RAW MATERIAL WITH PITH FIBER. HACHIRO KUMAGAWA, Hongoku, Tokyo, and KAMAKICHI SHIMOMURA, Nishiomachi, Hazugun, Aichiken, Japan. Filed May 31, 1927. Serial No. 195,583. 1 Claim. (Cl. 92—20.)

The method of recovering and separating long and thin fiber and short and pithy fiber from fibrous material such as cane sugar bagasse, consisting in beating the raw material to render the fibers thereof readily separable, subjecting such beaten material to the action of a body of water flowing in one direction to cause the sugar and other water soluble content to be removed from the mass, the heavy insoluble material to be precipitated, the long and thin fiber to be suspended in the water body and the short and pithy fiber to float on the surface of such water body, and separately removing the long and thin fiber and the short and pithy fiber from the water body.

1,818,898. DIRECT AZO DYES. WERNER LANGE, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1929, Serial No. 397,154, and in Germany Oct. 10, 1928. 4 Claims. (Cl. 260—69.)

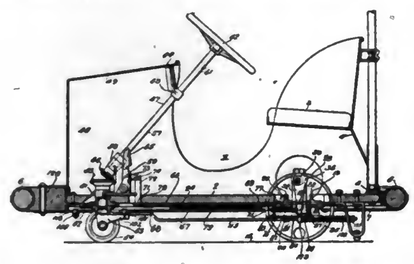
2. The new direct azo dyes for cotton corresponding to the general formula:



wherein R represents a radicle of the group consisting of benzene-, naphthalene-, diphenyl-, stilbene- and diphenylurea- radicles and of a plurality of benzoylamino compounds of one of these radicles, linked together by an atomic linkage of the group consisting of the azo- and azoxy group, and A represents an atomic linkage of the group consisting of —N=N—,

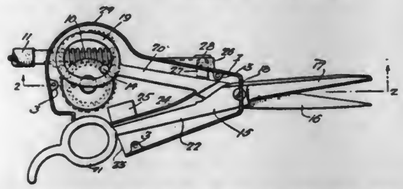


1,818,899. AMUSEMENT CAR APPARATUS. JOSEPH C. LUSSE, Philadelphia, Pa., assignor to Lusse Bros., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 1, 1927. Serial No. 237,003. 16 Claims. (Cl. 180—18.)



1. A pair of driven elements, driving means for said elements, means whereby said driving means may be rendered effective to actuate at least one of said driven elements, steering means, and means including a pair of independently pivoted cams for controlling said driving means upon a predetermined operation of said steering means, and a rigid link pivoted at its opposite ends to said cams respectively, whereby all pivotal movements of each of said cams will be positively and directly transmitted to the other of said cams.

1,818,900. AUTOMATIC SCISSORS OR SHEARS. JOSEPH B. MACNAMEE, Llanerch, Pa. Filed Feb. 18, 1930. Serial No. 429,240. 7 Claims. (Cl. 30—13.)

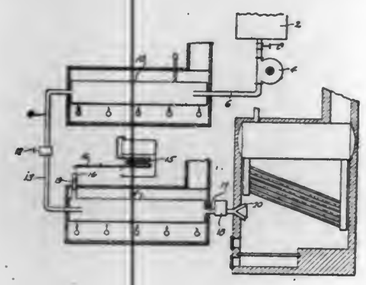


1. The combination with a pair of standard, manually-operable shears, of a casing into which said shears are adapted to be removably inserted, means within said casing for actuating said shears whereby they are converted into power-operated shears, and means on said casing for adjusting the amount of opening of said shears.

1,818,901. PROCESS OF TREATING CARBONACEOUS MATERIALS TO PRODUCE GASEOUS MIXTURES. ARLINGTON H. MALLERY, Poughkeepsie, N. Y., assignor to Mallery Process Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 19, 1926, Serial No. 149,516. Renewed June 19, 1930. 19 Claims. (Cl. 158—117.5.)

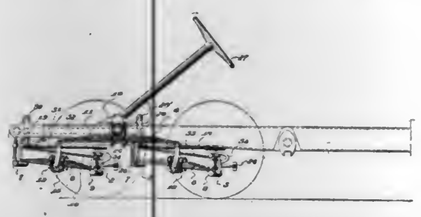
1. A process of treating carbonaceous material, which comprises forcing said material and superheated steam

into a substantially closed heated chamber, maintaining the temperature of the chamber at or above the kindling temperature of the hydrocarbons in the material, maintaining pressure in the chamber, producing continuous



and simultaneous variations in pressure, temperature, velocity of travel and concentration of the resultant gases in the chamber, and discharging the gases from the chamber.

1,818,902. STEERING AND TORQUING ARRANGEMENT. ARTHUR L. MARCUM, Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation, a Corporation of Delaware. Filed Apr. 17, 1926, Serial No. 102,744. Renewed June 23, 1930. 10 Claims. (Cl. 280—91.)



1. A road vehicle comprising a frame, tandem axles disposed adjacent one end of said frame, a pair of dirigible wheels on each axle, a pair of springs secured to each axle, the springs of each axle being each pivoted adjacent one end to said frame, the pivots of the axles being disposed at widely spaced points lengthwise of said frame, equalizing means pivoted to said frame and connected to adjacent springs on the same side of the vehicle whereby each axle is free to swing substantially about the axis of its springs independently of spring deflection, steering means on said frame to control said dirigible wheels and mechanism including a pair of links to connect said frame-carried steering means to said wheels, each of said links being pivoted at a point located substantially in a vertical plane containing a pivotal connection between the spring and frame and being of a length substantially equal to the length of the spring between its pivotal connection to the frame and its connection to one of the axles.

1,818,903. REFRACTORY ARTICLE AND COMPOSITION FOR AND METHOD OF MAKING SAME. RICHARD H. MARTIN, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 31, 1925. Serial No. 47,374. 10 Claims. (Cl. 91—70.)

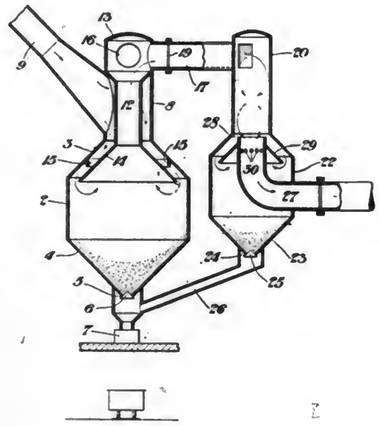
1. A refractory article comprising a body of bonded, refractory, granular material and a relatively thin coating thereon containing a major proportion of a zirconium compound and a fusible constituent.

4. A refractory body comprising ceramic bonded, refractory, granular material and a relatively thin coating thereon containing a predominating amount of zirconia and a smaller amount of magnesia with associated impurities fired in situ to form a relatively dense coating which is substantially impervious to kiln gases under normal firing conditions.

1,818,904. SILICON CARBIDE REFRACTORY ARTICLE AND METHOD OF MAKING THE SAME. RICHARD H. MARTIN, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Original application filed Apr. 18, 1925, Serial No. 24,277, now Patent No. 1,653,918, dated Dec. 27, 1927. Divided and this application filed July 22, 1927. Serial No. 207,816. 7 Claims. (Cl. 91—72.)

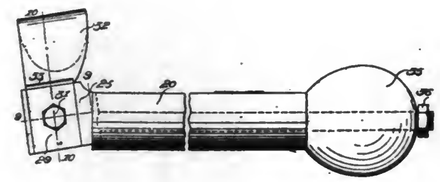
1. The method of forming a protective coating on a refractory article containing silicon carbide which comprises coating a face of the article with a compound, a considerable portion of which comprises magnesia and alumina, and thereafter appropriately firing the article to cause the magnesia and alumina to combine and form a dense coating which will protect the silicon carbide from rapid decomposition.

1,818,905. GAS CLEANER. FRANK R. MCGEE, Steubenville, Ohio. Filed May 26, 1930. Serial No. 455,772. 6 Claims. (Cl. 183—85.)



3. A dry gas cleaner comprising a primary dust catcher in combination with a secondary dust catcher, said primary dust catcher comprising a dust collecting chamber, a gas distributing chamber arranged above and in communication with said dust collecting chamber, a dirty gas supply conduit in communication with said gas distributing chamber, said dirty gas supply conduit having its diameter increased from a point adjacent said gas distributing chamber toward said chamber so as to cause the dirty gas to expand and move at reduced velocity into said chamber a gas outlet conduit arranged centrally within said gas distributing chamber and having its inlet end terminating at the upper end of said dust collecting chamber, said dust collecting chamber being of a materially greater diameter than said gas distributing chamber and having a frusto-conical upper end, the apex of which connects with said gas distributing chamber, a frusto-conical skirt on the lower end of said gas outlet conduit and spaced from the walls of the frusto-conical upper end of said dust collecting chamber to cause the gases entering said dust collecting chamber to flow in an annular stream, means for baffling and choking the stream of gases flowing between said skirt and the frusto-conical upper end of said dust collecting chamber, and means for conducting the gases from the upper end of said gas outlet conduit to said secondary cleaner.

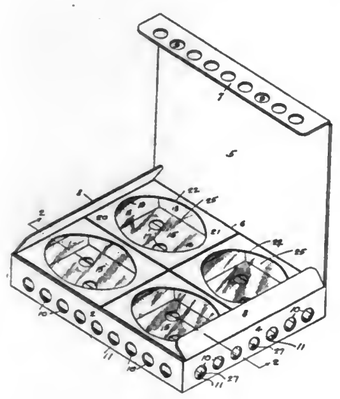
1,818,906. HACKER FOR TURPENTINE TREES. EDWIN A. MCKOY, New Orleans, La. Filed May 16, 1927. Serial No. 191,756. 1 Claim. (Cl. 47—13.)



A hacker comprising a blade holder embodying spaced upstanding shoulders and with a perforation intermediate the shoulders, a blade proportioned to fit snugly between the shoulders and having a perforation registering with the perforation of the holder, means inserted through the perforation to lock the blade rigidly relative to the holder, a handle provided with a longitudinal bore, a threaded extension formed upon the blade holder at an acute angle to the shoulder and proportioned to be inserted into the bore, and means to lock the extension into the handle.

1,818,907. [WITHDRAWN.]

1,818,908. VENTILATED CONTAINER. RENÉ A. POUCHAIN, Elkins Park, and FRANCIS S. FOX, Philadelphia, Pa., assignors to Tasty Baking Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1930. Serial No. 433,455. 7 Claims. (Cl. 229—6.)



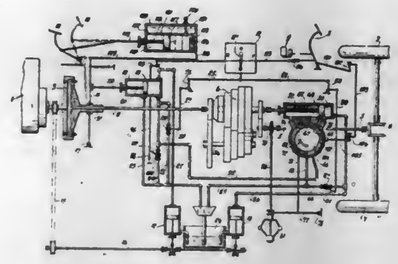
1. The combination of an outer container comprising perforated side walls, a bottom provided with air channels extending between an oppositely disposed pair of said perforated side walls, and an inner container having a perforated bottom resting on the channeled bottom in the outer container.

1,818,909. PROCESS FOR PRECIPITATING RHODIUM, IRIDIUM, OSMIUM, RUTHENIUM AND THE LIKE. ENGBERT HARMEN REERINK, Eindhoven, Netherlands, assignor to N. V. Philips Gloeilampenfabriken, Eindhoven, Netherlands, a Limited Liability Company of The Netherlands. Filed May 14, 1928, Serial No. 277,740, and in the Netherlands Oct. 20, 1927. 5 Claims. (Cl. 91—70.1.)



1. A process for precipitating on a body at least one of the metals rhodium, iridium, osmium and ruthenium, comprising heating said body in an atmosphere containing at least one volatile carbonyl halogen compound of the metal to be precipitated.

1,818,910. AUTOMATIC CHANGE SPEED MECHANISM. PIERRE SANINE, Nice, France, assignor of one-fourth to Claude E. Moore, Nice, France. Filed Aug. 16, 1929, Serial No. 386,401, and in France Dec. 21, 1928. 17 Claims. (Cl. 74—97.)

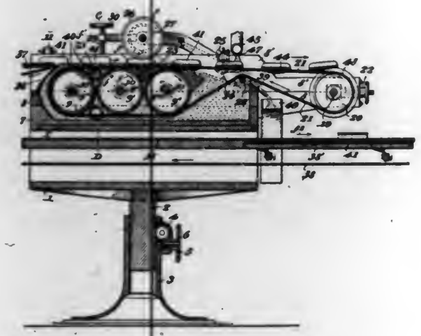


1. In combination with an engine, clutch and change speed mechanism having a reverse position, means driven by the change speed mechanism, an engine created pressure source, means operated by the pressure for operating the clutch, means operated by the pressure for operating the change speed mechanism, said means normally maintaining the change speed mechanism in a forward position, means to move the change speed mechanism into a reverse position, means controlled by the speed of the driven means for controlling the operation of the change speed mechanism in the forward positions, an engine controlling means, means operated thereby for operating the clutch controlling means, means operated thereby for preventing operation of the change speed mechanism when the clutch is engaged, and manual means for relieving pressure on the clutch controlling means and the change speed operating means whereby the reverse operating means is free to move the latter to a reverse driving position.

1,818,911. MACHINE FOR COATING AND GLAZING BISCUITS. EMILE SAVY, Paris, France. Filed Jan. 23, 1928, Serial No. 248,925, and in France Jan. 25, 1927. 12 Claims. (Cl. 91—3.)

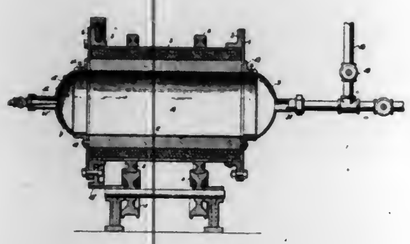
4. In a coating apparatus, a receptacle to contain coating material; a set of relatively-large, parallel coat-

ing cylinders mounted therein; means for driving said cylinders; means for feeding the articles to be coated across the tops of the cylinders while maintaining them in contact with the material; and a set of relatively-



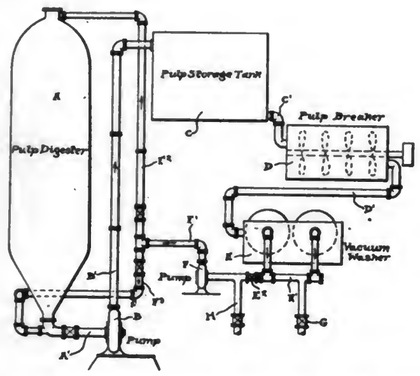
small rollers disposed below said feeding means in the spaces between adjacent cylinders and driven in the opposite direction from the same so as to create eddies in the material immediately above them.

1,818,912. PROCESS OF DISTILLING CARBONACEOUS MATERIALS. WALTER EDWIN TRENT, New York, N. Y., assignor to Trent Process Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 20, 1926. Serial No. 82,561. 7 Claims. (Cl. 202—14.)



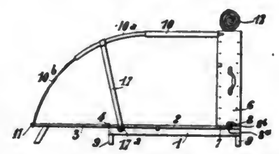
1. A carbonizing process which comprises storing a sufficient quantity of heat in a heat absorbing container to carbonize a predetermined quantity of solid material by direct application of heat thereto, discontinuing the application of heat to said container and introducing thereinto a charge of solid carbonaceous material having a volatile hydrocarbon content, maintaining carbonizing conditions within said container and thereby carbonizing said material by heat transferred thereto from the container, moving said container while substantially preventing the escape of heat through the walls of said container during the carbonization of the material therein, removing from said container the vapors and gases evolved from the material, and upon completion of the carbonization removing from said container and collecting the carbonized residue.

1,818,913. METHOD AND APPARATUS FOR THE CHEMICAL TREATMENT OF PULP. CHARLES R. VAN DE CARR, Jr., Dayton, Ohio, assignor to Chemipulp Process, Inc., Watertown, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,420. 17 Claims. (Cl. 92—7.)



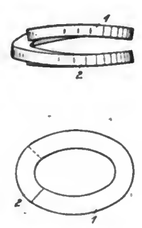
1. In the treatment of pulp, digesting fibrous material and withdrawing pulp from the digester, washing said pulp, and feeding spent liquor from the washer into the pulp leaving the digester to dilute said pulp.

1,818,914. CAMPING INSTALLATION. JEAN LOUIS JOSEPH ROBERT VERDINI, Oudjda, Morocco. Filed Dec. 27, 1930, Serial No. 505,183, and in Germany June 17, 1929. 5 Claims. (Cl. 135—4.)



1. Transportable camping apparatus comprising a case, a second case having means whereby it is adapted to fold downwardly and upwardly with respect to said first case, and a pliable frame-work adapted to span the distance between the top of said second case and the end of said first case remote from said second case.

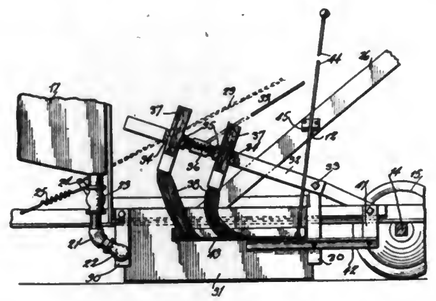
1,818,915. NUT LOCK. KARL VOSSLOH, Werdohl, Germany. Filed June 7, 1930, Serial No. 459,730, and in Germany June 13, 1929. 3 Claims. (Cl. 151—36.)



1. A nut lock, consisting of a segment of a helical spring representing an approximately elliptical form in the plan and comprising at least one convolution of the

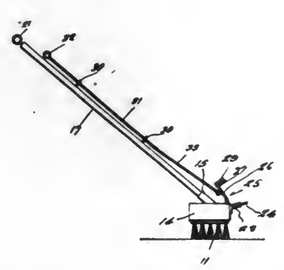
said helix, each coil of the said spring being bent out of the normal helical line so as to form two arches curved in the same direction, each arch comprising one half of the said coil and having a base of a length equal to the largest external diameter of the helix.

1,818,916. TRAFFIC LINE MACHINE. WALTER E. WASEN, Ashland, Ohio. Filed Apr. 3, 1930. Serial No. 441,307. 8 Claims. (Cl. 91—25.)



1. A pavement striper including a wheeled frame, a paint tank supported on the forward end of said frame and having a delivery nozzle, a brush mounted on said frame for movement into and out of pavement engaging position, and a drip pan movable into and out of position beneath the brush upon the latter being out of pavement engaging position.

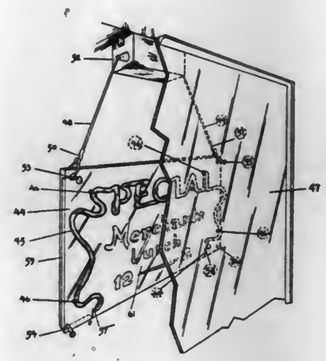
1,818,917. COMBINATION SURFACE TREATING AND CONDITIONING BRUSH. ABRAHAM J. WOLF, Bayonne, N. J. Filed Mar. 14, 1930. Serial No. 435,845. 1 Claim. (Cl. 15—124.)



In a structure of the type described having a brush head, a handle connected with said brush head, a bracket mounted on the brush head for holding a squeegee, a carrier pivotally mounted adjacent said bracket and including an absorbent surface contacting pad, said carrier being located in a position to swing over the effective edge of said squeegee to render the squeegee temporarily ineffective, and to bring the pad into play.

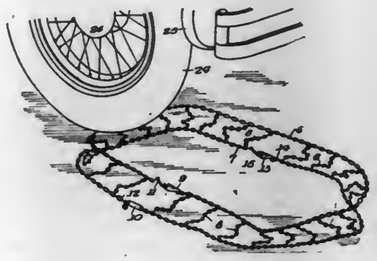
1,818,918. DISCHARGE TUBE DISPLAY. FRED HOTCHNER, Los Angeles, Calif. Original application filed May 25, 1929, Serial No. 366,069. Divided and this application filed Mar. 30, 1931. Serial No. 526,344. 9 Claims. (Cl. 40—130.)

1. A display sign of the character described having a pair of parallelly arranged light reflecting plates, a gaseous conduction light emitting display pattern forming part of the visible display and positioned between the planes of said plates in such manner as to leave certain portions of the visible display area unoccupied, and read-



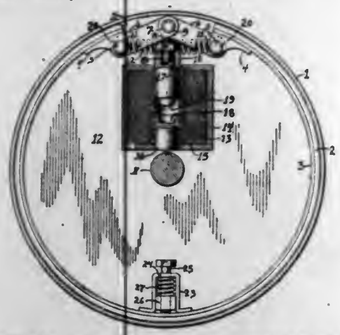
ily removable and replaceable light reflecting display characters also forming part of the visible display arranged in said unoccupied display area.

1,818,919. ANTISKID CHAIN. JAMES L. LYNCH, Media, Ill. Filed Oct. 8, 1930. Serial No. 487,129. 1 Claim. (Cl. 152—14.)



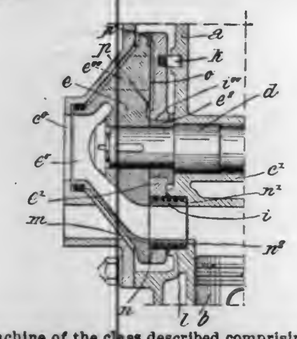
An anti-skid chain comprising two circumferential chains of substantially equal length and a plurality of cross chains extended therebetween, connector elements at corresponding points in said chains and another connector element in one of said side chains spaced not less than one-fourth the length of the chains and not more than three-fourths the length of the chains from the first-mentioned connecting elements in said chains, said last-named connecting element comprising a main body portion, an arm pivotally mounted at one end of said main body portion and including a hook portion into which an end of said chain may be fitted when said arm is moved away from said main body portion, said main body portion having a recess therein into which the end of said chain may be moved when said arm is moved into parallel relation with said main body portion, and means for retaining said arm in parallel relation with said main body portion.

1,818,920. BRAKE. BENJAMIN EARLE MINTURN, Chicago, Ill. Filed May 7, 1929. Serial No. 361,191. 4 Claims. (Cl. 188—163.)



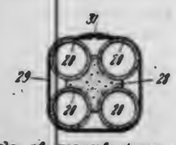
1. In a brake, a rotatable drum, a plurality of separate brake shoes frictionally engageable therewith, a solenoid magnet, pressure multiplying means for operating said shoes, and a pair of solenoid plungers for operating said pressure multiplying means.

1,818,921. ROTARY VALVE FOR RECIPROCATING ENGINES. PAUL NOUBRY and DANIEL GLUKSMANN-RODANSKI, Lyon, France. Filed Nov. 30, 1928, Serial No. 322,882, and in Belgium Dec. 5, 1927. 2 Claims. (Cl. 123—190.)



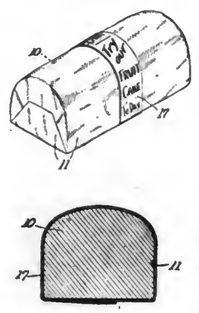
1. A machine of the class described comprising a cylinder having an opening in the wall thereof, a loosely mounted valve seat having an opening therethrough positioned in line with said first-named opening, a tube traversing both of aforesaid openings, means for sealing the joint between said tube and the walls of said openings, a rotatable valve having a plane surface in frictional contact with the valve seat, said valve having independent feed and discharge passages formed therethrough positioned to communicate successively with said tube during rotation of the valve, and discharge ports communicating with said passages during rotation of the valve.

1,818,922. MULTIPLE CONDUIT. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Original application filed Mar. 9, 1928, Serial No. 260,452. Divided and this application filed July 2, 1929. Serial No. 375,427. 8 Claims. (Cl. 247—34.)



1. As an article of manufacture, a multiple conduit comprising a plurality of individual conduit sections, a cement spacer member engaging said individual sections, and a narrow metal band looped around outside of the group of conduits and holding them against said spacer.

1,818,923. METHOD OF APPLYING AN ADVERTISING MEDIUM TO BAKERS' PRODUCTS. HARRY J. TAYLOR, New York, N. Y. Filed June 24, 1931. Serial No. 546,621. 3 Claims. (Cl. 93—2.)



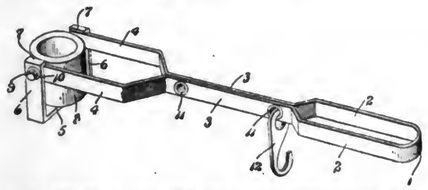
1. In a process of wrapping bread in which waxed wrapping material is fed under tension in continuous strip form, the steps which comprise simultaneously and in contacting relation with one another feeding a strip of such material and a relatively narrow strip of waxed legend-bearing material to a wrapping station, simultaneously enveloping a bread loaf in the wrapping material and applying a portion of said waxed legend-bearing material in the form of a band around the loaf with the ends overlapped at the overlap of the wrapper and in interleaved relation with the overlapped portions of the wrapper, and then applying heat to the overlapped portions of said wrapper and band to effect an integral sealing of said overlapped and interleaved portions.

1,818,924. COVER FOR PICKLES, ETC. PAUL K. BASMADJIAN, Philadelphia, Pa.; Aronseag Basmadjian executrix of said Paul K. Basmadjian, deceased. Filed Sept. 4, 1928. Serial No. 303,842. 2 Claims. (Cl. 215—47.)



1. A parallel-sided jar for the reception of food in bulk and a follower adapted to fill substantially the entire cross-section of the jar, having a cupped top for filling with liquid from the jar by over-flowing and removal of the liquid and a handle for the top extending from the bottom of the cup above the cup level in order that the cup may be lifted without engagement of the hand with the cup contents.

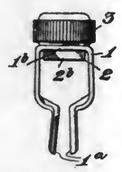
1,818,925. SOLDERING POT. RALPH EUGENE BROWN, Evanston, Ill. Filed Dec. 2, 1929. Serial No. 410,963. 5 Claims. (Cl. 113—111.)



1. A device of the class described comprising, an intermediate body, a handle at one end, and a fork having

spaced apart sides at the other end of the body, a U-shaped stirrup of flat metal having a bottom and vertical legs, said legs extending at their upper portions at the outer sides of said sides of the fork, lips turned inwardly from the upper ends of said sides of the stirrup over the upper edges of the fork, tubular eyes connecting said sides of the stirrup and fork, a metal pot open at its upper end located between the sides of said stirrups, and trunnions projecting from said pot through the eyes connecting the stirrup and fork.

1,818,926. ELECTRICAL PLUG CONNECTER. ARTHUR HERBERT CURTIS, Bedford, England. Filed July 30, 1927, Serial No. 209,421, and in Great Britain Aug. 5, 1926. 4 Claims. (Cl. 178—363.)

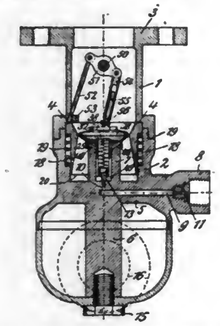


1. An electrical plug connecter, comprising a metallic spring strip doubled upon itself in U-form to provide separated side portions, said separated side portions having relatively wide finger grip sections adjacent the bend of the U and narrow reduced end portions to enter a contact socket when the side portions are pinched together by means of the finger grip sections aforesaid and a terminal screw extending through the connecting portion of the strip between the side portions, said terminal screw being of tubular form to provide a socket for the insertion of another similar plug connecter therein.

1,818,927. COLOR PHOTOGRAPHY. JOHN NAISH GOLDSMITH, London, THOMAS THORNE BAKER, Hatch End, Middlesex, and CHARLES BONAMICO, London, England, assignors to Spicers Limited, London, England, a British Company. Filed June 20, 1930, Serial No. 462,698, and in Great Britain Aug. 1, 1929. 10 Claims. (Cl. 98—81.5.)

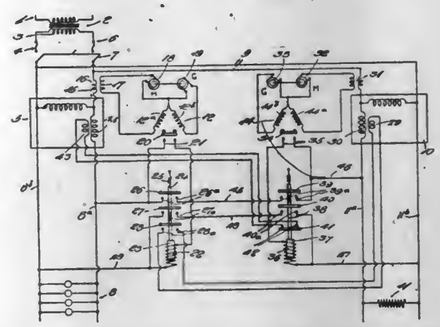
1. In a method for the production of a multicolor screen for color photography on a film comprising a cellulose derivative, the steps consisting in applying to the surface of the film one constituent of a coloring matter, and then impressing geometrical patterns on the surface of the film of a medium containing a compound capable of reacting with the said constituent to form a coloring matter.

1,818,928. FLOATLESS CARBURETOR. MAX KREHER, Freiberg, Germany, assignor to Curt Ludwig, Annaberg, Germany. Filed Mar. 12, 1929, Serial No. 346,369, and in Germany Jan. 29, 1929. 4 Claims. (Cl. 261—44.)



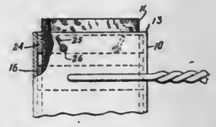
1. An injection head for floatless carburetors, comprising in combination a hollow stem provided with slots, a head composed of radial arms, and a ring with outlets towards the inside and outside in the suction air current flowing not only around but also through said head.

1,818,929. ELECTRIC METER SYSTEM. JOHN C. MCDONALD, New York, N. Y., assignor of one-half to Edward L. Corbett, New York, N. Y. Filed May 15, 1930. Serial No. 452,638. 5 Claims. (Cl. 171—268.)



1. An electrical measuring system comprising a power distribution circuit, separate load circuits, electric meters interposed between each of said load circuits and said power distribution circuit and relay devices connected with each of said load circuits, said relay devices operating to change the rate of operation of said electric meters when said load circuits are energized simultaneously.

1,818,930. SHOE POLISH APPLIER. DAVID PLONUS, Jersey City, N. J. Filed Sept. 16, 1930. Serial No. 482,262. 3 Claims. (Cl. 15—208.)



1. In a shoe polish applier, a roll of buffer cloth, a ring encircling the central portion of the roll to hold it in roll form and having a peripheral internal projection serving to clamp the ring upon the roll and an internal peripheral groove, a cylindrical tubular member engaged snugly about said ring so as to encircle the ring and encircling the buffer roll and of a length so that the buffer roll projects beyond the end of the tubular member, and a handle partially encircling the tubular member and disposed within a groove formed in the tubular member and aligning with the groove in said ring and having a twisted portion which serves to clamp the encircling portion of the handle tightly in the groove and also having ends disposed radially of the tubular member engaging through apertures in the tubular member and in the ring and into the roll of buffer cloth serving to simultaneously act to hold the handle in place and to lock the tubular member and the ring and the buffer roll together.

1,818,931. INSULATOR. GABRIEL POLAK, Forest City, Pa.; Helen Polak Administratrix of said Gabriel Polak, deceased. Filed Mar. 20, 1930. Serial No. 437,550. 1 Claim. (Cl. 173—314.)

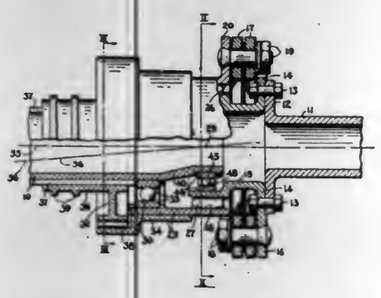
In a device for the purpose set forth, a support having pockets therein, a block of insulating material in each pocket, projecting therefrom and having its outer face grooved transversely for a conductor wire, an outer block of insulating material of a greater width and length than the first mentioned block hingedly secured to the

support and having its inner face grooved to receive the conductor wire therein, said last mentioned block having



its free end bifurcated, and a swingable bolt on the support movable into the bifurcated end of the block and engaged by a wing nut.

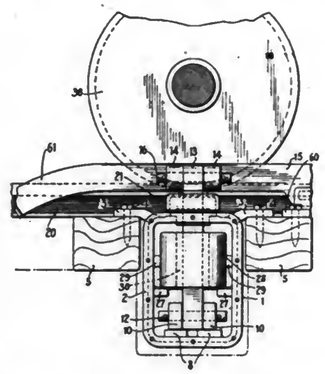
1,818,932. TRANSMISSION SHAFT CONNECTION. LEONZ P. A. RIEGER, Akron, Ohio, assignor to Goodyear-Zeppelin Corporation, Akron, Ohio, a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,518. 5 Claims. (Cl. 192—110.)



1. A transmission unit comprising a driving shaft, a driven shaft, a clutch having its members mounted coaxially upon one of the shafts, a flexible coupling connecting one clutch member to the other shaft, and a bearing connected to the adjacent ends of the shafts, the shafts being rotatable about said bearing while their axes are either coincident or angularly disposed, said clutch member and the shaft upon which the flexible coupling is mounted having splined connections therebetween.

1,818,933. MAGNETIC CAR RETARDER. OSCAR A. ROSS, New York, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Continuation of application Serial No. 245,141, filed Jan. 7, 1928. This application filed Jan. 7, 1928. Serial No. 245,142. 5 Claims. (Cl. 188—62.)

1. A car retarder of the electromagnetic type comprising, a track rail, a car having a wheel of magnetizable material movable over said track rail, a vertically disposed member of magnetic material on each side of said rail each pivotally secured at the bottom end and having a brake shoe at the other end engageable by said car wheel and each brake shoe facing the brake shoe of the other member, a coil on each of said members fixedly secured thereto,



separate spring means for urging said brake shoes toward each other and means for electrically energizing said coils.

1,818,934. ACCELERATION OF VULCANIZATION OF RUBBER. JAN TEPPEMA, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 21, 1927. Serial No. 234,925. 16 Claims. (Cl. 18—51.)

15. A method of vulcanizing rubber which comprises subjecting it to vulcanization in the presence of an accelerator selected from a group consisting of the reaction product of diphenylguanidine and 5-chlor mercapto-benzothiazole, the reaction product of diphenylguanidine and 6-nitro mercaptobenzothiazole, the reaction product of diphenylguanidine and 6-amino mercaptobenzothiazole, the diethyl amine salt of chlor mercaptobenzothiazole and the diethylamine salt of 6-amino mercaptobenzothiazole.

1,818,935. METHOD OF PREPARING THIAZOLES. JAN TEPPEMA and LORIN B. SEBRELL, Akron, Ohio, assignors to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 26, 1928. Serial No. 322,080. 5 Claims. (Cl. 260—44.)

1. A method of producing mercaptobenzothiazoles which comprises subjecting an alkali salt of amino thiophenol simultaneously to the action of carbon dioxide and carbon bisulfide.

1,818,936. LOOSE LEAF BINDER. PAUL O. UNGER, Syracuse, N. Y. Filed Sept. 23, 1929. Serial No. 394,536. 24 Claims. (Cl. 129—17.)

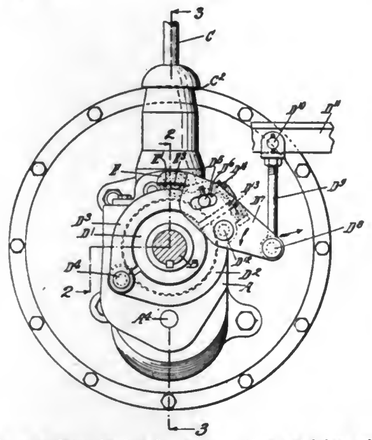


24. A loose leaf binder comprising back members connected for relative movement, a cover hinged to each back member, a set of prongs carried on each back member, a latch secured to one back member, a bar slidably mounted on the other back member and adapted to engage the latch, means for moving the bar out of engagement with the latch, means automatically engaging the bar when the same has been moved out of engagement with the latch to hold it in such disengaged position, and means actuated by relative movement of the back member for moving the last-named means out of engagement with the bar, such means including a pivoted member adapted to be moved into engagement with the automatic means.

1,818,937. TREATMENT OF AIR BAGS. CORNELIS VAN RENNES, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 10, 1927. Serial No. 239,127. 1 Claim. (Cl. 18—50.)

A method of protecting the interior surfaces of airbags which comprises injecting therein a solution of glycerine extracted from used airbags.

1,818,938. SAFETY DEVICE FOR MOTOR VEHICLES. HARRY K. BLANNING, Chicago, Ill., assignor of forty-nine one-hundredths to Lillie K. Blanning, New Castle, Pa. Filed Oct. 21, 1929. Serial No. 401,294. 13 Claims. (Cl. 192—4.)



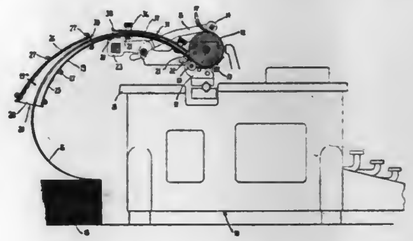
1. In a safety device for automotive vehicles which includes a motor shaft, a driven shaft, and speed change means interposed between said shafts, braking means applied to the driven shaft, including a brake drum, a shoe pivoted adjacent said brake drum and means for rotating it into locking engagement with the drum in response to retrograde rotation of the drum and means for preventing such locking engagement when the speed change means is in reverse, including a member actuated by said speed change means.

1,818,939. ARCHERY TARGET. HARRY M. BRADING, Evansville, Ind., assignor to Indian Archery & Toy Corporation, Evansville, Ind., a Corporation of Indiana. Filed Mar. 18, 1929. Serial No. 347,951. 7 Claims. (Cl. 273—102.)



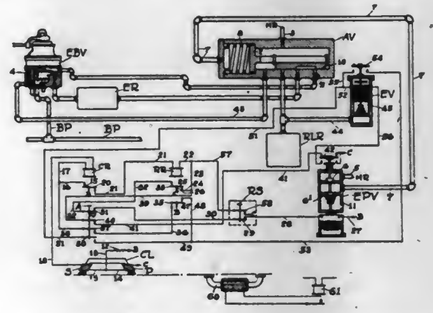
1. An archery target or the like comprising a casing of loosely woven fabric, the strands of which may be readily displaced by the penetration of an arrow head, a filling of fibrous material, a detachable facing for such target body, reinforcement tabs located at spaced intervals about the periphery of the facing, and removable pins inserted through said tabs into the fiber filled casing.

1,818,940. TYPEWRITING MACHINE. CARL W. BRENN, Montclair, N. J., assignor to Autographic Register Company, Hoboken, N. J., a Company of New Jersey. Filed Sept. 26, 1927. Serial No. 221,913. 2 Claims. (Cl. 197—143.)



1. In a typewriting machine, the combination of a traveling carriage; a platen mounted in said carriage; and a paper table mounted in said carriage and having a relatively extensive curvilinear surface reaching from the introductory side of the platen rearwardly and downwardly to a point behind the rear of the frame of the machine, the rear portion of the table having side edges converging as they extend forwardly and a cover portion to hold the pile of worksheets against removal from the table except by longitudinal movement of the worksheet, and the forward portion of the table having guides converging as they extend forwardly for engaging the side edges of the pile and bringing the pile to a predetermined position laterally relative to the platen, the said guides being adjustable on the table to vary the point of introduction of the pile of worksheets to the platen and to accommodate worksheets of different widths.

1,818,941. BRAKE APPLYING APPARATUS. CHARLES S. BUSHNELL, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed May 17, 1929. Serial No. 363,739. 12 Claims. (Cl. 246—63.)



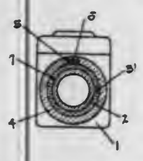
1. An automatic train control system comprising, automatic brake control apparatus superimposed upon an air brake system of the normally charged brake pipe type, which if initiated will vent the brake pipe to atmospheric pressure, means controlled in accordance with traffic conditions in advance for initiating said brake control apparatus under unfavorable traffic conditions ahead, and manually operable acknowledging means operable by the

engineer for limiting to an intermediate value the extent of venting of said brake pipe by said brake control apparatus.

1,818,942. ANTIOXIDANT OR AGE-RESISTER. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 2, 1928. Serial No. 297,115. 8 Claims. (Cl. 18—50.)

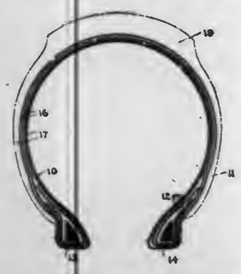
8. A rubber product that has been vulcanized in the presence of a reaction product of naphthylamine and formic acid, said reaction product having been formed in the presence of aniline.

1,818,943. CONDUIT FITTING. JOHN WILLIAM COX, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 13, 1925. Serial No. 8,917. 4 Claims. (Cl. 247—25.)



3. In a conduit fitting, the combination of a body; a slotted conduit receiving extension on the body; a ring surrounding the extension, said ring having an axially extending key-way; and a wedge in the key-way contracting the extension by direct radial wedging action of the wedge on the extension.

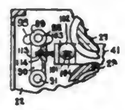
1,818,944. PNEUMATIC TIRE CASING. BURGESS DARROW, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed July 11, 1927, Serial No. 204,842. Patent No. 1,732,793, dated Oct. 22, 1929. Divided and this application filed June 7, 1929. Serial No. 369,031. 3 Claims. (Cl. 152—13.)



1. A pneumatic tire carcass comprising a plurality of distinct individual circumferentially extending sections, each of the sections comprising a plurality of plies of fabric, the plies having marginal portions, each of which is progressively stepped from the margins of the adjacent plies whereby to provide the sections with substantially feathered edges, the plies of one section enclosing a bead, the margins of the plies of one section substantially registering with the corresponding margins of the adjacent section to provide a splice of substantially the same thickness as the adjacent portions of the carcass.

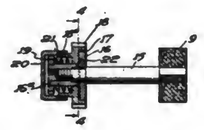
1,818,945. DOUGH MOLDING MACHINE. GEORGE W. DELL, Cheviot, Ohio, assignor to The Triumph Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 15, 1929. Serial No. 355,186. 11 Claims. (Cl. 107—8.)

10. In a dough molding machine, the combination of a drum provided with end flanges, an arcuate flexible molding plate about said drum between said end flanges, intermediate links at the respective ends of said drum having connections with the middle portion of said molding plate, links at the respective ends of said drum having connections with the respective end portions of said arcuate



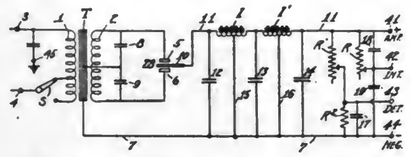
molding plate, disks at the respective ends of said drum about the axis of rotation of said drum, pivot connections between the inner ends of said links and said disks adjacent to said axis of rotation, and end contact means for said respective intermediate links whereby to position said molding plate edgewise between said flanges.

1,818,946. ASSEMBLER DRIVE CLUTCH FOR TYPOGRAPHICAL MACHINES. HERMAN R. FREUND, Brooklyn, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 19, 1929. Serial No. 393,763. 1 Claim. (Cl. 64—99.)



A friction drive clutch for the assembler star wheel shaft of a typographical machine comprising a friction disk to fit upon said shaft, a driving member rotatably mounted at a side of said disk and having a friction face at one side to engage the disk and having a collar fixed to and projecting from its opposite side and forming a lubricant chamber within it which is in communication at one end with said friction face and is open at its opposite end, a spring holding said disk and driving member in frictional engagement, and a cover removably fitted to said collar on the driving member and closing the open end of said chamber therein.

1,818,947. CURRENT SUPPLY APPARATUS. WILLIAM C. GRUNOW, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 6, 1926. Serial No. 139,788. 5 Claims. (Cl. 250—27.)



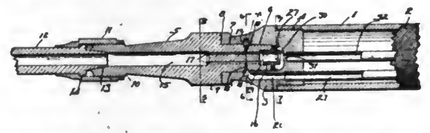
1. In a current supply circuit, a rectifying and filter circuit including a transformer, condensers in parallel with said circuit, choke impedance coils in series with said circuit, a rectifying tube for supplying rectified current to said circuit, positive and negative outgoing connecting terminals for the circuit, a detector terminal, connections therefor, a variable resistor for varying the voltage value at the detector terminal, a fourth terminal for radio frequency amplification or intermediate plate voltage supply and connections therefor, and a variable resistor included in the last said connections for varying the voltage thereof, the last said connections including said last resistor and a condenser in series across leads going to the said positive and negative terminals and a condenser in shunt of the resistor.

1,818,948. MOP-SHAKING DEVICE. JENNINGS B. HAMBLEN, Whiting, Ind., assignor to Harold V. Atwell, Vanderveer Voorhees, and Jennings B. Hamblen, trustees operating under the name of General Engineering Trust. Filed Sept. 10, 1928. Serial No. 304,931. 3 Claims. (Cl. 15—104.)



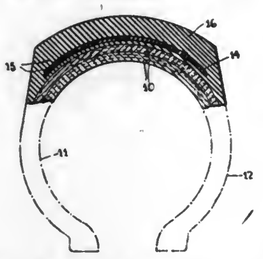
3. A device of the character set forth, comprising a mop stick, a grip handle associated therewith at one end, a mop attached thereto at the other end, a sleeve member on said mop stick and releasably fixed thereto, said sleeve member being provided with a spiral track, an actuating member associated with said sleeve member, and means on said actuating member cooperating with the track on said sleeve member for rotating said mop stick.

1,818,949. MIXER FOR WELDING TORCHES. GEORGE L. HAMMON, San Francisco, Calif., assignor to National Welding Equipment Co., Ltd., San Francisco, Calif., a Corporation of California. Filed Apr. 6, 1929. Serial No. 353,045. 4 Claims. (Cl. 158—27.4.)



2. A mixer for welding torches comprising a body member having distributing and mixing chambers therein connected by a series of longitudinal bores arranged in a circle and having bypasses leading therefrom intermediate said chambers; a perforated cap in the end of said distributing chamber; a supply member enclosing a portion of said body member and having an internal groove registering with said bypasses; a supply tube connected with said groove; and supply tubes in said supply member connected with said groove and distributing chambers respectively.

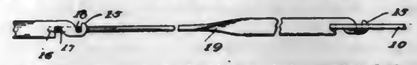
1,818,950. BREAKER STRIP. GEORGE A. HANDY, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 9, 1929. Serial No. 384,719. 5 Claims. (Cl. 152—13.)



1. A breaker strip for a pneumatic tire comprising a rubber web having rubber reinforcing elements of a less extensible compound therein.

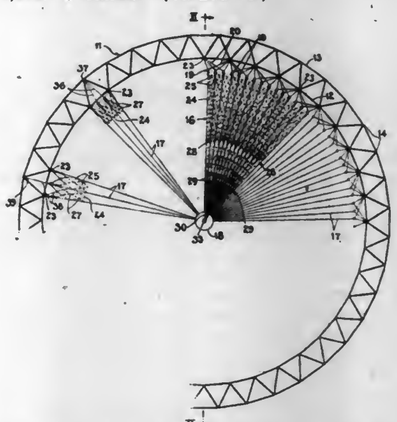
1,818,951. DUCT ROD. EDWIN R. HARRALL, Englewood, and ROBERT D. PARROTT, West New York, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed June 24, 1930. Serial No. 463,548. 2 Claims. (Cl. 175—380.)

1. A sectional rod adapted to be threaded through underground conduits, comprising a plurality of like sections coupled end to end, each section consisting of a flat metal bar having the opposite ends formed to provide respectively a hook member and slots to receive the hook mem-



ber of another section, and said bar being twisted through 90 degrees intermediate its ends to thereby position said ends in planes at right angles to each other.

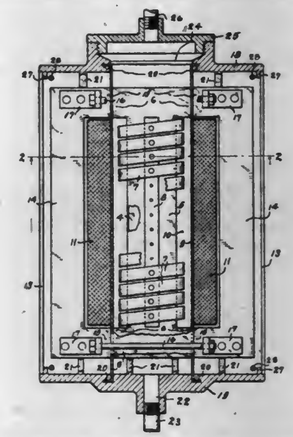
1,818,952. BULKHEAD FOR RIGID AIRSHIPS. KARL ARNSTEIN and PAUL HELMA, Akron, Ohio, assignors to Goodyear Zeppelin Corporation, Akron, Ohio, a Corporation of Delaware. Filed Feb. 2, 1928. Serial No. 251,372. 9 Claims. (Cl. 244—3.)



1. The combination with a rigid airship including longitudinals and an inherently rigid main ring, of a uniformly yieldable bulkhead comprising a plurality of wires connected in slack relation radially within and to the main ring and a cord netting installed in taut condition in conjunction with the wires.

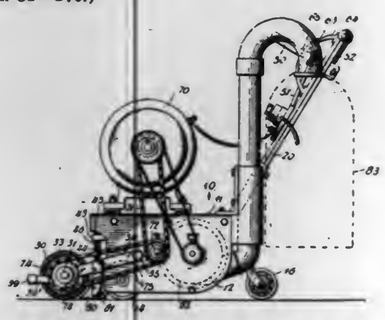
1,818,953. ELECTRIC HEATER. ANDREW J. HOLMES, Auburn, Wash., assignor of one-fourth to W. R. Everett, Auburn, Wash. Filed Feb. 18, 1929. Serial No. 340,809. 5 Claims. (Cl. 219—47.)

2. In an electric heater, a tubular liquid chamber, a core of magnetic material within said chamber, a liquid



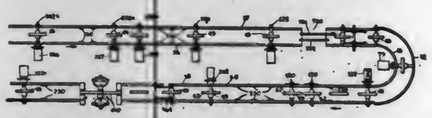
tight metal covering for said core, said covering and the walls of said chamber being of non-corrosive metal, a primary coil surrounding said chamber, and a secondary disposed within said chamber and surrounding said core.

1,818,954. FLOOR SURFACING MACHINE. GUSTAV JACOBSON and GUNNAR F. ERICSON, New York, N. Y., assignors to Superior Floor Surfacing Machine Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 11, 1927. Serial No. 182,597. 2 Claims. (Cl. 51—176.)



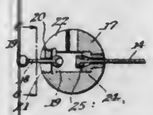
1. In a floor surfacing machine having a carriage and a rotary grinding drum at the front end of the carriage and movable vertically, drum-controlling mechanism comprising two intermeshing gear segments pivotally mounted on the carriage, one of which has an arm projecting rearwardly from its axis, a control handle connected to said arm, and a lever fulcrumed on the carriage and having its rear end pivotally connected to the other gear segment between the axis and the teeth of the gear segment, the front end of said lever being operatively connected to the drum.

1,818,955. METHOD OF AND APPARATUS FOR MANUFACTURING PNEUMATIC TIRES. ELOV F. MAAS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 28, 1929. Serial No. 374,487. 15 Claims. (Cl. 154—10.)



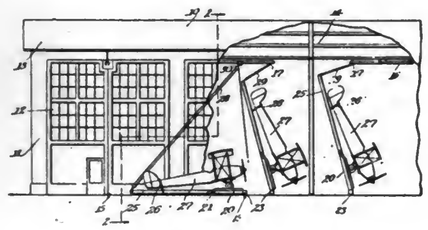
1. A machine for constructing pneumatic tires comprising a trackway, a plurality of detachable tire cores having spindles projecting therefrom and adapted to roll upon the trackway, each core being adapted to roll independently of the others, and a plurality of fabricating stations disposed at spaced intervals along the trackway, said stations being provided with means for engaging the cores and for performing various operations upon the tires being constructed upon the cores.

1,818,956. GRAPPLE FOR AIRPLANE PACKAGE TRANSFER APPARATUS. LYTLE S. ADAMS, Seattle, Wash., assignor to Airways Patent Corporation, a Corporation of Delaware. Filed May 10, 1929. Serial No. 361,958. 8 Claims. (Cl. 258—1.)



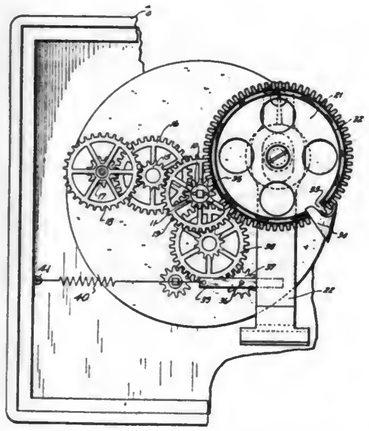
1. A grapple for airplane package transfer apparatus comprising a cable anchor member and a package carrier member, and a frangible connection between said members adapted to support the weight of the package during transit and to give way under the shock of impact with the ground apparatus.

1,818,957. AIRPLANE HANGAR OR SHED. LYTLE S. ADAMS, New York, N. Y., assignor to Aeroplane Hangar and Equipment Corporation, Buffalo, N. Y., a Corporation of Delaware. Filed Dec. 11, 1929. Serial No. 413,372. 6 Claims. (Cl. 244—2.)



6. A system for handling and storing airplanes comprising a tilting ground carriage and an overhead trolley, means for tilting said ground carriage, and means on said trolley for supporting said tilted carriage during movement thereof into and out of a hangar or the like.

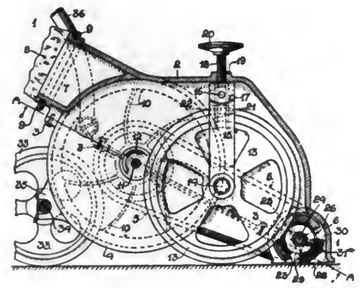
1,818,958. CLOCK FOR ALARM SYSTEMS. ARTHUR B. CHAPMAN, Oshkosh, Wis., assignor to The Double-A Alarm Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Apr. 30, 1926. Serial No. 105,786. 22 Claims. (Cl. 200—38.)



3. The combination with a clock mechanism, of an adjustable gear movable into and out of engagement therewith, said gear being rotatable and longitudinally movable, and a circuit maker and breaker controlled by longitudinal movements of said gear.

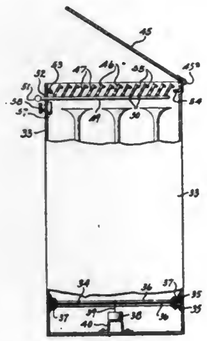
1,818,959. VACUUM CLEANER. MICHAEL KUPINSKY COOPER, Liverpool, England. Filed Jan. 16, 1928, Serial No. 247,023, and in Great Britain Jan. 19, 1927. 2 Claims. (Cl. 15—8.)

1. A hand-actuated vacuum cleaning machine including a housing, a fan mounted therein, a nozzle at one end of said housing, a brush rotatably mounted in said nozzle, a shaft carrying said fan, a floor wheel pivotally mounted between said shaft and brush, whereby said wheel is brought into engagement with said shaft on forward motion of the machine and disengaged therefrom on rear-



ward motion, a pinion carried by said rotatable brush, and spring means normally holding said pinion in engagement with said floor wheel.

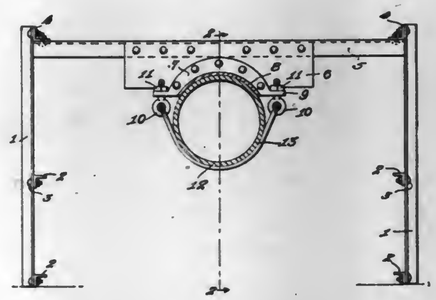
1,818,960. METHOD AND MEANS FOR PRODUCING COMPRESSIONAL WAVES. MILLER REESE HUTCHISON, Llewellyn Park, West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1927. Serial No. 159,135. 17 Claims. (Cl. 274—1.)



12. Means for producing compressional waves, comprising in combination a plurality of open ended casings forming resonators tuned to different predetermined wave frequencies respectively, an aperiodic reproducer, and means responsive to oscillatory energy of complex wave form for causing actuation of said resonators selectively in response to predetermined components of the energy, and for actuating the aperiodic reproducer in response to other components of the energy.

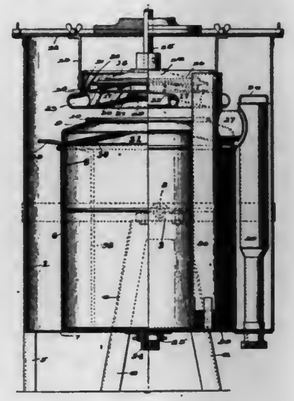
1,818,961. SCAFFOLD. FRANK J. KRAMER, Melvindale, Mich., assignor of one-half to Mildred Wick, Detroit, Mich. Filed Sept. 22, 1930. Serial No. 483,688. 2 Claims. (Cl. 248—31.)

1. A scaffold for supporting the sections of an elevated pipe line, comprising spaced corner posts, adjustable braces for connecting the posts, angle irons adjustably secured to the posts adjacent to the upper ends of said posts, a longitudinal angle member removably secured to the angle irons, an arched saddle carried by the longitudinal member and having its ends provided with outstanding apertured



ears, eye bolts passing through the ears and engaged by nuts and a strap member having its ends secured to the eye bolts.

1,818,962. APPARATUS FOR ELIMINATING FOAM FROM MILK AND OTHER LIQUIDS. MASON RAYMOND PARSELL, Baltimore, Md. Filed June 27, 1929. Serial No. 374,120. 5 Claims. (Cl. 183—2.6.)

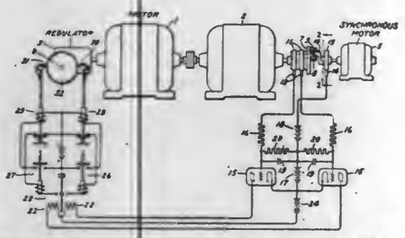


1. In an apparatus for treating froth and foam of liquids, a rotor for sucking the foam from the liquid and comprising a central opening with outwardly extending passages reaching to its periphery and an internally-ribbed collecting collar surrounding said rotor, said collar being spouted for ejecting from the interior of the collar the liquid component of the foam after separation of the liquid from the occluded gas.

1,818,963. SPEED CONTROL APPARATUS. WILLIAM A. TOLSON, Erlton, N. J., assignor to General Electric Company, a Corporation of New York. Filed Oct. 7, 1930. Serial No. 487,037. 5 Claims. (Cl. 172—293.)

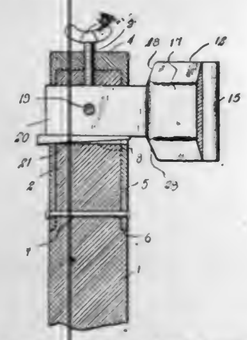
1. In combination, a power motor, a speed-reference motor subject to rapidly recurring speed variations, co-

operating contacts controlled respectively by the power motor and the reference motor, and means responsive to the operation of said contacts for controlling the speed



of the power motor, said means including time delay means whereby the power motor is rendered non-responsive to said speed variations of the reference motor.

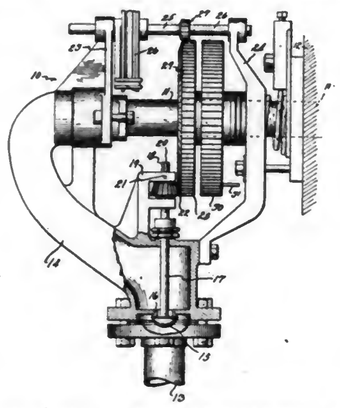
1,818,964. TURPENTINE WORKER'S TOOL. BENNIE H. SMITH, Manatee, Fla., assignor of one-half to A. B. Murphy, Manatee, Fla. Filed Dec. 3, 1928. Serial No. 323,388. 4 Claims. (Cl. 47—13.)



1. A tool of the character described comprising a staff, a metal cap enclosing the forward end portion of said staff and having a thick head fitting against the end of the staff and annular walls fitting snugly about the staff, a passage rectangular in cross section being formed transversely through the staff and walls and a threaded opening leading from the passage intermediate its ends through the head of the cap, the said cap serving to reinforce the forward end portion of said staff and the ends of the passage, a set screw in the threaded opening, and a working element having a shank extending through said passage and engaged by the inner end of the set screw.

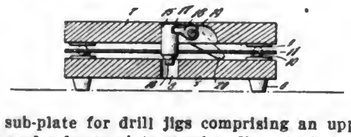
1,818,965. BOILER CLEANER. NORMAN L. SNOW, Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Oct. 13, 1924. Serial No. 743,495. 8 Claims. (Cl. 122—392.)

1. In a boiler cleaner, the combination with a blower element and a source of cleaning fluid, of a valve controlling the supply of cleaning fluid from said source to the blower element, a member adapted to control said valve, a second member adapted to rotate the blower element, means including a flexible actuating element adapted to be



successively moved into actuating engagement with the said members for causing the valve and blower element to function, and means providing a spiral guideway for automatically causing the aforesaid movement of said actuating element.

1,818,966. SUBPLATE FOR DRILL JIGS. JOSEPH F. STUMPF, Chicago, Ill. Filed Oct. 15, 1928. Serial No. 312,546. 3 Claims. (Cl. 77—62.)



1. A sub-plate for drill jigs comprising an upper plate member and a lower plate member disposed in superposed relation, bearing plates fitted in the opposed faces of said plates, ball bearings mounted between said bearing plate, a ball bearing retaining plate interposed between said upper and lower plate members and engaging the balls whereby to secure the same in fixed relative position, each of said plates having a plurality of vertical openings formed therein adjacent opposite sides thereof, a clamping pin slidably mounted in each of said openings and adapted to extend within the openings of each of the plates whereby to secure the same in fixed position with respect to each other and means engageable with said pins and operable from opposite sides of the plate for simultaneously moving the same into or out of plate clamping-position, said means comprising a lever for each of the pins, a rock shaft journaled for rotation in the uppermost of said plate members with one end of each of the levers operatively connected thereto and with the other end of said levers operatively engageable with one of said pins, said shaft having its ends protruding from opposite sides of the plate and operating handles formed on each end thereof.

Patents Nos. 1,818,967 to 1,820,005

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Plant Patents	1—No.	1	
Designs	44—No.	84,867 to No.	84,910, inclusive.
Patents	1,039—No.	1,818,967 to No.	1,820,005, inclusive.
Total	1,338		

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, July 28, 1931.*

Electromatic System Company, its assigns or legal representatives, take notice:

A cancellation proceeding has been instituted by this Office upon the application of the Williams Oil-O-Matic Heating Corporation, 207 East Washington Street, Bloomington, Ill., to effect the cancellation of the trade-mark registration of Clarence B. Strouse, of Chicago, Ill., No. 126,582, dated September 16, 1919, which registration, the assignment records of the Office show, has been transferred to the Electromatic System Company, Portland, Me. The notice of such proceeding sent by registered mail to the Electromatic System Company, at the said address having been returned by the post office as undeliverable, notice is hereby given that unless the Electromatic System Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 5, 1931.*

Theodore H. Froehlich, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Bourjois, Inc., of 35 West 34th Street, New York, N. Y., to effect the cancellation of the trade-mark registration of Theodore H. Froehlich, of 256 West 78d Street, New York, N. Y., No. 86,398, dated May 7, 1912, and the notice of such proceeding sent by registered mail to the said Froehlich at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Froehlich, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 5, 1931.*

Samuel B. Abbott, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, 63 Leon Street, Boston, Mass., to effect the cancellation of the trade-mark registration of Samuel B. Abbott, of 1115 Third Avenue North, Columbus, Miss., No. 178,387, dated January 8, 1924, and the notice of such proceeding sent by registered mail to the said Abbott at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Abbott, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

International Convention—Adhesion

New Zealand, Western Samoa

This Office has been notified by the State Department of the receipt of a notice from the Swiss Legation that New Zealand has adhered to the Convention of the Union for the Protection of Industrial Property, as revised at The Hague on November 6, 1925, and has also adhered to that convention for Western Samoa, the adherences to take effect July 29, 1931.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Adjudicated Patents

(U. S. C. C. A. Mo.) Schroeder and Bird patent, No. 1,288,694, for driving mechanism for operating devices, claims 10 and 11 *Held* not infringed. *Power v. Mola Washing Machine Co.*, 49 F.(2d) 1009.

Condition of Appli ations Under Examination at Close of Business August 1, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 91,676; Trade-Mark Division, 1,069. Oldest new case, Dec. 1, 1930; oldest amended, Dec. 1, 1930. The dates given are 1931 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action: New	Oldest amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Mar. 24	Mar. 31	770
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Feb. 4	Feb. 5	1,446
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 1	Apr. 16	859
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Mar. 5	Mar. 11	780
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Feb. 12	Feb. 18	716
318	6. LEWERS, A. M., Carbon Chemistry	†Dec. 31	Jan. 7	2,043
106	7. JARBOE, C. D., Optics; Photography	Jan. 13	Jan. 15	2,021
133	8. ADAMS, F. E., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Jan. 5	Jan. 14	1,618
221	9. ADAMS, R. D., Pumps; Fluid and Fluid-Current Motors	Feb. 18	Feb. 21	1,337
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 19	Apr. 2	1,051
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 3	Mar. 10	773
380	12. HENRY, C. C., Machine Elements	†Dec. 16	Feb. 3	1,255
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Feb. 7	Feb. 10	1,129
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Feb. 9	Mar. 12	1,109
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Jan. 12	Jan. 12	2,554
242*	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 23	Apr. 3	804
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Jan. 5	Jan. 5	1,496
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Feb. 2	Feb. 4	1,108
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	†Dec. 8	†Dec. 6	2,038
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Mar. 23	Mar. 28	866
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Feb. 6	Mar. 26	962
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Mar. 17	Apr. 11	734
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	†Dec. 3	†Dec. 9	1,045
147*	24. DURAS, C. C., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Feb. 6	Feb. 9	987
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Feb. 3	Feb. 2	1,523
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Feb. 13	Feb. 13	962
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Feb. 6	Feb. 6	1,086
225	28. BENSON, A. R., Internal-Combustion Engines	Feb. 1	Feb. 1	1,631
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Mar. 19	Apr. 11	572
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 2	May 11	878
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	†Dec. 1	†Dec. 1	2,677
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Mar. 4	Mar. 2	1,201
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Feb. 2	Feb. 2	2,400
304	34. SIMPSON, O. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Apr. 1	Apr. 1	873
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 11	Apr. 28	833
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	†Dec. 11	†Dec. 11	2,249
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Jan. 20	Jan. 24	1,492
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 16	Apr. 18	560
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Feb. 16	Feb. 24	1,553
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Jan. 2	Jan. 20	3,093
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Mar. 5	Mar. 7	725
223*	42. CUTTING, H. O., Electric Signaling	Jan. 15	Jan. 12	1,417
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Feb. 2	Feb. 9	1,558
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	†Dec. 4	†Dec. 8	2,165
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Jan. 2	Jan. 6	2,099
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Feb. 16	Feb. 27	1,185
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Feb. 2	Feb. 4	2,146
212*	48. ROEPKE, C. B., Electricity, General Applications	Feb. 4	Feb. 4	1,114
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 2	Mar. 4	1,426
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	†Dec. 19	†Dec. 22	2,494
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	†Dec. 20	†Dec. 20	2,167
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Feb. 17	Feb. 18	1,447
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 9	Mar. 20	752
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	†Dec. 12	†Dec. 12	2,794
102	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	June 18	June 18	191
	{Designs	July 14	July 21	298
209	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Jan. 2	Jan. 10	1,716
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Feb. 6	Feb. 27	803
270*	58. DOWELL, E. F., Abrading; Typewriting	Jan. 5	Jan. 5	1,517
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Feb. 16	Feb. 24	1,094
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Jan. 2	Jan. 2	1,866
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	†Dec. 5	†Dec. 26	2,062
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	†Dec. 9	†Dec. 8	2,574
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	†Dec. 17	†Dec. 20	2,292
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND—{Trade-Marks	July 3	July 20	980
	{Labels and Prints	July 3	July 20	89

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Marden

No. 2,631. Decided March 25, 1931

PATENTABILITY—DUCTILE URANIUM.

Claims for ductile uranium and for electrodes, cathodes, and targets made thereof *Held* unpatentable since uranium is a product of nature and applicant is not entitled to a patent thereon nor upon any of its inherent natural qualities and the articles made thereof were not new articles unknown to the art.

APPEAL from the Patent Office. Affirmed.

Mr. Max F. Reges and *Mr. Raymond Jones* for Marden.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellant has appealed from a decision of the Board of Appeals, rejecting his claims 18 to 32, inclusive, of his application for a patent upon processes of manufacture of, and products of uranium. The rejected claims are product claims, the appellant having been allowed, in the Patent Office, certain process claims in his application, and which are said to fully cover the process by which his product is obtained. The appellant states that claims 18, 22, 26, 29, 30 and 32 are typical, and they are here given:

18. As a new article, ductile uranium.
22. Uranium in wire form.
26. A filamentary body of ductile uranium.
29. An electrode of ductile uranium.
30. A cathode of ductile uranium.
32. A target of ductile uranium.

The Board of Appeals rejected the claims on the reference Liebmann, No. 1,111,698, of September 22, 1914, and upon the authority of *General Electric Co.* v. *De Forest Radio Co.*, 28 F.(2d) 641.

We are of opinion the rejection of these claims was properly made.

Uranium is a product of nature and the appellant is not entitled to a patent on the same, or upon any of the inherent natural qualities of that metal. Uranium was discovered in 1789 by Klaproth, in experimenting with pitchblende. Its qualities have been well known for many years. Watts Dictionary of Chemistry, published in 1907, Volume IV, page 821, states that uranium is "a lustrous, hard, silver-white metal" and that it "is somewhat malleable". Thorpe's Dictionary of Applied Chemistry, published in 1905, Volume III, page 893, states that uranium is "malleable and silver white, resembling nickel in colour". Malleability is, in some instances, as defined by Webster, synonymous with ductility. There is, therefore, nothing new and no invention in the product of ductile uranium.

Nor can there be said to be anything inventive in uranium wire, or in an electrode, cathode or target made of this metal. It is not claimed that these are new articles, not known to the art. The case of *General Electric Co.* v. *De Forest Radio Co.*, supra, involved similar claims, the metal in that case being tungsten. The claims there were substantially as here, as, for instance, claims 24 and 26, which were as follows:

24. A wire formed of ductile tungsten.
26. Substantially pure tungsten having ductility and high tensile strength.

The Circuit Court of Appeals of the Third Circuit found, as we are here finding, that the applicant was not entitled to a patent upon a product of nature, or upon one of its qualities, and that a tungsten wire was an obvious use to be made of tungsten. The same may be said of an electrode, a cathode, or a target, all of which are well known in the arts to which they belong.

In this connection reference is hereby had to *In re Marden et al.*, 18 C. C. P. A. (Patents)——, —— F.(2d) ——, decided concurrently herewith.

What we have said renders it unnecessary to discuss the Liebmann reference. However, it may be said that this reference discloses that the patentee, in 1914, obtained a process patent upon ductile high-fusing metals, among which was enumerated uranium. A good deal of discussion has arisen in this case as to whether the process disclosed by Liebmann in said patent is operable when applied to uranium. That question becomes immaterial, in view of what we have heretofore said.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

In re Ellis and Holden

No. 2,639. Decided March 25, 1931

PATENTABILITY—ESTOPPEL.

Where, in an interference between the application of appellants and the patent to H., priority was awarded to H. on the ground appellants could not make the claims, *Held* that certain claims slightly broader than, but not patentably different from, the issue of the interference and readable upon the H. disclosure, were properly refused appellants since they made no motion under rule 109, to include such claims in the issue of the interference.

APPEAL from the Patent Office. Affirmed.

Mr. Ralph N. Flint and *Mr. Arthur W. Davidson* for Ellis and Holden.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

This is an appeal from the decision of the Board of Appeals affirming that of the Examiner refusing to allow claims 17 to 21 inclusive (claims 7, 8, 9, 10 being allowed), relating to the distillation and purifying of oil in an internal combustion engine. Claims 17 and 18 are illustrative and follow:

17. In combination with an internal-combustion engine having a crankcase, and an exhaust conduit; a distilling vessel associated with said exhaust conduit so as to be heated thereby; means for supplying lubricating oil from the crankcase of said engine to said distilling vessel; and a thermostat separate from and located within and attached to a wall of said distilling vessel, and adapted to control the flow of oil thereinto through said supply means.

18. In a device of the class described, a distilling vessel; a pump; means for conveying oil from said pump to said distilling vessel; a valve for controlling the flow of oil through said conveying means; and a thermostat located

within said distilling vessel and which thermostat is complete in itself and independent as a structure from said distilling vessel, said thermostat being operatively connected with said valve to thereby control the flow of oil through said conveying means.

The grounds of rejection of said claims by the Board of Appeals, as we understand its decision, is in substance to the effect that the appealed claims are not considered patentably different from claims 8 and 13 allowed to Hans in the reference Hans, 1,420,837, June 27, 1922, concerning which the appellants herein had been a party in an interference proceeding in the Patent Office and in which interference priority was definitely awarded to Hans. Priority having been awarded to Hans in the only patentable subject matter involved in the claims herein appealed and in the counts of the interference, the Board found that the appellants could not afterwards successfully contend for the allowance of broad claims covering the same patentable subject matter. The counts in the interference between appellant and Hans, as above stated, were claims 8 and 13 of the Hans patent and follow:

Count 1. A purifier for the lubricating oil of an internal combustion engine consisting of a heating chamber having a volatile gas outlet, means for heating said chamber, means to cause lubricant to flow from said engine to said heating chamber, means to regulate the flow of the lubricant into said heating chamber, and means actuated by the temperature of the lubricant for controlling the means regulating the flow of the lubricant into said heating chamber.

Count 2. In a purifier for the lubricating oil of an internal combustion engine, the combination of a chamber to receive the oil, means for heating the oil in the chamber, means for causing the oil to flow from the engine to the heating chamber, and a thermostat controlled by the heated oil to regulate the flow of the oil.

It will be noted that in the claims of the Hans patent the matter involved in dispute was in claim 8 (count 1) in a thermostat "actuated by the temperature of the lubricant", and in claim 13 (count 2) it was in a thermostat that was "controlled by the heated oil." The rejected claims in this appeal are directed to the same subject matter as that involved in the interference, and expressed in the following language in claim 17 of the application at bar:

and a thermostat separate from and located within and attached to a wall of said distilling vessel, and adapted to control the flow of oil,

while in claim 18 the following language is used:

and a thermostat located within said distilling vessel and which thermostat is complete in itself and independent as a structure from said distilling vessel, said thermostat being operatively connected with said valve to thereby control the flow of oil.

As the case is presented here by the appellants, they take the position that in the interference with Hans, the Board held that they could not make the counts of the interference since their claims and disclosure did not respond to the terms in the counts of the interference "actuated by the temperature of the lubricant" and "controlled by the heated oil." Appellants insist that since the Board has held that their disclosure does not read upon the counts of the interference, which they contend is equivalent to holding that their invention is different from that of Hans, they are now entitled to a patent upon their means of thermostatically controlling the flow of oil. They complain of the fact that now, after having in effect been denied their rights in the interference proceeding (if the inventions were the same), their claims are improperly rejected on Hans either as prior art or on account of the judgment against them in the interference case.

This anomalous situation, arising from the foregoing facts, presents a problem which at first blush would seem difficult of solution, but, when upon closer consideration, the facts are carefully analyzed and the law is applied, it is found to be much less formidable.

The first question that arises is, does the disclosure of appellants show, and do their claims in issue call for any thing patentable over and above the counts of the Hans patent involved in the interference. The structures of appellants and Hans are alike in principle. The thermostat in the Hans structure is in the oil in the distilling vessel, while in appellants' structure, as affects the issue here, the claims require only that it be on the inside of the distilling vessel. The heat comes from the same source, the exhaust pipe, in both devices. We do not see any patentable distinction between the two devices. The claims of the application and the counts of the interference all call for the same invention.

It is true that appellants' structure does not literally read upon the exact words of the counts of the interference, since their thermostat is not in the oil, but since we conclude that both are claiming the same invention, prority in fact should have been determined before the Examiner of Interferences, whereas it seems to appear from the record that priority was awarded Hans because he was the first inventor of the particular thing Hans claimed (when limited by the exact terms used) and which appellants claimed in words which did not read upon the exact language used by Hans, that is to say, appellants did not show in the interference proceeding that they were entitled to priority of the particular structure which the counts called for regardless of whether the inventions of both parties were the same.

Under the circumstances of this case, the fact that there was a mistake or inadvertence in the interference proceedings which brought about a failure to adjudicate the real issue between the parties is no justification now for the allowance of applicant's claims which would clearly cover the patented subject matter in Hans.

It is well settled that the Primary Examiner could have, and we think should have, suggested a claim broad enough to cover the invention claimed by both, if he believed that the application and the patent were both calling for the same invention. That the Examiner did believe they called for the same invention is evidenced by the fact that he brought about the interference. Evidently the Examiner of Interferences, however, believed that they were not the same invention or else erroneously concluded that even if they were the same invention, priority in fact could not be determined, since the language in the counts taken from the Hans patent, if strictly and literally applied, would not respond to the disclosure of applicant.

That it was proper for the Examiner to suggest a count which would cover the real invention common to both applications is supported by *Ex parte Card and Card*, 112 O. G. 499, 1904 C. D. 383, and *Ex parte Behan*, 353 O. G. 8, 1926 C. D. 108.

The Patent Office has ruled in *Parker* v. *Craft and Reynolds* 265 O. G. 305, 1919 C. D. 72, that where the same invention is included in a claim of a patent and a claim of an application even though the wording of the claims are different and one slightly broader than the other, that there was "no informality in the declaration of the interference" and that there was "no reason why any relevant testimony of either party should not come under the broad issues and properly try out the question of priority, and the motion to dissolve on this ground should be overruled." To the same effect is *Bonine* v. *Bliss*, 265 O. G. 306, 1919 C. D. 75, and *Ex parte Card and Card*, supra. The record before us and the argument of counsel show that the Patent Office tribunals did not decide the interference between appellants and Hans with this understanding of the practice and did not apply this principle in the decision of the interference.

In *Bonine* v. *Bliss*, supra, the commissioner held that:

An interference was properly declared between the claim of a patent which specified a "manually operated switch" and the claim of an application for a similar apparatus in which a similar part was referred to by the broader term "switch" where the result of closing the switch was the same in each case—namely, to connect a dynamo-electric machine to a battery, so that it might operate as a motor, and to open an automatic switch. [Quoted from syllabus]

In *Ex parte Card and Card*, supra, involving a situation quite similar to the one at bar, the Acting Commissioner said:

It seems clear that if the Examiner is right in his views as to the question of patentability and as to the materiality of the differences between the claims the procedure outlined by him is proper. The ruling that the real invention claimed is the same is not necessarily inconsistent with the ruling that the applicant should present a claim in different form to constitute the issue of an interference. There may be a real conflict notwithstanding differences in the wording of claims, and the requirement as to the form of the claim is not for the purpose of bringing about a conflict, but to define the conflicting subject-matter in the same words in both cases, so as to avoid confusion and prevent disputes.

It must be held as a matter of procedure that the Examiner was right in suggesting the claims of the patentee to these applicants and in his statement that if they failed to make them certain of the claims which they now make will be rejected. An applicant can not be permitted to avoid an interference with a patentee by carefully avoiding the words of his claims when the real invention claimed is the same. When he claims substantially the same thing, he can secure his patent only by proving priority of the invention in the regular way.

Furthermore we agree with the holding in *Ex parte Peabody* 1927 C. D. 83, 364 O. G. 511, the syllabus of which is as follows:

Where, in an interference involving an applicant and a patent, the Law Examiner, in a decision holding that the applicant can not make the claim of the patent, stated that if there was no patentable distinction between the claim in issue and the subject matter originally claimed by the applicant a claim could be presented in language broad enough to cover both cases and applicant did not present such a claim, *Held* that after the termination of the interference he is estopped to present claims broad enough to cover the structure of both parties.

If the holding in the Peabody decision, supra, is followed, it points to the proper conclusion in the case at bar. We believe both parties claimed the same invention. A count should have been framed in the interference which would have been broad enough to have covered both structures. It was the duty of appellants herein under rule 109 of the United States Patent Office to have suggested and presented such a claim for consideration in the interference proceeding. Failing to do so and failing to be successful in the interference on counts which called for the invention at issue here, they can not now obtain an allowance of claims which cover the subject matter which was proper for consideration in the interference case. See *In re Marconi*, 38 App. D. C. 286, 1912 C. D. 483; *In re Austin*, 17 C. C. P. A. (Patents) 1202, 40 F.(2d) 756, 399 O. G. 625.

Appellants argue that they are entitled to a patent notwithstanding Hans by virtue of their proceeding under section 4886 of the Revised Statutes and rule 75 of the rules of practice of the Patent Office. Appellants rely upon their proceedings under this rule on the theory that the reference Hans "does not claim the rejected invention." As is hereinbefore indicated we think Hans does claim the rejected invention. Certainly this rule has no application where the rejected invention consists of the same patentable subject matter awarded to another in an interference in which the applicant was a party.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MARDEN AND RENTSCHLER

No. 2,633. Decided March 31, 1931

PATENTABILITY—PURE THORIUM AND PRODUCTS MADE THEREFROM—OPERATIVENESS OF PRIOR PROCESSES IMMATERIAL.

Claims respectively for a mass of pure coherent homogeneous thorium, a wire, a filament, and an electrode made therefrom *Held* unpatentable since these articles were fully disclosed in the prior art and the question of the operativeness of the prior art methods is not involved in the determination of the patentability of the article claims.

APPEAL from the Patent Office. Affirmed.

Mr. Max F. Reges and *Mr. Raymond Jones* for Marden and Rentschler.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals affirming the decision of the Primary Examiner rejecting claims 31 to 46, inclusive, in appellants' application for a patent for an alleged invention relating to a "mass of thorium, which is substantially pure, coherent and homogeneous," wire, filaments, and electrodes formed of ductile thorium.

Claims 32, 38, 42, and 46 are illustrative. They read:

32. A mass of thorium which is substantially pure, coherent and homogeneous.
38. A wire formed of ductile thorium.
42. A filament of ductile thorium.
46. An electrode of ductile thorium.

The references are: Von Bolton, 927,935, July 13, 1909; Arsem, 1,085,098, January 27, 1914; Kuzel,

1,088,909, March 3, 1914; Langmuir, 1,244,216, October 23, 1917.

Appellants' application also disclosed and claimed a process for producing ductile thorium. However, the process claims were allowed by the Primary Examiner and are not involved in this appeal.

The patent to Von Bolton relates to a method for the manufacture of filaments of highly refractory metals, including thorium, for electric lamps. In the specification, thorium metal was described as an "exceedingly easily ductile metal having a very high melting point and one which can be worked up mechanically in this manner."

The patent to Arsem relates to the production of pure thorium and the use thereof in the manufacture of filaments for incandescent lamps. In his specification, the patentee described a process for the production of metallic thorium free from impurities and in a condition suitable to be hammered and drawn, or otherwise manipulated, into lamp filaments and wire. A process for obtaining "pure, malleable, ductile, metallic thorium," was described in claim 8 of the patent.

The patent to Kuzel relates to a method for obtaining substantially pure metals from their compounds and oxides. Thorium is named as one of the metals produced by the patentee's process.

The patent to Langmuir relates to an electron discharge apparatus and "method of preparation," and discloses the use of metallic thorium as cathode material.

Counsel for appellants contended before the tribunals below and contends here that it has been established by the affidavit of John W. Marden, one of the appellants, that the processes described in the Von Bolton, Arsem, and Kuzel references are inoperative and will not produce ductile thorium.

The tribunals below discussed the references and held that the products claimed by appellants were old and were fully disclosed in the references.

The Primary Examiner cited the case of *In re Decker*, 36 App. D. C. 104, 162 O. G. 999, in which it was held that, where a product is clearly described in a patent, the operativeness of the process by which the patentee claimed the product could be produced was immaterial, and that the patent was a proper reference for the product therein disclosed.

The Board of Appeals did not refer in its decision to the case of *In re Decker*, supra, or the principles therein announced, but cited the case of *The General Electric Company* v. *De Forest Radio Company et al.*, 28 F.(2d) 641, in which it was held by the Circuit Court of Appeals, Third Circuit, that a patent awarded for a "product of nature" is invalid. Reference may also be had to the decisions in *In re Marden*, 18 C. C. P. A. (Patents) ——, —— F.(2d) ——, and *In re Marden and Rich*, 18 C. C. P. A. (Patents) ——, —— F.(2d) ——.

In the case of *Cohn* v. *United States Corset Company*, 93 U. S. 366, 11 O. G. 457, the Supreme Court said:

> It is quite immaterial, even if it be a fact, that the Johnson specification is insufficient to teach a manufacturer how to make the patented corset. It is enough if it sufficiently describes the corset itself. Neither it nor the plaintiff's specification exhibits the process of making. Neither of them set up a claim for a process. The plaintiff claims a manufacture, not a mode of making it; and the important inquiry, therefore, is, whether the prior publication described the article. To defeat a party suing for an infringement, it is sufficient to plead and prove that the thing patented to him had been patented or described in some printed publication prior to his supposed invention or discovery thereof. Rev. Stat., sec. 4920. What is required is a description of the thing patented, not of the steps necessarily antecedent to its production.

Ductile thorium and the products produced therefrom and claimed in appellants' application were clearly and adequately described in the references of record. Accordingly, in view of the decisions hereinbefore referred to, the question of the operativeness of the methods disclosed in the references is not involved in a determination of the issue of the patentability of the subject matter of the involved claims.

We are in accord with the conclusion reached by the tribunals of the Patent Office, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

REVERE SUGAR REFINERY *v.* SALVATO

No. 2,640. Decided March 31, 1931

TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES.

Meat products, condiments, fresh fish, and other grocery goods *Held* to be of the same descriptive properties as sugar.

Appeal from the Patent Office. Reversed.

GARRETT, *J.*, concurring.

Mr. Harrison F. Lyman for Revere Sugar Refinery.

Mr. Josiah McRoberts and *Mr. Chas. E. Riordon* for Salvato.

HATFIELD, *J.*:

This is an appeal in a trade-mark opposition proceeding from the decision of the Commissioner of Patents dismissing the opposition of appellant and holding that appellee was entitled to the registration of a trade-mark, comprising, as its essential features, the word "Revere" appearing immediately above the pictorial representation of a horse and rider (representing Paul Revere on his famous ride), for use on certain meat products, condiments, canned and fresh vegetables, canned, fresh, and preserved fruits, canned fish, food flavoring extracts, canned soups, syrups, flour, tea, and other grocery goods.

In his application for registration filed November 28, 1924, appellee alleged that he had used the trade-mark since March 10, 1922.

In its notice of opposition, appellant alleged that it was the owner of a trade-mark, comprising the word "Revere" appearing immediately above a pictorial representation of a man riding on horseback, for use on sugar; that it had used the mark since long prior to the first use by appellee of his alleged trade-mark; that the goods of the parties possessed the same descriptive properties; that the trade-marks were confusingly similar; and that appellant would be damaged by the registration to appellee of his alleged trade-mark. Appellant also pleaded registration No. 102,174, issued January 26, 1915, of its trade-mark for use on sugar.

It appears from an agreed statement of facts submitted by the parties that appellant and its predecessors used the word "Revere" as a trade name on its goods from 1873 to April, 1912; that, since 1912, appellant has used its registered trade-mark on six different types of sugar; that its sugar is sold in grocery and other stores in cardboard containers, and also in five, ten, and twenty-five pound sacks; that it has expended large sums of money in advertising its goods under its trade-mark; and that, since 1922, its sales have exceeded $21,000,000 annually; that its goods are well known to the public throughout the United States as "Revere sugar"; that appellee is in the wholesale grocery business at Chicago, Illinois, under the name "Revere Wholesale Grocery Company," and has used the involved trade-mark on some of the articles enumerated in the application for registration since March 10, 1923, and on the other enumerated articles since October 18, 1927; that the name "Revere" is and, for longer than a century, has been a "surname or proper name" in the United States; that there are cities and villages in the United States by that name; that several corporations have the name "Revere" as a part of their corporate name; and that the involved trade-mark has been registered by many others for use on a variety of products, including wheat flour.

The Examiner of Interferences held that, with the exception of maple syrup and cane syrup, the goods of the respective parties did not possess the same descriptive properties; that appellant had used its trade-mark since long prior to any use by appellee of his trade-mark; and that, although the marks so closely resemble each other as to be likely to cause confusion in the trade, appellee was entitled to register his mark on all articles named in the application for registration, except maple syrup and cane syrup.

The Commissioner of Patents held that appellant had used its trade-mark since long prior to its use by appellee; that appellant's trade-mark was a valuable asset in its business; that the marks were substantially the same; that, with the exception of maple syrup, cane syrup, candies, sugared ginger, sugared kumquats, sugared dates, candied orange peel, candied lemon peel, and candied citron, the goods of the parties did not possess the same descriptive properties; and that, therefore, appellee was entitled to the registration of its mark for use on all other products set out in his application for registration.

It is claimed by appellant that the goods of the parties possess the same descriptive properties; that the marks are confusingly similar; and that it will be damaged by the registration of the involved trade-mark to appellee.

It is contended by counsel for appellee that the goods of the parties do not possess the same descriptive properties; that appellant is not the originator of its trade-mark and, therefore, is entitled to limited protection only; and that appellee is entitled to have his mark registered.

The validity of appellant's trade-mark registration is not before us and will not be considered by this court in a proceeding of this character. *Sharpe & Dohme* v. *Parke, Davis & Co.*, 17 C. C. P. A. (Patents) 842, 37 F.(2d) 960, 394 O. G. 545; *American Fruit Growers, Inc.*, v. *Michigan Fruit Growers, Inc.*, 17 C. C. P. A. (Patents) 906, 38 F.(2d) 696, 393 O. G. 789; *National Biscuit Company* v. *Sheridan*, 18 C. C. P. A. (Patent) ——, 44 F.(2d) 987, 402 O. G. 4; *Decker & Cohn (Inc.)* v. *S. Liebovitz & Sons (Inc.)* 18 C. C. P. A. (Patents) ——, 46 F.(2d) 179, 404 O. G. 797; *Celanese Corporation of America* v. *Vanity Fair Silk Mills*, 18 C. C. P. A. (Patents) ——, 46 F.(2d) 711, 407 O. G. 579.

Appellee is in the wholesale grocery business, and the food products on which he uses his alleged trade-mark are sold in the same stores as the goods of appellant. The trade-marks are almost identical. It would seem to us, therefore, that if appellee is permitted to use his alleged trade-mark on his goods, concurrently with the use by appellant of its trade-mark on its goods, confusion as to the origin of the goods of the respective parties would likely result. Accordingly, we are of opinion that the goods of the parties possess the same descriptive properties within the principles heretofore announced by this court. *California Packing Corporation* v. *Tillman & Bendel*, 17 C. C. P. A. (Patents) 1048, 40 F.(2d) 108, 394 O. G. 789; *B. F. Goodrich Co.* v. *Hockmeyer (Zip-on Co., substituted)*, 17 C. C. P. A. (Patents) 1068, 40 F.(2d) 99, 394 O. G. 795; *Sun-Maid Raisin Growers of California* v. *American Grocer Co.*, 17 C. C. P. A. (Patents) 1034, 40 F.(2d) 116, 395 O. G. 3; *Cheek-Neal Coffee Co.* v. *Hal Dick Mfg. Co.*, 17 C. C. P. A. (Patents) 1103, 40 F.(2d) 106, 395 O. G. 10; *Cluett, Peabody & Co. Inc.* v. *Hartogensis, (Arrow Emblem Co., Inc., substituted)*, 17 C. C. P. A. (Patents) 1166, 41 F.(2d) 94, 396 O. G. 707; *Kotex Company* v. *McArthur*, 18 C. C. P. A. (Patents) ——, 45 F.(2d) 256, 404 O. G. 4.

It appears from the record that appellant has used its trade-mark since long prior to the adoption and use by appellee of his alleged trade-mark; that the goods of the parties possess the same descriptive properties; that the marks are confusingly similar; and that appellant would be damaged by the registration of appellee's alleged trade-mark.

Accordingly, the decision of the Commissioner of Patents is reversed.

Reversed.

GARRETT, *J.*, concurs in the conclusion.

U. S. Court of Customs and Patent Appeals

IN RE FISCHER

No. 2,629. Decided March 25, 1931

PATENTABILITY—ROOFING UNITS.

Claims for a roofing unit comprising a foundation strip provided with spaced vertical and horizontal guide lines *Held* unpatentable over the prior art.

LENROOT, *J.*, dissenting.

APPEAL from the Patent Office. Affirmed.

Mr. Albert F. Robinson and *Mr. James P. Burns* for Fischer.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

Appellant appeals from a decision of the Board of Appeals of the United States Patent Office, affirming the action of the Examiner in rejecting claims 16 to 19, inclusive, of appellant's application.

Claim 16 is illustrative of the claims in issue and reads as follows:

16. Roofing units comprising a foundation strip provided on its upper surface with suitably spaced vertical and horizontal guide lines to form a pattern-chart for facilitating the laying and securing of shingles and a group of individual shingles attached to said strip as indicated by the pattern-chart.

The references cited are: Warren, 175,532, March 28, 1876; Rahr, 1,340,348, May 18, 1920.

The decision of the Board of Appeals is brief and reads as follows:

This application relates to a roof covering in which each row of shingles is placed upon a foundation strip. The foundation strip has marks placed thereon to facilitate the placing of the shingles.

The patent to Warren shows an identical arrangement of shingles and foundation strips but the foundation strips are not marked. While marks are desirable and convenient in positioning objects, we do not consider that their use involves more than mechanical skill. We therefore concur in the opinion of the Examiner that it does not involve invention to provide markings on the foundation fabric of Warren.

The decision of the Examiner is affirmed.

Appellant concedes that the only question of patentability is whether the marking of the foundation strips to facilitate the placing of the shingles constitutes invention. As stated in the decision quoted, the patent to Warren does not show such marking of the foundation sheet.

In the Rahr specifications it is said:

The present invention has for its object so to form the shingles as to insure their being laid in proper relation by unskilled workmen, and also to insure the contact of each shingle, bridging a gap or space, with the shingle therebeneath.

Certain unsurfaced marginal strips are then described, and the specifications continue:

These unsurfaced strips extend from the upper edge of the shingle to a transverse line which may, for example, be located about four inches (more or less) from the lower edge of the shingle, * * *. The width of the strips determines the extent to which each shingle is laterally overlapped by the contiguous shingles of the superimposed horizontal row, and the length of the strips determines the extent to which the shingles of each row project below the shingles of said superimposed horizontal row.

Rahr's claim No. 2 refers to a "transverse line" and sets out an arrangement:

* * * in which asphalt coating is exposed to be overlapped by the corners of contiguous shingles.

The patent to Rahr was not discussed by the Board in its decision and, apparently, was not relied on by it as a reference. It does not anticipate the precise arrangement called for by appellant, but does clearly suggest the idea of a pattern line and discloses a means of providing same.

The case seems really to have been determined by both of the Patent Office tribunals, in so far as the line or pattern feature is concerned, upon the theory that appellant's markings upon the foundation sheet involve mere mechanical skill and do not constitute invention.

Appellant has presented another question.

It was made of record in this case, the matter having been presented to both tribunals of the Patent Office, that on May 1, 1928, a patent was issued to one Faison, No. 1,668,269, upon an application filed April 20, 1925, for a claimed invention which is alleged to be practically identical with that claimed by appellant. Faison's application was filed subsequent to that of appellant, the latter's filing date being January 15, 1921. The final rejection by the Examiner of appellant's appealed claims was on February 25, 1928; the affirmation thereof by the Board of Appeals was on July 5, 1929.

Since the applications were copending in the Patent Office, it would seem that if the Faison claims were there regarded as patentable an interference between Faison and appellant should have been declared and the issue of priority determined. Why this was not done the record does not disclose. That issue is, of course, not before us for determination.

It is, however, argued that we may and should consider the Faison patent upon the question of the patentability of appellant's claims in this respect, viz, that the granting thereof demonstrates a lack of concurring thought on the part of different tribunals of the Patent Office upon the subject matter, and that, therefore, the usual rule of practice in this court of not disturbing findings of fact agreed upon by all the tribunals of the Patent Office, unless manifestly wrong, is not made applicable here simply by reason of the concurrence by those who respectively passed only upon the application of appellant.

The insistence is that, since there was a grant to Faison, by an Examiner, upon subject matter alleged to be almost identical with that of appellant, this is at least sufficient to create doubt, not to say more, upon appellant's application and that this doubt should be resolved in appellant's favor.

To this insistence we are unable to agree. Faison's right to a patent is in no way involved here. There was never any action upon it by the Board of Appeals, so far as the record in this case discloses, and there is no reference to it in the decisions of either the Examiner or the Board in this case.

The question with which we are concerned is whether invention is present in appellant's device and this we must determine without considering whether invention was present in that of Faison.

If there was error in the issue to Faison and his patent is invalid (as to which we have no concern in this proceeding) that constitutes no reason why another error should be committed by issuing another invalid patent. *In re Delany*, 18 C. C. P. A. (Patents) ——, 46 F.(2d) 370, 406 O. G. 566; *In re Englehardt*, 17 C. C. P. A. (Patents) 1244, 40 F(2d) 760, 400 O. G. 678.

If, on the other hand, the Faison patent is a valid one, then, as has been intimated heretofore, it would seem that there should have been an interference declared between the parties at some time during the proceedings, but the, possibly unfortunate,

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situation created by the failure to declare such an interference cannot be remedied in this proceeding, nor are we at liberty to help solve the problem by granting patent to appellant, unless we are convinced that he has patentable matter or that, at least, there exists sufficiently substantial doubt to justify the application of the rule of doubt.

A careful examination of appellant's appealed claims fails to convince us that he has produced a patentable article.

Independent of the references it must be old in the building art to mark shingles and roofing material with lines to indicate the point to which the ends of the respective covers are to extend as they are applied to the roof. A familiar method of doing this of which there is common knowledge, is that of stretching taut a line which has been chalked, flexing it and snapping it upon the last laid course of shingles, thus making a mark to indicate the line to which the lower end of the succeeding course is to extend. Sometimes such a line may be drawn with pencil, or lines are marked upon the roofing foundation.

In applying weatherboarding to the walls of a structure the carpenter not infrequently, after having attached one piece, draws a line upon it to fix the point of overlap for the succeeding piece.

It is doubtless a great convenience, and is useful, to have the shingles themselves, or the foundation, so marked at the time of manufacture, or before the time of using them or it, as that a pattern will be supplied for their application, but we are unable to see patentable novelty in an article simply because it is so marked for that purpose. *Drummond et al.* v. *Venable et al.*, 26 Fed. 243, is in point.

As stated by the Board, Warren shows all that appellant shows except the marking. Rahr suggests lines and a certain method of forming them, but even without this suggestion invention is lacking.

We find no error in the conclusion reached by the Board of Appeals and its decision is affirmed.

Affirmed.

LENROOT, *J.*, dissenting:

I am compelled to dissent from the conclusion reached by the majority in this case because I feel that whether appellant's disclosure constitutes invention or involves purely mechanical skill is so doubtful as to call for the application of the rule that, in case of doubt as to patentability, such doubt must be resolved in favor of the applicant.

This is not a case of concurring decisions of the expert tribunals of the Patent Office, holding that there is no invention, because it appears from the record that while appellant's application was pending a patent upon substantially the same invention was issued to one Faison, No. 1,668,269. This patent was brought to the attention of both the Examiner and the Board of Appeals, but neither made any reference to it in their decisions.

The majority opinion discusses the Rahr reference, which was for an invention relating to the form of shingles so as to insure their being laid in proper relation by unskilled workmen. The specification of the Rahr reference discloses nothing with regard to the horizontal line, which is one of the elements of appellant's disclosure, and it has nothing to do with marking foundation sheets or the boards of the roof itself. I am unable to see how this reference is in any way applicable.

The majority opinion calls attention to the fact that it is old to stretch upon a roof a line which has been chalked, flex it and snap it, thus making a mark to indicate the line to which the lower end of the succeeding course of shingles is to extend, and also calls attention to the fact that in applying weatherboarding to the walls of a structure the carpenter not infrequently, after having attached one piece, draws a line upon it to fix the point of overlap for the succeeding piece. Instead of this well known practice being any evidence of want of invention upon the part of appellant, it is, to my mind, exactly the contrary. Foundation sheets to be laid upon a roof have been known, according to the record, for at least 45 years. If for 45 years carpenters have been following the old method of making a chalk line upon the foundation sheets or boards of a roof, involving labor and expense, and during all that period no one has conceived appellant's method, which avoids such labor and expense, it is some evidence, to my mind, that what appellant did involved more than merely mechanical skill. His invention not only does away with the necessity of using the old line, but it also secures accurate vertical spacing.

Considering the fact that appellant appears to have made a substantial contribution to the art of laying roofs, and that one tribunal of the Patent Office has held a similar claim to be patentable upon a copending application upon the same state of facts as are herein issue, I believe that sufficient doubt as to want of invention exists to require, as heretofore stated, the application of the rule that doubt must be resolved in favor of the applicant.

In my opinion the decision of the Board of Appeals should be reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

918,102, W. C. Tregoning, Socket for incandescent lamp, D. C. Mass., Doc. E 2467, *H. Hubbell, Inc.*, v. *Electrical Products Co., Inc.* Consent decree dismissing bill Apr. 30, 1926.

953,222, L. H. Nash, Displacement structure; 1,091,529, same, Pump and air compressor; Re. 15,637, I. C. Jennings, Wet vacuum pumping apparatus, D. C. Mass., Doc. E 2508, *Nash Engineering Co.* v. *The Trane Co.* Injunction Sept. 20, 1928.

1,027,570, J. R. Sheldon, Comforter filling machine; 1,370,411, F. Contrado et al., Mattress filling machine, D. C. Mass., Doc. E 2533, *Triangle Kapok Machine Corp.* v. *Royal Bedding Co., Inc.* Consent decree dismissing bill Nov. 9, 1927. Doc. E 2534, *Triangle Kapok Machine Corp.* v. *The Hub Mattress Co.* Decree as above Feb. 21, 1928. Doc. E 2796, *Triangle Kapok Machine Corp.* v. *Ideal Mattress Co.* Decree as above May 2, 1927. Doc. E 2797, *Triangle Kapok Machine Corp.* v. *F. Rotstein (Globe Mattress Mfg. Co.).* Decree as above Nov. 21, 1927.

1,069,830, J. Trau, Process of producing polychrome photogravures and apparatus therefor, D. C., N. D. Ohio, E. Div., Doc. 3453, *R. H. Stone* v. *Continental Lithograph Corp.* Patent held valid June 9, 1931.

1,087,514, M. Smolensky, Valve for pump; 1,147,343, 1,222,154, same, Check valve; 1,154,450, same, Work holder for machine tools; 1,124,821, same, Sash lock; 1,185,139, same, Valve mechanism for pumps, compressors, etc., D. C., N. D. Ohio, E. Div., Doc. 2625, *A. Kendzierski et al.* v. *The Smolensky Valve Co.* Dismissed June 2, 1931.

1,091,529. (See 953,222.)

1,100,319, H. Moore, Rubber, filed June 15, 1931, D. C., S. D. N. Y., Doc. E 60/161, *H. Moore* v. *U. S. Rubber Co.* Doc. E 60/162, *H. Moore* v. *Miller Rubber Co.*

1,115,866, H. M. Reynolds, Roofing shingle, filed June 12, 1931, D. C., N. D. Ohio, E. Div., Doc. E 3839, *The Patent & Licensing Corp.* v. *The Alling & Cory Co.*

1,124,821. (See 1,087,514.)

1,132,273, W. Jay, Fuel supply system for explosive engines; 1,635,692, F. G. Schweisthal, Valve snap action, D. C., S. D. Calif. (Los Angeles), Doc. E Q–104–H, *Stewart Warner Speedometer Corp. et al.* v. *Seneker Exchange Service, Inc., et al.* Decree for plaintiff June 1, 1931.

1,147,343. (See 1,087,514.) 1,152,670. (See Re. 15,111.)

1,154,450. (See 1,087,514.)

1,156,122, J. C. Woodley, Fibrous composition and process of manufacture, D. C. Mass., Doc. E 2519, *The Richardson Co. et al.* v. *The Hood Rubber Co.* Decree affirmed Jan. 20, 1928.

1,172,322, P. Torchio, Protective device for electric cable joints, filed Apr. 23, 1931, D. C., E. D. N. Y., Doc. 5474, *Electric Cable Joint Co.* v. *Brooklyn Edison Co.*

1,173,079, E. F. Alexanderson, Selective tuning system; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,297,188, I. Langmuir, System for amplifying variable currents; 1,618,017, F. Lowenstein, Wireless telegraph apparatus; 1,702,833, W. S. Lemmon, Electrical condenser; 1,728,879, Rice & Kellogg, Amplifying system, filed June 16, 1931, D. C., S. D. N. Y., Doc. E 60/174, *Radio Corp. of America et al.* v. *F. W. Lang et al.* (*Lang Radio Co.*).

1,185,139. (See 1,087,514.)

1,212,840, F. J. Straub, Building block and method of making same, D. C., N. D. Ohio, E. Div., Doc. 3485, *Croster-Straub, Inc.*, v. *F. P. Lippe.* Patent held valid and infringed June 11, 1931.

1,213,695, J. B. Scutti, Cloth covered buckle, filed Apr. 2, 1931, D. C., E. D. N. Y., Doc. 5451, *Liberty Die & Button Mould Co., Inc.*, v. *H. Chaifin et al.* (*G. & C. Button & Trimming Co.*).

1,222,154. (See 1,087,514.)

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit; 1,465,932, E. H. Colpitts, Multiplex radio telegraph system; 1,403,932, R. H. Wilson, Electron discharge device, filed June 16, 1931, D. C., S. D. N. Y., Doc. E 60/175, *Radio Corp. of America et al.* v. *F. W. Lang et al.* (*Lang Radio Co.*).

1,251,377. (See 1,173,079.) 1,256,834. (See 1,615,807.)

1,266,988, Pridham & Jensen, Amplifying receiver; 1,448,279, 1,579,392, same, Electrodynamic receiver, D. C., N. D. Calif. (San Francisco), Doc. 2166–S, *The Magnavox Co.* v. *F. H. Thompson Co.* Decree for plaintiff June 8, 1931.

1,271,527, 1,271,529, M. C. Hopkins, Sound regenerating machine, D. C. Mass., Doc. E 2535, *Lektophone Corp.* v. *C. M. Boudette et al.* (*Boudette Mfg. Co.*). Dismissed Apr. 6, 1926.

1,271,529. (See 1,271,527.)

1,278,213, J. H. Rand, Index, D. C. Mass., Doc. E 2062, *Rand Co., Inc.*, v. *Postindex Co., Inc.* Dismissed without prejudice Jan. 3, 1928.

1,291,897, W. C. Huebner, Apparatus for positioning the printing plates on the plate holders of photographic printing apparatus, D. C., S. D. N. Y., Doc. E 46/137, *Huebner-Bleistein Patents Co.* v. *The Fuchs & Lang Mfg. Co.* Dismissed on merits June 11, 1931. Doc. E 46/138, *Huebner-Bleistein Patents Co.* v. *Trautman, Bailey & Blamby.* Decree as above.

1,293,974, W. L. Sullivan, Check issuing machine, filed Apr. 20, 1931, D. C., E. D. N. Y., Doc. 5461, *General Register Corp.* v. *Lock-Stub Check Co.*

1,297,188. (See 1,173,079.) 1,324,238. (See Re. 15,111.)

1,326,591, J. Harrington, Stoker; 1,544,207, R. L. Beers, Tuyère structure for single retort stokers; 1,700,707, J. W. Peck, Chain grate stoker; 1,710,260, O. A. Johnson, Tuyère block, filed July 11, 1931, D. C., S. D. Ohio, W. Div., Doc. E 750, *Riley Stoker Corp.* v. *The E. H. Bardes Range & Foundry Co.*

1,340,709, Gathman & Eaglesfield, Spindle adjustment for motor driven molder, D. C. Mass., Doc. E 1700, *Vonnegut Machinery Co. et al.* v. *S. A. Woods Machine Co.* Dismissed under equity rule 57 Sept. 28, 1925.

1,370,411. (See 1,027,570.) 1,403,475. (See 1,231,764.)

1,403,932. (See 1,231,764.)

1,423,956, Mitchell & White, Tipless incandescent lamp, filed June 12, 1931, D. C., S. D. N. Y., Doc. E 60/145, *General Electric Co.* v. *American Lamp Co., Inc., et al.*

1,448,279. (See 1,266,988.)

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1,481,796, G. Gussoff, Combination vanity box, D. C., S. D. N. Y., Doc. E 57/248, *S. Kahn* v. *Druggist's Supply Corp.* Consent decree for plaintiff June 11, 1931. Doc. E 56/79, *S. Kahn* v. *D. H. Zell, Inc., et al.* Dismissed June 15, 1931.

1,491,510, A. E. Bellis, Fused eutetic salt bath; 1,520,744, same, Bath for heat treating metals, D. C. Mass., Doc. E 2482, *The Bellis Heat Treating Co.* v. *The Heatbath Corp. et al.* Decree affirmed Mar. 7, 1928.

1,516,383, F. E. Hoddersen-Balling, Ham boiler, filed Apr. 27, 1931, D. C., E. D. N. Y., Doc. 5478, *F. E. Hoddersen-Balling* v. *D. F. Lorenz.* Same, filed Apr. 30, 1931, D. C., E. D. N. Y., Doc. 5484, *F. E. Hodderson-Balling* v. *R. O. Kussar* (*Atlas Pattern & Model Works.*).

1,519,348. (See 1,732,814.) 1,520,744. (See 1,491,510.)

1,521,537, H. W. Houghton, Fumigant and process of fumigation, D. C., N. D. Calif., S. Div., Doc. 2896–L, *Safety Fumigant & Chemical Co., Inc., et al.* v. *J. J. Reid et al.* Dismissed without prejudice June 11, 1931. Same, filed June 12, 1931, D. C. Calif. S. Div., Doc. 2917–K, *Safety Fumigant & Chemical Co., Inc., et al.* v. *J. J. Reid Co. et al.*

1,523,702, Moeller & Kabbes, Insulating material, filed June 15, 1931, D. C., S. D. Ohio, W. Div., Doc. E 751, *H. J. Kabbes et al.* v. *The Philip Carey Mfg. Co.*

1,529,244, H. H. Eby, Binding post, D. C. Mass., Doc. E 2494, *H. H. Eby* v. *F. W. Morse et al.* Dismissed without prejudice for lack of prosecution Jan. 2, 1929.

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1,551,069, S. Stanczyk, Automatic blow torch, D. C. Mass., Doc. E 2472, *D. A. Lenk* v. *Hunt-Lasher Co., Inc.* Dismissed without prejudice for lack of prosecution Jan. 2, 1930.

1,579,392. (See 1,266,988.)

1,579,753, M. P. Burke, Driving mechanism for oil well rigs, filed June 9, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E V–17–J, *M. P. Burke et al.* v. *E. Derrick & Equipment Co. et al.*

1,615,807, J. Bosch, Striping attachment for knitting machine; 1,714,400, A. E. Page, same; 1,256,834, R. W. Scott, Stocking and mode of making same, filed June 11, 1931, D. C. S. D. N. Y., Doc. E 60/141, *Scott & Williams, Inc.*, v. *Hemphill Co.*

1,618,017. (See 1,173,079.) 1,635,692. (See 1,132,273.)

1,658,353, Ronning & Ronning, Combination traction implement; 1,658,354, same, Earth working attachment for tractors; 1,706,256, same, Combination tractor grader, filed Feb. 19, 1931, D. C. Minn. (St. Paul), Doc. E 2182, *Patents Holding Corp. et al.* v. *Gilbert Mfg. Co.*

1,658,354. (See 1,658,353.)

1,681,727, F. M. Emerson, Artificial cast stone and process of producing same, D. C., S. D. N. Y., Doc. E 59/70, *Varitex Co.* v. *New York Cut Cast Stone Corp.* Consent decree for plaintiff June 11, 1931. Doc. E 59/71, *Varitex Co.* v. *A. Vince et al.* (*National Cast Stone Co.*). Decree as above.

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1,694,702, B. B. Deitel, Vanity case, filed May 19, 1931, D. C., E. D. N. Y., Doc. 5511, *B. B. Deitel* v. *M. Seiderman* (*Pitkin Novelty Shoppe*).

1,697,024, A. J. Rubin, Electric toaster, D. C., S. D. N. Y., Doc. E 55/257, *Domestic Mfg. Corp. et al.* v. *Knapp-Monarch Co.* Dismissed June 12, 1931.

1,700,707. (See 1,326,591.)

1,700,985, C. H. Jasper, Process and device for joining, finishing and final insulating wire terminals of electrical conductors, filed June 15, 1931, D. C., S. D. N. Y., Doc. E 60/163, *Ideal Commutator Dresser Co. et al.* v. *Garfield Elliott Electrical Supply Co., Inc.*

1,702,883. (See 1,173,079.) 1,706,256. (See 1,658,353.)

1,710,073, 1,714,191, S. Ruben, Electrical condenser, filed June 10, 1931, D. C., S. D. N. Y., Doc. E 60/128, *Ruben Patents Co. et al.* v. *Insuline Corp. of America.*

1,710,260. (See 1,326,591.) 1,714,191. (See 1,710,073.)

1,714,400. (See 1,615,807.)

1,726,752, M. Mirkin, Bath tub, filed June 10, 1931, D. C., S. D. N. Y., Doc. E 60/140, *M. Mirkin et al.* v. *Babydear Bathinette Corp. et al.*

1,728,879. (See 1,173,079.)

1,732,814, E. L. Klos, Bed bottom; 1,519,348, G. W. Barnes, Method of assembling wire spring fabrics, D. C. Minn., 3d Div., Doc. E 1997, *Simmons Co.* v. *U. S. Bedding Co., Inc.* Decree for defendant; dismissed June 8, 1931.

1,733,451, A. E. Dixon, Lamp shade and process of making, D. C., S. D. N. Y., Doc. E 58/136, *Rembrandt Lamp Corp.* v. *Illuminating Novelties Corp.* Consent decree for plaintiff June 10, 1931.

1,736,205, A. J. Macy, Automatic safe burglar lock; 1,736,206, same, Vault gas bomb, filed June 11, 1931, D. C., W. D. Pa., Doc. 2527, *The Lake Erie Chemical Co.* v. *Federal Laboratories, Inc.*

1,736,206. (See 1,736,205.)

1,739,506, C. P. Deibel, Process and apparatus for forming connecters for dry cells, D. C., E. D. N. Y., Doc. 5288, *General Dry Batteries, Inc.* v. *The Crescent Specialty Co.* Discontinued by consent Dec. 17, 1930.

1,750,271, L. Kasan, Awning, D. C., E. D. N. Y., Doc. 5401, *L. Kasan* v. *Sunproof Awning Co. et al.* Consent decree for plaintiff May 1, 1931.

1,750,898, R. M. Magnuson, Automatic oiling system for deep well turbine pump, filed June 15, 1931, D. C., S. D. Ind. (New Albany), Doc. E 81, *Sterling Pump Corp.* v. *A. D. Cook, Inc.*

1,756,784, E. S. Johnson, Electric toaster; Des. 80,348, same, Casing for a toaster, D. C., S. D. N. Y., Doc. E 57/206, *Knapp-Monarch Co.* v. *Domestic Mfg. Corp. et al.* Consent decree for plaintiff June 11, 1931. Doc. E 57/280, *Knapp-Monarch Co.* v. *A. W. Stern.* Decree as above.

1,771,166, M. E. Davis, Process for applying paints or cements to skived articles, D. C., N. D. Ohio, E. Div., Doc. 3557, *H. E. Moyses et al. v. The Buxbam Co.* Claims, 1, 2, 5, 6, and 8 held valid and infringed June 12, 1931.

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1,784,470, C. Steinberg, Hat, filed June 16, 1931, D. C., S. D. N. Y., Doc. E 60/172, *Columbia Hat Mfg. Co., Inc.* v. *Kaufman Hats, Inc.*; Doc. E 60/173, *Columbia Hat Mfg. Co., Inc.* v. *J. Elishewitz & Sons Co., Inc.*

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1,806,479, G. O. Lory, Heat insulating hand grip, filed June 9, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E V–20–J, *O. J. Lafayette & Co., Ltd., et al.* v. *A. Moschansky et al.* (*Hollywood Nu Art Studio*).

Re. 13,730, P. Weston, Method of making paper, D. C. Mass., Doc. E 2516, *B. Weston Co.* v. *L. L. Brown Paper Co.* Dismissed Jan. 30, 1928.

Re. 15,111, J. M. Leaver, jr., Automatic bundling and tying machine; 1,152,670, M. B. Thompson, Board bundling machine; 1,324,238, C. E. Evans, Bundling, binding and tying machine, filed May 13, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U–3–H, *J. M. Leaver, jr.* v. *C. B. Parker.*

Re. 15,637. (See 953,222.)

Des. 61,878, W. M. Sexson, Emblem or badge, D. C. Mass. Doc. E 2510, *The Strange Co.* v. *H. W. Peters Co.* Dismissed Dec. 6, 1927.

Des. 66,525, Wurdack & Wurdack, Chair; Des. 68,027, A. Wurdack, same; Des. 70,495, I. K. Wurdack, Chair settee, D. C., E. D. Mo., E. Div., Doc. 9324, *A. Wurdack et al.* v. *B. Grosberg, Inc.* (*Barney's Army Goods Store*). Consent decree holding patents valid and infringed Mar. 18, 1931.

Des. 68,027. (See Des. 66,525.) Des. 70,495. (See Des. 66,525.)

Des. 73,709, H. C. Noe, Lamp shade, filed June 10, 1931, D. C., S. D. N. Y., Doc. E 60/138, *W. R. Noe & Sons* v. *East Side Metal Spinning and Stamping Corp.*

Des. 78,526, C. K. Marcell, Vanity case, D. C., S. D. N. Y., Doc. E 50/26, *C. K. Marcell* v. *Majestic Metal Specialties, Inc.* Decree for plaintiff June 8, 1931.

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Des. 81,971, J. Forst, Reclining arm-chair, D. C., S. D. N. Y., Doc. E 59/391, *Manhattan Wicker Co., Inc.* v. *Mayhew Shop, Ltd.* Consent decree for plaintiff June 8, 1931.

Disclaimers

1,669,458.—*Joseph Charles Devick*, Helena, Mont. PALLET AND GRATE FOR SINTERING MACHINES. Patent dated May 15, 1928. Disclaimer filed July 14, 1931, by the assignee, *American Smelting and Refining Company.*

Hereby enters this disclaimer to claims 1, 2, 8, 14, and 15 of said Letters Patent.

1,783,797.—*Clarence J. Klein*, Bellevue, Pa. MATERIAL-HANDLING DEVICE. Patent dated December 2, 1930. Disclaimer filed July 24, 1931, by the assignee, *United Engineering & Foundry Company.*

Hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to wit:

"1. In combination with a straightening machine, effective for applying a force on the side of an article to be straightened, means for turning the article, said turning means being yieldably mounted."

"5. In combination with a straightening machine effective for applying a force on the side of an article to be straightened, means for turning the article, and means for yieldably urging the turning means to a desired position and a stop for limiting the action of such means.

"6. In combination with a straightening machine effective for applying a force on the side of an article to be straightened, means for turning the article, and means for yieldably urging the turning means to a desired position and a stop for limiting the action of such means, the stop being adjustable."

1,699,153.—*Albert H. Mittag*, Schenectady, N. Y. SYSTEM OF DISTRIBUTION. Patent dated January 15, 1929. Disclaimer filed July 23, 1931, by the assignee, *General Electric Company.*

Therefore, enters this disclaimer to claims 1, 2, 4, 5, 6, and 7 of said patent which are in the following words:—

"1. The combination in a system of electrical distribution of a source of direct current, two sets of three-phase primary transformer windings connected to said source through a plurality of valves, a three-phase secondary transformer winding associated with each set of primary windings said secondary windings being connected to a three-phase distribution circuit and means for supplying to one set of primary windings currents which are displaced in phase from those supplied to the corresponding windings of the other set, the two secondary windings being so related to the primary windings that the currents supplied thereto by the two sets of primary windings will be in phase.

"2. The combination in a system of electrical distribution of a source of direct current, two sets of three-phase primary transformer windings connected to said source through a plurality of valves, a three-phase secondary transformer winding associated with each set of primary windings said secondary windings being connected to a three-phase distribution circuit and means for supplying to one set of primary windings currents which are displaced in phase by thirty electrical degrees from those supplied to the corresponding windings of the other set, the two secondary windings being so related to the primary windings that the currents supplied thereto by the two sets of primary windings will be in phase."

"4. The combination of the plurality of circuits, a group of primary windings, means connected between said group and one of said circuits for causing current impulses of substantially rectangular wave form to be successively applied to said windings, and a group of secondary windings arranged to supply to another of said circuits current impulses from which the fifth and seventh harmonics have been eliminated.

"5. The combination of direct and alternating current circuits, a group of primary windings, means comprising a plurality of electrical valves connected between said group and said direct current circuit for causing current impulses of substantially rectangular wave form to be successively supplied to said windings, and a group of secondary windings arranged to supply to said alternating current circuit polyphase currents from which the fifth and seventh harmonics have been eliminated.

"6. The combination of a plurality of circuits, a group of primary windings, electrical valve means connected between one of said circuits and said windings, means arranged to cause current of substantially rectangular wave form to be supplied from said circuit through said valve means successively to said windings, and a group of secondary windings arranged to supply to another of said circuits current impulses of a wave form different from that of the current supplied to said primary windings.

"7. The combination of a plurality of circuits, electrical valve means comprising a plurality of anodes and a plurality of grids each arranged to control the current of a different one of said anodes, a group of windings each connected to one of said circuits through a different one of said electrical valve means, grid potential control means arranged to cause current of substantially rectangular wave form to be supplied from said circuit through said anodes to said windings, and a second group of windings inductively related to said first mentioned group and arranged to supply to another of said circuits current impulses of a wave form different from the current impulses supplied to said first mentioned group."

Interference Notices

U. S. PATENT OFFICE, *Washington, July 17, 1931.*

Road-O-Graph Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Wilbur B. Tucker, 324 South Holmes street, Lansing, Mich., for registration of a trade-mark and trade-mark registered May 21, 1929, No. 256,583, to Road-O-Graph Co., Chamber of Commerce Bldg., Broadway at Twelfth street, Los Angeles, Calif., and a notice of such declaration sent by registered mail to said Road-O-Graph Co. at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Road-O-Graph Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, July 24, 1931.*

Fred J. Coad and Wilfred G. Greuling, their assigns or legal representatives, take notice:

An interference having been declared by this Office between a joint application for patent of Fred J. Coad and Wilfred G. Greuling, 3032 East Grand Boulevard, Detroit, Mich., and the applications of Porter Bakken, Grenera, N. Dak., Hoy H. Bray, 2054 Twelfth Street, Cuyahoga Falls, Ohio, and others, and counsel for Coad and Greuling having stated that he is not aware of the present whereabouts of said Coad and Greuling, notice is hereby given that unless said Coad and Greuling, their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 6, 1931.*

Michael Nicoletti, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications for patent of Albert L. Raven, care of Raven Screen Corporation, 1476 Broadway, New York, N. Y., and Michael Nicoletti, 147 South Street, Plainville, Mass., and the Office having been unable to secure service upon said Nicoletti, notice is hereby given that unless said Nicoletti, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 18, 1931

[VOL. 409. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 315,608. SCHECHTER-GUINSBERG-SCHECHTER, INC., New York, N. Y. Filed June 9, 1931.



The drawing is lined to indicate shading. No claim is made to the words "Made in France" except in combination with the remainder of the trade-mark.

For Dyed Rabbit Skins.

Claims use since Apr. 20, 1931.

CLASS 2

Receptacles

Ser. No. 310,819. AMERICAN OPTICAL COMPANY, Southbridge, Mass. Filed Feb. 7, 1931.

ALUMINETTE

For Spectacles, Eyeglasses, Magnifiers, and Ophthalmic Goods Generally.

Claims use since July 2, 1930.

Ser. No. 316,012. EARL W. LITTLE, Indianapolis, Ind. Filed June 18, 1931.

SPRING BOUGH PERCH

No particular claim being made to the words "Spring" and "Perch" apart from the mark shown.

For Bird Cages and Parts Thereof.

Claims use since March, 1929.

Ser. No. 316,116. BEMIS BRO. BAG CO., Minneapolis, Minn. Filed June 22, 1931.

DELTASEAL

For Paper Bags and Cartons.

Claims use since May 25, 1931.

Ser. No. 316,679. AMES HARRIS NEVILLE CO., San Francisco, Calif. Filed July 3, 1931.

SHOWOVEN

For Bags Made of Paper, Cotton Jute or Like Materials.

Claims use since May 29, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 315,444. CHICAGO HAND BAG MANUFACTURING CO., Chicago, Ill. Filed June 5, 1931.

LUCKEE GIRL

For Leather and Fabric Ladies' Hand Bags.

Claims use since Mar. 17, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 268,488. WALTER N. CROWELL, doing business as Crowell Chemical Co., East Rutherford, N. J. Filed June 22, 1928.



Applicant disclaims the right to the exclusive use of the word "Oxford" apart from the trade-mark as shown in the drawing.
For Metal Polish.
Claims use since Jan. 1, 1909.

Ser. No. 305,520. THE FIVE MINUTE HOME CLEANER COMPANY, Chicago, Ill. Filed Sept. 10, 1930.



For Dry Cleaner.
Claims use since Aug. 14, 1930.

Ser. No. 314,698. HUNTINGTON LABORATORIES, INC., Huntington, Ind. Filed May 18, 1931.

Terrazzo-San

The word "Terrazzo" is hereby disclaimed apart from the mark as shown.
For Cleaning Compound, Especially for Terrazzo Tile and Marble Surfaces.
Claims use since Mar. 15, 1931.

Ser. No. 315,068. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del. and San Francisco, Calif. Filed May 26, 1931.

VESTIS

For Compounds Used in Dry Cleaning Operations, Substances Use in Dry Cleaning Operations, Liquid Materials Used in Dry Cleaning Operations, Oils Used in Dry Cleaning Operations.
Claims use since Apr. 30, 1931.

Ser. No. 315,646. HOLMES HENRY PLOTT, Canton, N. C. Filed June 10, 1931.

PLOTT'S HP SOAP

No claim is made to the word "Soap" apart from the mark as shown.
For Soap.
Claims use since June 1, 1931.

Ser. No. 315,844. KLARO PRODUCTS CO., New Bedford, Mass. Filed June 15, 1931.

KLARO

For Powdered Cleaning Compound for General Household and Laundry Use.
Claims use since Feb. 12, 1930.

Ser. No. 315,941. SONTAG CHAIN STORES CO. LTD., Doing business as Dona Rosa Toiletries, Los Angeles and Hollywood, Calif. Filed June 16, 1931.

DONA ROSA

For Soaps.
Claims use since Mar. 1, 1930.

Ser. No. 316,049. AUBERT PARENT, Paris, France. Filed June 19, 1931.



The representation of a stick of soap and the words "Pour Se Raser Sans Se Faire Mal" being disclaimed apart from the mark as shown on the drawing.
For Shaving Soap.
Claims use since Feb. 20, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 292,577. CHIPMAN CHEMICAL ENGINEERING COMPANY, INC., Middlesex, N. J. Filed Nov. 19, 1929.

ATLAS

For Chemical Compositions for the Treatment of Boiler Feedwater to Prevent Incrustration and Corrosion and Cattle Dip.
Claims use since 1900.

Ser. No. 298,639. LINDSAY-MCMILLAN CO., Milwaukee, Wis. Filed Apr. 10, 1930.

Delco Benzol

The trade-mark consists of "Delco Benzol" as shown. No claim is made to the word "Benzol" except as shown.
For a Liquid Fuel for Internal Combustion Engines, Comprising a Volatile, Inflammable Liquid Obtained by Distillation of Certain Carbonaceous Material—namely, Benzol.
Claims use since February, 1918.

Ser. No. 299,459. HARRY K. OWYE, doing business as H. K. Owye & Co., San Francisco, Calif. Filed Apr. 25, 1930.



No claim is made to the word "Salt" apart from the mark as shown.
For Seasoning Salt.
Claims use since Apr. 1, 1930.

Ser. No. 302,567. HANNS ALLROGGEN, Wiesbaden, Germany. Filed June 19, 1930.

MOVA

For Medical Preparations Particularly Directed to the Treatment of Wounds, Nipples, and Similar Body Parts.
Claims use since January, 1925.

Ser. No. 306,765. CHEMISCH-PHARMAZEUTISCHE A. G. BAD HOMBURG WERK FRANKFURT A. M., Bad Homburg, Germany. Filed Oct. 15, 1930.

RHODAPURIN

For Preparation for Healing Troublesome Complaints of the Arterial High Pressure.
Claims use since February, 1926.

Ser. No. 306,766. CHEMISCH-PHARMAZEUTISCHE A. G. BAD HOMBURG WERK FRANKFURT A. M., Frankfort-on-the-Main, Germany. Filed Oct. 15, 1930.

Bromhosal

For Preparations of Calcium-Sodium-Double Salt Containing Bromine for Diet without Kitchen Salt.
Claims use since September, 1928.

Ser. No. 307,639. E. R. SQUIBB & SONS, New York, N. Y. Filed Nov. 7, 1930.

BICARBS

For Effervescent Antacid, Laxative, and Diuretic Tablets.
Claims use since Oct. 29, 1930.

Ser. No. 307,832. HARRY A. SCHWARZ, doing business as Silver Plato Company of America, New York, N. Y. Filed Nov. 12, 1930.

PLATO

For Plating Compound, Such as a Compound for Silver Plating.
Claims use since Nov. 7, 1930.

Ser. No. 309,627. ALVIM & FREITAS, S. Paulo, Brazil. Filed Jan. 6, 1931.



All wording with the exception of "Joviano Alvim" is disclaimed apart from the mark as shown on the drawing. The picture forming a feature of the mark is fanciful.
For Perfumery Products for the Hair—Namely, Hair Restorer Lotion and a Preventative Against Grey Hair, Falling Hair, and Scalp Infections.
Claims use since Feb. 22, 1922.

Ser. No. 309,745. SONTAG CHAIN STORES CO. LTD., doing business as Studio Products Co., Los Angeles, Calif. Filed Jan. 8, 1931.

Miss Beverly

For Toilet Preparations, Cosmetics, and Medicinal Preparations—Namely, Brilliantine, Pore Cleanser, Cleansing Cream, Tissue Cream, Lemon Cream, Vanishing Cream, and Astringents.
Claims use since Nov. 24, 1930.

Ser. No. 311,156. PARK DRUG CO. INC., doing business as The Park Laboratories, New York, N. Y. Filed Feb. 17, 1931.

ZINCORA

For Combination Mouth Wash and Liquid Antiseptic, and Tooth Powder.
Claims use since May, 1925.

Ser. No. 312,016. THE ROESSLER & HASSLACHER CHEMICAL COMPANY, New York, N. Y. Filed Mar. 11, 1931.

P. A. C.

For Solution of Formaldehyde and Copper Carbonate and Mixtures of Copper Carbonate.
Claims use since Mar. 1, 1923, on formaldehyde solution, and since Sept. 14, 1925, on copper carbonate.

Ser. No. 312,540. ACIERIES DE GENNEVILLIERS, ANCIENS ETABLISSEMENTS C. DELACHAUX, Gennevilliers, France. Filed Mar. 26, 1931.

CALORITE

For Heat Producing Chemicals for Aluminothermic Processes Consisting of a Mixture of Metallic Oxydes and Aluminium Silicium, Magnesium, or Other Metals.
Claims use since July 19, 1915.

Ser. No. 313,516. VALENTINE LABORATORIES, INC., Chicago, Ill. Filed Apr. 18, 1931.

ERBO

For Alterative Compounds.
Claims use since Mar. 7, 1931.

Ser. No. 313,586. SUTE MATSU ENDO, doing business as Honolulu Pharmacy, Honolulu, Territory of Hawaii. Filed Apr. 20, 1931.

PLASCO

For Preparation for the Treatment of Inflammations and Congestions.
Claims use since March, 1929.

Ser. No. 313,773. JOHN DECK, doing business as Washington Chemical Co., Cincinnati, Ohio. Filed Apr. 25, 1931.

AUNT SARAH'S
CHIGGER
SOLUTION

No claim being made to the words "Chigger Solution" apart from the mark shown on the drawing.
For Chigger Solution.
Claims use since July 15, 1930.

Ser. No. 314,030. DR. D. P. ORDWAY PLASTER CO., Camden, Me. Filed Apr. 30, 1931. Under 10-year proviso.

HAND DR. D. P. ORDWAY'S IMPROVED PLASTER MADE
FAC-SIMILE D. P. Ordway.

For Plasters for External Application for Muscular Soreness, Sprains, Strains, and for Chest Application for Minor Bronchial Irritation and Coughs Due to Colds.
Claims use since Mar. 24, 1892.

Ser. No. 314,166. N. V. CHEMISCHE FABRIEK "ROTTERDAM," Rotterdam, Netherlands. Filed May 4, 1931.

INSTANTO

For Chemical Products for Bleaching and Improving the Baking Qualities of Flour, Meal, and Other Mill Products.
Claims use since Jan. 2, 1930.

Ser. No. 314,287. LEA'S PHARMACY, doing business as Lea Brothers, Chemists, New Orleans, La. Filed May 7, 1931.



For Athlete's Foot Medicine.
Claims use since May 1, 1931.

Ser. No. 314,514. REMARKO COMPANY, Cincinnati, Ohio. Filed May 18, 1931.

REMARKO

For Preparation for the Treatment of Rheumatism, Sciatica, Lumbago, Kidney, Constipation, Liver Trouble, Blood Purifier, Cold, Backache, Dizziness, Skin Disease and Boils.
Claims use since Mar. 10, 1931.

Ser. No. 314,616. HOUBIGANT, INC., New York, N. Y. Filed May 15, 1931.

TRANSPARENCE

For Face Powder, Talcum Powder, Bath Salts, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Powder and Rouge Compacts.
Claims use since Apr. 10, 1931.

Ser. No. 314,633. MICROMERC GERMICIDE CO. LTD., Los Angeles, Calif. Filed May 15, 1931.



No claim is made to the right to use a red cross or a white cross on a red background.
For Antiseptics, Disinfectants, and Germicides.
Claims use since Feb. 1, 1931.

Ser. No. 314,768. L. J. MURPHY, doing business as Murphy Laboratories, Chicago, Ill. Filed May 19, 1931.

STAPHOIN

For Staphylacoccus Filtrate in Ointment Form for Local External Application to Boils, Furuncles, and Other Staphylococcic Bacteria.
Claims use since Mar. 30, 1931.

Ser. No. 314,836. LLOYD BAILEY, doing business as Southern Manufacturing Company, Waco, Tex. Filed May 21, 1931.

ROTOX

No claim is made to the word "Tox" apart from the mark shown in the drawing.
For Insecticidal Floor Compound.
Claims use since Feb. 1, 1929.

Ser. No. 314,900. JOHN ROLAND DULANY, doing business as Dulany Manufacturing Co., Pittsburgh, Pa. Filed May 22, 1931.

DE-CLOG-O

For Chemical Cleaner for Lavatories, Sinks, and Other Drains.
Claims use since April, 1931.

Ser. No. 314,919. LENWELLS, INC., Chicago, Ill. Filed May 22, 1931.



No claim is made to the exclusive use of the words, "Olive Oil Shampoo" and "Chicago, Ill., U. S. A." separated and apart from the mark as shown on the drawing. The portrait appearing in the drawing is fanciful.
For Olive Oil Shampoo.
Claims use since September, 1930.

Ser. No. 314,921. LENWELLS, INC., Chicago, Ill. Filed May 22, 1931.



No claim is made to the exclusive use of the words "For Dressy Hair" and "Chicago, Ill., U. S. A." separate and apart from the mark as shown on the drawing. The portrait appearing on the drawing is fanciful.
For Hair Dressing.
Claims use since September, 1930.

Ser. No. 314,970. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y. Filed May 23, 1931. Under Section 5b of the Act of 1905, as amended in 1920.

SOLVAY

For Chemical Preparation for Use as a Cream Neutralizer.
Claims use since Apr. 18, 1930.

Ser. No. 314,980. G. W. CARNRICK CO., Newark, N. J. Filed May 25, 1931.

PROGESTIN

For Active Estrus Inducing Principle Derived from Various Animal Glands and Tissues, Used to Initiate and Control the Menstrual Process in Women in Such Conditions as Amenorrhea and Dysmenorrhea.
Claims use since May 18, 1931.

Ser. No. 315,082. BAY CHEMICAL COMPANY, INC., New Orleans, La. Filed May 27, 1931.

DICALFOS

For Medicinal Product in Powdered or Tablet Form Composed of Calcium and Phosphorus for Use in Ailments Requiring Calcium and Phosphorus Therapy, and Which Also may be Used as a Food Supplement.
Claims use since May 20, 1931.

Ser. No. 315,088. JOHN CONKLIN, doing business as Universal Medicine Co., Chicago, Ill. Filed May 27, 1931.

UCCO HERB-BOLENE

No claim is made to the word "Herb" apart from the mark shown in the drawing.
For Tonic-Diuretic Carminative Intestinal-Lubricant.
Claims use since Jan. 15, 1929.

CARNEGIE LIBRARY OF

Ser. No. 315,145. INDEPENDENT GROCERS' ALLIANCE DISTRIBUTING CO., Chicago, Ill. Filed May 28, 1931.

IGA

For Baking Powder and Lye.
Claims use since Sept. 1, 1927.

Ser. No. 315,158. OHIO VALLEY DRUG CO., Wheeling, W. Va. Filed May 28, 1931.

GREEN DEATH

For Insecticides.
Claims use since July, 1904.

Ser. No. 315,285. IDA SMITHERMAN, doing business as Smith & Company, Oklahoma City, Okla. Filed June 1, 1931.

TRI-ICIDE
GERM KILLER

Applicant disclaims the descriptive words "Germ Killer" apart from the trade-mark as shown.
For Liquid Antiseptic for Use as a Typhoid, Tuberculosis, and Diphtheria Germ Killer.
Claims use since May 1, 1931.

Ser. No. 315,420. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed June 4, 1931.

DEENAX

For Denaturants.
Claims use since Apr. 27, 1931.

Ser. No. 315,503. GEO. RASMUSSEN CO., Chicago, Ill. Filed June 6, 1931.

GEO. RASMUSSEN CO.
QUALITY GROCERS

Applicant makes no claim to the words "Quality Grocers" apart from the mark as shown.
For Cream Tartar.
Claims use since Dec. 6, 1930.

Ser. No. 315,510. THE WETHREE COMPANY (NOT INC.), Chicago, Ill. Filed June 6, 1931.

PILENDEM

For Ointment for Treatment of Hemorrhoids.
Claims use since May 14, 1931.

Ser. No. 315,565. A. SCHILLING & CO., San Francisco, Calif. Filed June 8, 1931.

Schilling

Under 10-year proviso.
For Baking Powder and Cream of Tartar.
Claims use since 1881.

Ser. No. 315,644. THE LAC-TIDE CO., Long Beach, Calif. Filed June 10, 1931.

Lac-Tide

For Medicinal Preparation for Hay Fever, Catarrh, and Sinus Trouble.
Claims use since Mar. 15, 1931.

Ser. No. 315,697. RALSTON PURINA COMPANY, St. Louis, Mo. Filed June 11, 1931.

PURINA

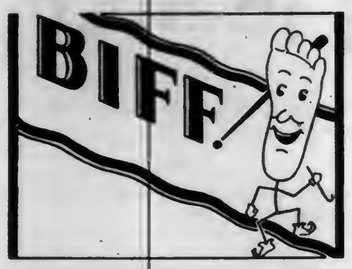
For Worm Capsules, Insect Powder, Disinfectants, and Liquid Insect Destroyer.
Claims use since May 1, 1931.

Ser. No. 315,749. INTERNATIONAL MEDICINAL CORPORATION, Chicago, Ill. Filed June 12, 1931.

PAR-EX

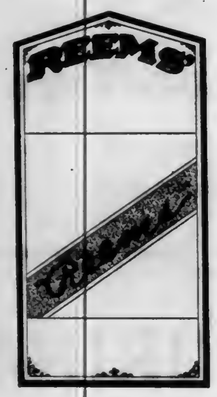
For Medicinal Preparation for External Use—Namely, for the Treatment of "Athlete's Foot," Muscular Aches and Pains, Bruises, Sprains, Burns, Blisters, Aching, Burning Feet, Superficial Cuts, Sunburn, and Bites and Stings of Mosquitos, Bees and Other Small Insects.
Claims use since Apr. 1, 1931.

Ser. No. 315,756. NU-FEET PRODUCTS COMPANY, Houston, Tex. Filed June 12, 1931.



For Skin Ointment for Affections of the Feet Such as Itch, Eczema, Tetter, Ringworm, Ivy Poisoning, and Prickly Heat.
Claims use since June 5, 1931.

Ser. No. 315,821. CARRIE BROWER, Valley Stream, N. Y. Filed June 15, 1931.



The lining on the drawing is for shading purposes only.
For Hair Restorer.
Claims use since January, 1931.

Ser. No. 315,849. THE L-B CHEMICAL CO., Canton, Ohio. Filed June 15, 1931.



For Hand Lotion, After Shaving Lotion, and Vanishing Lotion.
Claims use since May 26, 1931.

Ser. No. 315,850. THE L-B CHEMICAL CO., Canton, Ohio. Filed June 15, 1931.



For Hand Lotion, After Shaving Lotion, and Vanishing Lotion.
Claims use since May 26, 1931.

Ser. No. 315,871. REMINGTON LABORATORIES, INC., New York, N. Y. Filed June 15, 1931.

RŌBEX

For a Medicinal Preparation for Treating Obesity.
Claims use since Sept. 6, 1930.

Ser. No. 315,910. WILLIAM C. HAIRSTON, doing business as Estancia Drug Co., Estancia, N. Mex. Filed June 16, 1931.



DESERT-GLOW

For Digestive Tonic and Hand Lotion.
Claims use since Mar. 15, 1931.

Ser. No. 315,926. LEE J. ROBERTS, Monessen, Pa. Filed June 16, 1931.

2-SISTERS SALVE

For External Preparation for Rheumatism, Neuralgia, Sprains, and Sore Throat.
The word "Salve" is disclaimed apart from the mark shown on the drawing.
Claims use since Dec. 27, 1930.

Ser. No. 315,968. HEALTH PRODUCTS CORPORATION, Newark, N. J. Filed June 17, 1931.

CLO-TRATE

For Cod Liver Oil Concentrate.
Claims use since June 15, 1931.

Ser. No. 315,969. HOSPITAL LABORATORY COMPANY, Baltimore, Md. Filed June 17, 1931.

TINEACIDE

For Liquid Preparation for Treating Ringworm Infection or Athlete's Foot.
Claims use since Mar. 30, 1931.

Ser. No. 316,014. GREGORIO MALDONADO, Brooklyn, N. Y. Filed June 18, 1931.

LLUVIA DE FLORES

For Brilliantine.
Claims use since May 25, 1931.

Ser. No. 316,035. DOJAY TABLET CO., New York, N. Y. Filed June 19, 1931.

Dojay

For Preparations in Tablet Form Intended to Relieve Gastric Hyperacidity.
Claims use since Dec. 8, 1930.

Ser. No. 316,061. R. T. VANDERBILT COMPANY, INC., New York, N. Y. Filed June 19, 1931.



No claim is made for the words "American Products, N. Y." apart from the marks shown in the drawing.
For Chemical Compound Used as an Accelerator in the Manufacture of Rubber Products.
Claims use since May 1, 1925.

Ser. No. 316,091. HOLLYWOOD EVE TOILET PRODUCTS, INC., New York, N. Y. Filed June 20, 1931.



For Astringent, Almond and Benzoin, Bath Salt, Brilliantine, Cold Cream, Face Powder, Glycerine and Rose Water, Hand Cream, Lemon Lotion, Perfume, Shampoo, Toilet Water, Talc Powder, Vanishing Cream, and Wave Set.
Claims use since November, 1930.

Ser. No. 316,100. PHARMAZEUTISCHE INDUSTRIE A. G., Vienna, Austria. Filed June 20, 1931.

EUPHAGIN

For Anæsthetic for Mouth and Throat.
Claims use since Oct. 26, 1921.

Ser. No. 316,101. SERCK & KADE, INC., New York, N. Y. Filed June 20, 1931.

ACTIN

For Pharmaceutical Preparation for the Treatment of Colds, Headaches, and Neuralgia.
Claims use since June 11, 1931.

Ser. No. 316,108. SOCIETE ANONYME JEAN PATOU, Paris, France. Filed June 20, 1931.

FOLIE DIVINE

For Perfumes, Toilet Waters, Face Powder, Talcum Powder, Rouges, Sachet, Brilliantine, Bath Salts, Lotion for the Skin and Hair, Face Cream.
Claims use since Apr. 30, 1931.

Ser. No. 316,109. SOCIETE ANONYME JEAN PATOU, Paris, France. Filed June 20, 1931.

MOMENT SUPRÊME

For Perfumes, Toilet Waters, Face Powder, Talcum Powder, Rouges, Sachet, Brilliantine, Bath Salts, Lotion for the Skin and Hair, Face Cream.
Claims use since Apr. 30, 1931.

Ser. No. 316,138. SOMERVILLE LABORATORIES, INC., New York, N. Y. Filed June 22, 1931.

Mangfermal

For General Tonic to be Used in the Treatment of Anemia, Chlorosis, Neurasthenia, Debility, Mal-Nutrition, and Metabolic Diseases.
Claims use since Apr. 15, 1931.

Ser. No. 316,145. MIDWAY CHEMICAL COMPANY, doing business as Sure-Kil Company, Chicago, Ill. Filed June 22, 1931.

Sure Kil

For Insecticide.
Claims use since Apr. 7, 1928.

Ser. No. 316,177. AMERICAN BIO-CHEMICAL LABORATORIES, INC., New York, N. Y. Filed June 24, 1931.

IODOMIN

For Inorganic Preparation for Use in the Treatment of Various Respiratory Diseases—Namely, Coryza, Subacute Rhinitides, Rhinitis Vasomotoria, Hydrorrhœa Nasalis, Asthma, Bronchiale, and Hay Fever.
Claims use since May 9, 1931.

Ser. No. 316,510. E. R. SQUIBB & SONS, New York, N. Y. Filed June 30, 1931.

SPREDOL

For Intestinal Lubricants.
Claims use since June 17, 1931.

Ser. No. 316,561. C. E. JAMIESON & COMPANY, Detroit, Mich. Filed July 2, 1931.

SYL-O-GEN

For Mineral Oil Emulsion to be Used as an Intestinal Lubricant.
Claims use since June 23, 1931.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 306,503. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa. Filed Oct. 7, 1930. Under 10-year proviso.

MIDVALE

For Naval Guns, Army Guns, Projectiles.
Claims use since Mar. 1, 1881.

CLASS 10

Fertilizers

Ser. No. 291,287. THE NITRAGIN COMPANY, INC., Milwaukee, Wis. Filed Oct. 19, 1929.

NITRAGIN

For Seed and Soil Inoculant.
Claims use since March, 1896.

Ser. No. 315,937. WIL-GRO PRODUCTS CO., Willow Grove, Pa. Filed June 16, 1931.

WIL-GRO

For Liquid Fertilizer and Especially Prepared Soil Which is Also Similar to Fertilizer.
Claims use since Mar. 27, 1931.

CLASS 12

Construction Materials

Ser. No. 307,869. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.

ALCOA

For Aluminum Shingles, Corrugated Roofing, Down Spouts and Gutters and Flashings.
Claims use since Jan. 8, 1930.

Ser. No. 307,870. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.

ALCOA



For Aluminum Shingles, Corrugated Roofing, Down Spouts, and Gutters and Flashings.
Claims use since Jan. 8, 1930.

Ser. No. 314,192. SOUTHWESTERN PORTLAND CEMENT COMPANY, Dayton, Ohio. Filed May 6, 1931.

AKCELO

For Building Cement.
Claims use since Mar. 17, 1931.

Ser. No. 315,689. THE INSULCRETE COMPANY, Forest Park, Ill. Filed June 11, 1931.



No claim is made to the words "Warm in Winter, Cool in Summer, Plaster Base Load Bearing Fire Proof Nail Block" and "Products" appearing in the said drawing except as used in conjunction with the other features of the mark.
For Cellular Concrete Units.
Claims use since Feb. 1, 1929.

Ser. No. 316,125. EARL L. HOFFMAN, doing business as Earl Hoffman Co., Los Angeles, Calif. Filed June 22, 1931.

HOFFCO

For Wood Wall Board.
Claims use since Apr. 15, 1931.

Ser. No. 316,499. THE PARAFFINE COMPANIES, INC., doing business as Paint Products Company, San Francisco, Calif. Filed June 30, 1931.

RAYTEX

For Roofing, Shingles, Building Papers—Namely, Waterproofing, Thermal and Acoustical Insulating Papers and Felts All of Which Comprise a Body of Fibrous Material in Sheet Form Which May or May Not be Coated and/or Saturated in Whole or in Part With a Bituminous or Asphaltic Compound.
Claims use since June 15, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 315,359. LENAPE HYDRAULIC PRESSING & FORGING CO., Lenape, Pa. Filed June 3, 1931.

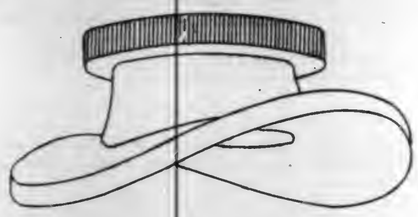
LENAPE
RED MAN PRODUCTS

The word "Products" is disclaimed apart from the mark as shown.

For Valve Boxes, Drip Boxes, Repair Sleeves, Weld Sleeves, Man-Hole Frame, Man-Hole Covers, Boiler Nozzles, Explosion Doors and Frames, Welding Necks, Man-Head Fittings, Vanstone Pipe and Man-Hole Saddles, All Made of Forged Steel.

Claims use since November, 1923.

Ser. No. 315,360. LENAPE HYDRAULIC PRESSING & FORGING CO., Lenape, Pa. Filed June 3, 1931.



The trade-mark consists of a red band arbitrarily applied to a boiler nozzle on the bolt flange thereof. Representation of the nozzle per se is disclaimed.

For Boiler Nozzles.

Claims use since Jan. 1, 1930.

Ser. No. 315,367. REVERE COPPER AND BRASS INCORPORATED, Rome, N. Y. Filed June 3, 1931.

GRAND DAUGHTER'S WARE

Applicant disclaims any exclusive right to the word "Ware" apart from the mark shown on the drawing.

For Copper Teakettles, Tea Pots, Coffee Pots, Percolators, Sauce Pans, Mixing Bowls, Preserving Kettles, Frying Pans, Double Boilers, and Double Boiler Inset Pails.

Claims use since May 15, 1931.

Ser. No. 315,925. PURO SANITARY DRINKING FOUNTAIN COMPANY, Haydenville, Mass. Filed June 16, 1931.

PUROKROM

For Drinking Fountains, Bubblers, Push Button and Spring Type Compression Valves.

Claims use since Mar. 28, 1931.

Ser. No. 316,242. ALUMINUM INDUSTRIES, INC., Cincinnati, Ohio. Filed June 25, 1931.

PERMITE

For Gate Valves and Bolts.

Claims use since Oct. 1, 1930.

Ser. No. 316,675. THOMAS S. WILLIAMS, Dallas, Tex. Filed July 6, 1931.

DORT

For Door Checks.

Claims use since Sept. 1, 1930.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 313,209. TITAN METAL MANUFACTURING COMPANY, Bellefonte, Pa. Filed Apr. 10, 1931.



For Brass and Bronze Rods, Shapes and Forgings and Automatic Screw Machine Parts Unfinished and in the Rough.

Claims use since 1927.

Ser. No. 316,647. KEYSTONE STEEL & WIRE COMPANY, Peoria, Ill. Filed July 6, 1931.

GALVANNEALED

For Zinc Coated Iron and Steel Sheets.

Claims use since June 15, 1931.

Ser. No. 316,742. RAMAPO AJAX CORPORATION, New York, N. Y. Filed July 8, 1931.

"SAMSON"

For Rail Switches.

Claims use since April, 1931.

Ser. No. 316,803. BRAUN-STEEPLE COMPANY, LTD., San Francisco, Calif. Filed July 10, 1931.

ALUMETAL

For Aluminum Solder.

Claims use since May 1, 1927.

CLASS 15

Oils and Greases

Ser. No. 271,615. MERCO NORDSTROM VALVE COMPANY, San Francisco, Calif. Filed Aug. 27, 1928.

MERCO

For Lubricating Greases.

Claims use since April, 1924.

Ser. No. 309,693. M. F. A. OIL COMPANY, Columbia, Mo. Filed Jan. 7, 1931.

PENN GUARD

For Motor Oil Used for Lubricating Gasoline Engines, Particularly Automobile Gasoline Driven Engines.

Claims use since Aug. 1, 1930.

Ser. No. 314,639. HENRY H. CROSS COMPANY, Chicago, Ill. Filed May 16, 1931.



Applicant does not claim herein the word "Octane" apart from the mark shown in the drawing.

For Motor Fuels Consisting of Gasoline.

Claims use since May 1, 1931.

Ser. No. 316,445. PANTHER OIL & GREASE MFG. CO., Fort Worth, Tex. Filed June 29, 1931.

CLARCO

For Lubricating Oils and Greases.

Claims use since Feb. 28, 1931.

Ser. No. 316,460. WADHAMS OIL COMPANY, Milwaukee, Wis. Filed June 29, 1931.

SpeciaLo

For Gasoline.

Claims use since Oct. 28, 1927.

Ser. No. 316,543. VICTOR C. THOMPSON, doing business as Globe Grease and Manufacturing Company, Los Angeles, Calif. Filed July 1, 1931.

Safe-T-Roll

For Lubricating Oils and Greases.

Claims use since Sept. 22, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 312,498. THE SHEFFIELD BRONZE POWDER & STENCIL CO., Cleveland, Ohio. Filed Mar. 24, 1931.

Sheffield

The word "Sheffield" is disclaimed apart from the mark.

For Paint and Varnish Remover, Bronzing Liquid, Gold Paint, Iron Paint Enamel; Wood, Metal, and Crack Paint Fillers; Banana Bronzing Liquid, Bronze Powder, Oil Colors, Lettering Varnish, Lacquer Thinner, and a Preparation for Cleaning Brush Bristles in the Nature of a Paint Remover.

Claims use since January, 1926.

Ser. No. 314,813. MARTIN VARNISH COMPANY, Chicago, Ill. Filed May 20, 1931.

AMBER-LYTE

For Finishes in the Nature of Paint, Varnish, Enamel, and Lacquer for Walls, Houses, Porches, Floors, Woodwork, Linoleum, Furniture, Motor Cars, Boats, Machinery, Wood, Canvas, Plaster, Metal, Concrete, Brick, and Wallboard.

Claims use since May 8, 1931.

Ser. No. 315,108. THE PATTERSON-SARGENT COMPANY, Cleveland, Ohio. Filed May 27, 1931.

SATONE

For Dry and Ready Mixed Paints, Varnishes, Paint-Enamels, Stains, Lacquers, and Varnishes.
Claims use since Apr. 21, 1931.

Ser. No. 316,578. THE MURALO COMPANY, INC., New Brighton, N. Y. Filed June 30, 1931.

SEMEX

For Cold Water Paint.
Claims use since Feb. 15, 1931.

Ser. No. 316,630. CRAFTEX COMPANY, Boston, Mass. Filed July 6, 1931.

SUNFLEX

For Paints in Powder, Paste, Semi-Liquid, or Ready Mixed Form.
Claims use since May 27, 1926.

CLASS 17

Tobacco Products

Ser. No. 316,648. CORNELIUS KLIS, doing business as Preston Cigar Company, Norwich, Conn. Filed July 6, 1931.

DUWELL

For Cigars.
Claims use since October, 1927.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 311,316. TOMS RIVER BOAT WORKS, INC., Toms River, N. J. Filed Feb. 20, 1931.



All words shown on the drawing except "Viking" and the applicant's corporate name are disclaimed apart from the mark as shown.
For Pleasure-Built Sea Skiff Craft, Clinker Construction.
Claims use since April, 1930.

Ser. No. 314,120. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa. Filed May 2, 1931. Under 10-year proviso.

MIDVALE

For Forged, Rolled, or Pressed Tires, Locomotives and Car Wheels, Axles, Side Rods, Frames and Parts for Cars.
Claims use since Mar. 1, 1881.

Ser. No. 315,817. ASSOCIATED PARTS, INC., doing business as The Lucas Manufacturing Co., Toledo, Ohio. Filed June 15, 1931.



The portrait is fanciful.
For Vehicle Heaters and Parts Thereof, Said Heaters Utilizing Hot Fluids from the Eugine.
Claims use since August, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 303,532. ELECTRAD, INC., New York, N. Y. Filed July 16, 1930.

DURATROL

For Impedance Units for Use as Electric Motor Controls, Voltage Controls, Volume and Tone Controls for Electric Sound Projecting Apparatus, Rheostats, and Resistors.
Claim use since Apr. 26, 1930.

Ser. No. 304,245. MICHAEL F. MAY, doing business as May Manufacturing Company, Redondo Beach, Calif. Filed Aug. 5, 1930.

TODAY'S SUNLIGHT TONIGHT

For Electric Flash Light Torches.
Claims use since Nov. 1, 1924.

Ser. No. 307,687. MODERN ELECTRIC PRODUCTS CORPORATION, Chicago, Ill. Filed Nov. 8, 1930.

HOT-TOT

The word "Hot" does not form a part of the registration sought apart from the trade-mark shown in the drawing.
For Electric Heaters of the Fan Type.
Claims use since Sept. 1, 1930.

Ser. No. 314,276. HENRI S. DE MALAUSSENE, North Hollywood, Calif. Filed May 7, 1931.

MOTOVERTER

For Combined Direct Current Motor and Alternating Current Generator Sets, Motor Generator Sets, Converters, and Electrical Generating Machines.
Claims use since Apr. 1, 1931.

Ser. No. 314,436. UNITED STATES RADIO & TELEVISION CORPORATION, Marion, Ind. Filed May 11, 1931.

Gloriette

For Radio Sending and Receiving Sets.
Claims use since Apr. 1, 1931.

Ser. No. 315,272. NEON PRODUCTS, INC., Lima, Ohio. Filed June 1, 1931.

FRAM-O-NEON

No claim is made for the word "Neon" apart from the mark as shown.
For Electrical Display Signs and Parts Thereof.
Claims use since Sept. 1, 1930.

Ser. No. 315,396. L. A. DARLING COMPANY, Bronson, Mich. Filed June 4, 1931.

ILLUMASCRIBE

For Electrical Display Signs and Parts Thereof.
Claims use since May 16, 1931.

Ser. No. 315,803. SEYMOUR SUITS, Philadelphia, Pa. Filed June 13, 1931.

MORE

For Headlights, Headlight Reflectors, Headlight Lenses, Headlight Lamp Housings, and Headlight Parts.
Claims use since June 3, 1931.

Ser. No. 316,019. LEMUEL W. SERRELL, New York, N. Y. Filed June 18, 1931.

Serelco

For Electrical Cooking Stoves, Electrical Roasting and Baking Ovens, Electrical Grills and Broilers and Thermostatically Controlled Electric Ovens.
Claims use since May 1, 1929.

Ser. No. 316,060. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass. Filed June 19, 1931.

PERSONAL

For Radio Receiving Sets.
Claims use since May 29, 1931.

Ser. No. 316,073. RCA VICTOR COMPANY, INC., Camden, N. J. Filed June 18, 1931.

Superette

For Radio Receiving Sets, Kits for Radio Receiving Sets, Electric Pick-ups for Phonographs, and Accessories and Parts Consisting of Aerials, Battery Eliminators, Binding Posts, Chokes, Coils, Coil Sets, Condensers, Dials, Grid Leaks, Jacks, Loud Speakers, Panel Boards, Potentiometers Radio Amplifying Units, Radio Rectifying Units, Rheostats, Shields, Transformers, Electron Tubes, Tube Sockets, Tuning Units, Choke Coils, and Wire and Cable for Radio Sets and Apparatus.
Claims use since Feb. 7, 1931.

Ser. No. 316,149. BIRMINGHAM ELECTRIC FURNACES LTD., Erdington, Birmingham, England. Filed June 23, 1931.

BIRLEC

For Electric Industrial Furnaces.
Claims use since 1928.

Ser. No. 316,212. THE MILLER COMPANY, Meriden, Conn. Filed June 24, 1931.

FOLD-O-FLECTOR

For Electric Lighting Fixtures and Lamps.
Claims use since June 5, 1931.

Ser. No. 316,393. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed June 27, 1931.

"Columette"

For Radio Receiving Sets.
Claims use since Apr. 20, 1931.

Ser. No. 316,451. THE SEISS MFG. CO., Toledo, Ohio. Filed June 29, 1931.

DAISY

For Electric Dry Battery Lamps.
Claims use since April, 1931.

Ser. No. 316,469. EMBURY MANUFACTURING CO., Warsaw, N. Y. Filed June 29, 1931.

SUPREME

For Electric Lanterns.
Claims use since Dec. 1, 1922.

Ser. No. 316,516. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed June 30, 1931.

FLAVOR ZONE

For Electric Ranges.
Claims use since June, 1928.

Ser. No. 316,540. THE REVERE RADIO CORPORATION, Mansfield, Ohio. Filed June 1, 1931.

REVERE

For Radio Broadcast Receiving Sets.
Claims use since Mar. 2, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 309,958. L. BAMBERGER & CO., Newark, N. J. Filed Jan. 15, 1931.

"Under the China-berry Tree"

For Toys (e. g. Rattles, Rag Dolls, Miniature Animals in Imitation of Dogs, Elephants, Horses, etc.)
Claims use since Nov. 21, 1930.

Ser. No. 312,637. WILLY BACKHAUS, Leipzig, Germany. Filed Mar. 28, 1931.

Fratellini's Reise um die Welt

For Table Board Games or Games of Disc, Card Games, Table Tennis.
Claims use since February, 1930.

Ser. No. 314,197. ROY K. DENNISON, East Machias, Me. Filed May 5, 1931.

ROY TOY

Applicant disclaims the right to the exclusive use of the word "Toy" apart from the trade-mark as shown in the drawing.
For Toy Building Sets.
Claims use since January, 1931.

Ser. No. 316,025. LESTER MICHAEL ALLEN, doing business as L. M. Allen Mfg. Co., Portland, Oreg. Filed June 19, 1931.

MIKADDY

For Mechanical Golf Caddy.
Claims use since June 8, 1931.

Ser. No. 316,374. PARKER BROTHERS INC., Portland, Me., and Salem, Mass. Filed June 27, 1931.

IVOROID

For Pieces for Playing Board and Table Games, Such as Checkers, Chess, Dominoes, Backgammon, and Like Games.
Claims use since Oct. 1, 1930.

Ser. No. 316,752. A. G. SPALDING & BROS., New York, N. Y. Filed July 8, 1931.

LATEXEAM

For Tennis Balls.
Claims use since May 11, 1931.

Ser. No. 316,793. WRIGHT & DITSON, Boston, Mass. Filed July 9, 1931.

Permawelt

For Tennis Balls.
Claims use since June 25, 1931.

Ser. No. 316,887. HILLERICH & BRADSBY CO., Louisville, Ky. Filed July 13, 1931.

Johnny Frederick

Trade-mark is a facsimile signature of Johnny Frederick.
For Baseball Bats.
Claims use since Oct. 8, 1929.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 295,556. CHEMICAL CONSTRUCTION COMPANY, Charlotte, N. C. Filed Feb. 4, 1930.

CHEMICO CCC

For Machinery for the Manufacture and Reclamation of Sulphuric Acid, Nitric Acid, Phosphoric Acid, and Other Acids, Chemicals, and Fertilizers.
Claims use since Feb. 1, 1929.

Ser. No. 307,970. THE FERRO ENGINEERING COMPANY, Cleveland, Ohio. Filed Nov. 17, 1930.

C & D

For Hot Top Casings for Use on Ingot Molds.
Claims use since Feb. 8, 1930.

Ser. No. 309,188. NIAGARA SPRAYER AND CHEMICAL CO., INC., Middleport, N. Y. Filed Dec. 18, 1930.

DRI-FOG

For Dusting Machine Operated by Horse or Motor Power for Applying Insecticidal or Fungicidal Dust to Plants to Control the Parasitic Diseases Thereof.
Claims use since Dec. 21, 1928.

Ser. No. 309,296. BOWEN PRODUCTS CORPORATION, Auburn, N. Y. Filed Dec. 25, 1930.

BOWEN OILSHOT SYSTEM

The word "System" is disclaimed apart from the mark as shown.
For Unified Lubricating System Comprising a Central Actuary and Lubricant Container with Lead Lines and Other Specific Parts for Use on Automobiles or for a Stationary Machinery Plant.
Claims use since June, 1929.

Ser. No. 309,297. NEW PROCESS GEAR COMPANY, INC., Syracuse, N. Y. Filed Dec. 25, 1930.

NEW PROCESS NP GEARS

No claim is made to the words "New Process" and "Gears" or to the representation of a gear apart from the mark as shown.
For Gears and Transmission Gearing.
Claims use since Nov. 10, 1930.

Ser. No. 309,352. THE PREST-O-LITE COMPANY, INC., Indianapolis, Ind. Filed Dec. 26, 1930.

P—O—L

For Gas Engine Primers.
Claims use since Dec. 4, 1930.

Ser. No. 311,488. ROTH-BÜCHNER AKTIENGESELLSCHAFT, Berlin-Tempelhof, Germany. Filed Feb. 26, 1931.

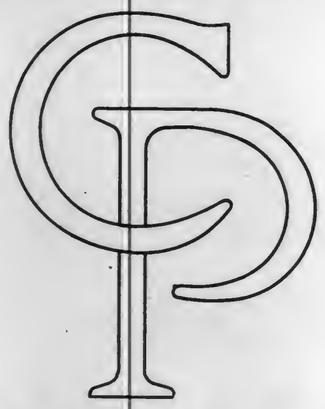


No claim is made to the exclusive use of the word "Palladium."

For Blades for Razors.

Claims use since Apr. 20, 1929.

Ser. No. 314,484. CHICAGO PNEUMATIC TOOL COMPANY, New York, N. Y. Filed May 13, 1931.



For Machinery and Tools Particular Description of Goods to Which Said Trade-Mark is Appropriated Being Pneumatic Beading, Calking, Chipping, Riveting, Scaling, and Stone Hammers; Pneumatic Jam, Pedestal, Staybolt, Squeeze, Stationary and Yoke Riveters; Rivet Busters, Air Drills, Wood-Boring Machines, Pistol and Rotary Drills, Power Grinders, Corner Drills, Chucks, Reamers, Twist Drills, Close Quarter Drills, Flue Expanders, Steam and Power Driven Air and Gas Compressors, Stationary, Portable and Mine Car; Gas and Gasoline Driven Air Compressors; Hand Drills, Coal Drills; Internal Combustion Engines, Gas, Oil, Diesel and Semi-Diesel; Mine Hoists, Water and Air Lift Pumps, Vacuum Pumps, Sump Pumps; Pneumatic Percussive Tools for Smoothing, Polishing, Cutting, Engraving, or Otherwise Working Stone; Fluid Pressure Motors, Lubricators, Bolt Drivers, Drilling Stands, Sand and Ingot Mold Rammers, Stone Dressers, Portable Hoists, Track Drills, Spike Drivers, Hammer Drills; Air Conditioning Apparatus for Pneumatic Tools—Namely, Aftercoolers, Reheaters, Receivers, and Intercoolers; Asphalt Cutters, Backfill Tampers, Pneumatic Buffers, Chisel Blanks, Clay Diggers, Concrete Surfacers, Demolition Tools, Drill Steels, Holder-Ons, Nut Runners, Oil Well Rock Bits, Pavement Breakers, Rail-Bonding Drills, Rivet Sets, Power Wrenches, Screw Drivers, Sheeting Drivers, Staybolt Tappers, Tie Tampers, Tire-Regrooving Tools, Winches, and Parts Thereof.

Claims use since April, 1919 on pneumatic hammers, pneumatic riveters of all types, bolt drivers, rivet busters, flue expanders, scaling tools, pneumatic percussive tools, sand rammers, stone dressers, asphalt cutters, portable buffers, chisel blanks, demolition tools, holder-ons, rivet sets, stone tools, and pavement breakers; since July, 1919, on pumps and air and gas compressors of all types, internal-combustion engines of all types, air-conditioning apparatus for pneumatic tools; since Mar. 1, 1921, on drill steels, hammer and rock drills; since Oct. 17, 1921, on tire regrooving tools; since Jan. 1, 1922, on tie tampers; since May 18, 1922, on clay diggers; since Mar. 13, 1924, on close-quarter drills and coal drills, wood-boring drills and machines, track drills, corner drills, twist drills; since December, 1924, on air drills, pistol and rotary drills, drilling stands, chucks, nut runners, power wrenches, reamers, screw drivers, spike drivers, tapping machines including staybolt tappers; since Apr. 21, 1925, on fluid-pressure and air motors, hoists and winches; since Sept. 24, 1925, on grinders, lubricators; since Mar. 3, 1926, on ingot-mold rammers; since April, 1927, on rail-bonding drills; since May, 1928, on squeeze riveters; since Aug. 15, 1928, on sheeting and pile drivers; since May, 1929, on oil-well rock bits; since Nov. 6, 1929, on concrete surfacers, and since May 1, 1930, on sump pumps.

Ser. No. 316,072. HERCULES MOTORS CORPORATION, Canton, Ohio. Filed June 18, 1931.

HERCANO

For Internal Combustion Engines, Power Units and Accessories—Namely, Reduction Gears, and Clutches for Internal Combustion Engines and Power Units.

Claims use since June 10, 1931.

Ser. No. 316,384. THE SHARPLES SPECIALTY COMPANY, Philadelphia, Pa. Filed June 27, 1931.

DEOXATOR

For Machines for Purifying Oils.

Claims use since June 5, 1931.

Ser. No. 316,488. THE F. & N. LAWN MOWER COMPANY, doing business as The Henley Lawn Mower Co., Richmond, Ind. Filed June 30, 1931.

VIKING

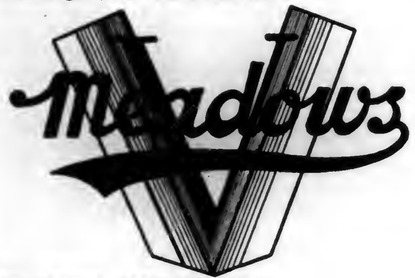
For Lawn Mowers.

Claims use since June 25, 1928.

CLASS 24

Laundry Appliances and Machines

Ser. No. 302,689. THE MEADOWS MANUFACTURING CO., Bloomington, Ill. Filed June 20, 1930.



For Laundry Washing Machines.

Claims use since Mar. 1, 1929.

Ser. No. 316,542. SOUTHERN MILLS, INCORPORATED, Atlanta, Ga. Filed July 1, 1931.

COTTON BLOSSOM

For Woven Cotton Feed Ribbons for Ironing Machines and the Like Ready for Use on Such Machines, and Laundry Net Bags.

Claims use since Feb. 12, 1931, on woven cotton feed ribbons for ironing machines and the like; since Apr. 17, 1931, on laundry net bags.

Ser. No. 316,656. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed July 6, 1931.

WASH-RITE

For Wash Boards.

Claims use since January, 1915.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 297,829. WATER WORKS SUPPLY COMPANY, San Francisco, Calif. Filed Mar. 24, 1930.

SENTRY GAUGE

No claim is made to the word "Gauge" appearing on the drawing apart from the mark as shown.

For Pressure Manometers and Liquid Column Gauges.

Claims use since Nov. 1, 1929.

Ser. No. 313,593. ELGIN SOFTENER CORPORATION, Elgin, Ill. Filed Apr. 21, 1931.

CONCENTROMETER

For Hydrometers for Measuring the Specific Gravity of Liquids.

Claims use since Feb. 6, 1930.

Ser. No. 315,114. SHELDON ELECTRIC CORPORATION, New York, N. Y. Filed May 27, 1931.

COLORSCOPE

For Instruments for Comparing Colors and Parts Thereof.

Claims use since Mar. 6, 1931.

Ser. No. 315,832. DEFIANCE SPARK PLUGS, INC., Toledo, Ohio. Filed June 15, 1931.

Defiance

For Spark Plug Testers.

Claims use since May 26, 1931.

Ser. No. 316,419. CHICAGO OPTICAL SUPPLY COMPANY, Chicago, Ill. Filed June 29, 1931.

COSCO

For Amoptiscopes, eyeglasses, spectacles, goggles, eye-protectors, eye-shields, bird-glasses, field-glasses, magnifying-glasses, reading-glasses, sun-glasses, ophthalmic-lenses, condensing-lenses, trial test-lenses, edged lenses, uncut lenses, lens-blanks, trial frames, trial sets, binoculars, loupes, lorgnettes, test-type cabinets, test-charts, test-cards, test-types, thermometers, compasses, fluoroscopes, combined ophthalmoscopes and retinoscopes, ophthalmoscopes, retinoscopes, ophthalmometers, eye-models, optometers, phorometers, prisoptometers, punctometers, rotary prisms, schematic eye-tests, "ski-optometer" automatic trial frames, pedometers, telescopes, axis-marking instruments, lens-centering machines, cement-segment setters, scale bifocal setters, eyeglass-fitting sets, calipers, eye-plates, eye-sizers, rim-stretchers, strap-gages, millimeter-gages, temple-gages, lens-gages, lens-measures, lens-sizers, millimeter-rules, pupillary measures, gold-testing needles, gold-weighing scales, neutralizing sets, tape-measures, muscle-tests, bifocal-lens holders, and eyeglass and spectacle mountings consisting of handles, frames, guards, end pieces, fronts, grab-backs, temples, temple-tubing, washers, screws, studs, springs, nose-rests, rims, bridges, comfort-pads, comfort-pad nose-cushions, and temple ear-protectors.

Claims use since Jan. 1, 1929.

Ser. No. 316,799. AGFA ANSCO CORPORATION, Binghamton, N. Y. Filed July 10, 1931.

BROVIRA

For Sensitized Photographic Paper.

Claims use since June 1, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 281,665. NOBUSU HONDA, San Francisco, Calif. Filed Apr. 1, 1929.



For Costume Jewelry—Namely, Novelty Necklaces Composed of Glass, Metal, or Composition Material, Pendants, and Earrings.
Claims use since Jan. 15, 1929.

Ser. No. 315,132. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed May 28, 1931.

NANETTE

For Bracelets.
Claims use since April, 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 310,090. BRACH-BELUCHE & CO., Buffalo, N. Y., assignor to S. F. Bowser & Company, Inc., of Fort Wayne, Ind., a Corporation of Indiana. Filed January 19, 1931.

FILTERVAC

No claim is made to the word "Filter" except in the association shown.
For Filters.
Claims use since Jan. 10, 1930.

CLASS 32

Furniture and Upholstery

Ser. No. 307,814. GREENPOINT METALLIC BED CO., INC., Brooklyn, N. Y. Filed Nov. 12, 1930.

GREEN ARROW

For Coil Springs for Beds, Mattresses, Daybeds, Etc., and Mattresses, Beds, and Daybeds.
Claims use since August, 1928.

Ser. No. 311,269. FURNITURE CORPORATION OF AMERICA, LTD., Portland, Oreg. Filed Feb. 20, 1931.



No claim is made to the words "Style Plus Value" apart from the mark shown in the drawing.
For Bedroom Furniture—Namely, Bedsteads, Bed Springs, Mattresses, Bureaus, Chiffoniers, Commodes, Dressing Tables; Dining Room Furniture—Namely, Buffets, China Closets, Chairs, Tables, Tea Wagons; Living Room Furniture—Namely, Arm Chairs, Davenports, Divans, Foot Stools, Desks, Occasional Tables, Occasional Chairs, Library Tables; and Steel Office Furniture—Namely, Desks, Chairs, Tables, Filing Cabinets, Book Cases, Typewriter Stands, and Telephone Stands.
Claims use since Nov. 1, 1930.

Ser. No. 312,990. FURNITURE CORPORATION OF AMERICA, LTD., Portland, Oreg. Filed Apr. 6, 1931.

BALTIC

For Bedroom Furniture—Namely, Bedsteads, Bed Springs, Mattresses, Bureaus, Chiffoniers, Commodes, Dressing Tables; Dining Room Furniture—Namely, Buffets, China Closets, Chairs, Tables, Tea Wagons; Living Room Furniture—Namely, Arm Chairs, Davenports, Divans, Foot Stools, Desks, Occasional Tables, Occasional Chairs, Library Tables; and Steel Office Furniture—Namely, Desks, Chairs, Tables, Filing Cabinets, Book Cases, Typewriter Stands, and Telephone Stands.
Claims use since Dec. 1, 1930.

Ser. No. 316,207. LOBDELL-EMERY MANUFACTURING CO., Alma, Mich. Filed June 24, 1931.

Herculease

For Folding Chairs, Folding Tables, and Serving Tables.
Claims use since Jan. 31, 1929.

Ser. No. 316,362. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed June 27, 1931.

KODASTAND

For Picture Frames and Standards Therefor.
Claims use since May 28, 1931.

Ser. No. 316,453. TELL CITY CHAIR COMPANY, Tell City, Ind. Filed June 29, 1931.

TEL-ROLL

For Chairs.
Claims use since June 18, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 316,470. EMBURY MANUFACTURING CO., Warsaw, N. Y. Filed June 29, 1931.

SUPREME

For Oil Lanterns.
Claims use since Jan. 20, 1916.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 314,209. RICH. KLINGER GESELLSCHAFT MIT BESCHRANKTER HAFTUNG, Gumpoldskirchen, Austria. Filed May 5, 1931.

RAK „Klinger"

For Brake Linings and Clutch Linings.
Claims use since January, 1931.

Ser. No. 315,125. ATLAS SUPPLY COMPANY, New York, N. Y. Filed May 28, 1931.



No claim is made to the representation of the goods nor to "Akron, Ohio. Made in U. S. A. 6.00—18."
For Rubber Tires.
Claims use since Mar. 19, 1929.

Ser. No. 316,454. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed June 29, 1931.



For Belts of Rubber and Fabric.
Claims use since Nov. 4, 1930.

CLASS 37

Paper and Stationery

Ser. No. 314,424. THE OFFICE SYSTEM PUBLISHING CO., Chicago, Ill. Filed May 11, 1931.

THE STANDARD ACCOUNT BOOK and Income Tax Record

The words "The Standard Account Book and Income Tax Record" are disclaimed apart from the mark as shown.
For Printed Book Consisting of Simplified Bookkeeping Forms.
Claims use since Mar. 31, 1931.

Ser. No. 314,425. THE OFFICE SYSTEM PUBLISHING CO., Chicago, Ill. Filed May 11, 1931.

THE KEY SYSTEM of Bookkeeping

The words "System of Bookkeeping" are disclaimed apart from the mark as shown.
For Printed Book Consisting of Simplified Blank Bookkeeping Forms.
Claims use since Feb. 12, 1931.

Ser. No. 315,723. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed June 12, 1931.

Charfain

For Charcoal Sticks for Use as Crayons and the Like.
Claims use since October, 1929.

Ser. No. 316,482. THE EVERETT PULP & PAPER COMPANY, Everett, Wash. Filed June 30, 1931.



The lining shown on the drawing is for the purpose of shading.
For Printing and Writing Paper, Calendered and Uncalendered Note Paper, Notebooks, Writing Tablets, Scratch Pads, Blank Books, Forms, Wrapping Paper, Tissue Paper, Mimeograph Paper, Typewriter Paper, Book Paper, Manila Tag Board, Paperboard.
Claims use since Aug. 30, 1897.

CLASS 38

Prints and Publications

Ser. No. 303,244. HERMAN N. BUNDESEN, Chicago, Ill. Filed July 8, 1930.



For Booklets.
Claims use since June 6, 1930.

Ser. No. 312,478. THE FIRMAN L. CARSWELL MFG. CO., Kansas City, Mo. Filed Mar. 24, 1931.

HIGHWAYS OF HAPPINESS

For Monthly Publication.
Claims use since Jan. 1, 1931.

Ser. No. 313,087. THE MEYERCORD CO., Chicago, Ill. Filed Apr. 8, 1931.

DU-CAL

For Decalcomania Transfers.
Claims use since August, 1926.

Ser. No. 313,994. CATHOLIC PUBLISHING SOCIETY, INC., Denver, Colo. Filed Apr. 30, 1931.

THE REGISTER

For Periodical Newspaper of Interest to Followers of the Catholic Religion.
Claims use since Jan. 1, 1925.

Ser. No. 315,593. PERCY L. CROSBY, McLean, Va. Filed June 9, 1931.

HOIMAN NORTHROP

For Drawings for Reproduction, as in Prints and Publications.
Claims use since 1926.

Ser. No. 316,239. FAMOUS INSURERS OF HISTORY, INCORPORATED, Watertown, N. Y. Filed June 25, 1931.

FAMOUS INSURERS OF HISTORY

For Printed Advertising Service Portraying Historical Events Sold to the Trade as Such.
Claims use since June 16, 1931.

Ser. No. 316,431. THE HEALD MACHINE COMPANY, Worcester, Mass. Filed June 29, 1931.

THE HEALD HERALD

For Periodical Publication.
Claims use since Aug. 1, 1917.

Ser. No. 316,532. F. W. DODGE CORPORATION, New York, N. Y. Filed July 1, 1931.

The DODGE PUBLIC WORKS BULLETIN

For Daily Construction News Bulletin Relating to Public Works Projects.
Claims use since June 16, 1931.

Ser. No. 316,550. CALIFORNIA BANKERS ASSOCIATION, San Francisco, Calif. Filed July 2, 1931.

The CALIFORNIA BANKER

For Publication Issued Periodically.
Claims use since June 15, 1931.

Ser. No. 316,587. GEHRING PUBLISHING COMPANY, INC., New York, N. Y. Filed July 3, 1931.

HOTEL WORLD-REVIEW PICTORIAL

For Monthly Magazine.
Claims use since May, 1931.

Ser. No. 316,609. THE PARENTS' PUBLISHING ASSOCIATION, INC., New York, N. Y. Filed July 3, 1931.

FEEDING THE FAMILY

For Section in a Monthly Magazine.
Claims use since June, 1928.

Ser. No. 316,620. WAKEFIELD ITEM COMPANY, Wakefield, Mass. Filed July 3, 1931.

WAKEFIELD DAILY ITEM

For Newspaper Published Daily Except Sundays and Legal Holidays.
Claims use since May 7, 1894.

Ser. No. 316,641. GUILD OF PRESCRIPTION OPTICIANS OF AMERICA, INC., Philadelphia, Pa. Filed July 6, 1931.

Guildcraft

For Periodical Publication.
Claims use since September, 1928.

Ser. No. 316,785. REVIEW PUBLISHING AND PRINTING COMPANY, Philadelphia, Pa. Filed July 9, 1931.

AMERICAN EXCHANGE & REVIEW

For Monthly Magazine.
Claims use since February, 1862.

CLASS 39

Clothing

Ser. No. 296,329. ETABLISSEMENTS ANDRÉ GILLIER, SOCIÉTÉ ANONYME, Troyes, France. Filed Feb. 21, 1930.

JIL KNIT

No claim is made herein to the use of the word "Knit" apart from the mark as shown.

For the Following Articles of Clothing for Men, Women and Children, Made of Knitted Fabrics of Silk, Wool, or Other Material—to wit, Drawers, Morning Jackets, Sex-Hiding Dresses, Tights, Vests, Pantaloons, Combination Waists and Petticoats, Slips, Robes Including Town Dresses, Sport Dresses, House-Dresses, and Evening Dresses; Cloaks, Skirts, Sweaters, Ensembles of Two or Three Pieces—i. e., Skirt and Pull-Over; Pull-Over, Skirt and Waistcoat, or Pull-Over With Beret, Having the Same Design or Shade and Forming an Ensemble; and Berets.

Claims use since Jan. 6, 1930.

Ser. No. 296,553. SUNNY CHILD UNDERWEAR COMPANY, New York, N. Y. Filed Feb. 26, 1930.

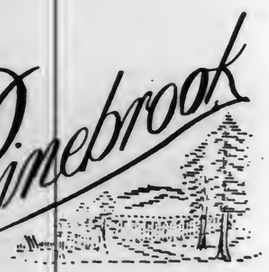
Sunny Child

For Children's Underwear.

Claims use since October, 1926.

Ser. No. 305,894. LOUIS D. BIERS, New York, N. Y. Filed Sept. 20, 1930.

Pinebrook



The word "Pinebrook" is disclaimed apart from the mark shown on the drawing.

For Ladies' Hats.

Claims use since May 15, 1929.

Ser. No. 305,918. AKCIOVÁ SPOLEČNOST TOVÁREN NA FEZY, Strakonice, Czechoslovakia. Filed Sept. 22, 1930.



For Wearing Apparel for Men, Women, and Children—Namely, Vests, Pullovers, Sweaters, Under and Outer Skirts, Breeches, Trousers, and Coats.

Claims use since Mar. 22, 1930.

Ser. No. 312,852. WM. R. MOORE DRY GOODS COMPANY, Memphis, Tenn. Filed Apr. 2, 1931.

RED MULE

The word and symbol of the mark are limited to red color.

For Work Shirts and Overalls.

Claims use since Jan. 1, 1931.

Ser. No. 313,910. LEO J. GOLDBERGER, doing business as L. WOHL & CO., New York, N. Y. Filed Apr. 28, 1931.

WOHLINE ROMPERETTE

For Children's Suits, Dresses, and Rompers.

Claims use since Mar. 11, 1931.

Ser. No. 314,794. GEORGE FROST COMPANY, Boston, Mass. Filed May 20, 1931. Under section 5b of the act of 1905 as amended in 1920.

The Boston Brace

No claim is made herein to the exclusive use of the word "Brace" apart from the mark shown.

For Suspenders and Braces.

Claims use since Mar. 1, 1929.

Ser. No. 315,519. BELDEN-EVANS CO., Minneapolis, Minn. Filed June 8, 1931.

Jamos

For Children's Pajamas.

Claims use since Apr. 24, 1931.

Ser. No. 315,521. BELDEN-EVANS CO., Minneapolis, Minn. Filed June 8, 1931.

Pa - Jamo

For Men's Pajamas.

Claims use since Apr. 24, 1931.

Ser. No. 315,810. VALORBILT CLO. CO., St. Louis, Mo. Filed June 13, 1931.

Valorbilt

For Men's and Boys' Clothing—Namely, Suits, Coats, Top-Coats, Over-Coats, Trousers, and Vests.

Claims use since May 15, 1931.

Ser. No. 315,947. TUTELMAN & KOHN, Philadelphia, Pa. Filed June 16, 1931.



The word "Hollywood" is herein disclaimed apart from the mark as shown on the drawing.

For Dress Shirts, Negligee Shirts, and Work Shirts for Men and Boys, and Pajamas for Men and Boys.

Claims use since March, 1929.

Ser. No. 316,003. ELDER MANUFACTURING COMPANY, St. Louis, Mo. Filed June 18, 1931.

Sunlake

For Men's and Boys' Dress and Negligee Shirts and Boys' and Children's Waists and Blouses.

Claims use since Mar. 14, 1928.

Ser. No. 316,102. I. SCHNEIERSON & SONS, INC., New York, N. Y. Filed June 20, 1931.

KREPECRAFT

For Ladies' Chemises, Princess Slips, Bloomers, Step-Ins, Nightgowns, Pajamas, and Step-In Drawers of a Textile Fabric.

Claims use since July 10, 1929.

Ser. No. 316,123. ESSEX RUBBER COMPANY INC., Trenton, N. J. Filed June 22, 1931.

SAND-PIPER SANDAL

No claim is made to the word "Sandal" apart from the mark shown in the drawing.

For Rubber Shoes and Sandals.

Claims use since June 17, 1931.

Ser. No. 316,254. BROWNSTEIN-LOUIS COMPANY, Los Angeles, Calif. Filed June 25, 1931.

SOPHOMORE BLUES

No claim is made to the word "Blues" apart from the mark shown in the drawing.

For Men's and Boys' Pants and Trousers.

Claims use since Mar. 23, 1931.

Ser. No. 316,348. UNITED SHOE MACHINERY CORPORATION, Boston, Mass., and Paterson, N. J. Filed June 26, 1931.



For Rubber Heels.

Claims use since June 3, 1929.

Ser. No. 316,928. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed July 14, 1931.

PARKTOWN

For Coats, Vests, Pants, and Overcoats for Men and Boys.

Claims use since Apr. 20, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 310,919. PEBO & DANIELS, INC., Jamaica Plain, Mass. Filed Feb. 10, 1931.

TA-LACET

Applicant disclaims the right to the exclusive use of the word "Lacet" apart from the mark as shown in the drawing.

For Shoe Laces.

Claims use since Aug. 1, 1930.

Ser. No. 312,593. ASSEMBLED PRODUCTS COMPANY, INC., New York, N. Y. Filed Mar. 27, 1931.

BLOSSOM



For Cotton Bias Binding, Silk Bias Binding, Rayon Bias Binding, and Rayon Alpaca Bias Binding.
Claims use since July, 1930.

Ser. No. 316,428. EVERLASTIK, INC., Chelsea, Mass. Filed June 29, 1931.

Fashionlastik

For Narrow Elastic Webbing.
Claims use since May 29, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 315,859. CHARLES S. MERTON & CO., New York, N. Y., and East Rutherford, N. J. Filed June 15, 1931.



No claim is made to the exclusive use of the words "New York" apart from the mark as shown in the drawing.
For Silk, Satin, Rayon, Cotton, Wool, Woven, Knitted and/or Netted, and Pile Fabrics and/or Combinations Thereof in the Piece, Textile Steamer Robes, and Motor Robes and Textile Rugs.
Claims use since Sept. 9, 1930.

Ser. No. 315,860. CHARLES S. MERTON & CO., New York, N. Y., and East Rutherford, N. J. Filed June 15, 1931.



For Silk, Satin, Rayon, Cotton, Wool, Woven, Knitted and/or Netted, and Pile Fabrics and/or Combinations Thereof in the Piece, Textile Steamer Robes, and Motor Robes and Textile Rugs.
Claims use since Sept. 9, 1930.

Ser. No. 316,182. AMSTERDAM TEXTILES, Amsterdam, N. Y. Filed June 24, 1931.



The lining on the drawing is to indicate that the inner panel is red. The words "Rugs Runners" are not claimed except in connection with the mark as illustrated.
For Textile Rugs and Runners.
Claims use since Oct. 1. 1930.

Ser. No. 316,189. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 24, 1931.

MIRANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 20, 1931.

Ser. No. 316,191. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 24, 1931.

SOIRANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 20, 1931.

Ser. No. 316,417. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

SOLANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

Ser. No. 316,638. CHARLES GOLDMAN, doing business as Atlas Mills, New York, N. Y. Filed July 6, 1931.

One Twenty Nine

For Textile Fabrics—Namely Silk Piece Goods.
Claims use since February, 1925.

Ser. No. 316,639. CHARLES GOLDMAN, doing business as Atlas Mills, New York, N. Y. Filed July 6, 1931.

Ten Sixty Nine

For Textile Fabrics—Namely, Silk Piece Goods.
Claims use since July, 1925.

Ser. No. 316,640. CHARLES GOLDMAN, doing business as Atlas Mills, New York, N. Y. Filed July 6, 1931.

Ten Thirty Eight

For Textile Fabrics—Namely, Silk Piece Goods.
Claims use since July, 1925.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 310,234. GENERAL ELECTRIC VAPOR LAMP COMPANY, Hoboken, N. J. Filed Jan. 21, 1931.

COOPER HEWITT

For Gaseous Electric Discharge Devices as Sources of Ultra-Violet and Other Light for Therapeutic and Diagnostic Purposes and for Medical and Surgical Use, and Parts for Said Gaseous Electric Discharge Devices.
Claims use since Feb. 23, 1929.

Ser. No. 315,506. SURGIDENT, LTD., Los Angeles, Calif. Filed June 6, 1931.

DENTASORB

For Dentists' and Surgeons' Absorbent Material in the Form of a Roll.
Claims use since May 19, 1931.

Ser. No. 316,270. THE KAHLENBERG LABORATORIES, INC., Two Rivers, Wis. Filed June 25, 1931.

K·L

For Surgical Sutures.
Claims use since June 7, 1931.

Ser. No. 316,272. KLEISTONE RUBBER CO., INC., Warren, R. I. Filed June 25, 1931.

FIFTH AVENUE

For Leg Cushion Used with a Surgical Splint.
Claims use since Apr. 18, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 312,349. O. WALTER PEES, Richmond Hill, L. I., N. Y. Filed Mar. 20, 1931.

Coffee-Royal

For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks, Sirups and Extracts for Making the Same.
Claims use since Mar. 1, 1928.

Ser. No. 312,916. HOLLYWOOD PRODUCTS COMPANY, LTD., Glendale, Hollywood, and Los Angeles, Calif. Filed Apr. 3, 1931.



The lines on the drawing are for shading purposes only and do not represent color.
For Non-Alcoholic, Noncereal Maltless Beverages Sold as Soft Drinks and Syrups, Extracts, and Concentrates for Preparing the same.
Claims use since Aug. 1, 1930.

Ser. No. 314,951. FRUIT INDUSTRIES, LTD., San Francisco, Calif. Filed May 23, 1931.

WINE HAVEN

No claim is made to the word "Wine" except in association with the word "Haven".
For Concentrated Grape Juice and Beverages Made Therefrom.
Claims use since Apr. 23, 1931.

Ser. No. 315,650. FRANK ROTELLA, doing business as Rotella's Beverages, Newark, N. J. Filed June 10, 1931.

GASSOSINA

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts Used in Making the Same.
Claims use since Apr. 27, 1931.

Ser. No. 316,519. CEAL ASSELIN, doing business as Del Rio Products Company, Dayton, Ohio. Filed July 1, 1931.

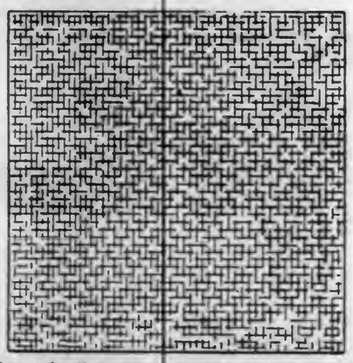
Del Rio

For Non-Alcoholic Maltless Beverage Sold as a Soft Drink Containing Coffee Extract Syrup.
Claims use since Apr. 1, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 278,078. THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y., assignor to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed Jan. 16, 1929.



Applicant is the owner of the trade-mark shown in registration No. 10,001. The trade-mark consists of a distinct yellow square facing-piece or label as a trade-mark. The lining on the drawing indicates the color yellow.
For Yeast.
Claims use since Jan. 30, 1876.

Ser. No. 297,436. JUILLARD COCKCROFT CORPORATION, doing business as Juillard Cockcroft Company, Watsonville, Calif. Filed Mar. 17, 1930.

HACIENDA

For Canned Fruits, Canned Vegetables, Canned Fish, Mayonnaise, Jellies, Pickles, Condiments, Namely Pimentos, Mustard and Chili; Bird Seed, Olives in Glass, Honey, Fruit Preserves, Brown Bread, Sandwich spread, and Peanut Butter.
Claims use since Jan. 6, 1930.

Ser. No. 299,658. MAX HYTKEN, doing business as Banana Royal Peanut Co., Ruleville, Miss. Filed Apr. 29, 1930.

BANANA ROYAL

For Toasted Peanuts.
Claims use since Jan. 1, 1930.

Ser. No. 300,404. COACHELLA VALLEY CITRUS ASSOCIATION, Thermal, Calif. Filed May 18, 1930.



The geographical words "Coachella Valley" are disclaimed apart from the mark shown on the drawing.
For Fresh Grapefruit and Tangerines.
Claims use since Nov. 14, 1927.

Ser. No. 302,044. SEGO MILK PRODUCTS COMPANY, Salt Lake City, Utah. Filed May 31, 1930.

SEGO

Applicant is the owner of registration No. 84,441.
For Butter, Cheese, Powdered Skim Milk and Casein.
Claims use since May 28, 1917, on butter; since 1922, on cheese; since 1929, on powdered skim milk and casein.

Ser. No. 305,060. TRIPLE "XXX" COMPANY, Galveston, Tex. Filed Aug. 26, 1930.



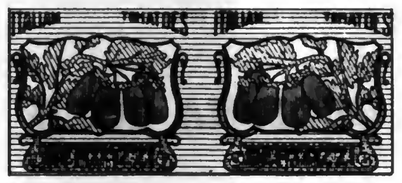
For Sandwiches and Condiment Sauce Suitable for Use in Sandwiches.
Claims use since July 15, 1930.

Ser. No. 306,529. THE JAMES G. GILL COMPANY, Norfolk, Va. Filed Oct. 8, 1930.

GILL'S HOTEL SPECIAL

The word "Special" alone is disclaimed. Applicant is the owner of Trade-Mark No. 141,413, registered Apr. 19, 1921.
For Coffee and Tea and Coffee Compounds.
Claims use since 1901.

Ser. No. 308,313. SOCIETA ANONIMA BERTOZZI, Parma, Italy. Filed Nov. 25, 1930.



The lining on the drawing represents the color red, the color blue, the color yellow and the color green. Applicant makes no claim to the exclusive use of the pictorial representation of the goods or any of the words shown on the drawing except the word "Bertozzi."
For Canned Tomatoes, Peeled Tomatoes, and Tomato Sauce.
Claims use since Jan. 1, 1918.

Ser. No. 308,835. NEW ENGLAND CONFECTIONERY COMPANY, Cambridge, Mass. Filed Dec. 10, 1930.

TOM THUMB

For Candy.
Claims use since 1889.

Ser. No. 308,949. THE PHARMA-CRAFT CORPORATION, Louisville, Ky. Filed Dec. 13, 1930.

PHARMA-CRAFT

For Dietetic Foods and Ingredients Thereof—Namely, Food Sweeteners and Flour.
Claims use since Oct. 10, 1930.

Ser. No. 309,122. F. DURBAN CRESPO Y CIA, Seville, Spain. Filed Dec. 18, 1930.



Applicant disclaims the name "Durban" except in the precise relation and association in which the same appears herein.
For Olive Oil.
Claims use since May 19, 1930.

Ser. No. 310,165. D. GOLDENBERG, INC., Philadelphia, Pa. Filed Jan. 20, 1931.

OKAY KERNEL

For Candy.
Claims use since Jan. 8, 1931.

Ser. No. 310,193. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Jan. 20, 1931.



No claim is made to the word "Coffee" apart from the trade-mark as shown in the drawing. In the drawing the

cross-hatching is intended to indicate the color orange in which the portions of the trade-mark so cross-hatched have customarily been printed and which is particularly claimed.

For Coffee.

Claims use since Dec. 19, 1930.

Ser. No. 311,221. AMERICAN BEET SUGAR COMPANY, Denver, Colo. Filed Feb. 19, 1931.



Applicant is the owner of registration 101,246. Applicant makes no claim to the word "Sugar" or the word "Crystal" apart from the mark shown in the drawing. The shading in the drawing is to indicate color, the circles being blue and the lettering red.

For Sugar.

Claims use since Mar. 1, 1930.

Ser. No. 312,722. SOUTH DAKOTA POULTRY IMPROVEMENT BOARD, Sioux Falls, S. Dak. Filed Mar. 30, 1931.



No claim is herein made to the representation of the hen and chicken apart from the mark as shown.

For Live Baby Chicks, and Hatching Eggs.

Claims use since July 8, 1930.

Ser. No. 312,925. PHILIP R. PARK LABORATORIES INC., Los Angeles, Calif. Filed Apr. 3, 1931.

MACROMAR

For Park-Processed, Dried, Ground, Macrocystis Pyrifera, a Species of Marine Algæ or Sea Plant, More Commonly Known as Kelp.

Claims use since Jan. 9, 1931.

Ser. No. 313,351. RAVARINO & FRESCHI IMPORTING & MANUFACTURING COMPANY, St. Louis, Mo. Filed Apr. 14, 1931.



The word "Spaghetti" is disclaimed apart from the other features of the mark shown in the drawing.

For Alimentary Pastes.

Claims use since July 1, 1928.

Ser. No. 314,093. WM. B. BRADSHAW & SONS, Cartersville, Ga. Filed Apr. 30, 1931.

GEORGIA GOLD

For Butter and Ice Cream.

Claims use since Sept. 1, 1929.

Ser. No. 314,121. FELIX A. MITCHEM, Oklahoma City, Okla. Filed May 2, 1931.

Chickburger
SANWICH

The descriptive word "Sanwich" is disclaimed apart from the mark as shown in the drawing.

For Sandwiches.

Claims use since Jan. 1, 1930.

Ser. No. 314,154. CRAMPTON CANNERIES, INC., Celina, Ohio. Filed May 4, 1931.

Sun-Blest

For Canned Vegetables and Pickles.

Claims use since 1919.

Ser. No. 314,444. JULIUS W. CAIN, Dallas, Tex. Filed May 12, 1931.



The word "Barbecue" is disclaimed apart from the other features of the mark shown in the drawing.

For Barbecued Meats, Barbecue Sauce, and Prepared Sandwiches.

Claims use since July 1, 1926.

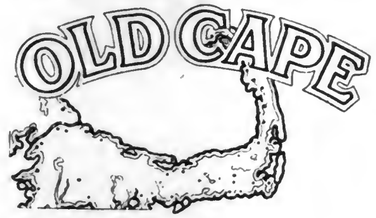
Ser. No. 315,404. HEALTH CANDIES, INC., Miami, Fla. Filed June 4, 1931.

STAR DUST

For Candies.

Claims use since May 23, 1931.

Ser. No. 315,589. P. BALLANTINE AND SONS, Newark, N. J. Filed June 9, 1931.



For Malt Syrup.

Claims use since May 12, 1931.

Ser. No. 315,667. AMERICAN CHEWING PRODUCTS CORPORATION, Newark, N. J. Filed June 11, 1931.

REGU-LAX

For Candy Coated Chewing Gum.

Claims use since Mar. 7, 1927.

Ser. No. 315,750. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Filed June 12, 1931.

HER GRACE

For Coffee.

Claims use since June 1, 1931.

Ser. No. 315,855. MCILHENNY COMPANY, New Iberia, La. Filed June 15, 1931.



The drawing is lined to indicate the colors red and green. No claim is made for the representation of a carton, the representation of a bottle, or to the wording appearing on the drawing, with the exception of the word "Tabasco" and the applicant's name, which are specifically claimed.

For Pepper Sauce.

Claims use since Apr. 6, 1931.

Ser. No. 315,861. SIREN MILLS CORPORATION, Chicago, Ill. Filed June 15, 1931.

Siren

For Prepared Chocolate Syrups, Chocolate Ice Cream Coating, Chocolate Candy Coating, and Chocolate Bars.

Claims use since Jan. 2, 1923, on prepared chocolate syrups; since Mar. 1, 1930, on chocolate ice cream coating and chocolate candy coating, and since Nov. 1, 1929, on chocolate bars.

Ser. No. 315,891. HENRY BECKER & SON, INC., Roseland, N. J. Filed June 16, 1931.



The drawing is lined to represent the color red. The words "Grade" and "Raw A" "Exclusively" and "Roseland, N. J." are disclaimed apart from the mark as shown on the drawing. No claim is made to the representation of the bottle.

For Milk.

Claims use since Feb. 15, 1931.

Ser. No. 315,892. HENRY BECKER & SON, INC., Roseland, N. J. Filed June 16, 1931.

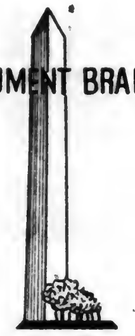


The drawing is lined to represent the color blue, the words "Grade" and "Raw," "A," "Exclusively," and "Roseland, N. J." are disclaimed apart from the mark as shown in the drawing. No claim is made to the representation of the bottle.

For Milk.

Claims use since Feb. 15, 1931.

Ser. No. 315,930. CONSTANTINE ROUMEL, doing business as O. K. Peanut Company and O. K. Nut Company, Washington, D. C. Filed June 16, 1931.



The word "Brand" is disclaimed.

For Candies, Candied and Salted Nuts and Nuts in Their Natural State.

Claims use since October, 1924.

Ser. No. 316,021. FLORENCE A. THOMSON, doing business as Floriana Candy Co., Philadelphia, Pa. Filed June 18, 1931.

Alaska ICE Mints

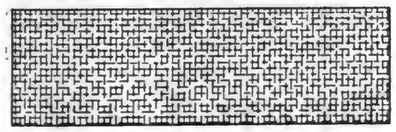
No claim is made apart from the mark shown in the drawing to the words "Alaska" and "Mints."

For Candy, More Particularly Crystalline Mints.

Claims use since Apr. 29, 1931.

Ser. No. 316,083. COLLIN COUNTY MILL & ELEVATOR CO., McKinney, Tex. Filed June 20, 1931.

GOLD BAND



The drawing is lined to indicate a gold coloring.

For Poultry and Stock Feed.

Claims use since Apr. 13, 1931.

Ser. No. 316,258. JOSEPH DI SANTO, doing business as Di Santo & Company, Duluth, Minn. Filed June 25, 1931.

CAVOUR



The name and portrait is that of Count Camillo Benso di Cavour, deceased, Italian statesman of the nineteenth century, born in 1810, and first premier of the new Kingdom of Italy.

For Malt Syrup.

Claims use since Jan. 16, 1931.

Ser. No. 316,264. DORA M. GOTTFRIED, doing business as The Dorett Co., Allston, Mass. Filed June 25, 1931.

DORETT'S

For Mayonnaise.

Claims use since May 28, 1931.

Ser. No. 316,310. NASH-FINCH CO., Minneapolis, Minn., and Oklahoma City, Okla. Filed June 15, 1931.

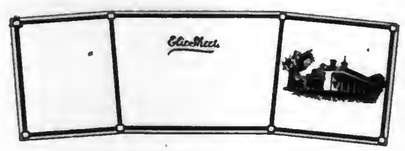


The descriptive notation "Special Pack Tomatoes" and the pictorial representation of tomatoes shown on the drawing are hereby disclaimed apart from the other features of the mark, but are claimed when taken in connection with the other features of the mark.

For Fresh Ripe Uncanned Tomatoes.

Claims use since Nov. 1, 1923.

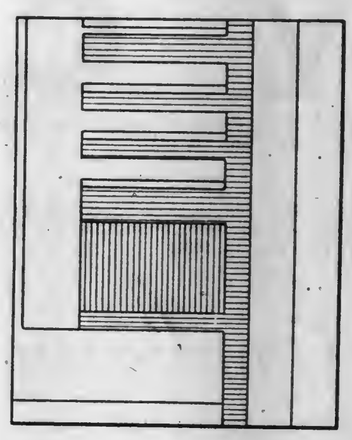
Ser. No. 316,351. MARTHA WASHINGTON CANDIES COMPANY, Chicago, Ill. Filed June 26, 1931.



For Ice Cream.

Claims use since May 20, 1931.

Ser. No. 316,361. THE CURTISS CANDY COMPANY, Chicago, Ill. Filed June 27, 1931.



The drawing is lined for the colors blue and red.

For Chewing Gum.

Claims use since Apr. 27, 1931.

Ser. No. 316,533. SAMUEL KASSER, doing business as Union Products Co., Philadelphia, Pa. Filed July 1, 1931.

COLONIAL

For Malt Syrup.

Claims use since June 6, 1931.

Ser. No. 316,722. R. FAIR, Modesto, Calif. Filed July 8, 1931.

CAREPAK

For Dried Fruit.

Claims use since June 18, 1931.

Ser. No. 316,750. SIMONS & FRENCH CO., INC., New York, N. Y. Filed July 8, 1931.

R. L.

For Fresh Vegetables, Fresh Citrus Fruits, Fresh Deciduous Fruits.

Claims use since Apr. 21, 1931.

Ser. No. 316,751. SIMONS & FRENCH CO., INC., New York, N. Y. Filed July 8, 1931.

Y. C.

For Fresh Citrus Fruits, Fresh Deciduous Fruits.
Claims use since Apr. 20, 1931.

Ser. No. 316,927. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Company, Cincinnati, Ohio. Filed July 14, 1931.

Embassy

For Candies, Namely, Mint Patties.
Claims use since June 10, 1931.

Ser. No. 316,928. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Company, Cincinnati, Ohio. Filed July 14, 1931.

May Gardens

For Tea.
Claims use since June 10, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 315,113. CHARLES SCHALLITZ, Milwaukee, Wis. Filed May 27, 1931.

German STYLE
SODA BREW
CINCINNATI
TRADE MARK

The drawing is lined for shading only. No claim is made to the words appearing on the drawing except in the association shown.
For Malt Beverage Containing Less Than One-Half of One Per Cent Alcohol, by Volume.
Claims use since Mar. 1, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 306,608. KENWORTHY BROTHERS COMPANY, Westboro, Mass. Filed Oct. 10, 1930.

KENEVA

For Sheet Material Composed of Chemically Treated Textile Fabric.
Claims use since May, 1922.

Ser. No. 315,176. ART PAINT POSTER COMPANY, Chicago, Ill. Filed May 29, 1931.

CHANGE-O-FLASH

No claim is made to the words "Change" and "Flash" apart from the mark as shown.
For Display Signs of the Box Type.
Claims use since July 1, 1929.

Ser. No. 315,870. RADIO CONDENSER COMPANY, Camden, N. J. Filed June 15, 1931.

CAMDEN
R-C-A
NEW JERSEY

No claim is made to the words "Camden, New Jersey."
For Non-Electric Traffic Signals.
Claims use since May 11, 1931.

Ser. No. 316,559. GLOBE AMERICAN CORPORATION, Kokomo, Ind. Filed July 2, 1931.

SILVER HEN

For Brooders.
Claims use since Oct. 10, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

AUGUST 18, 1931

286,100. HOSIERY. LANNER BROTHERS, New York, N. Y. Filed November 28, 1930. Serial No. 308,375. PUBLISHED JUNE 2, 1931. Class 39.

286,101. ELECTRICALLY-ILLUMINATED AUTOMOBILE DIRECTION SIGNAL SEMAPHORE. JOHNSTON ELECTRIC AUTOMOBILE SIGNAL CO., Des Moines, Iowa.
Filed March 3, 1930. Serial No. 296,746. PUBLISHED JUNE 2, 1931. Class 21.

286,102. LITHOGRAPHICALLY PRINTED ARTICLES, ETC. THEO. A. SCHMIDT LITHOGRAPHING COMPANY, Chicago, Ill.
Filed October 22, 1930. Serial No. 307,060. PUBLISHED JUNE 2, 1931. Class 38.

286,103. MEN'S PROFESSIONAL AND WORK UNIFORMS—NAMELY, COATS, SMOCKS, GOWNS, FROCKS, CAPS, NECKTIES, VESTS, AND APRONS. LEO M. COOPER, doing business as Leo M. Cooper Co., New York, N. Y.
Filed November 6, 1930. Serial No. 307,655. PUBLISHED JUNE 2, 1931. Class 39.

286,104. PREPARATION IN POWDER FORM TO BE ADDED TO OTHER INGREDIENTS IN THE PREPARATION OF ICINGS, TOPPINGS, AND THE LIKE. VIRGINIA DARE EXTRACT COMPANY, INC., Brooklyn, N. Y.
Filed November 11, 1930. Serial No. 307,768. PUBLISHED JUNE 2, 1931. Class 46.

286,105. HATS FOR MEN. KNOX HAT COMPANY, INC., New York, N. Y.
Filed November 11, 1930. Serial No. 307,779. PUBLISHED JUNE 2, 1931. Class 39.

286,106. COMBINATION WORK SUITS, OVERALLS, DUNGAREES, SHIRTS, WORK TROUSERS, AND BREECHES FOR MEN AND BOYS. LEON STRAUSS, doing business as Phoenix Manufacturing Company, Baltimore, Md.
Filed September 23, 1930. Serial No. 305,984. PUBLISHED MAY 26, 1931. Class 39.

286,107. CERTAIN NAMED WEARING APPAREL. NIHON TABI KABUSHIKI KAISHA, Kurume, Japan.
Filed July 29, 1930. Serial No. 304,086. PUBLISHED JUNE 2, 1931. Class 39.

286,108. WOMEN'S, MISSES', AND CHILDREN'S HATS. GROSS MILLINERY CO., INC., Trenton, N. J.
Filed August 13, 1930. Serial No. 304,555. PUBLISHED JUNE 2, 1931. Class 39.

286,109. MACHINE TOOLS—NAMELY, MILLING MACHINES AND CUTTER GRINDERS. THE CINCINNATI MILLING MACHINE COMPANY, Cincinnati, Ohio.
Filed October 19, 1929. Serial No. 291,266. PUBLISHED NOVEMBER 25, 1930. Class 23.

286,110. GUIDE TO SHOPPERS, PRINTED WEEKLY. GLADYS E. BROOKS, doing business as Spokane Shopping News, Spokane, Wash.
Filed January 20, 1930. Serial No. 294,955. PUBLISHED JUNE 2, 1931. Class 38.

286,111. OILS AND GREASES. BEACON OIL COMPANY, Boston, Mass., by change of name Colonial Beacon Oil Company.
Filed April 11, 1930. Serial No. 298,684. PUBLISHED MAY 26, 1931. Class 15.

286,112. HONEY. COLORADO HONEY SALES CORPORATION, Montrose, Colo., and Elmhurst, N. Y.
Filed April 14, 1930. Serial No. 298,792. PUBLISHED JUNE 2, 1931. Class 46.

286,113. BUSINESS HISTORY CHARTS AND COMPILATIONS THEREOF. ONTARIO FINANCE CORPORATION, Rochester, N. Y.
Filed April 17, 1930. Serial No. 299,010. PUBLISHED JUNE 9, 1931. Class 38.

286,114. CHEESE. HENRY SCARAMELLI INC., New York, N. Y.
Filed April 22, 1930. Serial No. 299,282. PUBLISHED MAY 26, 1931. Class 46.

286,115. UNDERWEAR. THE B. V. D. COMPANY, INC., Baltimore, Md.
Filed May 28, 1930. Serial No. 301,400. PUBLISHED MAY 26, 1931. Class 39.

286,116. BOOKS, PAMPHLETS, POSTERS, ETC. CARROLL N. SMITH, Boston, Mass.
Filed May 30, 1930. Serial No. 301,767. PUBLISHED JUNE 9, 1931. Class 38.

286,117. PERIODICAL PUBLICATION. THE ESTATE STOVE COMPANY, Hamilton, Ohio.
Filed January 12, 1929. Serial No. 277,875. PUBLISHED JUNE 2, 1931. Class 38.

286,118. CANNED FRUITS AND FRUIT PRESERVES, CANNED VEGETABLES, CANNED SEA FOOD, ETC. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio.
Filed February 23, 1929. Serial No. 279,795. PUBLISHED MAY 26, 1931. Class 46.

286,119. COFFEE. CAMPBELL HOLTON & CO., Bloomington, Ill.
Filed April 3, 1929. Serial No. 281,765. PUBLISHED MAY 26, 1931. Class 46.

286,120. MACHINE TOOLS—VIZ., GRINDING MACHINES FOR THE PRODUCTION OF SURFACES OF REVOLUTION — NAMELY, CENTER-TYPE GRINDERS, CENTERLESS-TYPE GRINDERS, AND INTERNAL GRINDERS. CINCINNATI GRINDERS INCORPORATED, Cincinnati, Ohio.
Filed October 19, 1929. Serial No. 291,264. PUBLISHED DECEMBER 2, 1930. Class 23.

286,121. CANNED TOMATOES. SCHROEDER BROTHERS, INC., doing business as Albarosa Packing Co., New York, N. Y.
Filed December 3, 1930. Serial No. 308,556. PUBLISHED MAY 26, 1931. Class 46.

286,122. HOSIERY. EMIL SABATH, doing business as Dorsell Hosiery Co., not Inc., Chicago, Ill.
Filed January 8, 1931. Serial No. 309,741. PUBLISHED MAY 26, 1931. Class 39.

286,123. CREEPERS, ROMPERS, AND BABY BOYS' AND BABY GIRLS' SUITS AND DRESSES. SMILEY-HEIDE, INC., New York, N. Y.
Filed March 2, 1931. Serial No. 311,641. PUBLISHED MAY 26, 1931. Class 39.

286,124. SEASONING FOR SAUSAGES, MEATS, AND OTHER FOODS. A. C. LEGG PACKING CO. INC., Birmingham, Ala.
Filed March 6, 1931. Serial No. 311,841. PUBLISHED JUNE 2, 1931. Class 46.

286,125. DRESS AND NEGLIGEE SHIRTS. JAMES S. FULLER, INC., Kingston, N. Y.
Filed March 19, 1931. Serial No. 312,297. PUBLISHED MAY 26, 1931. Class 39.

286,126. MEN'S AND BOYS' DRESS, NEGLIGEE, AND WORK SHIRTS. BROADSTREETS, INC., New York, N. Y.
Filed March 23, 1931. Serial No. 312,410. PUBLISHED JUNE 2, 1931. Class 39.

286,127. FROZEN CONFECTIONS. THE EMPIRE SALES COMPANY, Waterbury, Conn.
Filed March 23, 1931. Serial No. 312,421. PUBLISHED JUNE 2, 1931. Class 46.

286,128. WRAPPING PAPER. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa.
Filed March 24, 1931. Serial No. 312,485. PUBLISHED JUNE 2, 1931. Class 37.

286,129. ELECTRON EMISSIVE TUBES AND PARTS THEREOF. ARCTURUS RADIO TUBE COMPANY, Newark, N. J.
Filed March 28, 1931. Serial No. 312,635. PUBLISHED JUNE 2, 1931. Class 21.

286,130. CANNED PINEAPPLE. HAWAIIAN PINEAPPLE COMPANY, LTD., San Francisco, Calif., and Honolulu, Territory of Hawaii.
Filed April 3, 1931. Serial No. 312,910. PUBLISHED JUNE 2, 1931. Class 46.

286,131. MEN'S, BOYS', AND WOMEN'S BATH ROBES AND LOUNGE ROBES. BEHRENS & KASHINS, INC., New York, N. Y.
Filed April 6, 1931. Serial No. 312,973. PUBLISHED MAY 26, 1931. Class 39.

286,132. TOILET TISSUE AND FACIAL TISSUE. MODERN TISSUES CORPORATION, New York, N. Y.
Filed April 7, 1931. Serial No. 313,048. PUBLISHED JUNE 2, 1931. Class 37.

286,133. ADVERTISING MATERIAL. SALVADOR MILTON FERRER, New York, N. Y.
Filed April 9, 1931. Serial No. 313,128. PUBLISHED JUNE 2, 1931. Class 38.

286,134. CIGARS. J. W. ROBERTS & SON, Tampa, Fla.
Filed April 16, 1931. Serial No. 313,447. PUBLISHED JUNE 2, 1931. Class 17.

286,135. BLANK BOOKS AND LOOSE LEAF BINDERS. S. E. & M. VERNON, INC., New York, N. Y.
Filed March 23, 1931. Serial No. 312,464. PUBLISHED JUNE 2, 1931. Class 37.

286,136. BATHING SUITS. JOSÉ P. VILLAR, Brooklyn, N. Y.
Filed April 6, 1931. Serial No. 313,015. PUBLISHED MAY 26, 1931. Class 39.

286,137. COATS, VESTS, PANTS, AND OVERCOATS FOR MEN AND BOYS. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed April 7, 1931. Serial No. 313,035. PUBLISHED MAY 26, 1931. Class 39.

286,138. LADIES' UNDERWEAR. CARSON PIRIE SCOTT & Co., Chicago, Ill.
Filed April 8, 1931. Serial No. 313,073. PUBLISHED MAY 26, 1931. Class 39.

286,139. MEN'S SUITS, OVERCOATS, AND TOPCOATS. S. MAKRANSKY AND SONS, INC., Philadelphia, Pa.
Filed Apr. 9, 1931. Serial No. 313,140. PUBLISHED JUNE 2, 1931. Class 39.

286,140. NECKTIES, CRAVATS, AND SCARFS. COHAN, ROTH & STIFFSON, New York, N. Y.
Filed April 9, 1931. Serial No. 313,122. PUBLISHED MAY 26, 1931. Class 39.

286,141. LOOSE LEAF BINDERS AND BLANK BOOKS. S. E. & M. VERNON INC., New York, N. Y.
Filed April 18, 1931. Serial No. 313,517. PUBLISHED JUNE 2, 1931. Class 37.

286,142. STORAGE BATTERIES. CONTINENTAL TIRE CORPORATION, Chicago, Ill.
Filed April 21, 1931. Serial No. 313,590. PUBLISHED JUNE 2, 1931. Class 21.

286,143. TOILET PAPER. A. P. W. PAPER COMPANY, INC., Albany, N. Y.
Filed April 22, 1931. Serial No. 313,624. PUBLISHED JUNE 2, 1931. Class 37.

286,144. LEAD PENCILS. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,631. PUBLISHED JUNE 2, 1931. Class 37.

286,145. LEAD PENCILS. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,632. PUBLISHED JUNE 2, 1931. Class 37.

286,146. ELECTRICAL VACUUM TUBES AND VALVES. CECO MANUFACTURING COMPANY, INC., doing business as Argus Radio Tube Co., Providence, R. I.
Filed April 22, 1931. Serial No. 313,646. PUBLISHED JUNE 2, 1931. Class 21.

286,147. WALL PAPER. KIMBERLY-CLARK CORPORATION, Neenah, Wis.
Filed April 23, 1931. Serial No. 313,711. PUBLISHED JUNE 2, 1931. Class 37.

286,148. CORRESPONDENCE PAPER AND ENVELOPES. UNITED STATES ENVELOPE COMPANY, Springfield, Mass.
Filed April 24, 1931. Serial No. 313,760. PUBLISHED JUNE 2, 1931. Class 37.

286,149. SUSPENDERS. PAUL D. SWAYZE, doing business as Utility Design Company, Kansas City, Mo.
Filed February 28, 1931. Serial No. 311,576. PUBLISHED JUNE 2, 1931. Class 39.

286,150. GARTERS, SUSPENDERS (FOR WEAR), AND COLLARS (FOR WEAR). ADELAIDE LOUISA SPEECHLEY THOMAS EARLES, doing business as Epoch Delivery Co., Hadleigh, England.
Filed March 12, 1931. Serial No. 312,044. PUBLISHED JUNE 2, 1931. Class 39.

286,151. CHILDREN'S SHOES OF LEATHER, RUBBER, AND FABRIC, AND ANY COMBINATION OF THESE MATERIALS. THE PALAIS ROYAL, INC., Washington, D. C.
Filed March 13, 1931. Serial No. 312,116. PUBLISHED JUNE 2, 1931. Class 39.

286,152. PERIODICAL. TIMES PUBLISHING CO., Montgomery, Ala.
Filed March 17, 1931. Serial No. 312,242. PUBLISHED JUNE 9, 1931. Class 38.

286,153. KNITTED SNOW SUITS AND KNITTED LEGGINGS. EAGLE KNITTING MILLS, Milwaukee, Wis.
Filed March 27, 1931. Serial No. 312,602. PUBLISHED JUNE 2, 1931. Class 39.

286,154. BOOTS AND SHOES OF LEATHER, RUBBER, OR FABRIC OR ANY COMBINATION THEREOF HAVING LEATHER SOLES. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y.
Filed March 27, 1931. Serial No. 312,603. PUBLISHED JUNE 2, 1931. Class 39.

286,155. PHOTOGRAPHIC PRINTS. LOUISA P. FORD, doing business as Ford Optical Co., Denver, Colo.
Filed March 28, 1931. Serial No. 312,640. PUBLISHED JUNE 2, 1931. Class 38.

286,156. MEN'S HATS. M. S. LEVY & SONS INCORPORATED, Baltimore, Md.
Filed March 31, 1931. Serial No. 312,762. PUBLISHED JUNE 2, 1931. Class 39.

286,157. PERIODICALS. MEYERS PUBLICATIONS, INC., New York, N. Y.
Filed April 6, 1931. Serial No. 312,995. PUBLISHED JUNE 2, 1931. Class 38.

286,158. PHOTO-PRINTS, PHOTOSTAT PRINTS, PHOTOGRAPHS, AND BLUE PRINTS. JAMES C. ZOLL & SON, Baltimore, Md.
Filed April 8, 1931. Serial No. 313,104. PUBLISHED JUNE 2, 1931. Class 38.

286,159. COLORED CHALK CRAYONS. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio.
Filed April 9, 1931. Serial No. 313,114. PUBLISHED JUNE 9, 1931. Class 37.

286,160. WRAPPING PAPER. FLETCHER PAPER COMPANY, Alpena, Mich.
Filed April 16, 1931. Serial No. 313,427. PUBLISHED JUNE 9, 1931. Class 37.

286,161. WRAPPING PAPER. FLETCHER PAPER COMPANY, Alpena, Mich.
Filed April 16, 1931. Serial No. 313,428. PUBLISHED JUNE 9, 1931. Class 37.

286,162. WRAPPING PAPER. FLETCHER PAPER COMPANY, Alpena, Mich.
Filed April 16, 1931. Serial No. 313,429. PUBLISHED JUNE 9, 1931. Class 37.

286,163. BLACK LEAD AND COLORED PENCILS. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,628. PUBLISHED JUNE 2, 1931. Class 37.

286,164. BLACK LEAD PENCILS. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,629. PUBLISHED JUNE 2, 1931. Class 37.

286,165. NEWSPAPERS. SHERIDAN PRESS, INC., Sheridan, Wyo.
Filed April 23, 1931. Serial No. 313,720. PUBLISHED JUNE 9, 1931. Class 38.

286,166. DAILY EVENING NEWSPAPER. THE PROGRESSIVE PUBLISHING COMPANY INC., Muscatine, Iowa.
Filed April 25, 1931. Serial No. 313,796. PUBLISHED JUNE 9, 1931. Class 38.

286,167. DECALCOMANIAS. KIWANIS INTERNATIONAL, Chicago, Ill.
Filed April 27, 1931. Serial No. 313,855. PUBLISHED JUNE 9, 1931. Class 38.

286,168. MONTHLY MAGAZINES. THE BUILDERS' ASSOCIATION OF KANSAS CITY, MO., Kansas City, Mo.
Filed April 28, 1931. Serial No. 313,902. PUBLISHED JUNE 9, 1931. Class 38.

286,169. PERIODICAL. PAPER CLEARINGS BUREAU, INC., New York, N. Y.
Filed April 30, 1931. Serial No. 314,009. PUBLISHED JUNE 9, 1931. Class 38.

286,170. PERIODICAL DEVOTED TO THE OIL INDUSTRY. THE BIG INDIAN OIL AND DEVELOPMENT COMPANY, Kansas City, Mo.
Filed May 1, 1931. Serial No. 314,036. PUBLISHED JUNE 9, 1931. Class 38.

286,171. TALKING MACHINE NEEDLES. DREI-S-WERK SCHWABACHER SPINNEREINADEL- U. STAHLSPITZEN-WERK FR. REINGRUBER, Schwabach, Bavaria, Germany.
Filed December 23, 1930. Serial No. 309,266. PUBLISHED MAY 26, 1931. Class 36.

286,172. RADIO SPEAKERS. UTAH RADIO PRODUCTS COMPANY, Chicago, Ill.
Filed January 24, 1931. Serial No. 310,356. PUBLISHED JUNE 2, 1931. Class 21.

286,173. MEN'S AND BOYS' CAPS AND HATS. CHICAGO MAIL ORDER COMPANY, Chicago, Ill.
Filed January 28, 1931. Serial No. 310,472. PUBLISHED MARCH 17, 1931. Class 39.

286,174. RADIO ELECTRON TUBES. NATIONAL UNION RADIO CORPORATION, Newark, N. J.
Filed February 18, 1931. Serial No. 311,194. PUBLISHED JUNE 2, 1931. Class 21.

286,175. FLUTES, PICCOLOS, CLARINETS, SAXOPHONES, OBOES AND BASSOONS IN ALL SIZES AND PITCHES. HARRY BETTONEY, doing business as Cundy-Bettoney Co., Boston, Mass.
Filed February 27, 1931. Serial No. 311,589. PUBLISHED JUNE 2, 1931. Class 36.

286,176. FINGER RINGS, BRACELETS, HAND BAGS, ETC. MARATHON COMPANY, Attleboro, Mass.
Filed March 18, 1931. Serial No. 312,261. PUBLISHED MAY 26, 1931. Class 28.

286,177. FINGER RINGS, BRACELETS, HAND BAGS, ETC. MARATHON COMPANY, Attleboro, Mass.
Filed March 18, 1931. Serial No. 312,262. PUBLISHED MAY 26, 1931. Class 28.

286,178. GASOLINE, KEROSENE, GAS OIL, DIESEL OIL, FURNACE FUEL OIL, MOTOR LUBRICATING OILS, AND TRANSMISSION OILS AND LUBRICATING GREASES. SHELL OIL COMPANY, San Francisco, Calif.
Filed March 21, 1931. Serial No. 312,389. PUBLISHED MAY 26, 1931. Class 15.

286,179. DRY CELLS AND BATTERIES. THE CARBON PRODUCTS COMPANY, Lancaster, Ohio.
Filed March 31, 1931. Serial No. 312,752. PUBLISHED MAY 26, 1931. Class 21.

286,180. FINGER RINGS. GOLDMAN-KOLBER CO. INC., New York, N. Y.
Filed April 1, 1931. Serial No. 312,799. PUBLISHED MAY 26, 1931. Class 28.

286,181. TABLE SILVER-WARE—NAMELY, HOLLOW-WARE AND FLAT-WARE. WEIDLICH STERLING SPOON Co., Fairfield, Conn.
Filed April 1, 1931. Serial No. 312,823. PUBLISHED JUNE 2, 1931. Class 28.

286,182. FIRE DETECTING SYSTEMS. WALTER KIDDE & COMPANY, INC., New York, N. Y.
Filed April 4, 1931. Serial No. 312,953. PUBLISHED JUNE 2, 1931. Class 21.

286,183. GASOLINE. LOUIS J. SILBERMAN, doing business as Star Gasoline Co., St. Louis, Mo.
Filed April 6, 1931. Serial No. 313,009. PUBLISHED MAY 26, 1931. Class 15.

286,184. DIAMOND AND OTHER KINDS OF FINGER RINGS. ERNEST STEFFEN, doing business as Swiss Diamond Palace, San Francisco, Calif.
Filed April 6, 1931. Serial No. 313,011. PUBLISHED MAY 26, 1931. Class 28.

286,185. GASOLINE, LUBRICATING OIL, MOTOR FUEL OIL, AND FURNACE FUEL OIL. PIONEER TRUCK AND TRANSFER CO., El Centro, Calif.
Filed April 7, 1931. Serial No. 313,054. PUBLISHED JUNE 2, 1931. Class 15.

286,186. GLOVES AND MITTENS OF LEATHER AND FABRIC. PANAMA GLOVE COMPANY, Los Angeles, Calif.
Filed April 13, 1931. Serial No. 313,304. PUBLISHED JUNE 2, 1931. Class 39.

286,187. WEDDING RINGS. ROSENFIELD JEWELRY COMPANY, Oklahoma City, Okla.
Filed April 13, 1931. Serial No. 313,306. PUBLISHED MAY 26, 1931. Class 28.

286,188. RUST PREVENTING OILS AND GREASES. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill.
Filed April 13, 1931. Serial No. 313,314. PUBLISHED MAY 26, 1931. Class 15.

286,189. ELECTRIC LIGHTING FIXTURES AND LAMPS. THE MILLER COMPANY, Meriden, Conn.
Filed April 15, 1931. Serial No. 313,382. PUBLISHED JUNE 2, 1931. Class 21.

286,190. CRAYONS. MILTON BRADLEY COMPANY, Springfield, Mass.
Filed April 25, 1931. Serial No. 313,767. PUBLISHED JUNE 2, 1931. Class 37.

286,191. ELECTRICAL APPARATUS AND SUPPLIES. TOMLINSON FORT JOHNSON, doing business as Johnson Manufacturing Company, Atlanta, Ga.
Filed July 19, 1929. Serial No. 287,350. PUBLISHED JUNE 2, 1931. Class 21.

286,192. HOSIERY, SWEATERS, AND UNDERWEAR, ALL FOR MEN, WOMEN, AND CHILDREN. TROY WHOLESALE CORPORATION, Troy, N. Y.
Filed February 17, 1930. Serial No. 296,154. PUBLISHED APRIL 22, 1930. Class 39.

286,193. ELECTRIC LAMPS, GLOW TUBES, AND ELECTRON AND SPACE DISCHARGE TUBES. DE FOREST RADIO COMPANY, Passaic, N. J.
Filed March 3, 1930. Serial No. 296,731. PUBLISHED JUNE 2, 1931. Class 21.

286,194. GLASS AND METAL CLEANING PASTE. MOORE AND BRADFORD, Washington, D. C.
Filed March 17, 1930. Serial No. 297,450. PUBLISHED MAY 26, 1931. Class 4.

286,195. LUBRICATING OILS AND GREASES. CHAS. F. KELLOM & CO., INC., Philadelphia, Pa.
Filed March 26, 1930. Serial No. 297,918. PUBLISHED MAY 26, 1931. Class 15.

286,196. AUXILIARY LUBRICATING AND ANTICARBONIZING MATERIAL OF AN OLEAGINOUS NATURE FOR INTERNAL COMBUSTION ENGINES. CHAS. F. KELLOM & CO., INC., Philadelphia, Pa.
Filed March 28, 1930. Serial No. 298,031. PUBLISHED MAY 26, 1931. Class 15.

286,197. INSTRUMENTS OR INDEPENDENT UNITARY MECHANISM FOR CONTROLLING THE IGNITION CIRCUIT OF AN INTERNAL COMBUSTION ENGINE. THE NAFZIGER CORPORATION, Kansas City, Mo.
Filed March 31, 1930. Serial No. 298,199. PUBLISHED MAY 26, 1931. Class 21.

286,198. PLASTER. THE HIGGINSON MANUFACTURING COMPANY, Newburgh, N. Y.
Filed April 10, 1930. Serial No. 298,633. PUBLISHED JUNE 2, 1931. Class 12.

286,199. ELECTRIC COOKER. FLORENCE STOVE COMPANY, Gardner, Mass.
Filed April 11, 1930. Serial No. 298,694. PUBLISHED MAY 26, 1931. Class 21.

286,200. ELECTRIC LIGHTING FIXTURES, ELECTRIC WIRING CONDUITS, ELECTRIC WIRING SUPPLIES, ELECTRIC MOTORS. CHICAGO ELECTRICAL SUPPLY COMPANY, Chicago, Ill.
Filed October 22, 1928. Serial No. 274,099. PUBLISHED JUNE 2, 1931. Class 21.

286,201. FINGER RINGS. THE SLAVICK JEWELRY COMPANY, Los Angeles, Calif.
Filed October 27, 1930. Serial No. 307,223. PUBLISHED MAY 26, 1931. Class 28.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

286,202. (CLASS 37. PAPER AND STATIONERY.) CAREW MANUFACTURING COMPANY, South Hadley Falls, Mass. Filed Dec. 2, 1929. Serial No. 293,169.

PERSIA
ORIENTAL

For Cover, Announcement, and Book Paper.
Claims use since Nov. 8, 1929.

286,203. (CLASS 12. CONSTRUCTION MATERIALS.) PALMER LIME & CEMENT COMPANY, New York, N. Y. Filed Apr. 30, 1930. Serial No. 299,726.

SPRED & KUVER

For Lime.
Claims use since Dec. 15, 1926.

286,204. (CLASS 12. CONSTRUCTION MATERIALS.) PALMER LIME & CEMENT COMPANY, New York, N. Y. Filed Apr. 30, 1930. Serial No. 299,755.

KANT-PYT

For Lime.
Claims use since June 15, 1926.

286,205. (CLASS 39. CLOTHING.) BROOKS BROTHERS, New York, N. Y. Filed May 31, 1930. Serial No. 301,813.

STANLEY

For Collars.
Claims use since Nov. 21, 1912.

287,206. (CLASS 37. PAPER AND STATIONERY.) AMERICAN WRITING PAPER COMPANY, INC., Holyoke, Mass. Filed June 10, 1930. Serial No. 302,207.

ALBION ECTYPE

For Writing and Printing Paper and Papers Used on Duplicating Machines.
Claims use since May 26, 1930.

286,207. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS AND PARTS THEREOF.) THE BRUNSWICK-BALKE-COLLENDER COMPANY, Chicago, Ill. Filed July 21, 1930. Serial No. 303,685.

THE Brunswick ELECTRIC ROOM KEEPER

For Motor-Driven Rotatable Support for Re-Finishing, Polishing, and Similar Work on Billiard Cues, Billiard Balls, and Allied Objects, Including Tip Forming, Cue Shaft Cleaning, Ball Cleaning and Polishing, as Well as Chalk Grinding.
Claims use since June 18, 1930.

286,208. (CLASS 32. FURNITURE AND UPHOLSTERY.) M. KRAKOVITZ AND SONS CO., Philadelphia, Pa. Filed July 25, 1930. Serial No. 303,815.

SPOILPRUF

For Glass Mirrors.
Claims use since July 1, 1930.

286,209. (CLASS 8. SMOKERS' ARTICLES, NOT INCLUDING TOBACCO PRODUCTS.) SASIENI LONDON, LTD., New York, N. Y. Filed Sept. 30, 1930. Serial No. 306,246.

OLD ENGLAND

For Smokers' Pipes.
Claims use since July 2, 1930.

286,210. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) DELTA STAR ELECTRIC COMPANY, Chicago, Ill. Filed Nov. 10, 1930. Serial No. 307,704.

"TERMINATORS"

For Electrical Terminating Apparatus for Insulated Electric Cables of the Pothead Type.
Claims use since June 15, 1930.

286,211. (CLASS 11. INKS AND INKING MATERIALS.) PENENE CORPORATION, New York, N. Y. Filed Dec. 8, 1930. Serial No. 308,751.

KWIKINK

For Inks—Namely, Inks for Rubber Stamp Pads.
Claims use since June 25, 1930.

286,212. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) H. GOODMAN & SONS, INC., New York, N. Y. Filed Dec. 26, 1930. Serial No. 309,341.

KANT-SLIP

For Non-Electrical Hair Curlers, Hairpins, and Combs, Not Made of Precious Metal and Non-Electrical Wavers.
Claims use since June 24, 1930.

286,213. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) CHARLES H. DIETZE, Sr., doing business as The Kirchhof Patent Company, Newark, N. J. Filed Jan. 14, 1931. Serial No. 309,922.

KIRCHHOF

For Crickets, Rachet Noisemakers, Rattlers, and Other Metal Novelties.
Claims use since October, 1924.

286,214. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) ACIERIES DE GENNEVILLIERS, ANCIENS ETABLISSEMENTS C. DELACHAUX, Gennevilliers, France. Filed Mar. 13, 1931. Serial No. 312,080.

INFATIGABLE

For Iron and Steel Castings and Forgings.
Claims use since June 4, 1928.

286,215. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) A. N. FAULKNER & CO., Tilghman, Md. Filed Mar. 14, 1931. Serial No. 312,142.

PLUM POINT

For Canned Tomatoes, Fish, Herring Roe, Fresh Fish, Oysters, Crabs, and Crab-Meat.
Claims use since April, 1928.

286,216. (CLASS 12. CONSTRUCTION MATERIALS.) STERLING MATERIALS COMPANY, LIMITED, Montreal, Quebec, Canada, and New York, N. Y. Filed Mar. 16, 1931. Serial No. 312,223.

NALEAK

For Plastic Roofing Material or Plastic Roofing Compound to be Spread on Roofs.
Claims use since 1925.

286,217. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JAMES FORREST WILLIAMS, Texarkana, Ark. Filed Apr. 6, 1931. Serial No. 313,016.



TURNIP KRAUT

For Canned Turnip Kraut.
Claims use since Dec. 15, 1930.

286,218. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) A. ORTIZ Y PALACIOS, Madrid, Spain. Filed Apr. 14, 1931. Serial No. 313,350.

A. ORTIZ Y PALACIOS

For Soaps.
Claims use since Mar. 10, 1901.

286,219. (CLASS 45. BEVERAGES, NONALCOHOLIC.) A. E. HANSON, doing business as The Hanson Product Co., Blue Earth, Minn. Filed Apr. 27, 1931. Serial No. 313,885.

Hanson's

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups for Making Same.
Claims use since July 1, 1930.

286,220. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) DAY H. DEWEY, doing business as Arthur B. Miller Mfg. Co., Bremerton, Wash. Filed May 5, 1931. Serial No. 314,199.

DEWEY

For Saxophone Stands.
Claims use since May 1, 1925.

286,221. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) ALLTITE PISTON RING CO. INC., Brooklyn, N. Y. Filed May 7, 1931. Serial No. 314,263.

ALLTITE

For Piston Rings.
Claims use since June 28, 1929.

286,222. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) NEW PROCESS METALS CORPORATION, Newark, N. J. Filed May 11, 1931. Serial No. 314,423.

Auermetall

For Pyrophoric Household Lighter.
Claims use since Jan. 15, 1920.

286,223. (CLASS 45. BEVERAGES, NONALCOHOLIC.) H. KIRSCH & CO., INC., Brooklyn, N. Y. Filed May 19, 1931. Serial No. 314,939.

Kirsch's Beverages

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts for Making the Same.
Claims use since March, 1906.

286,224. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) JOHN D. BROCK, doing business as Specialty Optical Company, Kansas City, Mo. Filed June 1, 1931. Serial No. 315,245.

REST-LITE

For Eye Glass Lenses.
Claims use since May, 1929.

286,225. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) EDWIN F. M. SPEIDEL, doing business as Automatic Gold Chain Company, Providence, R. I. Filed June 3, 1931. Serial No. 315,372.

CELLINI

For Jewelry for Personal Wear or Adornment, Not Including Watches.
Claims use since February, 1930.

286,226. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) GAR WOOD INC., Marysville, Mich. Filed June 3, 1931. Serial No. 315,376.

GAR WOOD

For Motor Boats, Speed Boats, Cruisers, and Hydroplanes.
Claims use since 1920.

286,227. (CLASS 12. CONSTRUCTION MATERIALS.) THE NILES FIRE BRICK COMPANY, Niles, Ohio. Filed June 12, 1931. Serial No. 315,755.

OHIO

For Firebrick.
Claims use since 1905.

TRADE-MARK REGISTRATIONS RENEWED

36,767. CERTAIN NAMED PRINTERS' SUPPLIES. Registered July 16, 1901. BARNHART BROS. & SPINDLER. Renewed July 16, 1931, to Barnhart Brothers & Spindler, Chicago, Ill., a Corporation of New Jersey, successor.

36,799. LIQUID DISINFECTANTS. Registered July 23, 1901. THE EMBALMERS SUPPLY CO. Renewed July 23, 1931, to The C. B. Dolge Company, Inc., Westport, Conn., a Corporation of Connecticut, successor.

37,461. FIRE ENGINES. Registered December 10, 1901. AMERICAN FIRE ENGINE COMPANY, Seneca Falls, N. Y. Renewed December 10, 1931, to American-La France and Foamite Corporation, Elmira, N. Y., a Corporation of New York, assignee.

37,516. POLISHES FOR METAL WOOD, AND ENAMEL. Registered December 24, 1901. BUFFALO SPECIALTY MANUFACTURING CO. Renewed December 24, 1931, to Liquid Veneer Corporation, Buffalo, N. Y., a Corporation of New York, assignee.

37,538. CIGARETTE PAPERS. Registered December 31, 1901. MAISON PIERRE BARDOU JOB, Perpignan, France. Renewed December 31, 1931, to Societe Job Anciens Etablissements Bardou-Job et Paulhac, Perpignan and Toulouse, France, a Corporation of France, assignee.

37,560. CEREAL FOOD PRODUCTS. Registered December 31, 1901. THE "FORCE" FOOD COMPANY. Renewed December 31, 1931, to Hecker-H-O Company, Inc., Buffalo, N. Y., a Corporation of New York, assignee.

37,567. TEA. Registered December 31, 1901. SPRAGUE, WARNER & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed December 31, 1931.

37,605. COPPER. Registered December 31, 1901. TENNESSEE COPPER COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed December 31, 1931.

79,650. MACARONIC PASTE FOODS. Registered September 27, 1910. THE CLEVELAND MACARONI COMPANY, Cleveland, Ohio. Renewed September 27, 1930, to Golden Age Corporation, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

79,821. MACARONIC PASTE FOODS. Registered October 11, 1910. THE CLEVELAND MACARONI COMPANY, Cleveland, Ohio. Renewed October 11, 1930, to Golden Age Corporation, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

82,703. TOFFEE. Registered July 18, 1911. JOHN MACKINTOSH, LIMITED, Halifax, England. Renewed July 18, 1931, to John Mackintosh & Sons Ltd. Inc., Boston, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

82,830. LUBRICATING OIL AND GREASE. Registered July 25, 1911. ROYERSFORD FOUNDRY & MACHINE CO. INCORPORATED, Royersford and Philadelphia, Pa. Renewed July 25, 1931, to Royersford Foundry & Machine Co. Incorporated, Royersford, Pa., a Corporation of Pennsylvania.

82,926. HEAT-INSULATING MATERIAL. Registered August 1, 1911. UNION FIBRE COMPANY. Renewed August 1, 1931, to Union Fibre Co., Incorporated, Winona, Minn., a Corporation of Minnesota, assignee.

82,944. CERTAIN RECEPTACLES. Registered August 1, 1911. WHEELING CORRUGATING COMPANY, Wheeling, W. Va., a Corporation of West Virginia. Renewed August 1, 1931.

82,954. SILK PIECE GOODS. Registered August 8, 1911. ATUYER, BIANCHINI, FERIER & Co. Renewed August 8, 1931, to Bianchini, Ferier, Lyon, France, a Firm.

83,112. STIFFENING CORDS, BLADES, AND TAPES. Registered August 15, 1911. THE WARREN FEATHERBONE CO. Renewed August 15, 1931, to the Warren Featherbone Company, Three Oaks, Mich., a Corporation of Michigan, assignee.

83,115. STEEL DRY MEASURES IN GALVANIZED AND JAPANNED FINISHES. Registered August 15, 1911. WHEELING CORRUGATING COMPANY, Wheeling, W. Va., a Corporation of West Virginia. Renewed August 15, 1931.

83,299. GALVANIZED WASHTUBS FOR LAUNDRY PURPOSES. Registered August 29, 1911. WHEELING CORRUGATING COMPANY, Wheeling, West Va., a Corporation of West Virginia. Renewed August 29, 1931.

83,553. CERTAIN TOILET PREPARATIONS. Registered September 26, 1911. BORACOL CHEMICAL CO., Passaic, N. J. Renewed September 26, 1931, to Marthe Fischesser, doing business as Boracol Chemical Company, Mountain Lakes, N. J., assignee.

83,584. FISHING-LINES, TROLLING-SPOONS, ARTIFICIAL BAIT, AND FISHING-REELS. Registered September 26, 1911. KELLEY-HOW-THOMSON CO., Duluth, Minn., a Corporation of Maine. Renewed September 26, 1931.

83,723. LIQUID FISH-GLUE. Registered October 10, 1911. FLASH CHEMICAL CO., Boston, Mass. Renewed October 10, 1931. to Flash Chemical Company, Cambridge, Mass., a Corporation of Maine.

83,745. SHAVING-BRUSHES. Registered October 10, 1911. THE KOKEN BARBERS' SUPPLY COMPANY. Renewed October 10, 1931, to Dealers Sales Corporation, St. Louis, Mo., a Corporation of Delaware, assignee by mesne assignments.

83,791. LUBRICATING OILS AND GREASES. Registered October 10, 1911. TIDE WATER OIL COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed October 10, 1931.

83,816. WHEAT-FLOUR, BISCUIT-FLOUR, BUCKWHEAT-FLOUR, AND PANCAKE-FLOUR. Registered October 17, 1911. F. B. CHAMBERLAIN COMPANY, St. Louis, Mo., and East St. Louis, Ill., a Corporation of Illinois. Renewed October 17, 1931.

83,846. PIANOS AND ORGANS WITH AUTOMATIC-PLAYER ATTACHMENTS BUILT THEREIN. Registered October 17, 1911. LYON & HEALY. Renewed October 17, 1931, to Lyon & Healy, Incorporated, Chicago, Ill., a Corporation of Illinois, assignee.

84,018. LICORICE PASTE. Registered October 31, 1911. THE MACANDREWS & FORBES COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed October 31, 1931.

84,088. INSECT AND VERMIN EXTERMINATOR, DISINFECTANT AND TALCUM POWDER. Registered November 7, 1911. FLASH CHEMICAL CO., Boston, Mass. Renewed November 7, 1931, to Flash Chemical Company, Cambridge, Mass., a Corporation of Maine.

84,822. TOILET WATER. Registered November 28, 1911. THE KOKEN BARBERS' SUPPLY COMPANY. Renewed November 28, 1931, to Dealers Sales Corporation, St. Louis, Mo., a Corporation of Delaware, assignee by mesne assignments.

84,443. CERTAIN NAMED SEEDS. Registered December 12, 1911. OSCAR H. WILL & CO. Renewed December 12, 1931, to Oscar H. Will & Co., Bismark, N. Dak., a Corporation of North Dakota, successor.

84,528. DANDRUFF REMEDY. Registered December 19, 1911. THE RETONE COMPANY. Renewed December 19, 1931, to The Wildroot Company, Inc., Buffalo, N. Y., a Corporation of New York, assignee.

84,602. PAPER BAGS. Registered December 26, 1911. CROWN-COLUMBIA PULP AND PAPER COMPANY. Renewed December 26, 1931, to Crown Willamette Paper Company, San Francisco, Calif., a Corporation of Delaware, assignee by mesne assignments.

84,615. MACARONI, SPAGHETTI, VERMICELLI, AND NOODLES. Registered December 26, 1911. THE FOULDS MILLING COMPANY, Cincinnati, Ohio, and Chicago, Ill. Renewed December 26, 1931, to The Foulds Milling Company, Libertyville, Ill., a Corporation of Ohio.

84,616. UMBRELLA FRAMES, RIBS, AND TRIMMINGS. Registered December 26, 1911. FRETZ, GROSS & Co., Philadelphia, Pa., Renewed December 26, 1931.

84,628. CERTAIN ELECTRICAL SUPPLIES. Registered December 26, 1911. HEMMING MANUFACTURING COMPANY, Wallington Borough, N. J. Renewed December 26, 1931, to Garfield Manufacturing Company, Garfield, N. J., a Corporation of New Jersey, by change of name.

84,629. FIGS. Registered December 26, 1911. THE HILLS BROTHERS COMPANY, New York, N. Y., a Corporation of New York. Renewed December 26, 1931.

84,682. FRESH OYSTERS. Registered December 26, 1911. H. C. ROWE & COMPANY, New Haven, Conn. Renewed December 26, 1931.

84,770. A SEMIMONTHLY MAGAZINE. Registered January 2, 1912. THE VOGUE COMPANY. Renewed January 2, 1932, to The Conde Nast Publications, Inc., New York, N. Y., a Corporation of New York, assignee.

84,806. PISTOLS, RIFLES, SPORTING-GUNS, AND METALLIC CARTRIDGES. Registered January 9, 1912. ANCIENS ETABLISSEMENTS PIEPER SOCIETE ANONYME, Herstal, near Liege, Belgium, a Corporation of Belgium. Renewed January 9, 1932.

84,909. CAUSTIC SODA, BLEACHING-POWDER, AND SULFUR CHLORID. Registered January 9, 1912. HOOKER ELECTROCHEMICAL COMPANY, Niagara Falls, N. Y., a Corporation of New York. Renewed January 9, 1932.

84,916. SODA FOR COOKING PURPOSES. Registered January 9, 1912. ROYAL BAKING POWDER COMPANY, Jersey City, N. J., and New York, N. Y. Renewed January 9, 1932, to Royal Baking Powder Company, New York, N. Y., a Corporation of New Jersey.

84,927. FILES FOR PAPERS AND BOOKS. Registered January 16, 1912. J. H. ATWATER COMPANY. Renewed January 16, 1932, to E. E. Smith Company, Providence, R. I., a Corporation of Rhode Island, successor.

84,988. WHEAT-FLOUR. Registered January 16, 1912. MOSELEY & MOTLEY MILLING Co., Rochester, N. Y., a Corporation of New York. Renewed January 16, 1932.

85,021. LOCKS AND LATCHES. Registered January 16, 1912. VON DUPRIN FIRE EXIT LATCH COMPANY. Renewed January 16, 1932, to Vonnegut Hardware Company, Indianapolis, Ind., a Corporation of Indiana, assignee.

LABELS

REGISTERED AUGUST 18, 1931

39,558.—*Title:* SMOOTH-FREEZE MEADOW GOLD. For Ice Cream. BEATRICE CREAMERY COMPANY, Chicago, Ill. Published May 1, 1931.

39,559.—*Title:* BEECH-NUT GRAPE DROPS. For Candy. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published October 23, 1929.

39,560.—*Title:* BEECH-NUT RASPBERRY DROPS. For Candy. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published January 27, 1931.

39,561.—*Title:* BEECH-NUT GUM, PEPPERMINT FLAVORED. For Chewing Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published May 18, 1931.

39,562.—*Title:* BOOKER T. WASHINGTON. For Cigars. BROWARD CIGAR COMPANY, Pompano, Fla. Published June 1, 1931.

39,563.—*Title:* RED TOP. For Fresh Cherries. F. J. CAMPODONICO Co., Stockton, Calif. Published May 8, 1931.

39,564.—*Title:* GENUINE CHEVROLET BODY POLISH. For Polishing Material in Liquid Form, Designed Especially for Polishing Automobile Bodies. CHEVROLET MOTOR COMPANY, Detroit, Mich. Published May 9, 1931.

39,565.—*Title:* SUNSHINE STRAWS. For Drinking Straws Made of Paper. THE HERZ STRAW COMPANY, INC., New York, N. Y. Published June 17, 1931.

39,566.—*Title:* SUNSHINE STRAWS. For Drinking Straws Made of Paper. THE HERZ STRAW COMPANY, INC., New York, N. Y. Published June 17, 1931.

39,567.—*Title:* EVERGREEN. For Embossed Napkins. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis. Published May 7, 1931.

39,568.—*Title:* JEWEL CLEANSER. For Cleanser. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published March 2, 1931.

39,569.—*Title:* POWDERED AMMONIA COMPOUND. For Powdered Ammonia Compound. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published April 15, 1931.

39,570.—*Title:* ZYTHOS. For Malt Syrup for Food Purposes. THEM KOLLIAS, Santa Ana, Calif. Published July 10, 1931.

39,571.—*Title:* MAY GARDENS. For Tea. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published June 10, 1931.

39,572.—*Title:* ROCKY RIVER. For Root Beer. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published June 30, 1931.

39,573.—*Title:* HOLLYWOOD. For Olives. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Company, Cincinnati, Ohio. Published June 25, 1931.

39,574.—*Title:* LATONIA CLUB. For Ginger Ale. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published June 25, 1931.

39,575.—*Title:* COUNTRY CLUB. For Apricots. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Published June 10, 1931.

39,576.—*Title:* MAY GARDENS. For Tea. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published June 10, 1931.

39,577.—*Title:* COUNTRY CLUB. For Evaporated Milk. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Published June 10, 1931.

39,578.—*Title:* MAY GARDENS. For Tea. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published June 10, 1931.

39,579.—*Title:* MAY GARDENS (YOUNG HYSON). For Tea. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published June 10, 1931.

39,580.—*Title:* MAY GARDENS (ORANGE PEKOE). For Tea. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published June 10, 1931.

39,581.—*Title:* AVALON. For Liquid Bluing. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published July 10, 1931.

39,582.—*Title:* HOLLYWOOD. For Olives. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published June 25, 1931.

CARNEGIE LIBRARY OF ATLANTA

39,583.—*Title:* MOON-SHINE. For Washing Fluid. MOONSHINE CHEMICAL COMPANY, Pittsburgh, Pa. Published April 11, 1931.

39,584.—*Title:* REAL BOHEMIAN STYLE. For Malt Syrup. NATOMAH SALES CORPORATION, Chicago, Ill. Published November 22, 1928.

39,585.—*Title:* NORCROSS CARROT PRODUCTS. For Carrot Products. NORCROSS CARROT CO., San Antonio, Tex. Published July 17, 1931.

39,586.—*Title:* DR. PENCHEFF'S BOTANICAL LAXATIVE COMPOUND. For Laxative Compound. STEPHEN PENCHEFF, D. C., N. D., Indianapolis, Ind. Published July 22, 1931.

39,587.—*Title:* THE NURSE'S FOOT HEALTH CREAM. For Cream for Tired and Aching Feet. WINFIELD GRAVES PIPER, West Roxbury, Mass. Published July 10, 1931.

39,588.—*Title:* OUR BRAND EGGS. For Eggs. POULTRY PRODUCERS OF CENTRAL CALIFORNIA, San Francisco, Calif. Published June 18, 1931.

39,589.—*Title:* PREFERRED EGGS. For Eggs. POULTRY PRODUCERS OF CENTRAL CALIFORNIA, San Francisco, Calif. Published July 22, 1931.

39,590.—*Title:* LET HANDY ANN WASH YOUR DISHES. For Dishcloths. PUTNAM KNITTING CO., Cohoes, N. Y. Published July 16, 1931.

39,591.—*Title:* ALVAREZ LOPEZ Y CA. For Cigars. JOSE FERNANDEZ REIGOSA, doing business as Jose Fernandez Cigar Co. and Alvarez Lopez Y Cia, Tampa, Fla. Published May 30, 1930.

39,592.—*Title:* PANTRY WHIPPING CREAM. For Whipping Cream. S. M. A. CORPORATION, Cleveland, Ohio. Published July 1, 1931.

39,593.—*Title:* PROTEIN S. M. A. (ACIDULATED). For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published July 13, 1931.

39,594.—*Title:* PANTRY TABLE CREAM. For Table Cream. S. M. A. CORPORATION, Cleveland, Ohio. Published July 1, 1931.

39,595.—*Title:* MILWAUKEE CLUB. For Ginger Ale. JOS. SCHLITZ BEVERAGE COMPANY, Milwaukee, Wis. Published April 26, 1928.

39,596.—*Title:* PERSENICO. For Medicinal Preparation. SHERWOOD-ARTHUR PHARMACAL CO. (INC.), Kansas City, Mo. Published August 25, 1928.

39,597.—*Title:* HY-G-NO. For Denture Cleaner. FRANK J. TRAXL, Chicago, Ill. Published May 16, 1931.

39,598.—*Title:* READI-TO-SEW. For Fabrics. TRU-FIT DRESS CO. INC., New York, N. Y. Published May 29, 1931.

39,599.—*Title:* BUSTER BROWN. For Root Beer. HAROLD C. WYLIE, Harvey, Ill. Published May 11, 1931.

PRINTS

REGISTERED AUGUST 18, 1931

13,350.—*Title:* 3-4-5 TOSCANI CIGARS. For Cigars. RALPH CAPASSO, Providence, R. I. Published June 5, 1931.

13,351.—*Title:* SPECIFICATIONS OF THE NEW CAPEHART '400' SERIES. For Musical Instruments. THE CAPEHART CORPORATION, Fort Wayne, Ind. Published June 15, 1931.

13,352.—*Title:* COLUMBIA STEEL EQUIP. CO. For Steel Filing Cabinets. COLUMBIA STEEL EQUIPMENT CO., Philadelphia, Pa. Published January 10, 1931.

13,353.—*Title:* COLUMBIA STEEL EQUIP. CO. For Steel Filing Cabinets. COLUMBIA STEEL EQUIPMENT CO., Philadelphia, Pa. Published January 26, 1931.

13,354.—*Title:* WHEN HUNGRY FELLOWS GET TOGETHER. For Oven-Baked Beans. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published July 19, 1931.

13,355.—*Title:* OVEN-BAKED IN THE HOMELIKE KITCHENS OF HEINZ. For Oven-Baked Beans. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published July 18, 1931.

13,356.—*Title:* THE FLAVOR OF FLAVORS (17-A-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published January 4, 1931.

13,357.—*Title:* ONLY THIS COFFEE (17-B-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published February 22, 1931.

13,358.—*Title:* HERE IS THE SECRET (17-C-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published April 12, 1931.

13,359.—*Title:* IT IS IMPORTANT (17-D-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published May 31, 1931.

13,360.—*Title:* THIS COFFEE ALONE (17-E-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published January 10, 1931.

13,361.—*Title:* NO OTHER COFFEE (17-F-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published March 14, 1931.

13,362.—*Title:* IN ALL THE WORLD (17-G-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published May 16, 1931.

13,363.—*Title:* IT IS A REVELATION (17-H-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published January 9, 1931.

13,364.—*Title:* THIS COFFEE HAS EVERYTHING (17-J-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published March 13, 1931.

13,365.—*Title:* IT IS MATCHLESS (17-K-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published May 15, 1931.

13,366.—*Title:* "EXCLUSIVE" IS THE WORD (17-L-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published January 14, 1931.

13,367.—*Title:* THE RARE 'TASTE' (17-M-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published January 21, 1931.

13,368.—*Title:* THIS COFFEE OF COFFEES (17-N-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published January 28, 1931.

13,369.—*Title:* THE ONLY WAY (17-P-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published March 11, 1931.

13,370.—*Title:* OF ALL COFFEES (17-Q-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published March 18, 1931.

13,371.—*Title:* CONTROLLED ROASTING (17-R-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published March 25, 1931.

13,372.—*Title:* A NEW STANDARD (17-S-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published April 22, 1931.

13,373.—*Title:* IT'S NO WONDER (17-T-1931). For Coffee. HILLS BROS., San Francisco, Calif. Published April 29, 1931.

13,374.—*Title:* EXPECT THE UTMOST (17–V–1931). For Coffee. HILLS BROS., San Francisco, Calif. Published May 13, 1931.

13,375.—*Title:* IT'S A DIFFERENT COFFEE (17–W–1931). For Coffee. HILLS BROS., San Francisco, Calif. Published June 10, 1931.

13,376.—*Title:* UNLIKE ORDINARY COFFEES (17–X–1931). For Coffee. HILLS BROS., San Francisco, Calif. Published June 17, 1931.

13,377.—*Title:* OF ALL METHODS (17–Y–1931). For Coffee. HILLS BROS., San Francisco, Calif. Published June 24, 1931.

13,378.—*Title:* ORCHARD MAID PURE FRESH FRUIT JUICE SYRUP. For Pure Fresh Fruit Juice Syrups. ORCHARD PRODUCTS COMPANY, Chicago, Ill. Published July 1, 1931.

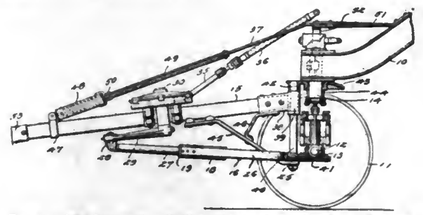
13,379.—*Title:* FROZEN DRUMSTICK. For Ice Cream Product Consisting of an Ice Cream Cone Dipped in Candy Coating, Etc. I. C. PARKER, Fort Worth, Tex. Published April 18, 1931.

13,380.—*Title:* SELMER H. & A. SELMER INC. SELMER BUILDING—ELKHART, INDIANA. For Clarinets, Flutes, Saxophones, All Woodwinds and Accessories. H. & A. SELMER, INC., Elkhart, Ind. Published June 6, 1931.

REISSUES

AUGUST 18, 1931

18,150. STEERING GEAR FOR ROAD GRADERS. FRANKLIN E. ARNDT, Galion, Ohio, assignor to The Galion Iron Works & Mfg. Co., Galion, Ohio, a Corporation of Ohio. Original No. 1,700,015, dated Jan. 22, 1929, Serial No. 228,674, filed Oct. 25, 1927. Application for reissue filed Sept. 27, 1930. Serial No. 484,911. 12 Claims. (Cl. 280—33.6.)



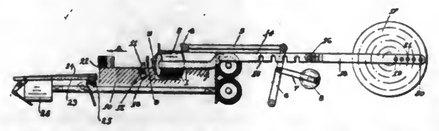
1. In an implement of the class described, a frame, an axle, a king pin connecting the frame and axle, a draft pole pivotally connected to the axle for swinging movement relative thereto about an axis substantially parallel to and in advance of the king pin, a stub tongue connected with the axle, and means connecting the tongue and pole for relative angular adjustment.

18,151. STENCIL MACHINE AND STENCIL THEREFOR. HARMON P. ELLIOTT, Watertown, Mass., assignor to Elliott Addressing Machine Company, a Corporation of Massachusetts. Original No. 1,637,443, dated Aug. 2, 1927, Serial No. 160,871, filed Jan. 13, 1927. Application for reissue filed July 7, 1931. Serial No. 549,301. 6 Claims. (Cl. 101—49.)



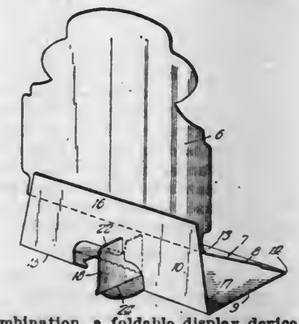
1. The combination of a stencil having a strong frame provided with a window therein and a sheet of thin stencil paper attached to the frame over the window, a pair of superposed sectors adapted to drive the stencil between them, said sectors characterized by each having a width greater than the width of the window in the stencil frame, and means for guiding the stencil in its movement between the sectors in such a manner that the sectors exert a driving pressure upon the strong frame of the stencil and maintain the thin stencil paper free from the driving force.

18,152. APPARATUS FOR COOLING AND ANNEALING METAL BARS. JEROME R. GEORGE, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Original No. 1,642,437, dated Sept. 13, 1927, Serial No. 753,241, filed Dec. 1, 1924. Application for reissue filed Feb. 19, 1931. Serial No. 517,086. 19 Claims. (Cl. 80—42.)



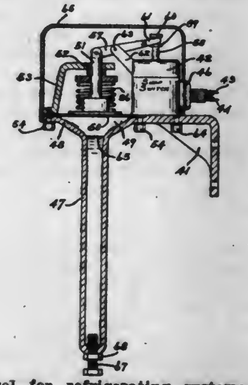
1. In apparatus of the class described, a horizontal bed, means for delivering bars on edge to said bed, means for moving said bars broadside across said bed, means for curving said bars as they are moved across the bed, and means for controlling the number of bars on the bed at one time.

18,153. DISPLAY STAND AND THE LIKE. JULIUS HORWATH, Chicago, Ill., assignor to Arvey Corporation, Chicago, Ill., a Corporation of Illinois. Original No. 1,713,758, dated May 21, 1929, Serial No. 277,586, filed May 14, 1928. Application for reissue filed May 20, 1931. Serial No. 538,862. 5 Claims. (Cl. 211—73.)



3. In combination, a foldable display device comprising a main display panel, a base for said panel disposed in a substantially horizontal plane, a member connected to said base, said member being substantially at right angles to said base when said device is in display position, and means for maintaining said device in display position comprising a tongue foldably connected to said base and provided with a notch for engaging an edge of a wall defining an aperture provided in said member adjacent its connection to the base when said tongue is folded into a position at an angle to said base.

18,154. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Original No. 1,768,600, dated July 1, 1930, Serial No. 635,521, filed Apr. 30, 1923. Application for reissue filed July 8, 1931. Serial No. 549,525. 5 Claims. (Cl. 236—99.)



1. A control for refrigerating systems comprising a chamber containing a substance to be frozen, and a sub-

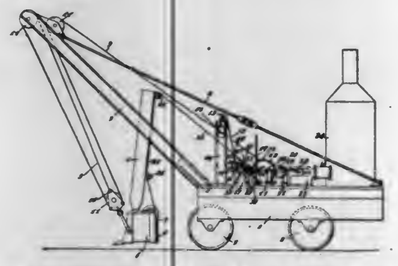
stance remaining in the gaseous phase throughout the temperature cycle, said chamber comprising a flexible wall, and means suddenly responsive to expansion of the substance to be frozen for controlling the operation of the refrigerating system.

18,155. DELIVERY APPARATUS. AUBREY M. LEE, Dallas, Tex., assignor, by mesne assignments, to General Ice Scoring Machine Company, Dallas, Tex., a Corporation of Delaware. Original No. 1,647,530, dated Nov. 1, 1927, Serial No. 152,349, filed Dec. 3, 1926. Application for reissue filed May 11, 1929. Serial No. 362,424. 10 Claims. (Cl. 19.8—27.)



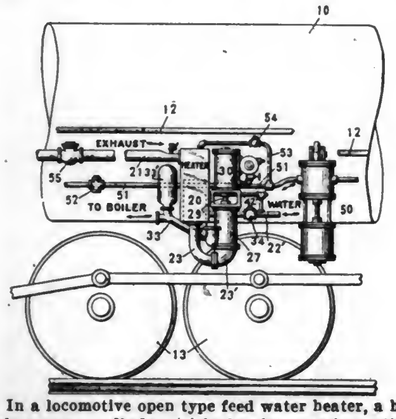
9. The combination with the wall of an ice storage house having an opening therethrough, of a housing secured in said opening, a flexible closure secured to said wall adjacent the top of said housing and bent to extend into said opening in the direction of travel of blocks of ice and normally fitting relatively air tight against the sides and bottom of said opening, to close said opening, an inclined chute arranged to deliver ice through the opening, a stop, and manually operable means for elevating blocks of ice to cause them to move over the stop and slide down the chute, substantially as set forth.

18,156. EXCAVATOR. RALPH VOLK, Portland, Oreg., assignor, by direct and mesne assignments, to Koehring Company, Milwaukee, Wis., a Corporation of Wisconsin. Original No. 1,598,945, dated Sept. 7, 1926, Serial No. 508,670, filed Oct. 19, 1921. Application for reissue filed Sept. 5, 1928. Serial No. 304,098. 1 Claim. (Cl. 214—146.)



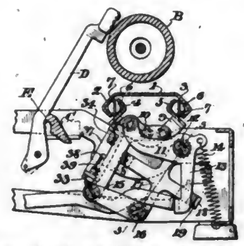
A device of the class described comprising a truck, a bucket, an arm carrying the bucket, a forwardly extended boom on the truck, the arm being slidable in the boom, an engine on the truck, a first shaft journaled on the truck and disposed forwardly of the engine, a second shaft located between the engine and the first shaft and journaled on the truck, means for dumping the bucket, said means embodying a first flexible element, a first drum rotatable on the first shaft, the first flexible element being wound in one direction about the first drum, means for swinging the arm, said means including a second flexible element mounted to slide on the boom, a second drum mounted to rotate on the second shaft, the second flexible element being wound about the second drum, a gear train connecting both shafts with the engine, clutches connecting the respective shafts with the corresponding drums, a tubular standard mounted on the truck and located in front of the first shaft, a weight slidably housed within the standard, and a third flexible element, one end of which is wound about the first drum in a direction opposite to that of the first element, the third flexible element being mounted slidably on the upper end of the tubular standard, the other end of the third flexible element being extended downwardly into the standard and being connected to the weight, the standard constituting means for preventing the weight and the adjacent portion of the third flexible element from coming into contact with the first flexible element.

18,157. LOCOMOTIVE FEED WATER HEATER AND PUMP. EDMUND H. BLUNT, Brooklyn, N. Y. Original No. 1,551,727, dated Sept. 1, 1925, Serial No. 448,778, filed Mar. 1, 1921. Application for reissue filed Aug. 23, 1926. Serial No. 131,134. 24 Claims. (Cl. 261—34.)



2. In a locomotive open type feed water heater, a heater vessel, a pump cylinder, a single piston reciprocating in said cylinder for forcing a certain volume of cold water into said heater vessel at each upward stroke of the piston and withdrawing a certain but larger volume of hot water from said vessel into the bottom of said cylinder at the same time, means for conducting steam to said heater vessel to be condensed by and mingled with the water therein, the volumetric displacement of the upper cold water end of the piston being less than the volumetric displacement of the lower hot water end of the piston by an amount determined by the cross-sectional area of the piston rod, a cold water by-pass connected between the upper cold water end of the cylinder and the heater vessel, a valve in said by-pass adapted to be opened by the pressure of water in said by-pass, and means operated by changes of water level in said heater vessel for limiting movement of said valve.

18,158. TYPEWRITING MACHINE. LEWIS C. MYERS, Freeport, and GEORGE F. HANDLEY, Glendale, N. Y., assignors to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Original No. 1,562,119, dated Nov. 17, 1925, Serial No. 757,169, filed Dec. 20, 1924. Application for reissue filed June 24, 1927. Serial No. 201,274. 7 Claims. (Cl. 197—149.)

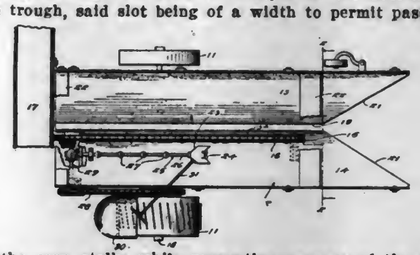


1. In a typewriting machine embodying a main frame and a shift frame having a pivotal movement for case shift purposes, the combination of a rock shaft for obtaining

said movement, a cone bearing for each end of said rock shaft, studs receiving said cone bearings, and adjustable members supporting said studs.

18,159. CORN HARVESTING APPARATUS. MICHAEL E. KRAXBERGER, Buckingham, Colo. Original No. 1,693,085, dated Nov. 27, 1928, Serial No. 102,250, filed Apr. 15, 1926. Application for reissue filed Jan. 8, 1931. Serial No. 507,538. 1 Claim. (Cl. 56—63.)

In corn harvesting mechanism and in combination, a trough, there being a longitudinally extending slot in said trough, means at one end of the trough for directing plant stems into the slot as the trough is moved along a row, flexibly mounted power driven knives adapted to be moved in any direction independently of said trough for severing ears of corn from the corn stalks during their passage through the slot, a conveyor in the bottom of the trough, said slot being of a width to permit passage



of the corn stalks while preventing passage of the ears of corn whereby the severed ears of corn are separated from the stalks and are placed on the conveyor.

PLANT PATENTS

GRANTED AUGUST 18, 1931

1. CLIMBING OR TRAILING ROSE. HENRY F. BOSENBERG, New Brunswick, N. J., assignor to Louis C. Schubert, New Brunswick, N. J. Filed Aug. 6, 1930. Serial No. 473,410. 1 Claim. (Cl. 47—1.)

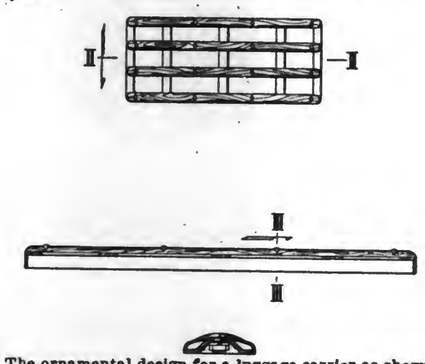


A climbing rose as herein shown and described, characterized by its everblooming habit.

DESIGNS

AUGUST 18, 1931

84,867. LUGGAGE CARRIER. EROS V. BARKER, Bellevue, Ohio, assignor to Jacob F. Martin, Bellevue, Ohio. Filed Aug. 25, 1930. Serial No. 36,755. Term of patent 7 years.



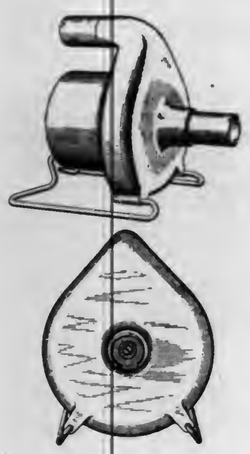
The ornamental design for a luggage carrier as shown.

84,868. RACK FOR TIRES. HARRY L. BEACH, Coshocton, Ohio. Filed Oct. 9, 1930. Serial No. 37,197. Term of patent 14 years.



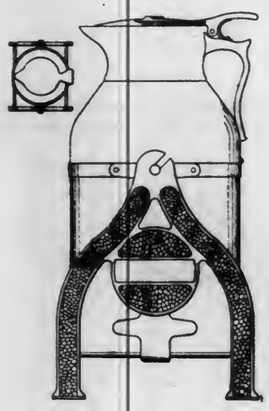
The ornamental design for a rack for tires, as shown.

84,869. CASING FOR A SUCTION CLEANER OR SIMILAR ARTICLE. BERNARD C. BECKER, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Oct. 24, 1929. Serial No. 33,149. Term of patent 14 years.



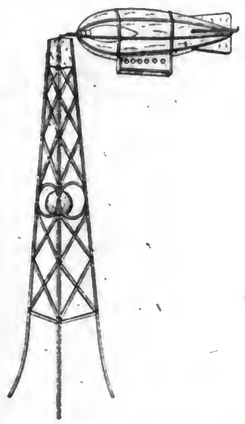
The ornamental design for a casing for a suction cleaner or similar article, as shown.

84,870. DISPENSING STAND. CARL F. BLATTNER, Los Angeles, Calif., assignor to Mission Dry Corporation, Ltd., Los Angeles, Calif., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 35,449. Term of patent 3½ years.



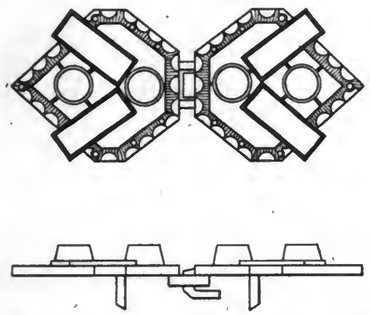
The ornamental design for a dispensing stand, as shown.

84,871. LAMP. LORENZO CECIO and SALVATORE BUONAMANO, Brooklyn, N. Y. Filed Mar. 20, 1931. Serial No. 39,178. Term of patent 3½ years.



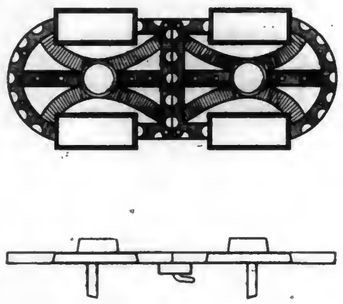
The ornamental design for a lamp substantially as shown.

84,872. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,246. Term of patent 3½ years.



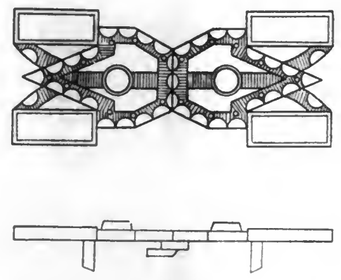
The ornamental design for a belt buckle combination, as shown.

84,873. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,247. Term of patent 3½ years.



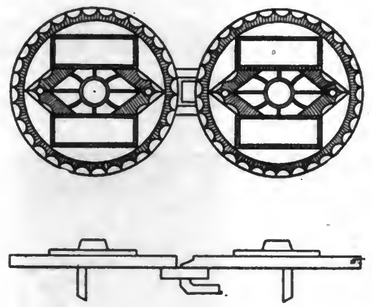
The ornamental design for a belt buckle combination, as shown.

84,874. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,248. Term of patent 3½ years.



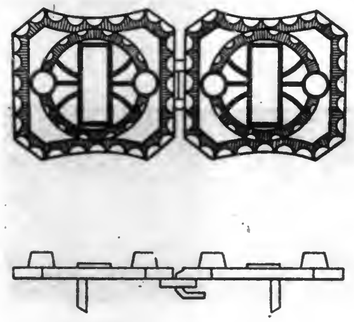
The ornamental design for a belt buckle combination, as shown.

84,875. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,249. Term of patent 3½ years.



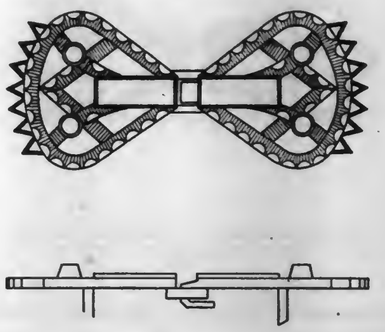
The ornamental design for a belt buckle combination, as shown.

84,876. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,250. Term of patent 3½ years.



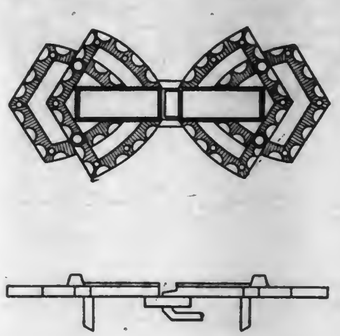
The ornamental design for a belt buckle combination, as shown.

84,877. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,251. Term of patent 3½ years.



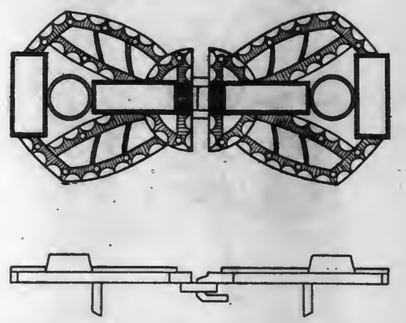
The ornamental design for a belt buckle combination, as shown.

84,878. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,252. Term of patent 3½ years.



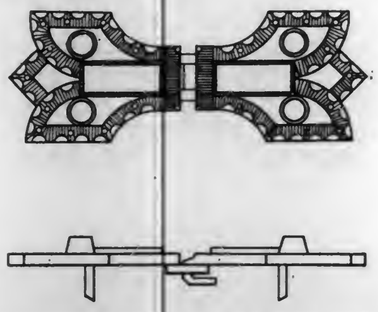
The ornamental design for a belt buckle combination, as shown.

84,879. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,253. Term of patent 3½ years.



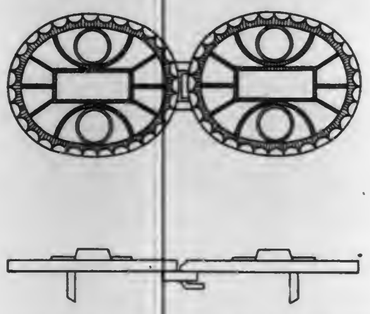
The ornamental design for a belt buckle combination, as shown.

84,880. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,254. Term of patent 3½ years.



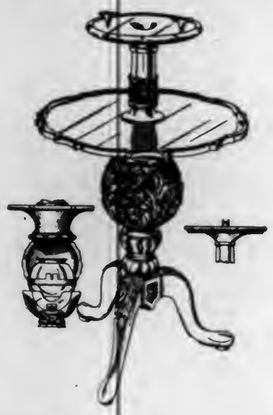
The ornamental design for a belt buckle combination, as shown.

84,881. BELT BUCKLE COMBINATION. BORIS COOPER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 40,255. Term of patent 3½ years.



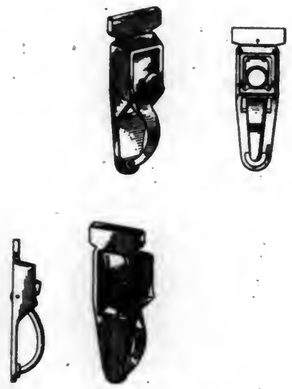
The ornamental design for a belt buckle combination, as shown.

84,882. SMOKER'S STAND OR ANALOGOUS ARTICLE. HUBERT K. DALTON, Stamford, Conn. Filed May 8, 1931. Serial No. 39,783. Term of patent 14 years.



The ornamental design for a smoker's stand or analogous article, substantially as shown in the accompanying drawing and described.

84,883. HAT HANGER. JOE DE GEORGE, Ashtabula, Ohio. Filed Oct. 16, 1929. Serial No. 33,056. Term of patent 14 years.



The ornamental design for a hat hanger, as shown.

84,884. LACE. ARMAND DELAHAYE, Calais, France. Filed May 27, 1931. Serial No. 39,999. Term of patent 3½ years.

The ornamental design for lace, as shown.

84,885. LACE. ARMAND DELAHAYE, Calais, France. Filed May 27, 1931. Serial No. 40,000. Term of patent 3½ years.



The ornamental design for lace as shown.

84,886. HOUSE-NUMBER-PLATE. ANTON FAZEKAS, San Francisco, Calif. Filed June 1, 1931. Serial No. 40,053. Term of patent 14 years.



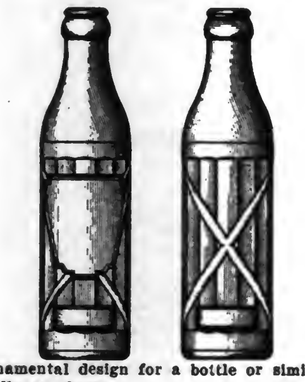
The ornamental design for a house-number-plate as shown.

84,887. BOTTLE. EDWIN W. FUERST, Toledo, Ohio. Filed June 17, 1931. Serial No. 40,244. Term of patent 14 years.



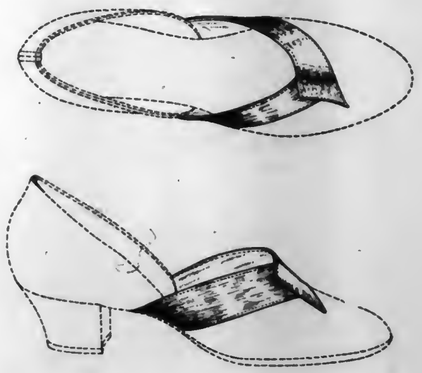
The ornamental design for a bottle substantially as shown and described.

84,888. BOTTLE OR SIMILAR ARTICLE. GEORGE F. GALLAGHER, Chicago, Ill., assignor to Krem-Ko Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1931. Serial No. 39,890. Term of patent 14 years.



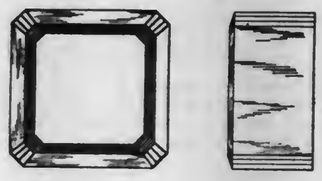
The ornamental design for a bottle or similar article, substantially as shown.

84,889. BOUDOIR SLIPPER. LEO GOODKIND, Woodmere, N. Y. Filed Mar. 3, 1931. Serial No. 38,918. Term of patent 3½ years.



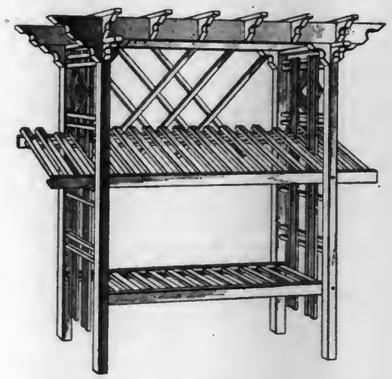
The ornamental design for a boudoir slipper substantially as shown and described.

84,890. CLOCK CASE. GEORGE GRAFF, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 28, 1930. Serial No. 35,426. Term of patent 14 years.



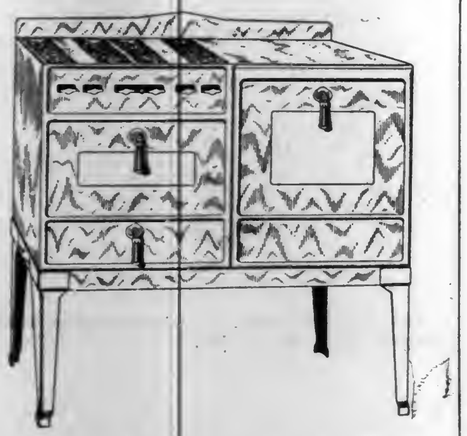
The ornamental design for a clock case substantially as shown.

84,891. DISPLAY STAND. GUY E. GRAYBILL, Oak Park, Ill. Filed May 27, 1931. Serial No. 40,013. Term of patent 3½ years.



The ornamental design for a display stand, substantially as shown.

84,892. GAS RANGE. HERMAN H. HEIDBREDER, Quincy, Ill., assignor to The Quincy Stove Manufacturing Company, Quincy, Ill., a Corporation of Illinois. Filed June 4, 1931. Serial No. 40,075. Term of patent 7 years.



The ornamental design for a gas range, as shown.

84,893. STOCKING. ALFRED E. ISCHINGER, Reading, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Dec. 15, 1930. Serial No. 37,991. Term of patent 14 years.



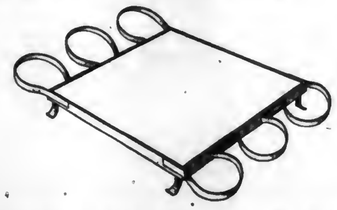
The ornamental design for a stocking, as shown and described.

84,894. STOCKING. ALFRED E. ISCHINGER, Reading, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Dec. 15, 1930. Serial No. 37,993. Term of patent 14 years.



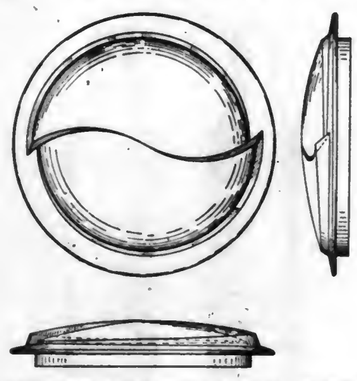
The ornamental design for a stocking, as shown and described.

84,895. HOLDER FOR BEVERAGE SETS. HARRY KORN, Brooklyn, N. Y., assignor to Artcraft Iron Works, Inc., a Corporation of New York. Filed June 10, 1931. Serial No. 40,161. Term of patent 7 years.



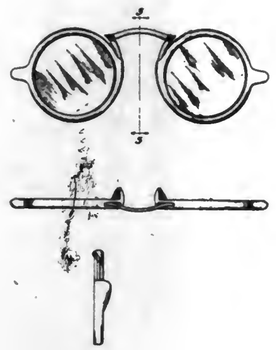
The ornamental design for a holder for beverage sets substantially as shown and described.

84,896. HUB CAP. RAYMOND LOEWY, New York, N. Y., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed June 1, 1931. Serial No. 40,043. Term of patent 7 years.



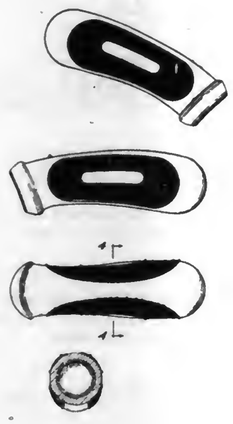
The ornamental design for a hub cap substantially as shown.

84,897. SPECTACLE FRAME. GERARDO F. MARCIANO, Providence, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Oct. 1, 1928. Serial No. 28,343. Term of patent 14 years.



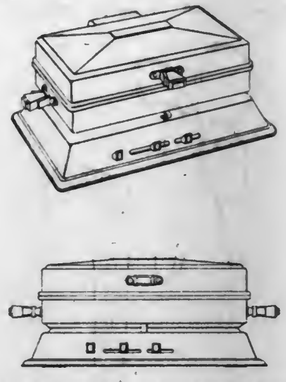
The ornamental design for a spectacle frame, substantially as shown and described.

84,898. SUCTION CLEANER HANDLE GRIP. EUGENE F. MARTINET, Cleveland, Ohio, assignor to The P. A. Geier Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 10, 1931. Serial No. 39,428. Term of patent 14 years.



The ornamental design for a suction cleaner handle grip, as shown.

84,899. TOASTER. MICHAEL W. MCARDLE, Chicago, Ill. Filed Nov. 13, 1930. Serial No. 37,637. Term of patent 14 years.



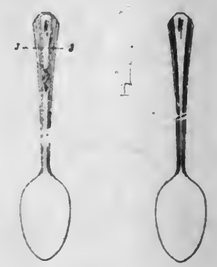
The ornamental design for a toaster, as shown.

84,900. SPRINKLER HEAD. JOSEPH F. MORAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn. Filed Dec. 23, 1930. Serial No. 38,098. Term of patent 7 years.



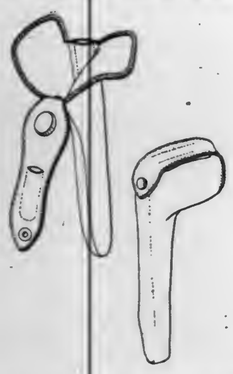
The ornamental design for a sprinkler head as shown.

84,901. SPOON OR SIMILAR ARTICLE. FREDERICK PRÉTAT, Waterbury, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Dec. 26, 1929. Serial No. 33,923. Term of patent 7 years.



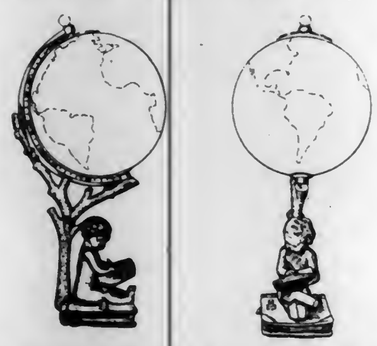
The ornamental design for a spoon or similar article as shown.

84,902. POCKET CASE FOR A TOBACCO PIPE AND ACCESSORIES. SYDNEY SCHISHKA, London, England. Filed Jan. 23, 1931, Serial No. 38,420, and in Great Britain June 24, 1930. Term of patent 7 years.



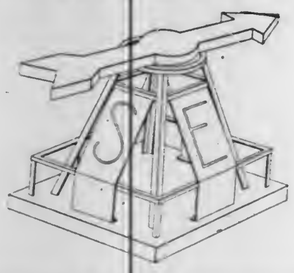
The ornamental design for a pocket case for a tobacco pipe and accessories, as shown.

84,903. COMBINED TERRESTRIAL GLOBE FRAME AND SUPPORT THEREFOR. HELMAN E. SCHULSE, Wilmington, Del., assignor to Uniclox Corporation, a Corporation of Delaware. Filed Apr. 11, 1931. Serial No. 39,452. Term of patent 3½ years.



The ornamental design for a combined terrestrial globe frame and support therefor as shown.

84,904. SUPERSTRUCTURE FOR BEACON TOWERS. JAMES E. TATE, Minneapolis, Minn., assignor to Henry E. Vance, Bemidji, Minn. Filed May 23, 1931. Serial No. 39,943. Term of patent 14 years.



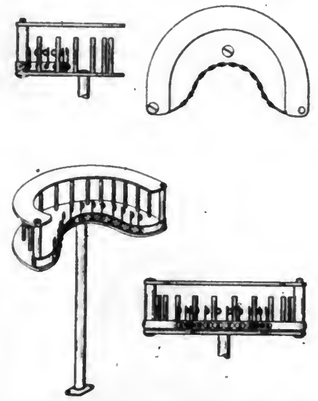
The ornamental design for a superstructure for beacon towers, as shown.

84,905. BEACON TOWER. JAMES E. TATE, Minneapolis, Minn., assignor to Henry E. Vance, Bemidji, Minn. Filed May 23, 1931. Serial No. 39,944. Term of patent 14 years.



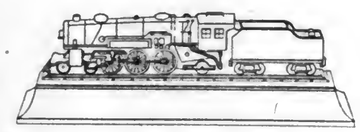
The ornamental design for a beacon tower, as shown.

84,906. SPOOL HOLDER FOR SPOOLS OF THREAD AND THE LIKE. POMPILIO VALERIO, Cincinnati, Ohio. Filed June 5, 1931. Serial No. 40,089. Term of patent 14 years.



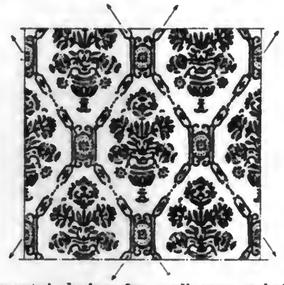
The ornamental design for a spool holder for spools of thread and the like, substantially as shown and described.

84,907. TOY SAVINGS BANK. ANTHONY VAN GYTENBEEK, Paterson, N. J. Filed May 29, 1930. Serial No. 35 849. Term of patent 3½ years.



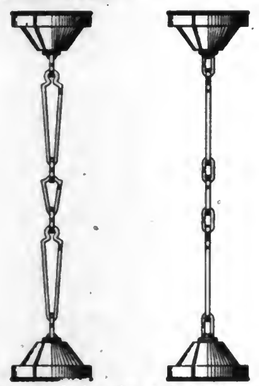
The ornamental design for a toy savings bank, as shown and described.

84,908. WALLPAPER. JOHN H. WHITWELL, Philadelphia, Pa. Filed June 16, 1931. Serial No. 40,231. Term of patent 3½ years.



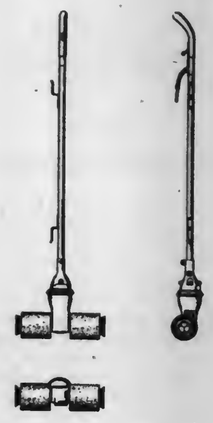
The ornamental design for wallpaper substantially as shown and described.

84,909. LIGHT FIXTURE HANGER. FREDERIC C. WINKLER, Lakewood, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 40,199. Term of patent 7 years.



The ornamental design for a light fixture hanger substantially as shown.

84,910. COMBINED CASING FOR A FLOOR POLISHING BRUSH AND HANDLE THEREFOR. HARRY H. WOLFE and HARRY L. MYERS, Toledo, Ohio, assignors to The American Floor Surfacing Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 25, 1930. Serial No. 37,071. Term of patent 14 years.

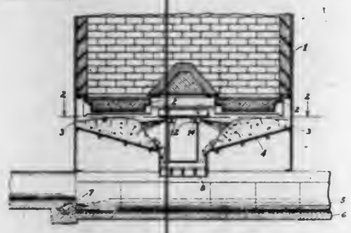


The ornamental design for a combined casing for a floor polishing brush and handle therefor showing our new design.

PATENTS

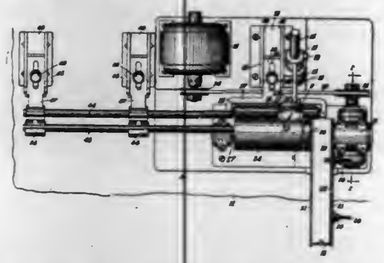
GRANTED AUGUST 18, 1931

1,818,967. APPARATUS FOR HANDLING SOLIDS, FRANK B. ALLEN, Lower Merion Township, Montgomery County, Pa., assignor to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 15, 1929. Serial No. 355,164. 3 Claims. (Cl. 302—15.)



1. Apparatus for handling loose solids comprising a receptacle having a discharge opening, an inclined feed plate disposed below said opening and adapted to retain solids discharged through said opening, a nozzle, means for supporting said nozzle whereby said nozzle is directed to throw a stream of liquid against the solids retained on said plate, connections between said nozzle and a source of supply of liquid under pressure, a water-wheel in said connections adapted to be turned by flow of liquid under pressure therethrough, and means, actuated by rotation of said water-wheel, for oscillating said nozzle whereby the stream of liquid from said nozzle is directed back and forth over the solid material on said feed plate.

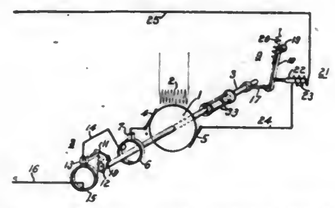
1,818,968. GAUGING APPARATUS. ERICK TORVALD ANDERSON, Hartford, Conn., assignor to The Skayef Ball Bearing Company, Hartford, Conn., a Corporation of Connecticut. Filed Sept. 12, 1928. Serial No. 305,455. 9 Claims. (Cl. 33—178.)



1. Mechanism for gauging rings, which comprises a pair of rolls adapted to support the rings, means for rotating one of such rolls to rotate the rings about their own axes, the rolls being adapted at the same time to move the rings axially, and a gauging device having a portion located in position for engaging the rings while they are so rotating and moving.

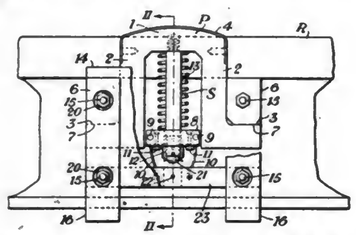
1,818,969. ELECTRICAL PROTECTIVE DEVICE. PORTER H. BRACE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 25, 1921. Serial No. 510,335. 15 Claims. (Cl. 175—294.)

1. A direct current electrical device connected in a circuit and comprising a rotatable armature normally held stationary but adapted to supply an electromotive force in opposition to the electromotive force of the circuit when it rotates responsive to a change in the circuit conditions, means for releasing the armature to permit ro-



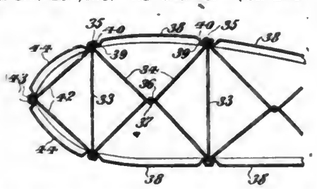
tation thereof, and additional means responsive, thereafter, to the change produced by the said rotation to effect the interruption of the circuit.

1,818,970. TRACK RAIL CONTACTOR. HAROLD C. CLAUSEN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 23, 1931. Serial No. 510,675. 4 Claims. (Cl. 246—246.)



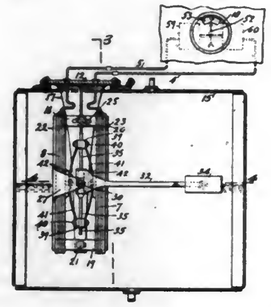
1. A track rail contactor comprising a block attached to the side of a rail and provided with two spaced vertical outer guide members, an apertured middle guide member fixed to said block between said vertical guide members, an inverted U-shaped plunger each leg of which is provided with an outwardly projecting foot, and each of which legs is movable between said middle guide member and one of said outer guide members, a spring interposed between said middle guide member and the cross bar of said plunger to bias the plunger upwardly to such position that the two feet engage the lower ends of said two outer guide members, from which position the plunger will be moved vertically downward by each wheel of a passing car, a stem attached to the cross bar of said plunger and projecting downwardly through the aperture in said middle guide member, and a contact operated by said stem.

1,818,971. AIRPLANE WING CONSTRUCTION. JAMES V. CRICHTON, Philadelphia, Pa., assignor of one-half to Karl Salberg, Philadelphia, Pa. Filed Nov. 19, 1929. Serial No. 408,213. 13 Claims. (Cl. 244—31.)



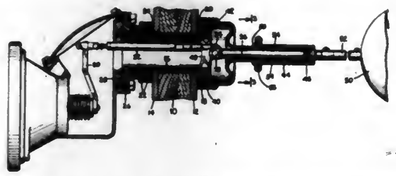
1. An airplane wing, comprising spaced longitudinally extending girders, diagonally extending braces, and surface plates connecting the marginal portions of said girders, each of said girders being provided with cutout regions forming between them diagonally extending brace portions, the said cutout regions progressing in staggered relation between marginal edge portions, said braces being corrugated to increase their rigidity.

1,818,972. LIQUID LEVEL INDICATOR. CLARENCE A. DE GIERS, New York, N. Y., assignor, by mesne assignments, to The Liquidometer Corporation, Wilmington, Del., a Corporation of Delaware. Filed May 9, 1922. Serial No. 559,669. Renewed May 28, 1930. 4 Claims. (Cl. 73—82.)



4. In a device of the character described, the combination of a tank, a float in the tank, pivoted float arms, a pair of fluid containing compressible and expansible chambers, a laterally reciprocable actuator rod, a second rod on which the reciprocable rod is pivoted, connections from the second rod to the float arms including an adjusting screw by means of which said second rod may be adjusted relatively to the pivot of the float arms, connections from the actuator rod to the chambers, a pressure responsive indicator, and fluid transmitting connections from the chambers to the indicator.

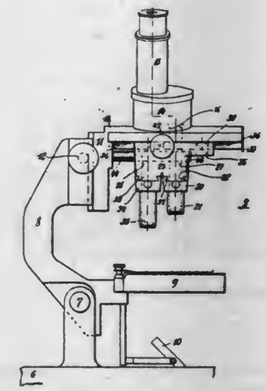
1,818,973. FLOAT ARM SEAL. CLARENCE A. DE GIERS, Forest Hills, N. Y., assignor to Liquidometer Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed July 10, 1929. Serial No. 377,089. 13 Claims. (Cl. 137—102.)



1. In apparatus of the class described, in combination, a tank adapted to contain liquid, a float adapted to rest on the liquid, an indicating device on the outside wall of the tank, and means for operatively interconnecting said float and said device, said interconnecting means including a shank, a float arm, jaws on said float arm and a ring for locking said jaws to said shank, substantially as described.

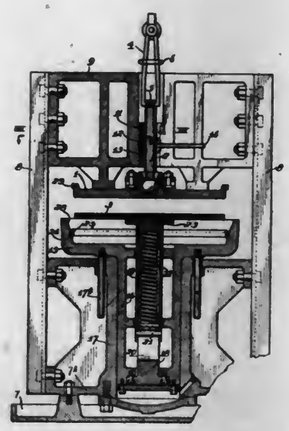
1,818,974. BINOCULAR MICROSCOPE. MAX ENGELMANN, Wetzlar, Germany, assignor to Ernst Leitz, Optische Werke, Wetzlar, Germany, a Corporation of Germany. Filed Feb. 19, 1930. Serial No. 429,479. 9 Claims. (Cl. 88—39.)

2. A binocular microscope comprising a plurality of pairs of objectives, a carrier for said objectives and means for reciprocating said carrier, rectilinearly and laterally, in a plane at substantially right angles to the plane of



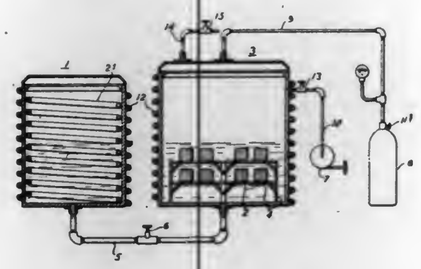
the binocular axes for adjustably positioning each of said pairs of objectives, selectively, for use in the binocular axes.

1,818,975. APPARATUS FOR APPLYING FELTS TO GLASS POLISHING BLOCKS. ALBERT E. EVANS, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Apr. 26, 1930. Serial No. 447,492. 7 Claims. (Cl. 51—275.)



7. In combination in apparatus for applying a felt sheet to a runner block having a spindle, a cross head having a supporting surface facing downwardly so as to engage the upper surface of a runner block and having a central recess opening laterally for receiving the spindle of the runner block, means for engaging the upper end of the spindle and supporting the block so that its spindle lies in said recess and the face of the block is held against said supporting surface, means for pressing the spindle into said recess, a support below the cross head for the felt sheet and for a clamping ring centered with respect to the cross head, and power means for causing a movement of approach of the support with respect to the cross head.

1,818,976. METHOD OF IMPREGNATING COILS. JAMES T. GOFF, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 22, 1930. Serial No. 483,466. 12 Claims. (Cl. 175—21.)



1. The process of insulating a coil which comprises impregnating the coil with thickened China wood oil in a nonoxidizing atmosphere and baking to gell the oil.

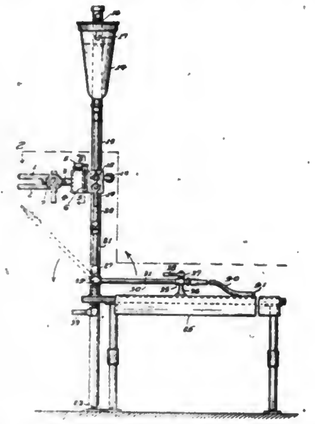
1,818,977. FRICTION CASEMENT ADJUSTER. ROBERT C. GRAY, Warren Township, Somerset County, N. J. Filed Jan. 25, 1929. Serial No. 334,965. 10 Claims. (Cl. 292—275.)



7. In a device of the character described, a barrel member, an automatically expansible plunger member, means for expanding the plunger member to cause friction between the latter member and the casing member, and means exterior to the casing member and operable while said members are attached for positively controlling the expanding means to maintain any desired degree of friction.

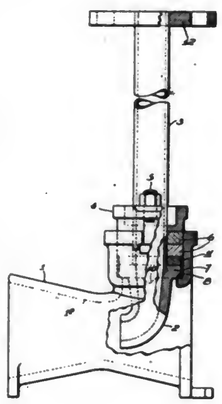
1,818,978. APPARATUS FOR ADMINISTERING COLON TREATMENTS. CHARLES COY HONSAKER, Philadelphia, Pa. Filed May 7, 1929. Serial No. 361,032. 4 Claims. (Cl. 128—227.)

1. An apparatus of the class described comprising a water supply pipe, a mixing chamber having an inlet port and an outlet port, the supply pipe entering the inlet port, a storage tank, a pipe connection between said outlet port and said tank, a movable member comprising two pipes having a pair of adjacent ends rigidly connected by a pipe, and a pipe connecting said chamber to one of the pipes comprised in said member, said pipes



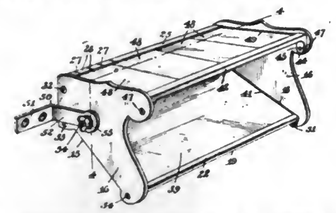
having at their ends pivotal connections with the pivots in axial alignment to permit the member with its two pipes to swing as a unit.

1,818,979. CIRCULATING STEAM JET CONSTRUCTION. OYSTEIN JACOBSEN, Dayton, Ohio, assignor to The Duriron Company, Inc., a Corporation of New York. Filed Oct. 31, 1930. Serial No. 492,442. 3 Claims. (Cl. 103—278.)



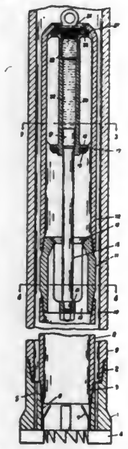
1. In combination in a steam jet construction, a casing member having a transverse passage, and a socket opening into said passage at right angles thereto, a shoulder or ledge formed in the casing member around said socket, a jet member seated in said socket having its end turned laterally and provided with a flange engaging said shoulder, a riser pipe having a flange at its lower end also lying in the socket in opposition to the flange on the jet member, a gland member surrounding the riser pipe and extending into the upper end of the socket, packing between the lower end of the gland member and the flange on the riser pipe, and clamping means for forcing the gland member down against the packing and holding it in such position.

1,818,980. LUMINOUS SIGN. FREDERICK A. KROTZER and WILLIAM B. CRANDALL, Westfield, N. Y. Filed Jan. 19, 1929. Serial No. 333,675. 6 Claims. (Cl. 40—130.)



1. A luminous sign, comprising a casing having end walls, an intermediate member forming an inclined bottom wall bent upon itself at its front edge to provide a retainer groove and having a vertically-disposed rear wall in piece with said bottom wall provided with a supporting flange and a retainer flange separated from said supporting flange and having also retainer ears stamped therefrom directly above said inclined bottom wall, a reflecting mirror placed against said inclined bottom wall and having its front marginal portion entered in said retainer groove and having its rear marginal portion engaged by said retainer ears, and a top wall having its rear marginal portion entered between said supporting flange and said retainer flange and provided with means to threw characters outlined thereon downwardly onto said reflecting mirror to be reflected from the latter, and means engaging the front marginal portions of said top wall.

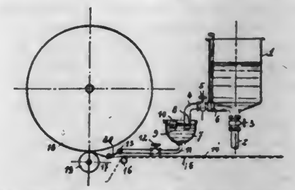
1,818,981. CORE BARREL VALVE. REXFORD O. ANDERSON, Houston, Tex. Filed May 31, 1930. Serial No. 458,801. 5 Claims. (Cl. 255—72.)



1. In a core barrel, a guide barrel secured to the upper end thereof, a piston of comparatively small diameter projecting upwardly within said guide barrel, a cylinder telescoping over said piston, and adapted to be filled with grease, valve seats at both ends of said guide barrel, valves at the upper and lower ends of said cylinder, adapted to move into position to fit said seats and close the passage of fluid therethrough.

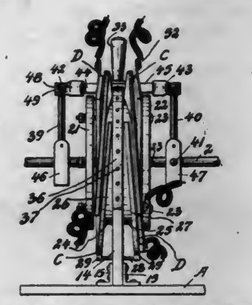
1,818,982. APPARATUS FOR THE PRODUCTION OF PAPER GLAZED AND/OR COLORED ON ONE FACE. VICTOR ANTOINE, Lambermont, near Ensival, Belgium. Filed Sept. 12, 1928, Serial No. 305,595, and in Belgium Sept. 15, 1927. 3 Claims. (Cl. 92—40.)

1. In a paper making machine, the combination for treating one surface of the paper comprising, in combination, a pressure roller, a drying cylinder, a felt, a sheet of paper passing between the said pressure roller and the said drying cylinder, a distributor for a coloring solution arranged in front of the point where the sheet of paper passes between the said pressure roller and the said drying cylinder and across the sheet of paper, a roller disposed between the said drying cylinder and the said distributor and against which a pool is formed, whereby the distribution of the coloring solution is made uniform



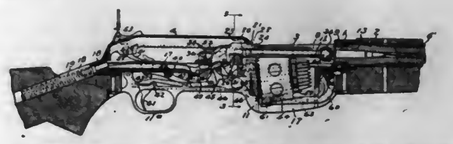
on the said sheet of paper, a regulator whereby the delivery of liquid is controlled, a pipe extending between the said regulator and the said distributor, means whereby a constant level is maintained in the said regulator, a reservoir connected to the said distributor and in which a charge of the coloring solution is contained, a second reservoir, means arranged in the said second reservoir and whereby the coloring solution is prepared during the utilization of the charge contained in the first reservoir.

1,818,983. SIGNAL TIMING DEVICE. WILLIAM H. BELL, North Olmsted, Ohio. Filed Oct. 22, 1928. Serial No. 314,217. 9 Claims. (Cl. 200—29.)



2. Timing mechanism of the class described, comprising, in combination, a pair of rings, each ring consisting of three timing plates, said timing plates being operatively connected with the signals of a traffic indicator, one plate on each ring being connected with the caution signal of the indicator, said plates which are connected with the caution signal being in stepped relation, and contact mechanism movable over said rings whereby to complete the circuit with certain of the signals in the indicator, said contact mechanism comprising brushes aligned in the same plane so that they are engaged at all times with the rings at directly corresponding points thereon.

1,818,984. AUTOMATIC FIREARM. JOHATHAN EDMUND BROWNING, Ogden, Utah, assignor to J. E. Browning Company, Ogden, Utah, a Corporation of Utah. Filed Jan. 28, 1931. Serial No. 511,741. 9 Claims. (Cl. 42—4.)

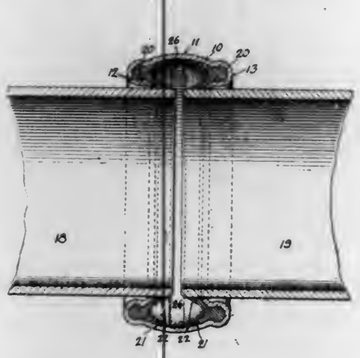


1. A firearm of the class described comprising in combination, a receiver, a barrel and barrel extension mov-

able upon recoil rearward relatively to the receiver, a rearward movable breech bolt normally in locked engagement with the barrel extension, means operative during recoil for unlocking the bolt from the extension and operative during counter-recoil for restoring the locked relationship, an accelerator pivoted to the receiver for movement about a fixed transverse axis and connected with the barrel extension for movement therewith, the said accelerator serving upon recoil to move the breech bolt rearward separately from the barrel extension, and a cam on the accelerator engaging the barrel extension to retard forward movement thereof during the counter-recoil movement of the bolt, the inclination of the said cam being such as to prevent turning thereof by forward pressure exerted thereon by the barrel extension.

4. In a firearm of the class described, the combination of a receiver having a cartridge opening extending vertically therethrough for receiving at the top a cartridge clip which is open at the top, bottom and front and closed at the rear, a breech bolt movable rearward upon recoil and automatically returned to its normal position, a follower on the firearm adapted to enter the cartridge clip at the bottom and move cartridges successively upward out of the clip into the path of return movement of the bolt, and a stop mechanism at the rear of the cartridge opening adapted to be engaged by the follower and moved upward into the path of return movement of the bolt after the last cartridge has been removed from the clip, the said stop mechanism including an element yieldable to permit a loaded clip to be inserted at the top and the empty clip to be discharged at the bottom.

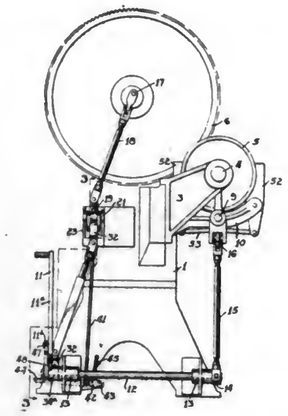
1,818,985. PIPE COUPLING. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Mar. 17, 1928. Serial No. 262,564. 3 Claims. (Cl. 285—193.)



3. A pipe coupling comprising a sheet metal annular element having oppositely disposed flexible re-entrant portions defining inwardly extending throated recesses and resilient sealing means partially confined in said throated recesses and adapted to engage the outer walls of the pipe sections being coupled to provide a seal therewith.

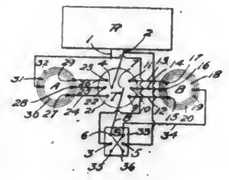
1,818,986. POWER PRESS CONTROL. NEAL W. DORMAN and MEREDITH R. HATCH, Toledo, Ohio, assignors to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 7, 1930. Serial No. 442,214. 15 Claims. (Cl. 192—82.)

1. In a power press, a drive member, a rotatable driven member, a clutch controlled connection between said members, a rock shaft, connection between said shaft and the clutch of said connection to engage or release the clutch when the shaft is rocked, means connecting said driven member and shaft for imparting movement from one to the other, said means having releasable connection with the



shaft, and a hand control for the shaft automatically operable when initially moved by hand in either direction to release the connection of said means with the shaft.

1,818,987. RADIO LOUD SPEAKER AND THE LIKE. CHARLES HUGH DUFFY, Miami, Fla. Filed June 30, 1930. Serial No. 464,788. 26 Claims. (Cl. 179—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

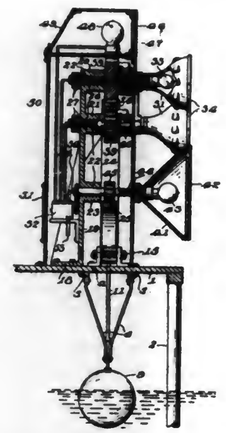


1. A drive system for radio loud speaker diaphragms and the like including two diaphragm actuating units, each of which includes a plurality of field windings of different impedances, a source of pulsating electric current, an electrical circuit, a selective switch including two series of swith contacts, one series of said contacts for each actuating unit and for electrical connection with the plurality of field windings of each actuating unit, and a reversing switch in electrical circuit with one of the actuating units and disposed electrically between the source of pulsating current and the selective switch, whereby the direction of flow of pulsating current through the field winding of one unit may be reversed with respect to the direction of flow of the pulsating current through the field windings of the other of the actuating units.

1,818,988. ADVERTISING DEVICE. JOHN GALLAGHER, Philadelphia, Pa. Filed May 14, 1930. Serial No. 452,224. 8 Claims. (Cl. 116—147.)

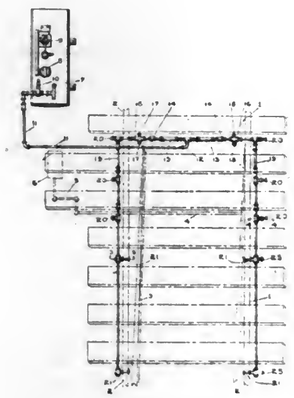
1. A device of the class described, comprising an oscillatable member, a segmental rack carried thereby and centering about the axis of oscillation, a rotatable element, a gear and ratchet unit connecting said element to said rack, and means carried by said element to produce sound as it rotates.

5. In a device of the class described, a rotatable support, a circular hollow member carried thereby and having an aperture, sound-producing means within said member and adapted to be operated by air currents passing



through said aperture, and means outside of said member to deflect said currents towards and through said aperture to actuate said first means.

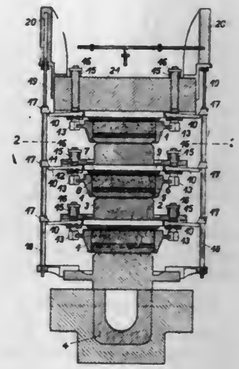
1,818,989. AUTOMATIC SNOW REMOVING DEVICE. MORGAN J. GRIFFITH, Cleveland, Ohio. Filed Aug. 21, 1930. Serial No. 476,923. 10 Claims. (Cl. 246—428.)



1. A method of conveying snow from track switches which consists in directing blasts of fluid under pressure against the areas to be cleared at successive predetermined time intervals.

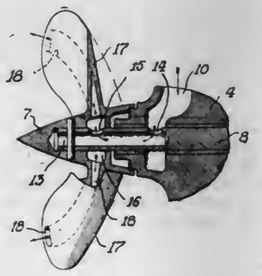
1,818,990. POT PRESS. PAUL HÄNEL, Dresden, Germany, assignor to the Firm J. M. Lehmann, Dresden-A., Germany. Filed Aug. 23, 1929, Serial No. 387,879, and in Germany Sept. 10, 1928. 4 Claims. (Cl. 100—50.)

1. In a pot press, a column of alternating pots and press heads for pistons in the respective pots, means individual to the respective pots acting to hold the same normally in tight contact with the under side of the adjacent press head to close all of the pots prior to the pressing operation, a relatively movable operating member



for each of said means carried by the associated press head, and means to simultaneously engage and actuate all of said members to thereby simultaneously release all of the pots from contacting engagement with the associated press heads.

1,818,991. WATER COOLING SYSTEM FOR MARINE MOTORS. FINN T. IRGENS, Jackson, Mich., assignor, by mesne assignments, to Outboard Motors Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 8, 1927. Serial No. 159,779. 2 Claims. (Cl. 115—17.)



1. In an outboard motor, a power plant, a chambered rudder structure adapted to receive and discharge water, said structure having a chamber formed in the leading edge thereof, a conduit extending from said chamber to said power plant and adapted to conduct water thereto, a discharge conduit extending from said power plant to said rudder structure and adapted to carry water from said power plant, a propeller shaft journalled in said rudder structure, a propeller mounted on said shaft and having passages formed longitudinally in the blades of said propeller, said passages being open at their outer ends, and means of communication between said second named conduit and the inner ends of said passages substantially closed against the admission of water to said passages from sources other than said discharge conduit, whereby the suction developed in said passages will circulate water through said conduits.

1,818,992. LEVER GRIP. ADOLPH C. KLOPPING, Toledo, Ohio. Filed June 23, 1930. Serial No. 463,164. 7 Claims. (Cl. 74—33.)



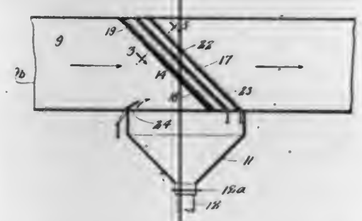
1. In combination, a lever, a socketed hand grip telescoped over the handle portion of the lever, means for retaining the grip on the lever handle, and means interiorly of the grip for interengagement with the outer end portion of the handle to center the outer end of the grip relative to the handle.

1,818,993. BLASTING CARTRIDGE. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Nov. 27, 1929. Serial No. 410,196. 5 Claims. (Cl. 102—7.)



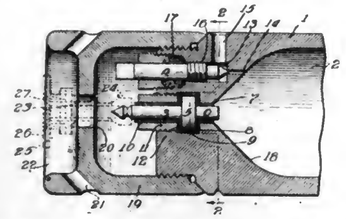
1. A blasting cartridge comprising a rigid casing having an opening therein, stepped sealing surfaces surrounding said opening, a closure for said opening, a gasket interposed between said closure and said stepped surfaces, means for forcing said closure and gasket toward said stepped surfaces to successively seal the closure on the respective surfaces and a passage for introducing gas into the cartridge beneath the closure when the closure is sealed against the first of said stepped surfaces, said closure and gasket serving to seal said passage when in engagement with the second of said stepped surfaces.

1,818,994. DUST COLLECTOR. HENRY KREISINGER, Piermont, N. Y., assignor to Combustion Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 11, 1924. Serial No. 742,977. 4 Claims. (Cl. 183—110.)



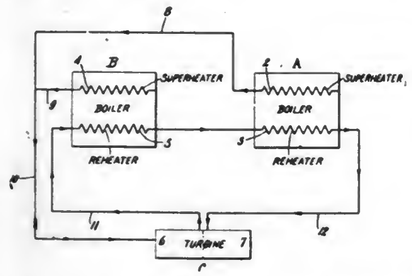
1. A dust collector comprising, in combination, a conduit through which the fluid from which dust is to be removed may be passed, a dust receiver, dust collecting means in said conduit delivering to said receiver, and means whereby any gaseous fluid which may pass into the receiver with the dust is returned to the conduit rearwardly of the collecting means.

1,818,995. BLASTING CARTRIDGE. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Nov. 29, 1929. Serial No. 410,629. 2 Claims. (Cl. 102—7.)



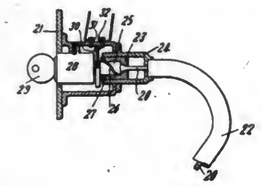
1. In a blasting cartridge of the type comprising a substantially cylindrical metallic body having an internal fluid chamber with a discharge opening in one end thereof, the combination of an insulated electrode positioned in the opposite end of said body and extending into said chamber, and an inclined approach to said electrode, whereby a heater unit inserted in said fluid chamber may be automatically guided into position to establish contact with said electrode.

1,818,996. APPARATUS FOR REHEATING STEAM FOR USE IN TURBINES. LEONARD J. MARSHALL, Westwood, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,825. 2 Claims. (Cl. 60—73.)



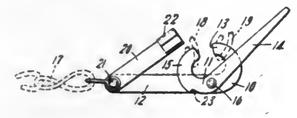
1. In combination, a plurality of boilers, a multiple stage prime mover, means for leading high pressure fluid from said boilers to the high pressure stage of said prime mover, a fluid reheater in each of different boilers, said reheaters being connected in series, means for leading the fluid from a stage of the prime mover to said serially connected reheaters, and means for leading the reheated fluid from said serially connected reheaters to the stage following said stage.

1,818,997. AUTOMOBILE LOCKING MECHANISM. EDGAR J. MARTEL, Laconia, N. H. Filed Apr. 10, 1930. Serial No. 443,091. 4 Claims. (Cl. 70—126.)



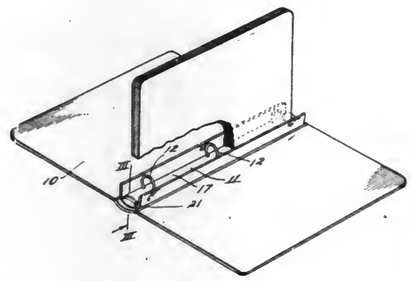
1. In an automobile transmission mechanism including a pair of shifter rods having depressions therein, a loose transverse rod adapted to rest in any depression in each rod, means for holding said transverse rod yieldingly or rigidly in said depressions, said holding means comprising a block having a hollow portion through which the loose rod extends, a spring in said hollow portion adapted to rest yieldingly against the loose rod when the block is in one position of operation, said block having a portion rigidly resting on said loose rod when the block is in another position of operation.

1,818,998. CLASP FOR AUTOMOBILE TIRE CHAINS. EDGAR J. MARTEL, Laconia, N. H. Filed May 12, 1930. Serial No. 451,553. 5 Claims. (Cl. 24—241.)



1. A clasp comprising a pair of hooks, each having a shank and a bend, means for pivotally connecting said hooks at the juncture of the shank and bend so that the bends overlap to form a closed ring when the shanks extend in substantially opposite directions, a shoulder formed on the outer edge of the bend of one of said hooks, and a locking member movable into position between said shoulder and an edge of the shank of the other hook.

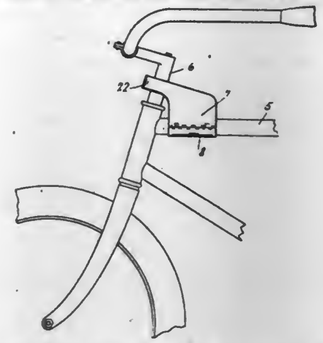
1,818,999. PROTECTOR FOR LOOSE LEAF BINDERS. EDWARD B. MURPHY, Kansas City, Mo., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Oct. 5, 1928. Serial No. 310,537. 9 Claims. (Cl. 129—24.)



1. In a loose leaf binder the combination with a cover and a sheet-carrying member, of a protector member associated with said binder and adapted to position itself between said cover and sheet-carrying member when the binder is in the closed position.

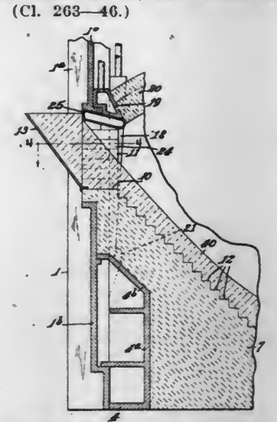
1,819,000. BICYCLE LOCK. ALFRED L. POE, Jacksonville, Fla. Filed Nov. 19, 1929. Serial No. 408,290. Renewed June 26, 1931. 1 Claim. (Cl. 70—90.)

A lock structure of the class described comprising a frame, means for securing the frame on the horizontal bar of the bicycle, a collar, means for securing the collar on the handle bar post of the bicycle, said frame having a hood extending over the collar, said collar being formed with a plurality of notches, a lock fixed in said frame and having a bolt extending into one of said notches, said frame being in the nature of a casing having a bottom wall, a portion of which is semi-cylindrical to fit over the horizontal bar, the means for clamping the frame in place comprising a semi-cylindrical plate to extend under the bar and having side ears, and screws threaded from



the interior of the casing through the bottom thereof into said ears to hold the clamp plate in place with the casing on the horizontal bar.

1,819,001. FRONT WALL FOR OPEN HEARTH FURNACES. HENRI RATEAU and JOHN ALBERT BECK, Weirton, W. Va. Filed Jan. 16, 1931. Serial No. 509,098. 12 Claims. (Cl. 263—46.)



2. In an open-hearth furnace, a front wall having an inner upwardly and outwardly inclined face which, between the door openings, extends to a height above the sill-level of said openings, said face having such an angle of inclination that it will retain in position thereon a bank of lining material in loose form, said front wall having port-like openings for the introduction of loose lining material in banked relation to said face.

1,819,002. PRODUCTION OF PULP OF HIGH ALPHA CELLULOSE CONTENT. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 25, 1930. Serial No. 438,905. 3 Claims. (Cl. 92—11.)

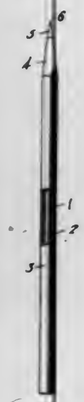
1. A process which comprises cooking raw cellulosic material short of fiber liberation in superheated water and in an acid sulphite liquor, and then cooking to complete fiber liberation in an alkaline liquor.

1,819,003. MULTIPLE-STEP PROCESS OF FIBER LIBERATION. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 25, 1930. Serial No. 438,906. 3 Claims. (Cl. 92—11.)

1. A process which comprises treating raw cellulosic material with a sulphurous acid liquor and with a mineral

acid solution short of fiber liberation, and disgesting the acid-treated material in an alkaline liquor to complete fiber liberation.

1,819,004. TOILET ARTICLE. WALTER C. ROESSINGER, Forest Hills, N. Y., assignor, by mesne assignments, to Northam Warren Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 10, 1930. Serial No. 487,705. 7 Claims. (Cl. 132—73.)



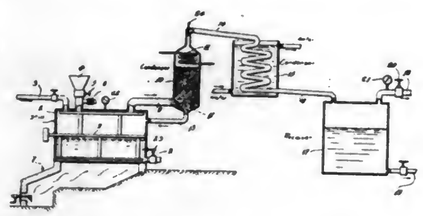
1. A toilet article for whitening finger nails, comprising a white coating composition which is hard and stiff under normal atmospheric conditions, will slowly soften when moistened and adhere to a nail when rubbed thereon in moistened condition, and will then harden and form a white coating on the nail.

1,819,005. AUTOMATIC CIRCUIT BREAKER. JOSEPH SACHS, West Hartford, Conn. Filed May 21, 1928, Serial No. 279,391. Renewed May 21, 1931. 6 Claims. (Cl. 200—88.)



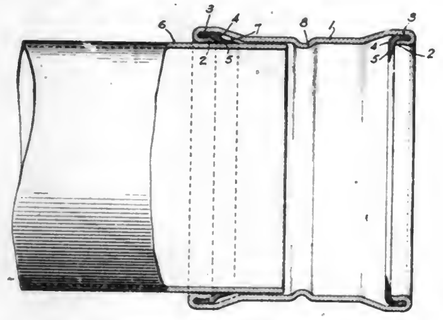
1. An automatic circuit breaker comprising in combination, an insulating support, two stationary spaced arms extending from the support, two stationary spaced electric contacts carried by the support, a contact member guided in a fixed rectilinear path determined by the said arms and carrying two connected electric contacts adapted to respectively engage and disengage the two stationary contacts, a spring tending to move the contact member to circuit breaking position, a manually operable actuating member pivotally mounted on the arms, and a bodily movable electro-responsively releasable mechanical connection between the actuating member and the contact member enabling the former to effect the movement of the latter to open or close the circuit, the said mechanical connection being automatically released upon the passage of excess current to release the contact member from the actuating member and thus permit the said contact member to automatically move to its open-circuit position independently of the actuating member.

1,819,006. METHOD OF TREATING HEAVY OILS FOR THE PRODUCTION OF LIGHT OILS BY THE EMPLOYMENT OF METALLIC HALIDES. WILLIAM H. SHIFFLER, Oakland, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Aug. 11, 1926. Serial No. 128,711. 6 Claims. (Cl. 196—54.)



1. A process of converting petroleum oils into relatively lower boiling point oils, which comprises contacting said petroleum oils with anhydrous aluminum chloride catalyst in a distilling zone at superatmospheric pressure sufficient to maintain the main part of the still unconverted oils in liquid phase but insufficient to prevent vaporization of the produced lower boiling point oils, while supplying sufficient heat to the admixture to vaporize said produced lower boiling point oils and maintain the admixture at about 50 to 70° F. higher than the temperature of ebullition of the admixture at atmospheric pressure.

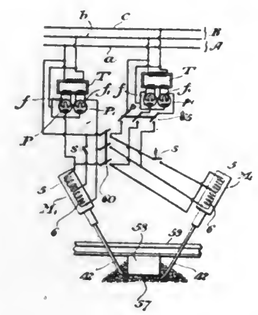
1,819,007. PIPE COUPLING. GEORGE M. SMITH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Jan. 17, 1930. Serial No. 421,427. 3 Claims. (Cl. 285—193.)



1. A pipe coupling comprising a sheet metal tubular member having its end edges bent back toward each other in a direction substantially parallel to the axis of the member to define an inside annular recess, a self sealing packing element in said recess, and means integral with said tubular member for centering the same with respect to the ends of the pipes to be joined.

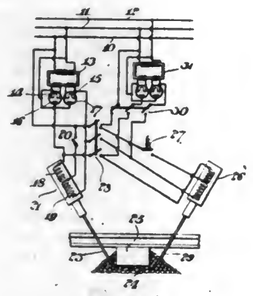
1,819,008. METHOD OF AND APPARATUS FOR OPERATING ELECTRIC MOTORS. CARL S. WEYANDT, Pittsburgh, Pa., assignor to Central Electric Tool Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Feb. 1, 1926, Serial No. 85,245. Divided and this application filed June 1, 1928. Serial No. 282,103. 6 Claims. (Cl. 172—240.)

1. The combination with a polyphase source of current, of a plurality of reciprocating motors each comprising a reciprocating core system and electro-magnetic actuating means therefor, and switching mechanism for bring-



ing the electro-magnetic actuating means of said motors into common association either with one phase or different phases of said source.

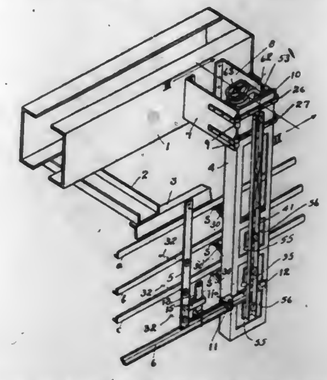
1,819,009. TIE-TAMPING SYSTEM AND METHOD OF OPERATING THE SAME. CARL S. WEYANDT, Pittsburgh, Pa. Original application filed June 1, 1928, Serial No. 282,103, which is a division of Serial No. 85,245, filed Feb. 1, 1926, now Patent No. 1,680,311, dated Aug. 14, 1928. Divided and this application filed Dec. 3, 1929. Serial No. 411,235. 14 Claims. (Cl. 104—12.)



1. In a tie-tamping system comprising a source of alternating current, a pair of tie-tampers each comprising a magnetizable reciprocating element, a tamping tool adapted to be struck thereby, and field-producing structure for effecting reciprocation of said element, the method of tamping ballast for ties and the like, which comprises relating the field-producing structures of the tampers to said source so that the reciprocating elements thereof move in phase with each other, and tamping the ballast adjacent one side of a tie at different positioons longitudinally thereof by simultaneous blows of the tamping tools.

1,819,010. CONTACT STAFF FOR CRANES. CHARLES T. WOODBURN, Pitcairn, Pa. Filed Mar. 4, 1931. Serial No. 520,092. 6 Claims. (Cl. 191—49.)

1. In a device for collecting from a conductor electric energy for a moving vehicle, the combination of a staff, a support for said staff, a lever pivotally borne by said staff and projecting angularly therefrom, a contact device carried at the outer end of said lever, yielding means associated with said lever for the maintenance of said contact device upon said conductor, releasing means associated with said lever, whereby the contact device is adapted to be removed from said conductor, and a hinged

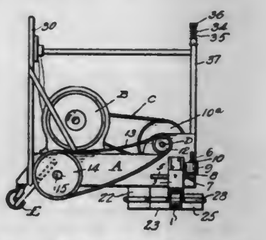


connection between said support and said staff, whereby said staff, lever, and contact device are adapted to be swung away from the conductor.

1,819,011. SHOE STIFFENER MATERIAL AND ART OF MAKING. FRANK O. WOODRUFF, Quincy, Mass., assignor to Beckwith Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 18, 1930. Serial No. 421,814. 10 Claims. (Cl. 92—21.)

1. Shoe stiffener material comprising a porous, water-laid sheet of felted fibers to which is attached as a discontinuous phase a previously gelantinized cellulose derivative capable of again being gelantinized by a volatile solvent and of rendering said material stiff upon the evaporation of the solvent.

1,819,012. SANDING MACHINE. GERWIN P. BAILEY, Salt Lake City, Utah. Filed Apr. 17, 1929. Serial No. 355,683. 3 Claims. (Cl. 51—175.)

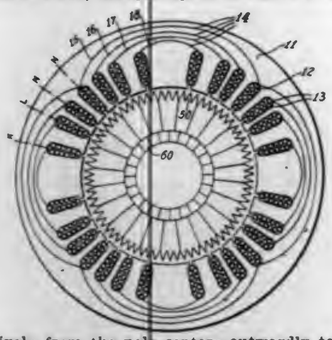


1. In a device of the class described, the combination of a framework having upright handles on each end thereof; a crank shaft mounted in suitable bearings in said framework; means to rotate said crank shaft; a guide bar mounted across said framework and having two spaced apart bars extending forward at right angles thereto; a pressure foot having the free ends of the spaced apart bars mounted therein; means to control said pressure foot on the top of one of said handles; springs to raise said foot when not in use; connecting rods carried on said crank shaft; sanding feet secured on the end of said connecting rods and having the two guide bars passing longitudinally through the upper portion thereof; and means to secure sand paper on the bottom surface of said pressure feet.

1,819,013. ALTERNATING CURRENT MOTOR. EDWIN C. BALLMAN, St. Louis, Mo. Filed Feb. 12, 1926. Serial No. 87,854. 6 Claims. (Cl. 172—275.)

1. In an alternating current motor, a primary member having spaced slots therein and a winding in said slots

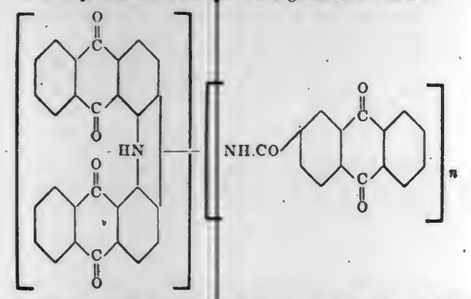
arranged in coils to produce magnetic poles with stepped distribution of flux, the spacings of the inner slots varying



progressively from the pole centers outwardly to produce a polar flux deviating from sine distribution by substantially equal positive and negative increments.

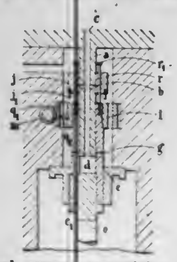
1,819,014. NEW VAT DYESTUFFS OF THE DIANTHRAQUINONYLAMINE-CARBAZOLE SERIES. FRITZ BAUMANN, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1930, Serial No. 441,705, and in Germany Apr. 9, 1929. 4 Claims (Cl. 260—46.)

1. The products of the probable general formula:—



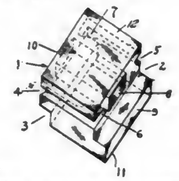
wherein n means one of the numbers 1 or 2, the —NH— group being linked to an alpha-position of the dianthraquinonylamine-carbazole nucleus, and wherein the different anthraquinone nuclei may be further substituted by monovalent substituents, said products forming red to black powders insoluble in alcohol, toluene and pyridine, soluble in strong sulfuric acid with red to blue colorations, dyeing cotton from an alkaline hydrosulfite vat strong orange to olive-green shades of good fastness properties.

1,819,015. LIQUID FUEL PUMP FOR INTERNAL COMBUSTION ENGINES. JOSEF BENES, Vsetin, Czechoslovakia. Filed Mar. 18, 1930, Serial No. 436,864, and in Great Britain Dec. 16, 1929. 3 Claims. (Cl. 103—37.)



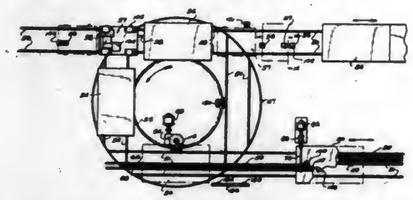
1. A liquid fuel pump comprising a piston with a longitudinal hole and with radial holes communicating therewith, a cylinder also provided with radial holes, the said piston engaging in the said cylinder and one of them being capable of being reciprocated relatively to the other, a sleeve on the piston capable of being reciprocated during certain portions of the said reciprocating relative movement between piston and cylinder, means acting on the said sleeve for adjusting the time when the sleeve on the piston shall uncover the radial slots in the piston during its reciprocating relative movement on the piston in one direction and means which will ensure the relative reciprocating movement of the said sleeve in the opposite direction, the distance between the radial holes in the piston and the end of the latter facing the working space within the cylinder, the position of the radial holes in the cylinder and the relative position between the sleeve on the piston and the means acting on the sleeve being such that during the whole of the suction stroke an open communication is maintained between the suction chamber and the working space of the cylinder either through the radial holes in the piston or the radial holes in the cylinder.

1,819,016. AIR AND WATER COOLED FURNACE AND GENERATOR BLOCK. GEORGE W. DAVEY, Long Island City, N. Y. Filed Dec. 29, 1925. Serial No. 78,250. 6 Claims. (Cl. 110—1.)



1. A furnace wall block having offset portions at two opposite edges for sliding overlapping engagement in the plane of the wall with adjacent similar blocks and grooves at the ends of the blocks extending between the two said edges adapted to engage cooling supporting means behind the offset portions, so that the block when positioned in a wall provieds broken or irregular joints at the four edges of engagement.

1,819,017. SYSTEM FOR GRINDING AND POLISHING GLASS SHEETS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 29, 1929. Serial No. 374,881. 17 Claims. (Cl. 104—38.)

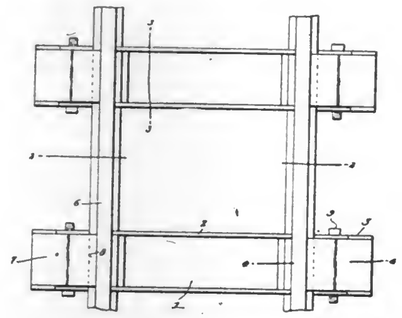


1. In a system of the character described, a pair of substantially parallel tracks, tables movable along the tracks, transfer means between the tracks at one end, means for moving one of the tables from one track onto the transfer means, and separate means for simultaneously moving a second table from said transfer means onto the second track.

1,819,018. METHOD OF MANUFACTURING POROUS MATERIAL FROM PORTLAND CEMENT. JOHAN AXEL ERIKSSON, Stockholm, Sweden. Filed Mar. 27, 1923, Serial No. 628,143, and in Sweden July 26, 1920. 3 Claims. (Cl. 106—18.)

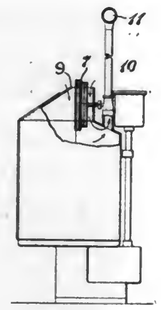
1. A cementitious composition adapted to form a porous material on mixing with water and subsequent setting, comprising cement, shale ashes, lime, and a metal adapted to react with the other ingredients to generate a gas when the said composition is mixed with water.

1,819,019. RAILROAD TIE. SAMUEL B. FERGUSON, Harlingen, Tex. Filed June 10, 1930. Serial No. 460,208. 2 Claims. (Cl. 238—62.)



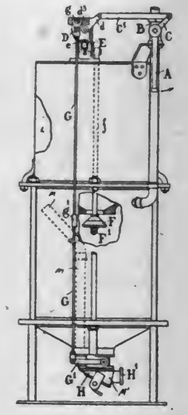
1. The combination with a channelled metallic tie having rail engaging tongues integral therewith for engaging the inner flanges of rails, of rail supporting blocks slidable endwise in the tie, ears integral with the blocks for engaging the outer flanges of rails, wedge keys extending through openings in the sides of the tie and in the block for holding the blocks against movement when engaged with the rail.

1,819,020. ARTIFICIAL SILK MAKING APPARATUS. WILLIAM H. FURNESS, National Park, N. J., assignor to Furness Corporation, Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 11, 1929. Serial No. 331,779. 2 Claims. (Cl. 18—8.)



1. In combination, a battery of artilcial silk thread forming spindles, each including a drawing wheel as a part thereof, a casing enclosing each spindle and having a slot in its top above which the drawing wheel extends for exposure to view, and means for drawing off fumes from the casings and for drawing room atmosphere into the casings through said slots.

1,819,021. SAND BLAST MACHINE. STEPHEN ERNEST GARRATT, Manchester, England, assignor to J. W. Jackman & Company Limited, Salford, England. Filed Oct. 2, 1928, Serial No. 309,804, and in Great Britain Oct. 3, 1927. 1 Claim. (Cl. 51—12.)



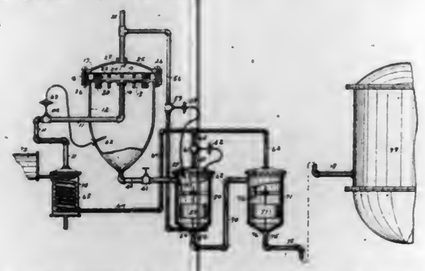
Sand blast apparatus comprising the combination with an abrasive storage chamber and a pressure chamber, a filling valve for delivering abrasive from the storage chamber to the pressure chamber, a valve for admitting compressed air to the pressure chamber, a mixing chamber below the pressure chamber, an outlet valve for the abrasive from the pressure chamber into the mixing chamber and an outlet pipe for the compressed air from the top of the pressure chamber to the mixing chamber of a single operating lever mounted on the air control valve, a cam mounted on a fixed pivot which controls the filling valve and to which the operating lever is connected and a vertical rod for controlling the abrasive regulating valve adjustably mounted on the cam so that its distance from the pivot thereof can be regulated.

1,819,022. DRY MINE LAYING SUBMARINE. HUGO E. GRIESHABER, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Jan. 19, 1929. Serial No. 333,610. 12 Claims. (Cl. 114—17.)



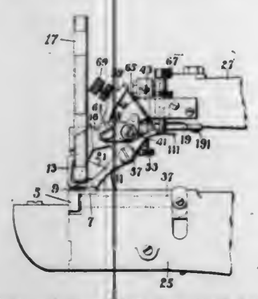
1. In a mine laying submarine boat, a water tight mine stowage tube at the midship portion of the hull and extending fore and aft thereof, a midship mine room within the hull, the tube opening into said room, and means for transferring the mines from the tube and discharging the them exteriorly of the hull while maintaining the mine room closed to the sea.

1,819,023. PROCESS FOR TREATING FOODS. GEORGE GRINDROD, Oconomowoc, Wis., assignor to Grindrod Process Corporation, Waukesha, Wis., a Corporation of Wisconsin. Filed Aug. 6, 1927. Serial No. 211,022. 5 Claims. (Cl. 99—15.)



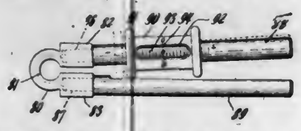
3. The process of sterilizing material which consists in subjecting the particles of material successively to contact with a high velocity steam jet while allowing such particles to compress and reactively expand without material support from surrounding media.

1,819,024. MACHINE FOR APPLYING STRIPS OF PIPING TO SHEET MATERIAL. THOMAS PERCY HALL, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 15, 1930, Serial No. 444,593, and in Great Britain May 15, 1929. 10 Claims. (Cl. 154—42.)



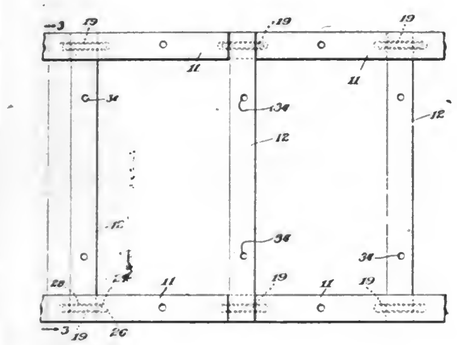
1. A machine of the class described having, in combination, a support over which a piece of sheet material is fed, a guide for engaging the edge of the material, means for directing a strip of piping upon the material, with its edge projecting beyond the edge of the material, and means for pressing the piping against the material.

1,819,025. THREAD GAUGE. JAMES HARTNESS, Springfield, Vt. Original application filed Apr. 7, 1927, Serial No. 181,708. Divided and this application filed Mar. 18, 1929. Serial No. 347,844. 3 Claims. (Cl. 33—199.)



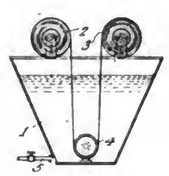
1. A thread gauge comprising a spring loop constructed to be sprung about and engaged between adjacent threads of a threaded member to engage said threaded member continuously therearound, said loop terminating in rigid handle portions extending in the same general direction, and an indicating element slidable on one of said handle portions and imited in its approach to said loop by the other of said handle portions for indicating the extent of closing of said loop permitted on closing said loop about the threaded member to be tested.

1,819,026. CRIBBING. JOHN S. HOBSON, Chicago, Ill., assignor to Massey Concrete Products Corporation, Chicago, Ill., a Corporation of Virginia. Filed Dec. 6, 1928. Serial No. 324,122. 12 Claims. (Cl. 61—47.)



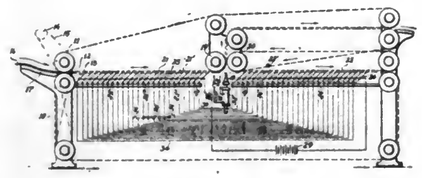
1. In a cribbing the combination of a header with an anchor member extending transversely to said header and engaging in a socket formed in said header, and a stretcher extending transversely to said header in the same course and engaged by said anchor member.

1,819,027. PIECE DYED SILK AND PROCESS. LESLIE N. HOOD, Greenville, S. C., and WALTER M. SCOTT, South Manchester, Conn., assignors to Cheney Brothers, South Manchester, Conn., a Corporation of Connecticut. Filed Oct. 24, 1925. Serial No. 64,526. 9 Claims. (Cl. 8—5.)



1. The process of dyeing silk goods in the piece, which comprises reducing and dissolving a vat dye, introducing the same and soluble vegetable oil, caustic soda, hydrosulphite and water into a vat and passing the silk therethrough, washing the silk in water, acidifying the same and oxidizing the dyestuff.

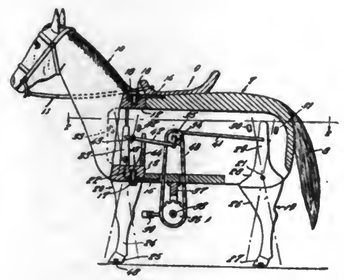
1,819,028. FOLDING DEVICE. LEO M. KAHN, New York, N. Y. Filed Apr. 24, 1930. Serial No. 446,856. 15 Claims. (Cl. 270—83.)



1. In a machine for folding articles of varying sizes, the combination of a folder, means for placing said articles in

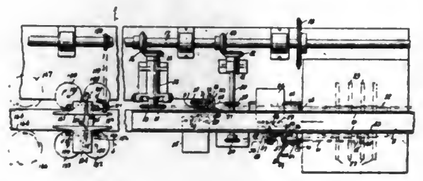
operative relation to said folder and means for selecting the line of fold when said articles are in operative relation to said folder.

1,819,029. MECHANICAL TOY HORSE. JAMES ST. CLAIR KING and WARNER LEE HENDERSON, Texarkana, Tex. Filed Sept. 22, 1930. Serial No. 483,672. 4 Claims. (Cl. 208—42.)



1. In a mechanical toy horse of the class described, a portable structure including a body and head portion constructed to resemble a miniature horse, the head structure being mounted on vertical pivots on the forward end portion of the body, a saddle on the body, a rear leg structure mounted on a horizontal pivot in the rear portion of the body, a front leg structure mounted on the horizontal axis in the head portion, and manually manipulated means for rocking said leg structures in unison, the legs of said leg structures being formed with hoofs and each hoof being provided with a recess, and frictional traction wheels mounted in said recesses for the purpose specified.

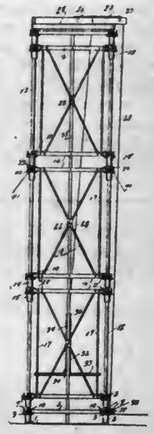
1,819,030. BOOK-COVERING MACHINE. PAUL E. KLEINEBERG, Brewster, N. Y., assignor to American Assembling Machine Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 7, 1926. Serial No. 140,124. 5 Claims. (Cl. 91—50.)



1. In a book-covering machine having in combination a pasting roller having its periphery vertically disposed, a coacting pressure roller, means for feeding separated cover sheets in vertical alinement between the two rollers, and means for separating and holding the pressure roller out of coactive engagement with the pasting roller to render the latter inoperative in the absence of a cover sheet therebetween.

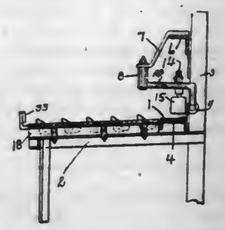
1,819,031. SECTIONAL KNOCKDOWN TOWER FOR HOISTS. WILLIAM A. KUHLMAN, Toledo, Ohio. Filed Feb. 18, 1929. Serial No. 340,866. 6 Claims. (Cl. 189—13.)

1. A tower having corner sections provided with upper and lower seat means, strut section units, each of said units being directly movable to engage a pair of upper or a pair of lower of said seat means, and assembly means



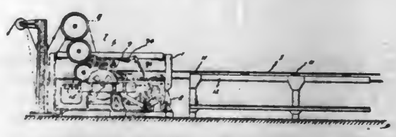
for the strut section unit at said seat means with a pair of adjacent corner sections comprising eyes and vertically extending stems for protruding into said eyes.

1,819,032. MANUFACTURE OF INNER TUBES. PAUL W. LEHMAN, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 1, 1926. Serial No. 145,662. 2 Claims. (Cl. 198—21.)



1. A device of the character described comprising a conveyor for advancing a mandrel in the direction of its length, pivoted arms normally positioned at one side of the conveyor, a plate positioned in the path of the advancing mandrel and adapted to be displaced thereby and link mechanism operatively connecting said plate and said arms to simultaneously swing said arms across the conveyor to transversely move a mandrel therefrom upon displacement of said plate.

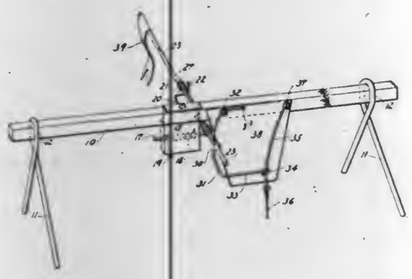
1,819,033. FEEDING AND CUTTING MACHINE. PAUL W. LEHMAN, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Oct. 15, 1927. Serial No. 226,480. 4 Claims. (Cl. 164—48.)



1. A device of the character described comprising a stock receiving conveyor, means to feed stock to the con-

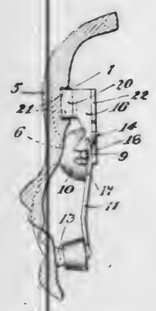
veyor, a drive shaft for the conveyor, a driven member freely rotatable about said shaft, a gear operatively connected to the stock feeding means and freely rotatable about said shaft, a one-way driving connection between the driven member and said gear, a one-way driving connection between said gear and the shaft whereby rotation of the driven member in one direction simultaneously advances the stock and the receiving conveyor, a second driven member freely rotatable about said shaft and a one-way driving connection between said second driven member and said shaft to drive the latter and advance the conveyor independently of said first recited driving means.

1,819,034. FISHING APPARATUS. HENRY L. LUELLOFF, Milwaukee, Wis. Filed Apr. 1, 1929. Serial No. 351,476. 9 Claims. (Cl. 43—17.)



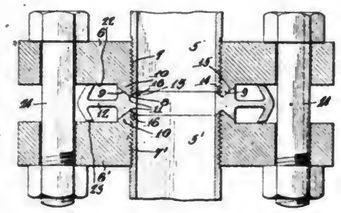
1. Fishing apparatus, including the combination with a support, of a wire hanger connected with the support and adapted to carry the fishing tackle, a resilient trip wire depending from the support and having a horizontally extending arm connected with the hanger wire, said depending portion of the trip wire having a portion provided with a laterally extending U-shaped bend in which a flag pole may be engaged, and a spring operated flag pole connected with said support and having an end portion adapted to be engaged by said trip wire to normally hold it in a non-signalling position against the tension of its spring.

1,819,035. EYE MOUNTING FOR DOLLS. LOUIS A. NEMCOVSKY, New York, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed May 13, 1927, Serial No. 191,078. Renewed July 11, 1929. 6 Claims. (Cl. 46—40.)



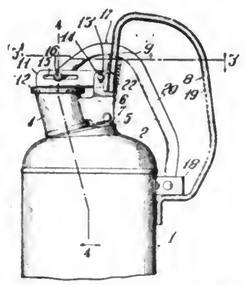
1. In combination with a doll head having spaced eye openings in its front wall and spaced vertical surfaces internally formed on said wall, spaced attaching parts resiliently connected for relative lateral movement and adapted to be forced under pressure towards each other and positioned between said spaced vertical surfaces on the head wall, each of said parts having means adapted to impale the opposed vertical surface of said wall upon the release of such pressure to thereby secure said attaching parts in fixed relation to the wall, and a part connected with and depending from said attaching parts having bearing means positioned in a vertical plane between said spaced vertical surfaces on the head wall and adapted to receive the axis of an oscillatory eye setting.

1,819,036. DISK PIPE JOINT. WILLIAM F. OBERHUBER, Lansdowne, Pa. Filed Nov. 23, 1925. Serial No. 70,858. 12 Claims. (Cl. 285—137.)



6. As an article of manufacture a metallic apertured sealing gasket having opposite, outwardly facing sealing annuli near its aperture and annular resilient inwardly springing engaging faces diagonal to its axis and spaced radially from the annuli.

1,819,037. SAFETY RECEPTACLE FOR INFLAMMABLE LIQUIDS. WALTHER RASTER, Chicago, Ill., assignor to Justrite Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1928. Serial No. 254,057. 7 Claims. (Cl. 221—15.)

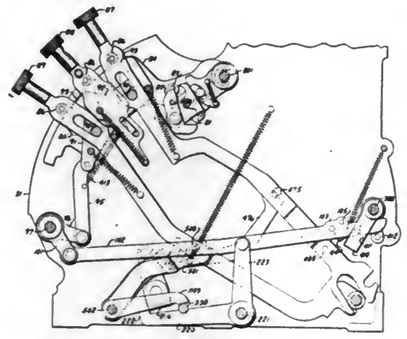


1. In a receptacle of the kind specified, a discharge nozzle mounted eccentrically of the longitudinal axis of the receptacle body upon the top wall thereof, a bail or handle secured at one end to the receptacle body and extending over the top wall thereof and downwardly to a point approximately in alignment with the longitudinal axis of the body behind said nozzle, a hand lever disposed mainly between the handle and the receptacle top and pivotally secured at one end to the receptacle, a closure cap for the nozzle having pivotal and sliding connection with said lever for movement to and from the nozzle and for movement relatively to said lever to cause said cap to adjust itself to firmly seat upon the nozzle, and a spring engaged with said lever for normally holding the same at the limit of its movement whereat the cap is seated, there being a slot in said handle through which the non-pivoted end portion of said lever projects.

1,819,038. CASH REGISTER. JEAN RAWYLER, Paris, France, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Aug. 14, 1924. Serial No. 732,016. 29 Claims. (Cl. 235—3.)

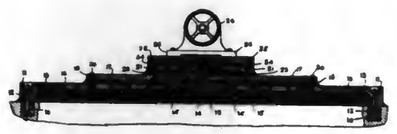
1. In a machine of the class described, the combination of a manipulative device for controlling the entry of

successive items in a subtotalizer, a manipulative device for controlling the machine for printing the total of the items, and means for preventing depression of the second-



mentioned manipulative device until after the machine has been operated subsequent to operating the first-mentioned manipulative device.

1,819,039. ISOLATING SUPPORT FOR VIBRATORY EQUIPMENT. MAURICE C. ROSENBLATT, Philadelphia, Pa. Filed Sept. 1, 1927. Serial No. 216,993. 5 Claims. (Cl. 248—16.)

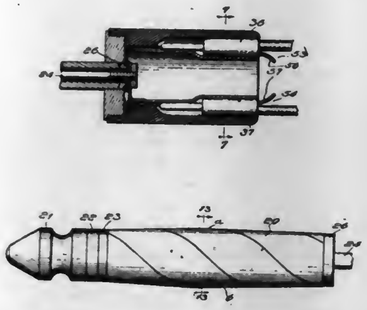


1. An isolating support for vibratory equipment adapted to rest on a floor having retaining means permanently and rigidly affixed to the floor and defining an area far greater than the normal supporting base of an item of equipment, damping material imposed upon the floor within the boundaries of the retaining means in intimate bearing association with the floor throughout the defined area but independent and detached therefrom, a rigid deck imposed upon the upper surface of the damping material in intimate bearing association with the damping material throughout its area, the damping material and deck being independent and detached except for gravitational forces, but held against lateral shifting motion by the retaining means, the deck arranged to support an item of vibratory equipment, such vibratory equipment being out of contact with the floor except through its association with the damping material.

1,819,040. PLUG. NEWTON C. SCHELLENGER, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed Apr. 18, 1925. Serial No. 24,002. 17 Claims. (Cl. 173—361.)

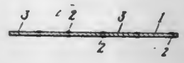
1. An electric connect and disconnect plug having a sleeve of spirally wound material and means for holding the ends of same.

15. In combination, a housing, a pair of spring terminal members inclosed in said housing and having projections integral therewith extending longitudinally of the housing to the outside thereof, a pair of cord tips gripped



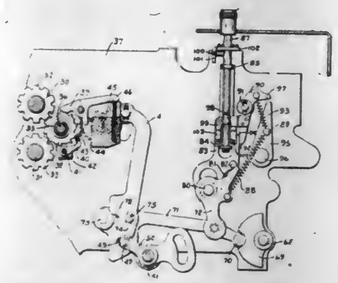
between the inner wall of said housing and spring terminal members, said cord tips being released from said grip by drawing together said longitudinal projections.

1,819,041. PAPER TOWEL AND THE LIKE. JOHN C. SHERMAN, Gorham, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 20, 1926. Serial No. 136,434. 1 Claim. (Cl. 91—68.)



A towel comprising a sheet of cellulosic material having lines of water resistent coating material on opposite faces, the thickness of the coating, the amount of coated area with relation to the uncoated area, the size of the coated and uncoated areas, the width of the lines of coating, and the character of the coating material being determined to delay the disintegration of the cellulosic material by absorption of water in use, but to insure ultimate disintegration in a single use.

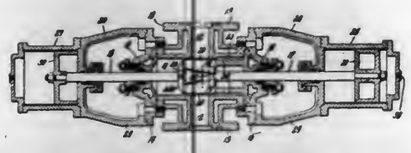
1,819,042. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 23, 1924. Serial No. 708,433. 12 Claims. (Cl. 235—27.)



1. In a machine of the class described having a consecutive counter and actuating means therefor, the com-

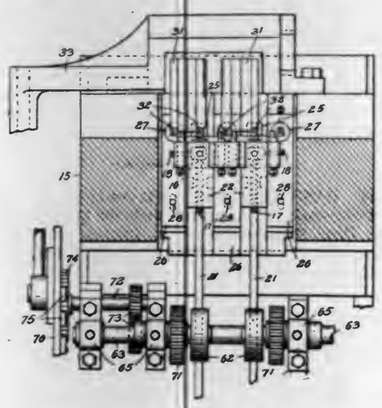
bination of a depressible and rotatable key for disabling said actuating means, a latch for holding said key depressed, means operable during the operation of the machine to trip said latch to release said key, and a tripping means carried by said key and adapted when said key is rotated previous to an operation of the machine, to trip said latch and release said key.

1,819,043. VALVE. CHARLES W. SLEEPER and WILLIAM B. MEOLITZ, Lancaster, and HOWARD PARKER, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Dec. 27, 1927. Serial No. 242,681. 5 Claims. (Cl. 137—139.)



2. A valve having a chamber with opposed inlet and outlet ports, means movable within said chamber to close said ports by two separate motions, a pair of cylinders, pistons in said sylinders, connections between one of said pistons and said movable means for effecting the first closing motion, connections between the other said piston and said movable means for effecting the second closing motion, and means for automatically operating said pistons in succession.

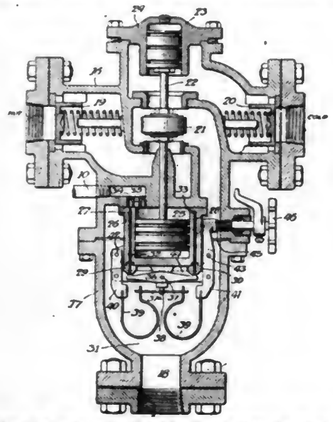
1,819,044. NUT MACHINE. GEORGE S. SMITH, Pittsburgh, Pa., assignor, by mesne assignments, to Pittsburgh Screw and Bolt Corporation, a Corporation of Pennsylvania. Filed Mar. 29, 1926. Serial No. 98,180. 10 Claims. (Cl. 10—76.)



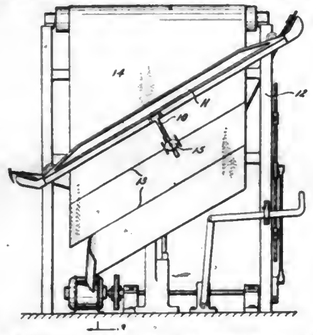
1. The combination in a nut making machine of means for feeding separate bars of stock thereto, a blanking die for each bar and a finishing die for trimming blanks received from each of said blanking dies.

1,819,045. THERMOSTATIC WATER MIXER. MORTON O. SNEDIKER, Chicago, Ill., assignor to Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed July 26, 1929. Serial No. 381,283. Renewed Jan. 30, 1931. 11 Claims. (Cl. 236—12.)

1. In combination, a casing having a mixing valve and a piston for controlling the same, a thermostat in the outlet for mixed fluids, a pilot valve operated by said thermostat for controlling the admittance of fluids above and below said piston, and means for supplying fluid pressure under the control of said pilot valve from a point removed from the point of entrance of the fluid into said casing.

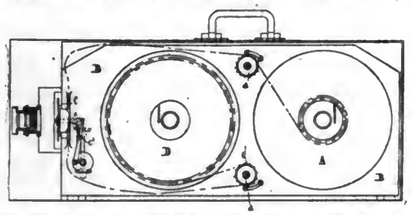


1,819,046. GAUGE FOR FABRIC CUTTING MACHINES. MICHAEL F. SULLIVAN, Chicopee Falls, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Oct. 19, 1929. Serial No. 400,816. 7 Claims. (Cl. 164—73.)



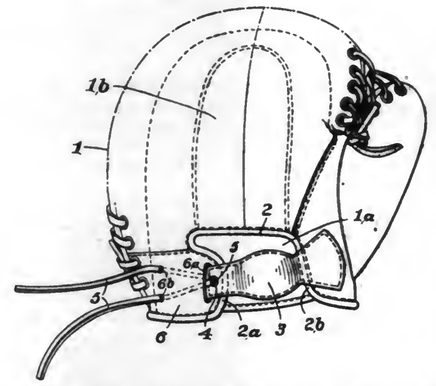
1. In a fabric cutting machine, means to indicate a variance from the desired width of cut which comprises a bar, a visual indicator slidably mounted on the bar and adapted to be locked thereto, and means carried by the indicator to permit the indicator to ride freely over the material to be gauged.

1,819,047. CINEMATOGRAPH APPARATUS. JOHN EDWARD THORNTON, West Hampstead, London, England, assignor to John Owden O'Brien, Manchester, England. Filed Jan. 6, 1927, Serial No. 159,479, and in Great Britain Jan. 6, 1926. 1 Claim. (Cl. 88—17.)



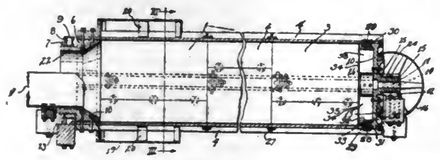
A cinematograph camera comprising a casing, a film supply spool rotatably mounted within the casing, a film receiving reel rotatably mounted in front of and in line with the supply spool, a lens mounted in an aperture in one end of the casing in front of the receiving reel, mechanism for feeding the film past the lens, a sprocket over which the film passes on its way from the spool to the exposure aperture and a second sprocket round which the film passes on its way from the exposure aperture to the reel, both sprockets being mounted between the spool and reel the arrangement being such that the film describes a track lying wholly in a plane the width of the film, a two part container within which the casing is housed, a chamber at one end of the container to enclose and protect the lens when not in use, a hinge connecting the two parts together at one end, spring operated struts to retain the container rigid as a flat base when open, and a handle on each of the two halves for transport purposes.

1,819,048. BASEBALL MITT. EDWIN W. TILL, Philadelphia, Pa., assignor to A. J. Reach Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 6, 1930. Serial No. 450,137. 3 Claims. (Cl. 2—19.)



1. A mitt having its back portion provided with a hand receiving recess, a strap having one end secured to one of the lateral margins of the recess and having a lacing eye adjacent its free end, a strap receiving pocket carried by the portion of glove adjacent the other margin, the rear wall of said pocket having a pair of lace receiving eyes remote from said other margin, and a lacing thong threaded through said eye in the strap and the eyes in the pocket wall.

1,819,049. ROTARY SCREEN. HUGO W. WEIMER, Milwaukee, Wis., Filed Aug. 26, 1925. Serial No. 52,545. 3 Claims. (Cl. 209—290.)



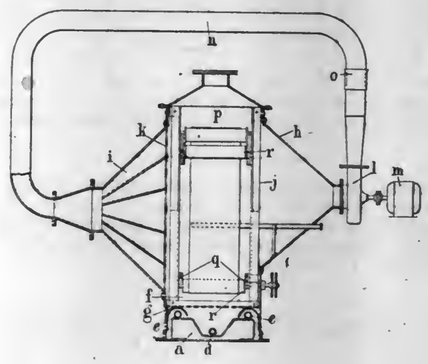
1. A rotary screen comprising a perforated sectional cylinder having an uninterrupted internal passage therethrough, V-shaped angle bars extending longitudinally of said cylinder, segmental hoops secured to said angle bars and cylinder for joining the sections of the cylinder together, a closure disc at each end of the cylinder, trunnions integral with said discs, stationary bearings holding said trunnions in alignment, the trunnon at one end of the cylinder defining a relatively large opening providing an adit for material to the screen, an inclined hardened steel liner surrounding the inner wall of the feed opening, the trunnion at the opposite end of the cylinder defining a relatively small opening, the disc at said latter end of the cylinder being spaced from the end of the screen, and exit means between said disc and screen for discharging oversize from said cylinder.

1,819,050. JORDAN ENGINE PLUG. HARRY N. WEIR, Hoosick Falls, N. Y., assignor to The Noble & Wood Machine Co., Hoosick Falls, N. Y., a Corporation of New York. Filed Sept. 14, 1929. Serial No. 392,498. 5 Claims. (Cl. 92—27.)



1. The combination with a Jordan plug having removable knives and wedges and extending radially to different distances, of a removable annular plate extending around and protecting the smaller end of said plug and having different portions engaging said knives and wedges respectively and thereby securing the same in position.

1,819,051. STEAMING OR AGING MACHINE FOR DYEING, PRINTING, AND LIKE OPERATIONS. JAMES STEVENSON WILSON, GEORGE WILLIAM SHEARER, and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Sept. 6, 1827, Serial No. 217,788, and in Great Britain Sept. 9, 1926. 7 Claims. (Cl. 8—15.)

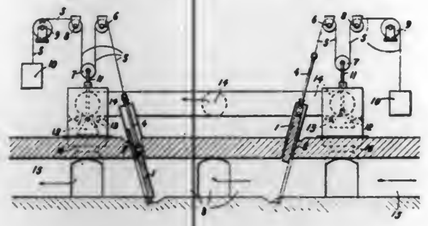


2. A steaming and aging machine including in combination a main chamber and fabric supporting means together with means for supplying steam to said chamber and means for passing the steam through said chamber parallel to the fabric supporting means.

1,819,052. VALVE AGGREGATE FOR REGENERATIVE FURNACES, HEAT APPARATUS, ETC. EDVARD SIXTEN SIXTENSSON WOHLFAHRT, Fagersta, Sweden. Filed Oct. 30, 1929, Serial No. 403,507, and in Sweden Sept. 19, 1929. 2 Claims. (Cl. 277—6.)

1. In a regenerator oven, the combination of a plurality of valves arranged in groups, each thereof comprising two

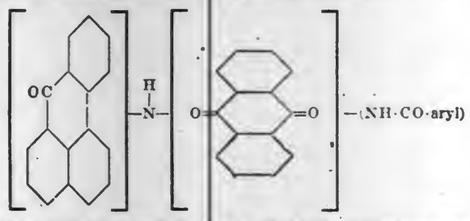
valves movable to closed positions in opposite substantially upright directions, and a cable for operating the



valves arranged with respect to the latter to compel either valve to reach its full closed position before the other valve begins to move to its open position.

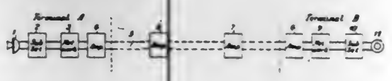
1,819,053. NEW VAT DYESTUFFS OF THE BENZANTHRONE SERIES AND PROCESS OF MAKING SAME. WERNER ZERWECK and ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 6, 1929, Serial No. 338,024, and in Germany Feb. 10, 1928. 6 Claims. (Cl. 260—46.)

1. A process which comprises acting with an acid condensing agent of the group consisting of chloro-sulfonic acid, sulfuric acid and aluminium chloride on a benzanthronyl-amino-anthraquinone compound containing at least one aroyl-amino-group in the anthraquinone residue and corresponding probably to the general formula:



wherein the benzanthrone as well as the anthraquinone and the aryl residue may contain further substituents.

1,819,054. CARRIER SIGNALING SYSTEM. HERMAN A. AFFEL, Ridgewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 24, 1927. Serial No. 193,902. 11 Claims. (Cl. 178—44.)

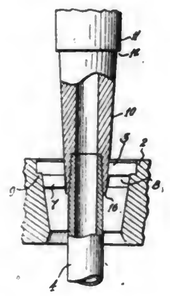


1. The method of transmission which consists in distorting the signal wave in order to obtain approximately the same level for all frequencies within said wave and introducing a compensating distortion at the receiving end.

1,819,055. DESULPHURIZATION OF GASES AND VAPORS. JAN AL and FRANZ RUDOLF MOSER, Amsterdam, Netherlands, assignors to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Oct. 21, 1929, Serial No. 401,366, and in the Netherlands Oct. 23, 1928. 11 Claims. (Cl. 23—3.)

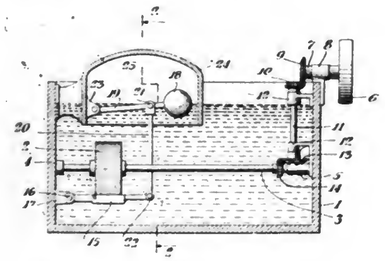
1. A process for desulphurizing gases free from constituents causing formation of hydrogen sulphide at reaction temperature, characterized by conducting the gas at an elevated temperature into the presence of a contact mass consisting primarily of a thorium containing substance as the effective desulphurizer.

1,819,056. SLIPS AND TOOL JOINT FOR ROTARY WELL DRILLING. FRED M. ALLISON, Corsicana, Tex. Filed Jan. 28, 1929. Serial No. 335,679. 7 Claims. (Cl. 24—263.)



1. Slips for use in well drilling, said slips having an inwardly sloped inner surface, an annular ledge formed midway of the inwardly sloped surface, said ledge providing a seat for a tool joint; the inner surface of the slips below the ledge being of the same diameter.

1,8189,057. CONTROLLED WATER HEATING MEANS. GEORGE F. ARCHER, New York, N. Y. Filed Feb. 18, 1931. Serial No. 516,759. 2 Claims. (Cl. 236—20.)

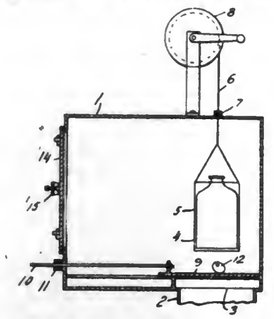


2. The combination with means for heating a body of water, of a float buoyed therein, a dome within which said float is pivoted, said dome entrapping a restricted area of said body of water, and means intermediate said float and heating means for the control of the latter with the fall and rise of the water level in the dome.

1,819,058. TANK SAMPLER. WILLIAM P. ARNOLD, Jr., Houston, Tex., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Oct. 23, 1929. Serial No. 401,933. 1 Claim. (Cl. 137—18.)

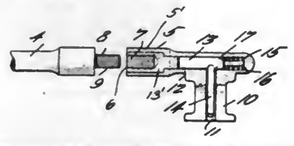
An apparatus for taking samples of liquids from tanks maintained under super-atmospheric pressure comprising a closable chamber adapted to be affixed to the tank and having an opening adapted to register with a corresponding opening in the tank, a carrier adapted to receive and hold a sampling container and means, operable from without said chamber, for carrying said carrier from within said chamber through said openings into the tank and back, a door, operable from without said chamber, adapted to close said openings when said carrier is within said chamber and means operable from without said chamber

adapted to exert mechanical pressure on said door to seal said openings when the carrier is within the chamber, and



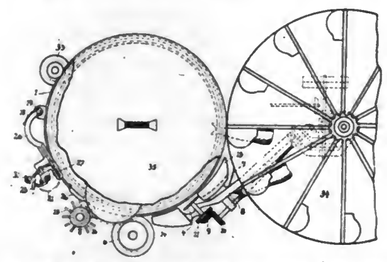
a door providing access to said chamber from without adapted to close said chamber when the first mentioned door is open.

1,819,059. SAFETY KEY FOR LOCKS. ERNEST SCHMID, Gladstone, Oreg. Filed June 15, 1929. Serial No. 371,250. 1 Claim. (Cl. 70—8.)



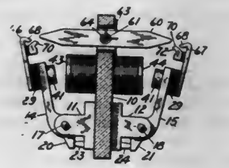
A key comprising a handle section and a bit section, said bit section including a hollow shank open at one end and closed at the opposite end and formed with an offset bit, the interior of the hollow shank at the open end being enlarged diametrically to provide an abrupt shoulder interiorly of the hollow shank, a bolt mounted for movement within the hollow shank and formed with parts of different diameters to accurately fit the similar parts of the hollow shank, the bolt having a shouldered portion to bear on the shouldered portion within the shank, a pin carried by and projecting at right angles from the bolt and extended through a slot in the hollow shank, the bit carried by the hollow shank being formed with a groove to house the pin in one position of the bolt relative to the hollow shank, one end of the bolt being formed with a threaded socket, the opposite end of the bolt being of reduced diameter, and a spring encircling the portion of reduced diameter of the bolt and terminally secured to the bolt and to the closed end of the hollow shank, the handle section having a threaded projection to cooperate with the threaded socket in the bolt.

1,819,060. MACHINE FOR SPLITTING OPEN, CLEANING, AND BONING FISH. RUDOLPH BAADER, Lubeck, Germany. Filed Dec. 17, 1929, Serial No. 414,651, and in Germany Jan. 7, 1929. 10 Claims. (Cl. 17—3.)



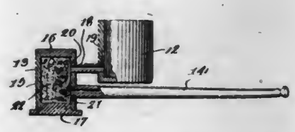
1. A machine for cutting open, cleaning and boning fish comprising in combination a rotating carrier for holding fish with their bellies outward, a guiding cheek for holding the fish on the carrier, rotatively mounted coacting disc knives set at an angle to which fish are moved by the carrier and operative to cut open the fish belly, a pivotally mounted arm supporting the guiding cheek and said knives, a rotating tool having a roughened working edge whose periphery projects into the belly of the fish for operating on the surface of the belly cavity, resilient discs coacting therewith for exerting a pressure externally on the fish, a toothed disc operative to remove the back bone together with the thin belly and back-flesh bone of the fish and a stationary knife arranged behind the toothed disc to undercut the back bone and free the same for removal by said toothed disc.

1,819,061. ELECTRIC SWITCH. JAMES E. BANCROFT, Detroit, Mich., assignor to Door-Motive Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 12, 1928. Serial No. 312,095. 14 Claims. (Cl. 200—99.)



1. A control device comprising an electric switch, a solenoid arranged to throw the switch in one direction when energized, a second electric switch, a second solenoid arranged to throw the second switch in one direction when energized, an interlocking device including a member normally in an open circuit with said solenoids which is arranged to permit the operation of either switch alone and prevent the simultaneous operation of both switches, and means forming an electrical connection, when either switch is initially thrown by its solenoid, between said member and the solenoid corresponding to the switch being thrown to maintain energization of said solenoid and hold the switch in the new position.

1,819,062. SMOKER'S PIPE. ROBERT W. BANKS, El Dorado, Ark. Filed May 26, 1928. Serial No. 280,768. 1 Claim. (Cl. 131—12.)

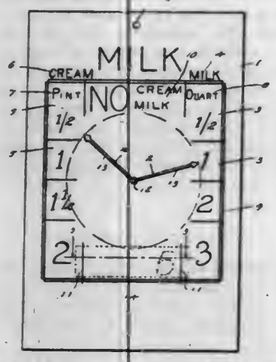


A smoker's pipe comprising a bowl, a cooling and filtering chamber, a stem in communication at its intake end with the lower rear portion of the cooling chamber and means establishing communication between the lower portion of the bowl at the forward side thereof and the upper portion of the cooling chamber at the rear thereof, thereby supporting the bowl in a position directly above the stem.

1,819,063. INDICATING OR ORDER CARD. EMMA FLORA BARRON, Ashland, Pa. Filed Dec. 18, 1930. Serial No. 503,298. 3 Claims. (Cl. 116—133.)

1. An indicator of the character described, comprising a card having thereon two columns of figures indicating quantities of a commodity to be ordered, and a selected commodity name printed at the head of each of said columns, a pair of indicating hands pivotally mounted be-

tween said columns each being designed to indicate a quantity in a column, and means whereby a character bearing

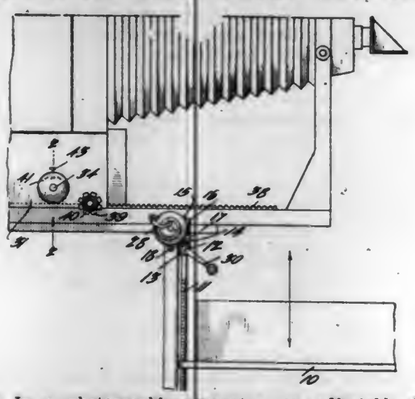


slip may be added to the card for indicating a quantity desired different from the quantities indicated in the columns.

1,819,064. OPERATION OF BLAST FURNACES. ERNST BAUMGARTNER, Kladno, Czechoslovakia. Filed Feb. 7, 1930, Serial No. 426,782, and in Germany Feb. 11, 1929. 2 Claims. (Cl. 75—74.)

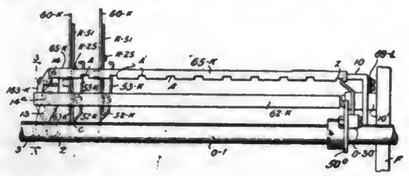
1. The herein described method of preparing a charge for a blast furnace with roasted fluxes, namely, limestone or dolomite, which consists in crushing the fluxes into predetermined sizes and introducing the same into the furnace in predetermined volume irrespective of weight to insure a fixed amount of basic substances of the class containing (CaO or MgO) in the blast.

1,819,065. PHOTOGRAPHIC FOCUS INDICATOR. GEORGE C. BEIDLER, Rochester, N. Y. Filed Nov. 12, 1930. Serial No. 495,230. 5 Claims. (Cl. 88—24.)



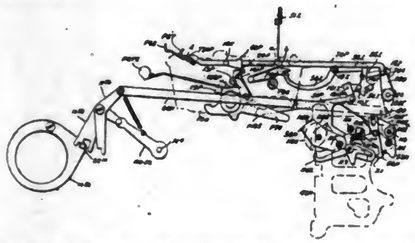
1. In a photographic apparatus, an adjustable film holder operably associated with light projecting means, a copy holder mounted to move toward and from the light projecting means, means for moving said copy holder, a rotative member having a spiral guide, means for moving the rotative member and the copy holder proportionally, a dial carried by the rotative member having spirally arranged indicia on its face, the spiral of which coincides approximately with the spiral guide, an oscillative member having means engaging the spiral guide, whereby the oscillative member is moved, a pivot for the oscillative member, a member moved in unison with the oscillative member projecting into operative relation with the indicia on the dial of the rotative member, means operated by the movement of the film holder, a dial having indicia on its face corresponding to the indicia on the rotative member rotated by the last mentioned means, and an indicator with relation to which the dial rotates whereby the respective numbers on the dials denote the proportional size of the picture and copy.

1,819,066. OVERDRAFT NUMERAL KEY LOCKING MECHANISM. FREDERICK W. BERNAU, Hillside, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Filed Sept. 13, 1926. Serial No. 135,141. 5 Claims. (Cl. 235—130.)



1 In a calculating machine, the combination with an accumulator adapted for either addition or subtraction, of settable numeral keys on which the numbers or amounts which are to be added into, or subtracted from, the accumulator may be manually set up, means adapted to automatically locking the numeral keys which remain undepressed to prevent them from being operated to set up a number after an "overdraft" has occurred in the accumulator, and means for releasing said locking means.

1,819,067. OVERDRAFT AND SIGNAL PRINTING MECHANISM FOR CALCULATING MACHINES. FREDERICK W. BERNAU, Hillside, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Original application filed Oct. 31, 1922, Serial No. 598,155. Divided and this application filed Oct. 4, 1929. Serial No. 397,806. 22 Claims. (Cl. 235—130.)

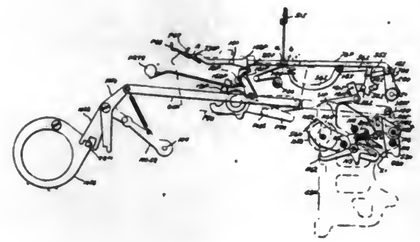


1. In a calculator, the combination with an accumulator adapted for either addition or subtraction, and "carrying" means self-contained with said accumulator, of means controlled by said carrying means adapted for indicating when the total of the items subtracted exceeds the total of the items added in the accumulator, and actuators for the accumulator which are independent of the carrying means aforesaid.

1,819,068. OVERDRAFT AND SIGNAL PRINTING MECHANISM FOR CALCULATING MACHINES. FREDERICK W. BERNAU, Hillside, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Original application filed Oct. 31, 1922, Serial No. 598,155. Divided and this application filed Sept. 16, 1929. Serial No. 393,104. 44 Claims. (Cl. 235—130.)

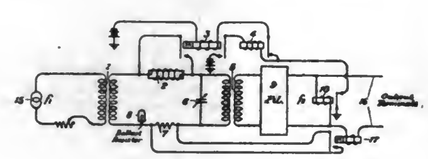
1. In a calculating machine, the combination with an adding and subtracting accumulator comprising a single set of registering wheels adapted to be turned in one direction for addition and in the opposite direction for subtraction, and "carrying" means therefor, including separate members, one of which is used for an additive opera-

tion and the other for a subtractive operation of said accumulator, of settable keys, normally stationary actuators independent of the settable keys which are operated when the machine is put through its cycle of operations and are then disposed according to the setting of the previously set keys, said actuators being adapted to set up the number appearing on the accumulator, operating means for putting



the machine through a cycle of operations to cause movement of the actuators corresponding to the numerical value of such keys as have been set and to effect corresponding accumulations in the accumulator and means controlled by the subtracting member of the aforesaid "carrying" means adapted to automatically lock said operating means when an "overdraft" occurs in the accumulator.

1,819,069. STATIC FREQUENCY CHANGER. RALPH K. BONELL, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 2, 1928. Serial No. 309,790. 9 Claims. (Cl. 172—281.)

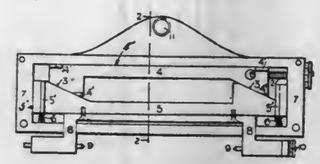


1. Static frequency reducing means comprising in combination a circuit adapted to oscillate freely at a fundamental frequency and at the harmonics thereof, said circuit containing suitable capacity and inductive means having a core of magnetic material, means for starting the free oscillations in said circuit, a source of current of one said harmonic frequency coupled therewith for sustaining said free oscillations thereafter by saturating said magnetic core, an output circuit coupled with said circuit for utilizing current of desired frequencies, relay means controlled by the output current for automatically reoperating said starting means upon failure of the output current, and a ballast resistor in said oscillatory circuit for equalizing the current therein.

1,819,070. PROCESS FOR CHEMICALLY IMPREGNATING JUTE SACKS, TENT CLOTH, AND THE LIKE. ARTHUR BORRMANN, Hamburg, Germany, assignor to Siegmund Koch, Hamburg, Germany. Filed Mar. 24, 1930, Serial No. 438,029, and in Germany Feb. 14, 1929. 2 Claims. (Cl. 91—68.)

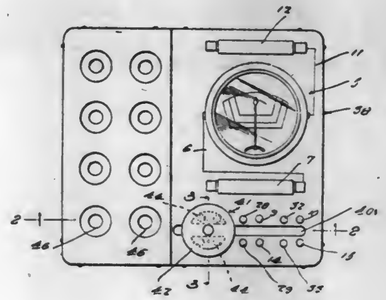
1. The herein described proces of waterproofing jute, tent cloth and other fabrics, which consists in dipping the fabric in a stretched state in an impregnating solution formed by dissolving balata in a solvent mixture including a filler for about 1½ minutes, removing the fabric from the solution and permitting any excess deposit to drain therefrom, and thereafter evaporating the solvent of the solution from the mixture remaining with the fabric.

1,819,071. TINT LAYING MACHINE. LEONARD J. BROWN, Tacoma, Wash. Filed May 20, 1929. Serial No. 364,597. 4 Claims. (Cl. 41—45.)



1. In a tint laying machine, the combination of a frame, a screen carrier mounted therein and adapted to be moved inward and outward therein, a single micrometer mounted in said frame, complementary inclined single acting planes interposed between said micrometer and said screen carrier, and springs holding said inclined planes in continuous contact, whereby the adjustment of said micrometer causes said carrier to move.

1,819,072. STORAGE BATTERY TESTER. WALTER Z. BUERGER, Chicago, Ill. Filed Sept. 20, 1928. Serial No. 307,200. 1 Claim. (Cl. 200—16.)

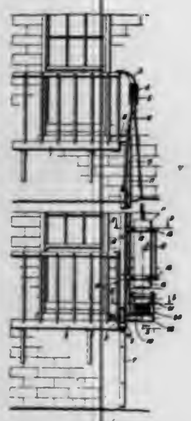


In a multiple cell battery testing device of the character described, a switch comprising a plate of electricity insulating material having an elongated slot therein, spaced pairs of contacts arranged on opposite sides of the slot longitudinally therewith, a bolt operable in the slot and extending upwardly therefrom, a knob of electricity insulating material mounted on the bolt for travel over the contacts, and a pair of parallel contact plates mounted on the knob on opposite sides of the bolt, for selective engagement with the pairs of contacts on opposite sides of the slot.

1,819,073. SAFETY DEVICE FOR FIRE ESCAPES. NETTIE CHINICH, Newark, N. J. Filed Jan. 16, 1930. Serial No. 421,248. 1 Claim. (Cl. 227—5.)

A counter-balancing weight that has a cable trained over a sheave wheel and which cable is connected to the

upper end of a vertically movable ladder for a fire escape, split ring bands arranged around and secured to the weight, a plate between the outer ends of the said bands, said bands having their opposite ends of substantially rectangular formation to provide guides, a vertically disposed rail for the guides, an open-like member fixedly supported at the lower end of the rail and disposed below the weight, a plate in the box-like member and a coil spring influencing the plate upwardly.



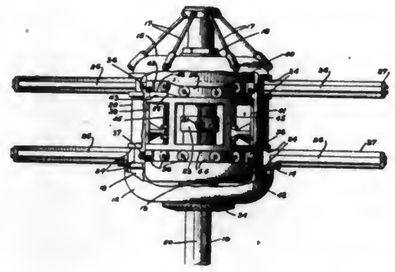
1,819,074. ARRANGEMENT FOR FREEING BOATS FROM WATER. JAN CARL CLASON, Stockholm, Sweden. Filed Sept. 17, 1930, Serial No. 482,628, and in Sweden Sept. 19, 1929. 4 Claims. (Cl. 114—185.)



1. A suction device for boats, comprising a hollow casting, a check valve mounted partially within the casting, a bottom on the casing having an elongated aperture therein, formed perpendicular to the longitudinal axis of the boat to which the device is applied, for the purpose of creating a strong suction within the hollow casting and operating the check valve when the boat is in motion.

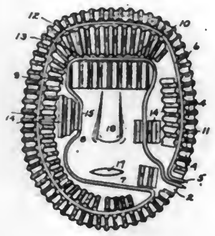
1,819,075. HELICOPTER. MILFORD L. DARR, Oakland, Calif. Filed Jan. 4, 1930. Serial No. 418,531. 4 Claims. (Cl. 244—19.)

2. In combination with a revoluble propeller having pivotal blades, a roller member adjacent the inner end of each blade and concentrically disposed in relation to the pivoted axis of the blade, a pair of tracks adapted to guide the roller members when the propeller revolves and con-



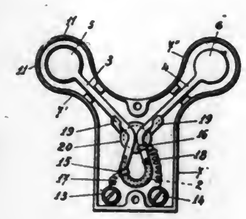
trols governing the relative positions of the tracks for altering the course of the rollers whereby the degree of inclination of the blades will be changed.

1,819,076. ELECTRICAL HEATER. RHYS DAVIES, Fort Wayne, Ind. Filed Oct. 19, 1928. Serial No. 313,448. 1 Claim. (Cl. 219—46.)



An electrical heater consisting of a mask having two molded walls of insulating material molded to fit the human face, corrugated strips between the walls to space the same and form radial channels between them and a heating element wound in a circuitous path between the opposed edges of the strips to heat the said walls uniformly throughout their area.

1,819,077. ELECTRIC-PNEUMATIC THERMOSCOPE AVAILABLE AS FIRE INDICATORS AND FOR LIKE PURPOSES. CARLO DE FILIPPI, Milan, Italy. Filed May 17, 1929, Serial No. 363,981, and in Italy Apr. 10, 1929. 1 Claim. (Cl. 200—141.)



A device of the class described comprising a casing consisting of complementary sections, each section having divergingly disposed prolongations having box terminals,

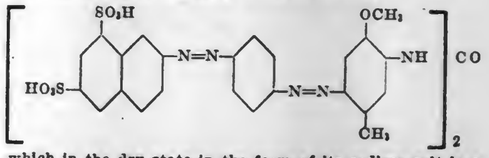
means carried by the sections to retain the same in detachably clamped relationship, a washer carried by one of the sections and having straps carried thereby for disposition within the casing, a tube having a looped portion, the arms of which terminate in divergingly disposed branches having bulbs upon their ends for engagement in the respective boxes, said straps engaging the branches of the tube to maintain the same centralized in the casing, said loop having contacts associated therewith, mercury in the loop cooperating with the contacts, said bulbs having gas therein for displacing the mercury to close the contact when the bulbs are subjected to abnormal heat, one of said boxes being closed and the other having openings therein, as and for the purpose set forth.

1,819,078. STENCIL SHEET FOR USE IN DUPLICATING TYPEWRITTEN OR MANUSCRIPT DOCUMENTS, DRAWINGS, AND THE LIKE. ARMAND DE WAELE, Old Southgate, London, England, assignor to D. Gestetner, Limited, London, England. Filed Jan. 22, 1929, Serial No. 334,370, and in Great Britain Feb. 23, 1928. 6 Claims. (Cl. 41—38.6.)

1. A stencil sheet adapted to be stencilized by pressure comprising a sheet of Yoshimo paper and a coating thereon, substantially free from water, adapted to be stencilized by pressure including a dispersion of a zinc salt of ricinoleic acid in coagulated gelatine and a proportion of an oleaginous tempering agent.

1,819,079. TETRAKISAZO DYE. CHARLES S. DEWEY, Hamburg, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 5, 1929. Serial No. 368,740. 6 Claims. (Cl. 260—71.)

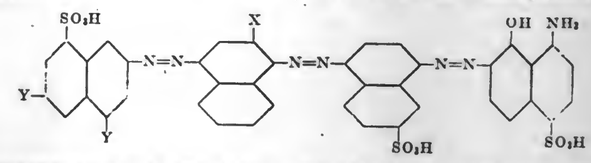
3. As a new product, the tetrakisazo dyestuff having in the free state the following probable formula:



which in the dry state in the form of its sodium salt is a reddish brown powder soluble in water and in concentrated sulfuric acid, and which from a neutral bath dyes cotton reddish brown shades which are capable of being discharged by the action of sodium hydrosulfite.

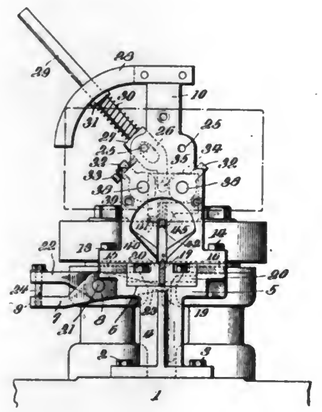
1,819,080. PRODUCTION OF TRISAZO DYES. CHARLES S. DEWEY, Hamburg, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 5, 1929. Serial No. 368,741. 14 Claims. (Cl. 260—72.)

4. As a new product, the amino trisazo dye having in the free state the following probable formula:



in which X denotes a hydrogen atom or an alkoxy group, and one Y represents a hydrogen atom and the other Y represents a sulfonic acid group.

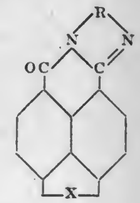
1,819,081. GUIDE FOR STRIP FINISHING MACHINES. IRVIN F. DITTMAR, Williamsport, Pa., assignor to The Cromar Co., Williamsport, Pa., a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,348. 18 Claims. (Cl. 144—253.)



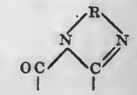
1. A guide for strip finishing machines comprising a pair of spaced guide members between which the strip to be finished is adapted to pass longitudinally in its passage therethrough, the upper guide member being hinged to swing upwardly and outwardly in one direction, and a pivoted and slidably mounted lever for operating said swinging guide member.

1,819,082. NITROGEN-CONTAINING VAT DYESTUFFS OF THE NAPHTHOYLENE-DIARYLIMIDAZOL SERIES AND PROCESS OF PREPARING THEM. WILHELM ECKERT, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1929, Serial No. 397,156, and in Germany Oct. 22, 1928. 13 Claims. (Cl. 260—44.)

1. The process which comprises treating a compound of the following formula:

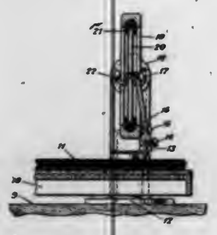


wherein X stands for the bivalent residue



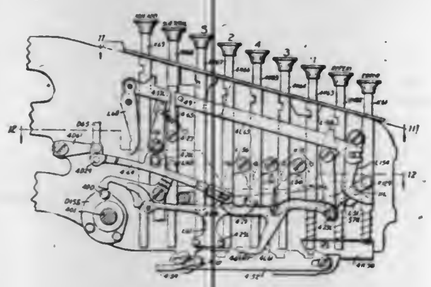
and R for substituted or unsubstituted bivalent aromatic residue, with a nitrating agent.

1,819,083. PHONOGRAPH REPRODUCER. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 14, 1929. Serial No. 363,087. 5 Claims. (Cl. 179—100.41.)



1. An electrical phonograph reproducer including a disk, a needle holder, and means controlled by said needle holder for subjecting said disk to stresses by bending and thereby varying the impedance of the disk.

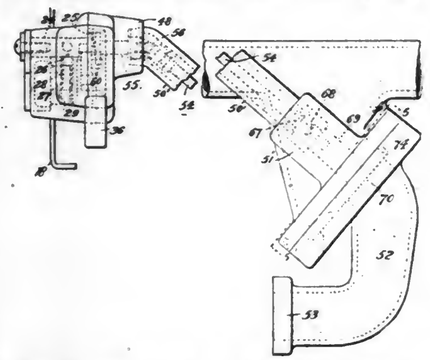
1,819,084. QUADRUPLEX ACCUMULATOR CALCULATING MACHINE. EMIL JOHN ENS, Newark, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 1, 1928. Serial No. 323,124. 20 Claims. (Cl. 235—60.)



1. In a calculating machine, the combination with a travelling carriage, of a plurality of accumulators, and operating mechanism therefor, of means operated by the carriage constituting the sole means of the machine whereby the respective accumulators may be selectively conditioned for accumulation, a sub-total key, total keys for the respective accumulators, whereby said operating mechanism may be conditioned for the taking of a total from the selected accumulator, and mechanism co-operating with said sub-total key and with the respective total keys, requiring the conjoint use of said sub-total key and any selected one of said total keys to condition the corresponding accumulator for the taking of a sub-total therefrom.

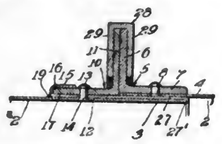
1,819,085. GAS LOCK. CHARLES N. FAIRCHILD, Milford, Conn., assignor to Fairchild Lock Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 14, 1925. Serial No. 56,403. 15 Claims. (Cl. 70—127.)

1. In an automobile ignition and gas lock, an ignition switch, a valve controlling alternate admission of air and fuel to the engine, key control means for simultaneously throwing the switch to ignition circuit closing position and moving the valve to fuel admitting position and also for moving the valve to position to close the fuel supply and establish communication between the engine cylinders and atmosphere and simultaneously throwing the switch



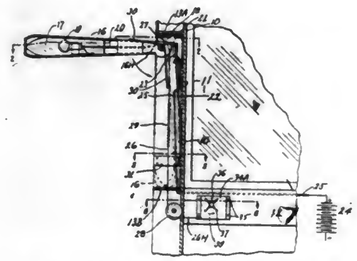
to ignition circuit opening position, and means for preventing movement of the valve from one position to the other without first removing the key from the lock.

1,819,086. TUBULAR STRUCTURE. RICHARD NASON FRIEND, Sioux City, Iowa. Filed Apr. 13, 1928. Serial No. 269,803. 7 Claims. (Cl. 285—185.)



4. In a sectional tubular structure of the kind described adapted to be set in a vertical or inclined position, a connection for two sections, comprising a lower end of an upper section adapted to telescope into the opposed end of the next lower section, a connecting member secured upon the outer surface of the lower end of the upper section having a flange in contact with the outer surface thereof and extending away from said end, a sheet metal part circumferentially sealed to the outer surface of said lower end and having a circumferential edge portion free of said section, and said free edge portion of said part formed outwardly around the adjacent edge of said flange.

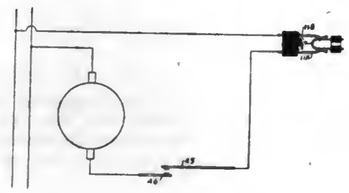
1,819,087. DIRECTION SIGNAL FOR MOTOR VEHICLES. ALBERT H. GERBER and JOSEPH P. MARCHAL, St. Paul, Minn. Filed Nov. 5, 1928. Serial No. 317,270. 1 Claim. (Cl. 116—54.)



In a direction signal of the class described having an upright metal housing of U-shape in cross section and adapted to be fixed in a post of a motor vehicle with its

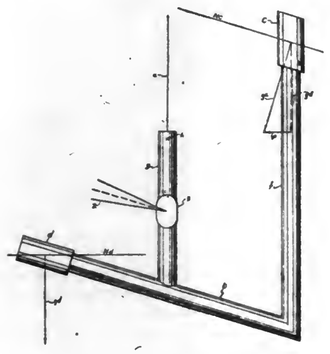
open side in a plane with the outer face of said post; a signal arm pivotally suspended from the upper part of said housing and adapted to be manipulated to horizontal signaling position, said pivotal part of the arm comprising a hub with an inwardly exposed arcuate face, spring means fixed to the inner wall of the housing and bearing yieldably and outwardly against said arcuate face, said signal arm being of hollow construction and quadrangular in cross section, and further means engaging the signal arm only when it is in lowered position, said latter means comprising a flat spring fixed in a wall of the housing near its outer edge and extending inwardly in an angular plane and in the path of the signal arm to frictionally and yieldably engage it near its free end.

1,819,088. SPEED CONTROL SWITCH FOR CASH REGISTERS. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Nov. 23, 1925. Serial No. 70,964. 14 Claims. (Cl. 172—239.)



1. In a machine of the class described, the combination with a driving motor, and a switch for closing a circuit through the motor to enable said motor to operate the machine, of another switch in the same circuit and adapted to temporarily render said first mentioned switch ineffective for a predetermined length of time after the machine completes its operation.

1,819,089. DEVICE FOR MEASURING SLIGHT FORCES. HUGO GORNICK, Charlottenburg, Germany. Filed Apr. 18, 1924, Serial No. 707,449, and in Germany Aug. 10, 1923. 5 Claims. (Cl. 265—1.)



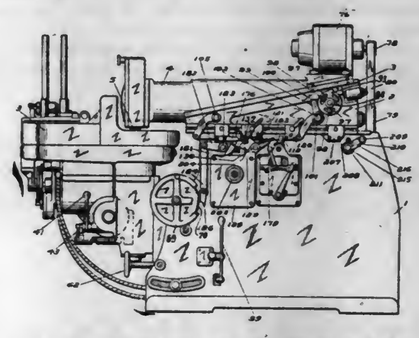
1. A device for measuring slight forces by ascertaining the torsion imparted to a thread, comprising in combination a torsion thread, and a rigid scale system suspended by said torsion thread, and consisting of a balance beam and two weights which are in different horizontal planes, one of said weights being placed above the level of the balance beam.

1,819,090. GAS CONTAINING PROJECTILE OR LONG RANGE TEAR GAS SHELL. BYRON C. GOSS, Cleveland, Ohio. Filed Apr. 7, 1930. Serial No. 442,382. 5 Claims. (Cl. 102—12.)



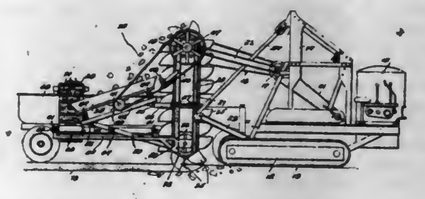
1. A gas containing cartridge, comprising a firing cap, a propelling charge of powder, a projectile adjacent said propelling powder, said cartridge containing a time fuse, a charge of explosive, a frangible container and a charge of gas generating chemicals in said frangible container, said time fuse arranged to ignite said explosive.

1,819,091. GRINDING MACHINE. WALDO J. GUILD, RALPH A. QUIMBY, and FREDERICK D. GIBBS, Worcester, Mass., assignors to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 25, 1927. Serial No. 208,263. 8 Claims. (Cl. 51—50.)



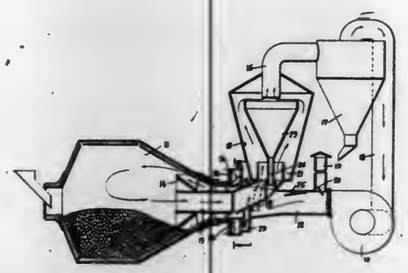
1. In a grinding machine, the combination with a grinding wheel, having means for reciprocating it in an inclined plane, and automatic means to dress and true said grinding wheel during cessation of its inclined movement, of a counting mechanism actuated synchronously with said reciprocating means, said counting mechanism being adapted to set the automatic dressing means in operation after the grinding of a predetermined number of workpieces.

1,819,092. SOIL TREATING MECHANISM. PHILIP W. HALL, Cranford, N. J. Filed Mar. 10, 1931. Serial No. 521,588. 6 Claims. (Cl. 262—2.)



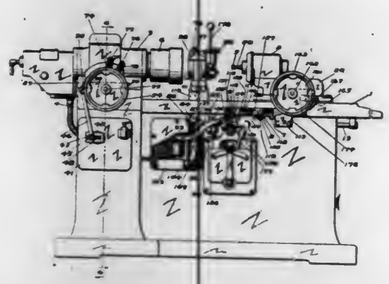
1. In a soil treating machine, a track-laying tractor, a main frame supported thereby, a digger frame movably carried by the main frame, means for moving the digger frame vertically, a plurality of digging buckets mounted to revolve about the digger frame, means for separating the soil from other material such as stones, means for driving the tractor and the digger buckets, and means for adjusting the soil separating means so as to discharge the soil either above or below said other material as may be desired.

1,819,093. JOINT SEAL. HARLOWE HARDINGE, York, Pa., assignor to Hardinge Company, Incorporated, York, Pa., a Corporation of New York. Filed Aug. 31, 1929. Serial No. 389,705. 26 Claims. (Cl. 83—9.)



1. The combination with a rotary unit having a chamber, a relatively non-rotatable conduit opening into said chamber and blower means controlling pressure within said chamber through said conduit, of means having a chamber disposed about the joint of said rotary unit with said conduit and means to reduce the pressure within the last named chamber below that on the side of the joint within said conduit.

1,819,094. GRINDING MACHINE. ROGER N. HEALD, Worcester, Mass., assignor to the Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 31, 1928. Serial No. 281,898. 4 Claims. (Cl. 51—50.)



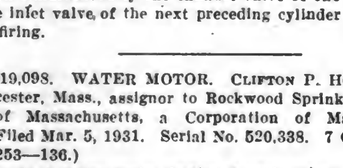
1. In a grinding machine, the combination with cam means for advancing and retracting a work head in relation to a grinding wheel to produce a cutting feed therebetween and replacement to a position of no feed to allow the entry of a grinding wheel into a fresh workpiece, of means for causing said wheel to withdraw from a workpiece just prior to the movement of said parts to the position of maximum feed, and means to cause said cam means to continue feeding after said withdrawal just long enough to cause the retraction of said parts in relation to each other.

1,819,095. METHOD OF SEALING CONTAINERS IN THE ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Mar. 7, 1929. Serial No. 344,940. 2 Claims. (Cl. 202—1.)

1. An improved method of making a tight joint between heads upwards of five feet in diameter and receptacles containing heavy hydrocarbon oils in which said oils are reduced to coke which comprises placing a gasket consisting of a rope of heat-resisting fibrous material having the general properties of asbestos which is saturated with an organic substance which is at least in a liquid state and which decomposes at a carbonizable temperature short of 900° F. to leave a carbonaceous residue between the head and its seat on the coking receptacle, clamping the head in place and then heating the coking receptacle to an operating temperature exceeding 900° F.

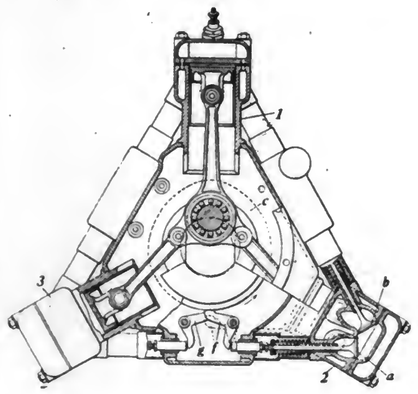
1,819,096. WATER INSOLUBLE AZODYSTUFFS. RICHARD HERZ, Frankfort-on-the-Main, and MAX SCHUBERT, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 4, 1929, Serial No. 411,676, and in Germany Dec. 17, 1928. 8 Claims. (Cl. 260—95.)

2. As new compounds azodyestuffs corresponding probably to the formula:



wherein aryl means a residue of the benzene or naphthalene series, which dyestuffs yield valuable color lakes when mixed with the usual substrata and dye the vegetable fiber valuable blue to bluish black shades of a very good fastness when produced on the fiber.

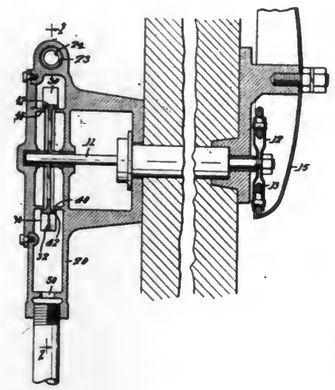
1,819,097. RADIAL-CYLINDER INTERNAL COMBUSTION ENGINE. FRANK WOOTTON HIGHFIELD, Coventry, England. Filed Nov. 14, 1929, Serial No. 407,250, and in Great Britain Dec. 20, 1928. 1 Claim. (Cl. 123—55.)



An internal combustion engine of the type referred to having a single cam whereof the same part is arranged to open simultaneously the exhaust valve of one cylinder and the inlet valve of the next preceding cylinder in the order of firing.

1,819,098. WATER MOTOR. CLIFTON P. HOWARD, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, a Corporation of Massachusetts. Filed Mar. 5, 1931. Serial No. 520,338. 7 Claims. (Cl. 253—136.)

1. In a water motor having a casing and means to direct a jet of liquid therein, a rotor mounted in said casing and having a plurality of blades movable in the path of said jet, and each blade having a forwardly projecting middle rib and rearwardly sloping side surfaces, whereby said blade is self-retarding under increased jet speed.



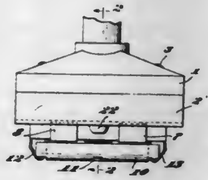
1,819,099. HOUSED INDICATOR DIAL. HENRY J. KOSCH, Dayton, Ohio. Filed June 15, 1929. Serial No. 371,131. 9 Claims. (Cl. 116—124.3.)



1. In an apparatus of the character described, a rotary dial or the like, a revoluble actuating stem having driving engagement with the dial, a mounting therefor, and a substantially heart-shaped spring having a medial reentrant bight in which the actuating stem rests.

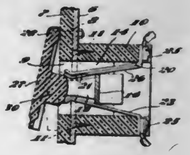
1,819,100. ELECTRIC PLUG. STANLEY M. KENERSON, Springfield, Mass., assignor to Standard Electric Time Company, Springfield, Mass., a Corporation of Connecticut. Filed Sept. 13, 1928. Serial No. 305,809. 2 Claims. (Cl. 173—361.)

1. An electric plug comprising a body of insulation having a central projection on its forward face, a plurality of contact pieces mounted on the body on opposite sides of the projection, the forward ends of the ends of the contact pieces being hooked over the projection, a bar secured to the face of the projection over said hooked ends, said bar having notches in its opposite ends, and holding lugs received in said notches and fastened to the body at opposite ends of the projection for frictionally retaining



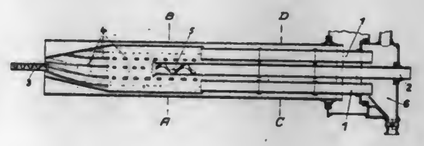
the plug in a jack, the lugs being insulated from the contact pieces and projecting forwardly beyond the projection and the contact pieces.

1,819,101. ELECTRICAL SOCKET. STANLEY M. KENERSON, Springfield, Mass., assignor to The Standard Electric Time Company, Springfield, Mass., a Corporation of Connecticut. Filed May 17, 1929. Serial No. 363,972. 8 Claims. (Cl. 200—51.)



1. An electrical jack comprising a housing containing a plurality of spaced fingers, means associated with said fingers normally forming a closed circuit, and a front plate having a plug opening and a cover for the opening pivotally attached to said plate to uncover the opening for the insertion of a plug, the cover having means engaging said contacts to open the circuit when swung to closed position.

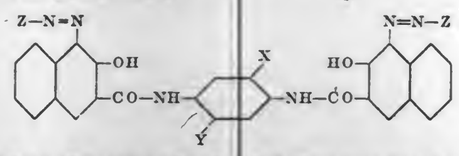
1,819,102. APPARATUS FOR DRYING. JOHANN KÜPPERS, Homberg, Niederrhein, Germany, assignor to the Firm Sachtleben Aktiengesellschaft fur Bergbau und Chemische Industrie, Homberg, Niederrhein, Germany, a Corporation of Germany. Filed May 31, 1930, Serial No. 458,550, and in Germany Dec. 6, 1929. 2 Claims. (Cl. 34—5.)



1. Apparatus for drying moist deposits, comprising an external casing rotatable about its longitudinal axis, a chamber for moist material in one end of the external casing, the part of the said chamber nearest to the end of the external casing being conical in shape, means for admitting material to be dried into the conical end of the chamber, a plurality of tubes for the conveyance of material to be dried extending rearwards through the external casing from the rear end of the chamber, means for introducing moderately heated drying gases into the said tubes at the rear end, and a longer tube extending rearwards from the interior of the chamber for the admission of highly heated gases to the chamber.

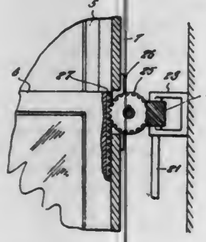
1,819,103. MANUFACTURE OF NEW AZODYESTUFFS. LEOPOLD LÁSKA and ARTHUR ZITSCHER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1928, Serial No. 302,439, and in Germany Sept. 5, 1927. 8 Claims. (Cl. 260—76.)

1. As new products azo dyestuffs corresponding probably to the general formula



wherein X as well as Y means alkyl, alkoxy or halogen and Z means the residue of any diazo-compound, of the benzene-napthalene or anthraquinone series containing no free sulfonic nor carboxylic acid group, which products are when dry reddish to blackish powders, soluble in concentrated sulfonic acid with a bluish-red to bluish-green color, being suitable for the production of valuable color lakes and yielding, when produced on the vegetable fiber, dark read to black dyeings and printings of a remarkable fastness to light.

1,819,104. CLOSURE OPERATOR AND RETAINING MEANS. JOHN LIPOVSKY, Kenosha, Wis. Filed Aug. 5, 1930. Serial No. 473,154. 2 Claims. (Cl. 268—132.)



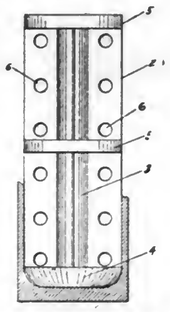
1. In combination with a window frame and a sash slidably arranged therein, a rack bar connected with one side edge of the sash and having spiral teeth thereon, a bracket supported on the frame, a worm gear rotatably supported by the bracket and the teeth of which engage the teeth of the rack bar, a vertically arranged shaft rotatably supported adjacent the window frame, a worm thereon meshing with the first-mentioned gear, and means for imparting rotary movement to the shaft to raise and lower the sash.

1,819,105. HIGH FREQUENCY LUMINOUS TUBE. RAYMOND ROBERT MACHLETT and JOHN FRASER STOKES, New York, N. Y., assignors to Rainbow Light, Inc., a Corporation of New York. Filed July 9, 1927. Serial No. 204,480. 11 Claims. (Cl. 176—14.)



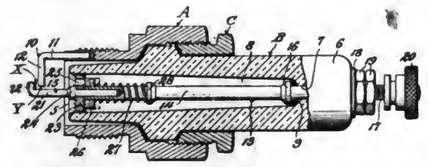
1. In a luminous tube, the combination with a source of high frequency electric oscillations constituting the entire electrical supply, and two condenser plates receiving energy therefrom, of an electrodeless gas filled luminous tube arranged with respect to said condenser plates to provide a path of minimum length for the oscillating current, perpendicular to the longitudinal axis of the tube, at least one of said plates having a length at least equal to the overall length of said luminous tube.

1,819,106. METHOD OF SHELL CONSTRUCTION. LEWIS M. MCBRIDE, Fort Sill, Okla., and FRANK B. HALE, Bel Air, Md. Filed Mar. 26, 1931. Serial No. 525,563. 7 Claims. (Cl. 102—29.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



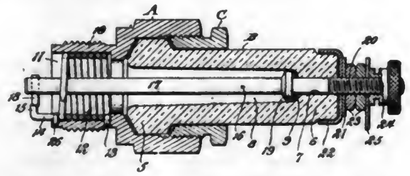
1. A rotary projectile comprising a fluid containing casing having a plurality of longitudinally extending apertured radial partitions mounted therein forming separate communicating compartments.

1,819,107. SPARK PLUG. WILLIAM OTTO MICHELSEN, Woodhaven, N. Y. Filed Apr. 3, 1929. Serial No. 352,184. 12 Claims. (Cl. 123—169.)



1. In a spark plug, a conducting portion and an insulating portion, and two electrodes respectively connected to said portions and normally forming two constantly open spark gaps of relatively smaller and larger sizes between said two electrodes, one of said electrodes being movable relatively to the other to increase the size of the smaller gap without varying the size of the larger gap.

1,819,108. SPARK PLUG. WILLIAM OTTO MICHELSEN, Woodhaven, N. Y. Filed Apr. 3, 1929. Serial No. 352,185. 10 Claims. (Cl. 123—169.)

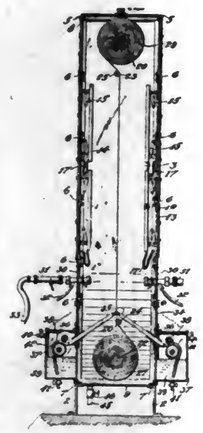


1. In a spark plug, a conducting portion and an insulating portion, two electrodes respectively connected to said portions and forming a spark gap between said electrodes, one of said electrodes including a metal rod

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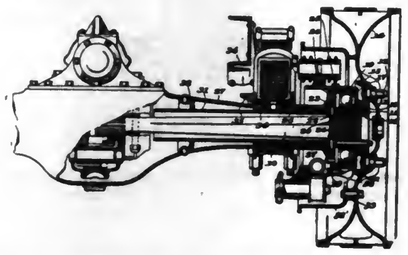
having a relatively high coefficient of expansion and movable in a direction under the influence of heat to increase the size of the gap, and a stop fixed to one of said members for cooperation with the expansible electrode to limit its movement toward the other electrode.

1,819,109. APPARATUS FOR TREATING FLEXIBLE MATERIALS. BERT C. MILLER, Newark, N. J., assignor to S. D. Warren Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 4, 1927. Serial No. 223,858. 8 Claims. (Cl. 91—38.)



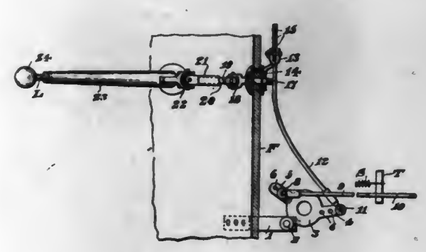
1. In an apparatus comprising an enclosed chamber, a liquid applying means comprising a wick extending from without through substantially air tight passage through a wall of said chamber, means within said chamber for handling flexible material for movement in contact with and past said applying means, means permitting the supplying of a liquid to said wick at a point outside said chamber and permitting the maintenance of a greater pressure outside said chamber than in it whereby feeding of the liquid by means of said wick is aided.

1,819,110. MOTOR VEHICLE AXLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 29, 1920. Serial No. 377,559. 2 Claims. (Cl. 301—126.)



2. In a motor vehicle axle construction, in combination, an axle housing, an axle bearing positioned within the outer end of the housing, said bearing having inner and outer races and the outer race being retained by the housing against movement axially thereof, a shaft extending axially of the housing, the inner end of which is driven and the outer end of which is supported by said bearing and projects from the housing and is provided with a portion to which a wheel may be detachably secured, said shaft also having an annular abutment adapted to engage the inboard bearing race on its outboard side, a retaining device encircling the shaft and adapted to engage the inboard side of the inner bearing race, and a bolt carried by the shaft, said bolt being accessible from the outer end of the axle and extending to and operatively engaging said retainer whereby said retainer and shaft may be relatively adjusted axially of the housing and caused to clamp and rigidly secure the inner bearing race to the shaft so that the shaft is held by the bearing against axial outward movement relatively to the housing, said bolt being releasable to permit withdrawal of the shaft independently of the bearing and retainer.

1,819,111. GAS THROTTLE. CECIL ROBERT NEAL, Portland, Oreg. Filed Sept. 3, 1929. Serial No. 389,995. 3 Claims. (Cl. 74—107.)



3. In a motor vehicle the combination with a throttle lever and a gear shift lever, of a rotatable stem, a member rotatable on the gear shift lever, means actuated by said member when rotated on the lever for rotating the stem, a lever, a thrust connection between said lever and the throttle lever, and means for transmitting thrusts to said lever from the stem when rotated, said thrust connections operating in different directions respectively.

1,819,112. FROTH FLOTATION OF MINERALS. ROBERT L. PERKINS, East Aurora, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 22, 1929. Serial No. 357,838. 23 Claims. (Cl. 209—166.)

1. A composition of matter comprising an ester of a xanthic acid having the probable formula

ROCSSR'

wherein R is CH_3—, C_2H_7—, C_4H_9—, C_5H_{11}—, C_6H_{13}—, C_7H_{15}—, C_8H_{17}—, C_9H_{19}—, C_6H_{11}—, or an aralkyl radical; and R' is an aryl or aralkyl radical.

1,819,113. FLOTATION REAGENT AND PROCESS OF FROTH FLOTATION. ROBERT L. PERKINS, East Aurora, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 22, 1929. Serial No. 357,839. 17 Claims. (Cl. 209—166.)

1. A composition of matter comprising an ester of a xanthic acid having the probable formula

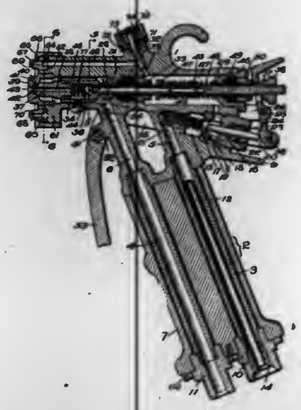
ROCSSR'

wherein R is CH_3—, C_2H_7—, C_4H_9—, C_5H_{11}—, C_6H_{13}—, C_7H_{15}—, C_8H_{17}—, C_9H_{19}—, C_6H_{11}—, or an aralkyl radical; and R' is an aralkyl radical.

1,819,114. CONCENTRATION OF ORES BY FLOTATION. ROBERT L. PERKINS, East Aurora, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed May 29, 1929. Serial No. 367,129. 5 Claims. (Cl. 209—166.)

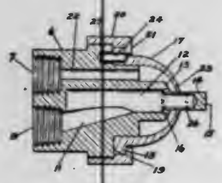
1. In the concentration of ores, the process which comprises subjecting an ore pulp to a froth flotation operation in the presence of a composition comprising a liquid composite condensation organic product derived from benzene, sulfur and aluminum chloride.

1,819,115. APPARATUS OR TOOL FOR APPLYING COATING. JAMES JARVIS PREBLE, Newton, and WAYNE B. THOMPSON, Winchester, Mass.; Livingston Stebbins administrator of the estate of James Jarvis Preble, deceased. Filed June 6, 1924. Serial No. 718,278. 8 Claims. (Cl. 91—45.)



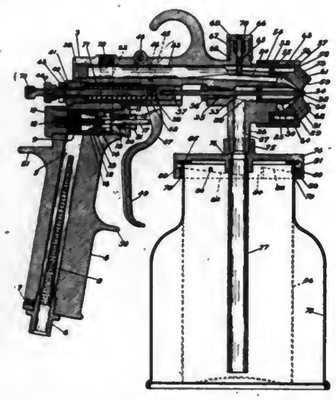
1. An apparatus or tool for applying coating material comprising a body having means to admit coating material and a motive agent for discharge therefrom, means for supplementally discharging motive agent upon the main discharge to flatten or spread the same including a supplemental motive agent passage in said body, a hollow element having a continuous annular groove in one end face and adapted to communicate with said supplemental passage, a pair of opposed jet members upon its opposite face and communicating with said groove, and locking means for said hollow element.

1,819,116. APPARATUS OR TOOL FOR APPLYING COATING. JAMES JARVIS PREBLE, Newton, Mass.; Livingston Stebbins administrator of said James Jarvis Preble, deceased, assignor to Spraco, Inc., Somerville, Mass., a Corporation of Massachusetts. Filed Mar. 13, 1925. Serial No. 15,282. 9 Claims. (Cl. 91—45.)



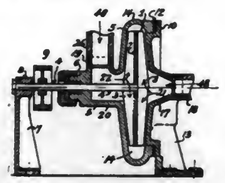
5. A tool for applying coating material having, in combination, an inner nozzle and an outer nozzle provided with a circular series of apertures, the apertures in both series radiating from a common point in the longitudinal axis of the tool, and a third circular series of apertures radiating from a common point in the longitudinal axis of the tool, said points being spaced apart with both the nozzles between them.

1,819,117. APPARATUS OR TOOL FOR APPLYING COATING MATERIAL. JAMES JARVIS PREBLE, Newton, and WAYNE B. THOMPSON, Winchester, Mass.; Livingston Stebbins administrator of estate of James Jarvis Preble, deceased. Filed Dec. 26, 1924. Serial No. 758,055. 9 Claims. (Cl. 91—45.)



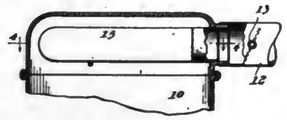
1. An apparatus or tool for applying coating material comprising a body having means to admit coating material and a motive agent, an inner nozzle through which the coating material is discharged, an outer nozzle through which the motive agent is discharged, means for supplementally discharging motive agent upon the main discharge to flatten or spread the same including a supplemental motive agent passage in said body, said outer nozzle having a continuous annular groove in one end face and adapted to communicate with said supplemental passage, a pair of opposed supplemental jet members upon its opposite face and communicating with said groove, and locking means for said outer nozzle.

1,819,118. DOUBLE ACTING CENTRIFUGAL PUMP. JULIUS PRELEUTHNER, New York, N. Y. Filed Dec. 15, 1926. Serial No. 154,999. 1 Claim. (Cl. 259—96.)



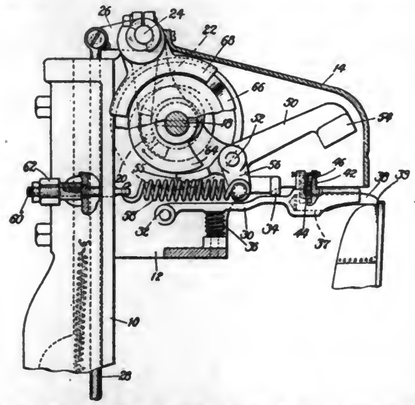
A rotatable stirrer for liquids operating on the principle of the centrifugal pump, comprising a circular dished case or body, having a centrally disposed inlet opening, a peripheral upturned lip on said body, a centrally disposed sleeve, a rotatable shaft in said sleeve, curved vanes originating centrally and terminating near the periphery of said body, a circular cover for said body having a central inlet opening, said cover and body forming peripherally a ring-shaped outlet opening for the peripheral ejection of the liquid from the stirrer causing a suction for drawing liquid into the cavity of the stirrer through the inlet openings of body and cover during the operation of said stirrer.

1,819,119. SMOKE CONSUMER. JOHN PYKOSZ, Chicago, Ill. Filed Mar. 25, 1929. Serial No. 349,624. 1 Claim. (Cl. 126—58.)



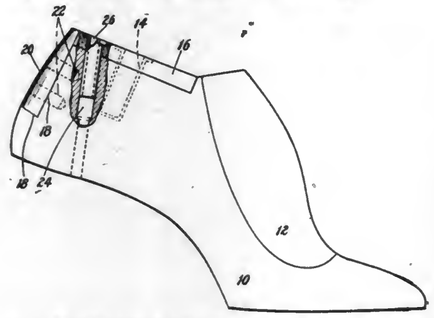
The combination of a combustion chamber; a draft flue leading from the upper portion thereof; and a substantially U-shaped pipe arranged in the upper portion of said combustion chamber with its limbs substantially in a horizontal plane and having one end connected with said draft flue, the other end opening into the upper portion of said combustion chamber.

1,819,120. SMOOTHING MACHINE. ARTHUR F. PYM, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 14, 1929. Serial No. 332,477. 15 Claims. (Cl. 12—51.)



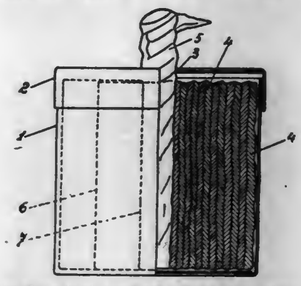
1. A shoe shaping machine, having in combination, a tool shaped substantially to fit the side of the upper adjacent to the last corner of a relasted turn shoe, and resiliently operated means for causing the tool to impinge upon a shoe held thereagainst.

1,819,121. LAST FOR TURN SHOES. JOSEPH V. REED, New York, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 22, 1928. Serial No. 287,411. 4 Claims. (Cl. 12—139.)



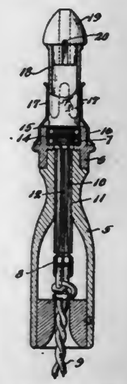
1. A wooden last having in its rear end a recess beginning at a point in the upper surface of the cone and running directly from the upper surface of the cone toward the bottom and having a filler piece of harder material than wood in the recess shaped to the normal heel contour of the last.

1,819,122. CONTAINER AND PACKING SYSTEM FOR POLISHING CLOTHS. ALDO RESNATI, Monza, Milan, Italy. Filed July 18, 1929, Serial No. 379,309, and in Italy July 20, 1928. 1 Claim. (Cl. 206—46.)



A dispensing device of the class described in combination, a dispensing box having a central aperture in its top, a roll composed of single cloths within the box, each having their single half portion folded within the half portion of the succeeding cloth, and the end of the coil being adapted to protrude through the box aperture, whereby when one cloth is withdrawn, a portion of the end of each succeeding cloth is partially withdrawn, ready to be easily released from the coil within the box.

1,819,123. ELECTRICAL VAPORIZER. JOSEPH ROBINSON, New York, N. Y., assignor of one-fourth to Roy M. Wolvin, New York, N. Y. Refiled for application Serial No. 194,437, filed May 26, 1927. This application filed July 30, 1929. Serial No. 382,209. 3 Claims. (Cl. 219—39.)

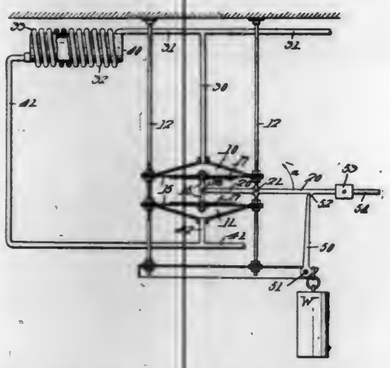


1. In a device of the class described, a heating unit having a handle receiving means at one side and a socket at the other side, a heating element disposed in the socket, a handle cooperating with said handle receiving means, and a gripping attachment mounted on said unit to grippingly hold an object over the heating element.

1,819,124. HEAT ACTUATED MECHANISM. GEORGE L ROCKWOOD, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed May 5, 1930. Serial No. 450,005. 12 Claims. (Cl. 297—4.)

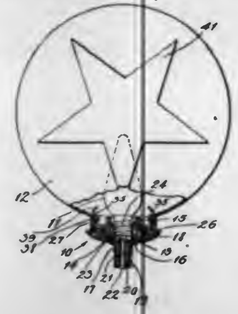
10. A heat-actuated mechanism comprising two pressure chambers, separate diaphragms covering said chambers and both connected to a control member, mechanism controlled

by said member, and heat-responsive containers each connected to one of said pressure chambers and having different heat-receiving characteristics, said containers being assembled and mounted to afford simultaneous expo-



sure thereof to substantially identical atmospheric conditions and said control member being actuated by the differential resultant of the fluid pressures on said diaphragms.

1,819,125. GLOBE AND ELECTRIC LAMP HOLDING ADAPTER. ALBERT SADACCA, New York, N. Y., assignor to Noma Electric Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 23, 1928. Serial No. 321,306. 6 Claims. (Cl. 240—135.)



1. An adapter comprising an insulating body formed with a central opening and an outwardly extending flange having a peripheral downwardly stepped ledge forming a seat, a lamp base receiving portion and a quick detachable plug attachment portion for connecting a lamp to an electric power supply mounted within said opening, and spring friction means for removably attaching a globe for said lamp to said adapter and retaining the mouth of said globe on said seat.

1,819,126. PUSH-PLATE. HAROLD M. SCHEIBE, Belmont, Mass. Filed Jan. 30, 1930. Serial No. 424,618. 4 Claims. (Cl. 85—50.)

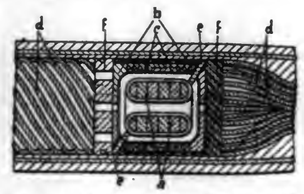


2. An article of manufacture comprising a plate of fragile material having an opening therein, a cup washer in said opening having its neck spaced from the walls of said opening, a flange on one end of the neck of said washer resting on the surface of said plate away from the edge of the opening, and resilient projections extending from said neck into gripping engagement with the walls of said opening to hold the washer therein.

1,819,127. HYDROXY CARBOXYLIC ACIDS OF CARBAZOLE. ALBERT SCHMELZER, FRIEDRICH MÜTH, and FRITZ BALLAUF, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 4, 1929, Serial No. 330,430, and in Germany Jan. 12, 1928. 14 Claims. (Cl. 260—46.)

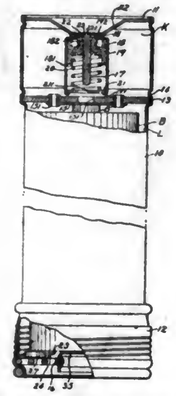
1. In the process of preparing hydroxy carbazole carboxylic acids the step which comprises reacting with carbondioxide under superatmospheric pressure upon a mixture of a hydroxycarbazole and a compound of the group consisting of the hydroxides and carbonates of the alkali metals at a temperature from about 100° to about 300° C.

1,819,128. COIL-JUNCTION-BOX FOR SUBMARINE CABLES. EUGEN SCHÜRER, Cologne-Mulheim, Germany, assignor to Felten & Guilleaume Carlswerk Aktiengesellschaft, Cologne-Mulheim, Germany. Filed May 28, 1928, Serial No. 281,229, and in Germany May 28, 1927. 1 Claim. (Cl. 178—45.)



A coil-junction box for submarine cables comprising for each coil two cylindrical cups of vulcanized rubber with smooth outer surface and capable of being inserted into one another to enclose the coil, the said cups having reinforcing wires vulcanized therein, in combination with perforated metal discs between each pair of cups, said metal discs having helical grooves on their periphery for the accommodation of the coil leads.

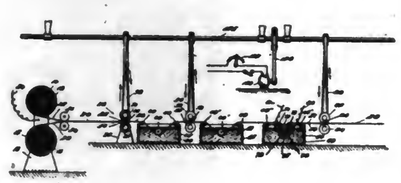
1,819,129. BATTERY CASE. RALPH R. SMITH, Jackson Heights, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed Aug. 5, 1925. Serial No. 48,344. 11 Claims. (Cl. 136—169.)



3. A portable self-contained electric current supply device comprising a case having an apertured cover at one end; a battery within said case; circuit control mecha-

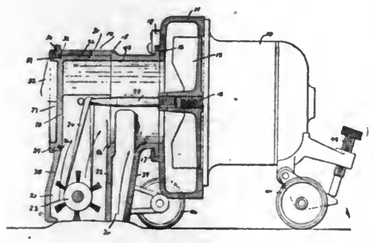
nism within said case between said cover and said battery including a member normally opposite the aperture in said cover; such member being depressible by terminal means inserted into said aperture and automatically returning to its normal position upon removal of such terminal means; a resiliently mounted plunger carrying said depressible member, and a guide for said plunger having a neck secured in the aperture of said cover, the interior of said neck and said depressible member and plunger being engageable by said terminal means.

1,819,130. ELECTROPLATING AND ELECTROPLATING APPARATUS. JOSEPH A. SMITH, Attleboro, Mass., assignor to Ernst Gideon Bek, Pforzheim, Germany. Filed Apr. 19, 1926. Serial No. 102,970. 4 Claims. (Cl. 204—1.)



1. The herein described improved steps in the process of continuously electroplating metal sheets in strip form, which comprise moving through and out of a plating bath two metal sheets compressed together in flush relationship throughout their width so that they form a single compressed sheet of substantially the sum of their thicknesses during immersion in said bath, said sheets forming the cathode of said bath, whereby said sheets may each be plated on the outer exposed side thereof only and after withdrawal from the plating bath separating said sheets.

1,819,131. MULTIPLE NOZZLE VACUUM CLEANER. ABRAHAM N. SPANEL, Rochester, N. Y. Filed Nov. 8, 1930. Serial No. 494,209. 4 Claims. (Cl. 15—8.)

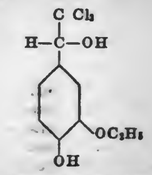


1. A vacuum cleaner formed with a fan chamber, a rotating fan mounted in the fan chamber, a double nozzle unit formed with an auxiliary nozzle and a main nozzle, the passageways of the nozzles being separated by a dividing wall, and shutter means for controlling the passageway of one only of the nozzles.

3. In a vacuum cleaner, the combination with a motor and fan casing of a nozzle unit in communication with the fan casing, the unit being provided with a tubular portion and with an auxiliary nozzle and a main nozzle, the nozzles having passageways in communication with the tubular portion of the unit, the tubular portion being formed with an attachment opening, an attachment sleeve for engagement with the attachment opening, the attachment sleeve extending into the tubular portion of the nozzle unit for shutting off both the auxiliary and main nozzle passageways, a brush mounted in the auxiliary nozzle passageway, and an operating shaft carried by the fan for driving the brush.

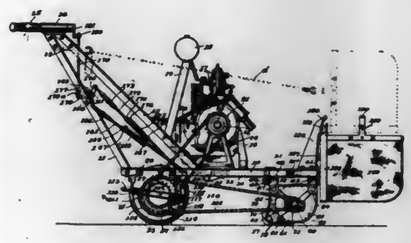
1,819,132. TRICHLOROMETHYL-ETHOXY-HYDROXY-PHENYL-CARBINOL. OSKAR SPENGLER, Neubabelsberg-Bergstucken, and HUGO PFANNENSTIEL, Dessau in Anhalt, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 22, 1930, Serial No. 446,402, and in Germany Feb. 22, 1929. 1 Claim. (Cl. 260—137.)

As a new product the condensation product of orthoethoxyhydroxybenzene with chloral corresponding probably to the formula



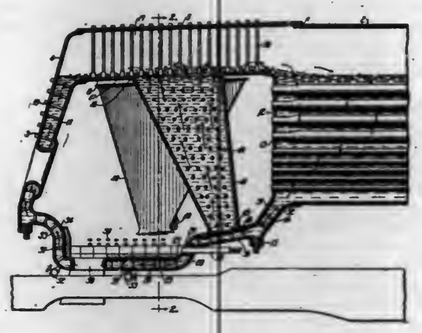
forming a crystalline powder melting at 112 to 113° C., being very difficultly soluble in water, benzine and cold xylene, easily soluble in alcohols, acetone and hot xylene and yielding 3-ethoxy-4-hydrobenzaldehyde by saponification and a suitable oxidation.

1,819,133. LAWN MOWER. HENRY J. STEGEMAN, Fairfield, and SYLVANUS D. LOCKE, Bridgeport, Conn., assignors to The Locke Steel Chain Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 8, 1925. Serial No. 21,470. 31 Claims. (Cl. 56—25.)



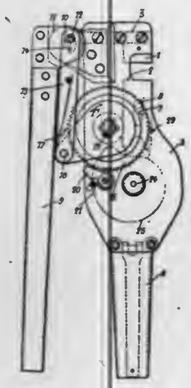
28. In a lawn mower, the combination of a main frame, a transversely and longitudinally pivoted cutter frame carried on the forward end of said main frame, a cutting mechanism carried in the cutter frame and a single gauge roll also carried in said cutter frame and entirely to the rear of said cutting mechanism, said cutting mechanism and gauge roll being held in permanent fixed relation to each other, means to swing the cutter frame and its gauge roll on its transverse pivot to vary the gauge of the cutting mechanism from the ground and locking means for positioning said cutter frame.

1,819,134. BOILER. HENRY V. STEVENS, Topeka, Kans. Filed Nov. 12, 1928. Serial No. 318,818. 11 Claims. (Cl. 122—68.)



1. In a boiler including a fire box, water legs at the sides of the fire box, a water table forming the bottom of the fire box and comprising shelf portions on all sides of the fire box directly communicating with the water legs, and a floor portion positioned below the shelf portions and cooperating with the shelf portions to provide a fuel combustion chamber.

1,819,135. PORTABLE SHEARING TOOL. RENÉ SUDRE, Paris, France, assignor to Societe d'Exploitation des Brevets Fort, Villiers, Neuilly-sur-Seine, France. Filed Feb. 14, 1930, Serial No. 428,461, and in France Apr. 11, 1929. 2 Claims. (Cl. 30—17.)

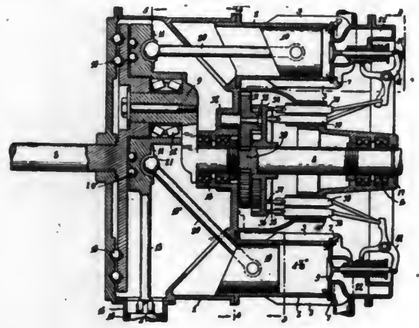


1. In a portable shearing tool, a frame, a handle rigid therewith, a cutting blade rigidly secured to said frame, a reciprocable cutting blade guided on said frame, rotary eccentric means pivoted to said frame and adapted to actuate said latter blade, a large ratchet wheel, power amplifying gearing connecting said ratchet wheel with said eccentric means, a pawl for rotating said ratchet wheel, an operating lever pivoted to said frame and power amplifying transmission means connecting said lever with said pawl.

1,819,136. PROCESS FOR THE PRODUCTION OF PLASTIC PRODUCTS, PAINTS, AND LACQUERS. FRANCIS CLIFFORD DYCHE-TEAGUE, London, England. Filed Feb. 2, 1928, Serial No. 251,470, and in Great Britain Sept. 13, 1927. 5 Claims. (Cl. 260—1.)

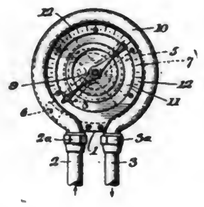
1. A process for the production of a chlorinated rubber product capable of forming solutions of low viscosity consisting in rolling rubber in a mill until said rubber is disaggregated, making a solution of the disaggregated mass and passing chlorine through the solution.

1,819,137. INTERNAL COMBUSTION ENGINE. SETH W. THOMPSON, Montclair, N. J. Filed Aug. 14, 1929. Serial No. 385,743. 10 Claims. (Cl. 123—58.)



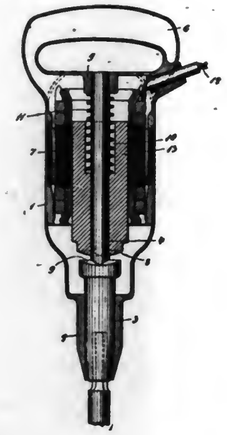
7. An internal combustion engine comprising a case, a plurality of concentrically arranged cylinders thereon, a piston and connecting rod in each cylinder, an eccentric shaft in said case centrally located with respect to the cylinders and approximately parallel with their bores, a connecting rod bearing ring on said eccentric shaft, means for connecting the connecting rods and connecting rod bearing ring, a master rod on said ring to prevent rotation thereof, inlet and exhaust valves in each cylinder, a cam track ring concentric with the eccentric shaft, means for rotating said cam track ring, and push rods and rocker arms connecting said valves and cam track ring whereby the valves are operated.

1,819,138. FLUID FLOW METER. ARTHUR M. TROGNER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,814. 7 Claims. (Cl. 73—167.)



1. A fluid flow meter comprising a conduit having a loop therein for the passage of fluid, a scale adjacent said conduit, said loop having a slot in the inner wall, a movable disc member journaled adjacent said conduit and extending through said slot and into the looped portion thereof throughout its periphery, means for resiliently biasing said disc member, a restricted orifice means carried by said movable disc member and located within said conduit, and an indicator connected with said movable disc member and movable simultaneously therewith for cooperation with said scale for indicating the rate of flow of fluid through said conduit.

1,819,139. STRIKING TOOL. ERNST HJALMAR WALODDI WEIBULL, Saltsjobaden, and ERIK GUSTAF HYSING, Stockholm, Sweden, assignors to Aktiebolaget Nordiska Armaturfabrikerna, Stockholm, Sweden, a Limited Company. Filed Jan. 18, 1929, Serial No. 333,302, and in Sweden Jan. 27, 1928. 3 Claims. (Cl. 125—33.)



1. A striking tool, including a frame, an electric motor drive device located in said frame and including a hollow stator, an anvil, and a striking body associated with the anvil and axially and rotatably movable through the hollow stator, and means acting in response to centrifugal force during rotation of the striking body to urge the latter in the direction of the anvil.

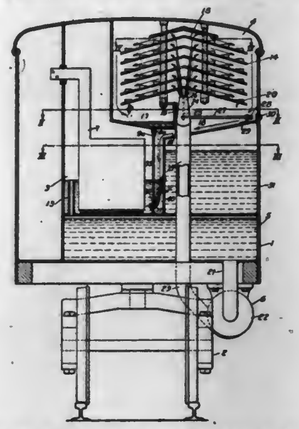
1,819,140. RECIPROCATING MOTOR. CARL S. WEYANDT and HAROLD E. FOX, Pittsburgh, Pa., assignors, by mesne assignments, to Central Electric Tool Company, a Corporation of Pennsylvania. Original application filed Nov. 21, 1923, Serial No. 676,106. Divided and this application filed May 5, 1928. Serial No. 275,399. 6 Claims. (Cl. 172—126.)



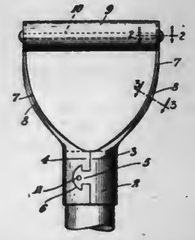
8. The combination with an electric reciprocating motor, of a magnetic casing for said motor comprising a rolled sheet of magnetic metal, said sheet having its edges substantially abutting and insulated from each other by comparatively thin layers of oxide of said metal.

1,819,141. WATER RHEOSTAT. CHARLES C. WHITTAKER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 30, 1927. Serial No. 187,760. 6 Claims. (Cl. 201—57.)

1. In a liquid rheostat, the combination with a cooling tower, an electrode-containing tank communicating with one section of the cooling tower and a second electrode-containing tank communicating with another section of the tower, of a circulating system and a nozzle for delivering electrolyte to the cooling tower, and a flow splitter located in the nozzle for distributing the electrolyte between the sections of the cooling tower.

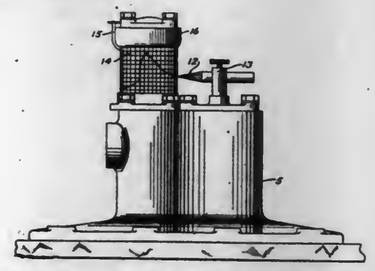


1,819,142. D-HANDLE. JAMES H. WILY, Bethlehem, Pa. Filed May 14, 1927, Serial No. 191,282. 5 Claims. (Cl. 294—57.)



3. A one piece sheet metal part for a D-handle, comprising a socket provided at its meeting edge with an interlocking dove-tail connection and integral upstanding spaced arms to receive a hand grip.

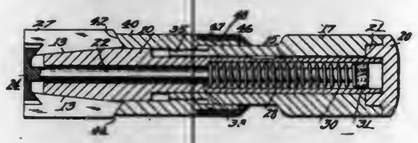
1,819,143. METHOD AND APPARATUS FOR OBTAINING INDICATOR CARDS FROM ENGINES. GLENN D. ANGLE, Cincinnati, Ohio. Original application filed Feb. 19, 1920, Serial No. 359,815. Divided and this application filed Feb. 27, 1929. Serial No. 343,139. 6 Claims. (Cl. 234—20.)



1. The method of ascertaining the mean pressure of any cyclic series of pressures for any point in the cycle which comprises, trapping in a closed chamber an instantaneous

pressure at that point, maintaining said pressure inert and out of communication with the recording device until transferred and transferring said pressure to the pressure recording device.

1,819,144. INTERNAL MICROMETER GAUGE. JAMES ROY AULENBACK, Worcester, Mass., assignor to Aulenback Tool Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 3, 1929. Serial No. 360,177. 1 Claim. (Cl. 33—178.)



An internal micrometer gauge comprising a supporting member of circular cross section having a plurality of axially extending guideways formed therein with bottom surfaces inclined to the axis of the gauge, said member having a longitudinal bore and having an extension at one end, gauge bars slidably mounted in said guideways, a spring plunger axially alidable in said supporting member and having an enlarged end engaging the outer ends of said gauge bars, said plunger being effective to yieldingly move said gauge bars endwise and outward in said guideways, a handle enclosing the extension of said supporting member and having an extended hub formed with external screwthreads at its end portion, the end of said support extension being externally threaded and the corresponding end of said handle being recessed and internally threaded, a cap for said handle having an internally and externally threaded annular flange fitting said recess and threaded in said support and handle, whereby said handle is firmly mounted on said support extension and is held from axial movement relative thereto, and a sleeve threaded on the end portion of said hub and forming an adjustable stop engaging the inner ends of said gauge bars, axial movement of said sleeve relative to said supporting member and handle being effected by rotation of said sleeve on said threaded handle hub.

1,819,145. METHOD FOR THE DESTRUCTION OF ANIMAL PESTS. WALTER BECK, Frankfort-on-the-Main, Germany, assignor to Deutsche Gold & Silber Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation. Filed Jan. 9, 1926, Serial No. 80,361, and in Germany Sept. 1, 1925. 2 Claims. (Cl. 167—46.)

2. Product for the liberation of poisonous gases for use in the destruction of animal pests which consists of a mixture of sulphur, potassium nitrate, sawdust, and charcoal in such proportions that it will liberate hydrogen sulphide and carbon monoxide upon combustion.

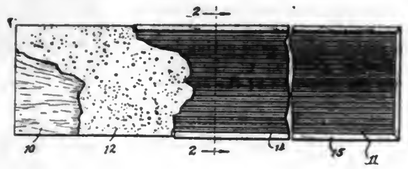
1,819,146. INCANDESCENT BODY FASTENER. CORNELIS BOL, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Filed June 28, 1926, Serial No. 119,093, and in the Netherlands July 2, 1925. 8 Claims. (Cl. 250—27.5.)

1. A filament support comprising a pair of fixed supports insulated from each other between which a filament is attached, an arm engaging the filament at some point between the fixed supports, said arm being free to move



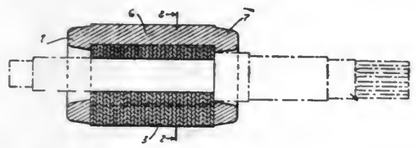
transversely of the filament thereby keeping it taut during all variations in length, and a spring pressing the arm engaging the filament transversely of the filament.

1,819,147. RUBBER COVERED ARTICLE AND METHOD OF PRODUCING SAME. BUDD BRONSON, Lakewood, Ohio, assignor to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 30, 1929. Serial No. 336,805. 6 Claims. (Cl. 18—59.)



3. The method of making rubber covered articles which comprises, spraying a layer of metal onto a non-metallic base, and then vulcanizing a layer of rubber to said layer of metal.

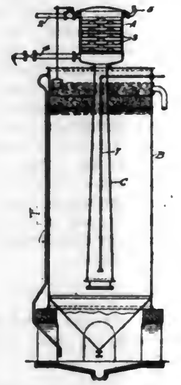
1,819,148. ELECTRICAL APPARATUS. CHARLES B. COATES and CLARENCE J. DRESSER, Cleveland, Ohio, assignors to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 21, 1928. Serial No. 263,564. 2 Claims. (Cl. 172—120.)



2. A rotor for induction motors designed for high sustained speed and high torque, said rotor having a slotted core and having conductor bars and end rings

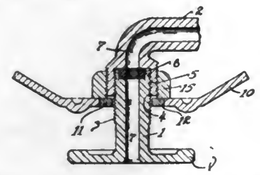
cast in one piece upon said core, said bars being of substantial size in cross section and covered as to their outer portions by said core save for a narrow part which extends to and forms a part of the peripheral surface of the rotor, said rings being in the form of annuli spaced from the periphery of the rotor and from the rotor shaft with wide bases engaging the ends of said core and covering the body portions of said bars, said rings extending outwardly from said core with smooth converging tapered sides and terminating in rounded ends thereby to cause dust and girt to be thrown off so as to prevent the cutting through of stator winding.

1,819,149. HOT WATER TREATMENT. PETER M. CONSTANT, New York, N. Y., assignor to Neckar Water Softener Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 19, 1928. Serial No. 313,562. 4 Claims. (Cl. 210—14.)



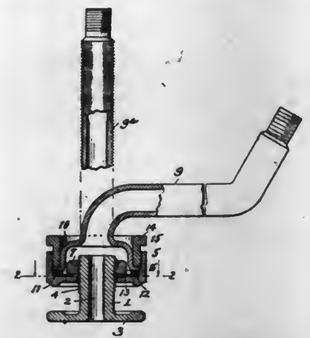
1. In a water purification system, a reaction tank, a preheating tank, a conduit for supplying water to be purified to said preheating tank, a second conduit suppling heating fluid to said preheating tank to cause heat reaction of said water and precipitation of impurities, a third conduit for conducting the heated water to the reaction tank, said conduit being of sufficient length to permit substantially complete heat reaction of said water, and a fourth conduit supplying chemicals to the heat reacted water adjacent the point of communication of the third conduit with the reaction tank to complete the purification.

1,819,150. VALVE STEM. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 21, 1929. Serial No. 348,735. 4 Claims. (Cl. 152—12.)



1. A spreader plate adapted to be used with a valve stem comprising a plate member provided with a centrally arranged opening and adapted to be adjustably arranged on a valve stem, and a washer member having a central opening provided with flats and adapted to be arranged on a valve stem with said flats engaging the usual flats on the stem, said plate member and said washer member having cooperating portions which when interengaged hold said plate member in its various positions of adjustment.

1,819,151. INTERCHANGEABLE VALVE STEM. JOHN C. CROWLEY, Cleveland Heights, Ohio. Filed Dec. 16, 1929. Serial No. 414,314. 2 Claims. (Cl. 152—12.)

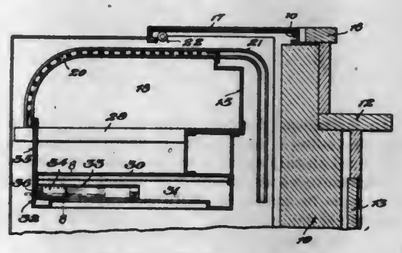


1. In combination, a valve stem having a head at one end adapted to be arranged within a tire tube and an exteriorly threaded portion at its other end, a cup-shaped member arranged on said valve stem so as to have longitudinal movement thereon, a nut arranged on said exteriorly threaded portion of the stem and within said cup-shaped member for holding the latter in position on the stem to clamp a tire tube between the head on the stem and the base of said member, an extension or adapter having a flanged portion arranged in said cup-shaped member, and means associated with said cup-shaped member and cooperating with the flange portion of said adapter or extension for maintaining the adapter or extension in air-sealed, assembled position with respect to said member and said stem.

1,819,152. METHOD OF TREATING CELLULOSIC MATERIAL. BÉLA DORNER, Budapest, Hungary, assignor, by mesne assignments, to Cornstalk Products Company. Filed Feb. 28, 1927. Serial No. 171,782. 4 Claims. (Cl. 92—1.)

1. The method of preliminary treating straw-like materials for fiber-liberation therefrom, which comprises shredding the same to a state of disintegration sufficient to permit access of wash-water and removal of insoluble adherent dirt, and washing said disintegrated material while agitating the same in a rotary sieve fine enough to retain the shredded material but coarse enough to permit passage of suspended dirt, the shredding of the material being insufficient to allow the same to mat and form a pulp.

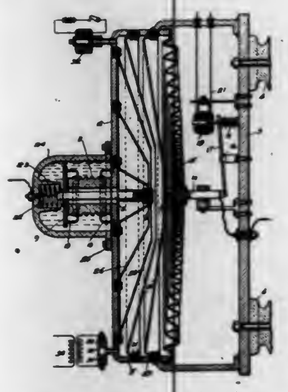
1,819,153. BANK COUNTER STRUCTURE. ERIK A. EKEDAHL, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed Mar. 28, 1930. Serial No. 439,740. 7 Claims. (Cl. 45—140.)



1. In a bank-counter structure, a working counter top provided with a recess to accommodate a change machine or the like, a receding closure for said working top adapted

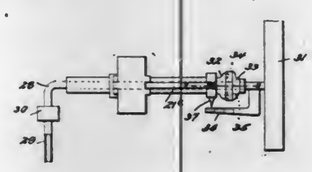
when closed to rest at its outer edge upon the upper face of the working top, and means separate from said closure for preventing access through the recess in said working top to the upper face of the latter when said closure is closed.

1,819,154. VACUUM CIRCUIT BREAKER. OTTO H. ESCHHOLZ, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 22, 1928. Serial No. 301,271. 3 Claims. (Cl. 200—144.)



1. In a vacuum circuit breaker, an evacuated enclosure, a plurality of spaced superimposed annular barriers having substantially centrally disposed aligned openings extending transversely of the enclosure, and a pair of relatively movable contacts disposed to draw an arc in a zone between at least two of the barriers so that the arc is substantially surrounded by the boundaries of the said openings, the boundaries of said openings being spaced from the electrodes a sufficient distance to prevent contact of the arc drawn between the electrode with the barriers, and the barriers being so positioned as to intercept electrons and gases radiated from the arc toward parts of the enclosure unshielded by the electrodes.

1,819,155. INSTRUMENT FOR INDICATING VELOCITY AND DIRECTION OF FLOW OF FLUID. ELISHA N. FALES, Dayton, Ohio. Filed June 27, 1923. Serial No. 648,049. 7 Claims. (Cl. 73—2.)



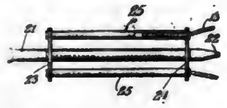
1. An instrument for indicating the velocity of fluid in motion, including a rod having a sleeve slidable thereon, a collar fixed on said sleeve, a second collar slidable on said sleeve, pressure vanes pivotally mounted on said slidable collar, means in connection with said fixed collar and in pivotal connection with said vanes to yieldably retain said vanes in an operative position, means mounted on said rod tending to resiliently resist movement of said sleeve along said rod under influence of said vane pressure and means for measuring the movement of said sleeve on said rod.

1,819,156. SELF ADJUSTING CARPET FASTENER. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 18, 1928. Serial No. 285,070. 2 Claims. (Cl. 24—213.)



1. A self-adjusting carpet fastener, comprising a base having a face provided with an opening of larger diameter than the head of the after-mentioned stud and of smaller diameter than that of the flange of said stud, said face having a rim turned inwardly from the periphery of the face and underneath the face and its greater portion spaced from it sufficiently to permit the self-adjustment of the stud to compensate for local variance between the stud and its socket, the said inwardly turned rim presenting a broad surface to contact with the carpet and the inner margin of said rim having prongs some of which are turned inwardly in a direction parallel with and beneath the flange of the stud to support the stud in the base without liability of distortion and without binding the stud against freedom of lateral movement as pressure is applied to the fastener, the other prongs being anchored in the carpet to secure the fastener thereto, and a stud having a head extending outside of the base through the opening therein and a flange placed in said base and supported therein by said inwardly turned prongs and laterally movable in said base.

1,819,157. FOUNTAIN BRUSH. CHARLES F. FITTER, Coscob, Conn. Filed Oct. 26, 1926. Serial No. 144,229. 4 Claims. (Cl. 15—129.)



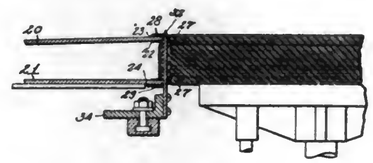
1. A fountain brush apparatus comprising a tubular nozzle having the outlet opening at one end and hose connected thereto at the other end, a handle secured to said nozzle and surrounding the same but spaced therefrom, said handle having apertures on opposite sides of said nozzle and a brush having projections arranged to fit into said apertures and hold the brush in operative position in front of said nozzle.

1,819,158. METHOD OF PRINTING UPON THE PAGES OF A BOOK. CHARLES E. GALE, Boston, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1929. Serial No. 354,295. 3 Claims. (Cl. 101—426.)



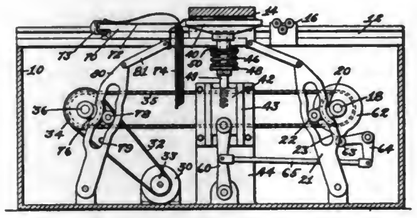
1. The method of printing upon the successive pages of a book, which comprises, positioning all the pages of the book in superposed relation and registering them with relation to each other and to a printing element, printing on predetermined portions of the upper surface of each page and turning each page thus printed while still maintaining the succeeding unprinted pages in their previously registered positions.

1,819,159. BOOK. CHARLES E. GALE, Boston, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1929. Serial No. 354,296. 6 Claims. (Cl. 281—15.)



4. A book in bound form comprising a body portion made up of a plurality of leaves, said body portion being provided with means forming a transversely extended passage for the reception of a positioning member, said passage being unobstructed whereby the positioning member may snugly fit the passage and engage the walls thereof to maintain the individual leaves making up the body portion in predetermined relation, cover members, and means for securing the body portion to said cover members independently of said passage and in a manner such as to permit at least one end of the passage to be uncovered only when the cover members are folded back to expose the body portion.

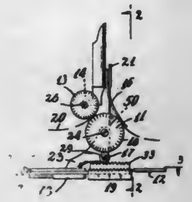
1,819,160. METHOD OF AND APPARATUS FOR PRINTING. CHARLES E. GALE, Boston, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Feb. 4, 1930. Serial No. 425,797. 7 Claims. (Cl. 101—287.)



1. The method of printing a bound book which consists in supporting the book with the covers opened at a substantial angle, moving the book while thus supported with relation to cooperating printing elements to position the book first adjacent and then spaced from the printing elements, inserting successive pages of the book between the printing elements and performing the printing operation upon each page during the intervals that the book is positioned adjacent the printing elements, and turning each printed page to a position adjacent one of the covers during the interval that the book is positioned spaced from the printing elements.

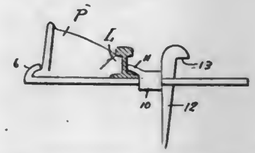
1,819,161. SEWING MACHINE ATTACHMENT FOR MENDING RUNS IN SHEER FABRICS. LOUIS GOODMAN and DANIEL L. FRIEDMAN, New York, N. Y. Filed May 19, 1930. Serial No. 453,699. 6 Claims. (Cl. 66—1.)

1. A sewing machine attachment for mending runs in sheer fabrics, comprising a pair of spaced ribbed rollers rotatively supported on a substitute bobbin cover plate of a sewing machine, a pair of spaced ribbed idler rollers engageable against said rollers and supported on a stem for attachment on the presser foot of said sewing machine, fabric spreading means for support on said stem and engageable against said first rollers, a ribbed driver drum engaging against said first rollers, and supported on said cover plate, and means for periodically turning said driver drum and including a foot in the path of motion of the cloth feeder of said sewing machine for advancing sheer



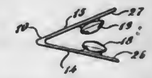
fabric between said first and second rollers timed with a latch needle substituted for the sewing needle of said sewing machine.

1,819,162. CAR REPLACER CLAMP. RAYMOND M. GRANDY, Superior, Wis. Filed July 9, 1930. Serial No. 466,858. 1 Claim. (Cl. 104—274.)



In a device of the character described, a replacer block provided with an integral lug adapted to engage one side of a rail web, the upper portion of the lug contacting the under face of the rail tread, and the lower portion of the lug contacting the base flange of the rail, a clamping plate having one end thereof adapted to support said replacer block, said clamping bar at said one end provided with a projection engaging the side of the replacer block remote from the rail, a sleeve member slidable on the clamping bar and having an integral forwardly and upwardly extending projection adapted to engage the opposite side of the rail web, said clamping bar provided with a series of staggered non-circular openings, and a retaining pin non-circular in cross section adapted to be disposed in a selected one of the openings for retaining said sleeve member at the desired adjustment on said bar.

1,819,163. CUFF BUTTON. FERRUCCIO GUIDETTI, Elmhurst, N. Y. Filed May 3, 1930. Serial No. 449,432. 6 Claims. (Cl. 24—102.)

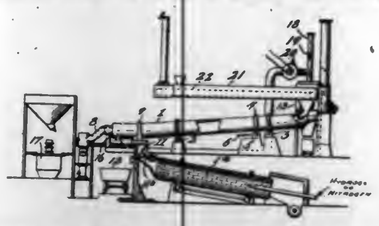


1. The method of producing a cuff button of the character specified, which consists in producing a flat elongated blank with lug portions laterally extending therefrom adjacent its ends at each side thereof, embossing and bending said lug portions inwardly to form buttonhole engaging projections at right angles to said blank, and bending said blank midway of its length to form a V shaped substantially rigid structure.

1,819,164. METHOD OF PRODUCING PYROPHORIC IRON. HERMAN L. HARTENSTEIN, Chicago, Ill. Filed Oct. 18, 1926. Serial No. 142,190. 14 Claims. (Cl. 75—14.)

1. The method of producing pulverulent and granular pyrophoric iron at a temperature not higher than 1100°

F., which consists in mixing iron ore with peat in its natural state, then reducing the ore with hydrogen at a temperature below its fusing or melting point to produce



a product in pulverulent form, and then allowing the resultant pulverulent and granular product to thoroughly cool in the absence of air.

1,819,165. HIGHLY ACTIVE CARBON AND ITS MANUFACTURE. HENRY BOHN HASS, Charleston, W. Va., assignor to Gasoline Recovery Corporation, a Corporation of Delaware. Filed May 28, 1927. Serial No. 195,137. 2 Claims. (Cl. 252—3.)

1. A process for the manufacture of highly active gas adsorbent carbon which consists in impregnating carbonaceous material with phosphoric acid, then calcining said impregnated material in the absence of free oxygen, and submitting the calcined product to controlled partial oxidation at temperatures above 700° C.

1,819,166. METHOD AND APPARATUS FOR PRODUCING ACTIVATED CHARCOAL. HENRY BOHN HASS, Charleston, W. Va., assignor to Gasoline Recovery Corporation, Charleston, W. Va., a Corporation of Delaware. Filed Sept. 17, 1928. Serial No. 306,594. 6 Claims. (Cl. 252—3.)

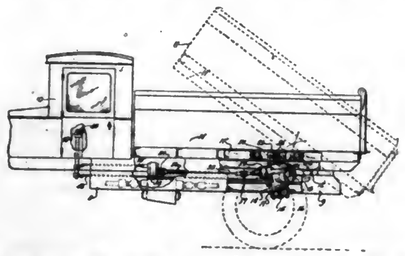


1. A process for activating charcoal by endothermic oxidation, which consists in activating the charcoal, oxidizing the gases produced during the activation by oxygen from the air, then causing said gases to be contacted again with the charcoal undergoing oxidation-activation, adding steam to said gases while the oxidation-activation is taking place, and utilizing the heat from the combustion of the said gases meanwhile to supply the heat required for maintaining the endothermic oxidation of the charcoal.

5. An apparatus for activating charcoal, comprising a rotatable tubular retort inclined to the horizontal, a conduit extending lengthwise within the retort and provided with outlet means for feeding a regulated amount of gaseous medium into the retort in a direction approximately tangential to said conduit, means for feeding charcoal into the upper end of the retort, and means for discharging gases from the retort.

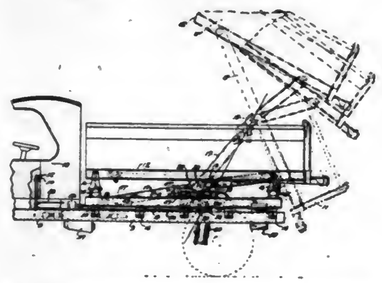
1,819,167. FLUID HOIST. JOSEPH F. HEIL, Milwaukee, and EARL B. GRUBER, Wauwatosa, Wis., assignors to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed July 1, 1929. Serial No. 375,127. 8 Claims. (Cl. 138—9.)

1. The combination with a truck having a dump body portion pivotally connected thereto at points intermediate the ends of the body, but closer to the rear end portion of the body, of a fluid hoist therefor, comprising a cylinder pivotally connected adjacent its lower end to the truck, said cylinder having a piston in its bore and a piston rod which extends upwardly and is pivotally connected at its upper end to a medial portion of the body to tilt the front portion of the body upwardly, said cylinder also having an upper head and a spaced partition carried by said head and forming a storage chamber in the upper portion of the cylinder, the piston rod recip-



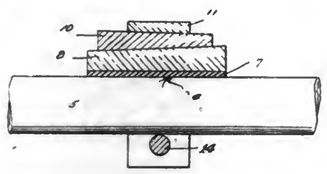
rocally extending through the partition and the head, and the cylinder having upper and lower ports opening into the bore of the cylinder, an outer duct connecting the upper and lower ports together, a pump intersecting the outer duct for moving a fluid medium within the cylinder from one side of the piston to the other, ducts by-passing the pump, a valve controlling the flow of fluid medium through the by-pass ducts, and a duct connecting the bore of the cylinder to the storage chamber.

1,819,168. TELESCOPIC FLUID HOIST. JULIUS P. HEIL, Milwaukee, and GEORGE L. LANDRY, West Allis, Wis., assignors to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 18, 1930. Serial No. 435,454. 4 Claims. (Cl. 138—9.)



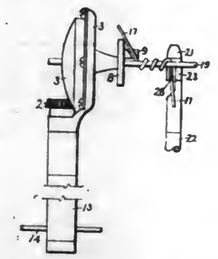
1. A telescopic fluid hoist, comprising a movable cylinder having a duct in communication with the bore of the cylinder, a piston-cylinder reciprocally positioned within the bore of the cylinder and having a tubular portion which extends through the head of the cylinder and also having an opening extending through the piston portion, a piston reciprocally positioned within the bore of the piston-cylinder and having a piston rod which extends through the head of the piston-cylinder, a fluid medium tank adjacent the cylinder, a duct connecting the tank to the cylinder duct, a pump intersecting the ducts between the tank and the cylinder bore, a check valve permitting the flow of the fluid medium from the pump only in one direction, a pump by-pass duct extending between the cylinder and the tank ducts, an automatic valve operable by the movement of said cylinder and movable to intercept the flow between the tank and the pump when said piston and piston cylinder have been fully elevated, and a manually actuated valve controlling the flow of the fluid medium through the by-pass duct to lower said piston and piston cylinder.

1,819,169. LEAK STOP. FRED D. HILDRETH, Mount Vernon, Ohio. Filed Mar. 18, 1930. Serial No. 436,808. 2 Claims. (Cl. 137—99.)



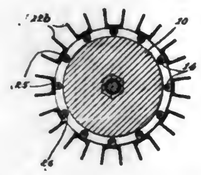
1. A device of the class described including a U-shaped member having apertured end portions, a block having a dished out face and an opposed inclined face, a wedge to be disposed between the inclined face and the bight portion of the U-shaped member and a pin to extend through the apertured end portions.

1,819,170. WIRE-TWISTING TOOL. ALEXANDER E. HOENE, Tacoma, Wash. Filed Nov. 25, 1930. Serial No. 497,999. 3 Claims. (Cl. 140—119.)



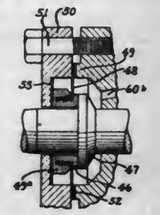
1. A wire twisting tool including a bevel gear wheel operated by a pinion gear wheel engaged therewith, said gear wheel mounted and operated within an annular frame or case without a pivotal shaft, a radial slot in said annular case and said bevel gear wheel wherein a pole line wire can be inserted at the axis of said gear wheel, a hub-like extension with a wire twisting stud thereon, extending from one side of said bevel gear wheel, and means for fixing and clamping a branch wire onto said pole line wire, said means including a pair of clamping jaws with a vertical slot in the lower jaw to receive the said branch wire, lift, put and clamp the same on said pole line wire while said branch wire is being twisted thereon by said wire-twisting tool.

1,819,171. POLISHING WHEEL. RALPH Z. HOPKINS and EARL F. SEGER, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 21, 1928. Serial No. 307,461. 4 Claims. (Cl. 51—190.)



1. A polishing or sanding device comprising a rotary drum having end support members, a number of rubbing elements having offset portions and provided with slots, retaining members having tongues engageable with said slots, and provided with eyelets, and a number of rods adapted to be inserted through the eyelets of the respective members and to be demountably secured between said end support members.

1,819,172. REFRIGERATING APPARATUS. ELMER L. HORLACHER, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 30, 1928. Serial No. 266,071. 1 Claim. (Cl. 286—11.)



In refrigerating apparatus including a compressor casing, a shaft passing through said casing, a seal for said casing at the point where said shaft passes therethrough, said seal comprising a flexible diaphragm having hermetic connections with said casing and with said shaft, one of said connections being a sliding, frictional connection including a bearing surface of a porous, lubricant impregnated, metal member cemented to said diaphragm, and a ring member soldered to said diaphragm on the side away from said hermetic connection, substantially as described.

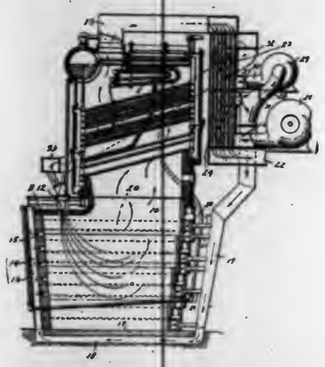
1,819,173. AWNING SUPPORT. JAMES F. HUNLEY and RAYMOND WILLIAM PACE, Lexington, Ky. Filed Aug. 12, 1930. Serial No. 474,805. 1 Claim. (Cl. 254—98.)



A device of the class described comprising an internally threaded base, a screw threaded for vertical adjustment in the base, an integral hexagonal head on the screw above the base constituting means for rotating the screw, an unthreaded shank extending upwardly from the hexagonal head, a tubular column disposed telescopically over the shank and engaged on the upper side of the hexagonal head, a reduced shank on the free end of the first named

shank, said reduced shank providing a shoulder at its point of mergence with the first named shank, a removable head mounted on the upper end of the tubular column, an unthreaded shank depending from the removable head into the upper portion of the tubular column for maintaining the removable head in position thereon, and a reduced shank depending from the last named shank and providing a shoulder at its point of mergence with said last named shank, the reduced shanks adapted for the reception of a tubular column of comparatively small diameter.

1,819,174. AIR COOLED FURNACE AND METHOD OF OPERATING THE SAME. DAVID S. JACOBUS, Jersey City, N. J., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed June 17, 1925, Seriol No. 37,641. Renewed Jan. 13, 1931. 8 Claims. (Cl. 110—28.)



6. The method of operating a furnace which comprises projecting into the furnace a stream of fuel, igniting and burning said fuel in the furnace, extracting heat from the waste gases and heating air therewith, supplying said heated air to the fuel adjacent its place of ignition, extracting some of the remaining heat from the waste gases and heating air therewith, and supplying said last named air to the furnace where the fuel is burning.

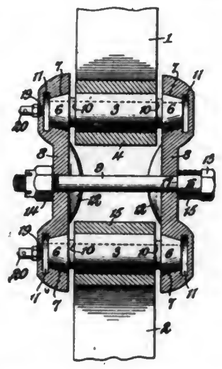
1,819,175. FLEXIBLE CONDUIT AND METHOD OF MAKING THE SAME. EDWARD JAMES, Cleveland, Ohio, assignor, by mesne assignments, to Harold Eino Smith, Cleveland Heights, Ohio. Filed Nov. 20, 1926. Serial No. 149,572. 7 Claims. (Cl. 187—75.)



1. A flexible conduit comprising a spirally corrugated tube, and an axially tensioned tube-controlling coil operatively associated with the corrugations of the tube.

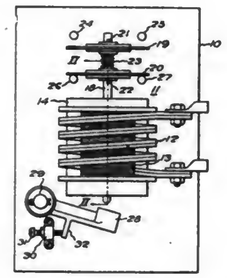
1,819,176. AUTOMATICALLY ADJUSTABLE CONNECTION FOR SHACKLE BOLTS. FRANCIS F. JAMES, Philadelphia, Pa. Original application filed July 20, 1928, Serial No. 294,154. Divided and this application filed July 10, 1929. Serial No. 377,312. 9 Claims. (Cl. 267—54.)

1. An adjustable connection for shackle bolts including a pair of shackle bolts having central cylindrical portions and cone portions and provided with circumferential grooves arranged between the cylindrical portions and the cone portions, said shackle bolts being also adapted to receive on their cylindrical portions the eyes of vehicle springs, shackle plates located at opposite sides of the springs and having tapered bearing recesses fitting



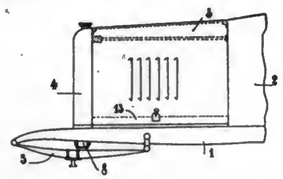
over the cone portions of the shackle bolts to form cone bearings, said shackle plates being provided at the ends of the shackle bolts with enlarged recesses and means for connecting the shackle plates.

1,819,177. CONTROL APPARATUS. HOWARD H. JOHNSTON, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 19, 1927. Serial No. 169,570. 3 Claims. (Cl. 175—341.)



1. In control apparatus, in combination, a movable armature, a main coil for actuating the armature, an auxiliary coil comprising turns of a conductor of magnetic material disposed to function as a core for the main coil and to co-operate in the operation of the armature.

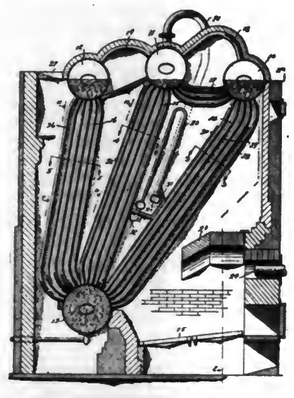
1,819,178. MOTOR-CAR BONNET AND RADIATOR MOUNTING DEVICE. ADOLPHE KÉGRESSE, Levallois Perret, France. Filed Oct. 11, 1927, Serial No. 225,581, and in France Oct. 15, 1926. 2 Claims. (Cl. 180—68.)



1. In a vehicle, the combination with a supporting frame, a body, a radiator, and a hood mounted thereon, of means for supporting said radiator and hood on said supporting

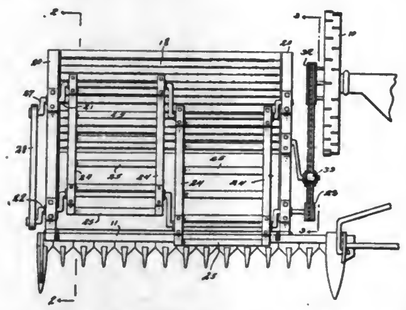
frame so as to be independent of any weaving movement thereof, comprising a pivotal support on said supporting frame for supporting said radiator substantially intermediate the sides thereof, a pair of tie rods having their forward ends connected to the upper portions of said radiator substantially centrally thereof and extending rearwardly to the opposite sides of said body, a pair of lower rods with their ends connecting with the sides of said body and the lower side portions of said radiator, and means for securing the said hood upon said lower tie rods.

1,819,179. STEAM BOILER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 15, 1926. Serial No. 81,370. 11 Claims. (Cl. 122—302.)



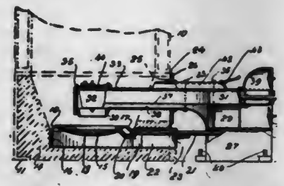
1. In a water tube steam boiler, upper and lower water chambers, a bank of tubes arranged in rows and connecting the water chambers, the tubes being spaced apart in the rows, a furnace chamber in front of the bank, a gas outlet at the rear of the bank, and a baffle extending across the boiler behind one of the rows of tubes, said baffle having openings therein adapted to cause the furnace gases to flow therethrough substantially at right-angles to the tubes and said baffle comprising a plurality of separate plates and connections between each plate and the tubes of the adjacent row.

1,819,180. SEED GATHERING ATTACHMENT FOR MOWING MACHINE. CURRIE KING, Rutherford, Tenn. Filed Nov. 14, 1929. Serial No. 407,189. 3 Claims. (Cl. 56—207.)



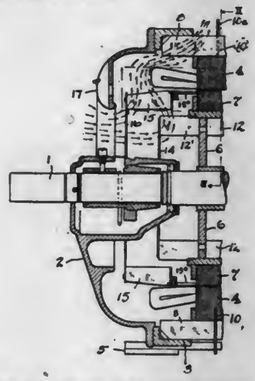
1. A seed gathering attachment for mowing machines comprising a supporting frame having side walls and having means whereby it may be hingedly connected to the cutter bar of a mowing machine, the frame being formed to provide a seed collecting pan, a perforated cover for the pan extending upward and rearward, crank shafts mounted upon the side walls, longitudinal members connecting the cranks of one crank shaft to the cranks of the other shaft, transverse spike carrying members mounted upon the longitudinal members, and means for driving said crank shafts from the mowing machine.

1,819,181. OIL HEATER. PAUL M. KLEIN, Cedarhurst, N. Y. Filed Jan. 27, 1927. Serial No. 163,925. 20 Claims. (Cl. 158—63.)



1. In combination with a heating plant, an oil burner including a unit consisting of an oil retaining and oil flow retarding generator and carburetter, a flame deflector provided with air supply means, and adapted to be placed within the heating plant, a casing partially extending beyond the heating plant and composed of outer and inner members for conveying air at low and high velocities, respectively, into said heating plant, an oil-gas generator associated with said casing and disposed within said heating plant and in close proximity to said flame deflector, and means provided with said casing for controlling air supplied therethrough from without the heating plant.

1,819,182. DYNAMO-ELECTRIC MACHINE. JAMES F. LINCOLN, East Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 23, 1927. Serial No. 207,992. 10 Claims. (Cl. 172—120.)

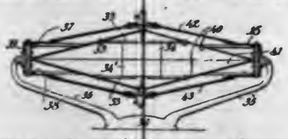


7. In an electric motor, the combination with a stator and a rotor, of fan blades connected to the rotor and projecting from the ends thereof, and a continuous peripheral blade of high heat conductivity extending around an intermediate portion of the stator in a plane perpendicular to the axis of the rotor to deflect outwardly in a radial direction the air currents created by the fan blades on the rotor.

1,819,183. LOUD SPEAKER DEVICE. ISRAEL LUDLOW, New York, N. Y., assignor of one-half to Albert E. Lamb, New York, N. Y. Filed Jan. 14, 1926. Serial No. 81,161. 7 Claims. (Cl. 181—31.)

1. A sound reproducing device including a diaphragm, actuating means applying energy to said diaphragm sub-

stantially at its center, one surface of said diaphragm being adapted to act directly on free and unconfined air, and a substantially fixed and nonvibrating sound reflector coaxial with and spaced apart from said diaphragm and forming in conjunction therewith a chamber which at least par-



tially encloses a body of air, the said reflector being marginally separated from the diaphragm so as to provide an annular passage between the edge of the diaphragm and said reflector, through which passage sound energy set up between said diaphragm and reflector may freely pass.

1,819,184. PROCESS FOR GENERATING SMOKE CLOUDS. BENJAMIN G. MACINTIRE, Edgewood, Md. Filed May 12, 1928. Serial No. 277,341. 1 Claim. (Cl. 252—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

The process of producing smoke clouds from solid smoke material comprising the steps of introducing the smoke material and an inert sealing liquid into a closed zone, supplying steam to said zone in indirect heat exchange relation to heat the sealing liquid and melt the smoke material to generate internal vapor pressure in said zone, discharging said molten smoke material from said zone under the influence of said internal vapor pressure, controlling the rate of said discharge by varying said internal vapor pressure and injecting steam into said smoke material while being discharged to atomize said material and disperse it into the atmosphere in the form of a cloud.

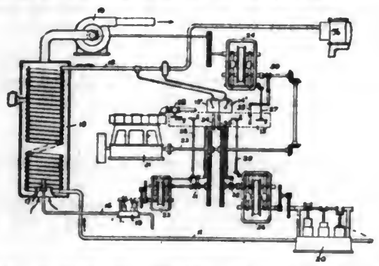
1,819,185. LINK BELT. SHIGERU MATSUMOTO, Tokyo, Japan. Filed Aug. 15, 1928, Serial No. 299,657, and in Japan Apr. 5, 1928. 1 Claim. (Cl. 74—64.)



A chain belt which is composed of a plurality of interfitting links, each link being provided with terminally disposed openings and intermediate openings, U-shaped connecting members alternately disposed at opposite sides of the belt with one of the arms thereof extending through the aligned terminal openings of adjacent link members in rolling engagement with one arm of an adjacent connecting member, and having its opposite arm extending through one of the intermediate openings, the rocking part of the arms being of triangular shape to provide triangular pivot arms whose bases coincide in a straight line during the straight run of the chain and which turn on each other on an arc of large curvature at the point of rolling; said arms being inscribed and wedged in the terminal opening; the edge of one of said arms being in contact with a like edge of an adjacent arm and constituting a rolling contact and the ends of the other arms being bent for tightening the chain-belt transversely of its length.

1,819,186. STEAM GENERATING SYSTEM. KARL A. MAYR, New York, N. Y., assignor to Siemens-Schuckertwerke Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Dec. 14, 1927. Serial No. 239,869. 3 Claims. (Cl. 122—446.)

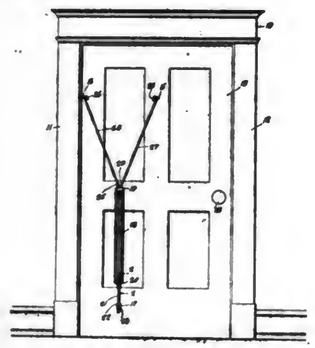
1. A method of controlling the quantity of steam supplied to consuming means in a steam power plant, which comprises supplying all the steam which is produced by the generator to the consuming means, and in regulating the input of steam to the consuming means wholly by conjointly controlling the feed water and heating material which is supplied to the generator.



2. The method of controlling the quantity of steam supplied to steam consumer means by a steam generator which comprises wholly controlling the steam supply by regulating and coordinating the supply of feed water and the supply of heating material for the steam generator.

3. The method of controlling the quantity of steam supplied to a consuming means which utilizes the entire generator output which comprises wholly regulating the steam supply to the consumer by controlling the feed water input and the heating material supply to the steam generator, and in coordinating the supply of feed water to the supply of heating material.

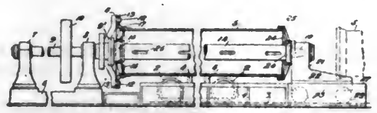
1,819,187. DOOR CLOSER. HENRY J. MCFERREN, Tiffin, Ohio. Filed Dec. 9, 1929. Serial No. 412,758. 2 Claims. (Cl. 16—72.)



1. The combination with a door frame and door, of a door closer and supporter including a vertical expansible spring, means for connecting the lower end of the spring to the lower portion of the door, means for connecting the upper end of the spring to the upper end of the door, and means for connecting said upper end of the spring to the door frame in the plane of the connection of said upper end of the spring with said door.

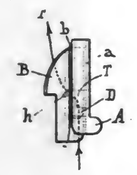
1,819,188. MANUFACTURE, CENTRIFUGALLY, OF PIPES AND OTHER HOLLOW ARTICLES. ALEXANDER MELVILLE, KENNETH DUNDAS, and RALPH ALEXANDER WHITSON, Glasgow, Scotland. Filed Nov. 21, 1927, Serial No. 234,694, and in Great Britain Nov. 24, 1926. 2 Claims. (Cl. 25—30.)

2. Apparatus for moulding, centrifugally, pipes, columns and other hollow articles from plastic or molten material or for lining such articles with the same or other material, comprising a headstock, a rotary driver including a spider member and an overhung element of less diameter than said spider, both sustained by said headstock for rotation about a horizontal axis, releasable clamping means on said spider and overhung element arranged to have releasable engagement externally and internally with one end of a hollow mold, a tailstock, a rotatable



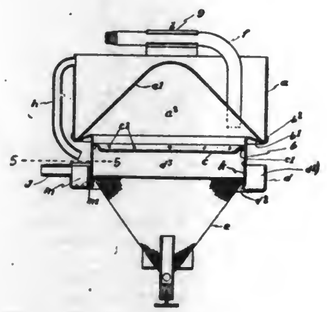
member sustained by said tailstock to engage the other end of said overhung element, and means on said rotatable member for engaging the other end of said mold.

1,819,189. WEFT THREADING DEVICE FOR THE SHUTTLES OF AUTOMATIC AND OTHER LOOMS. FRANÇOIS HENRI MEZERAY, Perpignan, France. Filed Nov. 1, 1928, Serial No. 316,387, and in France Nov. 5, 1927. 2 Claims. (Cl. 139—222.)



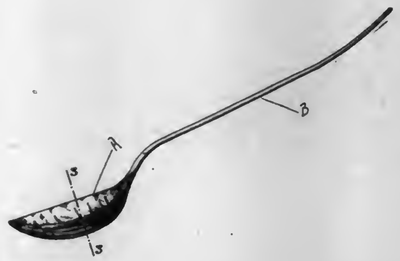
1. A threading device for shuttles comprising a block composed of two sections and having a slot located between said sections and leading to a thread-retaining hole located in one of said sections, and a projection located on the other section and formed by a thickening of said other other section toward one end of the block, said slot extending toward the side of the hole at which the thread tends to move downwardly as it is unwound from the bobbin.

1,819,190. DISTILLING APPARATUS. MANLEY R. MITCHELL and ROBERT W. SKOOG, Charleston, W. Va., assignors, by mesne assignments, to The Baltimore Gas Engineering Corporation, Charleston, W. Va., a Corporation of Maryland. Filed Sept. 15, 1927. Serial No. 219,694. 10 Claims. (Cl. 202—193.)



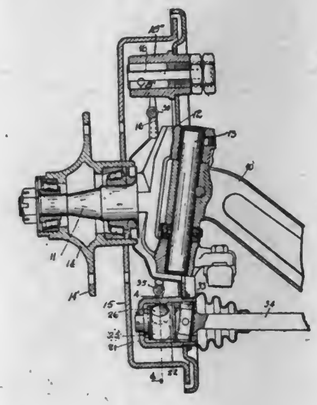
1. A distilling apparatus including a source of heat, a chamber heated by the latter, an open trough surrounding said chamber and heated by the source of heat, means for admitting liquid from the trough into said chamber, and substantially diametrically oppositely arranged means for introducing the liquid to be distilled into said trough.

1,819,191. SPOON. HUGO MOCK, New York, N. Y. Filed May 26, 1928. Serial No. 280,882. 2 Claims. (Cl. 30—22.)



1. A metal spoon having a handle and a thickened bowl and a series of corrugations on the underside of said bowl, the metal of which said spoon is made having a high specific heat.

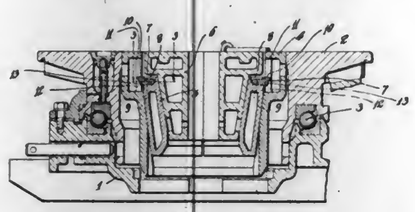
1,819,192. BRAKE MECHANISM. LOUIS P. MOOERS, Cleveland, and HERBERT W. FIES, Cleveland Heights, Ohio, assignors to The Columbia Axle Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 15, 1928. Serial No. 306,128. 14 Claims. (Cl. 188—78.)



1. In an apparatus of the class described, the combination of a pair of brake shoes each having its one end anchored and its opposite end resiliently secured to the corresponding end of the other shoe, a wear-plate rotatably mounted on the last-named end of each of said shoes, and means interposed between said last-mentioned ends and adapted to cooperate with said wear-plates to cause separation of said ends, said means being mounted to engage with said wear plates only on lines removed from center lines of said plates.

1,819,193. ROTARY MACHINE LOCKING DEVICE. JOHN S. MORGAN, Torrance, Calif., assignor to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Filed June 25, 1928. Serial No. 287,940. 8 Claims. (Cl. 255—23.)

1. In a rotary machine, a rotary table having a bore therethrough, a spider nested therein, a split table bush-

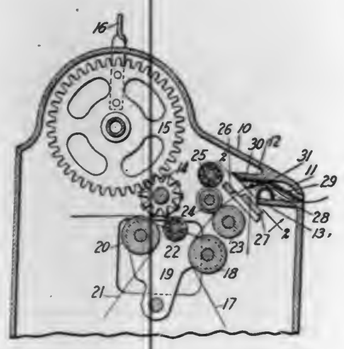


ing mounted in the spider, a lock hinge mounted in a recess formed in the split bushing and adapted to be rotated in a vertical plane into a recess formed in the spider to engage a shoulder formed on the spider and hold the split table bushing from upward vertical displacement.

1,819,194. FELTED MATERIAL AND METHOD OF MANUFACTURING THE SAME. TREADWAY B. MUNROE and ELBERT C. LATHROP, Chicago, Ill.; said Lathrop assignor to said Munroe. Filed Nov. 19, 1928. Serial No. 320,530. 11 Claims. (Cl. 92—3.)

1. The production of a substantially non laminated felted fibrous sheet by splitting in a plane parallel to a felting surface a felted sheet of course fibered insulating board formed initially in a thickness greater than that of the sheet desired.

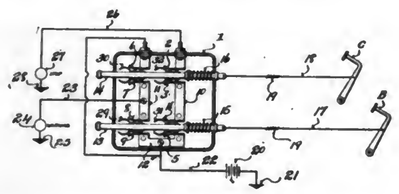
1,819,195. MEANS TO PREVENT MISUSE OF A TICKET ISSUING MACHINE BY THE INTRODUCTION OF AN INSTRUMENT THROUGH THE TICKET DELIVERY SLOT. JOHN F. OHMER and THOMAS C. MALEY, Dayton, Ohio, assignors to Ohmer Fare Register Company, Dayton, Ohio, a Corporation of New York. Filed Oct. 22, 1926. Serial No. 143,328. 2 Claims. (Cl. 235—31.)



1. In combination, a casing provided with a slot, and a knife mechanism within said casing and adjacent said slot, of a baffle plate mounted on the lower wall of said slot, said baffle plate being substantially semi-circular, the inner end of said baffle plate rising substantially perpendicular from the upper portion of said wall and of a second baffle plate mounted on the upper wall, said baffle plates serving as a means to retard the introduction of an instrument through said slot and preventing an instrument so introduced from reaching said knife mechanism.

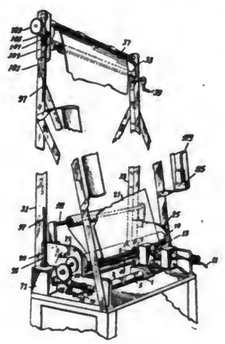
1,819,196. SIGNAL SWITCH. JAMES M. OSGIAN, Racine, Wis. Filed Oct. 11, 1926. Serial No. 140,915. 1 Claim. (Cl. 200—16.)

A switch including a casing, parallel plates arranged centrally of the casing, stationary contacts on the ends of said plates, spaced stationary contacts carried by the casing at one side thereof and arranged in spaced opposed relation with the contacts on one end of the parallel plates, a contact strip carried by the casing, stationary contacts



carried by the ends of the strip and arranged in spaced opposed relation with the contacts on the other end of the parallel plates, said contact strip being of a length equal to the combined width of the parallel plates and the space between the same, rods movable between the opposed contacts on opposite sides of the casing and yieldable opposed contacts carried by said rods on opposite sides of said rods arranged in spaced relation for engagement with the opposed stationary contacts.

1,819,197. PHOTORADIOSCOPE. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 9, 1928, Serial No. 245,349. Renewed Apr. 5, 1930. 10 Claims. (Cl. 178—5.)



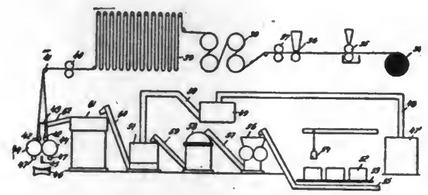
1. A photoradioscope, including, a picture recording machine, a frame work associated therewith, a recording surface carried by said frame work and said recording machine, means for producing marks on said recording machine in accordance with received signal impulses, means for periodically advancing the recording surface with respect to said marking means, and means for providing an interrupted motion of said advancing means for said recording surface in accordance with the rate of reproduction of a single line of a received picture irrespective of the direction of said reproduction.

1,819,198. HIGH VOLTAGE FUSE. REINHOLD REICHMANN and KARL ZIMMERMANN, Berlin, Germany, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 27, 1927, Serial No. 201,822, and in Germany June 26, 1926. 14 Claims. (Cl. 200—120.)



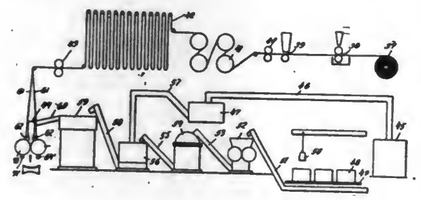
2. A fuse structure comprising a body portion having end closures, a fuse element of silver contained therein and iodine anhydride (I_2O_5) placed around the fuse element.

1,819,199. METHOD OF MAKING BUILDING MATERIALS. THOMAS ROBINSON, New York, N. Y., assignor to Lancaster Asphalt, Inc. Original application filed Oct. 5, 1926, Serial No. 139,612. Divided and this application filed Sept. 12, 1927. Serial No. 219,010. 22 Claims. (Cl. 154—2.)



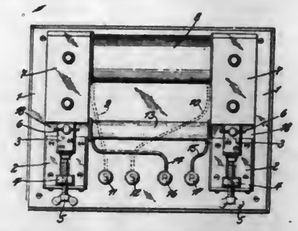
1. A method of making products suitable for building purposes which comprises placing plastic material capable of hardening between a pair of facing sheets, and pressing the said sheets together to consolidate and mold the plastic material to a selected shape, such that the facing sheets cover both faces of the shaped plastic material and at least a pair of opposite edges thereof.

1,819,200. APPARATUS FOR MAKING BUILDING MATERIAL. THOMAS ROBINSON, New York, N. Y., assignor to Lancaster Asphalt, Inc. Original application filed Oct. 5, 1926, Serial No. 139,612. Divided and this application filed Sept. 12, 1927. Serial No. 219,011. 25 Claims. (Cl. 154—1.)



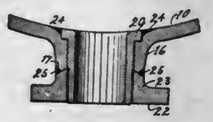
1. Apparatus for making products suitable for building and other purposes, which comprises the combination of means for advancing a pair of webs lengthwise and in spaced relation, means for feeding plastic material into the space between the webs, and means for pressing the webs together against the plastic material between them, the pressing means being also arranged to mold the plastic material to form a series of connected building products each having a selected shape of varying thickness and to press the webs into contact without overlapping along at least a pair of opposite edges of said connected products.

1,819,201. MAGNETIC TESTING APPARATUS. JAMES A. RODGERS, St. Louis, Mo., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed June 22, 1925. Serial No. 38,630. 1 Claim. (Cl. 175—183.)



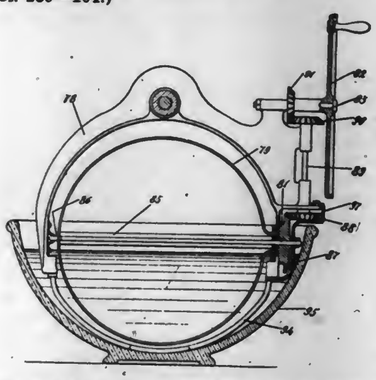
An apparatus of the class described comprising a base of non-magnetic material, a U-shaped member supported on the base having contact faces at the ends of the arms thereof, a pair of blocks slidably mounted on the base and movable toward and away from said contact faces, respectively, an overhanging arm on each of said blocks, a clamp device for moving said blocks toward said contact faces to engage edges of laminated test strips, and clamp devices in each of said overhanging arms adapted to superficially press the laminated test strips into close vertical contact, a test coil having an opening for receiving the test strips disposed intermediate of said blocks, and a coil wound on said U-shaped member.

1,819,202. TUBE CONNECTION. JOHN P. ROGER, Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 30, 1925. Serial No. 78,428. 6 Claims. (Cl. 285—50.)



1. In combination, a plurality of tubular metallic members having alined openings of substantially equal diameter, a sleeve extending through said openings, and a welded joint between the walls of said openings.

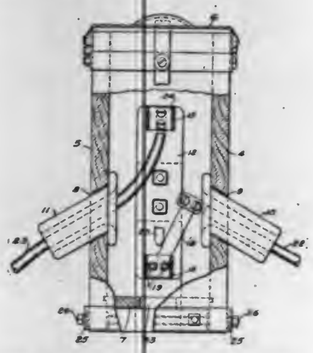
1,819,203. BATTER MIXING DEVICE. GUIDO M. SACERDOTE, Bayside, New York, N. Y. Filed Mar. 8, 1926, Serial No. 91,946. Renewed Jan. 6, 1931, 7 Claims. (Cl. 259—104.)



1. In a device of the class described, an open top container, a frame independent thereof, adapted to be removably mounted directly upon said container, two de-

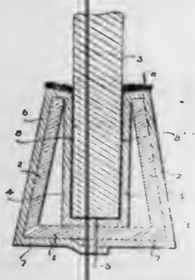
tachable beaters consisting of open frames revoluble on horizontal axes mounted on said frame, means, also carried by said frame, for simultaneously revolving said beaters in opposite directions, at the same speed, and hand operable means for detachably securing said frame onto said container.

1,819,204. FUSE BOX. JEROME SANDIN, Wilkins Township, Allegheny County, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 14, 1927. Serial No. 161,057. 8 Claims. (Cl. 200—133.)



1. A fuse structure comprising a housing, a pair of bushings associated therewith in angular relation to each other, a fuse tube, an insulating member within the housing having means for engaging the terminals of the fuse tube, one of the engaging means having a terminal member adapted to be adjusted to any one of a plurality of positions.

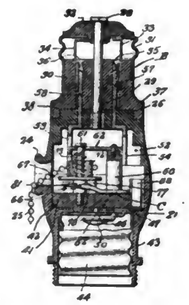
1,819,205. WINDOW CHANNEL. CHARLES P. SCHLEGEL, Rochester, N. Y., assignor to Schlegel Mfg. Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 14, 1927. Serial No. 226,249. 8 Claims. (Cl. 296—44.5.)



1. The combination with a channel body having its two opposite side walls resiliently supported, of two webs of pliable material secured to the bottom wall of the channel body, extending into diverging spaced relation to and connected with the side walls of the channel body.

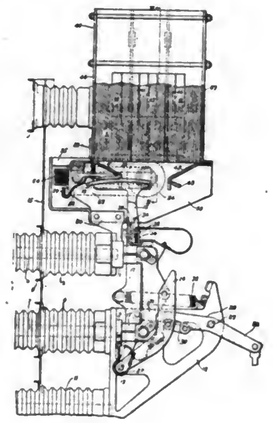
1,819,206. COMBINED CURRENT TAP AND PULL CHAIN LAMP SOCKET. HARRY A. SHRODER, Jackson, Mich., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Dec. 30, 1926. Serial No. 157,998. 16 Claims. (Cl. 173—334.)

2. A multiple tap socket, including a switch chamber, a switch in the chamber including a pivoted lever, a lamp socket in the tap, inverted U-shaped main line terminals bridging the switch and electrically connected with the latter and with the lamp socket, a plurality of detachable taps having electrical connection with said inverted U-



shaped terminals whereby current may flow through the taps at all times but to the lamp socket only upon operation of the switch.

1,819,207. CIRCUIT BREAKER. JOSEPH SLEPIAN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 8, 1925. Serial No. 54,930. 30 Claims. (Cl. 200—144.)

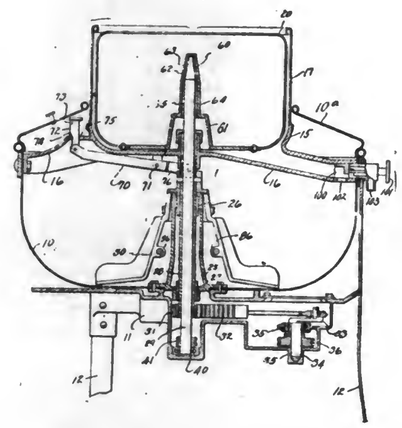


1. A circuit breaker comprising a pair of separable arcing contact members, a de-ionizing chamber for the arc drawn between said contact members, said chamber comprising de-ionizing conducting elements subdividing the arc space into small spaces less than ⅛ inch, said conducting elements being so supported that the latter conduct substantially no arc current.

1,819,208. WASHING MACHINE. CHARLES F. STAPLES, Detroit, Mich., assignor, by mesne assignments, to Graybar Electric Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 9, 1925. Serial No. 67,801. 22 Claims. (Cl. 68—15.)

3. In a washing machine, in combination, a washing container and a drier superposed over said container, a separate container for said drier, one of said containers being mounted within the other and substantially concentric therewith, and means for discharging the washing fluid from said drier container either into said first container or outside thereof.

13. A washing machine comprising a container, a washing element disposed therein, a rotary drying element superposed over said washing element, a pair of shafts severally connected to said washing and drying elements, and means for simultaneously oscillating said washing element shaft and rotating said drying element shaft.

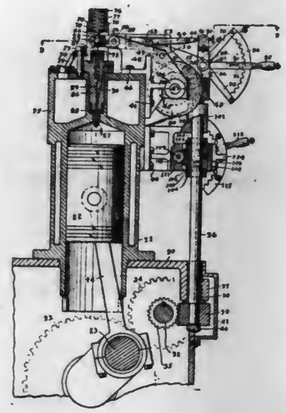


15. A washing machine comprising a container, a washing element disposed therein, a rotary drying element disposed above said washing element, a pair of separate shafts in said container, means for rotating one of said shafts and oscillating the other shaft, driving connections between the oscillating shaft and said washing element, and separable driving connections between said rotating shaft and said rotary drying element, whereby the latter may be removed from and replaced on said rotating shaft at will without disturbing said washing element.

21. A washing machine comprising a container, a washing element therein, a second container disposed above said washing element, a drier therein, a shaft extending through the bottom of said first container and connected to said agitator, a second shaft projecting through the bottom of the second container and connected to said drier, means for oscillating said agitator shaft, and means for rotating said drier shaft.

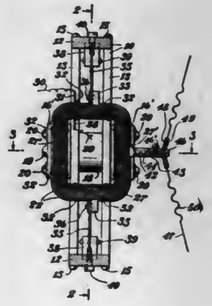
1,819,209. MECHANISM FOR CONTROLLING THE SUPPLY OF LIQUID FUEL TO INTERNAL COMBUSTION ENGINES. FRANK BALLOU STEARNS, Cleveland, Ohio. Filed May 25, 1925. Serial No. 32,784. 5 Claims. (Cl. 123—32.)

1. In a valve operating mechanism for internal combustion engines, a liquid fuel injecting valve, operating mechanism therefor, power transmission mechanism between the crank shaft of the engine and the valve operating mechanism, including a rotary element and a pair of opposed helical gears mounted for rotary and axial movement in unison, a helical gear in driving connection with the rotary element and in mesh with one of said pair of helical gears, a helical gear in driven connection with the engine crank shaft and meshed with the other of the pair of helical gears, means for moving the helical gears axially to advance the rotary element a fraction of a revolution on its rotational axis to change the time relative to the rotation of the engine crank shaft at which valve movement for fuel injection occurs and means co-



operating with the valve operating mechanism to change the amount of valve movement independently of the time of said movement.

1,819,210. LOUD SPEAKER. ADOLPH A. THOMAS, New York, N. Y., assignor to United Reproducers Corporation, a Corporation of New Jersey. Filed Aug. 21, 1928. Serial No. 300,994. 10 Claims. (Cl. 179—115.5.)



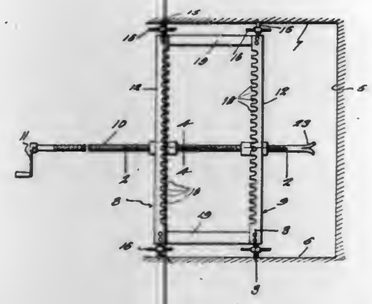
1. In an electric instrument, a vibratory coil consisting of an insulated ribbon wound in a single plane and having transverse corrugations to provide air spaces.

3. In an electrodynamic loudspeaker, a vibratory unit comprising a flat frame of non-magnetic material having substantially parallel flanges, an insulated conducting ribbon wound on said frame between said flanges in a single plane, and metallic means on said frame engaging the outer turn of said ribbon to hold the same in wound condition on the frame.

1,819,211. DRILLING MACHINE. GEORGE TOMESHKO, Trucksville, Pa., assignor of ten per cent to Andrew Hardisky, Trucksville, Pa. Filed Apr. 23, 1930. Serial No. 446,716. 1 Claim. (Cl. 255—53.)

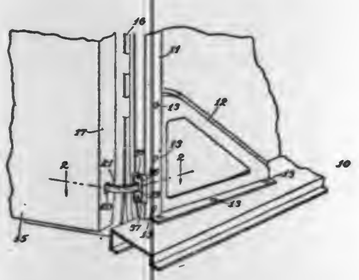
A drilling machine comprising two pairs of posts, the posts of each pair being spaced apart, cross bars connecting the pairs together, the inner or opposed edges of the posts being formed with a plurality of notches, a

rectangular member fitting between the posts of each pair and having a threaded bore, trunnions on each member for engaging any pair of notches in a pair of posts, a drill



bar provided with threads for passing through the threaded bores of the rectangular members, and adjustable pointed members at the ends of each pair of posts.

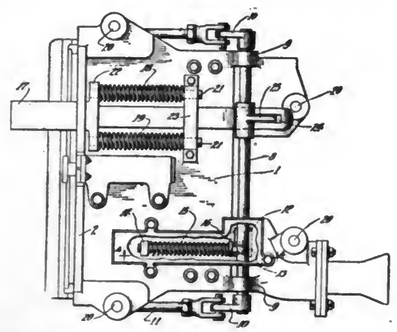
1,819,212. DOORSTOP STRAP. MILLARD H. TONCRAY, Detroit, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 27, 1928. Serial No. 257,139. 4 Claims. (Cl. 16—82.)



1. In combination with a body hinge pillar and a door including a door hinge pillar, a hinge connecting said pillars, a strap connecting said pillars and limiting the opening of said door, said strap having at one end a transverse stop of a length greater than the width of the strap adjacent thereto, one of said pillars being formed with an opening having a width at least equal to the length of the stop, said strap having a shoulder spaced from said stop, said stop being freely movable within the pillar and adapted to engage an abutment therein, and a plate partially closing said opening and adapted to engage said shoulder to prevent movement of the stop into said opening.

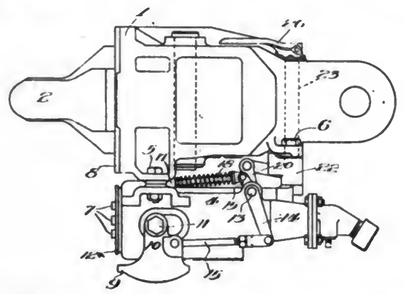
1,819,213. CAR AND ELECTRIC COUPLER. HERBERT E. VAN DORN, Chicago, Ill., assignor to William E. Van Dorn, Pasadena, Calif. Filed Feb. 21, 1927. Serial No. 169,751. 2 Claims. (Cl. 173—332.)

2. An electric coupler having contacts normally projecting beyond its front end to engage with similar contacts on a cooperating coupler when the two couplers are brought together, a door mounted on a coupler for swinging movements between a closed position in front of the coupler and an idle position underneath the coupler, an actuator extending lengthwise of the coupler and mounted on the latter so as to be slidable in the direction of its



length, means arranged between said actuator and said door to cause the door to be opened when the actuator is moved back a predetermined distance, and a spring normally holding said actuator with its forward end projected beyond the closed door a distance considerably greater than the aforesaid predetermined distance.

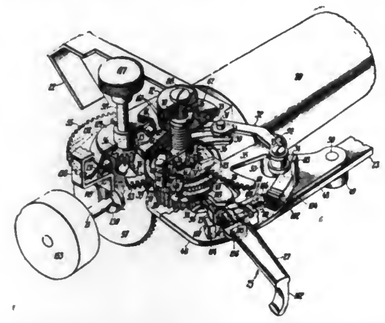
1,819,214. COMBINED CAR AND ELECTRIC COUPLER. HERBERT E. VAN DORN, Chicago, Ill., assignor to William E. Van Dorn, Pasadena, Calif. Filed Feb. 28, 1927. Serial No. 171,697. 14 Claims. (Cl. 173—332.)



7. In combination, a car coupler having a locking dog and means including a manually-actuated handle for operating said dog, an electric coupler mounted on the car coupler and having a door, and operating means for said door associated with said handle.

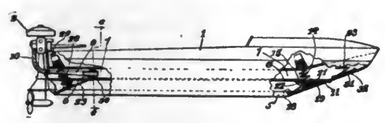
1,819,215. TYPEWRITING MACHINE. FRED WALSLEBEN, Rockville Center, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 6, 1928. Serial No. 290,775. 46 Claims. (Cl. 197—114.)

1. In a typewriting machine, the combination with a revoluble platen, a letter-feeding carriage and a shiftable platen-support carried by said carriage and shiftable relatively thereto for case shifting, of a reciprocatory line-space lever fulcrumed on said carriage, a platen-driving-gear rotatably mounted on said carriage, means for rotating said gear carried by said carriage and solidly supported thereon, said gear-rotating means controlled by the line-space lever movement and having means so as to be effective to rotate said gear only in one direction of said lever-movement and ineffective in the reverse direction, and means, carried by the platen-support, connecting said gear and platen to effect line-spacing of the latter through rotation of said gear, said last-mentioned connecting means on the platen-support and the gear on the letter-feeding



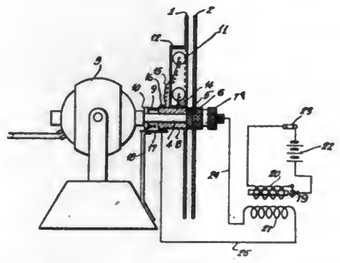
carriage having provision so as to be relatively shiftable in accordance with the case-shifting movement of the platen and its support.

1,819,216. AIR CUSHION BOAT. DOUGLAS KENT WARNER, Bristol, Conn. Filed Aug. 20, 1929. Serial No. 387,152. 18 Claims. (Cl. 114—67.)



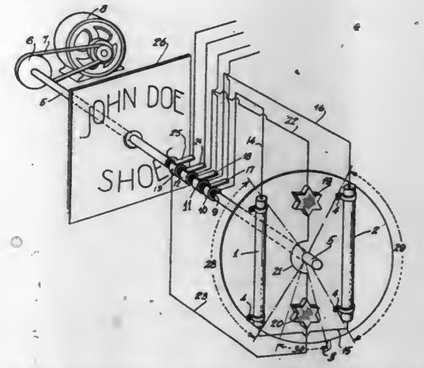
1. A boat having its sides formed with a pair of longitudinally extending air chambers, a longitudinally extending runner depending from each chamber, and bow and stern flaps extending downwardly and rearwardly from the bottom of the boat and coacting with the walls of the air chambers and runners to provide an air pocket beneath the boat.

1,819,217. APPARATUS FOR PRODUCING VISUAL EFFECTS. ARTHUR C. WATSON, Marietta, Ohio. Filed Aug. 27, 1929. Serial No. 388,811. 10 Claims. (Cl. 40—52.)



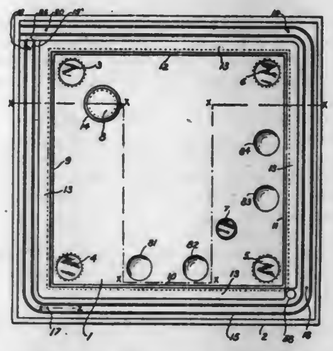
1. An apparatus of the character described embodying a source of light capable of emitting substantially instantaneous flashes of light when intermittently energized, means for intermittently energizing said source of light, means for moving said source of light about an axis of rotation at a speed satisfying the critical frequency of continual visual sensation, and a mask having light penetrable portions positioned forwardly of said source of light, and with respect to which the source of light is relatively rotatable.

1,819,218. METHOD OF AND APPARATUS FOR ADVERTISING. ARTHUR C. WATSON, Marietta, Ohio. Filed Oct. 17, 1929. Serial No. 400,282. 16 Claims. (Cl. 40—61.)



1. In an advertising apparatus, the combination of a source of relatively low frequency neon light, a source of substantially instantaneous neon light, means for mounting both of said sources of neon light for rotation about a predetermined axis, means for rotating said sources of neon light about said axis, and means for independently energizing each of said sources of neon light while they are rotating.

1,819,219. BASEBALL GAME. RALPH EMORY BATES, West Medford, Mass. Filed Feb. 6, 1929. Serial No. 337,975. 3 Claims. (Cl. 273—88.)

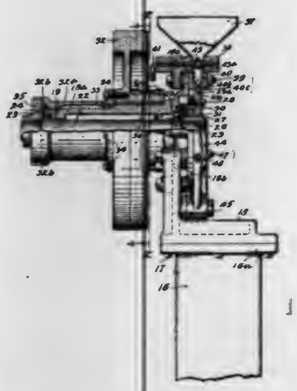


1. In a game apparatus of the character described comprising a playing field, a gravity raceway, a pitcher's position, base positions in the track, a movable stop at each base position, a pocket adjacent each base position, a cushion positioned within the field, means for initially actuating said stops from the pitcher's position by the action of the object ball vacating such position and means for subsequently actuating the stops after the object ball has traversed the field and reached any one of said pockets.

1,819,220. BALL SHAPING APPARATUS. CHARLES S. BRADLEY, Minneapolis, Minn., assignor to American Ball Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 13, 1927. Serial No. 225,971. 5 Claims. (Cl. 80—18.)

5. An apparatus for truing metal balls having in combination a stationary die, having an arcuate face with a groove slightly less than semi-circular in cross section therein, a rotating die having a cylindrical periphery and

having a face extending closely adjacent and parallel to said first mentioned face, said rotating die having a groove therein reversely disposed to said first mentioned groove, and slightly less than semi-circular in cross section, to form, with said first mentioned groove, a channel having its axial plane at right angles to the axis of said

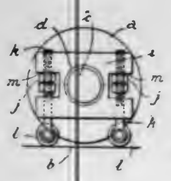


rotating die, the central planes of said grooves being coincident and the bottoms of said grooves being spaced apart less distance than the diameter of the grooves and the diameter of the grooves being appreciably greater than the diameter of said balls, means for feeding unfinished balls singly to said channel and means for discharging said balls from said dies.

1,819,221. TREATMENT OF CAST GLASS SHEETS AND PLATES. YVON BRANCART, Verreries de Fauquez, Ronquieres, Belgium. Filed Feb. 14, 1930, Serial No. 428,392, and in Belgium Feb. 14, 1929. 3 Claims. (Cl. 49—87.)

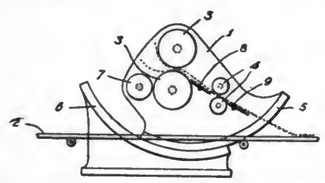
2. In a process of producing glass plates and sheets, casting molten glass on a flat surface, subjecting the fluid glass to the action of an impressing roller adapted to form therein temporary impressions running longitudinally of its direction of travel, driving said roller at a higher circumferential speed than if it were simply rolling on the table to simultaneously form temporary impressions extending at an angle to the first named impressions, and allowing said impressions to be evened up while the glass cools.

1,819,222. DEVICE FOR ADJUSTING THE THICKNESS OF GLASS PLATES AND SHEETS. YVON BRANCART, Verreries de Fauquez, Ronquieres, Belgium. Filed Feb. 14, 1930, Serial No. 428,393, and in Belgium Feb. 14, 1929. 3 Claims. (Cl. 49—34.)



3. In combination with a casting table, a calibrating roller, a pair of bearings for said roller, a pair of carriage bodies each carrying one of said bearings, wheels supporting said carriage bodies, said wheels resting on said table, screws interposed between said wheels and said carriage bodies said screws engaging said bodies, and means for locking said carriage bodies in adjusted position with respect to said screws.

1,819,223. GLASS ROLLING TRAIN. YVON BRANCART, Verreries de Fauquez, Ronquieres, Belgium. Filed Feb. 14, 1930, Serial No. 428,395, and in Belgium Feb. 14, 1929. 3 Claims. (Cl. 49—33.)



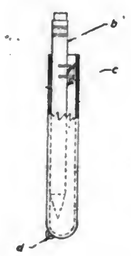
3. In a rolling train for the manufacture of glass plates and sheets, a rocking frame comprising a pair of side members and a pair of arc-shaped shoes supporting said side members, two pairs of rolls journalled in said side members, and an arc-shaped base supporting said shoes.

1,819,224. TABLE FOR CASTING GLASS SHEETS AND PLATES. YVON BRANCART, Verreries de Fauquez, Ronquieres, Belgium. Filed Feb. 14, 1930, Serial No. 428,396, and in Belgium Feb. 21, 1929. 5 Claims. (Cl. 49—34.)



3. A table for casting glass sheets and plates comprising a metal plate for receiving the glass, said plate having ribs on its underside and grooves between said ribs, a chamber under said plate, a bottom plate closing said chamber, two recesses located each in one of said grooves at opposite ends of said chamber, two water pipes opening each into one of said recesses at a level above the bottom of said grooves and a steam outlet tube of small cross-section leading from the top of the central portion of said chamber.

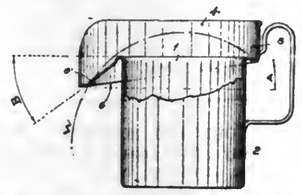
1,819,225. POCKET PENHOLDER. ABEL BURMAN, San Gabriel, Calif. Filed May 24, 1929. Serial No. 365,654. 1 Claim. (Cl. 24—10.)



A pocket-pen-holder comprising an impervious case having spaced side walls thereon and having a bottom and an open top, a brush including a back having bristles thereon,

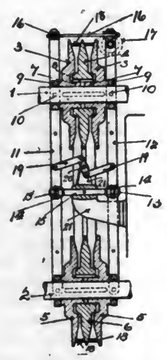
the back of said brush being rigidly secured to one of the inner walls of said case adjacent the open end thereof, said bristles firmly embedded in the back of said brush and being flexible and being shorter than the distance between said side walls, said bristles comprising spaced tufts, certain of said bristles being adapted to urge a pen towards the side wall remote from said brush and other of said bristles being adapted to hold a pen against lateral movement.

1,819,226. DEVICE FOR MILK VESSELS. ATTILIO CALIMANI and GIUSEPPE CAMPANA, Milan, Italy, assignors of one-half to said Calimani and one-half to Guilio Moneta. Filed Apr. 20, 1929, Serial No. 356,864, and in Italy Oct. 18, 1928. 2 Claims. (Cl. 53—1.)



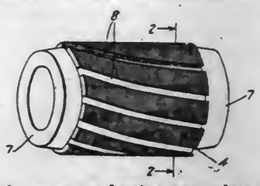
1. A milk boiling vessel, including the combination with a vessel proper having an upper edge, of a collecting rim surrounding said upper edge provided with a spout and with a top edge which is substantially parallel with the upper edge of said vessel proper, which collecting rim is eccentrically disposed with respect to said vessel proper in order to provide a progressive increase of the cross section of said collecting rim in width and depth toward said spout, while the bottom of said collecting rim forms a gutter which inclines downwardly below the upper edge of said vessel proper toward said spout, and the bottom of said spout extending from the upper edge of said vessel proper to the lowest point of the bottom of said collecting rim.

1,819,227. EXPANSIBLE V-PULLEY DRIVE. FRANK OSCAR LEVI CHORLTON, Bury, England. Filed Apr. 17, 1930, Serial No. 445,099, and in Great Britain Mar. 26, 1930. 2 Claims. (Cl. 64—8.)



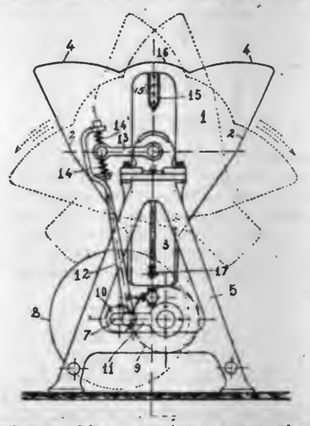
1. In a multiple-grooved pulley of the expansible V type, for variable-speed drives, laterally movable inner flanges in a space between laterally movable outer flanges, grooves for driving purposes formed between said flanges, inwardly extended bosses on the outer flanges, said inner flanges slidably mounted on said extended bosses, but revoluble therewith, and said outer flanges slidably mounted on a shaft of the drive, but revoluble therewith, whereby the distances apart of the flanges may be mechanically controlled, and the tension of the driving means in a variable speed drive may be automatically equalized, as herein set forth.

1,819,228. ROTOR. CHARLES B. COATES, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 26, 1929. Serial No. 349,958. 3 Claims. (Cl. 172—120.)



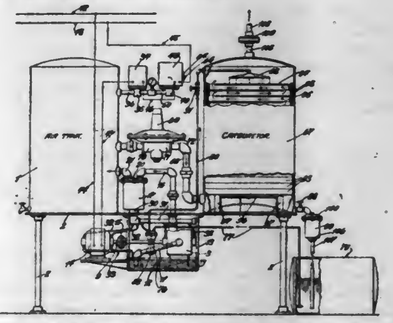
1. A rotor for a motor having very close clearance between stator and rotor comprising a core having bars and end rings cast in one piece thereon, and means on the exterior surface of said rotor in the form of grooves extending from end to end and at a slight axial inclination for impelling movement of air from one side of said rotor to the other when said rotor is in motion.

1,819,229. DYEING MACHINE WITH PIVOTING VAT. EUGÈNE CONSTANT and LOUIS CONSTANT, Roubaix, France. Filed Dec. 12, 1928, Serial No. 325,441, and in Great Britain Feb. 27, 1928. 2 Claims. (Cl. 8—18.)



1. A dyeing machine comprising a vat, the front and back walls of which are provided with angles intermediate the tops and bottoms thereof, a cover for the vat including plates forming acute angles with the upper ends of said walls and means to oscillate said vat.

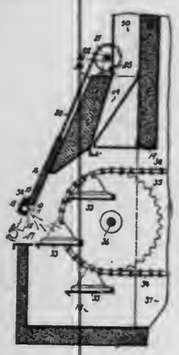
1,819,230. GAS GENERATING APPARATUS. JOHN H. CORDES, St. Louis, Mo. Filed Feb. 11, 1929. Serial No. 339,071. 8 Claims. (Cl. 261—26.)



1. In a gas generating apparatus the combination of a carburetor, with an air supply tank, a pipe for conducting air from the air supply tank to the carburetor, a device in

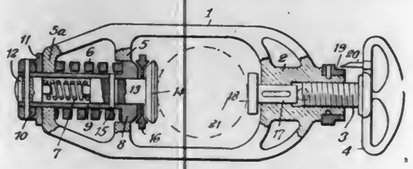
said pipe for maintaining a regulated supply of pressure to the carburetor, a fuel pump for supplying fuel to the carburetor, an air pump for maintaining pressure in said supply tank, a motor for simultaneously operating said fuel pump and said air pump, and an automatic switch operable in response to pressure in the air tank for controlling the operation of the motor.

1,819,231. BAKING OVEN. EMERICK B. CRAWFORD, New Haven, and MERTON TURRELL, Waterbury, Conn., assignors to The Crawford Oven Company, New Haven, Conn., a Corporation. Filed Oct. 23, 1930. Serial No. 490,586. 6 Claims. (Cl. 107—57.)



1. A baking-oven provided with a vestibule located in front of the oven proper, a sliding door for such vestibule, traveling-means passing through the vestibule for the conveyance of dough-units therefrom into the oven, and means installed upon the vestibule-door for spraying steam directly upon the upper surfaces of the dough-units at a point within the said door and closely adjacent thereto.

1,819,232. INSTRUMENT FOR DETERMINING THE QUALITY OF BALLS FOR GAMES AND COMPONENTS THEREFOR. THOMAS CROPPER, Erdington, England. Filed July 23, 1929, Serial No. 380,438, and in Great Britain Apr. 2, 1929. 15 Claims. (Cl. 265—19.)



1. An instrument for testing game balls comprising means for applying progressive loads thereto in two separate stages, means for determining when each load has attained a predetermined magnitude and means for determining the extent of deformation of the ball under a given load.

1,819,233. PREPARATION OF PENTOSANS. ELTON R. DARLING, Danville, Ill., assignor to Cornstalk Products Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 10, 1930. Serial No. 443,258. 7 Claims. (Cl. 127—34.)

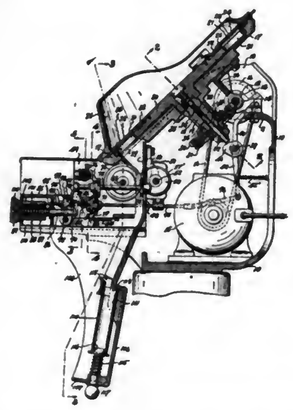
5. In the process of recovering pentosans from corncob meal by alkaline extraction, the step which comprises conditioning said meal by successive immersion into progressively more dilute solution of hypochlorites alternated with dilute sodium hydroxide solutions so as to remove selectively ligneous and non-pentosan material other than cellulose.

1,819,234. FORMER FOR ARTIFICIAL FLOWERS. ANTONIO DOLIA, Crescenzago, Italy. Filed Jan. 3, 1930, Serial No. 418,390, and in Italy Jan. 3, 1929. 3 Claims. (Cl. 41—2.)



1. In a former for artificial flowers, a plurality of wires over which petal-forming threads may be wound, a central holder radially of which the wires may slide, the holder being hollow and containing within it means for effecting such radial sliding of the wires.

1,819,235. COIN COUNTING MACHINE. EDWARD P. DONNELLAN, Brooklyn, N. Y., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 19, 1929. Serial No. 408,187. 8 Claims. (Cl. 138—8.)

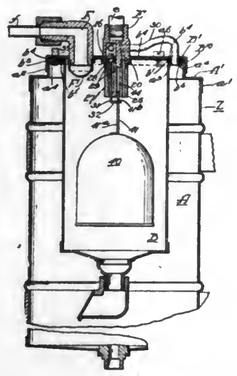


2. A clutch control means for power actuated coin counting machines having means to separate and feed coins to a plurality of counting devices according to their denominations which counting devices have coin actuated operating shafts, comprising a clutch releasing means, a plurality of spring actuated means corresponding to the counting devices for operating said clutch releasing means, a detent device for each spring actuated means, a trip means for each detent device, rotatable cam means for operating each trip means, and Geneva gearings respectively corresponding to and actuated by the shafts of said counting devices for rotating said cam means, each Geneva gearing having a ratio adapted to effect operation of a corresponding trip means on completion of the count of a given number of coins by the particular counting device in connection with which such gearing is associated.

1,819,236. FUEL FEEDING DEVICE. WILLIAM A. EDWARDS, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Oct. 23, 1929. Serial No. 401,871. 8 Claims. (Cl. 103—236.)

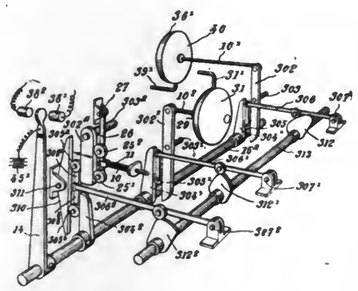
1. A vacuum tank having a vacuum chamber and reserve chamber into which the vacuum chamber discharges,

and; having a cover closing the vacuum chamber and the reserve chamber at the top, said cover having an exteriorly projecting member bored for a suction port, and counterbored from the outer end for pipe connection to the suction source, said member being bored from the



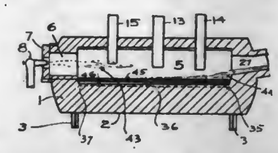
under side of the cover laterally of the suction port to form an atmosphere inlet valve chamber, and a tubular fitting secured in said member forming at its upper end a valve seat and protruding down in the vacuum chamber, an atmosphere inlet controlling valve seated at the upper end of said tubular fitting and having its stem extending through said fitting, the member being laterally bored for connection with the valve chamber of the first mentioned bore, the cover having an opening into the annular part of the reserve chamber, and a pipe connecting the lateral bore of the member with said last mentioned opening.

1,819,237. CONTROL SYSTEM FOR AUTOMATIC GEAR AND CLUTCH SHIFTING ASSEMBLIES. GASTON FLEISCHEL, Bieneau, France. Filed Mar. 4, 1931, Serial No. 520,091, and in France Sept. 17, 1930. 17 Claims. (Cl. 74—97.)



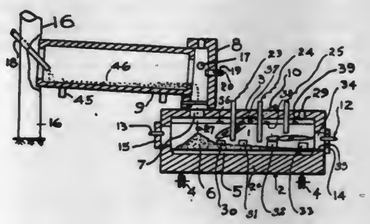
1. In combination with an automatic gear shifting assembly, a control system comprising a movable element, and means for displacing said movable element including a pair of levers having their pivotal points positioned in spaced relation, and means interposed between said levers and positioned to be moved in the interval between said pivotal points, whereby the effect of the effort transmitted from one lever to the other, through the intermediary of said means, may be varied by displacement of the latter.

1,819,238. ELECTRIC PROCESS OF REDUCING ORES. ALBERT E. GREENE, Medina, Wash. Filed July 17, 1924. Serial No. 726,541. 5 Claims. (Cl. 75—22.5.)



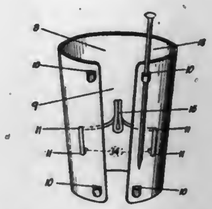
1. The metallurgical process which comprises passing a mixture of metal oxide, carbonaceous material and slag forming material into a smelting chamber, heating the charge within the chamber to reduce a substantial amount of the metal oxide without fusing the materials of the charge thereby to form particles or globules of reduced metal which pass downwardly through the charge, and subsequently fusing the remaining unreduced materials of the charge and producing a molten bath comprising molten metal covered by a layer of slag, the amount of carbonaceous material in the charge being in excess of that required to reduce the metal oxide and the operation being so controlled that a substantial amount of the excess carbonaceous material remains on the slag produced.

1,819,239. ELECTRIC SMELTING APPARATUS AND PROCESS. ALBERT E. GREENE, Medina, Wash. Filed June 1, 1925. Serial No. 34,041. 11 Claims. (Cl. 75—22.5.)



1. In the operation of a smelting furnace combining fuel combustion and electric heating, the process which consists in adding coal in proximity to the electric arc whereby the ingredients of the coal are broken up and subsequently admitting air to burn these ingredients in the same furnace chamber.

1,819,240. DRAPERY PLAITING AND SUPPORTING MEANS. DAVID HARRISON, St. Louis, Mo. Filed June 26, 1929. Serial No. 373,926. 10 Claims. (Cl. 156—21.)

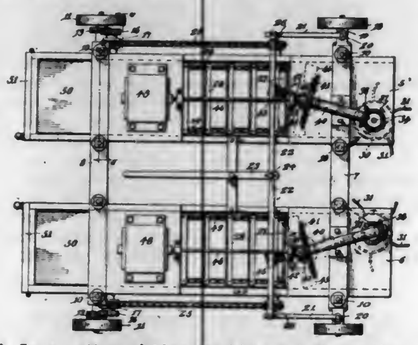


4. In a device for supporting, and forming a plait in draperies, a hollow shaping or foundation structure for the plait to be formed, said structure being of substantial, but variable dimension transverse to the associated drapery, pin seats in the hollow structure, said seats located to permit pinning the fabric in folded relation at adjacent points on the same side of said device, and supporting means for said device and drapery associated therewith.

1,819,241. PROCESS FOR THE TREATMENT OF RAYON AND THE PRODUCT PRODUCED THEREBY. JOSEF HIRSCHBERGER, South Orange, N. J. Filed Jan. 24, 1928. Serial No. 249,211. 6 Claims. (Cl. 91—68.)

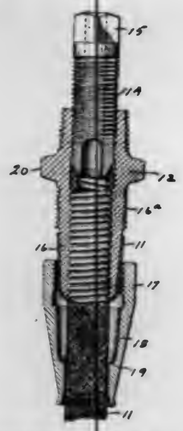
1. In a process for de-lustring rayon, the steps which comprise applying a solution of a partially opaque non-saponified wax in a volatile solvent to the fiber and drying.

1,819,242. COTTON PICKING MACHINE. WILLIAM S. HOBSON, Aberdeen, Miss. Filed Nov. 9, 1929. Serial No. 406,060. 4 Claims. (Cl. 56—48.)



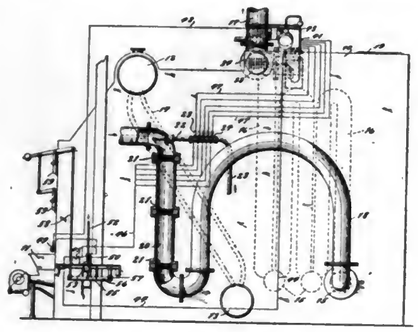
1. In a cotton picking machine, a body portion comprising spaced lateral sections, picking drums at the forward ends of the lateral sections, strips of leather stretched around the picking drums, picking fingers secured to the strips of leather to permit the fingers to bend rearwardly, rotary brushes operating adjacent to the picking fingers for removing material from the picking fingers, and endless conveyors for receiving the cotton from the brushes.

1,819,243. HOSE CONNECTION. NORMAN HUBBARD, Elizabeth, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed July 2, 1924. Serial No. 723,620. 6 Claims. (Cl. 285—72.)



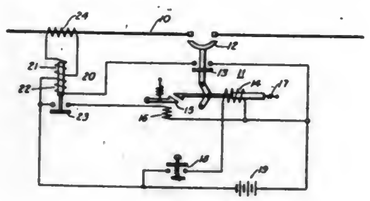
6. An end connection for spiral metallic hose, comprising a member having a threaded longitudinal opening therethrough, the threads on said opening being adapted to receive the spirals of a hose, means on said member for connecting it to another fitting, a sealing member threaded into said opening and adapted to expand said hose to lock it to said member, said sealing member having an axial opening therethrough and cut off flush with the end of said first named member, and wrench faces formed on said first named member.

1,819,244. TEMPERATURE REGULATING AND INDICATING DEVICE. DAVID S. JACOBUS, Jersey City, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 10, 1924, Serial No. 748,885. Renewed Dec. 18, 1930. 18 Claims. (Cl. 236—12.)



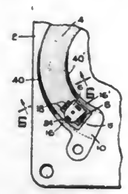
1. In a device of the class described, a closed vessel subjected to the heat of the medium whose temperature is to be regulated, a vertical tube out of contact with the medium and a U-tube connection between said tube and said vessel, said vessel, tube and connection containing a liquid which boils at the temperature at which the device is operated, whereby the height of the liquid column in said vertical tube is varied in accordance with the pressure in said vessel, means controlled by the height of said liquid column to change the temperature of said medium and means between the vessel and the vertical tube and adapted to condense the vapor formed in said vessel before it reaches said vertical tube.

1,819,245. CIRCUIT BREAKER TRIPPING SYSTEM. GORDON F. JONES, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 23, 1928. Serial No. 321,354. 7 Claims. (Cl. 175—294.)



1. A circuit-breaker system comprising an electric circuit, a circuit breaker therein having main and auxiliary contacts, a solenoid for closing said breaker, a latch for maintaining it closed, a solenoid for releasing said latch, and a spring for opening said breaker when said latch is released, a current source a relay for said releasing solenoid having two windings, one of which is adapted to be connected to the current source by said auxiliary contact, and a current transformer for energizing the other of said windings in accordance with changes in the current in said circuit, and being so connected as to aid the action of said first-mentioned coil when said current increases.

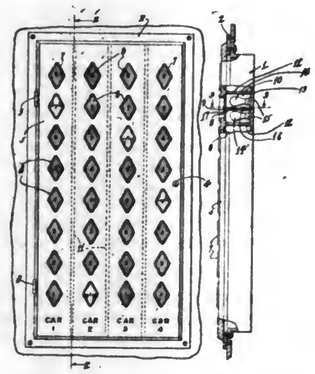
1,819,246. VARIABLE RESISTANCE UNIT. LESTER L. JONES, Oradell, N. J. Filed Mar. 28, 1929. Serial No. 350,731. 24 Claims. (Cl. 201—55.)



4. A variable resistance comprising a contact arm, and a sliding contact carried thereby, said contact being made of a sheet of soft highly conductive non-oxidizing material having a raised portion and depending leading and following contact portions, the latter being longitudinally slit to form a plurality of collateral individually flexible contacting fingers, the raised portion of said sliding contact being centrally recessed and carrying a pair of marginal upstanding lugs, and said arm having a protuberance and a pair of apertures for respectively cooperating with said recess and lugs, in order to mount the sliding contact freely oscillatably on the arm.

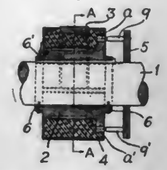
10. A variable high resistance comprising a base coated with a high resistance film, contact means cooperating therewith, and means for securing a gradual rise in resistance from the short circuit point comprising a metallic coating at the short circuit point which extends transversely of the resistance film and longitudinally along and in contact with the resistance film at opposite edges thereof outside of the path of the contact means, the edge of the transverse portion being made parallel to the trailing edge of the contact means when the latter is located just above the edge.

1,819,247. ELEVATOR SIGNAL. LUTHER J. KINNARD, Pasadena, Calif., assignor to Consolidated Steel Corporation, Los Angeles, Calif., a Corporation of California. Filed Mar. 14, 1930. Serial No. 435,798. 1 Claim. (Cl. 177—327.)



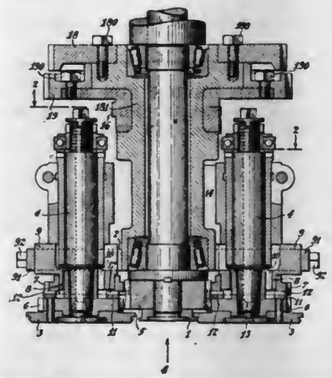
In a position indicator for elevators, an opaque casing, means defining a diamond shaped opening in said casing, a translucent screen in said opening, a pair of light sources arranged behind the screen and on opposite sides of the axis of said diamond, a light shield extending from said screen across said axis of the diamond for confining the illumination from either light source to its respective half of the diamond, and a cutout portion in said shield extending over a portion only of the axis of said diamond permitting passage of a narrow defined band of light to pass to the other half of the diamond.

1,819,248. ELECTRICAL CONTACT DEVICE. TOKIO KOBAYAKAWA, Ebara-Machi, Tokyo, Japan, assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 31, 1930, Serial No. 458,111, and in Japan July 9, 1929. 1 Claim. (Cl. 200—8.)



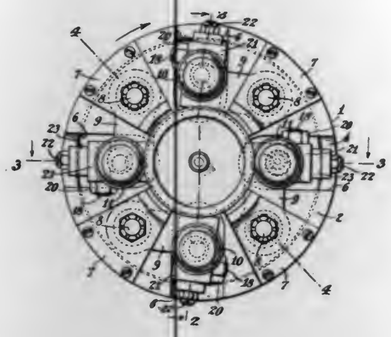
Electrical contact device having a contact drum comprising a rotatable shaft, a hub member secured on said shaft and provided with a plurality of recesses definitely arranged on the outer periphery thereof, a cylindrical member mounted on said hub member and provided with a plurality of recesses definitely arranged on the inner periphery thereof at one side, the arrangement of the second-mentioned recesses being different from that of the first-mentioned recesses, a contact member secured on the outer periphery of said cylindrical member, and a connecting member mounted on said shaft and movable thereon both tangentially and axially and provided with projecting pins adapted to be inserted into one or more of said recesses simultaneously.

1,819,249. SEAMING MECHANISM. PAUL H. LANGE, Bridgeport, Conn., assignor to The Max Ams Machine Company, Bridgeport, Conn., a Corporation of New York. Filed Aug. 7, 1929. Serial No. 384,152. 7 Claims. (Cl. 113—24.)



1. Seaming mechanism including: two elements having a relative revolving motion one with respect to the other, one element constituting a workholder and the other a seaming head, a non-circular seaming tool, carried by the head, rotatable about its own axis in timed relation to the relative revolving motion of the two elements to thereby present correctly varying configurations of seaming surfaces to the complementary configuration of the work, a gear on the workholder, two gears, carried by the head, side by side but in spaced relation with respect to each other, to mesh with the gear on the workholder, one of said gears rotating with the seaming tool and the other mounted to revolve freely, an actuating device to move the seaming tool toward and away from the workholder and to move the gear that rotates with the seaming tool into and out of mesh with the gear on the workholder, and a compensating transmission device interposed between and spacing the two gears carried by the head to thereby drive the gear that rotates with the seaming tool in synchronism with the gear on the workholder while it is out of mesh with the latter.

1,819,250. SEAMING MECHANISM. PAUL H. LANGE, Bridgeport, Conn., assignor to The Max Ams Machine Company, Bridgeport, Conn., a Corporation of New York. Filed Aug. 7, 1929. Serial No. 384,153. 5 Claims. (Cl. 113—24.)



1. Seaming mechanism including: a seamer head, a plurality of first-operation and a plurality of second-operation seaming tools arranged circularly of said head and in alternate relation with respect to each other, a plurality of pivotal supports, also circularly arranged of said head, the tools and supports alternating with each other, a lever mounted, near one end thereof, on each pivotal support and carrying a seaming tool at its other and free end, a cam roll also carried at said free end of each lever, and two cams to effect in-and-out movement of the seaming tools, one of said cams to coact with the cam rollers of the first-operation seaming tools and the other to coact with the cam rollers of the second-operation seaming tools.

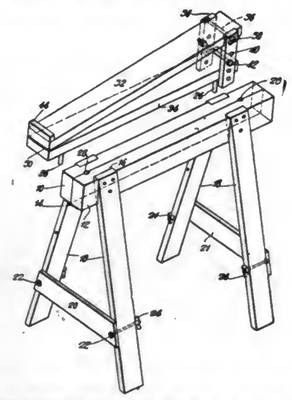
1,819,251. SIGNAL DEVICE FOR RECORD SHEETS. CLARE H. LAW, Chicago, Ill. Filed Apr. 5, 1930. Serial No. 441,876. 7 Claims. (Cl. 116—119.)



1. A sheet signal of the character described having a holding part formed of springy material and adapted to be slipped frictionally upon opposite sides of a record sheet adjacent to an edge thereof, and a signal part extending from said holding part, the holding part being adapted to rock frictionally upon the record sheet when the signal part is swung substantially in the plane of the record sheet, the signal part being formed to lie in a non-signaling position near the edge of the record sheet when the signal part is in one position and to extend away from the edge of the record sheet and substantially in the plane thereof, when in another position, to form a signal, the holding part having such frictional engagement with the record sheet as to hold the signal part in said last-mentioned position.

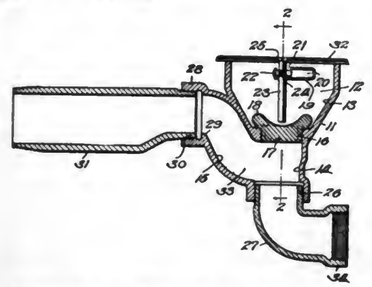
1,819,252. HORSE. ARTHUR F. LINSNER, Astoria, N. Y., assignor to Defiance Sales Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 20, 1929. Serial No. 393,899. 3 Claims. (Cl. 304—5.)

1. A device of the character described comprising a horse including two longitudinally extending members hinged to one another, legs secured to said members, an auxiliary support having a part adapted to be clamped



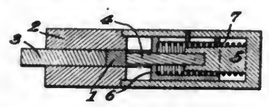
between said longitudinally extending members and means secured to at least two of said legs for holding said members in clamped relationship with said auxiliary support.

1,819,253. TRAP. WILLARD J. LUFF, Cleveland Heights, Ohio. Filed Mar. 5, 1929. Serial No. 344,286. 4 Claims. (Cl. 182—24.)



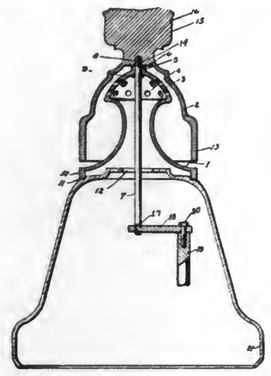
3. A fitting of the character described comprising an integral body member formed to provide a chamber having an internally threaded inlet opening in its bottom wall adapted adjustably to receive a curved pipe section of a diameter substantially equal to the diameter of said chamber, said body member providing further an enlarged clean-out chamber above said first-mentioned chamber and a clean-out port providing communication between said chambers, said body further being formed to provide an outlet conduit opening at one end into said first-mentioned chamber and having the lowest point of its opposite end disposed above the level of the bottom of said clean-out opening, but below the level of the top thereof.

1,819,254. ART OF EXTRUDING COLD MATERIALS. JOSEPH G. C. MANTLE, Leonia, N. J. Filed Mar. 31, 1924. Serial No. 703,060. 19 Claims. (Cl. 207—10.)



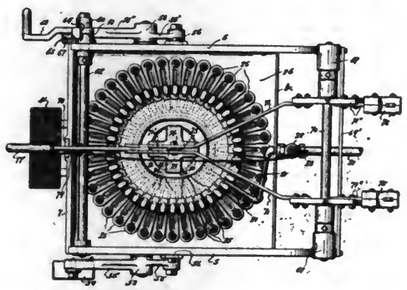
1. In an apparatus for making hollow articles from a blank of metal a receptacle for the blank, means for extruding material of the blank from the receptacle, and two members opposing the extrusion of said material, one of said members serving as an internal former and the other of said members yieldably opposing the extrusion during the entire period of said extrusion.

1,819,255. VENTILATOR. EDWARD W. MCINTYRE, Cleveland, Ohio, assignor to Westinghouse Electric & Manufacturing Co., a Corporation of Pennsylvania. Filed Mar. 5, 1929. Serial No. 344,507. 1 Claim. (Cl. 240—25.)



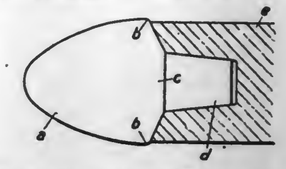
The combination with a globe having an opening in the top thereof, of a ventilator including a hollow upwardly converging member having a base seated on the globe over said opening and expanding and terminating at its upper end in a dome, said dome being perforated to permit heated air to pass from the interior of the globe, and a second bell-shaped member spaced from and supported by the first member and extending annularly downwardly close to the base of said first member, a rod threaded into said second member and extending downwardly into the globe, and a support for said rod within the globe.

1,819,256. HAT BLOCKER. RUDOLPH G. MULLER, Irvington, N. J. Filed Feb. 27, 1929. Serial No. 343,049. 4 Claims. (Cl. 223—31.)



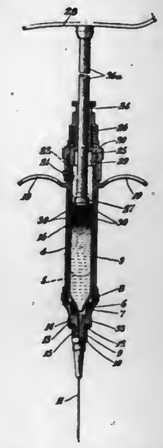
1. In a machine of the kind described, means for supporting a hat-body with the crown portion inverted and subject to the insertion of a hot-block therein, a sizing ring interchangeably mounted on said supporting means over which the brim portions of the hat-body may extend, a plurality of gripping and stretching elements radially disposed about said supporting means to engage the brim portions of the hat-body, means for oscillating said gripping and stretching elements relative to said supporting means, a lever frame above said supporting means and pivoted for movement toward the same, a presser head carried by said lever-frame to engage and exert inserting pressure upon a hat-block applied to said hat-body, means related to said supporting means for discharging steam about the supported hat-body, a steam supply pipe for said discharging means including a control valve, and manually actuatable means connected with said lever frame for operating said control valve at will.

1,819,257. MANDREL FOR TUBE ROLLING MILLS. PAUL MULTHAUPT, Dusseldorf, Germany. Filed Aug. 10, 1929, Serial No. 384,916, and in Germany Nov. 26, 1928. 6 Claims. (Cl. 78—103.)



3. A mandrel for tube-rolling mills comprising a head and a shank, said head including a rearwardly extending frusto-conical formation the base of which is of substantially the same diameter as the greatest diameter of the head, the shank having a frustro-conical end cavity, the base of which is of substantially the same diameter as the base of the frustro-conical formation of the head and exactly fitting said formation, whereby the edge portions of the part of the head of greatest diameter are supported by the shank against fracture.

1,819,258. SYRINGE. MENDEL NEVIN, Brooklyn, N. Y. Filed Sept. 28, 1929. Serial No. 395,855. 4 Claims. (Cl. 128—218.)

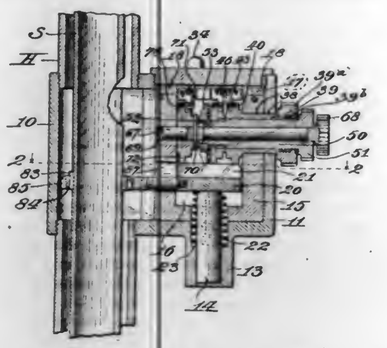


1. The combination of an ampule tapered at one end only, the tapered end being sealed, a piston member closing and sealing the opposite end of the ampule and adapted to be moved lengthwise of the ampule to expel the contents thereof, said tapered portion having a constriction therein, a holder for the ampule, a plunger carried by said holding means and adapted to operate said piston, said holding means having a head with a seat against which the reduced end of the ampule is adapted to be seated, said head having a passageway therethrough, a needle attached to said head and communicating with said passageway, the reduced portion of the ampule being adapted to be broken off at said constriction, and said constriction being so positioned that the broken end of the ampule will lie back of said passageway and permit the end of the ampule to be seated against said seat.

1,819,259. AUTOMOBILE STEERING COLUMN AND IGNITION LOCK. HAROLD B. PALMER, San Diego, Calif. Filed June 10, 1929. Serial No. 369,623. 5 Claims. (Cl. 70—127.)

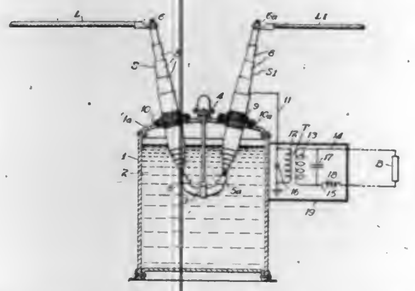
1. The combination with a rotatably mounted member, of a toothed ring fixed on said member, a spring pressed plunger having a toothed portion that is adapted

to engage the teeth of the ring to lock the rotatably mounted member against rotation, a series of independently movable rotary disks provided in their edges with



notches which when aligned with each other are adapted to receive a portion of the plunger and manually engageable means for independently rotating said disks to bring the notches therein into alinement with each other.

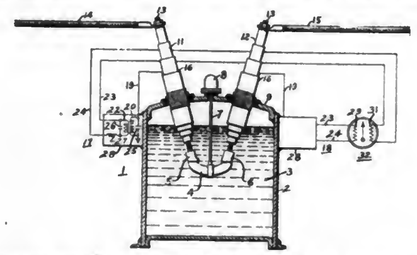
1,819,260. ELECTRICAL CONTROL SYSTEM. JOHN F. PETERS, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 20, 1927. Serial No. 227,449. 4 Claims. (Cl. 175—294.)



1. In combination with a high-tension alternating current circuit, a high-tension bushing operatively associated with said circuit embodying means constituting a potentiometer having one terminal thereof connected to ground, and a tap from said potentiometer for deriving a voltage therefrom, a control circuit including a voltage transformer having the primary winding thereof connected between said tap and ground, an electro-responsive device connected for energization from the secondary of said transformer, and an inductive reactance means in said control circuit for correcting the phase-angle error of the voltage imprsesed on said electro-responsive device to render said voltage proportional to and substantially in phase with the voltage of said alternating current circuit.

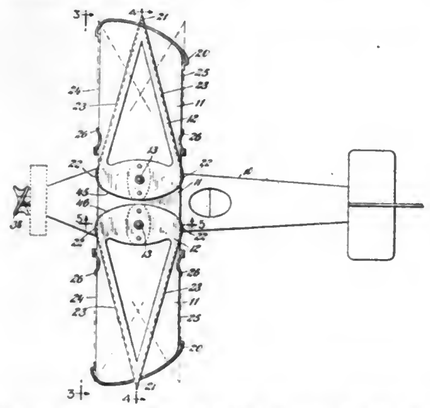
1,819,261. CIRCUIT INTERRUPTER. JOHN F. PETERS, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 12, 1928. Serial No. 269,460. 7 Claims. (Cl. 171—118.)

1. Apparatus for connecting together two separately-energized sections of a high-tension alternating-current line when they are in synchronism, consisting of a switch for connecting the sections having two terminals each connected with a separate one of said line-sections, a low-potential terminal associated with each switch terminal and deriving potential therefrom, and a synchronism-re-



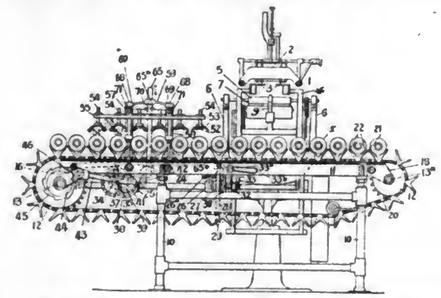
sponsive device connected with both of said low-potential terminals to indicate when the sections are in synchronism and the switch can be closed.

1,819,262. AEROPLANE. PER A. PETERSON, New York, N. Y. Filed May 16, 1930. Serial No. 452,863. 10 Claims. (Cl. 244—31.)



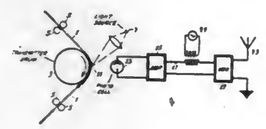
1. An aeroplane comprising a body portion, wings thereon, a scraper mounted above said wings adjacent thereto, and means for moving said scraper.

1,819,263. BOTTLE AND OTHER LABELING MACHINE. PERCIVAL JOHN PURDY, London, England. Filed Aug. 9, 1929, Serial No. 384,545, and in Great Britain Oct. 24, 1928. 13 Claims. (Cl. 216—54.)



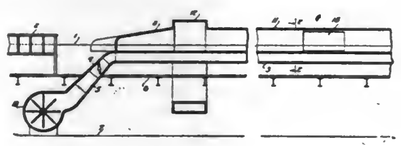
1. Apparatus for applying labels to articles comprising a plurality of pads having surfaces contoured to agree with the surface to which the label has been applied, supports for said pads, rods upon said support, a horizontally disposed bar to which said rods are connected, a vertically disposed slide carrying said bar, guides for said slide, means intermittently operating said slide to cause the label engaging pads to press upon the labels and to be removed therefrom, a horizontally disposed endless flexible body, supports carried by said body for said articles, and means intermittently operating said body to bring the articles into position for the pads to operate and to remove them after the operation has been completed.

1,819,264. PICTURE RECORDING. RICHARD HOWLAND RANGER, Newark, N. J., and FRANCIS G. MOREHOUSE, Greenwich, Conn., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 7, 1926. Serial No. 324,421. 6 Claims. (Cl. 178—5.)



1. The method of reproducing pictures transmitted from a distant point by recording the same on a heat sensitive recording surface which includes marking the recording surface in accordance with the varying intensity signals received, producing from said markings a latent image of the picture received, and coating the entire record surface with a color substance to produce a permanent coloration of only the original latent image.

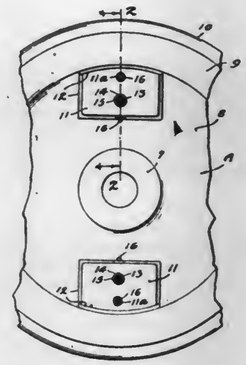
1,819,265. HEAT ECONOMY METHOD AND APPARATUS. JOHN O. ROSS, New York, N. Y., assignor to J. O. Ross Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 7, 1926. Serial No. 79,715. 1 Claim. (Cl. 34—48.)



An apparatus of the character described including, in combination, a duct, said duct providing the under side of a floater chamber, a hood providing the upper portion of said chamber, said chamber receiving a web of material disposed between said duct and said hood, means for forcing air under pressure through said duct and solely against the under side of said web and with the faces out of contact with said duct and hood, said hood being provided with an opening for the flow of air escaping from said duct and past said web, and a further duct connected to said hood opening and also connected to said air impelling means to return the escaped air thereto.

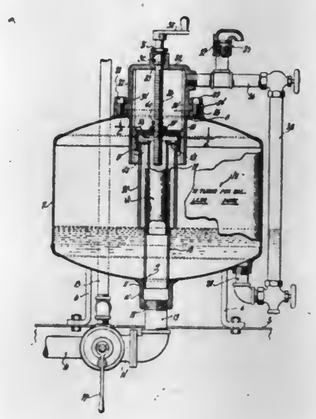
1,819,266. VIBRATION ABSORBER. OLE J. RUED, Minneapolis, Minn. Filed Aug. 19, 1929. Serial No. 387,055. 3 Claims. (Cl. 74—7.)

1. In a member subjectable to vibration and having two angular portions joining each other, a removable casing having an open inner side and an open edge, a gasket fitting against both of said portions, said casing being applied to bear against said gasket, means for simultaneously tightening said casing against all portions of said gasket to form with said two angular portions a



liquid tight chamber and liquid filling said chamber to absorb the vibration of both of said portions.

1,819,267. FLUID MEASURING DEVICE. ADOLPH WILLIAM RYBECK, Milwaukee, Wis., assignor to The T. L. Smith Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 18, 1929. Serial No. 333,421. 14 Claims. (Cl. 221—95.)

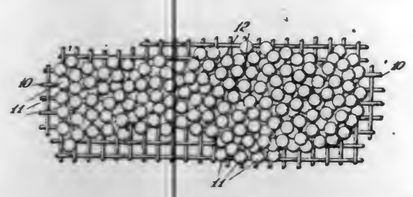


1. In a liquid measuring device including a container, a tubular discharge member extended into the container, a second tubular member in telescoped relation to the discharge member, the walls of the tubular members being spaced from each other to provide a passage for liquid, the length of which governs the quantity of fluid to be discharged, and means for moving one of the members with respect to the other to adjust the length of said passage and regulate the quantity of liquid to be discharged from the container.

1,819,268. PICTURE SCREEN. HOMER SAUNDERS, Chicago, Ill. Filed Feb. 4, 1929. Serial No. 337,425. 5 Claims. (Cl. 88—24.)

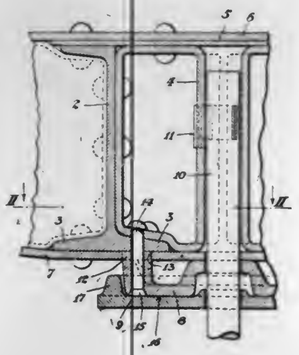
1. A sound-porous, light reflecting screen of the class described comprising a woven wire screen, a coating of

adhesive on said screen clinging mostly to the strands forming the screen and thus leaving openings between coated strands through said wire screen, said openings being variously distributed over said screen, and beads



substantially covering said adhesive coating and being irregularly attached thereto leaving openings among the beads, which openings extend in many instances completely through said screen, said beads approximating in size the mesh of said wire screen.

1,819,269. BODY CENTER PLATE FOR RAILWAY VEHICLES. JAMES A. SHAFER, East Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 8, 1928, Serial No. 252,696. Renewed July 1, 1931. 7 Claims. (Cl. 105—200.)



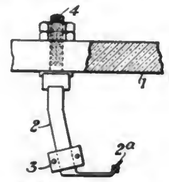
1. The combination of a body bolster of a railway vehicle with a bolster center plate, the bolster comprising flanged center sills and a tie plate, the center plate having upward projections extending into recesses in the tie plate and having a bearing on the center sills and securing means for holding the projections in the recesses and the center plate rigidly to the bolster.

1,819,270. METAL-PROTECTED ROOFING. WILLIAM M. SHAKESPEARE, South Orange, N. J., assignor to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed July 17, 1929. Serial No. 378,963. 6 Claims. (Cl. 108—7.)



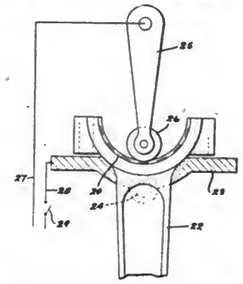
1. A roofing material which comprises a web of fibrous material and a coating of weather-resistant metal on one surface only of the web, said coating covering a substantial part of said surface and projecting beyond the edge of the web along one side thereof.

1,819,271. ELECTRICAL RELAY. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 9, 1930. Serial No. 451,028. 1 Claim. (Cl. 200—166.)



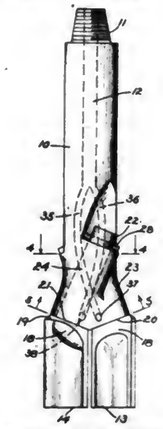
In an electrical relay, a metallic contact member, and a mass of metal attached to said member to cause the temperature of the member to lag behind that of other parts of the relay during a drop in the ambient temperature.

1,819,272. BEARING. CHARLES R. SHORT, Detroit, Mich., assignor to The Moraine Products Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 22, 1927. Serial No. 221,340. 7 Claims. (Cl. 219—10.)



1. In the method of making bearings for shafts and the like, the step of welding a preformed porous metallic lining to a reinforcing member of denser metal which consists in holding said elements in direct contact and heating the said elements to a high temperature while so held.

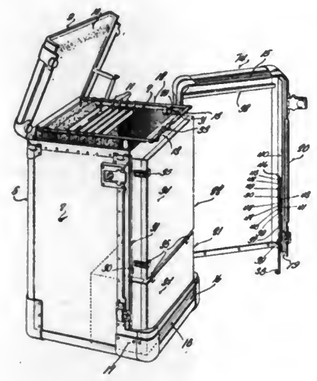
1,819,273. EXPANSIBLE FISH TAIL BIT. EDWIN C. WEISGERBER, Los Angeles, Calif. Filed June 28, 1930. Serial No. 464,549. 15 Claims. (Cl. 255—76.)



1. In an expansible rotary bit having a shank and means at the upper end thereof adapted to attach the shank to a string of drill pipe; a plurality of inclined bearing surfaces formed on the lower end of the shank, a plurality

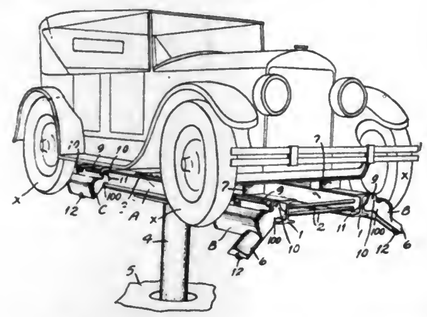
of cutters having inclined bearing surfaces adapted to cooperate with the first named bearing surfaces, whereby a weight on the shank will tend to separate said second named surfaces and cause a rotation of the cutters to expand them.

1,819,274. BAGGAGE CARRIER. GEORGE HENRY WHEARY, Racine, Wis., assignor to Wheary Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 28, 1927. Serial No. 171,595. 2 Claims. (Cl. 190—13.)



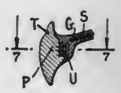
1. A baggage carrier, comprising a section, a closure for the section, a plurality of article carrying containers, means removably securing the containers in the carrier one upon the other with their outer faces substantially in vertical alignment and projected beyond the section to substantially fill the space within the closure when closed, wardrobe supporting means within the section for supporting garments therein rearwardly of the containers, the lowermost of the containers extending into the section to a greater depth than the other, and cooperating means between the closure and uppermost container to prevent the accidental dislodgement of the uppermost container from its securing means.

1,819,275. AUTOMOBILE LIFT. FRANK ACKERMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed Dec. 14, 1928. Serial No. 326,044. 17 Claims. (Cl. 254—89.)



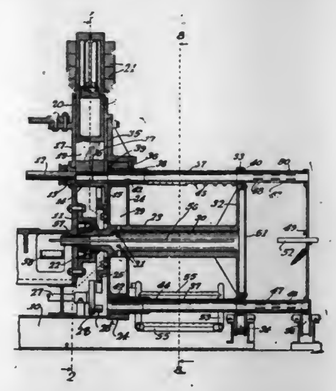
1. An automobile lift provided with a vertically movable platform, wheel engaging members adapted to co-operate with one pair of wheels of the automobile that is to be raised to arrest the automobile in a certain position with relation to the platform during the operation of moving the automobile over the platform and a shiftable means on the platform for supporting said members and maintaining said members in an inactive position with relation to said wheels, while the platform is in a raised condition.

1,819,276. TOOTH ANCHORAGE AND METHOD OF CONNECTING THE SAME. HERBERT R. BERGER, Brooklyn, N. Y. Filed Mar. 6, 1931. Serial No. 520,537. 1 Claim. (Cl. 32—9.)



An artificial denture comprising a tooth having a bite portion, a shut portion, a gingival portion, and a shoulder between said bite and shut portions, the shut portion having pin means extending therefrom, an angular anchorage strip having a substantially U-shaped end, and a denture in which said pins and strip are embedded, the bite portion of said tooth being substantially free from the denture, said U-shaped portion engaging said pins, and having the base of the U adjacent said shoulder.

1,819,277. BRIQUETTE FORMING AND BAKING MACHINE. WILLIAM CLARENCE CARPENTER, San Francisco, Calif. Filed Oct. 9, 1929. Serial No. 398,520. 17 Claims. (Cl. 25—12.)

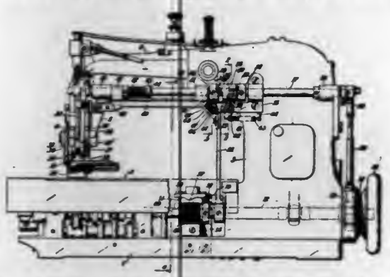


1. In a briquette forming and baking machine, a rotary carrier, a series of combined briquette forming and baking of which discs is hollow, the chamber therein having communication with the chamber in the tubular shaft of the carrier, a series of combined briquette forming and baking dies carried by said discs and means for circulating a fluid cooling medium through the chambers within said tubular shaft and hollow disc.

1,819,278. SEWING MACHINE RUFFLING MECHANISM. ANDREW B. CLAYTON, Union, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed July 25, 1930. Serial No. 470,566. 9 Claims. (Cl. 112—132.)

1. Ruffling mechanism for sewing machines having, in combination, a main-shaft, a ruffling blade, a driven rock-shaft connected to said ruffling blade, a driving rock-

shaft actuated by said main-shaft and disposed in end-to-end coaxial relation with said riven rock-shaft, and a cou-



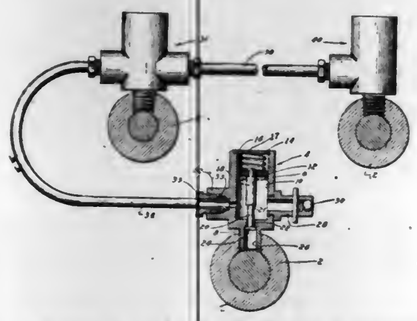
pling device at the adjacent ends of said rock-shafts for establishing and interrupting driving relation between them without stopping the machine.

1,819,279. CONTAINER. JOHN F. COYLE, St. Louis, Mo. Filed Aug. 1, 1930. Serial No. 472,352. 4 Claims. (Cl. 220—44.)



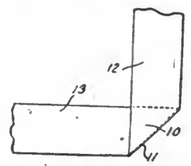
1. A container comprising a body portion having a neck portion, and a lid, one of the latter two elements being provided with a plurality of vent channels leading from the interior of the container to the exterior thereof, said vent channels being inclined with respect to the axis of the container, and certain of said channels intersecting others thereof.

1,819,280. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 4, 1927. Serial No. 180,751. 13 Claims. (Cl. 184—7.)



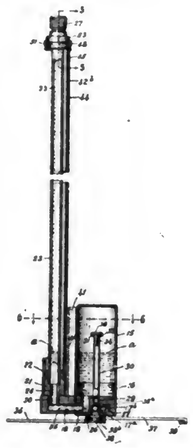
1. A system of lubrication comprising a plurality of bearings to be lubricated, a lubricant receptacle at each bearing comprising a body having a cylinder, a spring pressed piston therein, an outlet port, a piston rod having spaced shoulders adapted to close said outlet port when said piston is at the ends of its stroke, conduits connecting said receptacles and check valved means for admitting lubricant under pressure to said conduit system.

1,819,281. SPRING. BENJAMIN R. DEXTER, Oakland, Calif. Filed Nov. 9, 1925. Serial No. 67,716. 3 Claims. (Cl. 267—1.)



1. A spring comprising a continuous strip of resilient metal, said strip being bent diagonally intermediate its length, the extending lengths of said strip being transversely interwoven one relative to the other.

1,819,282. MANOMETER. FAIRLEIGH S. DICKINSON, Rutherford, N. J. Filed Sept. 15, 1925. Serial No. 56,428. 27 Claims. (Cl. 73—31.)

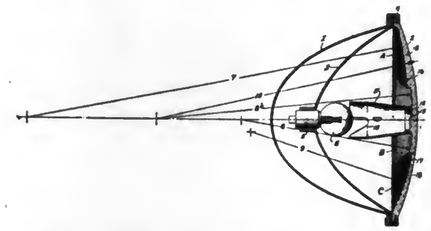


1. In a manometer, the combination of a fluid reservoir having a gravity-supporting base for supporting said reservoir from below in an upright position, an otherwise unsupported tube connected with said reservoir in off-set relation thereto and supported by said reservoir in an upright position, an indicating fluid in said reservoir normally acting as ballast therein to assist in retaining the reservoir and tube against tilting from said upright position, and an inlet nozzle for admitting a pressure creating medium into said reservoir to force the fluid therein up into the tube in the form of an indicating column.

1,819,283. HEAD LAMP LENS. ADIEL Y. DODGE, South Bend, Ind. Filed Apr. 4, 1928. Serial No. 267,173. 4 Claims. (Cl. 240—41.4.)

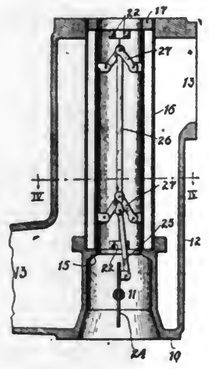
1. An automobile headlamp construction comprising an electric lamp bulb, a concave reflector in which said bulb is mounted for directing the rays of light which fall thereon substantially parallel to the axis, means for intercepting and redirecting the cone of those light rays from said bulb which do not fall on the concave reflector and

which would otherwise pass directly out through the open front of the reflector, said intercepting and redirecting means having provisions for effecting a materially greater spread of said light cone laterally than vertically, said intercepting and redirecting means not extending laterally or upwardly materially beyond the confines of a cylindrical surface tangent to the light bulb and coaxial with the



reflector whereby the beam from the concave reflector is not materially interfered with, and said intercepting and redirecting means comprising a funnel having its rear edge lying substantially in the surface of said cone of rays and its front portion flat vertically and elongated laterally, and a lens portion adjacent the front portion of said funnel having a greater refractive power laterally than vertically.

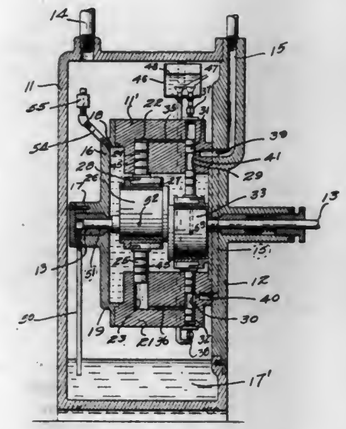
1,819,284. HEAT CONTROL APPARATUS. DAVID FIRTH, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed Mar. 21, 1929. Serial No. 348,709. 11 Claims. (Cl. 123—122.)



1. In a throttle controlled internal combustion engine the combination of an intake manifold, of a chamber for heating fluid formed in said manifold and having a relatively thin tubular passage through said heating chamber forming part of said intake manifold, a segmental lining for said tubular passage radially shiftable relative thereto, and means associated with said throttle for shifting said lining inwardly to form an air space between the lining and the said tubular passage when said throttle is opened.

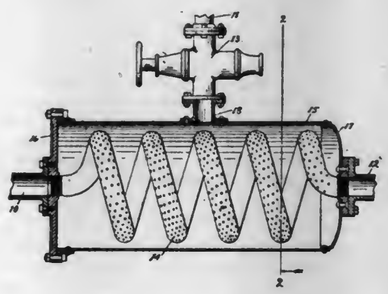
1,819,285. HIGH SPEED COMPRESSOR. WILFRED FOURNESS, Oakland, Calif., assignor to The Fourness Development Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 20, 1928. Serial No. 255,759. 9 Claims. (Cl. 230—185.)

1. In a compressor, a cylinder and piston, means for causing reciprocatory movement between the cylinder and piston, and a sliding valve operated by said means, said cylinder having a port opening in a passageway over which opening the valve is arranged to slide, said passageway also communicating with a discharge opening and an intake opening, said openings being so arranged that



movement of the valve in one direction serves successively to place the cylinder port in communication with one of said apertures while interrupting communication with the other, and then on continued movement, communication with said one aperture is interrupted and communication with the other is established.

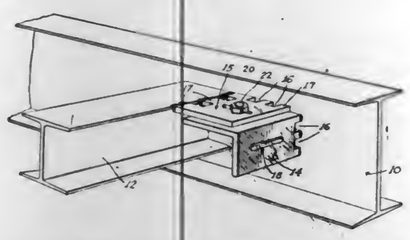
1,819,286. STEAM SUPPLY APPARATUS. WILLIAM A. GILCHRIST, Chicago, Ill. Continuation of application Serial No. 554,323, filed Apr. 17, 1922. This application filed July 7, 1928. Serial No. 290,920½. 4 Claims. (Cl. 122—459.)



1. In combination, a helical coil of pipe having a plurality of complete turns, the outer circumferential walls thereof being perforated substantially as described, a feed pipe applied to the delivery end of the pipe coil, a supply pipe for exhaust steam applied to the receiving end of the pipe coil, a jacket surrounding the pipe coil, a supply pipe for superheated steam entering the jacket and a pressure reducing valve controlling the last mentioned supply pipe.

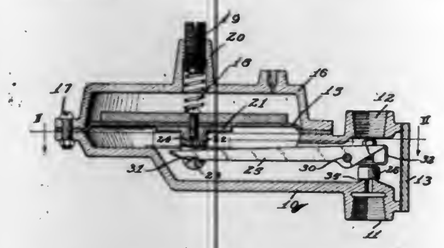
2. Uniting superheated steam and exhaust steam from separate sources by adding the superheated steam to the exhaust steam while the latter is in rapid whirling motion and conveying the mixed fluids through a common feed pipe.

1,819,287. METHOD OF ASSEMBLING STRUCTURAL STEEL. ARTHUR A. GOERZ, Alhambra, Calif. Filed Dec. 1, 1928. Serial No. 322,982. 3 Claims. (Cl. 113—99.)



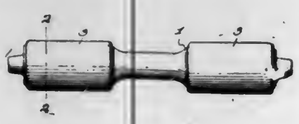
1. A method for assembling steel building frame structures, comprising tack-welding positioning clips to each of two members that are to be permanently received to each other, adjustably connecting the two clips, adjusting the two members to form a joint, binding the connection, and finally permanently welding the joint.

1,819,288. FLUID PRESSURE REGULATOR. WILLIAM C. GROBLE, Anderson, Ind., assignor to Groble Gas Regulator Co., Anderson, Ind., a Corporation of Indiana. Filed Dec. 20, 1930. Serial No. 503,683. 3 Claims. (Cl. 50—26.)



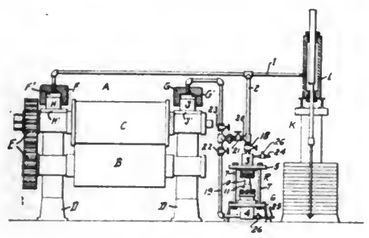
1. In a fluid pressure regulator, a lever member, a valve member, one of said members being provided with a socket and the other member with a head adapted to seat therein and a spring bracket connected to the lever member provided with a receiving slot therein for the reception of the other member and normally maintaining said head in engagement with the socket under spring pressure while permitting the forcible release or engagement thereof, said spring bracket being integral with said lever and comprising a slotted extension of said lever turned back under the lever proper for cooperation with the valve member.

1,819,289. ROLL FOR SPINNING MACHINES AND METHOD AND COMPOSITION FOR PRODUCING THE SAME. DEWEY L. HAYES, Rossville, Ga., assignor, by mesne assignments, to Everlastick Varnish, Inc., Chattanooga, Tenn., a Corporation of Tennessee. Filed Nov. 7, 1930. Serial No. 494,125. 12 Claims. (Cl. 19—143.)



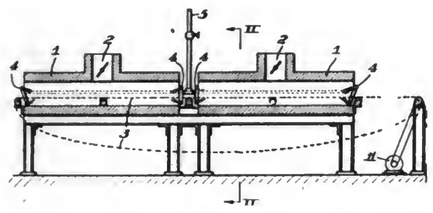
1. A drafting roll for spinning machines, provided with a covering of leather coated on its outer face with a composition including glue, an acid for dissolving the glue, a drying agent, and powdered soapstone.

1,819,290. SUGAR MILL. FRANCIS HEGENBARTH, New Orleans, La., assignor to Fulton Iron Works Company, St. Louis, Mo., a Corporation of Delaware. Filed Aug. 14, 1929. Serial No. 385,864. 10 Claims. (Cl. 138—10.)



1. A hydraulic equalizer comprising a pressure regulating element, a movable element disposed within said pressure regulating element, pressure-responsive means at opposite ends of a member with which the equalizer is associated, a pressure conductor leading from one end of said pressure-regulating element to the pressure responsive means at one end of said member with which the equalizer is associated, and a pressure conductor leading from the opposite end of said pressure-regulating element to the pressure responsive means at the opposite end of said member, the face at one end of said movable element being of greater diameter and area than the face at the opposite end thereof.

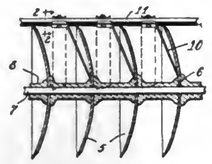
1,819,291. METHOD OF ANNEALING SHEET COPPER. GEORGE A. HEMPSTEAD, Lisbon, Ohio, assignor to The National Brass & Copper Co., Lisbon, Ohio, a Corporation of Ohio. Filed Jan. 30, 1930. Serial No. 424,567. 3 Claims. (Cl. 148—21.2.)



1. The method of heating sheet copper, which consists of passing such sheet continuously through an open ended tunnel furnace, and heating the sheet therein by enveloping it in impinging jet flames of fuel gas to which oxygen for supporting combustion is supplied by air entering the open end of the tunnel.

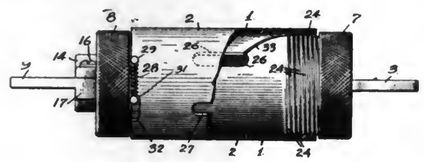
1,819,292. DISK PLOW. SIMEON B. HENDRICKS, Rockford, Ill., assignor, by mesne assignments, to J. I. Case Company, Racine, Wis., a Corporation of Wisconsin. Original application filed July 23, 1927, Serial No. 207,911. Divided and this application filed May 31, 1928. Serial No. 281,667. 15 Claims. (Cl. 97—224.)

1. In a disk plow, the combination with a gang of plow disks mounted on a frame, of a bar supported in parallelism with the gang of plow disks, a plurality of blades, one for each of the disks of the gang, and means for fastening each of said blades at a predetermined point on said bar in either one of two positions, said blades having their attaching ends so constructed whereby in one position of attachment to have the blades bear against the sides of the disks to act as scrapers, and in the other position



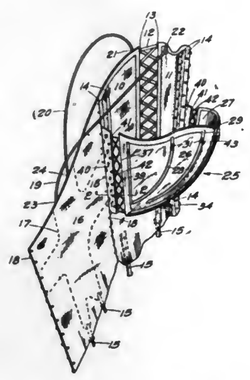
of attachment have the blades disposed between adjoining disks in proper spaced relation thereto to serve as trash guards.

1,819,293. ELECTRIC FUSE. JOHN H. HICKEY, San Francisco, Calif., assignor to Hickey Fuse & Manufacturing Company, San Francisco, Calif., a Corporation of California. Filed May 4, 1927. Serial No. 188,735. 9 Claims. (Cl. 200—131.)



1. An electric fuse comprising a casing formed from a air of telescoing tubular sections; a fusible element mounted within the casing; and a tortuous groove formed upon one casing section and communicating with the interior of the casing through an opening formed in the inner casing section to provide a vent between the casings for the escape of gas when the fuse is blown.

1,819,294. ABDOMINAL SUPPORT. JOSEPHINE L. HOLT and WILLIAM N. HOLT, Oakland, Calif. Filed Dec. 18, 1929. Serial No. 414,897. 6 Claims. (Cl. 2—27.)



2. In combination, corset back panels adjustably secured along their vertical edges by means of laces and cooperating eyelets, stays incorporated in said panels, the opposite edges of said panels being provided with one or more rows of eyelets, a front panel member having hooks disposed on its opposite vertical edges and adapted to cooperate with the eyelets on said back panels, a reenforcing member in said front panel, garters attached to the lower portion of said front and back panels, an abdominal support comprising a pair of form knitted body members,

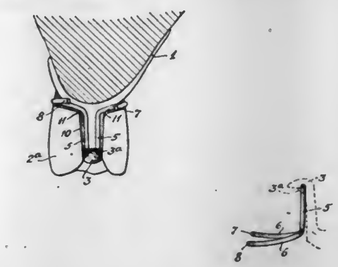
fastening means at the contiguous vertical edges of said body members, stays vertically disposed and attached to said body members, outwardly and upwardly turned hems at the lower edge of said body members, said hems adapted to slidably receive adjusting cords or tapes therein, said tapes being attached to said body members at their farther ends, a buckle slidably receiving and retaining said tapes in adjusted position at their contiguous ends, eyelets adjacent the opposite vertical edges of said body members, inserts having disposed at one edge thereof eyelets, laces cooperating with said eyelets on said inserts and said body members, the opposite edges of said inserts being provided with hooks adapted to attach said abdomen support to the cooperating eyelets on said back panels.

1,819,295. DOLL HANDKERCHIEF. JOSEPHINE L. HOLT, Oakland, Calif. Filed Oct. 13, 1930. Serial No. 488,204. 2 Claims. (Cl. 46—40.)



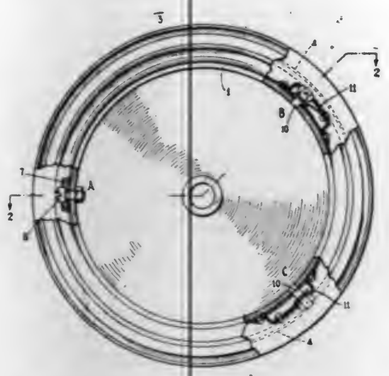
1. A doll consisting of a substantially rectangular portion of flexible material having a doll head formed on the vertical center and below the horizontal center and having both side edges inrolled, the inrolled form being folded backwardly adjacent the top of the head, the portions of the rolls adjacent the head being drawn backwardly and tied together with a simple knot whereby the doll is retained to form, the ends of the rolls extending from the knot forming arms.

1,819,296. CLASP AND CLASP SUPPORTED DENTAL RESTORATION. CHARLES C. KUNDE, New York, N. Y., assignor to Julius Aderer Inc., New York. N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 457,906. 7 Claims. (Cl. 32—12.)



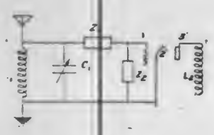
1. A clasp adapted to support a dental restoration from an abutment tooth, composed of resilient metal comprising two elongated approximately parallel closely adjacent vertical arms having free ends, said free ends being bent first outwardly and then inwardly from each of the vertical arms at approximately right angles thereto, said clasp on attachment to a restoration being held only at those portions of the vertical arms which are most remote from the free ends whereby, when the free ends are spread apart, they will be placed under resilient as well as tortional influence.

1,819,297. DEMOUNTABLE FELLY. ALFRED M. LOFLAND, Lebanon, Ind. Filed May 1, 1926. Serial No. 105,912. 2 Claims. (Cl. 301—13.)



1. A demountable rim wheel comprising a master felly member, and a split felly member carried thereon, pin means carried on the outer face of the split felly member, and a portion of said pin extending beyond the outer circumference of the split felly when in retracted position which provides an obstruction to the mounting of a rim thereon.

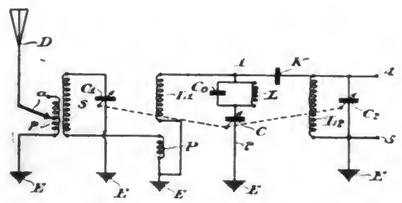
1,819,298. RADIOCIRCUIT. BRUNSON S. MCCUTCHEN, North Plainfield, and CARL V. SANDELL, East Orange, N. J. Filed Mar. 18, 1926. Serial No. 95,709. 5 Claims. (Cl. 179—171.)



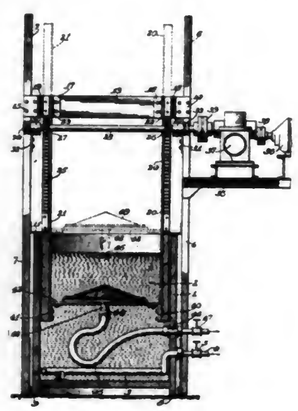
1. The combination with a radio frequency amplifying system, of a circuit including an energy absorption network, energy absorbing means included in said network and means inversely responsive to frequency for by-passing portions of the reproducing current around said energy absorbing means and for causing other portions of said reproducing current, the latter being substantially proportional to the frequency of the system, to traverse said energy absorbing means whereby the absorption of energy by said network substantially equals the regenerative electro-magnetic and electro-static feedbacks in the system at substantially all frequencies within the normal operating range of the system.

1,819,299. TUNING SYSTEM. JOHN M. MILLER, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 3, 1930. Serial No. 465,603. 20 Claims. (Cl. 250—20.)

1. A method of tuning to oscillations of various frequencies with additional discrimination against oscillations whose frequencies differ to a substantially fixed extent from said first-named frequencies, which comprises arranging inductive and capacitative reactances effecting a loop tunable to the oscillations of desired frequency, impressing upon a translating device a difference of potential related to the potential difference existing between a terminal of said loop and a point which divides one of said reactances into components one of which is in series with the other of said reactances, and varying only said other of said reactances to tune said loop to desired frequency and to bring into substantial resonance with the undesired frequency said variable reactance and said component of said one of said reactances.



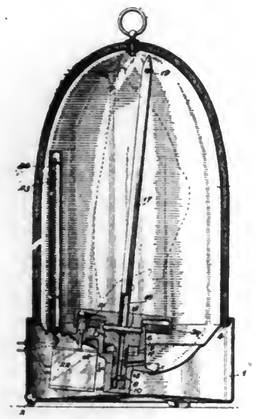
1,819,300. DEVICE FOR AND METHOD OF MAKING FIBROUS CONES AND THE LIKE. ALBERT NEWCOMBE, St. Charles, Ill., assignor, by mesne assignments, to Jesse B. Hawley, Geneva, Ill. Filed Mar. 26, 1928. Serial No. 264,796. 8 Claims. (Cl. 92—57.)



1. The process of making fibrous cones for sound reproducers, comprising immersing successive parts of a porous former in a fluid bath of suspended fibers whereby different points of the former will be immersed for different lengths of time, and causing depositing of fibers upon the former in thicknesses at different points proportional to the time of immersion of said points.

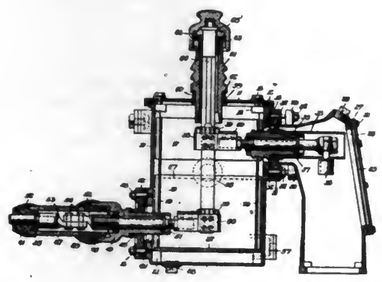
8. A device for making fibrous articles comprising a container for holding a bath carrying fibers in suspension, a hollow porous former, a support for said former, said support being movable, so that the former may be immersed in and removed from said bath, means for producing a difference of pressure outside of and within the former, so as to cause fibers to deposit thereon, and means for so controlling the speed of movement of said support that some portions of the former are immersed in the bath sufficiently longer than other parts thereof to provide a varied thickness of deposited fibers.

1,819,301. COOKING APPARATUS. WARREN NOBLE, Detroit, Mich. Filed Feb. 18, 1929. Serial No. 340,765. 13 Claims. (Cl. 219—35.)



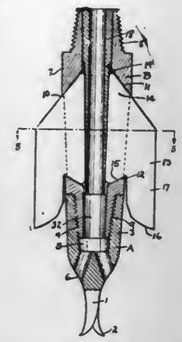
1. In a roadster, a support, a hollow spit rotatably mounted on said support, means for rotating said spit, means for feeding juices and grease through said spit for basting, and a heating element mounted in spaced relation from said spit.

1,819,302. OIL AND AIR BREAK POTHEAD DISCONNECT. JOSEPH RAH, Chicago, Ill., assignor to G & W Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 9, 1927. Serial No. 218,489. 3 Claims. (Cl. 200—150.)



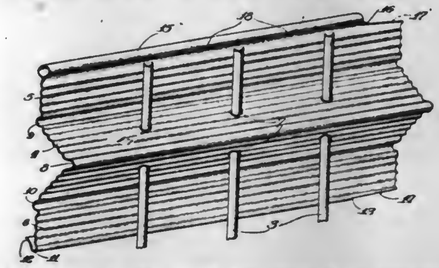
1. A combined oil and air break disconnect comprising a container having an insulating medium therein, a pair of terminals each of which is directly connected to a lead extending outside of said container and away from said disconnect, one of said terminals being located above the level of said medium and the other of said terminals being located in said medium, and a removable link normally connecting said terminals, said disconnect being so constructed that when said link is removed there will be neither body nor film of the said insulating medium extending between said terminals.

1,819,303. MULTIPLE STAGE ROTARY DRILL. WARREN B. REED and WALTER HEPLER, Morgan City, La. Filed July 2, 1925. Serial No. 41,183. 8 Claims. (Cl. 255—73.)



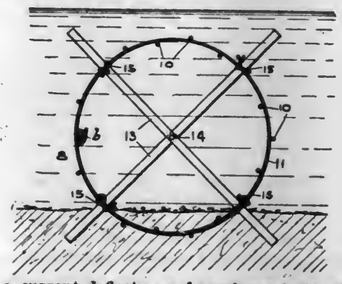
1. A multiple stage earth boring drill comprising a head, a fish tail bit on the lower end thereof, said head having lateral slots decreasing outwardly in length, cutting blades in said slots spaced above said fish tail bit the lower cutting edges thereof extending materially below said slots, and means within said head between said blades to retain said blades in position.

1,819,304. CONTRACTION CENTER STRIP. ROBERT R. ROBERTSON, Chicago Heights, Ill. Filed Jan. 2, 1930. Serial No. 417,959. 17 Claims. (Cl. 94—18.)



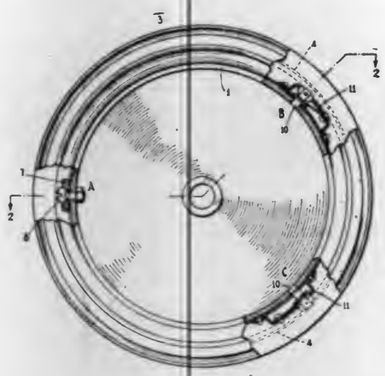
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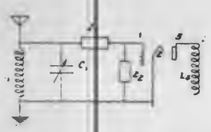
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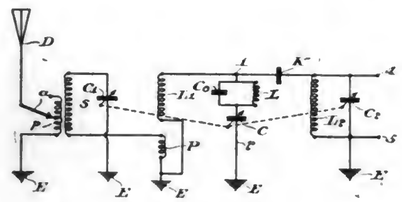
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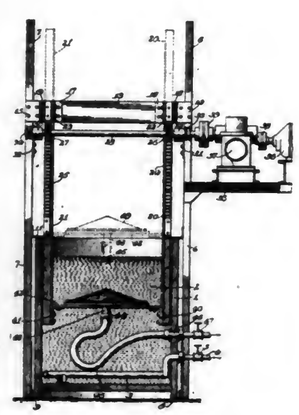
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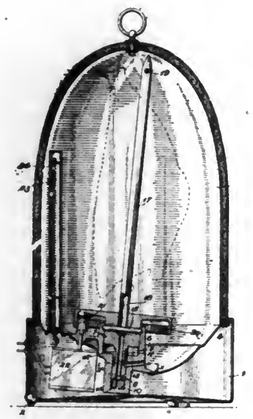
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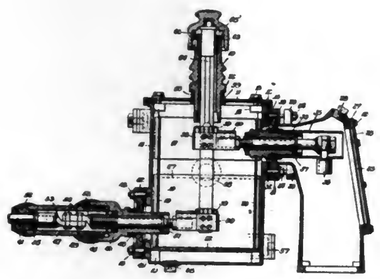
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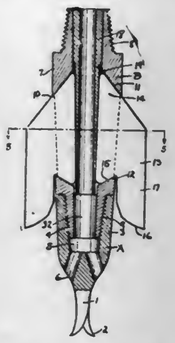
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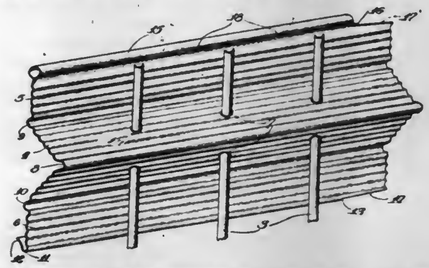
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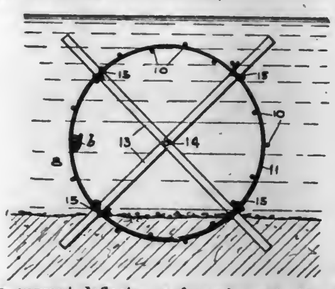
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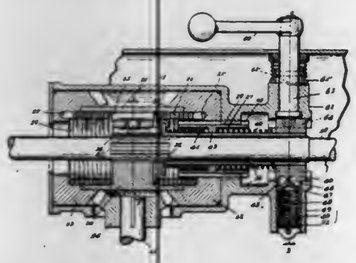
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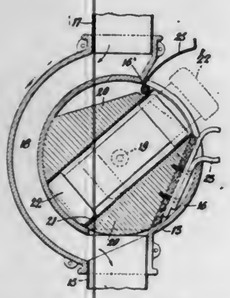
a plurality of clamping-members on each stabilizing-bar for securing a mounting on said foraminous body, each stabilizing-bar having end-portions projecting outwardly of said tubular body.

1,819,306. REVERSING DRIVE. WILLIAM CARLETON STARKEY and DALMAR TEMPLETON BROWNLEE, Indianapolis, Ind., assignors to L. G. S. Devices Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed June 13, 1927. Serial No. 198,439. 4 Claims. (Cl. 74—50.)



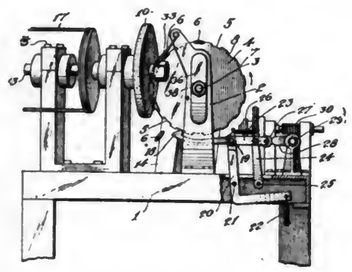
4. A reversing drive embodying therein a driving shaft, a driven shaft disposed at a right angles thereto, oppositely facing gears on the driving shaft, a third gear on the driven shaft and meshing with said oppositely facing gears, a duplex clutch member positioned between said oppositely facing gears and rotative with the drive shaft and having oppositely facing recesses therein, a coil spring in each recess and operatively connected at one end to an associated oppositely facing gear, longitudinally reciprocable means carried by the clutch member for engaging and energizing one spring and then the other to clutch and declutch the associated oppositely facing gear to and from said clutch member and means operated in the rotation of the driving shaft for intermittently imparting reciprocating movement to said means carried by the clutch member.

1,819,307. CARRIER INSERTING AND DISCHARGE DEVICE FOR PNEUMATIC DISPATCH SYSTEMS. JOSEPH JOHN STOETZEL, Queens Village, N. Y., assignor to G & G Atlas Systems, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 24, 1929. Serial No. 334,655. 6 Claims. (Cl. 243—28.)



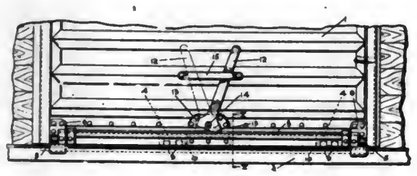
1. In a pneumatic dispatch system, a transmission line, means for causing movement of carriers inserted into said line, a member shiftable to a position for receiving in one end thereof a carrier for insertion into the line, means for shifting said member to a position wherein the carrier is inserted into the line through the opposite end of said member, and means whereby the line is maintained closed to the atmosphere at the place of insertion of the carrier regardless of the position of said member.

1,819,308. BUTTON EDGING MACHINE. FRED I. WALKER, Newark, N. J. Filed Aug. 7, 1929. Serial No. 384,104. 5 Claims. (Cl. 51—88.)



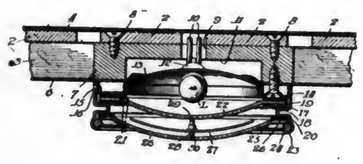
1. A button edging machine comprising a work support having an upwardly facing recess the plane of the bottom of which is at an angle of substantially forty-five degrees to the vertical to rotatably receive and hold a button against lateral displacement with diametrically opposite portions of its edges exposed, a pair of rotatable grinding wheels each with its periphery in contact with one of said opposite portion of the edge of the button, and means for rotating said wheels, said wheels being rotated at different speeds in the same direction and being angularly disposed with respect to said button so as to rotate the button and influence it toward the bottom of said recess.

1,819,309. BALL SUPPORTING AND LIFTING ARRANGEMENT. AXEL WASBERG and KENNETH J. TOBIN, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1928. Serial No. 308,119. 15 Claims. (Cl. 16—99.)



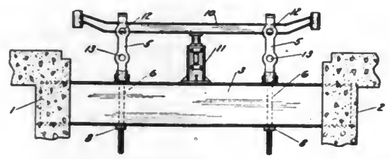
1. The combination with a track, of a door having frictional supporting means normally engaging said track, end castings upon said door, a longitudinally extending ball retainer eccentrically pivoted at its opposite ends to said castings, and a lever for rocking said retainer in a transverse direction.

1,819,310. COMBINED COMPASS AND LIGHT. LYNDON F. WILSON, Chicago, Ill. Filed Dec. 21, 1928. Serial No. 327,491. 7 Claims. (Cl. 33—222.)



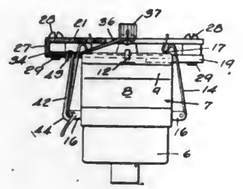
1. In a vehicle, a source of light, a transparent plate in front of said light, a translucent plate in front of said transparent plate and in spaced relation thereto, and a compass needle pivotally mounted between said plates.

1,819,311. AXLE STRAIGHTENING MECHANISM. HENRY WOCHNER, Rock Island, Ill., assignor to Bear Manufacturing Company, Rock Island, Ill. Filed May 6, 1929. Serial No. 360,662. 7 Claims. (Cl. 153—38.)



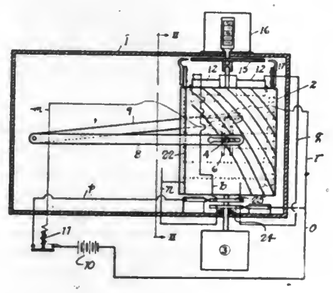
6. In combination with a fixed beam and an axle clamping mechanism mounted thereon, and rigidly attached thereto, a power jack supported on said beam, a cradle provided with a plurality of axle holds of varying widths, for engagement with the end of an axle held in said clamping mechanism, and having a bearing point on one end for engagement by said jack, and a bar connected with said cradle, and projected in the opposite direction from the bearing point.

1,819,312. DISTRIBUTOR TESTING DEVICE. HENRY C. WOODBURY, Berkeley, Calif. Filed June 3, 1929. Serial No. 368,138. 7 Claims. (Cl. 175—183.)



1. A testing device for distributors having exposed distributor terminals, comprising a frame of insulating material adapted to be supported on said distributor, a plurality of spring contact fingers mounted on said frame, for contacting with said distributor terminals, and means for grounding said fingers.

1,819,313. MEASURING APPARATUS. ARCHER E. YOUNG, Pittsburgh, Pa. Filed Sept. 27, 1929. Serial No. 395,694. 5 Claims. (Cl. 235—61.)



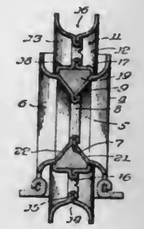
5. In measuring apparatus, the combination of a constantly moving member, a second movable member, means for uniting the two said members at regularly recurrent intervals in the course of movement of the member first named, two control members movable severally in response to the values of two variable quantities, and means subject to said control members and operating in sequence upon said uniting means for effecting separation of the two members first named, the interval at which the operation of the said separation-effecting means succeeds that of the said uniting means being greater or less, according to the instant values of such variables.

1,819,314. ACTIVATED CARBON. PAUL ZURCHER, Florence, Colo., assignor, by mesne assignments, to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Aug. 13, 1928. Serial No. 299,442. 16 Claims. (Cl. 252—3.)

1. The method of treating carbon which comprises subjecting the carbon to the combined activating action of steam and sulphur, and treating with steam until the sulphur products are removed.

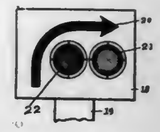
6. The method of treating carbon which comprises introducing sulphur into the carbon by contact with hydrocarbon vapors containing sulphur at about 450° C., and thereafter subjecting the mass to the resulting reaction with steam at temperatures above 600° C.

1,819,315. SASH PULLEY. GEDOR W. ALDEEN, Rockford, Ill., assignor to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,689. 1 Claim. (Cl. 16—210.)



A pulley of the character described comprising, in combination, a pulley housing having a pulley supporting and a bearing surface extending transversely of the housing, an annular fibrous bushing mounted on said bearing surface, a pulley mounted on said bushing and provided with flanges engaging the bushing for preventing relative lateral movement between said pulley and bushing, said pulley and flanges being spaced out of contact with both said bearing surface and said housing, said supporting surface having a circular groove and said bushing having a complementary bearing face to prevent lateral movement of said bushing on said bearing surface and to absorb lateral thrusts of said pulley.

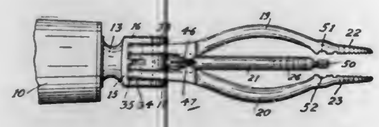
1,819,316. HIGHWAY DUAL-LIGHT SIGNAL. WILLIAM R. ALLEN, Custer Township, Whatcom County, Wash. Filed Mar. 8, 1930. Serial No. 434,409. 1 Claim. (Cl. 40—130.)



A road signal including a plate adapted to be supported alongside of a roadway, a red lens and a green lens fastened on one side of the plate in a horizontal line, and

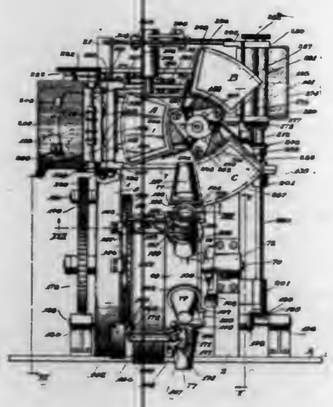
the semblance of a curved-shaft arrow on the side of the plate with and disposed near the lenses having its head end adjacent the green lens and its butt end opposite the red lens.

1,819,317. ARTIFICIAL HAND. JUSTUS WILHELM BAEHR, Minneapolis, Minn. Filed Mar. 22, 1929. Serial No. 349,027. 12 Claims. (Cl. 3—12.)



1. An artificial hand comprising a support, a pintle mounted in said support, a pair of fingers mounted on said pintle and arranged for endwise rocking movement thereon, a third finger rotatably mounted on said pintle, and means for successively rocking said first named fingers to move the same toward and from one another and swinging said third finger about its pivot.

1,819,318. CUP MACHINE. CESARE BARBIERI, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 273,970. 59 Claims. (Cl. 93—39.)



59. The combination with a translatable variable speed blank-carrying mandrel, of translatable cup finishing mechanisms adapted to travel in aligned cooperating relation with said mandrel to form blanks carried thereby into a cup.

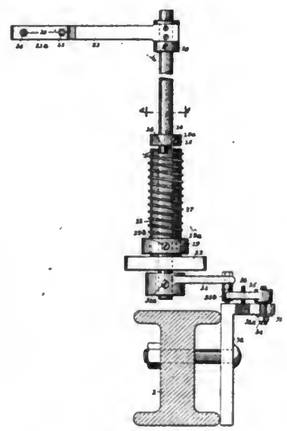
1,819,319. CIGAR AND CIGARETTE LIGHTER. LAWRENCE D. BELL, Los Angeles, and JOHN C. ROMBACH, Glendale, Calif.; said Rombach assignor to said Bell. Filed June 6, 1928. Serial No. 283,343. 12 Claims. (Cl. 67—7.1.)

3. A lighter having an elongated tubular casing with a lower and an upper partition adjacent the upper end, the lower part forming a fuel chamber, a wick extending therefrom through a tube through both partitions to a position above the upper partition, a flint wheel rotatably mounted above the upper partition, a flint, a liquid tight casing extending downwardly into the fuel chamber and con-



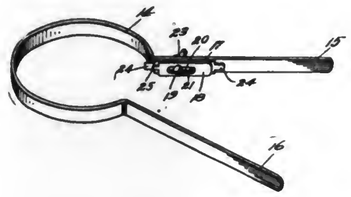
taining a spring bearing on the flint, and a rotary actuating wheel mounted between the two partitions and extending partly outside the wall of the casing.

1,819,320. WEFT STOP MOTION MECHANISM. WILLIAM CRUTCHLOW, Fullerton, Pa., assignor of one-half to William Crutchlow, jr., Fullerton, Pa. Filed Sept. 23, 1930. Serial No. 483,836. 7 Claims. (Cl. 139—233.)



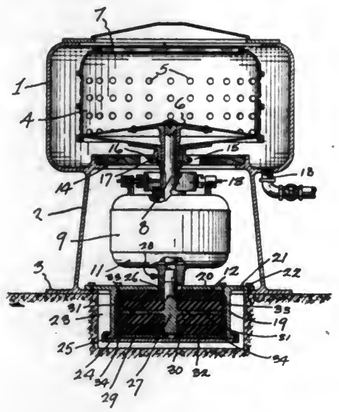
1. In a loom, the combination of a loom frame, a backward-and-forward-moving lay structure having a shuttle box, a shuttle movable into and out of the box and having a circuit-closer, an open circuit containing electro-magnetic means to be actuated, a member carrying the circuit terminals and movable on said structure in opposite directions and when moved in one direction adapted to cause contact of the terminals with the circuit-closer and means to move said member first in the direction to cause such contact during each background movement of said structure and then in the opposite direction, said means including a cam past which said member moves with said structure and arranged to move said member in one of said directions.

1,819,321. PISTON GROOVE CLEANER AND RING COMPRESSOR. MARTIN L. DECKER, Kansas City, Mo. Filed Apr. 22, 1929. Serial No. 357,110. 4 Claims. (Cl. 7—1.)



1. A tool of the character described comprising a resilient, curved body member of substantially circular form, spaced apart arms extending outwardly from opposite extremities respectively of said body member, a bit carried by one of said arms and means attaching said bit to the arm permitting rotatable and longitudinal adjustment of said bit.

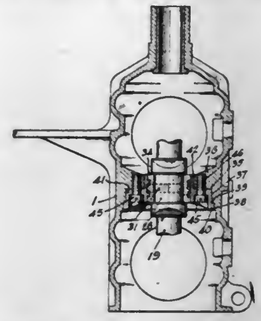
1,819,322. EXTRACTOR. MAURICE DUCASSE, San Francisco, Calif. Filed Dec. 13, 1927. Serial No. 239,637. 4 Claims. (Cl. 210—72.)



1. An extractor embodying in its construction, a rotatable shaft; an extractor basket fixed to and rotatable with said shaft; a housing for rotatably supporting said shaft; a supporting stud secured to said housing; and a block of flexible, resilient material vulcanized on said stud for supporting the same in axial alignment with said shaft, said block comprising three layers of said material vulcanized into a unit, the intermediate layer being softer than the outer layers.

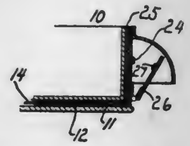
1,819,323. FOUR CYLINDER OUTBOARD MOTOR. OLE EVINRUDE, Milwaukee, Wis., assignor, by mesne assignments, to Outboard Motors Corporation, a Corporation of Michigan. Filed Feb. 27, 1928. Serial No. 257,501. 10 Claims. (Cl. 123—59.)

2. An outboard motor comprising a crank casing having end bearing members co-operable with end bearing portions of the crank shaft, at least one of the end bearing members being removable, the crank shaft being insertable endwise into the other bearing member, a stepped bearing seat provided directly in an intermediate portion of the crank casing, inwardly extending opposed webs adjacent said seat, a sectional intermediate bearing member encir-



cling an intermediate bearing portion of the crank shaft and having its periphery adapted to snugly engage said seat and means co-acting with the intermediate bearing member and the webs for securing the intermediate bearing member to its seat.

1,819,324. DEFROSTING DEVICE FOR REFRIGERATORS. GRANVILLE S. FLEECE, Memphis, Tenn. Filed Dec. 13, 1929. Serial No. 413,740. 3 Claims. (Cl. 62—108.5.)



2. In a refrigerator, a support, a removable tray supported thereby and subject to freezing thereto, an electric heating element carried by said tray, a separable plug member for said element carried by said tray, a complementary plug member within and carried by a wall of said refrigerator, current wires leading thereto, said heating element circuit being interrupted at the front of said tray and an automatically releasable switch for completing said heating element circuit.

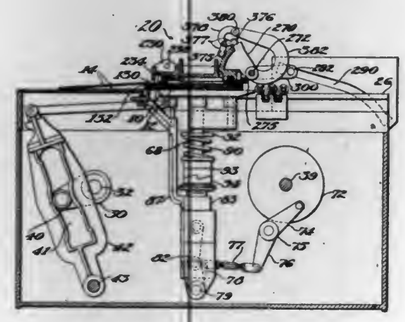
1,819,325. OPHTHALMIC LENS. LEON V. FOSTER, Rochester, N. Y., assignor to Bausch & Lomb Optical Co., Rochester, N. Y., a Corporation of New York. Filed May 25, 1928. Serial No. 280,582. 2 Claims. (Cl 88—54.)

DISC SIDE CURVES	READING ADDITIONS				
	.50	.62	.75	.87	1.00
+3.00	207	209	210	211	213
3.12	207	208	210	211	213
3.25	207	208	210	211	212
3.37	206	208	209	211	212
3.50	206	208	209	210	212
3.62	206	207	209	210	212
3.75	206	207	209	210	211
3.87	205	207	208	210	211
4.00	205	207	208	209	211
4.12	205	206	208	209	211

1. A product in the manufacture of bifocal lenses comprising a set of bifocal lens blanks covering the entire range of reading additions, each of said blanks being formed by fusing a minor lens member in a countersink in a major lens member, said set comprising two series of blanks, one of said series being made up of blanks

whose countersink curvatures vary from blank to blank by a fixed amount, the other series being made up of blanks whose countersink curvatures vary from blank to blank by a fixed amount which is different than the fixed amount of said first named series.

1,819,326. PRINTING MACHINE. CHARLES E. GALE, Boston, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Feb. 4, 1930. Serial No. 425,796. 28 Claims. (Cl. 101—287.)



1. In a machine for printing upon the pages of a bound book, in combination, a printing element, a supporting platen for supporting the body of the book to be printed, means movable with the platen for maintaining the body of the book in register with the printing element, and means for relatively moving the platen and printing element to perform the printing operation.

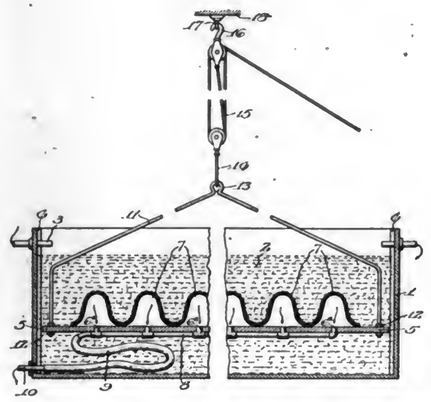
1,819,327. MEANS FOR THE ELIMINATION OF DISTORTION AND THE CREATION OF STEREOSCOPIC EFFECTS IN MOVING PICTURES. GRAVES GRIFFITH, San Francisco, Calif., assignor to Griffith Camera Corporation, Ltd., San Francisco, Calif., a Corporation of California. Filed Oct. 14, 1929. Serial No. 399,440. 3 Claims. (Cl. 88—16.6.)



2. In a device of the character described, in combination, a screen having a curved picture area, a projector remotely situated from said screen and adapted to project motion pictures thereon, means forming a support for said projector, a curved track carried by said support and having an arcuate guideway therein for the guidance of said projector in an oscillating movement relative to the screen, the curve of the picture area of the screen and the curve the track being arcs of concentric circles.

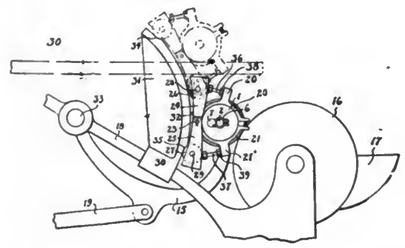
1,819,328. METHOD AND MEANS FOR MAKING SOUND AMPLIFIERS. JESSE BARNUM HAWLEY, St. Charles, Ill. Original application filed Sept. 26, 1924, Serial No. 740,009. Divided and this application filed May 27, 1927. Serial No. 194,636. 3 Claims. (Cl. 92—57.)

1. The method of forming sound amplifier horns which comprises immersing a porous horn-shaped former in a fibrous pulp bath, sucking the liquid of the bath through



the former, removing the fiber horn from the bath enclosing the formed fiber horn in an inflatable rubber, a horn-shaped mould, exerting pressure on said mold to press and smooth the walls of said fiber horn while exerting suction through the former, drying the fiber form, impregnating the superficial fibers with glue-like material, and finishing the horn.

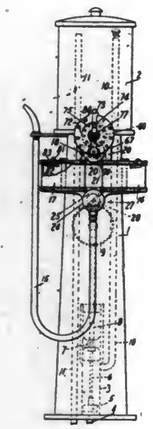
1,819,329. INK ROLLER BRAKE FOR PRINTING PRESSES. FREDERICK E. HUGHES, Toronto, Ontario, Canada. Filed May 25, 1929. Serial No. 366,021. 16 Claims. (Cl. 101—355.)



1. An ink roller brake for printing presses, comprising an oscillating roller, means carried with said roller adapted to be operated to close around the roller shaft to arrest the rotative movement thereof, and means for operating said arresting means periodically.

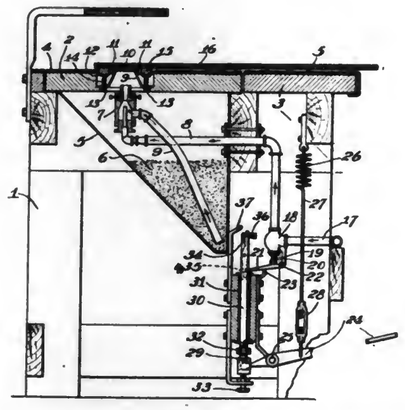
HARVARD LIBRARY OF BOTANY

1,819,330. LIQUID DISPENSING APPARATUS. HARRY F. JACKSON and CHARLES O. STRAUB, Springfield, Ohio. Filed Mar. 3, 1928. Serial No. 258,977. 17 Claims. (Cl. 221—101.)



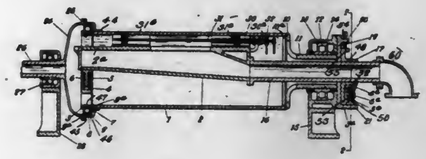
1. In a liquid dispensing apparatus comprising a delivery bowl, a pump to supply liquid to said bowl, a shaft operatively connected with said pump, means to rotate said shaft, and a delivery pipe for said bowl, a pair of measuring receptacles, means comprising a rotary valve to alternately connect said receptacles with said delivery bowl, other means comprising a rotary valve to alternately connect said measuring receptacles with said delivery pipe, actuating mechanism for said valves comprising a rotatable member, and devices connected with the respective valves and engaging said rotatable member to hold said valves normally against movement and to periodically actuate said valves, and a geared connection between said rotatable member and said pump operating shaft.

1,819,331. SAND BLASTING APPARATUS. WILLIAM O. LYTLE, New Kensington, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed June 22, 1929. Serial No. 372,983. 5 Claims. (Cl. 51—8.)



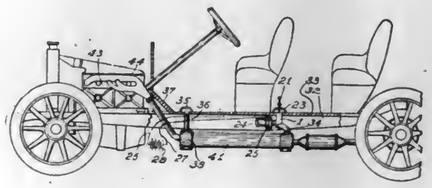
1. Sand blasting apparatus comprising a table for supporting an article to be marked and provided with an opening, a stencil plate in such opening at substantially the level of the table, vertically movable means having a face of soft material also lying in said opening and surrounding said plate with said face held yieldingly above the surface of the plate, a nozzle beneath the plate in line therewith, and means whereby abrasive under air pressure is supplied through the nozzle.

1,819,332. GEARLESS SUCTION ROLL WITH EXTENDED SUCTION BOX. WILLIAM H. MILLSPAUGH, Sandusky, Ohio, assignor to Paper & Textile Machinery Company, Sandusky, Ohio. Filed Mar. 23, 1928. Serial No. 264,171. 10 Claims. (Cl. 92—53.)



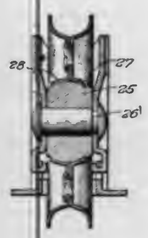
1. In a suction roll, a revolvable shell, a relatively non-revolvable suction box within said shell, stationary heads supporting opposite ends of said suction box exterior to said shell, means extending about one of said heads for driving said shell, a tubular journal of reduced diameter extending from the opposite end of the aforesaid shell, and a suction connection of reduced diameter carried by said box and extending through said journal in spaced relation thereto and mounted in the adjacent stationary head.

1,819,333. REVERSIBLE CURRENT HEATING APPARATUS. LE ROY C. MORRIS, Waterloo, Iowa. Filed Apr. 4, 1930. Serial No. 441,626. 6 Claims. (Cl. 257—241.)



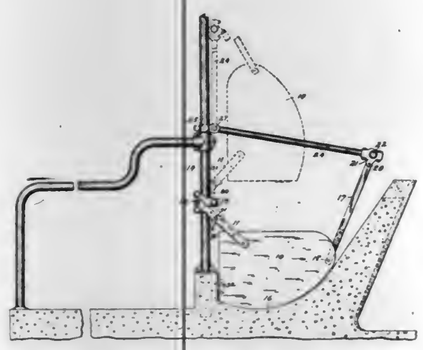
1. In a device of the character described, a blower, a valve-chamber in communication with the inlet- and outlet-ports of the blower, said chamber having conduits leading into spaced parts of an inclosure and containing valves intermediate said conduits movable to control the communications between said inlet- and outlet-ports with the conduits to permit reversal of an air current caused by said blower from one conduit to the other, said valves when both moved in the same and one direction only operating to cut off the communication of the valve-chamber with one conduit while permitting the blower to create a circulation of air through the chamber and said inclosure by way of certain conduits of said chamber only, which lead into one part of the inclosure.

1,819,334. SASH PULLEY. EDWIN W. NORTH, Rockford, Ill., assignor to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,657. 3 Claims. (Cl. 16—210.)



1. A sheet metal pulley comprising a body formed of two complemental parts centrally apertured and having inner marginal flange portions and a fibrous bushing, an external surface portion of which is in the surface of a sphere, supported within said marginal flange portions by said surface portion.

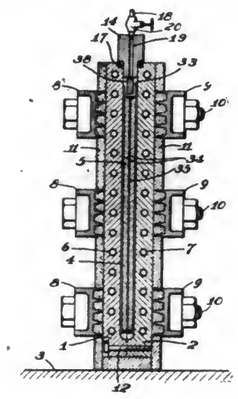
1,819,335. MANGER GUARD. JOHN B. OLSON, Fort Atkinson, Wis., assignor to James Manufacturing Company, Fort Atkinson, Wis. Filed Oct. 17, 1927. Serial No. 226,608. 10 Claims. (Cl. 119—148.)



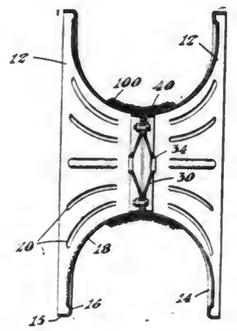
1. The combination with a manger, of a support at one side thereof, a guard rail at the opposite side thereof having a supporting arm pivoted to the support, and a manger partition member linked to the guard rail and pivotally connected with its support.

1,819,336. PROCESS AND APPARATUS FOR MAKING COMPOSITE GLASS. NICHOLAS J. PENNING, Pittsburgh, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,643. 15 Claims. (Cl. 49—81.)

14. A process of making a composite glass plate, which consists in assembling alternating sheets of glass and tough reinforcing material having their opposing surfaces prepared so as to become attached together upon the application of heat and pressure, applying protecting means to the edges of the assembled sheets and submerging such sheets in a bath of hot mercury under pressure.



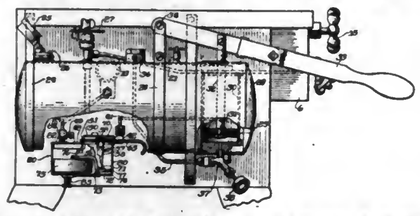
1,819,337. REEL. CHASE KEITH PEVEAR, New York, N. Y. Filed Dec. 20, 1927. Serial No. 241,304. 7 Claims. (Cl. 242—115.)



1. A metal reel comprising two sheet metal stampings each having the general shape of a truncated cone with a peripheral outturned flange at its large end and an inturned flange at its small end, and a disk member adjacent to its in-turned flange and having a conical central portion disposed in the opposite direction to the cone of its associated stamping, and means associated with said disk members for connecting the inturned flanges of said stampings.

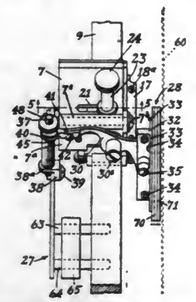
1,819,338. LIQUID FUEL STOVE. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed June 21, 1928. Serial No. 287,059. 7 Claims. (Cl. 137—68.)

1. A control device comprising, in combination, a bracket adapted to be mounted in a horizontal position and having an upward extension providing vertical side walls, a cup removably secured beneath said bracket and cooperating therewith to form a substantially closed housing, a rod extending through opposite vertical side walls of said extension so as to be supported and guided thereby for longitudinal sliding movement, one end of said rod being adapted for connection to a valve resilient means engaging said rod and one of said vertically walls within



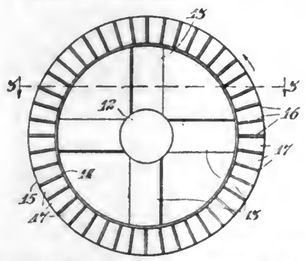
the housing to urge said rod in one direction, a latch device supported by said bracket and operable to releasably secure said rod against movement by said means, and a float supported by the bracket and movable by an accumulation of liquid in said cup to operate said latch device to release said rod for movement by said resilient means.

1,819,339. BANJO MUTE. CHARLES W. PIERSON, Beverly Hills, and CECIL Y. FITZGERALD and GEORGE E. THOMAE, Los Angeles, Calif., assignors of one-fourth to Robert D. Pearson, Los Angeles, Calif. Filed Apr. 4, 1930. Serial No. 441,628. 8 Claims. (Cl. 84—273.)



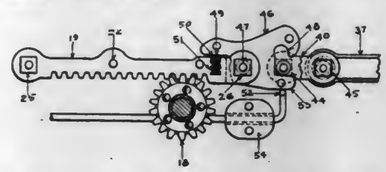
1. In combination with the head and membrane of a banjo, a mute, means to support said mute within said head in an operative relation to said membrane, a pendulum, means pivotally connecting said pendulum to said head, and means operatively connected with said pendulum to operate said mute, said last recited means comprising a pair of arms which extend in a general parallel direction with relation to each other and both of which are pivotally related to said mute.

1,819,340. AEROPLANE PROPELLER. RAYMOND L. RYMAL, Riverside, Ill. Filed Sept. 16, 1927. Serial No. 219,857. 9 Claims. (Cl. 170—166.)



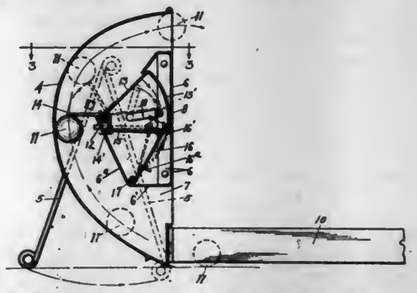
1. An aeroplane propeller comprising a hub, arms extending outwardly from said hub, an annular rim secured to the outer ends of said arms and a plurality of pocket members formed on the outer side of said rim having axial and radial openings whereby the air pressure is reduced on the forward side of said pockets.

1,819,341. WASHING MACHINE. SIMON E. SCHROEDER, Newton, Iowa, assignor, by mesne assignments, to Automatic Washer Company, Newton, Iowa, a Corporation of Delaware. Filed Jan. 20, 1928. Serial No. 248,053. 5 Claims. (Cl. 74—14.)



1. In a device of the class described, a driven gear, means for oscillating said gear including a rack bar, a guideway for said rack bar, downwardly projecting lug portions of the rack bar adapted to engage said guide, a pitman, power means for reciprocating same, connecting means pivoted to the reciprocating end of the pitman, guide means for the connecting member and a clutch member for accomplishing the connection between the rack bar and oscillating end of the pitman, including a member pivoted to the rack bar and guided thereby, said member including a hook portion fashioned in a manner to be automatically caught by the oscillating end of the pitman when reciprocated, a spring tension member normally holding said hook member in a position to be engaged by the oscillating end of the pitman, and a manually controlled clutch bar fashioned in a manner, when desired, to overcome the tension of the spring member and hold the hook member out of engagement with the oscillating end of the rack bar.

1,819,342. FLYBACK GAME AND TOY. WINFRED P. SHEPHERD, Pasadena, Calif. Filed Dec. 11, 1928. Serial No. 325,292. 6 Claims. (Cl. 273—122.)

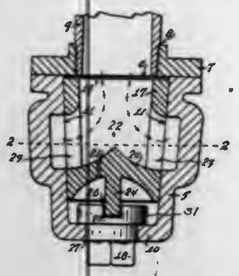


2. In a device of the character referred to, in combination, a body having a return runway therethrough and open in front to receive a rolled element and to return it toward the starting place, indicating elements in the front of said device each with trip means extended into the possible path of a rolled element, between the entrance and exit for said runway, whereby said trip means can be engaged and actuated by said rolled element passing through said runway, and means for restoring said indicating elements to their original positions.

1,819,343. VALVE AND PLUG SEATING MEANS FOR SAME. MARION R. SHIPLEY, Hermosa Beach, Calif., assignor, by mesne assignments, to Martin P. Smith and Joseph R. Neaves, jr., trustees. Filed Sept. 20, 1928, Serial No. 307,318. 6 Claims. (Cl. 251—95.)

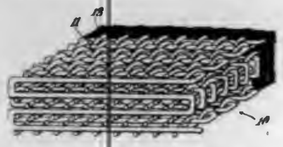
1. In a valve of the class described, a body provided with a vertical tapered bore, a top inlet opening for said bore

and opposed side outlet openings leading from said bore, an annular walled tapered plug fitted to turn in said cavity; said plug being open at its large end to said bore and inlet opening, the underside of said valve plug being recessed and spaced apart from the bottom of the body;



said plug further being provided with opposed side outlet ports of the same number and spacing as said side outlet openings and the upper surface of the bottom of said plug being extended upwardly in a central transverse plane between said outlet ports.

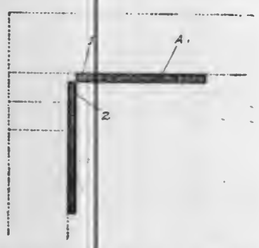
1,819,344. BRAKE LINING AND METHOD OF MAKING THE SAME. EDWARD SLADE, New York, N. Y. Filed Apr. 5, 1928. Serial No. 267,563. 19 Claims. (Cl. 28—1.)



1. The process of making brake lining which comprises immersing asbestos yarn in an impregnating compound solution, curing the compound without setting the same, treating said yarn to maintain it in plastic condition, weaving the same into a fabric, and subsequently treating the fabric to set the impregnating compound.

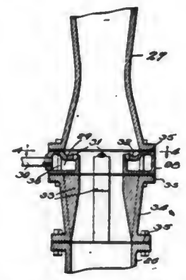
12. A brake lining fabric comprising interwoven warp and weft strands, each strand being composed of an asbestos paper sheath folded lengthwise about a metal core and binding wires oppositely wound thereabout, said asbestos being impregnated with heat-resisting waterproof compound prior to being woven and the fabric being compacted to produce a smooth exterior surface.

1,819,345. METHOD OF MAKING COVES AND CORNERS FOR PLASTER LATH. WILLIAM B. THURMAN, Stockton, Calif., assignor to Fireproof Wall Company, Reno, Nev., a Corporation. Filed Oct. 18, 1927. Serial No. 226,846. 1 Claim. (Cl. 72—124.)



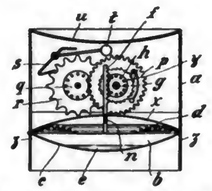
A method of preparing a sheet of wallboard for the formation of coves and corners, the wallboard consisting of front and back surface sheets of paper, and a center core of plaster or like material, comprising first cutting the back sheet of the paper along a line and then fracturing the core along said line; leaving the front sheet intact whereby the latter sheet may then be bent or curved along said line to separate the fractured core parts along the line of fracture so that the board may be built into coves or corners without strain or fracture of the front sheet.

1,819,346. CONVEYER. EDGAR B. TOLMAN, Jr., Chicago, Ill. Filed Nov. 23, 1928. Serial No. 321,440. 4 Claims. (Cl. 302—25.)



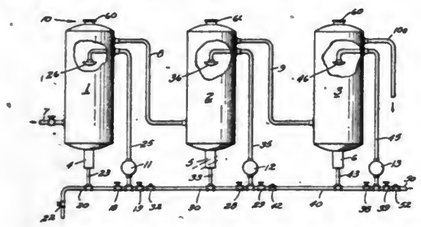
1. In a device of the kind described, a manifold member having a plurality of nozzles projecting from the side walls thereof so that a current of material may flow past said nozzles on a plurality of sides thereof, said nozzles expanding in diameter, and a tubular member associated with said manifold member, said tubular member having a restricted bore into which said nozzles discharge.

1,819,347. TEMPERATURE INDICATOR. JOSEF UNTERHOLZNER, Munich, Germany. Filed June 13, 1930, Serial No. 461,034, and in Germany June 19, 1929. 8 Claims. (Cl. 116—102.)



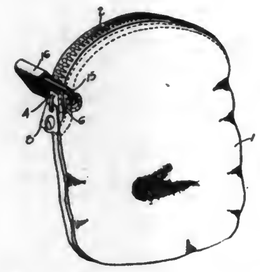
1. A temperature alarm comprising an airtight, gas-filled chamber, an aneroid thermostat having an elastic wall exposed to the gas pressure in said chamber, and signalling means in said chamber actuatable by said elastic wall.

1,819,348. PROCESS OF TREATING LIQUID HYDROCARBONS. GERHARDUS H. VAN SENDEN, Martinez, Calif., assignor, by mesne assignments, to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Mar. 27, 1928. Serial No. 265,120. 3 Claims. (Cl. 196—40.)



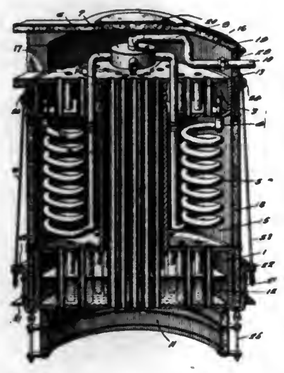
1. The process of treating petroleum distillate containing decomposition products, which comprises: treating the said distillate in three steps; in the first, by counter-current contacting with sulfuric acid sludge produced by the second step, said sludge being of not over 40° Bé.; the second, by counter-current agitation of oil refined by the first step with a sludge produced by the third step, said sludge being of not less than 55° Bé.; the third step being the countercurrent treatment of the oil previously refined by the first and second steps with fresh sulfuric acid of from 63° to 68° Bé. and so limited in amount as to produce a sludge of gravity not heavier than 60° Bé.

1,819,349. RECEPTACLE FASTENER. HERBERT R. WALRATH, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed June 15, 1928. Serial No. 285,736. 5 Claims. (Cl. 70—2.)



1. In a slide actuated separable fastener for securing together flaps of flexible material which has closely spaced fastening members secured along the edges of the flaps, a slider mounted for movement along the edges of the flaps for progressively engaging or disengaging the fastening members, a handle attached to the outer side of the slide, an eye formed integrally and homogeneously with the slide on the inner side thereof, and a ring passing through said eye and adapted to receive a locking member for holding the slider against movement.

1,819,350. STEAM BOILER. JARRETT B. WOOD, Tulsa, Okla. Filed June 18, 1929. Serial No. 371,820. 3 Claims. (Cl. 122—115.)



1. In a boiler, the combination of a lower head, an upper head spaced above the lower head, flues extending through said heads, a column in communication with the lower head and having a foraminous portion extending within the upper head and with its foraminations in communication with the interior of said upper head, flues extending through the column, a fire box in communication with the lower ends of the latter flues, an upper heating chamber in communication with the upper ends of the flues, superheating coils in a chamber between the lower and upper heads and disposed about the column and having their upper ends connected with the interior of the upper head, and a receiver located in the upper heating chamber and connected with the lower ends of the superheating coils and having a conduit for carrying steam to the point of use.

1,819,351. FLUID-OPERATED PUMP. PAUL F. YUNGLING, Los Angeles, Calif., assignor to Scott-Ross and Company, Los Angeles, Calif., a Corporation of Delaware. Filed June 27, 1928. Serial No. 288,691. 10 Claims. (Cl. 103—46.)



1. A fluid-operated pump comprising inner and outer tubings, the outer tubing provided with a perforated portion, a packer between the tubings and above the perforations, a working barrel in the outer tubing below the packer connected to discharge the pumped fluid into one of said tubings, a standing-valve for the working barrel, a valved plunger in the barrel, a fluid operated motor in the inner tubing operably connected with the plunger, and a valve mechanism connected with the tubing that does not receive the pumped fluid operable by the motor to control the flow of an operating-fluid under pressure from said last mentioned tubing to the motor.

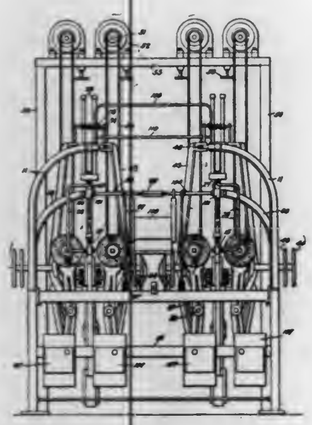
1,819,352. SMOKE PRODUCING AGENT FOR USE WITH GOLF BALLS. RICHARD W. BATES, Alameda, Calif. Filed Jan. 16, 1929. Serial No. 333,027. 4 Claims. (Cl. 252—1.)

1. A compound of the character described comprising approximately 75% of liquid titanium tetrachloride combined with approximately 25% by volume of a volatile retarding agent.

1,819,353. RIB GRINDING MACHINE. JOSEPH BEHLE, Dallas, Tex., assignor to The Murray Company, Dallas, Tex., a Corporation of Texas. Filed Oct. 29, 1929. Serial No. 403,269. 17 Claims. (Cl. 41—100.)

1. In a grinding machine, a frame, a trackway supported thereby, a carrier slidable upon said trackway, a work

holder beneath the carrier and connected for movement therewith and for relative vertical adjustment, a guide form connected to the work holder, a fixed contact with



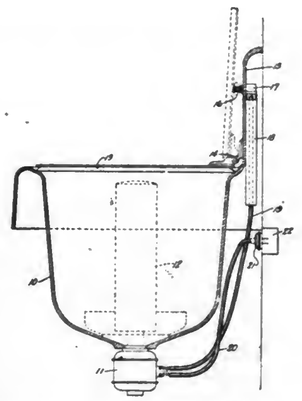
the frame engaging said form, means for reciprocating the carrier, and grinding wheels disposed at opposite sides of the work holder.

1,819,354. MATERIAL PREPARATION. ABRAHAM SIDNEY BEHRMAN, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 15, 1928. Serial No. 299,871. 21 Claims. (Cl. 252—6.)

1. In the process of producing a siliceous gel-like material, the steps of reacting together solutions of gel-forming reagents in such proportions and at such temperatures and concentrations as to form a gel occupying substantially all of the reaction mixture, so regulating such reaction mixture that it will be alkaline to phenolphthalein, treating the resultant gel without drying so as to remove a substantial portion of its liquid content, breaking up the partially dewatered gel, forming it into layers about 3" or less in thickness, and subjecting the layers of material to the action of gases of 40 to 50° containing small amounts of carbon dioxide in materially greater proportion than is normally contained in air less than 1% and very small traces of sulphur dioxide.

1,819,355. START AND STOP SWITCH FOR COMBINATION DISHWASHER AND SINK. FRANK G. BROTZ, Kohler, Wis., assignor to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Filed July 6, 1926. Serial No. 120,787. 4 Claims. (Cl. 192—135.)

2. In a combination dishwasher and sink having a back panel, a dishwasher receptacle, motor-driven dish-washing mechanism therein, a cover for the receptacle hinged to the back panel, a cushioning bumper on the back

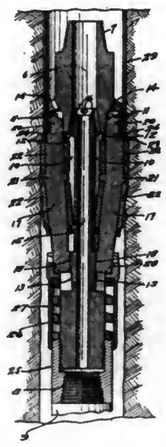


panel against which the cover swings when open, and a switch for the motor behind the back panel, said pumper constituting the handle for said switch.

1,819,356. METHOD OF MAKING PRECIPITATED SILICA. JOHN W. CHURCH, Carnegie, Pa. Filed Sept. 27, 1928. Serial No. 308,882. 7 Claims. (Cl. 23—182.)

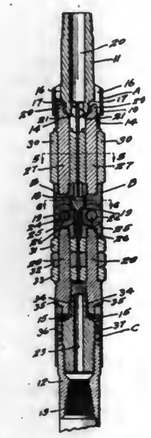
1. The process of making precipitated silica, which comprises dehydrating a colloidal solution of silica gel until it will no longer revert to its former gelatinous colloidal form in the presence of water, wet grinding the dehydrated product, washing, and subjecting the washed product to a second dehydration.

1,819,357. UNDERREAMER. ROLAND R. CRUM, Whittier, Calif., assignor, by mesne assignments, to John Grant, Los Angeles, Calif. Filed Apr. 2, 1928. Serial No. 266,553. 1 Claim. (Cl. 255—75.)



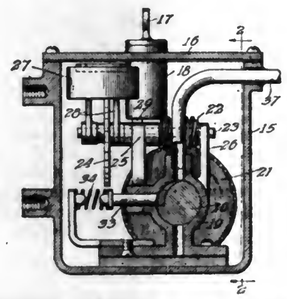
In an expansive reamer, the combination of a body having longitudinally extending cutter receiving recesses in its medial portion and cutter receiving sockets at the upper ends of the recesses, the recesses at the sockets having diagonal cutter expanding faces leading to the sockets, longitudinally extending cutters in the recesses and adapted by longitudinal movement to enter their ends in the sockets, a spring surrounding the body below the recessed portion, a sleeve surrounding the body and spring and having a flanged head against which the spring presses upwardly, the lower ends of the cutters resting on the sleeve head and the sleeve head having a marginal flange projecting upwardly outside the cutter ends to confine them.

1,819,358. UNDERREAMER. ROLAND R. CRUM, Whittier, Calif., assignor, by mesne assignments, to John Grant, Los Angeles, Calif. Filed Apr. 3, 1928. Serial No. 266,926. 15 Claims. (Cl. 255—75.)



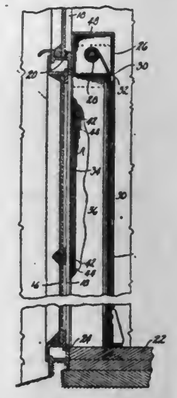
1. An underreamer of the character described comprising a body, cutter devices mounted on said body, said devices extending lengthwise of said body and being articulated intermediate the ends so as to be capable of being buckled outwardly into cutter expanded position, the ends of said devices being retained on said body against lateral displacement therefrom, and actuating spring means on said body tending to compress said devices longitudinally and buckle the latter.

1,819,359. LUBRICATING SYSTEM AND LUBRICATOR THEREFOR. ERNEST W. DAVIS, Oak Park, Ill., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 9, 1925. Serial No. 14,316. 6 Claims. (Cl. 184—26.)



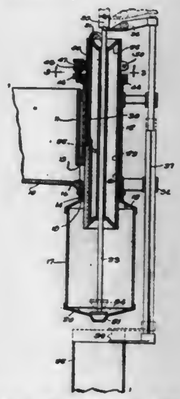
1. A lubricator comprising an oil receptacle, a filling tube projecting downwardly into said oil receptacle, whereby a maximum oil level is established in said oil receptacle, an inertia weight above said maximum oil level, a spring above said maximum oil level and tensioned to balance said inertia weight, a pawl and ratchet mechanism actuated by movement of said inertia weight, a worm gear operated by said pawl and ratchet mechanism, a cam shaft driven by said worm gear, a plurality of cams on said cam shaft, and a plurality of pump plungers, each of said plungers being operated by one of said cams.

1,819,360. ROLL SCREEN INSTALLATION FOR CASEMENT WINDOWS. HARRY DIXSON, Pella, Iowa, assignor to Rolscreen Company, Pella, Iowa. Filed May 13, 1929. Serial No. 362,653. 7 Claims. (Cl. 156—39.)



7. A guide track mounting for use with a roll screen arranged adjacent a window frame, comprising a member having a flat said adapted to contact with a jamb member of the window frame, screws carried by the window frame, said side having slots therein having enlarged portions and contracted portions to receive said screws for permitting said enlarged portions to receive the heads of said screws and thereafter the contracted portions to receive the shank of said screws below the heads thereof, for adjustably retaining said member on the window frame, said member being held against accidental movement relative to said window frame by tightening the screws after the member has been placed and positioned over them.

1,819,361. MEASURING DEVICE FOR FILLING MACHINES. LEE W. DUER, Elgin, Ill., assignor to Elgin Manufacturing Company, Elgin, Ill., a Corporation of Illinois. Filed Sept. 17, 1929. Serial No. 393,285. 10 Claims. (Cl. 226—108.)



1. In a device of the character described, the combination with a measuring container; of a displacement element adapted to adjustably extend into said container to vary the capacity thereof, said displacement element being

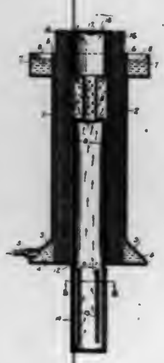
provided with a central hollow tubular portion and an inverted conical portion communicating with said tubular portion; and means for venting air from said container, said means discharging into said conical portion, whereby material carried from said container with the trapped air may be returned to said container through said tubular portion.

1,819,362. TELEPHONE CONSTRUCTION. WILLIAM G. DUNN, Clarinda, Iowa. Filed Aug. 25, 1930. Serial No. 477,664. 16 Claims. (Cl. 179—100.)



2. A telephone construction having a base, a telephone circuit switch associated therewith, a hand instrument adapted to contact with said base whereby the weight of the hand instrument causes the switch to open the telephone circuit when the base is in either a horizontal or vertical position.

1,819,363. FUEL BURNER. ATAULFO FERNANDEZ Y FERNANDEZ, Habana, Cuba. Filed Sept. 3, 1929, Serial No. 390,174, and in Cuba Sept. 18, 1928. 6 Claims. (Cl. 158—67.)

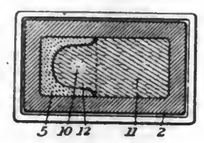


1. A burner comprising a fuel reservoir; an outer tube extending from the reservoir; an inner tube extending through the outer tube, providing an air passage; wires filling the space between the outer and inner tubes and reaching into the reservoir; and means intermediate the ends of the outer tube for diverting air from the inner tube into the interstices between the wires.

1,819,364. HOT TOP. LEWIS GERALD FIRTH, Pittsburgh, and ELMER B. WELCH, McKeesport, Pa., assignors to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Sept. 24, 1929. Serial No. 394,920. 9 Claims. (Cl. 22—147.)

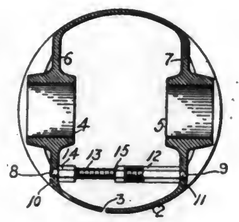
1. A hot top comprising carbonaceous material, said carbonaceous material being impregnated with a fire-proofing material, and a binder.

1,819,365. MOLD. LEWIS GERALD FIRTH, Pittsburgh, Pa., assignor to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Nov. 2, 1929. Serial No. 404,468. 6 Claims. (Cl. 22—126.)



1. A substantially rectangular mold having walls of good heat conducting properties, and a lining of refractory heat insulating material in one end of the mold, said lining covering one end wall and a portion of the adjacent side walls.

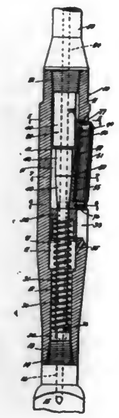
1,819,366. PISTON SPREADER. ROSS N. GIBSON, Lansing, Mich. Filed Dec. 16, 1930. Serial No. 502,817. 4 Claims. (Cl. 74—108.)



1. A piston spreader comprising an extension member having a threaded sleeve provided at the end with a projecting pintle, a threaded core adapted to enter and engage the said sleeve, the said core having a head provided with a projecting pintle, and a lock nut on the said core adapted to be set up against the end of the said sleeve.

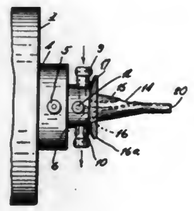
1,819,367. EXPANDING ROTARY REAMER. JOHN GRANT, Los Angeles, Calif. Filed Feb. 14, 1928. Serial No. 254,266. 24 Claims. (Cl. 255—75.)

22. In an expansive reamer, a vertically extending body rotatable about a vertical axis, vertically extending cutters mounted in the body, bearing means at the lower ends of the cutters guiding the lower ends in vertical axial movement in the body, bearing means in the body lying between and forming an internal abutment for the upper ends of the cutters and guiding the upper ends



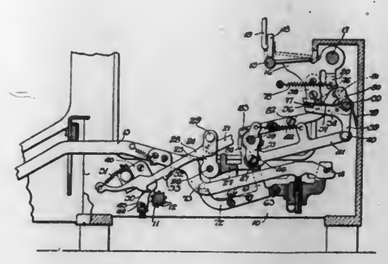
in movements upwardly and outwardly from the axis, and actuating spring means acting on the lower ends of the cutters and tending to move them upwardly.

1,819,368. APPLICATOR FOR ADMINISTERING IRRIGATING FLUIDS AND RADIANT ENERGY TO THE URETHRA. FRANK R. HART, Pacific Grove, Calif. Filed Dec. 4, 1929. Serial No. 411,585. 5 Claims. (Cl. 147—177.)



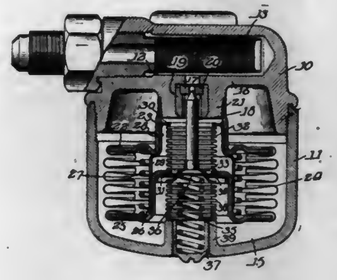
1. A dual-purpose applicator of the kind described, comprising a one-piece structure the heart only of which is composed of substance penetrable by the ultraviolet rays as quartz, a rear end to fit an adapter means, an adapter means connecting said applicator with a source of radiant energy and in axial alinement with the path of said energy, inlet means adapted for connection with a source of fluid supply, an inlet duct adapted to convey fluid toward the distal end of the applicator, an outlet for said inlet duct, a reflow duct adapted to carry fluid back toward said rear end of said applicator and outlet means therefor, said outlet being suitably smaller than said inlet as a means of restricting free flow of fluid through the applicator.

1,819,369. CASE SHIFT MECHANISM. OTTO A. HOKANSON, Woodstock, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed Feb. 24, 1925. Serial No. 11,066. 21 Claims. (Cl. 197—79.)



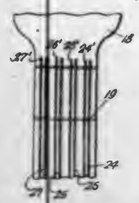
13. In a typewriter, the combination with a case shift device, of a pair of separately movable detents for retaining said device in its shifted position, and a power operated actuator for releasing both of said detents.

1,819,370. EXPANSION VALVE. RASMUS M. HVID, Chicago, Ill. Filed Jan. 10, 1931. Serial No. 507,899. 12 Claims. (Cl. 137—153.)



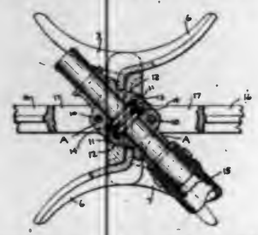
1. In combination, a casing, a wall therein providing low and high pressure chambers, said wall having a port, a needle valve controlling said port, a bellows in the low pressure chamber, said bellows having an axial opening, one end of the bellows being fixedly connected to said wall, a floating bellows head to which the opposite end of the bellows is connected, means for guiding the reciprocation of said bellows head, means connecting the bellows head and needle valve, a spring tending to expand said bellows and to open said needle valve, a second bellows surrounding the needle valve and connected at one end to said bellows head, a second spring tending to close said needle valve, and a third bellows surrounding said second spring, said second and third bellows and said springs and needle valve being with the axial opening in the first bellows.

1,819,371. PLUCKED STRING MUSICAL INSTRUMENT. FRANK KORDICK, Chicago, Ill., assignor to Regal Musical Instrument Co., Chicago, Ill., a Corporation of Illinois. Filed July 2, 1928. Serial No. 289,837. 11 Claims. (Cl. 84—267.)



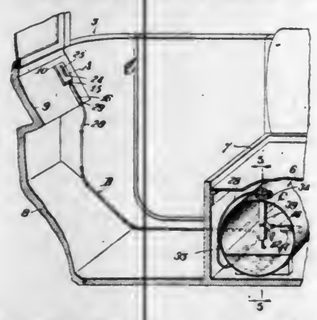
10. A guitar type musical instrument, in which the strings are strung in combinations for simultaneous vibration of the several strings of each combination in the playing of the instrument, and a plurality of said string combinations including a main string for sounding the fundamental tone, and an auxiliary string higher in pitch than said main string and tuned to sound simultaneously with said main string, a harmonic of the latter.

1,819,372. AUTOMATIC TRAIN PIPE COUPLING HEAD. ALBERT A. LECLERC, Westmount, Quebec, Canada, assignor to Joseph Robinson, Westmount, Quebec, Canada. Filed Apr. 4, 1921, Serial No. 458,596. Renewed June 25, 1929. 8 Claims. (Cl. 285,58.)



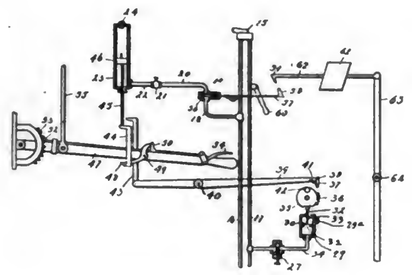
1. An automatic train pipe coupling head, comprising suitable guiding means for aligning the head with a counterpart head, and a conduit pivotally mounted on the head and having a portion extending through the head and adapted to engage and rest against a rigid part of a mating head whereby when the two heads are connected said conduit is held against and in alignment with the conduit of the mating head.

1,819,373. LIQUID LEVEL GAUGE. HANS LUNDQUIST, Chicago, Ill., assignor to United States Specialty Corporation, a Corporation of Illinois. Filed Sept. 10, 1921. Serial No. 499,765. 12 Claims. (Cl. 73—82.)



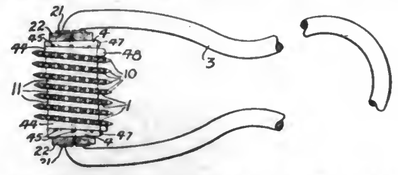
1. In a device of the character described, in combination, a transparent tube, a casing which is in axial alinement with said transparent tube, means for relatively longitudinally adjusting the tube and casing, a flexible cable extending through said tube and casing, actuating mechanism connected to said cable, a resiliently extensible housing surrounding said cable and adjustably connected to said casing, and means in said casing for maintaining said cable under tension.

1,819,374. TRAIN STOP. MICHAEL MAILE, Philadelphia, Pa., assignor of one-sixth to Evangelino Maile, one-sixth to Nicala Barattucci, and one-sixth to Angelo Chioli, Philadelphia, Pa. Filed June 8, 1928, Serial No. 283,795. Renewed Jan. 9, 1931. 8 Claims. (Cl. 246—188.)



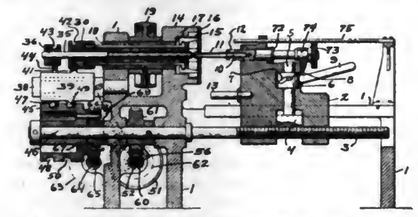
1. In a train stop, the combination with the throttle lever of a locomotive and the air brake system of a cylinder, a conduit connecting the supply pipe of the air brake system with one end of the cylinder, another conduit connected with the cylinder adjacent the opposite end and also with the brake line, a piston slidably mounted in the cylinder and operated in one direction by air passing from the supply pipe, means connecting the piston with the throttle for releasing and operating the latter in one direction to shut off the steam supply, a valve in the first mentioned conduit and including a valve stem, means to permit the manual closing of said valve, a hook on the outer end of said valve stem, a companion hook, means to oscillate said hook longitudinally from a movable part of the locomotive when the latter is running and which hook when in engagement with the hook on the valve stem will open the valve in the conduit between the air supply pipe and the cylinder, a number of cams revolubly mounted on a shaft, a ratchet wheel associated with said cams, means dependent upon a ramp adjacent track rails over which the locomotive travels to give an initial movement to the cams and ratchet wheel, a cam operating hook associated with the oscillating hook and oscillating therewith, means to normally hold said cam operating hook out of engagement with said ratchet wheel, and engageable by one of the cams but released upon the initial movement of said cams whereby said cam operating hook will engage the ratchet wheel to intermittently rotate said wheel and cams, a bell crank lever in the path of travel of another of the cams and coacting with the companion hook to hold it out of engagement with the hook on the valve stem until released by the rotation of the cams, a rest pin also co-operating with the companion hook, electrically operated means to project the rest pin under the companion hook and prevent its engagement with the hook on the valve stem, means co-operating with another of the cams and with the rest pin to withdraw the latter from the companion hook while the bell crank lever is in a position to prevent operation of the companion hook so that the non-actuation of the rest pin by the electrical operating means and the subsequent release of the bell crank lever by its cam will permit the companion hook to engage the hook on the valve stem to operate the valve and admit air to the cylinder, and means adjacent the track rails at signal points to supply electric current to the rest pin electrically operating means.

1,819,375. CHECK PROTECTOR. FRANK J. MATTHEWS, Seattle, Wash. Filed Jan. 15, 1930. Serial No. 420,933. 8 Claims. (Cl. 101—26.)



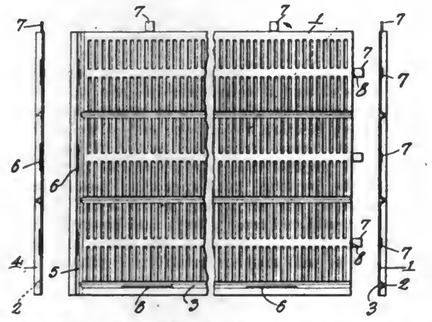
1. A check protector comprising a handle and a plurality of independent rollers supported thereon, means upon the peripheries of said rollers for marking the surface of a piece of paper over which they may be drawn, and means for altering the relative positions of the marking devices on adjacent rollers.

1,819,376. TUBE SWAGING MACHINE AND METHOD. FRIEDERICH MÜLLER, Elizabeth, N. J. Filed Aug. 25, 1924. Serial No. 733,930. 23 Claims. (Cl. 78—14.)



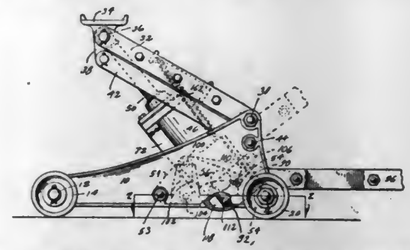
3. Tube forming apparatus comprising in combination a swaging head including a plurality of radially vibrating swaging members distributed about the position of the tube to be operated upon, means for intermittently driving said members toward the axis of the tube, means for passing the tube beneath said members, means for varying the approach of said members to said axis under the action of said driving means, a mandrel adapted to present varying diameters for cooperation with said swaging members and means for interconnecting said approach varying means and said mandrel to operate in predetermined relationship.

1,819,377. METAL LATH. NELS H. NELSON, Elbow Lake, Minn. Filed June 24, 1930. Serial No. 463,449. 1 Claim. (Cl. 72—116.)



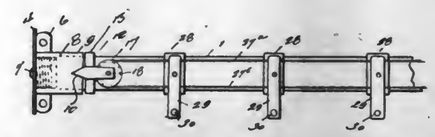
Sheet-metal laths abutting at their adjoining edges and having their corresponding faces flush, there being ribs adjacent to two edges of each lath and diverging from one of the corners thereof, and tongues extending from the other edges of each lath, each of the ribs having openings into which the tongues of the adjoining laths project.

1,819,378. CURB HYDRAULIC AND GENERAL GARAGE SERVICE JACK. LEONARD D. NILSON, Wayzata, Minn., assignor to Marquette Manufacturing Company, St. Paul, Minn. Filed Aug. 19, 1929. Serial No. 386,964. 5 Claims. (Cl. 138—9.)



1. In a hydraulic jack, a frame, a lifting arm having one end pivoted thereto and normally slanting downwardly from the pivotal connection of said lifting arm to said frame, a lifting head on the other end of said lifting arm, a hydraulic extensible mechanism having one end pivoted to said frame and its other end connected with said lifting arm, said lifting arm slanting upwardly at an angle from said lifting arm pivot when the hydraulic mechanism is extended, a pump structure carried by said hydraulic extensible mechanism and including a pump plunger at right angles to the longitudinal axis of said hydraulic extensible mechanism, a handle pivoted to said frame and link connections extending upwardly from said handle to said plunger and arranged to assume a position substantially parallel with said plunger throughout the pivotal movement of said hydraulic extensible mechanism with respect to said frame.

1,819,379. HANGER FOR DRAPERIES. CHARLES S. NUDELMAN and HARRY KRUGLICK, Chicago, Ill. Filed Mar. 29, 1930. Serial No. 440,019. 6 Claims. (Cl. 156—20.)

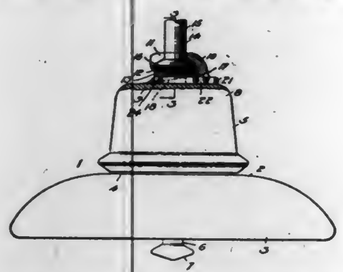


4. In a support for draperies of the type having a rod on which the draperies are mounted, a bracket at each end of the rod, each bracket having a socket member for receiving the end of the rod, and a supporting part for attachment to a brace, the periphery of the socket member having a notch therein, a combined pulley mounting and clamping device carried on each end of the rod and formed with a ring-like body portion on which the pulleys are positioned, a tooth on the body portion, means for clamping the ring-like body on the rod, and the tooth provided on said ring-like body designed for locking engagement with the notch in the socket member of the bracket so that the rod will be rigidly supported in the bracket when the ring-like body is clamped on the rod.

1,819,380. INSULATOR CONNECTION. DAVID H. OSBORNE, Victor, N. Y., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Feb. 4, 1924. Serial No. 690,453. 2 Claims. (Cl. 287—184.)

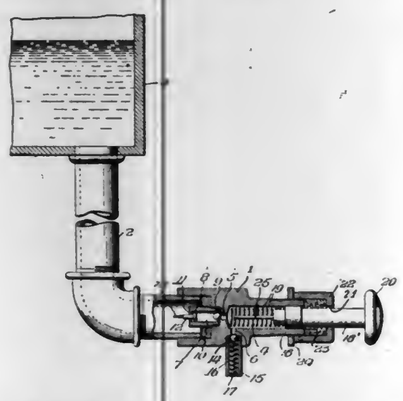
1. The combination with a suspension insulator, of a cap therefor having a hollow projection at its top formed with a slot in its top and an opening in its side communicating with the slot, a headed bolt adapted to have its head engaged within said hollow projection and including a stem portion adapted to extend through said

slot, said hollow projection having an opening in its side opposite said first named opening, a retaining member extending through said last named opening at right angles to the axis of the cap and bolt and located beneath the head of the latter for preventing disengagement of the bolt from the cap, said retaining member being in inter-



locking engagement with the second named opening to prevent withdrawal, and means within the projection engageable by opposite sides of the retaining member to guide the same and prevent lateral movement thereof, said last named means being formed as a pair of spaced ribs located in substantially parallel relation to said retaining member.

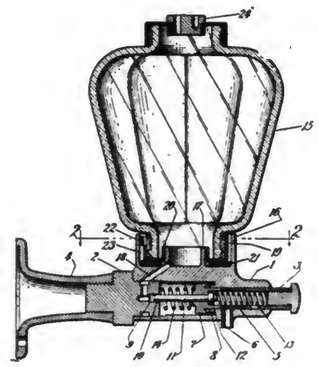
1,819,381. DISPENSING FAUCET. JOHN FREDERICK PALMER, Milwaukee, Wis. Filed Aug. 23, 1921. Serial No. 494,698. 15 Claims. (Cl. 221—91.)



1. A liquid dispensing faucet to which liquid under pressure is supplied, comprising a casing having a liquid receiving chamber therein, an inlet and an outlet for the receiving chamber, an inlet check valve adapted when seated to prevent discharge of liquid from the receiving chamber through the inlet, a second inlet valve adapted under pressure of the liquid supplied to the faucet to close the inlet, an outlet check valve and a piston within the receiving chamber controlling the opening and closing of said valves, a charge of liquid being admitted through the inlet to the receiving chamber by the outward movement of the piston and discharged therefrom by the inward movement of the piston.

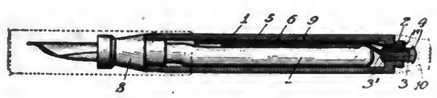
1,819,382. DISPENSER. JOHN FREDERICK PALMER, Milwaukee, Wis., assignor to Palmer Products, Inc., Waukesha, Wis., a Corporation of Wisconsin. Filed June 11, 1928. Serial No. 284,430. 11 Claims. (Cl. 221—94.)

1. A dispensing faucet having in combination therewith a glass receptacle for the liquid to be dispensed thereby, a socket arranged on said faucet and having ratchet notches in the walls thereof, a threaded nipple arranged in said socket and having a passage communicating with the chamber of said faucet, a ferrule base for said receptacle having a threaded opening to screw onto said threaded



nipple and draw and hold said base in said socket, a gasket arranged in said socket to be compressed by said base to provide and maintain a tight connection between said receptacle and said faucet, and a pawl arranged on said base to engage said ratchet notches to prevent the base from being loosened in said socket.

1,819,383. FOUNTAIN PEN. KENNETH SAFFORD PARKER, Janesville, Wis., assignor to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Continuation of application Serial No. 232,255, filed Nov. 10, 1927, and in Canada Dec. 2, 1927. This application filed May 18, 1928. Serial No. 278,864. 9 Claims. (Cl. 120—46.)

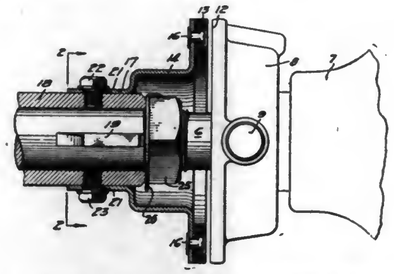


1. In a fountain pen having a barrel, a pen-point section at one end and a collapsible ink sac, the combination of a pressure bar adapted to be pressed against said sac, a resilient member having one end adjacent the end of the barrel remote from the pen-point section and adapted to be pressed inwardly lengthwise of the barrel to operate the pressure bar, anchoring means for said resilient member, the anchoring means being secured to said barrel at said end remote from said pen-point section, and means in said remote end of said barrel for pressing said one end of said member inwardly lengthwise of said barrel.

1,819,384. GOLD SUCCINIMIDE COMPOUND AND PROCESS OF MAKING THE SAME. WILLIAM JACKSON POPE, Cambridge, England. Filed Oct. 11, 1930, Serial No. 488,186, and in Great Britain July 19, 1929. 6 Claims. (Cl. 260—11.)

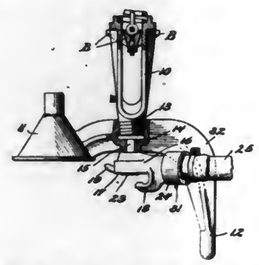
6. A compound of a non-cyclic nitrogen base, gold and succinimide.

1,819,385. CLUTCH BRAKE. WILLIAM H. RADFORD, San Leandro, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed May 20, 1929. Serial No. 364,655. 6 Claims. (Cl. 188—71.)



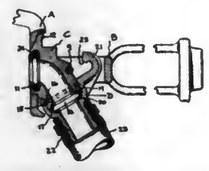
1. A clutch brake comprising a rotatable shaft, a non-rotatable ring surrounding said shaft, a cup encompassing said shaft and adapted to abut said ring, and means for fastening said cup to said shaft in any one of several axially and circumferentially spaced positions.

1,819,386. AUTOMATIC TRAIN PIPE CONNECTER. JOSEPH ROBINSON, Morristown, N. J. Filed Oct. 21, 1921. Serial No. 509,871. 2 Claims. (Cl. 285—58.)



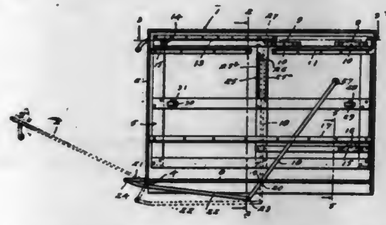
1. In an automatic train pipe connecter, in combination, a connecter head, a train pipe hose, means for centering said head on a mating head, a coupling rotatably mounted on the end of said hose, said coupling having a flat face thereon adapted to form the coupling face of the head when said coupling is mounted on the head, means for detachably mounting said coupling on said connecter head with said flat face thereof arranged at right angles to the longitudinal direction of the connecter, whereby said coupling may be detached from said head and rotated to a position to engage a conventional type of railway hand hose coupling.

1,819,387. AUTOMATIC TRAIN PIPE CONNECTER. JOSEPH ROBINSON, New York, N. Y. Refiled for abandoned application Serial No. 460,436, filed Apr. 1, 1921. This application filed Dec. 28, 1927. Serial No. 243,129. 2 Claims. (Cl. 285—58.)



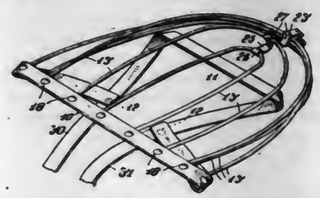
1. A coupling device adapted to connect the hose on a railway car to an automatic connecter head on said car or to a hose provided with a conventional type of railway hand hose coupling, said device comprising a tubular member secured to the end of said hose, a second tubular member arranged in line with and rotatably connected to said first member, said second member having a flat face thereon surrounding the open end of the bore therein, said face being arranged obliquely to the axis of rotation of said second tubular member.

1,819,388. OVEN RACK. ROBERT S. ROSSELLE, Seattle, Wash. Filed May 31, 1930. Serial No. 458,422. 3 Claims. (Cl. 126—340.)



1. In combination, an oven having a hinged door, a rack, means supporting the rack for sliding movement into and out of the oven, a keeper carried by the rack, a lever pivoted to the oven and occupying a position beyond the keeper when the door is closed, means connecting the lever to the door for movement in the direction of the keeper during the first phase of the opening movement of the door, and means carried by the lever and adapted to engage the keeper when the lever reaches the keeper to permit the withdrawal of the rack during the remaining phase of the opening movement of the door and to permit the lever to move the rack back in the oven during the first phase of the closing movement of the door.

1,819,389. MARCEL WAVER. JOHN J. RYAN, Chicago, Ill. Filed July 2, 1930. Serial No. 465,253. 3 Claims. (Cl. 132—38.)

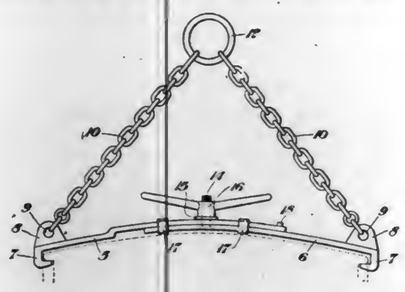


1. A collapsible hair waving structure comprising an upright horseshoe-shaped front frame member of flexible collapsible material, a horizontal horseshoe-shaped neck member connected to said front upright member, intermediate relatively stiff horseshoe-shaped members connected at spaced-apart points to said front upright member, a binding member connected to all of the aforesaid intermediate members and to the neck member to aid in spacing said intermediate members apart when the structure is fitted to the head of a person, said binding member being of flexible collapsible material, and flexible tie members connected to said structure for fastening said structure in position on the head of a person.

1,819,390. SLING. EDWARD SEAGER, Duquesne, Pa. Filed Nov. 4, 1930. Serial No. 493,387. 2 Claims. (Cl. 294—16.)

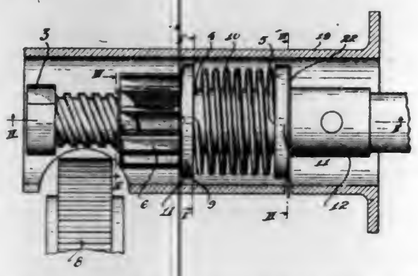
1. A sling comprising a pair of hook bars which overlap at one extremity and are provided with hooks at their opposite extremities, one of said bars being provided with a bolt on its overlapped extremity which projects through

a slot in the other bar whereby the bars may be adjusted to the length of a drum, guide brackets for the overlapped extremities of said bars, stops for limiting the movement



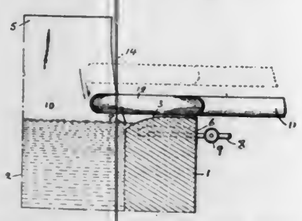
of said bars in said brackets, a clamping device for fixing said bars in adjusted position, and eye-lugs for attaching a suspending means to said bars.

1,819,391. ENGINE STARTER. PARKE T. SNYDER, Chicago, Ill., assignor to Vincent Bendix, Chicago, Ill. Filed July 7, 1928. Serial No. 291,105. 4 Claims. (Cl. 74—7.)



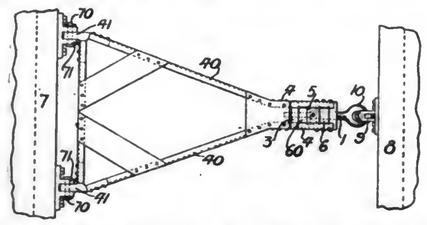
1. In an engine starter comprising a shaft, a sleeve having a threaded connection with said shaft, said sleeve having opposed abutments, a pinion slidably mounted between said abutments and having a yielding connection with one of said abutments and a leaf spring anchored against rotation and normally bearing against one of said abutments for the purpose set forth.

1,819,392. MEANS FOR AND METHOD OF DRAWING GLASS SHEETS OR PLATES. ARTHUR E. SPINASSE, Mount Vernon, Ohio. Filed Oct. 1, 1921. Serial No. 504,652. 23 Claims. (Cl. 49—17.)



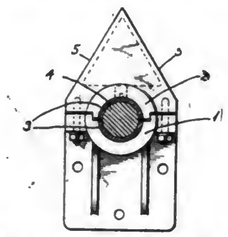
1. In the art of drawing sheet glass from a body of molten glass, the step that consists in intermittently engaging the edge portion of a drawn wedge of plastic glass above the body of molten glass by a squeezing tool, and imparting downward movement to such squeezing tool while the latter is engaged with the edge of the glass wedge.

1,819,393. DRAWBAR CONNECTION. EARL B. STALEY, Seattle, Wash. Filed May 29, 1929. Serial No. 367,036. 2 Claims. (Cl. 280—33.44.)



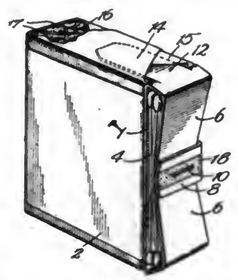
1. A drawbar connection comprising, in combination with the shank of a draft bolt adapted to be coupled to a complemental draft member, a collar secured on said shank intermediate its ends, and having a projecting wing, a pair of end members apertured to receive the opposite ends of said shank, means for coupling said end members together to prevent their relative endwise movement, said means engaging with the wing on said collar to prevent swiveling of the collar and shank, and resilient buffers interposed between said collar and each of said end members.

1,819,394. BEARING. MARCUS B. TARK, Philadelphia, Pa., assignor to Link-Belt Company, Philadelphia, Pa. Original application filed June 18, 1929, Serial No. 371,876. Divided and this application filed Nov. 21, 1930. Serial No. 497,291. 3 Claims. (Cl. 308—74.)



3. A bearing completely enclosed, except for the shaft aperture, by walls which are either sharply inclined or vertical, and walls which face downward; said sharply inclined walls terminating at their lower edges only at the lateral boundaries of the bearings; whereby said bearing is without upwardly facing horizontal surfaces or pockets.

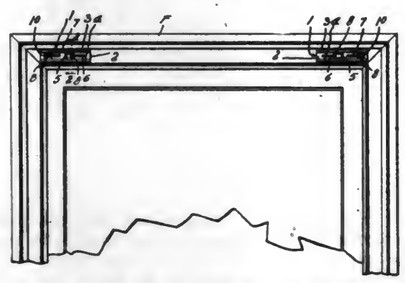
1,819,395. MATCH PACKET. JACOB O. TRAUTWEIN, Chicago, Ill. Filed Sept. 18, 1929. Serial No. 393,348. 4 Claims. (Cl. 206—48.)



1. A packet for matches comprising a blank having a main body portion adapted to contact the side of the cigarette package, said main body portion being approximately of the same length as the cigarette package, a flap

extending from the end of the body portion and adapted to cover the outside of the matches, a lateral extension attached to the side of the main body portion and adapted to be folded over and attached to the outer side of said main body portion for retaining the free end of said flap, and tongues struck from said main body portion and attached thereto at the ends thereof, said tongues being narrower than said main body portion and having free ends whereby they may be readily inserted beneath the end folds of the cigarette package.

1,819,396. CURTAIN AND SHADE FIXTURE. EUGENE VALOPPI, Scranton, Pa. Filed Apr. 9, 1923. Serial No. 630,812. 1 Claim. (Cl. 156—24.)

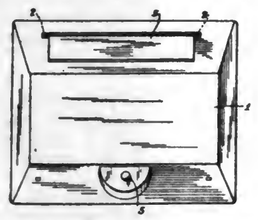


A curtain shade fixture comprising an elongated plate, the longitudinal edges of the plate being extended inwardly providing flanges spaced from the plate and forming guideways with the plate, a fixture formed of a length of sheet metal material, a pair of spaced rectangular feet formed integral with the fixture, said feet being spaced greater distances apart at their free ends than at their inner ends, to lend resiliency to the feet, said feet being so positioned within the guideways, and the outer corners of the feet adapted to bite into the plate to restrict movement of the fixture.

1,819,397. PROCESS OF PREPARING CELLULOSE NITROACETATE. WILHELM WALTER, Cologne-Niehl, and LUDWIG LOCK, Dormagen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 14, 1930, Serial No. 467,959, and in Germany July 11, 1929. 12 Claims. (Cl. 260—101.)

1. The process which comprises acetylating cellulose at a temperature between about 50 and 100° C. by means of acetic acid anhydride in acetic acid in the presence of a small amount of a mineral acid and of a salt of nitric acid with a weak base with the addition of a small amount of urea.

1,819,398. ILLUMINATED BUILT-IN MAIL BOX. JOHN H. WEDEHOFT, St. Louis, Mo. Filed Feb. 4, 1929. Serial No. 337,538. 3 Claims. (Cl. 240—2.)

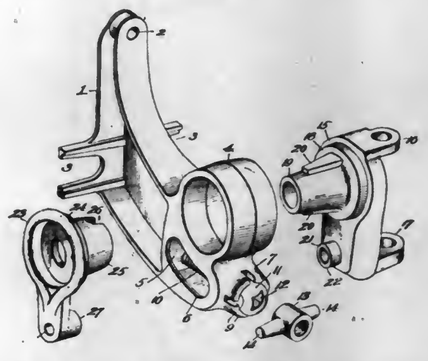


1. In an illuminated built-in mail-box, a one piece glass face plate having a face or protruding portion for name and house-number to be painted on, a back and outwardly extending flange or bevel around face portion to throw light over a large surface, a mail slot opening with cover in upper flange or bevel and a bell shaped raised center with doorbell button in lower flange or bevel, a lamp placed within the box and illuminating the name, house-number, and door-bell button, said light being otherwise unobstructed, and serving the additional function of a porch light.

1,819,399. MEDIA FOR COMBATING ANIMAL AND VEGETABLE PESTS. GEORG WESENBERG, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 14, 1929, Serial No. 347,181, and in Germany Mar. 20, 1928. 3 Claims. (Cl. 167—14.)

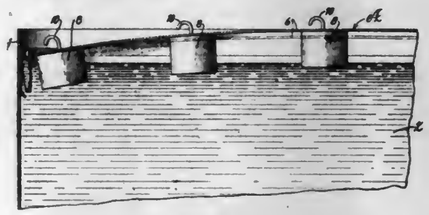
3. As a new medium for combating animal and vegetable pests the sodium salt of hydrazoic acid.

1,819,400. AWNING ARM SUPPORT. FREDERICK A. ANTON, Topeka, Kans. Filed Oct. 27, 1930. Serial No. 491,456. 5 Claims. (Cl. 156—44.)



4. In an awning support, a hanger having a head provided with a forwardly-projecting nose having a rounded socket open at both ends, the nose having bendable forwardly-projecting lips, means mounted on the head for rotary adjustment, a screw swivelled in the said socket and retained therein by said lips, and a nut upon the screw and provided with oppositely-projecting pins pivotally connected to said rotatable means eccentrically of the axis thereon.

1,819,401. FLOATING ROOF. OTTERBEIN A. BAILEY, Chicago, Ill., assignor to Chicago Bridge and Iron Company, a Corporation of Illinois. Filed Dec. 22, 1926. Serial No. 327,956. 3 Claims. (Cl. 220—26.)



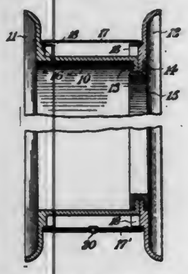
1. In combination with a liquid storage tank, a roof supported by a plurality of floats under the same adapted to float on liquid in the tank, said roof capable of flexing upwardly and downwardly, and provided with a depending peripheral rim defining a gas space under the same, said floats having the proper buoyancy and weight and so distributed as to permit flexing of said roof with variations in gas pressure under the same.

1,819,402. TANK HEATER. OTTERBEIN A. BAILEY, Chicago, Ill., assignor to Chicago Bridge & Iron Company, a Corporation of Illinois. Filed May 5, 1930. Serial No. 449,992. 1 Claim. (Cl. 257—198.)



In combination with an elevated tank and riser, an elongated heating element in the riser, and a circulating pipe surrounding said heating element and spaced therefrom, said circulating pipe being open at the top and bottom and extending up into the bottom of the tank.

1,819,403. WHEEL RIM. FREDERICK WILLIAM BAKER, Oldswinford, Stourbridge, England, assignor to Trinity Wheel Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 25, 1916, Serial No. 131,511. Renewed Oct. 3, 1928. 4 Claims. (Cl. 152—20.)



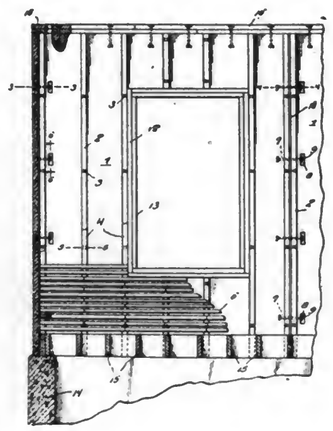
1. In combination with a drop center rim, a tire bed comprising a thin, flat, flexible band adapted to lie free in the rim and span the center part thereof, said band having means at its edges forming springy edge portions adapted to seat on the sides of the rim.

1,819,404. THREAD CUTTER. ORESTO BALZANO, New Haven, Conn., assignor to The Geist Manufacturing Company, a Corporation of Connecticut. Filed Apr. 9, 1930. Serial No. 442,895. 2 Claims. (Cl. 112—252.)



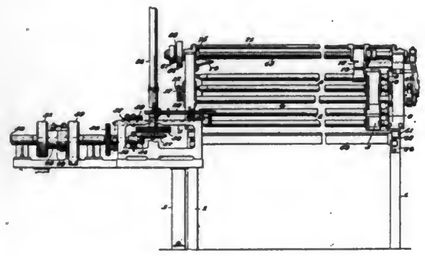
1. A thread cutter consisting of a single thin piece of sheet steel bent to form an attaching spring loop integral with which loop is an extension the end of which is bent to form a flange disposed at an angle to the said extension, said cutter being constructed with a notch, having sharpened edges, between said extension and said flange.

1,819,405. CONCRETE SLAB. FRANK T. BROOKS, Minot, N. Dak. Filed June 20, 1929. Serial No. 372,460. 1 Claim. (Cl. 72—16.)



In a wall construction of the class described, pre-cast slabs having vertically disposed reenforcing ribs formed on the inner faces thereof, bolt-receiving openings formed in the adjacent edge portions of the slabs; and cavities spaced from the ribs in the inner faces of the slabs and at the inner ends of said openings, bolts embedded in the edge portions of the slabs for disposition through the openings in the adjacent slabs, nuts arranged in the respective cavities on the threaded ends of the bolts to secure the adjacent slabs together in wall-forming relation.

1,819,406. ROLL WINDING MACHINE. WILLIAM H. CANNARD, Green Bay, and ALDEN G. LEWIS, La Crosse, Wis. Filed Oct. 3, 1927. Serial No. 223,756. 17 Claims. (Cl. 242—55.)

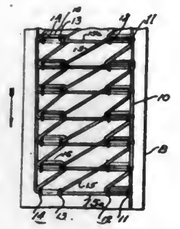


1. In a roll-winding machine, the combination of a carrier, a core-holding member supported at one end by said carrier, means for automatically applying cores to said member, and means for supporting the other end of said member after the cores have been applied thereto.

1,819,407. SEAM FOR SEWED ARTICLES. ROBERT R. CARVER, Cambridge, Mass., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 4, 1928. Serial No. 323,624. 1 Claim. (Cl. 112—266.)

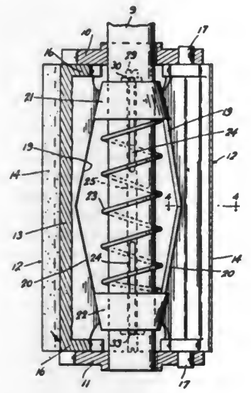
A seam for sewed articles comprising a fabric, a plurality of groups of rows of needle thread loops, said groups being spaced a greater distance than the rows in each group and the needle thread loops in the several rows being disposed in lines extending transversely of the seam, a single looper thread having loops formed

therein extending through the alined needle thread loops in all of the groups, said looper thread being secured by the needle thread loops in one of of the groups formed in



the next stitch and one of the strands of the looper thread loop between the groups being carried laterally and extended about the needle thread loops formed at the next stitch in the other group.

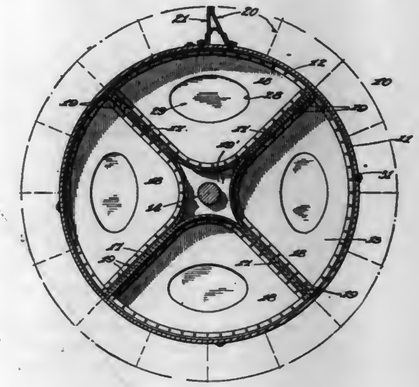
1,819,408. ROTARY HONE. WINCLOW R. CHERMACK, Hopkins, Minn. Filed Nov. 23, 1929. Serial No. 409,651. 3 Claims. (Cl. 184—2.)



1. In a cylinder hone of the class described, a shaft, a pair of longitudinally spaced mounting plates of disk-like form mounted on said shaft, a plurality of circumferentially spaced honing devices, each device comprising a holder, a stone fastened in said holder, an inwardly projecting flange having converging cam edges, a pair of outstanding lugs, pintles carried by said lugs and eccentrically pivoted in bearing openings in said plates, automatically operable expanding means cooperable with said cam edges and mounted on said shaft, and embodying a pair of shiftable longitudinally spaced spring-pressed conical expanders and adjustable stops for limiting the movement of the said expanders away from each other.

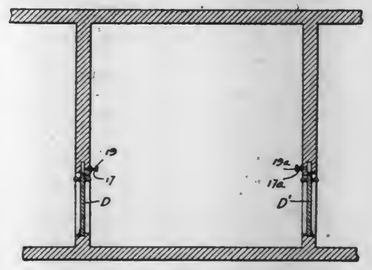
1,819,409. BUOYANT DRUM FOR MOTOR PONTOONS. CHESTER J. DU MOND, Jersey City, N. J. Filed Apr. 4, 1927. Serial No. 180,845. 2 Claims. (Cl. 170—142.)

1. In a pontoon propeller comprising a buoyant drum, paddles extending lengthwise of the periphery of said drum and equi-distantly spaced therearound, each of said paddles including a front plate having an angularly disposed flange resting upon said drum, an angle bar disposed over said flange and riveted thereto and to said drum and front plate, a rear plate having offset flanges along its longitudinal edges, one of which rests upon said drum and the other against a strip interposed between the outer end of said front plate and said last flange, rivets passing through said last flange, strip, and front plate to



hold the same together, an angle iron seated against the lower flange and back plate and riveted thereto and to said drum, and a brace member interposed between said front and back plates for maintaining said back plate at an acute angle with respect to said front plate.

1,819,410. LOCKING APPARATUS FOR DOORS. CHARLES B. FINKENBINDER, Los Angeles, Calif. Filed Sept. 29, 1926. Serial No. 138,481. 8 Claims. (Cl. 70—50.)

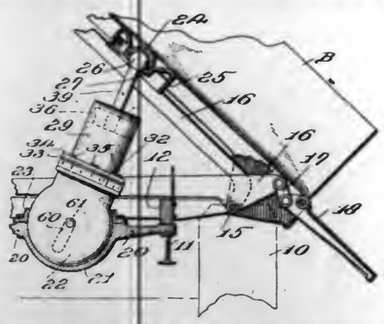


1. In a multiple door locking mechanism, a lock for each of the doors, manually operable means for actuating the lock of each door and electrical means by which the locks for all of the doors are operated to lock or unlock the doors according as the lock for any one door is manually operated to lock or unlock its respective door.

1,819,411. FLUID PRESSURE RAISING MECHANISM. HENRY FORT FLOWERS, Findlay, Ohio. Original application filed Sept. 27, 1924, Serial No. 740,307. Divided and this application filed Nov. 23, 1926. Serial No. 150,330. 7 Claims. (Cl. 298—22.)

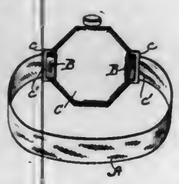
1. In a power unit, a lower socket, a lower ball rockable in said lower socket, a cylinder in said ball, a piston movable in said cylinder and having its external wall spaced therefrom, an inwardly extending flange at the upper end of said cylinder to pack and guide said piston with respect to said cylinder, spaced flange members at the lower end of said piston to guide said piston in said cylinder, an upper socket, an upper ball rockable in said upper socket, a piston rod connecting said piston and upper ball, said lower socket and lower ball having an

interengaging pin and slot connection, said slot having its center line in a plane including the axis of the cylinder piston and piston rod, said pin having its axis passing



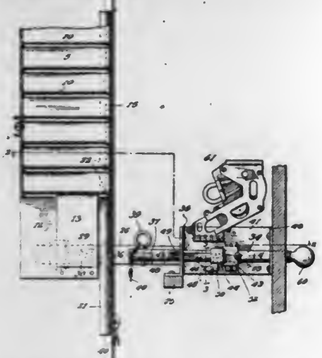
through the center of the ball, and a fluid pressure medium connection to said lower ball located in the plane of said slot and above said lower socket and communicating with the interior of said cylinder above the position of said lower flange members when the unit is collapsed.

1,819,412. FASTENING MEANS. ANNETTE FRIDOLPH, New York, N. Y., assignor to A. B. A. Specialties Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 1, 1926. Serial No. 151,856. 7 Claims. (Cl. 24—265.)



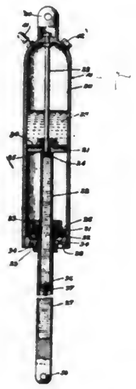
1. In a fastening of the class described, a flexible member and a channeled member encased within a folded part of the flexible member and compacted for effecting the rigid attachment of the two members, said channeled member comprising parts of unequal width.

1,819,413. COIN CONTROLLED MECHANISM. BENJAMIN L. FAY, St. Louis, Mo., assignor to National Sales Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 18, 1929. Serial No. 408,080. 4 Claims. (Cl. 194—71.)



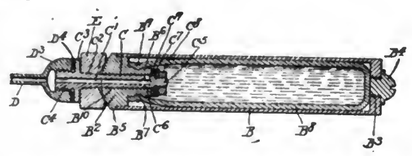
1. In a coin-controlled mechanism, the combination of a coin rest, a plunger operating beside the rest, a dog carried by the plunger and normally projecting from the opposite sides thereof, and a stop at one side of the plunger and adjustable along the same in the path of one end of the dog to normally prevent movement of the plunger, the opposite end of the dog being arranged to engage a coin upon the rest and ride on the coin whereby the stop will be cleared to permit movement of the plunger and the coin will be discharged.

1,819,414. SHOCK ABSORBING DEVICE. RAYMOND L. GRUSS, San Francisco, Calif.; Laura E. Gruss, administratrix of said Raymond L. Gruss, deceased, assignor, by mesne assignments, to California Bank, Los Angeles, Calif., a Corporation. Filed Oct. 22, 1928. Serial No. 313,987. 4 Claims. (Cl. 267—64.)



4. In a shock absorbing device of the pneumatic cylinder type, the combination of a cylinder adapted to contain air under pressure, a piston operating within said cylinder, a hollow piston rod secured to said cylinder, a stop for limiting the outward movement of said piston to a point intermediate the ends of said cylinder, a second piston operating within said cylinder below said first piston, a second hollow piston rod telescoping over said first piston rod, said first hollow piston rod being in communication with the pressure chamber of said cylinder and adapted to contain oil, and a communicating passageway between said first and second hollow piston rods whereby oil may flow therebetween to permit the pressure within said cylinder to be applied through said oil to extend said hollow piston rods when the load is removed therefrom.

1,819,415. HYPODERMIC BULLET. BARNETT HARRIS, New York, N. Y., assignor of one-half to Channing R. Dooley, Summit, N. J. Filed Sept. 19, 1927, Serial No. 220,483. Renewed Nov. 7, 1930. 18 Claims. (Cl. 102—12.)



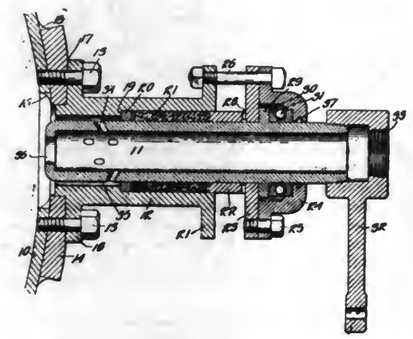
1. In a hypodermic bullet, a needle, a yielding walled reservoir adapted to contain a chemical charge, means for maintaining a charge contained normally within said reservoir and means for discharging said charge upon contact of the bullet with the target, including a perforated stem associated with said needle and adapted to be thrust inwardly into said reservoir in response to the impact of the bullet against the target.

1,819,416. COMPOSITIONS OF MATERIALS AND METHOD FOR PRODUCING THEM. MORTIMER T. HARVEY, East Orange, N. J., assignor to The Harvel Corporation, Newark, N. J., a Corporation of New Jersey. Filed Aug. 8, 1928. Serial No. 298,412. 20 Claims. (Cl. 106—23.)

1. As a new composition, a solution of rubber in cashew nut-shell liquid.

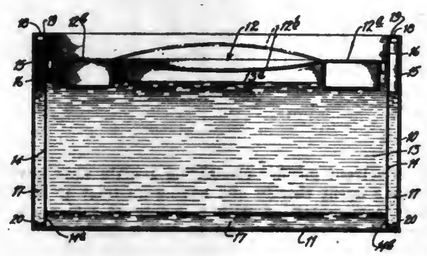
15. The method which comprises vulcanizing cashew nut shell liquid and then intermixing the same with rubber and continuing vulcanization.

1,819,417. JOINT PACKING. JULIUS H. HOLMGREEN, San Antonio, Tex., assignor to Alamo Iron Works, San Antonio, Tex., a Corporation of Texas. Filed Jan. 31, 1929. Serial No. 336,421. 3 Claims. (Cl. 285—96.)



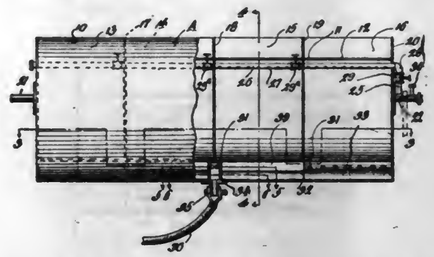
1. A journal packing comprising a hollow sleeve provided with a restricted discharge end, a stuffing box, a plurality of packing elements between said sleeve and said stuffing box adapted to hold the sleeve and the stuffing box spaced from each other, a plurality of ports in said sleeve opening into the space between the sleeve and the stuffing box, means for passing fluid through said sleeve and said ports to maintain the space between the sleeve and the stuffing box free of foreign substances, substantially as set forth.

1,819,418. STORAGE TANK. GEORGE T. HORTON, Chicago, Ill. Filed May 25, 1928. Serial No. 280,509. 5 Claims. (Cl. 220—26.)



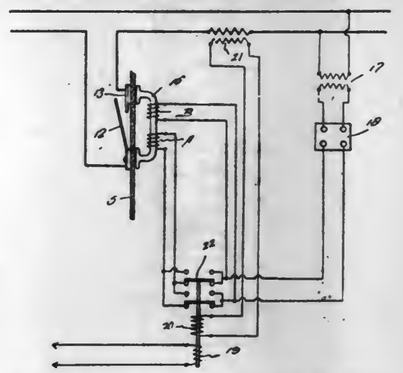
1. A storage tank including; an outer shell; a yieldable inner shell of relatively light sheet metal spaced therefrom and extending substantially to the tank bottom; a fluid passage between the space bounded by the inner shell and the space between the shells to equalize the pressure on both sides of the inner shell; and a roof having a sealing contact with the inner shell adapted to float upon liquid therein.

1,819,419. WASHING MACHINE. DAVID E. JACKSON, Olympia, Wash. Filed Apr. 3, 1928. Serial No. 267,025. 1 Claim. (Cl. 68—21.)



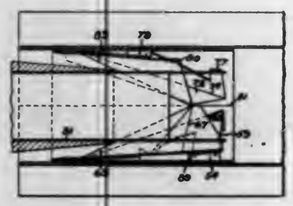
In a clothes washing machine, a tub, a plurality of partitions arranged in said tub defining a plurality of independent clothes receiving compartments, a false bottom for each compartment defining in connection with the bottom wall of the tub a drain receiving compartment, each of the false bottoms having a plurality of drain openings therein, a centrally disposed drain plug in the bottom wall having upper and lower drain openings therein, a drain nipple carried by said plug extending exteriorly of the tub, the lower set of drain openings communicating with the drain compartment and certain of the clothes compartments, and drain chambers arranged in the drain compartment communicating with others of the clothes compartments and having communication with the upper set of drain openings in said plug.

1,819,420. VACUUM CIRCUIT BREAKER. CLARENCE KABELE, Schenectady, N. Y. Filed Aug. 22, 1927. Serial No. 214,784. 6 Claims. (Cl. 175—294.)



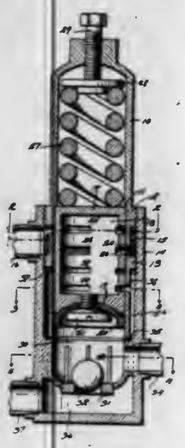
1. In combination, a vacuum container, an electric circuit arranged to extend therethrough, a circuit breaker interposed in said circuit within the container and comprising a plurality of movable breaker strips and a plurality of contact plates engageable thereby, said strips and said plates constituting conductors for the current of the circuit and coacting when arranged in engaged position to create a magnetic field within the container around the strips and plates due to the current passing therethrough at right angles with respect to the direction of flow of current through the circuit, a plurality of field coils disposed outwardly of the container, each having its opposite poles in magnetic relation to a strip and corresponding contact plate, means connecting the coils in a shunt circuit with said first named circuit, said coils being adapted to oppose or assist said magnetic field within the container and means for connecting said coils with said circuit for action by the variations in the load subjected thereon.

1,819,421. SELF-LOCKING VALVE BAG. MARVIN R. KENDALL, Port Townsend, Wash. Filed Feb. 3, 1930. Serial No. 425,457. 20 Claims. (Cl. 150—9.)



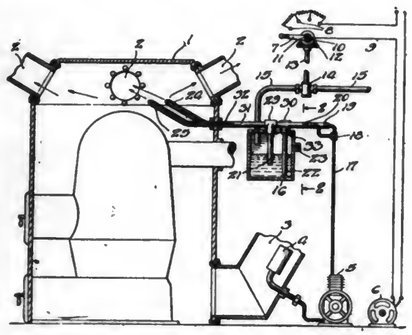
1. A bag having an end-closing seam and a filling opening at one end of the seam, the walls around said opening being of a character to receive definite fold lines and having formed therein a fold line on the side of the opening opposite the seam and a fold line on each side midway between the seam and the first said fold line, all of said fold lines being substantially parallel with said seam.

1,819,422. RELIEF VALVE FOR PRESSURE PUMPS. OMAR C. KIGER and RAY SHELTON, Yakima, Wash. Filed Mar. 27, 1930. Serial No. 439,441. 2 Claims. (Cl. 137—153.)



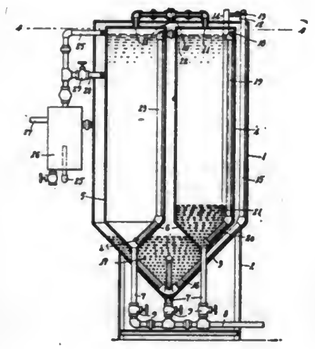
1. A pressure relief mechanism including a valve casing having a relief port adjacent one end, a hollow piston valve operating within the casing and having a port adapted to communicate with the relief port, the lower end of the valve casing being formed to provide a pressure inlet chamber and a valve seat, a check valve normally resting upon said seat and disposed between the inlet chamber and the piston valve, the space between said check valve and the piston valve having an outlet port, a duct communicating with the inlet chamber and extending to and communicating with the interior of the casing by a port, the piston valve having a port adapted to communicate with said last named port when the piston is shifted to a position where the first named port of the piston communicates with the relief port, and means urging the piston into a position where said ports are out of register with each other.

1,819,423. AIR HUMIDIFIER. WILLIAM KNOWLTON and WILLIAM S. VAUGHAN, Glen Ellyn, Ill. Filed Apr. 21, 1930. Serial No. 446,048. 2 Claims. (Cl. 126—113.)



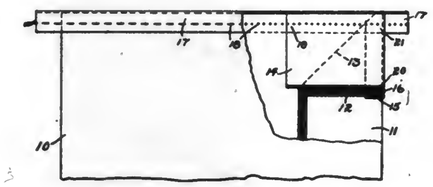
1. In combination with a heating apparatus and a jacket surrounding said heating apparatus, said jacket having a cold air intake and a plurality of warm air exits therein, means for withdrawing air from said cold air intake, means for compressing said air, means adapted with said compressed air to atomize water, and means for injecting said compressed air and atomized water into the path of heated air flowing out of said warm air exits in said jacket.

1,819,424. GASOLINE PURIFIER. HERMAN WILLIAM KRINER, Greensboro, N. C. Filed Feb. 23, 1929. Serial No. 342,277. 2 Claims. (Cl. 210—58.)



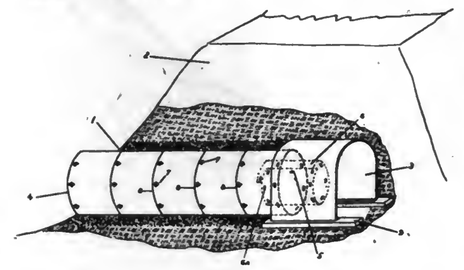
1. A solvent purifier comprising a main tank having a purifying agent therein and having an inlet at its upper end in communication with a supply of solvent, a pipe connected to said inlet and having a discharge opening near the lower end of said tank, a second tank housed in the main tank and having a purifying agent therein and having an inlet communicating with the upper portion of the main tank, a pipe connected to the inlet in said second tank and having a discharge opening near the lower end of said second tank, a third tank housed in the main tank and communicating with said second tank in its upper portion, and a filter supported by the main tank, said third tank having a plurality of communications with said filter whereby the solvent can be drawn off from the third tank at different levels.

1,819,425. VALVE BAG. CARL G. KRÖNMILLER, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed June 30, 1928. Serial No. 289,344. 7 Claims. (Cl. 150—9.)



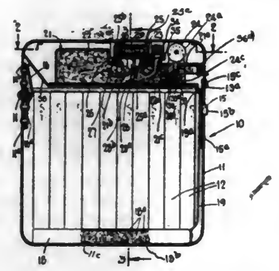
1. A valve bag comprising a body portion cut square across its end and having a gusset fold in its side, the apex of the fold being folded downward and outward at one end, and a sheet of material having one end attached to the end of the gusset fold where it is folded outward and having its other end extending inward.

1,819,426. METHOD OF CONSTRUCTING METAL CULVERTS OR TUNNELS. GEORGE E. LADD, Washington, D. C. Filed May 10, 1928. Serial No. 276,751. 8 Claims. (Cl. 61—45.)



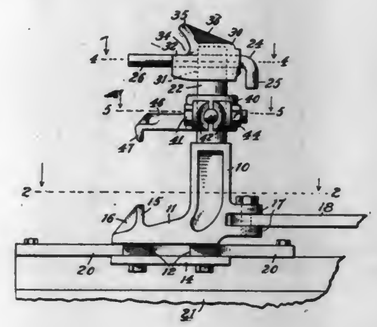
1. A method of constructing a culvert comprising moving convolved culvert sections through a completed portion of the culvert, forcibly expanding said sections, securing said expanded sections to the completed portion of the culvert and securing said expanded sections in a predetermined expanded position.

1,819,427. COMBINATION POCKET SMOKER'S ACCESSORY. LOUIS F. MAISTO, Brooklyn, N. Y., assignor of one-half to Colombo Maisto, Brooklyn, N. Y. Filed Feb. 23, 1928. Serial No. 256,141. 1 Claim. (Cl. 206—41.6.)



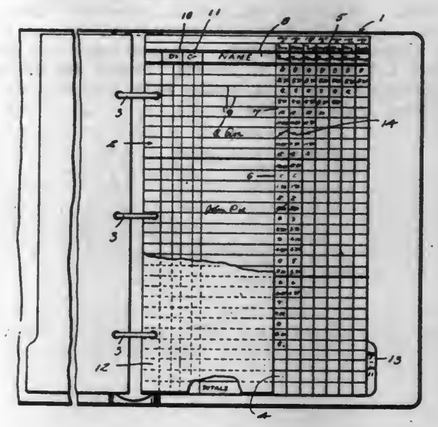
A smoker's pocket accessory of the character described comprising a case having a bottom closure and an opening opposite said closure, a humidifier demountably positioned in said case against said closure and a spring member extending from said humidifier along an inner wall of the case to said opening to retain the humidifier in position and to facilitate the removal thereof.

1,819,428. JAW. ROBERT E. MANLEY, York, Pa., assignor to Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed Oct. 15, 1926. Serial No. 141,847. 8 Claims. (Cl. 157—1.)



1. In a device for assembly with a jaw, a cap having a socket therein to receive a portion of the jaw, a pin for fastening the cap to the jaw and for supporting a rim.

1,819,429. APPOINTMENT BOOK. CLARENCE H. MANZLER, Rochester, N. Y. Filed Jan. 14, 1930. Serial No. 420,762. 4 Claims. (Cl. 283—42.)



1. An appointment record of the character described, comprising a group of sheets of progressively increasing width providing a longitudinally extending exposed portion of each, lines dividing the exposed portion of each sheet into a column of areas having time periods noted therein, the top of each column having a day of the week noted therein, and a calendar sheet forming the back or bottom sheet for said group and having a portion of the top extending above the first mentioned sheets with indicia thereon indicating a month and the dates of days thereof corresponding to and located above the days noted in the time columns of the overlying sheets.

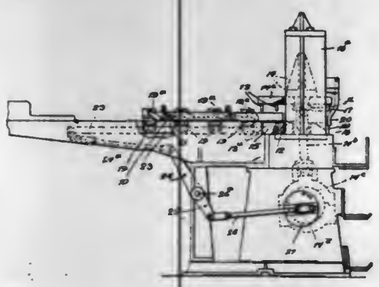
1,819,430. CABLE GRIP. PHILIP J. MARTIN, Elizabeth, and ARCHIBALD T. COLEY, Clifton, N. J. Filed Apr. 22, 1930. Serial No. 446,295. 5 Claims. (Cl. 24—123.)

1. A cable grip formed of a tubular woven mesh of wire strands brought together at the draft end into an



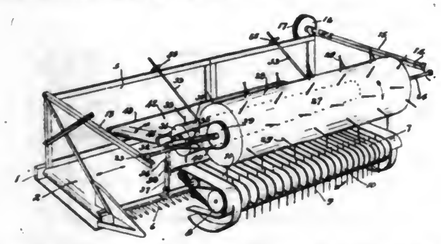
eye, said eye being offset from the axis of said cable grip, and a protecting member secured to the strands of said cable grip, said protecting member being positioned adjacent the draft end of said cable grip and substantially opposite said eye.

1,819,431. APPARATUS FOR FORMING SCROLL-EDGE METAL BLANKS. CHARLES D. MCDONALD, Chicago, Ill., assignor to McDonald Machine Co., Chicago, Ill., a Corporation of Illinois. Original application filed July 7, 1927, Serial No. 203,963. Divided and this application filed Oct. 21, 1929. Serial No. 401,155. 3 Claims. (Cl. 164—48.)



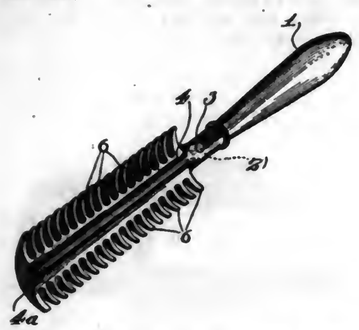
1. Apparatus for producing scroll-edge blanks from a metal sheet comprising notch cutting dies for cutting notches in the opposite edges of the sheet, a blanking die having two undulated cutting edges and transverse end cutting edges, said blanking die being of less length than the width of the sheet and arranged to blank out a scroll-edge blank between the notches and therewith leave an end portion of the sheet in advance thereof, and shearing members disposed transversely to said advance end portion for trimming off recoveries from said advance end portion of the sheet.

1,819,432. ATTACHMENT TO HARVESTER THRASHERS. WILLIAM MICKLE, Pilot Mound, Manitoba, Canada. Filed Jan. 10, 1929. Serial No. 331,511. 11 Claims. (Cl. 56—364.)



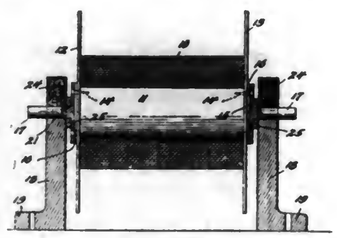
4. The combination with a harvester-thrasher having a table canvas and a pick-up, of a driven rotary feeder suspended above the front side of the pick-up and a driven rotary distributor suspended above the rear side of the pick-up.

1,819,433. COMB. LEONARD L. MILLER, Louisville, Ky. Filed Nov. 12, 1929. Serial No. 406,663. 3 Claims. (Cl. 132—18.)



1. A comb of the class described having a head having top and bottom surface portions, a set of teeth extending angularly from each edge of said head with their ends terminating below the plane of the bottom surface of the head portion, and a medial fulcrum rib projecting outwardly of said bottom surface for tangential engagement with the hair while one of said sets of teeth is being used for combing.

1,819,434. CORD REEL. HARRY S. MONTGOMERY, Oil City, Pa. Filed Jan. 9, 1929. Serial No. 331,200. 6 Claims. (Cl. 242—141.)

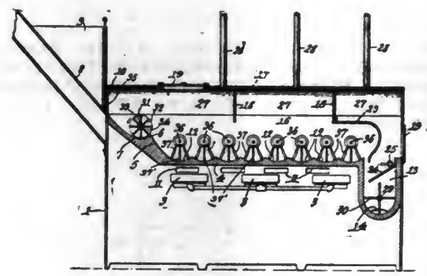


2. In a bearing for a cord reel, a supporting standard, a kerf in said supporting standard at the bottom of which a bearing opening is provided, a shaft insertable in said bearing opening through said kerf, and a block of felt filling said kerf and bearing upon said shaft to produce a braking effect.

1,819,435. PAPER-LIKE PRODUCTS AND METHOD OF MAKING THE SAME. KIRKE L. MOSES, Brookline, Mass. Filed Mar. 2, 1925. Serial No. 12,590. 8 Claims. (Cl. 92—21.)

1. The process of making a paper-like product which consists in forming by a paper-making process an absorbent web of loosely-matted fibres, increasing the wet strength of the web to a point where it will hold together when manipulated in a wet state by incorporating in the material of which the web is constituted a water resistant wet-strength giving ingredient which acts to lightly bind the fibres together when the web is wet but which does not appreciable affect the porosity of the web, then impregnating said web with rubber containing latex and evaporating water therefrom.

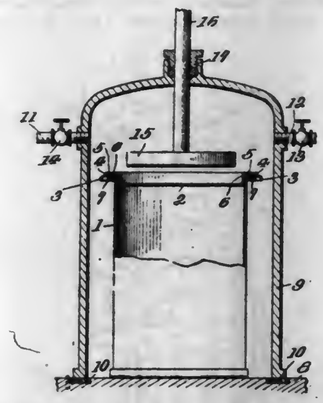
1,819,436. APPARATUS FOR ROASTING ORES. HENRY HARRISON NICHOLSON, Old Washington, Ohio. Filed July 30, 1929. Serial No. 382,165. 24 Claims. (Cl. 263—21.)



1. In ore roasting apparatus a pan having a series of agitator troughs, means for heating the pan, an agitator operating in each trough, means for simultaneously imparting a back and forth motion to the agitators within the respective troughs for predetermined periods, and means for simultaneously shifting the agitators in one direction between periods of motion to direct the contents of each trough into the next adjoining trough.

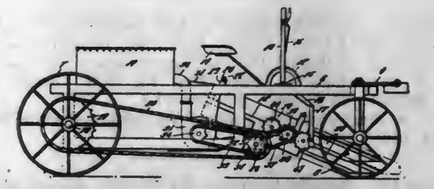
1,819,437. METHOD OF HERMETICALLY SEALING FOOD PRODUCTS IN VACUUM. JAMES H. O'NEIL and ALFRED L. KRONQUEST, Syracuse, N. Y., assignors to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed June 22, 1929. Serial No. 373,045. 2 Claims. (Cl. 113—112.)

1. The method of hermetically sealing food products in vacuum in containers which are formed and closed by having the ends seamed thereto consisting in providing the end to be closed with a sealing material for sealing the to the body under the vacuum pull of the container, placseam when formed and for temporarily sealing the end to the body under the vacuum pull of the container placing the container with the food product therein with the end resting lightly thereon in a vacuum chamber, vacuumizing the chamber and container, mechanically forcing the end into sealing contact with the container body while the chamber is under vacuum and retaining the end forcibly seated and sealed until the vacuum chamber is



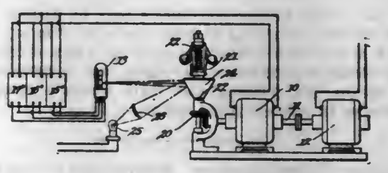
opened whereby atmospheric pressure will retain the end seated and sealed on the body, removing the container from the chamber and seaming the end therto.

1,819,438. COTTON PICKING AND GATHERING MACHINE. MARK L. OSBORN, Elida, N. Mex. Filed Oct. 25, 1929. Serial No. 402,503. 4 Claims. (Cl. 56—33.)



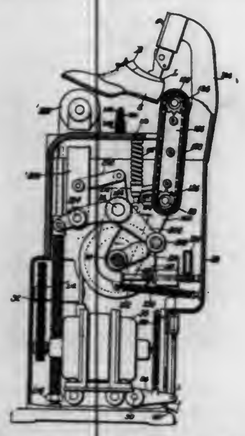
1. In a structure of the class described, a wheel supported frame, a collection trough on said frame, a housing adjustably and rockably mounted on said frame and open at its inner end and discharging into said trough, a pair of crank shafts mounted for rotation in said housing, a plurality of spaced parallel tooth equipped picking and gathering bars carried by said crank shafts, and having their inner and upper end portions movable longitudinally and rotatably in said housing.

1,819,439. SPEED REGULATING SYSTEM. ELWIN L. PETERSON, Riverside, Calif. Filed Aug. 23, 1929. Serial No. 388,024. 20 Claims. (Cl. 171—312.)



1. In a speed regulating system, a source of light, a driven element adapted to reflect the light and variable in position to change the path of travel of the reflected light as the speed of the element varies, a motor, means for varying the position of said driven element and light responsive means for controlling the speed of said motor in accordance with changes in the path of said reflected light.

1,819,440. SEPARATING SHOES AND LASTS. ARTHUR F. PYM, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 2, 1921, Serial No. 458,163. Renewed May 7, 1930. 84 Claims. (Cl. 12—15.1.)

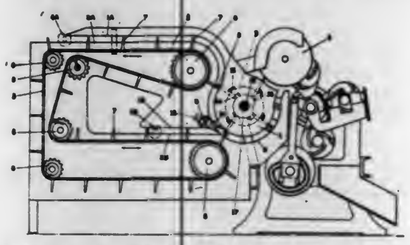


1. In a machine for removing shoes from lasts, in combination, a support to engage a last with a shoe thereon, means acting to move the shoe off the last, and independently movable auxiliary shoe-and-last-separating means arranged to engage the forepart of the shoe to co-operate with the first named means.

1,819,441. PAPER PRODUCT AND METHOD OF MAKING THE SAME. HAROLD R. RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Mar. 15, 1928. Serial No. 262,030. 20 Claims. (Cl. 92—21.)

1. A paper comprising fibrous material, carbonate filler and paraffin.

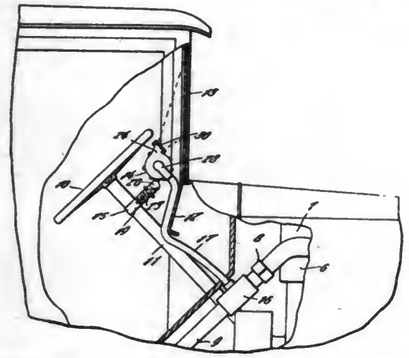
1,819,442. PEACH PITTING MACHINE. ALBERT STANLEY RIDLEY, Melbourne, Victoria, Australia. Filed July 11, 1929, Serial No. 377,506, and in Australia July 12, 1928. 5 Claims. (Cl. 146—28.)



2. In a fruit pitting machine, a pair of parallel main guide blades, a plurality of other pairs of tributary guide blades, a gate-blade connecting adjacent pairs of tributary guide blades alternately to the main pair of guide blades, and means for pushing the fruit forward along the guideways to fruit-gripping means.

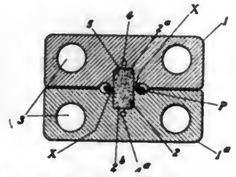
1,819,443. AUTOMOBILE WINDSHIELD HEATER. GEORGE SCHILLO and GUST PLAMANN, Gaylord, Minn. Filed Jan. 31, 1930. Serial No. 425,033. 1 Claim. (Cl. 20—40.5.)

In a structure of the class described in combination, a relatively thick standard, a bracket clamped thereon, an air heater and blower adjustably supported from said bracket and positioned in close proximity to a windshield, said air heater and blower comprising a fan housing, a fan mounted for rotation therein, a motor carried by aid housing and operatively connected with said fan, a central air inlet on the opposite side of the housing,



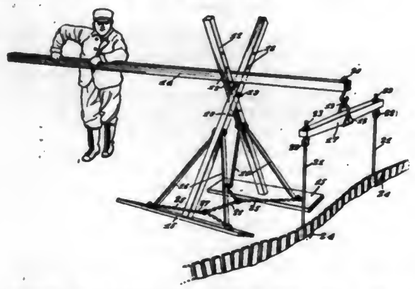
said inlet provided with an auxiliary heating element defining a secondary heater, a peripheral outlet directed toward the windshield, said inlet having associated therewith a primary delivery pipe and a preheating air jacket, said jacket adapted to surround an exhaust pipe.

1,819,444. METHOD OF MOLDING PLASTIC. JAMES H. SHERTS, Glen Ridge, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,514. 1 Claim. (Cl. 18—55.)



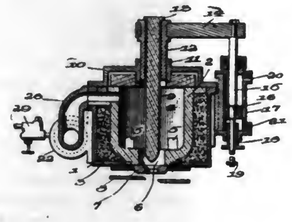
A process for molding articles from heat-softenable plastic with the elimination of heat marks from the surface of the article as molded which method comprises: introducing a body of plastic into an article-forming mold and heating the body of plastic throughout to provide for the flowing of the body in the mold, and, during such bodily heating and the flowing of the plastic locally chilling the same only at points immediately and closely adjacent the surface of the heated body.

1,819,445. SNOW FENCE LIFTER. JOHN H. SOEFFKER, Arlington, Minn. Filed May 31, 1929. Serial No. 367,531. 1 Claim. (Cl. 254—120.)



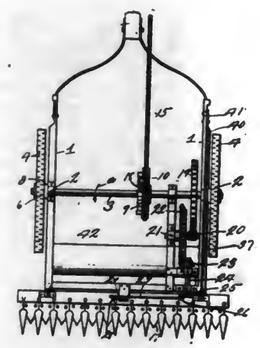
A lifting apparatus comprising pivotally associated intersecting leg members forming a crotch, feet carried by and disposed at right angles upon the lowermost ends of the legs to pack rather than penetrate the surface engaged, a lever seated and fulcrumed within the crotch, a single tree having connection with one end of the lever, grapples carried by and depending from the extremities of the single tree, and means establishing connection at its ends with and between the adjacent feet to prevent undue spreading thereof incident to the pressure exercised by the lever at the crotch defined at the intersection of the legs.

1,819,446. GLASS FEEDER. THOMAS STENHOUSE, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed July 8, 1927. Serial No. 204,234. 9 Claims. (Cl. 49—55.)



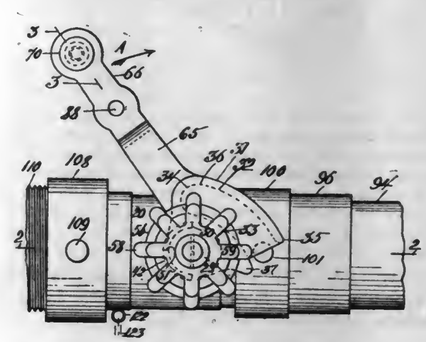
1. A glass feeder including a flow spout having a flow orifice, a plunger reciprocable in the flow spout in vertical alignment with the flow orifice, and means for reciprocating said plunger, said plunger having an airtight connection with the flow spout.

1,819,447. LAWN MOWER. ERICK W. STRANDBERG, Omaha, Nebr. Filed Oct. 20, 1926. Serial No. 142,865. 1 Claim. (Cl. 56—243.)



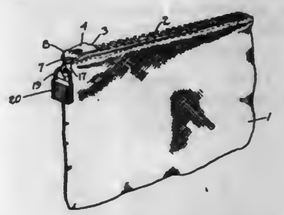
A lawn mower comprising a frame, an axle rotatably mounted in bearings of said frame, a cutter bar frame pivotally connected to the forward end of the frame, a cutter bar slidably mounted in said cutter bar frame, ground engaging wheels carried by the axle, ratchet connection between the ground engaging wheels and the axle, an intermediate shaft adjacent the axle, gear connections between the axle and shaft, a longitudinally disposed shaft, gear connections between the intermediate shaft and the longitudinally disposed shaft, a wrist pin carried by the forward end of the longitudinally disposed shaft, a vertically disposed rock lever, a connecting rod connecting the rock lever and the wrist pin, the lower end of said rock lever having a socket connection with the cutter bar and hand operated means carried by the handle of the frame and connected to the axle and forming means whereby said axle may be rotated independently of the wheels for operating the cutter bar when the machine is at a standstill.

1,819,448. HOSE COUPLING. EDWARD W. SULLIVAN, Rockaway Park, N. Y. Filed Aug. 16, 1928. Serial No. 300,073. 10 Claims. (Cl. 285—172.)



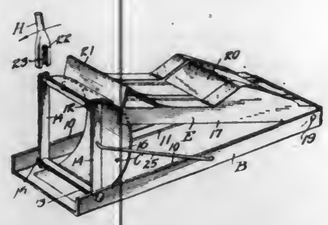
1. In a coupling the combination of a body portion having an abutting end, means to connect one end of the body portion to a conduit for a fluid, journal pins extending from the body portion, a flexible element supported on each of said journal pins, and a clamping head supported on each flexible element, said clamping heads adapted to draw the member of a coupling toward said body portion.

1,819,449. LOCK-CONTROLLED RECEPTACLE AND IMPROVED FASTENER THEREFOR. HERBERT R. WALRATH, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed June 15, 1928. Serial No. 285,735. 5 Claims. (Cl. 70—2.)



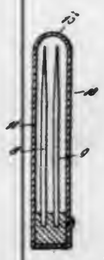
1. In combination with a bag formed of flexible material and having an elongated opening and a continuous fastener composed of closely spaced interlocking elements secured along the edges of the flaps at opposite sides of the opening, a slide mounted for movement along the edges of the flaps and engaging said elements to progressively move the same into or out of interlocking engagement, said bag having a reinforced opening adjacent an end of said elongated opening, and a fastening member secured to the said slide on the inner side of said bag, said fastening member having a portion adapted to project through said reinforced opening and to receive a locking element exteriorly of the bag.

1,819,450. AUTOMOBILE JACK. FRANK F. WELLER, Jennings, La. Filed Feb. 11, 1929. Serial No. 339,155. 2 Claims. (Cl. 254—88.)



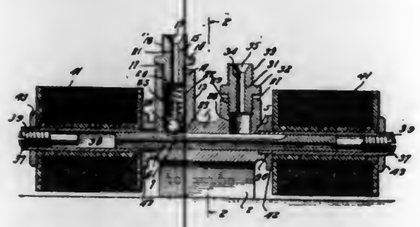
2. An automobile jack comprising a frame base, an elevating member pivoted to and adapted to fold within said base, a pair of parallel posts pivoted, one to each side of the base, and a curved plate mounted on said posts serving as means for raising and lowering said elevating member as desired, substantially as set forth.

1,819,451. BOOK OF TOOTHPICKS. SAMUEL WISSIG, Susanville, Calif. Filed Mar. 29, 1930. Serial No. 440,100. 1 Claim. (Cl. 132—89.)



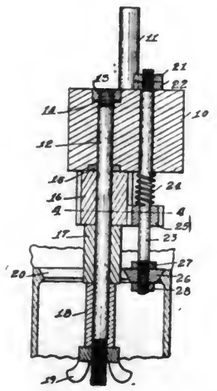
A tooth pick holder comprising a block, a longitudinally extending groove therein, and a row of tooth picks each formed with a pointed end and a blunt end, with the blunt end frictionally held in the groove and a cover member having a part attached to the block and extending over the tooth picks.

1,819,452. VALVE. LEONARD KAY WRIGHT, Jackson Heights, N. Y. Filed Dec. 3, 1927. Serial No. 237,517. 11 Claims. (Cl. 137—139.)



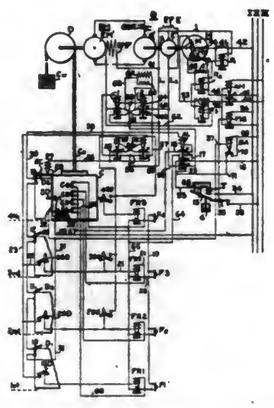
1. A valve comprising an inlet member, means to normally maintain the inlet closed, means separate from and coacting with the first-mentioned means to open the inlet, said second mentioned means having channels rabbeted therein providing a passage to an outlet member.

1,819,453. VALVE SEAT GRINDER. WILLIAM BARBER, Brooklyn, N. Y. Filed Jan. 26, 1928. Serial No. 249,670. 6 Claims. (Cl. 51—241.)



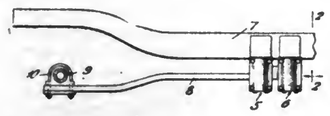
1. In a valve seat grinding device, a body member having a drive shaft and a plurality of apertures in said body, an anchoring shaft in one of said apertures for anchoring said grinding device to the valve guide by which the valve seat is to be ground, a gear on said shaft, a shaft parallel to said first named shaft having a gear thereon engaging said first named gear, a grinding element carried by said second named shaft, and means for constantly tensioning the grinding element onto the valve seat to a limited distance.

1,819,454. ELEVATOR CONTROL SYSTEM. MILTON BARUCH, Beverly Hills, Calif., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1927. Serial No. 234,409. 2 Claims. (Cl. 172—152.)



1. In an elevator-controlling system, an elevator operable past a plurality of floors, motive means therefor, a motor-generator set for supplying energy to said motive means, call means for actuating said motive means to cause said elevator to travel to any of said floors and to stop thereat, a closure for said elevator permitting entry to said elevator, and means, operable in response to actuation of any of said call means or to the opening of said closure for starting said motor-generator set and operably responsive to the lapse of a predetermined time after the stopping of said elevator for stopping said motor-generator set.

1,819,455. VEHICLE CUSHIONING OR SHOCK ABSORBING DEVICE. WILLIAM C. BROADWELL, Brooklyn, N. Y. Filed Jan. 10, 1925. Serial No. 1,522. 15 Claims. (Cl. 267—21.)



1. In a cushioning device for a vehicle having an axle and a frame; a lever, one end of which is adapted to be connected to said axle; and yieldable means universally connecting the other end of said lever to said frame and comprising a pair of cushioning units associated with said other end of said lever and adapted for connection to said frame, said cushioning units comprising cushioning elements arranged upon opposite sides of said lever, said cushioning elements being spaced from each other longitudinally of said lever and adapted to support the weight of the vehicle, and a second set of cushioning elements arranged upon opposite sides of said lever in a spaced relation to the first mentioned cushioning elements and in a spaced relation to each other longitudinally of said lever.

1,819,456. PROCESS OF IMPREGNATING PLANT TISSUES WITH SODIUM NITRATE FOR EXPLOSIVE PURPOSES. WILLIAM M. DEHN, Seattle, Wash. Filed Feb. 7, 1923. Serial No. 617,610. 5 Claims. (Cl. 52—19.)

1. The process of impregnating comminuted plant tissues with sodium nitrate for explosive purposes which comprises heating of said plant tissues with concentrated aqueous solution of sodium nitrate at 110–120° C., screening the hot masses so that spontaneous evaporation of water may be promoted through the heats of the solution and of crystallization and finally drying the masses at low temperatures, substantially without mechanical agitation so that formation of dust may be avoided.

1,819,457. COLLOIDED STARCH EXPLOSIVE AND PROCESS OF MANUFACTURING THE SAME. WILLIAM M. DEHN, Seattle, Wash. Filed Jan. 10, 1924. Serial No. 685,455. 2 Claims. (Cl. 52—19.)

1. Process of making disruptive explosives which comprises mixing starch with ammonium nitrate in the proportion of about one part of the former to about three parts of the latter, mixing therewith about 1.6 parts of a solution of ammonium nitrate of about 1.3 specific gravity, and subjecting to heat over 55° and under 100° C., whereby the starch is coagulated and the water content substantially reduced.

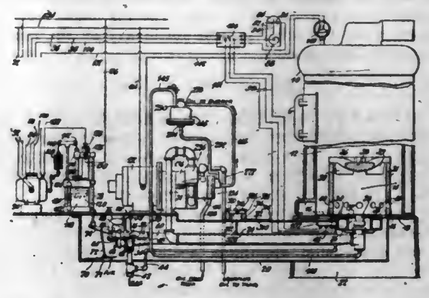
1,819,458. PROPELLENT EXPLOSIVE. WILLIAM M. DEHN, Seattle, Wash. Filed Oct. 28, 1929. Serial No. 403,182. 10 Claims. (Cl. 52—21.)

1. As an improvement in the manufacture of propellent powders, the process comprising the plasticizing of mixtures of starch, an alkali nitrate and nitrocellulose through the use of two miscible solvents, substantially as described.

7. A propellent explosive comprising a greatly preponderating proportion of ammonium nitrate in an intimate state and molded form with starch and colloidized nitrocellulose, the quantity of nitrocellulose exceeding that of the starch, substantially as described.

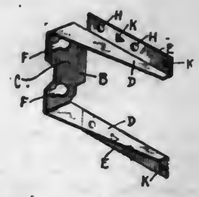
1,819,459. HOUSE HEATING SYSTEM. HENRY L. DOHERTY, New York, N. Y. Filed Jan. 22, 1925. Serial No. 3,907. 6 Claims. (Cl. 236—1.)

1. A heating system including a gas burner, an oil burner, automatic means associated with said burners for turning on the gas to said gas burner to full extent and then turning on the oil to said oil burner when a greater heat output is required of the system, said means operating



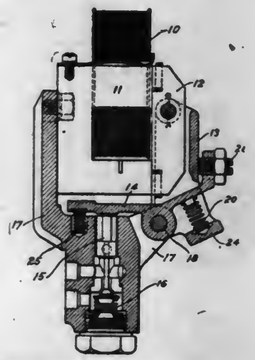
automatically to first turn off the oil to said oil burner and thereafter to decrease the gas to said gas burner when a lessened heat output is required of the system.

1,819,460. SWITCH BOX SUPPORT. ALEXANDER FRANK, New York, N. Y. Filed June 26, 1928. Serial No. 288,376. 2 Claims. (Cl. 247—21.)



2. A support for a switch box comprising a U shaped unit stamped from a single sheet of metal having a face plate with attachment openings therein engaging one side of a switch box, a pair of arms at right angles to said face plate and parallel to each other, and flanges at right angles to said arms and integral therewith, said flanges having alternate openings and tabs therein by which said unit can be directly secured to a building structure.

1,819,461. MAGNETICALLY OPERATED VALVE. LEO C. FRANK, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 5, 1928. Serial No. 267,586. 10 Claims. (Cl. 137 sub 139.)



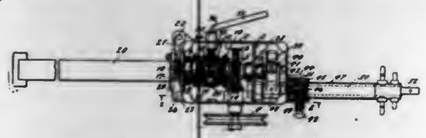
1. In an electro-magnetically operated valve, an electromagnet having an operating coil disposed to be energized by alternating current, an armature member responsive to the operating coil, a valve mechanism, a system of co-

axially mounted levers disposed to transmit motion from the armature member to the valve mechanism, one of said levers being pivotally connected to the armature member, and resilient means interposed between the pivotally connected lever and another lever, whereby one lever may vibrate while the other is held stationary by the reaction of the resilient means.

1,819,462. METHOD OF ACCELERATING THE SETTLEMENT OF PIGMENTS. HAROLD GROSSMAN, Caldwell, N. J., assignor of one-fourth to William S. Pritchard, New York, N. Y. Filed Feb. 24, 1927. Serial No. 170,742. 1 Claim. (Cl. 210—1.)

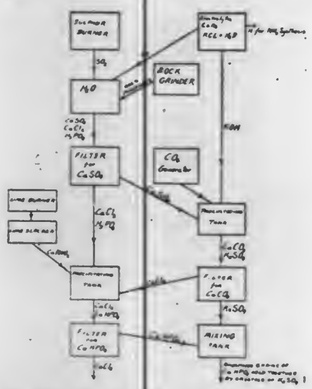
A method of accelerating the settling of a pigment in suspension in an aqueous liquid which comprises adding to the suspension aluminum acetate whereby aluminum hydroxide is formed and coagulating said hydroxide, whereby said pigment is coagulated.

1,819,463. WASHING APPARATUS. ROBERT HOE, Hyde Park, N. Y. Original application filed Sept. 29, 1926, Serial No. 138,356. Divided and this application filed June 22, 1927. Serial No. 200,574. 4 Claims. (Cl. 192—130.)



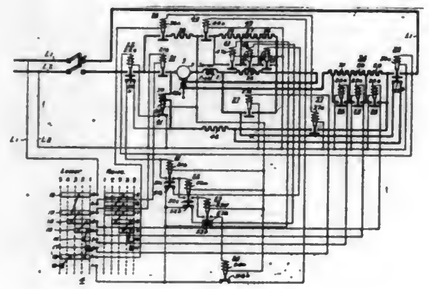
1. In combination, a support, a horizontally disposed rotating shaft in said support, means to drive said shaft, a device comprising rollers one of which is mounted on a shaft, a bracket supporting said device and hinged to said support and arranged, when in operative position, to hold said roller shaft in axial alignment with said rotary shaft, a clutch connection between the adjacent ends of said shafts arranged to be unclutched when said bracket is turned on its hinges, and means to hold said bracket in operative position, said means comprising a latch arranged to open and permit said bracket to swing on its hinge when considerable pressure is applied to said bracket to turn it on its hinge.

1,819,464. METHOD OF PRODUCING FERTILIZERS. AUGUST HOLZ, Irvington, N. J., assignor to Theodore V. D. Berdell, New York, N. Y. Filed Sept. 2, 1927. Serial No. 217,301. 2 Claims. (Cl. 71—7.)



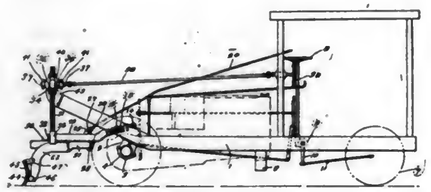
1. The process which comprises electrolytically decomposing potassium chloride in solution to form chlorine, hydrogen and potassium hydroxide, passing the chlorine into water, simultaneously with sufficient sulphur dioxide to form sulphuric and hydrochloric acids, adding to the mixed sulphuric and hydrochloric acids, calcium phosphate, thereby forming substantially insoluble calcium sulphate and soluble phosphoric acid, separating the insoluble calcium sulphate from the soluble phosphoric acid, treating the insoluble calcium sulphate with a solution of potassium hydroxide in the presence of carbon dioxide, under pressure and with the application of heat, so as to transform the calcium sulphate into insoluble calcium carbonate and the potassium hydroxide into potassium sulphate, then separating the insoluble calcium carbonate from the mother liquor.

1,819,465. CONTROL SYSTEM. HENRY D. JAMES, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 17, 1928. Serial No. 255,048. 8 Claims. (Cl. 172—152.)



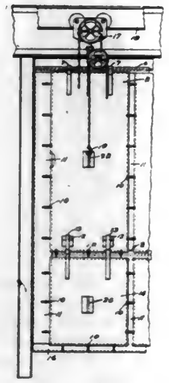
1. In a control system, in combination, a dynamo electric machine provided with an armature and a field winding, means for connecting the armature and field winding in series circuit relation for operation in one direction and for connecting the armature winding and field winding in parallel circuit relation for operating the motor in the other direction, a variable resistor connected in shunt relation to the field winding, and means responsive to the speed of the motor when running in one direction for establishing a dynamic braking circuit and varying the variable resistor.

1,819,466. ROAD WORKING MACHINE. NEIL E. JERSEY, Bucyrus, Ohio, assignor to W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed Sept. 22, 1928. Serial No. 307,653. 7 Claims. (Cl. 37—156.)



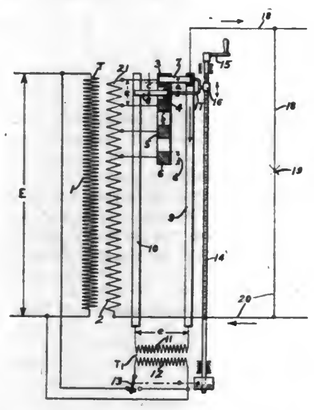
1. The combination with a standard tractor having its steering wheel assembly removed and the directional effectiveness of its drive gearing reversed, of spaced frame members on opposite sides of said tractor extending longitudinally therefrom at both ends, steering wheels carried by one end of said frame members, and a thrust tool carried by the other end of said frame members, said thrust tool adjacent the driving wheels of said tractor.

1,819,467. SECTIONAL BOILER DOOR. WILLIAM A. JONES, West New Brighton, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed July 12, 1923, Serial No. 651,021. Divided and this application filed Jan. 9, 1928. Serial No. 245,372. 4 Claims. (Cl. 122—494.)



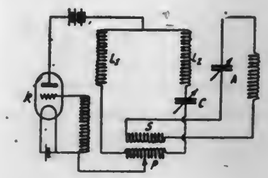
1. In a boiler casing, a substantially vertical door having a plurality of removable sections, a member extending from the water chamber of the boiler and parallel thereto, said member forming a sill for one door section and a lintel for the next lower section, and means removably to attach said sections to said member, said member being constructed and arranged to prevent passage of gases between said chamber and said sections.

1,819,468. SYSTEM OF VOLTAGE REGULATION. JOHANNES KAÖPPELIN, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 7, 1927, Serial No. 231,527, and in Germany Oct. 13, 1926. 2 Claims. (Cl. 171—119.)



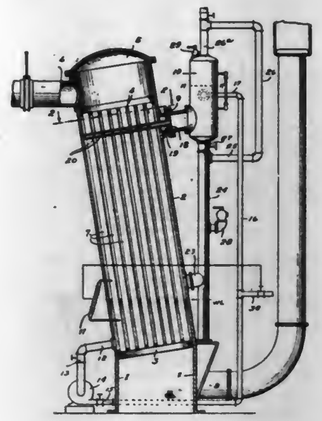
1. The combination with a main transformer winding comprising a plurality of sections, of contact members for successive connection to the respective terminals of said sections, an auxiliary transformer having a winding connected to said contact members, and means comprising an induction regulator for varying the voltage produced by said auxiliary transformer.

1,819,469. RADIO SYSTEM. WILHELM KUMMERER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 1, 1926, Serial No. 85,083, and in Germany Apr. 20, 1925. 3 Claims. (Cl. 250—36.)



1. In a radio frequency system, a source of oscillations having a fundamental and harmonics existing therein, said source including a circuit tuned to the fundamental frequency having inductive and capacitive branches connected in parallel and connected to said source of oscillations, said inductive branch consisting of a coil and a portion of a coupling inductance connected in series, said capacitive branch consisting of a coil, a condenser and a second portion of a coupling inductance connected in series and a load circuit coupled to each of said coupling portions whereby the introduction of harmonic frequencies in said load circuit is substantially suppressed.

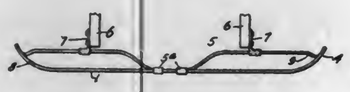
1,819,470. STEAM GENERATOR. WALTER DOUGLAS LA MONT, Larchmont, N. Y., assignor to La Mont Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 22, 1927. Serial No. 162,770. 5 Claims. (Cl. 122—39.)



2. Method of operating a boiler having heat exchanging tubes connected at their ends to members forming heads of a drum which normally contains a large part of the volume of water within the boiler and in which is normally maintained a water level adjacent the upper portion of the heat transferring surfaces of the boiler whereby said heat transferring surfaces are normally substantially

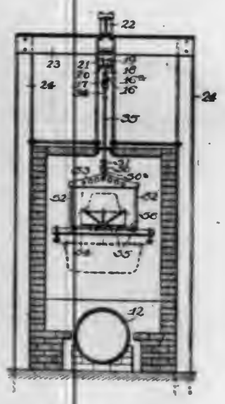
completely covered with the water of said volume of water within the boiler and in which the generated steam is normally discharged above said water level, which consists in maintaining a water level at such a point that the tubes are uncovered for substantially their entire length, supplying water to the upper portions of the heat transferring surfaces of the tubes so that it passes thereover in the form of a film under the action of gravity, the quantity supplied being greater than the steam generating capacity of the tubes but less than sufficient to fill the space between the heating surfaces, causing the steam generated in the boiler to be discharged therefrom at a point adjacent the lower end portions of the heat transferring surfaces of the tubes, and causing the gases used to furnish the heat for steam generation to flow in a direction counter to the flow of the steam and water over the surfaces of the tubes.

1,819,471. AUTOMOBILE BUMPER. NELSON LITTELL, Mount Vernon, N. Y. Filed Feb. 7, 1927. Serial No. 166,297. 9 Claims. (Cl. 293—55.)



1. A one piece automobile bumper comprising vertically spaced impact portions, a rearwardly bent backing member integrally attached to the ends of the impact portions, and clamped substantially intermediate of the impact portions.

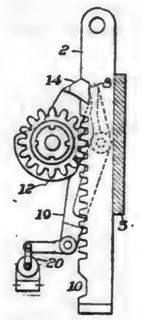
1,819,472. ENAMELING FURNACE CONVEYER. ROBERT MACDOUGALL, Downers Grove, Ill., assignor to Beemack Furnace Company, Cicero, Ill., a Corporation of Illinois. Original application filed Sept. 10, 1928, Serial No. 304,945. Divided and this application filed May 5, 1930. Serial No. 449,816. 4 Claims. (Cl. 25—142.)



1. In apparatus of the class described and having a heating passage and a metal-link conveyer chain equipped with suspension rods extending downwardly into said passage, means for suspending articles through said rods including spacing links flexibly connecting the lower ends of the rods, transversely disposed skeleton box frames also flexibly connected to said rods, and tool frames extending across spaces between the box frames and connected adjacent opposite ends to a pair of such frames.

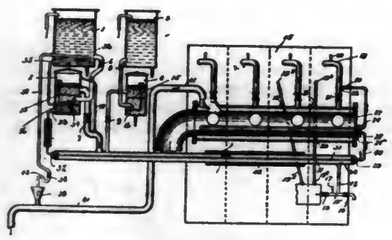
1,819,473. RAILWAY SWITCH OPERATING MECHANISM. GIUSEPPE MANZOLI, Turin, Italy, assignor to The Union Switch and Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 6, 1929, Serial No. 383,897, and in Italy Aug. 9, 1928. 8 Claims. (Cl. 246—448.)

1. In combination with a railway switch comprising two movable tongues and two stock rails, a driving member,



means including friction couplings for connecting said member with said tongues for operating the switch, locking means effective when either said tongue is in engagement with the corresponding stock rail to lock such tongue, and means controlled by the other tongue and operating when such other tongue is actuated to release said locking means.

1,819,474. APPARATUS FOR FEEDING HEAVY CRUDE OIL IN INTERNAL COMBUSTION ENGINES OF THE INJECTION TYPE. GUSTAV MEYER, Matanzas, Cuba. Filed Apr. 24, 1928. Serial No. 272,550. 7 Claims. (Cl. 123—32.)



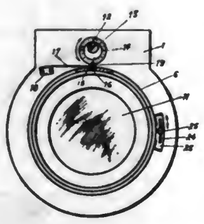
1. Apparatus for directly injecting high viscosity crude oils into an internal combustion engine of the injection type comprising, a crude oil supply tank, a filter tank communicating with said first named tank, a float valve control for said second tank for regulating the level of the liquid therein, a fuel feed pump for injecting the fuel into the cylinders of said engine, a fuel feed line joining said filter tank with said pump, said float valve maintaining the level of the fuel in said filter tank below the level of the fuel inlet to said cylinder, a thin starting oil supply tank connected to said same fuel line, means for independently controlling the flow from said crude oil tank and said thin oil tank to said fuel line, a water cooling system for said engine, an auxiliary pipe system for hot water branching off from said main cooling system, said auxiliary system passing through the exhaust of said engine, a portion of said fuel supply line, the said first named two tanks and out to the atmosphere, and regulating means in said auxiliary pipe system for controlling the flow of water therethrough.

1,819,475. FIGURE TOY. WILLIAM H. MORLEY, Manchester, N. H. Filed July 27, 1928. Serial No. 295,745. 7 Claims. (Cl. 46—40.)



1. A figure toy comprising a body, a head mounted on the body for lateral vibration with respect to the body, arm members mounted on the body, hinged connections between the head and the mounting thereof whereby to permit forward and rearward movement of the head, and connections between the said head and arm members whereby to cause said arm members to swing upwardly upon rearward swinging movement of the head.

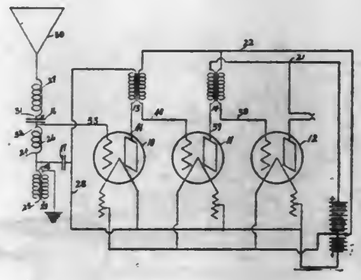
1,819,476. LENS MOUNT. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed June 25, 1930. Serial No. 463,667. 14 Claims. (Cl. 95—45.)



1. A lens mount comprising a longitudinally adjustable lens holder, a support therefor, and means carried by said support, and including a resilient member engageable with said holder and eccentric means for locking the same in adjusted position.

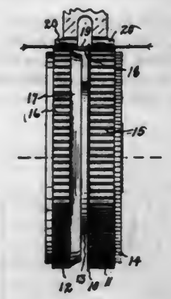
1,819,477. RADIO RECEIVING APPARATUS. VITAL PAQUIT, New York, N. Y. Filed Nov. 6, 1925. Serial No. 67,394. 4 Claims. (Cl. 250—20.)

1. In radio receiving apparatus comprising a three-electrode vacuum tube detector and sources of current for supplying its circuits, the combination of a single tuning coil with two windings, a variable condenser connected between said windings, the antenna connecting to one terminal of said coil, the grid element of the detector tube connected to said variable condenser, and a fixed con-



denser connecting the other terminal of said coil to the positive side of the current feeding the filament of the vacuum tubes.

1,819,478. FEED ROLL FOR RUN REPAIR MACHINES AND THE LIKE. ALEXANDER C. PARLINI, Woodside, N. Y., assignor to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 2, 1931. Serial No. 506,177. 8 Claims. (Cl. 66—1.)

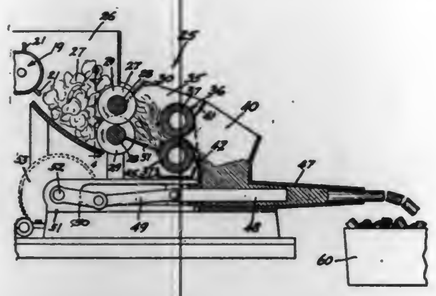


1. A feed roll for run repair machines comprising a spacer wheel having teeth on which the threads of a run are spaced and a feed wheel adjacent said spacer wheel, a second feed wheel spaced apart from said spacer wheel, said second feed wheel having an inner peripheral edge cutaway therefrom so as to provide room for the threads of the fabric to be depressed during the repairing operation.

1,819,479. METHOD OF MAKING SILICON IRON COMPOUNDS. JAMES A. PARSONS, Dayton, Ohio, assignor to The Duriron Company, Inc., a Corporation of New York. Filed Jan. 23, 1930. Serial No. 422,952. 2 Claims. (Cl. 75—45.)

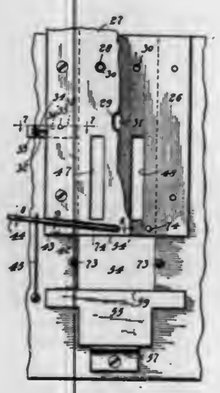
2. A method of making silicon iron compounds of substantially exact predetermined proportions in which the silicon content lies between 14.25% and 18% which consists in fusing together ferrosilicon and iron in the approximate calculated quantities necessary to give an alloy with the silicon slightly in excess of that of said predetermined proportions, taking a sample from the melt before it reaches pouring temperature, casing it into a test bar, determining the proportion of silicon in the sample by measuring its electrical resistance while the melt is being raised to pouring temperature; and then adding to the melt sufficient iron to bring the silicon and iron to said predetermined proportions.

1,819,480. METHOD OF DISPOSING OF CULL LETTUCE. HALE PAXTON, Redlands, Calif. Filed Nov. 17, 1930. Serial No. 496,864. 5 Claims. (Cl. 71—6.)



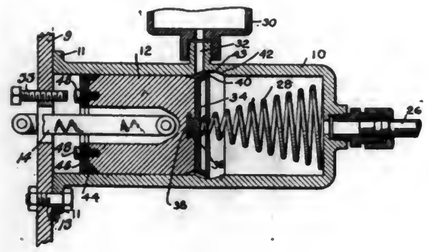
1. A continuous process of disposing of cull lettuce and the like which consists in feeding said cull lettuce in a continuous stream through a point of application of pressure, and desiccating said stream, of cull lettuce by a continuous pressure applied at said point to said stream as it passes, and compressing the desiccated cull lettuce pulp into compact forms of relatively high density.

1,819,481. MACHINE FOR CUTTING MAGNETIC CIRCUIT LAMINÆ. OSCAR A. PEARSON, Oak Park, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 12, 1928. Serial No. 292,299. 10 Claims. (Cl. 164—19.)



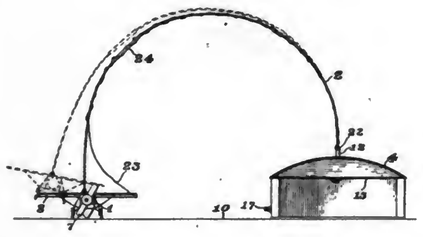
1. A machine of the class described comprising in combination a punch press and cooperating male and female die members arranged to operate on a strip of metal in three successive stages, the first stage comprising die members adapted and arranged to punch two holes spaced on opposite sides of the longitudinal medial line of the strip and on a transverse line and a third hole located on the dividing line between the first and second stages, the second stage comprising die members arranged to remove two longitudinal bars containing said first mentioned holes to form two longitudinal parallel slots, and the third stage comprising cutting members arranged to cut said strip transversely through said second mentioned hole and also transversely through said slots.

1,819,482. MASTER CYLINDER. ALBERT D. PENTZ, New York, N. Y., assignor to Pentz Motor Brake Corporation, New Brighton, N. Y., a Corporation of New York. Filed Jan. 31, 1928. Serial No. 250,861. 2 Claims. (Cl. 60—54.6.)



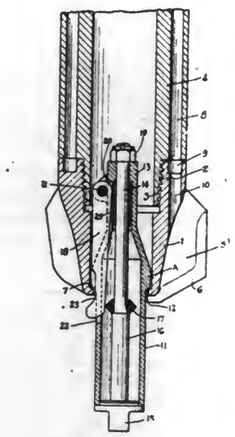
1. In a hydraulic brake for a vehicle, in combination, a master cylinder containing a fluid, a plunger arranged to reciprocate in said cylinder with a forward stroke and a return stroke, a cup washer on the forward end of said plunger, said washer having a forwardly projecting lip, a tapered counterbore in the wall of said cylinder into which said washer enters at the end of the return stroke, an elevated fluid reservoir and a passage connecting said reservoir to said counterbore at a point behind the rim of said washer at the end of its return stroke, whereby fluid may flow downwardly from said reservoir to said cylinder and air may pass upwardly from said cylinder to said reservoir for the purposes set forth.

1,819,483. TOY. ARTHUR E. RITTENHOUSE, Honeoye Falls, N. Y. Filed Oct. 15, 1929. Serial No. 399,764. 3 Claims. (Cl. 272—31.)



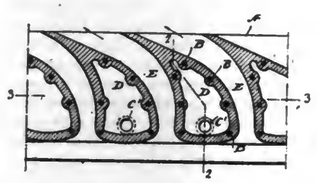
1. In a toy, the combination with a housing, of a resilient flexible rod revolubly mounted therein and arching in a continuous gradual curve extending substantially upwardly, outwardly and downwardly from the housing, said rod being flexible throughout its entire length from a point immediately above the housing, a toy suspended on the free end of said rod and means on the toy for propelling it, the arrangement being such that the rod flexes upwardly and throughout its entire length to maintain the form of an arch under the weight of the toy which moves in varying curves about the base of the rod as a center.

1,819,484. CORE DRILL PLUG. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Oct. 27, 1930. Serial No. 491,476. 7 Claims. (Cl. 255—72.)



5. A core drill having a core passage therethrough, a plug in said passage, and means holding said plug in said passage compressible to release said plug under longitudinal strain upon said plug.

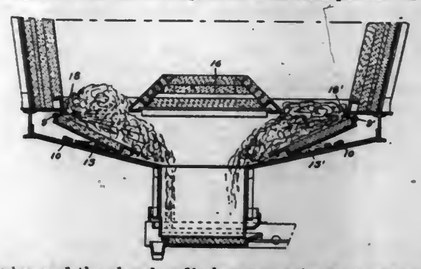
1,819,485. TURBINE NOZZLE. MICHAEL SEDLMEIR, Mulheim-Ruhr, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Sept. 4, 1926. Serial No. 133,568. 3 Claims. (Cl. 60—41.)



1. A turbine nozzle ring comprising a plurality of connecting elements each of which is composed of a body member having a pair of parallel fork members projecting from one end thereof, said fork members being spaced in a radial direction with respect to the axis of the nozzle ring, said body member at its opposite end being provided with notches into which the fork members of the adjoining element fit, whereby a nozzle channel defined by said body member, said fork members and the rear end of the adjoining element, is formed, said body member being hollow, and conduits for conducting a cooling medium to and withdrawing the same from the interior of said member.

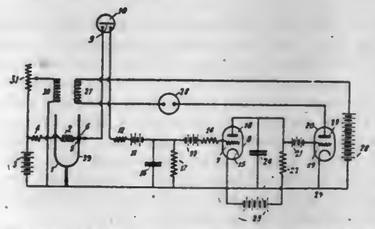
1,819,486. HOPPER CONSTRUCTION. MAX C. SHERMAN, Bala-Cynwyd, Pa., assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 26, 1926. Serial No. 111,749. 4 Claims. (Cl. 110—171.)

2. In furnace construction, a combustion chamber having a bottom discharge opening and adapted to contain a mass of burning fuel in the portion of said chamber lying above said discharge opening, and a hopper having a discharge opening, said hopper being offset laterally from the combustion chamber discharge opening whereby the hopper is positioned out of alignment with said portion of the



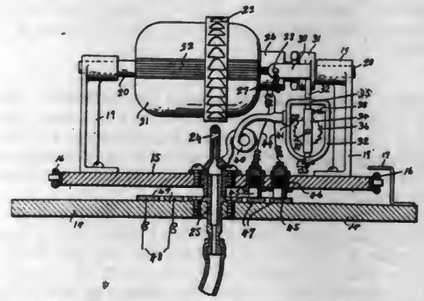
chamber and the chamber discharge opening and means for directing material discharged through said discharge opening into said offset hopper.

1,819,487. ELECTRICAL FREQUENCY STABILIZER OR TIME CONTROL DEVICE. JOHN ARTHUR SMALE, Brentwood, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 1, 1928, Serial No. 282,222, and in Great Britain June 27, 1927. 11 Claims. (Cl. 84—409.)



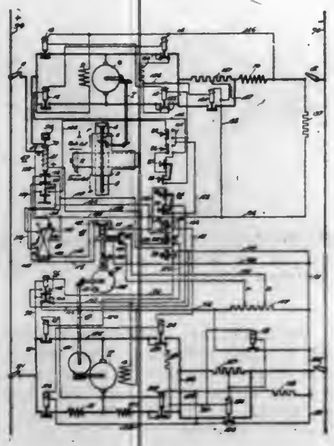
3. A frequency stabilizer comprising a time period device of substantialy constant frequency, a master time period device of absolute constant frequency, and a thermionic vacuum tube system adapted to become operable in accordance with the duration of coincidence between a given operation of the substantially constant time period device and the master time period device for aplying correcting forces to the substantially constant time period device and stabilizing the frequency thereof.

1,819,488. INDUCTOR COMPASS GENERATOR. MORRIS M. TITTERINGTON, Brooklyn, N. Y.; George A. Titterington, executor of said Morris M. Titterington, deceased, assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Original application filed Mar. 11, 1922, Serial No. 542,937, now Patent No. 1,770,243, dated July 8, 1930. Divided and this application filed Aug. 29, 1925. Serial No. 53,270. 12 Claims. (Cl. 171—204.)



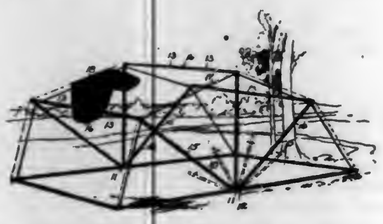
1. A generator comprising an armature having a commutator and brushes, and a stabilizer on which the brushes only are mounted.

1,819,489. CONTROL SYSTEM. PATRICK C. WARD, Homeville, Pa. Filed Dec. 7, 1928. Serial No. 324,543. 8 Claims. (Cl. 172—240.)



1. In a control system for a shaper provided with a motor operated ram, and tool-feeding mechanism, in combination, a feed motor for operating the tool-feeding mechanism, a source of power for the motor, a time-element relay for controlling the feed motor, a master switch disposed to be actuated synchronously with the operation of the ram for controlling the operation of the relay, said master switch being disposed to connect the feed motor across the source of power and to deenergize the relay, whereby the motor is deenergized a predetermined interval after it is started by the master switch.

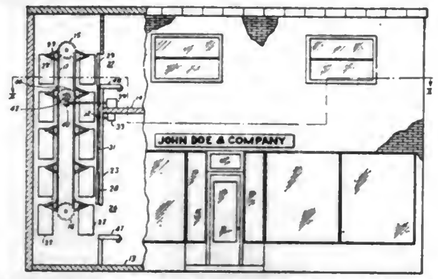
1,819,490. CANOPY. MAX WEISS, Newark, N. J. Filed Mar. 14, 1930. Serial No. 435,691. 4 Claims. (Cl. 135—5.)



1. A canopy comprising a pair of side supports consisting of radially arranged arms pivoted together at the bottom, and jointed cross arms connecting the ends of opposite side arms to enable the lateral folding of the structure.

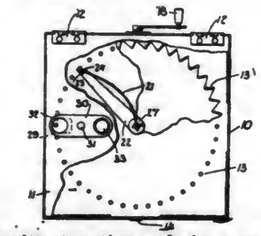
1,819,491. MERCHANDISING ESTABLISHMENT. HAROLD E. WHITE, Wilkinsburg, and HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 20, 1930. Serial No. 437,439. 12 Claims. (Cl. 186—1.)

1. In a merchandising establishment having a lower floor and an upper floor therein, a circuitous elevator comprising a plurality of receptacles for merchandise, means movably supporting said receptacles for movement in a circuitous path successively past the said floors, motive means for moving said receptacles, a door for opening and closing a doorway giving access to the receptacle stopped at the said lower floor and a door for opening and closing a doorway giving access to the receptacle stopped at the said upper floor, the two said doors being



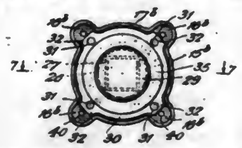
rigidly connected together and simultaneously operable, the one to be opened when the other is closed, and motive means for moving said doors.

1,819,492. METHOD AND MEANS FOR TAKING AND PROJECTING MOTION PICTURES. JAMES H. WHITE, New York, N. Y., assignor to Herman Germain, New York, N. Y. Filed Oct. 26, 1928. Serial No. 315,161. 2 Claims. (Cl. 88—18.8.)



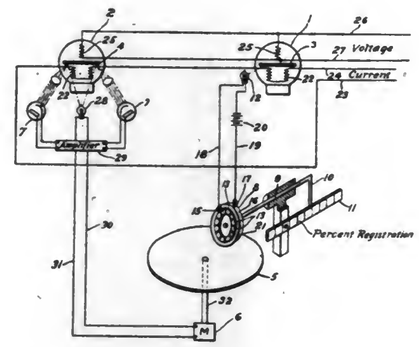
1. An intermittent motion-producing means for motion picture cameras comprising a supporting base, a revolving radial arm adapted to be revolved thereon around its center on the turning of a crank and having guides at its end, a flexible member pivoted to rotate with said arm about its center, its outer end adapted to slide between said guides as it is flexed, and stop means placed around a circumference of the supporting base and so arranged that the end of the flexible means at each flexing is adapted to pass beneath successive stop means and carry the arm from its rest position opposite one stop to a rest position opposite an adjoining stop.

1,819,493. CLOSURE. FRANK G. WIKSTROM, Brooklyn, N. Y., assignor to Hadwik Mfg. Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 7, 1928. Serial No. 324,443. 5 Claims. (Cl. 220—39.)



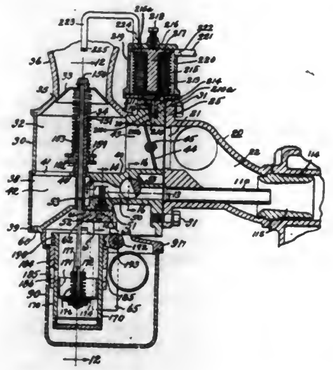
3. A closure comprising a sheet metal cover member having a non-circular wrench receiving contour and including a plurality of wrench receiving ears projecting therefrom, said cover plate being provided with a reenforcing flange at the outer margins of said ears and along its outer margin intermediate said ears, and a screw threaded member welded to said cover member, said screw threaded member having an outwardly projecting noncircular gasket supporting flange having portions cooperating with said re-enforcing flange whereby said cover member and said screw threaded member have interlocking and re-enforcing engagement with one another.

1,819,494. METHOD OF AND MEANS FOR TESTING METERS. SAMUEL ARONOFF, Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 3, 1929. Serial No. 352,138. 7 Claims. (Cl. 175—183.)



1. Means for indicating a function of the speed ratio of a plurality of rotating elements, comprising a plurality of coacting members having a variable radius of contact, means for turning one of said members in accordance with the speed of one of said elements, and means for changing said radius of contact until the speed of the other member is proportional to the speed of the other element, said radius of contact having a scale calibrated in a function of percent speed ratio associated therewith.

1,819,495. CHARGE FORMING DEVICE. FRED E. ASELTINE and WILFORD H. TEETER, Dayton, Ohio, assignors, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 22, 1927. Serial No. 221,371. 21 Claims. (Cl. 261—34.)



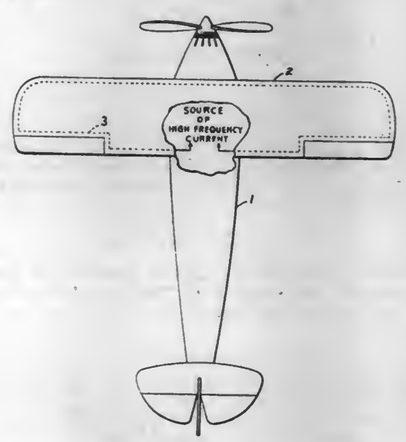
1. In a charge forming device for an internal combustion engine, a mixing chamber, fuel and air inlets therefor, a fuel supply chamber, a fuel conduit connecting the fuel supply chamber and said fuel inlet, and having a valve seat formed therein, a suction operated valve cooperating with said seat to control the flow of fuel through said conduit, a fuel metering orifice in said valve for controlling the flow of fuel under certain operating conditions and a suction operated pin for controlling the area of said orifice.

1,819,496. ACTIVATED CLAY AND METHOD OF PRODUCING SAME. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif., a Corporation of California. Filed May 22, 1926. Serial No. 110,961. 13 Claims. (Cl. 252—2.)

1. A method of activating clays which comprises: treating the clays with a solution of an inorganic acid in water; and removing the acid by washing the clay with water substantially free from all calcium compounds.

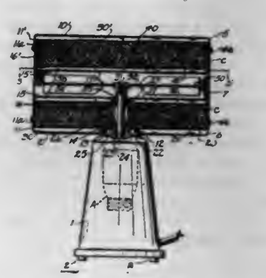
2. A previously unused activated clay substantially free from water soluble impurities.

1,819,497. COMBATING SLEET ON AIRPLANES. CHARLES F. CHISHOLM, Staten Island, N. Y. Filed May 16, 1930. Serial No. 452,833. 12 Claims. (Cl. 244—31.)



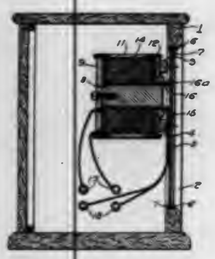
1. The method of combating sleet on the wings of an airplane which comprises inducing alternating currents in metal portions of the wings, whereby heat is generated in said metal portions as opposed to being conducted to such portions.

1,819,498. AIR CIRCULATING AND CLARIFYING UNIT. JAMES D. COLE, Cleveland Heights, Ohio, assignor, by mesne assignments, to The A. I. Root Company, Medina, Ohio, a Corporation of Ohio. Filed Aug. 22, 1929. Serial No. 387,647. 7 Claims. (Cl. 183—49.)



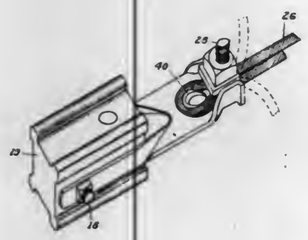
1. Mechanism of the kind described, wherein there is a casing, a fan in the casing, means for driving the fan, an air clarifying element at each side of the fan, the parts being adapted and arranged in such manner that the fan operates to simultaneously draw air from the top and bottom of the casing through both clarifying elements and to return the clarified air through the central portion of the casing to the room containing the casing.

1,819,499. TELEPHONE RECEIVER. FRANK CONRAD, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 13, 1925. Serial No. 43,096. 14 Claims. (Cl. 181—31.)



1. In a sound-producing device a plane diaphragm, means for vibrating it as a whole and means surrounding the diaphragm for preventing acoustic communication between the faces thereof.

1,819,500. INSULATOR CLEVIS. MILTON W. COOKE, Pittsburgh, Pa. Filed Dec. 8, 1927. Serial No. 238,695. 7 Claims. (Cl. 173—366.)

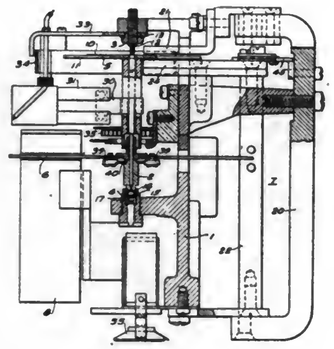


1. An insulator clevis comprising a unitary member having one of its ends U shaped for receiving an insulator, its other end flanged to form a cable entrance, the said flanged end terminating in an outwardly extending flange and a struck-up portion for engaging the contour of the cable substantially as described.

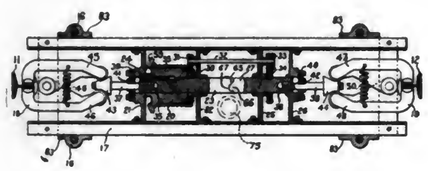
2. An insulator clevis having an insulator supporting end and a cable receiving end provided with oppositely disposed upwardly extending flanges formed on the body of the clevis and a clamp located between said flanges for clamping an associated cable to said body portion, said flanges extending upward a substantial distance so that said cable will be wholly within the height of said flanges and said clamp can be locked therebetween.

1,819,501. RELAY. LESLIE N. CRICHTON and JOHN V. BREISKY, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 23, 1926. Serial No. 130,784. 8 Claims. (Cl. 200—97.)

1. An electromagnetic relay comprising a movable magnetizable armature member, a field magnet having a split pole piece cooperating with said armature member, windings on the respective portions of said split pole piece, means including said field magnet and windings for controlling said armature member when said windings are energized above a predetermined degree and magnetic means for damping the movement of said armature.



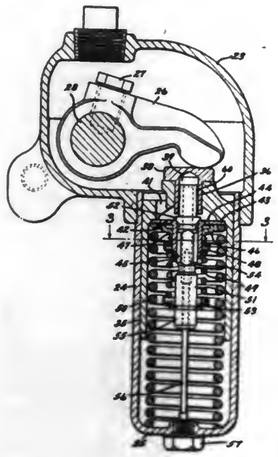
1,819,502. SAFETY DEVICE FOR ELEVATORS. JAMES DUNLOP, Park Ridge, Ill., assignor, by mesne assignments, to Westinghouse Electric Elevator Company, a Corporat'on of Illinois. Filed Feb. 6, 1929. Serial No. 337,950. 7 Claims. (Cl. 187—91.)



1. In a safety device for an elevator body, the combination with a plurality of cooperating jaws for gripping cooperating rails to stop the body, a pair of rods for operating the jaws, and a pair of nuts connected with the rods, of means for rotating said nuts at different relative speeds for actuating said rods to operate said jaws, and means operably responsive to the rotation of the nuts at different relative speeds for moving the nuts bodily to cause a rapid initial engagement of the jaws with the rails.

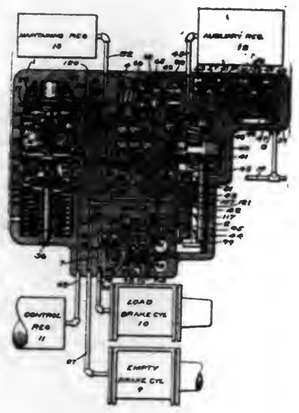
1,819,503. HYDRAULIC SHOCK ABSORBER. GEORGE W. ELSEY, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 14, 1927. Serial No. 205,779. 8 Claims. (Cl. 267—8.)

1. A shock absorber comprising in combination, a fluid containing casing; a cylinder communicating with said casing; a piston in said cylinder; valves in said piston providing for the free flow of fluid from the casing to the cylinder when the piston moves in one direction and the restricted return flow of fluid from the cylinder to the casing when the piston moves in the opposite direction; and a dashpot for cushioning the movements of the fluid flow restricting valve, said dashpot comprising a cylinder portion provided by the head of the piston and a plunger provided by the said fluid flow restricting valve, said plunger fitting into the cylinder portion so as to provide a fluid



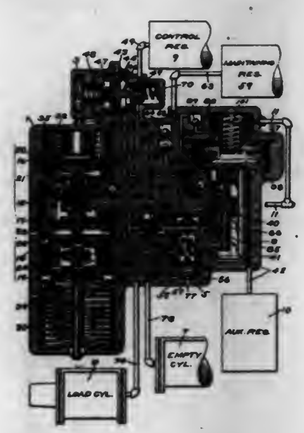
conducting space between the adjacent plunger and cylinder walls, the dashpot being fed with fluid flowing from the flu'd flow restricting valve.

1,819,504. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 11, 1929. Serial No. 346,020. 6 Claims. (Cl. 303—74.)



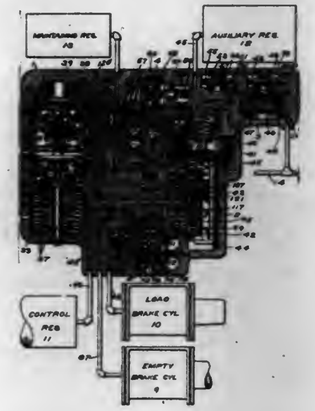
1. The combination with a brake cylinder, a brake pipe and a maintaining reservoir, of a valve mechanism for controlling the graduated release of the brakes and for maintaining the brake cylinder pressure against leakage, a valve device operative upon a reduction in brake pipe pressure for supplying fluid under pressure to the brake cylinder and for establishing communication from said maintaining reservoir to said valve mechanism, and a manually operable valve having a position for establishing communication through which fluid under pressure from the brake cylinder is vented to the atmosphere in releasing the brakes to render said valve mechanism inoperative to effect a graduated release of the brakes.

1,819,505. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,293. 9 Claims. (Cl. 303—59.)



1. The combination with a brake cylinder and an auxiliary reservoir, of valve means subject to the pressures of the brake cylinder, auxiliary reservoir and a pressure chamber for controlling the brakes, and means operative to compensate for loss of pressure in said chamber.

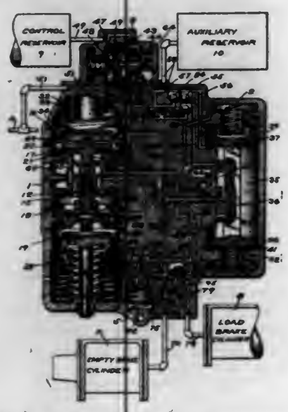
1,819,506. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,294. 4 Claims. (Cl. 303—74.)



1. The combination with a brake cylinder, a brake pipe, a maintaining reservoir and an auxiliary reservoir, of a valve mechanism for controlling the graduated release of the brakes and for maintaining the brake cylinder pres-

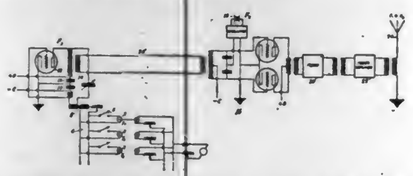
sure against leakage, a valve device operative upon a reduction in brake pipe pressure for supplying fluid under pressure to the brake cylinder and for establishing communication from said maintaining reservoir to said valve mechanism, a valve operative to one position for establishing communication through which fluid under pressure is adapted to be supplied from said maintaining reservoir to said valve mechanism when said valve device is in release lap position and for establishing communication through which fluid under pressure is supplied to the first mentioned communication through said valve and operative to another position for establishing communication through which fluid under pressure is vented to atmosphere independently of said valve mechanism, and for closing both of the communications through said valve.

1,819,507. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 16, 1929. Serial No. 347,707. 15 Claims. (Cl. 303—23.)



1. In a fluid pressure brake, the combination with a brake pipe, an empty brake cylinder and a load brake cylinder, of brake cylinder pressure maintaining valve means subject to a constant pressure and variations in pressures of fluid in the brake pipe and brake cylinders for controlling the supply of fluid under pressure to the brake cylinders, a valve normally unseated permitting unrestricted flow of fluid under pressure to said empty brake cylinder, and means operative when the pressure of fluid in the empty brake cylinder has been increased to a predetermined degree to establish communication through which fluid under pressure flows to the load brake cylinder and to close said valve to cause fluid under pressure to flow to the brake cylinders at a restricted rate.

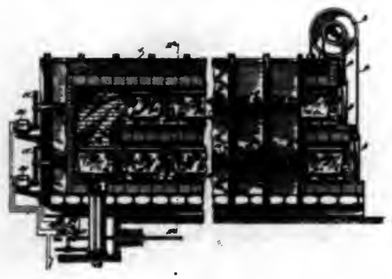
1,819,508. COMMUNICATION BY FREQUENCY VARIATION. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 11, 1927. Serial No. 212,192. 26 Claims. (Cl. 250—2.)



2. The method of transmitting multiple signals by frequency variation which includes signalling on each of a plurality of different relatively low frequency energies, adding the signal energies, and using the resultant complex wave to frequency modulate transmission energy according to a linear characteristic.

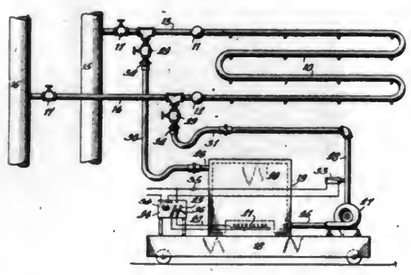
16. A multiplex transmission system comprising a single side band transmitter, a source of intermediate frequency for modulating the transmitter carrier energy, a plurality of sources of energy of different relatively low frequencies, means to add the low frequency energies to obtain their resultant, means for frequency modulating the intermediate frequency energy in response to the resultant, and signalling means for separately signalling on each of the low frequency energies.

1,819,509. COUNTERFLOW CARBURIZING MACHINE. HENRY H. HARRIS, Detroit, Mich. Filed Mar. 15, 1929. Serial No. 347,421. 22 Claims. (Cl. 263—6.)



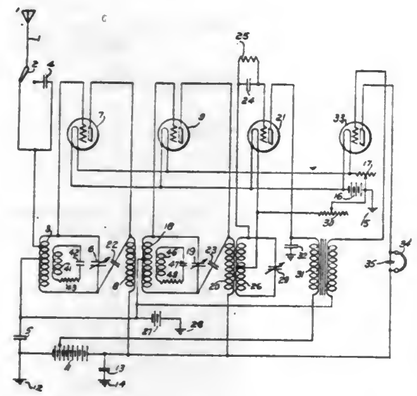
19. In a heat treating furnace, a conveyor comprising a row of rollers rotatably supported by shafts mounted in the walls of the furnace, article containing boxes having track carrying rims for suspending said boxes on said rollers, and means for impelling said boxes over said rollers from one end of said furnace.

1,819,510. DEFROSTING APPARATUS. EDWARD S. HEBELER, Williamsville, N. Y. Filed Oct. 18, 1929. Serial No. 400,513. 1 Claim. (Cl. 62—167.)



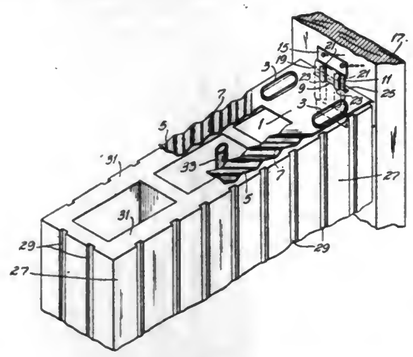
An apparatus for defrosting the cooling coils in cold storage plants, said coils including valves for controlling the admission and discharge of the cooling brine to and from the same, comprising a portable frame, a heating chamber mounted on said frame and having inlet and outlet pipes connected thereto, means for detachably joining said pipes to the cooling coil at a point between the same and their controlling valves, valves in said pipes for controlling the passage of the brine in the coil through said chamber, and a pump interposed in one of said pipes for circulating the heated brine through the coil to defrost it.

1,819,511. CIRCUIT FOR AMPLIFIER TUBES. RAY H. HOLMES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 18, 1925. Serial No. 16,345. 6 Claims. (Cl. 179—171.)



1. In a radio device, a tunable circuit having provisions for preventing feed-back over the tuning range thereof, and absorption means for preventing parasitic oscillations therein at frequencies above said range.

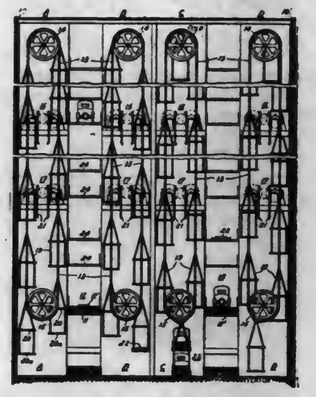
1,819,512. ANCHOR. WILLIAM O. ISAACSON, Chicago, Ill. Filed Dec. 13, 1929. Serial No. 413,711. 6 Claims. (Cl. 72—101.)



3. In an anchor of the class described, a body portion, the body portion including spaced extending legs, a bracket portion positioned between said legs and fastened thereto and a breakable junction between the bracket and body portion.

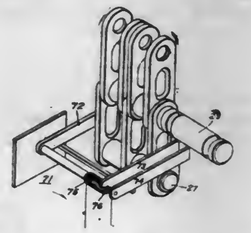
1,819,513. GARAGE ELEVATOR. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 27, 1928. Serial No. 265,011. 14 Claims. (Cl. 214—16.1.)

1. In a conveyor system, a supporting structure, a plurality of parallel passageways therein, a plurality of conveyors, each of which comprises a pair of parallel vertical columns inter-communicating at the respective ends thereof, and a plurality of load conveying elements disposed for circuitous movement in said pairs of columns, said conveyors being arranged in rows of adjacent conveyors on opposite sides of each of said passageways with one



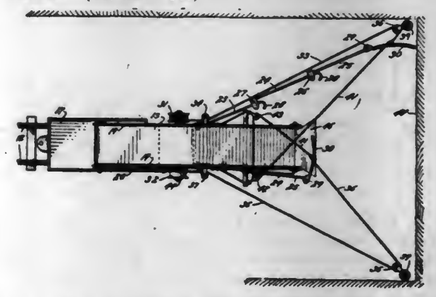
column of each of the conveyors arranged along one side of one passageway adjacent one column of a conveyor arranged along one side another passageway.

1,819,514. GARAGE ELEVATOR. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Mar. 27, 1928, Serial No. 265,011. Divided and this application filed July 25, 1929. Serial No. 380,815. 6 Claims. (Cl. 198—232.)



1. In a conveyor system, a chain for driving the conveyor, said chain comprising a plurality of links, a plurality of pins for interconnecting the links, and means operable by the projection of a pin beyond its prescribed position for attracting attention thereto.

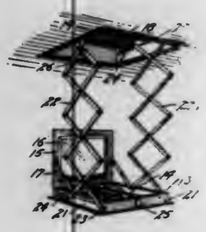
1,819,515. LOADING MACHINE. ROSSER E. JENKINS, Farr, Colo. Filed Dec. 3, 1929. Serial No. 411,281. 5 Claims. (Cl. 214—93.)



1. A mine car loading machine comprising: a motor box; wheels supporting said box; a conveyor extending over said box and projecting rearwardly thereof; a down-

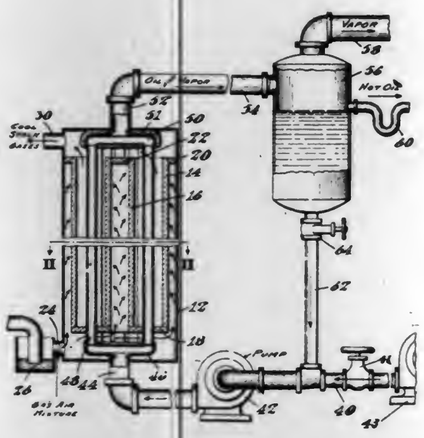
wardly inclined forward portion on said conveyor; hinged, telescoping arms extending forwardly at each side of said downwardly inclined portion; scrapers hinged at the forward extremities of said arms; a pair of cable drums carried by said motor box; and a cable connecting each of said cable drums with one of said scrapers so that each scraper will be actuated by an individual drum and means for interconnecting said scrapers so that they will actuate in unison.

1,819,516. AUTOMOBILE VANITY CASE. WILLIAM H. KELLY, Denver, Colo. Filed May 23, 1929. Serial No. 365,250. 2 Claims. (Cl. 296—37.)



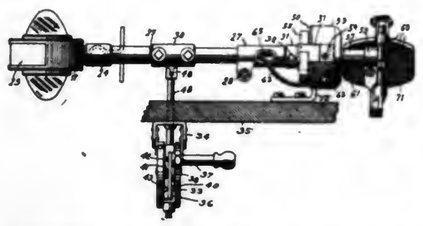
1. An automobile vanity case comprising: a container; lazy tongs secured to said container and extending upwardly therefrom; and means for securing said lazy tongs to the underside of the top of an automobile, said means comprising: plates secured in the sides of a recess in said underside and hinged to said tongs so that the container will pass into said recess.

1,819,517. HEATING SYSTEM FOR LIQUIDS. FRANK E. LICHTENTHAELER, Newton Highlands, Mass. Filed Oct. 22, 1927. Serial No. 227,974. 5 Claims. (Cl. 122—333.)



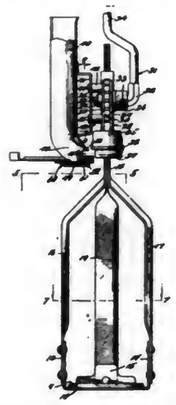
1. A system for heating oil moving at high velocity through an annular container, comprising inner and outer cylindrical walls of porous refractory material positioned opposite the inner and outer sides of the container respectively and forming an annular heating chamber, and a duct for supplying gaseous fuel to the walls of said chamber whereby to maintain surface combustion at their inner surfaces adjacent the container.

1,819,518. TRAFFIC SIGNAL ACTUATING APPARATUS. FUSAJIRO MAMIYA, Los Angeles, Calif. Filed May 17, 1930. Serial No. 453,192. 10 Claims. (Cl. 116—46.)



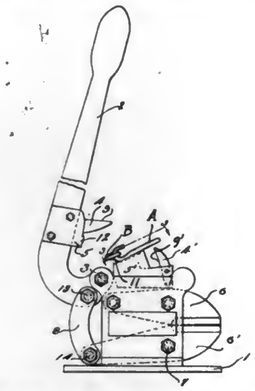
1. In a signal-actuating apparatus, the combination with a rotatable shaft, an actuating pinion on one end of the shaft, and supporting members for the shaft, of a lever housing disposed adjacent to the rotatable shaft, the housing having peripheral upper and lower slots, and notches in the upper slot, an initial signal lever operatively mounted in the lever housing, auxiliary levers pivotally connected relative to the initial signal lever and adapted to engage with the notches in the uppermost slot, an arm integral with the initial lever and projecting from the lower slot, a stop member fixed to the signal-actuating shaft, a shaft lever independently rotatable on the signal-actuating shaft, and adapted to engage with the stop member, a stop pin fixed to one of the supporting members for the signal-actuating shaft, a lever arm mounted on the signal-actuating shaft adjacent to the last-named supporting member, and a spring having one end fixed to the said supporting member and its opposite end to the lever arm.

1,819,519. BOTTLE CAPPING MACHINE. FRED K. MUELLER, Chicago, Ill. Filed Dec. 17, 1928. Serial No. 326,566. 6 Claims. (Cl. 226—84.)



6. A bottle capping machine comprising in combination a stand having at its upper end a vertical guide member, a slide working vertically on said guide member, means for moving said slide thereon, a downwardly facing cup secured to the lower portion of said slide, a U-shaped sheet spring metal clip open on one side and having its lower portion grooved for receiving and retaining a crown cap in position beneath said cup under spring tension with the cap flange engaging said groove, together with a hopper for said device comprising a vertical tubular chamber of proper size to receive the crown caps, a transversely movable feeding slide in the lower portion thereof, the lower portion of the hopper adjacent to the sealing cup being cut away to establish a slot for the delivery of the crown caps into the spring clip aforesaid, and means for connecting the hopper and feed device with the vertically movable slide first mentioned whereby said parts travel up and down in harmony, substantially as described.

1,819,520. CHAIN TOOL. FREDRICK A. OLMSTEAD, Cleveland, Ohio, assignor to The Chain Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 27, 1926. Serial No. 144,460. 2 Claims. (Cl. 7—1.)



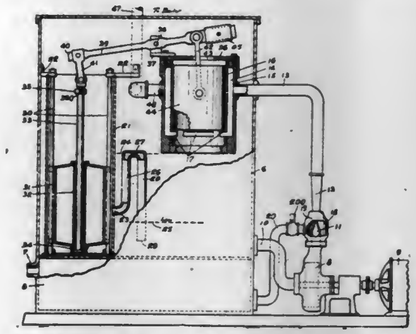
1. A bench tool for severing and manipulating the links of tire chains and the like comprising a base adapted to be secured to a suitable support, relatively movable severing jaws extending and opening beyond the base, relatively movable link spreading and closing jaws above the severing jaws and opening in the same direction as the severing jaws, a single operating member having movement in the plane of the jaws, operative connections between said member and the link spreading and closing jaws causing them to close with movement of the operating member in one direction, and connections between the operating member and the severing jaws to cause them to open with the closing movement of the other jaws, whereby when one set of said jaws is opening, the other is closing and vice versa.

1,819,521. AIR PURIFIER. HUBER H. ROOT, Medina, Ohio, assignor to The A. I. Root Company, Medina, Ohio, a Corporation of Ohio. Filed July 15, 1927. Serial No. 206,059. 2 Claims. (Cl. 183—36.)



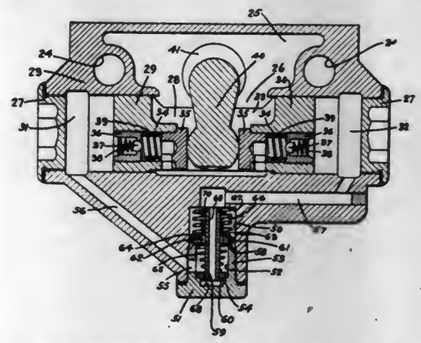
1. In combination, a bowl of the class described, an air purifying and deodorizing unit associated with the bowl and arranged to draw air therefrom, said unit comprising, a casing, a motor and fan, and an air purifying and deodorizing medium housed in the casing, said medium being disposed in the path of air induced by the operation of the motor and fan, there being means supporting the unit entirely from the bowl.

1,819,522. VACUUM CONDENSATION CONTROL. VICTOR ROSENHAGEN, Bellevue, Ky., assignor of one-fourth to William C. Buten and one-fourth to Otto Wolff, Newport, Ky., and one-fourth to Gustave M. Reiminger, Fort Mitchell, Ky. Filed Apr. 22, 1927. Serial No. 185,873. 6 Claims. (Cl. 137—68.)



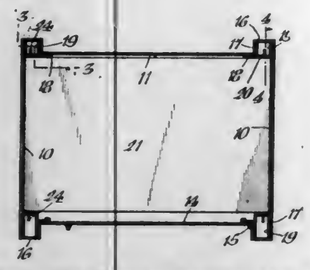
1. In a device of the class described the combination of a tank adapted to contain liquid, a float casing in the tank, a float in said casing, a siphon tube connected at its one end with the casing and at its opposite end with the interior of the tank below a normal low liquid level, the top portion of the siphon tube being co-incident with the high liquid level, a liquid supply connection, a two-way valve in said connection and means comprising a pivotally mounted arm for actuating the valve and arranged to be actuated by the float in the casing after predetermined movement of said float.

1,819,523. SHOCK ABSORBER. EDWIN F. ROSSMAN, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,346. 10 Claims. (Cl. 188—88.)



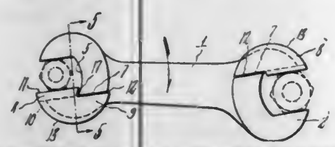
1. A shock absorber comprising in combination, a casing presenting a fluid reservoir and a cylinder; a piston in the cylinder forming a compression chamber at each end thereof; a valve-chamber; separate ducts connecting the respective compression chambers with the valve chamber; and a compound pressure release device within the valve chamber adapted to establish restricted flows of fluid from one or the other compression chambers into the one at the opposite end of the cylinder, said device comprising spring loaded valves all operating in the same direction to establish their respective fluid flows, certain of said valves being supported by others.

1,819,524. CABINET. ROBERT E. SANDBERG, Warren, Pa., assignor to De Luxe Metal Furniture Company, Warren, Pa., a Corporation of Pennsylvania. Filed Aug. 23, 1929. Serial No. 387,888. 5 Claims. (Cl. 312—141.)



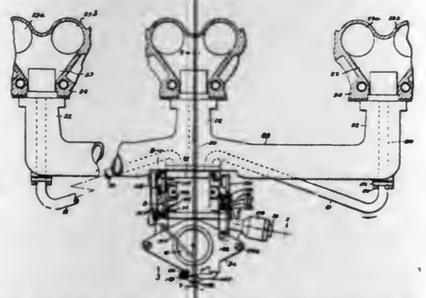
1. A cabinet of the character described, having upright guide-ways adjacent its corners facing into the cabinet, and shelf-supporting members fitted in said guide-ways said members including legs engaging the sides of the guide-ways and web portions extending across the open faces of said guideways.

1,819,525. WRENCH. GEORGE W. SCHAEFER, Quincy. Mass. Filed Oct. 18, 1930. Serial No. 489,538. 3 Claims. (Cl. 81—185.)



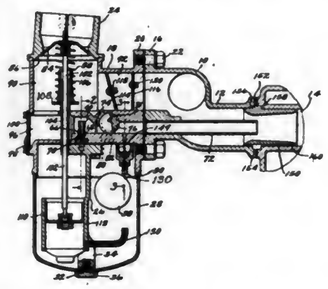
1. The combination with a wrench having a head and a nut-receiving opening, in said head defined by parallel opposite side walls extending inwardly of said head, and a bearing element on said head beyond a side wall, of a channel member comprising a bridge portion and flanges projecting therefrom, said bridge portion including an inner face in contact with a side wall and an outer face parallel with said inner face, and said flanges engaging over said head and extending inwardly of said head beyond the inner terminal of said bridge portion to transmit pressure to said bearing element when a nut is received between said outer face of said bridge portion and the opposite side wall, and when the nut is turned in a direction to apply pressure to said outer face.

1,819,526. CHARGE FORMING DEVICE. WILFORD H. TEETER, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 22, 1927. Serial No. 221,372. 33 Claims. (Cl. 123—119.)



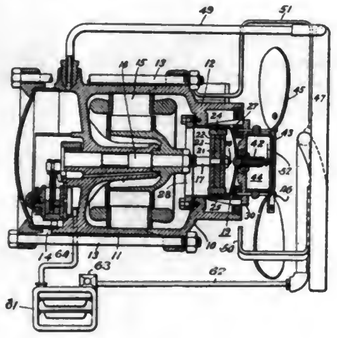
1. A charge forming device for internal combustion engines having in combination a plurality of secondary mixing chambers, a plurality of primary carburetors for supplying primary mixture to said secondary mixing chambers, a single throttle valve controlling flow of fuel mixture from the primary carburetors to the secondary mixing chambers and a single throttle controlling flow through the secondary mixing chambers.

1,819,527. CHARGE FORMING DEVICE. WILFORD H. TEETER, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 22, 1928. Serial No. 307,747. 5 Claims. (Cl. 261—41.)



1. A charge forming device for internal combustion engines comprising a secondary mixing chamber, a primary mixture passage for supplying a rich mixture to said secondary mixing chamber, means for supplying fuel and air to said primary mixture passage, means for supplying air to said secondary mixing chamber, a throttle in said primary mixture passage, and means for supplying additional fuel to said primary mixture passage substantially simultaneously with opening movements of the throttle.

1,819,528. REFRIGERATOR. MATSON C. TERRY, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1928. Serial No. 316,068. 21 Claims. (Cl. 62—115.)

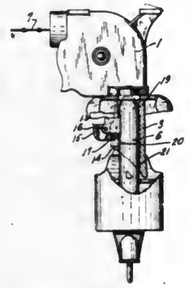


1. In a refrigerating apparatus, in combination, a hermetically sealed casing, a motor and a compressor within the casing, an evaporator, a condenser, and a fan actuated by the motor for forcing air around the condenser.

1,819,529. LAMP HANGER STRUCTURE. ALLISON J. THOMPSON, Cleveland, Ohio. Filed Oct. 27, 1930. Serial No. 491,445. 2 Claims. (Cl. 340—66.)

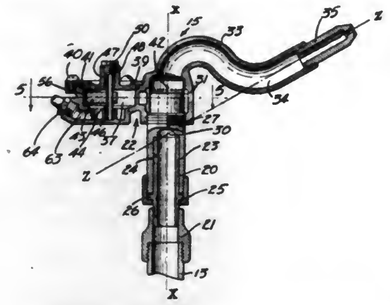
1. In a lamp hanger, a main hanger member having a vertically disposed slotted guide tube, a lamp hanger member having a stem adapted to loosely fit within said guide,

means associated with said main hanger member for raising and lowering said lamp hanger member to cause said stem to enter or leave said guide, an arm on said stem adapted to enter the slot of said guide, a latch dog carried by said arm, a shoulder on the outside of said guide engageable



by said latch dog to support said lamp hanger member in raised position, and means for maintaining said stem vertical in said guide when said dog is engaged, and comprising a boss within said guide at an elevation above said shoulder and on the side thereopposite only.

1,819,530. AUTOMATIC ROTATING SPRINKLER HEAD. WALTER VAN E. THOMPSON, Los Angeles, Calif., assignor to Thompson Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 8, 1926. Serial No. 153,276. 13 Claims. (Cl. 299—69.)

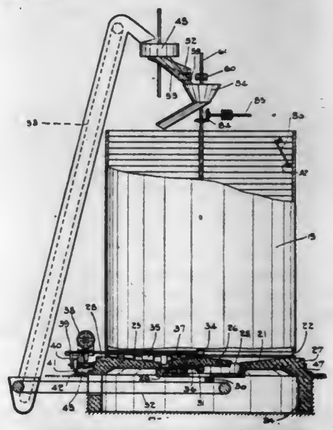


1. An irrigation sprinkler comprising: a support; a head carried by said support; a gooseneck conduit extended from said head and having imperforate walls; and a nozzle carried by said gooseneck at its outer end, said gooseneck having a curved inlet portion and a reversely curved portion in substantially the same plane and relatively proportioned to neutralize turbulence of flow initiated in the curved inlet portion.

3. An irrigation sprinkler comprising: a support; a head rotatably carried by said support, said head having a liquid passage; a primary nozzle carried by said head in communication with said passage, said primary nozzle being arranged so that the reaction of liquid flowing therefrom will tend to rotate said head but is normally incapable of doing so; and an oscillator carried by said head and operated by liquid from said passage for preventing said head from sticking, said oscillator being in the form of an eccentrically pivoted rotary weight arranged to rotate about a vertical axis so as to oscillate the head in the plane of its rotation.

6. An irrigation sprinkler comprising: a support; a head rotatably carried by said support, said head having a liquid passage; a primary nozzle carried by said head in communication with said passage, said primary nozzle being arranged so that the reaction of liquid flowing therefrom will tend to rotate said head; an oscillator pivoted in a cylindrical chamber of said head for oscillating the head in the plane of its rotation, said chamber being connected to said passage so that liquid may pass through said chamber and rotate said oscillator, said oscillator not engaging a cylindrical wall of said chamber; and a vane pivoted to said oscillator for substantially closing a space between said oscillator and said cylindrical wall.

1,819,531. PULP STORING AND MIXING MACHINE. CARL BUSCH THORNE, Hawkesbury, Ontario, Canada. Filed Mar. 22, 1929. Serial No. 349,168. 18 Claims. (Cl. 92—37.)



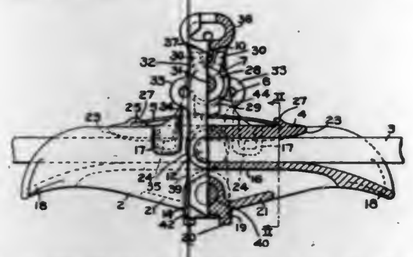
1. In a storing and mixing apparatus, a plurality of receptacles, means for gathering the products from said receptacles and means for proportioning the combined discharges for return to the receptacles and for final discharge.

1,819,532. LUBRICATING MECHANISM FOR DEEP WELL DRILLS. FRANK L. O. WADSWORTH, Pittsburgh, Pa. Filed Aug. 19, 1922. Serial No. 582,860. 24 Claims. (Cl. 255—71.)



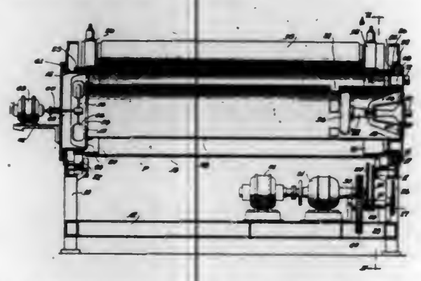
1. A driving shaft or stem for deep well drills and analogous apparatus, comprising a series of tubes of substantially different diameters disposed one within the other, multiple part coupling units secured to the contiguous ends of said tubes and having fluid circulating passages formed therein, said coupling units comprising means for radially and longitudinally uniting said tubes to form a substantially integral torque resisting member.

1,819,533. CONDUCTOR CLAMP. NILS A. WAHLBERG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1927. Serial No. 209,441. 3 Claims. (Cl. 248—31.)



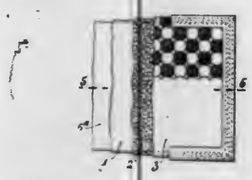
3. In combination, a clevis element, a pin for the clevis, and an element for mounting on the pin in the clevis, one of said elements having a seat and the other element having a portion adapted for positioning on said seat for temporarily holding said elements together for the reception of the pin.

1,819,534. HEATING SYSTEM FOR IRONING MACHINES. GUSTAV W. AKERLOW, Aurora, Ill., assignor to Kellman Sycamore Company, Sycamore, Ill., a Corporation of Illinois. Filed Aug. 16, 1930. Serial No. 475,645. 9 Claims. (Cl. 68—9.)



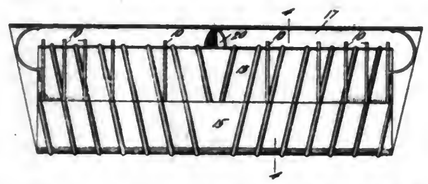
1. In combination, a drum to be heated, a tubular shell extending through said drum concentric therewith and spaced therefrom to leave an intervening space, a heating device at one end of said tubular shell, and a circulating device at the other end of said shell arranged to draw heated air out of said shell and force it to flow longitudinally through said intervening space to heat said drum.

1,819,535. DECORATIVE PRODUCT. MAURICE MOISE ASSAEL, Paris, France. Filed Apr. 17, 1930. Serial No. 445,152, and in France Mar. 12, 1930. 7 Claims. (Cl. 41—22.)



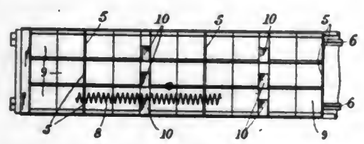
1. A decorated object comprising a core member, a sheet of plastic material covering said member, a creased thin metallic sheet covering said plastic sheet, a sheet of transparent plastic material covering said metallic sheet, the edges of said sheets being folded over the edges of said core member, and a U-shaped fitting for clamping said folded edges over said core member.

1,819,536. DEVELOPING TRAYS. GEORGE C. BEIDLER, Rochester, N. Y. Filed Nov. 12, 1930. Serial No. 495,237. 10 Claims. (Cl. 95—94.)



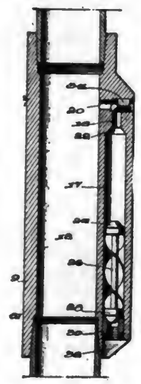
1. In a photographing and developing apparatus, a receptacle for developing fluid, and a guide associated therewith operative to flex film laterally of the direction of its movement into the receptacle.

1,819,537. ELECTRIC HEATING ELEMENT. HERBERT HENRY BERRY, London, England. Filed Sept. 1, 1928, Serial No. 303,523, and in Great Britain Oct. 28, 1927. 2 Claims. (Cl. 219—19.)



2. A support for the resistance wires of electric radiators comprising a plurality of sections, each of which is formed with a series of grooves, means for securing the sections together to longitudinally align the similar grooves of the respective sections, insulating heat resisting strips secured by said means between adjacent sections, said strips having their upper edges projecting beyond the wire-receiving surfaces of the grooves to thereby provide projections extending transversely of the grooves to engage between the convolutions of the resistance wires for holding the wires against longitudinal displacement, and members secured between adjacent sections by said means and formed with projections to overlie each of the grooves formed by the aligned sections for retaining the resistance wire against outward displacement.

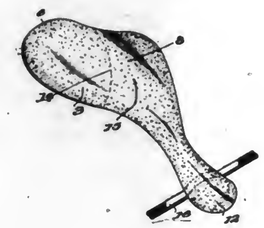
1,819,538. STAGE LIFT FLOWING DEVICE. ALEXANDER BOYNTON, San Antonio, Tex. Filed Dec. 10, 1926. Serial No. 153,947. 2 Claims. (Cl. 137—111.)



1. In a fluid control device for use in wells, a body having means whereby the same may be incorporated in a well tubing and being provided with a chamber for the passage

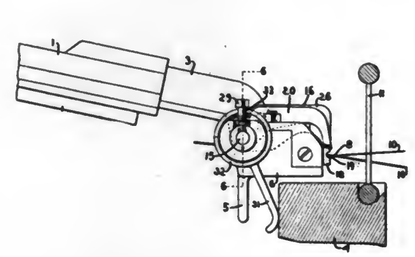
of a lifting fluid, said chamber being provided with upper and lower ports and cone-shaped seats in association with said ports, a valve movable between said seats and having upper and lower separate heads tapered to correspond to the conicity of said seats and adapted to engage said seats, said valve being provided with a spiral connection portion between said tapered heads and having one surface thereof in the path of travel of the fluid and having the edge thereof in movable engagement with the wall of the chamber to guide said tapered heads into sealing engagement with said cone-shaped seats whereby to fully close either of said ports, the length of said chamber being substantially greater than the length of said valve.

1,819,539. ARCH SUPPORT. MARTIN P. BRINGARDNER, St. Louis, Mo. Filed Oct. 24, 1929. Serial No. 402,078. 4 Claims. (Cl. 36—71.)



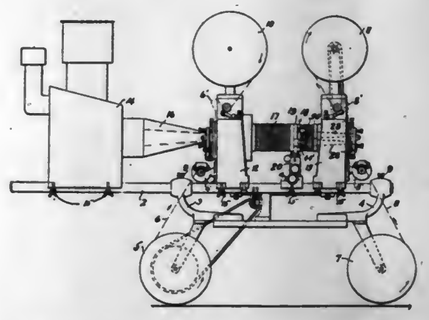
1. A shoe having arch supporting means built therein, said means comprising a stationary portion at the tarsal region and an integral adjustable portion at the metatarsal region, and means for shifting said adjustable portion.

1,819,540. SELVAGE TRIMMING MECHANISM. HORACE H. BURDETT, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 13, 1929. Serial No. 339,694. 10 Claims. (Cl. 139—303.)



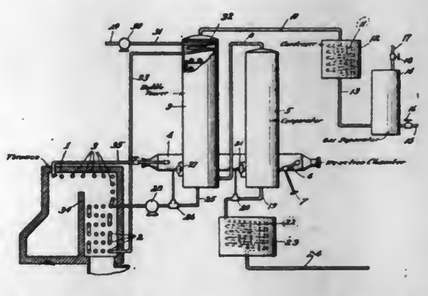
1. Selvage trimming mechanism for looms having a reed for beating in the filling, comprising a pair of cooperating cutter blades mounted and operating in a plane substantially normal to the path of the cloth the said blades having their cutting field close to the selvage forward of and adjacent the fell and means acting to effect the cutting movement of said blades before the reed has advanced sufficiently on the beat-up to divert a selvage warp into the field of action of said blades.

1,819,541. PHOTOGRAPHIC PRINTING APPARATUS. HERBERT O. CARLETON, Brooklyn, N. Y., assignor to Duplex Motion Picture Industries, Inc., a Corporation of Delaware. Filed Feb. 18, 1925. Serial No. 9,985. 6 Claims. (Cl. 88—24.)



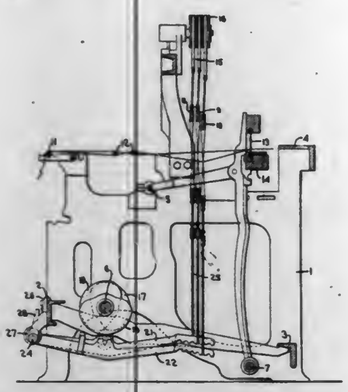
1. In a photographic printing apparatus, the combination with a film strip having a row of consecutive images thereon and means for effecting intermittent progressive movement of said film strip and a sensitized film strip adapted for movement in synchronism with said image-bearing strip, of a plurality of triangularly positioned lenses situated between said film strips one member of which being laterally displaced in position from the other and adapted for simultaneously and consecutively projecting onto said sensitized film strip a series of groups of images, each group simultaneously projected comprising an image on the sensitized film strip and another image spaced below and laterally displaced in position on said strip, and the images comprising the consecutively projected group being positioned directly below the images of the first-mentioned group and similarly laterally displaced with relationship to each other, and means for effecting independent adjustment of each of said lenses to the right and left and up and down.

1,819,542. PROCESS FOR CONVERTING PETROLEUM HYDROCARBONS. ROY CROSS, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Mar. 17, 1926. Serial No. 95,269. 6 Claims. (Cl. 196—48.)



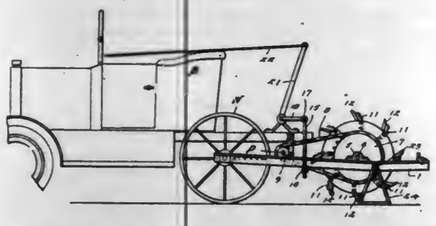
5. A process for converting petroleum hydrocarbons comprising passing a stream of oil through a furnace including a convection and a radiant heat section, to raise the oil to cracking temperatures, while maintaining high pressures, then reducing the pressure on the oil to distil off the lighter fractions, refluxing the lighter fractions to produce a clean reflux condensate, and then passing the reflux condensate directly to the radiant heat section to be directly blended with the oil passing through the furnace.

1,819,543. HARNESS LEVELING MECHANISM. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Jan. 16, 1931. Serial No. 509,064. 8 Claims. (Cl. 139—79.)



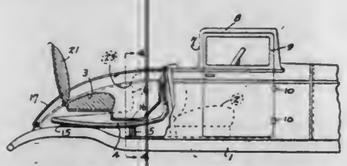
1. A loom comprising more than two harness frames, a lever for operating each frame, a cam for operating each lever, and means for shifting the fulcrums of the levers for all but two of said frames to enable those frames to be levelled which remain unlevelled after the leveling of the frames levelable by the cams.

1,819,544. WEEDING APPARATUS. HERBERT A. DECH, Northampton, Pa. Filed Oct. 23, 1930. Serial No. 490,744. 2 Claims. (Cl. 97—40.)



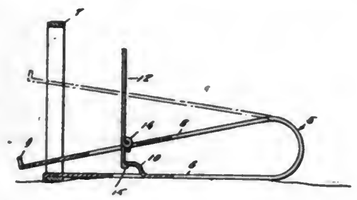
1. An apparatus of the class described comprising a frame, means for supporting the frame for movement in a vertical direction, a ground working means carried by the frame, means for raising the frame, and a freely movable prop carried by the frame for limiting its downward movement.

1,819,545. AUTOMOBILE TOP. ROLAND A. DELP, Oakland, Calif. Filed June 9, 1928. Serial No. 284,164. 5 Claims. (Cl. 296—107.)



1. An automobile having a rigid top hinged to the body of the car at the back of the top, the back of the car having a compartment large enough to receive the rigid top, a cover for the compartment, a rumble seat carried by the cover and a floor carried by the cover for supporting the feet of the occupants in the rumble seat above the concealed top.

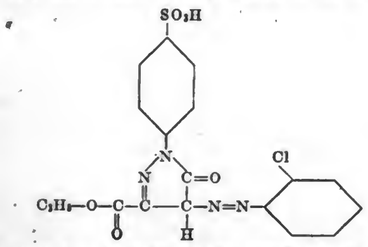
1,819,546. GOPHER TRAP. HENRY S. EASTON, Greenfield, Iowa. Filed June 11, 1930. Serial No. 460,456. 2 claims. (Cl. 43—85.)



1. A trap comprising a substantially U-shaped member formed of resilient material and embodying a pair of legs of unequal length, one of said legs adjacent the free end thereof having a tongue pressed therefrom, the other of said legs adjacent one end thereof provided with a slot, a latch swingably mounted on the last mentioned leg and having one end thereof provided with a hook for engaging said tongue, the distance between the pivots of the latch and said hook being less than the distance between the legs of said U-shaped member when the legs are in spaced parallel relation whereby when said hook is engaged with said tongue said other leg will be disposed at an acute angle to the horizontal, and said other leg at its free end provided with impaling tongues.

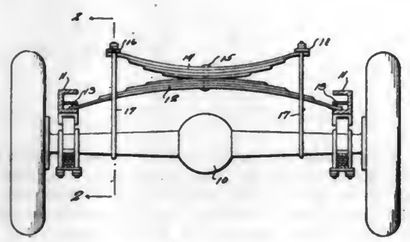
1,819,547. AZO DYESTUFF FROM SULPHOARYL-3-CARBOXYLIC ACID ESTER-5-PYRAZOLONES. HEINZ EICHWEDE and ERICH FISCHER, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 9, 1925, Serial No. 68,025, and in Germany Nov. 27, 1924. 14 Claims. (Cl. 260—87.)

1. As a new product the azo dyestuff of the formula:



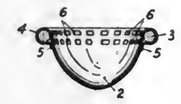
which dyes wool an even reddish yellow tint of excellent fastness to light.

1,819,548. VEHICLE SNUBBER. CHARLES ERICKSON, St. Cloud, Minn. Filed Sept. 7, 1929. Serial No. 391,014. 2 Claims. (Cl. 267—45.)



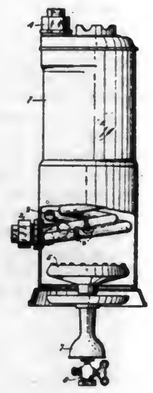
1. In a vehicle having an axle and a chassis and springs supporting the chassis from the axle, a snubber comprising a transversely extending upwardly bowed spring having its ends attached to the vehicle frame and a downwardly bowed spring superposed upon the upwardly bowed spring and connected therewith at the middle, the last named spring at its ends having shackles loosely engaging beneath the axle, said shackles permitting upward movement of the axle relative to the first named spring and limiting upward movement of the ends of the second named spring relative to the axle.

1,819,549. PESSARY. AUGUST FISSLER, Berlin-Wilmersdorf, Germany. Filed Sept. 24, 1927, Serial No: 221,793, and in Germany Oct. 11, 1926. 1 Claim. (Cl. 128—127.)



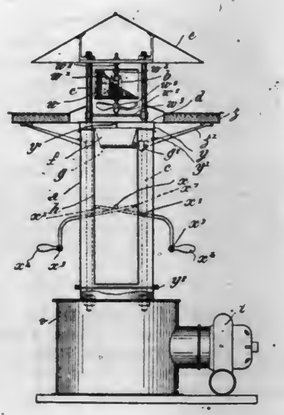
A pessary comprising a normally firm medicated ring liquefiable by heat of the body and a cup-shaped pocket of thin collapsible material non-dissoluble by heat and moisture, the edge of said pocket being overturned and joined to the exterior of the pocket thereby forming an outwardly closed chamber for housing said ring, the ring thus normally reinforcing the chamber, the inner wall of said chamber having perforations adapted to permit discharge of medicated matter into said pocket when said ring melts from heat and moisture, whereby, upon said ring having completely dissolved, the pocket automatically collapses.

1,819,550. WATER HEATER CIRCULATING COIL. ARTHUR FRIEDMAN, Cleveland, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 3, 1928. Serial No. 258,872. 6 Claims. (Cl. 122—250.)



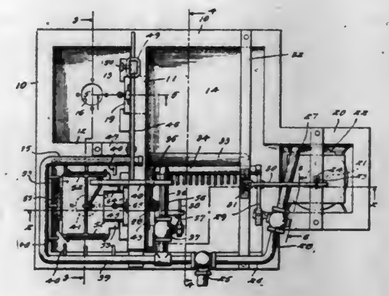
2. In a liquid heater, a circulating coil, a coupling member permanently brazed to the lower end of said coil so as to form an integral irremovable part thereof, and means adjacent to and spaced from said coupling member to prevent the collection of condensate at the joint between the coupling member and the coil.

1,819,551. METHOD AND APPARATUS FOR CAPTURING INSECTS. GEORGES GOURDON, Montmorency, France. Filed Dec. 27, 1929, Serial No. 416,779, and in Belgium Jan. 9, 1929. 6 Claims. (Cl. 43—113.)



6. In a trap, a source of light, means operative to vary the intensity of the light falling on a predetermined point in radiating range of said light source, scintillating and reflecting means positioned within radiating range of said light source and operative to reflect scintillating beams of light, an enclosure provided with an air-inlet, and means for producing a current of air flowing from said light source towards the air inlet of said enclosure.

1,819,552. APPARATUS FOR REGULATING THE CONSISTENCY OF PAPER STOCK. JOHN F. GRABOWSKY, Stevens Point, Wis. Filed Oct. 26, 1929. Serial No. 402,646. 11 Claims. (Cl. 92—46.)



1. An apparatus for regulating the consistency of a flowing liquid including a main compartment, a scale compartment having an inlet communicating with the main compartment, the scale compartment having an outlet, a gate valve for controlling the flow through said inlet, a scale beam, a scale plate disposed in the scale compartment and operatively engaging the beam, the scale beam having a counter-weight, a pipe for discharging thinning liquid into the interior of the main compartment adjacent the bottom thereof, and a valve in the length of said pipe and operative adjustable connections between said beam and said valve and between the gate and said beam.

1,819,553. RETAINING DEVICE FOR PIPE COVERINGS. MANUEL H. GYSLING, North Tonawanda, N. Y., assignor to American District Steam Company, North Tonawanda, N. Y., a Corporation of New York. Filed May 24, 1930. Serial No. 455,345. 9 Claims. (Cl. 154—44.)



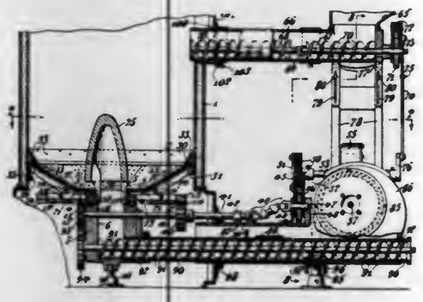
1. In combination, a pipe insulation surrounding said pipe, a rigid member seating on the pipe and extending outwardly through the insulation to the outer periphery thereof, and a retaining strap surrounding the insulation, said strap being supported by said rigid member.

1,819,554. RESISTOR AND TERMINAL CONNECTION. ALBERT J. HANSON, Arlington, Mass., assignor to American Electric Furnace Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 9, 1927. Serial No. 232,035. 2 Claims. (Cl. 201—74.)



1. In combination, an electric furnace terminal rod, a ribbon resistor for high temperature operation, and a single strip having an intermediate portion formed to embrace said rod and its end portions lapping opposite sides of said resistor, said rod, resistor and strip being welded together.

1,819,555. FURNACE. WALTER G. HERSCHELL, Wilkes-Barre, Pa., assignor to William F. Otto, Hazleton, Pa. Filed Oct. 29, 1930. Serial No. 491,867. 12 Claims. (Cl. 110—36.)



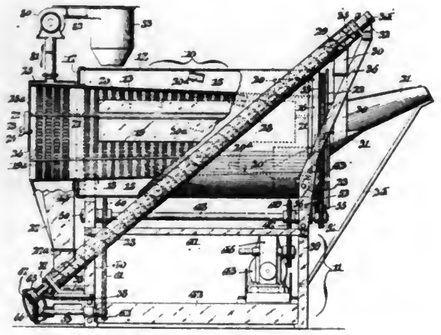
12. In a furnace, the combination of a rotatable grate having an opening therein upon which fuel is discharged, and a member supported above and spaced from said grate and located eccentrically thereof and with respect to said opening, means for causing rotation of said grate with respect to said member, thereby moving the fuel about said member and effecting the discharge of the ash from the combustion chamber of said furnace.

1,819,556. APPARATUS FOR STACKING MAIL. ROBERT HILL, Aylmer, Quebec, Canada. Filed Oct. 21, 1929. Serial No. 401,289, and in Canada Sept. 26, 1929. 8 Claims. (Cl. 198—35.)



8. In an apparatus for stacking mail, the combination with a trough provided with a base having slots therein, a conveyor belt co-operating with said base substantially between the slots, gravity operable carriers normlay assuming an upright position on the belt, stackers normally assuming an upright position in the trough and designed under the influence of pressure of material on the belt to collapse or dip through the slots to permit passage of the material thereover and to then return automatically through the slots to normal upright position.

1,819,557. COATING APPARATUS. HERBERT T. HUNTER, Catonsville, Md., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 3, 1928. Serial No. 317,079. 5 Claims. (Cl. 91—7.)



3. In coating apparatus of the character described, a horizontal rotating drum with an inner perforated shell having longitudinally-directed angularly-pitched progression-counteractive ribs, said shell being adapted to be traversed by the articles being coated by granular or pulverulent coating material showering from above upon the traversing articles, a longitudinaly extending vane in the shell to deflect the coating material laterally for distribution over the region of greatest concentration of the articles within the drum, stationary heads forming closures for the opposite ends of the drum and affording journal bearing for an axis supporting the deflecting vane aforesaid thereby to enable angular adjustment of the latter, and means whereby the vane may be fixed in adjusted positions.

1,819,558. CAP. MARION M. HUSMAN, New York, N. Y. Filed Apr. 23, 1930. Serial No. 446,728. 1 Claim. (Cl. 2—174.)

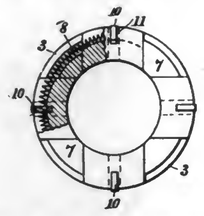
A cap comprising a sheet of material adapted to cover a person's head with its front edge extending across the forehead and sides of the face, said sheet increasing in width towards its rear end to provide pronounced side extensions integral with the sheet and tapered towards their outer ends and adapted to extend downwardly at opposite sides of the neck and being of sufficient length to be drawn towards each other and joined beneath the chin,

and companion fastening means adjacent opposite side edges of the sheet adapted to be releasably joined whereby



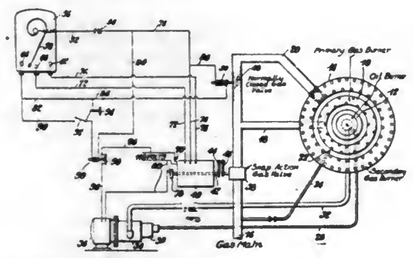
side portions of the sheet may be folded to form flaps drawn rearwardly about a person's head and united at the back of the head.

1,819,559. METALLIC PACKING FOR RECIPROCATING SHAFTS. GEORGE FREDERICK JONES, Westminster, London, England, assignor to British Metalic Packings Company (1929) Limited, a Company of Great Britain. Filed Nov. 23, 1929, Serial No. 409,322, and in Great Britain Aug. 17, 1929. 2 Claims. (Cl. 288—3.)



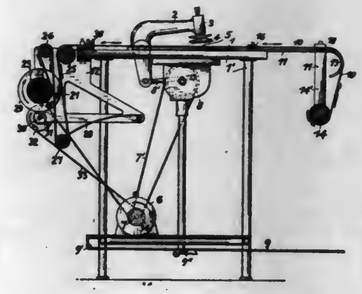
1. A metallic packing for reciprocating shafts, comprising a ring member divided into segments, a second ring member divided into segments along two pairs of parallel straight lines intersecting at right-angles and spaced apart by equal amounts from the centre of the second ring member, grooves in the outer peripheries of the ring members, and springs arranged in the grooves an encircling the ring members for holding the segments in place, said springs being received in radialy arranged plate elements extending between the ring members for holding them together.

1,819,560. HOUSE HEATING SYSTEM. ALBERT L. KLEES, New York, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Nov. 13, 1926. Serial No. 148,134. 1 Claim. (Cl. 158—11.)



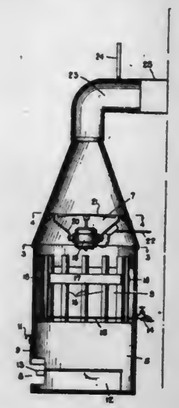
In space heating apparatus, in combination, a primary fluid fuel burner having a capacity sufficient to meet only the normal heat demands of the space, two auxiliary fluid fuel burners, means for supplying fuel and air to each of said burners, a thermostat responsive to changes in heat demand of said space, and separate means under the control of said thermostat for throwing said primary burner and either of said auxiliary burners into and out of operation in accordance with variations in the heat demand of said space.

1,819,561. PRINTING MACHINE FOR PRINTING STRIPS OF MATERIAL. JOSEPH KRELL, Berlin-Zehlendorf, Germany. Filed June 7, 1928, Serial No. 283,709, and in Germany July 9, 1927. 4 Claims. (Cl. 271—2.4.)



1. A strip-feeding mechanism for printing machines comprising a frame, strip-supporting and strip-feeding parts on said frame, a drive for said feeding parts, means exerting a braking action on the strip for retaining said strip on said frame against the action of said feeding parts, and means permitting slip intermediate said drive and said feeding parts.

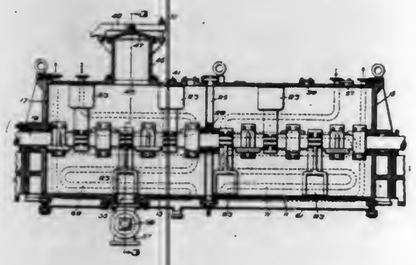
1,819,562. FUMIGATOR FOR FRUIT AND OTHER CARS. ARTHUR LAFAYETTE, Dinuba, Calif. Filed Sept. 17, 1928. Serial No. 306,601. 9 Claims. (Cl. 167—3.)



5. A fumigator comprising a casing having a combustion chamber at the bottom thereof and an outlet at the top thereof, a pair of cooling chambers arranged in successive order in said casing above said combustion chamber, a partition between the combustion chamber and lower cooling chamber, a partition between the cooling chambers having an opening therein, conducting tubes extending at their lower ends into the combustion chamber through the first-named partition and thence upwardly through the lower cooling chamber and terminating at their upper ends below the second-named partition, an annular dam wall surrounding the opening in the upper partition and extend-

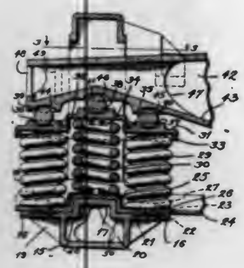
ing therefrom upwardly into the upper cooling chamber, a suction chamber in the casing between the outlet and the upper cooling chamber, and means for drawing fumes into said suction chamber through the cooling chambers from the combustion chamber and discharging the fumes from the suction chamber through the outlet.

1,819,563. METHOD OF MANUFACTURING ACETIC ANHYDRIDE. GEORGE P. LUNT, Brookline, Mass., assignor to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed June 4, 1929. Serial No. 368,316. 3 Claims. (Cl. 260—123.)



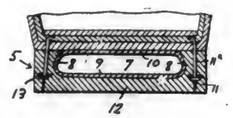
1. The process of manufacturing acetic anhydride which consists in charging a batch mixer with anhydrous acetate of soda, feeding by stages from time to time variable, individual quantities of sulphur chloride or sulphuryl chloride and chlorine gas to produce the required reaction, agitating the materials fed to the mixer, absorbing the heat of reaction from the walls of the mixer by a contacting body of liquid having a low freezing point, chilling the liquid by volatilizing a volatile refrigerant at the mixer in the presence of said liquid, and quickly changing the rate of volatilization from time to time with reference to the rate of feed of materials to the mixer to counteract the rise in the heat of reaction following the feeding of such materials and to maintain the temperature of the materials in the mixer within the prescribed temeprature range.

1,819,564. RAILWAY CAR TRUCK. MARK H. MARTIN, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Feb. 23, 1929. Serial No. 342,135. 23 Claims. (Cl. 105—197.)



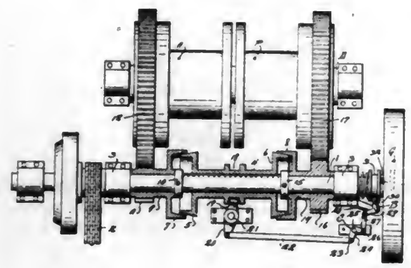
16. A truck bolster of hollow construction adapted for lateral movement and shaped on the under side thereof to cooperate with rollers disposed in a peak formation.

1,819,565. PNEUMATIC HEEL. CARL M. MCBRIDE, Eureka, Calif. Filed July 8, 1930. Serial No. 466,508. 2 Claims. (Cl. 36—35.)



1. A pneumatic heel of the type described comprising a resilient body in the shape of a heel and having a recess opening through its upper surface and an inflated bladder in said recess and protruding beyond the said upper surface, said recess defining a circular opening in said upper surface and vertical walls whose inward surfaces are concaved and a bottom, said opening occupying the greater portion of the area of the upper surface whereby to limit the thickness of the walls, said walls being of a thickness capable of supporting the standing weight of a person without distortion.

1,819,566. POWER TRANSMISSION MECHANISM. BYRON W. MILLER, Denver, Colo. Filed May 16, 1929. Serial No. 363,539. 2 Claims. (Cl. 74—97.)



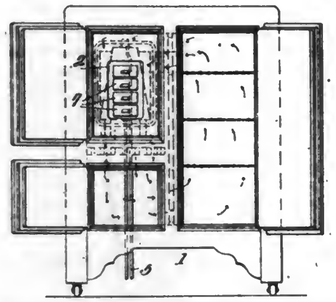
1. In a power transmission mechanism including a drive shaft, a driven member, and a series of gears connecting said drive shaft with said driven member, certain of said gears being rotatably disposed on said drive shaft, clutch elements rotatable with said certain gears, a sleeve rotatable with said drive shaft and having lengthwise movement thereon, opposed clutch elements carried by said sleeve, centrifugal means, rotatable with said drive shaft, and sleeve operating means engaging said sleeve and said centrifugal means.

1,819,567. TARGET TRAP. PAUL NORTH, Lakewood, Ohio, assignor to The Chamberlain Cartridge & Target Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 10, 1931. Serial No. 507,841. 5 Claims. (Cl. 124—6.)



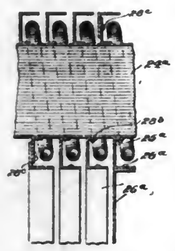
2. A carrier for a target trap comprising a base having a bottom supporting member of relatively light material and an upper target engaging member supported by the former member, the latter member being a relatively strong, thin sheet having a smooth upper surface adapted to be traversed by the targets under the influence of centrifugal action.

1,819,568. REFRIGERATING APPARATUS. REUBEN E. OTTENHEIMER, Baltimore, Md. Filed Dec. 19, 1927. Serial No. 241,101. 48 Claims. (Cl. 62—95.)



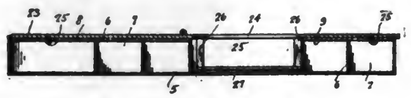
39. A refrigerating mechanism comprising a chamber, a form therein having a plurality of downwardly diverging walls so disposed relative to the walls of said chamber as to accelerate fluid currents downwardly through said chamber.

1,819,569. REFRIGERATING APPARATUS. REUBEN E. OTTENHEIMER, Baltimore, Md. Filed Dec. 19, 1927. Serial No. 241,102. 27 Claims. (Cl. 62—95.)



1. A refrigerating apparatus including a tank, angular fins thereon, and a coil having its turns disposed within the angles of the fins.

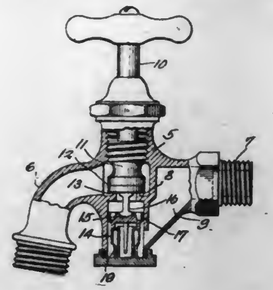
1,819,570. NONSINKABLE BOAT. EUGENE ALLEN PARKER and ROY CUTSINGER, Morrilton, Ark. Filed Mar. 23, 1931. Serial No. 524,714. 4 Claims. (Cl. 9—5.)



3. A boat of the character described comprising a plurality of air compartments arranged in forwardly and rearwardly spaced relation to provide an occupant compartment, a cover board for the tops of the compartments and provided with an opening registering with the occupant compartment, and a platform depending from the cover board into the said occupant compartment.

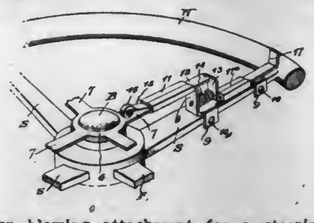
1,819,571. FAUCET. HORATIO A. PORTER and WALTER J. PORTER, Springfield, Mass. Filed June 26, 1928. Serial No. 288,328. 1 Claim. (Cl. 277—27.)

In a water faucet, a body portion, a valve seat in the body portion, a valve stem carrying a valve on its lower end, operating in the body portion and adapted to engage the valve seat to control the passage of water through the body portion, a vertically movable valve loosely mounted in the body portion under the valve seat and adapted to engage the valve seat to stop the flow of water through the body portion, and a vertically movable guiding member



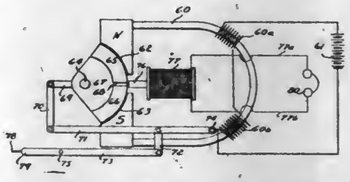
closely fitted in the body portion and into which the last mentioned valve moves, to guide the last mentioned valve to its seat.

1,819,572. HORN BLOWING ATTACHMENT FOR STEERING WHEELS. GEORGE RECHTER, San Francisco, Calif. Filed Nov. 7, 1929. Serial No. 405,448. 7 Claims. (Cl. 74—39.)



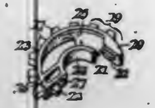
1. A horn blowing attachment for a steering wheel, comprising a strip, means for securing said strip upon a spoke of the wheel, guides carried by the inner and outer end portions of said strip, a second strip slidably engaged with said guides, a shoe on the inner end of said second strip adapted to bear against and depress the conventional horn button upon inward sliding of said second strip, a handle at the outer end of said second strip for inwardly sliding the same, and a spring for returning said second strip after each operation thereof.

1,819,573. METHOD OF AND APPARATUS FOR TRANSLATING ENERGY. WALTER H. SCHIMPF, Toledo, Ohio, assignor of one-fourth to John M. Cole, New York, N. Y. Filed Dec. 9, 1926. Serial No. 153,586. 35 Claims. (Cl. 179—100.41.)



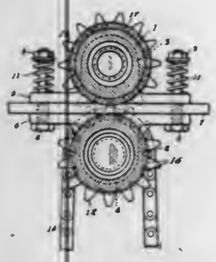
1. In an energy translating device, a magnet system including movably mounted parts arranged in fixed relation relative to one another and of opposite polarity, said parts being separated by a narrow gap, a coil, and a soft iron core in said coil, said core having an end projecting into the field emanating from said parts and separated from the same by a narrow air gap and acting on said parts to cause them to assume a normal position in which substantially no magnetic flux is induced lengthwise of the core, whereby flux variation in said core is a combined function of current in the coil and movement of said parts.

1,819,574. RACK AND PINION OPERATOR. JOSEPH H. SHEARD, Philadelphia, Pa., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1929. Serial No. 415,749. 10 Claims. (Cl. 74—28.)



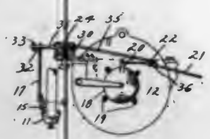
3. In a sectional gear the combination of opposing components, one provided with a yoke-like extension continuous with the root circle for engagement over an inwardly extended tooth on the other, a projection diametrically opposed to said extension engaging in a slot similarly opposed to the cooperative tooth effective to prevent lateral movement of the respective components, and means for securing said components in co-active assembly.

1,819,575. DEVICE FOR RECOVERING PINEAPPLE FROM WASTE SHELLS. ROBERT B. TAYLOR, Kapaa, Territory of Hawaii, assignor to Hawaiian Canneries, Ltd., Kapaa, Hawaii, a Corporation of Hawaii. Filed Oct. 26, 1927. Serial No. 228,952. 4 Claims. (Cl. 146—6.)



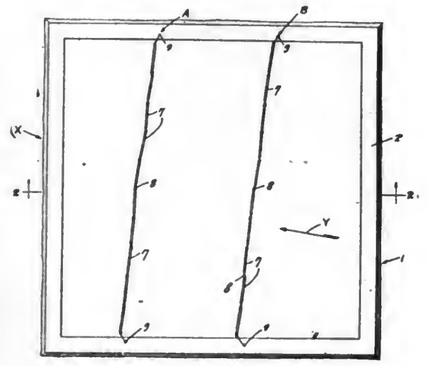
1. The method of recovering pineapple from shells containing the same, which consists in gripping the shell and subjecting the inner face thereof to rolling action relative to the shell.

1,819,576. AUTOMATIC SPARK RETARDER FOR INTERNAL COMBUSTION ENGINES. FRANK N. TRUAX, Fonda, Iowa. Filed July 30, 1929. Serial No. 382,132. 3 Claims. (Cl. 123—179.)



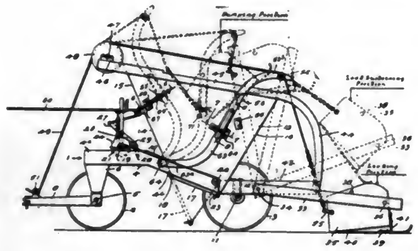
1. In combination, an internal combustion engine having a timing device in the ignition system provided with a movable member for advancing and retarding the ignition period of said system, a carburetor choker device, means for moving the choker device to open and closed positions, and means actuated by the closing movement of said choker operating mechanism for automatically moving the movable member of said timing device to a retarded position, and means included in the last said means for operating said timing device independently of the choker operating mechanism.

1,819,577. METHOD OF AND APPARATUS FOR PRECIPITATING DRIFT OR SHEET SALT. HATTIE K. TYNDALL, San Leandro, Calif. Filed Feb. 1, 1928. Serial No. 251,105. 4 Claims. (Cl. 23—42.)



1. The method of evenly settling salt crystals from a body of brine which consists in stopping the surface movement of the precipitated crystals at short intervals and in settling the crystals.

1,819,578. POWER LOADING DUMP WAGON. BRUCE A. WATT, Buffalo, Wyo. Filed June 28, 1930. Serial No. 464,587. 6 Claims. (Cl. 214—78.)



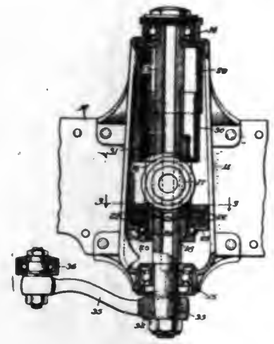
3. A machine of the character set forth, including a body, pivoted draft arms extending rearwardly of the body, a forwardly facing scraper rockably connected to the draft arms and normally occupying a downwardly and forwardly inclined loading position, means connected to the scraper and operable to swing the scraper on the draft arms into an upwardly and forwardly inclined load sustaining position and then swing the draft arms upwardly and forwardly to carry the scraper in this position above the body, and means for stopping the movement of the draft arms when the scraper is above the body, said first means being operable to release the scraper after the draft arms have been stopped, and the draft arms supporting the scraper when released for downward swinging movement into dumping position.

1,819,579. MOTOR VEHICLE FRONT END SUSPENSION. JAMES A. WHITCOMB, Kenosha, Wis.; Emma E. Whitcomb and Thelma G. Whitcomb, Kenosha, Wis., administratrices of said James A. Whitcomb, deceased. Filed May 2, 1929. Serial No. 359,735. 1 Claim. (Cl. 280—96.2.)

In a motor vehicle, an axleless independently sprung front wheel mounting comprising, in combination with a chassis, a bracket which is directly connected with the

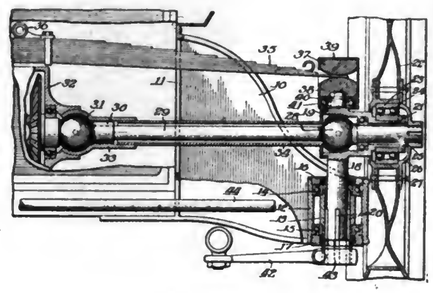
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chassis, a vertically disposed knuckle pin which is rotatable in the bracket, a wheel spindle which is mounted on the knuckle pin in non-rotatable association with the same, telescopic dash pot members housing the knuckle pin and engaged by the bracket and spindle respectively, resiliently yieldable means for resisting vertical movement of the



spindle relative to the bracket, a steering mechanism carried by the chassis, a steering arm mounted on the pin in non-rotatable association with the same, a connection between the steering mechanism and the steering arm, and means for preventing the steering arm from moving vertically with respect to the bracket.

1,819,580. FRONT WHEEL DRIVE FOR MOTOR VEHICLES. JAMES A. WHITCOMB, Kenosha, Wis.; Emma E. Whitcomb and Thelma G. Whitcomb, Kenosha, Wis., administratrices of said James A. Whitcomb, deceased. Filed Nov. 4, 1929. Serial No. 404,860. 2 Claims. (Cl. 180—43.)



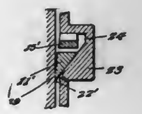
1. In a front wheel drive assembly, a bracket for attachment to the frame of a vehicle, a wheel for supporting the vehicle, a knuckle having a vertically extending portion which is mounted for both vertical and turning movement in the bracket and a hollow horizontally extending portion which forms a journal for the wheel, resiliently yieldable means for resisting vertical movement of the knuckle, a power-transmitting shaft in the horizontally extending portion of the knuckle connected with the wheel, a universal driving joint in the shaft in alignment with the axis of the vertically extending portion of the knuckle, a sleeve rotatably mounted in the bracket about the vertically extending portion of the knuckle in splined association with the latter, and a steering arm connected with the sleeve.

1,819,581. PISTON RING. JOHN WILLIAMS, Philadelphia, Pa. Filed Mar. 10, 1930. Serial No. 434,715. 5 Claims. (Cl. 74—109.)



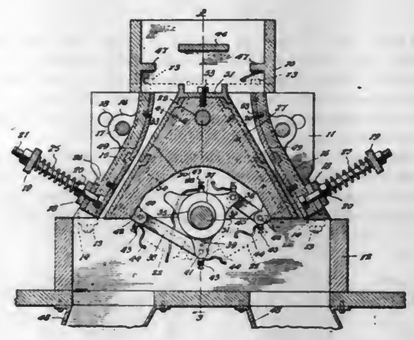
1. A piston ring provided with circumferentially aligned horizontal slots and with vertical slots communicating with the horizontal slots in rear of the ends of the slots and opening through the upper edge of the ring, said slots, producing tongues connected to the body of the ring by webs, said tongues being sprung upwardly from the body of the ring at the free ends and extending past the webs at the opposite ends said ring being formed with a beveled seat extending substantially to the bottoms of the horizontal slots.

1,819,582. PISTON RING. JOHN WILLIAMS, Philadelphia, Pa. Filed Mar. 10, 1930. Serial No. 434,716. 7 Claims. (Cl. 74—109.)



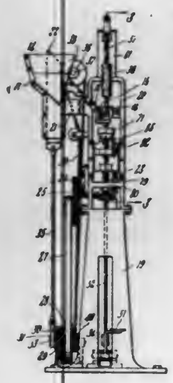
1. A piston ring provided with circumferentially aligned horizontal slots and with vertical slots communicating therewith, the material at the edge of the ring being cut away overlying each horizontal slot, said cut away portion extending from each vertical slot to a point contiguous to the next adjacent vertical slot, said slots and cut away portions producing tongues connected to the body of the ring by webs and providing oil drainage spaces above and below the tongues, said ring being formed with a beveled seat extending substantially to the bottoms of the horizontal slots.

1,819,583. CRUSHER. ORVAL C. WINTERS, Youngstown, Ohio. Filed Feb. 20, 1930. Serial No. 429,986. 9 Claims. (Cl. 83—53.)



1. A crusher comprising a casing, anvils therein, a shaft, a cam on the shaft, a crusher head between and coacting with the anvils, an eccentric block operated by the cam, and a pair of links pivotally connected to the block and pivotally connected to the head and adapted to oscillate said head by exerting an alternate pull upon the head.

1,819,584. DOWEL DRIVING MACHINE. WILLIAM J. YOUNG, Lynn, Mass., assignor to W. J. Young Machinery Company, Lynn, Mass., a Corporation of Massachusetts. Filed Mar. 10, 1931. Serial No. 521,422. 11 Claims. (Cl. 144—31.)



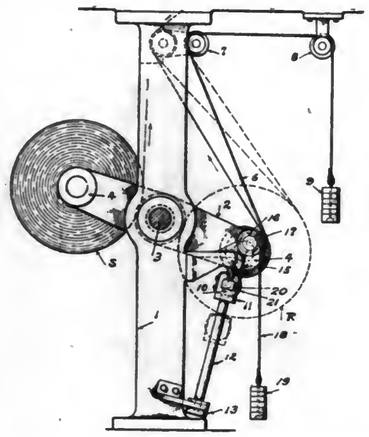
2. In a dowel driving machine, the combination with a reciprocatable driver and guiding means in alinement with such driver for receiving the dowels to be driven, of a raceway leading on an inclination toward such guideway for conducting dowels endwise thereto, and a movable transferer having a side which is adapted to be placed in alinement with said raceway for receiving dowels therefrom and to be shifted to another position wherein it forms a part of the guideway, the end of said transferer being arranged as a gate across the delivery end of the raceway when the transferer is in the last named position.

1,819,585. METHOD OF PREVENTING DECOMPOSITION OF HALOGENATED HYDROCARBONS. EDWARD C. ZUCKERMANDEL, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 3, 1928. Serial No. 297,368. 21 Claims. (Cl. 23—250.)

1. The herein described method of preventing the decomposition of halogenated aliphatic hydrocarbons which consists in adding thereto in relatively small amount an oil-soluble azo dye containing a phenolic component.

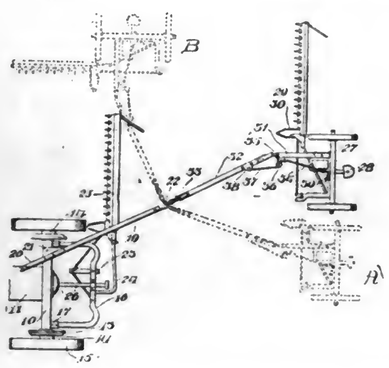
1,819,586. WEB ROLL CONTROLLING MECHANISM. HARRY V. BALL, Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 11, 1928. Serial No. 245,870. 10 Claims. (Cl. 242—75.)

1. In a web roll controlling mechanism, the combination of a movable support for supporting a spare web roll and a running web roll, a flexible tension device engaging the surface of the runing roll, and anchoring means for anchoring one end of the tension device below the running roll and supported to move with the roll and closely adjacent thereto when the support is moved to bring the web roll to a normal running position so that the anchored end is held closely adjacent the roll at all times during



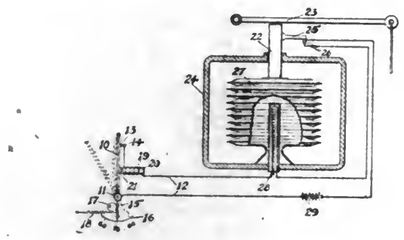
its unwinding and thus cause the tension device to engage the roll surface with a substantially constant arc of contact as the roll decreases in size.

1,819,587. MOWER HITCH. BERT R. BENJAMIN, Oak Park, and CHARLES PEARSON, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Feb. 19, 1927. Serial No. 169,443. 8 Claims. (Cl. 280—33.44.)



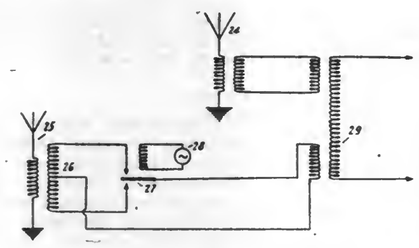
1. The combination with a tractor having a pair of rear traction wheels, a drawbar, and a mower having a rearwardly disposed and laterally extending cutter bar connected to said drawbar; of a hitch device for drawing a second mower, the hitch device comprising a primary draft connection rigidly carried by the tractor and extending diagonally rearwardly and outwardly across the first mower attachment and terminating at its free end at a point located laterally of the line of travel of one of the traction wheels and rearwardly of the cutter bar of the first mower, and said second mower including a secondary draft connection pivotally connected to the free end of the primary draft connection.

1,819,588. TEMPERATURE CONTROL SYSTEM AND APPARATUS. MORRIS H. BENNETT, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 20, 1929. Serial No. 341,379. 2 Claims. (Cl. 236—68.)



1. A temperature controlling system, comprising means responsive to changes in temperature, an electric circuit controlled by said means, heat regulating apparatus controlled by the circuit, said apparatus including a movable member, a bellows having an expansible gas, and a resistor within the bellows and in the circuit, means in the circuit acting to maintain the temperature responsive means in circuit closing position upon current flow in the circuit, and a pair of contacts in the circuit, one of the contacts being movable and carried by the movable member.

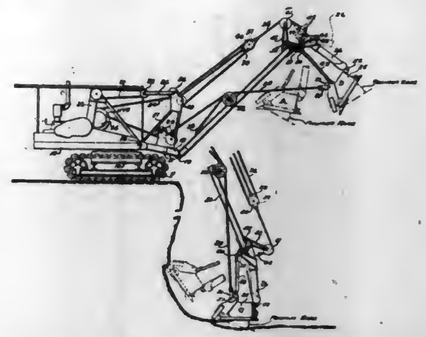
1,819,589. MEANS FOR ELIMINATION OF FADING ON SHORT WAVE LENGTHS. HAROLD H. BEVERAGE and HAROLD O. PETERSON, Riverhead, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 2, 1926, Serial No. 78,768, and in the Netherlands Dec. 31, 1926. 24 Claims. (Cl. 250—10.)



11. Apparatus for the elimination of fading comprising, a plurality of spaced antennæ each adapted to receive the same signal effect, a combining circuit, connecting lines connecting each separate antenna to said combining circuit, and means associated with at least one of said connecting lines for continually changing the phase of the received signal effect transmitted through said line.

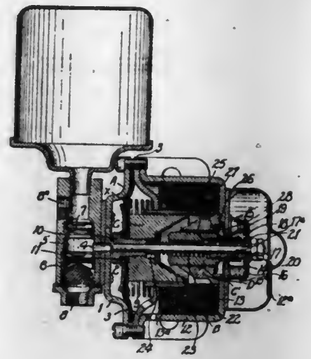
1,819,590. EXCAVATING MACHINE. PAUL BURKE and ARTHUR ORLOFF, Green Bay, Wis., assignors to Northwest Engineering Corporation, Green Bay, Wis., a Corporation of Wisconsin. Filed Feb. 23, 1929. Serial No. 341,962. 5 Claims. (Cl. 214—138.)

1. In an excavating machine, the combination of a pivoted boom, a dipper and dipper handle pivoted to the outer end portion of the boom, a drag line associated with the dipper and dipper handle to swing the same inwardly toward the boom during digging, a hoist cable for the boom and dipper, and means connecting said hoist cable with the dipper handle above its pivotal point with the



boom including a lost motion connection between said cable and dipper handle and movable rigidly with and relative to said handle for rapidly varying the radius arm of the dipper handle at different portions of the digging or dumping cycles.

1,819,591. ELECTRICALLY-OPERATED FUEL PUMP. WILLIAM C. CARTER, Flint, Mich. Filed Sept. 28, 1925. Serial No. 59,149. 3 Claims. (Cl. 103—150.)

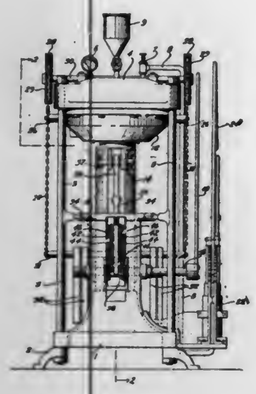


1. A fuel pump provided with a laminated non-metallic diaphragm that forms one wall of the pumping-chamber, and means for exerting pressure on the layers of the means for holding the peripheral portion of said diaphragm against movement, an actuating means attached to the central portion of the diaphragm, the intermediate portion of the diaphragm lying between said central portion and peripheral portion being adapted to flex back and forth, flexible intermediate portion of the diaphragm in a direction to prevent said layers from bulking or separating.

1,819,592. HAT PRESS. GANDOLFO CIPRIANO, Dongan Hills, N. Y. Filed Aug. 13, 1930. Serial No. 474,967. 7 Claims. (Cl. 223—31.)

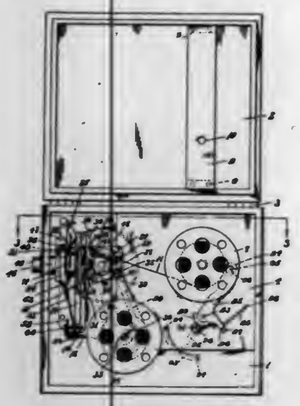
1. In a hat press having a base and frame, a pressure head supported by the frame, a hat mold mounted in the frame and movable toward and from the head, a shaft journaled in the base, an operating lever fixed to the shaft and connections between said shaft and mold for moving said mold to engage the head upon oscillation of said shaft, said connections comprising a lever fixed to the shaft, a lever pivoted to the mold and a member pivoted to both levers so as to act as a link for transmitting

motion between said levers during the major portion of the closing movement of the press, said member pivoting



about said shaft during the last portion of said movement and thereafter moving as one piece with said operating lever.

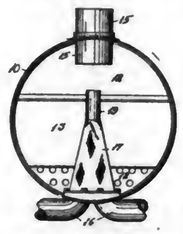
1,819,593. CAMERA. ROYAL A. CLAPP, Brookline, Mass. Filed Dec. 1, 1927. Serial No. 237,028. 8 Claims. (Cl. 88—18.4.)



1. In a camera, a film holding reel, a film having perforations in its edges, a member having a photographic aperture therein, an eccentric, means to rotate said eccentric, a member connected at its upper end to said eccentric, said member being slidably mounted at its lower end, a lip extending laterally of said member intermediate the upper and lower ends thereof, and prongs on said lip adapted to engage said perforations and move said film past said aperture in a step-by-step movement.

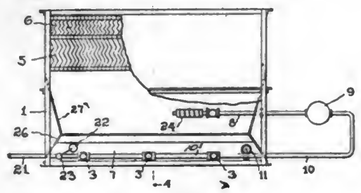
1,819,594. EXHAUST STEAM NOZZLE FOR LOCOMOTIVES. GILES H. COOK, Des Moines, Iowa. Filed Oct. 31, 1928. Serial No. 316,150. 1 Claim. (Cl. 230—96.)

An exhaust nozzle for locomotives comprising a hollow base rectangular in cross section and tapered towards its upper end, a cylindrical neck rising from said base, and being unobstructed throughout its length and of at least twice its diameter in length, and a partition in said base disposed vertically therein midway its width with its side edges fixed to opposed side walls of the base, said



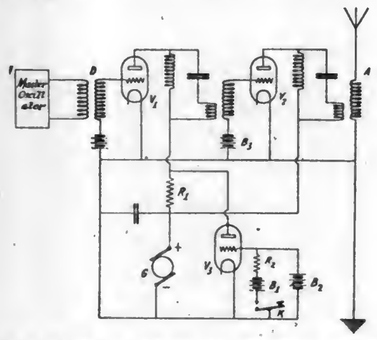
partition terminating in spaced relation to the upper end of the base and having its upper end formed with downwardly converging edges defining a V-shaped recess having its upper end extending the full width of the partition.

1,819,595. AIR WASHER. GEORGE SCOTT DAUPHINEE, Brooklyn, N. Y., assignor to The Cooling Tower Co., Inc., New York, N. Y., a Corporation of New York. Filed May 10, 1926. Serial No. 107,952. 4 Claims. (Cl. 261—115.)



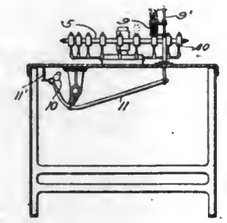
1. In a device of the character described the combination of a chamber, the bottom of said chamber forming a tank, a header pipe in said tank, risers on said header pipe, said risers having nozzles thereon, a strainer in said tank, pipe means connecting said strainer and said header pipe, a pump in said pipe means, other pipe means connected to said header pipe, an automatic valve in said other pipe means and means to drain said tank.

1,819,596. WIRELESS TRANSMITTER. NORMAN EUSTACE DAVIS, Chelmsford, and WILLIAM THEODORE DITCHAM, Colchester, England, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 9, 1925, Serial No. 61,556, and in Great Britain Oct. 13, 1924. Renewed Feb. 18, 1931. 24 Claims. (Cl. 250—19.)



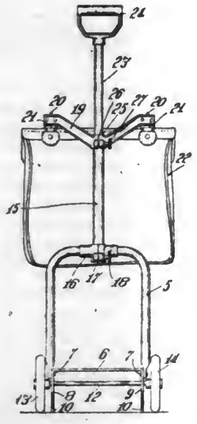
1. In a signalling system, an oscillator, an amplifier having input and output circuits the input circuit of which is coupled to said oscillator, a second amplifier coupled to the output circuit of said first amplifier, said second amplifier having an output circuit, a single direct current source supplying direct current to both amplifiers, an impedance between the source and the first amplifier only and a modulating device connected across said source and impedance.

1,819,597. COMBINED MACHINE FOR EXHAUSTING, BOMBARDING, AND SEALING OFF RADIOTUBES, LAMP BULBS, AND THE LIKE. CHARLES EISLER, Newark, N. J., assignor to Eisler Electric Corporation, a Corporation of Delaware. Filed Apr. 25, 1925. Serial No. 25,745. 7 Claims. (Cl. 250—27.5.)



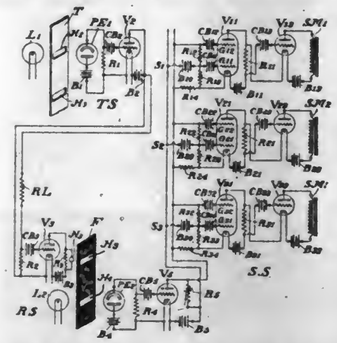
2. In a combined tube or lamp making machine the combination of a relatively movable exhaust head adapted to successively assume definite positions, a movable high frequency heating coil disposed at one of said positions in juxtaposition to an exhaust head and the lamp bulb carried thereby, said high frequency coil being adapted to move into heating relation with a bulb supported by the head to cause the exploding of the getter within the bulb and the consequent silvering of the bulb, a sealing off mechanism at a later position assumed by said exhaust head and means functioning in time relation to said intermittently movable exhaust head to first actuate the high frequency heating coil into operative position with respect to a lamp bulb carried by the head and then to seal off the bulb at the later position.

1,819,598. MAIL BAG CARRIER. KEITH J. EVANS, Chicago, Ill., and ALFRED O. WILLIAMS, Battle Creek, Mich; said Williams assignor to said Evans. Filed Dec. 7, 1927. Serial No. 238,282. 8 Claims. (Cl. 280—43.)



1. A carrier of the type described comprising a U-shaped member, wheeled means carried at the ends of said member, a T-shaped load supporting member telescopically connected to said U-shaped member, and a handle telescopically connected to said load supporting member.

1,819,599. TRANSMISSION SYSTEM. OLIVER T. FRANCIS, Quantico, Va. Filed Jan. 28, 1929. Serial No. 335,655. 10 Claims. (Cl. 178—4.)

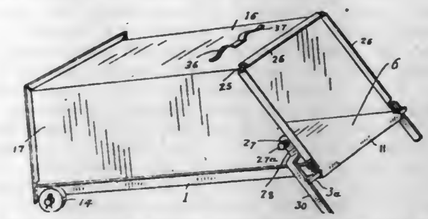


1. The method of transmitting a signal from one station to another which consists in producing lights of predetermined magnitudes, thereby generating a voltage at the transmitting station, and utilizing said voltage to produce a proportionate voltage across an element at the receiving station, thereby operating on of a plurality of devices, determined by the magnitude of said voltage generated at said transmitting station.

1,819,600. PROCESS OF ETHERIFYING CELLULOSE. FREDERICK C. HAHN, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 14, 1928. Serial No. 277,795. 4 Claims. (Cl. 260—152.)

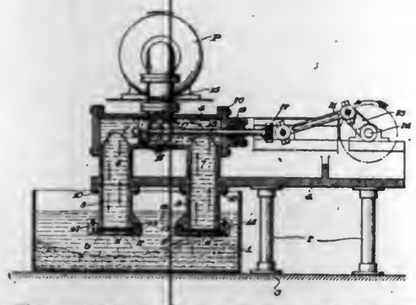
1. In a process of etherifying cellulose to obtain a cellulose ether wherein the cellulose is treated with an alkali and an alkyl compound, the procedure comprising completing the grinding of the cellulose apart from the alkali, then adding it to a slurry of alkali in an inert liquid and intimately mixing it therewith, and thereupon etherifying it.

1,819,601. BARROW TRUCK. ENOS R. HIATT, Winchester, Ind. Filed Jan. 23, 1929. Serial No. 334,431. 1 Claim. (Cl. 280—51.)



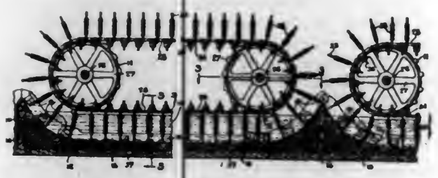
A device of the kind described, comprising a frame section provided with a floor plate having side flanges of hook shaped formation in cross section, there being a grooved flange at the front end, and a transverse rod at the rear end and whose ends project beyond the edges of the said floor plate, wheels journaled at the forward end of said frame section, a body member which is substantially U-shaped in cross section the edges of which are of hook shaped formation in cross section to slidably engage the flanges of the frame section, and the front end of said body member being flanged, an end section having lateral grooved flanges to engage the front flanges of the body member and an edge portion to engage the grooved flange of the frame section, and handle members retained yieldingly on the sides of the rear portion of the body member and which are adapted to be swung to or from engagement with the end portions of the aforesaid transverse rod of the said frame section.

1,819,602. FILTERING APPARATUS. JAMES W. HUGHES, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1926. Serial No. 126,504. 5 Claims. (Cl. 210—152.)



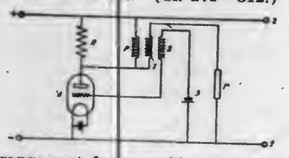
1. The combination with a cylinder, of a main conduit connected with the side thereof, a pair of branch conduits connected with the ends of said cylinder and submerged in a liquid to be filtered, a filter screen in each branch conduit, means for creating a suction in the main conduit, a piston fitting said cylinder, and means for causing said piston to pass back and forth across the point of connection of said main conduit with the cylinder.

1,819,603. ELECTROPLATING APPARATUS. JAMES W. HUGHES, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1928. Serial No. 307,307. 4 Claims. (Cl. 204—5.)



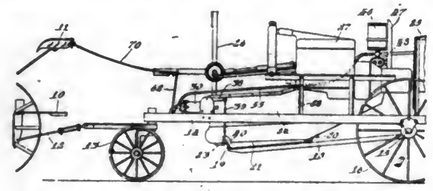
1. In an electroplating apparatus, in combination, a tank adapted to contain an electroplating solution, a trough extending longitudinally along the bottom of said tank, the opposite ends of said trough being curved upwardly toward the upper edges of the tank and the bottom of said trough between the curved portions thereof being corrugated, and means therealong operatively associated with said tank for continuously propelling a succession of articles to be plated along the corrugated bottom and curved portions of said trough, said corrugated bottom being operative to effect a constant shifting of the articles during their passage therealong.

1,819,604. CONSTANT POTENTIAL DEVICE. ANDREAS JAUMANN, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Feb. 27, 1929, Serial No. 342,991, and in Germany Feb. 17, 1928. 8 Claims. (Cl. 171—312.)



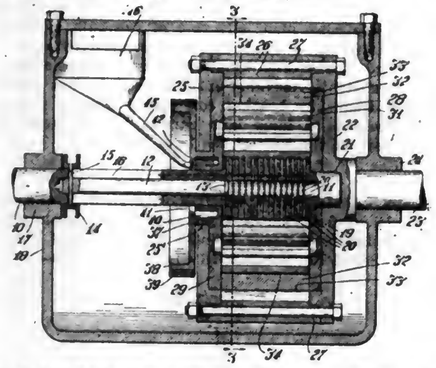
1. An arrangement for smoothing out current to be applied from a pulsating direct current source to a load circuit including a thermionic tube having an anode cathode and control electrode, a fixed impedance, means connecting the impedance of said tube and said fixed impedance in parallel with said load circuit, coupling means between said fixed impedance and said control electrode and amplifying means in said coupling means whereby variations in potential in said fixed impedance due to pulsations in said source are amplified and applied to the control electrode of said tube.

1,819,605. HARVESTER. EDWARD A. JOHNSTON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Nov. 24, 1928. Serial No. 321,616. 15 Claims. (Cl. 56—20.)



1. In a harvester having a main frame, an adjustable harvester element, hydraulically moved means on the frame, actuating means operated thereby and connected to the element for adjusting the same, and oprator controlled means for governing the operation of the hydraulic means.

1,819,606. HYDRAULIC CLUTCH. RUSSELL G. JONES, Van Wert, Ohio. Filed Mar. 26, 1928. Serial No. 264,786. 11 Claims. (Cl. 74—34.)

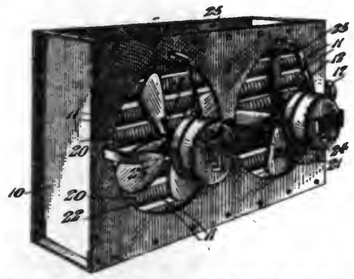


1. A hydraulic clutch comprising a hollow shaft; a sun gear on said shaft, there being ports leading from the spaces between the teeth of said gear into the hollow bore of said shaft; a shiftable valve plunger in said bore arranged to open and close said ports; planetary gearing revolving about and meshing with said sun gear; a casing enclosing said planetary gearing; an internal gear on said casing meshing with said planetary gearing, said casing being filled with liquid; and a shaft attached to said casing in alinement with said first mentioned shaft.

1,819,607. METHOD OF TREATING WASTE ALLOYS FOR THE PURPOSE OF REMOVING THEREFROM CERTAIN CONSTITUENTS WHOSE PRESENCE RENDERS THE ALLOYS UNSUITABLE FOR CERTAIN USES. PAUL KEMP, Vienna, Austria. Filed June 23, 1928, Serial No. 287,895, and in Austria June 23, 1927. 6 Claims. (Cl. 75—17.)

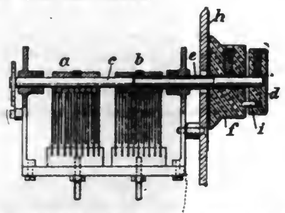
1. In the method of separating copper from copper-containing alloys of lead and other metals, the step which consists in treating the alloy melt with a substance of the class containing silicon, its alloys and all the constituents together of a silicon alloy.

1,819,608. HEATING APPARATUS. ALEXANDER THORNTON LEWIS, Merion, Pa., assignor to York Heating and Ventilating Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 28, 1928. Serial No. 302,455. 4 Claims. (Cl. 257—137.)



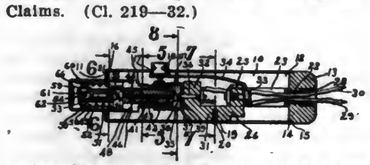
2. A heat exchange unit comprising a pipe coil of return bend construction arranged to receive a heating medium at one end and to discharge said medium at the same end, a casing enclosing said coil having two air inlets in one side thereof and an air outlet at the opposite side thereof, one of said inlets being located to admit air against the return bend portion of said coil, and the other of said inlets being located to admit air against the heat receiving end only of said coil, and separately controlled fans for respectively blowing air into said inlets through said coil in two separate paths and out of said discharge outlet.

1,819,609. BEAT-FREQUENCY HETERODYNE RECEIVER ARRANGEMENT. SIEGMUND LOEWE, Friedenau, Berlin, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 3, 1926, Serial No. 146,042, and in Germany Nov. 4, 1925. 4 Claims. (Cl. 175—41.5.)



4. A radio tuning device comprising a pair of condensers, a pair of independently rotatable, telescoped shafts affixed to the rotors of said condensers, an operating knob affixed to each shaft, means, mechanically coupling the knobs, for positively locking the knobs together whereby said rotors are fixedly maintained in a single desired angular relation during variation of the condensers, and additional means, provided on one of the knobs, for fixedly maintaining the rotors in another angular relation during variation of the condensers.

1,819,610. ELECTRICAL CIGAR LIGHTER. LOUIS V. LUCIA, Hartford, Conn., assignor, by mesne assignments, to The Beardsley & Wolcott Mfg. Co., a Corporation of Connecticut. Filed Aug. 7, 1926. Serial No. 127,931. 26 Claims. (Cl. 219—32.)



2. A cigar lighter or the like comprising a casing having a closed end presenting a small opening and an open end presenting a larger opening, a closure member for the open end of said casing, a block member within the casing secured to and spaced from said closure member, and means within the casing and extending from said block member out through the small opening in the closed end of said casing to ignite an article, said closure member and block being insertible as a unit through said open end.

1,819,611. DRAWER PULL. RAYMOND H. MARTIN, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 16, 1929. Serial No. 340,517. 1 Claim. (Cl. 16—126.)



In a pull, a backing plate including a panel portion and a marginal portion, said marginal portion including a raised portion defining said panel portion, attaching means secured to said backing plate and projected rearwardly therefrom, and a panel plate corresponding in shape to and secured in said panel portion and constituting with said marginal portion the outer exposed surface of the pull.

1,819,612. ELECTRICAL CONNECTING CORD AND METHOD OF PRODUCING IT. HENRY ROGERS MASSINGHAM, Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 26, 1927. Serial No. 235,830. 2 Claims. (Cl. 173—264.)

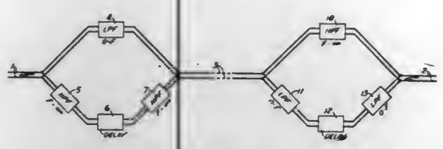


1. An electrical connecting cord comprising a plurality of uninsulated electrical conductors braided with a plurality of textile strands in such a manner that the conductors are insulated from each other by the textile strands, each of the conductors comprising a grouped plurality of tinsel covered strands disposed in contacting relationship throughout their entire lengths.

1,819,618. MANUFACTURE OF ORGANIC MONOCARBOXYLIC ACID CHLORIDES. CARL L. MASTERS, Nitro, W. Va., assignor to The Elko Chemical Company, Nitro, W. Va., a Corporation of West Virginia. Filed May 7, 1928. Serial No. 275,975. 8 Claims. (Cl. 260—128.)

1. The process of manufacturing an organic monocarboxylic acid chloride comprising the treating of an organic monocarboxylic acid anhydride with thionyl chloride.

1,819,614. WAVE TRANSMISSION SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,417. 16 Claims. (Cl. 179—105.)



1. A message path comprising delay means for altering the intelligibility of waves transmitted through said path, and means for transmitting message waves in opposite directions through said path to increase the intelligibility of the messages in one direction and decrease the intelligibility of the messages in the other direction, the portions of said path in which said increase and said decrease are effected being wholly common, and said path comprising channels having their transmission frequency ranges mutually exclusive.

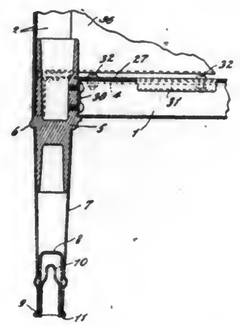
16. A two-way repeater circuit of the type having a single repeating element, said circuit comprising a one-way wave transmitting and amplifying path and transmission delay means in said one-way path.

1,819,615. BALANCED VALVE. KARL A. MAYR and RAYMOND E. WHITE, Chicago, Ill.; said White assignor, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill., a Common-Law Trust. Filed Feb. 3, 1927. Serial No. 165,569. 8 Claims. (Cl. 50—20.)



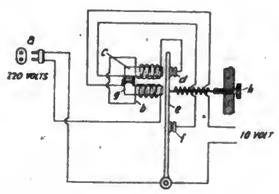
1. A valve mechanism having, in combination, a valve casing formed with an inlet passage and a discharge passage, a valve sleeve connecting said passages through two alined end ports, a valve stem slidably disposed in said casing and having a pair of conical valve members centrally disposed in said valve ports, a piston attached to said valve stem, said valve stem and said piston being of equal diameters so as to neutralize the effect of any back pressure on said valve stem, an elongated guide member for said stem, spring means acting on said stem and tending to move the latter in a direction to close said ports, means for adjusting the pressure of said spring means, a passage formed in said casing for transmitting the pressure in one of the first mentioned passages to the inner end of said piston so as to balance said pressure against the pressure of said spring means, and means for rotating said stem.

1,819,616. METAL FURNITURE. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed Apr. 10, 1929. Serial No. 353,907. 5 Claims. (Cl. 45—88.)



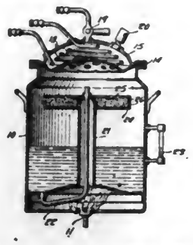
1. In an article of metal furniture, the combination of a hollow sheet metal frame upright, a tubular sheet metal leg member in alignment with the said upright below the lower end of the latter, a strong unyielding frame part forming a filler piece telescoping with a snug fit upwardly into the hollow upright to be confined thereby against lateral movement and telescoping downwardly with a snug fit into the tubular leg member a sufficient telescopic distance in each instance to give longitudinal rigidity of the leg member and upright relatively to each other, the said filler piece intermediate of its length being surrounded by an enlargement thereof providing upper and lower supporting shoulders between the lower end of the said hollow sheet metal upright and the upper end of the said tubular sheet metal leg member and other frame parts of the said article secured together and to the said upright and also secured to the upper end portion of the said filler piece which thereby forms a strong intermediary connection between all of the interconnected frame parts including the said other frame parts and the hollow upright and the leg member.

1,819,617. VIBRATING CONVERTER. WILHELM MOSER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Sept. 12, 1925, Serial No. 55,920, and in Germany Oct. 4, 1924. 3 Claims. (Cl. 171—97.)



1. A converter for changing the voltage of direct current comprising an electro magnet having an exciting coil connected to the input circuit, a second coil connected to the input circuit, a second coil on said electro magnet connected in the output circuit, said electro magnet controlling a vibrating armature provided with two contacts one of said contacts being connected in the input circuit and the other contact being connected in the output circuit whereby the currents in the input and output circuits are synchronously interrupted.

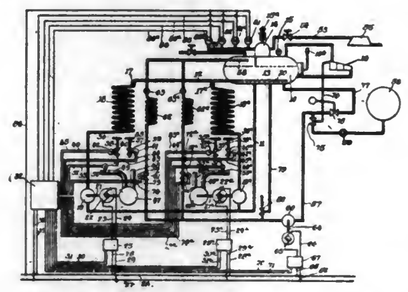
1,819,618. DEVICE FOR CLEANING, DYEING, DRYING, AND THE LIKE. CARL GEORG MUNTERS, Stockholm, Sweden. Filed Nov. 19, 1929, Serial No. 408,215, and in Sweden Mar. 22, 1929. 33 Claims. (Cl. 68—30.)



1. A method of treating material such as fabrics to be cleaned which comprises subjecting the material to contact with a body of liquid, heating the liquid to form vapor of the liquid, condensing the vapor thus formed, returning the condensed liquid to the body of liquid and applying the heat and effecting the condensation at such rates as to produce agitation in the body of liquid.

11. In a device for cleaning articles, a container having a space for reception of material to be agitated, means to hermetically close said container, means to vaporize cleaning fluid contained therein, means including a surface adapted to be cooled to condense the vapor within said container, and means for preventing contact of the agitated material with the cooled surface.

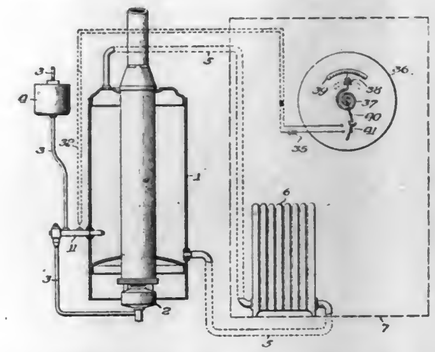
1,819,619. STEAM POWER PLANT. CHARLES B. PAGE and WARREN DEAN BURTON, Evanston, Ill., assignors, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill., a Common-Law Trust. Filed May 2, 1928. Serial No. 274,428. 6 Claims. (Cl. 122—448.)



1. A steam power plant having, in combination, an accumulator adapted to contain a body of water, a steam generator with its discharge end connected to said accumulator, means for circulating feed water from said accumulator through said steam generator, a plurality of heating units for said steam generator, and means responsive to the pressure in said accumulator for controlling said feed water supply and said heating units.

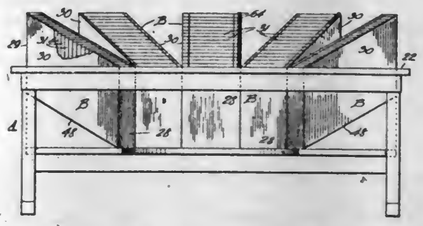
5. A steam power plant comprising, in combination, an accumulator adapted to contain a body of water, a steam generator for discharging to said accumulator, means for supplying feed water to said generator, a feed water preheater for discharging to said accumulator, a feed water supply, means responsive to the water level in said accumulator for selectively supplying water from said accumulator and said feed water supply to said preheater as the level in said accumulator rises above and falls below a predetermined point, means responsive to the pressure in said accumulator for controlling the supply of water to said feed water preheater, and a line including an overflow valve connecting said second mentioned means to said accumulator.

1,819,620. THERMOELECTRIC CONTROL FOR HEATERS. HOWARD I. PIATT, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Aug. 13, 1928. Serial No. 299,150. 23 Claims. (Cl. 236—9.)



1. In a fluid fuel heater control system, a valve, a thermostatic element exposed to surroundings the temperature of which is to be controlled, a mechanical operating connection between the thermostatic element and the valve, and means for electrically super-imposing upon the thermostatic element an additional temperature variation independent of the temperature of the surroundings thereof.

1,819,621. INDEX DEVICE. JAMES H. RAND, Jr., Tonawanda, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed June 11, 1925. Serial No. 36,365. 10 Claims. (Cl. 45—2.)

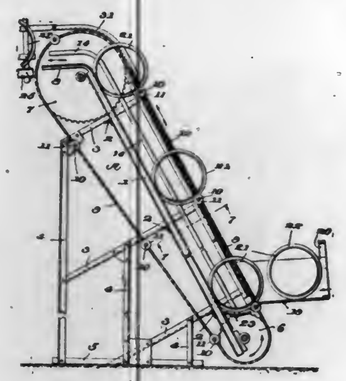


1. In a record device, a plurality of slides each adapted to bear a plurality of record members thereon in overlapping, offset arrangement, a plurality of guide containers each of which is adapted to receive one of said slides, an open-topped case in which said containers are adapted to be disposed one behind another with the upper portions of said slides exposed, each of said containers having manually actuated means for projecting the slide outwardly to an operative position so that said record members may be flat on the tops of the remaining slides for convenient reference.

1,819,622. RIM FEED FOR WHEEL ASSEMBLY MACHINES. ALBERT O. ROBERTS, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 23, 1927. Serial No. 214,934. 15 Claims. (Cl. 29—84.)

1. A mechanism of the character set forth comprising an assembling press, a rim guideway and a wheel body guideway disposed in operative relation to said press and arranged at an angle to each other and each being adapted to receive a plurality of such elements, said rim guideway having an elevated portion adapted to deliver said rims by gravity one at a time to the bed of said press, said wheel

body guideway having a positive feed mechanism associated therewith and adapted to deliver a wheel body to said



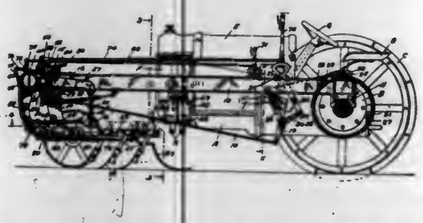
press in axial alignment with a rim in said press, and means for operating said press to assemble a rim and wheel body as a unitary structure.

1,819,623. KNIFE. BENJAMIN ROCKLIN, Chicago, Ill. Filed Dec. 29, 1928. Serial No. 329,086. 3 Claims. (Cl. 30—9.)



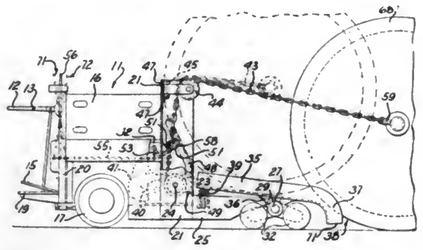
1. A knife having a blade and means for operating the same, the cutting edge of said blade being sharpened and continuous along one edge of said blade and having a series of short uniform truncated projections formed thereon in the plane of the blade, the portions between said projections being substantially longer than said projections and connected thereto by inclined cutting portions.

1,819,624. TRACTOR CULTIVATOR. ANDREAN G. RONNING and ADOLPH RONNING, Minneapolis, Minn., assignors to International Harvester Company. Filed Oct. 29, 1925. Serial No. 65,700. 12 Claims. (Cl. 97—47.)



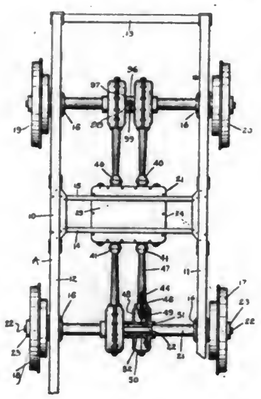
1. The combination with a tractor, of tillage means comprising a cross member, vertically spaced parallel members trailing from the cross member and having forward ends connected thereto for vertical movement, an implement beam horizontally pivoted at its forward end to the rear ends of said parallel members and trailing therefrom, and adjustable means for controlling the elevation of the implement beam while maintaining it in horizontal position including separate supporting elements connected to the respective ends of the beam.

1,819,625. INDUSTRIAL TRUCK. WILLIAM SCHROEDER, Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 19, 1928. Serial No. 313,434. 7 Claims. (Cl. 214—94.)



1. In an industrial truck, a platform for supporting an object, means for engaging the object to advance it onto the platform, driving means for actuating said engaging means, and a tiltable apron on the platform operable by the object when the object has reached a predetermined position to render said driving means inoperative.

1,819,626. POWER TRANSMISSION DEVICE. EDWARD H. SCOFIELD, Minneapolis, Minn. Filed Feb. 13, 1928. Serial No. 253,995. 20 Claims. (Cl. 105—52.)

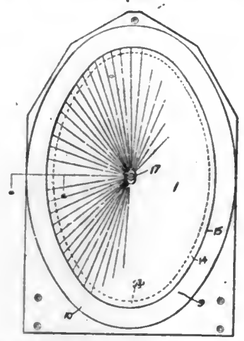


2. In a propulsion system for vehicles having a frame and front and rear wheels journaled relative thereto, a power transmission device comprising two revoluble elements revoluble relative to one another and to said frame, said elements having fixed operating characteristics relative to one another, one of said elements being connected to one of said front wheels and the other of said elements being connected to the trailing rear wheel, means for disconnecting one of said revoluble elements from its corresponding wheel, means for arresting the rotation of said disconnected element to increase the speed of the other element, and a mechanical drive between said front wheel and trailing rear wheel forming an interlock therebetween.

1,819,627. SOUND REPRODUCER AND METHOD OF MANUFACTURING THE SAME. LE ROY W. STAUNTON, Jackson Heights, N. Y., and CYRIL A. BRIGHAM, East Orange, N. J., assignors to Brandes Laboratories, Inc., Newark, N. J., a Corporation of New Jersey. Filed Oct. 8, 1925. Serial No. 61,298. 11 Claims. (Cl. 181—31.)

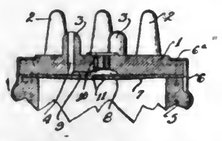
1. A sound reproducing diaphragm comprising in combination an elliptically apertured supporting member, an

elliptical cone shaped sound reproducing diaphragm arranged to float therein, and an elliptical ring of flexible



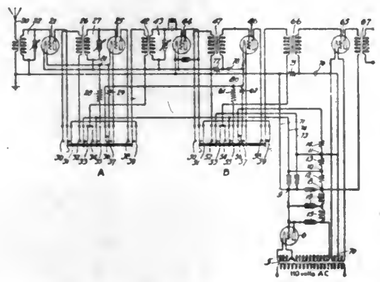
material disposed between said elliptically apertured supporting member and the peripheral edge of said elliptical cone shaped sound reproducing diaphragm.

1,819,628. MASSAGE APPLICATOR. ROBERT H. VAN SANT, Chicago, Ill., assignor to Van Ess Laboratories, Inc., a Corporation of Delaware. Filed Nov. 10, 1927. Serial No. 232,252. 1 Claim. (Cl. 128—65.)



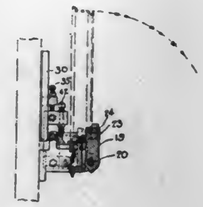
An applicator having ointment feeding nipples and a recess in its bottom with passages extending from said recess to said feeding nipples, a sealing disk upon the bottom of the applicator, and means on the top of the applicator defining the location of the recess for the purpose of perforating the sealing disk when the same is put to use.

1,819,629. VACUUM TUBE CIRCUITS. DONALD F. WHITING, Port Washington, N. Y., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y., a Corporation of New York. Filed Jan 29, 1926. Serial No. 84,550. 6 Claims. (Cl. 179—171.)



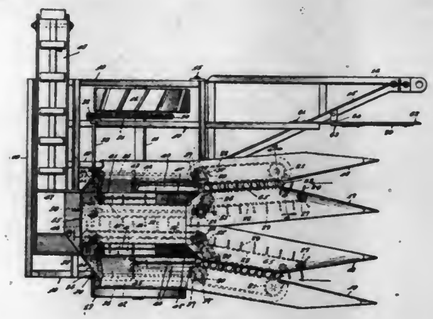
4. In combination with a plurality of vacuum tube stages interdependently supplied from a common energizing source, means for maintaining the respective energizing currents constant when one of said stages is removed, comprising means for inserting equivalent impedances in the connections occupied by the filament and the anode-filament path respectively of the vacuum tube of the stage removed.

1,819,630. RING FORMING MACHINE WITH KNOCK-OUT. CHARLES L. WILES, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 2, 1928. Serial No. 251,300. 7 Claims. (Cl. 80—5.)



1. A ring knock-out mechanism comprising elements movable to engage the work on its outer and inner surfaces and means for relatively moving said elements bodily to engage and tilt the ring.

1,819,631. CORN HARVESTING MACHINE. PERCY TYLER WOODLAND, Grahamstown, South Africa. Filed Feb. 16, 1929, Serial No. 340,547, and in South Africa May 8, 1928. 16 Claims. (Cl. 56—103.)

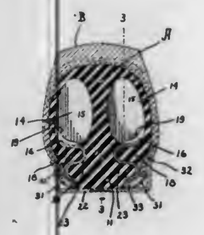


1. In a corn harvesting machine, a frame, spaced guards supported on the frame and having divergent outer ends constituting a guiding entrance for receiving standing corn stalks, an endless chain in one of said guards carrying fingers traveling through the space between the guards, an endless chain in the opposite guard member carrying concavo-convex stripping fingers traveling through the space between the guards and adapted to close about a stalk and maintain the latter in upright position to strip ears therefrom as the machine is moving, and means for actuating said chains to cooperate for the purpose stated.

1,819,632. TIRE CUSHION. GEORGE H. YOUNG, Chicago, Ill. Filed April 25, 1925. Serial No. 25,749. Renewed July 3, 1931. 12 Claims. (Cl. 152—5.)

4. A cushion formed of resilient material adapted to be supported within a casing, a pair of reinforcing ribs

formed of metal removably held within the base portion of said cushion, air spaces formed in said cushion, a central rib extending longitudinally through said cushion and separating said air spaces, radial webs spaced apart in said air spaces and recesses formed under said webs in a manner to limit the resiliency of the cushion radially through the same and adapted to support and reinforce the cushion under heavy strain.



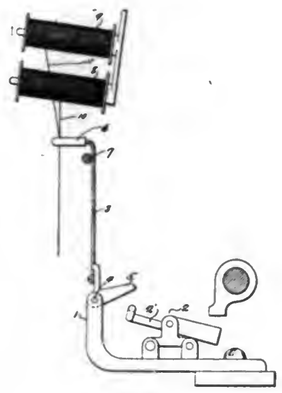
8. A tire cushion including, a member formed of resilient material, open spaces formed in said member, transverse and longitudinal webs separating said open spaces from each other and forming reinforcing webs in said cushion, spaces formed under the transverse webs to permit the cushion to flex freely a limited amount when held within a tire casing and said cushion having slits to communicate with all of said spaces in said cushion.

1,819,633. MINIATURE FLASHER. NATHAN ABRAMSON, Brooklyn, N. Y. Filed Sept. 26, 1929. Serial No. 395,430. 1 Claim. (Cl. 200—115.5.)



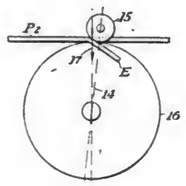
In a flashing device, an insulated shell, a bulb receptacle having an insulated base at one end of the shell, a cap having an insulated cover at the other end of the shell, said cap and receptacle being made of metal and in electrical connection, an insulated supporting member having its upper end serrated to fit the threads in the cap and adapted to be threaded therein and extending to said receptacle, a thermostatic switch attached to one end of said supporting member, the upper end of said switch projects over the insulated cover of the cap, a strip of metal, one end of which is adapted to coact with said switch and is attached to said supporting member, the lower end of said strip extends into said receptacle below the insulated base, said upper end of thermostatic metal and lower end of strip are turned horizontally, thereby grasping the cover and base and adapted to hold together the cap and receptacle in spaced relation and provide contact points for the current to enter and leave the flashing device.

1,819,634. THROWING MACHINE. ROBERT J. BARTHOLOMEW, Germantown, Pa., assignor to Fletcher Works, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,331. 7 Claims. (Cl. 117—28.)



1. In throwing machines, a faller wire, a stop therefor of non-magnetizable material intermediate the ends of said wire and in contact therewith during the operation of the machine.

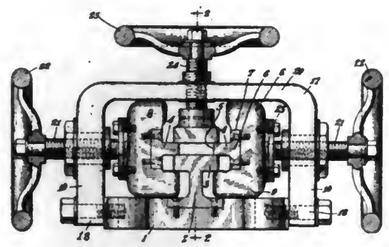
1,819,635. SHEARING METAL PLATES. FLORENCE C. BIGGERT, Jr., Crafton, and LANE JOHNSON, Ingram, Pa., assignors to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 24, 1927. Serial No. 242,366. 17 Claims. (Cl. 164—61.)



1. In combination, a plurality of rotary cutting blades, rotatable eccentric supporting means for the cutting blades, and means for rotating the supporting means to vary the angle of intersection between a plane defined by the axes of the blades and the plane of material passing the blades.

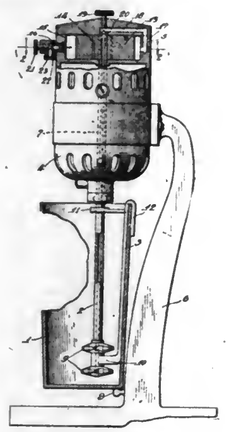
1,819,636. APPARATUS FOR AND METHOD OF MAKING BOILER HEADERS. JOHN J. CAIN, Bayonne, N. J. Filed Apr. 6, 1928. Serial No. 268,043. 30 Claims. (Cl. 153—69.)

1. The method of forming a boiler header including the operation of die-shaping a stationary hollow blank with a mandrel therein by pressure of a plurality of dies applied progressively from one end of the blank to the other.



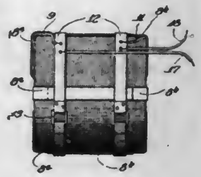
9. An apparatus for forming boiler headers, including a mandrel adapted to be inserted in a blank, a pair of holding and operating arms pivoted at one end, dies for shaping the sides of said blank provided in said arms, and means for actuating said arms and dies to engage and shape the sides of said blank progressively from one end to the other.

1,819,637. DRINK MIXER. HERBERT E. CARLSON and CLYDE S. MORSE, De Kalb, Ill. Filed Oct. 9, 1929. Serial No. 398,422. 3 Claims. (Cl. 261—93.)



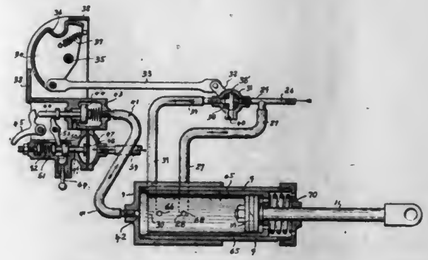
1. The combination with rotary fluid mixing means, of air impelling means for supplying air to the fluid as it is being mixed, said fluid mixing means comprising an electric motor mounted with its shaft in a vertical position, said shaft being tubular to provide an air passage therethrough, and a mixing chamber comprising a vertical tubular shaft having provisions for ready attachment and detachment with respect to the tubular motor shaft, whereby air forced through the motor shaft will also be forced through the mixer shaft, said motor shaft extending above said motor, and a rotary air pump comprising a rotary air impeller mounted on said upward shaft extension for forcing air through said motor shaft and mixer shaft into the fluid.

1,819,638. MAGNET COIL AND METHOD OF MAKING SAME. ROBERT A. CONNOR, Fort Wayne, Ind., assignor to Inca Manufacturing Corporation, Fort Wayne, Ind., a Corporation of Indiana. Filed Dec. 16, 1929. Serial No. 414,369. 13 Claims. (Cl. 175—21.)



1. In a magnet coil, a circumferential strap for bracing said coil, and means including said strap arranged to form coil terminals.

1,819,639. PRESSING MACHINE MECHANISM. JOSEPH P. DALY, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed May 11, 1927, Serial No. 190,576. Renewed July 30, 1930. 24 Claims. (Cl. 121—38.)

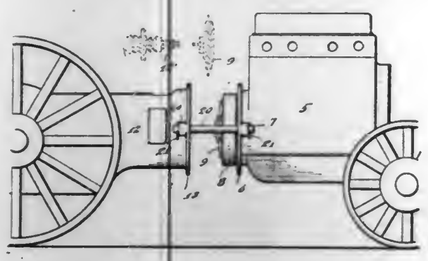


1. An actuating mechanism for pressing machines and the like comprising a cylinder, a single acting piston movable in the cylinder, means for supplying and controlling the supply of motive fluid to the cylinder, a relief valve, a normally open port in the cylinder, a pipe connecting said port and the relief valve, and pressure operated means for opening the relief valve on a predetermined back pressure in the cylinder, the cylinder being formed with a relief port, a pipe connected to said relief port, and valve mechanism operated by the movement of the piston for closing the relief port when the piston approaches the end of its power stroke.

1,819,640. TRACTOR. DAVID P. DAVIES, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Feb. 26, 1930. Serial No. 431,620. 7 Claims. (Cl. 180—54.)

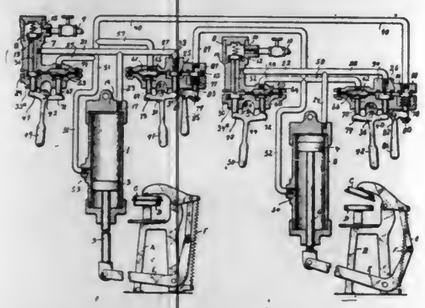
6. In a tractor, a power plant having a flange on its end, a transmission housing having a flanged on its end, bolts securing said flanged ends together, bosses associated with said flanges having registering openings therein, re-

movable means insertible in the bosses for normally securing the housings together, and alining shafts removably insertible in the bosses whereby when said bolts and re-



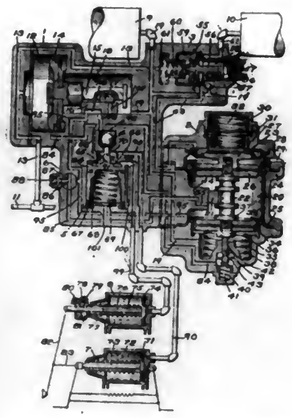
movable means are withdrawn said housings will be supported by the shafts when separated and while being reassembled.

1,819,641. CONTROL FOR FLUID MOTORS. ERNEST DAVIS, Syracuse, N. Y., assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 4, 1924, Serial No. 735,884. Renewed Jan. 11, 1929. 16 Claims. (Cl. 60—97.)



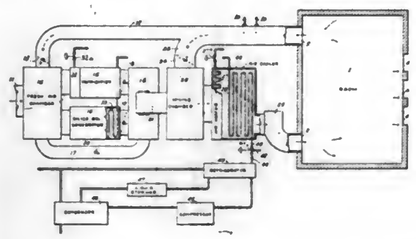
6. The combination of a pair of cylinders and pistons movable in the cylinders, each cylinder having a combined intake and exhaust port in the head thereof, a pair of exhaust valve casings for each cylinder and a normally open exhaust valve therein, an intake conduit and a normally closed intake valve in the conduit, the intake valve of each cylinder being connected to one of the exhaust valves of that cylinder to act as a unit therewith, whereby when the exhaust valve is closed, the intake valve is open, said intake conduit of each cylinder being connected in multiple with the exhaust valve casings of that cylinder and with the cylinder through the combined intake and exhaust port, manual means for operating the valves to close the exhaust valves and open the intake valves of each cylinder, each cylinder also having a supplemental exhaust port, means operated by the pressure within the cylinder through the supplemental exhaust port for holding the exhaust valves closed and the intake valve open, such means being connected in multiple with the cylinder through the supplemental exhaust port, an additional valve casing for each cylinder connected to the supplemental exhaust port and having a normally closed exhaust valve therein, manual means for opening the additional exhaust valve of each cylinder, the manual means for the additional exhaust valve of one cylinder being located near the manual means for one of the normally open exhaust valves of the other cylinder whereby both may be operated simultaneously.

1,819,642. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 9, 1929. Serial No. 345,659. 48 Claims. (Cl. 303—74.)



1. In a fluid pressure brake, the combination with a brake pipe and brake cylinder, of a plurality of normally charged reservoirs, valve means operated upon a reduction in brake pipe pressure for supplying fluid under pressure from one of said reservoirs to the brake cylinder, and means subject to brake pipe pressure and operated upon an over reduction in brake pipe pressure for supplying fluid under pressure from the other reservoir to the first mentioned reservoir.

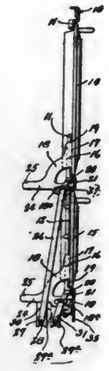
1,819,643. METHOD OF COOLING AND DRYING AIR. WALTER L. FLEISHER, New York, N. Y., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1927. Serial No. 236,650. 8 Claims. (Cl. 257—8.)



3. The process of conditioning air which comprises apportioning the air between a refrigerating dehydrator and a hygroscopic dehydrator mixing the appointed air and adjusting the proportions of the mixture to control both temperature and humidity.

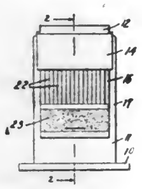
6. An apparatus of the character described including a dehydrating apparatus, cooling means arranged to the rear thereof, an enclosure formed with inlet and outlet openings, means providing a passageway extending from said outlet opening and connected to the intake end of said dehydrating apparatus, a by-pass in said passageway, and means providing a passageway connected to said cooling means, said by-pass and to the intake opening of said enclosure whereby withdrawn unconditioned air is injected into the dehydrated cooled air and the resultant mixture is introduced into said enclosure.

1,819,644. DOOR HINGE CONSTRUCTION FOR STOVES. ALFRED B. HERMAN, Belleville, Ill., assignor to Baker Nagle Company, Belleville, Ill., a Corporation of Delaware. Filed Oct. 3, 1930. Serial No. 486,209. 6 Claims. (Cl. 126—191.)



6. In a stove door construction of the class described, the combination of a stove wall provided with two door openings arranged in a vertical plane, a door pivotally mounted along its lower edge for closing each opening, a pair of leaf springs arranged below the lowermost door opening parallel with said wall, an extension on the inner side of said wall supporting said springs intermediate their ends, a pair of long links pivotally connected at their upper ends to said upper door and at their lower ends to the ends of one of said springs, and a pair of comparatively short links pivotally connected at their upper ends to the lower door and at their lower ends to the ends of the other spring.

1,819,645. MATCH STAND. ADOLF KASSLER, New York, N. Y. Filed Nov. 1, 1929. Serial No. 404,098. 1 Claim. (Cl. 206—20.)



A match stand comprising a base, a plate member rising therefrom, a clip for clamping a match package to said plate member, and a protecting element adapted to swing on said clip for concealing and exposing to view, at will, the heads of the matches of said package.

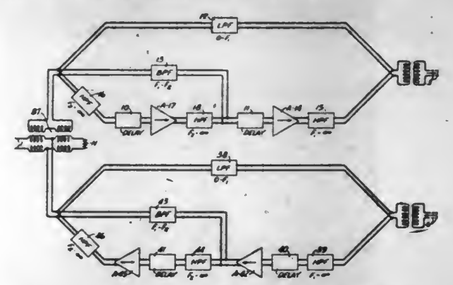
1,819,646. DRILLING OF TERRESTRIAL BORES. ALBERT GEYER LOOMIS, HENRY ALFRED AMBROSE, and JASPER SUMNER BROWN, Pittsburgh, Pa., assignors to Gulf Production Company, a Corporation of Texas. Filed Apr. 22, 1930. Serial No. 446,409. 3 Claims. (Cl. 255—1.)

1. In the sinking of a terrestrial bore with the aid of a mud fluid to and through a formation susceptible to heaving due to the presence of water-soluble salts therein, the method herein described which consists in conducting the drilling operation with the aid of a normal mud fluid until the formation susceptible to heaving is reached, then modifying the mud fluid by increasing its burden of dissolved matter, and proceeding with the drilling operation with the aid of the mud fluid so modified.

1,819,647. MANUFACTURE OF GOODS OF RUBBER OR SIMILAR MATERIAL. EVELYN WILLIAM MADGE, Erdington, Birmingham, England, assignor to Dunlop Rubber Company, Limited, a British Company. Filed Dec. 23, 1930, Serial No. 504,277, and in Great Britain Dec. 20, 1929. 6 Claims. (Cl. 18—53.)

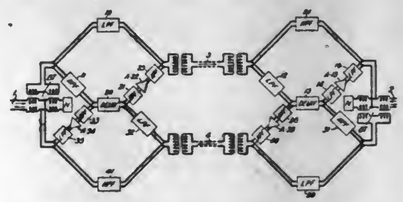
1. A process for the manufacture of porous or microporous articles of vulcanized rubber from aqueous dispersions without the use of electrolytes or gelling which comprises separating the dispersed rubber material from a dispersing medium by electrophoresis and vulcanizing said deposit while preventing the evaporation of liquid from the pores therein.

1,819,648. WAVE TRANSMISSION SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,415. 9 Claims. (Cl. 179—1.5.)



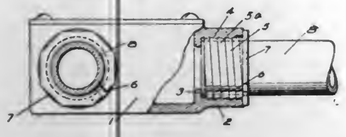
1. A message path for altering the intelligibility of waves transmitted therethrough, and means for transmitting subdivided portions of message waves in opposite directions throughout the length of said path to increase the intelligibility of the messages in one direction and decrease the intelligibility of the messages in the other direction, the portions of said path in which said increase and said decrease are effected being at least partly common.

1,819,649. WAVE TRANSMISSION SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,416. 6 Claims. (Cl. 179—1.5.)



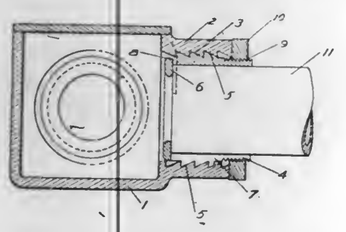
1. In combination, a wave transmission path, a second wave transmission path, a third wave transmission path, two transmission delay paths, and means for transmitting selected waves between said first and second paths through said delay paths in tandem, to the exclusion of other waves, and transmitting said other waves between said first and third paths through one, only, of said delay paths.

1,819,650. CONNECTER. GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed July 16, 1928. Serial No. 293,170. 6 Claims. (Cl. 247—25.)



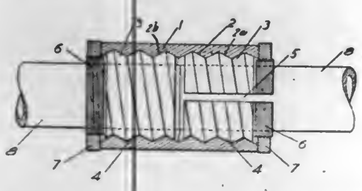
1. In a connecter, the combination of a body sleeve; and a slotted sleeve in the body sleeve, said slotted sleeve being adapted to clamp an inserted member, said sleeves being provided with engaging screw threads, the slopes of the threads receiving the thrust of the sleeves as the sleeves are screwed together having less inclination to the axis than to a perpendicular to the axis, said sleeves having engaging abutments limiting the relative axial movement of the sleeves to create a thrust relation on the threads.

1,819,651. CONNECTER. GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed July 16, 1928. Serial No. 293,171. 19 Claims. (Cl. 247—25.)



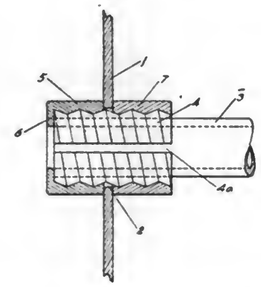
1. In a connecter, the combination of a body comprising a body sleeve provided with wedging surfaces; a removable sleeve having wedging surfaces faced outwardly engaging the wedging surfaces of the body sleeve, one of said sleeves being insertable into interlocking position with the other by a movement of the removable sleeve axially and rotatively relatively to the body sleeve, the axial movement being inwardly from the outer end of the body sleeve and one of said sleeves being axially slotted; and means forcing said removable sleeve outwardly to actuate the slotted sleeve radially.

1,819,652. CONNECTER. GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed July 16, 1928. Serial No. 293,172. 20 Claims. (Cl. 247—27.)



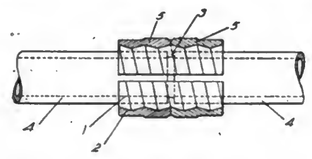
2. In a connecter, the combination of a sleeve having a thread extending inwardly from the end thereof, both slopes of the thread being inclined to form wedging surfaces, the inclination being less relatively to the axis than to a perpendicular to the axis; a slotted sleeve having threads in wedging engagement with the first-mentioned thread; and means forcing said sleeve axially relatively to each other.

1,819,653. CONNECTER FITTING. GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Aug. 6, 1928, Serial No. 297,803. Renewed Apr. 27, 1931. 5 Claims. (Cl. 247—25.)



1. In a connecter fitting, the combination of a wall having an opening therethrough; a contractible tube slotted and exteriorly screw-threaded arranged in the opening; an interiorly threaded sleeve on the inner end of the tube; and an interiorly threaded sleeve on the outer end of the tube, the slope of a thread of each sleeve being inclined to form wedging surfaces, the inclination being less relatively to the axis than to a perpendicular to the axis and engaging a similar slope on the contractible tube, and said sleeves clamping the wall between them and contracting the tube through the wedging action of the threads of both sleeves.

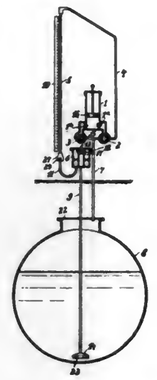
1,819,654. CONNECTER. GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Aug. 6, 1928. Serial No. 297,804. 6 Claims. (Cl. 247—25.)



1. In a connecter, the combination of a tube, said tube being axially slotted and having screw threads; and a screw-threaded member acting at each end of the tube on the screw threads of the tube with wedging engagement forcing the walls of the tube in a radial direction, said screw threaded members being in direct engagement at their inner ends.

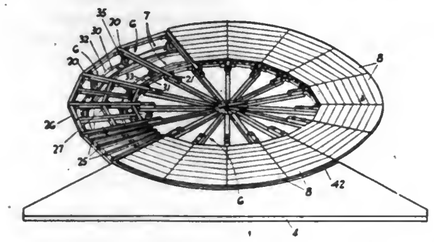
1,819,655. APPARATUS FOR INDICATING THE LEVEL OF LIQUIDS. ARNOLD MOHR, Berlin, Germany, assignor to Gesellschaft fur Mess- und Full-Apparate m. b. H., Berlin, Germany. Filed June 25, 1928, Serial No. 288,026, and in Germany Sept. 23, 1925. 7 Claims. (Cl. 73—54.)

5. In means for measuring and indicating the quantity of liquid in a tank, a sight glass extending at an angle to the horizontal, a liquid carrying receptacle having a connection from the bottom thereof with the lower end of the sight glass, tubular means having a connection with and opening to the receptacle above the liquid level therein and adapted to be extended into the liquid in the tank to be measured, a suction and pressure pump, and valve controlled means for connecting the upper end of the sight



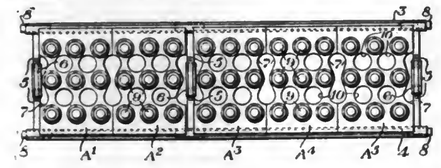
glass with the inlet to the pump and the tank and the outlet of the pump with the tank and the air space in the receptacle.

1,819,656. REVOLVING STAGE. CHARLES E. PRESSLEY, Santa Barbara, Calif. Filed Sept. 29, 1930. Serial No. 485,079. 5 Claims. (Cl. 20—1.123.)



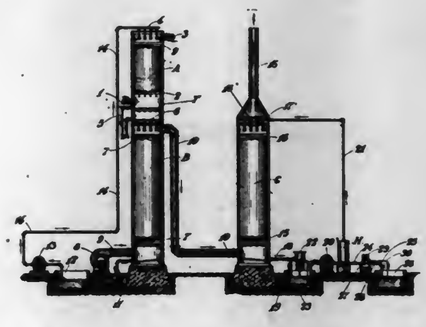
1. In a device of the character described, in combination, a king pin, a support therefor, a set of radially arranged stringers each having a hanger plate secured to its inner end and in pivotal relation to said king pin, said plates being associated with said stringers in such a manner that the inner end portions of all of said stringers are maintained in substantially the same plane, and flooring sections mounted on the outer portions of said stringers to rotate therewith.

1,819,657. TERMINAL BOARD. WILLIAM E. SMITH, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1930. Serial No. 480,957. 2 Claims. (Cl. 175—371.)



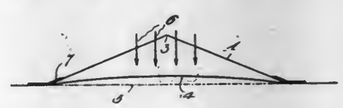
1. A terminal board comprising two sections of insulating material arranged end to end, each section being provided with two grooves located in the upper and lower edges respectively of the section, two rigid strips one fitting in the upper grooves of both sections and one fitting in the lower grooves of both sections, two bolts one engaging each strip, means for drawing said bolts together to clamp said sections between said strips, and terminal posts mounted on each section, said sections each being provided with a plurality of holes to permit wires to be brought through said sections for connection with said terminal posts.

1,819,658. GAS PURIFICATION. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Pennsylvania. Filed July 17, 1926. Serial No. 123,166. 14 Claims. (Cl. 23—3.)



2. The process of removing hydrogen sulphide from gas containing also carbon dioxide, which comprises transferring the hydrogen sulphide to a current of air containing substantially less carbon dioxide than said gas and subjecting said air to intimate contact with an aqueous suspension of an alkaline earth.

1,819,659. SOUND REPRODUCING DIAPHRAGM. LE ROY W. STAUNTON, Jackson Heights, N. Y., assignor to Brandes Laboratories, Inc., of Newark, N. J., a Corporation of New Jersey. Filed June 30, 1926. Serial No. 119,768. 7 Claims. (Cl. 181—31.)



1. A sound reproducing diaphragm comprising a large direct acting conical diaphragm of mechanically stressed thin sheet material having an elliptical periphery, and a supporting member attached to the periphery of said diaphragm.

1,819,660. BROILING DEVICE. ARTHUR A. STONE, Cleveland, Ohio, assignor to Pearl F. Stone, Cleveland Heights, Ohio. Filed Jan. 2, 1931. Serial No. 506,066. 2 Claims. (Cl. 53—5.)



1. A broiling device, comprising a relatively shallow drip pan member and a sheet metal food-supporting plate member supported thereon at substantially the top thereof, said food-supporting member having a flat, food-sup-

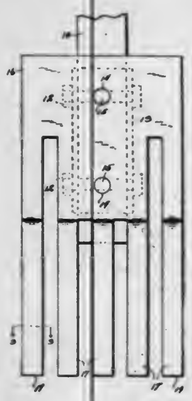
porting portion entirely covering the chamber of said drip pan member and provided throughout substantially its entire area with perforations, said perforations being of such size and being so spaced as to permit grease freed from the food being broiled to readily and quickly pass therethrough down into the chamber of the drip pan member but effectively preventing burning of said grease within said drip pan chamber.

1,819,661. CONNECTING CONVEYER DEVICE FOR HANDLING FIBROUS MATERIAL IN PROCESS OF MANUFACTURE. BERTRAND S. SUMMERS, Evanston, Ill., and HERBERT T. HEATH, Cardenas, Cuba. Filed May 29, 1929. Serial No. 366,858. 2 Claims. (Cl. 19—5.)



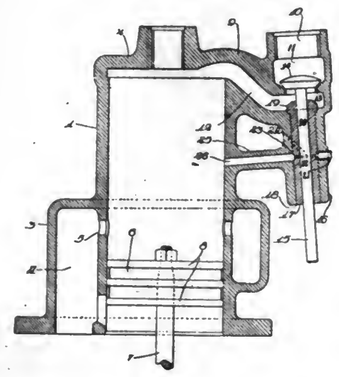
1. The combination with a device for moving vertically suspended fibers along a horizontal path to a point of discharge, of a conveyer for receiving said fibers, said conveyer comprising a vertical idler shaft at one end of the conveyer carrying a series of spaced idler pulleys, a horizontal driven shaft at the other end of the conveyer carrying a series of spaced driven pulleys, means for driving the latter shaft and pulleys, and a series of endless spaced rope conveyer elements trained around the pulleys, the pulleys on the driven shaft increasing in size from one end of the shaft to the other whereby the fibers are moved from their initial vertical position and gradually turned to horizontal position to cause the fibers to move in parallel transverse lines to a point of discharge.

1,819,662. WEEDING SHOE. CHARLES J. VIEG, Appleton, Minn. Filed Nov. 8, 1930. Serial No. 494,369. 1 Claim. (Cl. 97—207.)



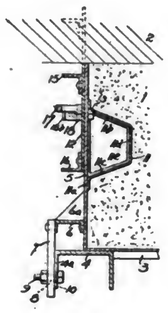
A weed cultivator of the character described, comprising a U-shaped clamp, means for securing the clamp to a cultivator shank, a weeding shoe, and means for securing the shoe to the clamp said shoe comprising a vertically disposed body portion, and a plurality of depending forwardly inclined tines secured to said body in spaced parallel relation to each other, said tines having a keen edge portion on the lower ends thereof.

1,819,663. LUBRICATING DEVICE. EARL C. WALKER, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Feb. 7, 1930. Serial No. 426,523. 6 Claims. (Cl. 184—18.)



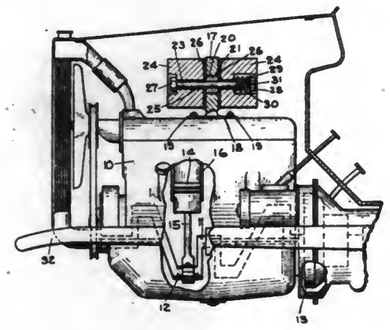
1. In an engine, a cylinder, a valve guide support rigid with respect to said cylinder, a valve guide fitted in said formed around said valve guide, a duct formed in the support, lubricating means comprising an oil channel valve guide and leading from said channel to the interior of the guide, a conduit leading from the channel to the interior of the cylinder, and means to supply lubricant to said lubricating means.

1,819,664. BULKHEAD. OMAR K. WEST, Detroit, Mich. Filed Sept. 20, 1929. Serial No. 394,101. 6 Claims. (Cl. 61—84.)



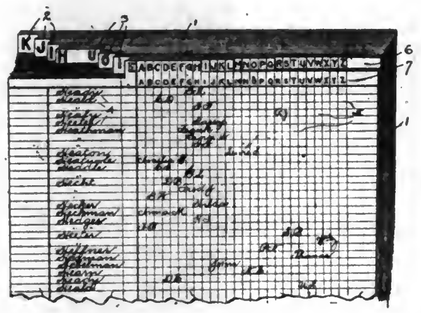
1. In a bulkhead, the combination of a stationary plate adapted to extend outwardly from one extremity of an inner form and substantially at right angles thereto a member on the outer face of said plate, plates secured to said member which are attached to other members projecting forwardly from one end of the inner form, a key secured to the inner face of the stationary plate, a movable plate having substantially parallel slots therein slidable on said stationary plate and substantially parallel thereto, and fastening means engaging said stationary plate and projecting through said slots which either permit the movable plate to be moved substantially parallel to the stationary plate or enable the movable plate to be held still on the stationary plate, said movable plate being adapted to project beyond the outer margin of the stationary plate.

1,819,665. VIBRATION REDUCING DEVICE. JEROME A. WILTSE, Fremont, Nebr., assignor to The Vibrachek Company, Fremont, Nebr. Filed Jan. 8, 1930. Serial No. 419,442. 5 Claims. (Cl. 123—192.)



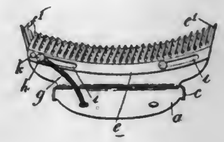
1. A vibration reducer for a mounting on an engine having reciprocating vibration generating parts, comprising a support rigidly carried by the engine, and a weight carried by the support adapted to be actuated in movements whereby on the movement of the support in one direction, the weight is disposed against the support and on the movement of the support in the opposite direction, the weight is disposed away from the support, whereby vibratory movements of the engine are adapted to be reduced by the said movements of the weight.

1,819,666. FILE SYSTEM. RODNEY J. WOOD, Dayton, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Nov. 2, 1923. Serial No. 672,322. 4 Claims. (Cl. 283—38.)



1. A series of sheets, an appropriate column located in the same position on each of the sheets for the entry therein of lists of family names, each sheet bearing a transversely disposed succession of letters of the alphabet, letters carried by succeeding sheets being simultaneously exposed to present to view a substantially complete alphabet, a series of columns appropriately designated by the alphabetical succession of letters for the entry of given name initials pertaining to the family names on a sheet and corresponding to such alphabetical column designations, like positions upon the succeeding sheets being occupied by columns pertaining to like initials.

1,819,667. HAIRDRESSING DEVICE. ANDRE AARONSON, London, England. Filed June 4, 1930, Serial No. 459,144, and in Great Britain June 25, 1929. 5 Claims. (Cl. 132—38.)



1. A wave-forming device comprising two spring controlled jaws pivoted together longitudinally and provided with serrated or toothed edges, in combination with an outer toothed or serrated member secured to each jaw.

1,819,668. WELL CEMENTING APPARATUS. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed July 13, 1929. Serial No. 377,962. 8 Claims. (Cl. 166—1.)

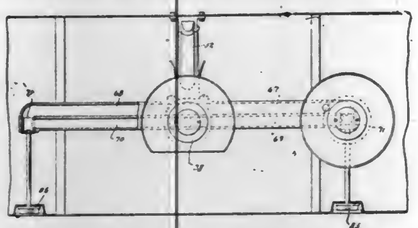


1. In combination with a string of well casing, an elongated cylinder of substantially the same diameter as the well casing interposed between the ends thereof, an upper coupling connecting the upper end of the cylinder to the well casing, a lower coupling connecting the lower end of the cylinder to the well casing, a back pressure valve structure in the upper coupling, a plug in the lower coupling completely plugging the coupling preventing the passage of fluid therethrough, said cylinder being formed with a plurality of spaced open ports arranged about the periphery thereof and extending through the wall of the cylinder intermediate the couplings.

1,819,669. STOVE STRUCTURE. WILLIAM BLASKEWITZ, CLARENCE BURT OVERLY, and CHARLES F. LAMBERT, Grosse Pointe, and JAMES IRONSIDE, Detroit, Mich., assignors, by mesne assignments, to Clayton & Lambert Manufacturing Co., Detroit, Mich., a Corporation of Delaware. Filed Aug. 27, 1926. Serial No. 131,868. 6 Claims. (Cl. 158—59.)

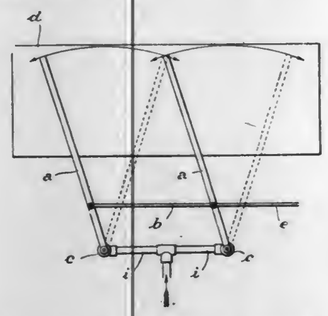
1. A stove structure, comprising a plurality of burners, a manifold for connecting said burners, a mixing chamber, a conduit for connecting the mixing chamber with said manifold, means for effecting continuous circulation of

the combustible mixture within the manifold, and pilot conduits positioned in said manifold and between the



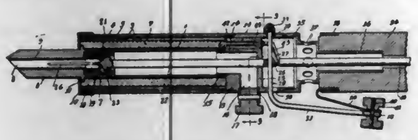
mixing chamber and burners whereby a portion of the continuously flowing combustible mixture is introduced into the pilot conduit.

1,819,670. PROCESS OF AND APPARATUS FOR TREATING CAST GLASS SHEETS AND PLATES. ARTHUR BRANCART, Rotquieres, Belgium. Filed Feb. 14, 1930, Serial No. 428,445, and in Belgium Feb. 23, 1929. 5 Claims. (Cl. 49—34.)



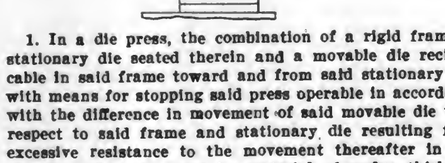
5. In combination with a table for receiving cast glass plates and sheets, a movable hollow rod having a flat underside resting on said table and a perforated convex upper side, said rod being mounted at one end on a pivot at right angles to said plate, a gas supply pipe connected to the pivoted end of said rod, and means for swinging said rod about said pivot.

1,819,671. ELECTRIC SOLDERING IRON. JOSEPH BUCCOLA, Los Angeles, Calif., assignor to National Self-Feeding Iron Company, Incorporated, Los Angeles, Calif. Filed May 16, 1930. Serial No. 452,948. 6 Claims. (Cl. 219—27.)



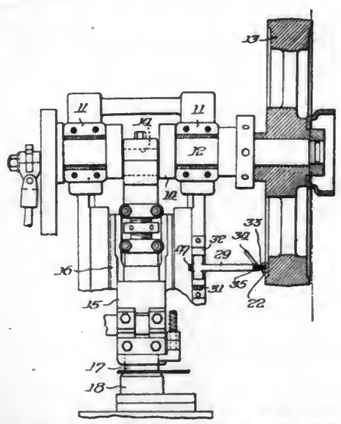
1. In a soldering iron, the combination of a soldering chamber, a point extending beyond said solder chamber but in overlappinig relation thereto for a portion of its length, a conduit in said point, said conduit communicating with said solder chamber, an electrical heating element surrounding said solder chamber, a housing surrounding said heating element, means operably connected to said housing and cooperating with said point for maintaining said point in contact with said heating element, a sharp valve seat providing a restricted opening in said conduit, a body portion, means for operably connecting said housing and soldering chamber to said body portion, a conduit in said body portion communicating with said solder chamber, a removable closure to said conduit, a movable valve pin extending axially through said solder chamber and body portion conduit and adapted to coperate with said valve seat, and means carried by said body portion for actuating said valve pin.

1,819,672. HIGH PRESSURE GAUGE COCK. JOHN J. CAIN, Bayonne, N. J. Filed Oct. 6, 1927. Serial No. 224,331. 17 Claims. (Cl. 277—42.)



1. In a device of the character described including, in combination, a body member in the form of a sleeve and having a valve seat, a valve member mounted in said body member and having a part adapted to fit said seat, a nipple member secured to said body member and having a valve and valve seat therein, said first-mentioned valve member having a part adapted to engage said second valve member, a plunger member mounted to move within said body member and adapted to engage said first-mentioned valve member to move it off its seat, a sleeve member positioned in said body member and affording a seat for part of said plunger member and resilient means for normally holding said plunger member on its seat, and an operating member adapted to engage said plunger member to move said plunger member off its seat and to operate said other valves as aforesaid.

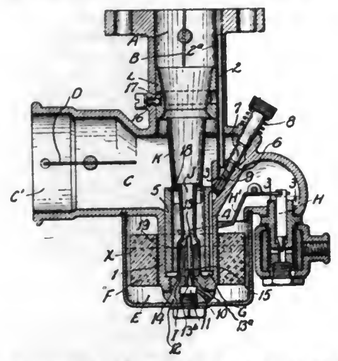
1,819,673. STOP MECHANISM FOR PRESSES. WILLIAM CAMERON, Chicago, Ill., assignor to Cameron Can Machinery Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 15, 1928. Serial No. 306,255. 8 Claims. (Cl. 192—126.)



1. In a die press, the combination of a rigid frame, a stationary die seated therein and a movable die reciprocable in said frame toward and from said stationary die, with means for stopping said press operable in accordance with the difference in movement of said movable die with respect to said frame and stationary die resulting from excessive resistance to the movement thereafter in one direction thereof caused by material of undue thickness between said die members.

1,819,674. CARBURETOR. WILLIAM C. CARTER, Flint, Mich. Filed July 15, 1927. Serial No. 206,030. 4 Claims. (Cl. 261—41.)

1. A carburetor for an internal combustion motor, provided with a main passageway through which a mixture of fuel and air travels to the intake of the motor, a throttle valve for said main passageway, an accelerating well for holding fuel, means for causing the fuel in said well to be dumped into said main passageway when the



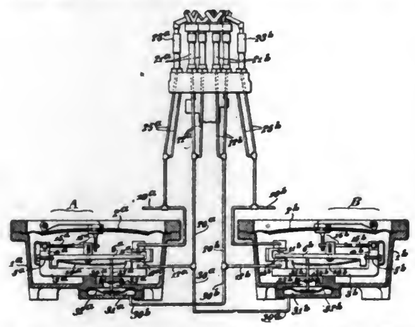
throttle is opened suddenly, and a separate and distinct means for causing the fuel to be discharged from said well into the main passageway gradually and economically when the throttle is opened gradually.

1,819,675. SWITCH. MERLE P. CHAPLIN, Waterville, Me., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 4, 1929. Serial No. 360,432. 7 Claims. (Cl. 200—166.)



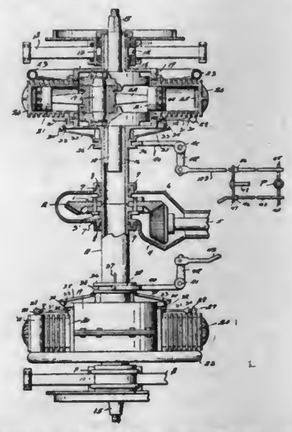
1. A curved terminal bank in which sides of adjacent terminals are parallel.

1,819,676. GAS LIGHT SIGNAL APPARATUS. GUSTAF DALÉN and SVEN AUGUST ESKILSON, Stockholm, Sweden, assignors to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 31, 1929, Serial No. 367,480, and in Sweden Feb. 16, 1929. 10 Claims. (Cl. 67—111.)



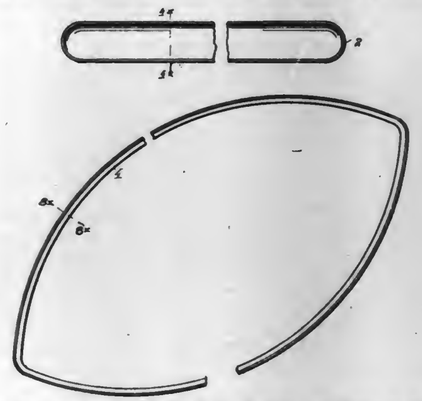
10. In combination, one or more gas burners, a plurality of flasher devices for supplying gas to the said burner or burners, valves for controlling the inlet and outlet of gas to and from the said devices, and connections between the said devices, the said connections including means whereby if the valve in one of said devices is actuated to open an outlet opening in advance of the corresponding movement of the valve of the other of said devices the latter valve is immediately actuated into position to open the outlet opening therefrom.

1,819,677. TRANSMISSION MECHANISM. AMILCARE GALANTI, Philadelphia, Pa. Filed Sept. 4, 1929. Serial No. 390,340. 6 Claims. (Cl. 180—18.)



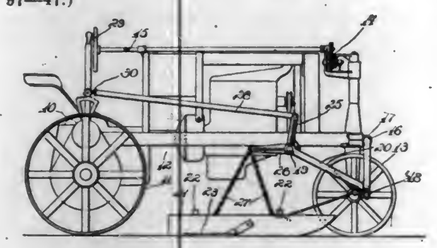
1. A hydraulic transmission mechanism comprising a tubular member, means for supporting the same for rotation, a driving means therefor, shafts extending within said tubular member through opposite ends thereof, said tubular member at a point intermediate the ends of each of the shafts being provided with a surrounding casing, cylinders radiating from said casing, pistons working in the cylinders, operative connections between the pistons and the shaft, a continuous pipe line in communication with each of the cylinders in advance of the pistons, a valve controlling the communication between each cylinder and the continuous pipe line, and means for adjusting said valves in unison.

1,819,678. METHOD OF FORMING ENDLESS RIMS FOR REELS, WHEELS, FRAMES, ETC. EDGAR R. GERMAN, Rochester, N. Y., assignor to Taylor Shantz Company, a Corporation of New York. Filed Apr. 10, 1929. Serial No. 354,126. 6 Claims. (Cl. 29—159.1.)



1. The method of forming an endless rim from a single blank having a limited length which consists in forming the blank into a trough having its ends closed and then piercing the bottom of the trough between the closed ends and expanding the sides of the trough to form the endless band.

1,819,679. TRACTOR LISTER ATTACHMENT. WILLIAM S. GRAHAM, Canton, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Sept. 20, 1930. Serial No. 483,193. 3 Claims. (Cl. 97—47.)

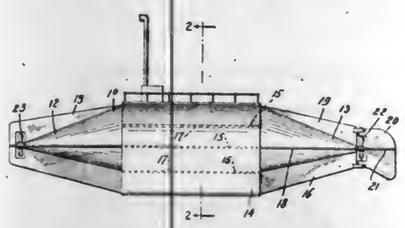


3. A self-propelled lister cultivator comprising a tractor, a draft bar secured to the front of the tractor, a lifting shaft mounted on the tractor rearwardly of the draft bar, a row-guided implement pivotally connected to the draft bar by parallel transversely spaced links, a bell-crank on the lifting shaft, flexible lifting elements connecting one arm of the bell-crank to the implement, and actuating means connected to the other arm for swinging the bell-crank.

1,819,680. PURIFICATION OF SOLID AROMATIC HYDROCARBONS. JOSEPH BENNETT HILL, Philadelphia, Pa., assignor to The Barrett Company, a Corporation of New Jersey. Filed Mar. 29, 1921. Serial No. 456,706. 12 Claims. (Cl. 260—168.)

1. The process of refining crude hydrocarbons of the aromatic series, which hydrocarbons are solid at ordinary temperature, comprising the treatment of the crude hydrocarbons with sulfuric acid in a proportion less than the theoretical amount required to completely sulfonate the hydrocarbons, said treatment being continued until substantially all of the sulfuric acid is used up and the subsequent distillation of the unsulfonated hydrocarbons from the sulfonic acids produced.

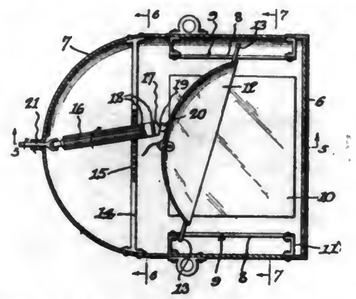
1,819,681. SUBMARINE VESSEL. SANDOR HORVATH, Flushing, N. Y. Filed June 19, 1930. Serial No. 462,238. 1 Claim. (Cl. 114—16.)



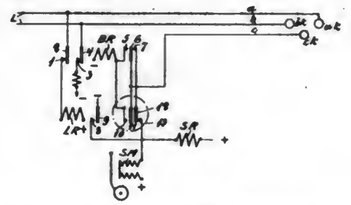
The combination with the hull of a submarine boat, of a pusher propeller at the stern thereof, a tractor propeller at the bow of said hull, said propellers being adapted to be actuated independently of one another and at different speeds for effecting the submerging and rising of the vessel, a shell surrounding the midship section of said hull and spaced therefrom, and a plurality of fins projecting laterally from said midship section within and to said shell, said shell being open at both of its ends.

1,819,682. MOTOR VEHICLE HEADLIGHT. FRANCIS JOSEPH JACOBI, Floyds Knobs, Ind. Filed Feb. 26, 1930. Serial No. 431,491. 2 Claims. (Cl. 240—41.6.)

1. A headlight comprising a body portion, a movable reflector operating within the body portion, means for holding the movable reflector against lateral movement, an operating member including an elongated gear, an operating rod; a universal coupling between the rod and elongated gear, to rotate the elongated gear, means for causing one end of the elongated gear to move vertically when the gear is rotated, and a universal coupling for connecting the elongated gear and movable reflector to tilt the movable reflector, when the gear is rotated.

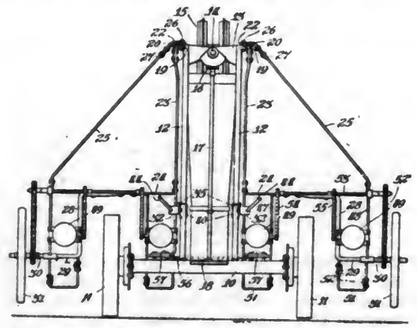


1,819,683. TELEPHONE SYSTEM. KNUT LARSSON, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed June 9, 1930, Serial No. 460,017, and in Sweden June 21, 1929. 8 Claims. (Cl. 179—9.)



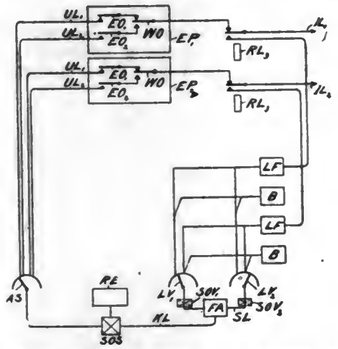
1. In a circuit arrangement for telephone plants a subscriber's line, line and cut-off relays connected to said line, a number of contacts appertaining to said cut-off relay and controlling the circuit extending over the test wire, and means to actuate said contacts by the line relay when the latter relay is energized.

1,819,684. TRACTOR IMPLEMENT. ALEXUS C. LINDOREN, Chicago, and JAMES L. HIPPLE, Canton, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed July 1, 1929. Serial No. 375,173. 8 Claims. (Cl. 111—52.)



1. A tractor planter comprising the combination with a self-propelled vehicle having a rear axle and wheels adapted to span the space of two plant rows and a narrow central body supported at the front on a steering truck positioned on a line midway between the rear wheels, of a frame at each side of the vehicle body, each frame having an elongated member extending alongside the body and forwardly pivoted thereto, connecting means loosely suspending the rear end of each member on the vehicle, freely movable connecting means between the rear ends of said members, an outwardly extending bar fixed to each member and projecting laterally therefrom ahead of each rear wheel, a ground wheel supporting the outer end of each outwardly extending bar, and planting mechanism carried by each outwardly extending bar.

1,819,685. TELEPHONE SYSTEM. TORSTEN ADIL LUNDELL, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Jan. 3, 1930, Serial No. 418,880, and in Sweden Jan. 12, 1929. 11 Claims. (Cl. 179—27.)



1. A switching arrangement to establish inter-office transit or through-communications between the lines entering a telephone exchange from other telephone exchanges and more especially inter-office communications having repeaters or amplifiers, characterized in that said lines are associated in multiple with final selectors which are two and two mutually interconnected through cord lines in which amplifiers may be included and over which the inter-office communications are established by the one final selector in a selector pair being connected to the calling line and the other line selector to a line extending in the wanted direction, said cord lines being adapted to be connected over distributing selectors to auxiliary or supervisory lines extending from the inter-office operators, positions over which lines the selectors may be operated and the inter-office communications supervised.

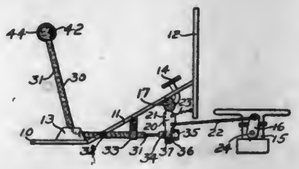
1,819,686. METHOD OF MAKING TILE. ANDREW MALINOVSZKY, South Gate, Calif., assignor to Malinite Products, Inc., Los Angeles, Calif., a Corporation of California. Filed Oct. 15, 1929. Serial No. 399,878. 10 Claims. (Cl. 25—156.)

1. In a method of making tile, the steps of reducing a glass to a state of fine division, reducing a magnesia-containing material to a state of fine division, mixing and moistening the materials, moulding bodies under pressure from said mixture, drying the moulded bodies, and then burning said bodies at a temperature and for a time sufficient to incompletely vitrify the glass.

1,819,687. PROCESS OF RECOVERING TAR ACIDS. STUART P. MILLER, Englewood, N. J., assignor to The Barrett Company, a Corporation of New Jersey. Filed Nov. 14, 1924, Serial No. 750,006. Renewed Aug. 22, 1929. 3 Claims. (Cl. 260—154.)

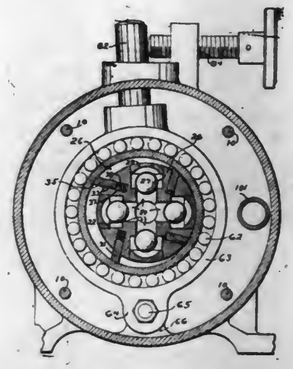
1. In the process of recovering phenols from tar oils containing same, the steps comprising treating the tar oils with lime, and water, thereby forming a solution of water soluble calcium phenolates in the presence of tar oil, separating the solution of calcium phenolates from the tar oil, treating the thus separated solution of calcium phenolates with an alkali metal salt capable of precipitating the calcium and forming a solution of a water soluble alkali metal phenolate, and separating the solution of water soluble phenolate from the calcium precipitate.

1,819,688. FUEL AND SPEED CONTROL DEVICE. WILLARD C. MOORE, Dayton, Ohio. Filed June 13, 1929. Serial No. 370,710. 4 Claims. (Cl. 74—107.)



1. In a fuel and speed control device for automotive vehicles, the combination of a carburetor; a fuel-valve control lever thereon; a hollow gear-shift lever; a hollow handle thereon, adapted to be turned and shifted relatively thereto; connections intermediate the handle and control lever, said connections including a flexible rod running through the gear-shift lever and into the handle; means, including a screw having a lip within the handle to which the rod is secured, a sleeve rigid with the gear-shift lever, said sleeve having a substantially spiral cam race; and a pilot secured to the handle and cooperating with the cam race in said sleeve to raise the handle as the latter is turned in one direction, and to lower the handle as the same is turned in another direction, whereby the connections are shifted to actuate the fuel-valve control lever to control the amount of fuel that is to pass into the carburetor.

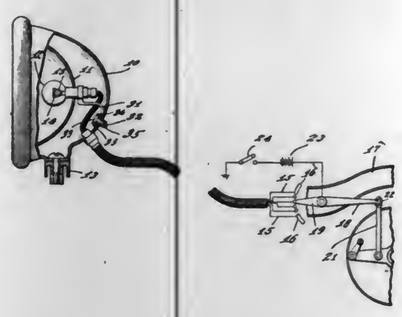
1,819,689. HYDRAULIC PUMP. PERCY OLIVER OTT, Rockford, Ill., assignor to Racine Tool & Machine Company, Racine, Wis., a Corporation of Wisconsin. Filed July 25, 1929. Serial No. 380,939. 8 Claims. (Cl. 103—120.)



1. In a hydraulic pump, the combination of a rotor having a body portion formed to provide an annular space, a ring member revolving with said rotor and fitting within said space and defining with the sides thereof a chamber, reciprocating blades mounted in the body of the rotor and working within said annular space and defining with

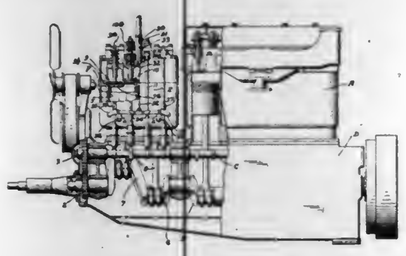
said rotor and ring member a plurality of pumping compartments, valve-controlled inlet and discharge passages in the rotor communicating with said compartments, and adjustable means in which said ring member is freely journalled for varying the position of said ring member relative to the axis of rotation of the rotor to vary the output of the pump.

1,819,690. HEAD LAMP CONTROL. CHESTER S. RICKER, Waukesha, Wis. Filed Apr. 26, 1929. Serial No. 358,212. 7 Claims. (Cl. 240—7.1.)



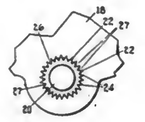
3. In combination with a vehicle having an axle and a frame spring-supported upon said axle, a headlamp carrier from said frame, a lamp-bulb for said head-lamp, said lamp-bulb having a plurality of vertically spaced filaments, a source of current, and switch means for selectively controlling the connection of said current-source and said filaments, said switch means including a plurality of contacts mounted on the vehicle frame, a contact finger movably mounted on the vehicle frame and adapted to engage any of said contacts, and means for operatively interconnecting said finger and said axle.

1,819,691. AIR COMPRESSOR. AUSTIN J. RIX, San Francisco, Calif. Filed May 7, 1930. Serial No. 450,390. 7 Claims. (Cl. 230—25.)



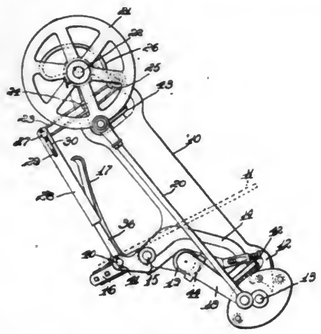
1. In a structure of the character described a four-cycle internal combustion engine having an extended crank shaft and cam shaft, an air compressor cylinder having a piston driven by the extended crank shaft, an inlet and a discharge valve in communication with said cylinder, a pair of cams on the extended cam shaft, and means actuated by said cams whereby the inlet and discharge valves are opened and closed in timed relation to the movements of the piston once during each revolution of the crank shaft.

1,819,692. VARIABLE CONDENSER. LAZARUS SHAPIRO, Bronx, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 9, 1923. Serial No. 611,667. 7 Claims. (Cl. 175—41.5.)



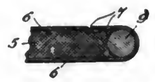
5. In a condenser, a rotatable shaft provided with a plurality of sharp edged, wedge-shaped projections, one or more rotor plates mounted on said shaft, said projections being embedded in a portion of each plate.

1,819,693. TRIP ADJUSTER FOR GRAIN BINDERS. DANIEL W. SMITH, Oak Park, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Aug. 19, 1930. Serial No. 476,358. 6 Claims. (Cl. 56—436.)



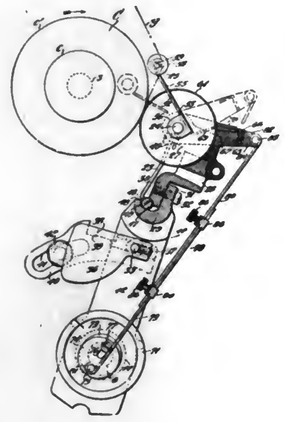
1. A tension device to be connected between the cam lever and compressor shaft trip of a binder, said device comprising a housing adapted to be pivotally connected to the cam lever, a block slidable in the housing, a rod turnably anchored in the slide block and having an end slidably passed through an end of the housing and adapted to be pivotally connected to the compressor shaft trip, a spring encircling the rod within the housing, and a nut positioned on a threaded part of the rod within the housing and serving as a stop for an end of the spring.

1,819,694. GASKET. LEONARD B. SPERRY, Western Springs, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Oct. 11, 1926. Serial No. 140,709. 2 Claims. (Cl. 288—1.)



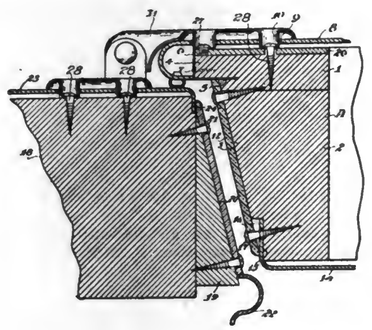
1. A cylinder head gasket for an internal combustion engine, said gasket comprising a packing, metallic sheathing enclosing the packing, said gasket having a cylinder opening, a wire ring lying within the sheathing and encircling the cylinder opening, the sheathing being laid around the ring in contact therewith whereby the wire and sheathing form a wide and solid metallic edge as thick as the gasket for protecting the inner packing where exposed to the fire.

1,819,695. WINDING MACHINE. JOHAN A. ANDERSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed May 29, 1928. Serial No. 281,571. 20 Claims. (Cl. 242—43.)



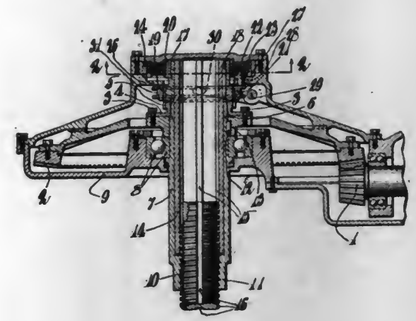
1. In a winding machine, the combination of a winding-spindle, an oscillating thread-guide for traversing strand material on the winding-spindle to deposit it in inclined chasses to form a bobbin, an oscillatory track along which the thread-guide travels during the winding of the bobbin, and means to oscillate the track to cause the thread-guide to follow the inclined chase of the bobbin without contact therewith.

1,819,696. DOOR HARDWARE WITH SCREW PROJECTIONS. GEBHARD C. BOHN, St. Paul, Minn. Filed May 7, 1930. Serial No. 450,432. 4 Claims. (Cl. 16—128.)



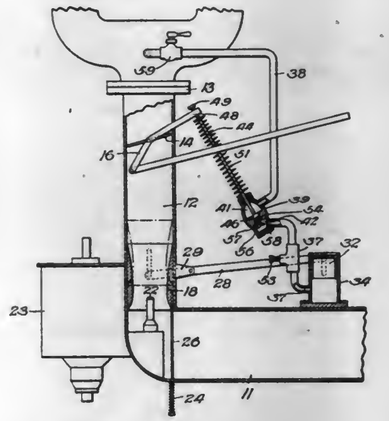
1. In a refrigerator, an inner frame, a sheathing member having apertures therein adapted to receive projections on a fitting member, a fitting member adapted to seat on said sheathing member, and having apertured projections extending downwardly below the lower surface thereof and adapted to enter the openings in said sheathing member and to rest upon said inner framework.

1,819,697. POWER TRANSMISSION AND ADJUSTING MECHANISM. CORNELIUS G. BOUDETTE, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 21, 1924. Serial No. 694,222. 21 Claims. (Cl. 74—40.)



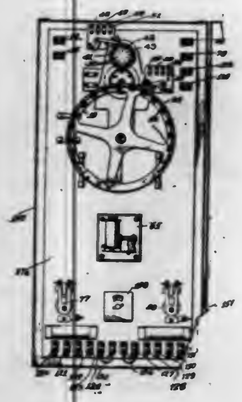
1. In combination, a screw, a nut threadedly engaged therewith, means for rotating one of the same, means releasable at will for positively connecting the other thereto for rotation therewith at an equal angular rate, and means operative when said second mentioned means is released for frictionally holding said other against rotation to effect relative movement between said screw and nut.

1,819,698. CARBURETOR. EDMUND BOW and LOUIS W. JENKS, Berkeley, Calif. Filed July 12, 1928. Serial No. 292,095. 2 Claims. (Cl. 261—44.)



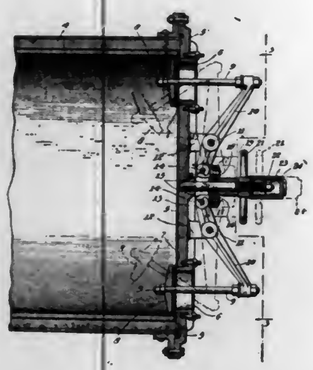
1. A carburetor comprising a conduit; a venturi in said conduit; a fuel nozzle in said venturi; a throttle valve in said conduit at the induction side of said venturi; compensating means for moving said venturi relative to said nozzle, comprising a vacuum cylinder, a piston in said cylinder, means operatively connecting said venturi to said piston for operative movement therewith, piping connecting said vacuum cylinder to said conduit at the induction side of the throttle therein; a pilot valve interposed in said piping, means for closing said pilot valve to incapacitate said compensating means, and means for relieving suction in said vacuum cylinder when the pilot valve is closed.

1,819,699. DELINQUENCY SIGNALING SYSTEM. JAMES W. BRICE, Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed June 21, 1924. Serial No. 721,503. 18 Claims. (Cl. 234—37.5.)



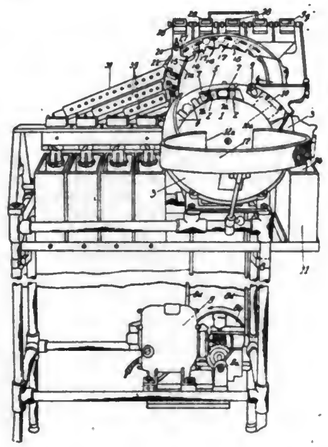
1. In a system of the class described, in combination, a recording device located at an area to be supervised and adapted to be actuated by a watchman in making his rounds, signaling means, and inaccessible means controlled by said device for preventing operation of said signaling means provided the watchman actuates said device at a predetermined time and makes a proper record upon the recording device at the area to be supervised which shows that the watchman has operated the recorder in time to prevent operation of the signal device.

1,819,700. FILTER. EDWIN BURT, Canutillo, Tex. Filed Dec. 10, 1928. Serial No. 325,035. 7 Claims. (Cl. 220—57.)



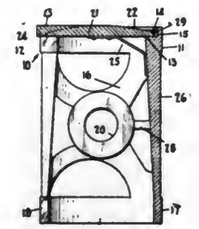
5. A filter as specified in claim 1, which comprises a lever mounted on the discharge end of the filter casing, a stem rigidly secured thereto, which extends through the discharge opening into said filter casing, to the outer end of which said closure is rigidly secured, a threaded post secured in the end of said filter casing, a nut having threaded engagement with said post, and operative connection between said nut and lever.

1,819,701. COIN COUNTING AND ASSORTING MACHINE. CLEMENT LEE DOWNEY, Cincinnati, Ohio. Filed May 10, 1927. Serial No. 190,309. 11 Claims. (Cl. 133—3.)



6. A machine of the character described having a rotable coin carrying disc, a plurality of devices associated with said disc each for receiving coins of different denominations, a plurality of means each for a respective device for tripping said devices to induce their movement into position to receive coins, said means being mounted in spaced positions equidistant from the axis of said disc, and cam means for directing coins carried on said disc into engagement with said tripping means.

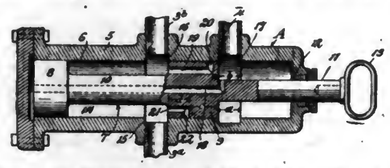
1,819,702. ENGINE PISTON. GEORGE DRAKE, Linden, N. J. Filed Apr. 8, 1930. Serial No. 442,485. 8 Claims. (Cl. 74—108.)



1. In a piston of the class described, the combination comprising a pressure receiving head consisting of a split compression ring, and a horizontal plate slidably arranged in air-tight engagement with the said split compression ring.

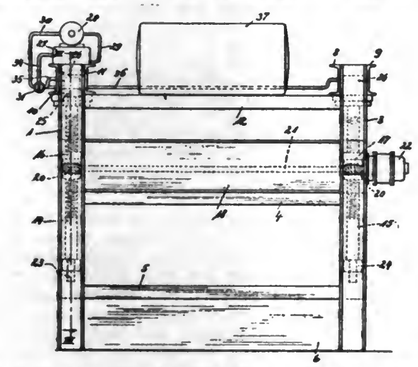
1,819,703. VALVE. WALTER ERNST, Mount Gilead, Ohio, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed Dec. 29, 1930. Serial No. 505,402. 8 Claims. (Cl. 251—76.)

8. In combination; a valve casing; a delivery passage therein; an exhaust port in the casing and spaced from the delivery passage; and a valve element mounted for movements in the casing and being adapted to be positioned between said passage and port to prevent communication therebetween and to be moved away from said passage and past said port to establish relatively unrestricted communication therebetween, said element having a relief passage of small cross-sectional area adapted to be closed when said head is positioned between said delivery passage and said port and being adapted to be



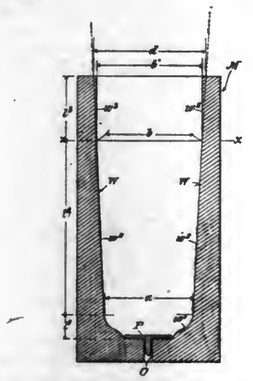
opened during movement of the valve head past said port, to thereby establish relatively restricted communication between said delivery passage and port before said relatively unrestricted communication has been established.

1,819,704. PRESS. ADOLPH FRIZ, Stuttgart-Cannstatt, Germany. Filed Feb. 19, 1930, Serial No. 429,606, and in Germany Mar. 1, 1929. 6 Claims. (Cl. 100—44.)



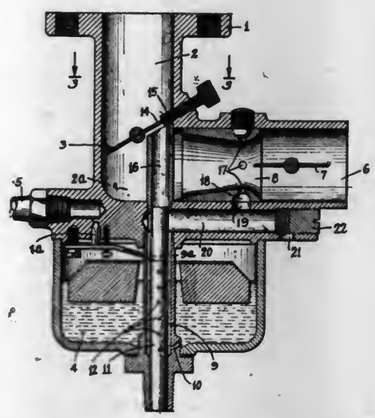
4. In a press, a presser plate, a spindle for actuating said presser plate, mechanical means adapted to alternately displace said plate with respect to said spindle, and said spindle with respect to said plate, and hydraulic means adapted to exert thrust on said spindle.

1,819,705. INGOT MOLD. EMIL GATHMANN, Baltimore, Md. Filed Feb. 5, 1931. Serial No. 513,751. 1 Claim. (Cl. 22—139.)



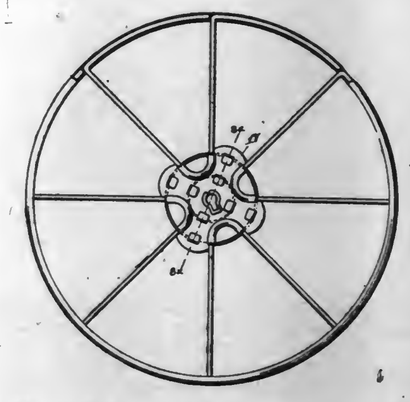
In a metallic mold of the big-end-up type, an ingot-forming chamber the lower and intermediate portions of which are defined by upwardly diverging walls and the top portion of which is defined by substantially parallel walls, the vertical length of said parallel walls being greater than five-eighths but less than seven-eighths of the minimum cross section of the chamber at the top of the mold.

1,819,706. CARBURETOR. EDWARD F. GEIGER, Binghamton, N. Y. Filed Mar. 27, 1928. Serial No. 265,183. 13 Claims. (Cl. 261—121.)



1. A carburetor having therein an air intake passage, a venturi, a mixing chamber, means for supplying fuel and air to the said mixing chamber and passages connecting the venturi with the aforesaid means to properly proportion the fuel and air, which is supplied to the mixing chamber, said venturi being disposed in the air intake at a point ahead of all of the fuel supplying means.

1,819,707. CONSTRUCTION AND METHOD OF MANUFACTURING REELS. EDGAR R. GERMAN, Rochester, N. Y., assignor to Taylor Shants Company, a Corporation of New York. Filed Apr. 10, 1929. Serial No. 354,127. 11 Claims. (Cl. 29—174.)



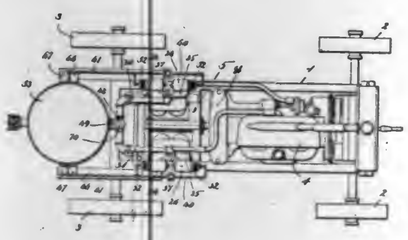
1. The method of making a reel which consists in forming each side of the reel from an elongated sheet metal blank having a limited lengths, forming said blank into a trough, piercing the bottom of the trough, expanding and forming said trough into an endless tubular rim, forming the wire spokes in pairs with their inner ends connected, anchoring the outer free ends of the pairs of spokes in the endless tubular rim and connecting the inner connected ends of the spokes with a hub plate.

1,819,708. PLANT MARKER. ALFRED V. HART, Westfield, N. J., and DAVID B. THOMS, Torrington, Conn. Filed Nov. 13, 1930. Serial No. 495,502. 8 Claims. (Cl. 40—11.)



1. A plant marker including a single length of wire bent to provide a coil constituting a clip having an elongated stem extending from the coil, and a tab insertible between the convolutions of the coil to be gripped thereby, there being oppositely extended spaced lugs integral with and extending from the tab within the space defined by the coil, the ends of the lugs constituting means for thrusting in opposite directions respectively against the coil.

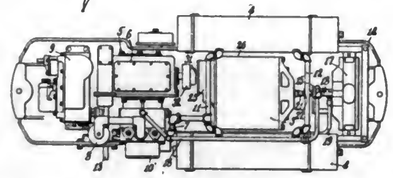
1,819,709. COMPRESSOR MECHANISM. FRED D. HOLDSWORTH, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 14, 1924. Serial No. 706,583. 13 Claims. (Cl. 230—56.)



1. A portable compressor outfit comprising an engine having a flywheel provided with an axially disposed recess, a compressor comprising a shaft, and flexible connecting means disposed within said recess for transmitting torque from the motor to the shaft of the compressor.

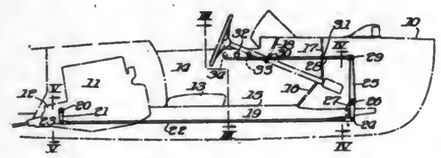
1,819,710. MINE CAR COMPRESSOR. FRED D. HOLDSWORTH, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Sept. 19, 1928. Serial No. 306,953. 7 Claims. (Cl. 230—212.)

1. In a mine car compressor, a wheel mounted truck, a self-contained pumping unit including a motor and a compressor driven thereby mounted on said truck, and a pair of receivers for receiving fluid pumped by said com-



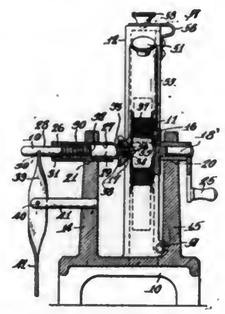
pressor, one disposed horizontally along each side of said truck in longitudinally overlapping relation with said pumping unit.

1,819,711. CLUTCH CONTROL MECHANISM. WILLIAM M. HORN, Detroit, Mich., assignor to Horace E. Dodge Boat & Plane Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 20, 1930. Serial No. 430,013. 3 Claims. (Cl. 115—34.)



1. In combination with a boat hull having an engine compartment and a driver's compartment forward thereof, the driver's compartment having a floor spaced from said boat hull, a toe board and dash closing the forward end of said driver's compartment, steering mechanism extending into said driver's compartment, a longitudinally movable rod extending through said dash adjacent the upper edge thereof, means for supporting the rearwardly extending portion of said rod adjacent said steering mechanism, lever mechanism positioned forward of said dash, said last named mechanism comprising a pivot member, a lever mounted thereon, means extending rearwardly beneath the floor of said driver's compartment for connecting the lower end of said lever to the clutch of said engine, and means for operatively connecting the forward end of said longitudinally movable rod to the upper end of said lever.

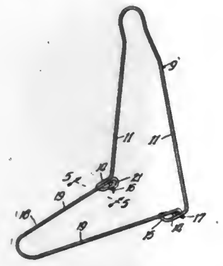
1,819,712. SPOOL DEVICE FOR TYPE RIBBON MATERIAL. EDMUND KIRKBRIDE, Camden, N. J., assignor of one-half to S. C. Loveland, Hammonton, N. J. Filed Aug. 13, 1927. Serial No. 212,672. 6 Claims. (Cl. 242—55.)



1. In a spool winder, the combination of a longitudinally movable shaft, a centering head having a rearwardly sloping surface and a rearward axial socket receiving a for-

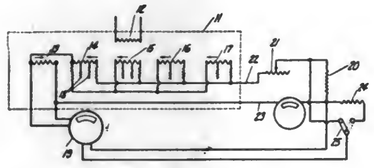
ward portion of the shaft, affording bearing engagement at the bottom to the socket between the end of the shaft and the head, a friction driving disc axially in line with the shaft and adapted to be rotated, and retractable means spring pressing the shaft toward the disc.

1,819,713. UTENSIL SUPPORT. HERMAN KLEIN, Chicago, Ill. Filed Sept. 6, 1929. Serial No. 390,683. 6 Claims. (Cl. 248—20.)



1. A utensil support comprising a U-shaped arm having downwardly extending legs, a forwardly extending loop on each of said legs, a second U-shaped member having legs pivotally connected to the rearward side of said loops and normally resting upon the forward side of said loops thereby forming a support for a utensil.

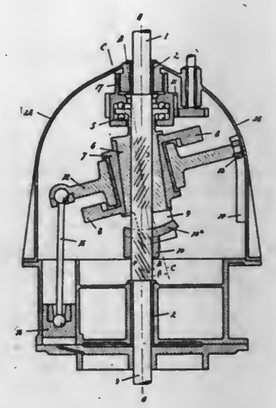
1,819,714. CALIBRATION SYSTEM. OTTO A. KNOPP, Oakland, Calif. Filed Aug. 28, 1926. Serial No. 132,265. 7 Claims. (Cl. 175—183.)



1. The method of calibrating instrument transformers in which there are a plurality of windings inductively associated, which comprises inducing in a winding that forms at least a part of the secondary of the transformer, a current flow by passage of a current in another winding having the same number of turns as the winding in which the current is induced, impressing upon one of the systems of a wattmeter, the difference between that electrical characteristic in these two windings which the transformer is designed to reduce, impressing upon the other system of the wattmeter a steady electrical current supplied from a source displaced 90° from the source to which the transformer is connected, and measuring the response of the wattmeter as well as that electrical characteristic of the inducing winding which forms the subject matter of the calibration.

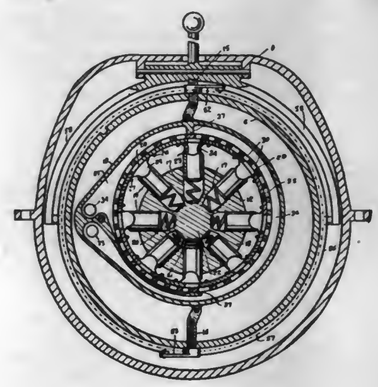
1,819,715. ECCENTRIC BALANCE DRIVING-GEAR. LUDWIG LE BRET, Charlottenburg, Germany. Filed Aug. 31, 1927, Serial No. 216,732, and in Germany November, 1923. 5 Claims. (Cl. 74—14.)

1. In an eccentric balance driving-gear, the combination with an operative positively guided balance arm, and a shaft for the latter, of two obliquely eccentric members arranged within and rotatable and thereby adjustable with reference to one another, the outer member carrying said arm and the inner one being arranged on said shaft, two oppositely directed screw-threaded parts on said shaft, one of said parts serving for the reception of said inner obliquely eccentric member thereon, recessed projections



on said outer obliquely eccentric member, and a guiding nut in engagement with said recessed projections and screwed over the other screw-threaded shaft part.

1,819,716. POWER TRANSMISSION. DONALD GORDON MACKENZIE, Montreal, Quebec, Canada, assignor to Donmac Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 8, 1926. Serial No. 86,704. 5 Claims. (Cl. 103—161.)

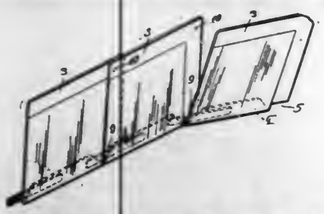


1. In a device of the kind described, a pump comprising a rotor having plunger wells, tubular plungers in said wells, springs in said wells holding said plungers to their outer positions, a ring having ports and mounted on said plungers and rotating therewith, and a non-rotative casing eccentrically supported in relation to said rotor and having ports registering with the aforesaid ports and connected with inlet and outlet passages.

1,819,717. SHINGLE. CHARLES L. MANGANO, Gouverneur, N. Y. Filed Apr. 30, 1930. Serial No. 448,690. 3 Claims. (Cl. 108—38.)

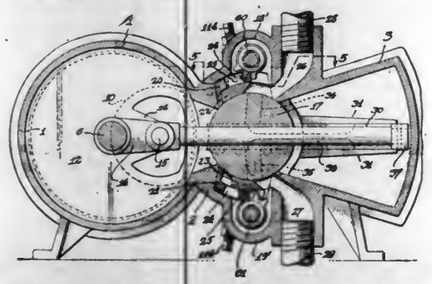
3. A flexible shingle having one edge thereof cut away a predetermined distance at one end thereof, a flange bent

under to form a flap in back of said shingle beginning at the cut away edge thereof, and a locking strip anchored in



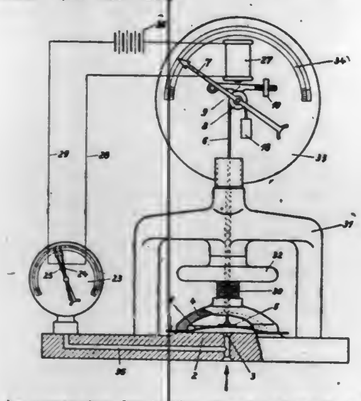
the fold of said flap and projecting from said shingle at the opposite end from the cut away portion.

1,819,718. ROTARY ENGINE. CHARLES MCQUOWN, Detroit, Mich. Filed Feb. 27, 1928. Serial No. 257,150. 4 Claims. (Cl. 121—68.)



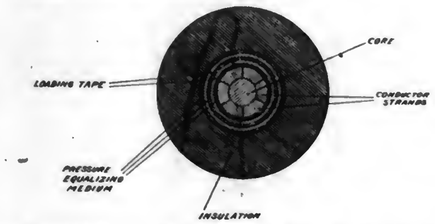
2. In a rotary engine, a cylinder, a piston, an oscillatory hub adjacent said cylinder adapted to rock on an axis substantially parallel to that of said cylinder, a partition extending from said piston and slidable in said hub, said partition cooperating with the piston in dividing the cylinder, inlet and exhaust means at opposite sides of said partition and controlled by the position of said partition in the hub, and an operating rod connecting said piston to said partition for oscillating the latter, said rod passing through said hub whereby to rock the same.

1,819,719. APPARATUS FOR TESTING TENSILE STRENGTH. ALFRED SCHOPPER, Leipzig, and GUSTAV DALÉN, Berlin-Dahlem, Germany, assignors to the Firm Louis Schopper, Leipzig, Germany. Filed Mar. 8, 1929, Serial No. 345,504, and in Germany Sept. 20, 1926. 7 Claims. (Cl. 265—14.)



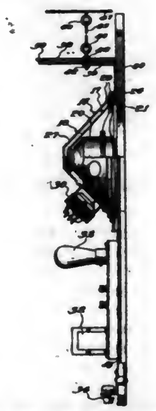
1. An apparatus for testing tensile strength comprising means for holding the part to be tested, means for supplying gas under pressure to one side of said part, a gauge for indicating the camber of said inflated part, and automatic means for arresting the indicator of said gauge when said part bursts.

1,819,720. SUBMARINE CABLE. WILLOUGHBY STATHAM SMITH, Benchams, Newton Poppleford, HENRY JOSEPH GARNETT, Sevenoaks, and HENRY CHARLES CHANNON, Kensington, London, England. Filed Sept. 4, 1928, Serial No. 303,970, and in Great Britain Sept. 2, 1927. 12 Claims. (Cl. 178—45.)



1. A loaded signalling conductor suitable for the transmission of electric currents at audio and carrier frequencies, comprising a conducting member and a layer of loading material having a thickness not in excess of about 0.0015 inch and formed of an alloy having high specific resistance and a permeability below about 800 at low magnetizing forces.

1,819,721. SOUND REPRODUCING DEVICE. JOHN MCWILLIAMS STONE, St. Charles, Ill., assignor to Operadio Manufacturing Co., St. Charles, Ill., a Corporation of Illinois. Filed July 26, 1929. Serial No. 381,206. 17 Claims. (Cl. 181—51.)

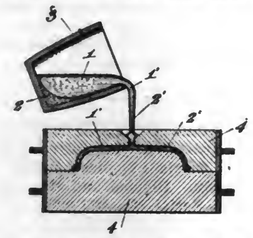


1. A device of the kind described comprising an apertured baffle member, a loud speaker carried by said baffle member and having a diaphragm located at said aperture, means for suspending said baffle member from an overhead support, and yielding material at the edges of the panel for engaging and protecting the walls of a room on which said device may be placed.

1,819,722. PROCESS FOR COMPOSITE CASTING. IHEI SUGIMURA, Shiba Ku, Tokyo, and KWAMICHI MAGARISAWA, Tsurumi Ku, Yokohama, Japan, assignors to Meijiro Yasumoto, Yokohama, Japan. Filed Nov. 22, 1929. Serial No. 409,138. 5 Claims. (Cl. 22—201.)

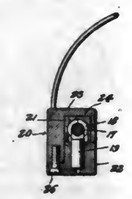
1. A process for casting two different kinds of metals with one metal acting as a core and the other metal as a surrounding sheath, said metals having the property of not

alloying with each other, one metal having less specific gravity, higher melting point and greater surface tension than the other and the other metal having greater specific gravity, lower melting point and less surface tension and being provided with moderate adhesive power to the former, and having a good fluidity and being adapted to form a



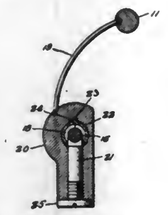
strong sheath when solidified; said process consisting in mixing and melting said metals together in a vessel while being stirred, then permitting said metals to remain at rest for a while thereupon pouring them into a mould and permitting them to solidify, thereby forming a sheathing of the metal of lower melting point around the metal of higher melting point.

1,819,723. FISHING REEL. SAMUEL T. THORPE and LOUIS ZIPP, Bristol, Conn., assignors to The Horton Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Feb. 7, 1929. Serial No. 338,169. 9 Claims. (Cl. 242—84.4.)



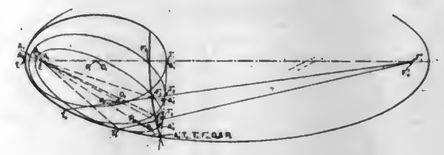
1. In a fishing reel, the combination of a frame, a spool, a traversing shaft, a guide bar partially surrounding said shaft, a line guide carriage slidable on said guide bar, said carriage surrounding said bar but being removable therefrom and said carriage being held against rotation by said bar, and driving connections comprising a pawl between said carriage and shaft said pawl being held spaced from said guide bar.

1,819,724. FISHING REEL. HALVOR S. BROADWELL and SAMUEL T. THORPE, Bristol, Conn., assignors to The Horton Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Feb. 7, 1929. Serial No. 338,170. 2 Claims. (Cl. 242—84.4.)



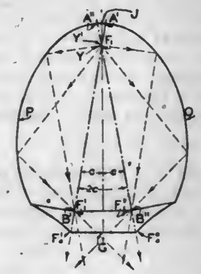
1. In a fishing reel, a frame, a spool, a traversing shaft, a cylindrical tubular casing around said shaft, a line guide carriage slidable on said casing, said casing constituting the sole support for said carriage, a rib extending along said casing engaging in a recess in said carriage for preventing rocking of the carriage on the casing, and a pawl in said carriage co-acting with said shaft, said pawl being held against movement circumferentially of said shaft.

1,819,725. LIGHT PROJECTING REFLECTOR. WILLIAM G. WOOD, San Francisco, Calif., assignor to American Woodlite Corporation, San Francisco, Calif., a Corporation of California. Filed Apr. 5, 1926, Serial No. 99,684. Renewed July 21, 1930. 22 Claims. (Cl. 240—41.37.)



1. A reflector for head lights and the like in combination with a light source, which consists of a reflecting surface generated from a series of ellipses, their planes being inclined to one another and including a common horizontal transverse line, the vertices of said ellipses being disposed along the arcs of two conic sections whose planes and foci are coincident, and their proximate focus being situated at the light source and their remote focus being situated on the transverse horizontal line, the remote foci of the generating ellipses being disposed along the arc of a circle lying in the plane of said conic sections coincidentally, the center of the circle being on the transverse horizontal line and a light-emitting aperture at the remote foci of said inclined ellipses.

1,819,726. LIGHT PROJECTOR. WILLIAM G. WOOD, San Francisco, Calif., assignor to American Woodlite Corporation, San Francisco, Calif., a Corporation of California. Filed Nov. 21, 1928. Serial No. 320,808. 12 Claims. (Cl. 240—41.37.)

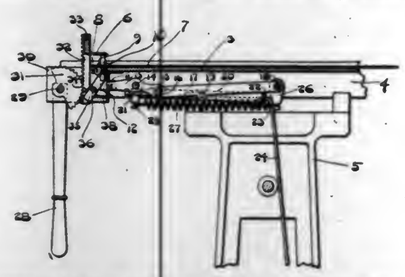


1. A reflector whose surface on opposite sides of the vertical median planes is composed of diminishing elliptical arcs which lie on planes converging to a remote transverse line which passes through the exterior remote foci of the vertical elliptical arcs defining said median planes, and the vertical median planes being angularly dispaced, with a line through the common proximate focus as axis of rotation, and the opposite sides being joined together transversely with a reflecting surface.

1,819,727. PAPER CUTTER. PETER A. ASPENLEITER, Cincinnati, Ohio, assignor, by mesne assignments, to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 5, 1929. Serial No. 344,288. 7 Claims. (Cl. 164—44.)

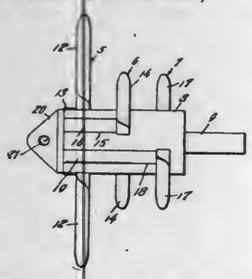
1. Apparatus of the kind described comprising a blade, a second blade cooperating therewith, means including a manually operable pivoted lever for reciprocating the first-

mentioned blade, and means for pivotally mounting said second blade, said last-mentioned means being adapted to



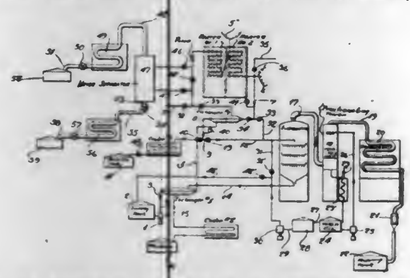
cooperate with the first-mentioned means to bring said second blade into a functionally operative position each time the first mentioned blade is reciprocated.

1,819,728. MULTIPLE BLADE PROPELLER. HOMER G. BAUGH, Chicago, Ill. Filed Sept. 12, 1930. Serial No. 481,487. 2 Claims. (Cl. 170—165.)



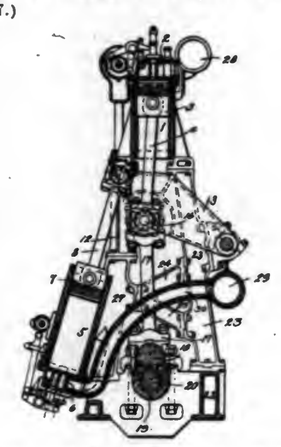
1. A propeller comprising a hub having a number of longitudinally extending grooves therein, said grooves passing through one end of the hub and terminating short of the other end, the grooves being arranged in sets with the grooves of the different sets varying in length, propeller blades having their inner ends fitting in the grooves and engaging the closed ends of the grooves and means for retaining the blades in position and filling the parts of the grooves not occupied by the ends of the blades.

1,819,729. APPARATUS FOR DECOMPOSITION AND PROCESSING OF PETROLEUM HYDROCARBONS. JOHN C. BLACK, Destrehan, La., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Aug. 29, 1925. Serial No. 53,334. 2 Claims. (Cl. 196—107.)



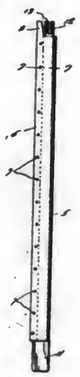
2. An apparatus for cracking oil comprising a supply tank, a cracking coil in a furnace, a connection between said tank and the coil, primary and secondary heat exchangers and a dehydrator interposed in said connection, said heat exchangers being positioned between the supply tank and the dehydrator, means in the connection between the supply tank and coil whereby said dehydrator may be by-passed, an evaporator, a transfer line for passing oil from the coil through said secondary heat exchanger to the evaporator in heat exchange relationship with the oil passing to the coil, means for removing unvaporized residue from the evaporator, means for passing said residue through the primary heat exchanger in heat exchange with the oil passing to the coil, a fractionating tower, means for passing vapors from the evaporator to said tower, means for removing condensate from said fractionating tower and passing the same to said supply tank.

1,819,730. VERTICAL OPPOSED CYLINDER INTERNAL COMBUSTION ENGINE. JOHN LAWRENCE BOGERT, Brooklyn, N. Y. Original application filed Oct. 11, 1926, Serial No. 140,852. Divided and this application filed June 13, 1929. Serial No. 371,027. 6 Claims. (Cl. 123—197.)



1. A vertical opposed cylinder internal combustion engine in which power producing pistons reciprocate together in pairs in substantially vertical directions, the lower ones developing power only during up strokes and the upper ones only during down strokes, the lower pistons having the same area but greater stroke than the upper ones, in combination with mechanism for turning reciprocating motion into rotary motion substantially as represented and for the purpose set forth.

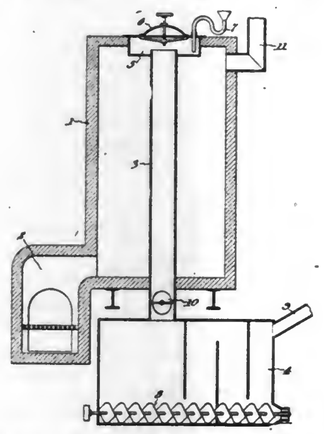
1,819,731. HAIR CURLING BAR. OSCAR BROSIUS, Oil City, Pa. Filed Aug. 25, 1930. Serial No. 477,693. 1 Claim. (Cl. 132—33.)



A hair waving device comprising a tube having a relatively blunt edge extending longitudinally thereof and about which hair is wrapped, said edge portion being pro-

vided with perforations through which steam can be expelled, a bar rotatably carried in the tube and provided with means at one end through which the hair to be waved can be fastened, said blunt edge of the tube having an extension at one end located adjacent such means, said extension acting to prevent the hair from slipping over the end of the tube during the tightening process.

1,819,732. PROCESS FOR THE PRODUCTION OF HYDROGEN AND CARBON FROM HYDROCARBONS. ARTHUR W. BURWELL, Niagara Falls, N. Y., assignor to Alox Chemical Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1925. Serial No. 56,772. 1 Claim. (Cl. 23—212.)



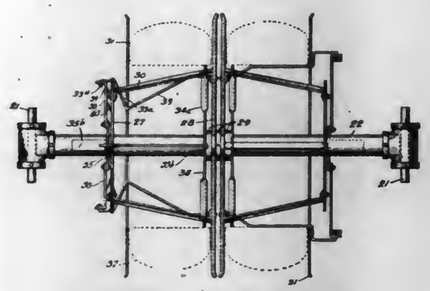
Process which comprises treating a petroleum oil with sulfuric acid and with alkali and subsequently drying the treated oil, whereby the oil is substantially completely freed of oxygen and oxygen compounds, and passing the resulting oxygen-free oil in vapor form into contact with a solid body heated to a temperature of from about 850° to about 1170° C.

1,819,733. TORCHÈRE. JOHN CASTELLI, Carnegie, Pa. Filed Jan. 28, 1930. Serial No. 423,999. 1 Claim. (Cl. 240—10.)



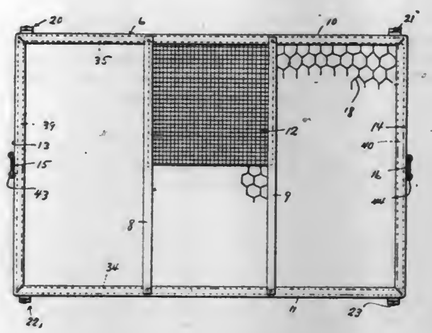
In a torch of the character described, a base, a hollow standard rising from the base, a globe on the upper end of said standard having its upper end open, a cap fitted over the open end of the globe and being provided with spring fingers for releasably securing the cap in position, said cap having a dome rising from its center, a canopy resting upon the dome, a sling fitted in said globe having an open pan with an upstanding rim, a container in said pan, and means connecting the said sling and said cap to the canopy for removal from the globe as a unit.

1,819,734. WIRE DISPENSING APPARATUS. JACOB COLITZ, Chicago, Ill. Filed Feb. 28, 1929. Serial No. 343,365. 16 Claims. (Cl. 242—111.)



1. A wire reel comprising a frontal disk, a backing disk, and a circular array of spaces rigidly connecting the disk and adapted to receive the wire coil, one disk being larger and the spacers tapering in a conical assembly in the direction of the other disk, and means carried by the disks and expansible against the inner side of the coil to hold the latter to the disks.

1,819,735. COLLAPSIBLE CHICKEN CRATE. THOMAS E. COOK, Detroit, Mich. Filed July 11, 1929. Serial No. 377,528. 3 Claims. (Cl. 220—6.)



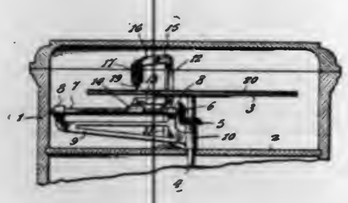
1. A collapsible crate comprising an open upper and an open lower horizontal frame, said lower frame having floor boards anchored therein to form a bottom for the crate, open side frames hingedly connected at their upper ends to the upper frame to form upwardly into abutment with the upper frame in folded position, open end frames hingedly connected at their lower ends to the floor boards at the ends of the bottom frame to collapse into abutment with the lower frame, chicken wire anchored to the upper, side and end frames to close the openings therein, said upper frame further formed with an opening in the chicken wire, a cover slidably supported on the upper frame to close said last mentioned opening, means on the upper frame cooperating with means on the end frames

for locking the end frames in extended position, and means connected to the upper and lower frames independently of the side and end frames for hingedly connecting the upper and lower frames together.

1,819,736. FURNITURE POLISH. CHARLES C. COSTIGAN, Christiansburg, Va., assignor of one-half to Archie E. Cromer and one-half to Albert R. Jones, Christiansburg, Va. Filed Apr. 17, 1929. Serial No. 355,989. 1 Claim. (Cl. 87—5.)

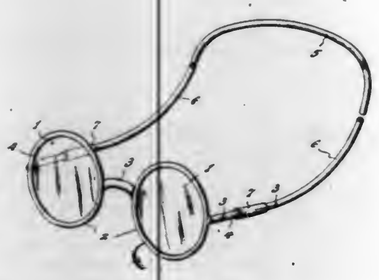
Furniture polish formed by mixing together the following ingredients in substantially the proportions specified: paraffin oil 23.36%, pure turpentine 23.35%, pure cider vinegar 23.36%, denatured alcohol 17.52%, ammonia (commercial) 4.38%, oxalic acid 0.46%, soap dissolved in water 5.84%, Japan drier 1.46%, and lemon juice 0.27%.

1,819,737. RADIO RECORDING MEANS. RICHARD M. CRAIG, San Antonio, Tex. Filed Sept. 5, 1929. Serial No. 390,638. 1 Claim. (Cl. 179—100.11.)



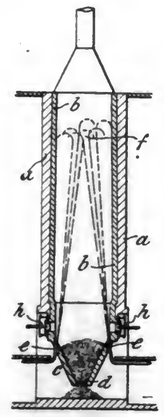
An attachment for radio-receiving sets comprising a turntable to carry a disk, an angle lever mounted at the rear of the turntable and having one arm extending over the turntable and another arm extending under the turntable, a stylus carried by the free end of the lever to rest on a disk carried by the turntable, a threaded shaft below the turntable, a nut carried by the lever under the turntable and engaged with said threaded shaft, means for rotating the turntable, means for rotating the threaded shaft in consonance with the turntable, and means for pivotally shifting the shaft about the center of the turntable as the turntable and shaft rotate.

1,819,738. SPECTACLES. LUDLOW DANIELS, Dallas, Tex. Filed Feb. 23, 1928. Serial No. 256,333. 4 Claims. (Cl. 88—51.)



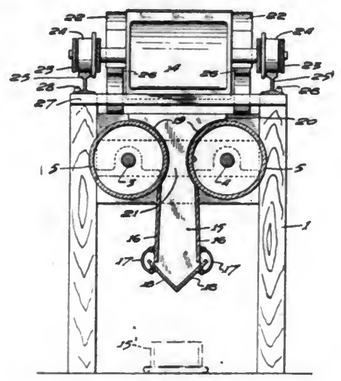
1. Spectacles comprising lenses, and temples connected therewith and provided with straight forward end portions to extend rearwardly from the lenses towards a person's ears at opposite sides of the face and rear portions curved upwardly at a rearward incline and united to form a bow adapted to straddle a person's head transversely thereof rearwardly of the ears.

1,819,739. MANUFACTURE OF CEMENT AND THE LIKE. ARTHUR CHARLES DAVIS, Westminster, London, England. Filed Nov. 19, 1927, Serial No. 234,504, and in Great Britain Oct. 11, 1927. 13 Claims. (Cl. 222—3.)



1. A process for the manufacture of cement and the like in a kiln of the vertical type having a horizontal combustion zone, which consists in injecting the raw cement material separate from fuel and in a state of suspension into the kiln in an upward direction at a point located beneath the combustion zone, and in causing the material to traverse said zone in an upward direction to a height sufficient for calcination and fall downwardly therethrough to the base of the kiln.

1,819,740. BRICK MAKING MACHINE. ROY P. M. DAVIS, Mount Union, Pa. Filed Oct. 11, 1929. Serial No. 399,030. 7 Claims. (Cl. 25—103.)



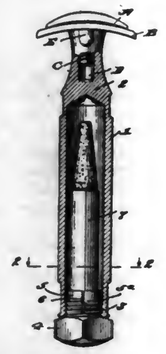
1. In a brick making machine, a hopper having an upper mouth portion and a lower wak forming portion, means for feeding brick making material to the hopper, and intermediate means of substantially greater length than the length of the hopper and having a portion only within the hopper for reshaping the flowing mass of material before it reaches the lower or wak forming portion of the hopper.

1,819,741. BRICK MAKING MACHINE. ROY P. M. DAVIS, Mount Union, Pa. Filed Nov. 1, 1930. Serial No. 492,791. 2 Claims. (Cl. 25—1.)



1. A brick machine comprising a frame, a relatively thick smooth liner plate, spaced anchoring ribbons extending from the rear corner edges of said plate and attached to the frame, means for slidably supporting a mold and a pallet in contact respectively with the upper and lower surfaces of said liner plate, and means for engaging the pallet whereby when said mold is pushed across and beyond the end of said plate and out of contact therewith said pallet will move correspondingly and the mold will be deposited on the pallet.

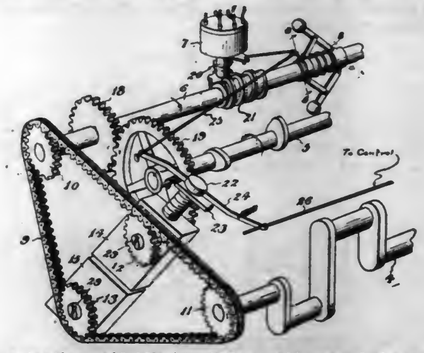
1,819,742. SAFETY RAZOR HANDLE. MARTIN C. DELLINGER, Lancaster, Pa. Filed Feb. 16, 1929. Serial No. 340,613. 1 Claim. (Cl. 132—80.)



A safety razor handle having an internally screw threaded bore in its upper end, a large bore forming a chamber extending from its lower end to a point adjacent said upper bore, and the lower portion of said handle being internally screw threaded in said chamber, in combination with a plug having a portion normally extending beyond the lower end of said handle and angular in cross section and appreciably larger in cross section than all portions of said handle, formed with an externally screw threaded portion immediately next above said angular portion to engage in the threads in the lower portion of said handle to close the said chamber and maintain said plug in normal position in said handle, and provided with a resilient split annularly extending ferrule, and a styptic pencil having its lower end forced into, and gripped by, said ferrule to be insertable and withdrawable with said plug as a single operative part in and from said handle wherein it is normally received in said chamber.

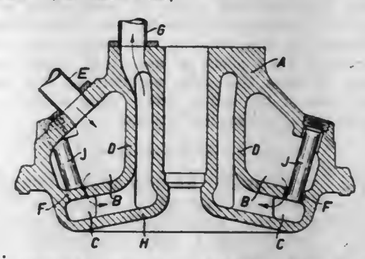
1,819,743. MECHANISM FOR AUTOMATICALLY AND SYNCRHONOUSLY ADJUSTING THE IGNITION AND VALVE MECHANISM OF INTERNAL COMBUSTION ENGINES FOR SPEED AND POWER. HERBERT L. DUNCAN, Highland Park, Mich., assignor of one-half to Lewis P. Threlkeld, Highland Park, Mich. Filed Oct. 26, 1928. Serial No. 315,227. 4 Claims. (Cl. 123—99.)

1. In an internal combustion engine, the combination with a timer shaft, a cam shaft, a crank shaft, and an endless drive chain between said shafts, of an idler associated with a run of the drive chain, and an expansible sectional mount carrying said idler on one section thereof



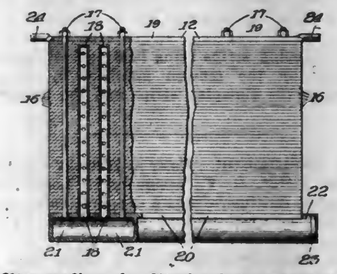
for actuating said idler to deflect said run of the drive chain and effect advancement or retarding of the timer and cam shafts with respect to the crank shaft.

1,819,744. INTERNAL COMBUSTION ENGINE COOLING SYSTEM. HANS DUNKELMANN, Kiel, Germany, assignor to Fried, Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Germany. Filed May 17, 1930, Serial No. 453,301, and in Germany May 27, 1929. 4 Claims. (Cl. 123—173.)



1. An internal combustion engine having a cylinder cover including a cooling water fore-chamber and a cooling water chamber proper, a water inlet on said fore-chamber and a water outlet on said cooling chamber proper, said two chambers intercommunicating by a plurality of uniformly distributed passages the total area of which is smaller than that of said water outlet.

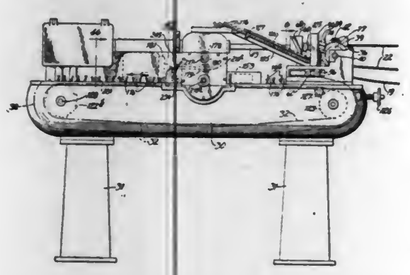
1,819,745. FILTRATION OF TARS. FRANK J. GAINER, Woodriver, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 5, 1928. Serial No. 290,426. 6 Claims. (Cl. 196—147.)



4. A filter medium for filtering hot pressure tars which comprises a body of asbestos having its surface which comes into direct contact with the hot tar to be filtered provided with a coating of graphite.

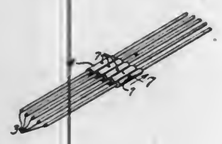
6. The method of filtering hot pressure tars which comprises forcing said tars through an asbestos filtering medium, the surface of said medium which comes in direct contact with the tar to be filtered, being provided with a coating of graphite.

1,819,746. CORE WRAPPING MACHINE. JAMES H. GRAHAM and GEORGE G. GUNDERSON, Madison, Wis., assignors to French Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Apr. 2, 1928. Serial No. 266,854. 20 Claims. (Cl. 93—7.)



1. In combination; a carrier equipped with a series of folder devices, each comprising a plurality of pivotally connected jaws including a pair of outstanding jaws; a tucker device coacting with one of said outstanding jaws for effecting the wrapping of one lateral edge portion of a wrapper piece about a core; and means serving thereafter to close the other outstanding jaw and effect wrapping of the other lateral edge portion of the wrapper piece in overlapping relation.

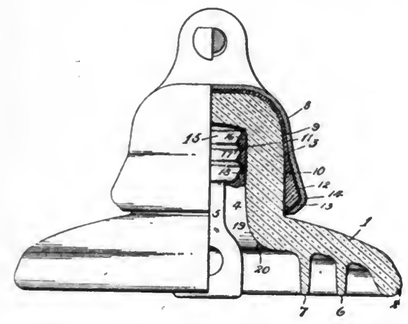
1,819,747. TIRE-BEAD REENFORCING ELEMENT. CLAYTON C. HARRAH, Niles, Mich., assignor to National-Standard Company, Niles, Mich., a Corporation of Michigan. Filed July 5, 1929. Serial No. 376,203. 4 Claims. (Cl. 245—1.5.)



1. A tire-bead reenforcing element, including a plurality of substantially parallel adjacent tension members held in parallel relationship by a plurality of transversely arranged clamping strips crimped around the same, the clamping strips being held against longitudinal displacement on the tension members by cooperating identations in the clamping strips and the tension members.

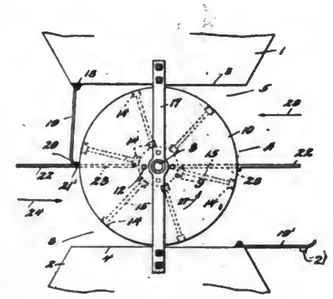
1,819,748. INSULATOR. KENT A. HAWLEY and DAVID H. OSBORNE, Victor, N. Y., assignors to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Feb. 4, 1924. Serial No. 690,446. 2 Claims. (Cl. 173—318.)

2. In an insulator of the type in which there is provided an elastic coating interposed between the adjacent surface of a cap and the cement and between the surface of the pin and the cement, the combination of a dielectric body having a skirt portion and an upstanding stem, that portion of the stem adjacent the skirt portion being cylindrical and the remaining portion being reduced in diameter and curved at its end to be of dome shape, said cylindrical portion being roughened, the stem having a recess therein having the innermost portion of its wall roughened, a cap upon the stem and cemented thereto and a pin cemented within the recess, the cap having its lower portion flared outwardly and having its edge



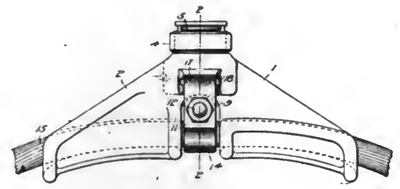
inclined downwardly and toward the axis of the dielectric body, the pin having at least one portion of the surface inclined downwardly and toward the axis of the body to accord with the inclined portion of the cap, said inclined edge portion of the cap being located in a plane below the inclined portion of the pin, the roughened portions of the stem and recess wall being staggered and both lying in the field of compressive strain between the pin and cap.

1,819,749. TIDE POWER APPARATUS. WILDE E. JENKINS, Macon, Ga. Filed June 7, 1929. Serial No. 369,144. 1 Claim. (Cl. 170—101.)



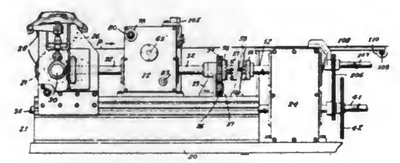
A water power apparatus including a water driven wheel, a wall structure terminating at opposite sides of the wheel, and wing means extending outwardly from opposite edges of the wheel at right angles to said wall and extending within the said wheel to provide a separate waterway on each side thereof, and means operable by the current for simultaneously cutting off the flow through one waterway and permitting its flow through the other one when the current flow is in one direction and alternately operable with respect to said waterways when the current flow is in the opposite direction, whereby said wheel is driven in the same direction irrespective of the direction of the current flow.

1,819,750. CLAMP FOR CONDUCTORS. KARL KROLZIG, Berlin-Oberschoneweide, Germany, assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 16, 1925, Serial No. 15,915, and in Germany July 18, 1924. 9 Claims. (Cl. 248—31.)



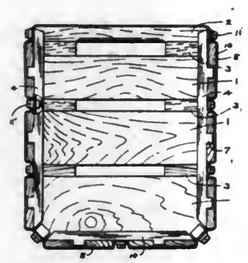
1. In a device of the character described, the combination with a support, of a carrying clamp comprising a pair of members having ball and socket connection with said support, the members each being provided with a cable supporting portion, and means engaging a cable for interlocking connecting said clamp thereto.

1,819,751. COMBINATION PRINTING PRESS. LEON E. LA BOMBARD, Waltham, and MELVIN H. SIDEBOTHAM, Newtonville, Mass., assignors to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed June 14, 1929. Serial No. 370,854. 9 Claims. (Cl. 101—228.)



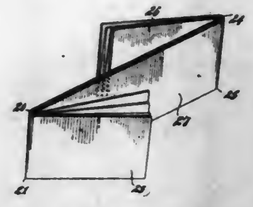
1. A web-printing rotary press having printing cylinders and web-feeding mechanism, means for accelerating and reducing the speed of operation of said cylinders and feeding mechanism during each cycle of printing operation, and means for imparting a slight advance movement to the web prior to the start of each successive cycle of printing operation.

1,819,752. BOX HEAD OR END FOR FIELD BOXES. JAMES L. MAULL, Orlando, Fla. Filed Aug. 27, 1930. Serial No. 478,211. 7 Claims. (Cl. 217—43.)



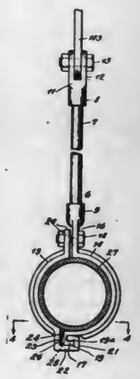
1. In a box or crate, the combination of heads; metal edges for the heads, having tongues extending outward; boards against the heads, having slots to receive the tongues; and bands binding the boards against the heads.

1,819,753. FOLDED PAPER NAPKIN. ELMER C. MORRIS, Chicago, Ill. Filed Feb. 3, 1928. Serial No. 251,499. 6 Claims. (Cl. 206—57.)



6. An article adapted to be dispensed from a holder, comprising a sheet of paper folded transversely to form a plurality of transverse sections, the end portions of the folded sheet being folded on lines transverse to said first fold lines in opposite directions upon opposite sides of the sheet, each end section having a length substantially less than the intermediate section of said sheet, the sheet when thus folded being in condition for dispensing from the holder.

1,819,754. SUSPENSION DEVICE. GEORGE T. MOTT, Pearl River, N. Y. Filed Oct. 29, 1927. Serial No. 229,548. 7 Claims. (Cl. 241—31.)

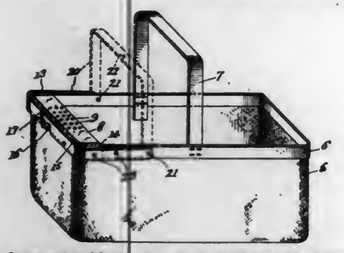


3. For a suspension device, a load-carrying member including sections having turned back ends arranged in interlocking engagement to hold said ends against separation under normal load stresses; and additional locking means to hold said ends against separation under excess load stresses, said additional locking means including a local key extension on one of said ends while the other of said ends is formed with a corresponding recess therein to provide a keyway for said key extension, said key extension and recess being located and arranged to prevent relative movement of said turned back ends in the direction of their length while permitting lateral disengagement thereof.

1,819,755. COMPUTING BASKET. GUS K. PRIMOS, Shreveport, La., assignor of one-half to George Thurber, Shreveport, La. Filed June 24, 1929. Serial No. 373,283. 2 Claims. (Cl. 248—20.)

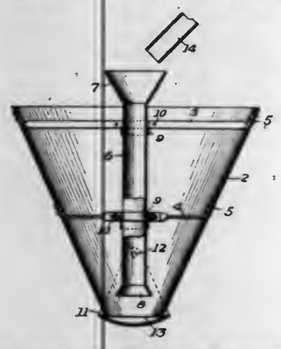
2. Means for supporting an adding machine in one end of a basket, comprising a side plate extending the full length of said adding machine and opposite end plates extending the full width of the adding machine and secured to the outer side and upon the opposite ends of the casing of the adding machine, said plates having outwardly downturned flanges at their upper edges and extending through-

out their entire length for engaging over one end and the opposite sides of the rim of the basket and gripping the



outer surfaces of said rim to support the adding machine in one end of the basket and to prevent the adding machine from shifting about in said basket.

1,819,756. MACHINE FOR MIXING CONCRETE AND THE LIKE. ARTHUR G. REED, Swissvale, Pa., assignor to McCrady Brothers Company, Braddock, Pa., a Corporation of Pennsylvania. Filed May 20, 1929. Serial No. 364,345. 7 Claims. (Cl. 83—73.)



1. A device for mixing and delivering concrete to a mixing machine, comprising a frustro-conical hopper adapted to receive sand and gravel and deliver them in an annular stream, and a concentric tube within the hopper adapted to receive cement and deliver it in a stream to and surround it by the sand and gravel.

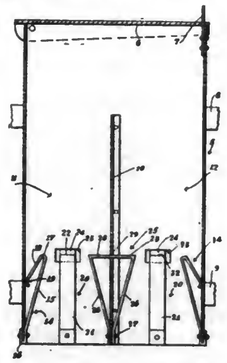
1,819,757. NOVELTY PIN. CHARLIE PAUL ROBERTS and WILLIAM IRA LATTA, Atlanta, Ga. Filed May 17, 1929. Serial No. 363,947. 6 Claims. (Cl. 63—2.)



1. A supporting member having one or more apertures constituting seats for scintillating elements in the nature of crystals, each of said crystals having normally a plurality of non-reflective surfaces, and means adjustable to render said surfaces reflective.

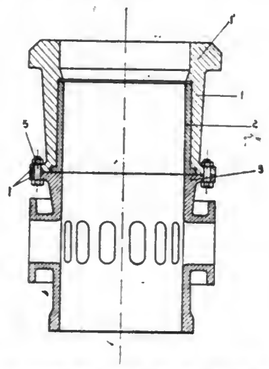
1,819,758. MILK BOTTLE HOLDER. JOSEPH B. ROBSON and JOHN M. WILLIAMS, Delagua, Colo. Filed Oct. 21, 1930. Serial No. 490,269. 3 Claims. (Cl. 232—41.)

1. In a bottle holder of the class described, an open bottom casing, a closure at the top of said casing, an internal vertical partition plate in said casing dividing it into a pair of distinguishable bottle receiving compartments, said partition plate being provided adjacent its lower end with an aperture, a double-acting supporting bracket comprising a single length of metal bent upon itself into substantial triangular form, the flat horizontal bight portion thereof being located in said aperture so that the opposite end portions project simultaneously into both of said compart-



ments, the converging arm portions being located on opposite sides of the plate with their free ends securely fastened to the bottom of the plate, and additional supporting elements in said compartment to operate concurrently with said first named bracket.

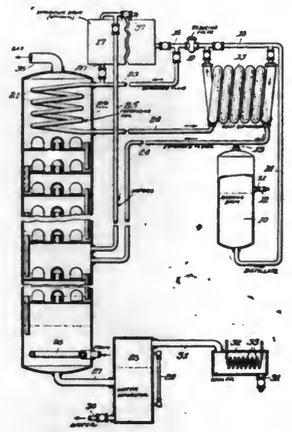
1,819,759. CYLINDER FOR INTERNAL COMBUSTION ENGINES. VITTORIO VALLETTA, Turin, Italy, assignor to Fiat Societa Anonima, Turin, Italy. Filed June 6, 1929. Serial No. 368,889, and in Italy June 12, 1928. 1 Claim. (Cl. 123—173.)



A cylinder for internal combustion engines, comprising a lower portion made of a metal of low mechanical strength such as ordinary cast iron, a central portion, made of a hard wear-resisting material of low tensile strength, extending through the zone traversed by the resilient rings of a piston operable in the cylinder, and an upper portion made of steel embracing the central portion throughout its length thereby constituting a reinforcement for said central portion, said upper portion extending above the latter forming the combustion chamber of the cylinder and constituting a cooling medium for said central portion.

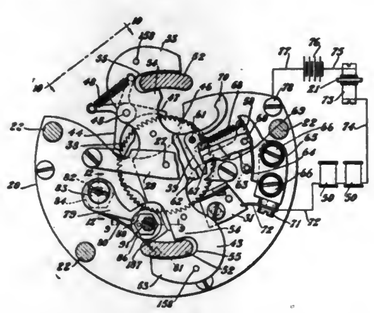
1,819,760. REMOVAL OF GAS AND LOW-BOILING FRACTIONS FROM PETROLEUM PRODUCTS. WALTER G. WHITMAN and CLARKE C. MILLER, Whiting, Ind., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Mar. 9, 1927. Serial No. 173,916. 11 Claims. (Cl. 196—11.)

1. The method of removing gases and low-boiling fractions from hydrocarbon distillates which consists in reducing the pressure on such distillate thereby liberating gas therefrom, expanding the gas while in the presence of said distillate to reduce the temperature of the distillate, passing the chilled distillate through a closed conduit in the



upper part of a fractionating column, then introducing the distillate with its contained gas into the column at an intermediate point of said column and applying heat at a lower part of said column.

1,819,761. SELF WINDING ELECTRIC CLOCK. IRA A. AUNOST, Canton, Ohio. Filed Jan. 13, 1930. Serial No. 420,398. 12 Claims. (Cl. 185—40.)

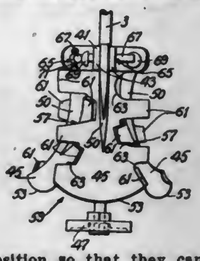


1. In a spring winder, the combination of a spring, a pivoted armature for intermittently winding said spring, an electromagnet having a field elongated circumferentially of the armature axis and providing with said armature a positive torque increasing at a geometric rate throughout the advance of the armature, and means actuated by the movement of said armature for controlling the magnet circuit.

1,819,762. ANCHOR. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed June 30, 1927. Serial No. 202,531. 7 Claims. (Cl. 189—92.)

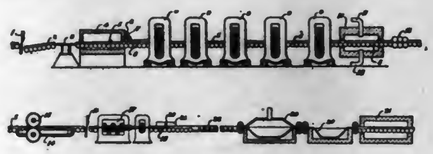
1. The anchor comprising juxtaposed pivoted flukes adapted to be opened and closed and re-entrant edges on said flukes adapted to intermesh when the flukes are in closed position.

4. In an anchor the provision of means for pivoting juxtaposed flukes comprising pivot members arranged so as to interfere with one another when one is locked in a



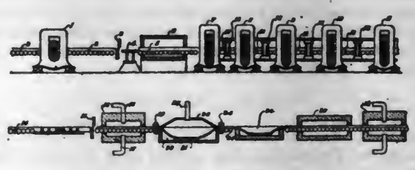
predetermined position so that they cannot be removed and not to interfere when said one pivot member is unlocked.

1,819,763. CONTINUOUS SHEET MILL. WILLIAM M. BLECKER, Canton, Ohio, assignor of fifty-one per cent to Edward A. Langenbach, Canton, Ohio. Filed June 23, 1928. Serial No. 287,745. 22 Claims. (Cl. 80—35.)



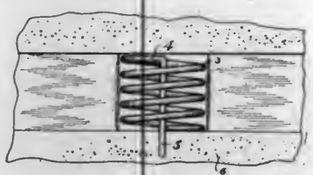
22. Apparatus for the continuous and simultaneous selective rolling of one pass cold rolled and annealed sheets, pickled cold rolled and annealed sheets and full finished cold rolled sheets from light plates and the like including a heating furnace, a series of hot mills, means for passing material through the furnace and mills in packs, pack opening and separating mechanism, a double continuous pickling tank, tandem cold rolls, a double continuous annealing furnace, a second tandem cold rolls, levelling rolls, auxiliary tandem cold rolls and an auxiliary double continuous annealing furnace, conveying means for passing sheets in spaced pairs continuously through the pickling tank, cold rolls, annealing furnace, second cold rolls, and levelling rolls, auxiliary conveying means for passing sheets through the auxiliary rolls and auxiliary annealing furnace, means for selectively transferring sheets from the first said conveying means to the auxiliary conveying means before passing into the pickling tank, and means for selectively removing and collecting the sheets from the first said conveying means before passing through the second cold rolls.

1,819,764. CONTINUOUS STRIP MILL. WILLIAM M. BLECKER, Canton, Ohio, assignor of fifty-one per cent to Edward A. Langenbach, Canton, Ohio. Filed June 23, 1928. Serial No. 287,746. 20 Claims. (Cl. 80—35.)



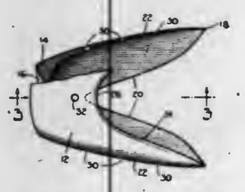
1. An apparatus for continus rolling of strips, including a slab mill, a plurality of stands of continuous strip rolling mills, a pickling tank, a drying furnace, a cooler, a plurality of stands of cold rolls, an annealing furnace, and means for passing material continuously through said apparatus.

1,819,765. CHILL FOR CASTINGS. GEORGE C. BUMBAUGH, Canton, Ohio, assignor of one-half to J. S. McCormick Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 4, 1928. Serial No. 275,018. 5 Claims. (Cl. 22—174.)



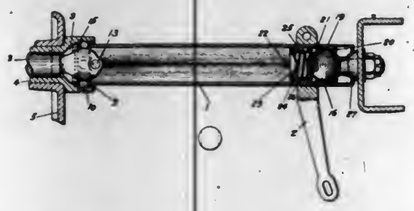
1. A chill for casting comprising a metal spiral coil adapted to be placed in a mold and having a tail portion for insertion into the sand of the mold.

1,819,766. TOE SHIELD. SALVATORE CAPEZIO, East Paterson, N. J. Filed Aug. 5, 1930. Serial No. 473,192. 13 Claims. (Cl. 36—1.)



1. A shield or cushion for toe dancers, the outer surface of the forward end of which is hollowed out to form a concave surface so as to increase the yielding effect of said cushion.

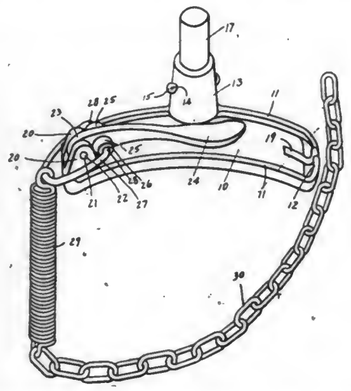
1,819,767. CONTROL MECHANISM FOR VEHICLE WHEEL BRAKES. JOHN RANDOLPH CAUTLEY, South Bend, Ind., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 11, 1924, Serial No. 698,465. Renewed Dec. 26, 1930. 20 Claims. (Cl. 188—194.)



13. In a control mechanism for vehicle front wheel brakes, a brake-applying device arranged to be supported at the wheel, a shaft having one end arranged to be movably supported by the vehicle, a universal joint connecting the shaft and said device, and a spring arranged to urge the shaft lengthwise toward said joint.

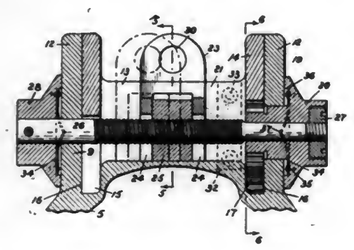
1,819,768. FLAG CLAMP FOR POLES. FREDRICK W. COFFING, Perrysville, Ind. Filed Jan. 9, 1931. Serial No. 507,563. 7 Claims. (Cl. 116—173.)

1. A clamp for poles and the like suitable for article support purpose comprising a base, an article support portion thereon, flexible extensible means permanently connected at one end to end of the base and including a relatively free opposite end adjustably and detachably connected to the opposite end of the base, the base being included in the pole encircling arrangement, and a lever pivotally supported at one end upon the base and pivotally connected intermediate its ends to said flexible extensible means and for permanent connection of said means to said



base, said lever when positioned to overlap the base positioning the pivotal connection of said means in overlapping relation to base for imparting tension to said means, said lever when tilted oppositely from the overlapping relation releasing the tension imparted to said means.

1,819,769. GUN SIGHT. RICHARD C. COUPLAND, Norfolk, Va. Filed May 15, 1930. Serial No. 452,767. 19 Claims. (Cl. 33—56.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

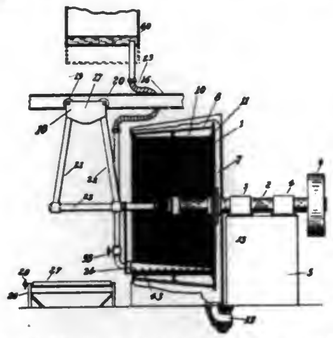


18. In a gun sight, a pair of coaxial operating shafts, one of said shafts having one end journaled in the other shaft.

1,819,770. PROCESS FOR DECOMPOSING ORES OF THE RARE EARTHS, OF ZIRCONIUM AND TITANIUM, IN A CYCLE BY MEANS OF SULPHURIC ACID. JEAN D'ANS, Berlin, Germany, assignor to Deutsche Gasglühlicht-Auergesellschaft mit beschrankter Haftung, Berlin, Germany, a Corporation of Germany. Filed May 12, 1928, Serial No. 277,396, and in Germany May 23, 1927. 6 Claims. (Cl. 23—16.)

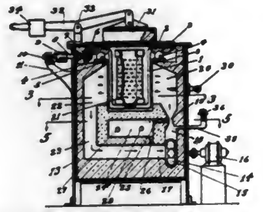
1. A cyclic process for the treatment of titanium-bearing material which includes treating the comminuted material, under application of heat, with gases containing SO_2 and SO_3 and an addition of oxygen, whereby said material is partly converted into sulfate form, treating the partly converted material with sulphuric acid to continue its conversion into sulfate form, roasting this converted sulfate material to convert it from the sulfate form to the oxide form and to obtain gases containing SO_2 and SO_3, and utilizing these gases, with an addition of oxygen, in the treatment step first mentioned.

1,819,771. APPARATUS AND PROCESS FOR PRODUCING SHEETS. WILLIAM A. DARRAH, Chicago, Ill. Filed Aug. 10, 1929. Serial No. 384,850. 17 Claims. (Cl. 92—39.)



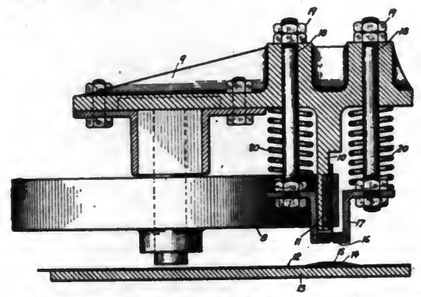
1. The process of forming sheets which consists in first feeding prepared stock in stream line flow into a centrifugal device, second removing a portion of the water from said stock, third splitting the cylinder thus formed and removing said cylinder intact to a conveyor, fourth passing said sheet through straightening rolls while wet and finally drying between live rolls.

1,819,772. PROCESS OF APPLYING HEAT. WILLIAM A. DARRAH, Chicago, Ill. Original application filed June 4, 1927, Serial No. 196,584. Divided and this application filed Oct. 12, 1929. Serial No. 399,177. 11 Claims. (Cl. 263—1.)



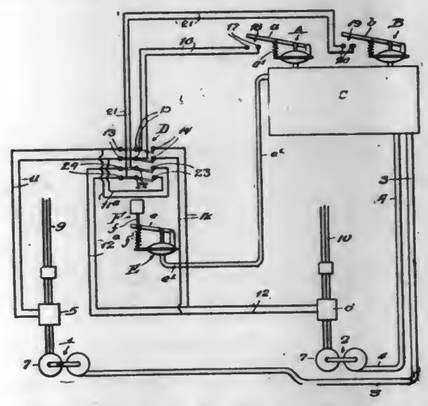
8. In the process of applying heat by circulating gases in a closed circuit at a pressure above atmospheric, the step of drawing into said circulating gases a portion of hotter gases by raising the velocity of said cooler circulating gases and thereby reducing their pressure.

1,819,773. FABRIC CUTTING MACHINE. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 18, 1924. Serial No. 693,421. 7 Claims. (Cl. 164—35.)



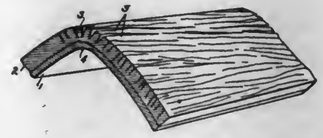
1. In a machine for cutting fabric or the like, a movable head, a channel in the head opening laterally, a flexible belt received in the channel and guided thereby so that the plane of rotation of the belt is parallel with the fabric, and a plurality of knife blades attached to and projecting beyond the plane of rotation of the belt, the head in its movement causing the plane of rotation of the belt to approach or recede from the fabric in parallel relation therewith.

1,819,774. AUTOMATIC CONTROL FOR MOTORS. AUGUSTUS C. DURDIN, Jr., Chicago, Ill. Filed Nov. 10, 1928. Serial No. 318,551. 26 Claims. (Cl. 103—11.)



1. The combination of two electric pump units opening to the same source and capable of operating in a regular sequence, a single pressure operated starting and stopping switch for both motors of said units, and automatic sequence control means associated with said starting and stopping switch and having an element whereby first one motor is started while another is quiescent and whereby said other motor is started while the first mentioned one is quiescent.

1,819,775. FLEXIBLE WOOD-FACED SHEET MATERIAL. ARMIN ELMENDORF, Chicago, Ill., assignor to The Flexwood Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 24, 1929. Serial No. 334,865. 2 Claims. (Cl. 20—189.)

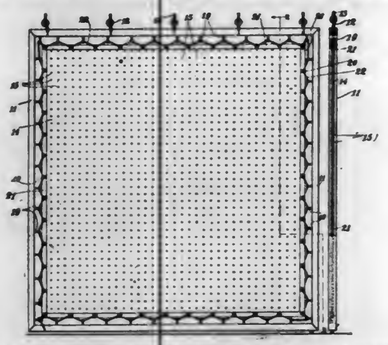


1. A material consisting of a flexible backing and a sheet of thin wood veneer glued thereto, the veneer being in a ruptured state wherein at least the face of the veneer is composed of a mass of small strands or filaments whose rupture contours follow the wood grain in close mesh with each other and cause the surface of the veneer to appear to be continuous when the material is laid flat.

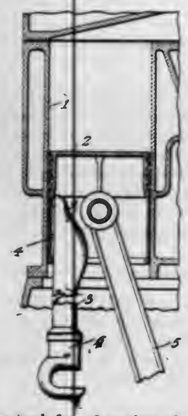
1,819,776. CINEMATOGRAPH SCREEN. JACOB C. HECK, Chicago, Ill., assignor, by mesne assignments, to The Da-Lite Screen Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1928. Serial No. 317,210. 1 Claim. (Cl. 88—24.)

A moving-picture screen adapted for co-ordinated sound transmission, composed solely of a single-thickness finely-woven textile-fabric screen having a front light-reflecting surface to receive the projected picture and provided with perforations therethrough in number and size sufficient to permit passage of sound-waves therethrough of appropri-

ate volume without blurring, while at the same time preserving the light-reflecting properties of such surface sufficiently to constitute an efficient screen for the presentation of the pictures, the walls of said perforations being at substantially right-angles to the body of the screen.

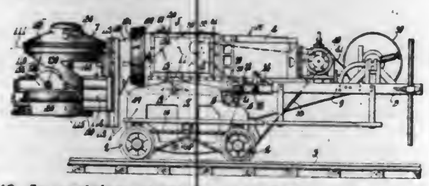


1,819,777. PEENING TOOL. WILLIAM C. HOLDEN, Ossining, N. Y. Filed Dec. 3, 1929. Serial No. 411,289. 11 Claims. (Cl. 153—80.5.)



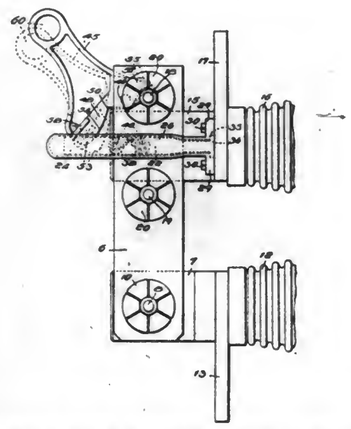
1. In a peening tool for changing the shape or dimensions of hollow bodies having narrow working spaces and having no reactive surfaces, such as between internal piston walls and connecting rods of pistons of internal combustion engines while in position in a cylinder block, the combination which comprises an outer casing having a fixed reaction portion carried thereby, a reciprocating member slidably mounted thereon, and a peening head co-operating with said member for striking lateral blows at points substantially opposite said reactive portion.

1,819,778. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 20, 1924, Serial No. 694,139. Renewed Sept. 29, 1930. 117 Claims. (Cl. 262—28.)



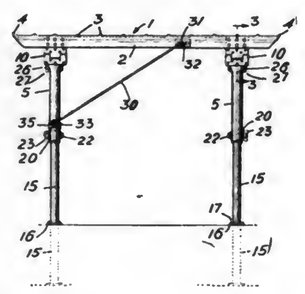
49. In a mining apparatus, coaxial motor driven cutting mechanism adjusting and actuating means.

1,819,779. DISCONNECTING SWITCH. PEDER B. HOYE, Maywood, Ill., assignor to Electrical Engineers Equipment Co., Melrose Park, Ill., a Corporation of Illinois. Filed Sept. 2, 1927. Serial No. 217,060. 21 Claims. (Cl. 200—169.)



21. A switch having a contact member, a switch blade movable into and out of engagement therewith, an operating lever pivoted to the blade, said lever having a curved camming portion for engaging the contact to exert a powerful camming action for moving the blade from the contact, said camming portion rolling upon the contact after the edge of the blade clears the edge of the contact thereby continuing the camming action, and abutment means thereafter effective for moving the blade to the full open position by a continued movement of the operating lever.

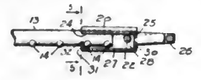
1,819,780. TRESTLE OR SAW HORSE. JOHN KRAUT, Brooklyn, N. Y. Filed June 25, 1929. Serial No. 373,613. 3 Claims. (Cl. 304—7.)



1. A metal work support of character described, comprising a top rail of substantially V section, tubular upper leg sections rigidly connected to one side member of the rail, other tubular upper leg sections hingedly connected to the other side member of the rail, to permit variation of the leg angle, and lower tubular sections telescoped in the upper sections.

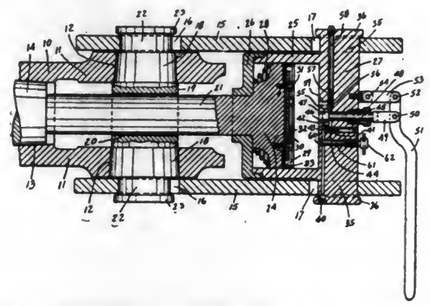
1,819,781. TERMINAL SNAP AND LOOP CONNECTION FOR FLEXIBLE WRIST WATCH BANDS. JACQUES KREISLER, New Rochelle, N. Y., assignor to Jacques Kreisler & Co., New York, N. Y. Filed June 18, 1929. Serial No. 371,869. 2 Claims. (Cl. 24—123.)

2. In combination, a strand of metal cord folded on itself to form a loop at one end and to bring the free ends together side by side, the free ends being soldered together and provided with spaced beads in the crease be-



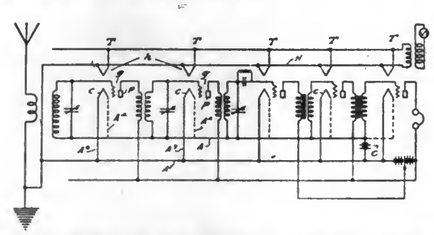
tween the ends on one side thereof, and a snap terminal to removably embrace the ends of the cord and project over a bead to hold the ends in the terminal.

1,819,782. LOCOMOTIVE FLUID PRESSURE PISTON ROD REMOVER. ALBERT W. MARTIN and JACOB N. MARTIN, Indianapolis, Ind. Filed Mar. 14, 1930. Serial No. 435,978. 4 Claims. (Cl. 29—89.)



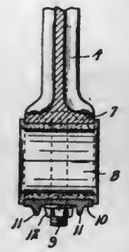
1. In apparatus of the class described, the combination of a pair of spaced plates, each having spaced apertures in alignment, a transverse member in each aligned pair of apertures, one of said members supporting the crosshead and piston rod to be separated and provided with a transverse opening in alignment with the piston rod, a cylinder supported by the other member, a parting plunger in said cylinder slidable through said opening, and piston means within the cylinder and operatively associated with the plunger for moving the same by increase of pressure in the cylinder.

1,819,783. RADIO CIRCUITS EMPLOYING ALTERNATING CURRENT RADIO TUBES. FREDERICK S. MCCULLOUGH, Wilkinsburg, Pa.. Filed May 4, 1925. Serial No. 27,679. 6 Claims. (Cl. 250—27.)



1. A three-section radio circuit, including a radio amplifier, a detector, an audio amplifier, an audion tube in each of said sections, cathodes for each of said tubes, heater elements for said cathodes for heating the same by conduction, a source of alternating current multiply connected to said heater elements, control grids and anodes for each of said audion tubes, the leads extending from the grids, cathodes and plates being removed from the inductive field of the leads extending from a source of alternating current to the heaters, means connected between said grids and said cathodes for biasing said cathodes, means for tuning certain of the grid cathode circuits, a common conductor for connecting said heaters to said cathodes, and connections from said cathodes to said anodes.

1,819,784. CONNECTING ROD STRUCTURE. LEO J. MCKONE, Minneapolis, Minn. Filed Sept. 17, 1927. Serial No. 220,270. 10 Claims. (Cl. 74—17.)



10. A connecting rod for an internal combustion engine having a body portion of one metal including a half-bearing at its larger end, a detachable cap at said end of a different metal having a coefficient of expansion considerably different from that of said first mentioned metal, and a bushing of babbitt metal embraced by said half-bearing and cap and held in place thereby, said bushing being adapted to receive a shaft.

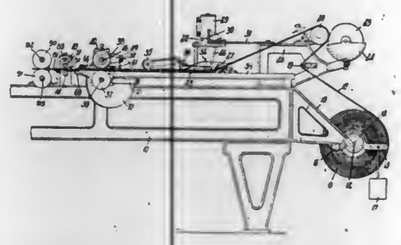
1,819,785. FEED WATER HEATER. KARL MUHLEISEN, Philadelphia, Pa., assignor to Schutte and Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 28, 1930. Serial No. 478,471. 3 Claims. (Cl. 257—229.)

1. In fluid heating means the combination of a hollow casing, a header having connection with one end of said casing, said header comprising inlet and outlet chambers, said chambers being located below the inner side of the said header and one of the said chambers being inclosed by the other, coils located within the said casing, the opposite ends of which have connection with the inner side of the said header, one end of each coil being in communication with the inlet chamber and the other end thereof in communication with the outlet chamber and the said ends constituting supports for the said coils, and a plate secured in the said casing in spaced relation to the said header, said plate having openings therein within which are located the upper ends of the said coils.

1,819,786. BAG MACHINE. WILLIAM MUIRHEAD, Lockport, N. Y. Filed Feb. 3, 1930. Serial No. 425,450. 6 Claims. (Cl. 93—19.)

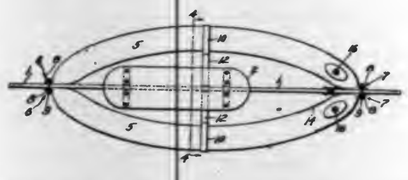
1. A machine of the character described having, in combination, a former plate, a plurality of feed rolls adapted

to feed a strip of sheet material thereto, means to fold the strip of sheet material around said plate, means to intermittently engage the strip of sheet material and positively



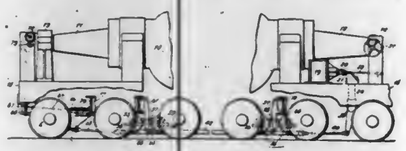
force the same laterally of a face thereof to create a slack portion therein, and means to sever the slack portion of the strip from the main portion thereof.

1,819,787. WATER CRAFT. GEORGE H. NOBBS, Cambridge, Mass. Filed Sept. 3, 1930. Serial No. 479,476. 7 Claims. (Cl. 9—11.)



4. A water craft of the character described comprising a vertically disposed keelson plank; a pair of arcuate outwardly bowed tubular floats disposed upon opposite sides of said keelson plank directly opposite each other, and clamps fastening the opposite ends of each float to said keelson adjacent but a substantial distance away from the bow and stern thereof, respectively.

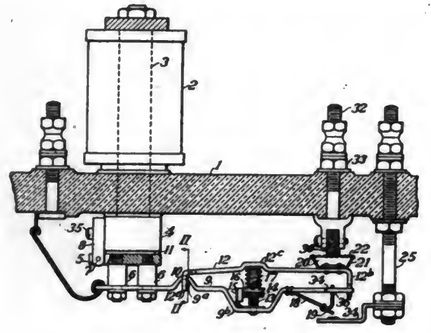
1,819,788. BRAKING MECHANISM. JOHAN HJALMAR OLSON, Larchmont, N. Y., assignor to M. H. Treadwell Company, a Corporation of New York. Filed Oct. 22, 1927. Serial No. 227,943. 19 Claims. (Cl. 188—107.)



1. A braking mechanism comprising a pair of floating levers of the first class, operating means connected to the fulcra of said levers, means for preventing the movement of the fulcra in given direction and a pull rod connected between corresponding ends of said levers, said pull rod having a length greater than the distance between the fulcra.

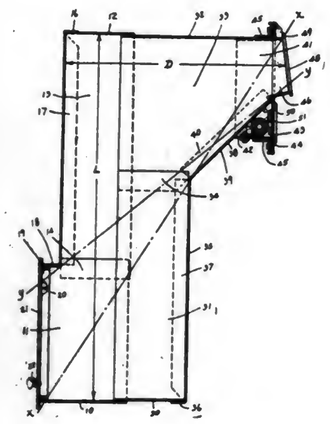
1,819,789. ELECTRICAL RELAY. THOMAS J. O'MEARA, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1928. Serial No. 308,645. 10 Claims. (Cl. 200—170.)

1. In combination, a contact mechanism comprising a rigid strip provided with a notch and having a bifurcated end, a bar, a first downwardly extending lug integral with said bar at one end of the bar and provided with a hole receiving said strip at said notch in such manner that said bar is pivoted on said strip, a second downwardly extending lug integral with said bar at the other end of the bar and having a T-shaped section the neck of which enters the bifurcated end of said strip with considerable clearance and which is tapered where the head of the T joins the



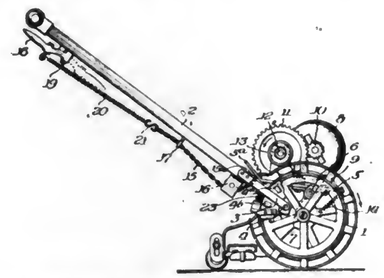
neck to accurately center the bar when the head of said T is in engagement with said strip, a coil spring interposed between said bar and said strip for exerting a pressure between said bar and said strip, means for varying the pressure exerted by said spring upon said bar and said strip, a contact member attached to the upper side of said bar, and a contact finger carrying a low resistance contact tip attached to the lower side of said strip.

1,819,790. ADJUSTABLE MAIL BOX. WILL D. REDRUP, Huntington, Ind., and JOHN C. GUSTAFSON, Chicago, Ill., assignors to The Majestic Company, Huntington, Ind., a Corporation. Filed Feb. 15, 1930. Serial No. 428,577. 2 Claims. (Cl. 232—19.)



1. In a mail box, a main body portion, a lateral extension at one end including an inclined portion leading therefrom toward the body mid-portion for chute formation, and a U-shaped member having its sides coincident with the extension sides and one edge of the intermediate portion associated with the inclined portion to form a triangular compartment therewith beneath the extension.

1,819,791. POWER UNIT ADAPTED TO BE APPLIED TO LAWN MOWERS. MATTHEW HOWARD REED, Chicago, Ill. Filed Nov. 17, 1927. Serial No. 233,833. 17 Claims. (Cl. 56—26.)

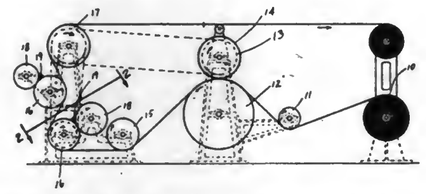


1. In combination with a lawn mower having ground wheels and a handle for controlling it, a power unit comprising a bed plate directly trunnioned upon the lawn mower, and a motor, said motor having a drive wheel moving by the trunnioning action of the bed plate into and out of driving contact with the ground wheel; the path of movement of said drive wheel toward the ground wheel intersecting the periphery of said ground wheel at a low angle and the rotation of the drive wheel being in a direction which causes it to wedge itself upon the ground wheel.

1,819,792. RUBBER ACCELERATOR AND METHOD OF USING THE SAME. CHARLES J. ROMIEUX, Elizabeth, and LUDWIG J. CHRISTMANN, Jersey City, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Dec. 20, 1927. Serial No. 241,446. 14 Claims. (Cl. 18—53.)

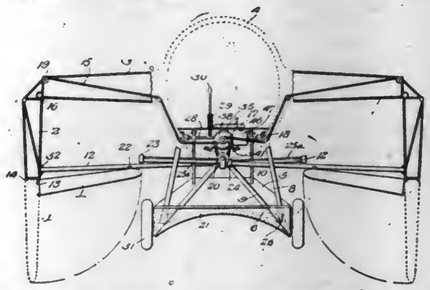
1. A method which comprises adding to a rubber mix prior to vulcanization, the reaction product of an organic dithiophosphate and a basic compound, and then vulcanizing the mixture.

1,819,793. PROCESS OF DECORATING PAPER. HARRY M. ROSS, Indianapolis, Ind., assignor of one-half to Beveridge Paper Company, Indianapolis, Ind., a Corporation. Filed Aug. 3, 1928. Serial No. 297,233. 1 Claim. (Cl. 91—67.9.)



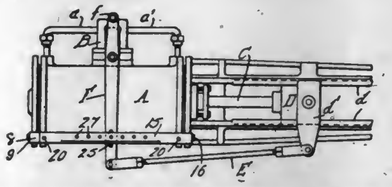
An apparatus for decorating paper including a pair of embossed rolls through which the paper is continuously passed for embossing the surface thereof, a pair of coloring rolls mounted in said apparatus parallel with each other with their surfaces in rolling contact for providing a pocket adapted to receive and retain therein a deposit of coloring material, means for continuously directing the paper from said embossing rolls about the outer free surface of one of said coloring rolls remote from the deposit of coloring material and the adjacent roll and with the embossed surface in direct contact therewith, and means for imparting a different speed to said paper with respect to said coloring rolls, whereby it will receive a thin application of coloring on the raised portion thereof leaving the depressed portion free therefrom.

1,819,794. AEROPLANE. MAX F. SCHULTZE, Mandan, N. Dak. Filed Apr. 20, 1928. Serial No. 271,486. 4 Claims. (Cl. 244—2.)



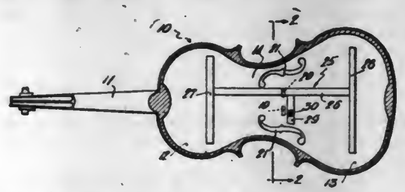
4. In an aeroplane the combination of one three unit wing structure, the two end sections of which are constructed leak-proof and rotatable from a horizontal to a vertical position about hinges which are fastened to the under side of the middle wing section, and means for rotating these end sections and holding them into the desired positions for either pontoon or wing service, the middle of said end sections being further foldable by means of bolt-locks and hinges for hangar purposes.

1,819,795. GUIDE FOR POWER REVERSE GEAR FLOATING LEVERS. WILLIAM H. SHAW, Scranton, Pa. Filed Jan. 11, 1928. Serial No. 245,938. 2 Claims. (Cl. 121—41.)



1. In a locomotive power reverse gear of the type having a cylinder and floating lever pivotally supported near one end above said cylinder and having its other end unsupported against side sway, the combination of a guide including two parts arranged approximately in contact with opposite sides of said floating lever and extending parallel to the direction of movement thereof and between which said floating lever may swing about its pivot, means for securing said guide to a fixed part of said reverse gear, and a connecting member adapted to be rigidly secured to said guide and to engage said lever for holding said lever fixed against movement in said guide.

1,819,796. STRINGED MUSICAL INSTRUMENT. JOHN E. SHERMAN, Foxboro, Mass., assignor to Samuel M. Stone, Attleboro, Mass. Filed July 20, 1929. Serial No. 379,671. 5 Claims. (Cl. 84—276.)



1. In a stringed musical instrument of the viol family the combination with the bridge and belly of an equalizing frame secured to the under side of the belly and

including a longitudinally extending bass bar below one foot of the bridge, a pair of transversely extending bars at the ends of the bass bar in the upper and lower bouts, and a sound post associated with the equalizing frame, the lower end of the sound post resting against the back of the instrument and its upper end contacting with said equalizing frame.

1,819,797. MAGNETOMETER. SEIZO SHIMIZU, Tokyo, Japan. Filed June 11, 1924, Serial No. 719,300, and in Japan Apr. 28, 1923. 2 Claims. (Cl. 175—183.)



1. A magnetometer for determining a magnetic field for the adjustment of a magnetic compass, comprising a coil of predetermined size through which current is passed to set up a magnetic field, means for measuring the current through the coil, a magnetic compass horizontally positioned in the field of the coil and provided with a vertically adjustable mounting rotatable about a vertical axis, and indicating means for determining the several adjustments of said compass.

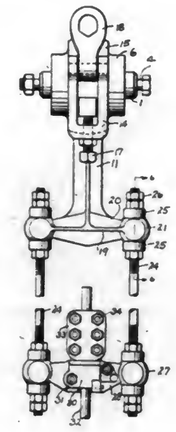
1,819,798. COLLAPSIBLE BIT. JOHN C. STOKES, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Apr. 25, 1927. Serial No. 186,473. 15 Claims. (Cl. 255—76.)



1. In a drill, a head, a blade carrier slidable in said head, a blade movably mounted on said carrier, a plunger slidable in said head and movable with respect to said carrier, a link carried by said plunger, and a finger carried by said link and engaging said blade to move the latter.

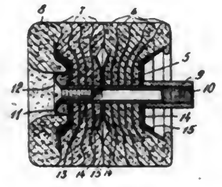
1,819,799. BEAM HANGER. WALTER C. TROUT, Lufkin, Tex. Filed Nov. 1, 1930. Serial No. 492,737. 6 Claims. (Cl. 255—18.)

1. A rod hanger for walking beams including a bearing having a convex outer peripheral bearing area, a yoke including upper and lower jaws pivoted together and shaped to engage and pivot universally about said bearing, a crosshead on the lower end of said yoke, a rounded knob at each end of said crosshead, said knobs having vertically arranged openings therethrough, a rod



gripping clamp, knobs on each end thereof shaped like those on said crosshead, and adjustable rods connecting said knobs.

1,819,800. POLISHING DEVICE. WILLIAM BREWER TURNER, East Orange, N. J., assignor to Walker-Turner Company, Inc., Jersey City, N. J., a Corporation of New York. Filed Feb. 21, 1931. Serial No. 517,528. 7 Claims. (Cl. 15—230.)

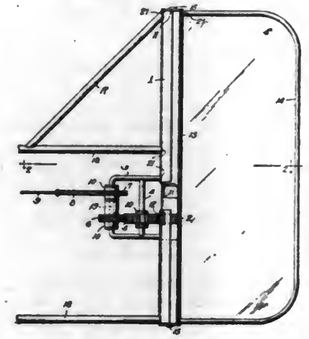


1. A device for cleaning and polishing comprising a rotatable support, a plurality of groups of flexible discs each carrying wool on one face thereof mounted on the support, the wool-carrying faces of the respective groups being oppositely directed, and means to hold the discs in assembled relation on the support.

1,819,801. AIRPLANE VERTICAL RUDDER CONTROL MECHANISM. EDWIN M. WALDEN, Tampa, Fla. Filed Feb. 9, 1931. Serial No. 514,372. 1 Claim. (Cl. 244—29.)

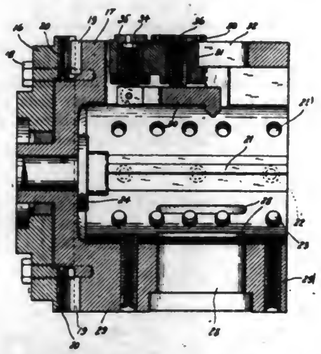
A device for controlling an airplane's vertical rudder, comprising one half of a full round tube the height of an airplane's fuselage and vertical fin at the leading edge of the rudder containing a circumferential slot cut through it two inches below the lower surface of the fuselage at the rudder post, capped top and bottom with full round caps, drilled with holes at their centers and welded around one half their circumstance to the upper and lower edges of the half tube and a bracket containing two axels in the vertical plane welded at its one end above and one end below the slot on the vertical center line of the half tube

and a compound spur gear and sprocket wheel carried on the rear bracket axle, the spur gear meshing with a spur gear of same diameter and pitch on the forward bracket axle which in turn projects through the circumferential slot in the half tube, meshing with a spur gear of same pitch welded into the round tube rudder leading edge, the round tube rudder leading edge being held securely in the cavity of the half tube by pins screwed into the caps of the half tube rudder post and projecting through the holes in the



caps in the round tube rudder leading edge and a short section of roller chain carried by the compound sprocket wheel that when attached at its ends to the rudder control cables of an airplane rotates to either right or left, half way round its circumference, the compound sprocket wheel and spur gear which in turn meshing with the spur gear on the forward axle rotates it to either right or left and this gear in turn meshing with the spur gear of same pitch in the rudder leading edge rotates it to either right or left, half way round its circumference.

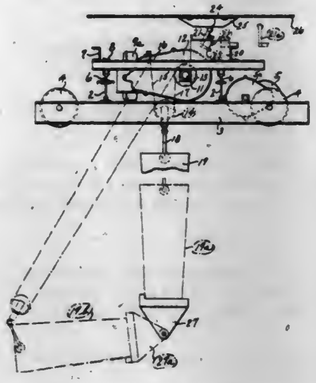
1,819,802. CHUCK. HUMPHREY R. WARD, Boston, Mass., assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 2, 1927. Serial No. 237,136. 11 Claims. (Cl. 279—1.)



1. A chuck comprising a rotary member having a pair of longitudinally extending work supporting shoulders projecting inwardly into the interior of the rotary member and overhanging the inner wall thereof, and means for supporting the inwardly overhanging portions of the shoulders.

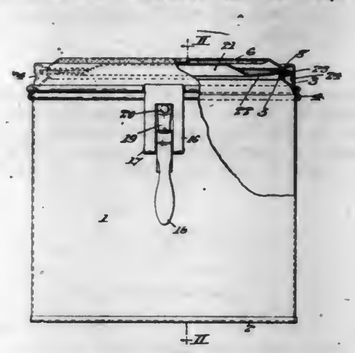
1,819,803. CRANE. WILLIAM WHITE, Cleveland, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed Dec. 26, 1929. Serial No. 416,507. 1 Claim. (Cl. 212—126.)

In a crane for moving ice cans between freezing, dipping, and dumping positions, and having for the purpose a hoist and a trolley carrying the same, a motor for said hoist, automatic control means to provide high speed lowering operation of said motor when said trolley is in dumping position and operation of said motor at a lower speed under other conditions, said control means comprising co-



operative control parts, one fixed and the other arranged to be movable with said trolley and associated switch means arranged in the circuit of the motor, and operator-operated control means for said motor providing for hoisting and lowering operation of said hoist under the conditions imposed by said automatic control means.

1,819,804. CONTAINER. JASPER WHITING, Dublin, N. H., assignor to Container Patents Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1929. Serial No. 352,640. 4 Claims. (Cl. 220—29.)

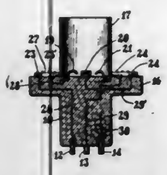


1. A container of the class described comprising, a body having an inwardly projecting portion adjacent its opening, a cover, a closure member located within the cover and free to tilt bodily therein, said closure member consisting of a disk having an elevated central portion fitted to engage the cover and a yielding peripheral rim fitted to engage the inwardly projecting portion of the body, whereby the closing of the cover will compress the closure member against said inwardly projecting portion of the body and the freedom to tilt bodily will cause the closure member to effect an air tight seal.

1,819,805. RADIO VACUUM TUBE SOCKET ADAPTER. NATHAN ZUCKERMAN, Brooklyn, N. Y. Filed Feb. 18, 1928, Serial No. 255,241. Renewed May 18, 1931. 6 Claims. (Cl. 173—344.)

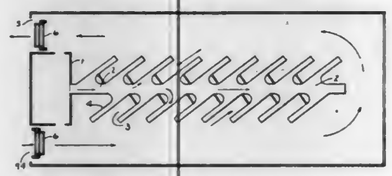
2. A device of the class described, comprising a radio tube socket plug having bottom contact pegs, an en-

largement arranged on the top thereof, a radio tube socket having contact springs arranged on top of the enlargement, pairs of connected terminals arranged on the



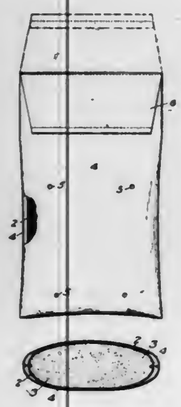
disc, connection links removable from the said terminals, and connections for connecting the pegs, the terminals and the contact spring in series for the purpose described.

1,819,806. SERVICE STAND AND SERVING APPARATUS. BENJAMIN H. ALLEN, Beaumont, Tex. Filed May 25, 1929. Serial No. 365,839. 12 Claims. (Cl. 186—1.)



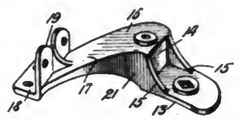
1. A service installation including a service stand, a laterally extending delivery stand connected therewith, said delivery stand having stalls connecting therewith on each side at a convenient parking angle, a table adjacent each of said stalls, and means to deliver trays from said service stand along said delivery stand on to any selected one of said tables.

1,819,807. HEATING PACK AND COMPOSITION THEREFOR. VIRGIL R. BAYSINGER, Pittsburgh, Pa., assignor, by direct and mesne assignments, to Torridaire Company, a Corporation of Delaware. Filed Aug. 4, 1928. Serial No. 297,543. 7 Claims. (Cl. 44—3.)



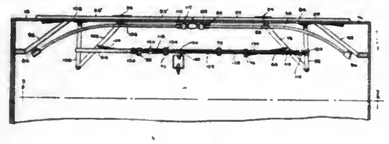
1. A heat generating compound for heating pads comprising crushed cast iron and crushed carbon steel, and a salt for accelerating the oxidation of the iron and steel when water is applied to the composition.

1,819,808. INDIVIDUAL CHAIR. ALFRED B. BELL, Philadelphia, Pa., assignor to Hale & Kilburn Co., Philadelphia, Pa., a Corporation of Delaware. Filed June 3, 1929. Serial No. 367,968. 5 Claims. (Cl. 155—183.)



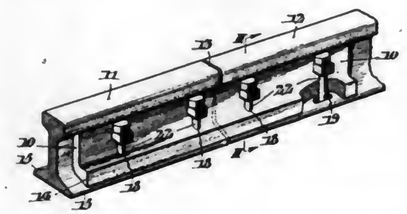
5. In a chair of the character described, in combination, a support, a bracket on the rear of the support extending rearwardly and upwardly, brackets on the front corners of the support extending sidewise and upwardly, each of said brackets having cushion supporting surfaces intermediate their ends, a cushion resting on said surfaces, and a seat back supported on the outer ends of said brackets, leaving a clear space between said cushion and support and between the cushion and the seat back.

1,819,809. ELECTRICAL DOOR OPERATING DEVICE. EDWIN R. BEEMAN, Minneapolis, Minn. Filed Nov. 11, 1929. Serial No. 406,363. 5 Claims. (Cl. 268—63.)



1. A door operating device comprising a motor, two racks, guides for said racks which maintain them in parallelism with each other and parallel to the closed position of the doors, a pinion engaging the teeth of both of said racks for moving the latter in opposite directions, mechanism for driving said pinion from said motor, rods pivotally attached at one of their ends to said racks respectively, links to which the other ends of said rods are pivotally and intermediately attached, the outer ends of said links being pivotally attached to the doors respectively, bars to the inner ends of which the inner ends of said links are pivotally attached, fixed members secured above the doors and to which the outer ends of said bars are pivotally attached, and means whereby said motor may be rotated in either direction as desired.

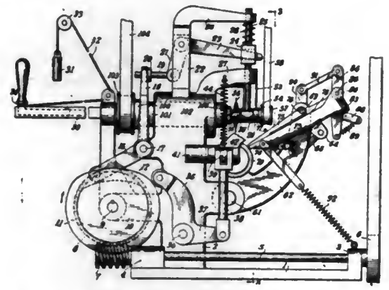
1,819,810. RAIL CONNECTING MEANS. ERNEST J. BOWDEN, West Chester, Pa. Filed Sept. 12, 1929. Serial No. 392,072. 6 Claims. (Cl. 238—260.)



1. Rail connecting means comprising companion fish plates with lateral flanges at their bottoms appropriately configured to snugly fit the side hollows of the rails over the joint between contiguous rail sections at opposite sides but not projecting beyond the rail head or base flanges

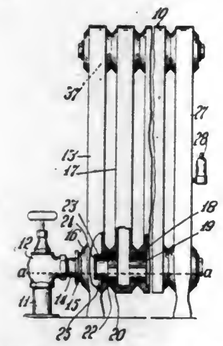
respectively, key elements engaging through coordinated openings in the fish plates and through registering longitudinally elongated apertures in the rail sections with their ends protruding; and headed wedge keeper means having tangential faces abutting the fish plates and engaging crosswise through the ends of the key elements to maintain the fish plates in intimate contact with the rails but with allowance for relative endwise movement of the latter incident to expansion and contraction.

1,819,811. BUTTON MAKING MACHINE. EMANUEL CLEMENS, East Orange, N. J. Filed June 1, 1929. Serial No. 367,760. 4 Claims. (Cl. 79—8.)



1. In a machine for making buttons from a rod of suitable material, a support, a tool holder pivotally mounted on the support, a facing tool movably mounted in the tool holder, an abrasive wheel mounted on the support, spring means to periodically tilt the tool holder to bring the tool into engagement with the abrasive wheel, cam controlled means to raise the tool holder to a position in alignment with the rod, and means to periodically move the support to bring the tool into engagement with the rod from which the buttons are made.

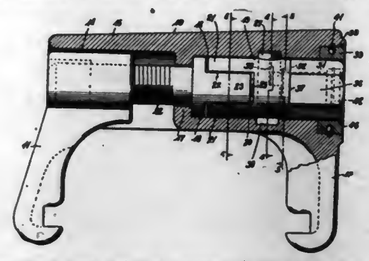
1,819,812. RADIATOR. FRANK J. DOUGLASS, Chicago, Ill., assignor to Eloise Kastler Douglass, Chicago, Ill. Filed Oct. 19, 1928. Serial No. 313,451. 7 Claims. (Cl. 257—46.)



1. In combination with a sectional radiator, a grease retainer arranged in the passageway between one end section of the radiator and the adjacent section, projecting into the interior of the end section and formed in the bottom with an aperture for passage of heating medium.

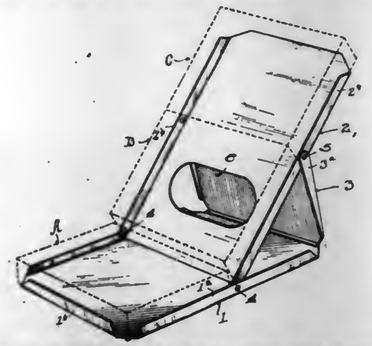
1,819,813. VISE GRIP LOCK. CLARENCE M. ELLENBERGER, Detroit, Mich., assignor, by mesne assignments, to Oakes Products Corporation, a Corporation of Michigan. Filed Dec. 5, 1928. Serial No. 323,975. 1 Claim. (Cl. 70—90.)

In a locking device of the class described, the combination of a frame having a bore, a securing member rotatable in said bore, an operating member rotatable in said bore and having its outer end adapted to receive a tool for rotating said operating member, coupling ends on said members adapted to transmit rotation of said operating member to said securing member but to permit axial movement of said operating member relative to said securing member,



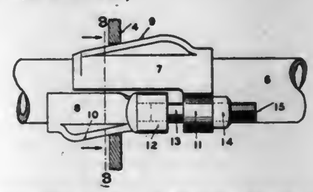
said coupling ends having communicating pockets, a compression spring confined within said pockets tending to hold said operating member with its tool receiving end outside of said frame for the application of a tool thereto, and means for locking said operating member against the pressure of said spring to retain its tool-receiving end concealed within said frame.

1,819,814. DISPLAY STAND. AUGIE L. HANSEN, Chicago, Ill., assignor to A. L. Hansen Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 7, 1929. Serial No. 397,820. 2 Claims. (Cl. 211—160.)



1. A collapsible display stand comprising a base plate having side and end flanges, a supporting plate hinged along one edge to said base plate intermediate the ends thereof and a brace member hinged to said supporting plate intermediate its ends, said supporting plate being normally braced in an inclined position with the free edge of said brace member abutting the adjacent flanged edge of said base plate to provide horizontal and rearwardly inclined tray sections.

1,819,815. PIPE CLAMP. LOUIS A. HOZER and FRANK H. PIETZSCH, St. Louis, Mo., assignors to Railway Devices Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 6, 1930. Serial No. 426,264. 8 Claims. (Cl. 248—31.)



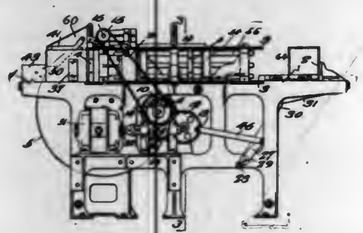
1. The combination with a support having an opening and a pipe extending therethrough, of a pair of clamp-

ing members each having a wedge face engaging with the edge of said opening, said wedge faces lying at opposite sides of the pipe and extending at opposite sides of the support, and means for moving said parts relatively longitudinally, whereby the pipe is clamped between the members and the members clamped to the support by the action of said wedge faces.

1,819,816. ART OF MAKING ENAMEL WARE. OSCAR HOMMEL, Pittsburgh, Pa., assignor to The O. Hommel Company, a Corporation of Pennsylvania. Filed Sept. 27, 1928. Serial No. 308,879. 3 Claims. (Cl. 91—73.)

1. In the manufacture of enamel ware the method herein described which consists in applying to the surface of a body of iron or steel a solution of an adhesive in association with a metallic salt, drying the so treated body, applying to the surface of the dried body enamel material, and firing.

1,819,817. BOX SLITTING MACHINE. JOHN F. HOY, Norristown, Pa., assignor, by mesne assignments, to Autokraft Box Corporation, York, Pa., a Corporation of Delaware. Filed Aug. 14, 1928. Serial No. 299,556. 4 Claims. (Cl. 143—33.)



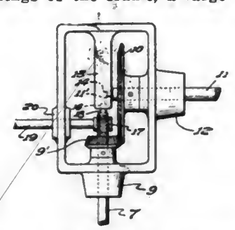
1. In a machine of the character stated, a pair of horizontally disposed endless chains, a second pair of endless chains spaced above the first mentioned pair of chains, said chains being provided with lugs connecting the upper and lower chains to engage and advance a box structure to a cutter for box part slitting, a cutter rotatably mounted in a vertical manner between said pairs of chains, a reciprocating plunger for feeding a box structure to said chains, a horizontal drive shaft upon which said cutter is mounted, a motor for directly driving said shaft, independent means including a motor for driving said chains, and means operatively connected with said chain driving means for operating said reciprocating plunger.

1,819,818. CATALYTIC ESTERIFICATION. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Original application filed Mar. 23, 1928, Serial No. 264,275. Divided and this application filed Mar 28, 1929. Serial No. 350,830. 9 Claims. (Cl. 260—103.)

1. A method of esterification, which comprises vaporizing an organic carboxylic acid and an alcohol and passing the vapors at an elevated temperature over a contact mass containing at least one permutogenetic body.

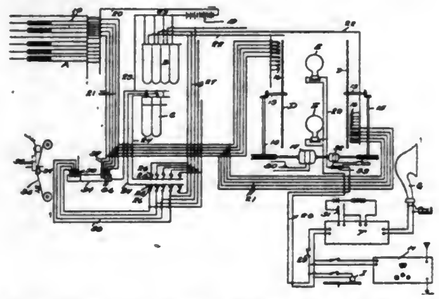
1,819,819. MECHANICALLY SYNCHRONIZED SHAFT. GEORGE KENDE, East Orange, N. J., assignor to Phonodisc Corporation, New York, N. Y. Filed May 8, 1929. Serial No. 360,125. 1 Claim. (Cl. 74—7.)

A gearing mechanism for synchronized machines, including a substantially rectangular open frame having shaft bearings, one each in three of its sides and a centrally disposed bearing standard projecting inwardly from the remaining side and aligned with the bearing in the opposed side, a drive shaft journaled in the latter bearing and having one end within the frame and journaled in the bearing standard, a worm gear and a bevel gear fast upon said end, two driven shafts also journaled in the remaining bearings of the frame, a large bevel gear car-



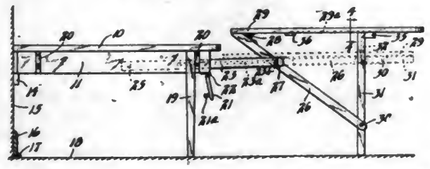
ried by one driven shaft within the frame and meshing with the first bevel gear, and a mating worm gear carried by the remaining driven shaft and connected to the first worm gear.

1,819,820. SOUND RECORDING AND REPRODUCING MEANS. EARLE L. KENT, Carthage, Mo. Filed June 11, 1929. Serial No. 370,126. 2 Claims. (Cl. 84—1.)



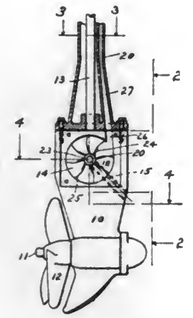
2. In combination with a movable member having a band composed of opaque and transparent portions, means for moving said member, an electric lamp disposed to one side of said member, means disposed to the other side of said member in position to receive light waves projected from said lamp through the transparent portions of said band, and to change said light waves into electric waves, means for changing said electrical waves into sound waves, electrical connections between said two last named means, and means for inductively associating an alternating current with said connections whereby a tremelo effect may be imparted to said sound waves.

1,819,821. IRONING BOARD. WALLACE L. KULLBERG, Minneapolis, Minn. Filed June 8, 1929. Serial No. 369,278. 11 Claims. (Cl. 68—10.)



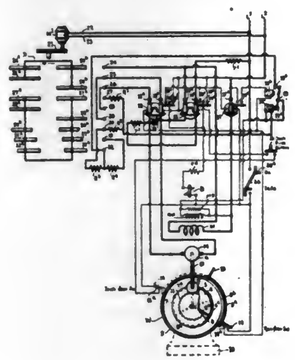
1. An ironing board structure having in combination with a member having a recess with walls, a board having a leg slidingly and pivotally connected to its bottom side adjacent one end thereof, bars pivotally connected to said leg adjacent its lower end and hingedly connected at their other ends to said board beneath the other end thereof, and bars pivoted intermediate the ends of said bars and slidably connected with the walls of said recess whereby said parts may be collapsed and moved into said recess.

1,819,822. COOLING SYSTEM PUMP FOR OUTBOARD MOTORS. CLARENCE LA GRANGE, Howard Beach, N. Y. Filed May 16, 1930. Serial No. 452,940. 1 Claim. (Cl. 115—17.)



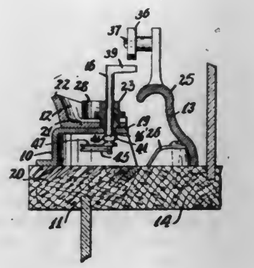
In combination with an outboard motor having a submerged housing and a vertical shaft rotating therein, a circular recess formed in one side of said housing, a cover for said recess, water inlet and outlet passages leading to and from said recess, a paddle wheel rotating in said recess on an axis at right angle to that of the vertical shaft in the housing, and means for transferring rotary motion from said vertical shaft to the paddle wheel.

1,819,823. ELECTRIC MOTOR CONTROLLER. RALPH G. LOCKETT, Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer Inc., a Corporation of Delaware. Filed Nov. 7, 1928. Serial No. 317,709. 4 Claims. (Cl. 172—240.)



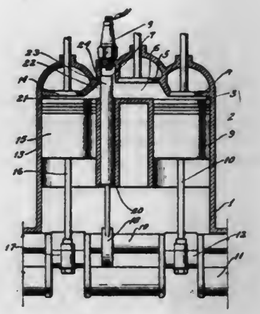
1. In a controller for a motor driven rotary device, in combination, control means operable automatically for periodically reversing the driving motor and accelerating the same after each reversal thereof, means to effect quick stopping of the motor irrespective of the speed of the latter or the rotary position of said device, said means including manually controlled electromechanical braking means and means operable simultaneously therewith to provide a dynamic braking effect upon the motor, and control means operable upon initial stopping of the motor to thereafter limit the latter to substantially constant slow speed unidirectional operation, said last mentioned means including a single manually operable switch adapted to control starting and stopping of said motor.

1,819,824. AUTOMATIC WINDOW SASH LOCK. HARRY E. MCALLISTER, Mariners Harbor, Staten Island, N. Y. Filed May 19, 1930. Serial No. 453,610. 8 Claims. (Cl. 292—336.)



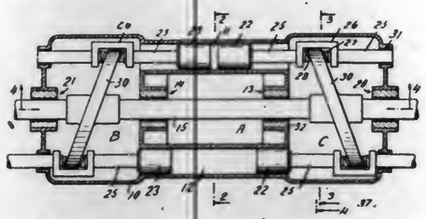
1. An automatic window sash lock, comprising a bracket for attachment on an inner window sash, a cup rotatively mounted in said bracket for engaging and locking in one position with a catch on an outer window sash, means for urging said cup to move into locked position, a lacth for holding the cup in unlatched position, a stem swivelly mounted, means on said stem to cause rotation upon closing of said window sashes and adjustable to another condition to cause a smaller degree of rotation, means for rotating said stem back to initial condition upon opening of said sashes, and means operated upon full rotation of said stem to trip said latch and move out of tripped position to allow resetting of said latch and upon slight rotation to trip said latch and keep the latch in the tripped position.

1,819,825. INTERNAL COMBUSTION ENGINE. GUY R. POYER, Wichita, Kans. Filed Oct. 22, 1928. Serial No. 313,982. 1 Claim. (Cl. 123—53.)



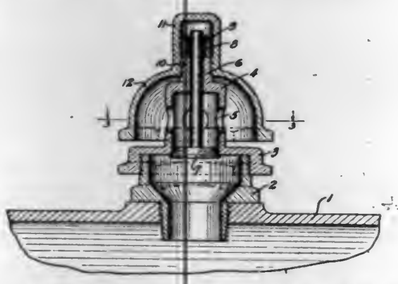
An internal combustion engine comprising two cylinders, one of which is a fuel cylinder and the other an air cylinder, a combuston chamber connecting the two cylinders, the combustion chamber having a pocket therein near the air cylinder, a spark plug in said pocket, pistons in the cylinders, a piston valve to alternately open and close communication between the air cylinder and the combustion chamber and the pocket while maintaining open communication between the pocket and the combustion chamber and a crank shaft connected to the pistons and driving the piston valve.

1,819,826. CRANKLESS ENGINE. THOMAS L. SHERMAN, Melbourne, Australia, assignor to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 14, 1929. Serial No. 339,951. 5 Claims. (Cl. 121—119.)



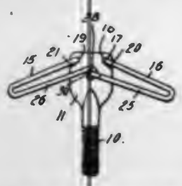
5. An engine comprising a casing having a removable section, bearings in said casing, a shaft in said bearings, cylinders in said casing having their axes in a plane passing through the shaft axis, said bearings being removable in a direction at right angles to said plane, pistons in said cylinders, a swash plate on said shaft and connections between said swash plate and pistons, open to permit removal of the plate and shaft.

1,819,827. SANITARY VENT FOR PRESSURE MILK TANKS. FREDERICK G. THWAITS, Wauwatosa, Wis., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 24, 1929. Serial No. 373,175. 5 Claims. (Cl. 220—44.)



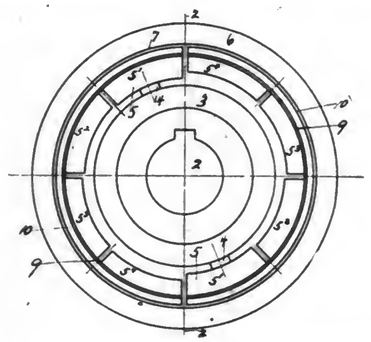
5. A vent for a tank, comprising a valve casing having upper and lower threaded end portions, a plate member threaded on the upper end portion of the casing and having an upstanding tubular portion provided with lateral air passages, a downwardly opening valve closing the lower end of the tubular portion, a light spring normally holding the valve on its seat, and a cap extending in spaced relation around the tubular portion of the plate member and the air passages thereof.

1,819,828. TOGGLE BOLT. CHARLES C. TOMKINSON, Plainfield, N. J., assignor, by mesne assignments, to J. Edward Ogden Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 22, 1928. Serial No. 301,207. 20 Claims. (Cl. 85—3.)



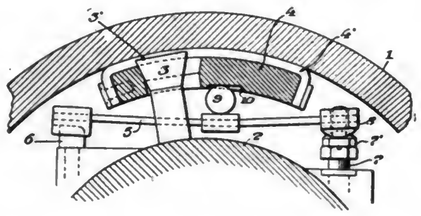
19. A toggle bolt structure comprising a bolt and a pair of wings pivotally associated with said bolt, one of the wings having an integral portion resiliently engaging the other wing.

1,819,829. CENTRIFUGAL CLUTCH. KARL J. WERSALL, New York, N. Y., assignor to American Kambi Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 16, 1929. Serial No. 347,529. 12 Claims. (Cl. 192—105.)



1. A centrifugal friction clutch comprising a driving means, a driven means, and a plurality of flexibly-connected, radially-shiftable bodies connected with the driving means and having successively decreasing weights, no two alike.

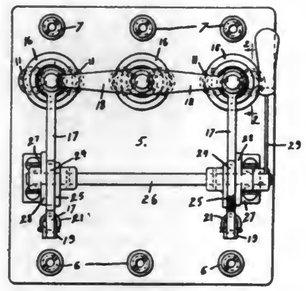
1,819,830. SPRING-CONTROLLED CENTRIFUGAL CLUTCH. KARL J. WERSALL, New York, N. Y., assignor to American Kambi Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,161. 13 Claims. (Cl. 192—105.)



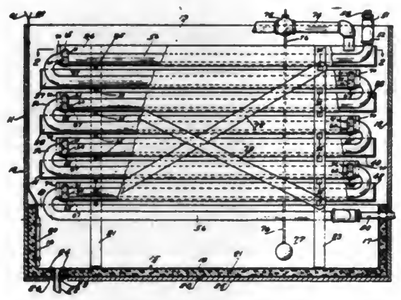
1. A centrifugal friction clutch comprising a driving member having a radially-extending pin, a driven member, a friction shoe loosely carried by said pin and radially shiftable relatively thereto, and means for insuring freedom of movement of the clutch shoe carried by the pin and comprising a spring and a member intermediate thereof and the shoe for applying the pressure of the spring to the shoe.

1,819,831. ELECTRIC SWITCH. JAMES WHALEN, Omaha, Nebr. Filed May 31, 1930. Serial No. 457,700. 5 Claims. (Cl. 200—6.)

1. In an electric switch, a contact-member having a substantially horizontal upper face, a contact-plate having a lower face engageable with said upper face of said contact-member, a switch-lever carrying said contact-plate, an actuating member on which said switch-lever is fulcrumed at a point spaced horizontally from said contact-plate, said actuating member being movable arcuately in a vertical plane, an element pivotally connected with the switch-lever and spaced horizontally from said actuating fulcrum member, said element being movable horizontally to accommodate horizontal movement of the switch-lever imparted thereto by said actuating member, means for moving said element vertically and tending to move the switch-lever about said actuating fulcrum member whereby to press said contact-plate toward said contact-member, and means limiting vertical movement of said element whereby the same may form a fulcrum for the switch-lever during movement of said actuating member to lift said contact-plate from said contact-member.



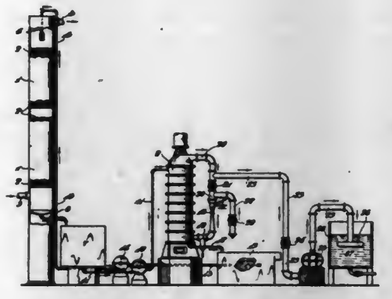
1,819,832. HEAT EXCHANGE DEVICE. FRANCIS W. WILLIAMS, Charlotte, N. C. Filed May 20, 1929. Serial No. 364,490. 2 Claims. (Cl. 257—198.)



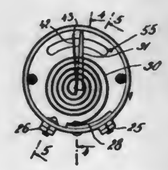
1. In a heat exchange device, a plurality of troughs mounted one above the other, said troughs being in the same vertical plane and being parallel to each other, said troughs being adapted to receive a fluid to be refrigerated, said fluid being adapted to pass from the end of one trough and to fall into the end of another trough, and so on through the series, a coil passing through each of the troughs and being bent after leaving one trough to follow the course of the next preceding trough respectively, a retarding member in the open end of each of the troughs adapted to retard the flow of the fluid adapted to be refrigerated until the fluid has covered the coil in the trough, and a plurality of holes in the bottom of each trough adapted to permit the trough to drain when the machine is not in operation.

1,819,833. GAS PURIFICATION PROCESS. GILBERT A. BRAGO, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 243,855. 2 Claims. (Cl. 33—3.)

1. The process of purifying gas from acidic impurities, which comprises continuously recirculating an ammoniacal liquid through a cycle comprising an absorption stage wherein the gas is purified by the liquid and an actification stage wherein the liquid is regenerated for further use by subjecting it to contact with a continuously recirculating body of gas, continuously refreshing said recirculated body of gas by withdrawing a portion thereof and replacing it with fresh gas, and treating said withdrawn portion of the gas to remove therefrom ammonia derived from the gas purification liquid.



1,819,834. THERMOSTATIC SWITCH CONTROL MECHANISM. WILHELM B. BRONANDER, Montclair, N. J., assignor to Scandia Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed July 28, 1928. Serial No. 296,057. 19 Claims. (Cl. 200—138.)



1. A thermostatic switch comprising a casing, a pair of relatively fixed contact terminals, an element formed of thermostatic metal connected to each terminal, and an arm secured to each element, said elements being so arranged that said arms will move in the same direction when said elements are subjected to heat, one of said arms having a portion disposed in the path of movement of the other arm, the thermostatic element having said last named arm connected thereto being exposed to the air surrounding the switch and the other element being mounted in said casing and shielded thereby from the surrounding air.

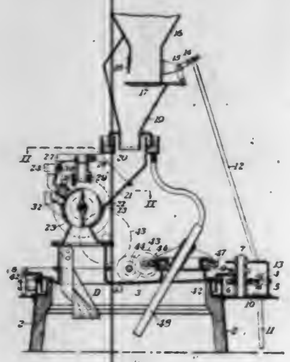
1,819,835. SHOCK ABSORBING MOUNT OR SUPPORT. GUY CAMPBELL, Tottenham, London, England, assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 21, 1925, Serial No. 63,818, and in Great Britain June 30, 1925. 5 Claims. (Cl. 173—328.)



1. A cushion socket for vacuum tubes comprising a plurality of contacts for engaging the tube terminals, an insulating tube supporting member to which said contacts are secured, and means for yieldingly supporting said tube

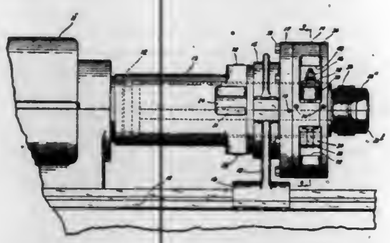
supporting member and affording electrical connections for said contacts, comprising a plurality of sheet metal members, one for each contact, each sheet metal member comprising a flat portion lying substantially in a plane transverse to the axis of the tube, to be secured to a support and a ribbon-like strip wound into a spiral spring formed integrally with said flat securing portion and electrically connected with a contact.

1,819,836. GAS PRODUCER. REINHARDT DAAE, Youngstown, Ohio. Filed July 10, 1926, Serial No. 121,562. Renewed June 21, 1929. 3 Claims. (Cl. 214—35.)



1. In a gas producer, a rotary feeding member, driving means therefor, and a plurality of means at different distances from said member for rendering the said driving means inoperative under predetermined conditions.

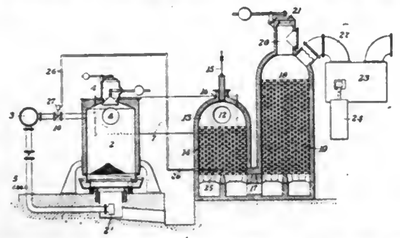
1,819,837. CHUCK. WILBUR C. DE GRAFF, Cleveland, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 9, 1928. Serial No. 268,448. 17 Claims. (Cl. 279—106.)



1. A chuck comprising a chuck body having a plurality of oppositely disposed independently movable clamping members, and means for actuating them located at one side of the chuck and accessible at one part of the body of the chuck.

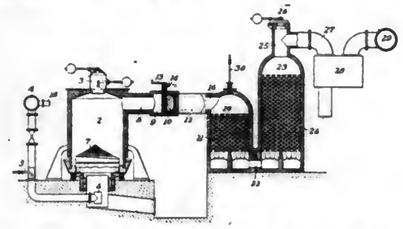
1,819,838. MANUFACTURE OF CARBURETED GAS. ALBERT W. GRANT, Jr., Wilmette, Ill., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1925. Serial No. 3,973. 10 Claims. (Cl. 48—80.)

1. The process of manufacturing carbureted producer gas, which comprises continuously blasting a bed of incandescent solid carbonaceous fuel with a mixture of an oxygen-containing gas and steam, burning a portion of the gas thereby produced, then introducing a liquid hydrocarbon in a separate chamber to at least a portion of the gas thereby produced, and employing said combustion to furnish the heat required for the permanent volatilization of the liquid



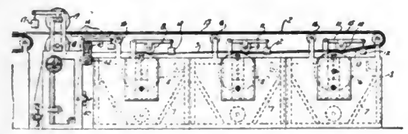
hydrocarbon and the consequent enrichment of the gas, the portion of the gas burned being such as to supply sufficient heat for said volatilization and enrichment.

1,819,839. MANUFACTURE OF CARBURETED GAS. ALBERT W. GRANT, Jr., Wilmette, Ill., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1925. Serial No. 3,974. 6 Claims. (Cl. 48—205.)



1. The process of manufacturing carbureted producer gas in apparatus comprising a gas producer adapted to contain a bed of solid carbonaceous fuel and a pair of carburettors located in parallel, which comprises continuously passing a mixture of oxygen-containing gas and steam through said fuel bed to generate producer gas, supplying fluid fuel to one of said carburettors and there burning it with a further quantity of oxygen-containing gas to heat said carburettor, simultaneously passing producer gas through the other and previously heated carburettor and there carburetting said gas with oil, and periodically reversing the operation of the carburettors.

1,819,840. METHOD AND APPARATUS FOR MAKING FIBER AND CEMENT SHINGLES AND BOARDS. HARRY E. HOLCOMB, Bound Brook, N. J., assignor to Fiberfraks Inc., New York, N. Y., a Corporation of New York. Filed Jan. 30, 1928. Serial No. 250,558. 18 Claims. (Cl. 92—42.)

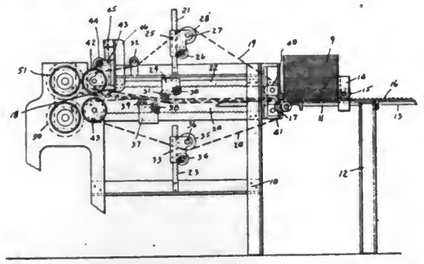


1. The process of producing a sheet of composition material which comprises forming a plurality of layers of hydraulic cement and fiber, passing the layers in a substantially horizontal plane into contact with each other and subjecting said layers to pressure.

1,819,841. STACKING MACHINE. HARRY E. HUDSON, Anderson, Ind., assignor to W. A. Quebbeman, Indianapolis, Ind. Filed Feb. 2, 1926. Serial No. 85,467. 4 Claims. (Cl. 214—6.)

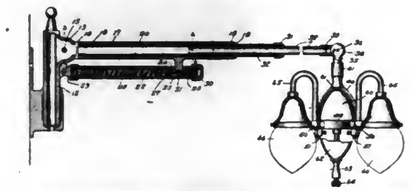
1. In a sheet feeding device, the combination of two superposed substantially triangular endless belt conveyors

having their base portions cooperating as opposed runs with a common direction of movement, and means for offsetting said opposed runs intermediate the ends of the



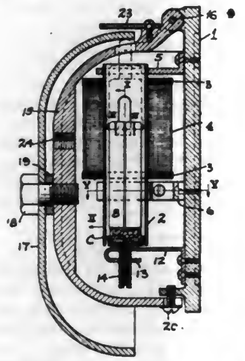
opposed portions of said conveyor for the reception of and overlapping conveyance of successively presented overlapping sheets.

1,819,842. LAMP SUPPORT. CLARENCE W. MOORE, Roslyn, Pa., assignor, by mesne assignments, to Ritter Dental Manufacturing Company Inc., Rochester, N. Y., a Corporation of Delaware. Filed Feb. 29, 1928. Serial No. 258,002. 15 Claims. (Cl. 240—67.)



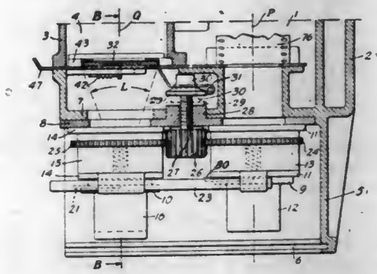
1. A lamp cluster including a hub having a closed upper end, light sources mounted on the hub below the closed end, the hub having a substantially horizontal supporting means extending between certain of the light sources below the closed end, means for supporting the hub for oscillation on the supporting means, both said last mentioned means being provided with electric conductor receiving channels whereby conductors may extend from the last mentioned means to the light sources on the hub below the closed end of the hub.

1,819,843. ELECTROMAGNETIC BELL. LOUIS E. RICHMOND, Shelby, Ohio, assignor to The Autocall Company, Shelby, Ohio, a Corporation of Ohio. Filed Oct. 3, 1925. Serial No. 60,141. 1 Claim. (Cl. 177—7.)



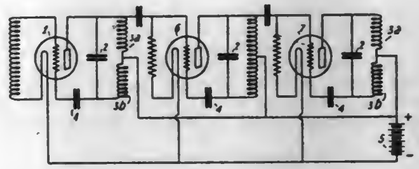
In a device of the character described, a solenoid plunger shaped into cylindrical form from a sheet metal blank, and hollow throughout substantially the entire length thereof, a tapper of small cross sectional area, and a skeleton support of sheet metal members presenting their thin edges to the direction of travel for securing the tapper to one end of said plunger.

1,819,844. FOCUSING FINDER. OSCAR A. ROSS, New York, N. Y. Filed Sept 24, 1927. Serial No. 221,785. 12 Claims. (Cl. 95—44.)



1. In combination, a camera, a focusable photographing lens and a focusable finder lens secured thereto, means for causing simultaneously axial movement of the lenses, a view finder arranged in the path of the image rays formed by the finder lens and means actuated by the lens moving means for causing movement of the finder whereby the delineation of the field recorded at the photographing aperture of the camera will substantially conform to the delineation of the field viewed at the finder.

1,819,845. THERMIONIC AMPLIFIER AND OSCILLATION GENERATOR. HENRY JOSEPH ROUND, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed July 19, 1926, Serial No. 123,360, and in Great Britain July 20, 1925. 6 Claims. (Cl. 179—171.)

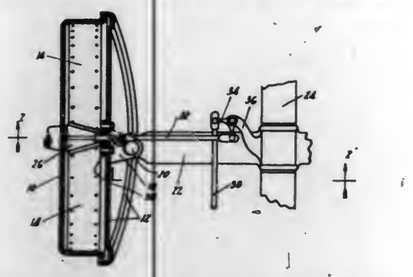


1. In an impedance resistance coupled cascade relay having a vacuum tube in each stage thereof, means for coupling the vacuum tubes of the several stages including an inductance between adjacent stages composed of two portions, one of which is in the output circuit of the preceding tube, alternating ones of said inductances being astatic to prevent electromagnetic coupling between said stages and means in each stage providing a path for neutralizing the inherent feed back between the output and input circuits of each stage.

1,819,846. BRAKE-OPERATING MECHANISM. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Nov. 1, 1926. Serial No. 145,448. 11 Claims. (Cl. 188—194.)

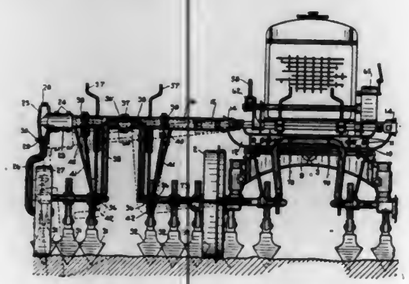
1. A vehicle having, in combination, a swivelled wheel having a brake, a brake-applying device at the top of the brake movable in applying the brake in a direction away from the wheel substntially parallel to the axis of the wheel, a non-swivelling support opposite the brake, a connection carried at one end on the support, and a universal

joint between the opposite end of the connection and the brake-applying device which moves bodily crosswise of



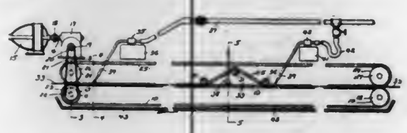
the swivelling axis and which is arranged when the brake is applied near enough the swivelling axis of the wheel not to materially interfere with swivelling the wheel.

1,819,847. CULTIVATOR. WALTER H. SILVER, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 29, 1928. Serial No. 289,122. 19 Claims. (Cl. 97—47.)



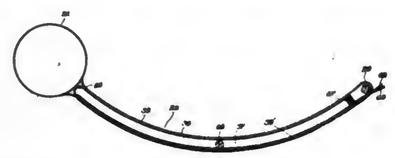
1. A cultivator comprising in combination a central rig supporting frame, an outrigger frame pivotally secured thereto for relative up and down movement, shovel rigs supported by said frames, the rigs of one of said frames being movable laterally relative thereto, and means for preventing lateral movement of the shovel rigs of one frame relative to those of the other frame.

1,819,848. PHOTOGRAPHIC DEVELOPING APPARATUS. LUTHER G. SIMJIAN, New Haven, Conn. Filed Dec. 2, 1927. Serial No. 237,168. 2 Claims. (Cl. 95—94.)



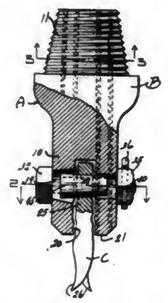
1. An apparatus for developing films and like photosensitized material comprising a relatively-wide endless carrier-belt; a plurality of pulleys therefor; a pair of relatively-narrow endless retaining-belts adapted to engage one face of the said carrier-belt near the respective opposite edges thereof and provided with lips overhanging the side-edges of the said carrier-belt to prevent the lateral displacement of the sensitized material carried thereby; pulleys for the said retaining-belts; and means for driving the said belts to convey a sensitized article gripped between them from one position to another for chemical treatment.

1,819,849. GASOLINE GAUGE FOR AUTOMOBILES. HARRY C. STEARNS, Oak Park, Ill., assignor of one-third to Cameron A. Whitsett, Chicago, Ill., and one-third to Homer W. Larson, Downers Grove, Ill. Filed Mar. 29, 1926. Serial No. 98,158. 8 Claims. (Cl. 201—48.)



6. In a liquid level gauge of the class wherein rise and fall of the liquid level is arranged to vary the resistance of an electrical circuit and thereby actuate an indicator which is responsive to said circuit, the combination with said circuit of means for varying its resistance in accordance with changes in liquid level comprising a tube pivotally mounted for swinging movement, a float responsive to the changes in liquid level and arranged to swing said tube, a resistance element extending longitudinally of said tube and having a varying resistance per unit of length, and a contact element in said tube engaging with said resistance element and adapted to move gravitationally along said tube as the latter is swung by said float, said tube being curved between its ends eccentrically with respect to the pivot axis about which said tube swings.

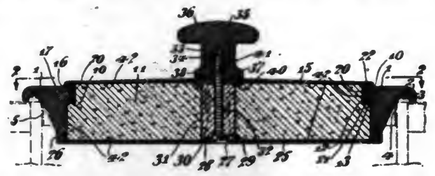
1,819,850. DRILL BIT. JOHN C. STOKES, Houston, Tex. Filed Oct. 19, 1929. Serial No. 400,952. 14 Claims. (Cl. 255—61.)



1. In a device of the class described a supporting body having a socket therein with transverse openings intersecting at opposite sides of the socket, a blade having a transverse opening therein, an anchor pin secured in the transverse opening of the blade and extending at opposite sides of the blade through the socket and into the openings of the body which intersect the socket to prevent direct pull removal of the blade from the socket in the body, the blade and its anchor pin fitting in the slot and openings of the body with clearances, and a fusible bonding material capable of withstanding the usual drilling shocks filling said clearances and anchoring the blade and its pin rigidly in the body.

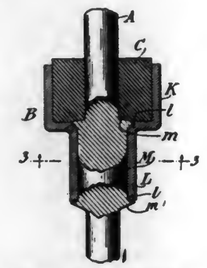
1,819,851. LID FOR REFRIGERATOR CABINETS. NELSON MARTIN VANDEGRIFT, Philadelphia, Pa., assignor to Sheip & Vandegrift, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 13, 1930. Serial No. 488,214. 15 Claims. (Cl. 220—24.)

9. A lid for refrigerator cabinets comprising in combination an annular rim member having a shoulder on the inner wall thereof, a top plate overlying the rim member and having its edge reversely bent upon itself, a bottom plate, an expansion ring within the rim member having an outwardly turned flange at one edge for engagement with the reversely bent edge of the top plate and an outwardly



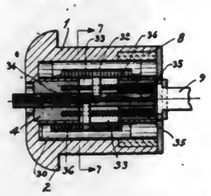
turned flange at the opposite edge for engagement with the shoulder on the rim member, and insulating material within the space formed by the rim member and said plates.

1,819,852. VALVE INSIDE. JULIUS VOLCKHAUSEN, Weehawken, N. J., assignor to A. Schrader's Son, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 7, 1925. Serial No. 1,028. 2 Claims. (Cl. 152—12.)



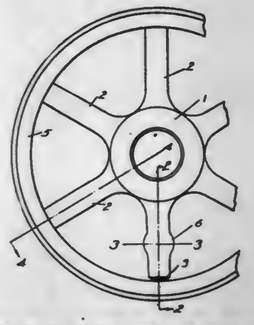
1. A valve insides for pneumatic tire valves or the like, comprising a valve pin having a shoulder intermediate its ends and a sheet metal valve packing support on said pin having a tubular portion and a cup-shaped portion, the shoulder on the pin overlying the tubular portion and facing in the same direction as, and being substantially flush with the base of the cup-shaped portion.

1,819,853. KEY OPERATED COMBINATION LOCK. OSWALD D. VON MEHREN, New York, N. Y., assignor to Mehren Lock Company, Incorporated, Clifton, N. J., a Corporation of New Jersey. Filed May 10, 1928. Serial No. 276,765. 17 Claims. (Cl. 70—92.)



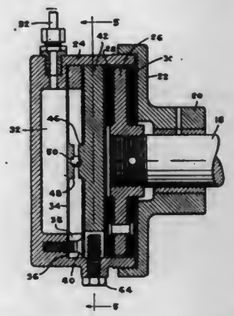
1. In a key operated combination lock, a lock casing having a cross axial shoulder, a rotary barrel positioned within said casing and having a locking portion radially overlapping said shoulder, alined passages extending into the said overlapping portions of the casing and barrel, said passages being parallel to the axis of the barrel, locking elements mounted to slide longitudinally in said passages, key operable plungers positioned parallel to the axis of the barrel and having substantially radial projections extending into cooperative relation to the locking elements, means for regulatably securing said projections to the respective locking elements to preclude normal relative movement between said projections and elements in the direction of the length of the elements, and means for normally impelling said elements into positions wherein each element will extend into the passages of both the casing and the barrel to lock the barrel against rotation within the casing, said plungers being simutaneously movable by a suitable key to position all of the locking elements wholly within the passages of the casing to allow of rotation of the barrel.

1,819,854. METHOD OF FORMING METAL WHEELS. LORENZO E. WAITE, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Apr. 7, 1928. Serial No. 268,152. 6 Claims. (Cl. 29—174.)



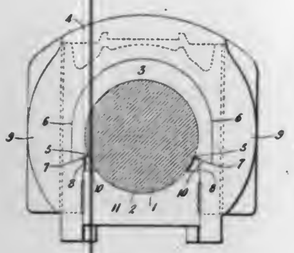
1. The method of forming metal wheels which consists in forming a wheel center with hollow integral metal spokes, placing said center within a wheel felloe, and elongating the hollow walls of the spokes to assemble the ends of the spokes with the felloe.

1,819,855. SHOCK ABSORBING MECHANISM. ALBERT A. WILSON, Minneapolis, Minn., assignor of one-half to Alexander D. Robertson. Filed Dec. 29, 1926. Serial No. 157,698. 3 Claims. (Cl. 188—130.)



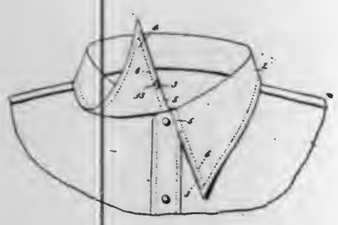
1. A shock absorbing mechanism for vehicles comprising a rod held by an axle of the vehicle, a link pivotally attached at one end to said rod, a cylinder mounted on the frame of the vehicle, a shaft axially disposed with relation to said cylinder and projecting from one end thereof, a crank on the projecting end of said shaft pivotally connected to the other end of said link, the inner end of said shaft extending part way only through said cylinder, a disk member secured to said inner end, a disk member slidably and non-rotatably mounted in said cylinder adjacent said first disk member, a flexible diaphragm spaced from the other end of said cylinder whereby a compartment is formed therein, said diaphragm being disposed adjacent said slidable disk member for applying pressure thereto, a source of fluid supply connected to said compartment, and pressure applying means within reach of the driver whereby pressure may be transmitted through said fluid to flex said diaphragm.

1,819,856. LOCOMOTIVE DRIVING BOX AND BEARING THEREFOR. WILLIAM E. WOODARD, Forest Hills, N. Y. Filed Jan. 12, 1928. Serial No. 246,106. 1 Claim. (Cl. 308—53.)



The combination of a locomotive driving axle having a journal and an adjacent portion of smaller diameter than the journal, a yoke-shaped driving box the legs of which are spaced sufficiently far apart to pass said journal, and a one-piece crown bearing in the box having sides which curve inwardly both above and below the horizontal center line of the journal to provide a substantial journal engaging portion adapted to receive horizontal thrusts but spaced sufficiently to pass said reduced portion, said bearing being of greater thickness both above and below than at said horizontal center line.

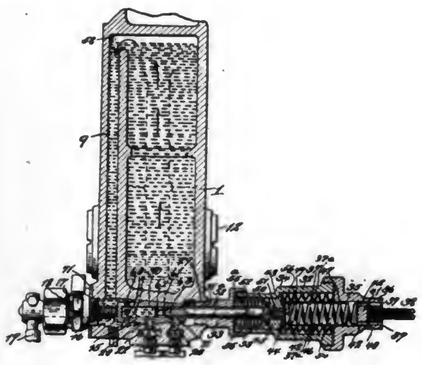
1,819,857. COLLAR. JOHN S. ABELES, Brooklyn, N. Y., and EDWARD LIND, New York, N. Y. Filed Jan. 10, 1931. Serial No. 507,965. 2 Claims. (Cl. 2—132.)



1. A collar having a member formed of a plurality of plies run, turned and stitched whereby a pocket is formed between the plies and between the two rows of stitching, whereby a member is run and stitched, one of said plies being slit and having the two edges thereof turned back and held in place by one of said lines of stitching, and a separate stiffening member positioned in said pocket from said slit to the end of the pocket and supported by the end of said pocket.

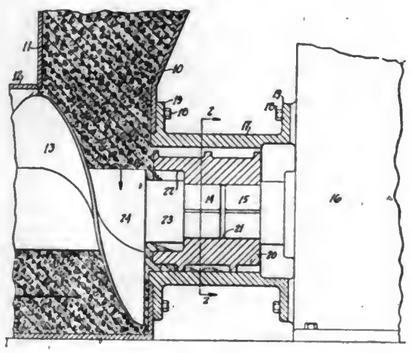
1,819,858. AUTOMATIC VARIABLE OIL CONTROL VALVE FOR LUBRICATORS. CHAUNCEY D. ALLEN, Philadelphia, Pa. Filed Apr. 5, 1929. Serial No. 352,812. 10 Claims. (Cl. 184—30.)

4. In an attachment for oil control valves on hydrostatic lubricators, the combination with an oil control valve having a passage for the reception of oil and provided with outlet ports, said attachment comprising a casing having an expansible oil chamber and an expansible steam chamber, one of the chambers being of greater area than the other, a spindle movable in the attachment casing and operatively associated with the outlet ports of the control valve, said spindle having a head interposed between the



two chambers, which are responsive to the variation of oil pressure on one side and steam pressure on the other side of the head, for regulating the position of the spindle with relation to the ports, thereby rendering the out flow of oil through the ports automatically variable.

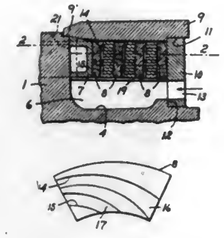
1,819,859. SHAFT COUPLING. THOMAS H. BANFIELD, Portland, Oreg., assignor to Iron Fireman Manufacturing Company, Portland, Oreg. Filed Aug. 20, 1928. Serial No. 300,791. 6 Claims. (Cl. 198—15.)



4. A coupling for feed worms having means for attaching a driving shaft to a feed worm, and having a spiral conveyor formed on the outer surface thereof and a sleeve forming the sole support for the coupling.

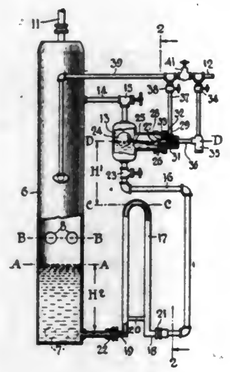
1,819,860. DYNAMO-ELECTRIC MACHINE. GEORGES BELFILS, Belfort, France, assignor to General Electric Company, a Corporation of New York. Filed Jan. 7, 1930, Serial No. 419,184, and in France Jan. 19, 1929. 2 Claims. (Cl. 171—207.)

1. A rotor for dynamo-electric machines having a slotted core structure reduced in diameter at the ends thereof, a winding arranged in the slots of said core structure and having end-turns extending axially of the rotor beyond the slots, said end-turns being spaced from the bottom of said rotor of reduced diameter to form an air passage,



and means including spacing members between said end-turns for impelling air to ventilate the winding, said spacing members having circumferentially and outwardly extending openings therein.

1,819,861. REFRIGERATION. JOHN G. BERGDOLL, York, Pa., assignor to York Ice Machinery Corporations, York, Pa., a Corporation of Delaware. Filed Dec. 20, 1930. Serial No. 503,847. 15 Claims. (Cl. 62—126.)



1. The combination with an evaporator, of means for maintaining a desired liquid level therein, comprising a liquid containing manometer; a valve controlling the supply of liquid refrigerant to the evaporator; operating means for said valve responsive to the height of the liquid in said manometer; a pressure transmitting connection between said manometer and a point within the evaporator below the liquid level therein; means for developing in said connection a vapor pressure at least equal to the head of the liquid refrigerant at said point; and means for varying the vertical height of the vapor filled portion of said pressure transmitting connection.

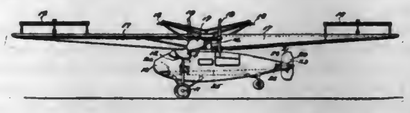
1,819,862. SEWING HOLDER. ESTHER BEAGSTEDT, International Falls, Minn. Filed July 30, 1929. Serial No. 382,227. 2 Claims. (Cl. 223—54.)

1. A device of the character described comprising a clamp adapted to be associated with a suitable support, a headed stud projecting from the clamp, a work-holder including a strap having one end swivelly connected with said stud, a coil spring surrounding the stud and exert-



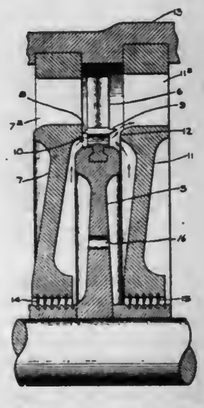
ing a pressure against the strap to hold the latter in any given position, and a work holding clamp carried by the other end of said strap.

1,819,863. HELICOPTER. MAITLAND B. BLEECKER, Hempstead, N. Y. Filed Feb. 15, 1927. Serial No. 168,332. 3 Claims. (Cl. 244—19.)



1. In a helicopter, aerofoils rotatable in a horizontal plane around a vertical axis, a fuselage below said aerofoils freely swingable around their axis of rotation, and a normally vertically disposed control surface mounted on the fuselage for rotating around the longitudinal axis of the fuselage, said control surface within and acted upon by the downwardly directed aerofoils airflow for controlling swinging of the fuselage.

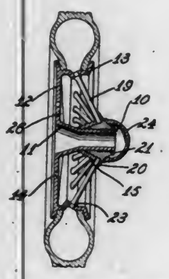
1,819,864. ELASTIC FLUID TURBINE. DAVID J. BLOOMBERG, Chelsea, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 24, 1930. Serial No. 438,311. 5 Claims. (Cl. 253—77.)



1. In an elastic fluid turbine having alternate rows of stationary and movable fluid directing elements providing a working passage for the fluid, skirts formed integral with

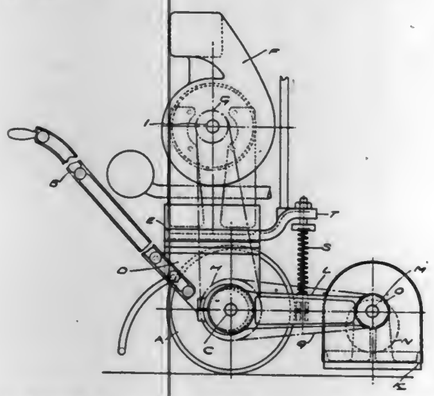
said elements to substantialy shield the working passage from cross currents, means comprising ventilating openings whereby leakage fluid may flow from the inlet side of said movable fluid directing elements to the outlet side, and means permitting the leakage fluid to reenter the working passage substantially parallel thereto.

1,819,865. STEEL STRUT WHEEL. WILLIAM T. BRENNEN, Bridgeport, Pa. Filed June 25, 1930. Serial No. 463,781. 1 Claim. (Cl. 301—62.)



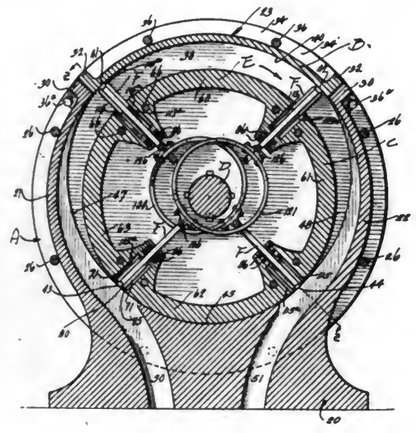
A vehicle wheel structure comprising a hub supporting a disk, a rim mounted upon the disk, a frusto-conical shaped member telescopically associated with the hub having pockets opening to the periphery of its outermost end, a sleeve member adjustably connected with the hub having a portion disposed for telescopic association to lockingly maintain the frusto-conical shaped member in position for use, struts projected within said openings for abutting engagement with the mentioned portion of the sleeve member at their innermost ends and engageable at their other ends with the rim, and a flange mounted upon the sleeve disposed at right angles to the pockets to overlie the outer sides of said struts for retaining same within said pockets.

1,819,866. TAMPING AND ROLLING MACHINE OPERATED BY VIBRATION. JAMES GRANT CAMERON, Aberfoyle, Scotland. Filed June 7, 1929. Serial No. 369,199, and in Great Britain June 27, 1928. 1 Claim. (Cl. 94—48.)



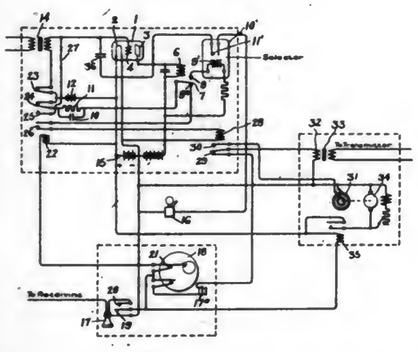
A tamping and rolling machine comprising a bracket, a shaft rotatably mounted in said bracket, rollers freely mounted on said shaft for supporting said bracket, a pair of arms freely mounted on said shaft at each side of the rollers, a cross-bracket connecting the arms together, a mental base having upstanding bearings supported by the free ends of said arms, a shaft freely carried by said bearings, an off-the-balance fly wheel keyed to said second shaft, means carried by said bracket for driving said first shaft, and a driving connection between the two shafts.

1,819,867. ROTARY ENGINE. CHARLES W. CARLTON, Syracuse, N. Y. Filed June 1, 1927. Serial No. 195,830. 3 Claims. (Cl. 121—87.)



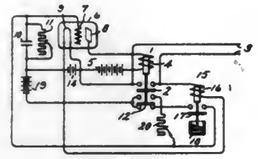
1. In a rotary engine a stator having a compartment therein with motive fluid inlet and outlet ports, a rotor in the stator compartment comprising a casing, pistons radially slidable in said casing, and said flexible spring rings pivotally connecting said pistons in pairs, said rings being oval shaped and having means thereon for adjustably receiving the pistons at various locations thereabout.

1,819,868. ELECTRORESPONSIVE DEVICE. EMMETT F. CARTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 8, 1924. Serial No. 754,482. 9 Claims. (Cl. 250—9.)



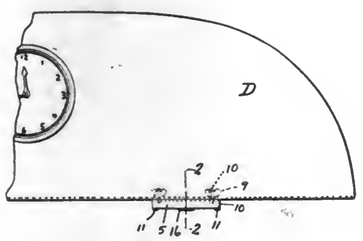
8. The combination in an electrical system of an electron discharge device having input and output circuits, a condenser, a source of potential and a resistance all connected in parallel in said input circuit, a relay which is responsive to the current in said output circuit, means for disconnecting the source of potential, from the input circuit, the hole being so arranged and proportioned that the relay will operate at a predetermined time interval after the source of potential has been disconnected from the input circuit, and additional means for applying electromotive force to the grid to cause instantaneous operation of said relay.

1,819,869. CONTROL SYSTEM. EMMETT F. CARTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Fled Oct. 22, 1925. Serial No. 64,276. 4 Claims. (Cl. 175—375.)



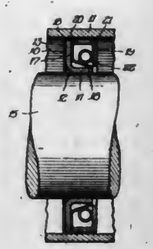
4. The combination of an electrical valve including a grid interposed between a cathode and anode, an energy storage device conected betwen said cathode and grid for controlling the conductivity of said valve, a control device connected betwen said cathode and anode, means responsive to operation of said control device in one direction for causing energy to be supplied to said storage means during one predetermined time interval, means responsive to operation of said control device to another position for causing energy to be supplied to said storage device during a different predetermined time interval, and means for dissipating the energy of said storage device at a predetermined rate.

1,819,870. IDENTIFICATION CARD AND LICENSE HOLDER. GEORGE C. CLARK, Indianapolis, Ind. Filed Dec. 16, 1929. Serial No. 414,463. 2 Claims. (Cl. 40—17.)



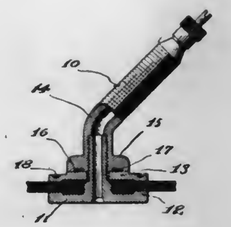
1. In an operator's license card and identification card receptacle of character described, an attaching plate, means for adjustably securing said attaching plate to a stationary part of a vehicle, said plate being provided on opposite longitudinal side edges thereof with longitudinally extending guide channels, said plate at one end thereof and extending transversely thereof being provided with a downwardly directed stop flange, a drawer slidably supported in said channels for sliding movement in a plane parallel to said plate, and the bottom wall of said drawer at the forward end theroef having a depression formed therein to provide exteriorly of the drawer a finger engaging lug to facilitate sliding movement of said drawer.

1,819,871. OIL SEAL. HAROLD A. CLARK, Northbrook, Ill., assignor to Chicago Rawhide Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed July 9, 1928. Serial No. 291,164. 4 Claims. (Cl. 288—1.)



1. In a seal, a flanged packing having an axially extending portion, an endless coil spring for constricting the packing about a shaft rotatable within the same, and means interposed between the spring and the packing for localizing the pressure of the spring at a point adjacent the edge of the axially extending portion of the packing.

1,819,872. INTERCHANGEABLE TIRE VALVE. GEORGE G. COOKE and MAX E. DAYTON, Detroit, Mich., assignors of one-third to Frederick W. Smith, Detroit, Mich. Filed July 18, 1927. Serial No. 206,669. 1 Claim. (Cl. 152—12.)

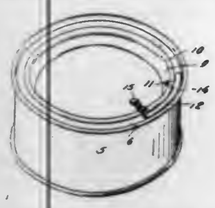


In a valve assembly for pneumatic tire tubes and the like, the combination with a plug having a base portion engageable with the inner side of the tube and having a stem portion extending through the tube, of a member non-rotatively mounted upon the stem portion aforesaid and engageable with the outer side of the tube, and a valve stem threadedly engaging the stem of the plug and having a portion engageable with the member to clamp the same against the tube, said member having a pair of slots therein adapted to receive a suitable tool for rotatively adjusting the plug to accurately position the valve stem.

1,819,873. RECEPTACLE OPENER. NICHOLAS P. COURTNEY, Passaic, N. J. Filed July 31, 1930. Serial No. 472,153. 6 Claims. (Cl. 220—43.)

1. In combination, a pair of separably connected members, and an element for separating the members, said

element comprising a shank provided with a laterally and intermediately disposed trunnion extending to one side



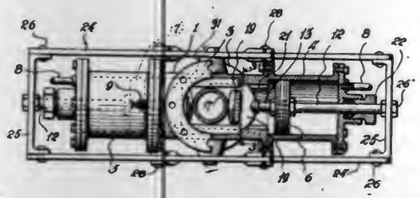
thereof journaled in one of the members so that by swinging the element one end thereof will impinge against the other member to pry the members apart.

1,819,874. HEEL FOR FOOTWEAR. JOHN CROOKSHANKS, Langside, Glasgow, Scotland. Filed May 2, 1929, Serial No. 359,843, and in Great Britain Dec. 18, 1928. 2 Claims. (Cl. 36—36.)



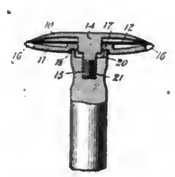
1. The combination of a heel having a recess in the base thereof, a series of slots around the outer edge of the recess and a hole formed centrally therein, a heel pad having a hole formed centrally thereof, a plate secured thereto adapted to fit into the recess and provided with a plurality of integral lugs around its periphery adapted to fit into the slots in the recess, and having a hole formed centrally thereof, and a screw adapted to pass through the central holes in the pad and the plate and to be screwed into the central hole in the heel.

1,819,875. SAFETY CASING HEAD FOR OIL WELLS. MARION STOKES CUNNINGHAM, Dallas, Tex. Filed May 24, 1930. Serial No. 455,181. 1 Claim. (Cl. 137—139.)



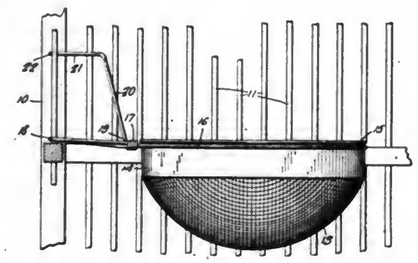
A safety casing head for controlling oil wells, said head formed with vertical and horizontal passages, a cylinder connected to each end of the horizontal passages, pistons and rods in each cylinder; the interior of the cylinders and the interior of the horizontal passages being of substantially the same diameter; a valve member carried by each of the piston rods, said valve member comprising a disk-like formation for fitting snugly the interior walls of the horizontal passages of the head and including a relatively flat body portion for engaging one half of a drill rod, longitudinal ledges formed on opposite sides of the interior walls of the horizontal passages of the head; longitudinal grooves in the peripheries of the disk-like formation and adapted to permit the latter to slide over the ledges to guide the valve members to and from engagement with the drill rod; and means in the cylinders for introducing steam or similar pressure on each side of the pistons.

1,819,876. SAFETY-RAZOR. LOUIS E. CURDES, Napoleon, Ohio. Filed Jan. 15, 1930. Serial No. 420,930. 3 Claims. (Cl. 30—12.)



1. In a safety razor, the combination of cooperative upper and lower blade clamping members, the upper member having a lower concaved face, and the lower member having an upper convexed face, said lower member being associable with the upper member so that the concaved face of the latter will oppose the convexed face of the former, for the purpose of clamping therebetween a flexible blade in a flexed condition to vary the angular dispositions of the cutting edges of the blade in relation to the edges of the clamping members when they are associated in the stated manner, and said lower member also being associable with the upper member so that the concaved face of the former will oppose the concaved face of the latter, said clamping members having co-operative means adapted for the purpose of clamping therebetween an inflexible blade, to obtain a different angular disposition of the cutting edges of the blade in relation to the edges of the clamping members when they are associated in the last stated manner.

1,819,877. BIRD NEST HOLDER. EDWARD DUMAS, Marquette, Mich. Filed Dec. 28, 1927. Serial No. 243,089. 1 Claim. (Cl. 248—20.)



A bird nest holder including a nest receiving member of circular formation, a resilient member bent in circular formation to frictionally engage the holder and having the end portions twisted about themselves adjacent the circular formation and extended to provide diverging and resilient arms having the ends bent in opposite directions to provide oppositely disposed hooks to engage the bars of a cage, and a second resilient member having one end twisted about the twisted portion of the first member and extending upwardly and outwardly from the holder and having the free end bent to engage the bar of the cage located between the bars engaged by the first mentioned hooks.

1,819,878. PROCESS OF PRODUCING LOW VISCOSITY CASEIN. HENRY V. DUNHAM, Mount Vernon, N. Y., assignor, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 15, 1922. Serial No. 607,221. 10 Claims. (Cl. 134—20.)

1. A process producing a mobile solution of casein, which comprises treating precipitated casein out of contact with the bulk of the liquid of origin, with a dilute solution of an acid material, the ratio of actual acid to water in the mixture being over 1.25%, and the amount of such acid material corresponding to between about 2% and about 5% of phosphoric acid, based on the amount of casein, such acid material, in the amount and concentration used, being incapable of dissolving the casein, drying the product and thereafter treating the product with a casein solvent.

1,819,879. TREATMENT OF CASEIN. HENRY V. DUNHAM, Bainbridge, N. Y., assignor, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1929. Serial No. 352,053. 13 Claims. (Cl. 134—20.)

1. The process of reducing the viscosity characteristics of cooked casein which comprises treating a cooked casein, prior to treatment with an alkaline solvent for casein, with a small percentage of a fluorine-containing mineral acid.

1,819,880. PROCESS OF TREATING RENNET CASEIN AND PRODUCT THEREOF. HENRY V. DUNHAM, Bainbridge, N. Y., assignor, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 24, 1929. Serial No. 357,890. 13 Claims. (Cl. 134—20.)

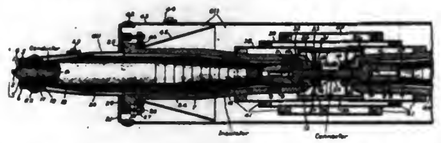
3. In the process of making alkaline solutions of casein, the step which comprises allowing rennet casein to stand for several hours with water in amount not considerably less than the actual casein and with an amount of a fluorine-containing mineral acid equal to about 1½ to 2%, based on the weight of the actual casein, prior to treatment with alkaline solvent for casein.

1,819,881. SEMISTOP JOINT FOR FLUID FILLED CABLES. EUGENE D. EBY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 22, 1927. Serial No. 162,888. 18 Claims. (Cl. 173—268.)



2. A fluid-filled cable comprising insulated conductor sections, joints for uniting similar conductors of the sections, a sheath for each section, a chambered casing for the joints, cork disks located near the ends of the casing to prevent transfer of fluid from one part of the cable to another, and means formed by the casing walls for compressing the disks on the conductors by radial pressure.

1,819,882. INSULATED CABLE JOINT. EUGENE D. EBY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 18, 1927. Serial No. 213,914. 18 Claims. (Cl. 173—268.)



2. In an insulating joint, the combination of sheathed oil-filled cables, an oil stop comprising a tapered insulating shell adapted to enclose with clearance a sheath stripped cable end, a terminal cap having oil passages therethrough connected to the conductor of said cable and provided with a stud extending through an end of said insulating shell, means for connecting the respective ends of said tapered insulating shell by oil-tight joints with said terminal and the sheath of said cable, and provisions to introduce oil into said insulating shell.

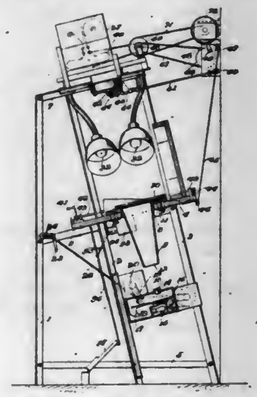
5. In an insulating joint for sheathed oil-filled cables, the combination of insulated sleeved oil stops respectively adapted to enclose and oil seal the sheath stripped ends of two cables to be joined, terminal studs connected to the conductors of said cables and extending through the ends of the respective oil stops, metal disks connected radially to said terminal studs, and an electrostatic shield surrounding and electrically connected to said metal disks.

8. An end stud for oil-filled cables having an enlarged head at one end and a threaded shank at the other, said head having a stepped axial bore in the end opposite the threaded shank and oil holes extending from the inner end of said bore through the side walls of said head.

10. In an insulating joint, the combination with two sections of oil filled sheathed cable, of means for connecting the conductors thereof together, an oil container disposed about the said connecting means comprising a metal cylinder and two metal rings connected to the ends thereof and to the sheaths of the respective cable sections, and conical ground shields disposed within said oil container and connected at their smaller ends to the respective metal rings,

14. In an insulating joint, the combination of two fluid filled cable sections provided with connectors, the insulation adjacent the ends of said cable sections being tapered toward each other, tapered insulating shells enclosing with clearance the insulation of the respective cable ends and each secured at its ends by fluid-tight joints to the connector and the cable sheath, a metal casing secured to the sheaths of both cable sections, and a metal cylinder within said casing connected to the cable connector and overlying the adjacent ends of said insulating shells.

1,819,883. METHOD AND MEANS FOR PRODUCING FILMS. MAX FLEISCHER, Brooklyn, N. Y., assignor to Out of the Inkwell Films, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 3, 1925. Serial No. 20,440. 11 Claims. (Cl. 88—16.)



1. The method of producing a composite negative for cinematography which comprises forming a projection film of a background having moving elements, projecting the first frame of said film on a screen, masking the projected frame except that portion defining the initial pose of an element disclosed as being in action, successively photographing said element on a complete series of raw stock frames, projecting on said screen a series of successive frames of the projection film disclosing poses of the element advanced by increments, masking the action portion of each frame of the projection film by a silhouette defining the initial pose of said element, photographing the frames as they are projected in succession on a number of the raw stock frames on which the photographs of the initial pose were registered, projecting on the screen an-

other frame disclosing the element in a pose remote from the initial pose, masking the projected frame except that portion defining the element in the advanced pose, photographing the unmasked element on the remainder of the raw stock frames on which are registered photographically the initial pose of the element in action, then masking said element in such advanced pose and also in the initial pose, projecting succeeding frames on the screen and consecutively photographing the projected frames thus masked on the same negatives on which are photographically registered the initial and advanced poses of the element.

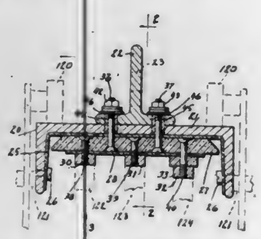
10. A method of producing a composite negative for cinematography which comprises a projection film of a background involving moving elements, projecting an initial frame of said film on a screen, applying a transparent sheet to the screen, manually producing a mark on the transparent sheet capable of being photographed, photographing by reflected light the mark on all of the raw stock frames of the negative, photographing the frames of the projection film which correspond to the position of the moving object as represented by the mark, projecting other frames of the projection film in succession on the screen, applying marks consecutively on transparent sheets to designate the continuing path of the elements and photographing the marks applied in succession by transmitted light while photographing by the transmitted light the background corresponding to the continuing path of the elements on the raw stock frames of the negative.

1,819,884. NOSTRIL INSERT. FERNANDO FORÉS, Manila, P. I. Filed Apr. 14, 1930. Serial No. 444,296. 1 Claim. (Cl. 128—148.)



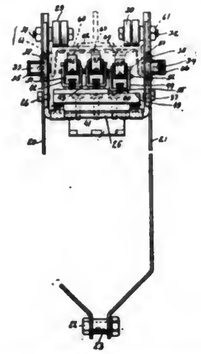
A nostril insert comprising an oval-shaped rim having portions removed upon diametrically opposite sides and inner periphery thereof to prevent distortion of the natural shape of the nostrils, an annular flange inwardly directed from the other peripheral edge, a filter having upper and lower layers disposed within the rim, a ring reposing upon the upper surface of the upper layer and forcing the lower layer against said flange, and the lower layer of the filter having the side edges thereof extending peripherally of the upper layer and ring and reposing against the upper surface of the latter.

1,819,885. DUCT FOR CURRENT DISTRIBUTING SYSTEMS. HARRISON J. L. FRANK and WILLIAM A. HARPER, Detroit, Mich., assignors to Bulldog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Filed July 28, 1930. Serial No. 471,391. 22 Claims. (Cl. 191—34.)



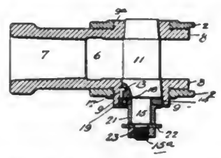
1. In a current distribution system, current distributing means comprising an elongated, inverted U-shaped metallic channel member, an insulating liner therefor, spaced insulating supports in and bolted to said channel, and bus bars bolted to said supports.

1,819,886. TROLLEY FOR CURRENT DISTRIBUTING SYSTEMS. HARRISON J. L. FRANK and WILLIAM A. HARPER, Detroit, Mich., assignors to Bulldog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Filed July 28, 1930. Serial No. 471,382. 27 Claims. (Cl. 191—57.)



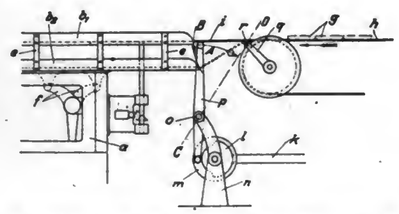
1. A current collecting trolley including a pair of side plates, a contact support secured to and between said plates, contacts between the plates on said support, and trolley supports on and between said side plates, said contacts including collector wheels adapted to rotate against bus bars.

1,819,887. CROSSHEAD. LAWFORD H. FRY, Burnham, and ELLWOOD M. SHANNON, Bala, Pa. Filed Mar. 15, 1930. Serial No. 436,207. 6 Claims. (Cl. 308—3.)



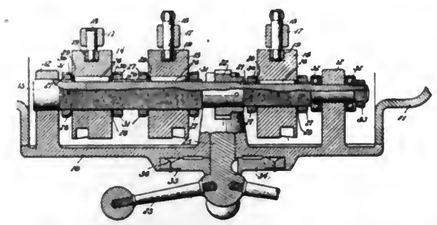
1. The combination in a cross-head, of a body portion having gibs secured thereto; a knuckle member having trunnions pivotally mounted in the body portion; and a wrist-pin extending through the knuckle member.

1,819,888. SHAKER MACHINE WITH AUTOMATIC MOLD TRANSPORT FOR SHAKING-DOWN CHOCOLATE OR SIMILAR MASSES IN THE MOLDS. GEORG GÄBEL, Dresden, Germany. Filed Sept. 4, 1930, Serial No. 479,754, and in Germany June 5, 1929. 2 Claims. (Cl. 107—8.)



1. In a device of the character described, a plurality of superimposed shaker tables, and means for feeding molds to said tables, including a horizontally pivoted bridge-plate, a rocking lever engaged with the under face of said plate and means for rocking said lever whereby to alternately dispose the forward edge of said plate in registration with said tables.

1,819,889. SPEED CONTROL MECHANISM. ALFRED C. GETZ, Sidney, Ohio. Filed May 18, 1928. Serial No. 278,833. 4 Claims. (Cl. 74—59.)



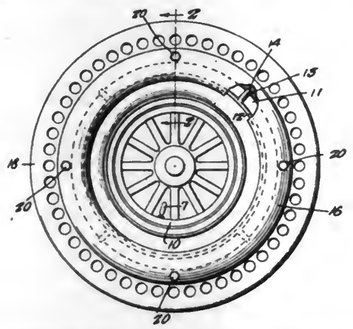
1. Control mechanism for the clutches of change speed mechanism for lathes or machine tools comprising, in combination, a face plate removably secured to the lathe head and having spaced integral inwardly extending brackets; a cam shaft journaled in said brackets; screw threaded portions on the shaft; a plurality of cams adjusted on and positively locked to said threaded portions; and manual means extending through the face plate to operate the cam shaft, said plate and all of said control mechanism being freely removable as a unit.

1,819,890. PISTON RING. CHARLES J. GLEASON, Augusta, Ga. Filed July 26, 1930. Serial No. 470,939. 1 Claim. (Cl. 74—109.)



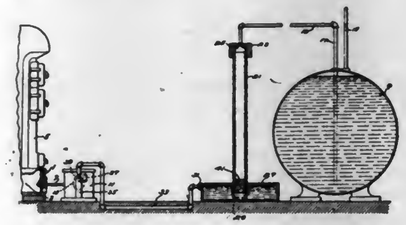
A one-piece piston ring comprising overlapping coils connected by a diagonal bend, the mutually contacting sides of the coils having matching recesses to provide lubricant grooves.

1,819,891. TIRE. FREDERICK DEAN GOODLAKE, Memphis, Tenn. Filed Jan. 21, 1929. Serial No. 334,007. 1 Claim. (Cl. 152—33.)



In a device of the class described, a tubular member of balloon tire construction, annular protecting elements surrounding the balloon tire and extending along the sides thereof, clamping means for the annular elements, a tread mounted on the annular elements, and means including interengaging devices extending annularly and transversely of the tire and the annular elements, for preventing creeping action, said clamping means producing pressure, through the protecting elements, on the sides of the tread, and producing pressure on the tire at points between the interengaging devices having an annular direction and that diameter of the tire having a direction parallel with the axis of rotation of a wheel mounting the tire, the annular interengaging devices excluding moisture intermediate of the pressure zones specified, and being positioned near the edges of the protecting elements.

1,819,892. FUEL FEEDING APPARATUS FOR LIQUID FUEL BURNERS. GEORGE E. GOODRIDGE, Reading, Mass., assignor to Arthur H. Ballard, Incorporated, Boston, Mass, a Corporation of Massachusetts. Filed Aug. 16, 1927. Serial No. 213,281. 6 Claims. (Cl. 103—1.)

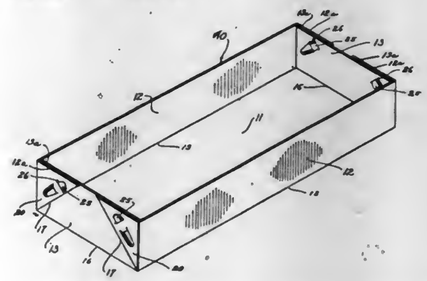


1. In a liquid fuel feeding system, the combination with a main vented fuel reservoir, of a pump positioned at a level below the level of the fuel in said reservoir, an intermediate, substantially air-tight, receiving chamber provided with a reservoir suction conduit having one end extending into said main reservoir, its opposite end connected to said receiving chamber and an intermediate portion located above the fuel level in the main reservoir and having an effective cross-sectional area less than that of the chamber, the chamber being arranged to terminate at its bottom in an enlarged settling space below the level of the pump intake and provided thereat with a cleaning opening, and a pump suction conduit connected with said intermediate chamber at a point above the bottom of said settling space but below the pump intake and having an effective cross-sectional area no greater than that of the reservoir suction conduit, thereby to prevent the formation of a siphon through said intermediate chamber.

1,819,893. HEAT INSULATION MATERIAL AND COMPOSITION. HAROLD W. GREIDER, Plymouth Meeting, Pa., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Apr. 18, 1929. Serial No. 356,297. 18 Claims. (Cl. 106—18.)

1. Heat insulation material employing in its composition magnesium hydroxide precipitated from basic magnesium carbonate solution.

1,819,894. TRAY. WILLIAM WALTER HARTMAN, Los Angeles, Calif. Filed July 15, 1930. Serial No. 468,057. 2 Claims. (Cl. 229—31.)



1. A rectangular tray consisting of a bottom and substantially vertical marginal walls thereabout, said tray being folded into shape from a single rectangular sheet of

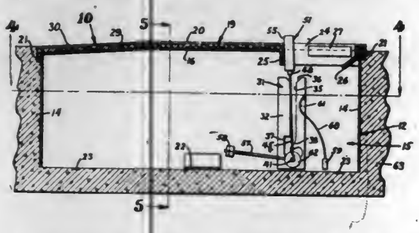
material, portions of the material from which adjacent vertical walls are formed, being folded upon one another at a corner of the tray to form a flap, said flap being bodily folded against one of said walls thereby forming a triple thickness of material locally through said flap and adjacent wall, and interlaced triple ply fastening means formed integrally from the material of said tray for strongly securing each flap to its adjacent wall, said triple ply fastening means comprising three overlapping tongues formed from said triple thickness of material consisting of the two flap thicknesses and the adjacent wall thickness, the said three tongues being interlaced as a unit through three overlapping slits formed respectively in both folds of said flap and in the adjacent wall, thereby forming the strong three ply fastening for holding the flap against the adjacent tray wall.

1,819,895. PAPER ROLL. WILLIAM V. HUNT, North Vancouver, British Columbia, Canada, assignor to International Airex Ltd., Vancouver, British Columbia, Canada. Filed Nov. 4, 1927. Serial No. 231,065. 5 Claims. (Cl. 242—55.2)



1. In a paper roll adapted for mounting on a paper dispensing device, said roll having an open ended slot extending transversely thereof and means adjacent the inner end of the slot capable of being engaged by a part of the dispensing device on attempt being made to withdraw the roll therefrom.

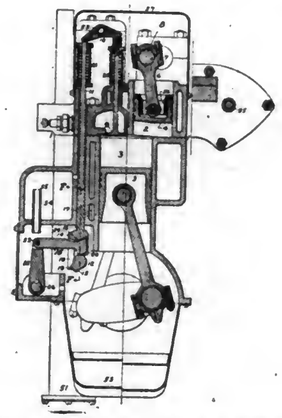
1,819,896. AUTOMATIC GOLF TEE. RUSH W. IRISH, Canon City, Colo., assignor of one-half to John P. Thomas, jr., Canon City, Colo. Filed Aug. 27, 1929. Serial No. 388,757. 7 Claims. (Cl. 273—33.)



1. In an automatic golf tee, and in combination with a teeing surface, a stem, said stem having a ball supporting portion thereon, means to support said stem for pivotal movement and means whereby the axis of pivotal movement of the stem may be shifted vertically to vary the position of the ball supporting portion.

1,819,897. INTERNAL COMBUSTION ENGINE. HAMILTON JOHNSON, Baton Rouge, La. Filed Oct. 26, 1929. Serial No. 402,664. 14 Claims. (Cl. 123—48.)

1. In a machine for developing mechanical energy by the compression, combustion and expansion of a mixture of air with an inflammable gas or vapor, the combination of a piston against which the medium exerts its expansive pressure reciprocating in a cylinder fitted with a head containing an auxiliary cylinder communicating at its inner end with the main cylinder and closed at its outer end by a piston which may be moved axially in either direction and to any desired extent while the machine is in operation so as to vary the volume of this auxiliary cylinder which forms part of the clearance volume of the main cylinder, a source of mechanical energy independent of



that developed by the machine itself and means for applying this energy so as to obtain the axial motion of the piston to the auxiliary cylinder.

1,819,898. APPLICATOR. WALTER LAWRENCE JOHNSON, Lincoln, Nebr. Filed May 28, 1930. Serial No. 456,483. 1 Claim. (Cl. 128—223.)

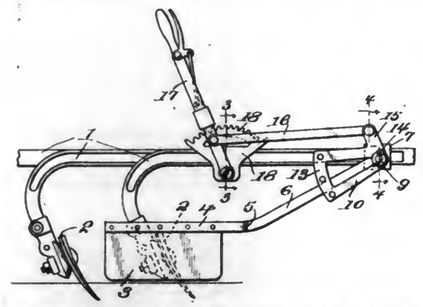


An applicator for discharging measured quantities of semi-soft medicament into body cavities, said applicator including a bulb and nozzle of a capacity for temporarily retaining a predetermined quantity of the semi-soft medicament, said bulb being provided with a screw threaded aperture for releasable connection with a collapsible tube of the medicament whereby pressure on the collapsible tube will fill said bulb and said nozzle with the medicament, and a screw threaded plug closure for the aperture of said bulb, said nozzle being formed from soft and pliable material and having walls of decreasing thickness from its base to its tip and being of a predetermined length to limit the distance of its insertion into the body cavity.

1,819,899. CULTIVATOR GUARD. JOSEPH H. KOEBEL, Lowell, Iowa. Filed Feb. 15, 1929. Serial No. 340,163. 1 Claim. (Cl. 97—188.)

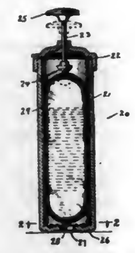
A cultivator guard including a bracket secured to the beam of a cultivator and having a pivot pin, a substantially triangular shaped yoke having the apex thereof apertured to receive the pivot pin, relatively spaced elements secured to the yoke at the opposite end thereof from the connection with the pivot pin, a guide plate connecting the elements and spaced from the yoke to provide a vertical guide, a bar having one end mounted on the pivot pin and

extending rearwardly through the guide, said bar being bent laterally intermediate the ends thereof to offset the remaining portion of the bar from that portion received by the guide, a guard plate secured to the offset portion of



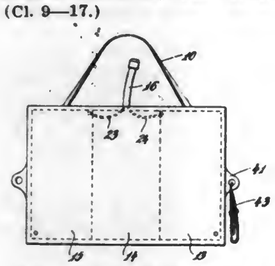
the bar and supported laterally of the beam, a radially extending arm on the apex of the yoke, and a lever means for vertical adjustment of the guard plate connected to the arm and mounted on the beam.

1,819,900. FUMIGATING DEVICE. EDWARD THORNDIKE LADD, Lewiston, N. Y., assignor to Isco Chemical Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Oct. 26, 1929. Serial No. 402,613. 2 Claims. (Cl. 167—3.)



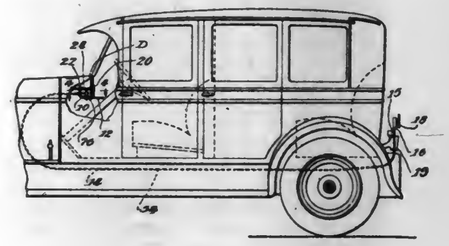
2. A fumigating device, comprising a chest, a cover for the chest, a fumigating unit carried by the chest, comprising a casing having an outlet opening, a screen disposed over the opening, a glass ampoule contained within the casing and resting upon the screen, a cap for the casing, a slidable plunger carried by the cap having a foot for engagement with the ampoule, and a button carried at the upper end of the plunger for engagement with the cover of the chest when the same is moved to its closed position, whereby the ampoule is broken.

1,819,901. LIFE SAVING VEST. ALBERT LEHMANN, Brooklyn, N. Y. Filed Oct. 16, 1930. Serial No. 489,036. 1 Claim. (Cl. 9—17.)



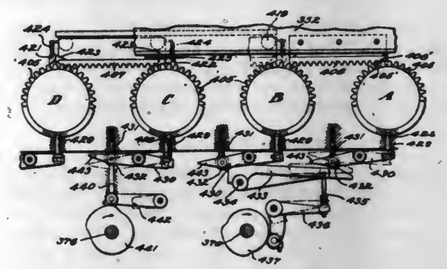
In a device of the class described, a pair of plates having their marginal edges secured to each other and secured intermediate their length, said plates forming chambers, a main inflation tube said chamber being arranged side by side, said structure having an opening therein, a ball normally closing said opening, a straight resilient finger secured to said structure and said ball, said finger yieldably retaining said ball in normally closed position over said opening, said resilient finger holding said ball definitely in position aligned with said opening when seated or unseated, a shank on said ball loosely mounted in said opening of said structure, and a push button mounted on said shank and adapted to be depressed to unseat the ball for deflating said outer chambers.

1,819,902. AUTOMOBILE SIGNALING DEVICE. THOMAS H. LESTER, Highland Park, Ill. Filed Mar. 18, 1931. Serial No. 523,457. 13 Claims. (Cl. 116—47.)



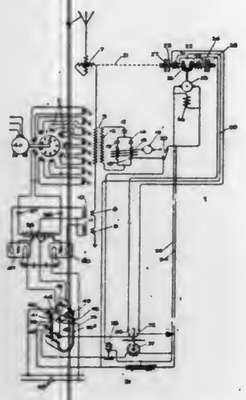
1. The combination of a signal arm, a shaft therefor, a pinion on said shaft, a flat rack bar meshing with said pinion, a pair of outwardly turned ledges on said rack bar, a collar supported therebetween, a flexible shaft, an operating lever, said flexible shaft extending from said operating lever to said collar, and means for fastening said shaft to said collar to reciprocate said rack.

1,819,903. GLASS SHAPING MACHINE. EDWARD H. LORENZ, West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original application filed Aug. 8, 1921, Serial No. 490,567. Divided and this application filed May 16, 1928. Serial No. 278,296. 9 Claims. (Cl. 49—9.)



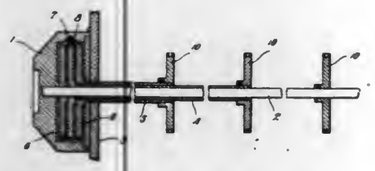
8. A glassware forming machine comprising a rotatable turret, an annular series of radially disposed bearings carried by said turret, a drum in each of said bearings, a mold carried by each drum, each drum being provided with a seat, spring thrown plungers carried by said turret and movable therewith respectively for engaging each seat, and a movable cam independent of and beneath said turret and effective at a predetermined place in the turret rotation for successively withdrawing each plunger from its seat and retaining it in an inoperative position during the inversion of said drum and said mold, said cam being effective successively to withdraw said plungers from their seats irrespective of whether the turret be moving or stationary.

1,819,904. ANTENNA REGULATOR. JOSEPH E. LOVE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 12, 1927. Serial No. 212,574. 12 Claims. (Cl. 250—40.)



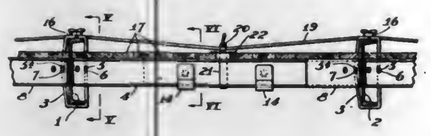
1. In combination, an antenna, regulating means and detuning means therefor, means for controlling said regulating means responsively to impedance variations in said antenna, and means for rendering said regulating means unresponsive to operation of said detuning means.

1,819,905. RADIO APPARATUS. JAMES LYONS, Jr., New York, N. Y., assignor of one-half to Lawrence W. Luellen, Mountain Lakes, N. J. Filed Jan. 28, 1927. Serial No. 164,313. 11 Claims. (Cl. 34—7.)



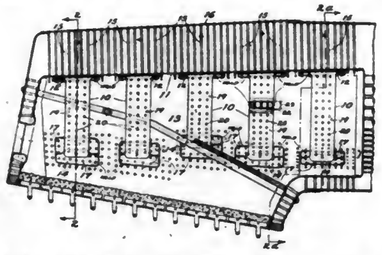
1. In apparatus of the class described, the combination, with a plurality of condensers, of a single general control device therefor, a plurality of gears carried by the general control device, and independently movable means for actuating the gears for effecting refinement control.

1,819,906. FORM FOR SUPPORTING MONOLITHIC SLABS OF CEMENTITIOUS MATERIAL. HERBERT E. MARKS, Glen Osborne, Sewickley, Pa., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 3, 1928. Serial No. 258,842. 2 Claims. (Cl. 25—131.5.)



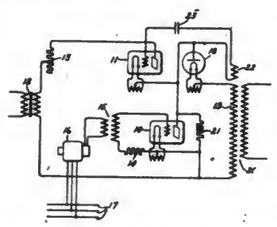
2. A form for supporting a monolithic slab of cementitious material, comprising spaced beams, wire loops enclosing said beams; the ends of said loops being secured together above said beams, integral, laterally extending projections formed on said wire loops intermediate the top and bottom thereof, and platform supporting bars extending from one to another of said beams, and provided at their ends with openings through which said laterally extending projections extend for supporting the bars against downward and upward movements.

1,819,907. CROWN SHEET SUPPORT FOR LOCOMOTIVE FIREBOXES. JESSE C. MARTIN, Jr., Los Angeles, Calif. Filed Apr. 2, 1930. Serial No. 440,961. 8 Claims. (Cl. 122—68.)



5. In a crown sheet supporting structure for a locomotive fire box, in combination, an inner side sheet and a crown sheet, a hollow water carrying and crown sheet supporting column having its lower end secured to and opening through the side sheet adjacent its lower portion and its upper end secured to and opening through the crown sheet at a point spaced from the side sheet, the axis of said column continuously curved between its ends upon a single radius of curvature concave towards the connected sheets.

1,819,908. ELECTRIC TESTING CIRCUIT. HAROLD T. MASER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1930. Serial No. 485,675. 22 Claims. (Cl. 250—27.)



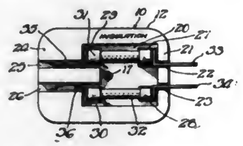
1. The method of testing an electric valve provided with an anode and a cathode which comprises passing between said anode and cathode for one interval of time a relatively low potential current of the same order of magnitude as the rating of the valve and impressing between said anode and cathode for a second interval of time a potential of opposite polarity and of the same order of magnitude as the inverse potential rating of the valve.

1,819,909. BED SPRING BRACE. VINCENZO MASSACESE, New York, N. Y., assignor, by mesne assignments, to Manhattan Spring & Couch Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 20, 1928. Serial No. 271,583. 3 Claims. (Cl. 5—262.)



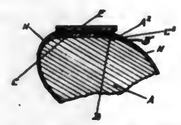
1. In a spring structure including a supporting frame having parallel side rails and an upper side edge reinforcing member above each rail, coiled spring members supported by the said side rails and attached to the said side edge reinforcing members, a bracing means for the members comprising a rigid cross bar having upwardly offset terminals at the opposite ends rigidly connected respectively with the reinforcing members of the opposite sides of the structure, and oppositely arranged resilient contractile connections between the opposite ends of the cross bar and the side rails respectively and normally parallel with said crossbar for resiliently maintaining the cross bar centrally with respect to the side rail whereby the coiled springs are tensioned against downward movement and lateral displacement.

1,819,910. ELECTRICAL ATTACHMENT PLUG. PHILIP MATTIA, Chicago, Ill. Filed May 27, 1929. Serial No. 366,428. 1 Claim. (Cl. 200—115.5.)



A receptacle for cartridge fuses, comprising a body of insulating material formed from cooperating upper and lower sections, said sections having cooperating recesses formed in the abutting surface thereof, the greater portion of said recesses being disposed rearwardly of the middle of said body thereby defining cooperating flanges at the rear of said sections, the lower of said flanges having a pair of aligned grooves formed therein opening exteriorly and communicating with said recesses, substantially U-shaped clip members mounted in the recess in the lower of said sections in spaced apart relation, said U-shaped members having the bight portions thereof secured to said lower section and having the arms thereof directed upwardly, substantially L-shaped contact members, said L-shaped members having the stem portions thereof disposed in said grooves and extending exteriorly of said body to provide male connecting elements, the foot portions of said L-shaped members being secured to said U-shaped members, the lower of said sections having grooves therein aligned with said first named grooves but extending in the opposite direction from said recesses, a second pair of substantially U-shaped clip members mounted in said lower section adjacent the inner ends of said last named grooves, said second named U-shaped clip members having the bight portions thereof secured to said lower section and having the arms thereof directed upwardly parallel to the arms of said first named clip members, a second pair of substantially L-shaped members, said second named L-shaped members having arcuated resilient stem portions disposed in said second named grooves to provide female connecting elements, the foot portions of said second named L-shaped members being secured to said second named U-shaped members, and means for detachably interconnecting said sections, said clip members being adapted to releasably hold the end portions of cartridge fuses.

1,819,911. METHOD OF LASTING SHOES. RICHARD B. MCCARTHY, Swampscott, Mass., assignor to Attlast Company, Inc., Boston, Mass., a Corporation. Filed Feb. 6, 1930. Serial No. 426,401. 2 Claims. (Cl. 12—142.)



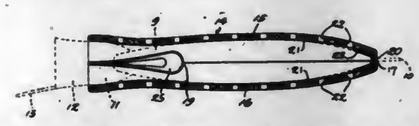
1. The method of making close shank shoes, which comprises applying to the bottom of the last an insole substantially coextensive with said bottom and supporting the inside shank area only of the insole upon the last so as to bring the outer surface of said area substantially flush with the adjacent lateral shank surface of the last, and attaching an upper to the insole with the inner shank portion of the upper applied to the substantially unbroken surface formed partly by the insole and partly by the last.

1,819,912. GOLF BAG UMBRELLA. HILDRED MCGAFFEY, Carmel, N. Y. Filed Mar. 24, 1931. Serial No. 524,998. 6 Claims. (Cl. 135—16.)



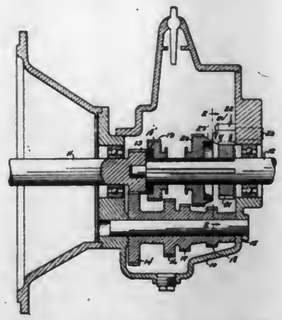
1. In a golf bag umbrella, a collapsible member normally positioned in a chamber in a golf bag, said umbrella being provided with a resilient rim, a covering, and means for receiving the handle of a golf stick to serve the purpose of a standard.

1,819,913. COVER FOR CONTAINERS. THOMAS W. MILLER and ARTHUR D. GREENE, Ashland, Ohio, assignors to The Faultless Rubber Company, Ashland, Ohio, a Corporation of Ohio. Filed Aug. 18, 1930. Serial No. 476,218. 19 Claims. (Cl. 150—52.)



1. A pliable heat-transfer-retarding receptacle jacket, comprising pliable rubber sponge, having the outer surface of the rubber sponge exposed to form the outer surface of said jacket, and having said outer surface of said rubber sponge in cut section, to provide for said jacket an outer surface clinging and pleasant to touch.

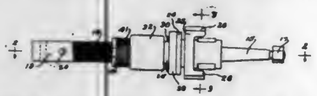
1,819,914. TRANSMISSION CHOCK FOR AUTOMOBILES. WILLIAM GORDON MILLER, Bellevue, Pa. Filed Mar. 25, 1929. Serial No. 349,836. 1 Claim. (Cl. 192—4.)



In combination with a transmission mechanism of an automobile including a drive shaft and a driven shaft, and forward speed gearing and reverse gearing, means to selectively adjust the gearing to engage either the forward or reverse gears, a ratchet wheel carried by the

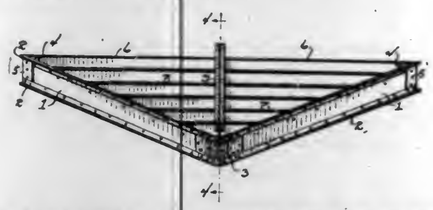
driven shaft, a pawl cooperating with said wheel to lock the shaft against reverse movement, said pawl including a pivot pin projecting from one longitudinal edge and adjacent one end thereof and journaled in the adjacent wall of the transmission casing, said pawls having a rounded longitudinal edge portion adjacent its opposite end, and means carried by the reverse gearing to cooperate with the rounded edge portion of the pawl to release the driven shaft when the reverse gears are engaged.

1,819,915. BOILER-FLUE ROLLING APPARATUS. ROLLA O. MORRISON, Chicago Heights, Ill. Filed Feb. 25, 1929. Serial No. 342,562. 3 Claims. (Cl. 153—82.)



1. In a device of the class described, a roller supporting member having openings therein in which rollers may be confined for lateral movement, a mandrel having a tapered portion adapted to be disposed in said roller supporting member whereby the tapered portion thereof may engage said rollers to impart lateral movement thereto as said mandrel is moved through said housing, a nipple structure connected to said roller supporting housing, a coupling rotatably connected to said nipple structure, and means connected to said coupling having screw-threaded engagement with a portion of said mandrel, said mandrel being adapted to be rotated to cause advancement thereof, said coupling and said nipple being interconnected such that rotative movement imparted to said mandrel will not be imparted to said roller supporting housing and such that rotative movement imparted to said roller supporting housing will not be imparted to said mandrel.

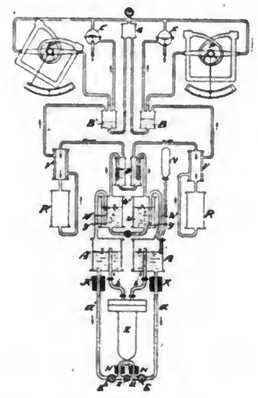
1,819,916. FORM. MARTIN E. MURPHY, West Palm Beach, Fla. Filed Feb. 19, 1930. Serial No. 429,707. 5 Claims. (Cl. 25—118.)



1. A form for sea wall buttresses constructed of metal and which is substantially V-shaped in plan and arranged at an inclination, the side members comprising risers, spaced transversely arranged ribs secured to the risers adjacent to the top portions thereof, upwardly disposed angularly arranged plates centrally secured to the ribs, channeled members fixedly secured to the plates and having their upper and lower ends disposed at opposite and substantially horizontal angles, and plates fixedly secured to the outer ribs and to the central or nose portions of the risers and likewise fixedly secured to the ends of the channeled members.

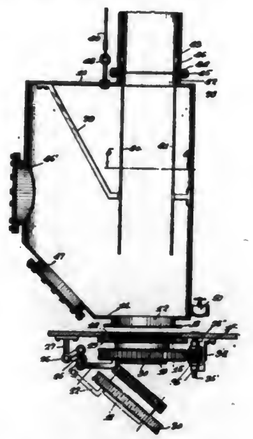
1,819,917. MEANS FOR REGULATING THE CIRCULATION OF THE ELECTROLYTE IN PRESSURE DECOMPOSERS WITH A SEPARATE CIRCULATION OF THE ANOLYTE AND CATHOLYTE. HANS NIEDERREITHER and WALTER ERNST, Munich, Germany, assignors to the Firm Lawaczeck Gesellschaft mit beschrankter Haftung, Berlin, Germany. Filed Oct. 9, 1930. Serial No. 487,624, and in Germany Oct. 2, 1928. 4 Claims. (Cl. 204—5.)

1. In combination, a high pressure electrolyzer, a reservoir in communication with the said electrolyzer adapted to supply electrolyte to the said electrolyzer, heating and cooling means adapted to regulate the circulation of the electrolyte and having separate circulation means for anolyte and catholyte, pressure regulating means responsive to pressure differences existing between the gases evolved from the anode and cathode portions of the said



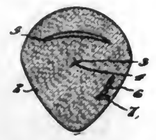
electrolyzer, and a high pressure purification and collection system in communication with the said electrolyzer, having additional pressure regulating means disposed therein, responsive to pressure differences existing between the gases originating in the said anode and cathode portions of the said electrolyzer.

1,819,918. APPARATUS FOR RESCUING CREWS OF SUBMARINES. CHARLES E. OLSON, Bridgeport, Conn. Filed July 23, 1928. Serial No. 294,655. 1 Claim. (Cl. 61—69.)



In an apparatus of the class described, a lower tube section and housing having manholes in a plurality of walls extending at an angle with each other, additional tube sections connected with that first named, car guiding-rails extending thru said sections, a structure having a hatch-way for connection with one of the man-holes of the housing, means for closing the hatchway, and rotatable means for releasing the closing means from the interior and exterior of the structure, the rotatable means including intermeshing elements one of which is tiltable incident to the closing movement, and a prerequisite thereof.

1,819,919. THERMOMETER. CHARLES R. PALMER and CURTIS P. MITCHELL, Cincinnati, Ohio, assignors to The Palmer Company, St. Bernard, Ohio, a Corporation of Ohio. Filed July 26, 1929. Serial No. 381,152. 10 Claims. (Cl. 73—52.)



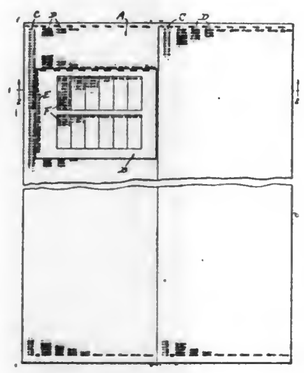
8. A thermometer tube formed to provide a lens portion and a duct formed with a relatively flattened wall, the duct adapted to contain a temperature responsive fluid having a light reflecting surface, a color stripe associated with the tube and so arranged in relation to the lens and the flattened wall of the duct that a ray of light traveling from the stripe to the flattened wall will be reflected by the temperature responsive fluid through the lens.

1,819,920. WINDOW SHADE BRACKET. EDWARD REUKAUF, Jr., Philadelphia, Pa., assignor to Carey-McFall Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 2, 1930. Serial No. 418,051. 5 Claims. (Cl. 156—24.)



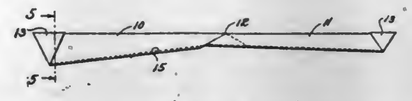
4. A one-piece hooded bracket, for supporting the roller of a window shade and the like, comprising a single sheet metal stamping consisting of a body portion, and a tongue formed integral with and extending inwardly from the edge of said body portion, said tongue having an aperture adapted to receive a projection on the end of the roller, said body portion being concaved and imperforate in line with said aperture to accommodate and conceal the end of the projection extending through the aperture.

1,819,921. INTEREST CALCULATOR. ELBERT G. RICE, Seattle, Wash. Filed June 18, 1929. Serial No. 371,884. 3 Claims. (Cl. 235—89.)



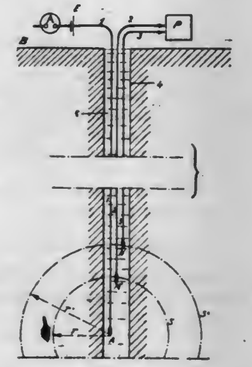
1. An interest calculator comprising in combination, a single chart sheet having vertical columns of tables representing the interest due on different principals; an associated vertical column of figures representing elapsed time in thirty day months and in days for the interest amounts; and a small chart freely movable over the large chart and having a vertical marginal column of numbers to represent a thirty-one day month, said numbers being spaced like the numbers representing elapsed time in months and days on the large chart, and the construction and arrangement being such that when a marginal number on the small chart, representing the day of the month from which the interest started to run, is placed adjacent to a number on the large chart representing the number of elapsed months and the day of the month the interest is due, the upper margin of the small chart will lie under a horizontal row of figures representing elapsed time on the basis of thirty day months and days and the actual interest on the different principals for that time.

1,819,922. NECKTIE. MILDRED ROARK ROY, Jackson, Tenn. Filed Nov. 18, 1929. Serial No. 408,066. 1 Claim. (Cl. 2—146.)



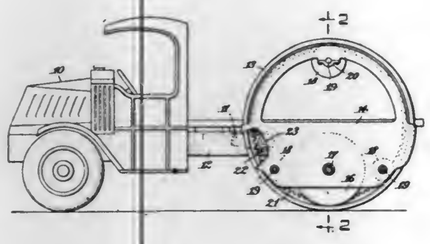
The method of making neckties consisting in the use of two pieces of material having corner extensions at one end, connecting the other ends of the pieces so that the extensions will be at opposite ends of the tie, folding the material upon its wrong side, centrally, and longitudinally, stitching the adjacent edges of the extremities together, stitching the longitudinal edges of the material together and leaving an unstitched portion adjacent the corner extensions at each end of the tie and providing a tube-like body, folding the stitched extensions over the end of the body to provide an inwardly opening pocket, the open edge of which is defined by the unstitched portion of the longitudinal edges of the material, positioning a lining upon the body with the ends of the lining within the pockets, stitching along the outer edges of the pockets through the lining and then reversing and pressing the tie.

1,819,923. ELECTRICAL PROCESS AND APPARATUS FOR THE DETERMINATION OF THE NATURE OF THE GEOLOGICAL FORMATIONS TRAVERSED BY DRILL HOLES. CONRAD SCHLUMBERGER, Paris, France, assignor to Societe de Prospection Electrique Procedes Schlumberger, Paris, France, a Corporation of France. Filed June 6, 1929, Serial No. 368,882, and in France Oct. 26, 1928. 4 Claims. (Cl. 175—182.)



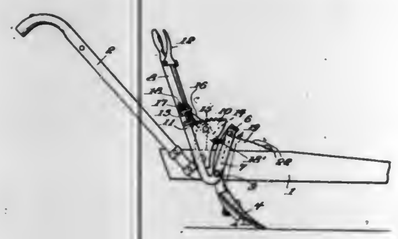
1. An electrical process for determining the nature of the geological formations traversed by drill holes, and which consists in measuring the electrical specific resistivity of the formations encountered at different depths inside the drill hole where said hole contains water.

1,819,924. TRACTION DEVICE FOR VEHICLES. ASLE SEPPOLA, Entwistle, Alberta, Canada. Filed June 18, 1929. Serial No. 371,834. 3 Claims. (Cl. 180—10.)



2. The combination with a vehicle running gear frame, of a stator arranged on each side of said frame, a traction wheel mounted for rotation on said stator, a load sustaining wheel, said load sustaining wheel being mounted on an axle carried solely by said stator and in rolling contact with said traction wheel, and means to drive said traction wheel, said means including an internal gear on said traction wheel, and a driver which coacts with said gear, said driver being disposed not lower than the plane of said frame.

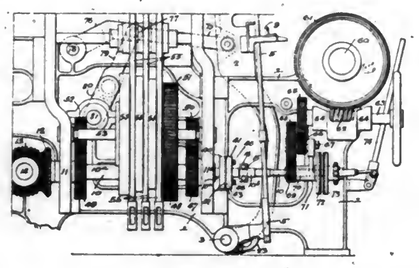
1,819,925. PLOW. NATHAN C. SMITH and WARREN W. WALLACE, Cullman, Ala. Filed May 28, 1930. Serial No. 456,633. 2 Claims. (Cl. 97—129.)



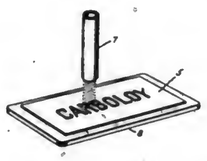
1. A device for angularly swinging and sustaining a plow point on a plow beam, comprising a yoke-like shank for the shovel surrounding a plow beam and pivotally secured thereto, a slidable wedge member having an upper arched and stepped face movable beneath the yoke-shaped shank, lever operated means for swinging the shank and means actuated by the turning of the lever for imparting a longitudinal movement to the wedge to cause the steps thereof to engage with the yoke-shaped shank and means for rocking the lever when thus swung.

1,819,926. PICKER CRANK ADJUSTMENT. WILLIAM E. SMITH, Milltown, N. J., assignor to Gulbenkian Seamless Rug Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Mar. 17, 1928. Serial No. 262,523. 4 Claims. (Cl. 139—145.)

1. The combination in a loom, of a picker shaft comprising a main section and a crank portion including a shaft section axially aligned with the main section, a plurality of operating elements rigidly secured to said main section in predetermined relation to each other, and means for adjusting the crank shaft section circularly with respect to said main shaft section, for timing the crank with respect to said plurality of operating elements without disturbing the predetermined relationship of the said plurality of operating elements on said main section.



1,819,927. METAL STENCIL. GEORGE F. TAYLOR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 1, 1929. Serial No. 382,707. 3 Claims. (Cl. 101—127.)



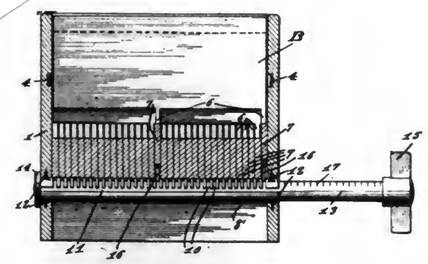
1. The method of making a stencil from a mixture of powdered materials which comprises forming the powdered materials into a substantially flat plate, partially sintering the plate at a relatively low temperature while under pressure, cutting an insignia in the plate and heating the plate under pressure to a relatively high temperature.

1,819,928. VIOLIN. TOY THRASHER, Golden, Miss. Filed Mar. 21, 1930. Serial No. 437,861. 2 Claims. (Cl. 84—296.)



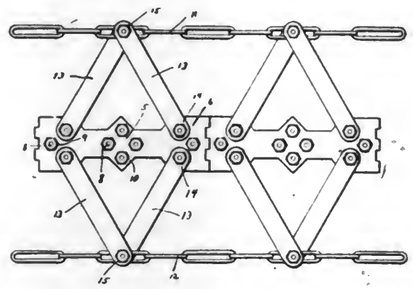
1. A stringed musical instrument including a body carrying a finger board having strings connected thereto and extending over the body, an amplifying horn located in the body and having a restricted end extending through the body, a sound reproducing casing secured to the last named end of the horn, a diaphragm in the casing, a diaphragm arm secured to the diaphragm, and a head connected to the strings and to the arm.

1,819,929. SELF-SORTING CARD FILE. CHARLES E. TUMMINELLO, Pittsburgh, Pa., assignor of one-fourth to Samuel A. Greenberg and one-fourth to Harry K. Angel, Pittsburgh, Pa. Filed July 30, 1930. Serial No. 471,784. 2 Claims. (Cl. 129—16.1.)



1. A device of the class described comprising a card-holding casing, a plurality of slats therein, cards having their lower edges formed with projections resting upon the slats, the cards being arranged in sets with the projections of one set in a different location from the projections of the other sets whereby the different sets of cards will engage different slats, selective means for raising the slats which support any desired set of cards, such means consisting of a shaft rotatably and slidably arranged in the casing under the slats and projections on the shaft for engaging the lower edges of the slats to raise the same when the shaft is turned.

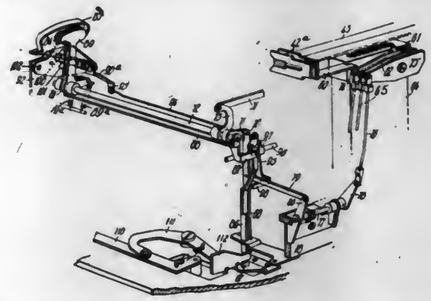
1,819,930. ANTISKID CHAIN. HENRY VADEBONCOEUR, Kankakee, Ill. Filed Aug. 19, 1930. Serial No. 476,421. 1 Claim. (Cl. 152—14.)



A tire chain comprising a plurality of hingedly connected plates adapted to extend circumferentially about the tire, a pair of side chains, and flexible straps connected to the plate adjacent each end and extending outwardly from each side thereof with the outer ends of the straps overlapped and positioned at opposite sides of an adjacent chain and a bolt inserted through the overlapped ends of the straps and also through one of the links of the chain to provide limited longitudinal movement of the chains with respect to the plates.

1,819,931. COMBINED TYPEWRITING AND COMPUTING MACHINE. HARRY H. VICKERS, Corona, N. Y., assignor, by Mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed June 26, 1925. Serial No. 39,650. 15 Claims. (Cl. 235—60.)

1. In a typewriting and computing machine normally set for addition, the combination state-setting mechanism, with a ribbon having a black field and a red field, automatic ribbon-field-shifting mechanism including a pendant operable by the state-setting mechanism while the machine is being set to the state of subtraction to render the red field of the ribbon effective, a carriage and carriage-operated means including a link connected to said pendant to shift said pendant out of co-operative relation with the state-setting mechanism automatically, of a manually-controlled lever operable in one direction to engage said pendant to shift the



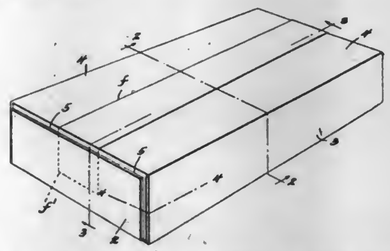
latter out of co-operative relation with the state-setting mechanism to render the black field of the ribbon effective while the machine is in the state of subtraction, said lever being operable in the other direction to engage said link to lift the pendant to render the red field of the ribbon effective when the machine is in the state of addition.

1,819,932. GAME APPARATUS. HAROLD L. WALDEN, Helena, Mont. Filed May 25, 1929. Serial No. 366,033. 5 Claims. (Cl. 273—85.)



1. A game apparatus comprising a game board having a playing field, a bordering rail about the field, barrier strips projecting inwardly in aligning relation from each side of the field adjacent opposite ends thereof with their inner ends spaced to form gate ways, a removable goal for each gate way embodying keeper pins removably insertable into the inner ends of the barrier strips for supporting the goals vertically in said gate ways, a set of game pieces for resting upon the field inwardly of each goal, a ball for movement over the field, and means for impelling the ball.

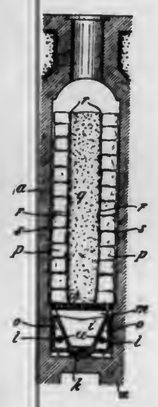
1,819,933. FOLDING BOX. FRANK WATSON, Baltimore, Md. Filed July 12, 1929. Serial No. 377,806. 5 Claims. (Cl. 229—33.)



1. A folding box comprising a base, side walls hinged to the base and of the same length as the base, cover portions hinged to the side walls and each approximately half the

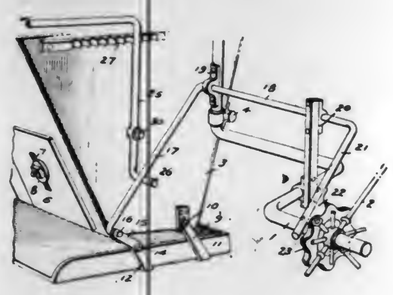
width of the base, said cover portions meeting edge to edge along the longitudinal center of the box, end flaps on the cover portions extending downwardly to the base, corner flaps, of approximately the same width as the side walls, hinged to said end flaps and folded inwardly against the side walls, and end flaps on the base folded against the end flaps on the cover portions.

1,819,934. COKE OVEN. CARL WESSEL, Borbeck, near Essen-on-the-Ruhr, Germany, assignor to the Firm: Carl Still, Recklinghausen, Westphalia, Germany. Filed June 16, 1926, Serial No. 116,359, and in Germany June 16, 1925. 6 Claims. (Cl. 202—259.)



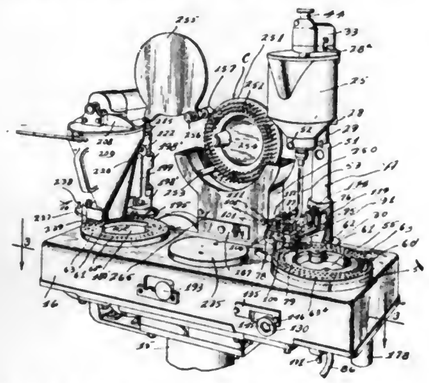
1. In a coke oven, means forming a coking chamber, means for leading off gaseous distillation products from the coking chamber comprising a conduit arranged within the first named means but independent thereof and below the coking chamber, means forming a container for insulating media arranged to protect the products in the conduit from the heat of the oven, and means establishing a communication between said coking chamber and conduit.

1,819,935. FERTILIZER DISTRIBUTOR. HERBERT M. WHITAKER and MALCOLM D. OVERSTREET, Enfield, N. C. Filed July 26, 1928. Serial No. 295,392. 3 Claims. (Cl. 275—9.)



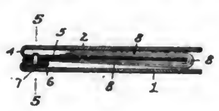
1. In a device of the class described, a hopper, a shaker pan disposed beneath the hopper, a knocker wheel supported for rotation, means for rotating the knocker wheel, a shaft, means for supporting the shaft for rocking movement about a fixed longitudinal axis, the shaft having transverse arms which swing with said axis as a center of swinging movement, one of said arms lying in the path of the knocker wheel, and means for connecting the other arm of the shaft to the pan.

1,819,936. CAPSULE FILLING MACHINE. WARREN WILKIE and ARTHUR A. LEVERENZ, Detroit, Mich., assignors to Parke, Davis Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 1, 1928. Serial No. 258,340. 18 Claims. (Cl. 226—41.)



18. In a capsule filling machine, a rotatable plate mechanism provided with a plurality of apertures arranged spirally of its axis, a capsule feeding mechanism, and means for moving said mechanisms to cause the capsule feeding mechanism to register successively with said spirally arranged apertures.

1,819,937. TARIFF BINDER. CHARLES BUFORD WILLIAMS, Nashville, Tenn. Filed July 28, 1930. Serial No. 471,265. 2 Claims. (Cl. 129—25.)



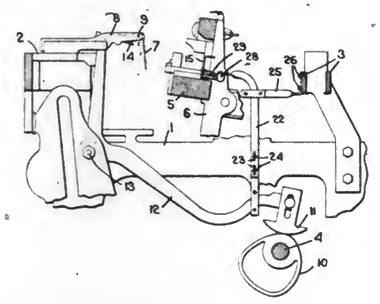
2. A binder of the class described comprising a bottom cover leaf, a top and a center cover leaf formed of one piece of material having parallel scored lines adjacent its center, one forming a hinge for the top leaf and the other a hinge for the center leaf and means for detachably connecting that part of the piece of material between the fold lines to the rear marginal portion of the bottom cover leaf.

1,819,938. CABLE CONNECTER AND METHOD OF APPLYING THE SAME. CHARLES E. WILSON, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Aug. 23, 1929. Serial No. 387,996. 4 Claims. (Cl. 247—25.)



1. An armored cable containing wires and a connecter for securing the cable to a metal box, in combination with a body of paper which surrounds the wires, projects beyond the armor and is compressed endwise between the raw end of the cable armor and a part of the connecter and forced into the space under the armor and between it and the wires.

1,819,939. FILLING FORK GRID AND CLEARER FOR LOOMS. JAMES C. WRIGHT, Canton, Ga., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Dec. 18, 1928. Serial No. 326,800. 5 Claims. (Cl. 139—379.)



1. A filling fork grid for looms comprising a top bar and a plurality of parallel spaced tines rigid with and depending from the top bar with their lower ends free to permit any fly, lint, yarn ends or other obstruction collecting on the tines to be cleared from the tines over their free ends and means for supporting the grid with the top bar and tines in fixed position on the loom.

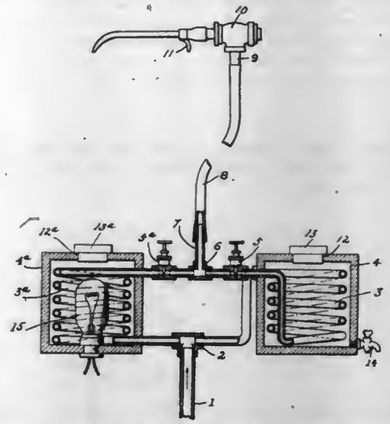
1,819,940. MANIFOLD BOOKBINDER. WALTER F. BAKER, Newport News, Va. Filed Jan. 24, 1930. Serial No. 423,159. 1 Claim. (Cl. 281—29.)



In combination with a hook body including leaves secured together at their rear edges to form a back bone; of covers for said body, flexible hinge strips, one strip secured along one edge to one side of said body adjacent said back bone and the other strip secured along one edge to the outer face of one cover member, said strips being glued to the back bone and meeting intermediate the width of the back bone and secured together a distance equal to the distance from the meeting point of the strips to the body face to which one strip is attached, said strips having their other edges straddling the rear edge of the other cove member and secured thereto.

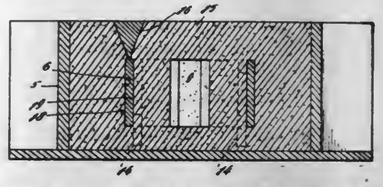
1,819,941. APPARATUS FOR SUPPLYING WATER AT VARIOUS TEMPERATURES TO DENTAL SYRINGES. CARL HARDY BROWN, Macon, Ga. Filed Dec. 22, 1927. Serial No. 241,883. 1 Claim. (Cl. 128—227.)

Means for supplying water at various temperatures to a dental syringe, comprising a closed container, heating means in said container, a coil in said container, a receptacle for a cooling medium, a second coil in said receptacle, a water supply pipe connected to the lower end of the first-named coil, and to the upper end of the second-named coil, a water delivery pipe connected to the upper end of the first named coil and to the lower end of the



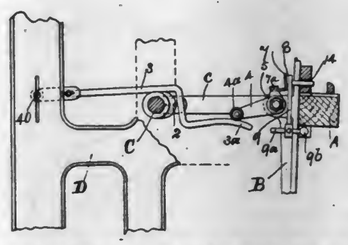
second-named coil and having an outlet for connection to a dental syringe, and a valve in said delivery pipe between each of said coils and said outlet.

1,819,942. METHOD OF CASTING CONTINUOUS POLYGONAL BANDS. WILLIAM M. CARTY, Pine Bluff, Ark., assignor of one-third to Edwin J. Kerwin, Pine Bluff, Ark., and two-thirds to Standard Brake Shoe Foundry Co., Pine Bluff, Ark., a Copartnership consisting of Fred L. Dilley and Edward S. Dilley. Filed Feb. 20, 1929. Serial No. 341,469. 1 Claim. (Cl. 22—200.)



The process of casting a continuous polygonal metal band comprising pouring molten metal in a mold cavity, subjecting the corners of the metal to a rigid supporting and chilling action, and subjecting the balance of the metal to a restricted expanding action while the metal is cooling to the self-supporting stage and to a contracting action after the metal reaches the self-supporting stage.

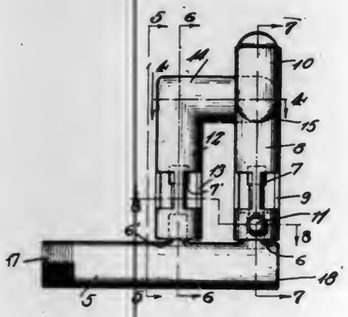
1,819,943. DEVICE FOR CHECKING OR ARRESTING SHUTTLES WITHIN THE SHUTTLE BOXES OF LOOMS. NATHANIEL CATTERALL, Bromley Cross, near Bolton, England. Filed May 1, 1929, Serial No. 359,482, and in Great Britain May 4, 1928. 2 Claims (Cl. 139—185.)



1. In devices for checking or arresting shuttles within the shuttle boxes of looms, the combination with the loom crank shaft, slay board and longitudinal stop rod, of a

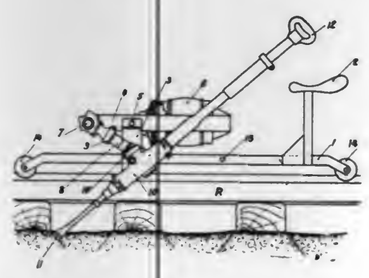
cam mounted on the crank shaft and capable of adjustment, a pivoted lever cooperating with the cam, a second lever having a projection engaging the lever cooperating with the cam, means for pivotally mounting the second lever on the slay board, a flat spring, means for securing said flat spring to the stop rod, and a second projection on the second lever adapted to contact with the flat spring.

1,819,944. GAS BURNER. HUGH W. CHRISTIE, Tulsa, Okla. Filed May 10, 1929. Serial No. 362,088. 2 Claims. (Cl. 158—104.)



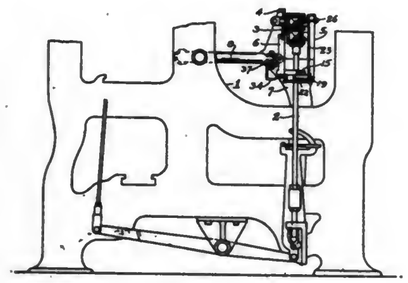
1. In a gas burner of the character described, a main gas supply pipe, spaced gas nipples secured to the main gas supply pipe, a gas burner supported over the nipples, said gas burner including a main and auxiliary operating tube having their ends surrounding the nipples at the junction with the pipe.

1,819,945. BALLAST TAMPING MACHINE. MAURICE COLLET, Paris, France, assignor to Les Fils d'Albert Collet, Paris, France, a Corporation of France. Filed Sept. 6, 1930, Serial No. 480,209, and in Germany Oct. 26, 1929. 4 Claims. (Cl. 104—12.)



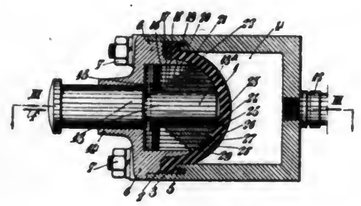
1. A ballast tamping machine adapted to run over one rail comprising a truck, wheels carrying same and lying in substantially the same vertical plane, two hammers carried by the truck on either side of the truck, means for giving them any desired direction in space, a motor controlling and balancing the hammers and a seat carried by the truck at a height allowing the feet of the workman seated on it to balance the machine and in a longitudinal position such that the hammers are within reach of the workman.

1,819,946. SHUTTLE CHECK AND RELEASE. LEO A. DAMICO, Wilkes-Barre, Pa. Filed Aug. 9, 1928. Serial No. 298,502. 2 Claims. (Cl. 139—187.)



1. In a box loom, a shuttle box guide frame, a binder pivotally mounted at one end adjacent the outer end of the shuttle box and free at its other end, with an intermediate portion disposed so as to make frictional contact with the side of a shuttle and a swell adjacent the pivoted end adapted to make resilient wedging contact with the head of said shuttle, a shaft journalled at the bottom of said guide frame disposed axially parallel to the direction of movement of the shuttle, an arm extending from said shaft to a point adjacent said shuttle box, and a spring projected plunger extending from said arm adapted to make contact with said binder at the region of said swell, and means for oscillating said shaft synchronously with the movement of the lay of the loom.

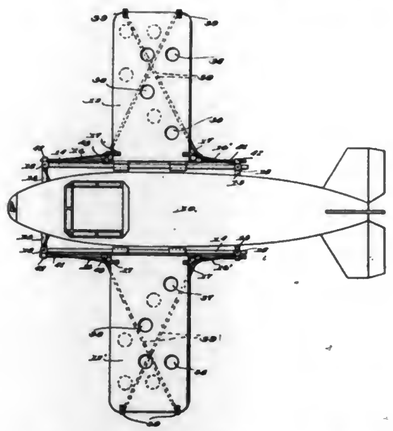
1,819,947. HYDRAULIC STRESS TRANSMITTING SYSTEM. DIMITRI SENSAUD DE LAVAUD, Paris, France. Filed Jan. 3, 1930, Serial No. 418,409, and in France Dec. 27, 1928. 1 Claim. (Cl. 60—54.6.)



In a hydraulic stress transmitting system, a pressure producing element comprising a distortable hemispherical wall, the convexity of which is in contact with the liquid, a piston arranged in the concavity of the hemispherical wall, sleeves arranged for fitting into each other and around the piston and to be in contact with the distortable wall, the said sleeves being provided with longitudinal notches, said notches being of graduated depth, a transverse pin mounted on the piston and fitting into the said notches for successively compelling each of the sleeves to follow the movement of the piston.

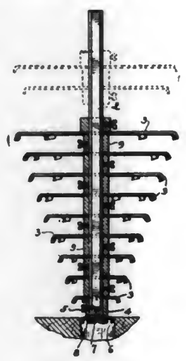
1,819,948. AIRPLANE. FEDERICO G. DIAGO, Habana, Cuba. Filed Feb. 21, 1930. Serial No. 430,329. 8 Claims. (Cl. 244—12.)

1. An airplane having stationary wing members and other wing members independently shiftable horizontally to and from normally alined relation with respect to the stationary wing members, each of said wing members having vertically disposed apertures therein which are substantially closed to the passage of air therethrough when the shiftable wing members are alined with the



stationary wing members, said apertures being staggered whereby to be progressively opened and closed during movements of the shiftable wing members relatively to the latter.

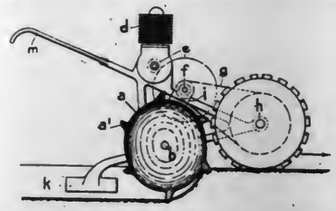
1,819,949. BORING RIPPER. STEPHEN CORNELIUS DOEHRING, Chicago, Ill. Filed May 29, 1930. Serial No. 457,133. 2 Claims. (Cl. 145—116.)



1. In a boring ripper bit, a shaft and a series of disk forming blades slidably carried by the shaft and rotatable therewith, adjustable spacing collars positioned on the shaft for mounting the blades in spaced longitudinal adjustment thereon, the blades being of diminishing diameters toward the advance end of the bit, spaced arms extending radially from the disk, and provided at their outer ends with flanges extending toward the advance end of the bit, the flanges being formed with suitable teeth.

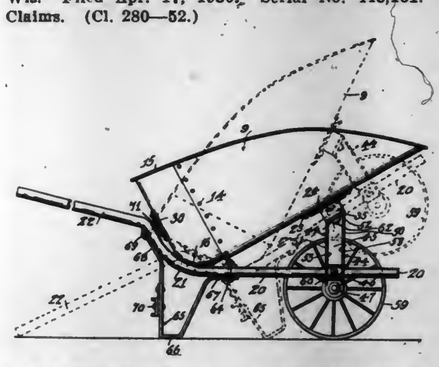
1,819,950. TILLING MACHINE. LÉON DUFOUR, Versoix, near Geneva, Switzerland. Filed Feb. 2, 1929, Serial No. 336,950, and in Germany Feb. 13, 1928. 1 Claim. (Cl. 97—37.)

In a tilling machine, the combination of a carriage frame, at least one running wheel thereon to support same, a motor drive mechanism on said frame for driving said carriage running wheel, a rotary working shaft carried by said frame in both a forwardly and upwardly oblique position, a star-like, forwardly concave cutter disc on said shaft, having circumferential spaced teeth within the curved surface of the disc, and connecting means between said shaft and the motor drive mechanism so arranged as to drive the cutter disc with a considerably



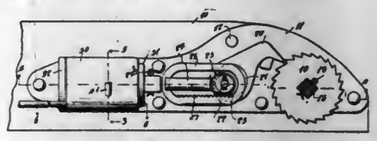
greater peripheral speed than the carriage running wheel for the purpose of causing the cutter disc to undercut the furrow from its inwardly front top to its outwardly rear bottom with a simultaneous advancing action for the machine.

1,819,951. WHEELBARROW. AUGUST EHNERT, Kiel, Wis. Filed Apr. 17, 1930. Serial No. 445,161. 14 Claims. (Cl. 280—52.)



1. In a wheelbarrow, a pair of handle bars having the forward portions thereof positioned below the rear portions, a scoop arranged over said forward portions and extending at an upward inclination from rear to front with respect to said forward portions, an apertured element secured against the outer face of the back of the scoop, an apertured element secured against the lower face of the bottom of the scoop, a spring suspension positioned below the bottom of the scoop, means interengaging with said element on the bottom of the scoop for detachably connecting said spring suspension to said bottom, a pair of spaced supports for detachably connecting said spring suspension to the forward portions of said handle bars, and means interengaging with the plate on the back of the scoop for detachably connecting the back of the scoop with said handle bars.

1,819,952. AUTOMATIC HAND BRAKE RELEASE. BERL I. FINK, Hinton, W. Va., assignor of one-third to J. R. Wheeler and one-third to C. E. Fink, both of Hinton, W. Va. Filed Oct. 25, 1928. Serial No. 315,016. 3 Claims. (Cl. 188—216.)



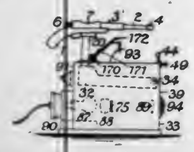
1. In combination with a hand brake mechanism, a detent pawl therefor, an eccentric on which the pawl is journaled, a shaft carrying said eccentric, a mutilated

gear wheel movable with the eccentric, a rack member engaged by the gear wheel, a piston movable with the rack member, and a cylinder carrying said piston, an expansive coil spring in the cylinder engaging the piston to normally maintain it retracted, and means for the application of compressed air to the cylinder from the exhaust incidental to release of the air brakes.

1,819,953. SEED DISINFECTANT. FOREST J. FUNK, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Original application filed May 21, 1927, Serial No. 193,380. Divided and this application filed Dec. 2, 1930. Serial No. 499,536. 7 Claims. (Cl. 167—38.)

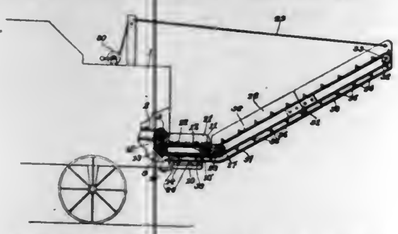
1. A seed disinfecting preparation which comprises a water insoluble mercury oxide and a hydrophilic colloidal material, said preparation adapted to form with water a substantially permanent and substantially homogeneous suspension.

1,819,954. AUTOMATIC SHOOTING MACHINE. FRIEDRICH CLAUS HEINRICH HANSEN, Hamburg, Germany. Filed June 26, 1929, Serial No. 373,844, and in Germany Feb. 27, 1929. 9 Claims. (Cl. 124—15.5.)



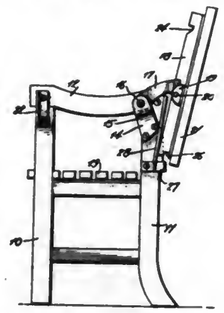
1. An automatic shooting machine comprising an optical-projection apparatus, a preferable slide in said apparatus representing a target, a holder for said slide, a guide wherein said holder is movable in its own plane, a spring controlling the slide, a cam plate, means for rotating said cam plate, a lever coupled to said holder and bearing under the influence of the spring against said cam plate for imparting a reciprocated motion to the holder, a frame supported above said projection apparatus and universally adjustable about a fixed point, a dummy rifle mounted on and movable together with said frame for aiming at the projected light image of said target, a spring-controlled perforating hammer pivoted to said frame in position to perforate the target, on being rocked about its pivot, at the exact spot towards which the rifle is aimed, an electromagnet for rocking said hammer and perforating the slide, a trigger on the rifle, and a switch controlled by said trigger and adapted to energize said magnet on the trigger being pulled.

1,819,955. CONVEYER. THOMAS J. HILE, Iron City, and LYTLE D. BARBER, Climax, Ga. Filed Oct. 17, 1929. Serial No. 400,371. 3 Claims. (Cl. 198—99.)



3. In a peanut picker having a hay discharge carrier mounted on a shaft, supporting means pivotally mounted on the shaft, a wide endless carrier mounted on said supporting means, and a narrow endless carrier having its forward end disposed adjacent the rearward end of the wide carrier and pivotally connected with said supporting means.

1,819,956. COMBINED TABLE AND CHAIR. LOUIS KOCJAN, Milwaukee, Wis. Filed Mar. 20, 1930. Serial No. 437,493. 5 Claims. (Cl. 155—43.)

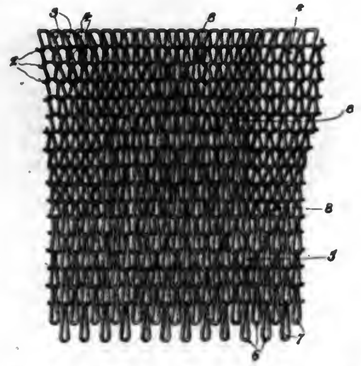


3. The combination with a chair frame having front and rear legs of substantially the same height, arms and a seat; of a combined table top and chair back, a link connection between said combined top and back and the chair frame pivotally mounted at both ends whereby the top may rest horizontally above the arms in one position and behind the rear legs above the seat in a second position, supporting means horizontally on said arms and carried at the front and rear of the arm for holding the top and back in the first named position, and other supporting means carried on the rear legs below the rear supporting means on the arms to cooperate with the top and back and support the top and back in its second position.

1,819,957. MANUFACTURE OF OIL AND FAT SOLUBLE AZO DYESTUFFS. ADOLF KREBSER and ERNST WYSARD, Basel, Switzerland, assignors to "J. R. Geigy S. A.," Basel, Switzerland. Filed Nov. 23, 1928, Serial No. 321,514, and in Germany Dec. 3, 1927. 5 Claims. (Cl. 260—77.)

1. As new articles of manufacture, the herein described oil and fat soluble azo-dyestuffs for print works, obtained by coupling a tetrazotized diamino base from a benzaldehyde and para-xylidine with unsulphonated azo components, said azo-dyestuffs being very easily soluble in linseed oil and having in oil solution the properties of well and rapidly drying up and not blotting.

1,819,958. STOCKING. ELMER C. LOCHHEAD, Moberly, Mo., assignor of one-half to Charles R. Henderson, Moberly, Mo. Filed July 29, 1930. Serial No. 471,506. 4 Claims. (Cl. 66—182.)



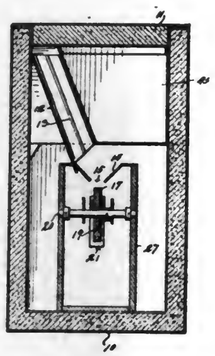
1. A stocking including a main body portion having circumferentially extending threads formed into a succession of loops to provide a series of wales extending longitudinally of the stocking, said stocking further including a reinforced portion merging into the main body portion and composed of elongated loops formed in said threads, such elongated loops in alternate threads providing wale parts integral with and in continuation of the wales in said main body portion.

1,819,959. RECEIVING TABLE FOR CAST GLASS. CLAUDE LOCREILLE, Fauquez, Belgium. Filed Mar. 27, 1930, Serial No. 439,518, and in Belgium Apr. 9, 1929. 6 Claims. (Cl. 49—14.)



4. A table for casting and receiving glass plates and sheets, said table comprising a slab made of a concrete formed of a ground mixture of burned lime, silica and alumina, with fragments of porphyry embedded therein, said slab comprising a bottom layer having fragments of porphyry 20 to 30 mm. in size, intermediate layers with fragments respectively 10 to 20 mm. and 5 to 10 mm. in size, and a top layer containing pulverized porphyry, metal armatures embedded in each except the top layer, said armatures comprising transverse and longitudinal bars, circles and wire netting, and a metal band encircling said slab.

1,819,960. BUTTER DISPENSING MACHINE. ARTHUR N. MANTERIS, Baton Rouge, La. Filed Feb. 26, 1931. Serial No. 518,534. 5 Claims. (Cl. 31—20.)



3. A butter dispensing machine of the character described, comprising an outer casing, a downwardly inclined chute disposed within the outer casing and adapted to contain superposed blocks of butter disposed transversely of the chute, a trough extending at right angles to the chute and upon which the chute discharges, the trough being approximately V-shaped in cross section, the trough for a distance being formed with a longitudinally extending slot, an endless element mounted below the trough and having its uper flight extending downward and forward from the rear end of the trough, outwardly projecting abutments mounted upon the endless element and spaced from each other a distance approximately equal to the length of a block of butter, a vertically depressible plunger mounted upon the casing and carrying a knife moving across the extreme end of the trough, and means for giving a step by step movement to said endless element upon each depression of the plunger, comprising a cam carried by said plunger, a longitudinally reciprocatable rod resiliently urged against the cam, wheels carrying said endless elements, one of said wheels having a shaft, a ratchet wheel mounted upon said shaft, a lever pivoted intermediate its ends and at its uper end connected to said rod and a pawl carried by the lower end of said lever and engaged with said ratchet wheel.

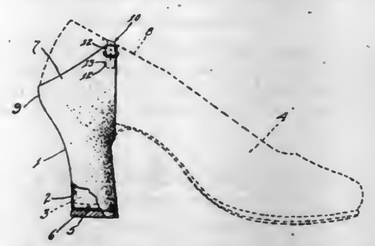
1,819,961. AZO DYESTUFFS AND PROCESS OF MAKING SAME. BERTRAM MAYER, Basel, and JOSEPH GRIMMER, Neuewelt, near Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 11, 1928, Serial No. 311,960, and in Switzerland Oct. 31, 1927. 6 Claims. (Cl. 260—72.)

1. The manufacture of direct-dyeing cotton dyestuffs by diazotizing a disazo-dyestuff of the general formula

$$R_1-N=N-R_2-N=N-R_3-NH_2$$

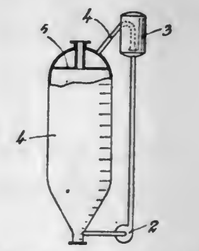
in which R_1, R_2 and R_3 signify benzene or naphthalene nuclei which contain no hydroxy-groups, and of which at least two contain sulfo-groups, and coupling the diazo-compound thus formed with the 1-amino-5-hydroxynaphthalene-7-sulfonic acid.

1,819,962. ATTACHMENT FOR SHOES. ALBERT M. MAZEROCK, Winnetka, Ill. Filed Sept. 17, 1928. Serial No. 306,404. 2 Claims. (Cl. 36—72.)



1. A shoe heel protector comprising a casing adapted for receiving the heel of a shoe, said casing being provided with a pair of side portions, sheath members connected with the side portions, U-shaped hook members having connecting arms and retaining arms, said retaining arms being adapted for being removably disposed within the sheath members whereby engagement is provided between the connecting arms and the sides of the shoes, and movable members carried by the side portions and extending within the sheath members for engagement with the retaining arms whereby said arms may be adjustably positioned and retained within the sheath members.

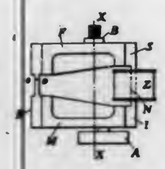
1,819,963. PROCESS FOR TREATMENT OF WOOD PULP BY PERCOLATION. EINAR MORTERUD, Torderod, near Moss, Norway. Filed Nov. 10, 1930, Serial No. 494,756, and in Norway Nov. 20, 1929. 6 Claims. (Cl. 92—7.)



1. In a process for treating materials, such as wood pulp, with a current of liquid for the purpose of extracting, washing, etc., supplying the liquid in such a manner

to the vessel containing the material in question, that the liquid is caused to pass the various particles of said material in an intermittent current.

1,819,964. ELECTROMECHANICAL VIBRATOR. ALBERT EMILE GUSTAVE NANDILLON, Cherbourg, France, and ANDRÉ EMILE COTTET, Brussels, Belgium. Filed May 22, 1928, Serial No. 279,818, and in France May 28, 1927. 4 Claims. (Cl. 175—338.)



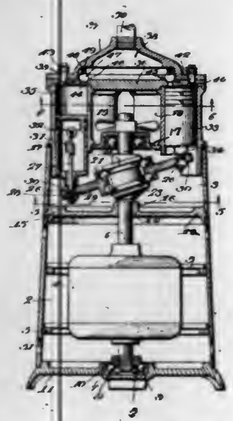
1. A reversible electromechanical vibrator adapted to operate on audible frequencies comprising in combination a pair of rigid masses, a thin elastic member connecting said masses, said masses and elastic member being composed in part at least of magnetic material and comprising an airgap, an electric coil mounted in the vicinity of said airgap and cooperating therewith, means for varying the width of said airgap and a damping device mounted on one of said masses, said damping device comprising a hollow body containing granular material.

1,819,965. ROD FOR SUSPENDING CURTAINS ON DOORS AND WINDOWS. WILHELM HELMER NORLING, Stockholm, Sweden. Filed July 27, 1929, Serial No. 381,535, and in Sweden May 30, 1929. 2 Claims. (Cl. 156—22.)



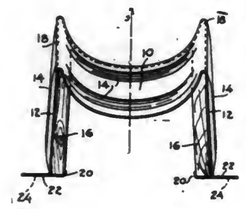
1. A curtain rod comprising a rod, a bracket fixed to the door frame pivotally supporting the rod near one end and oscillatory means for connecting the rod to a door, said rod swinging horizontally in relation to the movement of the door.

1,819,966. AIR COMPRESSOR. CHARLS OLSON, Grand Rapids, Mich. Filed Sept. 26, 1929. Serial No. 395,317. 4 Claims. (Cl. 230—186.)



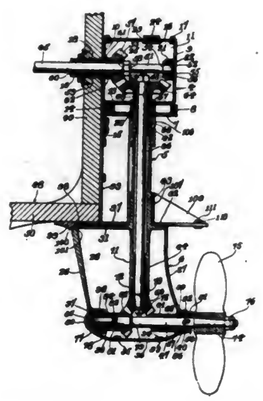
1. In an air compressor, reciprocating pistons, for compressing the air, provided with apertured protuberances forming bearing abutments, and resilient connecting rods extending through said apertures and pivotally connected to said pistons and provided with bearing abutments adjacent their ends, and means for reciprocating with pistons, comprising a wobble plate engaging between said bearing abutments.

1,819,967. LOADING BLOCK. CARL B. PARSONS, Detroit, Mich. Filed Feb. 24, 1928. Serial No. 256,520. 5 Claims. (Cl. 188—32.)



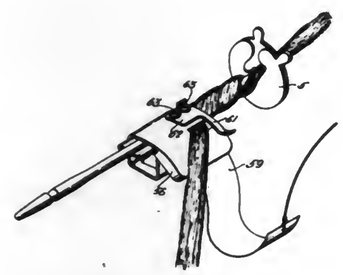
1. A loading block formed of sheet metal bent to provide an arcuate portion shaped to embrace the periphery of a wheel and having leg portions bent downwardly on each side therefrom and a reinforcing member positioned upon the inside of each leg portion bearing directly against the arcuate portion at the juncture of the leg therewith and secured to said leg portion.

1,819,968. RUDDERLESS OUTBOARD PROPELLING UNIT DRIVEN FROM AN INBOARD MOTOR. ROBERT A. PATRICK, Freeport, N. Y. Filed Apr. 16, 1929. Serial No. 355,587. 4 Claims. (Cl. 115—35.)



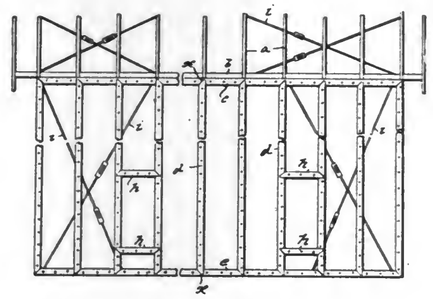
1. In a rudderless outboard propulsion unit for boats a revoluble housing of substantially oval contour in horizontal section and inclined forwardly from its bottom toward its top to extend under the rear portion of the bottom of the boat, means secured to and projecting rearwardly from the stern of the boat for revolving and suspending said housing below and in rearwardly projecting relation with respect to the rear of the boat bottom, said means including a vertical sleeve connected to the top of and opening and depending into said housing and a wheel for revolving and suspending said sleeve, a driven propeller shaft supported by the lower portion of and having one end extended from the rear of the housing, a propeller on said end and in connection with said housing, when the latter is revolved steering the boat, and means extending through said sleeve and into the housing for driving said propeller.

1,819,969. DEVICE FOR WINDING HAIR ON THE STEMS OF HAIR CURLING HEATERS. ARNAUD E. PAUSSER, Philadelphia, Pa. Filed Apr. 13, 1929. Serial No. 354,838. 1 Claim. (Cl. 132—33.)



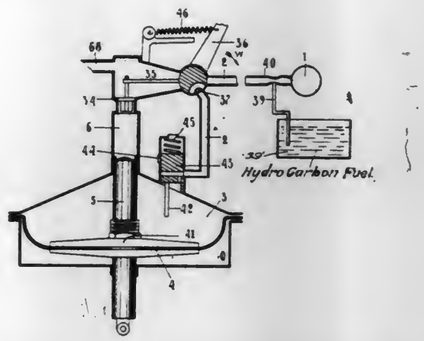
An integrally formed clamp member for the reception of a hair curler comprising a hollow member, a channel member mounted therein and resiliently urged upwardly against the upper surface thereof, the top surface having a notch opening through one end thereof for the introduction of the hair, and a channelled guide-way communicating with one of the sides of the member adjacent the top thereof for the introduction of the winding tape, and resilient means on the exterior of the top surface of the body for yieldably closing the outer end of the notch.

1,819,970. BUILDING CONSTRUCTION. NORMAN E. PEDEN, Newellton, La. Filed Jan. 21, 1929. Serial No. 334,029. 5 Claims. (Cl. 189—1.)



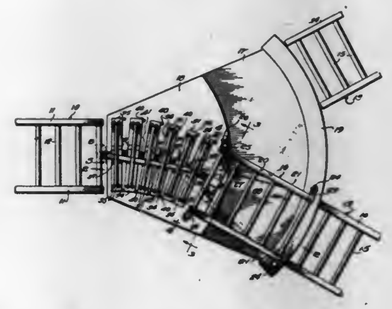
5. In a metallic building structure, a structural element having lateral flanges, spaced angle irons each having one flange abutting against the web of the element and the other flange abutting against a flange of said element, one of the abutting flanges being cut away to receive the flange of the other element whereby the angle iron is supported upon said cut away flange and upon the web of the first named element, the abutting ends and flanges of the building element being welded to said element.

1,819,971. SERVO BRAKE. HENRI PIEPER, Liege, Belgium, assignor to Compagnie International des Freins Automatiques, Societe Anonyme, Liege, Belgium. Filed Dec. 23, 1924, Serial No. 757,747, and in Belgium Dec. 29, 1923. 7 Claims. (Cl. 303—49.)



1. In a servo brake, a brake piston, braking means comprising a gas under pressure acting on a liquid which displaces said piston, vacuum producing means, releasing means which restore said braking means to their initial state by the action of a partial vacuum, and a control apparatus arranged to cause the vacuum producing means to be automatically cut out of action when the brake is completely released.

1,819,972. SWITCHING CONVEYER. CARL W. RESCH, Jeffersonville, Ind., assignor to Logan Co., Inc., Louisville, Ky., a Corporation of Kentucky. Filed May 2, 1929. Serial No. 359,897. 10 Claims. (Cl. 193—36.)

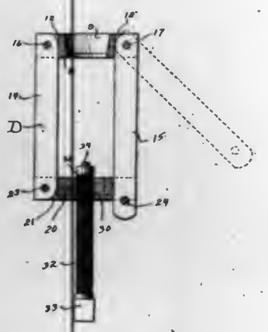


10. A conveyer comprising a main section, a movable section having one end arranged adjacent and in alinement with one end of said main section, said movable section including a plurality of supports and a roller carried by each support, said rollers being normally parallel, a spring extending longitudinally of said movable section and slidably engaging each support, means for securing one end of said spring adjacent said main section, and means for limiting the distance from said main section of the support most remote therefrom.

1,819,973. SPINDLE BOLT REMOVER. ERNEST E. RICHARDSON and ROLAND L. CULPEPPER, Albany, Ga. Filed May 24, 1930. Serial No. 455,313. 7 Claims. (Cl. 29—85.)

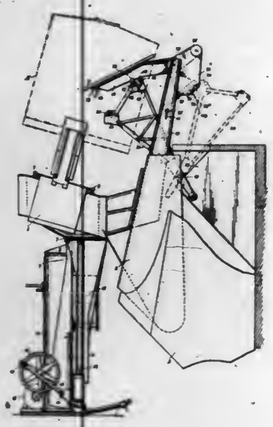
1. A spindle bolt remover comprising a head plate provided with a spindle receiving opening, an arm pivotally connected with each end of the head plate, a cross-bar

pivotally connected at one end to the opposite end of one of said arms, means detachably coupling the opposite arm



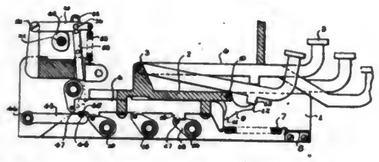
to the opposite end of the cross-bar, and a pressure screw threaded thru the cross-bar for axially aligning with the opening in the head plate.

1,819,974. CAR DOOR OPENER. HENRY RICHARDSON, Passaic, N. J. Filed Jan. 31, 1928. Serial No. 250,900. 22 Claims. (Cl. 254—84.)



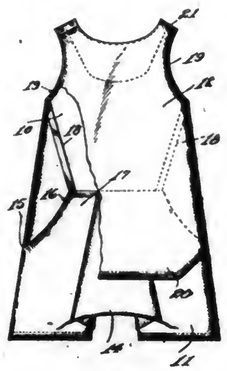
1. The combination of a car supporting platform mounted to move a car thereon in an arcuate path about a longitudinal axis which remains horizontal during such movement, door-engaging means having a pivotal support toward its upper end and swingable into a position at the outer side of a door in a side of the car on said platform, and means having a support with respect to which the arcuate movement of said platform takes place and operative on said door-engaging means, during said arcuate movement of the platform, to swing said door-engaging means about its pivotal support at an increasing rate of speed to initially open the door inwardly in direct consequence of the movement of the platform and to further open the door with an accelerated movement with respect to the arcuate movement of the platform.

1,819,975. KEYBOARD MECHANISM. CHARLES H. SAMPSON, Rochester, N. Y., assignor to Sampson Permagraph Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 18, 1929. Serial No. 340,846. 6 Claims. (Cl. 197—6.)



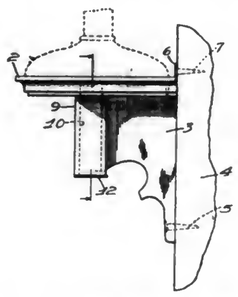
3. A keyboard mechanism comprising a plurality of key operated slides, a rock shaft having a portion eccentric thereto and extending longitudinally thereof and arranged to be engaged by the ends of all the slides, a motor driven member and a clutch controlled by the motor driven member and controlled by said rock shaft.

1,819,976. DROP-SEAT FOR GARMENTS. WILLIAM DOW SCALF, Pineville, Ky. Filed Aug. 29, 1930. Serial No. 478,707. 2 Claims. (Cl. 2—78.)



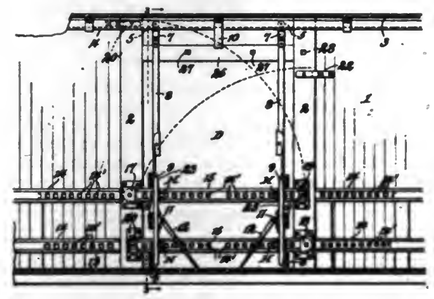
1. A garment comprising a body portion having arm holes, leg members upon said garment, a drop-seat formed with said leg members, and elastic strap members secured to and extended between the lower edge of said arm holes and upper portion of said drop seat.

1,819,977. TELEPHONE STAND. JOHN L. SHAHAN, Chicago, Ill. Filed Sept. 2, 1927. Serial No. 217,217. 4 Claims. (Cl. 133—6.)



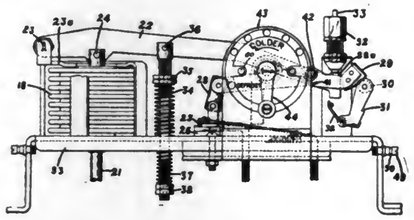
3. A device of the type described comprising a plate member having an edge adapted for being connected with a vertical supporting member, the opposite edge being provided with a cylindrical formation having a vertical passageway therethrough, said plate member being provided with an enlarged top portion, said top portion being provided with an opening therethrough in registration with said vertical passageway, and a retaining plate connected with the bottom of said cylindrical portion and provided with an opening therethrough of less diameter than the passageway, the bottom of said cylindrical portion being provided with a transverse outlet opening whereby an article disposed in said passageway may be withdrawn therefrom.

1,819,978. BULK-HEAD CONSTRUCTION FOR REFRIGERATOR CARS. EDWARD J. SHUR, New Orleans, La. Filed Dec. 27, 1929. Serial No. 416,856. 3 Claims. (Cl. 105—376.)



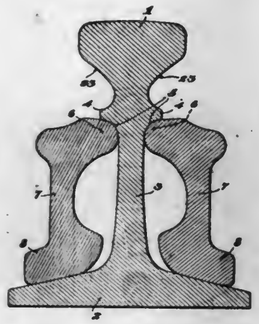
1. In a bulk-head construction, the combination of a car, longitudinal notch bars secured to the sides thereof, other longitudinal side bars pivotally secured to the car, rails longitudinally arranged in the ceiling of the car, trolleys adapted to travel over the rails, depending bars pivotally arranged in the shaft of the trolleys, gates secured to the depending bars, props pivotally secured to the gates, and slide bolts secured in the gates and adapted to engage the bars.

1,819,979. REFRIGERATING APPARATUS SWITCH CONTROL. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1928, Serial No. 281,599. Renewed May 5, 1931. 21 Claims. (Cl. 200—83.)



1. In a pressure responsive switch for a refrigerating system, a platform, a pressure responsive element mounted on said platform, electric contacts and snap action mechanism interposed between said contacts and pressure responsive element and mounted on said platform, a device with manual operating means mounted on said platform and normally independent of said snap action mechanism, but operable to modify said snap action mechanism to vary the pressures at which said mechanism is responsive without disturbing the normal adjustment of said switch, said device being provided with means operable at will for maintaining open said contacts to provide a defrosting operation for said refrigerating system.

1,819,980. RAILWAY RAIL. MCLEOD THOMSON, Chelsea, N. J. Filed Feb. 18, 1930. Serial No. 429,377. 9 Claims. (Cl. 238—125.)



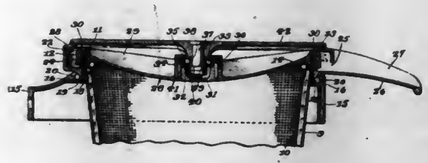
1. A rail having upper and lower lateral projections from its web with which the head and the base of a cooperating splice bar are adapted to take loading engagement, respectively.

1,819,981. MULTICOLOR CINEMATOGRAPH FILM MATERIAL. JOHN EDWARD THORNTON, London, England. Original application filed May 5, 1924, Serial No. 711,253, and in Great Britain May 18, 1923. Divided and this application filed Oct. 3, 1925. Serial No. 60,347. 4 Claims. (Cl. 95—2.)



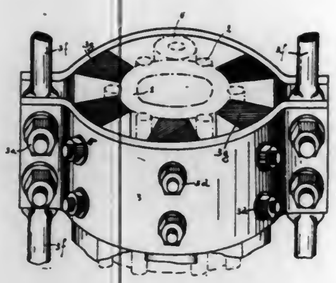
4. The method of constructing a two-part mosaic colored film material for the production of multi-color positive pictures, comprising applying a layer of colloid upon a support, forming in said layer of colloid a mosaic pattern in two longitudinal stripes of different colors, two colors in one stripe and two colors in the other stripe, and simultaneously sensitizing both the multi-color stripes.

1,819,982. RINSING AND DRYING APPARATUS. HAROLD F. VIEAU, Liverpool, and EDWARD J. O'NEILL, Syracuse, N. Y., assignors of one-third to Roy C. Higby, Big Moose, N. Y. Filed June 11, 1927. Serial No. 198,272. 23 Claims. (Cl. 210—75.)



1. In an apparatus for the purpose set forth, a vertically disposed rotatable receptacle forming a combined rinsing and drying chamber, an adjustable drain board, means carried at the top of the receptacle to permit of adjustably positioning said board circumferentially with respect to the receptacle for directing the overflow from said chamber to the point desired, and a rotatable vertically disposed hollow shaft connected with and opening into the bottom of said receptacle for operating the latter and supplying water to the chamber.

1,819,983. DISMOUNTING DEVICE FOR LEAD COLUMNS, PIPES, OR THE LIKE. EDMOND VOITURON, Brussels, Belgium. Original application filed May 17, 1928, Serial No. 278,511, and in Belgium May 20, 1927. Divided and this application filed Feb. 8, 1930. Serial No. 426,963. 2 Claims. (Cl. 137—75.)



1. A device for demounting columns of lead or the like, comprising wood members applied on said columns, metallic stays of several parts applied against the above members and assuming their form and bolts firmly retaining the stays and the wood members.

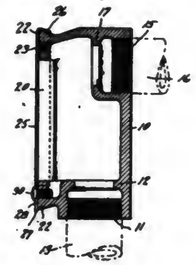
1,819,984. AUTOMATIC GATE. EDWARD WEIDLEIN, Augusta, Kans. Filed Dec. 1, 1928. Serial No. 323,127. 1 Claim. (Cl. 39—18.)



In combination, an upwardly tiltable movable gate body including top and bottom members, the former being of greater length and projecting beyond the latter, a vertical support positioned adjacent one end of said bottom member, means for pivotally connecting said top member at a point between its vertical median and one end thereof within said support in proximity to the top of the latter, a weight, flexible means for suspending the weight, said means attached to said top member in proximity to the said end thereof, a vertical guide for receiving the other ends of said members, a normally inclined, horizontally disposed depressible lever extending through the lower portion of and projecting in opposite directions from said support, means for pivotally anchoring one of the ends of said lever in a roadbed, a link having one end pivotally connected to said top member between the pivot for the latter and the point of attachment of said flexible means and having its other end pivotally connected to the other end of said lever, and a depressing element for, directly engaging with and disposed transversely of said lever whereby on the depression of the latter by the said element the gate body will be tilted upwardly and automatically fold.

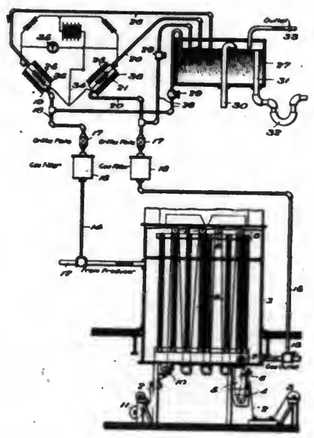
1,819,985. SERVICE ENTRANCE. JOHN C. BOYTON, Cleveland, Ohio, assignor to The Adalet Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 22, 1929. Serial No. 387,570. 2 Claims. (Cl. 247—15.)

1. An electrical conduit fitting open at one side to facilitate the threading of wires through the conduits it connects, said fitting being provided with an outwardly flaring flange about its open side and with screw holes at its opposite ends, a cover plate having an inwardly directed flange that extends only along its two sides and across one end and being provided with a notch that opens through its opposite end, the plate being adapted to be slid lengthwise over the open side of the fitting from either end thereof



with its flange embracing the flange of the fitting and with said notch in register with the screw hole in the adjacent end of the fitting, and a screw adapted to occupy said hole and to be received by said notch as the cover plate is applied to the fitting and whose head is arranged to have holding engagement with said plate.

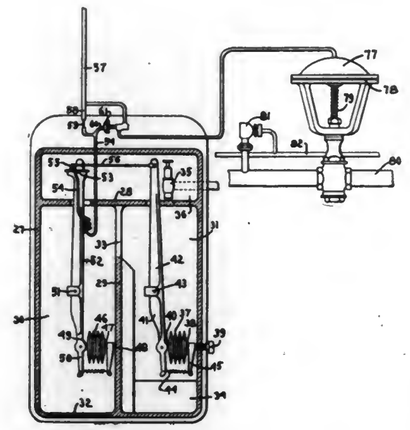
1,819,986. METHOD AND APPARATUS FOR USE IN MANUFACTURE OF RUBBERIZED FABRICS. ROY W. BROWN, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 8, 1922. Serial No. 566,892. 9 Claims. (Cl. 73—56.)



1. An apparatus for the uses and purposes set forth comprising, the combination of an enclosed drying chamber adapted for the drying of material dissolved in a volatile solvent, means for admitting gas to one side of the chamber and exhausting the gas from the other side of said chamber, of a device arranged to be effected by the incoming and outgoing gases for comparing the relative character of the said gases to determine the content of volatilized solvent in the outgoing gases.

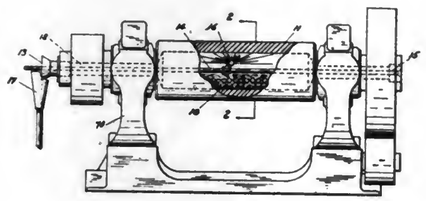
1,819,987. THERMOSTATIC APPARATUS. WILLIAM B. HODGE, Charlotte, N. C., assignor to Parks-Cramer Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Apr. 23, 1929. Serial No. 357,460. 4 Claims. (Cl. 236—44.)

4. A regulator comprising thermostatic motors subject respectively to the wet and dry bulb temperatures of the air, each motor consisting of a plurality of thermo-sensitive cells having the same coefficient of expansion and interchangeable with any other cell of the same or another motor of said regulator, each cell comprising initially flat diaphragm walls of thin sheet metal peripherally united to provide a rigid annulus with the effective areas of said walls circumscribed by said annulus, confining a volatile fluid and expansible spherically within a prede-



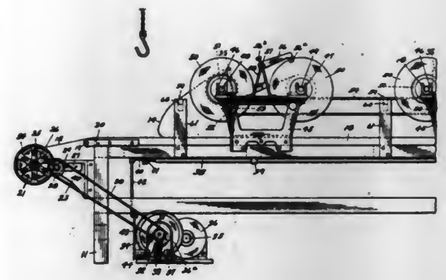
termined temperature range, and producing uniform amounts of axial movement by elastic resistance compensatory of the varying changes in the vapor pressure of the confined fluid which result from uniform changes in temperature, and means detachably coupling the central portions of the contiguous diaphragms of successive cells of each motor in axial alinement to provide a structure in which the combined axial movement of the respective motors is directly proportional to variations in the temperature to which they are respectively subjected.

1,819,988. MILL ROLL COOLING DEVICE. ROBERT R. JONES, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 20, 1926. Serial No. 149,727. 5 Claims. (Cl. 257—95.)



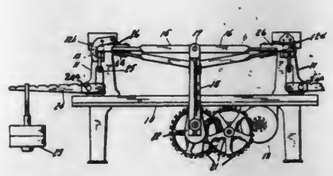
1. A device for cooling a hollow mill roll having an opening in one end thereof, comprising a cold water supply pipe passing within said roll through said opening and journaled in the opposite end of said roll, a spray nozzle connected to said pipe for directing a spray of water to the interior of said roll, and a plurality of metal balls housed in said hollow roll and having free movement therein, whereby, as the roll is rotated, the layer of hot water adhering to the interior thereof will be broken up and the sediment deposited thereon removed.

1,819,989. WINDING AND REELING DEVICE. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 9, 1925. Serial No. 7,789. 1 Claim. (Cl. 242—55.)



Winding and reeling apparatus comprising a traveling carrier for a plurality of strips of tacky stock, a plurality of reels mounted over the carrier for separately reeling the strips and a plurality of reels adjacent the first reels and carrying liners to be interwound with said strips on said first reels, the first and second set of reels respectively, being mounted on common shafts, and means for holding said second set of reels in spaced positions on said shaft, said means including arms engaged with said reels and adjustably mounted on a common transverse rod.

1,819,990. TESTING MACHINE. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 18, 1927. Serial No. 161,780. 6 Claims. (Cl. 73—51.)

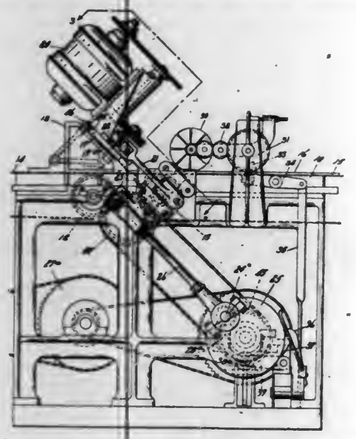


1. A machine for testing rubber shock insulators, comprising a pair of spaced fixed housings for said insulators, spring ends adapted to be reciprocated within said insulators, a pair of rigid bars having one end of each hinged together, said bars being attache dat their other ends to said spring ends, means for vertically reciprocating said hinged ends, and means for applying to said spring ends a load eqivaient to the weight of an automobile.

1,819,991. BAND CUTTING MACHINE. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 10, 1927. Serial No. 218,817. 8 Claims. (Cl. 164—74.)

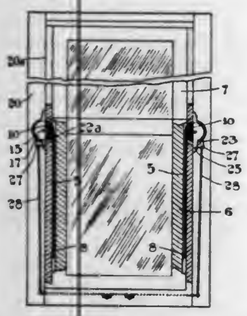
1. A machine of the class described comprising in combination, a conveyor for carrying a continuous strip of material, a carriage mounted to slide transversely of said conveyor, a rotatable cutting disc mounted on said carriage, means for rotating said disc, means for reciprocat-

ing said carriage, means for operating said conveyor, a trip device serving to set said conveyor actuating means and said carriage reciprocating means alternately into



operative motion, and an adjustable gauge wheel engaging said material and operated by the passage of a predetermined length thereof to actuate said trip device.

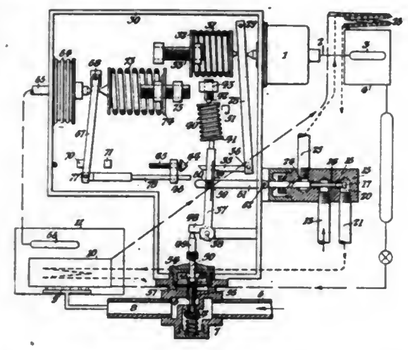
1,819,992. WINDOW SASH OPERATING MECHANISM. JOSEPH ALPHANSE VALLÉE, Montreal, Quebec, Canada, assignor of one-half to Napoleon Mathieu, Montreal, Quebec, Canada. Filed Nov. 6, 1930. Serial No. 493,858. 2 Claims. (Cl. 268—129.)



1. A window comprising a frame equipped with a sliding sash, spring actuated winding drums carried by the sides of the frame, a flat, flexible metal band connecting each drum to one side portion of the sash, pivoted detents normally engaging said drum to prevent rotation thereof, a rock shaft mounted in the lower portion of the frame, spring means tending to rock the shaft in one direction, manually operable means for rocking the shaft in the opposite direction and connections between the shaft and detents functioning to move the detents into and out of engagement with the drums dependent upon the direction in which the shaft is rocked.

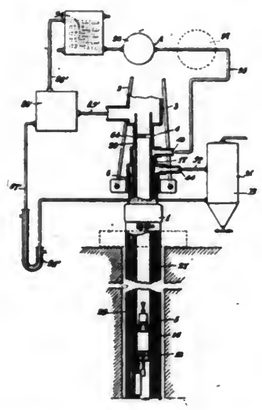
1,819,993. THERMOSTATICALLY OPERATIVE VALVE. JOSEPH WILLIAM WINTER, Penfield, Pa., assignor to John Wood Manufacturing Company, Conshohocken, Pa., a Corporation of Pennsylvania. Original application filed Jan. 23, 1929, Serial No. 334,382. Divided and this application filed Nov. 23, 1929. Serial No. 409,196. 3 Claims. (Cl. 236—48.)

1. The combination with a thermostat; of a lever connected to be actuated by said thermostat; valves operative to respectively control different fluids in an apparatus; and means operatively connecting said valves with said lever; whereby said valves are operated in directions at right angles to each other; including a link having a



slot connection with said lever; whereby said lever is movable to the extent of said slot connection, to operate the other valve before operating the valve having such slot connection.

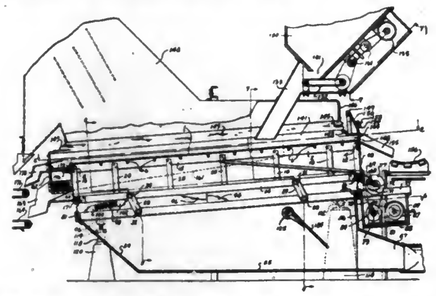
1,819,994. FLUID LIFT FOR LIQUIDS. EDWIN E. CLAYTOR, New York, N. Y., assignor to Charles Paul Mackie, Newark, N. J. Filed Mar. 4, 1925, Serial No. 13,011. Renewed Oct. 21, 1926. 3 Claims. (Cl. 103—52.)



1. Apparatus of the character described, comprising in combination, a casing, a swab operable therein, a valve carried by the swab, latch means for holding the valve open, a spring for holding the valve closed, means carried by an upper part of the casing for opening the valve and setting the latch, means in a lower part of the casing for releasing said latch to allow the spring to close the valve, and means in the lower part of the casing controlled by the swab, for admitting compressed gas to the casing for raising the swab.

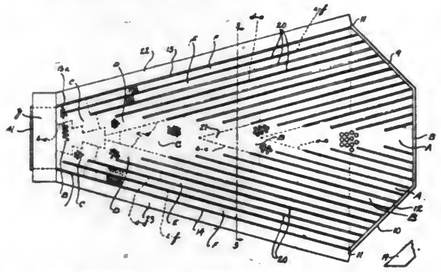
1,819,995. MECHANISM AND PROCESS OF SEPARATING INTERMIXED DIVIDED MATERIALS. KENNETH DAVIS, St. Benedict, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del., a Corporation of Delaware. Filed May 21, 1924. Serial No. 714,916. 31 Claims. (Cl. 209—467.)

1. A mechanism for separating intermixed divided materials of different specific gravities including in combination an air-pervious table having longitudinally thereof an unobstructed portion and a portion having separating partitions thereon and means for progressing the separated ma-



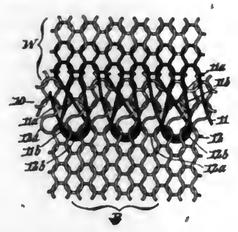
terials, in substantially diametrically opposite directions along the table according to their respective specific gravities.

1,819,996. MECHANISM FOR SEPARATING INTERMIXED DIVIDED MATERIALS. KENNETH DAVIS, Ebensburg, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 25, 1925, Serial No. 18,112. Renewed Oct. 11, 1930. 9 Claims. (Cl. 209—467.)



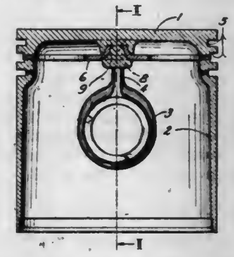
1. A mechanism for separating intermixed dividing materials which vary relatively very greatly in size and relatively very little in specific gravities which comprises an air previous table, means for feeding the intermixed materials near the rear end of the table to maintain a bed of materials thereon undergoing progressive separation, said table having means for graduating the force of the air action therethrough decreasingly forwardly along the table away from said feeding means, but also increasingly for a short distance from the front end of the table, and means for longitudinally reciprocating the table.

1,819,997. ANTIRAVEL WELT JUNCTURE FOR STOCKINGS. GEORGE W. GOETSCH, Elkins Park, Pa., assignor to Quaker Hosiery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 22, 1930. Serial No. 469,667. 6 Claims. (Cl. 66—173.)



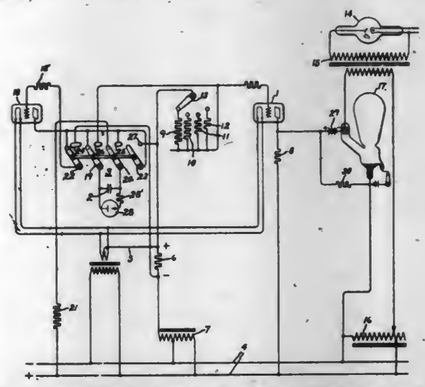
1. The method of forming a ravel proof stocking welt juncture by drawing alternate terminal loops of one thickness of the welt fabric, after folding, over the corresponding terminal loops of the other thickness of the welt fabric; and then transferring the loops so drawn laterally and interlooping them with adjacent doubled terminal loops of the superposed welt layers.

1,819,998. PISTON. FRANK JARDINE, Cleveland, Ohio, assignor, by mesne assignments, to The Cleveland Trust Company, as trustee, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 15, 1929. Serial No. 340,088. 4 Claims. (Cl. 74—108.)



1. A piston comprising a metallic element having an aperture therethrough surrounded by a flange, and an element having a different coefficient of expansion and cast with a boss imbedding said flange and extending through the aperture.

1,819,999. TIME DELAY APPARATUS. WILLIAM K. KEARSLEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 28, 1930. Serial No. 491,805. 8 Claims. (Cl. 175—220.)



7. In combination, a pair of electron discharge devices, each of said devices having an anode, a cathode and a grid, means for supplying alternating electromotive force between the anode and cathode of each of said devices, a condenser, switching means for alternatively connecting said condenser in circuit with the anode of one of said discharge devices and between the grid and cathode of the other of said discharge devices in series with the anode and cathode of said first discharge device, means responsive to current to the anode of said other discharge device for impressing a negative charge on the grid of said first discharge device thereby to prevent discharge of said condenser through said other discharge device prior to interruption of current to the anode thereof, a discharge path for said condenser connected between the grid and cathode of said other discharge device, and means responsive to current to the anode of said other discharge device, whereby said means is operable at a predetermined time subsequent to interruption of said current determined by the rate of discharge of said condenser through said discharge path.

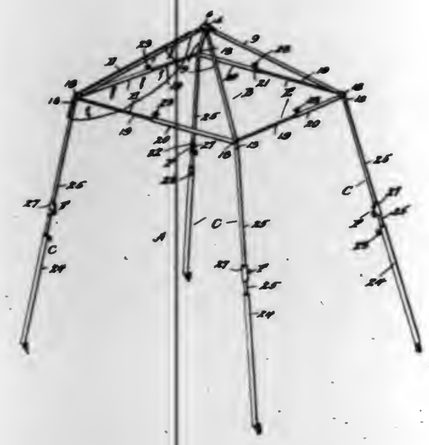
1,820,000. EXPLOSIVE. CAESAR GUSTAV LUIS, London, England. Filed Feb. 15, 1928, Serial No. 254,600, and in Great Britain Mar. 9, 1927. 27 Claims. (Cl. 52—18.)

1. An explosive composition formed of a perchlorate oxygen carrier reasonably free from chlorates, and the dried and powdered husk or flesh, that is the outer part only and excluding the stone or kernel, of the fruit of Terminalia chebula.

1,820,001. SEED DISINFECTANT COMPOSITION. MORRIS S. KHARASCH, Chicago, Ill., assignor to E. I. du Pond de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 9, 1929. Serial No. 384,785. 20 Claims. (Cl. 167—38.)

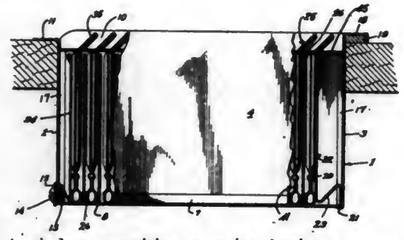
1. A seed disinfectant comprising an organic mercury compound of the type Y—R'—R_2—HgX, in which R_1 and R_2 are unsaturated hydrocarbon radicals, X is a radical taken from the group Cl, Br, I, OH, and $OCOCH_3$, and Y is a radical taken from the group OH, O-alkyl, O-alkyl-HgX.

1,820,002. TENT. SAMUEL C. FORRESTER, Atlanta, Ga., assignor to Fulton Bag & Cotton Mills, a Corporation of Georgia. Filed Feb. 21, 1929. Serial No. 341,800. 6 Claims. (Cl. 135—4.)



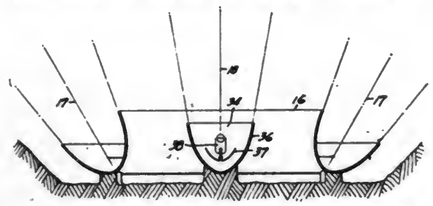
1. The combination with a collapsible skeleton tent frame and a cover overlying the frame, said frame including a top section comprising a cap plate, a series of radially extending arms connected to said cap plate and relatively movable with respect thereto, a coupling element secured to the free extremity of each arm, a plurality of telescopic side bars engageable with the respective coupling member to interconnect the respective arms, whereby relative movement of the arms and side bars with respect to the cap plate and expansion and contraction of said top section is effected, and telescopic supporting standards for said top section.

1,820,003. INDEX FILE. LE ROI E. HUTCHINGS, Tonawanda, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 3, 1930. Serial No. 425,524. 9 Claims. (Cl. 129—16.)



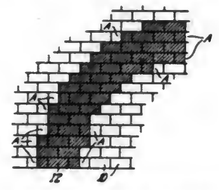
6. An index comprising a casing having an open side and shoulders formed thereon adjacent said open side, a plurality of index holders therein, separating plates loosely retained by said shoulders in said casing between adjacent holders, tail pieces hingedly connected to said holders adapted for engagement with said shoulders to prevent complete detachment of said holders from said casing.

1,820,004. AERIAL NAVIGATION SYSTEM AND METHOD. GEOFFREY GOTTLIEB KRUESI, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed June 12, 1928. Serial No. 284,864. 9 Claims. (Cl. 250—11.)



9. In a radio system, a wave reflector formed as a surface of revolution and having a circular focal line, and a circular shaped antenna conductor substantially coincident with said focal line.

1,820,005. ROOFING. ROBERT MACLEAN, Chicago, Ill., assignor to Amalgamated Roofing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 23, 1930. Serial No. 422,740. 5 Claims. (Cl. 108—7.)



5. A design roof having design areas with straight vertical edges, said roof being made up of overlapping courses of three kinds of rectangular shingles, a first kind having a first color, a second kind having a second color, and a third kind divided vertically into two portions, one portion being of said first color and the other of said second color.

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Labels	35—No.	39,600 to No.	39,634, inclusive.
Prints	11—No.	13,381 to No.	13,391, inclusive.
Reissues	12—No.	18,160 to No.	18,171, inclusive.
Designs	60—No.	84,911 to No.	84,970, inclusive.
Patents	894—No.	1,820,006 to No.	1,820,899, inclusive.
Total	1,284		

Trade-Marks Canceled

214,870. Boots and shoes. John Davis Shoe Stores, Inc., Boston, Mass. Registered July 6, 1926. Canceled August 7, 1931.

221,260. Lacquers, enamels, thinners, bronzing liquids, etc. Royalin Flexible Lacquer Company, Incorporated, Long Island City, N. Y. Registered November 23, 1926. Canceled July 23, 1931.

255,985. Orange beverage. California Bottling Works, Los Angeles, Calif. Registered April 30, 1929. Canceled July 23, 1931.

260,210. Certain named wearing apparel. Royal Worcester Corset Company, Worcester, Mass. Registered August 20, 1929. Canceled July 23, 1931.

275,134. Stained shingles. Arthur E. Stitzinger, doing business as Stitzinger Lumber Company, Philadelphia, Pa. Registered September 16, 1930. Canceled August 7, 1931.

280,037. Certain named machinery and tools and parts thereof. National Equipment Corporation, Milwaukee, Wis. Registered February 10, 1931. Canceled August 7, 1931.

281,499. Marking chalk, tailor's chalk. Star Binding and Trimming Co. Inc., New York, N. Y. Registered March 17, 1931. Canceled August 7, 1931.

Adjudicated Patents

(D. C. Ill.) Ramsey patent, No. 1,093,009, for lamp-support, *Held* not infringed. *International Spotlight Corporation* v. *United Mfg. Co.*, 50 F.(2d) 234.

(D. C. Ill.) Aiken patent, No. 1,144,956, for lamp socket, *Held* not infringed. *Id.*

(D. C. Ill.) Ramsey patent, No. 1,147,973, for lamp-support, *Held* not infringed. *Id.*

(C. C. A. Cal.) Henderson patent, No. 1,174,008, for art of preserving eggs, *Held* invalid. *Kasser Egg Process Co.* v. *Poultry Producers of Central California*, 50 F.(2d) 141.

(C. C. A. Cal.) Henderson patent, No. 1,177,105, for art of preserving and sterilizing eggs, *Held* invalid. *Id.*

(D. C. Ill.) Cousino patent, No. 1,327,945, for spot light mounting device, claims 5 and 6 *Held* valid and infringed. *International Spotlight Corporation* v. *United Mfg. Co.*, 50 F.(2d) 234.

(D. C. Ill.) Wielage patent, No. 1,434,468, for dirigible spotlight, claims 1 and 2 *Held* invalid. *Id.*

(D. C. Ill.) Sklarek patent, No. 1,675,915, for dirigibly-mounted light, claims 3 and 4 *Held* invalid. *Id.*

(D. C. Ill.) Sklarek patent, No. 1,682,150, for drill-guiding jig, claims 5 and 7 *Held* invalid. *Id.*

(D. C. Ill.) Sklarek patent, No. 1,699,124, for adjustable light mounting, claim 18 *Held* not infringed. *Id.*

(D. C. Conn.) Fox design patent, No. 73,226, for bottle, *Held* invalid. *Fox* v. *Spiegel*, 50 F.(2d) 195.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,553,680, W. N. Frank, Fluid gauge, decided June 9, 1931, claims 2 and 19.

Pat. 1,660,944, S. B. Winn, Tractor trailer combination, decided July 17, 1931, claims 18, 19, 20, and 21.

Pat. 1,701,399, H. W. Vickery, Adjustable switching mechanism, decided July 27, 1931, claims 1, 2, and 3.

Pat. 1,705,799, B. A. Woina, Vehicle closure, decided July 8, 1931, claim 2.

Pat. 1,715,710, L. J. Kinnard, Automatic gate closer, decided July 27, 1931, claims 1, 2, and 8.

Pat. 1,738,808, George Walker, Direction recorder, decided July 27, 1931, claims 1, 2, 10, 11, 12, and 13.

Pat. 1,800,126, H. W. Williams, Inductor relays for elevators, decided July 27, 1931, claim 10.

Condition of Applications Under Examination at Close of Business August 8, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 92,125; Trade-Mark Division, 1,025. Oldest new case, Dec. 8, 1930; oldest amended, Dec. 8, 1930. The dates given are 1931 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Mar. 28	Apr. 2	781
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Feb. 14	Feb. 14	1,437
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 8	Apr. 21	887
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Mar. 9	Mar. 26	794
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Feb. 19	Mar. 2	744
318	6. LEWERS, A. M., Carbon Chemistry	Jan. 2	Jan. 7	2,077
106	7. JARBOE, C. O., Optics; Photography	Jan. 16	Jan. 17	2,002
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Jan. 12	Jan. 29	1,637
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Mar. 2	Mar. 2	1,365
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 19	Apr. 2	1,061
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 13	Mar. 13	768
380	12. HENRY, C. C., Machine Elements	†Dec. 23	Feb. 10	1,252
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Feb. 19	Feb. 21	1,141
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Feb. 10	Mar. 19	1,109
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Jan. 18	Jan. 18	2,553
242*	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 28	Apr. 9	801
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Jan. 12	Jan. 15	1,505
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants, Speed-Responsive Devices	Feb. 12	Feb. 13	1,103
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	†Dec. 11	†Dec. 11	2,070
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Apr. 3	Apr. 6	895
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Feb. 13	Mar. 26	974
244*	22. COLWELL, I. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Mar. 17	Apr. 11	742
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	†Dec. 11	†Dec. 12	1,053
147*	24. DURAS, C. C., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Feb. 9	Feb. 9	973
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Feb. 10	Feb. 9	1,557
228*	26. HODGES, J. F., Electricity, Generation; Motive Power	Feb. 21	Feb. 25	955
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Feb. 13	Feb. 9	1,095
225	28. BENSON, A. R., Internal-Combustion Engines	Feb. 4	Feb. 5	1,643
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Apr. 1	Apr. 16	587
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 8	May 11	887
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	†Dec. 8	†Dec. 8	2,647
149	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Mar. 11	Mar. 9	1,283
252	33. WYMAN, W. L., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Feb. 11	Feb. 9	2,409
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Apr. 8	Apr. 10	884
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 18	May 19	829
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	†Dec. 15	†Dec. 24	2,264
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Jan. 23	Jan. 29	1,491
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 16	Apr. 18	537
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Feb. 26	Mar. 2	1,555
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Jan. 9	Jan. 20	3,151
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Mar. 11	Mar. 14	744
223*	42. CUTTING, H. O., Electric Signaling	Jan. 22	Feb. 2	1,418
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Feb. 13	Feb. 13	1,561
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	†Dec. 15	†Dec. 10	2,154
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Jan. 8	Jan. 8	2,101
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Feb. 24	Mar. 7	1,182
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Feb. 9	Feb. 11	2,131
212*	48. ROEPKE, O. R., Electricity, General Applications	Feb. 11	Feb. 10	1,120
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 9	Mar. 11	1,438
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	†Dec. 30	†Dec. 30	2,531
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	†Dec. 29	†Dec. 29	2,165
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Feb. 18	Feb. 25	1,437
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 9	Mar. 20	718
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	†Dec. 19	†Dec. 19	2,812
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery	June 19	June 19	200
	{Designs	July 23	July 24	294
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Jan. 14	Jan. 10	1,769
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Feb. 12	Feb. 28	808
270*	58. DOWELL, E. F., Abrading; Typewriting	Jan. 8	Jan. 9	1,532
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Feb. 26	Feb. 28	1,696
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Jan. 8	Jan. 13	1,858
269	61. PARKS, G. B., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	†Dec. 16	†Dec. 27	2,065
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers.	†Dec. 16	†Dec. 17	2,598
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	†Dec. 30	†Dec. 30	2,295
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND, {Trade-Marks	July 11	July 30	972
	{Labels and Prints	Aug. 7	July 28	53

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE PEILER

No. 2,651. Decided March 31, 1931

PATENTABILITY—DOUBLE PATENTING.

Certain claims for an apparatus for feeding molten glass *Held* unpatentable since they are for the same invention as that claimed in applicant's prior patent.

APPEAL from the Patent Office. Affirmed.

Mr. Vernon M. Dorsey, *Mr. S. F. Parham*, and *Mr. L. C. Bates* for Peiler.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

Appellant has taken out a series of patents on glass feeding mechanism and processes. On May 5, 1919, he filed his application, Serial No. 294,792, with claims for device and processes, and this application afterwards went to patent on January 3, 1928, as Patent No. 1,655,391. The application here in issue is a division of said application and was filed April 9, 1926. On November 25, 1925, the appellant filed an application for patent on improvements in the same device and processes, which afterwards went to patent on February 16, 1926, as Patent No. 1,573,742. The divisional application now before the court, involves a cam mechanism governing the rise and fall of the impelling implement which controls the discharge of the glass, and which cam mechanism is adjustable while the impelling implement and other mechanism is in operation.

The Examiner and Board of Appeals rejected certain of the claims of appellant. Appeal was taken from this action, but in this court, some of the rejected claims were abandoned, so that we have for consideration only rejected claims 1 to 6, inclusive, 8, 15, and 16. Claim 1 is fairly typical of said claims, and is here given:

1. The combination with apparatus for feeding molten glass, including a container having a submerged outlet for discharging the glass, of an implement movable in adhesive contact with glass in the container toward and from the outlet, a cam for reciprocating the implement to cause periodic application of accelerating and retarding impulses to the glass in the outlet, and means for varying the contour of the contact surface of the cam while the cam is rotating.

The Board of Appeals rejected these claims on reference to appellant's patents heretofore cited, on the general ground that to issue a patent to appellant on this application would result in double patenting, the invention in issue being held to be fully covered by appellant's disclosure and claims in said Patent No. 1,573,742. The appellant contends that, under the Patent Office practice at the time of the application which ripened into said Patent No. 1,573,742 was being prosecuted, he could not claim for the specific invention herein claimed upon; that in said application, in his specification and drawings, he disclosed several alternative forms of application of his invention, and that, while said specification and drawings showed the cam mechanism here in question, his claims were drawn therein on a form of the mechanism which did not show such mechanism; that he could not, under said practice, claim for both, and is therefore entitled here to claim a patent on the specific device which he could not claim there.

As opposed to this view, the Solicitor of the Patent Office argues that the specification and drawings of appellant in the application in said Patent No. 1,573,742 disclosed the identical device here claimed upon, and that the claims therein fully covered it. It is also argued that inasmuch as appellant, in said application, showed alternative devices, with claims covering all, the patent should be construed as covering the most specific showing therein. In this connection the solicitor calls attention to the statement of the Examiner:

> It is well settled, it seems, that where a patent discloses several species of an invention and contains claims specific to one of these species, the species on which the specific claims of the patent are based cannot form the patentable subject matter of the claims of another patent.

The Board of Appeals has this to say on the subject:

> It is also contended that the specific claims of No. 1,573,742 are drawn to the "paddle-needle" feeder disclosed in Figs. 1 to 11, inclusive, and the rejected claims to the needle feeder of Figs. 12 to 19, inclusive, so that the rejected claims could not be made in the patent. The paddle and its operating devices are entirely separate and distinct from the needle operating devices in Figs. 1 to 11, inclusive, and there is no claim in the patent which is specific to the operating devices of the needle mechanism of this modification. The fact that there are claims specific to the paddle operating devices would not preclude the allowance of claims to the needle or plunger operating mechanism of either claims 1 to 11, inclusive, or claims 12 to 19, inclusive, and there is a claim generic to both of them (see claim 35). Of the rejected claims, claims 1 to 6, inclusive, and 8 are limited to adjustment of one lobe of the cam relative to the other while the cam is rotating, as disclosed in Figs. 12 to 19, inclusive, of the patent and involved in claims 10 and 35 of the same. Claims 7 and 11 to 14, inclusive, are not so limited and would read on the form shown in Figs. 1 to 11, inclusive.
>
> Claims 19 and 25 of the patent involve variation of the length of the feed period without varying the frequency of the severing operation and this is just what the rejected claims cover.
>
> To state the matter briefly, our conclusion is that the construction whereby the cam devices for operating the impeller are adjusted for the purpose of varying the up and down strokes is not a different invention from the phase changing operation between the impeller operating devices and the severing means which results therefrom, as covered by claims 19, 22, 25 and 35 of Patent No. 1,573,742.
>
> There is no reason why the rejected claims could not have been made in the patent and we see no proper line of division between these claims and those of the patent.

The device in question here is used in drawing molten glass from a container, and consists of an impeller or plunger which is caused to accelerate the flow of the molten glass and expel it in charges of a certain size and form into the molds at the will of the operator. The particular feature here involved is a cam with a plurality of parts, which raises and lowers the impeller. The construction of the cam is as follows: Two sleeves, freely rotatable on a shaft, have bevel gears on their outer extremities. The inner extremities thereof have flanges, which constitute a part of the cam. To these flanges are bolted cam lobes, one to the flange of the right sleeve and one to the flange of the left.

These constitute the cam for raising and lowering the impeller. Each sleeve is caused to rotate in the same direction by bevel gears placed between the bevel gears on the outer extremities of said sleeves and other bevel gears fixed immovably upon the rotating shaft. The operator may, while the mechanism is operating, by means of a handle, connected with a worm gear which engages a movable, cogged sector, turn the small interconnecting beveled cog wheel one way or the other, and thus move the portion of the cam attached to that particular sleeve. Both sleeves have such adjustable means. Thus the operator can regulate the stroke of the impeller while the machine is in operation, at will.

The precise device in question is fully described in appellant's specification, on pages 6 and 7, and is shown in his drawings 12 to 19, inclusive, in said Patent No. 1,573,742. The Solicitor for the Patent Office contends that claims 28 and 29 of said patent fully cover the device here sought to be patented. Said claims are as follows:

28. In apparatus for separating molten glass into mold charges, the combination of a container for the glass having a submerged discharge outlet, a vertically movable implement projecting downwardly into the glass in working alignment with the outlet, shears adapted to close beneath the outlet to sever mold charges suspended therebeneath, and means for closing the shears periodically and reciprocating the implement vertically in timed relation to the shear operation, said means being adapted to permit adjustment of said timed relation while maintaining uniform reciprocations of the implement.

29. In apparatus for separating molten glass into mold charges the combination of a container for the glass having a discharge outlet, periodically operable means for timing the formation and suspension of successive gathers of glass beneath said outlet, severing means operating periodically, in timed relation to said timing means, to sever a mold charge from each suspended gather, and means, operable during the continued operation of the apparatus, for altering the said timed relation between the said severing and timing means.

Appellant invokes the rule that he may have separate valid patents as he makes patentable inventions, and that he has the option to secure all of these inventions, if they be related, by a single patent or by many patents. He further argues that the fact that he has described this patent device in a former application does not preclude him from having a patent upon the same now, so long as he did not claim the same in his application which ripened into said patent. In support of this contention, he cites *Century Elec. Co.* v. *Westinghouse Elec. Co.*, 191 Fed. 350; *Wirebounds Patents Co.* v. *Saranac, etc.*, 37 F.(2d) 830; *Traitel Marble Co.* v. *Hungerford Brass & Copper Co.*, 22 F.(2d) 259, and *Thomson-Houston Elec Co.* v. *Ohio Brass Co.*, 80 Fed. 712, 729.

This is the law, and the appellant's right here must be measured by it. If he has disclosed, but not claimed the particular invention here in question in his patent, he can claim it now. However, we are in agreement with the Solicitor of the Patent Office in his construction of claims 28 and 29 of said Patent No. 1,573,742. In claim 28, for instance,

means for * * * reciprocating the implement vertically in timed relation to the shear operation, said means being adapted to permit adjustment of said timed relation while maintaining uniform reciprocations of the implement,

is another way of stating what appellant has stated in his rejected claims wherein he recites,

means for varying the contour of the contact surface of the cam while the cam is rotating.

The essential feature is the means for controlling the impeller mechanism while it is in motion. This element, in our opinion, was not only fully disclosed in the specification and drawings of appellant's Patent No. 1,573,742, but was claimed therein in said claims 28 and 29. Hence, to grant his application here on the rejected claims would be to give him another patent upon a device already patented, and would operate to prolong his monopoly beyond the period which the legislature provided he might have.

The decision of the Board of Appeals is affirmed. Affirmed.

U. S. Court of Customs and Patent Appeals

HEGER PRODUCTS CO. *v.* POLK MILLER PRODUCTS CORP.

No. 2,555. Decided March 31, 1931

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES.

   Dog and bird medicines *Held* goods of the same descriptive properties as bird food, gravel, cuttlebone, and medicated seed cake.

2. TRADE-MARKS—OPPOSITION—ESTOPPEL.

   The fact that the H. Company purchased goods from the P. M. Company carrying a certain trade-mark does not estop the H. Company from subsequently asserting that it had previously used that mark on goods of the same descriptive properties.

3. SAME—SAME—PRIORITY.

   Testimony of the H. Company reviewed and *Held* insufficient to establish that it had used the mark in question prior to the time that the P. M. Company began to use it.

APPEAL from the Patent Office. Affirmed.

Mr. Howard L. Fischer, Mr. Thos. L. Mead, jr., and *Mr. James H. Littlehales* for Heger Products Co.

Messrs. Mason, Fenwick & Lawrence and *Mr. Edward G. Fenwick* for Polk Miller Products Corp.

GRAHAM, *P. J.:*

On May 16, 1925, the appellant filed its application, Serial No. 214,416, for the registration of a trade-mark to be used in connection with the sale of parrot, dog, bird, and cat medicines. The trade-mark consists of a yellow label with two annular red bands, one on the upper and one on the lower portion of the label. In its application the appellant stated "the trade mark has been continuously used and applied to said goods in applicant's business since on or about January 10th, 1931." Opposition was filed thereto by the appellee. Both parties took testimony. The Acting Examiner of Interferences sustained the opposition and refused registration and, on appeal to the Commissioner, this decision was affirmed on August 1, 1929.

The appellee opposed the registration sought, on the ground that the same would cause confusion with the mark used by the opposer, which was the same mark as that used by the appellant, and which the opposer stated had been used by it upon animal medicines, since "long prior to the year January 10, 1921." The opposer contended that its goods were of the same descriptive properties as those of the appellant, and that to grant the application in question would cause it damage.

The Commissioner gave, as reasons for his holding, that medicines for animals are not of the same descriptive properties as foods and ingredients of foods, and that the appellant, having used the mark in question only on products consisting of aquarium cement, foods for birds, gravel and cuttlebone, and medicated seed cake, which he held to be a food, could not expand this mark to include animal medicines.

The Commissioner further found that the appellee had been using its mark, the label in question, on dog medicines since June, 1919, at which time it adopted the same as its trade-mark. He also found that this date was prior to any date of use by appellant, shown by the record, and held that the evidence of appellant as to earlier use than this was insufficient and unsatisfactory. The appellant, on August 21, 1929, filed a petition to remand to the Examiner, to take further testimony on the question raised by the Commissioner in his decision, wherein he had held that the medicated seed cake made by appellant was not of the same descriptive properties as the goods manufactured by appellee. This motion was denied by the Commissioner on September 5, 1929.

In the written decision filed at that time, the Commissioner called attention to the statement of appellant, in its application for registration, that it had used this mark on its goods since on or about January 10, 1921, and held that the appellant could not be entitled to an earlier date in the absence of correct and convincing evidence showing error in his said statement, and which clear and convincing evidence the Commissioner held did not exist. The Commissioner also held that the appellant was estopped by the acts of its officers, the Heger brothers, from claiming the right of registration by virtue of the fact that they had, in their business up until the year 1924, known of the use, by appellee, of the mark in question; had continuously bought goods from the appellee bearing such marks and had sold the same in their place of business continuously, and sometimes representing to customers that the goods were the product of the appellant.

On September 14, 1929, the appellant filed his notice of appeal to this court in the Patent Office, setting forth nine assignments of error; thereafter, on October 1, 1929, appellant again filed in the Patent Office a motion to remand and reopen the case, alleging the discovery of claimed new and important testimony, namely, certain check stubs made in the business of Edward S. Schmid, and which, it was said, substantiated the claims of appellant to an earlier use than that set out in his application for registration. On October 9, 1929, the Commissioner denied this motion on the grounds that the case was decided on the theory that medicated seed cake for animal and bird foods were of different descriptive properties, and that the alleged newly discovered evidence would not affect that decision. He also held that the appellant was estopped by the facts appearing of record; that, therefore, the alleged new evidence would not be beneficial to him, and that notice of appeal had been filed and "it is at least doubtful whether this Office has authority to entertain a motion to reopen after notice of appeal to the court."

The matter now comes to this court on this record. No error is assigned by appellant upon the failure of the Commissioner to grant his motion for a remand of the cause, made October 1, 1929, as this motion was made after the notice of appeal containing the assignments of error had been filed. It is apparent that this action of the Commissioner is not now before this court for consideration. *In re Schneider*, 17 C. C. P. A. (Patents) 952, 39 F.(2d) 278, 396 O. G. 348; *In re Smith*, 17 C. C. P. A. (Patents) 752, 36 F.(2d) 522, 393 O. G. 1029; *Nolop* v. *Smith*, 17 C. C. P. A. (Patents) 768, 36 F.(2d) 838, 393 O. G. 1027.

The question of the jurisdiction of the Patent Office to take further steps in proceedings of this nature after notice of appeal to this court has been filed, is, therefore, not now before us, and that question is reserved for the future consideration of the court.

We shall first examine the question of estoppel raised on this record, for it is quite evident that if the appellant, by its affirmative acts, has lulled the appellee into security, and has induced it to believe that the use of its mark was unobjected and consented to, then it would seem to follow that the appellant should be precluded from claiming the exclusive right to the use of said mark.

The evidence on behalf of the appellant shows that in 1892 one Harman H. Heger conducted a business known as H. H. Heger's Retail Store, and dealt in birds, pets and sundries. Mr. Heger died in 1909, at which time his business was known as the Heger Bird Store. Thereafter, his sons, William F. Heger and Robert R. Heger, took charge of the business and conducted it as a co-partnership, using the name of Heger Bird Food Co., until about 1918 or 1919, at which time the name was changed to the Heger Products Company. Thereafter, the firm was incorporated as Heger Products Corporation. During these years, and up to the time of hearing herein, these parties have conducted a retail store where bird, fish and animal foods and medicines are sold, in St. Paul, Minnesota.

The appellee is a corporation which was first known as the Polk Miller Drug Company, and is, at this time, known as the Polk Miller Products Corporation. The appellee and its predecessors has been engaged, since February 1, 1919, in the manufacture of a general line of dog medicines.

In May or June, 1919, the Polk Miller Drug Company adopted, as its trade-mark, a carton with a yellow background and with parallel red bands at the top and bottom of the carton. The evidence in the record shows, satisfactorily, that this particular kind of carton was used by the appellee and its predecessor as a trade-mark continuously since that time up to the time of hearing. There was a slight variation in the color scheme in this respect, that in cartons containing packages of sufficient size, the red bands entirely surrounded the

carton, while in small flat packages, such as is shown by appellant's Exhibit 1, namely, arsenic and iron pills, the red bands were simply superimposed across, or approximately across, the upper and lower portions of the front sides of the carton. No doubt exists from the record that this mark was used continuously by the appellee and its predecessor, as above stated.

The appellant and its predecessor, as has been said, were engaged in conducting a general retail store, in the conduct of which the Heger Brothers personally took part. They ordered goods, as needed in the store, and sold the same over the counters to customers, doing a rather extensive business in the general line of bird, fish and animal foods and medicines.

On September 8, 1920, the Polk Miller Drug Company sold to the appellant's predecessor certain of its goods, which were received by appellant's predecessor and sold by it to its customers. The evidence satisfactorily establishes that these goods were marked with appellee's trade-mark, which it had adopted and had been using, namely, a yellow carton with red annular stripes. From that time until the Heger Brothers completed their own line of bird, fish and animal remedies, sometime during the year 1924, the Heger brothers purchased and used, in their business, large quantities of appellee's products, all of which were in containers bearing appellee's aforesaid trade-marks, and all of which were displayed upon appellant's shelves and sold by them to their customers.

During all of this time the appellant made no complaint, nor did either of the Heger brothers, about the use of this mark by the appellee, and at no time intimated or indicated to the appellee that it had any objection to the use of such mark. In fact, on many occasions, the goods of appellee were sold and represented to customers of appellant as the goods of the appellant, as was shown by the testimony of William F. Heger, appearing in the record.

The Heger brothers testify that since their corporate business first began in 1919, they have used on certain of their products a similar mark, namely, a yellow carton with red stripes. They testify further that they were using this same mark when they were selling the goods of the appellee; that they carried these goods on their shelves side by side. They explained their failure to object to the use of this mark by the appellee on the general grounds that they did not know this was necessary. They are, however, men of apparent intelligence and education, and accustomed to the ways of business. They admit that they purchased goods as stated by the appellee, except that they gave the approximate date of commencement at 1921, and admit that they noticed the color of the labels used by the appellee at various times while the goods were being sold by them. The purport of their testimony is, however, that there is some confusion in their minds as to whether the red bands were annular, or only extended a part of the way around the packages. However, they both concede and testify that they knew the distinctive mark of a yellow label with red bands.

The goods which the appellee sold comprised a number of medicines for animals, such as are usually sold in a store which caters to the bird, animal and pet fish trade. These were such as distemper medicine, mange medicine, carbolic tar soap, etc. Appellant first manufactured aquarium cement, mixed bird seed, medicated seed cake and some other similar products, and later added cat, dog and fish medicines and foods.

[1] Some contention has been made, in this case, that the goods of the appellant and appellee are not goods of the same descriptive properties. We are of opinion that this contention is not well taken. Under the recent decisions of this court, the goods of appellant and appellee, being goods which are used for the same general purpose, namely, the care of pet animals, fish and birds, and being sold from the same places of business, are goods of the same descriptive properties. *Palmer Co.* v. *Nashua Mfg. Co.*, 17 C. C. P. A. (Patents) 583, 34 F.(2d) 1002, 389 O. G. 533; *Check-Neal Coffee Co.* v. *Hal Dick Mfg. Co.*, 17 C. C. P. A. (Patents) 1103, 40 F.(2d) 106, 395 O. G. 10; *B. F. Goodrich* v. *Hockmeyer*, 17 C. C. P. A. (Patents) 1068, 40 F.(2d) 99, 394 O. G. 75; *Sun-Maid Raisin Growers* v. *American Grocer Co.*, 17 C. C. P. A. (Patents) 1034, 40 F.(2d) 116, 395 O. G. 3; *Kotex Co.* v. *McArthur*, 18 C. C. P. A. (Patents) ——, 45 F.(2d) 256, 404 O. G. 4; *National Biscuit Co.* v. *Sheridan*, 18 C. C. P. A. (Patents) ——, 44 F.(2d) 987, 402 O. G. 4; *Skookum* v. *Pacific*, etc., 18 C. C. P. A. (Patents) ——, 45 F.(2d) 912, 403 O. G. 515.

[2] On the question of estoppel, we are unable to concur with the Commissioner. Mere acquiescence in the use of one's trade-mark by another, even though it may be for an extended period, will not, in itself, bar the person from asserting the right to such trade-mark at any time. There must be something more than mere acquiescence and delay in enforcing such rights. The right to claim the exclusive use of such trade-mark is a continuing right in the owner. This has been well settled by the authorities. *McLean* v. *Fleming*, 96 U. S. 245, 257, 13 O. G. 913; *Menendez* v. *Holt*, 128 U. S. 514, 524, 46 O. G. 971; *Michigan Condensed Milk Co.* v. *Kenneweg Co.*, 30 App. D. C. 491, 135 O. G. 451; *Carroll & Son Co.* v. *McIlvaine et al.* 171 Fed. 125. This rule has long been the rule in equity cases, and has been announced in *Michigan Condensed Milk Co.* v. *Kenneweg Co.*, supra, to be equally applicable in matters of registration in the Patent Office.

We should not be understood as here holding that estoppel may not arise by the acts of the parties which would prevent registration. All we desire to hold is that the facts presented in this case constituting acquiescence, merely, do not raise such an estoppel. The fact that the agents of the appellant sold the goods of appellee as their own to customers, constituted a fraud and one which could have been restrained in equity by the appellee, but it was not such a circumstance as to create an estoppel against the appellant in this proceeding, which might be asserted by the appellee.

[3] The question then arises as to the priority of use by the respective parties. The appellant represented in its original application for patent that it had used the mark in question continuously since on or about January 10, 1921. This application was sworn to by Robert H. Heger, one of the Heger brothers. No attempt, at any time, was made to amend this application in this respect. On the hearing, the Hegers attempted to prove that the mark in question had been used by them and their father on or before the year 1909, and continuously since that time, on various products, including aquarium cement and various kinds of medicated seed cake and other bird, animal and fish preparations.

The testimony of the Heger brothers is, to a considerable extent, unsatisfactory, and lacks those corroborating circumstances which should be present if the appellant is to sustain the burden placed upon it to overcome the concurring decisions of the Patent Office tribunals. The fact that during many years of their business they were selling the appellee's goods bearing the mark which they now claim the exclusive right to use, and that during the whole of that period no protest was made against the use of the same, added to the further fact that Robert R. Heger, one of the brothers, testified that as early as February 1, 1921, his firm had no trade-marks, are all circumstances which induce a belief in the reasonable mind that at the time the appellee began to use the trade-mark in issue here on its goods, the appellant and its officers had not adopted the same as its trade-mark. It is true that the Heger brothers, and possibly their father, may have used a color combination of yellow and red in making cartons for the particular products they handled, but it is equally true, in our opinion, that the idea of appropriating the same to their exclusive use as a trade-mark was not in their minds at the time the appellee began to use the same as its trade-mark, and that this idea was a thought conceived by the Heger brothers at the time they formed their present company, the Heger Products Corporation, on January 10, 1921.

This being our conclusion, it follows that the Commissioner committed no error in finding that appellee was the prior user and owner of the mark in question, and that the appellant was not and is not entitled to the registration of the same, and that the opposition should be sustained.

The decision of the Commissioner sustaining the opposition is affirmed, and costs occasioned by the supplemental record are taxed against the appellant.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE SIMMONS

No. 2,663. Decided March 31, 1931

PATENTABILITY—PROCESS—RELIEVED CONICAL TAPS.

Claims for a process of making relieved conical taps *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Kwis, Hudson & Kent, Mr. Watts T. Estabrook and *Mr. W. E. Williams* for Simmons.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

The appellant filed an application for a patent, which application contained two claims, and which was for an alleged improved process of making relieved conical taps. In his specification and drawings the appellant discloses a method by which a cylindrical hob with relieved teeth is caused to be rotated with its teeth in contact with the surface of the blank, the axis of the cutting hob to be parallel with the surface of the conical tap or parallel with its surface when it is completed in the form desired. The hob is caused to rotate very rapidly, as compared to the speed of the rotation of the grooved tap blank, the latter preferably making but one revolution for the complete tap threading operation, during which time the hob is moved longitudinally of the tapered blank and toward the large end thereof a distance of approximately the pitch distance of the tap, that is, the adjacent threads thereof. The hob also has a lateral motion to cut the tap threads in each row in a relieved form.

The Examiner rejected the claims on the following references: Müller, 1,155,432, October 5, 1915; Müller, 1,273,904, July 30, 1918; Taylor, 331,167, November 24, 1885. This rejection was affirmed by the Board of Appeals.

The appellant admits that the Müller references show tap-cutting mechanisms which operate upon cylindrical grooved tap blanks in the same method appellant discloses here. But he argues this is not a sufficient reference upon which his claims may be refused, because he has applied this idea to the cutting of a conical tap, which has not before been done. The Board of Appeals properly states, in our opinion, that the Taylor device referred to is an anticipation of this idea. Taylor shows the cutting of a conical, threaded bushing by a cylindrical hob by the same method proposed by appellant here. Appellant is claiming here not a device patent, but a process patent, namely, a patent upon a process for cutting taps by disposing the axes of the hob and the surface of the tap blank parallel to each other. That method was fully disclosed by Taylor, and whether Taylor used it in cutting taps or in cutting bushings, in view of the disclosures of Müller, is unimportant.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MARDEN AND RICH

No. 2,632. Decided March 25, 1931

1. PATENTABILITY—PROCESS OF PREPARING DUCTILE VANADIUM.

   Certain claims for a process of preparing ductile vanadium *Held* unpatentable over the prior art.

2. SAME—DUCTILE BODY OF VANADIUM.

   Claims for a ductile body of vanadium *Held* unpatentable since the quality of purity of vanadium or its ductility is a quality of a natural product and not patentable.

APPEAL from the Patent Office. Affirmed.

Mr. Max F. Reges and *Mr. Raymond Jones* for Marden and Rich.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

From a decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner, refusing to allow claims 9 to 12 inclusive and 14 to 19 inclusive on the ground that the claims defined nothing inventive over the prior art, the applicants have appealed here. Claims 9 to 12 are for a method of producing ductile vanadium, and claim 9 is regarded as illustrative of the method claims. Claims 14, 15, 16, 17, 18, and 19 are article claims and these with claim 9 are as follows:

9. The method of preparing ductile vanadium which comprises reducing an oxide of vanadium to form vanadium powder, slowly heat-treating the vanadium in a high vacuum until substantially all the adsorbed and absorbed gases are removed, and then fusing said powder to remove any hydrogen remaining.
14. A coherent homogeneous ductile body of vanadium.
15. A pure ductile homogeneous body of vanadium.
16. A wire formed of ductile vanadium.
17. A filamentary conductor of ductile vanadium.
18. An electrode formed of ductile vanadium.
19. A form of vanadium which is ductile and homogeneous.

The process claims relate to a process for preparing vanadium so that it will be ductile. The metal in its ductile state may be made into filaments for use in various electrical arts. The process consists of taking oxide of vanadium and reducing the same to a form of vanadium powder. This is slowly heat treated in a high vacuum until substantially all the adsorbed and absorbed gases are removed. The powder is then fused to remove any hydrogen remaining. A filament may then be formed by cold working the fused body of vanadium.

It is contended by appellants that they were the first to produce ductile vanadium and that they are not only entitled to all of their process claims but that they are entitled to a patent on the article, ductile vanadium, in its various forms.

It is conceded by counsel on both sides that ductile or malleable vanadium is nothing more or less than vanadium freed from all of its impurities and that all pure vanadium is ductile.

The Board of Appeals allowed certain method claims relating to the method of producing the substantially pure metal powder and rejected the method claims at issue relating to the vacuum heat-treating process, on the references Kuzel et al., 1,088,909, March 3, 1914, and Liebmann, 1,111,698, September 22, 1914, and also referred to the patent to Von Bolton, 799,441, September 12, 1905. In the decision of the Board of Appeals the following language is used:

We find nothing patentable in the rejected claims over these references. Attention is also called to the decision of the Circuit Court of Appeals, 3rd Circuit in *General Electric Co.* vs. *De Forest Radio Co. et al.* 28 F. R. (2nd ser.) p. 641, in which claims exactly parallel to the article claims 14 to 19, inclusive, of the present case were held invalid on grounds which are equally applicable to these claims. Claims 14–19, inclusive, are further held unpatentable in view of this decision. The brief contends that the decision is not in point because the Just and Hanaman Patent No. 1,018,502 disclosed as prior art a coherent, homogeneous substantially pure tungsten filament whereas in the present case the prior art does not disclose vanadium having these characteristics. we do not understand that the decision was based upon the disclosure of Just and Hanaman and furthermore it is believed that the art discloses substantially the same process as that of the application as adapted to a group of metals which are equivalent to vanadium and if applied to vanadium the process of appellant, at least as defined in the claims, would result in the same product.

[1] We agree with the decision of the Board of Appeals that the appealed method claims call for no patentable invention not disclosed in the prior cited art, and we furthermore agree with the decision of the Board rejecting the article claims. If appellants have invented a new and useful process for producing pure vanadium, they are entitled to their patent monopoly of that process. But, pure vanadium is not new in the inventive sense, and it being a product of nature, no one is entitled to a monopoly of the same.

Pure vanadium has been known to the metal art for many years. Whether it was produced in commercial quantities or whether commercial use was made of it is immaterial, so long as it was known to the art. A discussion of pure vanadium, the methods of its production and its uses is found in Thrope's Dictionary of Applied Chemistry, Volume V, p. 610. [1913]

Vanadium in composition with other metals has been known to exist by metallurgists for more than a century, having been discovered by Del Rio in 1801 in vanadinite. Webster's New International Dictionary. [1925]

[2] The quality of purity of vanadium or its ductility is a quality of a natural product and as such is not patentable. *General Electric Co.* v. *De Forest Radio Co. et al.*, 28 F.(2d) 641. *In re Marden.* No. 2631, 18 C. C. P. A. (Patents) —, — F.(2d) —, decided concurrently herewith.

In the above cited case two of the claims involved were: "24. A wire formed of ductile tungsten" and "26. Substantially pure tungsten having ductility and high tensile strength." Substantially the same question was there presented as is presented here, and the court held that pure tungsten was an element of nature and hence was not patentable because the patentee, Coolidge, did not invent it, and furthermore held that the drawing of the tungsten into wire for filament purposes was obvious and, therefore, not patentable. In the opinion the following language was used:

There are thus many elements of invention in what Coolidge did but we should be careful to distinguish between the several things he did and accord invention only to the proper thing and the thing through which the art made its advance, and that, we think, was the method he disclosed for producing substantially pure tungsten, not the drawing of pure tungsten, once obtained, into a wire. * * * given pure tungsten with its natural characteristics of great ductility and high tensile strength, the drawing of such tungsten into a wire for filament purposes was obvious.

While the counsel of appellants argues that the prior art is silent on ductile vanadium, he admits, in his brief, that "all metals are ductile to a greater or to a lesser degree," and that the purification of the vanadium brings about its ductility. The ductility or malleability of vanadium is, therefore, one of its inherent characteristics and not a characteristic given to it by virtue of a new combination with other materials or which characteristic is brought about by some chemical reaction or agency which changes its inherent characteristics.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE SCHNEIDER

No. 2,558. Decided March 31, 1931

PATENTABILITY—ADJUSTABLE WINDOW WEIGHT.

Claims for an adjustable window weight *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Wallace R. Lane, Mr. William S. Hodges, and *Mr. Louis A. Bisson* for Schneider.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals affirming the decision of the Primary Examiner rejecting claims 10, 11, 12, 13, and 16 in appellant's application for a patent for an alleged invention relating to adjustable weights for windows and other purposes.

Claims 10, 12, and 13 are illustrative. They read:

10. In an adjustable weight, a shell, auxiliary weights for use therein, said auxiliary weights being elongated and longer in their central portion than at their tops and bottoms so that in normal position they will be held in the shell but will also be capable of manual rotation about a transverse axis.
12. In an adjustable weight, a shell provided on opposite walls with weight retaining means, auxiliary weights for use therein, said auxiliary weights being elongated, provided at their ends with means for interengaging with the weight retaining means on the opposite walls, and said ends constituting parts of the curved surface of a cylinder so that in normal position they will be held in the shell but will also be capable of rotation about a transverse axis.
13. An adjustable weight, comprising a shell having side walls provided with spaced retaining members, auxiliary weights adapted to be located between and retained by said members, said side walls being wider than said auxiliary weights to guard against the same being displaced.

The references are: Reich (French), 385,916, April 2, 1908; Aufderheide, 1,425,570, August 15, 1922.

The shell, described in the specification, is open in front for the introduction of auxiliary weights. These weights, which are longer in their central portion, are provided with rounded ends so that they may be easily inserted, removed, or, when in normal position, retained in the shell.

In its decision, the Board of Appeals said:

The patent to Aufderheide is cited to show that adjustable sash weights comprising a support or carrier for removable petty weights whereby the sash weight may be made heavier or lighter to balance sashes of different weights are old in the art.

The patent to Reich is for a casing, box or chest for carrying briquettes or blocks. The casing of Reich comprises a deep box having closed back and sides, a closed bottom and open top. The front has a window or opening extending from near the bottom through to the top, and the back extends above the sides and is provided with a hole through which the figures may be passed for carrying the casing. Briquettes are shown in the casing which are longer than the width of the window or opening and the top and bottom of the ends of the briquettes are beveled off so that the briquettes may be rotated about their transverse axes to be turned so that they may be turned and passed through the window past the retaining edges of the front of the casing into the interior of the casing and then turned to be retained therein by the front wall.

We think there would be no invention in using the casing of Reich loaded with a suitable number of briquettes for a sash weight. The briquettes are not shown with rounded ends to facilitate passage through the window but are shown with beveled ends and we think there would be no invention involved in rounding the ends as specified in claims 12 and 16.

It is contended by counsel for appellant that the patent to Reich is not a proper reference because it pertains to nonanalogous art, and does not disclose the claimed invention in full, clear, and exact terms. It is further contended that the Board of Appeals should have followed the decision of the Supreme Court in the case of *Potts* v. *Creager et al.*, 155 U. S. 597, 70 O. G. 494. In that case the Court said:

As a result of the authorities upon this subject, it may be said that, if the new use be so nearly analogous to the former one, that the applicability of the device to its new use would occur to a person of ordinary mechanical skill, it is only a case of double use, but if the relations between them be remote, and especially if the use of the old device produce a new result, it *may* at least involve an exercise of the inventive faculty. Much, however, must still depend upon the nature of the changes required to adapt the device to its new use.

The involved claims are not limited to window weights, and, with the exception of claims 12 and 16, read directly on the Reich disclosure.

Claims 12 and 16 provide that the auxiliary weights shall have rounded ends, whereas, the briquettes, disclosed in the patent to Reich, have beveled ends.

We are of opinion that the applicability of the Reich device and the slight changes required to adapt it to its new use would occur to a person of ordinary mechanical skill, and that the involved claims are, therefore, not patentable.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

(Notices under sec. 4921, R. S., as amended Feb. 18, 1922.)

1,125,476, G. Claude, System of illuminating by luminescent tubes, filed June 12, 1931, D. C., N. D. Calif. (San Francisco), Doc. E 2916–S, *Claude Neon Electrical Products, Inc.*, v. *Wonderlite Neon Products Co., Ltd.*

1,171,061, E. T. Morris, Perambulator, mail cart, etc., filed June 22, 1931, D. C., S. D. N. Y., Doc. E 60/229, *Marmet, Ltd.*, v. *Majestic Baby Carriage Co., Inc.*

1,195,232, H. W. Kines, Automatic cut out for electric motors, D. C., S. D. Iowa (Des Moines), Doc. E 4454, *The McKays Co.* v. *Penn Electric Switch Co.* Dismissed June 24, 1931.

1,212,840, F. J. Straub, Building block and method of making same, filed Jan. 19, 1931, D. C., S. D. Ill. (Springfield), Doc. 1389, *Crozier-Straub, Inc.*, v. *H. G. Malek (Lincoln Ice & Coal Co.).* Doc. 1390, *Crozier-Straub, Inc., et al.* v. *J. J. Horan (Liberty Fuel & Material Co.).*

1,219,766. (See 1,316,461 (*a*) and (*b*).)

1,224,253, R. R. Wiley et al., Illuminated sign, filed June 20, 1931, D. C., W. D. Mich. (Grand Rapids), Doc. E 2453, *Flexlume Corp.* v. *American Signs Corp.*

1,245,506. (See 1,316,461 (*a*).)

1,250,705. C. L. Van Amburgh, Wire winding machine, filed June 13, 1931, D. C. Del., Doc. E 884, *Johns-Manville Corp.* v. *Resistcor Engineering Corp.*

1,260,704. (See 1,316,461 (*a*) and (*b*).)

1,304,979, J. Hirshstein, Coupling; 1,348,945, same, Double-drainage roof drain and sediment cup, D. C. Oreg. (Portland), Doc. E 9093, *Josam Mfg. Co.* v. *Portland Iron Works.* Dismissed without prejudice (notice June 17, 1931).

1,307,733, A. V. Guilborg, Lubricating apparatus; 1,307,734, same, Lubricating means, D. C., S. D. Calif. (Los Angeles), Doc. E P–28–H, *Alemite Mfg. Corp.* v. *S. S. Livingston et al.* Patents held valid and infringed June 15, 1931.

1,307,734. (See 1,307,733.)

1,310,698, H. Hill, Paper or similar cup, filed June 17, 1931, D. C., S. D. N. Y., Doc. E 60/177, *Lily-Tulip Cup Corp. et al.* v. *American Lace Paper Co.*

1,316,461 (*a*), J. R. Peirce, Distributing machine; 1,260,704, same, Machine for check making, etc.; 1,219,766, same, Bookkeeping machine, filed Dec. 28, 1928; 1,245,506, J. Powers, Automatic total taking mechanism for accounting machines, included by counter-claim Jan. 29, 1929, D. C. Del., Doc. E 700, *J. R. Peirce et al.* v. *C. A. Tripp et al.* Consent decree dismissing bill May 25, 1931, and dismissing counter-claim June 15, 1931.

1,316,461 (*b*), J. R. Peirce, Distributing machine; 1,260,704, same, Machine for check making, etc; 1,219,766, same, Bookkeeping machine, D. C. Del., Doc. E 706, *J. R. Peirce et al.* v. *C. A. Tripp et al.* Consent decree dismissing bill May 25, 1931, and dismissing counter-claim June 15, 1931.

1,317,431, L. P. Clutter, Ditching or excavating machine; 1,476,121, G. E. Wagner, et al., Excavating scoop; 1,511,114, R. R. Downie, Excavating machine, D. C., N. D. Ohio, E. Div. Doc. 3617, *Keystone Driller Co.* v. *The Day & Maddock Co. et al.* Claim 4 of 1,317,431, claims 6 and 7 of 1,476,121, and claims 6 to 14, incl., of 1,511,114 held valid and infringed (notice June 26, 1931).

1,336,901, D Handelan, Hot air heating system, D. C., S. D. Ill. (Springfield), Doc. 918 *XXth Century Heating & Ventilating Co.* v. *H. S. Myers, et al. (H. S. Myers & Co.).* Decree for plaintiff May 2, 1931.

1,348,945. (See 1,304,979.)

1,378,158, F. J. West et al., Concrete tunnel structure, filed June 19, 1931, D. C., E. D. Mich., S. Div., Doc. 4823, *A. Baxter et al.* v. *S. A. Healy.*

1,443,363, I. E. Heller, Means and method of manufacturing inter-folded pieces of cloth, etc., appeal filed May 26, 1931, C. C. A., 3d Cir., Doc. 4636, *West Disinfecting Co., Inc.*, v. *D. A. Rosenthal.*

1,445,074, S. C. Dowling, Bushing, filed Dec. 1, 1928, D. C., S. D. Ill. (Springfield), Doc. 992, *F. A. Dowling et al.* v. *J. Ingels et al.*

1,447,090, J. E. Langsdorf, Necktie, filed June 22, 1931, D. C., S. D. N. Y., Doc. E 60/232, *Franc-Strohmenger & Cowen, Inc.*, v. *H. W. Spiegel et al. (Spiegel Bros.).*

1,462,453, W. G. Lerch, Tire construction, filed June 25, 1931, D. C., S. D. N. Y., Doc. E 60/251, *The India Tire & Rubber Co.* v. *The B. F. Goodrich Co.*

1,476,121. (See 1,317,431.)

1,497,293, J. Denaro, Automatic ice cream cone machine; 1,615,799, same, Automatic machine for making cup pastry, C. C. A., 4th Cir., Doc. 3151, *J. Denaro* v. *The Maryland Baking Co.* Decree affirmed June 20, 1930.

1,511,114. (See 1,317,431.)

1,512,191, H. Baumhauer, Hard tool and implement and process of making same, filed June 19, 1931, D. C., S. D. N. Y., Doc. E 60/202, *General Electric Co. et al.* v. *Fansteel Products Co., Inc.*

1,523,629, A. Bullock, Well drilling apparatus, filed June 13, 1931, D. C. Nev. (Carson City), Doc. G-126, *A. Bullock* v. *H. D. Sandstone et al.*

1,528,446, C. B. Martin, Rubber cutting machine; 1,533,126, same, Rubber tube cutting machine, D. C., N. D. Ohio, E. Div., Doc. 3417, *C. B. Martin* v. *W. H. Spencer et al.* Claims 1 and 2 of 1,528,446, and claims 1, 2, 4, and 5 of 1,533,126 held valid but not infringed; bill dismissed June 23, 1931.

1,533,126. (See 1,528,446.)

1,537,569, Whittier and Thayer, Central station for carrier despatch system, D. C., E. D. Mich., S. Div., Doc. 4413, *The Lamson Co.* v. *The Grover Co.* Decree for plaintiff (notice June 18, 1931).

1,544,793, G. Arthur, Range boiler cover, filed June 18, 1931, D. C. Oreg. (Portland), Doc. E 9215, *Arthur Fowler Co.* v. *Gillen-Cole Co.*

1,548,204, M. W. Moesta, Water cooled portable electric welding machine; 1,703,683, same, Spot welding machine, D. C., E. D. Mich., S. Div., Doc. 4551, *M. W. Moesta* v. *Fisher Body Co.* Dismissed June 23, 1931.

1,586,764, H. J. Wheaton, Base-exchange silicate and process of making, D. C. Minn. (St. Paul), Doc. E 859, *American Doucil Co.* v. *Twin City Water Softener et al.* Claims 6 and 19 held infringed June 20, 1931.

1,615,799. (See 1,497,293.)

1,642,068, W. C. Hart, Printing roller, filed June 22, 1931, D. C., S. D. N. Y., Doc. E 60/231, *W. C. Hart* v. *R. Hoe & Co., Inc.*

1,681,827, F. Tausend, Artificially hemstitched fabric, D. C., S. D. N. Y., Doc. E 57/354, *F. Tausend* v. *Barth & Guttman, Inc.* Consent decree for plaintiff June 18, 1931.

1,690,723, M. S. Frankle, Deflector for motor vehicle hot-air heaters, filed June 17, 1931, D. C., S. D. Iowa, C. Div., Doc. E 4460, *N. C. Barnes et al.* v. *Sears, Roebuck & Co.*

1,698,166, F. W. Menzer, Method of forming stencils, filed June 18, 1931, D. C., S. D. N. Y., Doc. E 60/199, *F. W. Menzer et al.* v. *S. Takatian.*

1,703,683. (See 1,548,204.)

1,712,783, M. Alpern, Finger ring, D. C., S. D. N. Y., Doc. E 59/83, *I. Papick et al.* v. *Stern & Stern.* Consent order of discontinuance (notice June 18, 1931).

1,721,416, K. Schroter, Hard metal composition, filed June 19, 1931, D. C., S. D. N. Y., Doc. E 60/201, *General Electric Co. et al.* v. *J. A. Crowley.*

1,722,338, G. C. Papendick, Sliced baked loaf package and packing, D. C., W. D. Mo., S. W. Div., Doc. E 78, *Papendick, Inc.*, v. *Joplin-Purity Baking Co.* Claims 2, 3, and 4 held valid and infringed Jan. 8, 1931.

1,731,967, L. J. Antonsen, Paper excelsior machine, filed June 22, 1931, D. C., E. D. Wash. (Spokane), Doc. E 4408, *L. J. Antonsen* v. *J. H. Rasmussen (Spokane Waste Paper Co.).*

1,753,725, Solomon and Levine, Rack for garments, filed June 25, 1931, D. C., S. D. N. Y., Doc. E 60/264, *S. Solomon et al. (Hercules Rack Co.)* v. *Tenzer Bros., Inc., et al.*

1,760,060, J. Holtzman, Razor blade ejector, D. C., S. D. N. Y., Doc. E 54/234, *J. Holtzman* v. *Magazine Repeating Razor Co., Inc.* Dismissed June 20, 1931.

1,764,555, A. S. Friedlander, Shield for garments, D. C., N. D. Calif. (San Francisco), Doc. E 2732-L, *M. M. Adams* v. *I. B. Kleinert Rubber Co.* Dismissed without prejudice June 12, 1931.

1,770,852, C. A. Hill, Connecting means; 1,776,502, Gresley and Ensey, Connecting means; 1,783,088, C. A. Hill, Method of and apparatus for reshaping deformed pipe ends, filed Jan. 3, 1931, D. C., S. D. Ill. (Springfield), Doc. 1381, *Mueller Brass Co.* v. *Mueller Co.*

1,776,502. (See 1,770,852.) 1,783,088. (See 1,770,852.)

1,789,236, Klein and Kasanof, Tag securing means; 1,790,695, M. B. Behrman, Seal, filed June 24, 1931, D. C., S. D. N. Y., Doc. E 60/250, *S. Klein* v. *International Seal & Knot Protector Co., Inc.*

1,790,695. (See 1,789,236.)

1,803,266, P. A. Martin, Spring belt, brace, garter, etc., filed June 19, 1931, D. C., S. D. N. Y., Doc. E 60/212, *De Witt Fox et al.* v. *Wallach Bros.*

Re. 16,297, H. F. Parker, Control for electric elevators, filed May 23, 1931, D. C. Del., Doc. E 881, *Otis Elevator Co.* v. *A. B. See Elevator Co., Inc.*

Re. 16,870, T. H. Nakken, Means for transforming light impulses into electric current impulses, filed June 12, 1931, D. C. Del., Doc. E 882, *Nakken Patents Corp.* v. *Westinghouse Electric Supply Co., Inc.*

Re. 17,131, O. S. Caesar, Heating apparatus for automotive vehicles, appeal filed June 22, 1931, C. C. A., 8th Cir., (St. Louis), Doc. 9228, *United Motors Service, Inc.*, v. *Tropic-Aire, Inc.*

Re. 17,180, C. T. Hibbard, Method and means for starting synchronous motors, filed June 27, 1931, D. C., W. D. Pa., Doc. 2533, *Electric Machinery Mfg. Co.* v. *Westinghouse Electric & Mfg. Co.*

Re. 17,342, A. Peun, Automatic air volume controlling device for water storage tanks, filed Apr. 25, 1931, D. C., S. D. Iowa (Des Moines), Doc. 4458, *Penn Electric Switch Co.* v. *Luthe Hardware Co.*

Re. 17,672, W. O. Prouty, Display sign, filed June 17, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U-24-J, *Metlox Corp., Ltd.*, v. *Neon Sign Co. et al.*

Des. 76,543, A. R. Kanne, Bowl, D. C., S. D. N. Y., Doc. E 50/148, *Kanne & Bessant, Inc.*, v. *McKee Glass Co. et al.* Dismissed June 20, 1931.

Des. 84,230, C. H. Davis, Textile fabric, filed June 24, 1931, D. C., S. D. N. Y., Doc. E 60/235, *Lambert Silk Co.* v. *Glodstein Wilkins Corp.*

T. M. 134,900, The Cellucotton Products Co., Sanitary napkin, C. C. A., 3d Cir., Doc. 4581, *Kotex Co.* v. *Kotabs, Inc., et al.* Decree affirmed June 25, 1931.

T. M. 137,699, T. M. 202,599, Simmons Co., Metal bedstead, bed springs, couches, etc.; T. M. 207,821, same, Mattress, filed June 17, 1931, D. C. R. I., Doc. 370, *Simmons Co.* v. *Simon's Bedding Co. et al.*

T. M. 162,338, Peter Paul Candy Mfg. Co., Inc., Candy, filed June 26, 1931, D. C. Nebr. (Omaha), Doc. E 1129, *Peter Paul, Inc.*, v. *Douglas Candy Co.*

T. M. 181,083, S. G. Whitsitt, Salad dressing, filed June 26, 1931, D. C., N. D. Tex. (Fort Worth), Doc. E 667, *Bestyett Food Co.* v. *Mrs. Dalton's Mayonnaise Co.*

T. M. 202,599. (See T. M. 137,699.)

T. M. 207,821. (See T. M. 137,699.)

Disclaimers

1,529,461.—*Ernest M. Brodgen*, Santa Monica, and *Miles L. Trowbridge*, Palms, Calif. ART OF PREPARING FRESH FRUIT FOR MARKET. Patent dated March 10, 1925. Disclaimer filed August 3, 1931, by the assignee, *Brodgex Company.*

Hereby enters this disclaimer to said claims 1, 2, 3, 4, 5, 6, 7, 9, 14, 15, 16, 17, 18, 23, 24, 25, and 26 of said Letters Patent which are in the following words, to wit:

"1. In the preparation of fresh fruit for market, the process which comprises subjecting fruit to the action of an aqueous solution of a compound comprising the boric acid radical having a retarding action on the development of blue mold, the fluidity, strength and temperature of the treating solution, and the duration of the treatment, being such that exposed rind or skin tissues of the fruit are effectively impregnated with said compound and rendered resistant to blue mold decay, while at the same time the fruit is not scalded nor is its freshness or edibility otherwise substantially impaired.

"2. In the preparation of fresh fruit for market, the process which comprises subjecting fruit to the action of an aqueous solution of an alkali metal borate, the fluidity, strength and temperature of the treating solution, and the duration of the treatment, being such that exposed rind or skin tissues of the fruit are effectively impregnated with said borate and rendered resistant to blue mold decay, while at the same time the fruit is not scalded nor is its freshness or edibility otherwise substantially impaired.

"3. In the preparation of fresh fruit for market, the process which comprises subjecting fruit to the action of an aqueous solution of borax, the fluidity, strength and temperature of the treating solution, and the duration of the treatment, being such that exposed rind or skin tissues of the fruit are effectively impregnated with borax and rendered resistant to blue mold decay, while at the same time the fruit is not scalded nor is its freshness or edibility otherwise substantially impaired.

"4. In the preparation of fresh fruit for market, the process which comprises subjecting fruit to the action of an aqueous solution containing at least 5 per cent of borax, the fluidity, strength and temperature of the treating solution, and the duration of the treatment, being such that exposed rind or skin tissues of the fruit are effectively impregnated with borax and rendered resistant to blue mold decay, while at the same time the fruit is not scalded nor is its freshness or edibility otherwise substantially impaired.

"5. In the preparation of fresh fruit for market, the process which comprises subjecting fruit to the action of an aqueous solution containing at least 5 per cent of borax, said solution being at a temperature above 100° F. and most desirably approximating 115° to 120° F., the fluidity of the solution and the duration of the treatment being such that exposed rind or skin tissues of the fruit are effectively impregnated with borax and rendered resistant to blue mold decay, while at the same time the freshness and edibility of the fruit remain substantially unimpaired.

"6. In the preparation of fresh fruit for market, the process which comprises applying to fruit an aqueous solution of a solid mold-retarding agent comprising borax, and allowing a sufficient quantity of said solution to evaporate upon the surface of the fruit to leave thereon a substantial deposit of said solid agent.

"7. In the preparation of fresh fruit for market, the process which comprises soaking and rubbing fruit for at least 2 minutes with a warm solution of an alkaline mold-retarder comprising borax, and allowing the fruit to dry without rinsing off the liquid of said bath."

"9. In the preparation of fresh citrus fruit for market, the process which comprises soaking fresh citrus fruit with an aqueous solution of borax for at least 2 minutes, and thereafter removing surface moisture from the fruit, the fluidity, strength and temperature of the solution, and the duration of the treatment, being such that exposed rind or skin tissues of the fruit are effectively impregnated with borax and rendered resistant to blue mold decay, while at the same time the fruit is not scalded nor is its freshness or edibility otherwise substantially impaired."

"14. In the preparation of fresh citrus fruit for market, the process which comprises advancing the fresh fruit in a traveling stream over a predetermined path, maintaining the fruit wet with a warm solution of borax for a period of at least 2 minutes during such travel, the fluidity, strength and temperature of the solution, and the duration of the treatment, being such that exposed rind or skin tissues of the fruit are effectively impregnated with borax and rendered resistant to blue mold decay, while at the same time the fruit is not scalded nor is its freshness or edibility otherwise substantially impaired, and further treating the fruit at subsequent stages in its travel to effect removal of surface moisture and surface excess of borax, while avoiding removal of borax to such an extent as would destroy resistance of the fruit to blue mold decay.

"15. In the preparation of fresh fruit for market, the process which comprises advancing fresh fruit in a traveling stream over a predetermined path, applying to said fruit as it travels over a portion of said path a strong solution of borax while causing the fruit to turn over and over, subjecting the fruit as it travels over a subsequent portion of said path to a drying treatment for removal of surface moisture therefrom, and then rubbing the fruit.

"16. In the preparation of fresh fruit for market, the process which comprises impregnating exposed rind or skin tissues of fresh fruit with a compound comprising the boric acid radical to an extent sufficient to render such fruit substantially immune to attack by blue mold.

"17. In the preparation of fresh fruit for market, the process which comprises impregnating exposed rind or skin tissues of fresh fruit with a compound comprising borax to an extent sufficient to render such fruit substantially immune to attack by blue mold.

"18. In the preparation of fresh fruit for market, the process of protecting the same against blue mold which includes the step of maintaining fresh fruit wet for at least 2 minutes with an aqueous solution containing between 5 and 15 per cent of borax, the temperature of said solution being above 100° F. but being insufficiently high to injure the fruit."

"23. Fresh fruit of which the rind or skin carries a non-poisonous mold-inhibiting compound comprising the boric acid radical, the amount of said compound present being very small but sufficient to render the fruit resistant to blue mold decay.

"24. Fresh fruit of which the rind or skin carries borax in amount that is very small but sufficient to render the fruit resistant to blue mold decay.

"25. Fresh citrus fruit of which the rind or skin carries a non-poisonous mold-inhibiting compound comprising the boric acid radical, the amount of said compound present being very small but sufficient to render the fruit resistant to blue mold decay.

"26. Fresh citrus fruit of which the rind or skin carries borax in amount that is very small but sufficient to render the fruit resistant to blue mold decay."

1,549,145.—*Leroy Metzgar*, Grand Rapids, Mich. WHEEL STRUCTURE. Patent dated August 11, 1925. Disclaimer filed August 1, 1931, by the patentee.

Therefore enters this disclaimer to that part of the claims in said specification which is in the following words, to-wit:

"1. In a wheel structure: circularly-disposed fibrous blocks, whose fibre extends radially and which taper at their mutually adjacent sides toward the structure's axis of rotation and having recesses adjacent the structure's circumferential periphery and adjacent said axis respectively; rings fittingly seated in the recesses; means extending through the blocks and through the rings respectively for tightly fastening the blocks together and the rings in their recesses.

"2. In a wheel structure: circularly-disposed fibrous blocks, whose fibre extends radially and which taper at

their mutually adjacent sides toward the structure's axis of rotation and having circular rabbets in the structure's opposite sides adjacent its circumferential periphery and adjacent said axis respectively; rings fittingly seated in the rabbets; bolts extending through the blocks and through the rings respectively and secured thereto for tightly fastening the blocks together and the rings in their rabbets."

1,658,361.—*Julien Tessier*, Rochester, N. Y. MOTION-PICTURE APPARATUS. Patent dated February 7, 1928. Disclaimer filed August 8, 1931, by the assignee, *Eastman Kodak Company*.

Hereby enters this disclaimer to that part of the claim in said application which is in the following words, to wit:

"8. In motion picture apparatus having means for advancing a film and take-up means for said film, common driving means for said film advancing mechanism and said take-up means, a clutch between said driving means and said take-up means, and means for necessarily rendering the film advancing means inoperative when the clutch is rendered inoperative."

1,762,925.—*Loyd A. Jones* and *Clifton M. Tuttle*, Rochester, N. Y. SOUND FILM WITH SENSITOMETRIC SCALE. Patent dated June 10, 1930. Disclaimer filed August 1,1931, by the patentees, and the assignee, *Eastman Kodak Company*.

Hereby enter this disclaimer to that part of the claim in said specification which is in the following words, to wit:

"1. A band of sensitized film having thereon at interyals throughout its length latent images of sensitometric strips, and having a longitudinal series of exactly spaced perforations, each sensitometric strip image varying in exposure longitudinally of the band in an accurate dimensional relation to the perforations."

Interference Notices

U. S. PATENT OFFICE, *Washington, Aug. 6, 1931.*

Michael Nicoletti, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications for patent of Albert L. Raven, care of Raven Screen Corporation, 1476 Broadway, New York, N. Y., and Michael Nicoletti, 147 South Street, Plainville, Mass., and the Office having been unable to secure service upon said Nicoletti, notice is hereby given that unless said Nicoletti, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, July 24, 1931.*

Fred J. Coad and Wilfred G. Greuling, their assigns or legal representatives, take notice:

An interference having been declared by this Office between a joint application for patent of Fred J. Coad and Wilfred G. Greuling, 3032 East Grand Boulevard, Detroit, Mich., and the applications of Porter Bakken, Grenera, N. Dak., Hoy H. Bray, 2054 Twelfth Street, Cuyahoga Falls, Ohio, and others, and counsel for Coad and Greuling having stated that he is not aware of the present whereabouts of said Coad and Greuling, notice is hereby given that unless said Coad and Greuling, their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Aug. 5, 1931.*

Samuel B. Abbott, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, 63 Leon Street, Boston, Mass., to effect the cancellation of the trade-mark registration of Samuel B. Abbott, of 1115 Third Avenue North, Columbus, Miss., No. 178,387, dated January 8, 1924, and the notice of such proceeding sent by registered mail to the said Abbott at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Abbott, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 5, 1931.*

Theodore H. Froehlich, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Bourjois, Inc., of 35 West 34th Street, New York, N. Y., to effect the cancellation of the trade-mark registration of Theodore H. Froehlich, of 256 West 73d Street, New York, N. Y., No. 86,398, dated May 7, 1912, and the notice of such proceeding sent by registered mail to the said Froehlich at the said address having been returned by the post-office as undeliverable notice is hereby given that unless said Froehlich, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 8, 1931.*

The Golf Ball Corporation of America, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The General Tire & Rubber Company, of Akron, Ohio, to effect the cancellation of the trade-mark registration of The Golf Ball Corporation of America, of 79 Wall St., New York, N. Y., No. 203,500; dated September 22, 1925, and the notice of such proceeding sent by registered mail to The Golf Ball Corporation of America, at the said address, and also at Wilmington, Del., another address of record, having been returned by the post office as undeliverable, notice is hereby given that unless said The Golf Ball Corporation of America, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 25, 1931

[VOL. 409. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 313,750. THE NORTHWEST PAPER COMPANY, Cloquet, Minn. Filed Apr. 24, 1931.

SODITE

For Chemical Wood Pulp and Chemical Pulp in the Form of Lap Board.

Claims use since January, 1930.

Ser. No. 315,160. NATHAN PROVOL, Chicago, Ill. Filed May 28, 1931.



The word "Bird" except in the form and association shown is not claimed as a trade-mark. The representation of the bird is disclaimed.

For Birds.

Claims use since November, 1930.

CLASS 2

Receptacles

Ser. No. 313,861. METAL-GLASS PRODUCTS CO., Belding, Mich. Filed Apr. 27, 1931.

CARB-O-TANK

Applicant disclaims the word "Tank" except in connection with the mark shown.

For Porcelain Enamel Beverage Tank.

Claims use since Mar. 2, 1931.

Ser. No. 314,357. THE BRITISH SURE SEAL COMPANY LIMITED, London, England. Filed May 9, 1931.

STRIPLEX

For Metal Tins, Cans, Boxes, and Canisters for Containing Patent Food Preparations, Fish, Foods, Meat Extracts, Soups, Dried Milk, Malted Milk, Baby Foods, Coffee, Tea, Cocoa, Syrups, Jams, Marmalades, Fruit Preserves, Oil, Paint, Varnish, Vegetables, Grease, Face Creams, Cold Cream, Pharmaceutical Preparations, or Enamels; and Screw-On, Press-On, Clip-On Caps, Lids, and Covers and Screw-In and Press-In Stoppers for Use on Tins, Cans, Boxes, and Canisters Sold with Such Tins, Cans, Boxes, and Canisters.

Claims use since February, 1931.

Ser. No. 314,380. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed May 9, 1931.

POPSICLE

For Wrappers and Bags Made of Glassine, Vegetable Parchment, Plain and/or Waxed Paper.

Claims use since May 28, 1923.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 312,897. MAX BERNSTEIN, Cincinnati, Ohio. Filed Apr. 3, 1931.

CHAMPION HUMANE

No claim is made to the exclusive use of the word "Humane" apart from the trade-mark as shown on the drawing.

For Dog Harness.

Claims use since Mar. 1, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 310,555. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Jan. 30, 1931.

BADGER

For Soap Flakes, Granulated Soap, and Liquid Soap.
Claims use since 1900.

Ser. No. 315,056. MEYER LEVIN, doing business as Levin Chemical Co., Newark, Ohio. Filed May 26, 1931.

LEVIN'S SUCCESS CLEANSER

The descriptive word "Cleanser" is disclaimed apart from the other features of the mark shown in the drawing.
For Cleansing Powder Having Incidental Water Softening Properties and Recommended for Cleansing Metal, Painted and Tile Surfaces, for Washing Kitchen Utensils, Clothes, and the Like.
Claims use since Feb. 20, 1931.

Ser. No. 316,910. SWIFT AND COMPANY, Chicago, Ill. Filed July 13, 1931. Under section 5b of the act of 1905, as amended in 1920.

Swift's

For Soap.
Claims use since 1900.

CLASS 5

Adhesives

Ser. No. 308,034. PROCESS ENGINEERING AND EQUIPMENT CORPORATION, Attleboro, Mass. Filed Nov. 18, 1930.

PREECO

For Adhesive Furnace Cement.
Claims use since Oct. 25, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 296,483. CHEMISCHE FABRIK EISENDRATH GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Mettmann/Rhld, Germany. Filed Feb. 25, 1930.



The drawing is lined for red, which is an essential feature of the trade-mark. No claim is made to the exclusive use of the wording with the exception of the letter "J" and the name of applicant apart from the mark as shown in the drawing. The representation of the label per se is disclaimed.
For Special Preparation for Making Leather Processing Substances.
Claims use since June 1, 1928.

Ser. No. 304,323. THOMAS GABRIEL HITT, doing business as Northwest Flower Extractions Co., Seattle, Wash. Filed Aug. 7, 1930.

Glacial

For Perfumes.
Claims use since January, 1929.

Ser. No. 305,092. APFFEL AND COLCLOUGH, New Orleans, La. Filed Sept. 24, 1930.



Beautyeast PAK

Applicants disclaim the right to the exclusive use of the words "Beautyeast Pak" apart from the trade-mark as shown in the drawing. The female figure shown in the accompanying drawing is fanciful.
For Cosmetic Composition for Beautifying the Skin.
Claims use since Sept. 1, 1930.

Ser. No. 306,482. THE AYER COMPANY, Lowell, Mass. Filed Oct. 7, 1930.

Vita-ray

Applicant is the owner of registered Trade-Mark No. 273,941.
For Face Powder, Brilliantine, Muscle Oil, Rouges, and Lipsticks.
Claims use since Mar. 21, 1930.

Ser. No. 307,674. JOSEPH HERMAN, Brooklyn, N. Y. Filed Nov. 8, 1930.

BANNER ANTI-FREEZE

The applicant does not claim the word "Anti-Freeze" but claims only the word "Banner" in connection with the anti-freeze solution.
For Anti-Freeze Solution.
Claims use since Oct. 1, 1928.

Ser. No. 308,496. VITAGIENE LABORATORIES, Philadelphia, Pa. Filed Dec. 1, 1930.

Vitagiene

For Liquid Preparation for the Treatment of Dandruff.
Claims use since Nov. 21, 1930.

Ser. No. 309,401. SOCIETE ANONYME PREMET, Paris, France. Filed Dec. 27, 1930.

LE SECRET DE PREMET

For Perfumes, Toilet Water, Face Powder, Talcum Powder, Sachets, Face Creams, Rouge, Lipsticks, Bath Salts, Brilliantine.
Claims use since Sept. 16, 1930.

Ser. No. 313,425. REGNANTE AND CALAJOE, doing business as Eastern Drug & Chemical Co., New York, N. Y. Filed Apr. 16, 1931.



No claim being made to the exclusive use of the words "Cuts Colds Cough Fever" apart from the mark as shown in the drawing.
For Preparation for the Treatment of Coughs, Colds, Malaria, Chills and Fever, Intermittent, Remittent, and Bilious Fever, Constipation, and for a Cleanser for the System.
Claims use since November, 1930.

Ser. No. 314,207. THOMAS F. NELSON, Steilacoom, Wash. Filed May 5, 1931.

DENTO-SOLVO

For Composition for Cleaning False Teeth.
Claims use since Apr. 25, 1931.

Ser. No. 314,463. C. H. ROBERSON, Freehold, N. J. Filed May 12, 1931.

CHROTAR

For Liquid Chemical for the Treatment of Corn to Protect Same from Birds, Insects, and Animals After the Corn Has Been Planted.
Claims use since Apr. 17, 1931.

Ser. No. 314,844. FRACY, INC., New York, N. Y. Filed May 21, 1931.

NAILWITE

For Nail White, a Cosmetic for Use on Finger Nails.
Claims use since May 4, 1931.

Ser. No. 315,002. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed May 25, 1931.

Moth-Ded

For Liquid Insecticide.
Claims use since December, 1927.

Ser. No. 315,100. IRON-JON LABORATORIES, Los Angeles, Calif. Filed May 27, 1931.

IRON-JON

The section lining of the word or words "Iron-Jon" indicates the color red and that of the background the color blue. No claim is made to the word "Iron" apart from the mark shown in the drawing.
For General Tonic in Tablet Form.
Claims use since November, 1930.

Ser. No. 316,070. RUE-VIM COMPANY, Johnstown, Pa. Filed June 17, 1931.

RUE VIM

For Medicinal Preparation for Use as a General Tonic.
Claims use since Jan. 15, 1930.

Ser. No. 316,260. FRED FEAR & CO., Brooklyn, N. Y. Filed June 25, 1931.

"EASTER LILY"

For Dyes—Namely, Easter-Egg Dyes.
Claims use since June 10, 1931.

Ser. No. 316,376. GEORGE P. PSYRAS, doing business as Vitamone Medicine Company, Boston, Mass. Filed June 27, 1931.

VITAMONE

For Medicines for Rheumatism, Sugar Diabetes, Muscular Atrophy, Arthritis, Chronic Gonorrhea, Indigestion, Gas, Constipation, Neurasthenia, Kidney Trouble, Heart Trouble, Rupture, Whooping Cough, Colds, Throat Troubles, Eczema, Pimples, Skin Troubles, General Weakness, and a Hair and Scalp Medicine.
Claims use since June 4, 1931.

Ser. No. 316,537. WARREN MALANDRA, Philadelphia, Pa. Filed July 1, 1931.

MEPHISTOPHILIS MALANDRA

The surname "Malandra" is disclaimed apart from the mark as shown.
For Medicine for Stomach Trouble.
Claims use since October, 1925.

Ser. No. 316,885. ERNEST L. HAMPSHIRE, doing business as The Elham Products Co., Chicago, Ill. Filed July 13, 1931.

ELHAM

For Disinfectant in Soluble Tablet Form.
Claims use since June 11, 1931.

CLASS 7

Cordage

Ser. No. 317,191. JANUARY AND WOOD COMPANY, Maysville, Ky. Filed July 21, 1931.

HOME-TIES

For Cotton Twine and Cord.
Claims use since Nov. 15, 1929.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 317,068. COLT'S PATENT FIRE ARMS MANUFACTURING CO., Hartford, Conn. Filed July 18, 1931.

ACE

For Pistols.
Claims use since June 20, 1931.

Ser. No. 317,069. COLT'S PATENT FIRE ARMS MANUFACTURING CO., Hartford, Conn. Filed July 18, 1931.

SHOOTING MASTER

For Revolvers.
Claims use since May 4, 1931.

CLASS 12

Construction Materials

Ser. No. 303,448. LAWRENCE R. MCCOY & CO., INC., Worcester, Mass. Filed July 12, 1930.

WEST WOOD

The drawing is lined for red. Applicant disclaims the right to the exclusive use of the word "Wood" apart from the trade-mark as shown on the drawing.
For Stained Cedar Shingles, Doors, and Cedar Siding.
Claims use since December, 1927.

Ser. No. 308,519. WILLIAM O. SHELDON, Lakewood, Ohio. Filed Dec. 2, 1930.

STEEL LUMBER

The words "Steel Lumber" are hereby disclaimed apart from the mark as shown.
For Metal Building Beams.
Claims use since June 21, 1930.

Ser. No. 314,454. MEDUSA PORTLAND CEMENT COMPANY, Cleveland, Ohio. Filed May 12, 1931.

STONESET

For Non-Staining Waterproofed Mortar Cement.
Claims use since Apr. 29, 1931.

Ser. No. 315,433. ARMSTRONG CORK & INSULATION COMPANY, Lancaster, Pa. Filed June 5, 1931.

Vibracork

For Isolation Material for Dampening Vibration and Sound, Particularly that Caused by Moving Machinery.
Claims use since Apr. 28, 1931.

Ser. No. 316,733. E. J. LAVINO AND COMPANY, Philadelphia, Pa. Filed July 8, 1931.

HILUM

For Bricks.
Claims use since Jan. 14, 1928.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 312,936. AIR REDUCTION SALES COMPANY, New York, N. Y. Filed Apr. 4, 1931.

AIRCO SPEEDWELD

No claim is made to the word "Speedwell" apart from the mark shown.
For Welding Rods.
Claims use since Mar. 7, 1931.

Ser. No. 315,080. AKTIEBOLAGET KANTHAL, Stockholm and Hallstahammer, Sweden. Filed May 27, 1931.

KANTHAL

For Heat Resistant Iron and Steel Alloys.
Claims use since Feb. 23, 1931.

Ser. No. 316,956. CAR-MOR METAL CO., INC., Philadelphia, Pa. Filed July 15, 1931.

CAR-MOR

For Ingots Cast of Non-Ferrous Metal and More Particularly Babbitt Metal.
Claims use since August, 1927.

CLASS 15

Oils and Greases

Ser. No. 315,408. RICHARD T. LUTY, doing business as Bellevue Oilall Company, Bellevue, Pa. Filed June 4, 1931.

OILALL

For Lubricating Oil.
Claims use since May 1, 1931.

Ser. No. 315,570. SHELL OIL COMPANY, San Francisco, Calif. Filed June 8, 1931.

SHELL GASOLINE 400

No claim is made to the word "Gasoline" or the number "400" apart from the mark shown in the drawing.
For Gasoline.
Claims use since May 17, 1927.

Ser. No. 316,115. CARL F. BATTENFELD, Detroit, Mich. Filed June 22, 1931.

CHIMES

For Lubricating Oils, Lubricating Greases.
Claims use since Feb. 2, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 273,517. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Oct. 8, 1928.

UNIVERSAL THINNER

No claim being made to the word "Thinner" apart from the mark as shown.
For Thinners for Liquid and Paste Paints, Paint Colors, Oil Stains, Fillers, Varnishes, and Lacquers.
Claims use since Aug. 11, 1919.

Ser. No. 312,228. AMERICAN CHEMICAL PAINT COMPANY, Ambler, Pa. Filed Mar. 17, 1931.

JAPARADOX

For Fluid or Semi-Fluid Finishing Material in the Nature of a Primer or Enamel.
Claims use since Mar. 2, 1931.

Ser. No. 315,090. DIXIE POLISH COMPANY, INC., Washington, D. C. Filed May 27, 1931.

DIXIE POLISH

No claim is made to exclusive use of the word "Polish" apart from the mark as shown.
For Polishing Compound to be Used on Bright Surfaces, Lacquer Finishes, Furniture, Automobiles, Waxed and Simonized Surfaces.
Claims use since Apr. 11, 1931.

Ser. No. 316,309. FLACSS PRODUCTS COMPANY, Madison, Wis. Filed June 25, 1931.

FLACSS

For Varnish Remover for Floors, Woodwork and Furniture, Which May Incidentally be Used for Cleaning Varnished Surfaces.
Claims use since May 29, 1931.

Ser. No. 316,577. THE MURALO COMPANY, INC., New Brighton, N. Y. Filed June 30, 1931.

MURALO

For Cement Paint to be Used for Painting Masonry Surfaces in General.
Claims use since May 1, 1931.

Ser. No. 317,132. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed July 20, 1931.

FLEMITE

For Dry and Ready Mixed Paint, Lacquer, Paint Enamel, Paint Colors, and Paint Thinner.
Claims use since Apr. 30, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 309,945. LOUIS SCHRECK, Argenteuil, France. Filed Jan. 14, 1931.

F. B. A.

For Sea Planes.
Claims use since July, 1915.

Ser. No. 309,946. LOUIS SCHRECK, Argenteuil, France. Filed Jan. 14, 1931.

"F.B.A."

Applicant disclaims the representation of the goods apart from the mark as shown in the drawing.
For Sea Planes.
Claims use since July, 1915.

Ser. No. 310,756. CHICAGO FORGING & MANUFACTURING Co., Chicago, Ill. Filed Feb. 5, 1931.

FILTERAY

For Automobile Shields for Protecting the Eye of a Driver from Glare.
Claims use since Mar. 31, 1930.

Ser. No. 313,666. THE JOHN A. MCKAY MANUFACTURING Co., Dunn, N. C. Filed Apr. 22, 1931.

McK STURDYBILT

No claim is made to the word "Sturdy" or the word "Bilt" apart from the mark as shown.
For Truck Trailers.
Claims use since Mar. 1, 1931.

Ser. No. 315,583. CURTIS-WRIGHT AIRPLANE COMPANY, Robertson, Mo. Filed June 8, 1931.

CURTISS WRIGHT

For Aeroplanes and Structural Parts Thereof.
Claims use since Mar. 1, 1931.

Ser. No. 316,268. INDIAN MOTOCYCLE COMPANY, Springfield, Mass. Filed June 25, 1931.

DISPATCH-TOW

For Motor Vehicles of the Motorcycle Type.
Claims use since Mar. 27, 1931.

Ser. No. 316,827. BUHL AIRCRAFT COMPANY, Marysville and Detroit, Mich. Filed July 11, 1931.

Bull-Pup

For Airplanes and Structural Parts Thereof.
Claims use since Apr. 1, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 314,589. UNITED DRUG COMPANY, Boston, Mass. Filed May 14, 1931.

Electrex

For Electric Appliances Consisting of Curling Irons, Hair Dressing Sets (Waving Rod, Electric Comb, Marcel Iron, Curling Iron), and Marcel Irons for Individual Use, Fans, Flat Irons, Table Grills, Emergency Nursing Bottle Heaters, Room Heaters, Heating Pads for General Use, Household Mixers, Coffee Percolators, Cord Sets, Toasters, Waffle Irons and Corn Poppers.
Claims use since Nov. 8, 1923.

Ser. No. 316,633. FEDERAL AUTO PRODUCTS CO., Chicago, Ill. Filed July 6, 1931.

MOTOSPOT

For Spot Lights for Automobiles.
Claims use since Jan. 1, 1931.

Ser. No. 316,889. JENSEN RADIO MANUFACTURING COMPANY, Chicago, Ill. Filed July 13, 1931.

P M SPEAKER

The word "Speaker" is disclaimed apart from the mark shown in the drawing.
For Radio Loud Speakers.
Claims use since May 19, 1931.

Ser. No. 316,890. JENSEN RADIO MANUFACTURING COMPANY, Chicago, Ill. Filed July 13, 1931.

TYM·FLEX

For Radio Loud Speakers.
Claims use since Apr. 6, 1930.

Ser. No. 317,006. NARRICOT COMPANY, New York, N. Y. Filed July 16, 1931.

"ACELATE"

For Insulating Tape and/or Ribbons.
Claims use since June 2, 1931.

Ser. No. 317,134. THE PYLE-NATIONAL COMPANY, Chicago, Ill. Filed July 20, 1931.

QUELARC

For Circuit Breaking Plugs and Receptacles.
Claims use since July 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 301,251. DENNISON PLAY EQUIPMENT CO., Reading Mass. Filed May 26, 1930.

PLAYMAKER

For Card Games, Table Game, Indoor Golf Game, and Games Employing Boards or Charts, Ring Toss, Bean Bags, Croquet Wickets; Sand Tables Provided with Built-In Receptacles for Sand.
Claims use since May 5, 1930.

Ser. No. 316,602. MARLEW PRODUCTS COMPANY, INC., New York, N. Y. Filed July 3, 1931.

NO-KALUS

For Golf Club Grips.
Claims use since Mar. 15, 1931.

Ser. No. 316,607. MORRISON MANUFACTURING CO. INC., Conway, N. H. Filed July 3, 1931.

KINK-A-DOOS

For Construction Toys—That is, Toys Constructed of Parts Adapted to be Fitted Together to Form Toy Figures, Toy Animals, Dolls, Toy Wagons, and the Like.
Claims use since Jan. 15, 1931.

Ser. No. 316,945. WHIRLPOOL INCORPORATED, Keyport, N. J. Filed July 14, 1931.

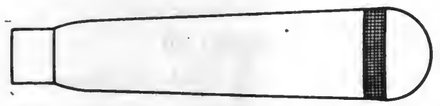
CIRCLEPOOL

For Table Board Games Played with Pieces.
Claims use since July 1, 1931.

CLASS 23

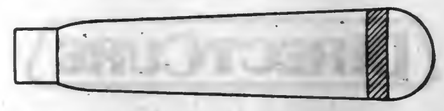
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 303,082. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



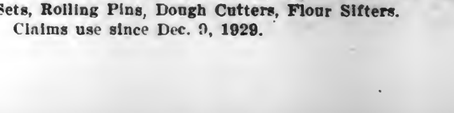
The trade-mark consists of a narrow black colored band around the handle of the goods and near the free end thereof as indicated by the lining shown in the drawing. The representation of the handle is disclaimed.
For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 303,084. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



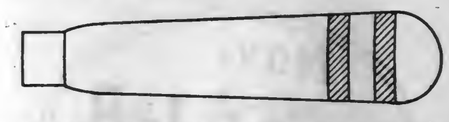
The trade-mark consists of a narrow purple colored band around the handles of the goods and near the free ends thereof as indicated by the lining shown in the drawing. The representation of the handle is disclaimed.
For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain) Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 303,087. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



The trade-mark consists of two narrow black colored bands around the handles of the goods and near the free ends thereof as indicated by the lining shown in the drawing.
The representation of the handle is disclaimed.
For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 303,089. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



The trade-mark consists of two narrow purple colored bands around the handles of the goods and near the free ends thereof as indicated by the lining in the drawing. The representation of the handle is disclaimed.
For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers, Egg Beaters, Covers and Bowls (Sets), Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 304,049. WALTER J. JARRATT, Chicago, Ill. Filed July 31, 1930.

DIRECTCURE

The word "Cure" is disclaimed except in connection with the use of the present mark.

For Electrical Vulcanizing Equipment—Namely, Vulcanizing Molds and Tube Plates, Spot Presses, Full Circle Retreaders, and Part Circle Retreaders.

Claims use since May 1, 1930.

Ser. No. 313,486. BELKNAP HARDWARE & MANUFACTURING COMPANY, Louisville, Ky. Filed Apr. 18, 1931.

JOHN PRIMBLE

For Pocket Knives, Razors, Scissors, Shears, Table Cutlery Made of Base Metal, Carvers, Butcher Knives, Cotton Knives, Tobacco Knives, Shoe Knives, Oil Cloth Knives, Sticking Knives, Banana Knives, Broom Corn Knives, Putty Knives, Scraping Knives, Mule Shears, Vegetable Knives, Grape Fruit Knives, Spatulas, Bread Knives, Steak Knives, Slicers, Butcher Steels, Carving Sets.

Claims use since February, 1890.

Ser. No. 314,168. NOVO ENGINE COMPANY, Lansing, Mich. Filed May 4, 1931.

NOVO ROLLR BEARING ENGINES

Exclusive use of the words "Rollr Bearing Engines" and the representation of the crank shaft is disclaimed apart from the mark as shown.

For Internal Combustion Engines.

Claims use since May 1, 1927.

Ser. No. 315,977. STEVENS WALDEN INCORPORATED, Worcester, Mass. Filed June 17, 1931.

BOXTITE

For Wrenches and Wrench Sets.

Claims use since May, 1928.

Ser. No. 316,243. ALUMINUM INDUSTRIES, INC., Cincinnati, Ohio. Filed June 25, 1931.

PERMITE

For Piston Pins, Explosion Mufflers, Machinery Bushings, Water Pump Parts, Machinery Shafts, Machinery Valves, and Water Pump Assemblies.

Claims use since Oct. 1, 1930.

CLASS 24

Laundry Appliances and Machines

Ser. No. 316,977. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed July 15, 1931.

THE TIME SAVER

For Washboards.

Claims use since Feb. 12, 1917.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 313,909. FOX HEARST CORPORATION, now by change of name to Movietonews, Inc., New York, N. Y. Filed Apr. 28, 1931.

MAGIC CARPET OF MOVIETONE

For Motion Picture Films.

Claims use since Nov. 15, 1930.

Ser. No. 314,927. FREDERICK A. PEARSON, Great Barrington, Mass. Filed May 22, 1931.

Hygrovane

For Humidity Measuring Instruments.

Claims use since May 2, 1931.

Ser. No. 316,127. CHESTER V. JOSEPH, Ligonier, Ill. Filed June 22, 1931.

TELESCORE

For Instruments for Telling and Recording Golf Scores.

Claims use since May 27, 1931.

CLASS 27

Horological Instruments

Ser. No. 316,839. THE HAMMOND CLOCK COMPANY, Chicago, Ill. Filed July 11, 1931.

Bichronous

For Electric Clocks.

Claims use since June 8, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 316,657. THE PHI MU DELTA FRATERNITY, Brooklyn, N. Y. Filed July 6, 1931.

ΦΜΔ

For Fraternity Pins, Badges, and Buttons, All Made of or Plated with Precious Metal.

Claims use since Mar. 1, 1918.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 315,096. HINDES LIMITED, Birmingham, England. Filed May 27, 1931.

TINGLOW

For Body Friction Brushes.

Claims use since Feb. 26, 1931.

Ser. No. 316,699. THE GARDNER TOOTH-BRUSH CO., INC., New York, N. Y. Filed July 7, 1931.

DR. McGAULEY'S GREEN CROSS

For Toothbrushes.

Claims use since May 10, 1930.

CLASS 32

Furniture and Upholstery

Ser. No. 315,221. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed May 29, 1931.

For Mattress Springs.

Claims use since July 8, 1918.

CLASS 37

Paper and Stationery

Ser. No. 303,693. LAWRENCE PAPER MANUFACTURING COMPANY, Lawrence, Kans. Filed July 21, 1930.

FREEZUR

For Paper for Lining Packing Cases and Paper Board.

Claims use since May 9, 1930.

Ser. No. 305,154. THE AMERICAN ENVELOPE CO., West Carrollton, Ohio. Filed Aug. 30, 1930.

SECUROMAIL

For Mailing and Correspondence Envelopes.
Claims use since July 28, 1930.

Ser. No. 306,645. JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J. Filed Oct. 11, 1930.

SOCIETY

For Pencils.
Claims use since Apr. 14, 1923.

Ser. No. 314,507. MODERN TISSUES CORPORATION, New York, N. Y. Filed May 18, 1931.

FLUFFY TISSUE



The words "Fluffy Tissue" are disclaimed when used apart from the mark shown.
For Toilet Tissue and Facial Tissue.
Claims use since May, 1929.

Ser. No. 315,855. JOHN P. GIBSON, Los Angeles, Calif. Filed June 3, 1931.

CAR-I-CAST CARDS

The words "Car," "Cost," and "Cards" are disclaimed apart from the mark shown.
For Record Card Books.
Claims use since May 26, 1931.

Ser. No. 315,712. WATERFALLS PAPER MILLS, New York, N. Y. Filed June 11, 1931.

WATERFALLS BONDGRAPH

No claim being made to the exclusive use of the word "Bond" apart from the mark as shown in the drawing.
For Bond and Writing Paper.
Claims use since Apr. 29, 1931.

CLASS 38

Prints and Publications

Ser. No. 313,958. J. MCKEEN CATTELL, doing business as The Science Press, New York, N. Y. Filed Apr. 29, 1931. Under 10-year proviso.

SCIENCE

For Magazine.
Claims use since December, 1883.

Ser. No. 314,715. PHOTOPLAY PUBLISHING COMPANY, Chicago, Ill. Filed May 18, 1931.

— Seymour

For Fashion Section of Magazines.
Claims use since Feb. 13, 1931.

Ser. No. 315,490. EMPIRE ART IMPORT CO. INC., New York, N. Y. Filed June 6, 1931.



For Pictures, Paintings, and Reproductions on Paper, Canvas, and Cloth.
Claims use since Mar. 1, 1930.

Ser. No. 316,441. LAWRENCE W. NEFF, Emory University, Ga. Filed June 29, 1931.

VERSECRAFT

INSPIRATIONAL INFORMATIVE

The words "Inspirational" and "Informative" appearing on the drawing are hereby disclaimed apart from the mark shown.
For Bi-Monthly Periodical of Poetry and Criticism.
Claims use since Apr. 5, 1931.

Ser. No. 316,484. THE GASOLINE RETAILER, INC., New York, N. Y. Filed June 30, 1931.

The Gasoline Retailer
With Garage, Service & Filling Station News

For Periodical.
Claims use since Jan. 1, 1930.

Ser. No. 316,563. AMOS PARRISH & COMPANY, New York, N. Y. Filed July 2, 1931.

Answers...

For Periodical.
Claims use since May 1, 1931.

CLASS 39

Clothing

Ser. No. 301,182. THE MABLEY & CAREW COMPANY, Cincinnati, Ohio. Filed May 24, 1930.

FEATURE FASHION

Applicant hereby disclaims the right to the exclusive use of the word "Fashion" except in the association shown.
For Shoes for Women, Made of Leather or Fabric, Combinations of Leather and Fabric.
Claims use since June 16, 1929.

Ser. No. 302,380. THE FAULTLESS MANUFACTURING COMPANY, Baltimore, Md. Filed June 13, 1930. Under section 5b of the act of 1905 as amended in 1920.

"FAULTLESS"

For Garters.
Claims use since May 29, 1930.

Ser. No. 305,686. ABORN HAT MANUFACTURING CO., Chicago, Ill. Filed Sept. 15, 1930.



No claim being made to the word "Mastercraft" and the representation of a hat apart from the mark shown in the drawing.
For Men's Hats.
Claims use since June, 1929.

Ser. No. 308,832. LAWRENCE MANUFACTURING COMPANY, Lowell, Mass. Filed Dec. 10, 1930.



For Knitted Garments—Namely, Shirts and Drawers, Athletic Shirts, Union Suits, Bloomers, Shorts, Pajamas, Sweaters, and Sweater Coats for Men and Women, and Suits, Sweaters, and Sweater Coats for Outer Wear, and Shirts, Bands, and Pants for Under Wear for Children.
Claims use since Nov. 15, 1928.

Ser. No. 312,043. JOSEPH H. CLARK, San Francisco, Calif. Filed Mar. 12, 1931.

"GOLD DOLLAR"

For Hosiery (All Kinds).
Claims use since Mar. 3, 1931.

Ser. No. 313,690. CLAUD DROGE, Astoria, L. I., N. Y. Filed Apr. 22, 1931.



For Union Suits for Men, Women, and Children.
Claims use since Apr. 17, 1931.

Ser. No. 314,042. THE CROFUT & KNAPP COMPANY, South Norwalk, Conn. Filed May 1, 1931.

BOHEMIAN

For Hats for Men.
Claims use since Apr. 24, 1931.

Ser. No. 314,658. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed May 16, 1931.

Serona

For Women's Rayon Undergarments and Nightwear—Namely, Bloomers, Chemises, Combinations (All-in-One Garments), Dance Sets (Consisting of Brassière and Bloomers or Brassière and Step-Ins), Night Gowns, Panties, Sleepers (One-Piece Sleeping Garments), Step-Ins, and Vests.
Claims use since May 2, 1931.

Ser. No. 314,910. J. HORWITZ, INC., New York, N. Y. Filed May 22, 1931.

Le Modèle Français JH

The descriptive words "Le-Modèle Français" are hereby disclaimed as part of the trade-mark as shown on the accompanying drawing.
For Infants' and Children's Clothing.
Claims use since Jan. 1, 1930.

Ser. No. 315,262. HAMILTON-BROWN SHOE COMPANY, St. Louis, Mo. Filed June 1, 1931.

QUALITY STYLE HIS MAJESTY FOUR "FIT FOR A KING" COMBINATION LAST HB

Applicant disclaims the right to the exclusive use of the words "Quality," "Style," and "Combination Last."
For Men's Leather Shoes.
Claims use since May 8, 1931.

Ser. No. 315,800. NATHAN-MARSHALL CO. INC., New York, N. Y. Filed June 13, 1931.

DUNMURRAY

For Men's Suits and Overcoats.
Claims use since Jan. 2, 1930.

Ser. No. 315,982. THE ALLIGATOR COMPANY, St. Louis, Mo. Filed June 18, 1931.

TRAVELWEIGHT

For Raincoats and All Kindred Waterproof Garments—Namely, Capes, Hats, Caps, Jackets, Overalls, Leggings, Shirts, Pants, Ponchos, Aprons, Golf Shirts, and Golf Coats, for Men, Boys, Women, and Girls.
Claims use since June 12, 1931.

Ser. No. 316,174. MARJORIE BORTELL, Chicago, Ill. Filed June 22, 1931.

M. E. Shoppe

For Ladies Hats and Dresses.
Claims use since Mar. 3, 1928.

Ser. No. 316,432. JANTZEN KNITTING MILLS, Portland, Oreg. Filed June 29, 1931.

SUNAIRE

For Swimming Suits.
Claims use since July, 1930.

Ser. No. 316,579. LEO M. COOPER, doing business as Leo M. Cooper Co., New York, N. Y. Filed July 1, 1931.

WHITE SWAN *Duoform*

For Nurses Uniforms, Uniform Dresses, House Dresses, Porch Dresses, and Daytime Frocks Having a Reversible Skirt.
Claims use since Oct. 1, 1930.

Ser. No. 316,616. THE STERLING COMPANY, Chicago, Ill. Filed July 3, 1931.

Winnie Mae

For Ladies' House Dresses.
Claims use since July 2, 1931.

Ser. No. 316,729. THE KELLER KNITTING COMPANY, Cleveland, Ohio. Filed July 8, 1931.

SNO-JAMA

For Knitted Snow Suits.
Claims use since June 30, 1931.

Ser. No. 316,905. A. STEIN & COMPANY, Chicago, Ill. Filed July 13, 1931.

·W·T·S·

For Garters.
Claims use since July 2, 1931.

Ser. No. 316,924. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed July 14, 1931.

SLAKSOX

For Stockings and Socks for Men and Boys.
Claims use since Mar. 1, 1931.

Ser. No. 316,931. MAIDEN FORM BRASSIERE CO., INC., New York, N. Y. Filed July 14, 1931.

NEW-MOON

For Brassières.
Claims use since June 10, 1930.

Ser. No. 316,947. STANLEY M. GRISWOLD, doing business as Griswold Shoe Company, South Danville, N. H. Filed July 14, 1931.

Vul-co-tite

For Leather Boots and Shoes.
Claims use since May 5, 1931.

Ser. No. 316,967. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed July 15, 1931.

GLADSTEP

For Boots and Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since Apr. 20, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 304,453. J. A. FINN & COMPANY, New York, N. Y. Filed Aug. 11, 1930.

FINN'S SUPER POPLIN

No rights are asserted to the exclusive use of the word "Poplin" apart from the mark shown in the drawing.
For Cotton Piece Goods.
Claims use since May 5, 1930.

Ser. No. 312,691. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Mar. 30, 1931.

Ermino-Tu

For Pile Fabrics in The Piece.
Claims use since Mar. 23, 1931.

Ser. No. 313,802. ROSSMAN BROTHERS & MESSNER, INC., New York, N. Y. Filed Apr. 25, 1931.

PLAETYME

For Cotton Goods in the Piece and Cotton and Silk Goods in the Piece and Artificial Silk Goods in the Piece.
Claims use since Apr. 10, 1931.

Ser. No. 316,900. MATTHEW W. RYAN SONS & CO. INC., New York, N. Y. Filed July 13, 1931.

RYNELEX

For Linen, Cotton, and Silk Piece Goods and Mixtures Thereof.
Claims use since Dec. 29, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 315,142. PAUL HARTMANN, A.-G., Heidenheim-on the-Brenz, Germany. Filed May 28, 1931.

Idealplast

For Surgical Dressing Materials—Namely, Absorbent Cotton, Adhesive Plasters, Not Medicated, and Surgical Bandages.
Claims use since Oct. 1, 1929.

Ser. No. 316,210. THE MARTIN BROTHERS ELECTRIC COMPANY, Cleveland, Ohio. Filed June 24, 1931.

TURBINATOR

For Electric Driers—Namely, Electric Hair Driers.
Claims use since Apr. 1, 1928.

Ser. No. 317,100. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed July 18, 1931.

VALESSE

For Vaginal Douches.
Claims use since May 29, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 314,950. FRUIT INDUSTRIES, LTD., San Francisco, Calif. Filed May 23, 1931.

VIRGINIA DARE

For Concentrated Grape Juice and Beverages Made Therefrom.
Claims use since Aug. 8, 1919.

Ser. No. 315,481. TRY ME BEVERAGE AND COMPOUND COMPANY, Birmingham, Ala. Filed June 5, 1931.

Try-me ROCK

For Non-Alcoholic, Malt Beverages Sold as Soft Drinks.
Claims use since Apr. 6, 1931.

Ser. No. 317,021. CITRUS JUICE & FLAVOR COMPANY, doing business as Citrus Beverage Supply Co., Los Angeles, Calif. Filed July 17, 1931.

PEPTOMIST

For Nonalcoholic, Maltless, Noncereal Beverages Sold as Soft Drinks, and Syrups, Extracts, and Concentrates Used in Preparing the Same.
Claims use since Mar. 28, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 298,478. Y. AOYAMA, doing business as Y. Aoyama Company, Brawley, Calif. Filed Apr. 7, 1930.

77 TWIN SEVEN

For Fresh Honey Dew Melons, Fresh Persian Melons, and Fresh Cantaloupes and Fresh Vegetables.
Claims use since Nov. 5, 1929.

Ser. No. 300,926. CITY BREWING CORPORATION, New York and Ridgewood, N. Y. Filed May 21, 1930.

"KITCHEN"

For Malt Syrup.
Claims use since May 10, 1930.

Ser. No. 301,529. TITMAN EGG CORPORATION, New York, N. Y. Filed May 28, 1930.

DIAMOND T QUALITY

Applicant disclaims exclusive use of the word "Quality" except and apart from the mark as shown in the accompanying drawing.
For Dressed Poultry—i. e., Turkeys.
Claims use since Nov. 15, 1929.

Ser. No. 302,612. ALBERT LEA PACKING COMPANY, INCORPORATED, Albert Lea, Minn. Filed June 20, 1930.

ALBERT LEA PACKING CO.

For Smoked Meats, Boiled Hams, and Sausage.
Claims use since Feb. 14, 1930.

Ser. No. 304,131. FLICK & KUPFER, Los Angeles, Calif. Filed Aug. 2, 1930.

ATTENTION

For Fresh Vegetables.
Claims use since Aug. 23, 1928.

Ser. No. 304,720. GOODMAN & DUMERACKI, Salem, Mass. Filed Aug. 18, 1930.



The representation of the banana and all the wording except "Bergs" are hereby disclaimed.
For Product Consisting of a Frozen Banana Firmly Secured to a Portion of a Stick.
Claims use since May 15, 1929.

Ser. No. 306,066. ORCHARD PRODUCTS COMPANY, Chicago, Ill. Filed Sept. 25, 1930.

ORCHARD MAID

For Food Flavoring Syrups, Fruit Preserves, Jams, Jellies, Marmalades, and Fruit Butters.
Claims use since Apr. 9, 1920.

Ser. No. 306,509. MRS. SMITH'S DELICIOUS HOME MADE PIES, INC., Philadelphia, Pa. Filed Oct. 7, 1930.



No claim is made to the representation of the pie apart from the mark as shown. The phrase "Look for the Rope Edge" is disclaimed except in connection with the other features of the mark as shown in the drawing. This disclaimer is for the purpose of registration only and is not a surrender of applicant's common law rights to the use of said phrase and the rope edge per se as shown on the representation of the pie.
For Pies.
Claims use since August, 1926.

Ser. No. 306,519. FRED FEAR & CO., Brooklyn, N. Y. Filed Oct. 7, 1930.

My Wife's

For Table Syrups and Food Flavoring Extracts.
Claims use since Jan. 1, 1895.

Ser. No. 306,963. O. R. PIEPER COMPANY, Milwaukee, Wis. Filed Oct. 20, 1930.

Gargoyle

For Canned Fruits and Canned Vegetables—Namely, Corn, Tomatoes, Asparagus, Spinach, Large and Small Peas, Sweet Potatoes, Blackberries, Red and Black Raspberries, Sliced Pineapple, Fruit for Salad, Strawberries, Loganberries, Whole and Halved Apricots, Royal Ann and Pitted Red Cherries, Grape Fruit, Sliced and Halved Cling Peaches, Bartlett Pears, and Olives and Pickles.
Claims use since 1900.

Ser. No. 309,480. LUCIE MARCHAUDON, Paris, France. Filed Dec. 30, 1930.



The word "Creme" is disclaimed apart from the mark as shown on the drawing.
For Preparation of Milk and Rennet in Liquid or Paste Form for Use as Food.
Claims use since Dec. 20, 1929.

Ser. No. 314,437. OLD RIVER FARMS CO., Stockton, Calif. Filed May 11, 1931.

Tree Sweet

No claim is made to the exclusive right to the use of the word "Sweet" apart from the mark as shown.
For Fresh Fruits—Namely, Pears.
Claims use since July 1, 1930.

Ser. No. 315,042. A. M. FERBER, doing business as The Ferbo Company, Bayonne, N. J. Filed May 26, 1931.



For Food Flavoring Extracts.
Claims use since 1929.

Ser. No. 315,237. Z. ASAMEN, Brawley, Calif. Filed June 1, 1931.

JU-C

For Fresh Cantaloupes.
Claims use since May 10, 1931.

Ser. No. 315,460. MRS. E. G. KIDD, INC., doing business as Virginia Pickle Company, Richmond, Va. Filed June 5, 1931.



The representation of Mephistopheles and the conventional flames are in red and said color is an essential feature.
For Vegetable Relishes.
Claims use since Apr. 1, 1931.

Ser. No. 315,504. SOUTHWEST UTILITY DAIRY PRODUCTS COMPANY, Oklahoma City, Okla. Filed June 6, 1931.



For Ice Cream.
Claims use since May 22, 1931.

Ser. No. 315,613. MARIA CASO ZOTTOLA, Gilroy, Calif. Filed June 9, 1931.



The geographical term "Monterey" is disclaimed apart from the other features of the mark shown in the drawing.
For Cheese.
Claims use since last 10 years.

Ser. No. 315,896. CALIFORNIA PEACH AND FIG GROWERS ASSOCIATION, Fresno, Calif. Filed June 16, 1931.

TURCAL

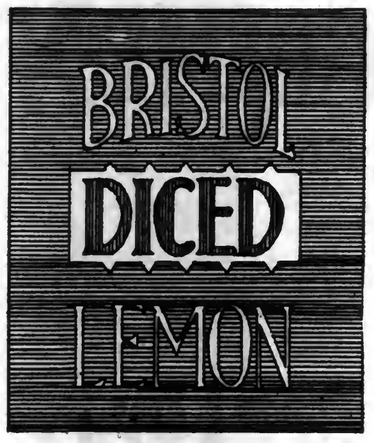
For Dried Figs.
Claims use since July 1, 1930.

Ser. No. 315,932. SIMONS & FRENCH CO., INC., New York, N. Y. Filed June 16, 1931.



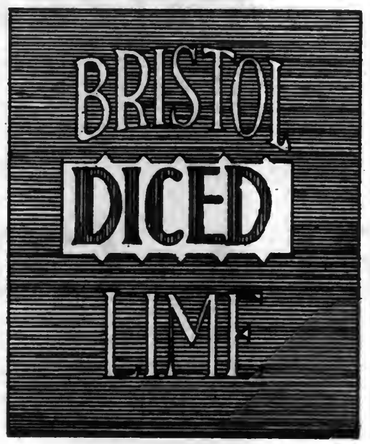
The descriptive notations "Foreign", "Domestic", and "Fruits" are disclaimed apart from the mark shown on the drawing.
For Fresh Vegetables, Fresh Citrus Fruits, and Fresh Deciduous Fruits.
Claims use since Aug. 9, 1930.

Ser. No. 315,984. BRANDLE & SMITH CO., Philadelphia, Pa. Filed June 18, 1931.



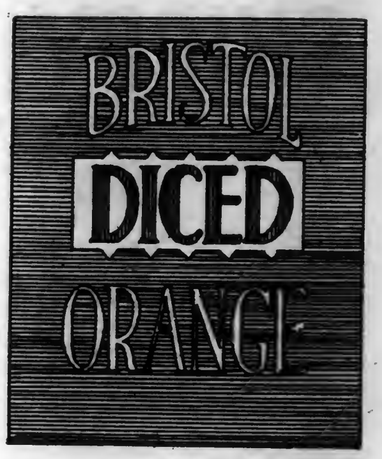
In the drawing illustrating the trade-mark the characters of the word "Diced" are in red against a blue background. The words "Diced Lemon" are disclaimed apart from the mark shown in the drawing. Applicant is the owner of registration No. 280,842, dated March 3, 1931.
For Candy.
Claims use since June 6, 1931.

Ser. No. 315,985. BRANDLE & SMITH CO., Philadelphia, Pa. Filed June 18, 1931.



In the drawing illustrating the trade-mark the characters of the word "Diced" are in red against a blue background. The words "Diced Lime" are disclaimed apart from the mark shown in the drawing. Applicant is the owner of registration No. 280,842, dated Mar. 3, 1931.
For Candy.
Claims use since June 6, 1931.

Ser. No. 315,986. BRANDLE & SMITH CO., Philadelphia, Pa. Filed June 18, 1931.



In the drawing illustrating the trade-mark the characters of the word "Diced" are in red against a blue background. The words "Diced Orange" are disclaimed apart from the mark shown in the drawing. Applicant is the owner of registration No. 280,842, dated Mar. 3, 1931.
For Candy.
Claims use since June 6, 1931.

Ser. No. 316,064. GEO. N. WILSON, doing business as Wilson Coffee & Tea Co., Dallas, Tex. Filed June 19, 1931.



For Coffee and Tea.
Claims use since Feb. 1, 1930.

Ser. No. 316,330. MCDANIEL & RATCLIFFE, Baltimore, Md. Filed June 26, 1931.

Sayso!

For Malt Syrup.
Claims use since June 19, 1931.

Ser. No. 316,450. DR. W. J. ROSS CO., doing business as Hollywood Packing Co., Norwalk, Calif. Filed June 29, 1931.

SKIPPY



For Dog and Cat Food.
Claims use since May 30, 1931.

Ser. No. 316,502. THE HILLS BROTHERS COMPANY, New York, N. Y. Filed July 3, 1931.

CALIPH

For Dried Dates.
Claims use since June 23, 1931.

Ser. No. 316,503. THE HILLS BROTHERS COMPANY, New York, N. Y. Filed July 3, 1931.

KADS

For Dried Dates.
Claims use since June 23, 1931.

Ser. No. 316,504. THE HILLS BROTHERS COMPANY, New York, N. Y. Filed July 3, 1931.

CAMELEER

For Dried Dates.
Claims use since June 23, 1931.

Ser. No. 316,730. NATHAN KULICK, doing business as Ideal Malt Supply Company, Los Angeles, Calif. Filed July 8, 1931.

CREME-X

For Malt Syrup for Food Purposes.
Claims use since September, 1929.

Ser. No. 316,731. CHARLES G. LANG, doing business as C. C. Lang & Son, Chesapeake Conserving Co., and Milford Packing Co., Baltimore, Md. Filed July 8, 1931.

CHESAPEAKE

For Pickles, Pickle Chows, and Pickle Relishes.
Claims use since July 30, 1930.

Ser. No. 316,974. MARITIME MILLING CO., INC., Buffalo, N. Y. Filed July 15, 1931.

VITAMIZED

For Poultry Feeds.
Claims use since Jan. 1, 1929.

Ser. No. 317,031. EARL FRUIT COMPANY, San Francisco, Calif. Filed July 17, 1931.

PLA-CO

For Fresh Deciduous Fruits.
Claims use since June 23, 1931.

Ser. No. 317,112. DREW CANNING COMPANY, LTD., San Jose, Calif. Filed July 20, 1931.

U. C.

For Canned Fruits, Canned Vegetables.
Claims use since June 23, 1931.

Ser. No. 317,114. HAAS-BARUCH & COMPANY, Los Angeles, Calif. Filed July 20, 1931.

VIVETTE

For Canned Sardines.
Claims use since Mar. 26, 1931.

Ser. No. 317,133. I. M. PIERCE, Oklahoma City, Okla. Filed July 20, 1931.



For Sandwiches.
Claims use since June 23, 1931.

Ser. No. 317,162. THOMAS E. COLLINS, Seattle, Wash. Filed July 21, 1931.

HAMBURGER

For Canned, Smoked, and Fresh Oysters.
Claims use since June 6, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 310,016. THE DISTRIBUTING COMPANY OF AMERICA, doing business as New England Extract Company, Hartford, Conn. Filed June 18, 1931.

Nuco

For Malt Beverages Containing Less Than One-half of One Per Cent of Alcohol by Volume.
Claims use since Apr. 1, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 315,903. CRAWFORD-AUSTIN MANUFACTURING COMPANY, Waco, Tex. Filed June 16, 1931.

ZIPPER

OPEN ⟷ CLOSED

No claim is made to the exclusive use of the words "Open" and "Cl sed" aside from the mark as shown.
For Tents, Tarpaulins, and Wagon Covers.
Claims use since May 15, 1931.

Ser. No. 316,849. JOHN D. POND, doing business as Re-Zilio Printing Plate Company, Springfield, Mass. Filed July 11, 1931.

Re-Zilio

For Printing Plates.
Claims use since Dec. 1, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

AUGUST 25, 1931

286,228. SOLUTION FOR TESTING SOILS FOR ACIDITY. THE URBANA LABORATORIES, Urbana, Ill.
Filed April 1, 1931. Serial No. 312,820. PUBLISHED JUNE 2, 1931. Class 6.

286,229. COLD CREAM AND SKIN TONIC. HELENE TANNER, Haddonfield, N. J.
Filed April 1, 1931. Serial No. 312,819. PUBLISHED JUNE 2, 1931. Class 6.

286,230. MEDICINAL PREPARATION. GANE'S CHEMICAL WORKS, INC., New York, N. Y.
Filed March 28, 1931. Serial No. 312,728. PUBLISHED JUNE 2, 1931. Class 6.

286,231. SCIENTIFIC MEDICINAL PREPARATION FORMULATED TO STIMULATE AND REVITALIZE THE SCALP AND TO PROMOTE THE GROWTH OF HAIR. THE SANO PRODUCTS CO. INC., Binghamton, N. Y.
Filed March 30, 1931. Serial No. 312,721. PUBLISHED JUNE 2, 1931. Class 6.

286,232. LIQUID SOLUBLE COMPOUND USED IN CONNECTION WITH THE DYEING AND FINISHING OF TEXTILE FABRICS. NEUTRASOL PRODUCTS CORPORATION, New York, N. Y.
Filed March 30, 1931. Serial No. 312,718. PUBLSHED MAY 26, 1931. Class 6.

286,233. MEDICAL PREPARATIONS—NAMELY, AN ANTISEPTIC JELLY USED AS A BACTERIOSTAT AND PROPHYLACTIC. BLAIR & CURTIS, INC., New York, N. Y.
Filed March 27, 1931. Serial No. 312,677. PUBLISHED MAY 26, 1931. Class 6.

286,234. MEDICAL PREPARATIONS—NAMELY, A NON-IRRITATING ACIDIC JELLY ANTISEPTIC AND PROPHYLACTIC. BLAIR & CURTIS, INC., New York, N. Y.
Filed March 27, 1931. Serial No. 312,676. PUBLISHED MAY 26, 1931. Class 6.

286,235. CERTAIN COSMETICS—NAMELY, FACE CREAMS, ROUGE, SKIN LOTIONS, FACE POWDER, BATH SALTS, SHAMPOO, BRILLIANTINE, AND WAVE-SET LIQUIDS. WILLIAM GOLDWYN, St. Louis, Mo.
Filed March 28, 1931. Serial No. 312,643. PUBLISHED MAY 26, 1931. Class 6.

286,236. COMPOUND OF PLANTAGO PSYLLIUM FOR THE RELIEF OF INTESTINAL STASIS. MUNSCH LABORATORIES, INC., New York, N. Y.
Filed March 27, 1931. Serial No. 312,620. PUBLISHED MAY 26, 1931. Class 6.

286,237. CANNED FISH, FRUITS, MEATS, MILK, ETC. H. P. LAU CO., Lincoln, Nebr.
Filed May 21, 1930. Serial No. 300,950. PUBLISHED OCTOBER 28, 1930. Class 46.

286,238. DYES—NAMELY, EASTER EGG DYES. FRED FEAR & CO., Brooklyn, N. Y.
Filed December 5, 1930. Serial No. 308,620. PUBLISHED JUNE 2, 1931. Class 6.

286,239. OINTMENT. JOE. F. SANTEE, doing business as Santarub Chemical Company, Okmulgee, Okla.
Filed October 4, 1930. Serial No. 306,418. PUBLISHED MAY 26, 1931. Class 6.

286,240. BATH PERFUMERY. A/S APOTHEKERNES LABORATORIUM FOR SPECIALPRÆPARATER, Skoyen, near Oslo, Norway.
Filed September 18, 1930. Serial No. 305,801. PUBLISHED MAY 26, 1931. Class 6.

286,241. ANTI-FREEZE COMPOUND FOR AUTOMOBILE RADIATOR. THE RESEARCH LABORATORIES, Warren, Pa.
Filed August 21, 1930. Serial No. 304,890. PUBLISHED JUNE 2, 1931. Class 6.

286,242. ADHESIVE PLASTERS FOR SURGICAL DRESSING AND BANDAGING. P. BEIERSDORF & CO. INC., New York, N. Y.
Filed March 8, 1930. Serial No. 297,000. PUBLISHED JULY 15, 1930. Class 44.

286,243. CANNED FRUITS AND VEGETABLES, JAMS, JELLIES, OLIVES, ETC. CALIFORNIA PACKING CORPORATION, San Francisco, Calif.
Filed January 7, 1930. Serial No. 294,467. PUBLISHED MAY 27, 1930. Class 46.

286,244. CANNED FRUITS AND VEGETABLES, JAMS, JELLIES, OLIVES, ETC. CALIFORNIA PACKING CORPORATION, San Francisco, Calif.
Filed January 7, 1930. Serial No. 294,466. PUBLISHED MAY 27, 1930. Class 46.

286,245. SOLUTION OF SODIUM COMPOUND USED IN DRILLING MUD. VISCO PRODUCTS COMPANY, Houston, Tex.
Filed June 24, 1929. Serial No. 286,093. PUBLISHED MAY 20, 1930. Class 6.

286,246. FACINGS AND FACING PRODUCTS FOR USE IN CASTING METALS. KELLY GRAPHITE MILLS, INC., Stockertown, Pa.
Filed March 19, 1929. Serial No. 281,005. PUBLISHED JUNE 3, 1930. Class 1.

286,247. HOSIERY. COMBINE HOSIERY CORPORATION, Wilmington, Del., and New York, N. Y.
Filed May 4, 1928. Serial No. 265,891. PUBLISHED JULY 10, 1928. Class 39.

286,248. CHEMICAL JELLY COMPOUND FOR CLEANING, SCOURING, AND POLISHING METALS. FRANK H. JONES, Boston, Mass.
Filed April 9, 1931. Serial No. 313,135. PUBLISHED JUNE 9, 1931. Class 4.

286,249. TOILET PREPARATION CONSISTING OF A CREAM-LIKE OINTMENT. FREDERICK H. MÜLLER, doing business as F. H. Muller & Co., Chicago, Ill.
Filed March 27, 1931. Serial No. 312,618. PUBLISHED JUNE 2, 1931. Class 6.

286,250. PERFUME, TOILET WATER, FACE POWDER, ETC. CHARLES C. VAN CLEVE, doing business as Van Charme Toiletries, Kansas City, Mo.
Filed March 24, 1931. Serial No. 312,502. PUBLISHED JUNE 2, 1931. Class 6.

286,251. SOOTHING AND HEALING PREPARATION FOR BURNS, CUTS, AND BRUISES. S. C. WELLS & CO., Le Roy, N. Y.
Filed March 17, 1931. Serial No. 312,245. PUBLISHED MAY 26, 1931. Class 6.

286,252. SALT. WORCESTER SALT COMPANY, New York, N. Y.
Filed March 10, 1931. Serial No. 311,992. PUBLISHED MAY 26, 1931. Class 6.

286,253. SALT. WORCESTER SALT COMPANY, New York, N. Y.
Filed March 10, 1931. Serial No. 311,991. PUBLISHED MAY 26, 1931. Class 6.

286,254. INSECTICIDES. INTERSTATE CHEMICAL MFG. CO., Jersey City, N. J.
Filed March 6, 1931. Serial No. 311,838. PUBLISHED MAY 26, 1931. Class 6.

286,255. PRESERVATIVE PREPARATION. HENRY T. CARUTHERS, doing business as Zenith Cleaner Products Company, Memphis, Tenn.
Filed February 27, 1931. Serial No. 311,637. PUBLISHED MAY 26, 1931. Class 16.

286,256. ABSORBENT LINIMENT, ETC. HENRY HENKIN, doing business as El-O-Pathic Laboratories, Los Angeles, Calif.
Filed March 2, 1931. Serial No. 311,609. PUBLISHED MAY 26, 1931. Class 6.

286,257. HYPNOTIC IN AMPOULES FOR INTRAVENOUS AND INTRAMUSCULAR INJECTION. RIEDEL-DE HAEN, INC., New York, N. Y.
Filed February 25, 1931. Serial No. 311,446. PUBLISHED MAY 26, 1931. Class 6.

286,258. HAIR TONIC IN LIQUID AND OINTMENT FORM FOR USE IN ASSISTING THE GROWTH OF HAIR. HAGOP BAGDIGIAN, Highland Park, Mich.
Filed February 13, 1931. Serial No. 311,023. PUBLISHED JUNE 2, 1931. Class 6.

286,259. PERFUMES AND HYGIENIC PRODUCTS—NAMELY, ASTRINGENTS, SKIN TONIC, CLEANSING CREAM, COLD CREAMS, FACE PACKS, FACE CREAMS, VANISHING CREAMS, SKIN CREAMS, FACE AND HAND LOTIONS. FRANKLIN SIMON & CO. INC., New York, N. Y.
Filed February 11, 1931. Serial No. 310,939. PUBLISHED MAY 26, 1931. Class 6.

286,260. INSECTICIDE. WILLIAM COOPER & NEPHEWS, INCORPORATED, Chicago, Ill.
Filed January 28, 1931. Serial No. 310,473. PUBLISHED MAY 26, 1931. Class 6.

286,261. HAIR REJUVENATING OINTMENT. ANNA SPERL, doing business as The Anna Sperl Mfg. Co., New York, N. Y.
Filed January 22, 1931. Serial No. 310,267. PUBLISHED MAY 26, 1931. Class 6.

286,262. PETROLEUM JELLY. CHESEBROUGH MANUFACTURING COMPANY, CONSOLIDATED, New York, N. Y.
Filed January 21, 1931. Serial No. 310,211. PUBLISHED MAY 26, 1931. Class 6.

286,263. ADHESIVE PLASTERS, DRESSINGS OF IODOFORM GAUZE, PERFUMERY, ETC. KISSANA CHEM.-PHARM. LABORATORIUM G. M. B. H., Bad Kissingen, Germany.
Filed December 17, 1930. Serial No. 309,086. PUBLISHED MAY 26, 1931. Class 6.

286,264. BOOTS AND SHOES OF LEATHER, FABRIC, AND COMBINATIONS THEREOF. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed December 17, 1930. Serial No. 309,084. PUBLISHED MAY 26, 1931. Class 39.

286,265. BOOTS AND SHOES OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed December 17, 1930. Serial No. 309,083. PUBLISHED FEBRUARY 10, 1931. Class 39.

286,266. ACIDOPHILUS CULTURE. LOUIS H. MYERS, Atlantic City, N. J.
Filed December 16, 1930. Serial No. 309,032. PUBLISHED MAY 26, 1931. Class 6.

286,267. SEMI-ORGANIC PREPARATION SERVING TO ELIMINATE TOXIC MATTER FROM THE HUMAN SYSTEM. THE ELECTROVITA COMPANY, San Francisco, Calif.
Filed April 21, 1931. Serial No. 313,592. PUBLISHED JUNE 2, 1931. Class 6.

286,268. BATH SALTS. NEPTUNE TRADING CORPORATION, New York, N. Y.
Filed April 16, 1931. Serial No. 313,445. PUBLISHED JUNE 2, 1931. Class 6.

286,269. MEDICINAL PREPARATION FOR THE ALLEVIATION OF PAIN IN LIQUID, CAPSULE, PILL, AND POWDER FORMS. SAMUEL G. LEVIN, doing business as Medicinal Health Laboratories, New York, N. Y.
Filed April 16, 1931. Serial No. 313,440. PUBLISHED JUNE 2, 1931. Class 6.

286,270. ROQUEFORT CHEESE. BERNARD M. DOUGLAS, New York, N. Y.
Filed April 17, 1931. Serial No. 313,468. PUBLISHED JUNE 16, 1931. Class 46.

286,271. INSECTICIDES. THE BLACK FLAG COMPANY, Baltimore, Md.
Filed April 16, 1931. Serial No. 313,418. PUBLISHED MAY 26, 1931. Class 6.

286,272. ALTERNATIVE TONIC AND SYSTEM BUILDER. GIROTONE CO., Savannah, Ga.
Filed April 15, 1931. Serial No. 313,366. PUBLISHED MAY 26, 1931. Class 6.

286,273. HAIR TONICS AND TOILET WATERS. TRIPOLI BARBER SUPPLY CO., INC., Philadelphia, Pa.
Filed April 14, 1931. Serial No. 313,353. PUBLISHED MAY 26, 1931. Class 6.

286,274. HAIR TONIC. FREDERICK E. ISCHERLAND, Flint, Mich.
Filed April 14, 1931. Serial No. 313,343. PUBLISHED MAY 26, 1931. Class 6.

286,275. HAIR TONIC. FREDERICK E. ISCHERLAND, Flint, Mich.
Filed April 14, 1931. Serial No. 313,342. PUBLISHED MAY 26, 1931. Class 6.

286,276. MOTHPROOFING COMPOUND AND INSECTICIDE. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill.
Filed April 13, 1931. Serial No. 313,313. PUBLISHED MAY 26, 1931. Class 6.

286,277. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. MAXIMILIAN P. MATTHIAS, Forest Hills, N. Y.
Filed April 13, 1931. Serial No. 313,302. PUBLISHED MAY 26, 1931. Class 6.

286,278. SKIN LOTION. THE A. G. CLARKE DRUG COMPANY, Denver, Colo.
Filed April 13, 1931. Serial No. 313,283. PUBLISHED MAY 26, 1931. Class 6.

286,279. MEN'S, WOMEN'S, AND CHILDREN'S UNDERWEAR. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed April 10, 1931. Serial No. 313,178. PUBLISHED MAY 26, 1931. Class 39.

286,280. PREPARATION FOR THE TREATMENT OF SKIN DISEASES OF HOGS. JOHN SCHLENSIG, Soldier, Iowa.
Filed April 8, 1931. Serial No. 313,096. PUBLISHED MAY 26, 1931. Class 6.

286,281. MEDICINE. ZO-RO-LO, INC., Ada, Ohio.
Filed April 7, 1931. Serial No. 313,066. PUBLISHED MAY 26, 1931. Class 6.

286,282. TONIC IN THE FORM OF TABLETS, SALTS, OR POWDER FOR REDUCING WEIGHT. HENRY JOHN HERZOG, New York, N. Y.
Filed April 7, 1931. Serial No. 313,039. PUBLISHED MAY 26, 1931. Class 6.

286,283. TONIC IN THE FORM OF TABLETS, SALTS, OR POWDER TO INDUCE GAINING OF WEIGHT. HENRY JOHN HERZOG, New York, N. Y.
Filed April 7, 1931. Serial No. 313,038. PUBLISHED MAY 26, 1931. Class 6.

286,284. COATS, VESTS, PANTS, AND OVERCOATS FOR MEN AND BOYS. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed April 7, 1931. Serial No. 313,031. PUBLISHED JUNE 2, 1931. Class 39.

286,285. LIQUID MEDICAL PREPARATION FOR USE IN INTRAVENOUS TREATMENT OF SWINE FOR SWINE FEVER AND LIKE CONDITIONS. Z. L. HAWORTH, Kansas City, Mo.
Filed April 6, 1931. Serial No. 312,989. PUBLISHED JUNE 2, 1931. Class 6.

286,286. WOMEN'S UNDERWEAR. AUGUSTA KNITTING CORPORATION, Utica, N. Y.
Filed April 1, 1931. Serial No. 312,880. PUBLISHED MAY 26, 1931. Class 39.

286,287. FACE POWDER, TALCUM POWDER, DUSTING POWDER, ETC. HENRY TETLOW COMPANY, Philadelphia, Pa.
Filed April 2, 1931. Serial No. 312,870. PUBLISHED JUNE 2, 1931. Class 6.

286,288. WEARING APPAREL—NAMELY, SLIPS AND PAJAMAS. FRANKLIN SIMON & CO. INC., New York, N. Y.
Filed April 2, 1931. Serial No. 312,866. PUBLISHED JUNE 2, 1931. Class 39.

286,289. SALVE FOR THE TREATMENT OF CANCER. JOHN G. WAGNER, San Francisco, Calif.
Filed April 1, 1931. Serial No. 312,826. PUBLISHED JUNE 2, 1931. Class 6.

286,290. PREPARATION USED IN SELECTED CASES OF AMENORRHEA, DYSMENORRHEA, AND MENOPAUSE. THE DAUG PRODUCTS CO., INC., Long Island City, N. Y.
Filed April 16, 1931. Serial No. 313,424. PUBLISHED JUNE 2, 1931. Class 6.

286,291. CARBONATED, NON-ALCOHOLIC, NON-CEREAL, AND MALTLESS BEVERAGES AND EXTRACTS THEREFOR. BLUE SEAL EXTRACT COMPANY, Cambridge, Mass.
Filed May 11, 1931. Serial No. 314,393. PUBLISHED JUNE 16, 1931. Class 45.

286,292. GOLF CLUBS. WRIGHT & DITSON, Boston, Mass.
Filed May 9, 1931. Serial No. 314,385. PUBLISHED JUNE 16, 1931. Class 22.

286,293. GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed May 4, 1931. Serial No. 314,185. PUBLISHED JUNE 9, 1931. Class 22.

286,294. TOY TYPEWRITERS. SIMPLEX TYPEWRITER CO., INC., New York, N. Y.
Filed May 1, 1931. Serial No. 314,079. PUBLISHED JUNE 16, 1931. Class 22.

286,295. JACK STONES AND JACK SETS. GREY IRON CASTING COMPANY, Mount Joy, Pa.
Filed May 1, 1931. Serial No. 314,050. PUBLISHED JUNE 9, 1931. Class 22.

286,296. GAME PLAYED WITH DISCS. DANIEL M. SHIPMAN, doing business as Whipponong Novelty Co., Whippany, N. J.
Filed April 29, 1931. Serial No. 313,980. PUBLISHED JUNE 16, 1931. Class 22.

286,297. SLED COASTERS. SCHILLER PIANO COMPANY, Oregon, Ill.
Filed April 25, 1931. Serial No. 313,804. PUBLISHED JUNE 16, 1931. Class 22.

286,298. MALT BEVERAGES CONTAINING NOT MORE THAN THE LEGAL ALCOHOLIC CONTENT. ESSLINGER'S, INC., Philadelphia, Pa.
Filed May 1, 1931. Serial No. 314,045. PUBLISHED JUNE 16, 1931. Class 48.

286,299. DRY MALTLESS COMPOUND USED FOR THE PREPARATION OF NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. M. B. ECCLES, Omaha, Nebr.
Filed April 30, 1931. Serial No. 313,997. PUBLISHED JUNE 16, 1931. Class 45.

286,300. NONALCOHOLIC, MALTLESS, CONCENTRATED FRUIT JUICES FOR MAKING SOFT DRINKS. THE VITAMIN COMPANY OF AMERICA, Orlando, Fla.
Filed April 15, 1931. Serial No. 313,398. PUBLISHED JUNE 16, 1931. Class 45.

286,301. NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. WATSEKA WHOLESALE GROCERY COMPANY, Watseka, Ill.
Filed April 8, 1931. Serial No. 313,166. PUBLISHED JUNE 16, 1931. Class 45.

286,302. FACE POWDER. TALCUM POWDER, AND SACHET POWDER. SOCIETE ANONYME JEAN PATOU, Paris, France.
Filed March 27, 1931. Serial No. 312,631. PUBLISHED JUNE 2, 1931. Class 6.

286,303. FACE POWDER, TALCUM POWDER, AND SACHET POWDER. SOCIETE ANONYME JEAN PATOU, Paris, France.
Filed March 27, 1931. Serial No. 312,630. PUBLISHED JUNE 2, 1931. Class 6.

286,304. SKIN CREAM. PENATEN, PHARMAZEUTISCHE FABRIK DR. MAX RIESS & Co., Rbondorf-on-the-Rhine, Germany.
Filed March 25, 1931. Serial No. 312,529. PUBLISHED MAY 26, 1931. Class 6.

286,305. LAXATIVE. SEBASTIAN GYSIN, doing business as Modern Health Products, Milwaukee, Wis.
Filed March 12, 1931. Serial No. 312,049. PUBLISHED JUNE 2, 1931. Class 6.

286,306. PURE WATER. ALFRED C. WRIGHT, doing business as U-Ni-L Health Institute, Whittier, Calif.
Filed March 11, 1931. Serial No. 312,031. PUBLISHED JUNE 9, 1931. Class 45.

286,307. MEDICINAL PREPARATION FOR RELIEF OF ALCOHOLIC EXCESSES. WALLACE-ROBERTS, INC., Boston, Mass.
Filed March 10, 1931. Serial No. 311,989. PUBLISHED JUNE 9, 1931. Class 6.

286,308. CAPSULES FOR THE TREATMENT OF DIABETES. MELATOL LABORATORIES, San Francisco, Calif.
Filed March 7, 1931. Serial No. 311,880. PUBLISHED MAY 26, 1931. Class 6.

286,309. ASTRINGENTS, ETC. MAX SATNICK, doing business as Emkins, Brooklyn, N. Y.
Filed March 6, 1931. Serial No. 311,850. PUBLISHED MAY 26, 1931. Class 6.

286,310. PREPARATION FOR THE TREATMENT OF SOUR STOMACH, BLOATING, HEARTBURN, SICK HEADACHE, HYPERACIDITY, GASTRIC DISTRESS, AND CONSTIPATION. A. M. KINGDON, doing business as Nu-Age Laboratories, Omaha, Nebr.
Filed March 2, 1931. Serial No. 311,613. PUBLISHED MAY 26, 1931. Class 6.

286,311. PREPARATION USED AS A SPREADER IN CONJUNCTION WITH CONTACT INSECTICIDES. CRYSTAL SOAP & CHEMICAL CO., INC., Philadelphia, Pa.
Filed March 21, 1931. Serial No. 312,364. PUBLISHED JUNE 2, 1931. Class 6.

286,312. LIQUID PREPARATIONS USED IN AND BENEFICIAL FOR THE REDUCING OF CONGESTION OF THE MUCOUS MEMBRANES OF THE NOSE. WALTER SCHWARTZ, Yonkers, N. Y.
Filed April 2, 1931. Serial No. 312,891. PUBLISHED JUNE 2, 1931. Class 6.

286,313. INSECTICIDE. BELISARIO DIAZ, Los Angeles, Calif.
Filed April 4, 1931. Serial No. 312,950. PUBLISHED JUNE 16, 1931. Class 6.

286,314. CHEMICALS FOR USE IN PLANOGRAPHIC PRINTING. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio.
Filed April 4, 1931. Serial No. 312,937. PUBLISHED MAY 26, 1931. Class 6.

286,315. BLEACH AND WATER SOFTENER HAVING CLEANING, DEODORIZING, AND DISINFECTING PROPERTIES. THE EUSEY CO., LTD., Los Angeles, Calif.
Filed April 3, 1931. Serial No. 312,907. PUBLISHED JUNE 2, 1931. Class 6.

286,316. PREPARATION FOR TREATING LIVE STOCK FOR ABORTION. ERICK BOWMAN, doing business as Bowman Laboratory, Owatonna, Minn.
Filed April 3, 1931. Serial No. 312,899. PUBLISHED MAY 26, 1931. Class 6.

286,317. OINTMENT FOR USE IN THE TREATMENT OF HEMORRHOIDS. MRS. LYDIA DANCHAK, doing business as Gold-Vein Co., Waco, Tex.
Filed April 2, 1931. Serial No. 312,876. PUBLISHED JUNE 16, 1931. Class 6.

286,318. PREPARATION FOR TREATING THE SKIN. RESEARCH PRODUCTS CORPORATION, New York, N. Y.
Filed April 1, 1931. Serial No. 312,815. PUBLISHED JUNE 9, 1931. Class 6.

286,319. CONCENTRATED LIPOIDAL EXTRACT. G. S. STODDARD & CO., INC., New York, N. Y.
Filed March 31, 1931. Serial No. 312,778. PUBLISHED MAY 26, 1931. Class 6.

286,320. TABLE BOARD GAME PLAYED WITH PIECES. MILTON BRADLEY COMPANY, Springfield, Mass.
Filed April 14, 1931. Serial No. 313,325. PUBLISHED JUNE 9, 1931. Class 22.

286,321. GAME BOARDS. FLOYD S. JIMISON, Los Angeles, Calif.
Filed March 11, 1931. Serial No. 312,010. PUBLISHED JUNE 9, 1931. Class 22.

286,322. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,414. PUBLISHED JUNE 16, 1931. Class 22.

286,323. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,413. PUBLISHED JUNE 16, 1931. Class 22.

286,324. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,411. PUBLISHED JUNE 16, 1931. Class 22.

286,325. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,410. PUBLISHED JUNE 16, 1931. Class 22.

286,326. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,409. PUBLISHED JUNE 16, 1931. Class 22.

286,327. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,408. PUBLISHED JUNE 16, 1931. Class 22.

286,328. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,405. PUBLISHED JUNE 16, 1931. Class 22.

286,329. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,404. PUBLISHED JUNE 16, 1931. Class 22.

286,330. GOLF CLUBS AND GOLF BAGS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,403. PUBLISHED JUNE 16, 1931. Class 22.

286,331. BREAD. STROEHMANN BROTHERS CO., Norristown, Pa.
Filed April 7, 1931. Serial No. 313,002. PUBLISHED JUNE 16, 1931. Class 46.

286,332. COAL. DONNEN-FUEL, INC., New York, N. Y.
Filed February 25, 1931. Serial No. 311,461. PUBLISHED JUNE 16, 1931. Class 1.

286,333. SOYA BEAN FLOUR. SOYOLK COMPANY, INC., doing business as Soyex Company, Inc., New York, N. Y.
Filed January 5, 1931. Serial No. 309,624. PUBLISHED JUNE 9, 1931. Class 46.

286,334. SHORTENINGS COMPOSED OF VEGETABLE SUBSTANCES AND OF COMBINATIONS OF ANIMAL AND VEGETABLE SUBSTANCES. C. F. SIMONIN'S SONS, INC., Philadelphia, Pa.
Filed April 11, 1931. Serial No. 313,261. PUBLISHED JUNE 16, 1931. Class 46.

286,335. CANNED OYSTERS IN THEIR NATURAL STATE. PLANTERS OYSTER COMPANY, INC., Port Norris, N. J.
Filed April 6, 1931. Serial No. 313,000. PUBLISHED JUNE 16, 1931. Class 46.

286,336. POP CORN—NAMELY, CORN KERNELS BEFORE BEING POPPED AND THE CORN AFTER IT IS POPPED AND POP CORN SALTED OR BUTTERED. GOLDEN GLOW SHOPS, INC., Somerville, Mass.
Filed April 2, 1931. Serial No. 312,888. PUBLISHED JUNE 16, 1931. Class 46.

286,337. MEDICINAL PREPARATIONS IN SOLID AND LIQUID FORM FOR THE TREATMENT OF RECTAL NARCOSIS. BYK-GULDENWERKE CHEMISCHE FABRIK AKTIENGESELLSCHAFT, Berlin, Germany.
Filed April 2, 1931. Serial No. 312,838. PUBLISHED MAY 26, 1931. Class 6.

286,338. CANNED MUSHROOMS. VON BREMEN, ASCHE, DE BRUYN, INC., New York, N. Y.
Filed February 26, 1931. Serial No. 311,499. PUBLISHED JUNE 9, 1931. Class 46.

286,339. CANDY. THE PURITAN CHOCOLATE CO., Cincinnati, Ohio.
Filed December 24, 1930. Serial No. 309,313. PUBLISHED JUNE 9, 1931. Class 46.

286,340. PROPHYLACTIC RUBBER AND MEMBRANEOUS ARTICLES. SAMUEL S. KOHN, doing business as Thrift Rubber Company, Newark, N. J.
Filed May 5, 1931. Serial No. 314,204. PUBLISHED JUNE 16, 1931. Class 44.

286,341. PLANTS TREATED TO PRESERVE THEM DURING THEIR DORMANT STATE AND SHIPMENTS. THE CONARD-PYLE COMPANY, West Grove, Pa.
Filed April 11, 1931. Serial No. 313,270. PUBLISHED JUNE 9, 1931. Class 1.

286,342. COAL. THE CLINTON COMPANY, Cleveland, Ohio.
Filed May 8, 1931. Serial No. 314,323. PUBLISHED JUNE 16, 1931. Class 1.

286,343. COAL. THE SENECA COAL & COKE COMPANY, Tulsa, Okla.
Filed May 4, 1931. Serial No. 314,174. PUBLISHED JUNE 16, 1931. Class 1.

286,344. WHEAT FLOUR, PASTRY FLOUR, ETC. GEO. O'BRIEN & SON, INCORPORATED, Greenville, Ohio.
Filed April 30, 1931. Serial No. 314,008. PUBLISHED JUNE 9, 1931. Class 46.

286,345. HAT BOXES AND SHOE BOXES USED FOR LUGGAGE. VUITTON & VUITTON, SOCIETE A RESPONSABILITE LIMITEE, Paris, France.
Filed April 29, 1931. Serial No. 313,984. PUBLISHED JUNE 16, 1931. Class 3.

286,346. BUTTER. CHALLENGE CREAM & BUTTER ASSOCIATION, Los Angeles, Calif.
Filed April 27, 1931. Serial No. 313,882. PUBLISHED JUNE 9, 1931. Class 46.

286,347. BUTTER, EGGS, CREAM, AND CHEESE. MORRIS WEINGER, doing business as Sunny Farm Products, Chicago, Ill.
Filed April 20, 1931. Serial No. 313,572. PUBLISHED JUNE 9, 1931. Class 46.

286,348. BIRD SEED FOOD AND BIRD COLORED PEPPER FOOD. SAMUEL FRIED, doing business as Golden-Voice Bird Food Products Co., Brooklyn, N. Y.
Filed April 18, 1931. Serial No. 313,503. PUBLISHED JUNE 9, 1931. Class 46.

286,349. COFFEE. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed April 24, 1931. Serial No. 313,757. PUBLISHED JUNE 16, 1931. Class 46.

286,350. COFFEE. FRANK C. RUSSELL, doing business as Russell & Co., New York, N. Y.
Filed April 18, 1931. Serial No. 313,511. PUBLISHED JUNE 9, 1931. Class 46.

286,351. CONCENTRATED VEGETABLES. VECON, INCORPORATED, Chicago, Ill.
Filed April 16, 1931. Serial No. 313,455. PUBLISHED JUNE 9, 1931. Class 46.

286,352. CANDY. GEORGE D. LEOCOPOULOS, Chicopee Falls, Mass.
Filed April 10, 1931. Serial No. 313,272. PUBLISHED JUNE 16, 1931. Class 46.

286,353. DENTURES AND BRIDGES. HENRY P. BOOS, doing business as Henry P. Boos Prosthetic Studios, Minneapolis, Minn.
Filed April 30, 1931. Serial No. 313,993. PUBLISHED JUNE 9, 1931. Class 44.

286,354. SUGAR. J. D. AND A. B. SPRECKELS INVESTMENT COMPANY, doing business as Western Sugar Refinery, San Francisco, Calif.
Filed February 3, 1931. Serial No. 310,701. PUBLISHED JUNE 9, 1931. Class 46.

286,355. CLEANER FOR DUCO, LACQUER, PAINT, ENAMEL, GLASS, PORCELAIN, AND METAL FINISHES. CELOLAC PRODUCTS COMPANY, Minneapolis, Minn.
Filed January 26, 1931. Serial No. 310,433. PUBLISHED JUNE 9, 1931. Class 4.

286,356. PLAIN AND SELF RISING FLOUR. RED BAND CO., INC., Johnson City, Tenn.
Filed May 6, 1931. Serial No. 314,250. PUBLISHED JUNE 16, 1931. Class 46.

286,357. CEREAL BREAKFAST FOOD. UNCLE SAM BREAKFAST FOOD COMPANY, Omaha, Nebr.
Filed April 17, 1931. Serial No. 313,482. PUBLISHED JUNE 9, 1931. Class 46.

286,358. LAWN SEED. JOSEPH BRECK & SONS CORPORATION, Boston, Mass.
Filed April 17, 1931. Serial No. 313,463. PUBLISHED JUNE 9, 1931. Class 1.

286,359. LAWN SEED. JOSEPH BRECK & SONS CORPORATION, Boston, Mass.
Filed April 17, 1931. Serial No. 313,462. PUBLISHED JUNE 9, 1931. Class 1.

286,360. COOKIES. THE ROCHESTER BREAD COMPANY, Rochester, Minn.
Filed April 16, 1931. Serial No. 313,448. PUBLISHED JUNE 16, 1931. Class 46.

286,361. DYED FURS, SKINS, PELTS, AND HIDES. FEDERAL STAR DYERS CORPORATION, New York, N. Y.
Filed April 16, 1931. Serial No. 313,426. PUBLISHED JUNE 16, 1931. Class 1.

286,362. LEATHER, LEATHER DRESSED BY THE CHROMIC PROCESS, LEATHER DRESSED BY THE HOLE PROCESS, PATENT LEATHER. ADLER & OPPENHEIMER AKTIENGESELLSCHAFT, Berlin, Germany.
Filed April 23, 1931. Serial No. 313,879. PUBLISHED JUNE 9, 1931. Class 1.

286,363. PORTFOLIOS AND POCKET-BOOKS. E. W. BREDEMEIER & CO., Chicago, Ill.
Filed April 1, 1931. Serial No. 312,790. PUBLISHED JUNE 16, 1931. Class 3.

286,364. SOLE LEATHER. ADOLPH SALOMON & SON, Chicago, Ill.
Filed March 31, 1931. Serial No. 312,775. PUBLISHED JUNE 9, 1931. Class 1.

286,365. PHYSIC AND LAXATIVE FOR HUMAN USE. FLAVO LAX CORPORATION, Brooklyn, N. Y.
Filed April 10, 1931. Serial No. 313,264. PUBLISHED JUNE 16, 1931. Class 6.

286,366. BALSAM USED EXTERNALLY FOR THE RELIEF OF BACKACHE, NEURALGIA, INSECT BITES, AND STINGS. NEWTON BALSAM COMPANY, Newton, Kans.
Filed October 10, 1930. Serial No. 306,618. PUBLISHED JUNE 9, 1931. Class 6.

286,367. CELLULOSE PULPS. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed October 9, 1930. Serial No. 306,555. PUBLISHED DECEMBER 2, 1930. Class 1.

286,368. NERVE TONIC AND BLOOD PURIFIER. ZAMARANO LABORATORIES, Van Nuys, Calif.
Filed October 6, 1930. Serial No. 306,473. PUBLISHED JUNE 9, 1931. Class 6.

286,369. MEDICINE FOR PYORRHEA. LENA FLAHERTY, doing business as Rhealinzo Co., Portland, Oreg.
Filed October 6, 1930. Serial No. 306,487. PUBLISHED MAY 26, 1931. Class 6.

286,370. COMPOSITION FOR CLEANING THE INTERIOR OF HOT WATER CIRCULATING SYSTEMS. RADIATOR SPECIALTY COMPANY, Charlotte, N. C.
Filed October 1, 1930. Serial No. 306,287. PUBLISHED MAY 26, 1931. Class 6.

286,371. FACE POWDERS. WEISSBARD BROS., Newark, N. J.
Filed August 30, 1930. Serial No. 305,202. PUBLISHED JUNE 9, 1931. Class 6.

286,372. SYNTHETIC PERFUME. NEWPORT CHEMICAL WORKS, INCORPORATED, Carrollville, Wis.
Filed August 6, 1930. Serial No. 304,292. PUBLISHED MAY 26, 1931. Class 6.

286,373. FISH PASTE. HARRY PECK & COMPANY LIMITED, London, England.
Filed December 9, 1930. Serial No. 308,791. PUBLISHED JUNE 9, 1931. Class 46.

286,374. PREPARATIONS FOR CLEANING LINOLEUMS. THEODORE JOHNSON, New York, N. Y.
Filed October 27, 1930. Serial No. 307,206. PUBLISHED JUNE 16, 1931. Class 4.

286,375. SEASONING FOR POP CORN. ROBBINS & MYERS, INC., Springfield, Ohio.
Filed September 10, 1930. Serial No. 305,542. PUBLISHED JUNE 9, 1931. Class 46.

286,376. GOLF CLUBS, INCLUDING STEEL SHAFTED GOLF CLUBS, GOLF IRONS, GOLF CLUB SHAFTS, GOLF CLUB HEADS, GOLF BALLS, GOLF BAGS, AND GOLF TEES. DONALDSON MANUFACTURING COMPANY, LIMITED, Glasgow, Scotland.
Filed May 12, 1931. Serial No. 314,447. PUBLISHED JUNE 16, 1931. Class 22.

286,377. TARGET BACKSTOPS. KOEHLER BROS., Saginaw, Mich.
Filed May 11, 1931. Serial No. 314,411. PUBLISHED JUNE 16, 1931. Class 9.

286,378. TOY WALKING DEVICES IN THE NATURE OF LOW-DOWN STILTS. BRINLY-HARDY COMPANY, Louisville, Ky.
Filed April 24, 1931. Serial No. 313,728. PUBLISHED JUNE 16, 1931. Class 22.

286,379. PREPARATION TAKEN INTERNALLY FOR PURIFYING THE BLOOD. CHARLOTTE E. HOWELL, doing business as Europa Health Restorer Co., Glendale, Calif.
Filed April 22, 1931. Serial No. 313,661. PUBLISHED JUNE 16, 1931. Class 6.

286,380. MOUTH WASH AND A PREPARATION USED IN THE TREATMENT OF DANDRUFF. C. G. MEADOWS, doing business as Aracoma Laboratories, Logan, W. Va.
Filed April 21, 1931. Serial No. 313,605. PUBLISHED JUNE 16, 1931. Class 6.

286,381. PREPARATION FOR THE TREATMENT OF NASAL AND SINUS INFECTIONS. KENNETH E. GOIT, Minneapolis, Minn.
Filed April 20, 1931. Serial No. 313,540. PUBLISHED MAY 26, 1931. Class 6.

286,382. PREPARATION FOR TREATING POISON SORES, ECZEMA, PILES, ETC. ADOLF ROTH, Philipsburg, Pa.
Filed April 16, 1931. Serial No. 313,449. PUBLISHED MAY 26, 1931. Class 6.

286,383. TABLE BOARD GAMES OF SKILL PLAYED WITH PIECES AND HAVING GUIDES FOR EFFECTING THE DIRECTION OF SUCH PIECES. PHILLIPS & UPPERCU, New York, N. Y.
Filed April 22, 1931. Serial No. 313,670. PUBLISHED JUNE 16, 1931. Class 22.

286,384. COLD SALVE AND ALSO A PREPARATION FOR TREATMENT OF DANDRUFF. JACOB S. NADOOLMAN, South Fallsburg, N. Y.
Filed April 14, 1931. Serial No. 313,349. PUBLISHED JUNE 16, 1931. Class 6.

286,385. CHEESE PREPARATION. PABST CORPORATION, Milwaukee, Wis.
Filed January 26, 1931. Serial No. 310,400. PUBLISHED JUNE 16, 1931. Class 46.

286,386. CLEANING AND POLISHING PADS FOR ALL KITCHEN UTENSILS. THOMAS W. SLACK, Fort Worth, Tex.
Filed March 9, 1931. Serial No. 311,935. PUBLISHED JUNE 9, 1931. Class 4.

286,387. ICE CREAM SANDWICH WAFERS. S. & S. CONE CORPORATION, New York, N. Y.
Filed March 3, 1931. Serial No. 311,697. PUBLISHED JUNE 9, 1931. Class 46.

286,388. MAYONNAISE DRESSING, THOUSAND ISLAND DRESSING, AND SANDWICH SPREAD. MRS. ELEANOR LAMB, Norwalk, Ohio.
Filed February 28, 1931. Serial No. 311,548. PUBLISHED JUNE 9, 1931. Class 46.

286,389. SOAP, FABRIC CLEANER, AND NICKEL POLISH. PURITAN SOAP COMPANY, Rochester, N. Y.
Filed February 14, 1931. Serial No. 311,070. PUBLISHED JUNE 16, 1931. Class 4.

286,390. THERAPEUTIC DEVICES FOR HOLDING ABSORPTIVE PADS USED IN THE TREATMENT OF GENITO-URINARY DISEASES. LYLE A. GARNER, doing business as S & S Specialty Co., Long Beach, Calif.
Filed March 11, 1931. Serial No. 312,000. PUBLISHED JUNE 9, 1931. Class 44.

286,391. SHEARLINGS OR WOOL PELTS. A. C. LAWRENCE LEATHER COMPANY, Peabody, Mass.
Filed March 27, 1931. Serial No. 312,608. PUBLISHED JUNE 16, 1931. Class 1.

286,392. GENERAL TONIC. COLUMBIA LABORATORIES INC., New York, N. Y.
Filed February 26, 1931. Serial No. 311,471. PUBLISHED JUNE 9, 1931. Class 6.

286,393. PREPARED MINERAL WATER USED AS A MEDICINAL PREPARATION. GREENVILLE PRODUCTS CO., Greenville, Ala.
Filed February 16, 1931. Serial No. 311,097. PUBLISHED JUNE 2, 1931. Class 6.

286,394. LINIMENT. DONALD MACKAY, Twin Falls, Idaho.
Filed January 23, 1931. Serial No. 310,325. PUBLISHED MAY 26, 1931. Class 6.

286,395. CANDY. JOSEPH LOUIS SORDILLO, doing business as Sordillo Candy Co., Baltimore, Md.
Filed May 9, 1931. Serial No. 314,381. PUBLISHED JUNE 16, 1931. Class 46.

286,396. CANDIES. DILLING & COMPANY, Indianapolis, Ind.
Filed May 9, 1931. Serial No. 314,362. PUBLISHED JUNE 16, 1931. Class 46.

286,397. CANDY. CANDY KITCHENS, INC., Chicago, Ill.
Filed May 9, 1931. Serial No. 314,360. PUBLISHED JUNE 16, 1931. Class 46.

286,398. CHOCOLATE. PURE CANDY KITCHEN, INC., New York, N. Y.
Filed May 7, 1931. Serial No. 314,296. PUBLISHED JUNE 16, 1931. Class 46.

286,399. CONFECTIONERY—NAMELY, CHOCOLATES AND CANDY. CRAILO SWEETS, INCORPORATED, Brooklyn, N. Y.
Filed May 7, 1931. Serial No. 314,274. PUBLISHED JUNE 16, 1931. Class 46.

286,400. CHEWING GUM. WM. WRIGLEY JR. COMPANY, Chicago, Ill.
Filed May 1, 1931. Serial No. 314,091. PUBLISHED JUNE 9, 1931. Class 46.

286,401. CHEWING GUM. WM. WRIGLEY JR. COMPANY, Chicago, Ill.
Filed May 1, 1931. Serial No. 314,090. PUBLISHED JUNE 9, 1931. Class 46.

286,402. CHEWING GUM. ORBIT LISTERATED GUM COMPANY, Chicago, Ill.
Filed May 1, 1931. Serial No. 314,070. PUBLISHED JUNE 9, 1931. Class 46.

286,403. FEVER AND PAIN POWDER. SWAMP & DIXIE LABORATORIES, INC., Fort Smith, Ark.
Filed April 24, 1931. Serial No. 313,762. PUBLISHED JUNE 16, 1931. Class 6.

286,404. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,436. PUBLISHED JUNE 9, 1931. Class 46.

286,405. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,435. PUBLISHED JUNE 9, 1931. Class 46.

286,406. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,434. PUBLISHED JUNE 9, 1931. Class 46.

286,407. MEDICINAL CREAM, LIQUID POWDER AND CREAM DENTIFRICE, COLD CREAM, ETC. R. B. MIZRAHI, doing business as Laboratorium Mizrahi, Mexico City, Mexico.
Filed March 20, 1929. Serial No. 281,038. PUBLISHED JUNE 2, 1931. Class 6.

286,408. GARDEN VEGETABLE SEEDS. W. ATLEE BURPEE CO., Philadelphia, Pa.
Filed February 5, 1929. Serial No. 278,891. PUBLISHED JUNE 9, 1931. Class 1.

286,409. MEDICINAL ACIDS, ALKALIES, AMMONIUM COMPOUNDS, ETC. BURROUGHS WELLCOME & CO. (U. S. A.) INC., New York, N. Y.
Filed January 17, 1929. Serial No. 278,089. PUBLISHED JUNE 16, 1931. Class 6.

286,410. BEEF, MUTTON, PORK, POULTRY, AND GAME, FRESH, DRIED, AND POTTED. FOX & FOX, Philadelphia, Pa.
Filed January 10, 1929. Serial No. 277,783. PUBLISHED JUNE 16, 1931. Class 46.

286,411. SYNTHETIC ORGANIC PRODUCTS FOR USE IN VANILLA FLAVORS, FOOD FLAVORING COMPOUNDS, AND FOR GENERAL FOOD FLAVORING PURPOSES. FLORASYNTH LABORATORIES, INC., New York, N. Y.
Filed December 18, 1928. Serial No. 276,931. PUBLISHED JUNE 16, 1931. Class 6.

286,412. COFFEE AND TEA. A. SCHILLING & CO., San Francisco, Calif.
Filed April 12, 1927. Serial No. 247,342. PUBLISHED JUNE 9, 1931. Class 46.

286,413. MEN'S AND BOYS' SHOES. A. E. NETTLETON COMPANY, Syracuse, N. Y.
Filed April 21, 1931. Serial No. 313,607. PUBLISHED JUNE 9, 1931. Class 39.

286,414. PERFUMES AND COSMETICS. LENTHERIC, INCORPORATED, New York, N. Y.
Filed January 17, 1931. Serial No. 310,059. PUBLISHED MAY 26, 1931. Class 6.

286,415. PREPARATION FOR SOUR STOMACH, FLATULENCE, ETC. THE ANTE-FERMEN CO., Columbia, S. C.
Filed January 7, 1931. Serial No. 309,665. PUBLISHED MAY 26, 1931. Class 6.

286,416. INSECTICIDES, LIQUID SPREADER COMPOUNDS, A COMPOUND OF EMULSIFIED KEROSENE USED AS A DISINFECTANT AND HAVING INCIDENTAL DETERGENT PROPERTIES, LIME SULFUR. LEFFINGWELL RANCHO COMPANY, Whittier, Calif.
Filed December 22, 1930. Serial No. 309,247. PUBLISHED JUNE 9, 1931. Class 6.

286,417. COMPLEXION SOAP AND SHAVING SOAP. ARTHUR CALDER LYONS, Brantford, Ontario, Canada.
Filed May 2, 1930. Serial No. 299,849. PUBLISHED JUNE 9, 1931. Class 4.

286,418. PERFUME, TOILET WATER, EAU DE COLOGNE, ROUGE, ETC. MORRIS DAUER, doing business as Redau Laboratory, Brooklyn, N. Y.
Filed April 26, 1930. Serial No. 299,499. PUBLISHED AUGUST 12, 1930. Class 6.

286,419. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND FRUIT JUICES FOR BEVERAGE PURPOSES. TOMANGO LIMITED, Mataffin, Eastern Transvaal, South Africa.
Filed April 24, 1930. Serial No. 299,417. PUBLISHED JUNE 9, 1931. Class 45.

286,420. DAIRY FEED. ALLIED MILLS, INC., Chicago, Ill.
Filed May 16, 1930. Serial No. 300,601. PUBLISHED JUNE 9, 1931. Class 46.

286,421. DRIED FRUITS. F. A. SCHNEIDER, doing business as Warren Dried Fruit Co., San Jose, Calif.
Filed January 6, 1930. Serial No. 294,445. PUBLISHED FEBRUARY 10, 1931. Class 46.

286,422. CANNED PEAS. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn.
Filed April 10, 1930. Serial No. 298,644. PUBLISHED JUNE 16, 1931. Class 46.

286,423. HAIR TONICS. M. M. FLERON & SON, INC., doing business as Bercy Laboratories, Trenton, N. J.
Filed February 28, 1930. Serial No. 296,640. PUBLISHED APRIL 22, 1930. Class 6.

286,424. TONIC FOR THE SCALP. THE PACKER MANUFACTURING COMPANY, INC., New York, N. Y.
Filed February 25, 1930. Serial No. 296,494. PUBLISHED APRIL 29, 1930. Class 6.

286,425. TONIC FOR THE TREATMENT OF COCCIDIOSIS AND WHITE DIARRHOEA IN POULTRY. P. J. OESTERLING & SON, INC., Butler, Pa.
Filed December 6, 1929. Serial No. 293,339. PUBLISHED MAY 26, 1931. Class 6.

286,426. LIQUID TONIC MADE FROM HERBS, INCLUDING THOSE USED AS A STOMACHIC AND HAVING A MILD LAXATIVE ACTION, FOR OCCASIONAL CONSTIPATION AND CONTAINING ALCOHOL. ROCCO TRILLO, doing business as Monaderb Tea Co., Merchantville, N. J.
Filed September 30, 1929. Serial No. 290,439. PUBLISHED JUNE 9, 1931. Class 6.

286,427. CANDIES GENERALLY. THE TEMPTATION COMPANY, Chicago, Ill.
Filed April 24, 1929. Serial No. 282,954. PUBLISHED SEPTEMBER 2, 1930. Class 46.

286,428. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed April 9, 1929. Serial No. 282,119. PUBLISHED JUNE 9, 1931. Class 46.

286,429. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,438. PUBLISHED JUNE 9, 1931. Class 46.

286,430. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,437. PUBLISHED JUNE 9, 1931. Class 46.

286,431. CANNED TOMATOES. MICHELE DE ROSA, New York, N. Y.
Filed December 10, 1930. Serial No. 308,819. PUBLISHED JUNE 9, 1931. Class 46.

286,432. MEDICINAL PREPARATION TO BE USED IN THE TREATMENT OF ARTHRITIS, RHEUMATISM, NEURALGIA, NEURITIS, LUMBAGO, MIGRAINE, LA GRIPPE, AND INFLUENZA. CHEMISCHE FABRIK HELFENBERG A. G. VORM EUGEN DIETERICH, Helfenberg, near Dresden, Germany.
Filed December 5, 1930. Serial No. 308,614. PUBLISHED JUNE 16, 1931. Class 6.

286,433. MINERAL OILS FOR MEDICINAL PURPOSES. AMERICAN DRUGGISTS SYNDICATE, INC., New York and Long Island City, N. Y.
Filed November 25, 1930. Serial No. 308,281. PUBLISHED JUNE 9, 1931. Class 6.

286,434. ARTIFICIAL SWEETENING SUBSTANCES AND COMBINATIONS OF THE SAME TO BE USED AS MEDICAMENTS FOR DIABETES AND AS SUBSTITUTES FOR SUGAR. VERKAUFSSTELLE DES INTERNATIONALEN SÜSSTOFF-SYNDIKATS GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Hamburg, Germany.
Filed November 18, 1930. Serial No. 308,047. PUBLISHED JUNE 2, 1931. Class 6.

286,435. HAIR WAVING PADS. THOMAS R. JAMES, Dallas, Tex.
Filed April 20, 1931. Serial No. 313,546. PUBLISHED JUNE 16, 1931. Class 44.

286,436. CASTING GOLDS. J. F. JELENKO & CO., INC., New York, N. Y.
Filed February 27, 1931. Serial No. 311,528. PUBLISHED JUNE 16, 1931. Class 44.

286,437. TOILET SOAP AND SHAVING CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed April 27, 1931. Serial No. 313,882. PUBLISHED JUNE 16, 1931. Class 4.

286,438. CELLULOSE SANITARY NAPKINS. L. BAMBERGER & CO., Newark, N. J.
Filed April 27, 1931. Serial No. 313,825. PUBLISHED JUNE 16, 1931. Class 44.

286,439. FROZEN CONFECTION. COLD SNAP INCORPORATED, New York, N. Y.
Filed April 14, 1931. Serial No. 313,330. PUBLISHED JUNE 9, 1931. Class 46.

286,440. SOLVENT PREPARATION FOR REMOVING NICOTINE STAINS. ALBERCO CORPORATION, LTD., Hollywood, Calif.
Filed April 18, 1931. Serial No. 313,273. PUBLISHED JUNE 16, 1931. Class 4.

286,441. SHOE POLISH AND DRESSING. LYONS & COMPANY, New York, N. Y.
Filed April 9, 1931. Serial No. 313,139. PUBLISHED JUNE 16, 1931. Class 4.

286,442. ELASTIC REDUCING GARMENTS FOR WOMEN, USED FOR THERAPEUTIC PURPOSES. THE SANDFELDER COMPANY, Chicago, Ill.
Filed March 19, 1931. Serial No. 312,314. PUBLISHED JUNE 16, 1931. Class 44.

286,443. DRY WINDOW CLEANING POWDER AND METAL POLISH. ERASM CHEMICAL CORPORATION OF AMERICA, INC., Cincinnati, Ohio.
Filed April 7, 1931. Serial No. 313,080. PUBLISHED JUNE 9, 1931. Class 4.

286,444. PROPHYLACTIC RUBBER ARTICLES. THOMAS KAPLAN, doing business as Midwest Drug Co., Minneapolis, Minn.
Filed April 4, 1931. Serial No. 312,952. PUBLISHED JUNE 9, 1931. Class 44.

286,445. PROPHYLACTIC RUBBER OR TISSUE MEMBRANEOUS ARTICLES. ALBERT CASSETT, New York, N. Y.
Filed March 27, 1931. Serial No. 312,598. PUBLISHED JUNE 16, 1931. Class 44.

286,446. SOAPS. D'ORSAY PERFUMERIES CORPORATION, New York, N. Y.
Filed March 21, 1931. Serial No. 312,366. PUBLISHED JUNE 9, 1931. Class 4.

286,447. PREPARATION IN THE NATURE OF A DRY CLEANER. M. M. A. CHEMICAL COMPANY, Boston, Mass.
Filed March 16, 1931. Serial No. 312,190. PUBLISHED JUNE 16, 1931. Class 4.

286,448. CLEANING COMPOUNDS HAVING WATER SOFTENING PROPERTIES. THE ABSORENE MANUFACTURING COMPANY, St. Louis, Mo.
Filed March 13, 1931. Serial No. 312,081. PUBLISHED JUNE 9, 1931. Class 4.

286,449. CHEMICALLY TREATED POLISHING CLOTHS. SHINEEN PRODUCTS CORPORATION, Neenah, Wis.
Filed March 12, 1931. Serial No. 312,068. PUBLISHED JUNE 16, 1931. Class 4.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

286,450. (CLASS 39. CLOTHING.) CHICAGO GARMENT CO., INC., Argos, Ind. Filed Apr. 4, 1930. Serial No. 298,378.

RUFF-WEAR

For Children's Play Suits, Rompers, Overalls, Jeans, and Flapper Suits.
Claims use since Aug. 1, 1923.

286,451. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) TIME-O-STAT CONTROLS COMPANY, Elkhart, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 26, 1930. Serial No. 299,529.

HYWATT

For Electrical Switches of the Mercury Make-and-Break Type.
Claims use since November, 1927.

286,452. (CLASS 39. CLOTHING.) CEDAR GROVE SHOE MFG. CO., Cedar Grove, Wis. Filed May 3, 1930. Serial No. 299,897.

FOOT MODEL

For Shoes Made of Leather, Rubber, and Fabric and Combinations of These Materials.
Claims use since Mar. 25, 1930.

286,453. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHELSEA PACKING CO. INC., Brooklyn, N. Y. Filed May 16, 1930. Serial No. 300,614.

Chelsea

For Mayonnaise, Apple Butter, Canned Cherries; Spices—Namely, White Pepper, Black Pepper, and Paprika; Pickles—Namely, Sweet Mixed and Sour Mixed; Sweet Relish, Chow Chow; Preserves—Namely, Peach, Strawberry, and Raspberry; Peanut Butter, Mincemeat, Olives, Tea, and Coffee.
Claims use since July, 1911.

286,454. (CLASS 39. CLOTHING.) LARGMAN, GRAY COMPANY, New York, N. Y. Filed May 22, 1930. Serial No. 301,042.

◄ TISHU ►

For Hosiery.
Claims use since May 15, 1930.

286,455. (CLASS 39. CLOTHING.) PROPPER-MCCALLUM HOSIERY CO., INC., New York, N. Y. Filed May 26, 1930. Serial No. 301,292.

Yarndi

For Hosiery.
Claims use since May 22, 1930.

286,456. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) ABRAHAM GOLDSHOLL, New York, N. Y. Filed June 21, 1930. Serial No. 302,681.



For Elastic Belts for Bloomers.
Claims use since June 12, 1930.

286,457. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BALFOUR GUTHRIE & COMPANY, San Francisco, Calif., assignor to Balfour, Guthrie & Co., Limited, San Francisco, Calif., a Corporation of Delaware. Filed June 20, 1930. Serial No. 302,618.

MARMION

For Canned Fruits, Canned Vegetables, Canned Fish, Fresh Deciduous Fruits, Fresh Vegetables, and Dried Fruits.
Claims use since Aug. 21, 1925.

286,458. (CLASS 39. CLOTHING.) UNITED STATES RUBBER COMPANY, New York, N. Y. Filed June 21, 1930. Serial No. 302,704.

Norwich

For Raincoats of Rubber and Fabric.
Claims use since May 12, 1930.

286,459. (CLASS 39. CLOTHING.) PRINCESS ROYAL HOSIERY MILLS, INC., Reading, Pa. Filed June 23, 1930. Serial No. 302,745.

SPUN-DUL

For Hosiery.
Claims use since June 5, 1930.

286,460. (CLASS 39. CLOTHING.) S. S. KRESGE COMPANY, Detroit, Mich. Filed July 21, 1930. Serial No. 303,692.

DULMODE

For Hosiery.
Claims use since May 1, 1930.

286,461. (CLASS 37. PAPER AND STATIONERY.) THE CREPE-KRAFT COMPANY, INC., Newark, N. J. Filed July 26, 1930. Serial No. 303,840.

EVERDRY

For Waterproof Wrapping and Lining Paper.
Claims use since July 9, 1930.

286,462. (CLASS 2. RECEPTACLES.) LAWRENCE PAPER MANUFACTURING COMPANY, Lawrence, Kans. Filed Aug. 1, 1930. Serial No. 304,103.

QUIK-FREEZ

For Flap Style Corrugated Cartons.
Claims use since July 1, 1930.

286,463. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARTIN A. TANGEN, doing business as Matz Company, Taylors Falls, Minn. Filed Aug. 7, 1930. Serial No. 304,354.

MATZ

For a Corn and Callous Preparation.
Claims use since May 1, 1930.

286,464. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CORVALLIS CREAMERY CO., Portland, Oreg. Filed Aug. 30, 1930. Serial No. 305,157.

FLAVOR FOODS

For Sandwich Spread, Mayonnaise, Canned Chicken with Noodles.
Claims use since June 15, 1930.

286,465. (CLASS 39. CLOTHING.) EVERY BUDDY'S BLOUSE CO., New York, N. Y. Filed Sept. 5, 1930. Serial No. 305,350.

DICKY DARE

For Boys' Blouses Made of Textile Fabric for Outer Wear, Boys' Dress Shirts, and Boys' Play Suits.
Claims use since July 1, 1930.

286,466. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PEDRO C. ACEVEDO, doing business as Orizaba Distributing Company, Los Angeles, Calif. Filed Sept. 16, 1930. Serial No. 305,742.

ORIZABA

For Malt Syrup for Food Purposes.
Claims use since May 27, 1930.

286,467. (CLASS 39. CLOTHING.) RAYMOND D. STEELE, Candor, N. Y. Filed Oct. 7, 1930. Serial No. 306,512.

PlaWork

For Negligee and Work Shirts for Men, Women, and Children.
Claims use since June 1, 1930.

286,468. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STOKELY BROTHERS & COMPANY, Louisville, Ky. Filed Nov. 3, 1930. Serial No. 307,513.

Table Tested

For Canned Vegetables—Namely, Beets, Carrots, Corn, Green Beans, Pumpkin, Red Kidney Beans, Green Lima Beans, Hominy, Honey Pod Peas, Peas, Peas and Carrots Mixed, Sauerkraut, Succotash, Tomatoes, Tomato Puree, Turnip Greens, and Wax Beans; and Chili Sauce, Cranberry Sauce, Pork and Beans, Tomato Catsup, and Tomato Juice.
Claims use since June 30, 1930.

286,469. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE FIVE MINUTE HOME CLEANER COMPANY, Chicago, Ill. Filed Sept. 10, 1930. Serial No. 305,519.

FIVE MINUTE HOME CLEANER

For a Dry Cleaner.
Claims use since May 15, 1930.

286,470. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALVERT COMPANY, INC., Seattle, Wash. Filed Dec. 4, 1930. Serial No. 308,572.

Calvert

For Canned Salmon.
Claims use since June, 1930.

286,471. (CLASS 39. CLOTHING.) SWEETSER & SON, INC., New York, N. Y. Filed May 15, 1929. Serial No. 284,093.

BIDDLE

For Negligee Shirts and Collars.
Claims use since Feb. 27, 1929.

286,472. (CLASS 39. CLOTHING.) FRANZ GUTMANN & WEINBERG G. M. B. H., Chemnitz, Germany. Filed Jan. 15, 1930. Serial No. 294,803.

Doppelhand

For Gloves Made of Textile Fabrics.
Claims use since July 21, 1921.

286,473. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ST. LOUIS PRODUCTS COMPANY, St. Louis, Mo. Filed Jan. 15, 1930. Serial No. 294,830.

BESTMADE

For Malt Syrup for Food Purposes.
Claims use since Feb. 20, 1928.

286,474. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) M. STEFFEN & Co., INC., Chicago, Ill. Filed Jan. 23, 1931. Serial No. 310,310.

Paw Paw

For Apple Butter, Fruit Preserves and Pickles, and Cider Vinegar.
Claims use since July, 1922.

286,475. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) J. BRENER Co., Boston, Mass. Filed Mar. 12, 1931. Serial No. 312,039.

VELVET MESH

For Rayon Knitted Cloth in the Piece.
Claims use since May 15, 1930.

286,476. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HINDU INCENSE MANUFACTURING Co., INC., Chicago, Ill. Filed Apr. 13, 1931. Serial No. 313,293.

HINDU INCENSE

For Incense.
Claims use since August, 1922.

286,477. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) NORTHWESTERN MINING & EXCHANGE COMPANY OF ERIE, PA., Dunmore, Pa. Filed May 6, 1931. Serial No. 314,247.

KRAMER COAL

The drawing is lined for red color.
For Coal.
Claims use since May, 1923.

286,478. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) AMERICAN FLYER MFG. Co., Chicago, Ill. Filed May 11, 1931. Serial No. 314,392.

DYALTYPE

For Transformers.
Claims use since Nov. 1, 1929.

286,479. (CLASS 39. CLOTHING.) M. C. SCHRANK COMPANY, Bridgeton, N. J. Filed May 27, 1931. Serial No. 315,112.

Flat-Bak

For Women's Pajamas, Petticoats, and Shorts.
Claims use since January, 1930.

286,480. (CLASS 45. BEVERAGES, NONALCOHOLIC.) SEMINOLE BOTTLING Co., Huntsville, Ala., assignor to Seminole Fruit Flavor Company, Chattanooga, Tenn., a Corporation of Tennessee. Filed June 3, 1931. Serial No. 315,370.

Double Lime

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts Used in Making the Same.
Claims use since Jan. 1, 1929.

286,481. (CLASS 39. CLOTHING.) THE SILVERTEX COMPANY, Philadelphia, Pa. Filed June 9, 1931. Serial No. 315,610.

Silverdale

For Men's, Boys', and Children's Outer Garments Consisting of Coats, Vests, Pants, Overcoats, Raincoats, Dusters, Mackinaws, Ulsters, Automobile Coats, and Bath Wraps.
Claims use since Jan. 1, 1930.

286,482. (CLASS 45. BEVERAGES, NONALCOHOLIC.) SEMINOLE BOTTLING Co., Huntsville, Ala., assignor to Seminole Fruit Flavor Company, Chattanooga, Tenn., a Corporation of Tennessee. Filed June 3, 1931. Serial No. 315,369.

DOUBLE LEMON

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts Used in Making the Same.
Claims use since Jan. 1, 1929.

286,483. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THOMAS R. BIRCH, doing business as Phoenix Costume Manufacturing Company, Philadelphia, Pa. Filed June 4, 1931. Serial No. 315,382.

Treacy Covrpress

For Tennis Racket Casings.
Claims use since April, 1921.

286,484. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STUART W. MILLER, doing business as Kitchen & Retail Store, Colmar Manor, Md. Filed July 7, 1931. Serial No. 316,703.

MILLER'S POTAT-O-CHIPS

For Potato Chips.
Claims use since August, 1926.

286,485. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) U. S. HAME COMPANY, Buffalo, N. Y. Filed June 25, 1931. Serial No. 316,305.

LAWSON

For Wrenches.
Claims use since Jan. 1, 1926.

TRADE-MARK REGISTRATIONS RENEWED

82,436. A FOOD MADE OF CORN, SUGAR, AND SALT. Registered June 27, 1911. HENRY C. HAWK, Battle Creek, Mich. Renewed June 27, 1931, to Postum Company, Inc., New York, N. Y., a Corporation of Delaware, successor.

82,629. CERTAIN POLISHING MATERIALS. Registered July 11, 1911. THE NUGGET POLISH Co., LTD. Renewed July 11, 1931, to Chiswick Products Limited, London, England, a Corporation of Great Britain, assignee.

82,950. SAWS OF ALL KINDS. Registered August 8, 1911. E. C. ATKINS & COMPANY, Indianapolis, Ind.; New York, N. Y.; Memphis, Tenn.; Atlanta, Ga.; Minneapolis, Minn.; Portland, Oreg.; Seattle, Wash.; San Francisco, Calif.; Chicago, Ill.; and Toronto, Ontario, Canada. Renewed August 8, 1931, to E. C. Atkins & Company, Indianapolis, Ind., a Corporation of Indiana.

82,951. SAWS OF ALL KINDS. Registered August 8, 1911. E. C. ATKINS & COMPANY, Indianapolis, Ind.; Atlanta, Ga.; Chicago, Ill.; Memphis, Tenn.; Minneapolis, Minn.; New Orleans, La.; New York, N. Y.; Portland, Oreg.; San Francisco, Calif.; Seattle, Wash., and Hamilton, Ontario, Canada. Renewed August 8, 1931, to E. C. Atkins & Company, Indianapolis, Ind., a Corporation of Indiana.

83,471. BEER. Registered September 19, 1911. BIRK BROS. BREWING Co. Renewed September 19, 1931, to Birk Brothers, Inc., Chicago, Ill., a Corporation of Illinois, by change of name.

83,632. BEER. Registered October 3, 1911. BIRK BROS. BREWING Co. Renewed October 3, 1931, to Birk Brothers, Inc., Chicago, Ill., a Corporation of Illinois, by change of name.

83,987. A PREPARATION USED AS A CLEANER FOR WALL-PAPER. Registered October 31, 1911. THE CLIMAX CLEANER & CLEVELAND PASTE CO. Renewed October 31, 1931, to The Climax Cleaner Mfg. Company, Cleveland, Ohio, a Corporation of Ohio, by change of name.

84,296. LUBRICATING OILS AND GREASES. Registered November 21, 1911. UNION PETROLEUM COMPANY. Renewed November 21, 1931, to Sinclair Refining Company, Philadelphia, Pa., a Corporation of Maine, assignee.

84,316. COUNTER-STIFFENERS FOR BOOTS AND SHOES. Registered November 28, 1911. CHARLES E. HARWOOD COMPANY. Renewed November 28, 1931, to Harwood Counter Company, Lynn, Mass., a Corporation of Massachusetts, by change of name.

84,338. A REMEDY FOR COLIC, INDIGESTION, AND AZOTURIA IN CATTLE AND HORSES. Registered November 28, 1911. ROBERT W. PYLE, New Philadelphia, Ohio. Renewed November 28, 1931, to John Knox Smith, Amsterdam, Ohio, successor.

84,600. BUTTER, EGGS, AND DRESSED POULTRY. Registered December 26, 1911. CONRON BROS. COMPANY, New York, N. Y., a Corporation of New York. Renewed December 26, 1931.

84,662. A PERIODICAL PUBLICATION. Registered December 26, 1911. NEW YORK EVENING JOURNAL PUBLISHING COMPANY. Renewed December 26, 1931, to New York Evening Journal, Inc., New York, N. Y., a Corporation of New York, successor.

84,664. A PERIODICAL PUBLICATION. Registered December 26, 1911. NEW YORK EVENING JOURNAL PUBLISHING COMPANY. Renewed December 26, 1931, to New York Evening Journal, Inc., New York, N. Y., a Corporation of New York, successor.

84,665. A PERIODICAL PUBLICATION. Registered December 26, 1911. NEW YORK EVENING JOURNAL PUBLISHING COMPANY. Renewed December 26, 1931, to New York Evening Journal, Inc., New York, N. Y., a Corporation of New York, successor.

LABELS

REGISTERED AUGUST 25, 1931

39,600.—*Title:* MISS DIXIE SCRATCH FEED. For Scratch Feed. ATLANTA MILLING CO., Atlanta, Ga. Published July 1, 1931.

39,601.—*Title:* GOLDEN GLOW. For Malt Syrup. P. BALLANTINE & SONS, Newark, N. J. Published July 23, 1931.

39,602.—*Title:* CAMP FIRE. For Coffee. BLUE RIBBON PRODUCTS CO., INC., San Francisco, Calif. Published July 1, 1931.

39,603.—*Title:* COLLINS LUSTRE-LAC POLISH. For Liquid Polish. D. A. COLLINS MFG. CO., INC., Brooklyn, N. Y. Published May 8, 1931.

39,604.—*Title:* TARFREE. For Asbestos Fibre and Asphalt Roof Coatings. JOSIAH H. CROCKER, doing business as Pingo Company, Boston, Mass. Published July 27, 1931.

39,605.—*Title:* DIXIE RUSH. For Laxative in the Form of a Drink Made with Orange Juice. DIXIE RUSH COMPANY, New York, N. Y. Published May 23, 1931.

39,606.—*Title:* DUGAN'S 100% WHOLE WHEAT PECAN ROLLS. For Pecan Rolls. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published April 22, 1931.

39,607.—*Title:* DUGAN'S 100% WHOLE WHEAT NUT POUND CAKE. For Nut Pound Cake. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published February 2, 1931.

39,608.—*Title:* DUGAN'S PURE APPLE JELLY. For Apple Jelly. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published December 10, 1930.

39,609.—*Title:* DUGAN'S MARBLE POUND CAKE. For Marble Pound Cake. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published February 2, 1931.

39,610.—*Title:* DUGAN'S 100% WHOLE WHEAT CITRON POUND CAKE. For Citron Pound Cake. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published February 2, 1931.

39,611.—*Title:* DUGAN'S 100% WHOLE WHEAT PLAIN POUND CAKE. For Plain Pound Cake. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published February 2, 1931.

39,612.—*Title:* DUGAN'S 100% WHOLE WHEAT CRACKERS. For Crackers. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published June 22, 1931.

39,613.—*Title:* DUOSOL. For Wash for Mouth and Throat. THE DUOSOL COMPANY, Chicago, Ill. Published October 8, 1930.

39,614.—*Title:* HI-FUL-PAK. For Apples. EARL FRUIT COMPANY, Wenatchee, Wash. Published March 30, 1931.

39,615.—*Title:* FOSTER PREMIUM. For Coal. FOSTER LUMBER COMPANY, Kansas City, Mo. Published May 15, 1931.

39,616.—*Title:* GOLDEN STATE. For Butter. GOLDEN STATE COMPANY, LTD., San Francisco, Calif. Published October 1, 1930.

39,617.—*Title:* GOOD COFFEE. For Coffee. HIGH POINT COFFEE COMPANY, INC., High Point, N. C. Published April 13, 1931.

39,618.—*Title:* HIGRADE. For Ginger Ale. HIGRADE PRODUCTS CO., Pittsburgh and Braddock, Pa. Published January 14, 1931.

39,619.—*Title:* FAMOUS-BARR CO. FINE FOOTWEAR. For Footwear. HOLMAN PAPER BOX CO., INC., St. Louis, Mo. Published June 29, 1931.

39,620.—*Title:* KRANK. For Hair Root Oil. A. J. KRANK Co., St. Paul, Minn. Published November 17, 1930.

39,621.—*Title:* SPORICIDE. For Germicide. A. J. KRANK COMPANY, St. Paul, Minn. Published May 27, 1931.

39,622.—*Title:* TRIPLE-C. For Germicide. ALFRED J. KRANK, INC., St. Paul, Minn. Published May 27, 1931.

39,623.—*Title:* L. & D. For Olive Oil. LEKAS AND DRIVAS, New York, N. Y. Published December 1, 1930.

39,624.—*Title:* LIMPIO MOUTH WASH. For Mouth Wash. LIMPIO MANUFACTURING COMPANY, Tucson, Ariz. Published June 5, 1931.

39,625.—*Title:* GENUINE NEW ENGLAND COKE. For Coke. NEW ENGLAND COKE COMPANY, Boston, Mass. Published July 10, 1931.

39,626.—*Title:* POPSICLES—A FROZEN DRINK ON A STICK. For Frozen Confections. POPSICLE SERVICE, INC., Chicago, Ill. Published June 1, 1931.

39,627.—*Title:* OXO. For Preparation Used as a Germicide Deodorant, Sterilizer, Disinfectant, Cleanser, and Bleacher. J. L. PRESCOTT COMPANY, Passaic, N. J. Published March 23, 1931.

39,628.—*Title:* INSEC-TOX. For Insecticide. REX RESEARCH CORPORATION, Toledo, Ohio. Published April 29, 1931.

39,629.—*Title:* INSEC-TOX. For Insecticide. REX RESEARCH CORPORATION, Toledo, Ohio. Published April 29, 1931.

39,630.—*Title:* COLONAIDE. For Medicinal Tablets. SOCIETY OF THE COLONAIDE, INCORPORATED, New York, N. Y. Published April 20, 1931.

39,631.—*Title:* ROYAL. For Gelatin Aspic. STANDARD BRANDS INCORPORATED, New York, N. Y. Published July 3, 1931.

39,632.—*Title:* MITZIE GREEN'S ART NEEDLEWORK OUTFIT. For Art Needle Work Outfits. STANDARD SOLOPHONE MFG. CO., INC., New York, N. Y. Published April 10, 1931.

39,633.—*Title:* AMBER BEAUTY. For Raisins. SUN-MAID RAISIN GROWERS OF CALIFORNIA, Fresno, Calif. Published May 27, 1931.

39,634.—*Title:* MATES. For Candy Bars. WILLIAMSON CANDY COMPANY, Chicago, Ill. Published January 6, 1931.

PRINTS

REGISTERED AUGUST 25, 1931

13,381.—*Title:* PONY MALTED MILK — (WINDOW STRIP). For Malted Milk. THE BORDEN COMPANY, New York, N. Y. Published June 24, 1931.

13,382.—*Title:* INDERA FIGURFIT. For Bathing Suits. INDERA MILLS COMPANY, Winston-Salem, N. C. Published February 18, 1931.

13,383.—*Title:* MY ADELINE. For Cakes. EARL D. JOHNSON, Chicago, Ill. Published April 18, 1931.

13,384.—*Title:* THE LITTLE LEMON MAN. For Pure Lemon Juice. ROBERT MCLENNAN, San Francisco, Calif. Published January 11, 1929.

13,385.—*Title:* NOW IS THE TIME TO CLEAN-OUT RADIATORS WITH NORUST. For Cleaner for Radiators, Boiler Tubes and the Like. MOGACO LABORATORIES, Buffalo, N. Y. Published April 14, 1931.

13,386.—*Title:* OLD FASHIONED ROSE. For Quilting Cotton. THE STEARNS & FOSTER CO., Cincinnati, Ohio. Published April 28, 1931.

13,387.—*Title:* ACORN AND OAK LEAF. For Quilting Cotton. THE STEARNS & FOSTER CO., Cincinnati, Ohio. Published September 22, 1930.

13,388.—*Title:* THE DOUBLE WEDDING RING. For Quilting Cotton. THE STEARNS & FOSTER CO., Cincinnati, Ohio. Published March 31, 1931.

13,389.—*Title:* NEW YORK BEAUTY. For Quilting Cotton. THE STEARNS & FOSTER CO., Cincinnati, Ohio. Published November 28, 1930.

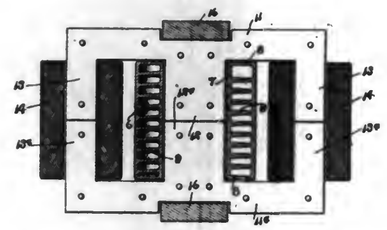
13,390.—*Title:* THE OHIO ROSE. For Quilting Cotton. THE STEARNS & FOSTER CO., Cincinnati, Ohio. Published January 17, 1931.

13,391.—*Title:* LOW POINT NOW. For Kashan Rugs. JOHN WANAMAKER NEW YORK, New York, N. Y. Published June 1, 1931.

REISSUES

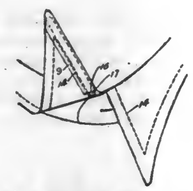
AUGUST 25, 1931

18,160. ELECTRIC WATER HEATER. WILLIAM J. HAMMERS, Grand Rapids, Mich. Original No. 1,656,518, dated Jan. 17, 1928, Serial No. 130,877, filed Aug. 23, 1926. Application for reissue filed Jan. 14, 1930. Serial No. 420,780. 8 Claims. (Cl. 219—47.)



1. In combination, a water heating member formed with an outer shell, an inner hollow wall, and integral ends connecting the ends of said shell and wall, an inlet and an outlet at the respective ends of said water heating member, a core located around said water heating member having a middle vertical portion passing through said hollow wall and two end vertical portions parallel with and spaced from the sides of the outer shell, and primary coil windings around said end vertical portions of the core.

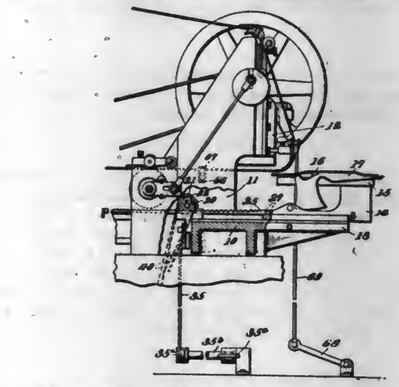
18,161. COLLAR. JOHN N. COLLINS, York, Pa., assignor to The Shirtcraft Co. Inc., New York, N. Y., a Corporation of New York. Original No. 1,782,000, dated Nov. 18, 1930, Serial No. 351,900, filed Apr. 2, 1929. Application for reissue filed May 12, 1931. Serial No. 536,888. 12 Claims. (Cl. 2—132.)



1. A collar including an outer ply, an inner ply, and an interlining ply together with a pocket ply interposed between said inner and outer plies and adjacent said interlining ply, all of said plies being stitched together by a common seam at the extreme edge of the collar, said pocket ply extending around the extreme outer edge of said inner ply and extending rearwardly thereof, and all of said plies being stitched together by a common seam and lying at the rear edge of said pocket ply.

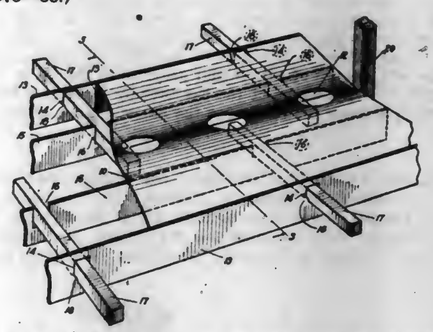
18,162. POWER DRIVE FOR SLIDES. BENJAMIN W. FREEMAN, Cincinnati, Ohio. Original No. 1,716,954, dated June 11, 1929, Serial No. 737,770, filed Sept. 15, 1924. Application for reissue filed Aug. 15, 1929. Serial No. 385,985. 38 Claims. (Cl. 164—19.)

13. In a machine for operating upon fitted boot and shoe uppers, the combination of a reciprocating plunger, a work support shaped to support an upper to be cut, and movable into and out of position with respect to the plunger, said machine having clearance spaces adjacent said support, whereby portions of said upper may be draped about the support, ornamenting instrumentalities



carried by said work support for co-action with said plunger in ornamenting the work, and means for operating the plunger and the work support in synchronism.

18,163. TOY BASKET BALL GAME. HAROLD GARVER, Merriam, Kans., assignor of one-half to James Thomas Findlay, Dickinson County, Kans. Original No. 1,654,968, dated Jan. 3, 1928, Serial No. 165,672, filed Feb. 3, 1927. Application for reissue filed Dec. 26, 1929. Serial No. 416,728. 17 Claims. (Cl. 273—85.)

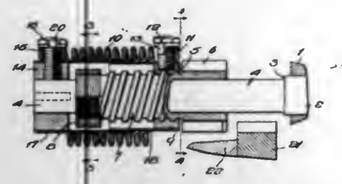


7. A game of the character described including a board member having a top surface provided with synclinal longitudinally-extending half top portions, and having holes spaced along the synclinal axis, a ball of greater diameter than the holes and adapted to rest in any one of said holes, and means for projecting the ball from its seat in any one of said holes.

18,164. DRIVE FOR ENGINE STARTERS. CLARENCE RINGWALD, North Hampton, Ohio, assignor, by direct and mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Original No. 1,597,830, dated Aug. 24, 1926, Serial No. 745,555 filed Oct. 24, 1924. Application for reissue filed Aug. 23, 1928. Serial No. 301,667. 14 Claims. (Cl. 74—7.)

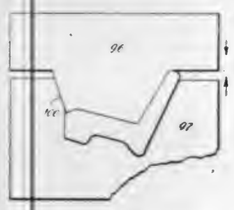
1. In combination, a sleeve member bearing a coarse external thread and having a pinion on one end, a threaded

collar on said threaded part of the sleeve member, an attaching collar, a helical drive spring concentric with said



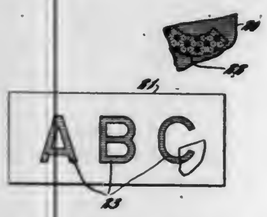
sleeve between said two collars and a stop on the threaded end of the sleeve for engaging the threaded collar to stop the forward movement of the member.

18,165. METHOD OF REFORMING BARS. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Original application filed July 16, 1926, Serial No. 122,864, Patent No. 1,712,506, dated May 14, 1929. Divided and application filed Mar. 20, 1929, Serial No. 348,389. Original No. 1,808,466, dated June 2, 1931. Application for reissue filed July 6, 1931. Serial No. 548,994. 5 Claims. (Cl. 29—169.)



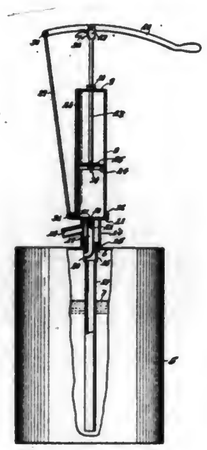
1. The method of reforming the flange fishing surface of an angle-type rail joint bar consisting in first applying pressure to the bar in one direction and then applying a supplementary pressure in another direction, during the continuance of said initial pressure to the upper outer surface of the flange of the bar thereby to exert a lateral thrust thereon for reforming the flange fishing surface.

18,166. LUMINOUS DISPLAY OR REFLECTOR SIGN. JONATHAN C. STIMSON, Chicago, Ill. Original No. 1,809,761, dated June 9, 1931, Serial No. 650,403, filed July 9, 1923. Application for reissue filed June 15, 1931. Serial No. 544,649. 21 Claims. (Cl. 40—130.)



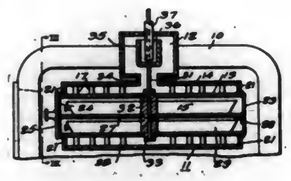
1. A luminous display sign comprising, a reflecting area on which characters are displayed so as to be visible in front of said area, and a light source in front of and distant from said area for reflection within a selected field, said reflecting area being composed of reflecting surfaces formed and positioned to cause a definite spread of the reflected light from said area and so as to confine the reflection within the selected field, in order that the characters may be visible to an observer anywhere within that field.

18,167. PUMP. ALFRED C. ANDREASEN, Oak Park, Ill., assignor to Air-Way Pump Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,672,401, dated June 5, 1928, Serial No. 162,518, filed Jan. 21, 1927. Application for reissue filed Aug. 14, 1929. Serial No. 385,771. 8 Claims. (Cl. 221—77.)



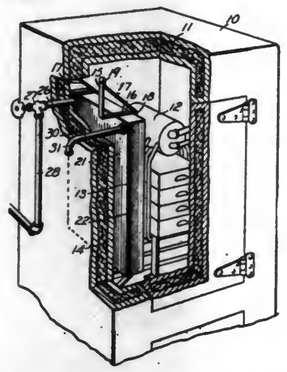
1. In a pumping mechanism of the class described, the combination of a cylinder, a plunger slidable in the cylinder, a hollow plunger rod connected with the plunger and extending through one end of the cylinder to terminate exteriorly thereof, means for reciprocating the hollow rod, a manually operable valve at the outer end of the hollow plunger rod, a check valve in the other end of the cylinder, a pin extending from the plunger in an opposite direction to the rod to engage the check valve for unseating the same when the plunger approaches the check valve closely so that the manually operated valve may be opened to allow a vent passage therethrough and through the hollow plunger rod and the check valve.

18,168. REFRIGERATOR. HERBERT T. HERR, Philadelphia, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original No. 1,697,185, dated Jan. 1, 1929, Serial No. 643,403, filed June 4, 1923. Application for reissue filed Oct. 20, 1930. Serial No. 490,038. 12 Claims. (Cl. 62—126.)



6. Refrigerant liquid storage and evaporating means for refrigerating apparatus comprising a fabricated unitary structure formed of a pair of nested sheet-metal casings spaced apart but having one of said casings joined at its periphery to the other of said casings to provide a relatively shallow refrigerant chamber, said chamber in operating condition being substantially filled with liquid refrigerant, the inner casing being so formed as to provide a longitudinal freezing chamber for receiving an ice tray, and means for rigidly fastening said casings to each other at a plurality of points intermediate their peripheries whereby to prevent deformation of the casings under pressures other than atmospheric.

18,169. FOUNTAIN TANK. HOWARD K. PINKERTON, Madison, Wis., and FREEMAN L. RHYNDRESS, Kansas City, Mo., assignors, by mesne assignments, to General Electric Company, a Corporation of New York. Original No. 1,692,223, dated Nov. 20, 1928, Serial No. 141,505, filed Oct. 14, 1926. Application for reissue filed Aug. 13, 1929. Serial No. 385,622. 7 Claims. (Cl. 62—141.)

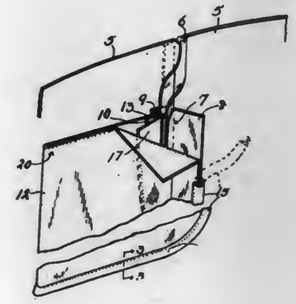


1. In a device of the character described, an insulated receptacle, refrigerating means therein, a tank mounted in said receptacle having an inlet adjacent one end thereof and an unobstructed outlet adjacent the other end thereof, means exterior to the tank for controlling the inlet and baffle members in said tank between said inlet and said outlet.

18,170. ARTIFICIAL THREAD AND PROCESS FOR MAKING SAME. LEON LILIENFELD, Vienna, Austria. Original No. 1,683,199, dated Sept. 4, 1928, Serial No. 156,751, filed Dec. 23, 1926, and in Austria June 20, 1925. Application for reissue filed Aug. 16, 1930. Serial No. 475,840. 44 Claims. (Cl. 18—54.)

33. The improved process of making filaments of regenerated cellulose silk and the like, which comprises spinning the alkaline solution containing a dissolved cellulose compound into a bath containing such a high concentration of an acid coagulating agent as to produce a plasticizing effect on the coagulated filaments the filaments being under sufficient tension during some part of the time of contact with such agent, to cause a substantial elongation of the filaments.

18,171. POCKET CONSTRUCTION FOR TROUSERS. MORRIS FALKOVITZ, Philadelphia, Pa. Original No. 1,748,836, dated Feb. 25, 1930, Serial No. 260,777, filed Mar. 10, 1928. Application for reissue filed Apr. 11, 1931. Serial No. 529,588. 2 Claims. (Cl. 2—248.)



2. In a garment having a pocket opening formed at the adjoining edges of a pair of the sections of the garment material, a strip of material projecting from one side of the pocket opening and within the garment, a pocket having its open side edges disposed at the respective sides of the pocket opening with one of said pocket side edges coinciding with the longer free edge of the projecting strip of material, and a tape secured to the projecting strip of material and one layer of the pocket in the region of said strip of material and both layers of said pocket below the strip of material for closing the joints between the several parts with the raw edges disposed in the folds of the tape.

DESIGNS

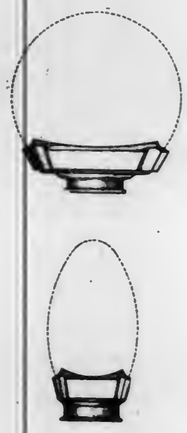
AUGUST 25, 1931

84,911. LAMP GLOBE. JOSEPH H. ALLEN, Chicago, Ill., assignor to Inland Glass Works, Inc., Chicago, Ill. Filed Jan. 26, 1931. Serial No. 38,444. Term of patent 14 years.



The ornamental design for a lamp globe as shown.

84,912. LAMP GLOBE. JOSEPH H. ALLEN, Chicago, Ill., assignor to Inland Glass Works, Inc., Chicago, Ill. Filed Jan. 26, 1931. Serial No. 38,445. Term of patent 14 years.



The ornamental design for a lamp globe as shown.

84,913. LAMP GLOBE. JOSEPH H. ALLEN, Chicago, Ill., assignor to Inland Glass Works, Inc., Chicago, Ill. Filed Jan. 26, 1931. Serial No. 38,446. Term of patent 14 years.



The ornamental design for a lamp globe as shown.

84,914. LANTERN. JOSEPH H. ALLEN, Chicago, Ill., assignor to Inland Glass Works, Inc., Chicago, Ill. Filed Apr. 7, 1931. Serial No. 39,391. Term of patent 14 years.



The ornamental design for a lantern as shown.

84,915. ASH TRAY. ERNEST THEODORE BAHNER, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a copartnership composed of Amalia Earles and Edgar H. Barbe. Filed June 8, 1931. Serial No. 40,107. Term of patent 7 years.



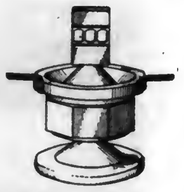
The ornamental design for an ash tray as shown.

84,916. ASH TRAY. ERNEST THEODORE BAHNER, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a copartnership composed of Amalia Earles and Edgar H. Barbe. Filed June 8, 1931. Serial No. 40,108. Term of patent 7 years.



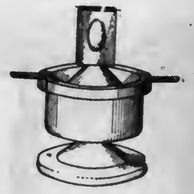
The ornamental design for an ash tray as shown.

84,917. ASH TRAY. ERNEST THEODORE BAHNER, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a copartnership composed of Amalia Earles and Edgar H. Barbe. Filed June 8, 1931. Serial No. 40,109. Term of patent 7 years.



The ornamental design for an ash tray as shown.

84,918. ASH TRAY. ERNEST THEODORE BAHNER, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a copartnership composed of Amalia Earles and Edgar H. Barbe. Filed June 8, 1931. Serial No. 40,110. Term of patent 7 years.



The ornamental design for an ash tray as shown.

84,919. ASH TRAY. ERNEST THEODORE BAHNER, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a copartnership composed of Amalia Earles and Edgar H. Barbe. Filed June 8, 1931. Serial No. 40,111. Term of patent 7 years.



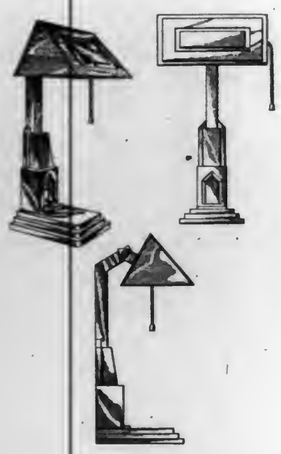
The ornamental design for an ash tray as shown.

84,920. BRIDGE FOR AN EYEGLASS MOUNTING. EARLE J. R. BEATTEY, Edgewood, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Dec. 27, 1929. Serial No. 38,956. Term of patent 14 years.



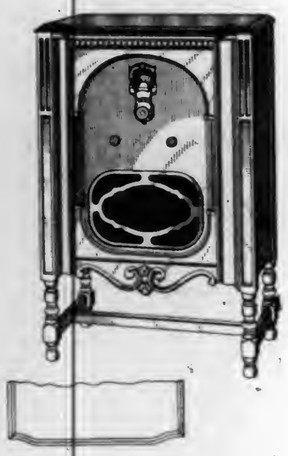
The ornamental design for a bridge for an eyeglass mounting, substantially as shown.

84,921. LAMP. ALBERT BORNSTEIN, Westwood, N. J. Filed Jan. 21, 1931. Serial No. 38,405. Term of patent 7 years.



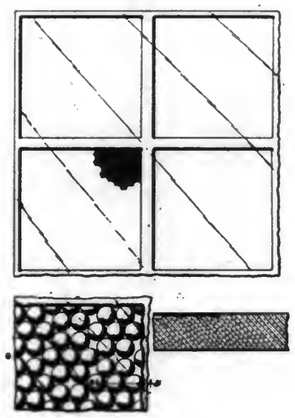
The ornamental design for a lamp, as shown.

84,922. RADIOCABINET. FRANK C. BURTON, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 12, 1930. Serial No. 35,240. Term of patent 7 years.



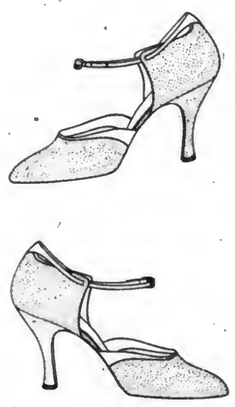
The ornamental design for a radio cabinet as shown.

84,923. SHEET GLASS. WILLIAM R. CRAWFORD, Kingsport, Tenn., assignor to Blue Ridge Glass Corporation, Kingsport, Tenn., a Corporation of New York. Filed July 3, 1929. Serial No. 31,931. Term of patent 14 years.



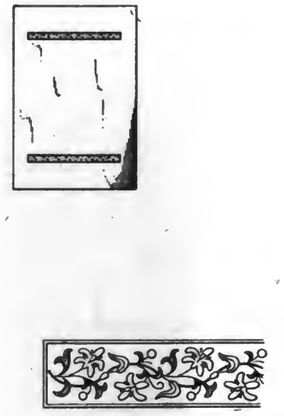
The ornamental design for sheet glass as shown and described.

84,924. SHOE. VINCENT DE LISO, Astoria, N. Y., assignor to Saks & Co., New York, N. Y., a Corporation of New York. Filed May 14, 1931. Serial No. 39,845. Term of patent 3½ years.



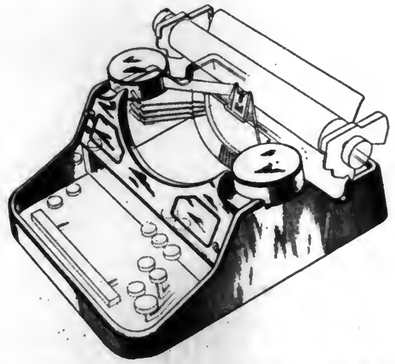
The ornamental design for a shoe as shown.

84,925. SHEET OF WRITING PAPER. PAUL DIXON, Atlanta, Ga., assignor to J. P. Stevens Engraving Co., Atlanta, Ga., a Corporation of Georgia. Filed July 15, 1930. Serial No. 36,356. Term of patent 7 years.



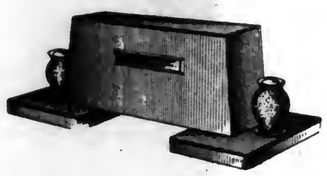
The ornamental design for a sheet of writing paper as shown.

84,926. TYPEWRITER. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 30, 1931. Serial No. 39,288. Term of patent 14 years.



The ornamental design for a typewriter, as shown.

84,927. MEMORIAL STONE FOR GRAVES. CLIFFORD I. ENOCHS, Ardmore, Pa. Filed Sept. 2, 1930. Serial No. 36,849. Term of patent 14 years.



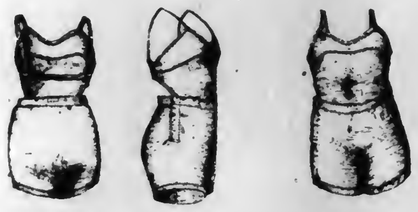
The ornamental design for a memorial stone for graves as shown and described.

84,928. MEMORIAL STONE FOR GRAVES. CLIFFORD I. ENOCHS, Ardmore, Pa. Filed Sept. 2, 1930. Serial No. 36,850. Term of patent 14 years.



The ornamental design for a memorial stone for graves as shown and described.

84,929. BATHING SUIT. IRENE FOGEL and SATCHS SHULKIN, Los Angeles, Calif. Filed Apr. 28, 1931. Serial No. 39,648. Term of patent 3½ years.



The ornamental design for a bathing suit, as shown.

84,930. ELECTRIC LIGHT FIXTURE. GEORGE E. GLATTHAR, Cleveland Heights, Ohio, assignor to The Art Metal Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 22, 1931. Serial No. 39,926. Term of patent 7 years.



The ornamental design for an electric light fixture, as shown.

84,931. BADGE OR SIMILAR ARTICLE. JAY ALLEN GLENN, Hendersonville, N. C. Filed Sept. 19, 1930. Serial No. 37,027. Term of patent 7 years.



The ornamental design for a badge or similar article, as shown.

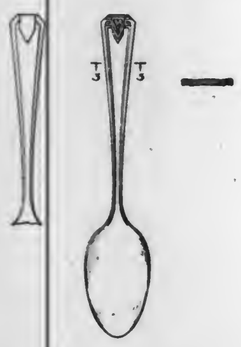
84,932. RADIOCABINET. JAMES GUBITOSI, Nutley, N. J. Filed Apr. 2, 1931. Serial No. 39,333. Term of patent 7 years.





The ornamental design for a radio cabinet as shown.

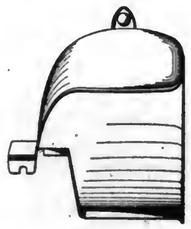
84,933. SPOON OR SIMILAR ARTICLE. LILLIAN V. M. HELANDER, Oneida, N. Y., assignor to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Sept. 18, 1930. Serial No. 37,007. Term of patent 14 years.



The ornamental design for a spoon or similar article as shown and described.

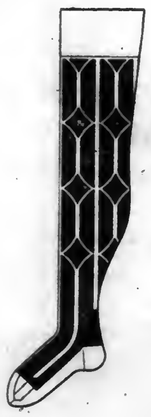
84,934. COMBINED FENDER AND LAMP CASING FOR VEHICLES. JAMES R. HUGHES, South Bend, Ind. Filed Sept. 6, 1929. Serial No. 32,684. Term of patent 14 years.





The ornamental design for a combined fender and lamp casing for vehicles substantially as shown.

84,935. STOCKING. ALFRED E. ISCHINGER, Reading, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 26, 1931. Serial No. 40,330. Term of patent 14 years.



The ornamental design for a stocking, as shown and described.

84,936. STOCKING. ALFRED E. ISCHINGER, Reading, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 26, 1931. Serial No. 40,331. Term of patent 14 years.



The ornamental design for a stocking, as shown and described.

84,937. STOCKING. ALFRED E. ISCHINGER, Reading, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 26, 1931. Serial No. 40,328. Term of patent 14 years.



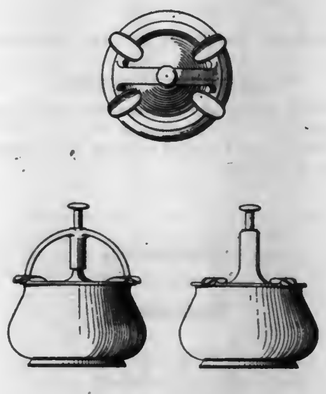
The ornamental design for a stocking, as shown and described.

84,938. STOCKING. ALFRED E. ISCHINGER, Reading, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 26, 1931. Serial No. 40,333. Term of patent 14 years.



The ornamental design for a stocking, as shown and described.

84,939. ASH RECEIVER. HENRY JANSSEN, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 22, 1931. Serial No. 40,298. Term of patent 14 years.



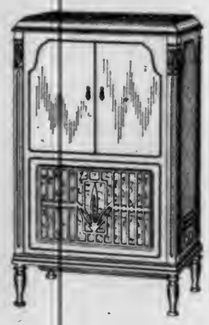
The ornamental design for an ash receiver, as shown.

84,940. HEATER. BERTRAND B. KAHN, Cincinnati, Ohio, assignor to The Estate Stove Company, Hamilton, Ohio, a Corporation of Ohio. Filed June 20, 1931. Serial No. 40,280. Term of patent 7 years.



The ornamental design for a heater, substantially as shown.

84,941. HEATER. BERTRAND B. KAHN, Cincinnati, Ohio, assignor to The Estate Stove Company, Hamilton, Ohio, a Corporation of Ohio. Filed June 20, 1931. Serial No. 40,281. Term of patent 7 years.



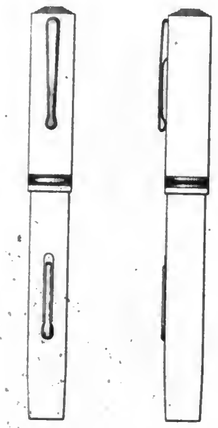
The ornamental design for a heater, substantially as shown.

84,942. SHOE BUCKLE. CLIFFORD G. KING, Barrington, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed June 18, 1931. Serial No. 40,266. Term of patent 3½ years.



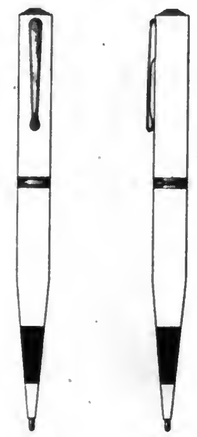
The ornamental design for a shoe buckle as shown.

84,943. FOUNTAIN PEN. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed May 4, 1931. Serial No. 39,701. Term of patent 14 years.



The ornamental design for a fountain pen substantially as shown.

84,944. PENCIL. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed May 4, 1931. Serial No. 39,702. Term of patent 14 years.



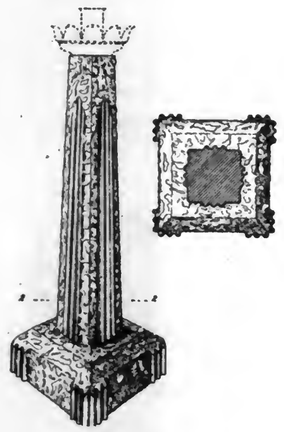
The ornamental design for a pencil substantially as shown.

84,945. COMBINED DESK AND RADIOCABINET. HORACE LEHR, Easton, Pa. Filed Aug. 23, 1930. Serial No. 36,747. Term of patent 3½ years.



The ornamental design for a combined desk and radio cabinet as shown and described.

84,946. CANDLESTICK OR ARTICLE OF ANALOGOUS NATURE. STANLEY A. LIBOLD, Duluth, Minn. Filed May 14, 1931. Serial No. 39,848. Term of patent 14 years.



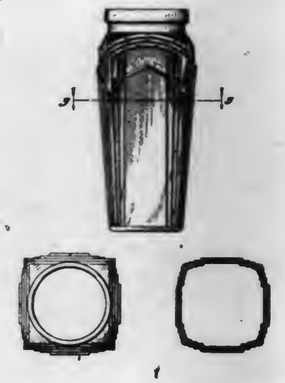
The ornamental design for a candlestick or article of analogous nature substantially as shown.

84,947. BEVERAGE CONTAINER. GEORGE G. MARSHALL, Shaker Heights, Ohio, assignor to The Marshall Drug Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 6, 1931. Serial No. 40,103. Term of patent 7 years.



The ornamental design for a beverage container substantially as shown and described.

84,948. GLASS JAR. HARRY R. MCDONALD, Dunkirk, Ind., assignor to Hart Glass Manufacturing Company, Dunkirk, Ind., a Corporation of Indiana. Filed May 11, 1931. Serial No. 39,808. Term of patent 7 years.



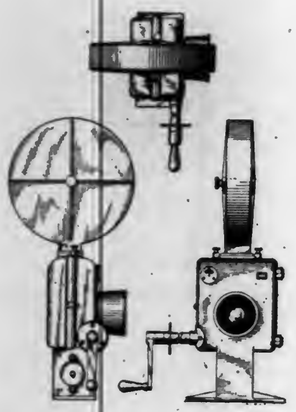
The ornamental design for a glass jar, as shown.

84,949. WOVEN FABRIC. GEORGE E. O'HEARN, Gardner, Mass., assignor to O'Hearn Manufacturing Company, Gardner, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1931. Serial No. 38,279. Term of patent 7 years.



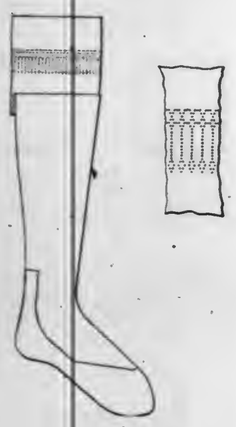
The ornamental design for woven fabric as shown and described.

84,950. CASING FOR A CAMERA. STANLEY J. PASK, Long Island City, N. Y., assignor to Al. H. Woods, New York, N. Y. Filed Nov. 25, 1930. Serial No. 37,787. Term of patent 14 years.



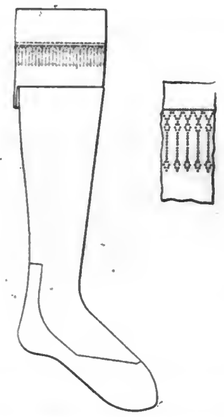
The ornamental design for a casing for a camera, as shown.

84,951. STOCKING. HENRY PETERS, Clifton, N. J. Filed Mar. 13, 1931. Serial No. 39,068. Term of patent 14 years.



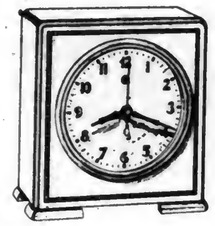
The ornamental design for a stocking as shown and described.

84,952. STOCKING. HENRY PETERS, Clifton, N. J. Filed Mar. 13, 1931. Serial No. 39,069. Term of patent 14 years.



The ornamental design for a stocking as shown and described.

84,953. CLOCK CASE. SHEPARD POND, Winchester, Mass., assignor to Warren Telechron Company, a Corporation of Maine. Filed June 12, 1931. Serial No. 40,171. Term of patent 14 years.



The ornamental design for a clock case as shown.

84,954. BOX AND THE LIKE. HARRY L. PURCHAS, McGraw, N. Y. Filed June 23, 1931. Serial No. 40,302. Term of patent 7 years.



The ornamental design for a box and the like, as shown.

84,955. LAMP OR ANALOGOUS ARTICLE. ROBERT H. RICH, East Hampton, Conn. Filed Apr. 25, 1931. Serial No. 39,621. Term of patent 7 years.



The ornamental design for a lamp or analogous article.

84,956. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Apr. 28, 1931. Serial No. 39,646. Term of patent 7 years.



The ornamental design for a shoe ornament, as shown.

84,957. LIGHTING FIXTURE OR ARTICLE OF SIMILAR NATURE. FREDERICK W. ROETTGES, Brooklyn, N. Y., assignor to Lighting Appliance Company, Inc., New York, N. Y. Filed Jan. 30, 1930. Serial No. 34,352. Term of patent 3½ years.



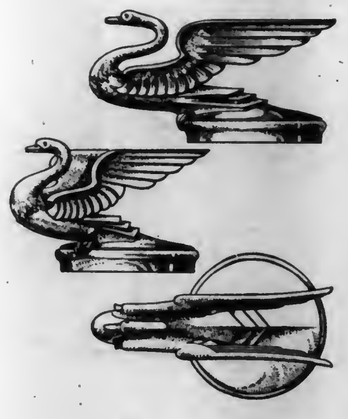
The ornamental design for a lighting fixture, or article of similar nature, as shown and described.

84,958. TOURIST HOUSE. WALTER M. ROWLES, Onawa, Iowa, assignor to Economy Housing Co., Inc., Onawa, Iowa, a Corporation of Iowa. Filed May 21, 1930. Serial No. 35,707. Term of patent 14 years.



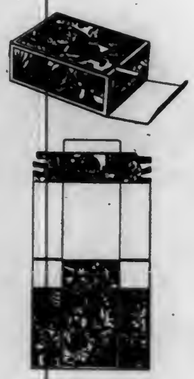
The ornamental design for a tourist house as shown.

84,959. RADIATOR CAP OR SIMILAR ARTICLE FOR AN AUTOMOTIVE VEHICLE. WILLIAM SCHNELL and BONNIE E. LEMM, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed June 1, 1931. Serial No. 40,048. Term of patent 7 years.



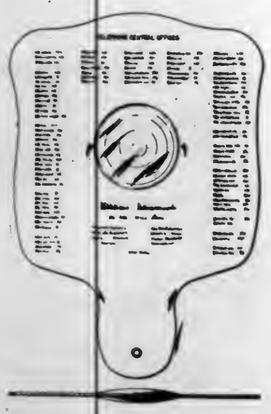
The ornamental design for a radiator cap or similar article for an automotive vehicle substantially as shown.

84,960. BOX FOR BABY'S SHOES. BENNO SCHUBART, Nuremberg, Germany. Filed Feb. 16, 1931. Serial No. 38,692. Term of patent 3½ years.



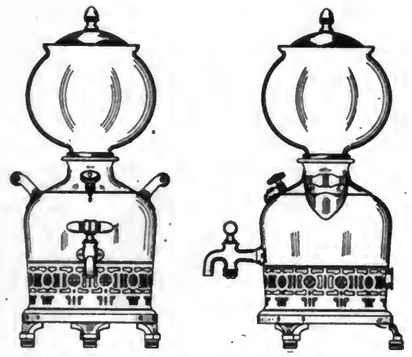
The ornamental design for a box for baby's shoes, as shown and described.

84,961. COMBINED TELEPHONE INFORMATION CARD AND MAGNIFYING GLASS. ADOLPH SELIKOWITZ, Brooklyn, N. Y., assignor to Metropolitan Importing & Mfg. Co., New York, N. Y., a Corporation of New York. Filed May 18, 1931. Serial No. 39,889. Term of patent 3½ years.



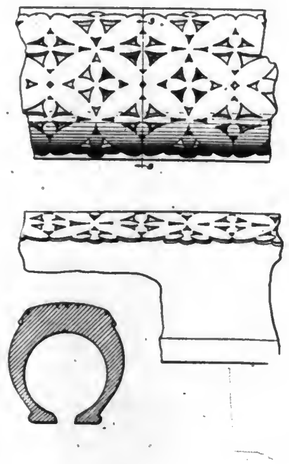
The ornamental design for a combined telephone information card and magnifying glass as shown and described.

84,962. PERCOLATOR. CHARLES F. SMITH, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed July 9, 1931. Serial No. 40,472. Term of patent 14 years.



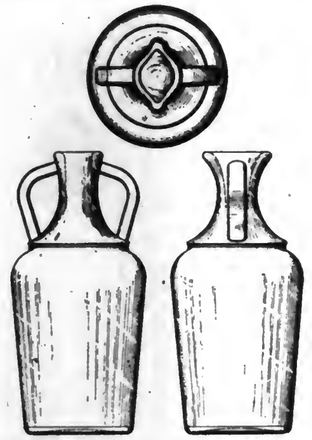
The ornamental design for a percolator as shown.

84,963. TIRE. RUSSELL SMITH, Gosport, Ind. Filed Mar. 12, 1931. Serial No. 39,057. Term of patent 14 years.



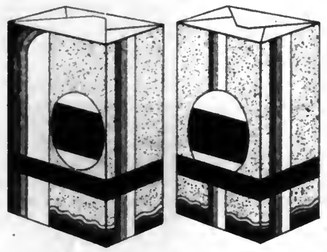
The ornamental design for a tire, as shown.

84,964. JUG. WALTER S. VIELE, New York, N. Y., assignor to American Maize-Products Company, a Corporation of Maine. Filed Feb. 7, 1931. Serial No. 38,584. Term of patent 7 years.



The ornamental design for a jug, as shown and described.

84,965. BAG OR SIMILAR ARTICLE. JOSEPH C. WALTERS, Philadelphia, Pa., assignor to Standard Brands Incorporated, New York, N. Y., a Corporation of Delaware. Filed May 13, 1931. Serial No. 39,823. Term of patent 14 years.



The ornamental design for a bag or analogous article, as shown and described.

84,966. CLOSURE CAP. ANDREW WEISENBURG, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Filed Feb. 4, 1931. Serial No. 38,547. Term of patent 14 years.



The ornamental design for a closure cap, substantially as shown and described.

84,967. NAPKIN CLIP OR SIMILAR ARTICLE. HELEN WELDER, San Antonio, Tex. Filed Nov. 7, 1930. Serial No. 37,583. Term of patent 3½ years.



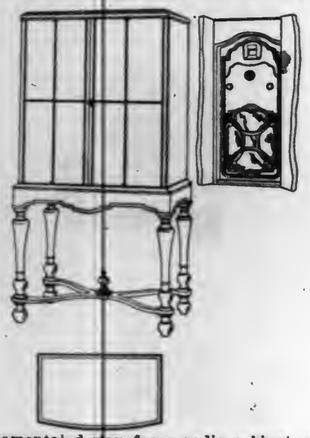
The ornamental design for a napkin clip or similar article, as shown.

84,968. AUTOMOBILE IDENTIFICATION PLATE. JOHN WENZEL, Foley, Ala. Filed June 15, 1931. Serial No. 40,214. Term of patent 7 years.



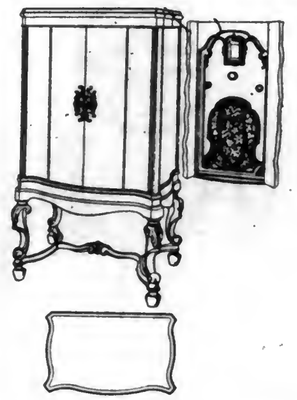
The ornamental design for an automobile identification plate as shown.

84,969. RADIOCABINET OR THE LIKE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 17, 1931. Serial No. 40,237. Term of patent 3½ years.



The ornamental design for a radio cabinet or the like, as shown.

84,970. RADIOCABINET OR THE LIKE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 17, 1931. Serial No. 40,238. Term of patent 3½ years.

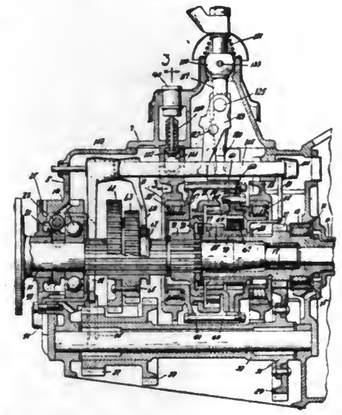


The ornamental design for a radio cabinet or the like, as shown.

PATENTS

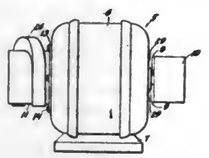
GRANTED AUGUST 25, 1931

1,820,006. FOUR SPEED TRANSMISSION. ROSCOE BERINGER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 24, 1926. Serial No. 156,884. 2 Claims. Cl. 74—58.)



1. In a transmission for vehicles, aligned driving and driven shafts, a hollow gear element eccentrically surrounding said aligned shafts, a gear on said driven shaft, a co-operating first gear carried by said hollow gear element whereby said hollow gear element is in constant driving relation with said driven shaft, a second gear carried by said hollow gear element clutch means carried by the driven shaft, a clutch gear member slidable on said driving shaft into gear engagement with said second gear of the hollow gear element or into clutch engagement with said driven shaft clutch means said first-mentioned gear of the hollow gear element being an external gear and the engaged gear of the driven shaft being a surrounding internal gear to effect a gear reduction clutch means, a plurality of spaced bearings for rotatably supporting said hollow gear element, all of said clutch and gear elements being located between said spaced bearings.

1,820,007. VENTILATING APPARATUS FOR DYNAMO ELECTRIC MACHINES. MARK L. BLAIR, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Sept. 26, 1927. Serial No. 222,136. 9 Claims. (Cl. 183—77.)



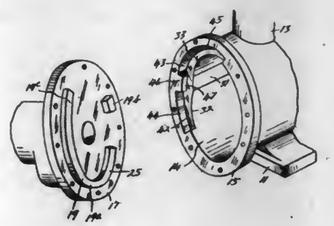
1. For use with a machine having a casing and a rotatable shaft within said casing and projecting therethrough at one end, a housing around the projecting end of the shaft, means dividing said housing into an inner compartment communicating with the interior of the casing and an outer compartment communicating with the atmosphere and means providing an air passage between the two compartments, and a fan on the shaft and in the outer compartment to cause circulation of air through the housing and the casing.

1,820,008. SIGN. CHARLES E. BAER, Emporium, Pa. Filed Jan. 17, 1929. Serial No. 333,109. 3 Claims. (Cl. 40—125.)



1. The combination with a sign, of a holder, means detachably securing the sign to the holder, fastening elements extending through the holder and into a tree, and expansion members fitted about said fastening elements intermediate to the heads thereof and the holder for allowing movement of the holder relative to the tree to compensate for the growth of the tree.

1,820,009. ROTARY PUMP. ROBERT M. BLACKMER, Detroit, Mich., assignor to Stephen A. Griggs, Detroit, Mich. Filed Apr. 2, 1928. Serial No. 266,648. 5 Claims. (Cl. 103—135.)

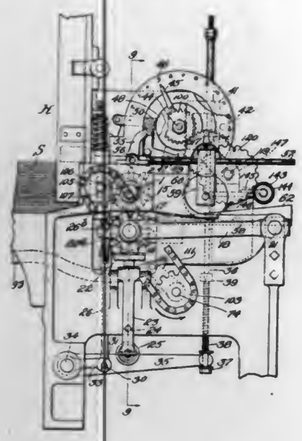


1. In a pump, a cylindrical housing, a rotor within said housing, vanes extending outwardly from said rotor engaging the cylindrical surface of said housing, a cam abutment extending across a portion of said cylindrical housing, heads at the opposite ends of said housing having recesses for engaging said rotor, rings on said heads engaging the end edges of said vanes, said rings being cut away on opposite sides of said abutment and inlet and outlet passageways communicating respectively with the cut away portions of said rings on the opposite sides of said abutment.

1,820,010. GRADING MACHINE. LEANDER A. COGSWELL, deceased, Henniker, N. H., by Edward M. Cogswell, Henniker, and Arthur M. Heard and Frank L. Clarke, Manchester, N. H., executors, assignors to Lacene Manufacturing Company, Manchester, N. H., a Corporation of Maine. Filed Sept. 19, 1928. Serial No. 306,978. 10 Claims. (Cl. 101—43.)

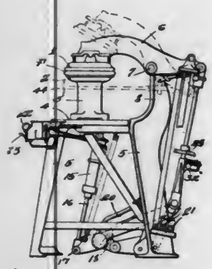
1. A grading machine comprising a pair of feeding and detecting rolls, one of which is mounted to yield with relation to the other, grading means responsive to said yielding roll, and setting mechanism connecting the yielding roll and the grading mechanism, said setting mechanism including a rock shaft, two arms fixed to the rock

shaft, two rods connected at one end to the yielding roll and at the other end directly engaging said arms to ad-



just the rock shaft in accordance with the movements of the roll, and actuating connections between the rock shaft and the grading means.

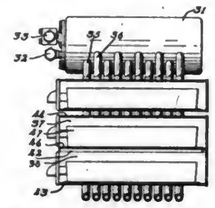
1,820,011. PRESSING MACHINE (PRESSURE ADJUSTING MEANS). ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed June 4, 1928, Serial No. 282,689. Renewed Jan. 22, 1931. 17 Claims. (Cl. 68—9.)



1. A pressing machine comprising cooperating pressing elements, one of which is movable toward and from the other, means for actuating the movable element including parts arranged in the rear of said elements and adjustably connected together and one being adjustably movable relatively to the other to vary the starting position of the movable element, and hence adjust the pressure between said elements, means for automatically adjusting one of said parts in one direction relatively to the other during the operation of the press to maintain a predetermined pressure, and manual means for adjusting one of said parts relatively to the other in the opposite direction including a portion movable with the actuating means and extending toward the fron of he machine.

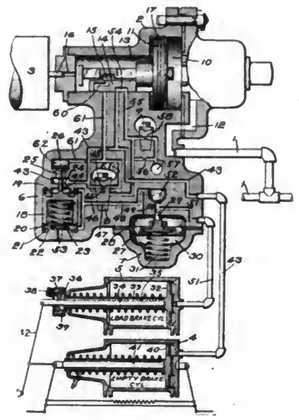
10. In a pressing machine, cooperating pressing elements, one of which is movable toward and from the other, means for actuating the movable element including parts adjustably connected together, one being adjustably movable relatively to the other to adjust the pressure between said elements, means for adjusting one of said parts comprising a manual and connections operated thereby movable with said parts during the operation of the press and having an operating portion extending from said relatively movable part and secured to the frame.

1,820,012. REFRIGERATING APPARATUS. GRANVILLE S. DICKEY, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 241,759. 3 Claims. (Cl. 62—126.)



2. A refrigerating element for refrigerating apparatus comprising in combination a freezing enclosure adapted to receive ice-making containers, self supporting means in the enclosure, a removable shelf adapted to separate the enclosure into a plurality of compartments each adapted to receive a container, and cooperating vertical shoulders on the shelf and on the enclosure for preventing movement of the shelf in a horizontal direction, said shelf being movable in a vertical direction to disengage said shoulders and permit the removal of the shelf from the enclosure in a horizontal direction.

1,820,013. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,295. 17 Claims. (Cl. 303—23.)

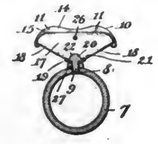


1. In a fluid pressure brake, the combination with an empty brake cylinder and a load brake cylinder, of means operative to supply fluid under pressure to said empty brake cylinder, and a means subject to a predetermined pressure in said empty brake cylinder for supplying fluid under pressure to said load brake cylinder and operative to control the supply of fluid under pressure to the load brake cylinder to prevent said predetermined pressure from reducing into the load brake cylinder.

1,820,014. TWINE CUTTER. HERBERT W. FENTON, Dowagiac, Mich. Filed June 4, 1929. Serial No. 368,230. 3 Claims. (Cl. 30—14.)

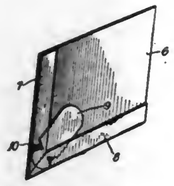
2. In combination with a finger ring, a blade-holder having a supporting stud centrally between its ends entered in said ring for rotatably adjusting said holder on said ring, means for securing said stud against movement

when said holder is adjusted to desired position, and a cutting blade carried by said blade-holder and having cutting edges exposed at opposite sides of said stud, said cut-



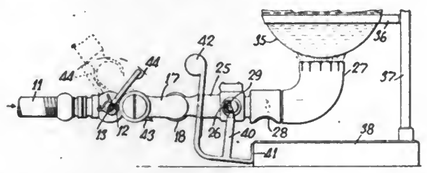
ting edges being at an angle to each other and capable of being disposed parallel with a plane passing axially through the ring or at any angle thereto.

1,820,015. ROOF AND SHINGLE THEREFOR. CARROLL C. FIGGE, Chicago, Ill. Filed Oct. 20, 1928. Serial No. 313,707. 2 Claims. (Cl. 108—33.)



2. The combination of a composition shingle having adjacent edges turned under forming an angular tip, and a substantially flat shingle positioning member secured between the said edges and the under side of the shingle and holding the edges together, and the free end of the member extending toward the central portion of the shingle.

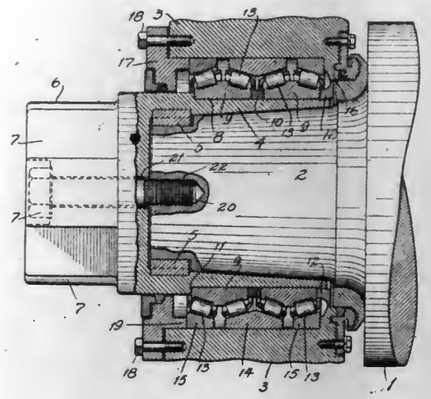
1,820,016. GAS BURNER. RICHARD HENRY FIRTH, New York, N. Y., assignor to United Cigar Stores Company of America, New York, N. Y., a Corporation of New Jersey. Filed Apr. 29, 1929. Serial No. 358,885. 6 Claims. (Cl. 126—52.)



1. In a device of the character described, the combination of a fuel supply pipe, a shut-off valve in said pipe, a burner unit extending from said pipe and movable between operative and inoperative positions, and means to close said shut-off valve when said burner unit is moved from an operative to an inoperative position, said means being arranged to retain said valve closed until the same is manually operated independently of the movement of the burner unit.

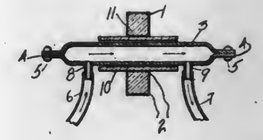
1,820,017. REMOVABLE BEARING MOUNTING. ROBERT FOULKS, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed July 27, 1929. Serial No. 381,654. 1 Claim. (Cl. 308—207.)

A removable bearing mounting for rolling mill rolls having a conical end portion extending into a frame member, comprising an internally conical sleeve fitting on said conical end portion and antifriction bearings on said sleeve, said sleeve having a threaded bore therethrough and the end of said roll having a threaded recess of smaller diameter than said sleeve bore, whereby said sleeve may be secured on said roll end by means of a bolt small enough to clear the threads of said sleeve bore and having a threaded end portion fitting the thread of the re-



cess in said roll, and may be removed from said roll by the use of a bolt having a threaded body portion and an end portion small enough to clear the threads of the recess in said roll.

1,820,018. ELECTRICAL MEASURING SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,987. 1 Claim. (Cl. 175—358.)

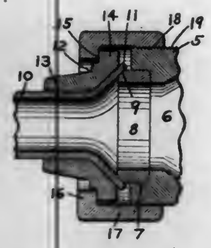


In a transformer, a primary conductor consisting of a hollow tube, a toroidal secondary winding surrounding said primary conductor and substantially perpendicular to the axis thereof, an insulating sleeve interposed between said secondary winding and said primary conductor, means for closing the ends of said primary conductor, nozzle members attached to and communicating with the interior of said primary conductor near the respective ends thereof, means for supplying cooling liquid to a nozzle adjacent one end of said primary conductor and means for withdrawing said liquid from a nozzle adjacent the opposite end of said primary conductor.

1,820,019. COMPOUNDS OF THE ANTHANTHRONE SERIES. RUDOLF HEIDENREICH, Leverkusen-on-the-Rhine, and WERNER ZERWECK and ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 31, 1929, Serial No. 336,635, and in Germany Feb. 3, 1928. 6 Claims. (Cl. 260—61.)

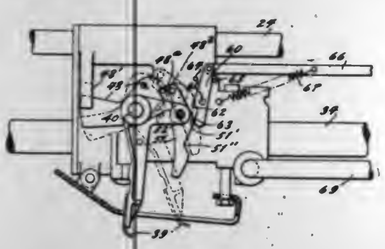
2. Process which comprises, reacting upon a halogenated anthanthrone with an alkali metal xanthogenate, in the presence of a high boiling organic solvent at a temperature of about 120–150° C.

1,820,020. PIPE COUPLING. ELLIS E. HEWITT, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 26, 1928. Serial No. 321,832. 1 Claim. (Cl. 285—37.)



A pipe coupling comprising a member provided with an opening which is enlarged at the face of the member to provide a rectangular recess, a seat ring mounted in said recess and projecting beyond the face of the member, said seat ring having an arcuate contact face on the outer face thereof, the seat ring and the member constituting a unitary structure whereby the coupling is made interchangeable for use with different types of pipes, a pipe section adapted to be coupled to said member and having an internal conical seat at its mouth for engaging the arcuate face of said seat ring, a collar encircling the pipe section, said collar having an outturned flange, and a nut threaded to the member and having an inturned flange for embracing the flange of the collar.

1,820,021. TRIP MECHANISM FOR SHEET CUTTING MACHINES. OTTO M. HOCH, Rochester, N. Y., assignor to M. D. Knowlton Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 12, 1928. Serial No. 325,584. 12 Claims. (Cl. 164—49.)



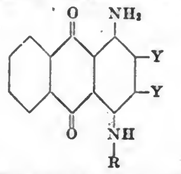
1. In a machine of the class described, the combination with shearing means and actuating mechanism therefor including a clutch, of a clutch-controlling mechanism including a latch normally holding the clutch inoperative, a trip member having a shiftable connection with the latch, and means for selectively operating said connection to trip the latch at different points in the travel of the trip member.

1,820,022. METHOD OF PRODUCING SUBSTANTIALLY PURE METALLIC MAGNESIUM DIRECTLY BY ELECTROLYSIS OF A FUSED BATH. RALPH M. HUNTER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich, a Corporation of Michigan. Filed May 31, 1929. Serial No. 367,251. 4 Claims. (Cl. 204—19.)

1. In a method of the character described, the step which consists in washing molten metallic magnesium with the fused bath containing magnesium chloride from which it has been liberated by electrolysis before removal of said metal from said bath.

1,820,023. ACID WOOL DYESTUFFS OF THE ANTHRAQUINONE SERIES AND A PROCESS OF MAKING SAME. GEORG KALISCHER, Frankfort-on-the-Main, and ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 29, 1929, Serial No. 336,000, and in Germany Feb. 1, 1928. 6 Claims. (Cl. 260—60.)

1. A process for the manufacture of anthraquinone thioethers which comprises condensing an anthraquinone mercaptan corresponding to the general formula:

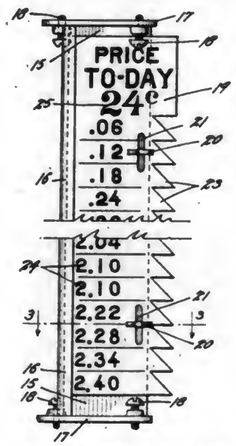


wherein R stands for hydrogen or an aryl or cycloalkyl group, one Y stands for hydrogen, halogen or an ether or thiother group and the other Y for SH, with a benzyl halide, and sulfonating the product thus obtained.

1,820,024. DIAZOSALT PREPARATIONS FOR DYEING AND PRINTING. FERDINAND KELLER and KARL SCHNITZSPAHN, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Dec. 24, 1925, Serial No. 77,576, and in Germany Jan. 19, 1925. Divided and this application filed Jan. 3, 1929. Serial No. 330,137. 6 Claims. (Cl. 8—6.)

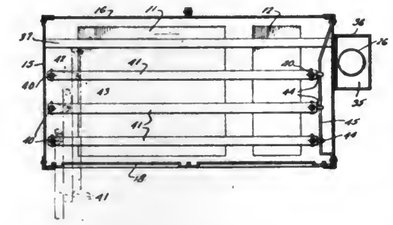
1. Diazo salt preparations for dyeing and printing comprising a dry acid 1.5-naphthalenedisulfonic acid diazonium salt of an unsulfonated substituted aromatic amine, mixed with an amount of a dry alkali compound corresponding to its acidity.

1,820,025. COMPUTING GASOLINE GAUGE. LEIGHTON H. KIRKPATRICK, Walsenburg, Colo. Filed Aug. 5, 1929. Serial No. 383,744. 1 Claim. (Cl. 73—166.)



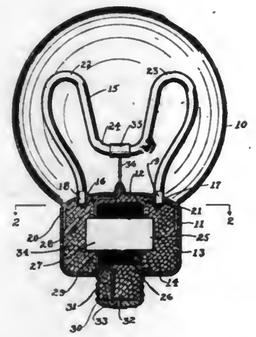
A computing scale for visible gasoline pumps comprising: a backing plate adapted to be secured to said pump; a price card provided with longitudinal openings and having a series of price indications; a series of pointers formed on said price card opposite and corresponding to said price indications; a turned back portion along one edge of said backing plate adapted to overlap said price card; and rotatable narrow headed attachment clips carried by said backing plate and adapted to pass through said longitudinal openings in said price card and be turned so as to maintain the latter in place.

1,820,026. CLOTHES DRYING RACK. OTTO JOHN KUENHOLD, Cleveland, Ohio. Original application filed Aug. 10, 1923, Serial No. 656,701. Divided and this application filed Dec. 21, 1928. Serial No. 327,694. 1 Claim. (Cl. 312—184.)



Drying apparatus, comprising a cabinet provided with a drying chamber, and a series of work holding racks each pivotally mounted at one end upon a vertical axis therein, the axes of the several racks being spaced apart in said chamber sufficiently to provide between adjacent racks the necessary clearance for the swinging of each rack, the axes of the several racks lying in the general planes of said racks and being offset progressively differing distances from the pivoted ends of said racks, whereby said racks lie parallel to each other when closed within and when opened out from the drying chamber.

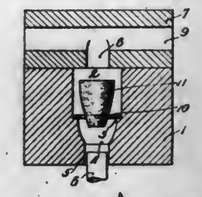
1,820,027. LAMP. EDWARD MCCLINTOCK, Minneapolis, Minn. Filed July 13, 1928. Serial No. 292,566. 2 Claims. (Cl. 176—122.)



1. A lamp comprising a globe having a neck, a partition extending across said neck, a tube integrally connected at its ends to said partition and formed with electrodes at the ends thereof, an external electrode positioned in proximity to said tube intermediate the ends thereof, said tube and partition being disposed in close proximity to one another at said electrode, and a conductor connected with said electrode and passing through said partition at the portion thereof adjacent said electrode.

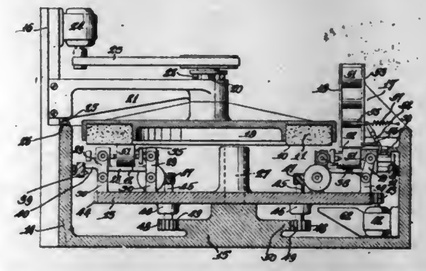
1,820,028. FURNACE. CHARLES LADD NORTON, Jr., Boston, Mass. Filed Feb. 8, 1929. Serial No. 338,567. 4 Claims. Cl. 263—14.)

1. A fuel fired furnace comprising upper and lower blocks of refractory material, the lower block having a substantially vertical passage diverging upwardly from a point adjacent the lower end thereof to an enlarged portion providing a working chamber in the upper end of the passage, the upper block being adapted to rest on the lower block and having a passage providing a flue extending from the working chamber through this upper block to



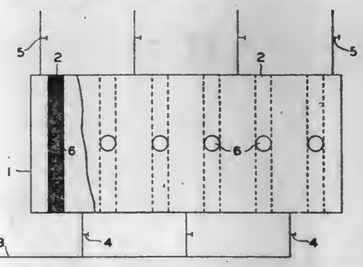
the atmosphere, this upper block having refractory material spanning the upper end of the working chamber for retaining heat therein.

1,820,029. EXTERNAL CENTER GRINDER. CLIFFORD T. RAULE, Brookline, Pa. Filed Apr. 17, 1929. Serial No. 355,740. 6 Claims. (Cl. 51—134.)



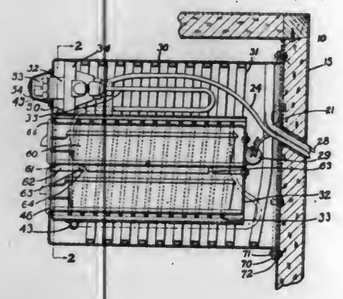
3. In a multiple external grinding machine, a downwardly directed disc grinding wheel, an upwardly directed turn-table parallel and eccentric thereto, work-holders spaced at uniform intervals around the turn-table, and parallel links supporting the individual holders from the table pivoted at one end to the table and at the other to the work-holder, in combination with gearing adapted to rotate the holder having cooperating wheels coaxial with the pivots of one of the links.

1,820,030. APPARATUS FOR THE REMOVAL OF ODORS FROM AIR. ARTHUR B. RAY, Bayside, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed Feb. 7, 1928. Serial No. 252,654. 2 Claims. (Cl. 183—4.)



1. In an odor removing apparatus of the character described comprising a metal tank, the interior of which is divided into a plurality of compartments by means of thin vertical beds of activated carbon arranged in spaced relation therein, inlet valves for the air to be treated connected with alternate compartments, outlet valves connected with the remaining compartments, and means provided for individually charging and discharging each of said carbon beds by gravity.

1,820,031. REFRIGERATING APPARATUS. DONALD H. REEVES, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257 334. 23 Claims. (Cl. 62—126.)

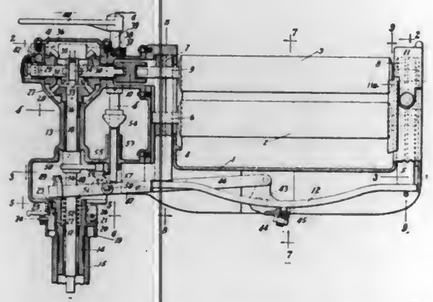


1. Refrigerating apparatus comprising in combination a casing, a refrigerating element including a circular coil of resilient refrigerant conduit, the coil being normally of a diameter different from the corresponding dimension of the casing, said coil being sprung into engagement with the casing to place the convolutions of the coil in intimate thermal contact with the casing.

6. Refrigerating apparatus comprising in combination a compartment for receiving ice-making containers; a shelf for supporting a container within the compartment; and retaining means for the shelf including means near one end of the shelf permitting horizontal movement but preventing vertical movement of the shelf and means near the other end of the shelf preventing horizontal movement but permitting vertical movement of the shelf.

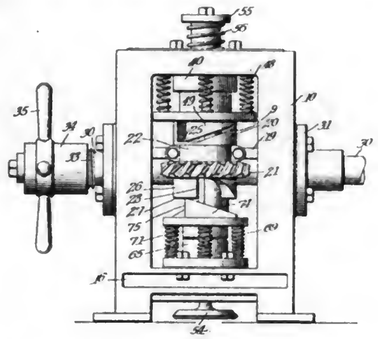
22. Refrigerating apparatus comprising in combination a refrigerating element having an enclosing casing and a temperature responsive element for controlling the refrigerating element, the temperature responsive element being disposed partly within and partly outside of the casing to be influenced by the temperature both of the refrigerating element and of the surrounding atmosphere, said temperature responsive element being a container charged with expansible fluid and adjustably supported to permit varying the ratio of the parts within the outside of the casing.

1,820,032. CLOTHES WRINGER. CHARLES ROBERTS, New York, N. Y., assignor to Harry Bohn, Dayton, Ohio. Filed July 26, 1928. Serial No. 295,538. 19 Claims. (Cl. 68—32.)



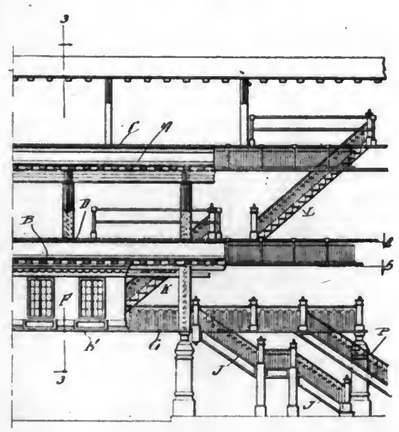
1. In a clothes wringer, comprising a pair of rollers one of which is movable toward and from the other, and an operating device to drive one of said rollers, a normally inoperative spring to act on said movable roller and move the same toward the other roller, and means actuated by said operating device during the initial movement of said driven roller to render said spring operative.

1,820,033. MECHANICAL MOVEMENT. ROBERT C. ROEBLING, Trenton, N. J. Filed Sept. 28, 1928. Serial No. 309,022. 26 Claims. (Cl. 74—14.)



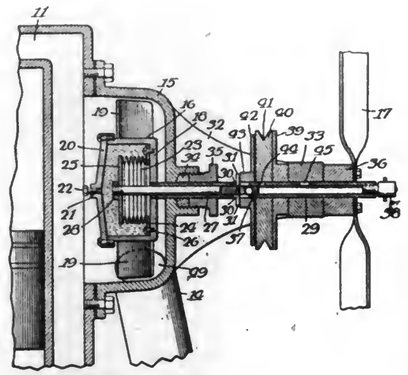
1. In a device of the class described, a movable member, means for moving the same in opposite directions, said means being alternately free of connection with said member, and means for automatically and alternately rendering said movable member subject to the alternate action of said first mentioned means.

1,820,034. RAILWAY STRUCTURE. LOUIS T. SCHUBERTH, Chicago, Ill. Filed July 22, 1929. Serial No. 379,919. 6 Claims. (Cl. 104—27.)



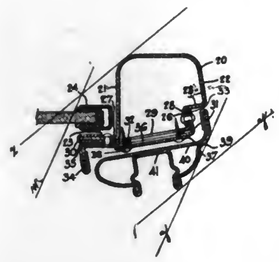
1. A railway structure comprising sets of railway tracks disposed at different elevations, one above the other, passenger platforms disposed contiguous to said respective sets of tracks, stairways connecting the lower with the upper platform, a platform disposed below the lower of the aforesaid platforms and extending transversely thereof, ticket offices at the ends of the transverse platform, stairways extending from the street level to said ticket offices, stairways leading from said transverse platform to the next higher platform at points between the said ticket offices, said last-named stairways including passenger ascents and descents separated from each other, lateral platforms associated with said transverse platform adjacent the ends thereof, stairways leading from said lateral platforms to street level, and partitioning means on said transverse platform forming aisles thereon leading from said passenger descents to said lateral platforms to thereby segregate exit passenger streams from entering passenger streams.

1,820,035. TEMPERATURE REGULATOR. CHARLES LAWRENCE STOKES, Los Angeles, Calif. Filed Feb. 18, 1928. Serial No. 255,295. 9 Claims. (Cl. 123—171.)



1. An attachment for a water cooled internal combustion engine comprising a casing containing a fluid pump, a shaft fastened to the pump and extending through the casing, a fan fastened to the shaft, a thermostat, and clutch mechanism connected with the shaft and actuated by the thermostat.

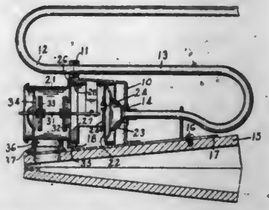
1,820,036. FRONT POST CONSTRUCTION FOR VEHICLE BODIES. JOHN P. TARBOX, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1927. Serial No. 241,687. 5 Claims. (Cl. 296—28.)



1. In a vehicle body construction, a cowl unit including a hollow A-post structure built up of outer and inner panels, said outer panel being a rearwardly presenting channel having its side walls flanged inwardly of the body and the inner panel bridging the walls of said channel and secured to said flanges, and a side unit having an A-post portion of web cross section fitting against and secured to the rearwardly facing wall of the A-post portion of the cowl.

1,820,037. VALVE UNIT FOR PLAYER PIANOS. WILLIAM A. WATSON, New Haven, Conn. Filed Apr. 24, 1928. Serial No. 272,470. 7 Claims. (Cl. 84—56.)

1. A valve unit comprising a hollow body, the side wall of the body, at a point intermediate its ends, being folded outwardly to provide an external flange and then folded inwardly to extend beyond the base of the flange and provide an internal shoulder, and a partition lodged against the internal shoulder dividing the interior of the body into a pouch chamber and a valve chamber,

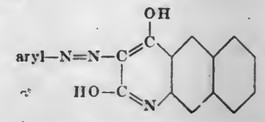


1,820,038. NITRO COMPOUNDS OF DINAPHTHYLENE-DIOXIDES. LUDWIG ZEH, Wiesdorf-on-the-Rhine, ERWIN KRAMER, Cologne-Deutz, and BERNHARD BOLLWEG, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 28, 1928, Serial No. 289,077, and in Germany July 25, 1927. 4 Claims. (Cl. 260—54.)

1. In the process for the manufacture of nitro compounds of dinaphthylene dioxides, the step which comprises causing nitric acid formed in situ to act on dinaphthylene dioxides.

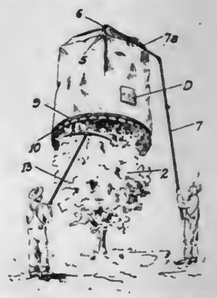
1,820,039. AZODYESTUFFS INSOLUBLE IN WATER AND PROCESS OF MAKING SAME. ARTHUR ZITSCHER, Offenbach-on-the-Main, and ROBERT SCHMITT, Darmstadt, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 3, 1929, Serial No. 352,318, and in Germany Apr. 7, 1928. 4 Claims. (Cl. 260—86.)

4. As new compounds the azodyestuffs of the probable general formula:



wherein the arylgroup may contain further azo-groups, which compounds are colored powders, insoluble in water yielding valuable color lakes or when produced on the fiber fast dyeings and printings.

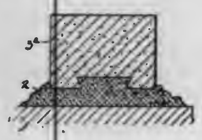
1,820,040. PROTECTING ENVELOPE FOR TREES. ROSCOE C. ZUCKERMAN, Stockton, Calif. Filed May 8, 1929. Serial No. 361,363. 5 Claims. (Cl. 47—22.)



1. A tree protecting device comprising a flexible envelope to be placed over and completely enclose the foliage bearing portion thereof, means for contracting the

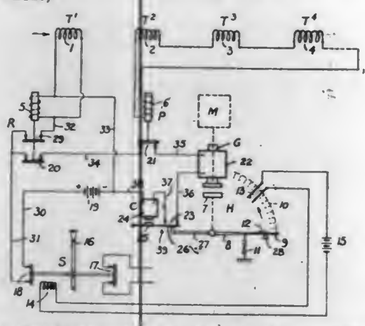
mouth of the envelope about the tree after said envelope is in position, and means removable relative to the envelope and tree for initially holding said mouth fully extended.

1,820,041. BUILDING CONSTRUCTION. STANLEY H. BARROWS, Chicago, Ill., assignor, by mesne assignments, to California Chemical Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 27, 1927. Serial No. 163,915. 2 Claims. (Cl. 72—101.)



2. In building construction, a concrete sub-floor element, a secondary element of oxychloride and a filler preformed to self sustaining shape independently of said subfloor element, and means for securing said elements together without mechanical keying, said means consisting of an oxychloride cement.

1,820,042. SPEED RESPONSIVE APPARATUS. WOLFGANG BÄSELER, Munich, and AUGUST MEYER, Berlin-Schoneberg, Germany. Filed Aug. 23, 1930, Serial No. 477,330, and in Germany June 24, 1926. 9 Claims. (Cl. 246—182.)



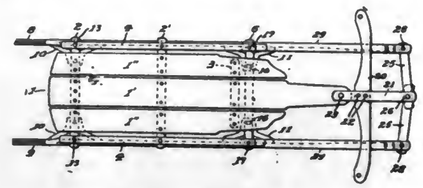
1. In speed responsive apparatus the combination of a device located on a track over which a vehicle travels, a movable indicating member, means operated by the passage of said vehicle over said device for starting said member into motion and means operated by the passage of said vehicle over a point in the track separated from said device by a predetermined interval for arresting the movement of said member.

1,820,043. RUBBER HEEL. CHARLES F. BENZ, Providence, R. I. Filed July 18, 1930. Serial No. 468,769. 2 Claims. (Cl. 36—35.)



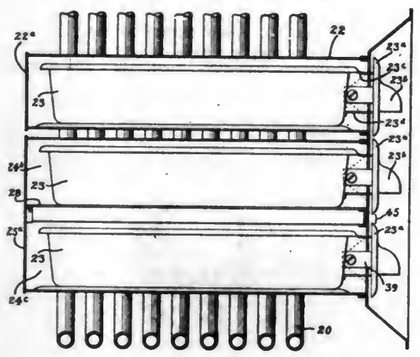
1. A shoe heel of rubber having a plurality of spaced parallel transversely positioned pockets of substantial depth for collecting and retaining moisture, the front and rear walls of said pockets being parallel and inclined rearwardly from the plane of the bottom of the heel.

1,820,044. SLED. JAMES MONROE BOWEN, Cape May Court House, N. J., assignor to S. L. Allen & Co., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 17, 1930. Serial No. 428,867. 2 Claims. (Cl. 280—22.)



1. A steering sled having laterally bendable runners, a deck disposed therebetween, supports carried by the runners, cross benches carried by said supports and affording vertical support to the deck, a side bar extending adjacent each runner and pivotally connected at its extremities to one of the cross benches and to the forward end of the runner, a steering bar pivotally connected at one end to the deck and extending forwardly therefrom, and a pair of links respectively extending inwardly from the forward ends of the runners and lying in angular relation to each other when the runners are unflexed, each link being pivoted to the adjacent runner at its outer extremity and to the steering bar at its inner.

1,820,045. REFRIGERATING APPARATUS. HENRY P. BRAEUTIGAM and GRANVILLE S. DICKEY, Dayton, Ohio, assignors to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 31, 1928. Serial No. 303,202. 8 Claims. (Cl. 62—126.)



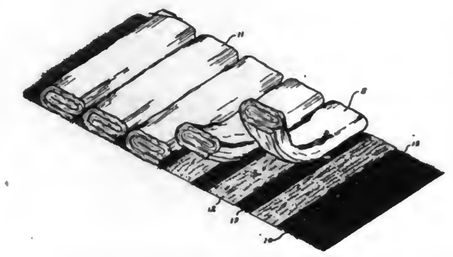
6. Refrigerating element for refrigerating apparatus comprising in combination a freezing enclosure open at the front and adapted to receive ice-making containers, a ledge in said enclosure for supporting a shelf, a removable shelf on the ledge separating the enclosure into a pair of compartments each adapted to receive a container, said shelf being removable through the open front while the ledge is maintained in position and an integral hook on said shelf engaging the ledge to prevent vertical movement of the front end of the shelf when said shelf is in position.

1,820,046. PROCESS OF MAKING PRODUCTS FROM VEGETABLE GROWTHS AND THE PRODUCT THEREOF. LAURIE LORNE BURGESS, Cambridge, Mass., assignor to Plastic, Inc., a Corporation of New Hampshire. Filed Aug. 17, 1927. Serial No. 213,690. 4 Claims. (Cl. 252—1.)

1. The process of extraction and production of a suspensoid solution of algin and algulose which comprises

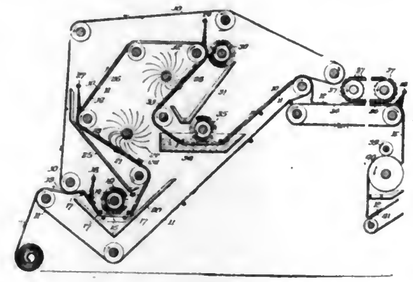
washing a quantity of vegetable sea growth with fresh water, and treating the same with a colloid protective agent in the presence of an alkaline reagent.

1,820,047. CUSHION PAD. HARRY J. BURKART, Kirkwood, Mo. Filed Nov. 10, 1927. Serial No. 232,375. 2 Claims. (Cl. 154—54.)



2. A foundation material for upholstery, comprising a fabric back element, a plurality of transversely folded cushioning elements disposed in rows, each cushioning element having one internally folded edge, and one free or exposed edge, and an adhesive substance carried on restricted areas of said back element in adjacence to the exposed edges of the cushioning element, and having a trend along said rows, whereby said substance is adapted to secure the cushioning elements in folded relation upon themselves and onto the back element.

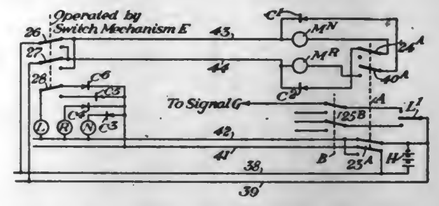
1,820,048. METHOD OF CLEANING PILE FABRICS. STEPHEN CHASE, 4th, Chicago, Ill., assignor, by direct and mesne assignments, to Chase Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 18, 1926. Serial No. 95,506. 6 Claims. (Cl. 15—40.)



1. A method of cleaning pile fabrics which comprises first wetting the dust and dirt in the pile of the fabric to prevent its floating in air when removed, beating the fabric on the back subsequent to the wetting to disengage wetted dust and dirt therefrom, and subsequently washing the fabric to remove remaining dirt.

1,820,049. RAILWAY INTERLOCKING APPARATUS. JOHN P. COLEMAN, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1929. Serial No. 394,323. 10 Claims. (Cl. 246—133.)

1. In combination, a manually operable interlocking machine lever, a railway traffic governing device responsive to complete operations of said lever, a circuit controller comprising a roller associated with said lever, means responsive to a partial operation of said lever for shifting said roller to an intermediate position, means for preventing complete operation of said lever unless said roller responds to the partial operation, means responsive to a



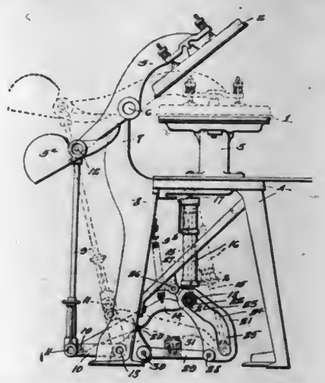
movement of said traffic governing device for completing the movement of said roller, and means for controlling another traffic governing device by said circuit controller.

1,820,050. GUMMED CLOTH. CHARLES H. CROWELL, Fairville, Pa. Filed May 24, 1927. Serial No. 193,820. 2 Claims. (Cl. 154—46.)



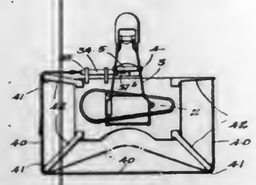
1. A fiber filled composite gummed fabric comprising a composite web made up of a cloth backing, a split web of paper impregnated with sizing and waxes, said paper web having been pressed into intimate relation with, filling the mesh of, and adhesively secured to, said cloth backing, an adhesive attaching coating applied to the more pronounced paper side of the composite web to render said web adhesive, and a wax filling applied to the more pronounced cloth side of said composite web.

1,820,051. MOTION TRANSMITTING MECHANISM. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Dec. 11, 1925, Serial No. 74,700. Renewed Aug. 23, 1926. 13 Claims. (Cl. 68—9.)



1. A motion transmitting mechanism comprising a toggle, a reciprocally movable actuator, a combined lever and pull link pivoted at one end to the toggle and at its other end to the reciprocally movable actuator, a fulcrum for the combined lever and pull link coacting with the same between its ends, the lever and pull link being arranged to shift endwisely relatively to the fulcrum and to lift off of the fulcrum, and means for causing the link to take a pivotal and endwise shifting movement during the movement of the actuator in one direction, said means comprising a cam and a follower on said link coacting with the cam.

1,820,052. OPERATING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 3, 1927. Serial No. 158,493. 5 Claims. (Cl. 192—130.)



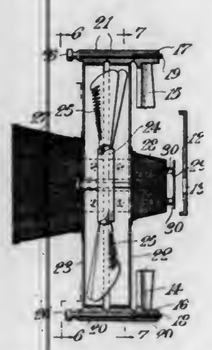
1. In a pressing machine, the combination of coacting pressing elements, one of which is movable toward and from the other, power means for actuatinig the movable element, a member for controlling the actuation of the movable element by the power means and a flexible operating member comprising a normally taut pull cord connected to the controlling member and spaced apart from the machine in the path of the body of a person approaching the machine.

1,820,053. AEROPLANE HATCH COAMING. ROY J. DAVIS and GEORGE E. WATTS, Portland, Oreg. Filed June 13, 1931. Serial No. 544,160. 6 Claims. (Cl. 244—30.)



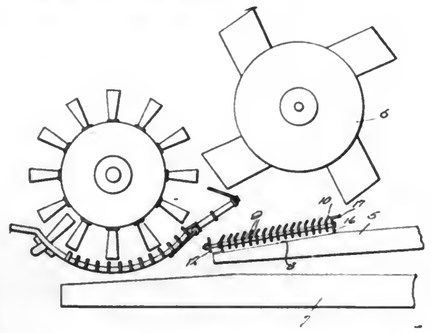
1. The method of forming hatch coaming for aeroplanes consisting in the forming of a length of fabric covered resilient material of such normal uniform cross section as described characterized by a tapered groove and the subsequent bending thereof to conform to the figure of the edge to which it is applied to effect the closure of the said tapered groove to make substantial contact with the fuselage structure.

1,820,054. LIGHT GUARD FOR MOTION PICTURE PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,206. 12 Claims. (Cl. 88—17.)



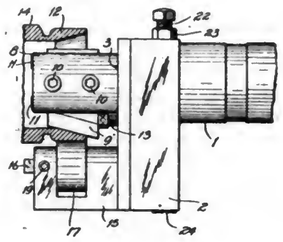
1. In a projection machine having a projection light beam, a projection head having an aperture opening upon which said beam is directed, a perforated shield around a portion of the beam adjacent said head, and an end wall to said shield, said wall extending across said beam and having an opening therein of predetermined cross-sectional area to define the area of the light beam falling upon the aperture opening.

1,820,055. GRAIN BEATER SIEVE. THOMAS E. DIVOKY, Western, Nebr. Filed Aug. 26, 1929. Serial No. 388,873. 1 Claim. (Cl. 130—24.)



A sieve of the character described comprising a pair of spaced, parallel rods, a series of spaced, parallel plates mounted transversely on the rods, spacing collars mounted on the rods between the plates, the forwardmost of the plates having a forwardly disposed right angular integral extension on its upper edge, the lower edge of said forwardmost plate extending below the plane of the intermediate plates, the remaining plates having formed integrally on their upper edges obtusely disposed, forwardly directed, parallel extensions, the rearmost of the plates extending below the plane of the intermediate plates and, in conjunction with the forwardmost plate, constituting means for supporting same in elevated position, an integral light angularly disposed flange on the lower edge of the rearmost plate having openings therein for the passage of securing elements for anchoring the sieve on a rack of a threshing machine and a comb plate in spaced parallel relation with the rearmost plate.

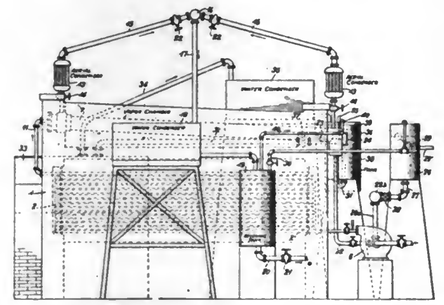
1,820,056. BORING TOOL HOLDER. IRVIN DROWNS, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Mar. 19, 1928. Serial No. 262,732. 4 Claims. (82—35.)



1. A boring tool holder comprising a carrier adapted to be mounted in a machine, a tool holder yieldably mounted in said carrier, said tool holder having a portion adapted to extend into the work, a tool rigidly mounted in said projecting portion, said tool holder having a projecting portion overhanging the outer surface of the work and a guide roll mounted in said projecting portion and engaging a portion of the outer surface of the work.

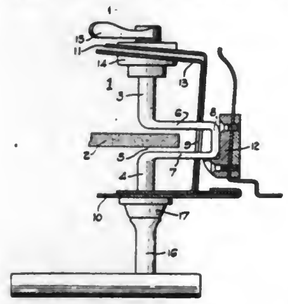
4. A boring tool holder comprising a carrier adapted to be secured in a machine and having undercut jaws constituting a slideway, a tool holder having a slide portion mounted in said slideway, a pin secured to said tool holder and projecting into a bore provided therefor in said carrier, an adjustable abutment for said pin extending into one end of said bore, a spring in the other end of said bore bearing against said pin to force it against said abutment, a tool supporting stem on said tool holder, a tool rigidly mounted in said supporting stem, a projecting portion on said tool holder overhanging the outer surface of the work, a pin mounted in said projecting portion, said pin having an eccentric portion and a work engaging roller mounted on said eccentric portion of said pin.

1,820,057. PROCESS FOR CONVERTING HYDROCARBONS. CARBON P. DUBBS, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed June 20, 1918, Serial No. 240,913. Divided and this application filed June 18, 1931. Serial No. 545,327. 12 Claims. (Cl. 196—49.)



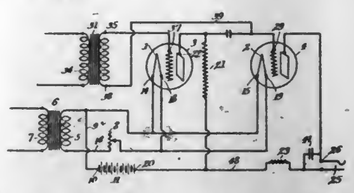
1. The improvement in the art of pressure distillation of petroleum oils for the purpose of producing lighter products by pyrogenesis, which consists in maintaining a considerable body of said oil under cracking conditions of temperature and pressure, continuously withdrawing oil from the said body, releasing the pressure from the withdrawn oil while the latter is in a heated condition, whereby its lighter fractions will distill off, collecting such lighter fractions and returning them to the oil body for further cracking therein.

1,820,058. LATCH MECHANISM. LEON EDELSON, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 11, 1926, Serial No. 147,647. Renewed Feb. 11, 1931. 10 Claims. (Cl. 292—202.)



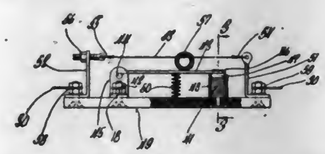
1. In a latch mechanism for an automobile door having a window of substantially the full width of the door slidable therein, inside and outside latch operating devices extending inwardly of the door in opposite directions to points adjacent to the window on opposite sides thereof, and a latch of substantially U-shape having it bight portion lying without the plane of the jamb face of the door and its arms extending inwardly of the jamb face and embracing said window, the inner ends of said arms and the inner ends of said operating devices being respectively connected together.

1,820,059. RADIO APPARATUS. VINCENT J. FABIAN, Washington, D. C. Filed Feb. 19, 1926. Serial No. 89,471. 6 Claims. (Cl. 250—27.)



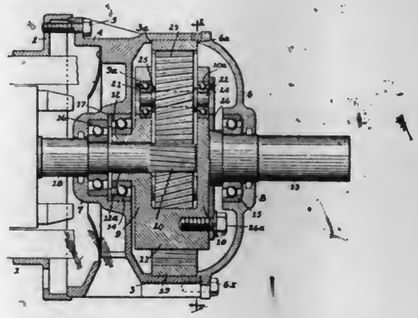
1. The herein-described method of amplifying signal energies introduced into an amplifier including a plurality of audions, which includes the steps of simultaneously impulsing a signal upon the audions, amplifying this signal in one of the audions, then combining the original signal present in the second audion with the amplified signal, amplifying the combined signal, and outputting the resulting signal.

1,820,060. CURRENT SUPPLY DEVICE. JOHN W. FITZ GERALD, Shorewood, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 6, 1926. Serial No. 146,725. 4 Claims. (Cl. 171—229.)



1. A device of the character described, comprising a rheostat, a member for controlling the resistance of the rheostat, means normally urging said member toward one position, a thermal member normally taut between fixed supports, and means connecting the medial portion of the thermal member with said member to hold the same against its urging means, the expansion of said thermal member under the influence of temperature changes permitting the movement of said member by its urging means.

1,820,061. SPEED CHANGE UNIT. JOHN H. FLAGG, Oradell, N. J., assignor to Watson-Flagg Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 26, 1930. Serial No. 498,258. 3 Claims. (Cl. 74—34.)



1. A speed-change unit comprising, in combination, a supporting structure having an internally toothed gear, a cage revoluble in said structure concentrically with the gear and including two spaced heads rigidly secured together, one head having an axially projecting shaft, another shaft revoluble coaxially with the first shaft

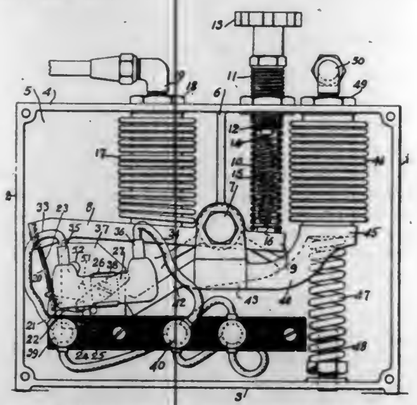
and projecting through one head and having a toothed portion between the heads, said heads having opposed bores, removable bearings in said bores, planet gears between the heads meshing with the first gear and said toothed portion, and shafts axially penetrating and removable from the planet gears and having their ends projecting therefrom and journaled in said bearings, said cage having means for each head outwardly opposing and common to all said bearings in such head, to confine the same against outward displacement in the bores, one of said means being removable to permit removal of the adjoining bearings.

1,820,062. RUNWAY FOR AIRPLANES. JAMES GAFNEY, New York, N. Y. Filed Aug. 13, 1929. Serial No. 385,530. 15 Claims. (Cl. 244—2.)



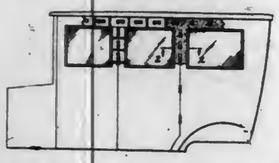
1. A runway for airplanes having a magnetic metal surface, non-magnetic sections provided in said runway, and extending transversely there-across.

1,820,063. PRESSURE ELECTRIC SWITCH. FREDERICK C. GEILER, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Aug. 9, 1926. Serial No. 128,022. 12 Claims. (Cl. 200—81.)



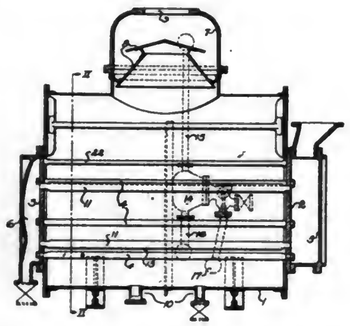
1. In a switch, movable contact means, a normal pressure actuator having lost motion connection with said contact means, and an emergency pressure actuator having a connection with said contact means independent of said lost motion connection.

1,820,064. MEANS FOR ATTACHING UPHOLSTERY. CHARLES R. GREEN, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 9, 1926. Serial No. 80,364. 5 Claims. (Cl. 45—138.)



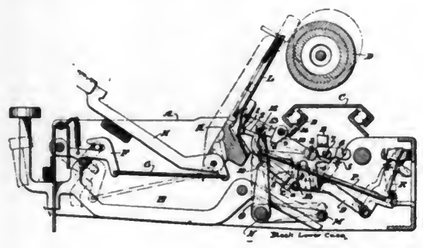
1. An attaching means for upholstery and the like comprising a body portion having a slot therein formed with enlarged and restricted portions, means adapted to be attached to said upholstery having a part thereof provided with an enlargement adapted to be freely passed into said enlarged portion of said slot, said enlargement having slots therein adapted to freely receive a portion of the walls of said restricted portion whereby said part is adapted to be passed from said enlarged portion into said restricted portion and be held thereby from dislodgement from said body portion.

1,820,065. EVAPORATOR. HENRY LEWIS GUY, Hale, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 17, 1929, Serial No. 363,862, and in Great Britain May 19, 1928. 6 Claims. (Cl. 257—236.)



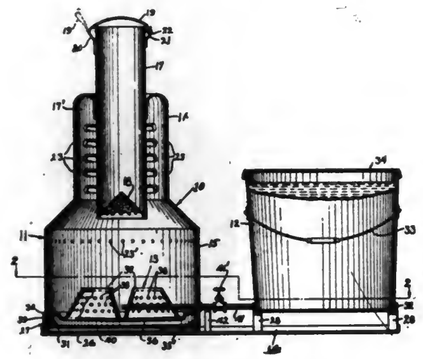
1. In an evaporator, the combination of a shell structure, an inlet disposed in the lower portion of the shell structure for the admission of liquid to be evaporated, an outlet disposed in the upper portion of the shell structure for the vapor generated, and upper and lower layers of substantially elliptical tubes for circulating heating fluid longitudinally through the shell structure, the tubes in said upper layer being disposed with their major axes vertical and the tubes in said lower layer being disposed with their major axes horizontal.

1,820,066. TYPEWRITING MACHINE. GEORGE F. HANDLEY, Glendale, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 10. 1927. Serial No. 225,230. 9 Claims. (Cl. 197—157.)



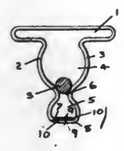
1. Bichrome ribbon mechanism for a typewriting machine having a shiftable carriage and a universal bar, comprising a vibrator, an actuator therefor adapted to shift with the carriage, an arm on said actuator having two operative surfaces, an operating member movable independently of the universal bar and pivotally connected at one end to the frame of the machine and having a part adapted to engage one or the other of said operative surfaces, and means for varying the position of said operating member to change the zone of the ribbon presented at the printing point.

1,820,067. ORCHARD HEATER. STEVEN J. HARBAN, Riverside, Calif. Filed Apr. 12, 1927. Serial No. 183,071. 2 Claims. (Cl. 158—91.)



1. In a burner, a circular base, a plurality of spaced upstanding hollow portions on and integral with said base, certain of said portions including adjacent side walls extending convergingly upward, said upstanding portions being disposed so that the adjacent side walls form upwardly directed wedge shaped troughs, said side walls having apertures therethrough, said base having transverse channels therein between said upstanding portions and having a peripheral channel, said transverse and peripheral channels communicating to form a fluid container.

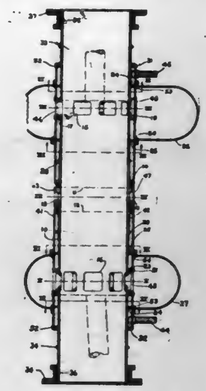
1,820,068. BUTTON LOOP. GEORGE B. HEATHER, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Feb. 20, 1930. Serial No. 429,946. 4 Claims. (Cl. 24—224.)



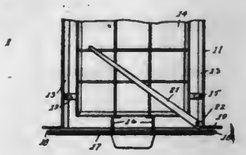
1. A button loop comprising spring arms cooperating to form associated loops in axial alignment and having an intermediate normally contracted throat portion, the ends of the arms overlapping and the facing surfaces of said ends having depressions providing interlocking shoulders adjacent the wire extremities, the engaging shoulders limiting the relative sliding movement of the end portions in the plane of the loops upon the expansion of the contracted throat.

1,820,069. METHOD OF MANUFACTURING AN ENGINE CYLINDER. HERBERT T. HERR, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 11, 1929. Serial No. 331,809. 5 Claims. (Cl. 29—156.4.)

1. The method of manufacturing an engine cylinder structure which comprises forming a cylinder and a jacket sleeve separately; telescoping the jacket sleeve about the cylinder and in spaced relation to portions of the cylinder; shrinking the jacket sleeve against other portions of the cylinder; welding portions of the jacket sleeve to the cylinder so as to provide a fluid-tight cooling jacket; and annealing the assembled cylinder and jacket sleeve.

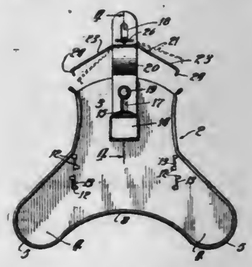


1,820,070. REFRIGERATOR. HERNDON P. HIPPEE, Des Moines, Iowa; Marguerite B. Hippee, administratrix of said Herndon P. Hippee, deceased, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 5, 1928. Serial No. 317,426. 5 Claims. (Cl. 62—126.)



3. A refrigerating element for refrigerating apparatus comprising in combination, a freezing chamber open at one end, a plurality of relatively shallow freezing trays removably placed within said chamber, said trays being normally spaced apart when located in said chamber, and means for bridging the space between said trays at the open end of said chamber, said means being movable inwardly upon the insertion into said chamber of a tray of greater depth than one of said shallow trays.

1,820,071. POULTRY FEEDER. ADOLPH R. HOEFT, Evanston, Ill., assignor to Hoeft & Company, Inc., North Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1929. Serial No. 405,325. 6 Claims. (Cl. 119—52.)



5. In a feeder of the kind described, an upright end member, a normally upright link having a pin and slot pivotal connection with said end member, and a pocket

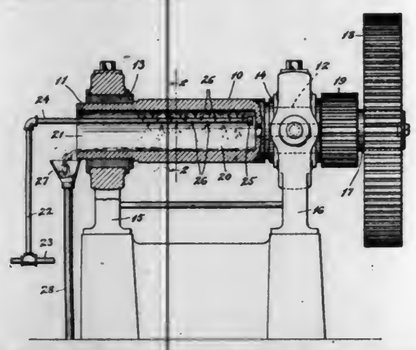
punched from said end member and adapted to detachably receive one end of said link and to coact with said pin and slot connection to hold said link in upright position.

1,820,072. OVERALL SUSPENDER ELASTIC. LYNDON W. JOYCE, Greensboro, N. C. Filed Aug. 20, 1930. Serial No. 476,696. 3 Claims. (Cl. 139—423.)



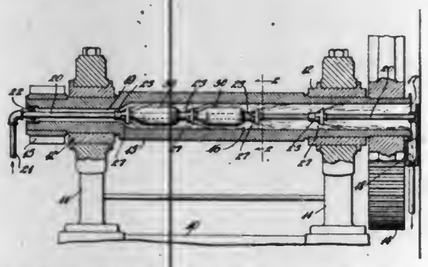
1. Overall suspender elastic comprising woven fabric in which are frictionally embedded a group of parallel rubber strands each having a helically wound thread covering, said woven fabric comprising weft threads on opposite sides of the group and warp threads at both sides of the group, said weft and warp threads being so interwoven as to push between the turns of said helical covering when said fabric is stretched, at opposite points in a plane perpendicular to said threads.

1,820,073. COOLING MEANS FOR ROLLER MILLS. KARL B. KILBORN, Fairlawn, Ohio, assignor to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Filed Oct. 18, 1928. Serial No. 313,239. 2 Claims. (Cl. 257—95.)



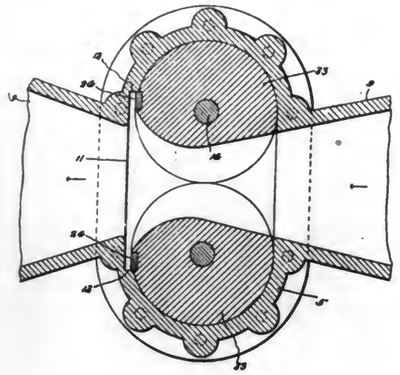
1. In a roller mill, the combination of a horizontal roll formed with a chamber having an outlet at one end substantially as large in diameter as the body of the chamber, and means for projecting water jets against the walls of said chamber in greater quantity in the upper half than in the lower half thereof.

1,820,074. MEANS FOR COOLING MILL ROLLS. KARL B. KILBORN, Fairlawn, Ohio, assignor to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Filed Dec. 3, 1928. Serial No. 323,537. 5 Claims. (Cl. 257—95.)



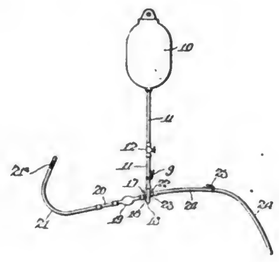
1. The method of cooling a heated, hollow mill-roll which comprises spraying water into the interior of said roll and forcing a current of slightly compressed air therethrough to assist in the evaporation of the water.

1,820,075. VALVE. EDWARD S. KING, Kansas City, Mo. Filed Nov. 26, 1929. Serial No. 409,883. 1 Claim. (Cl. 251—91.)



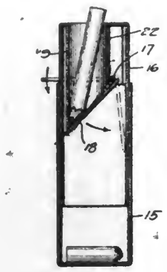
A valve comprising an ovate-shaped casing, a pair of rotary valve elements mounted within the said casing and in rolling contact with each other, each of said rolls being provided with a circumferentially extending groove in its periphery which grooves register with each other when the valves are rotated to form a passage communicating the inlet and outlet of the casing, means for simultaneously operating the said rolls, a pair of stop shoulders formed on the internal wall of the casing and each roller having a transverse groove therein at an end of the first groove and a strip fastened in said transverse groove and having its edge remote from the end of the circumferential groove projecting from the periphery of the roll for engaging the shoulder to prevent the rolls being rotated beyond a position where the grooves in the rolls register with each other, said strips contacting each other when the rolls are moved into position to close the passage whereby said strips act as means to prevent leakage between the rolls.

1,820,076. IRRIGATOR. MAURICE H. KOWAN, Chicago, Ill. Filed Oct. 8, 1928. Serial No. 311,018. 3 Claims. (Cl. 128—227.)



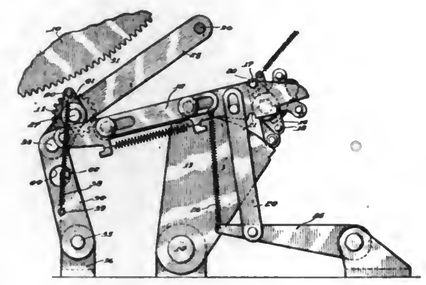
1. In an apparatus of the character described having a source of liquid supply, a tubular applicator, discharge means in communication with the applicator tube through means forming a passageway between the discharge means and the applicator tube, with means for controlling the flow of liquid through the applicator tube and from the applicator tube through the discharge means, the combination therewith of means forming a liquid trap effectively between the source of liquid and said passageway.

1,820,077. COMBINED CIGARETTE EXTINGUISHER AND RECEPTACLE. JOHN M. LARSON, Los Angeles, Calif. Filed May 29, 1929. Serial No. 367,045. 2 Claims. (Cl. 206—41.)



1. A device of the character described, comprising a casing including separable superimposed sections, a tube in the upper section having its inner end terminating at an acute angle and providing an entrance passage to the lower section, a frame secured within the upper section embracing the tube, a shaft journaled in the frame and projecting exteriorly of the upper section, a handle on the projecting end of the shaft, a door secured to the shaft, and a spring mounted on the shaft and associated with the door for urging the latter to closed position with respect to the inner end of the tube.

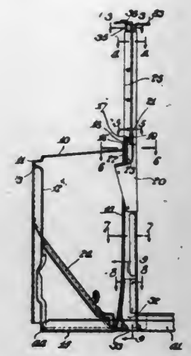
1,820,078. ACCUMULATOR OPERATING MECHANISM. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed July 23, 1925. Serial No. 45,577. 6 Claims. (Cl. 74—14.)



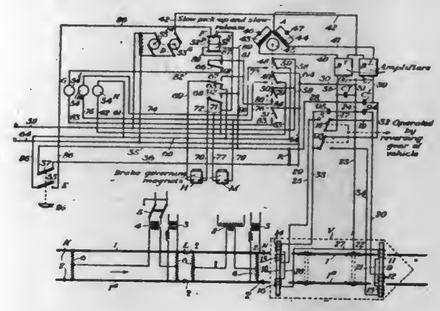
1. In a device of the character stated, the combination of a rack sector, an accumulator pinion, means including a toggle structure for meshing and unmeshing said pinion with said rack sector, and means for accelerating the straightening and breaking of said toggle structure.

1,820,079. PRESSED METAL AUTOMOBILE BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 9, 1926. Serial No. 80,363. 11 Claims. (Cl. 296—28.)

1. In a pressed metal automobile body construction, a cowl panel having a transversely extending portion at the rear thereof, an instrument board support secured to said transversely extending portion to form therewith an inverted channel, said support having one portion thereof projecting forwardly of the body, and a reinforcing member of angular cross section having one portion seated in and secured to the bottom of said channel and the other portion founded upon and secured to the forwardly projecting portion of the instrument board support.



1,820,080. RAILWAY TRAFFIC CONTROLLING APPARATUS. LLOYD V. LEWIS, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 15, 1924. Serial No. 737,741. 13 Claims. (Cl. 246—63.)

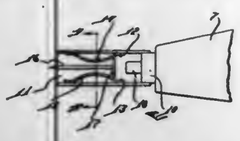


1. Railway vehicle carried apparatus comprising a first front coil mounted in inductive relation to one rail, a second and a third front coil mounted in inductive relation to the other rail, a first and a second rear coil mounted in inductive relation to the first rail, a third rear coil mounted in inductive relation to the second rail, a track receiving circuit, a local receiving circuit, and a circuit controller effective when in normal position to connect the first and second front coils in opposition in the track receiving circuit and the first and third rear coils in series in the local receiving circuit, said circuit controller when in reverse position being effective to connect the second and third rear coils in opposition in the track receiving circuit and said first and third front coils in series in the local receiving circuit.

1,820,081. PORTABLE POWER OPERATED HAMMER. ABRAHAM LUDWIG, Detroit, Mich. Filed Nov. 25, 1929. Serial No. 409,742. Renewed May 27, 1931. 2 Claims. (Cl. 1—47.)

1. A portable power operated hammer, comprising: a casing; a projection extending outwardly from one end of said

casing; a resilient retaining member engaging and clamping itself on said projection, said retaining member being



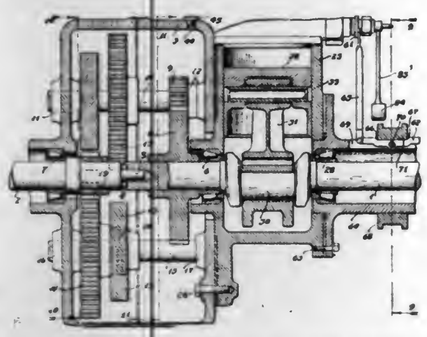
substantially U shaped in cross section; and a pair of oppositely positioned bow shaped springs in said retaining member and in spaced relation to each other.

1,820,082. CROOKED HOLE INDICATOR. LEWIS A. MCLAIN, Wichita, Kans. Filed Aug. 31, 1929. Serial No. 389,851. 2 Claims. (Cl. 234—1.)



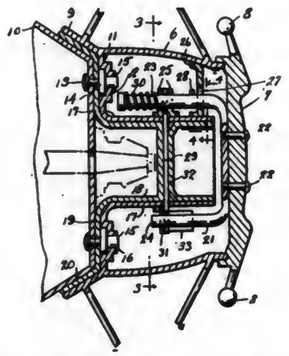
1. A device of the class described comprising a light proof casing, means for supporting a disk of sensitized material within the casing, a shoulder within the casing below the sensitized sheet supporting means having a central opening with a knife edge surrounding the opening, a spherical cap in the opening bearing upon the knife edge, a storage battery case supported by the cap, a light source energized by storage batteries in the case; a lens in the cap above the light source, and a magnetic needle above the lens and beneath the sensitized sheet supporting means.

1,820,083. HYDRAULIC VARIABLE SPEED POWER TRANSMITTING MECHANISM. ROLLIN B. MILLER, Toledo, Ohio. Filed Aug. 25, 1930. Serial No. 477,556. 6 Claims. (Cl. 74—34.)



1. In a hydraulic variable speed power transmitting mechanism the combination of a driving shaft and a driven shaft each having a gear fixed thereto, a gear casing rotatably mounted on the said shafts, a plurality of gears rotatably mounted in the said gear casing of such a ratio that when the one shaft remains stationary the gear casing will rotate in the same direction effecting a close ratio with the other shaft, at least three fluid pumps rotatably mounted on the said driving shaft and fixed to the gear casing, pistons for the said pumps each having a connecting rod operatively connected to a crank throw on the driving shaft, fluid pipe lines connecting the said pump cylinders whereby the fluid of the one cylinder may flow into the other, and valve means for variably impeding the flow of the fluid from one pump to another whereby the ratio between the gear casing and the driving shaft may be varied to in turn vary the rate of rotation of the said driven member.

1,820,084. AUTOMOBILE WHEEL. ERNEST L. MOLINE, Mead, Nebr. Filed Sept. 8, 1930. Serial No. 480,520. 2 Claims. (Cl. 301—9.)



1. An automobile wheel of the type described, comprising a pair of completely telescoping cylinders, flanges on the inner ends of said cylinder with retaining bolts through one of said flanges, and means associated with said flanges to retain said flanges and cylinders in position upon a brake drum, the outer of said cylinders being freely mounted on said retaining means, and a hub shell spaced from and fixedly mounted exterior of said outer cylinder for carrying the spokes of the wheel, said cylinders being provided with cuts approximately halfway through said cylinders, and means pivotally mounted on the outer of said cylinders for engaging in said cuts to thereby retain said outer cylinder and the hub shell carried thereby in close engagement with the inner of said cylinders and said retaining means, said last named retaining means adapted to prevent relative rotation of said hub shell with said inner cylinder.

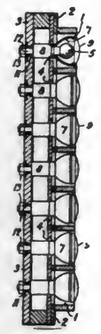
1,820,085. LIQUID HEAT TRANSFERRING COMPOSITION. THOMAS A. MOORMANN, Milwaukee, Wis., assignor to The Shaler Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 2, 1929. Serial No. 344,104. 2 Claims. (Cl. 252—5.)

1. A heat transferring liquid adapted to serve as a distributing medium in vulcanizing operations consisting of a major portion of glycerin and a minor portion of ethylene glycol, the latter containing a small quantity of water.

1,820,086. SIGN. JAMES PRIESTNALL NAYLOR, London, England. Filed June 28, 1929, Serial No. 374,574, and in Great Britain June 30, 1928. 4 Claims. (Cl. 40—130.)

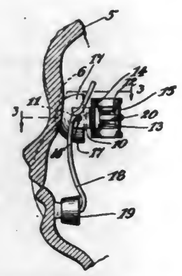
1. In an illuminated sign of the kind referred to a group of luminous elements each comprising an incandescent lamp having a compact filament and arranged in

combination with a concentrative reflector the front of which is glazed with a light diffusing screen, each of said lamps and reflectors being mounted in a casing so as to form removable self-contained units that can be fitted into



counterpart openings in the body of the sign, said casing being furnished with contact members connected to the lamp mounted therein, which contact members are adapted to engage counterpart contact members on the body of the sign.

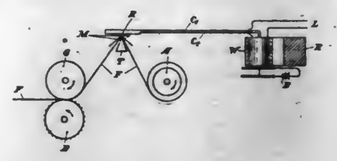
1,820,087. EYE MOUNTING FOR DOLLS. LOUIS A. NEMCOVSKY, New York, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed June 7, 1927. Serial No. 197,017. 5 Claims. (Cl. 46—40.)



1. In combination with a doll head having spaced eye openings in its front wall and internal abutment surfaces on its side walls adjacent said eye openings, a supporting bridge for an oscillatory eye setting consisting of a resilient metal plate having spaced portions yieldable under pressure for movement towards and from each other and provided with spurs adapted to impale said abutment surfaces of the doll head wall, said parts of the bridge plate adapted to be forced inwardly towards each other to position the spurs thereof for engagement with said abutment surfaces, and a bowed resilient member extending between and engaged with said relatively movable parts of the bridge plate to urge the same away from each other and force the spurs under pressure into the structure of the head wall, and said bridge plate having means projecting forwardly therefrom between the eye openings of the doll head wall adapted to receive the axis of an oscillatory eye setting.

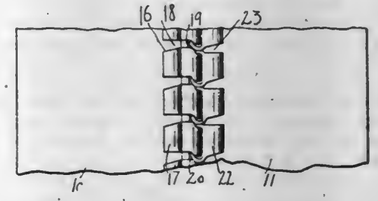
1,820,088. RECORDING APPARATUS. RALZEMOND D. PARKER, Brooklyn, N. Y., and FRED H. BEST, Westfield, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 7, 1927. Serial No. 217,978. 22 Claims. (Cl. 234—1.5.)

1. The method of recording continuous electrical variations, which consists in transmitting horizontally a strip of chemically treated paper of uniform width, progressively exposing only a narrow section of the paper, and applying



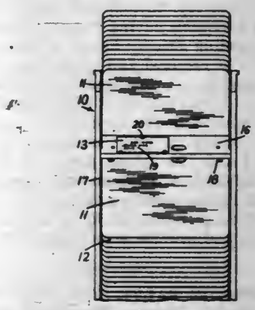
heat of uniform intensity steadily to the exposed narrow section in order to cause a permanent impression of the continuous electrical variations upon said paper.

1,820,089. SEPARABLE FASTENER. GUNNARD P. PETERSON, Naugatuck, Conn., assignor to Firestone Footwear Company, Hudson, Mass., a Corporation of Massachusetts. Filed July 8, 1927. Serial No. 204,361. 2 Claims. (Cl. 24—205.)



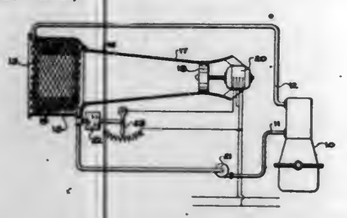
1. In a separable fastener, rows of fastening elements attached to opposite sides of a closure, one of said rows consisting of male members and the other row consisting of socket members, each male member having spaced, slightly convergent, angularly arranged prongs, the upper prong on one male member receiving the lower prong in the next higher male member in nested relationship, said upper prong extending beyond and embracing the end of said lower prong, and each socket member being adapted to receive both of said prongs.

1,820,090. COMBINED CARD AND STENCIL FOR VISIBLE INDEXES. BERNARD L. POLKOSNIK, West Haven, Conn. Filed Dec. 1, 1927. Serial No. 237,048. 12 Claims. (Cl. 129—16.7.)



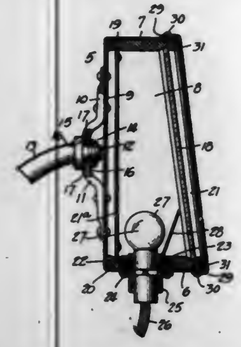
2. A reference member adapted to bear reference material and carrying stencil material thereon, said reference member having positioning means thereon, said means serving to detachably secure it to a file cabinet or the like.

1,820,091. ENGINE COOLING. ANDREW B. REAVIS, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 27, 1929. Serial No. 381,644. 5 Claims. (Cl. 123—174.)



1. In a cooling system for jacket liquid of an internal combustion engine, the combination of a liquid circuit including the engine jacket space, inlet and outlet passages connected to the jacket space, and a heat exchanger connecting the inlet and outlet passages; and means for furnishing cooling air to the heat exchanger including a casing having a divergent portion with its discharge end arranged to discharge air through the heat exchanger, a propeller in the casing at the entrant end of the divergent portion, and means responsive to temperature of liquid leaving the heat exchanger for controlling the quantity of air delivered from the casing to the heat exchanger.

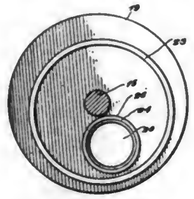
1,820,092. LICENSE PLATE HOLDER AND PROTECTOR. GERALD A. RILEY, Los Angeles, Calif. Filed Apr. 21, 1930. Serial No. 446,089. 2 Claims. (Cl. 40—132.)



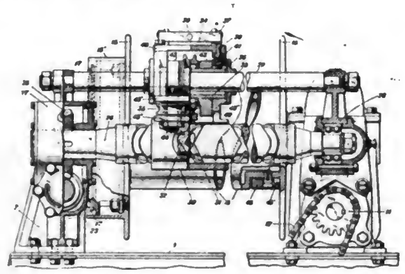
1. A license plate holder and protector comprising a rectangular casing having an open front, strips of resilient material bounding the top, bottom and ends of the casing within the latter and each having a pair of spaced apart longitudinally extending grooves in one of which a license plate is adapted to be received and supported adjacent the rear wall of the casing, a transparent panel seated in the other groove of the strips and yieldingly supported by the latter in spaced relation to the license plate and adjacent the front of the casing, a lamp interposed between the transparent panel and the license plate for illuminating the latter, and molding strips detachably secured to the casing and having flanges pressing against the outer edges of the resilient strips to clamp the latter against displacement in the casing and provide a watertight seal.

1,820,093. ADMISSION VALVE FOR TWO CYCLE ENGINES. CHARLES H. SEIFERT, Hempstead, N. Y. Filed Nov. 8, 1930. Serial No. 494,389. 3 Claims. (Cl. 123—73.)

1. In a gas admission means for a two-cycle reciprocating engine of the type in which gas is compressed in the crank case by the power strokes of the piston and admitted to the cylinder concurrently with discharge of exhaust gases from the latter; a disk member rigidly carried by the crank shaft at the inner side of a rigid end member of the crank case, said members having gas admission ports which register during charge-compressing strokes of the piston and are out of register during power strokes of said piston, relatively large diameter continuous sealing means between said members and so disposed that both of said ports lie always within its radius, and relatively small diameter sealing means between said members, said small diameter sealing means surrounding one of said ports and lying constantly within said radius of said large diameter sealing means.

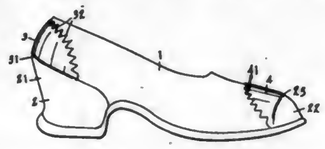


1,820,094. WINCH ROPE WINDER. TEMPLE C. SMITH, Westfield, and JOHN B. SPOWART, Newark, N. J., and PAUL G. FITZPATRICK, New York, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 27, 1928. Serial No. 315,550. 9 Claims. (Cl. 242—158.)



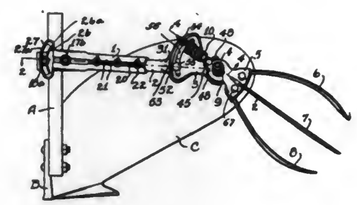
1. A winch rope winder comprising a rotatable drum, a pair of shafts positioned parallel to the drum, a carriage mounted to reciprocate on said shafts and moving in synchronism with the drum, means adjustably mounted in said carriage and automatically movable thereon in a plane perpendicular to the axis of the drum for guiding rope in orderly layers on and from said drum, and automatic braking mechanism associated with said means for locking the rope on said drum.

1,820,095. RUBBER WITH MUD GUARD DEVICE. WALLACE D. SMITH, Kalamazoo, Mich. Filed June 17, 1929. Serial No. 371,647. 4 Claims. (Cl. 36—70.)



1. A rubber with a mud guard consisting of a flexible, deflectable, soft rubber shield integrally united with said rubber with serrated edge conforming normally to the body of the rubber when not in use and adapted to be deflected to form an umbrella guard to serve as a deflector.

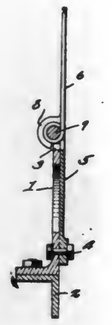
1,820,096. SOIL PULVERIZER. GEORGE M. SOULE, Cleveland, Ohio, assignor to The Plow-Mate Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 16, 1927. Serial No. 233,542. 5 Claims. (Cl. 97—117.)



1. In a device of the class described, a rigid arm section adapted to be secured to a plow, a longitudinally adjustable arm section in telescoping relation to the rigid section, a plurality of elongated blades one above the other and mounted on the second mentioned section, the longitudinally adjustable section being turnable with reference to the rigid section to position the uppermost blade forwardly of the adjacent blades in the direction of plowing.

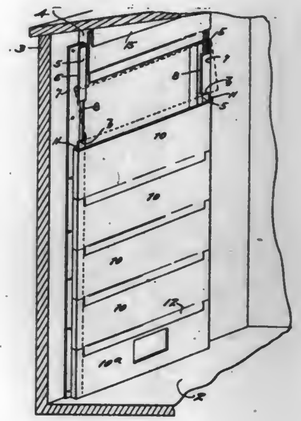
4. In a soil pulverizer for plows, a set of blades disposed adjacent the rear edge of the mold board, an arm for supporting the blades and means for securing the arm to the plow beam, including a bolt member surrounding three sides of the plow beam, and terminating in threaded ends on the fourth side of said plow beam, said arm having a longitudinal slot through which one end of said bolt member passes and a transverse slot through which the other end of said bolt member passes, and securing means associated with the threaded ends of said bolt member for securing said arm in different positions, relative to the support for said plow.

1,820,097. ADJUSTING LEVER FOR CULTIVATORS AND THE LIKE. BURGESS T. SPRY, San Dimas, Calif. Filed Nov. 22, 1929. Serial No. 409,045. 2 Claims. (Cl. 74—39.)



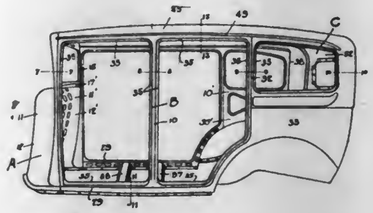
1. In a cultivator or the like, the combination with a notched segment, of a lever mounted to swing relative to the segment, a handle hingedly connected to the lever and foldable downwardly onto the segment, and an arcuate notch engaging element concentric with the pivot of the handle and rotatable with the handle about said pivot into and out of engagement with the segment when the handle is lowered and raised respectively.

1,820,098. GRAIN DOOR FOR BOX CARS. WILLIAM J. STORM, Burbank, Calif. Filed Dec. 11, 1929. Serial No. 413,283. 1 Claim. (Cl. 20—30.)



A grain door for box cars having a pair of stiles with oppositely disposed flanges forming guides, and a door structure consisting of a plurality of panels set longitudinally edge on edge, and each panel having end flanges forming hook means to interlock with, lap over and slide vertically along the stiles; whereby the several panels form a vertical closure along stiles; said stile flanges being interrupted below their upper ends to form notches for the introduction of the several panels onto the guide flanges and the upper ends having flanges to retain the topmost door panel, the latter interlocking on flanges at the ends of the notches.

1,820,099. VEHICLE BODY. JOHN P. TARBOX, Philadelphia, Pa., assignor to Edward G. Budd Mfg. Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 1, 1927, Serial No. 216,906. Renewed Feb. 12, 1931. 10 Claims. (Cl. 296—28.)

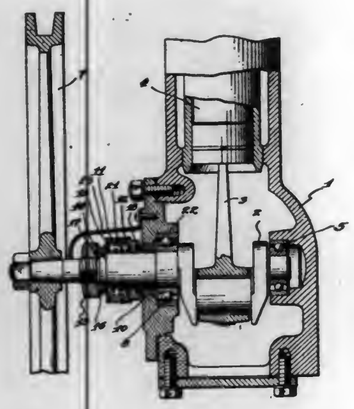


1. A vehicle body having hollow threshold portions comprised of inner and outer panels, and a body cross brace having its ends extended through openings in the inner panel of the threshold and secured to the outer panel.

1,820,100. CRANK CASE SEAL. HARRY E. THOMPSON, Detroit, Mich. Filed Oct. 17, 1927. Serial No. 226,537. 1 Claim. (Cl. 286—11.)

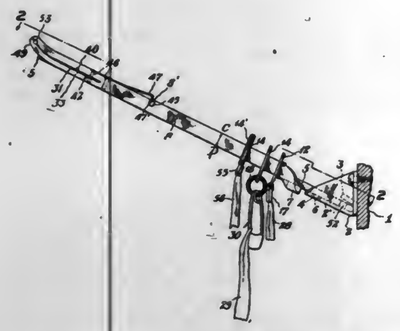
A seal construction for effecting a seal between a rotating shaft and a housing, comprising a bellows mounted over and in non-rotative relation with the shaft, a car-

bon ring member connected to one end of the bellows, means on the housing for providing a frictionally engaging seal with this carbon ring, a shoulder on the shaft, a ringlike end member connected to the opposite end of



the bellows and abutting against this shoulder and means for clamping this ringlike member against the shoulder in sealing relation, and a compression spring within the bellows for urging the carbon ring against its co-operating surface.

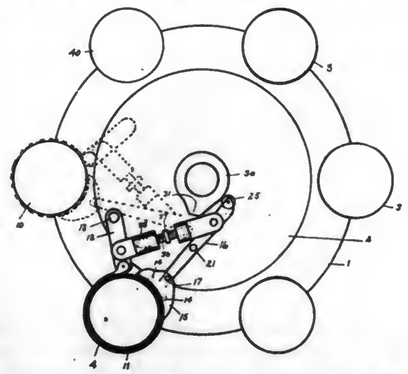
1,820,101. LAUNDRY CHECKING DEVICE. JOHN H. TODD, Cleveland, Ohio, assignor to The Key-Tag Checking System Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 21, 1930. Serial No. 437,698. 11 Claims. (Cl. 40—19.5.)



1. A hanger for laundry-checking devices, comprising a main arm adaptable for detachable connection to a support and an auxiliary arm secured to said main arm and extended in laterally spaced and generally parallel relation to the latter, each of said arms having means, adjacent an end of such arm, for permitting passage of check-members of predetermined formation onto the body of such arm and excluding check-members of other formations therefrom.

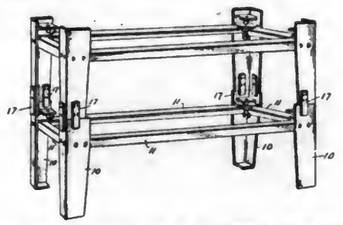
1,820,102. CLAMP FOR A MACHINE FOR FORMING PAPER CONTAINERS. LOUIS P. TOSCANO, Utica, N. Y., assignor to Fonda Container Company, Inc., Utica, N. Y., a Corporation of New York. Filed Jan. 9, 1930. Serial No. 419,655. 2 Claims. (Cl. 93—55.)

1. In a clamp for a machine for forming paper containers, a ring for surrounding a paper container, a member connected with one end of said ring, a lever connected with the other end of said ring, a link connected with said member and with said lever and means for actuating said



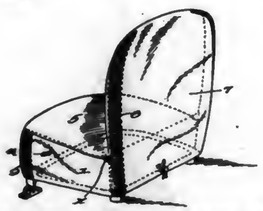
first named member and lever, whereby to move said ring in a concentric manner, to hold the said paper container in predetermined position.

1,820,103. PEDESTAL. HUGH T. TOY, Sidney, Ohio. Filed Feb. 11, 1930. Serial No. 427,597. 7 Claims. (Cl. 248—41.)



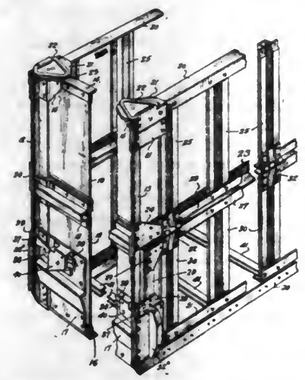
6. A pedestal comprising a plurality of vertical members, means connecting said members to hold them in substantial verticality, each member carrying a leveling screw, said screws being so positioned with reference to each other that an article supported by the pedestal rests upon the screws and may be leveled with reference to the pedestal.

1,820,104. SEAT COVER. JOHN W. WHALEY, Richmond, Va. Filed Apr. 17, 1930. Serial No. 445,082. 1 Claim. (Cl. 155—182.)



A combined cover for automobile front seats and back rests, consisting of rigidly connected sections of flexible material shaped to substantially the contour of the top, front and two side walls of the seat cushion and the front and back walls of the back rest, the section for covering the back of the back rest extending downwardly to substantially the plane of the lower edges of the front and side wall sections, and longitudinal elastic insert sections connected between the front and two side wall sections at the front corners of the seat cushion and also between said two side wall sections and the downwardly extending portion of the back section for the back rest to provide a cover portion for seat cushions which may vary in size, said last two elastic insert sections extending upwardly between the front and back wall sections for the back rest and over and inwardly beyond the upper corners thereof providing elastic connections therebetween terminating in spaced relation with respect to each other leaving a rigid connection between said front and back cover sections over the top portion of the back rest to provide an expansible and contractable cover for the back rest which will snugly accommodate seat back rests which may vary in size and in the contour of their upper corners.

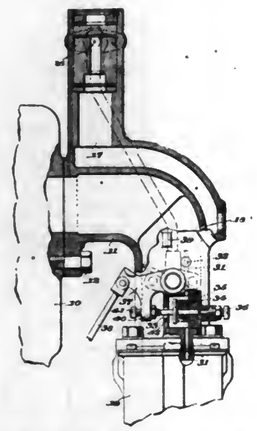
1,820,105. SECTIONAL CARLOAD CONTAINER. GRAHAM C. WOODRUFF, Bronxville, N. Y., assignor to The L. C. L. Corporation, a Corporation of Delaware. Filed Aug. 14, 1930. Serial No. 475,304. 12 Claims. (Cl. 105—366.)



1. A container of the character described having an open top and a slatted bottom and provided in a side wall thereof with a door opening upward and outward from said slatted bottom.

2. A container of the character described having an open top, waste vents through its bottom and a side door opening upward from the bottom of the container.

1,820,106. HYDROCARBON MOTOR. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 8, 1920. Serial No. 429,180. 11 Claims. (Cl. 261—72.)



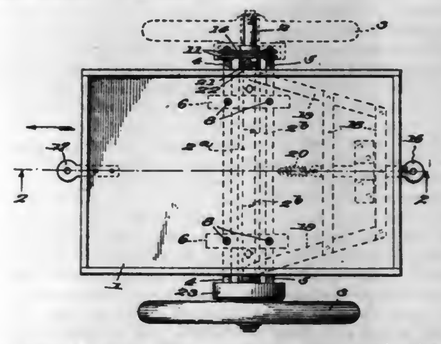
2. In a hydrocarbon motor, having an intake pipe and a throttle valve therein, the combination with a carburetor comprising a float chamber, means comprising a depression line connected to said float chamber, means actuated by said throttle valve for venting said depression line, and means comprising a submerged vent for said float chamber.

1,820,107. ACOUSTIC DEVICE. ALFRED W. AGEE, Ogden, Utah. Filed Apr. 22, 1930. Serial No. 446,363. 3 Claims. (Cl. 181—23.)



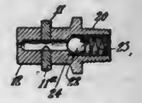
1. An acoustic device comprising an artificial ear adapted to be applied to the external ear in surrounding relation thereto and having its front side open and rear side closed, the artificial ear being substantially in the form of a spherical segment and having its rear edge curved to conform to the curvature of the external ear where it contacts with the head, and a hook carried by the artificial ear and adapted to engage the external ear to secure the former in place.

1,820,108. VEHICLE RUNNING GEAR. ALBERT AGRAMONTE, Camaguey, Cuba. Filed Oct. 26, 1929. Serial No. 402,650. 8 Claims. (Cl. 280—80.)



1. Vehicle running gear comprising, in combination a main axle, a supporting spring and an auxiliary axle rigidly secured to said spring, a wheel on said main axle, and a plate tiltable about said main axle and having an arcuate slot through which said auxiliary axle extends.

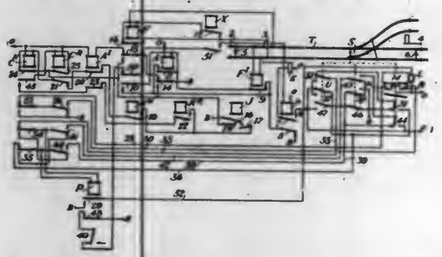
1,820,109. LUBRICATING SYSTEM. HERMAN ALBERTINE, East Rutherford, N. J., assignor, by mesne assignments, to Rogers Products Co. Inc., a Corporation of New Jersey. Filed May 6, 1927. Serial No. 189,210. 5 Claims. (Cl. 184—105.)



1. A lubricating system, including a brass nipple having a screw-threaded base adapted to fit a grease conduit, a wrench engaging portion of larger diameter than said base and a body portion having a passage extending therethrough which is of relatively small diameter to afford thick walls throughout said body portion of the nipple, which has a relatively small opening at the grease

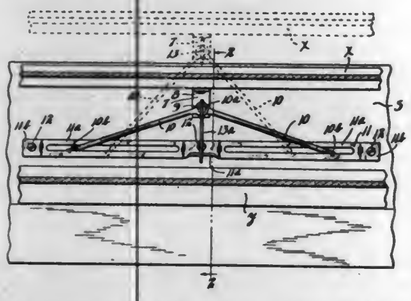
receiving end thereof, and which is enlarged rearwardly of said opening to afford a solid valve seat; a rearwardly opening check valve with a spring anchored in the rear end of the nipple tending to hold said valve closed; and transversely projecting steel arms having a drive fit in the thick brass walls of said body portion of the nipple.

1,820,110. RAILWAY TRAFFIC CONTROLLING APPARATUS. EARL M. ALLEN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1930. Serial No. 480,887. 4 Claims. (Cl. 246—5.)



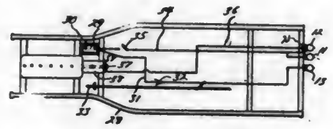
4. In combination, a section of railway track containing a switch, a signal governing traffic over said switch, a normal switch control relay C^N and a reverse switch control relay C^R for governing said switch, an approach locking relay A, an approach locking repeater relay A^1, a signal relay D, a polarized indication relay P; a group of relays controlled from a remote point and including a normal switch relay K^N, a reverse switch relay K^R, a code operating relay J, and a signal code relay X; a track circuit for said section including a source of current connected across the rails at one end and a track relay connected across the rails at the other end through its own front contact, a shunt around said track relay front contact including a back contact of relay X, an approach track section provided with a track relay F^1; means for energizing approach locking relay A when relay D is open and relay F^1 is closed, or when relays D and F are both open, means for subsequently keeping relay A energized while relay D is open, means for energizing relay P while relays A and F are both closed; means for energizing relay C^N while relays J, K^N and P are closed and relay C^R is open; means for keeping relay C^N energized while relay A is open, or while relay A is closed and relay F is open, or while relay J is open; means for energizing relay C^R while relays J, K^R and P are closed and relay C^N is open; means for keeping relay C^R energized while relay A is open, or while relay A is closed and relay F is open, or while relay J is open; means for energizing relay P in normal or reverse direction when relay C^N is closed and said switch is in normal position, and means for energizing signal relay D when relays X and F are energized and relay P is energized in normal direction.

1,820,111. STORM SASH HOLDER. GEORGE A. AWALT, Minneapolis, Minn. Filed Jan. 27, 1930. Serial No. 423,602. 7 Claims. (Cl. 292—263.)



1. In combination with a window frame and a storm sash swingably mounted therein, a pair of attachment members, one adapted to be secured to said storm sash and one adapted to be secured to said window frame, a link pivoted at one end to one of said attachment members, connections between the opposite end of said link and the other attachment member and an eccentric carried by said first attachment member having its working edge disposed in position to clamp against said link adjacent said pivot to secure said link against swinging movement.

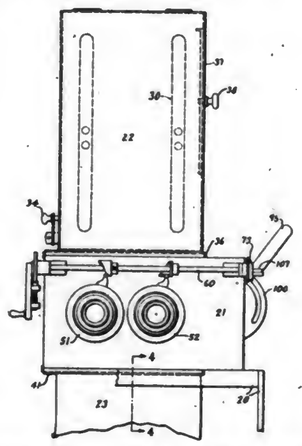
1,820,112. LAMP. FRANK L. BAMFORD, Detroit, Mich., assignor to C. M. Hall Lamp Company, Detroit, Mich., a Corporation of Michigan. Filed July 26, 1926. Serial No. 125,045. 6 Claims. Cl. 177—329.)



1. In a motor vehicle having a frame, a battery and reverse mechanism electrically grounded upon said frame, a lamp casing having a tail filament and a backing filament, means for electrically grounding one terminal of said tail filament upon said frame, means for electrically insulating both terminals of said backing filament from said frame, means for electrically connecting one terminal of said backing filament to said reverse mechanism when in operative position, a single wire from said battery to said lamp casing, and means within said casing for electrically connecting said wire to the other terminals of said tail and backing filaments.

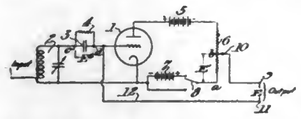
3. In a combination lamp, a casing, an insulator plug mounted upon said casing, a pair of electrical conductors extending through said plug, a light within said casing and having a terminal electrically connected thereto, a second light within said casing, an insulator upon said casing for carrying said second light, means extending from one of said conductors to the other terminal of said first-mentioned light and to a terminal of said second-mentioned light for electrically connecting the same and means extended from the other terminal of said second-mentioned light to the other of said conductors for electrically connecting the same.

1,820,113. CAMERA. GIANNI BETTINI, New York, N. Y. Filed July 28, 1927. Serial No. 209,047. 10 Claims. (Cl. 95—37.)



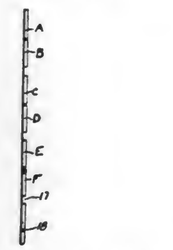
1. A photographic exposing camera comprising guide means for a sensitized plate or carrier having successive pairs of image spaces, transversely spaced lenses, a single exposing mechanism for operating both lenses simultaneously, and a longitudinal feeding mechanism for advancing the plate progressively from row to row in a direction perpendicular to a plane extending through the axes of both lenses, whereby a series of successive pairs of stereoscopic images are produced, substantially as decribed.

1,820,114. VACUUM TUBE RECTIFIER. KNOX CHARLTON BLACK, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 21, 1930. Serial No. 446,096. 6 Claims. (Cl. 250—27.)



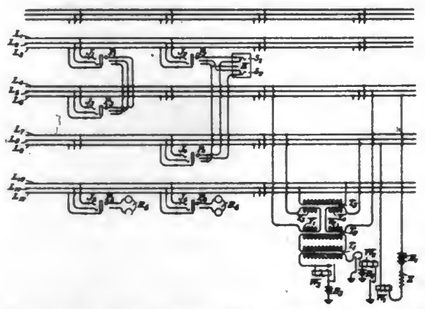
1. In the operation of a vacuum tube rectifier stage having in the input circuit thereof a condenser shunted by a grid leak, the method which comprises combining in the output circuit the rectified potential across said condenser and a rectified voltage developed in the plate-cathode circuit by grid circuit rectification.

1,820,115. MAP CONSTRUCTION. ROBERT S. BLAIR, Sound Beach, Conn. Filed June 8, 1921. Serial No. 475,947. 10 Claims. (Cl. 283—34.)



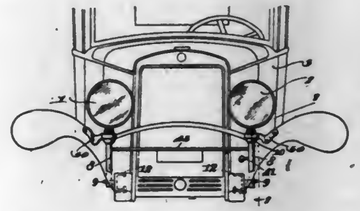
1. A map folded along parallel lines in zigzag form and means holding the folds on one side together to form a hinge, the folds upon the opposite side being free and the portions of the map being unconnected one with another adjacent said free folds, whereby said folds may be temporarily flattened to connect visually the portions on opposite sides thereof.

1,820,116. TESTING SYSTEM. ROY W. BURNS, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 8, 1930. Serial No. 487,801. 4 Claims. (Cl. 179—175.)



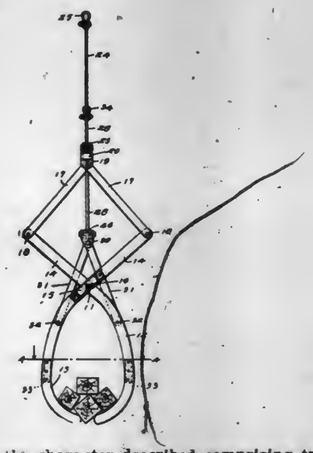
1. A testing system including a plurality of jacks to be tested, a plurality of plugs each of which engages one of said jacks, a source of alternating current, a pair of circuits coupled to said source of alternating current, the tip sides of said jacks and said plugs being included in series with each other in one of said circuits, the ring sides of said jacks and plugs being included in series with each other in the other of said circuits, and receiving means coupled to said pair of circuits, said pair of circuits being poled so that their effects on said receiving means will be mutually opposite.

1,820,117. DIRIGIBLE HEADLIGHT. JAMES M. CALKINS, Miami, Fla. Filed Aug. 19, 1929. Serial No. 387,065. 10 Claims. (Cl. 240—62.)



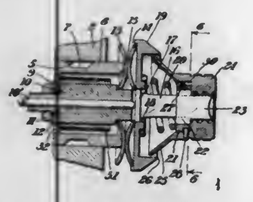
1. In a dirigible headlight construction having a horizontally rotatable and vertically tiltable headlight supporting arm; a finger connected with said arm, a cam mechanism having a movable section with a cam surface which operates to swing the arm on its pivot as it is rotated, and resilient means pressing said section against the finger to maintain a close contact.

1,820,118. MATERIAL HANDLING GRAPPLE. ANDREW D. CANULETTE, Slidell, La., assignor to Canulette Ship Building Co. Inc., Slidell, La., a Corporation of Louisiana. Filed May 28, 1931. Serial No. 540,730. 4 Claims. (Cl. 294—111.)



1. A grapple of the character described comprising two pairs of opposed crossed jaws, the jaws of each pair being pivoted to each other, transversely extending members connecting each jaw on one side with the corresponding jaw on the other side, a supporting cross bar for the jaws, two pairs of links pivoted to the ends of the cross bar and having their lower ends pivoted to the upper ends of the corresponding jaws, a cross bar below the supporting cross bar, a pair of links pivoted to the end of the second named cross bar and pivoted at their lower ends to the corresponding jaws, and independent yoke connected to the cross bars, the yoke connected to the upper cross bar supporting the weight of the grapple and the lower yoke acting to control the movement of the jaws.

1,820,119. GRADUATED TENSION REGULATOR FOR SEWING MACHINES. DANIEL H. CHASON, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 9, 1930. Serial No. 450,952. 9 Claims. (Cl. 242—150.)



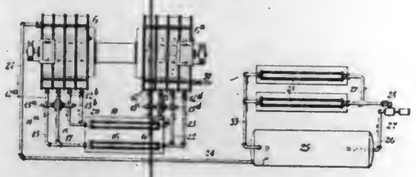
1. In a sewing machine tension-device, the combination with the thread-engaging means, a stem, and a tension-spring, of a screw-threaded tension-regulating nut on said stem, a washer interposed between said nut and spring, said washer being keyed to said stem to slide lengthwise of the latter without rotation, and coacting stop-elements on said washer and nut to limit the movement of the latter to one rotation.

1,820,120. TIRE GAUGE VALVE. JUSTUS COLLINS, Charleston, W. Va. Filed Mar. 11, 1930. Serial No. 434,865. 3 Claims. (Cl. 152—11.5.)



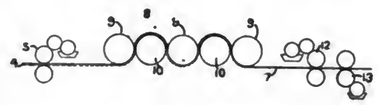
3. An attachment for a tire gauge, comprising an elongated body having a flat casing-engaging inner face, said body provided on its inner end with an integral sleeve-surrounding collar, said collar extending at right angles to said body, said collar being concaved on its inner face, said body and collar provided with a common passage therethrough, and said body provided in its outer end with valve means, substantially as shown and described.

1,820,121. DRYING OF GASES. CHARLES COOPER, Huddersfield, England, assignor to W. C. Holmes and Company, Limited, Huddersfield, England. Filed June 6, 1927, Serial No. 196,970, and in Great Britain Oct. 21, 1926. 1 Claim. (Cl. 183—120.)



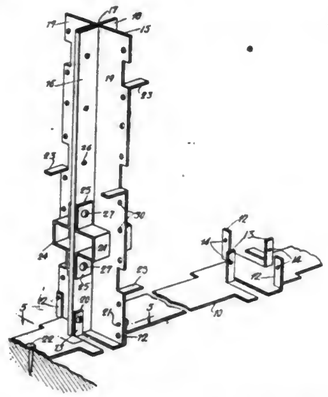
The process of drying fuel gases which comprises causing the gases to flow in intimate contact with a main body of hygroscopic material in the liquid state, continuously withdrawing a portion of the said main body of hygroscopic material, cooling the same, returning the cooled liquid to the main body of material and continuously and separately withdrawing a further portion of the main body of hygroscopic material, subjecting the same to treatment to expel a portion of its content of water and continuously returning the liquid after such treatment to the main body of hygroscopic material

1,820,122. PROCESS OF MAKING FIBER FILLED WOVEN FABRIC. CHARLES H. CROWELL, Bellefonte, Del. Filed Oct. 31, 1929. Serial No. 403,715. 7 Claims. (Cl. 154—2.)



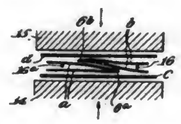
1. The process of making a fiber filled woven fabric which comprises applying a wetting mixture to the paper side of a composite fabric of cloth and paper by wetting devices, passing said web over such a distance and at such rate to a calendar to allow said mixture to penetrate, and pressing said paper and cloth into intimate relation in said calendar.

1,820,123. PARTITION. JOHN J. DONOVAN, Bronx, N. Y. Filed Mar. 4, 1930. Serial No. 433,074. 6 Claims. (Cl. 72—115.)



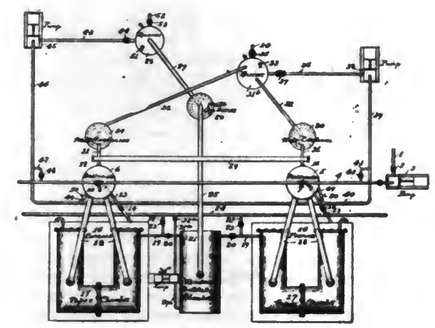
1. In a wall frame structure, spaced vertically alined anchor strips, sets of inwardly extending alined fingers along said anchor strips, vertical studs having their opposite ends fitting against said anchor strips with the sets of fingers embracing the sides of said studs, and fastening elements passing through said fingers and said studs to securely hold said studs in vertical position.

1,820,124. RUBBER BALL. ISTVÁN DOROGI and LAJOS DOROGI, Budapest, Hungary, assignors to Dr. Dorogi és Társa Gummigyár R. T., Budapest-Albertfalva, Hungary, a Limited Company. Filed Feb. 23, 1927, Serial No. 170,280, and in Hungary Aug. 28, 1926. 6 Claims. (Cl. 154—2.)



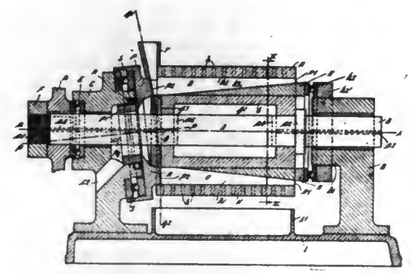
4. Method of manufacturing a six-part ball by stamping from unvulcanized rubber sheets by means of blunt welding dies in which two pocket-shaped elements having outwardly convexed bottoms are stamped from a pair of rubber sheets by arcuate cuts whereupon an arcuate branch of a wire loop welding die is interposed between the layers of said pocket shaped elements and the thus covered wire loop welding die is pressed between two additional rubber sheets.

1,820,125. PROCESS AND APPARATUS FOR TREATING OILS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 27, 1921, Serial No. 480,510. Renewed Jan. 17, 1929. 10 Claims. (Cl. 196—48.)



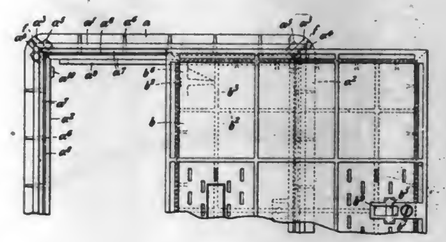
1. A continuous process for cracking oil, consisting in initially heating and vaporizing the oil in separate interconnected zones, in maintaining a uniform pressure in said zones, in passing the evolved vapors through dephlegmators, in condensing the dephlegmated vapors and collecting the distillate produced in said zones in a single reservoir, in continuously passing the unvaporized oil from said zones to a zone of reduced pressure to cause further distillation thereof, in condensing and collecting the vapors released in said latter zone, and in returning the distillate produced in said initial and reduced pressure zones to said dephlegmators to simultaneously dephlegmate the evolved vapors and re-distill portions of such distillate.

1,820,126. MACHINE FOR EXPRESSING LIQUIDS FROM SOLIDS. HENRY JOSEPH LONG DUNLOP, Blundellsands, and ALBERT JACK SIBBALD, Wallasey, England. Filed Feb. 3, 1928, Serial No. 251,588, and in Great Britain Feb. 4, 1927. 15 Claims. (Cl. 100—50.)



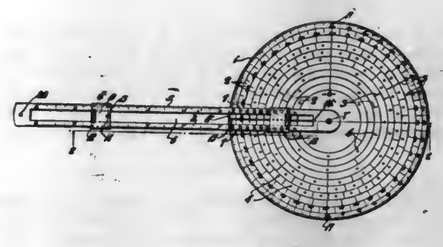
15. In a machine for expressing liquids from solids in combination; a casing having an inner part fixed on a main shaft journaled in fixed bearings and held against axial movement, and an outer perforated part carried by the inner part so as to provide between the inner and outer parts of the casing a passageway of annular configuration; the perforations forming a series of ducts in the outer part of the casing adapted to permit the passage through them of the expressed liquid but not of the solid material; a compression member rotatably mounted about an axis inclined to the axis of the main shaft and incapable of axial movement along the said axis; a compression surface on said compression member adapted to propel the solid material through the annular passageway, and power operated means for rotating the said main shaft.

1,820,127. MANHOLE COVER AND FRAME AND THE LIKE. VIVIAN ELKINGTON, St. Margarets Bay, England. Filed Dec. 1, 1928, Serial No. 323,013, and in Great Britain Mar. 5, 1928. 7 Claims. (Cl. 94—34.)



1. A manhole or like construction, comprising a rectangular cast metal frame embodying a plurality of coördinate sections bolted together at adjacent corners to provide a rigid structure, and a rectangular cast metal cover seated on the frame; said frame and cover having inwardly-directed beveled or inclined seating faces which conformably fit directly against each other; the cooperating faces of the corner portions of the sections of the frame being provided with recesses forming chambers for the reception of metal keys to accommodate irregularities.

1,820,128. PROTRACTOR. ROY JONES ETHRIDGE, San Antonio, Tex. Filed July 17, 1929. Serial No. 378,855. 2 Claims. (Cl. 33—75.)

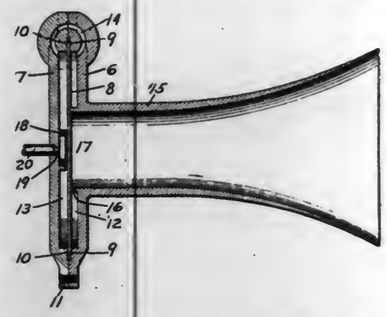


1. In a device of the kind described, a circular protractor plate having a plurality of concentric scales, an elongated arm, a tubular rivet pivotally connecting the said arm to the center of the protractor plate, the said arm having a longitudinal slot and having scales upon its margins, the said arm also having numerals overlying the said scales upon the protractor plate and indicating the divisions in these scales, a carrier slidably mounted on the arm, the said carrier having a marker receiving aperture, an indicator slide slidably mounted on the arm, an indicating wire medially and longitudinally secured in the slot in the arm over the said scales upon the protractor plate, the said protractor plate having diametrically opposite apertures for the reception of a supporting means, and the said arm having an aperture in its free end for the reception of a sighting means.

1,820,129. SOUND PRODUCER. GEORGE C. FARMER, Chicago, Ill., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 16, 1930. Serial No. 452,854. 6 Claims. (Cl. 116—142.)

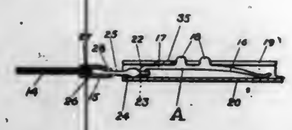
1. In a sound producer, the combination with a chamber connected to a source of partial vacuum, a chamber adapt-

ed to be connected to the atmosphere, and a passage connecting both chambers, of a flexible diaphragm separating



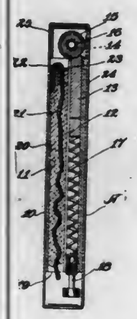
the chambers and adapted in one position to cut off the communication to the atmosphere and in another position to cut off the source of partial vacuum.

1,820,130. LEAD PUSHER FOR MECHANICAL PENCILS. HOWARD L. FISCHER, St. Paul, Minn., assignor to Brown & Bigelow, St. Paul, Minn., a Corporation of Minnesota. Filed June 6, 1925. Serial No. 35,426. 4 Claims. (Cl. 120—18.)



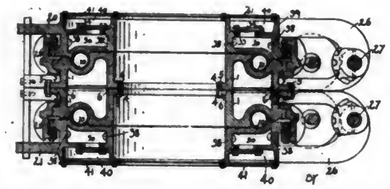
2. A lead carrier for a mechanical pencil comprising a member formed with thread engaging teeth, spring arms projecting from said member, a connecting link rod, an opening formed in said rod to permit pivotal engagement of one of said spring arms therein and a slidable spring lead gripping sleeve secured to the forward end of said link.

1,820,131. POCKET LIGHTER. HOWARD L. FISCHER, St. Paul, Minn., assignor to Brown & Bigelow, St. Paul, Minn., a Corporation of Minnesota. Filed May 25, 1929. Serial No. 366,023. 5 Claims. (Cl. 67—7.1.)



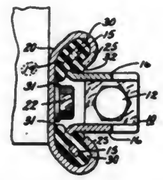
2. A pocket lighter, including tubular casing members, one providing the bottom of said lighter, the other providing a cap for the same, an abrading wheel positioned in said bottom member, a sparking flint adapted to be abraded by said wheel, a wick in close proximity to said flint in said bottom member, and a recess for said wick in said bottom member into which the wick folds when said cap is placed over said bottom member.

1,820,132. WATCHCASE VULCANIZER. ANDREW J. FLEITER, Akron, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 29, 1927. Serial No. 187,528. 2 Claims. (Cl. 18—38.)



1. A vulcanizer section comprising a side having a vulcanizing cavity therein, inner and outer peripheral walls about the section, a transverse wall midway of the section, an outer cover plate completely bridging the walls so that the section is divided into inner and outer chambers, the outer chamber extending to either side of the inner, the transverse wall being provided with openings, a removable plate over the openings, and webs connecting the transverse wall with the body of the section.

1,820,133. RESILIENT CONNECTER. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 17, 1929. Serial No. 400,428. 2 Claims. (Cl. 248—14.2.)



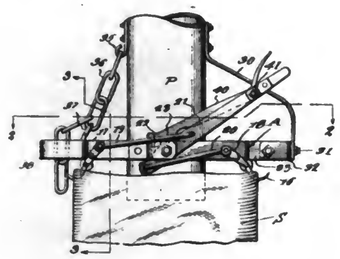
1. A vibration absorbing resilient connecter connecting two parts for preventing transmission of vibrations therebetween, comprising: a metal member fixed to one of said connected parts and having two laterally projecting substantially vertical flanges on opposite sides thereof, elastic rubber material encasing said vertical flanges, and a second metal member fixed to the other of said connected parts and isolated from said first member and having portions thereof bent around the outside edges of said vertical flanges so as to clamp the rubber material under a permanent high compression, whereby vertical loads upon the connecter are sustained.

1,820,134. FREEZING CONTAINER. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 12, 1930. Serial No. 451,708. 14 Claims. (Cl. 62—108.5.)



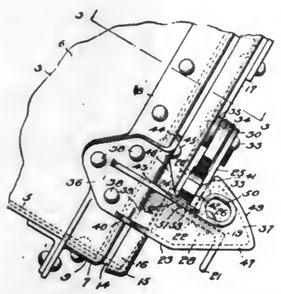
1. A freezing tray adapted to be inserted within a freezing chamber, comprising: a molded flexible rubber container having the upper edges of its side walls stiffened by molded in situ metal inserts, said inserts being rotatable relative to the confining rubber, whereby said side walls may be more easily partially turned inside out.

1,820,135. SACK HOLDER. WILLIAM HANLEY, Mountain Home, Idaho. Filed May 19, 1930. Serial No. 453,654. 2 Claims. (Cl. 83—26.)



1. A sack holder comprising an open supporting frame, including side longitudinally extending bars and connecting transverse end bars, depending bearings supported by the end bars, rock shafts mounted in the bearings, oppositely extending pairs of hooks connected with the rock shafts, inwardly extending crank arms carried by the inner end of the rock shaft, a lever rockably secured to one of the side bars, links operatively connecting the cranks to the lever above and below the pivot point thereof, means pivotally supporting one end of the frame, and an extensible means for engaging the other end of the frame to hold the same in an adjusted angular position.

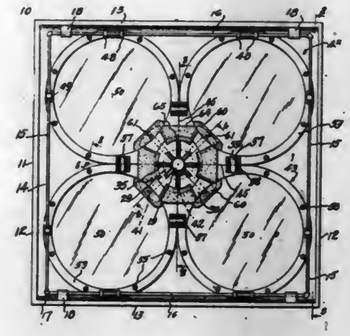
1,820,136. RAILWAY CAR. CYRUS HANKINS, Washington, D. C., and GEORGE B. CHRISTIAN, Chevy Chase, Md., assignors to Wine Railway Appliance Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 12, 1929. Serial No. 385,360. 19 Claims. (Cl. 105—308.)



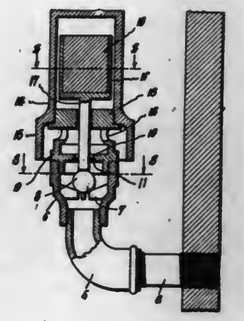
1. In a railway car, the combination with a hopper having an end provided with a lading discharge opening, of a door for closing the said opening, and mechanism for supporting the door in closed position involving a latch movably mounted on the door, and a hook carried by the hopper, said hook having offset portions respectively secured to the side and to the end of the hopper.

1,820,137. MAXIMUM RANGE RADIO LOUD SPEAKER. WYLIE JAY HANNA, Bayside, N. Y. Filed Nov. 9, 1928. Serial No. 318,172. 32 Claims. (Cl. 181—31.)

1. A device of the character described, including a speaker unit, a primary sounding medium of a light material operated by said unit to reproduce high notes and a secondary sounding medium of a heavier material connected to the primary sounding medium for reproduction of bass notes, said secondary sounding medium being divided into a plurality of areas, and means being provided to slightly deaden one of the said areas with respect to the other, for reproduction of the lowest notes.



1,820,138. AUTOMATIC DRAIN VALVE. ANDREW B. HARGIS, Jellico, Tenn. Filed Mar. 31, 1930. Serial No. 440,538. 3 Claims. (Cl. 251—147.)

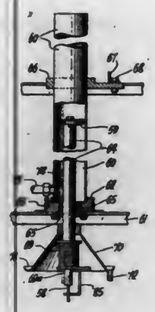


2. A means for draining the fluid from a pipe or tank when such fluid passes beyond a predetermined level and when such pipe or tank is controlled by a valve for preventing the passage of fluid therethrough or thereinto, comprising a vertically arranged two-part body, whose lower part has a pipe connection with the pipe or tank and which lower part has inwardly directed fins therein, a valve to rest on such fins, the top part of the body being screwed to the lower part thereof and providing an open seat for the valve and outlet openings above the seat, a plunger guided through the upper part of the valve body and through the valve seat, and urging the valve onto the fins.

1,820,139. ELECTRIC WELDING MACHINE. WALTER REGINALD HUME, Melbourne, Victoria, Australia. Filed May 16, 1928, Serial No. 278,210, and in Australia May 21, 1927. 17 Claims. (Cl. 219—8.)

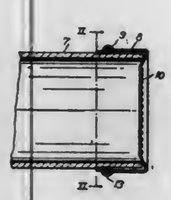
2. In electric arc welding apparatus the combination of a vertically arranged hydraulic cylinder and plunger therein, an arc striking solenoid attached to the lower end of the plunger rod and adapted to receive the upper end of an electrode, and electro-mechanical means con-

nected into the arc circuit and adapted to automatically control the escape of fluid from said cylinder whereby



said plunger and the electrode are fed downwardly towards the work by gravity in accordance with fluctuations in the length and voltage of the welding arc.

1,820,140. PIPE THREAD PROTECTOR. PERCY E. HUNTER, Pittsburgh, Pa. Filed July 26, 1929. Serial No. 381,371. 4 Claims. (Cl. 137—91.)



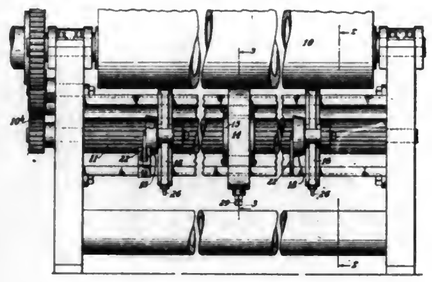
2. The method of making a thread protector, which compriaes forming a tongue on a collar, offsetting the tongue relative to the body portion of said collar, and bending said tongue to partially embrace a key and support the same in inoperative position with respect to a pipe thread.

1,820,141. PROCESS FOR THE PURIFICATION OF METALS. ALFRED CLAUDE JESSUP, Clamart, France, assignor to British Maxium Company Limited, London, England. Filed Oct. 23, 1928, Serial No. 314,541, and in France Nov. 7, 1927. 18 Claims. (Cl. 75—17.)

1. Process of separating impurities carried by magnesium which comprises the step of passing the magnesium in the liquid state through a sifter the meshes of which are smaller than No. 20 and covered with a substance the fusion point of which is lower than that of the metal to be purified, the impurities thus being retained by the meshes of the sifter while allowing the magnesium to pass through.

1,820,142. SLITTING DEVICE. ROBERT MCC. JOHNSTONE, Short Hills, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 17, 1929. Serial No. 400,217. 6 Claims. (Cl. 164—60.)

1. In a slitting machine: a transversely extending rotatable driving member having a transversely extending uninterrupted driving surface, a transversely extending support adjacent thereto, a bracket transversely adjustable on the support, a rotatable slitting member on the bracket, and transmission means, also on the bracket, to engage



different portions of the driving surface of the driving member in differently adjusted positions of the bracket and to transmit its motion to the slitting member.

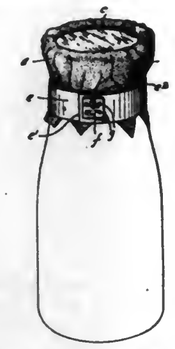
1,820,143. SOUND PRODUCER. CECIL S. KELLEY, East McKeesport, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 16, 1930. Serial No. 453,005. 2 Claims. (Cl. 116—142.)

1. A sound producer comprising a chamber adapted to be connected to a source of partial vacuum, a flexible diaphragm subject on one side to atmospheric pressure and to the partial vacuum in said chamber, and a chamber on the other side of said diaphragm in communication with the first named chamber.

1,820,144. PROTECTIVE COVER FOR THE MOUTH OF BOTTLES. EDWARD KLEIST, Portland, Oreg. Filed Aug. 13, 1928. Serial No. 299,207. 2 Claims. (Cl. 215—38.)

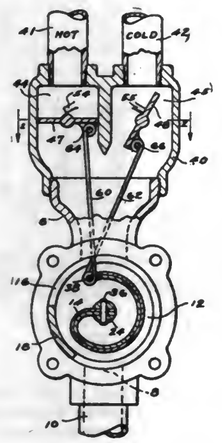
1. A bottle closure means comprising, a sheet of flexible material adapted to be cupped over the mouth of the bottle with its marginal portions extending a substantial distance down over the neck of the bottle and terminating in the form of triangular finger grasping pieces, a disk adapted to be firmly seated over the sheet in the mouth of the bottle, a band of rupturable material encircling the sheet about the neck of the bottle and located intermediate the top and the extremities of said marginal portions, a

clamp for securing the ends of the band together, said band constituting a seal whereby the sheet may not be removed



without breaking the seal, and said extremities of said sheet constituting means for rupturing said band to remove the closure means from the bottle.

1,820,145. THERMOSTATIC VALVE. GEORGE P. LIASET, Seattle, Wash. Filed Nov. 13, 1929. Serial No. 406,769. 4 Claims. (Cl. 236—12.)



1. In a plumbing fixture of the class described a body member; a cold water inlet; a hot water inlet; a cold water control valve; a hot water control valve; a water mixing chamber; a thermostatic element in said chamber; a pivot point on the free end of the thermostatic element; links connecting the pivot point with both the hot and cold water control valves; means for mounting the thermostatic element capable of varying the position of the pivot point so as to vary the relative openings of the hot and cold water valves; an opening for discharging the blended hot and cold water and a valve controlled by the same handle by which the pivot point is adjusted, adapted to close the discharge opening.

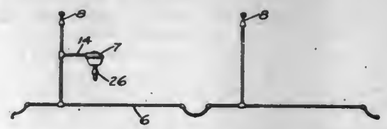
1,820,146. PACKING PHOTOGRAPHIC PLATES. BERNHARD LIEBESKIND, Berlin-Lichterfelde, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Feb. 26, 1930, Serial No. 431,558, and in Germany Mar. 16, 1929. 1 Claim. (Cl. 206—62.)

A pack consisting of a pile of photographic plates wherein the plates situated in twos with the emulsion side adjacent to each other, are separated by means of short folds of a paper strip wrapping the pile of plates on four sides, the pile thus prepared being inserted into



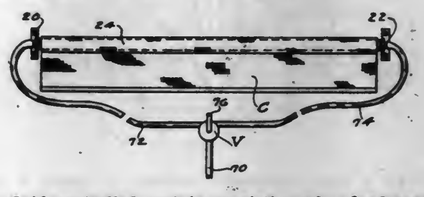
a paper wrapper closely embracing it at the upper and lower sides and at the two sides not yet covered, said wrapper fixing the plates resiliently.

1,820,147. SIGNAL VALVE DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 16, 1930. Serial No. 452,885. 16 Claims. (Cl. 116—55.)



1. In a fluid pressure signal system, the combination with a train signal pipe, of a signal valve device comprising a diaphragm subject to the opposing pressures of the signal pipe and a chamber, a second chamber, a restricted port through which the second chamber is charged with fluid under pressure from the signal pipe, a restricted port through which the first chamber is charged with fluid under pressure from said second chamber, a valve, operated by said diaphragm for controlling a communication from the first chamber to the second chamber, and a signal controlling valve operated by said diaphragm for venting fluid from said second chamber.

1,820,148. FLUID CONTROLLED CURTAIN. NEIL P. MCLEOD, Seattle, Wash. Filed Mar. 22, 1930. Serial No. 437,969. 1 Claim. (Cl. 156—28.)



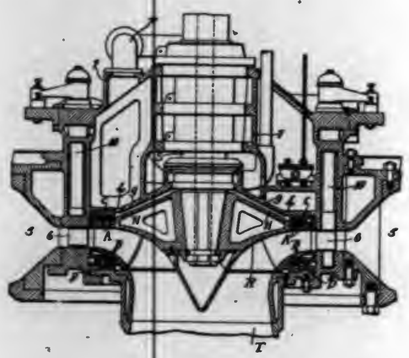
A fluid controlled curtain consisting of a fixed central spindle having a spiral groove thereon; supporting bracket for said spindle; said spindle having each end formed with a fluid passage, a discharge opening and a short flat sided bracket engaging portion adapted to secure said spindle against rotation; end portions for said spindle adapted to receive a suction hose; a revolvable curtain receiving tube disposed concentric with said spindle; packing, retaining and compressing means at each end of said tube; a deformation of said tube extending longitudinally thereof; a curtain secured at one end, to said tube; a piston adapted to slide along said spindle; said piston consisting of, a housing member adapted to retain packing and also to engage the spindle groove in a manner to cause said piston to revolve as it slides along said spindle, a plurality of flexible washers adapted to engage the inner surface of said tube, a washer retaining gland nut and a washer secured to said piston having thereon means adapted to engage a deformed portion of said tube and causing the same to revolve with said piston, and means for supplying suitable fluid pressure to said piston to cause it to slide.

1,820,149. OVERSHOE AND METHOD OF MAKING SAME. RICHARD J. MECKLENBURG, Mishawaka, Ind., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed Sept. 16, 1929. Serial No. 393,023. 11 Claims. (Cl. 36—5.)



1. In an overshoe the combination of an upper with the forward portion of one quarter lapped over and detachably connected with the forward portion of the other quarter, and having a layer of lining material and a facing, the layer of lining material being slitted along the forward edge of the latter quarter and the facing on the other quarter being continued across the slit to the overlapping edge of said other quarter.

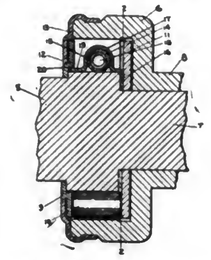
1,820,150. LABYRINTH PACKING FOR TURBINES. LEWIS FERRY MOODY, Philadelphia, Pa. Filed Sept. 15, 1920. Serial No. 410,454. 18 Claims. (Cl. 253—117.)



1. In a rotary hydraulic machine, a casing, a rotor with vanes therein, a conduit through the casing to deliver water to the vanes of the rotor and another such conduit to convey the water away, the casing and runner having adjacent opposed faces spaced to form a passage between them, said passage consisting of a narrow part opening into a relatively wide part with an abrupt change of direction at the transition, then another narrow passage extending in a direction opposite to the direction of the preceding narrow passage, and so on repeatedly, at least two of said narrow parts with an intermediate wide part constituting a passage through which leakage must flow.

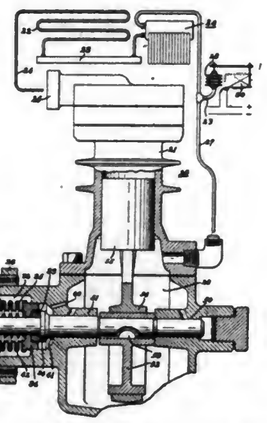
1,820,151. OVERRUNNING CLUTCH. RAYMOND F. MULLEN, Rochester, N. Y., assignor, by mesne assignments, to North East Appliance Corporation, Rochester, N. Y., a Corporation of New York. Filed May 10, 1929. Serial No. 362,034. 5 Claims. (Cl. 192—45.)

1. In an overrunning clutch comprising a shell member, a cam member inside the shell, intermediate rollers, and a spring urged plunger for each roller and extending at right angles to the axis of the roller, the combination, with the cam member, of a ring attached thereto, at one



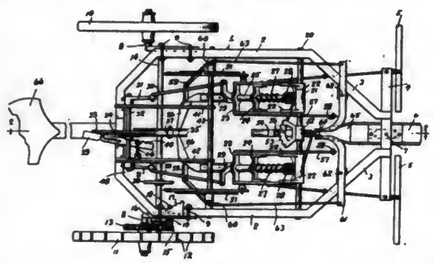
side of the cam, and provided with pockets extending laterally into alinement with the cam surfaces and serving as supports and guides for the spring urged plungers.

1,820,152. REFRIGERATING APPARATUS. DUANE R. NEAL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 30, 1928. Serial No. 266,057. 4 Claims. (Cl. 286—11.)



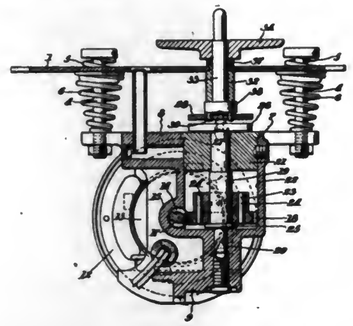
4. In a refrigerating system, a seal comprising a corrugated metal bellows, and squeak damping means confined unhermetically between the corrugations.

1,820,153. COTTON CHOPPER. GEORGE P. PARDUE and CHARLES HOLBROOK, Calexico, Calif. Filed Apr. 19, 1930. Serial No. 445,679. 6 Claims. (Cl. 97—11.)



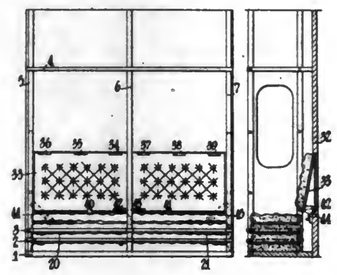
1. A cotton chopper comprising a wheeled frame, a bar mounted transversely on the frame, a pair of spaced, parallel brackets mounted for sliding and swinging movement on the bar, standards rotatably mounted in the brackets, hoes on one end portion of the standards, means operatively connecting the standards to one of the wheels for rotary actuation in one direction by said wheel, coil springs encircling the other end portions of the standards and connected thereto and to the brackets for rotating the standards in the other direction.

1,820,154. PHONOGRAPH DRIVING MECHANISM. WILBUR J. PEETS, Elizabeth, N. J., assignor to Diehl Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 15, 1929. Serial No. 386,133. 5 Claims. (Cl. 185—1.)



1. In a phonograph driving device, in combination, a main supporting bed, a motor-mechanism yieldingly suspended as a unit from said bed and having a vertical output spindle, a turntable spindle journaled in and supported by said bed independently of the motor-mechanism, a cushioned driving connection between said spindles, and a sound-record supporting turntable mounted on said turntable spindle.

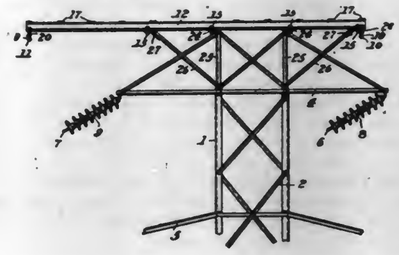
1,820,155. BENCH CONVERTIBLE INTO BEDSTEAD FOR VEHICLES. LOUIS CONSTANT ADRIEN POIROT, Villemonble, Seine, France. Filed Oct. 17, 1929, Serial No. 400,410, and in France Oct. 22, 1928. 13 Claims. (Cl. 105—317.)



1. A seat convertible into a plurality of superposed bunks for use in railway carriages, ships, aircraft, automobile vehicles and the like, comprising fixed corner posts, bunk frames vertically slidable on the corner posts and means for temporarily securing the bunk frames to the corner posts at various heights for use as bunks.

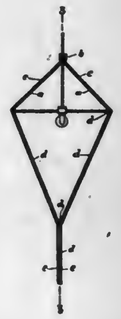
2. A seat convertible into a plurality of superposed bunks for use in railway carriages, ships, aircraft, automobile vehicles and the like, comprising fixed corner posts, bunk frames vertically slidable on the corner posts and means for temporarily securing the bunk frames to the corner posts at various heights for use as bunks and a bunk frame fixed to the corner posts above the uppermost slidable bunk frame.

1,820,156. STRUCTURAL TOWER. LYLE A. PRESCOTT and IRA W. MARSHALL, Pittsburgh, Pa., assignors to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 25, 1929. Serial No. 380,820. 14 Claims. (Cl. 189—33.)



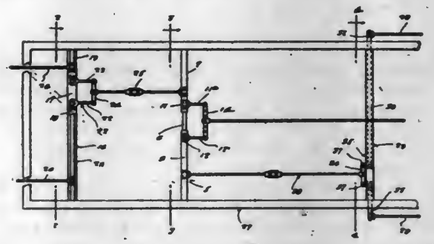
10. A structural tower comprising a ground wire support adapted to occupy different positions on the tower.

1,820,157. TRANSPARENT FLAG. VÁCLAV PROCHÁZKA, Brunn, Czechoslovakia. Filed Oct. 11, 1920, Serial No. 398,875, and in Czechoslovakia Sept. 29, 1928. 3 Claims. (Cl. 40—130.)



1. A display device of the class described including a support, substantially diamond-shaped end frames depending from said support, a transverse lamp supporting bar member arranged between said end frames, cloth panels fitted to the upper sides of the frames, and a flag secured to the lower sides of the end frames and draped therefrom.

1,820,158. VEHICLE BRAKE OPERATING DEVICE. CHARLES D. RAMELLI, Reno, Nev. Filed June 4, 1930. Serial No. 459,126. 1 Claim. (Cl. 188—10.)



A four wheel brake mechanism for vehicles including in combination a shaft extending transversely of the frame of a vehicle, a pair of sleeves mounted upon said

shaft, supports extending transversely of the vehicle frame forwardly and rearwardly of said shaft, each of said supports including a bar having a plurality of bearings, the bar of one of said supports being upset with respect to the bar of the other of the supports, a pair of shafts journalled in the bearings of each support bar, one of said sleeves embodying a pair of similarly directed arms, the other of said sleeves embodying a pair of oppositely directed arms, a brake control rod, means operatively connecting said rod with the inner arms of said sleeves, each of said rock shafts provided with a pair of crank arms, longitudinally adjustable means connecting the inner arms of one pair of shafts with the outer arm of one of said sleeves, a second longitudinally adjustable means connecting the inner arms of the second pair of shafts with the outer arm of the other of said sleeves, and means operatively connecting the outer arm of each shaft of the respective pairs of shafts with the wheel brakes at corresponding ends of the vehicle frame.

1,820,159. BOBBIN FILLING CARRIER. OTTO REINHARDT, Pawtucket, R. I. Filed May 24, 1930. Serial No. 455,310. 4 Claims. (Cl. 242—134.)

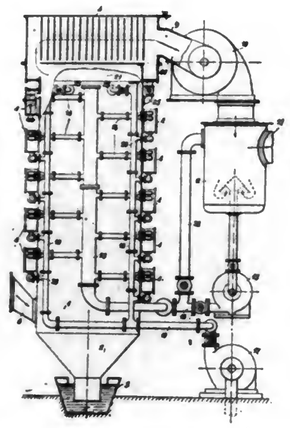


1. In a bobbin filling carrier, a substantially rectangular wire frame, a series of parallel runways each composed of a bendable metal strip having its sides turned inwardly to provide spaced flanges which overlie the body and having its ends provided with extensions, said extensions being bent around the top and bottom of the frame, and a series of bobbin carriers composed of rods having their bases bent into substantially U-shape and held by and between the bodies and flanges of the runways, the adjacent bases of adjacent carriers and the adjacent extensions of the adjacent runways being engaged with one another.

1,820,160. SEPARATING MAGNESIUM COMPOUNDS FROM POTASH SALTS. FRIEDRICH RÜSBERG, Berlin-Niederschoneweide, Germany, assignor to Kali-Chemie, Aktiengesellschaft, Berlin, Germany. Filed Sept. 4, 1929, Serial No. 390,414, and in Germany Sept. 7, 1928. 8 Claims. Cl. 23—40.)

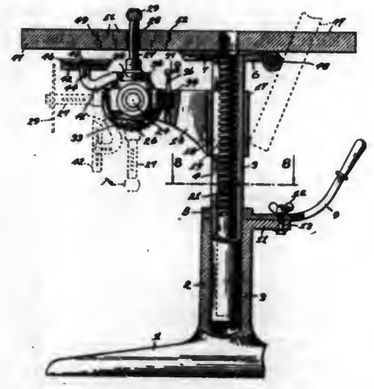
1. A method for making valuable products from crude potash salts containing potassium chloride and magnesium sulfate which consists in dissolving the potash salt, converting the magnesium compounds present in the solution into magnesium-ammonium phosphate, separating the magnesium-ammonium phosphate from the mother liquor and precipitating potassium sulfate in said mother liquor by treatment with ammonia.

1,820,161. PLANT FOR TREATING GAS. BRONISLAW RZECZKOWSKI, Sosnowice, Poland. Filed Jan. 10, 1929, Serial No. 331,442, and in Poland Jan. 23, 1928. 12 Claims. (Cl. 261—118.)



1. A plant for the treatment of gas, including a vertical container rectangular in cross section, means for injecting currents of atomized liquid into the container at different elevations and perpendicularly to the path of the gas passing through the container, each of the injecting means extending entirely across one side of the rectangular container.

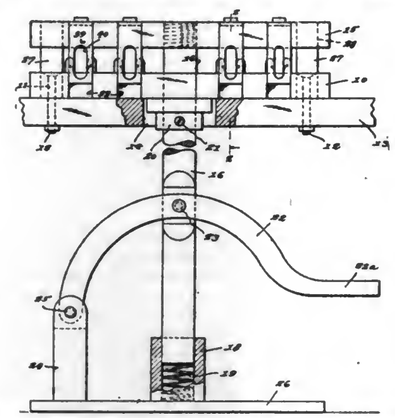
1,820,162. WOOD WORKING MACHINE. PIERRE SALVAT, San Francisco, Calif. Filed Apr. 14, 1930. Serial No. 444,051. 11 Claims. (Cl. 144—134.)



1. A wood working machine comprising a supporting pillar; a bracket adjustably mounted upon the pillar; a motor adjustably mounted upon the bracket and provided with a cutter shaft to receive a cutter of desired form; and a guide adjustably mounted adjacent the motor to guide materials moved past the cutter, said guide being movable with the motor to various adjusted positions thereof.

1,820,163. SPECIAL TOOL. IGNATZ SALZ, New York, N. Y. Filed Oct. 5, 1929. Serial No. 397,707. 3 Claims. (Cl. 29—84.)

1. A tool of the class described including a fixed member having a groove adapted to receive a feeder of a fountain pen, a pair of pins carried by said member and adapted to limit the position of a pen with respect to said feeder, a member adapted to be reciprocated over said



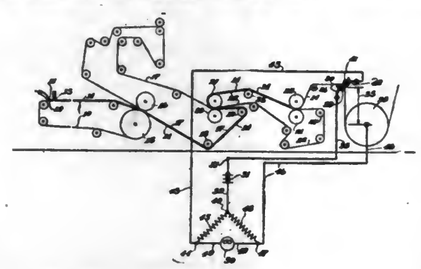
fixed member and means associated with the last-named member whereby the extent of the insertion of a nozzle over said feeder and pen may be regulated.

1,820,164. PLATEN FOR TYPEWRITERS AND ANALOGOUS MACHINES. GILBERT M. SCHERER, New York, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 23, 1930. Serial No. 422,851. 26 Claims. (Cl. 197—147.)



1. In a typewriter platen, a cylindrical core formed of wood the grain of which extends substantially radially to all points of the cylindrical surface of the core.

1,820,165. PAPER-MAKING MACHINE. WILLIAM P. SCHWEITZER, Hillside, N. J. Filed May 8, 1930. Serial No. 449,404. 14 Claims. (Cl. 92—38.)

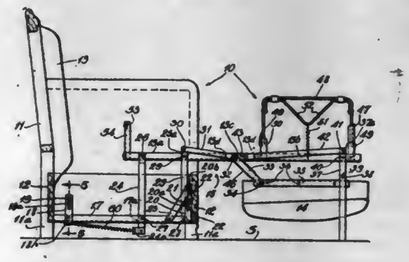


1. In a paper-making machine, means for continuously forming and advancing a paper web composed of pulp and water; a Wheatstone-bridge electric circuit; and means for automatically varying the resistance of one bridge arm in proportion to resistance variations lengthwise through a constant web area, and for automatically varying the resistance of an adjacent bridge arm in proportion to resistance variations perpendicularly through said web; whereby the balance of said bridge will be unaffected by variations of water purity, and whereby the extent of unbalance will serve as a measure of variations of web thickness in said area.

1,820,166. COPPER OXIDE RECTIFIER. CHARLES K. STROBEL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 18, 1930. Serial No. 462,145. 2 Claims. (Cl. 175—366.)

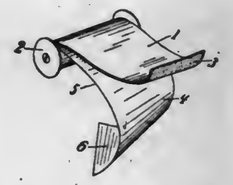
1. The method of manufacturing a copper oxide rectifier which consists in placing a copper blank in an oxidizing furnace maintained at substantially 1860° Fahrenheit for 15 minutes, removing the blank from such furnace and placing it in a second furnace maintained at substantially 1040° Fahrenheit for approximately 4 minutes and then removing the oxidized blank and allowing it to cool slowly in still air to room temperature.

1,820,167. BED CONVERTIBLE SEATING FURNITURE. SIGMUND TAFFEL, Brooklyn, N. Y. Filed Dec. 7, 1929. Serial No. 412,521. 2 Claims. (Cl. 5—31.)



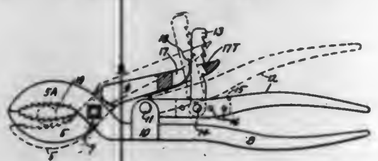
2. Bed convertible seating furniture comprising a frame having a removable seat and a bed unit collapsibly mounted in said frame under said seat, said unit comprising foldable inner and outer end sections each pivotally connected to an intermediate section, a mattress support connected to certain of said sections, an attachment member including sets of spaced swingable links securing one end section to said frame, floor supporting means comprising stanchions pivoted directly to the opposite end section and to said seat, bracket arms pivotally connected to the upper ends of said stanchions and to said intermediate section, bracket arms pivotally connected to the upper ends of said swingable links of one set and to said intermediate section, and links pivotally connected to said seat and to said intermediate section on a common pivot with said last mentioned bracket arms.

1,820,168. PHOTOGRAPHIC ROLL FILM CARTRIDGE. PAUL VEHL and EDUARD SCHNITZLER, Dessau in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Apr. 24, 1930, Serial No. 447,039, and in Germany May 7, 1929. 6 Claims. (Cl. 95—9.)



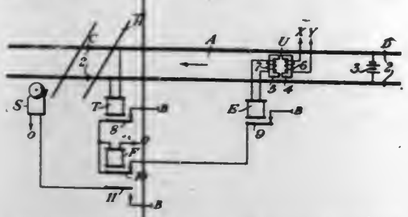
1. In a photographic film cartridge a film strip bearing a highly sensitive photographic emulsion, and a protective paper covered on the side which does not come in contact with the said highly sensitive emulsion, with a light impermeable coating consisting of a dry colloid layer and an inactinic dye.

1,820,169. PLIERS AND THE LIKE. EDWARD H. WIGAND, St. Paul, Minn. Filed Dec. 9, 1929. Serial No. 412,786. 2 Claims. (Cl. 81—46.)



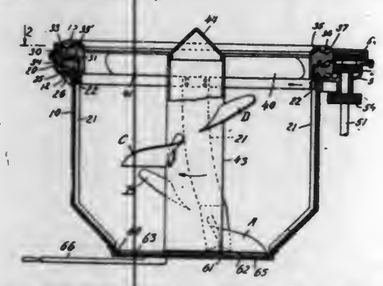
1. A pair of pliers comprising two counterpart jaw members crossed and pivotally connected, a main lever arm extending integrally from one of said jaw members and comprising one member of two hand operated levers, a secondary hand operated lever extending in a common plane with the said first lever rearwardly of the jaws and the forward end thereof fulcrumed rearwardly of the jaw-fulcrum; the other of said jaw members comprising in part an integral short arm extending rearwardly from its fulcrum and in proximity to the forward part and outwardly of the secondary hand lever described, a toothed rack bar pivoted to said short hand lever rearward of its fulcrum and adjustably engaging the said short jaw arm and yieldable means pressing said bar into engagement with said arm.

1,820,170. APPARATUS FOR THE CONTROL OF HIGHWAY CROSSING SIGNALS. PAUL F. WILLARD, Wilkinsburg, and GEORGE R. PFLASTERER, Swissvale, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1930. Serial No. 480,890. 10 Claims. (Cl. 246—130.)



1. In combination, a railway track provided with a track section, a highway intersecting said track at one end of said section, a track circuit including a track relay for said section, an auxiliary device located at an intermediate point in said section and influenced by the passage of a train, and a highway crossing signal controlled jointly by said track relay and said device.

1,820,171. MIXER. KEMPTON ADAMS, Redding Ridge, Conn. Filed Jan. 21, 1930. Serial No. 422,281. 8 Claims. (Cl. 83—73.)

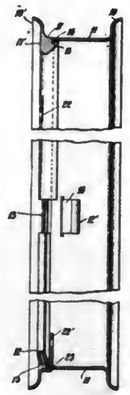


1. A mixer comprising a receptacle, a frame mounted in and disposed adjacent the inner surface of the receptacle, means on said frame for moving material circumferentially and downwardly, means for rotating said frame, a member disposed centrally in said receptacle, deflecting means on said member, inclined to feed the material upwardly and outwardly, and means for rotating said member relative to the receptacle and in a direction opposite to the direction of rotation of the frame.

1,820,172. PROCESS FOR CONCENTRATING ORES. FRANK AYER and ARTHUR CROWFOOT, Morenci, Ariz., assignors of fifty-five one-hundredths to Phelps Dodge Corporation, a Corporation of New York. Filed June 13, 1929. Serial No. 370,732. 9 Claims. (Cl. 75—18.)

1. A method for the preparation of refractory ores for subsequent treatment by flotation, said ores containing constituents separately amenable and unamenable to separation by flotation, which comprises treating the ore with a solvent to dissolve a portion of the ore unamenable to flotation, and simultaneously comminuting the ore mass in the presence of a metal which will precipitate out metal values from the dissolved portion of the ore, which metal values are freed in elemental form and rendered amenable to flotation.

1,820,173. DEMOUNTABLE WHEEL RIM. FREDERICK WILLIAM BAKER, Stourbridge, England, assignor to Trinity Wheel Corporation, a Corporation of New York. Filed Feb. 1, 1926. Serial No. 85,260. 4 Claims. (Cl. 301—11.)



1. A wheel rim having opposed separable complementary parts one having a continuous and connected flange and tire bed wtih a segmental socket member at the free edge of the bed, the second part having a continuous flange with a segmental rib disposed to enter the socket of the first part and a segmental inner bead disposed to aline with the socket of the first part, and a displaceable member fitting between the said socket and bead to hold the parts in locked engagement.

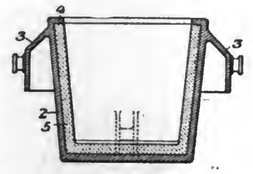
1,820,174. DISK WHEEL. FREDERICK WILLIAM BAKER, Stourbridge, England, assignor to Trinity Wheel Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 25, 1926. Serial No. 131,512. 3 Claims. (Cl. 301—5.)



1. A disk wheel having a disk terminating in a peripheral flange concentric with the wheel tread, the disk being circumferentially channelled adjacent to the flange

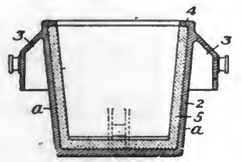
to provide an air inlet to the inner side of said flange, a tire carrying rim supported spaced about the flange, said flange being peripherally perforated to admit the air from said channel to the space between the flange and rim, and block like bearings between the flange and rim and countersunk in the flange.

1,820,175. METHOD OF PRODUCING PUDDLED IRON INGOTS. ADDISON H. BEALE, Pittsburgh, Pa., assignor, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 19, 1928. Serial No. 294,039. 6 Claims. (Cl. 75—47.)



1. In the manufacture of wrought iron, the step consisting of pouring the molten product of a steel-making process into a slag bath in an oblong receptacle, forming an oblong ingot in the bottom of the bath while distributing the pour over different points of the bath, and then compressing the oblong ingot thus formed.

1,820,176. METHOD OF GRANULATING STEEL AND FORMING WROUGHT IRON. ADDISON H. BEALE and JAMES ASTON, Pittsburgh, Pa., assignors, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 19, 1928. Serial No. 294,040. 9 Claims. (Cl. 75—27.)



1. In the making of wrought iron, the step consisting of pouring metal from a steel-forming operation into and through a bath of puddle slag of a depth greater than 18 inches.

1,820,177. MANUFACTURE OF WROUGHT IRON FROM BESSEMER STEEL. JAMES ASTON and ADDISON H. BEALE, Pittsburgh, Pa., assignors, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 19, 1928. Serial No. 294,049. 16 Claims. (Cl. 75—27.)

1. In the manufacture of wrought iron, the steps consisting of Bessemerizing metal until the carbon is below .10%, and then shotting the same in a bath of iron silicate puddle slag and forming a welded puddle-ball therein.

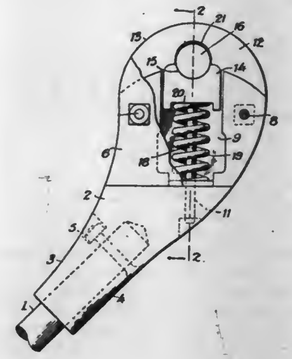
1,820,178. METHOD OF PREPARING AND REMELTING SYNTHETIC SLAGS. ADDISON H. BEALE, Pittsburgh, Pa., and HERMAN A. BRASSERT and FRED WILLE, Chicago, Ill., assignors, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 21, 1928. Serial No. 294,571. 4 Claims. (Cl. 75—27.)

1. In the manufacture of wrought iron, the steps consisting of melting materials containing iron oxides and silica in desirable ratios in a hearth furnace, maintaining a non-reducing atmosphere therein to hold the material ratios substantially the same in the slag, pouring the moulten product of a steel-making operation into portions of the molten substantially uniform slag, and forming welded wrought iron balls therein.

1,820,179. METHOD OF PREPARING OR REMELTING WROUGHT IRON SLAG. EDWARD L. IVES, Chicago, Ill., assignor, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 21, 1928. Serial No. 294,580. 2 Claims. (Cl. 75—27.)

1. In the method of preparing or re-melting slag for wrought iron use, the steps consisting of melting or re-melting slag-forming materials in a shaft furnace by solid combustible material in the charge, tapping out the liquid slag into a hearth furnace, and making additions to the charge to bring it to the desired chemical characteristics.

1,820,180. TROLLEY FOR ELECTRIC CARS. HARRY E. BUTTS, Sandusky, Ohio, assignor of one-half to Edmund L. Stewart, Sandusky, Ohio. Filed May 16, 1930. Serial No. 455,028. 3 Claims. (Cl. 191—68.)



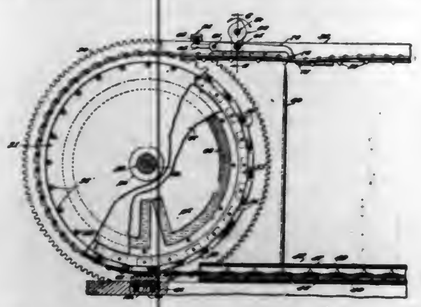
1. In a trolley, a trolley head comprising a pair of vertically divided members having their inner faces formed to provide a vertical chamber and guideways and a wire receiving channel above and communicating with said chamber and having guard flanges at opposite sides thereof, a spring supported bearing in said chamber, and a contact roller in guided connection with the members of the head and journaled for rotation upon said roller.

1,820,181. APPARATUS FOR MAKING REENFORCED WASHERS FOR COMMUTATOR RINGS. HENRY W. COOPER, West Newton, Mass., assignor to New England Mica Co., Waltham, Mass., a Corporation of Massachusetts. Filed July 16, 1927. Serial No. 206,350. 25 Claims. (Cl. 154—2.5.)

1. An apparatus of the class described having, in combination, a travelling means for supporting two loosely superimposed disks of composite mica, means for heating the disks to render them tacky, and means for subjecting the tacky disks to pressure while moving with said support to form a unitary laminated disk.

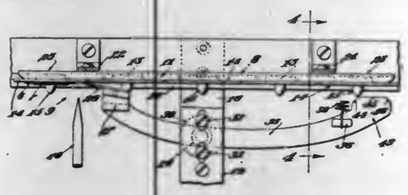
24. An apparatus of the class described having, in combination, endless conveying means on which mica washers are assembled in a succession of superposed pairs, means for supporting and advancing said conveying

means, means operating during the advance of the conveying means for causing the washers of each pair to



become united, a spindle for receiving the united pairs of washers, and means for successively ejecting said united pairs in stacked relation on said spindle.

1,820,182. APPARATUS FOR PRODUCING LAMINATED MICA WASHERS. HENRY W. COOPER, West Newton, Mass., assignor to New England Mica Co., Waltham, Mass., a Corporation of Massachusetts. Filed July 16, 1927. Serial No. 206,351. 9 Claims. (Cl. 198—185.)



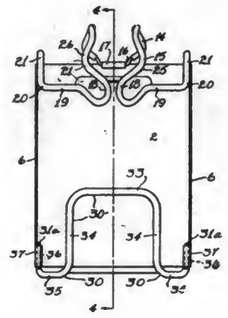
1. An apparatus of the class described having, in combination, a carrier for conducting a series of united pairs of mica disks on its under surface in succession to an ejecting station, means for causing the carrier to move in a fixed path through the ejecting station, and mechanism beneath the carrier and movable toward and from its under surface for engaging and ejecting the united pairs on the carrier as each pair successively reaches the ejecting station.

1,820,183. SCOURING DEVICE. J FRANK DARLING, Wilmington, Del. Filed Feb. 4, 1930. Serial No. 425,866. 8 Claims. (Cl. 15—209.)



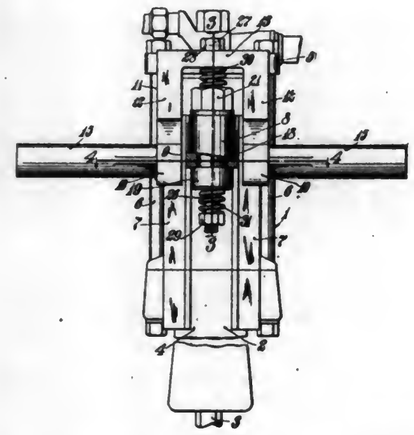
1. A scouring device comprising an abrasive pad, a plate, means connecting the said pad to the plate, oppositely projecting ears arranged on the one side of said plate and having their free ends spaced above the plate, a handle, a tongue formed on one end of said handle arranged to fit in the space between the said ears and the plate and inclined surfaces on the said tongue adapted to engage the said ears to press the tongue against the plate.

1,820,184. WRITING PAD SUPPORT. WILLIAM L. DEMING, Salem, Ohio. Filed July 9, 1927. Serial No. 204,492. 6 Claims. (Cl. 45—82.)



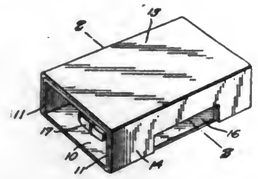
1. A pad support for use with a telephone, and comprising in combination, a relatively stiff member adapted to detachably support a paper pad and positioned in inclined and forwardly extending relation to the telephone column, a looped wire bracket engaging the said member and bifurcated to embrace the column, separate portions of the wire being extended downwardly to engage the top of the telephone base at each side of the column, and then being extended upwardly and laterally to the corners of the pad holding member.

1,820,185. PERCUSSIVE TOOL. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Sept. 29, 1925. Serial No. 59,417. 9 Claims. (Cl. 121—36.)



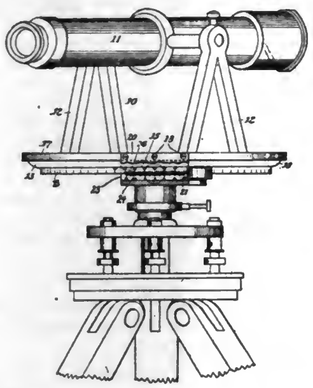
1. In a percussive tool, a cylinder having guides thereon, front and rear heads for said cylinder, means under tension for maintaining said cylinder and heads in assembled relation, and a handle supporting member slidably mounted on said guides and having portions cooperating with the tensioned portion of said holding means.

1,820,186. BAIT HOLDER. MAUDE E. GASKINS, Arcadia, Fla. Filed Feb. 25, 1928. Serial No. 256,962. 1 Claim. (Cl. 43—131.)



A bait holder comprising a single piece of material having each end notched and provided with spaced slots adjacent the medial portion thereof and folded upon itself to provide a rectangular shaped receptacle in cross section with each end fully open and with the notches and slots in alignment to provide entrances in the sides of the receptacle, a poisonous bait positioned in the receptacle on the bottom wall thereof, and adhesive applied to the outer face of the bottom wall of the receptacle for securing the latter to a surface of a support against accidental displacement therefrom by either a rodent or a person.

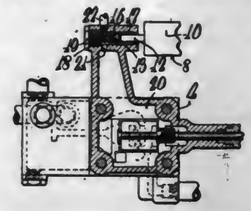
1,820,187. RECORDING MEANS FOR READINGS OF THEODOLITES AND THE LIKE. JAMES A. GAYNOR, Brooklyn, N. Y. Filed Feb. 28, 1928. Serial No. 257,587. 2 Claims. (Cl. 234—1.)



1. In a theodolite, having a stationary element and a rotatable element, in combination, a ring scale on said stationary element; an arm secured to said rotatable element; a scale carried by said arm in surface alignment with said scale on said stationary element, and means carried by said arm to take an impression of a desired relative position of the scales.

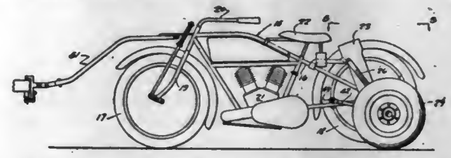
1,820,188. FORGING MACHINE. FRANK A. HALLECK, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Original application filed July 30, 1920. Serial No. 400,121. Patent No. 1,679,129, issued July 31, 1928. Divided and this application filed Sept. 9, 1924. Serial No. 736,795. 15 Claims. (Cl. 76—5.)

1. In a drill steel punch, a support having a guide, a pressure fluid operated hammer motor mounted on said guide for sliding movement relative thereto, a punch pin percussively actuated by said hammer motor, and valve mechanism for controlling the pressure fluid supply to said motor including a valve having a valve stem projecting outwardly from and secured to said hammer motor and cooperating seat means on said support, said valve



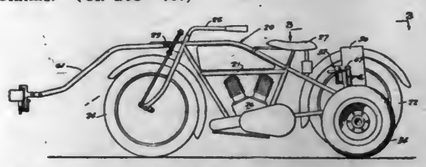
being operable by movement of said hammer motor relative to said guide and adapted to be closed positively when the hammer motor is moved to its inoperative position.

1,820,189. TOWABLE CYCLE. ALBERT LAURANCE HESS, Los Angeles, Calif., assignor to Cycletow Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed Dec. 11, 1929. Serial No. 413,267. Renewed Nov. 10, 1930. 15 Claims. (Cl. 208—79.)



1. A convertible bicycle comprising a frame having bicycle wheels in line, one of said bicycle wheels being a traction wheel; a pair of arms, one pivotally mounted on each side of said frame upon a pivotal axis inclined in relation to the ground level of said bicycle wheels whereby said arm may be positioned outwardly from said frame with its outer end at a lower ground level or inwardly with its outer end at a higher ground level, a resiliently mounted spindle member at the outer end of each arm, tricycle wheels journalled on said spindle members, said tricycle wheels being placed on said arms so that when said arms are disposed in one outward position they will engage the ground and hold said traction wheel out of ground engaging position and in a second outward position will resiliently engage the ground together with said traction wheel and when in inner position said tricycle wheels will be disposed above ground engaging position, and means to selectively lock said arms to said frame in any one of the three positions.

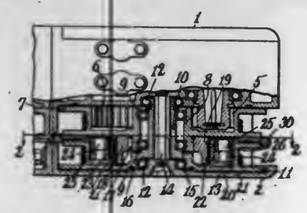
1,820,190. AUXILIARY WHEEL ATTACHMENT FOR CYCLES. ALBERT LAURANCE HESS, Los Angeles, Calif., assignor to Cycletow Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed Feb. 10, 1930, Serial No. 427,181. Renewed Nov. 10, 1930. 18 Claims. (Cl. 208—79.)



1. A convertible bicycle comprising a frame having bicycle wheels in line, one of said bicycle wheels being a traction wheel; a pair of arms, said arms being connected by joints to opposite sides of said frame for positioning in folded position against said frame or in open position outstanding from said frame, a pair of tricycle wheels journalled on said arms at the outer ends thereof, said arms being jointed to said frame so that when disposed in folded position said wheels are located above ground

engaging position and when disposed in outstanding position said wheels are disposed in ground engaging position either at or below ground engaging level of said traction wheel, toggle braces extending between said frame and said arms to lock said arms in outstanding position with said tricycle wheels below ground engaging level of said traction wheel, and means on said frame to support the joints of said toggle braces in position with said tricycle wheels at ground engaging level with said traction wheel.

1,820,191. HAULAGE MECHANISM. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 20, 1928. Serial No. 255,803. 21 Claims. (Cl. 254—183.)



1. In a haulage mechanism, relatively rotatable haulage drums of the same size one of which is power driven while the other is freely rotatable, and clutch means carried by said freely rotatable drum for connecting the latter to said power driven drum for rotation in the same direction therewith, said clutch means including clutch elements movable relative to said freely rotatable drum to effect connection between said drums and normally stationary with said freely rotatable drum when in their released position.

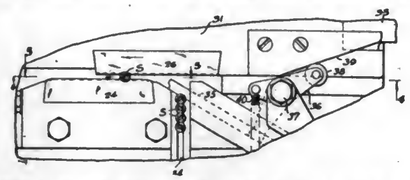
1,820,192. CONTAINER CLOSURE. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 30, 1929. Serial No. 351,194. 3 Claims. (Cl. 220—39.)



1. A container closure comprising a screw-threaded nozzle having an opening therein, and an open-bottomed screw-threaded cap therefor adapted to be screwed on said nozzle, said nozzle having a flange surrounding said opening, said cap being provided with a gasket retaining seat and having a portion of the side wall thereof extended outwardly beyond said screw threaded portion to provide a finger hold, and a gasket positioned within said seat and brought into engagement with said nozzle flange when said cap is screwed on said nozzle.

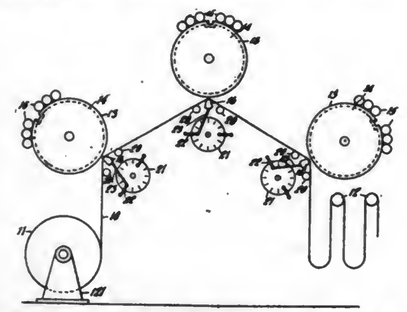
1,820,193. DEVICE FOR ROLLING SCREW THREADS. HARVEY HUBBELL, JR., Bridgeport, Conn., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 12, 1927. Serial No. 160,627. 8 Claims. (Cl. 80—8.)

4. A screw thread rolling die comprising a block having in one face thereof a plurality of parallel inclined ribs to form threads in a screw rolled against them, said ribs being arranged in two groups with the ribs in one group arranged to form a thread of a different pitch from that formed by the other group, the two groups being arranged side by side so as to act simultaneously on the bolt being threaded to form a continuous thread, the ribs of one group being shorter than the adjacent ribs of the other group so that the thread is formed for the entire thread-



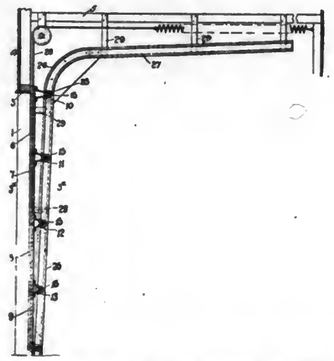
ed length of the bolt of the pitch corresponding to the second group and then a portion of this thread is shifted to a different pitch by the first group while the metal of the thread is in a flowing state.

1,820,194. PROCESS OF AND APPARATUS FOR PRINTING. WILLIAM C. HUEBNER, Chicago, Ill. Filed Dec. 30, 1927. Serial No. 243,642. 19 Claims. (Cl. 101—426.)



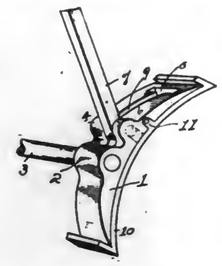
14. The herein described improvement in the art of printing, which comprises taking a printing surface having an inked image thereon, bringing said printing surface into close proximity to an image receiving surface within an induced field, to thus effect the transfer of the inked image from the printing to the receiving surface.

1,820,195. GARAGE DOOR. CLARENCE G. JOHNSON, Detroit, Mich. Filed Oct. 6, 1024. Serial No. 741,837. 14 Claims. (Cl. 20—20.)



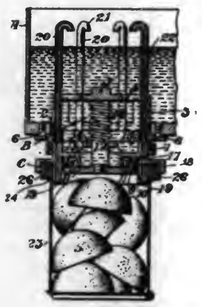
1. In a flexible panel door construction adapted for the closing of a doorway, a plurality of horizontally hinged panels, brackets extending rearwardly of said door, certain of said brackets forming the hinges of said panels, and tracks guiding said brackets in an upward and then a rearward direction upon the opening of said door.

1,820,196. RAILWAY CAR BRAKE. WILLIAM HENRY LAWRENCE, Oklahoma City, Okla. Filed Jan. 21, 1929. Serial No. 333,979. 6 Claims. (Cl. 188—206.)



1. A brake shoe construction consisting of a brake-shoe body having a combined transverse and centrally located slot in union, and associated with the under cut of a housing formed on the brake shoe, a brake hanger having a pin for engagement with the undercut housing, said hanger being adapted to be inserted into the transverse slot, passed along the central slot for insertion into the housing, and reversedly withdrawn at will, a brake shoe facing for holding the hanger and pin on the shoe and means to hold the facing to the body of the shoe.

1,820,197. FILLING VALVE. THURMAN MCGHEE and PETER WOODHEAD, Hayward, Calif., assignors, by direct and mesne assignments, to Sprague-Sells Corporation, Hoopeston, Ill., a Corporation of Delaware. Filed Mar. 19, 1923. Serial No. 626,110. 16 Claims. (Cl. 226—124.)

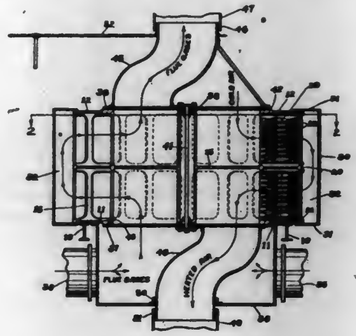


13. In a device of the character described, an annular and movably mounted valve, the upper end of the valve being in communication with a source of liquid supply and the lower end forming a discharge outlet, a stationary seat for said valve, and means interposed between the valve and seat for forming a liquid seal when the valve is open.

1,820,198. NONINFLAMMABLE FABRIC AND PROCESS OF MAKING THE SAME. ALAN F. RANDOLPH, Verona, N. J., assignor, by mesne assignments, to The Celastic Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 9, 1926. Serial No. 134,579. 5 Claims. (Cl. 91—68.)

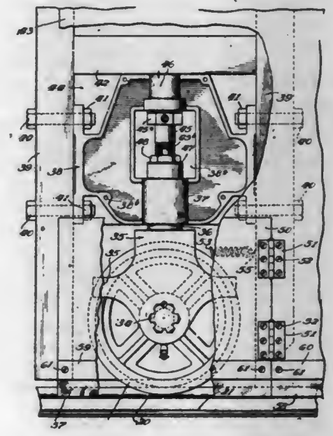
1. As an article of manufacture, a porous fabric having in and through the interstices thereof, and carried within the same as a filling therefor, a powdered colloidal material in precipitated form, forming a porous deposit capable of ready penetration by solvents therefor, together with a fire-retardant, such retardant being deposited within, entangled in and distributed through the deposit of colloidal material.

1,820,199. FURNACE HEAT EXCHANGE APPARATUS. ROBERT SANFORD RILEY, Worcester, Mass., assignor, by mesne assignments, to The Air Preheater Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 10, 1925. Serial No. 49,255. 16 Claims. (Cl. 257—6.)



10. A regenerative heater comprising a stationary cylindrical casing divided internally into a plurality of separated radial passages, heat absorbing material within said passages, and a rotatable valvular device having channels therein positioned to selectively and successively conduct a hot gas and a gas to be heated to and away from said passages.

1,820,200. SUPPORTING MEANS FOR DOORS. JOHN EDWARD SCOTT, Danville, Ill. Filed July 17, 1929. Serial No. 378,868. 11 Claims. (Cl. 16—100.)

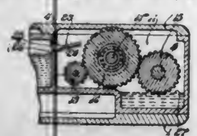


3. The combination with a door, of a supporting roller connected to said door and having a swinging movement about an axis transverse to its axis of rotation, and means comprising a sub-door for enclosing said roller, said sub-door being movable outwardly to accommodate the swinging movement of said roller.

1,820,201. LUBRICATING SYSTEM. LEON P. SIMMONS, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Sept. 6, 1927, Serial No. 217,745, and in Great Britain Aug. 9, 1927. 15 Claims. (Cl. 184—11.)

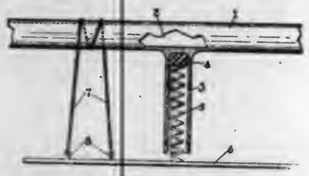
15. In an apparatus of the character described, a motor housing containing a motor having a power shaft, a gear

casing having a main gear chamber adjacent said motor housing and containing lubricating oil, an intermediate chamber between the motor housing and the gear casing and into which said motor power shaft projects and in which the lubricating oil leaking from the main gear chamber of the gear casing is collected, and devices located



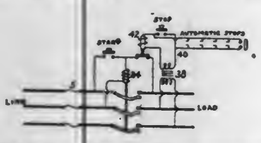
in the intermediate chamber for automatically discharging oil from said chamber so that the oil level in the intermediate chamber is kept below the motor shaft and including a discharge device which returns the oil collected from the intermediate chamber directly back to the main gear chamber.

1,820,202. VACUUM TUBE LAMP SUPPORT. ROBERT C. SMALLEY, Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed May 1, 1926. Serial No. 105,895. 8 Claims. (Cl. 248—30.)



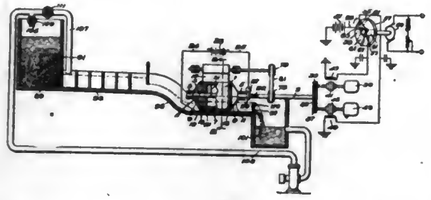
1. A support for attaching lamps of the class described to a base comprising a sleeve forming part of said lamp, a spring retained in position by the sleeve for maintaining said lamp out of contact with said base, and means for securing said lamp against said spring.

1,820,203. AUTOMATIC CUT-OFF SWITCH. CONNIE W. WHITEHEAD, Chattanooga, Tenn., assignor, by mesne assignments, to New Era Electro Devices, Chattanooga, Tenn., a Corporation of Tennessee. Filed Apr. 20, 1927. Serial No. 185,314. 1 Claim. (Cl. 175—375.)



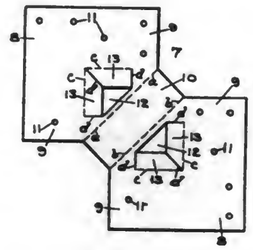
Means for the purpose set forth comprising a working circuit including main line conductors, fixed contacts, and rocking contacts pivoted eccentrically whereby to set normally away from the fixed contacts, an armature connected to and movable with said rocking contacts, a magnet arranged to cooperate with said armature, a starting circuit extending from two main line conductors and through the magnet whereby when the starting circuit is closed the magnet will be energized and the rocking contacts caused to engage the fixed contacts and close the working circuit, a holding circuit extending from a fixed contact and over a part of the starting circuit through the magnet whereby the holding circuit will be closed simultaneously with the working circuit and the energization of the magnet will be maintained, said holding circuit including relatively movable parts located between the fixed contact and the starting circuit, a step-down transformer having its high side connected to two fixed contacts, and a stopping circuit including the low side of the transformer and controlling the relatively movable parts in the holding circuit whereby when the stopping circuit is closed said parts will be separated and the holding and working circuits will be broken.

1,820,204. ELECTROLYTIC METHOD AND APPARATUS. RICHARD A. WILKINS, Beverly, Mass., assignor to Industrial Development Corporation, Salem, Mass., a Corporation of Maine. Filed Jan. 12, 1929. Serial No. 332,108. 12 Claims. (Cl. 204—5.)



1. Electrolytic apparatus comprising, in combination, an electrolytic cell having a cathode, means for guiding the electrolyte in a swift-flowing continuous stream along the cathode surface in contact therewith, and means for reciprocating said cathode for reciprocating said surface thereof transversely to the direction of flow of said stream while depositing thereon.

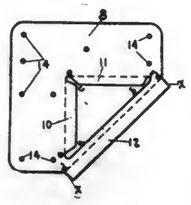
1,820,205. CORNER PIECE FOR FRAME STRIPS. THEODORE R. WILSON, Omaha, Nebr., assignor to Micklin Lumber Company, Omaha, Nebr., a Corporation. Filed June 10, 1929. Serial No. 369,687. 1 Claim. (Cl. 29—92.)



A corner piece for frame members comprising a substantially rectangular bridge adapted to extend within the plane of the joint of the frame members and overlie the joint, wings connected to the bridge and extending in a plane at an angle to the plane of the bridge and adapted to engage the frame members, each wing having frame engaging portions struck therefrom and extending in a plane at an angle to the plane of the wing, that part of the wing between said frame engaging portions and the bridge forming an angularly disposed reinforcing flange integral with the bridge and arranged in a plane at an angle to the plane of the bridge, said reinforcing flange extending longitudinally of the bridge and oppositely disposed to said frame engaging portions, the flange being co-extensive with the wing to reinforce the bridge throughout its length.

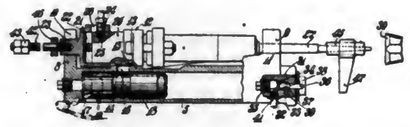
1,820,206. FASTENING MEANS FOR CORNER FRAME STRIPS. THEODORE R. WILSON, Omaha, Nebr., assignor to Micklin Lumber Company, Omaha, Nebr., a Corporation. Filed Aug. 18, 1930. Serial No. 475,968. 1 Claim. (Cl. 20—92.)

A corner brace for frame members comprising an integral plate having substantially right angularly extending leg portions which engage the sides of the frame members to be braced and an integral connecting portion connecting said leg portions, flanges struck out from said leg portions and engaging the frame members within the plane of their joint, and a flange extending from the connecting portion of said plate to lie within the plane and across the joint of the frame members, said flange being



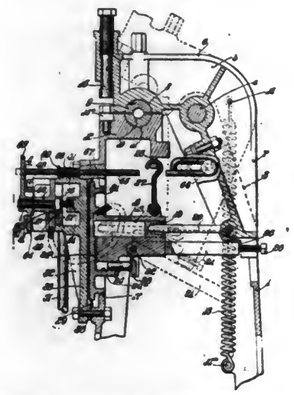
substantially rectangular in shape and reinforced by said connecting portion with the free edges of said flange contacting with the sides of the frame members.

1,820,207. FORGING MACHINE. WADE H. WINEMAN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 28, 1925. Serial No. 65,452. 41 Claims. (Cl. 76—5.)



1. A drill steel forming mechanism comprising a punch, means for first imparting a forward hammering action thereto consisting of a series of repeated blows, and means for causing a rearward impact to be imparted thereto after said hammering action consisting of only a single blow.

1,820,208. FORGING MACHINE. WADE H. WINEMAN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Jan. 4, 1928. Serial No. 244,480. 16 Claims. (Cl. 76—5.)



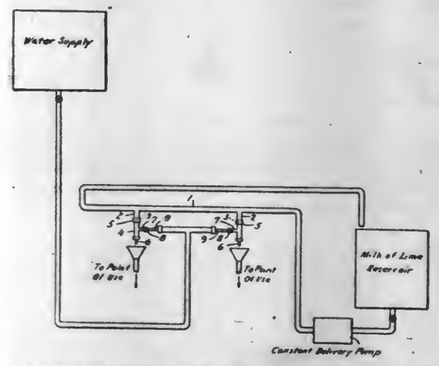
1. In a forging machine, a clamping device comprising a pair of relatively movable jaws, fluid pressure means for closing said jaws comprising a plurality of pressure fluid actuated elements movable relative to one another in the same direction, one of said elements presenting a larger effective area to the action of fluid pressure than another of said elements, and means whereby each of said elements is adapted to transmit through solely mechanical connections its operating force during the clamping operation.

1,820,209. EDUCATIONAL DEVICE. HARRY S. C. BACON, Philadelphia, Pa., assignor to Ketterlinus Lithographic Mfg. Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1929. Serial No. 408,448. 6 Claims. (Cl. 35—16.)



5. In a device of the character stated, a blank comprising two body portions separated by a crease, a typewriter key-board having its buttons formed in relief on one of said body portions, a plurality of lesson sections being separated from said body portion by creases, and being detachable from said body portion along said creases, and end flaps for said lesson sections adapted to be deflected to form supports therefor.

1,820,210. REAGENT FEEDING. LYLE M. BARKER, Clarkdale, Ariz., assignor to United Verde Copper Company, Clarkdale, Ariz., a Corporation of Delaware. Filed Mar. 18, 1929. Serial No. 347,924. 5 Claims. (Cl. 137—78.)

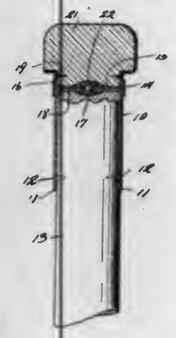


1. Apparatus of the class described comprising a mixing chamber provided with a discharge outlet, means for delivering a fluid reagent to said mixing chamber under substantially uniform pressure, means for delivering a fluid diluent to said mixing chamber under relatively higher substantially uniform pressure, and means for controlling the amount of fluid diluent admitted to said mixing chamber to control the relative amounts of reagent and diluent passing through said discharge outlet.

1,820,211. SWIVELED TOOL HANDLE. WILLIAM C. BARRIER, Fremont, Nebr. Filed May 27, 1930. Serial No. 456,160. 1 Claim. (Cl. 145—61.)

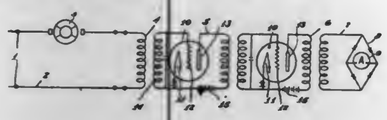
A readily assembled swivel connection for handles comprising two caps or cylindrical members having each an

end wall and swiveled to each other by a rivet passed through and headed over on each end wall, an encircling band or flange secured to one of the cap members and extending over the other to cover the joint between them



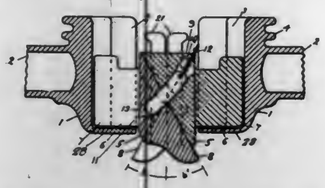
and maintain them in axial alinement while permitting the swivelling thereof, and handle members inserted in said cap members secured by means passing through the cylindrical walls into the handle members.

1,820,212. ELECTRIC METER. PAUL SHERMAN BAUER, Cambridge, Mass. Filed Nov. 7, 1929. Serial No. 405,488. 6 Claims. (Cl. 171—95.)



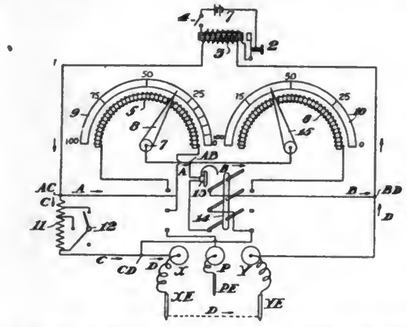
3. An electric meter comprising a circuit in which there is a direct-current electrical quantity to be measured, means for converting the direct-current electrical quantity into an interrupted-current electrical quantity, an amplifier for amplifying the interrupted-current electrical quantity, a transformer coupling the converting means with the amplifier, and means for measuring the amplified electrical quantity.

1,820,213. AUTOMATIC COUPLING. VLADIMIR NICOLAIEVITCH BOGDANOV, Moscow, Union of Socialist Soviet Republics. Filed Nov. 18, 1929. Serial No. 408,011. 7 Claims. (Cl. 213—76.)



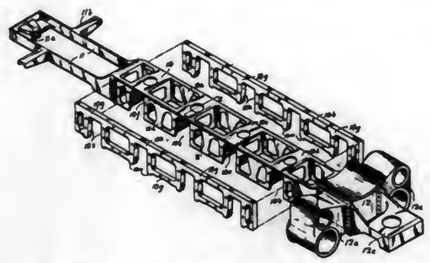
1. In an automatic coupling, the combination with a head adapted to be attached to a vehicle and provided with a vertical dovetailed slot closed at its lower end, of a coupling block, the rear end of said block being provided with an enlarged portion adapted to fit said slot, said block with said enlarged portion being adapted to slide vertically in said slot and to rotatively oscillate in a horizontal plane, a plurality of inclined surfaces at the front end of said block adapted to engage corresponding inclined surfaces of a corresponding block on another vehicle thereby aligning said block in a vertical plane, said front end of said block being provided with apertures passing through said inclined surfaces, locking pins slidably fitted in said apertures and adapted to join said respective coupling blocks together, and means to align said coupling blocks in a horizontal plane.

1,820,214. METER FOR MEASURING GROUND RESISTANCE. STEPHEN W. BORDEN, Summit, N. J. Filed Mar. 18, 1929. Serial No. 347,780. 4 Claims. (Cl. 175—183.)



1. A zero balancing bridge for measuring the resistance of an earth electrode which includes four bridge arms as A, B, C and D; A and B each containing a rheostat, having a movable contact, C containing a known resistance and D containing two binding posts; a source of electric potential connected between the junction of arms A and C and the junction of arms B and D and a zero current detector connected between the junction of arms A and B and the junction of arms C and D; a graduated scale associated with the rheostat in the arm B and a double-throw switch so connected that when thrown in one direction the connections of the bridge are as stated above and when thrown in the other direction the rheostat of arm A will have its two ends connected to the two binding posts, the source of electric potential will be connected to the two binding posts and the zero detector will be connected between the movable contact of the rheostat in arm A and a third binding post.

1,820,215. LOCOMOTIVE BED. ALFRED W. BRUCE, New York, N. Y. Filed Aug. 13, 1929. Serial No. 385,657. 21 Claims. (Cl. 105—172.)

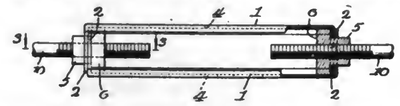


1. A locomotive bed comprising a body member formed as an integral, one piece casting for carrying the load of a steam locomotive super-structure, and a pair of separately formed side members comprising pedestal jaws.

1,820,216. TURNBUCKLE. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed Aug. 18, 1928. Serial No. 300,598. 4 Claims. (Cl. 287—60.)

4. A turn buckle comprising a pair of plates made of sheet metal bent into shape to provide right angle end

portions having openings therein, and threaded one-piece nut portions anchored in said openings, each one-piece nut having means to permanently hold said plates together

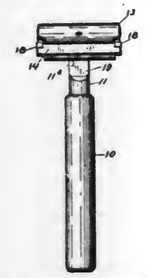


in fixed relation, said means comprising lateral recesses in the nut portions into which portions of said plates are forced.

1,820,217. CONSTRUCTIONAL MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 5, 1926. Serial No. 106,986. 12 Claims. (Cl. 94—18.)

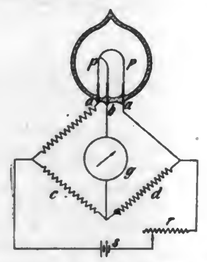
1. A preformed expansion joint comprising a predominating mass of ductile bituminous material and vegetable fiber incorporated therein, said vegetable fiber being of sufficient length to reenforce the ductile material for preventing brittleness or oozing in extreme temperatures.

1,820,218. SAFETY RAZOR. PAUL A. FRANK, Akron, Ohio. Filed May 16, 1928. Serial No. 278,170. 7 Claims. (Cl. 30—12.)



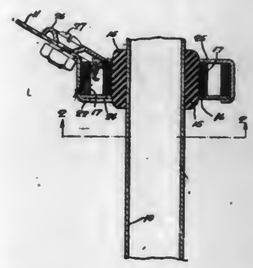
7. A safety razor comprising a handle, a blade supporting head swiveled thereon for movement to either a shaving position transversely of the handle or a stopping position longitudinally of the handle, and a detachable guard adapted to be slipped over the blade and into engagement with the handle to hold the head in its transverse position.

1,820,219. OPTICAL PYROMETER. DOUGLAS CRISP GALL, South Norwood, England. Filed June 23, 1928, Serial No. 287,683, and in Great Britain June 29, 1927. 5 Claims. (Cl. 88—14.)



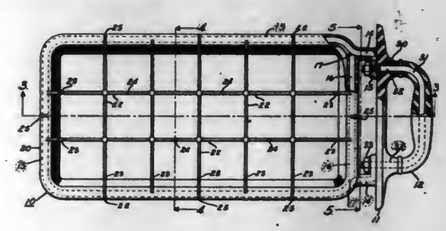
1. An optical pyrometer comprising in combination: a Wheatstone bridge, a galvanometer in said bridge, a lamp in one of the arms of the bridge, a compensating resistance loop inside said lamp arranged in a contiguous arm of the bridge, a source of current for supplying current to the bridge and to the lamp and means for regulating the current.

1,820,220. STEERING WHEEL AND SHAFT ASSEMBLY. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed July 2, 1928. Serial No. 289,698. 3 Claims. (Cl. 280—87.)



3. In a steering mechanism for automotive vehicles and the like, in combination, an unhoused rotatable steering shaft, a resilient vibration damping bearing for said shaft intermediate the end portions thereof, said bearing comprising: a relatively hard rubber sleeve portion forming the bearing proper, a relatively soft rubber annulus of less axial length than said sleeve portion surrounding and yieldably supporting said sleeve portion, and a stationary metal housing bracket having top and bottom flanges thereon retaining and supporting the outer portion only of said soft rubber annulus, whereby to provide a fixed yieldable support for said hard rubber sleeve portion.

1,820,221. FREEZING TRAY. HARVEY D. GEYER and FREDERICK W. SAMPSON, Dayton, Ohio, assignors to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 31, 1930. Serial No. 457,742. 5 Claims. (Cl. 62—108.5.)



1. A freezing tray adapted to be inserted by hand within a freezing tray compartment, comprising: a molded non-metallic container having a stiffening metal inserted therein, said insert having a portion projecting outwardly in front of said container, and a separate flexible rubber closure front for said compartment secured to said outwardly projecting portion of said insert.

3. A molded rubber freezing container having a metal stiffening insert molded in situ therein, said metal insert having a series of spring clips snapped thereupon in spaced relation and extending to the outer surface of the molded rubber, whereby said insert is properly located in the mold cavity.

1,820,222. FILE, TEMPORARY BINDER, LOOSE LEAF BOOK AND THE LIKE. GEORGE HERBERT GUYATT, Warwick Lane, London, England, assignor to John Walker & Company, Limited, London, England. Filed Dec. 20, 1929, Serial No. 415,390, and in Great Britain June 4, 1929. 3 Claims. (Cl. 129—9.)

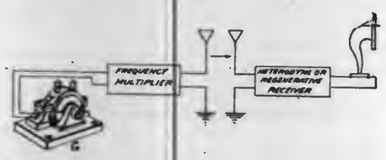
1. A device of the kind referred to, comprising a plate, a second plate slidable upon the first and in superposed

relation to the lower plate, a plurality of cam slots provided in the upper slidable plate and engaging said pins; whereby the upper plate is slidable in a longitudinal, and,



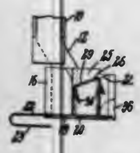
to some extent, in a transverse direction relative to the lower plate, a plurality of cooperating prongs provided on both the upper and lower plate, and a guide formed integral with the lower plate.

1,820,223. HIGH-FREQUENCY MACHINE TRANSMITTER. WALTER HAHNEMANN, Berlin-Marienfelde, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Oct. 27, 1927, Serial No. 229,220, and in Germany Oct. 28, 1926. 4 Claims. (Cl. 250—17.)



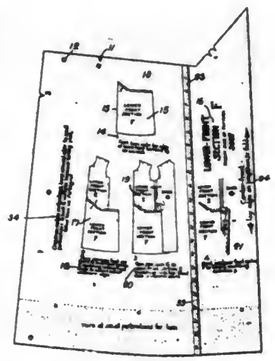
1. The method of transmitting messages between a wireless transmission apparatus supplied with current by a high frequency alternator and a heterodyne or regenerative receiver so as to prevent trilling of the beat note in the receiver, which consists in transmitting and receiving the messages while during transmission suppressing the mechanical torsional vibrations of the stator relative to the rotor of the alternator which give rise to frequency variations producing such beat note trills.

1,820,224. HOLDER AND CARRIER FOR A RIVETING MACHINE. ARTHUR R. HAVENER, Wayland, Mass., assignor to Judson L. Thomson Manufacturing Co., Waltham, Mass., a Corporation of Massachusetts. Filed Aug. 7, 1930. Serial No. 473,679. 7 Claims. (Cl. 1—3.)



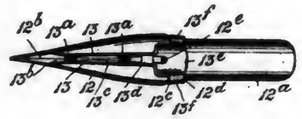
2. A holder and carrier for a riveting machine having, in combination, a slide, a pair of oppositely disposed spring arms fast to said slide and spaced apart, and a pair of oppositely disposed plates fast to the lower ends of said arms and spaced apart to form a chamber adapted to receive a two-pronged rivet, the inner faces of said plates being recessed to form a pair of oppositely disposed inclined ridges upon which the head of a two-pronged rivet may rest and whereby said rivet is held in an inclined position.

1,820,225. PATTERN SET. MAX HERZBERG, New York, N. Y., assignor, by mesne assignments, to Pictorial Review Company, New York, N. Y., a Corporation of New York. Filed Jan. 27, 1927. Serial No. 163,861. 6 Claims. (Cl. 33—12.)



1. A garment pattern set, including a multiplicity of tissue paper pattern sections from which corresponding garment portions are to be formed, one of said sections providing the foundation piece of said set, and the other sections comprising the remaining portions of the garment pattern; said foundation piece having upon its body an illustration of the manner in which it is to be associated with the sections to be disposed immediately adjacent thereto, and certain of said other sections bearing similar illustrations indicating the manner in which they are to be associated with portions respectively immediately adjacent thereto.

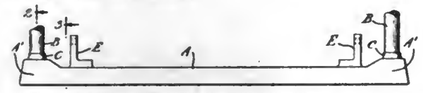
1,820,226. RESERVOIR PEN. HORACE RODERIC HUGHES, Alcester, England. Filed Jan. 17, 1929, Serial No. 333,061, and in Great Britain Mar. 24, 1928. 1 Claim. (Cl. 120—114.)



A reservoir pen nib comprising a separate member adapted to be disposed on the underside of the anterior portion of the nib, a plurality of substantially parallel webs formed integral with the said member and constituted by slitting the said member and bending the marginal portions of the slit sections through angles of approximately 90° so that the webs are arranged edgewise relatively to the nib and with their upper edges in substantial abutment with the underside of the anterior portion of the pen nib, transverse means located intermediate the ends of the webs and connecting the outer edges thereof, a rear extension of the said member shaped to conform to the part of the nib to which it is adjacent, a cut away portion adjacent to the said shaped rear portion of the aforesaid member, a centrally disposed downwardly bent tongue pressed out of the nib and adapted to engage with the said cut away portion, and ear pieces formed integral with

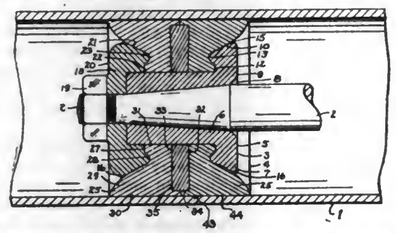
the said rearward extension and adapted to be bent round the nib for securing the aforesaid member thereto, said ear pieces in conjunction with the aforesaid tongue constituting a three point attachment means for the said member which ensures the correct positioning thereof relatively to the nib.

1,820,227. FLUID HEATING ELEMENT. WALTER F. KEENAN, Jr., Pelham, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 23, 1927. Serial No. 177,796. 7 Claims. (Cl. 257—248.)



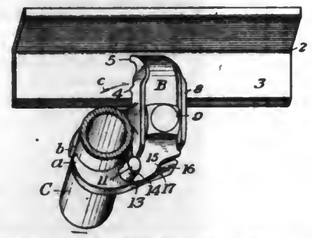
1. A new article of manufacture consisting of a tubular fluid heating element made of wrought metal and having its end portions internally and externally enlarged to provide suitable spaces for the introduction and discharge of the fluid heated from and into transverse end connections and having integral portions closing the outer end of said spaces and having end connection openings in said enlarged portions and having parts welded to said end portions to thicken the portions of the wall thereof surrounding said openings.

1,820,228. PUMP PISTON. EUGENE KIBELE, San Antonio, Tex.; Eugenia Schroeder executrix of said Eugene Kibele, deceased. Filed Dec. 11, 1928. Serial No. 325,298. 8 Claims. (Cl. 74—109.)



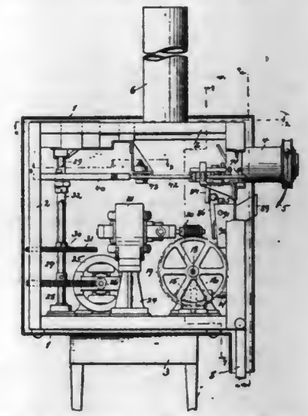
1. A pump piston including an approximately cylindrical body, a radial flange at one end and a follower plate at the other end, means to clamp said follower plate slidably upon said body, the peripheral surfaces of said flange and plate being tapered inwardly, a packing ring on said body between said flange and plate, and lips on said packing ring curved outwardly to overlie said flange and plate and to be compressed outwardly thereby to force said lips more positively against the cylinder.

1,820,229. CONDUIT SUPPORT. CLARENCE C. KORNS, Johnstown, Pa. Filed Aug. 26, 1926. Serial No. 131,653. 9 Claims. (Cl. 248—32.)



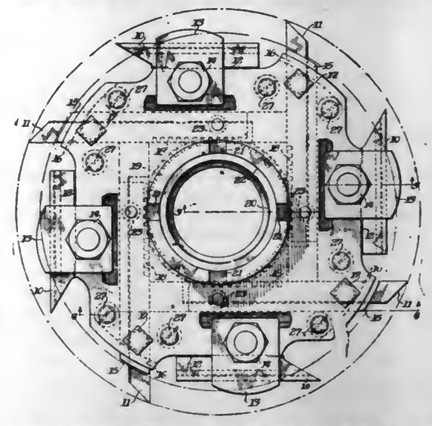
8. As an article of manufacture, a pair of clamping members, a bolt extending therethrough for drawing said members together, and jaws on said members rotatable about the bolt and having cooperating surfaces for contracting the jaws when the clamping members are drawn together.

1,820,230. AUTOMATIC PHOTOGRAPHIC APPARATUS. MATTHEW MARRIN KULUS, New York, N. Y., assignor to Photoself Machine Corporation, Jamaica, N. Y., a Corporation of New York. Filed Oct. 11, 1927. Serial No. 225,435. 17 Claims. (Cl. 95—14.)



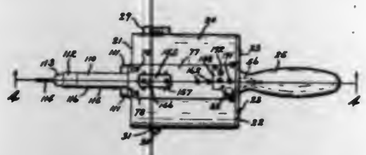
1. In automatic photographic apparatus, the combination with a closed casing, a frame therein and a photographic lens and shutter carried thereby, of a magazine for a plurality of single sensitized elements, means for successively delivering said elements from said magazine to exposure position, means for retaining said sensitized elements in position while being exposed, means for releasing the exposed sensitized element, a developing tank, a revolving member for moving the exposed sensitized element through said tank and then delivering it from said casing, a source of electric energy, an electric circuit, means for closing said circuit, an electric motor in said circuit, a slide-member shifted by said electric motor upon the closing of said circuit to thereby actuate said retaining and said releasing means and the shutter.

1,820,231. CUTTER HEAD. FRANKLIN L. LANE, Beloit, Wis., assignor to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed Feb. 21, 1927. Serial No. 169,705. 8 Claims. (Cl. 144—218.)



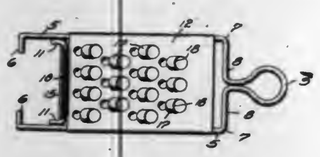
1. In a cutter head, a body having a plurality of elongated sockets therein, holders in the sockets, knives in the holders, means connected with the holders for retracting or projecting all of the holders simultaneously and to an equal extent longitudinally of the socket, and means for permitting each of the knives to be moved separately longitudinally of the sockets.

1,820,232. VIBRECORDER. ROGER KENNETH LEE, Dayton, Ohio, assignor to General Motors Research Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 2, 1925. Serial No. 12,632. 4 Claims. (Cl. 234—1.)



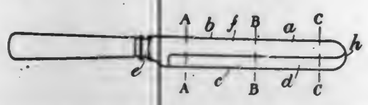
1. In a vibration recording device, the combination of a record sheet and a marker therefor, of means for operating the marker comprising a feeler adapted to engage the vibrating member, a flexible strap between the feeler and marker and differential springs connected with the feeler and marker respectively.

1,820,233. KITCHEN UTENSIL. RUBY LEEDS, Seattle, Wash. Filed Apr. 8, 1929. Serial No. 353,527. 4 Claims. (Cl. 146—171.)



1. In a kitchen utensil of the character described, the combination of a wire frame having a plurality of supporting leg elements, and a rectangular cutter plate detachably mounted upon said frame, said cutter plate being adapted to be connected at one end thereof with the underside of the frame and at opposite sides of the frame by means of downwardly extending flanges.

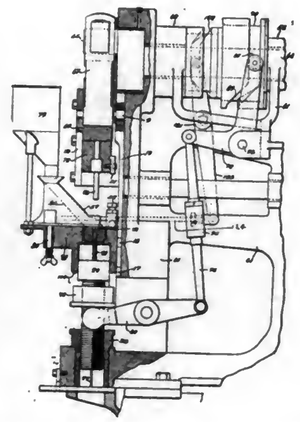
1,820,234. CUTLERY AND THE LIKE. NORA ELSA LEES, Sheffield, England. Filed Sept. 26, 1929, Serial No. 395,234, and in Great Britain Sept. 29, 1928. 4 Claims. (Cl. 30—9.)



1. A knife having its blade hollow ground on one face thereof alongside the cutting edge, said blade tapering in thickness longitudinally towards the point and the hollow increasing in fulness towards the point.

1,820,235. BRIQUETTING MACHINE. JOHN C. LEMMING and ALBERT H. VALENTINE, Dayton, Ohio, assignors to The Moraine Products Company, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 15, 1929. Serial No. 340,111. 4 Claims. (Cl. 18—5.)

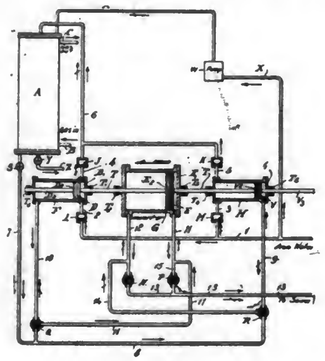
1. Molding apparatus for briquetting a flanged end bushing, comprising: a reciprocatable die having a mold cavity provided by two bores of different diameters, a stationary central mandrel projecting through said mold cavity, larger and smaller tubular rams received respectively by the bores at opposite ends of said mold cavity and having a sliding fit upon said central mandrel, means for filling said cavity with material, means for forcing said larger ram into said larger bore a predetermined distance to form the bushing flange of the desired thickness, means for then holding said larger ram and die in positively fixed relation and causing relative movement there-



of with respect to said smaller ram to complete the briquetting operation, means for withdrawing said larger ram, and means for moving said smaller ram relative to said die to eject the briquetted bushing.

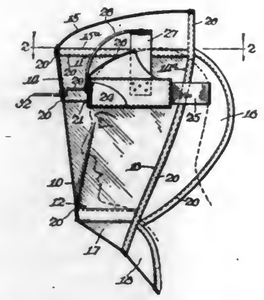
1,820,236. PROCESS AND APPARATUS FOR UTILIZING THE ENERGY OF A LIQUID UNDER PRESSURE. HENRY S. LOUD, Syracuse, N. Y., assignor to Atmospheric Nitrogen Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1928. Serial No. 317,668. 10 Claims. (Cl. 261—34.)

1. Apparatus for the circulation at an elevated pressure of a liquid utilizing the energy of a liquid under pressure which comprises a piston rod element provided with more than two piston faces movable in a housing, means for causing the liquid under pressure to act upon opposed piston faces alternately corresponding to the alternations



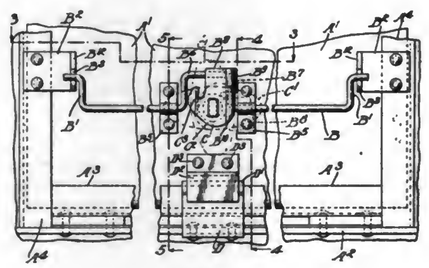
in the stroke of the piston rod, means for causing the liquid to be circulated to simultaneously act upon piston faces corresponding to the piston faces upon which said liquid under pressure acts, and means for causing, simultaneously, piston faces opposed to the faces upon which said liquid is acting, to act upon portions of the liquid to be circulated, said opposed piston faces which contact with the liquid to be circulated being each a part of a double-acting piston element, another face of which contacts with the liquid under pressure.

1,820,237. FACE-AND-HEAD PROTECTOR. ROBERT MALCOM, Chicago, Ill. Filed Feb. 1, 1929. Serial No. 336,898. 3 Claims. (Cl. 2—9.)



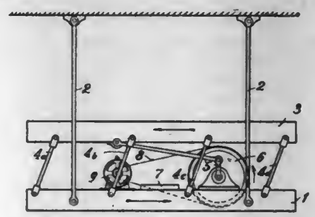
1. A face-and-head protector of the character described comprising a window element of transparent thin and flexible material substantially the height of the wearer's face and bowed substantially U-shaped in top view and extending rearward at the sides sufficiently to overlie the wearer's face, with a vertically-long flap at each side extending sufficiently further rearward to protect the rest of the wearer's head at the sides thereof, a cover secured to said window element at the top thereof, a chin-protecting part secured to said window element at the bottom thereof, a flexible throat-protecting flap secured to said chin-protecting part and extending downwardly and rearwardly therefrom, and means for holding the window element and its associated parts upon the wearer's head, said means including a substantially stiff U-shaped band-like member open rearwardly, with means for holding same in spaced relation to and within the confines of said window element, flexible means adapted to rest upon the top of the wearer's head for limiting the downward movement of said band-like member, and band means for the wearer's head extending rearward from said U-shaped member to complete therewith a band for encompassing the wearer's head.

1,820,238. HOOD LATCH. NORTON A. MEARS and DIBRELL P. HYNES, Chicago, Ill., assignors to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed May 10, 1929. Serial No. 361,932. 6 Claims. (Cl. 292—215.)



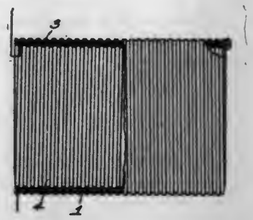
1. A latching device for an automobile hood which includes a plurality of latch abutments positioned within the hood and laterally inwardly spaced therefrom when the hood is in closed position, a rock shaft adapted to be supported upon the interior of said hood, said shaft having an intermediate offset portion, a cam member, adapted to engage said offset portion, rotatably mounted within and upon the hood, an exterior handle adapted to rotate said cam member, and portions adapted to engage said latch abutments, and means, associated with said cam member, adapted to prevent retrograde rotation of the rock shaft in response to pressure thereagainst, said means including a lateral extension of said cam adapted to overlie said offset portion when the device is in locking position, said lateral extension, and the portion of the offset opposed thereto, being in general parallelism with the rock shaft.

1,820,239. MEANS FOR AND METHOD OF COMPENSATING OSCILLATING MASSES. KARL MERZ, Tiengen, Germany. Filed June 18, 1928, Serial No. 286,434, and in Germany July 22, 1927. 3 Claims. (Cl. 74—14.)



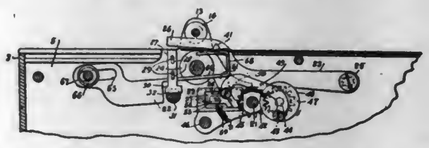
1. A device of the type described comprising a fixed supporting structure; a system of masses supported by said structure but free to oscillate horizontally as a whole; said system comprising two masses, one supported by the other but free to oscillate horizontally with relation to each other, and a mechanical movement inserted between said two masses adapted to cause said masses to oscillate in relation to each other, and a prime mover adapted to drive said mechanical movement, said prime mover forming part of one of said oscillating masses.

1,820,240. COIL. PHILIP A. MICHELL, New Brighton, N. Y. Filed Mar. 30, 1929. Serial No. 351,168. 2 Claims. (Cl. 175—359.)



1. The method of producing a coil which consists in depositing conductive material upon a non-conductive cylindrical surface and forming the deposit into a helix of spaced convolutions.

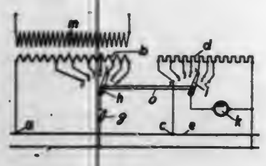
1,820,241. AUTOGRAPHIC REGISTER. GEORGE J. NETH, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed July 24, 1925. Serial No. 45,764. 4 Claims. (Cl. 282—16.)



1. In an autographic register having a plurality of sheets with spaced perforations, an actuating handle, a handle shaft, upper and lower ejecting rollers, means to operate

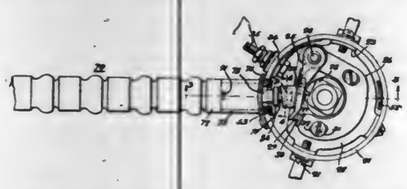
said rollers from said handle shaft, means to spread said rollers, means on said handle shaft to operate said spreading means during a predetermined interval, a pin frame adapted to reciprocate pins mounted thereon, means actuated by said handle shaft to reciprocate said pin frame and moving said frame and pins with said paper forwardly to move said paper to final aligned position, and means carried on the register engaging with said pin frame for moving the pins into engagement with the paper sheets, moving the sheets forwardly to clamping position, withdrawing the pins and restoring the pins and the frame to the initial position for another operation of alignment.

1,820,242. REGULATING SYSTEM FOR TRANSFORMERS. KARL NIEMANN and EHRHARDT LEUTERITZ, Berlin, Germany, assignors to the Firm Siemens-Reiniger-Veifa Gesellschaft für Medizinische Technik m. b. H., Berlin, Germany. Filed Feb. 27, 1929, Serial No. 343,174, and in Germany May 22, 1928. 4 Claims. (Cl. 171—119.)



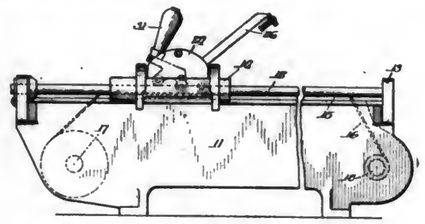
1. In a transformer especially employed in X-ray apparatus and including a subdivided primary winding, power conductors to one of which is connected one terminal of said winding, a plurality of other terminals for said winding designating the subdivisions thereof, a control element for connecting any one of said other terminals to the other of said conductors, a variable resistance connected to said conductors and including a plurality of terminals correspondingly arranged relative to said other terminals of the primary winding, a second control element for the second mentioned group of terminals, a voltmeter bridging said power conductors in series with said second control member and said resistance and means connecting said control elements for effecting unitary operation between the same.

1,820,243. APPARATUS FOR LOCKING IGNITION TIMERS. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 29, 1928. Serial No. 265,756. 10 Claims. (Cl. 200—19.)



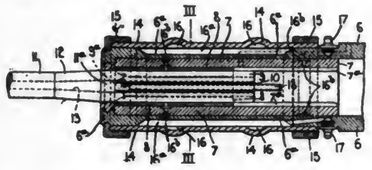
1. Apparatus for locking an ignition timer comprising, in combination, a housing, a circuit interrupter in the housing, a cover for the housing and provided with a lug having a notch including narrow and wide portions, a locking bolt having a shank portion receivable by both portions of the notch and having an enlarged portion receivable only by the larger portion of the notch whereby edgewise movement of the cover is prevented when the enlarged portion of the bolt is received by the larger portion of the notch, means cooperating with the locking bolt and interrupter to prevent functioning of the interrupter, and key controlled means for operating the bolt.

1,820,244. CARRIAGE ROLL RELEASE FOR HECTOGRAPH MACHINES. JOHN P. PEDERSON, Chicago, Ill., assignor to Ditto Inc., Chicago, Ill., a Corporation of West Virginia. Filed Mar. 10, 1930. Serial No. 434,576. 8 Claims. (Cl. 101—133.)



1. In a carriage construction for duplicating machines comprising a pivotally mounted handle arm, side extensions integral with said arm, an impression roller journaled in said extensions, a ledge provided in one of said extensions, a pivotally mounted locking lever adapted to engage said ledge to hold the arm in depressed position, and a trip lever mounted on said arm for manually releasing said locking lever.

1,820,245. ROCK DRILLING MACHINE OF THE HAMMER TYPE. HENRY SAMUEL POTTER, Johannesburg, South Africa. Filed June 20, 1929, Serial No. 373,683, and in Union of South Africa June 26, 1928. 8 Claims. (Cl. 121—18.)



1. In a rock drill, a front head, and a contractible casing secured around the front head and forming with it a chamber for lubricant, said head being provided with an outlet connecting the said chamber with the interior of the head and operating to supply it with lubricant when the casing is squeezed.

1,820,246. GEAR. GEORG PARIS, Weinbohla, Germany. Filed Sept. 17, 1928, Serial No. 306,566, and in Germany Sept. 22, 1927. 4 Claims. (Cl. 74—41.)

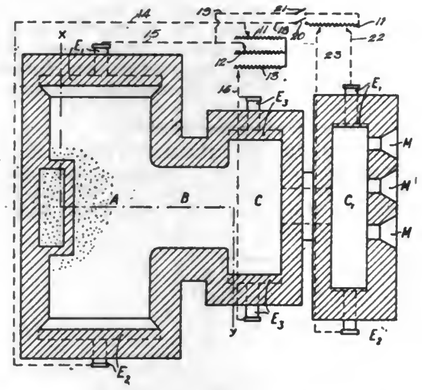


1. Gear comprising two cooperating wheels, the teeth being corrected by addition or subtraction, the top lines of the teeth and the bottom lines of the notches in one wheel extending in a direction opposite to the top lines of the teeth and the bottom lines of the notches in the other wheel.

1,820,247. METHOD OF AND APPARATUS FOR MAKING GLASS. JOHAN KRISTOFFER BJÖRN RÆDER, Holmenkollen, near Oslo, Norway, assignor, by mesne assignments, to Hartford Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 14, 1925. Serial No. 56,301. 47 Claims. (Cl. 13—6.)

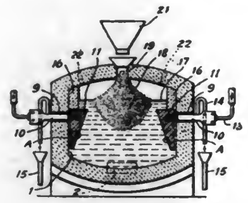
1. In apparatus of the class described, the combination with an electric furnace for melting glass or other similar

fusible material in which the molten material contained therein acts as a resistance for the electric current, of spaced electrodes disposed within said furnace and positioned therein so as to be totally submerged in the bath, said electrodes extending through the furnace wall, and



being enlarged within said furnace in a direction at right angles to the direction of passage of current, said electrodes being fluted, whereby the contact surface is sufficiently great to prevent melting or corrosion of the electrodes.

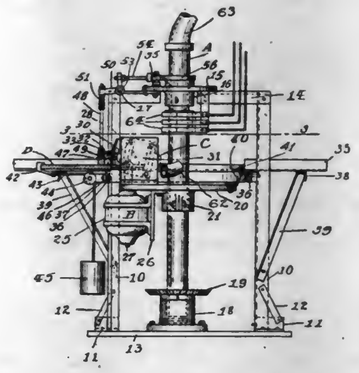
1,820,248. GLASS MAKING FURNACE AND METHOD. JOHAN KRISTOFFER BJÖRN RAEDER, Holmenkollen, near Oslo, Norway, assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 25, 1928, Serial No. 308,196, and in Norway May 19, 1928. 22 Claims. (Cl. 13—6.)



1. An electric resistance glass making furnace in which molten glass serves as a resistance to the flow of an electric current, comprising a chamber adapted for the reception of a bath of molten glass, said chamber having an inlet above the level of said bath through which glass making materials may be fed to said bath and having an outlet at a lower level submerged by the molten glass, and spaced electrodes totally submerged by the molten glass in said chamber and disposed above the level of said outlet.

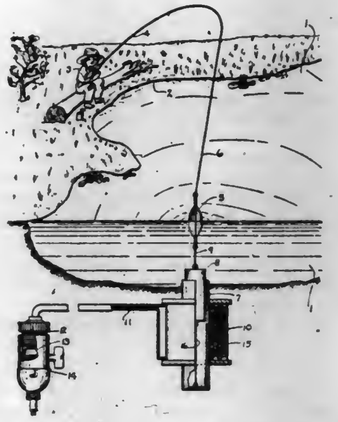
1,820,249. MACHINE FOR MAKING COAT HANGERS. WILLIAM J. REHRIG, Los Angeles, Calif. Filed Feb. 12, 1929. Serial No. 339,380. 3 Claims. (Cl. 144—2.)

1. A machine for making coat hanger blanks, comprising, in combination, a carrier revoluble about a vertical axis, means for revolving said carrier, a motor driven cutting element mounted upon said carrier and adapted to move in a circular path concentric with said axis, a stop on said carrier against which the stock is adapted to be adjusted with its inner end across the cutting path of said cutting element, a plurality of stock holders distributed around said axis and adapted to present a series of pieces of stock against said stop and to the successive cutting action of said cutting element as the latter revolves about said axis, each of said stock holders comprising a guide support for holding and guiding a piece of stock across the path of said cutting element and



against said stop, clamping means co-acting with said holder for securing the stock while the cutting element is performing its function and for releasing the stock thereafter, and cam operated means connected with said shaft for applying and releasing said clamp automatically.

1,820,250. ADVERTISING DISPLAY DEVICE. ELMO MURRAY ROBERTS, Jr., and FRANK R. PENMAN, Nacogdoches, Tex., assignors of one-third to Ben T. Wilson, Nacogdoches County, Tex. Filed May 15, 1930. Serial No. 452,582. 8 Claims. (Cl. 46—49.)

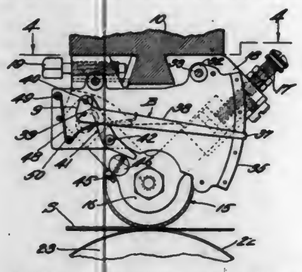


1. A display device including a stationary pole, a line thereon, a float on said line adapted to be submerged, and automatically operated means connected thereto to move said float downwardly at intervals of time and then release the same.

1,820,251. CREASING MECHANISM. JOHN T. ROBINSON, Boston, Mass., assignor to John T. Robinson Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 22, 1929. Serial No. 349,195. 6 Claims. (Cl. 93—58.)

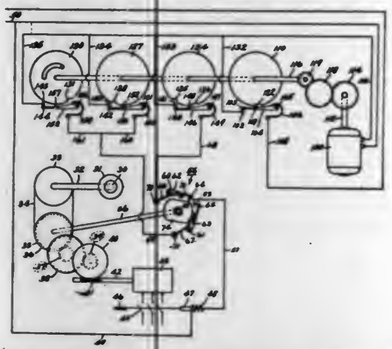
3. In a creasing machine having a creasing device comprising a holder, a carrier adjustably mounted in said holder, a creasing wheel rotatably mounted in said carrier,

and means for adjusting said carrier, the combination therewith of an indicator having a scale mounted on the



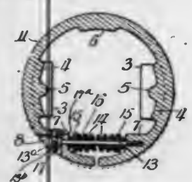
holder, an indicating pointer movably mounted on the holder, an adjusting screw on said carrier, and resilient connections between said screw and pointer.

1,820,252. ELECTRIC CONTROL. LEO C. SHIPPY, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 3, 1929. Serial No. 352,310. 15 Claims. (Cl. 161—7.)



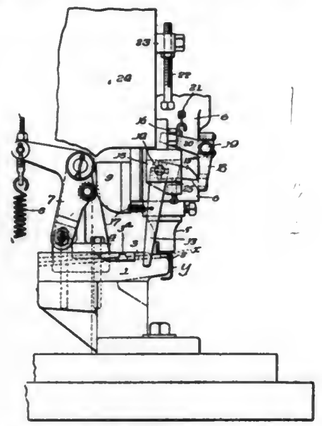
1. A device for controlling the pressure applied to a cylinder of a hydraulic press from a plurality of sources of different pressures comprising, in combination, a rotary valve for connecting a cylinder of the hydraulic press to each of the different pressures in a predetermined sequence; a motor for rotating the valve through a fraction of a revolution to connect the cylinder to one of said sources of pressure; an electrically controlled timer for automatically closing the motor circuit so as to cause the valve to be rotated after a predetermined time interval thereby changing the pressure applied to the hydraulic press and a snap switch for automatically opening the circuit after the valve has been rotated into position.

1,820,253. ENGINE PISTON AND METHOD OF MAKING THE SAME. WILLIAM SIEMAN, Jr., Menominee, Mich. Filed Nov. 22, 1928. Serial No. 321,077. 3 Claims. (Cl. 74—108.)



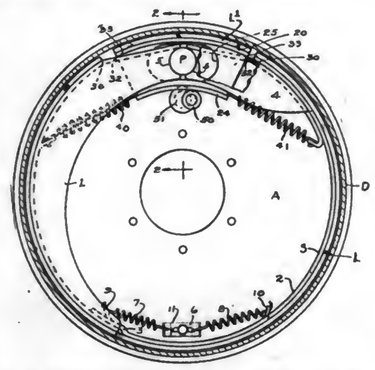
1. A piston comprising a head and skirt, said skirt provided with a longitudinal slot, pairs of bosses on either side of the slot and located on the inside of the skirt, the bosses on one side of the slot provided with a threaded bore with the bosses on the other side of the slot provided with bores connecting with recesses in the outer wall of the piston, threaded bolts passing transversely of the slot in the skirt and through the bores in the bosses on one side of the slot with their headed ends located in the recesses in the piston wall and with their threaded ends screwed into the threaded bores in the bosses on the opposite side of the slot, cotter pins passing through bores in the heads of the bolts and projecting through larger openings in the walls of the recesses, and expansible springs encircling the bolts to assist in enlarging the skirt.

1,820,254. AUTOMATIC RIVETING PRESS. RUDOLPH A. SKRIBA and FREDERICK J. LITTELL, Chicago, Ill., assignors to F. J. Littell Machine Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1928. Serial No. 317,861. 6 Claims. (Cl. 218—2.)



1. In a riveting press, a reciprocating plunger, a work support, a kick-off lever having a fulcrum located to cause the lever to swing against and displace a structural member from said work support and out of the path of said plunger, and a lever actuating means carried by the plunger imparting movement to the kick-off lever.

1,820,255. BRAKE. JOHN SNEED, Ferndale, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 4, 1928. Serial No. 310,267. 19 Claims. (Cl. 188—78.)



1. In a brake, the combination of a friction device having oppositely disposed adjacent channel shaped ends, an auxiliary shoe arranged to act on either of the ends of

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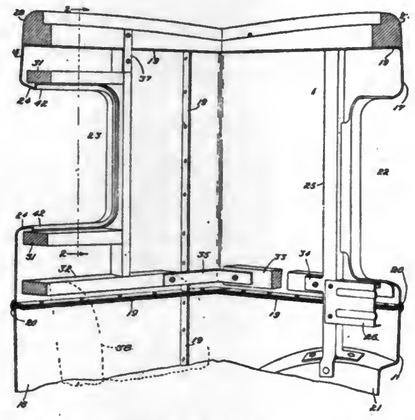
said device having a lining supporting part overlying the ends thereof and having an inwardly extending reinforcing part disposed between the side flanges of the said end.

1,820,256. COMBINATION SPONGE AND WASH RAG. ROBERT STEWART, Ozone Park, N. Y. Filed June 18, 1929. Serial No. 371,863. 1 Claim. (Cl. 15—44.)



As a new article of manufacture, a combination sponge and wash cloth including a substantially straight walled slab of spongy rubber, said slab being of substantially uniform thickness, a form determining cover for the spongy slab comprising a pair of similar sections of fabric disposed at opposite sides of the slab and having their edges turned toward each other and connected by a concealed line of stitching following the substantially straight side walls of the slab, the fabric cover being of inelastic rough surfaced material and the sections thereof being so sewed together that the spongy rubber slab is placed under compression whereby the inherent resiliency of the slab maintains the cover stretched taut and prevents slippage of the cover relatively to the slab.

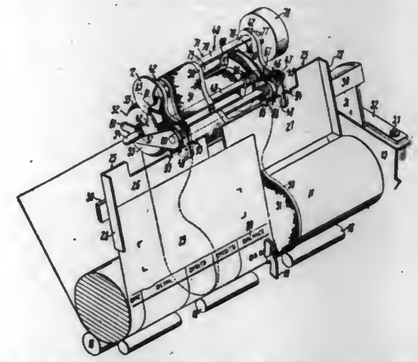
1,820,257. AUTOMOBILE BODY. MILLARD H. TONCRAY, Detroit, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 11, 1926. Serial No. 93,846. 7 Claims. (Cl. 296—28.)



1. In an automobile body, in combination, an exterior shell composed of back and quarter panels, said back panel having a window opening, pillars at the sides of said shell, a top supported on said shell and pillars; an interior brace or frame comprising a back portion having parts surrounding said window opening and side rails connecting said back portion with said pillars, and back and quarter trim panels secured respectively to the back portion and side rails of said brace or frame, said trim panels being further secured at their upper edges to said top.

1,820,258. TYPEWRITING MACHINE. HARRY H. VICKERS, Corona, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 25, 1928. Serial No. 249,288. 20 Claims. (Cl. 197—128.)

3. In a typewriting machine, the combination with a collating table at the delivery side of the platen of said machine, of a tally-strip device disposed in the rear of said table, and instrumentalities carried by said device



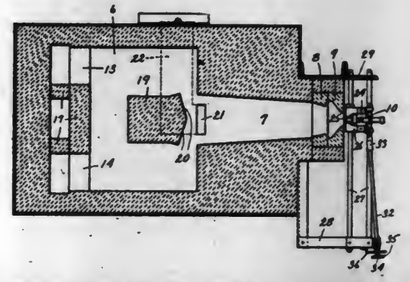
for operatively engaging the top edge portion of said table, whereby to make said tally-strip device self-retaining on said table.

1,820,259. TISSUE PAD. KURT WANDEL, New York, N. Y., assignor to National Cellulose Corporation, a Corporation of New York. Filed Jan. 9, 1929, Serial No. 331,339. Renewed Apr. 16, 1931. 9 Claims. (Cl. 132—78.5.)



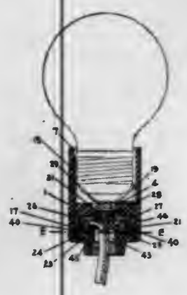
1. A pad of facial tissue comprising a plurality of sheets having their edges held together along one edge solely by the interlocking fibres of the sheets.

1,820,260. METHOD OF AND APPARATUS FOR ANNEALING GLASSWARE. THOMAS WARDLEY, Greenford, England, assignor to Hartford-Empire Company, Hartford, Conn., a Corporaton of Delaware. Filed Dec. 17, 1930, Serial No. 503,012, and in Great Britain June 5, 1930. 7 Claims. (Cl. 49—47.)



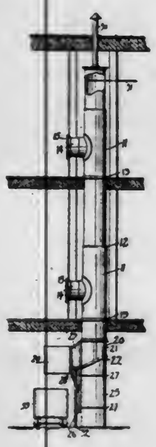
5. Apparatus for annealing glassware comprising a lehr, heating flues extending longitudinally through the said lehr, a firebox, a burner for directing a flame of combustion into said firebox, passageways leading from said firebox to said flues, a deflector positioned in said firebox against which said flame impinges, said deflector having diverging surfaces, and an air inlet port in said firebox located between said deflector and said burner.

1,820,261. ELECTRIC LAMP SOCKET. ERNEST CANTELO WHITE, New York, N. Y., assignor of one-half to R. Fenton Fisher, Philadelphia, Pa. Filed May 14, 1925. Serial No. 30,263. 4 Claims. (Cl. 173—349.)



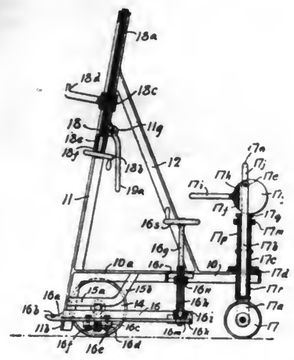
1. An electric lamp socket including in combination a socket body formed of insulating material, a lamp receiving chamber in the socket body, a partition of insulating material forming a bottom closure for the lamp receiving chamber, an opening in the partition near the side of the chamber, a contact member adapted to be inserted through the opening and having an enlarged end adapted to seat against one side of the partition, the other end of the contact member being adapted to engage the screw-shell contact of a lamp base, a socket cap formed of insulating material and having a supply contact carried thereby and means for attaching the socket cap to the socket body, the socket cap being adapted to engage the enlarged end of the contact member so as to retain the contact member in position and to provide a working contact between the contact member and the supply contact.

1,820,262. CHUTE. CLARENCE M. WILKINSON, Akron, Ohio. Filed Oct. 29, 1927. Serial No. 229,581. 12 Claims. (Cl. 193—34.)



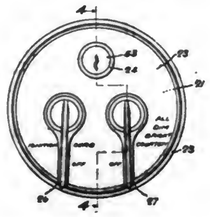
11. A chute for installation in a building comprising, in combination, a plurality of chute sections, means for supporting each chute section upon a floor level, said means comprising a flange ring mounted at each floor level and secured to each chute section, a discharge section comprising a self-contained unit, and a pier on which the discharge section only of the chute is supported, said chute structure being self-adjusting under settling movement of the building in which it is installed.

1,820,263. TRUCK FOR TRANSPORTING ANNULAR OBJECTS. STEPHEN FRANCIS WILLIAMS, Montreal East, Quebec, Canada. Filed Jan. 24, 1930. Serial No. 422,997. 18 Claims. (Cl. 214—65.)



1. A truck for transporting, in a substantially upright position, metal tires for wheels, comprising a frame having a part extending longitudinally of the truck, and an upstanding part at one end of the longitudinal part and rigidly connected thereto, against the outer face of which upstanding part the tire rests when being transported; a pair of parallel, aligned wheels revolubly mounted one at each side of said longitudinal part near the end at which the upstanding part is disposed, the axis of said wheels forming a fulcrum about which both parts may be tilted as a unit to bring the upstanding part to a tire loading position and to a tire transporting position; a support, comprising a wheel, for the frame at the end of the longitudinal part remote from the upstanding part; and means operatively associated with said support operative to raise and lower said remote end whereby said parts are tilted as a unit and upstanding part moved to its said two positions.

1,820,264. SWITCH. CHARLES E. WILSON, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Original application filed May 6, 1922, Serial No. 558,852, now Patent No. 1,678,893, dated July 31, 1928. Divided and this application filed Feb. 12, 1927. Serial No. 167,823. 2 Claims. (Cl. 200—5.)

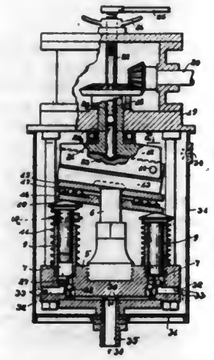


1. A lighting and ignition switch for automobiles comprising, in combination, a case, a plate carried by the case and carrying terminals for connection with a current source, an ignition circuit and a plurality of lighting circuits respectively, two series of stationary switch contacts insulatingly supported by the plate and arranged in arcuate rows, connections carried by the plate for connecting the terminals with the contacts respectively, certain of the lighting circuit terminals being connected with contacts of both series of stationary contacts, two shafts supported by the case for rotation concentrically with respect to the two arcuate series of stationary contacts, operating handles respectively carried by the shafts, a movable contact member engageable with one series of stationary contacts and operated by one of the handles in the same direction of rotation from off position to connect the current source terminals with certain ones of the various lighting circuit terminals, and a movable contact member engageable with the other series of stationary contacts and movable by the other handle from off position to a position for connecting the current source terminal with the ignition circuit terminal by a movement of the handle in a direction which is opposite to that in which the other handle is moved to complete the lighting circuits, movement of the last mentioned handle into off position interrupting the ignition circuit, and continuing the movement of the handle in the same direction further than off position causing certain of the lighting circuit terminals to be connected with the current source terminal.

1,820,265. ESTER GUM AND METHOD OF PRODUCING. LEAVITT N. BENT, Holly Oak, Del., and ALAN C. JOHNSTON, Kenvil, N. J., assignors to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 24, 1928. Serial No. 321,755. 8 Claims. (Cl. 260—98.)

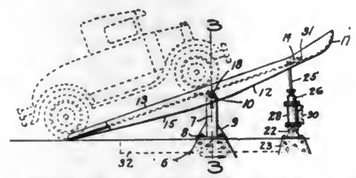
4. As a new article of manufacture pentaerythrite abietate.

1,820,266. PUMP. JOHN THOMAS BILDERBECK, Los Angeles, Calif., assignor to Western Concrete Pipe Company, Los Angeles, Calif. Filed Jan. 30, 1929. Serial No. 336,108. 8 Claims. (Cl. 184—27.)



5. In a pump, pumping mechanisms disposed to operate in the direction of the longitudinal axis of the pump, a sectioned operating head including one member pivotally connected to another member with an actuating face adjustably transversely to the longitudinal axis of the pump, controlling means for setting one of said members in relation to the other whereby the pumping mechanisms can be controlled in the operations from zero to 100% capacity.

1,820,267. AUTOMOBILE LIFT. WILLIAM A. BOX, Denver, Colo. Filed Aug. 13, 1929. Serial No. 385,580. 15 Claims. (Cl. 254—91.)



3. An automobile lift comprising a runway pivoted to move from a slanting position to a horizontal position by the weight of an automobile driven thereonto, and a self-contained hydraulic brake-element at a side of the pivotal axis, adapted to automatically restrict the movement of the runway, said brake element being constructed, and located relative to the pivotal axis to form a positive support for the runway when in a horizontal position.

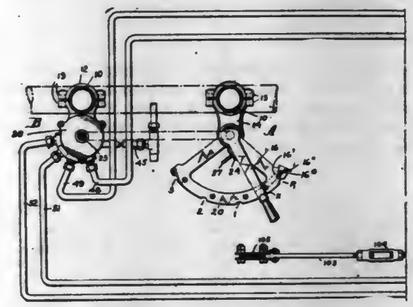
4. An automobile lift comprising a runway pivoted to move from a slanting position to a horizontal position by the weight of an automobile driven thereonto, and a self-contained hydraulic brake-element at a side of the pivotal axis, adapted to automatically restrict the movement of the runway in opposite directions.

1,820,268. LOCK RING. CHARLES H. CLEVELAND, Minneapolis, Minn., assignor of one-third to Charles A. Heine and one-third to John T. Allison, Minneapolis, Minn. Filed July 11, 1929. Serial No. 377,442. 4 Claims. (Cl. 287—1.)



1. An expansion lock ring adapted for use in connection with a bearing having an annular groove in the bore thereof, said lock ring being formed from a single piece of wire shaped to provide a circular body portion adapted to be fitted into said annular groove to retain a member in the bearing, said body portion being open on one side to permit expansion and contraction of the ring, the end portions of the wire from which said lock ring is formed being bent inwardly and disposed within the confines of said body portion, and means whereby said end portions may be interlocked to retain the lock ring in the bearing groove.

1,820,269. PNEUMATIC GEAR SHIFT. ALVIN M. CRAIG, New Haven, Conn., assignor to Universal Gear Shift Corporation, a Corporation of Delaware. Filed May 8, 1926. Serial No. 107,592. 4 Claims. (Cl. 74—59.)



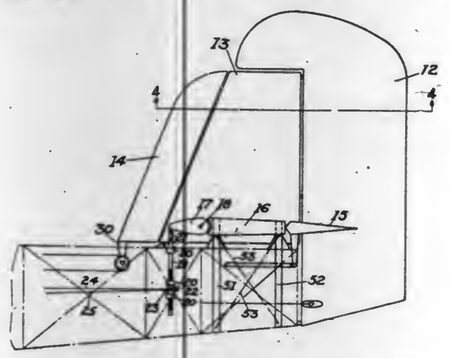
1. The combination with a sliding of a gear shift cylinder and its piston, a boss on one end of the cylinder, a piston rod sliding thru the boss, a thimble slidably mounted on said piston rod, means on said piston rod to engage said thimble and limiting its sliding, an abutment centered with and fixedly spaced from said boss, a collar slidably mounted upon said piston rod and limited in its outward movement by said abutment, means on said piston rod adapted to engage said collar, and a coil spring between said thimble and said collar operating normally to keep them separated.

1,820,270. IRON HOLDER. JOHN CHESTER DE PENNING, Portland, Oreg. Filed Feb. 21, 1929. Serial No. 341,629. 3 Claims. (Cl. 68—27.)



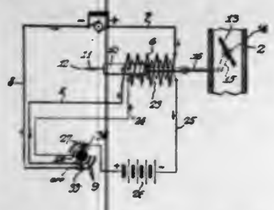
1. The combination with an ironing board having a recess formed at one end and opening thereon therein of a depth less than the thickness of the board, of a perforated receptacle provided with an uneven active surface forming an iron holder depending into such recess with its upper surface substantially flush with that of the ironing board, the recess being of greater depth than the depending portion of such receptacle thus to provide a space between the floor of the recess and the floor of the receptacle, a perforation of relatively small cross-section with respect to the area of the receptacle extending from the floor of such recess to the lower surface of the ironing board, such perforation being arranged in registration with one of those in the receptacle to provide an air opening to cool the upper surface of such receptacle.

1,820,271. ADJUSTABLE STABILIZER AND FIN. WILLIAM K. EBEL, Cleveland, and LESSITER C. MILBURN, Wickliffe, Ohio, assignors to The Glenn L. Martin Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 19, 1928. Serial No. 293,937. 22 Claims. (Cl. 244—29.)



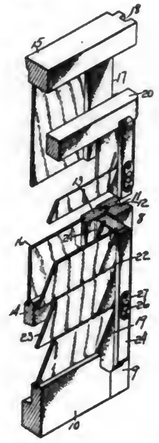
1. An airplane construction comprising in the tail assembly thereof a vertical fin, said fin being formed of two parts hingedly connected together, the rearward of said parts being fixed with respect to the tail assembly and the forward of said parts being movable thereto.

1,820,272. ELECTRIC GOVERNOR FOR AUTOMOBILES. HAROLD D. GUMPPER, Detroit, Mich. Filed Aug. 2, 1929. Serial No. 383,105. 4 Claims. (Cl. 123—102.)



1. In combination with a gasoline motor having a fuel intake pipe, a governor comprising a generator geared to said motor, a solenoid connected to said generator, a core in said solenoid, a valve in said pipe and connected to said core, a winding opposed to said solenoid, means for supplying current to said winding concurrently with the connection of said solenoid to said generator, and a variable resistance connected between said means and said winding.

1,820,273. WINDOW SASH. CARL H. HANSEN, Portland, Conn. Filed Jan. 12, 1929. Serial No. 332,107. 4 Claims. (Cl. 20—56.)

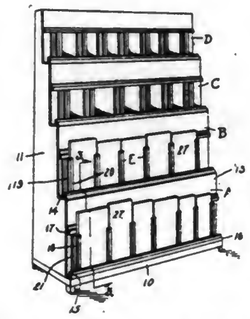


1. A window sash including a supporting frame, the latter including stiles, an immovable ventilating frame rigidly secured to said supporting frame and a pane sash slidably mounted in the stiles of the supporting frame and including a top rail with its ends overlying the ends of the stiles of the supporting frame.

1,820,274. MANUFACTURE OF PHENOLS. ALBERT HEMPEL, Leipzig-Oetzsch, Germany. Filed July 7, 1930, Serial No. 466,033, and in Germany Apr. 9, 1929. 2 Claims. (Cl. 260—154.)

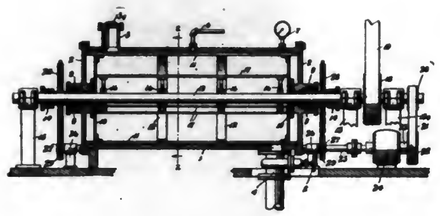
1. In the method of manufacturing sodium phenate by fusing the corresponding sulphonate with caustic soda, the improvement which consists in conducting the fusion under subatmospheric pressure conditions.

1,820,275. DISPLAY RACK FOR MAGAZINES, FOLDERS, AND THE LIKE. WILLIAM C. KELLEY, Des Moines, Iowa. Filed July 5, 1929. Serial No. 376,062. 9 Claims. (Cl. 211—54.)



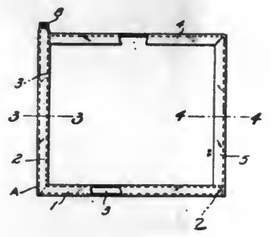
1. A display device comprising a panel having a back wall and a bottom wall, a slide bearing formed adjacent the forward part of said bottom wall, a slide bearing on said back wall, and a series of movable partition members cooperating with said panel, each partition member having parts receivable in each of said slide bearings, each partition member also having relatively broad base flanges resting on said bottom wall.

1,820,276. PROCESS OF WOOD DIGESTION. HERMAN B. KIPPER, Muskegon, Mich. Filed Feb. 15, 1926. Serial No. 88,420. 2 Claims. (Cl. 92—6.)



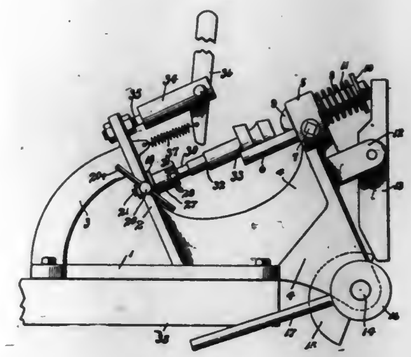
1. The herein described process of producing cellulose fibres from wood or vegetable matter which consists in placing the said wood or vegetable constituents and chemicals in aqueous solution as commonly used for digestive purposes in a vessel, continuously cutting through the said constituents in an instantaneous rectilinear direction and continuously heating the digesting liquor and vegetable constituents contained within the said vessel.

1,820,277. GAS STOVE. ALVIN H. L. KLEMME, Belleville, Ill., assignor to Eagle Foundry Company, Belleville, Ill., a Corporation of Illinois. Filed July 2, 1928. Serial No. 289,809. 1 Claim. (Cl. 126—39.)



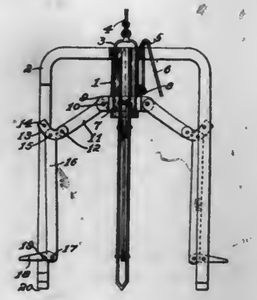
A grid supporting top frame for gas stoves comprising front, rear and side rails, the rear rail and one side rail comprising a rolled structural steel member of substantially angle-shaped section, and the front rail and other side rail comprising sections of steel tubing of substantially rectangular section, the adjacent ends of said tube sections being welded together, the angle member abutting against the inner face of the tubing at one corner of said frame and being welded thereto, and the tubing extending beyond the angle-shaped rail at said corner of said frame and terminating in a threaded portion adapted to receive a pipe fitting, said angle member overlapping the adjacent end of the tube forming the front rail of said frame to close the same and being welded thereto.

1,820,278. SAW SETTING MACHINE. WARREN E. KNOTT, Grand Rapids, Mich., assignor, by mesne assignments, to Pioneer Pearl Button Company, Poughkeepsie, N. Y., a Corporation of New York. Filed Apr. 16, 1928. Serial No. 270,201. 6 Claims. (Cl. 76—58.)



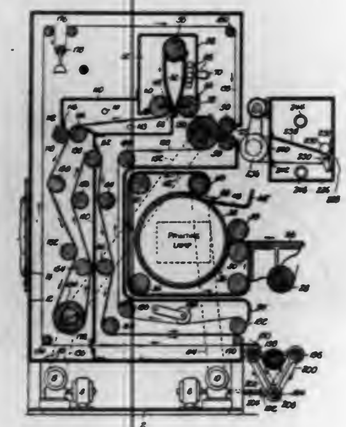
1. A saw setting machine comprising, a saw setting die adapted to set the teeth of a cylindrical saw, an arbor therefor, a slide in alignment with the axis of the saw setting die and adapted to support the arbor of a cylindrical saw in proper operative position, a slidable plunger in alignment with said slide and engageable with said arbor and a means for actuating said plunger to force the saw into engagement with the saw setting die.

1,820,279. HAYFORK. JOSEPH M. KYLE, Greene, Iowa. Filed Oct. 29, 1930. Serial No. 491,927. 4 Claims. (Cl. 294—128.)



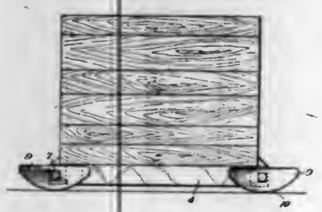
1. A central stem having radiating angular arms whose farther parts are directed downwardly in spaced relation, a sleeve slidably mounted on said stem below the inner parts of said arms, detents pivoted on the lower terminations of said arms to swing from positions parallel thereto to positions outwardly angularly relative thereto, and operating connections linkedly connected between said sleeve, said arms, and said detents.

1,820,280. DEVELOPING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 12, 1928. Serial No. 305,591. 8 Claims. (Cl. 95—94.)



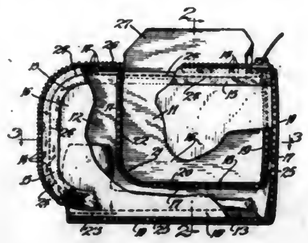
1. An apparatus of the character described comprising means forming an enclosing chamber having an inlet and discharge opening, means for creating a moist atmosphere in said chamber and conveying means for said chamber constructed and arranged to receive light sensitive material inserted through the inlet opening and to convey the same through the chamber and discharge the same through the outlet opening of the chamber and a jet for spraying ammonia against the light sensitive material as it is carried along.

1,820,281. SHOCK ABSORBING SUPPORT. JOHN W. LESLIE, Evanston, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company, a Corporation of Delaware. Filed July 17, 1926. Serial No. 123,245. 3 Claims. (Cl. 248—41.)



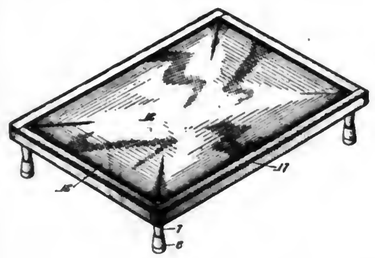
1. A shock absorbing support for bearing loads in carriers subject to horizontal shocks, comprising a frame for carrying the load, and a series of rockers independently pivoted to the frame to take the weight of the frame and transfer it to the carrier floor, the curved floor engaging surface of each rocker being eccentric to its pivotal connection with the frame whereby horizontal shocks in either direction cause the frame and load to pivot on the rockers and absorb power by elevating the frame and load.

1,820,282. TOBACCO POUCH. MICHAEL J. MCGUIRE, Chicago, Ill. Filed Feb. 6, 1930. Serial No. 426,223. 6 Claims. (Cl. 206—38.)



1. In a device of the character described, an outer casing constructed of flexible sheet material, and a lining secured marginally to the adjacent opening marginal portion of the casing but being otherwise detached from said casing, a portion of said lining being fabricated into a pocket opening coincidently with the opening marginal portion of the casing and constituting a pouch for containing tobacco, the remainder of said lining material affording a lining for a pipe receptacle comprising the portion of the casing not occupied by said pouch, the opening marginal portions of both the tobacco pouch and pipe receptacle being controlled by a common closure element.

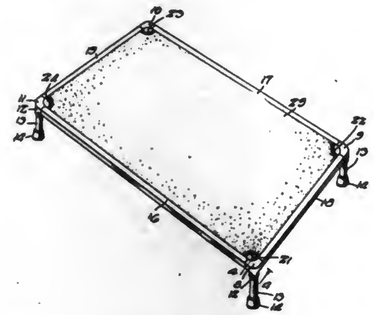
1,820,283. ANIMAL BED. FRANK LOUIS MILLS, Chicago, Ill. Filed Oct. 14, 1929. Serial No. 399,478. 4 Claims. (Cl. 119—1.)



1. An animal bed comprising a rectangular main frame, a sheet stretched across said main frame and having side and end flaps extending down the outer sides and under the main frame, said flaps being of a length substantially equal to the length of the sides of the frame over which they are passed whereby restricted openings will be defined in said cover at the corners of said frame, means fastening the flaps together under the main frame, and a clamping frame arranged on the main frame over the flaps.

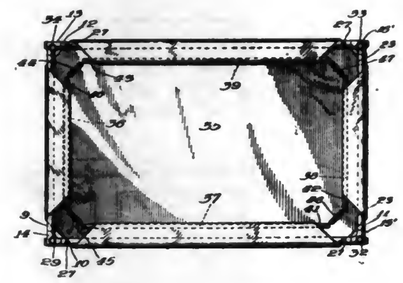
4. An animal bed comprising a rectangular frame having outwardly beveled outer sides, short legs demountably engaged with said frame at the corners thereof, a sheet stretched across the frame and having the corners cut away forming flaps therebetween and said flaps extending around opposite sides of the frame, means underneath the sheet engaging said flaps for securing the sheet on the frame, and a clamping frame embodying rounded outer edges and having inwardly beveled inner sides and arranged on the main frame over said flaps.

1,820,284. ANIMAL BED. FRANK LOUIS MILLS, Chicago, Ill. Filed May 5, 1930. Serial No. 449,726. 3 Claims. (Cl. 119—1.)



1. An animal bed comprising an outer frame embodying tapered portions, an inner frame embodying cooperatingly tapered inner portions, a section of covering material stretched over said inner frame, means for maintaining said section of covering material in taut condition, sections of said covering material being interposed between the tapered portions of said frames when said inner frame is arranged in said outer frame whereby pressure exerted thereon will cause a wedging action to prevent undue stretching of said section of covering material.

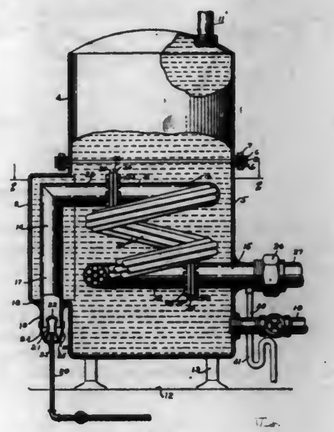
1,820,285. BED. FRANK LOUIS MILLS, Chicago, Ill. Filed Nov. 6, 1930. Serial No. 493,752. 2 Claims. (Cl. 5—187.)



1. A textile covering for a rectangular bed frame, comprising connected side and end rails, said covering comprising a textile sheet adapted to extend over the side and end rails, extensions at each side and end edge of the sheet adapted to extend about and under the respective rails and inwardly toward the centre of the bed, each extension terminating in a hem, a rod in each hem, and resilient tension means at each corner connecting the spaced adjacent ends of the rods thereat, whereby the extensions are drawn inwardly and the fabric yieldingly stretched over the rails.

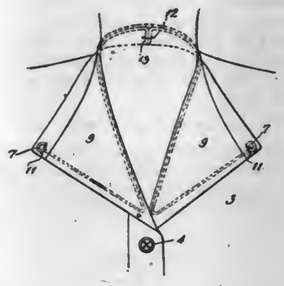
1,820,286. BOILER. FREDERICK M. MINER, Jr., and WALTER C. DAUMLING, Madison, Wis. Filed July 8, 1929. Serial No. 376,543. 1 Claim. (Cl. 122—45.)

In a boiler, the combination of a vertically disposed cylindrical casing, having a removable top portion, a flue tube structure comprising an inlet tube section extending upwardly and then horizontally, an exhaust tube section disposed below the horizontally extending portion of said inlet tube section, an intermediate tube section including headers detachably connected to said tube sections and coiled pipes connecting said headers, said last named tube section being readily removable through the upper end of said casing on the removal of said top portion, a trap for condensation products communicating with said exhaust tube section at a low point in the latter, said tube structure being of a length to insure complete combustion of the burning gases before reaching that portion



of the exhaust section adjacent said trap, an inlet for the supply water entering said casing below and adjacent said exhaust tube section to insure the cooling of the burnt gases so that the water or sulphuric acid in the burnt gases is condensed and flows out through said trap so that damage to the piping beyond said trap is prevented, and a burner for delivering burning gases to the inlet end of said inlet tube section.

1,820,287. SHIRT ATTACHMENT. ALFRED A. MORCK, New York, N. Y. Filed May 26, 1930. Serial No. 455,485. 2 Claims. (Cl. 2—132.)

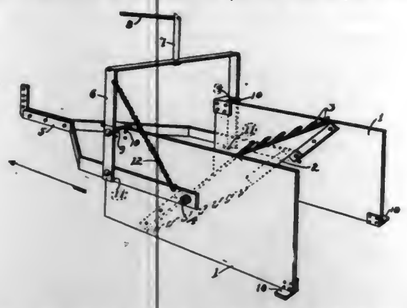


1. A shirt attachment of the kind described, comprising a piece of wire bent to approximately horse collar form and dimensioned to fit the neck portion of a shirt with the legs extending down and outwardly bent across the bosom, a stud element carried on the end of each of said outwardly bent portions and a third stud element carried by the center of the attachment, for the purpose described.

1,820,288. GAP FILLER. NEILS A. NEILSEN, Cupertino, Calif. Filed May 11, 1929. Serial No. 362,353. 1 Claim. (Cl. 37—139.)

A device of the character indicated comprising a pair of vertically positioned rectangular side plates, a flat spacing plate rigidly mounted thereon and therebetween and terminating at the upper and lower edges thereof, and

angularly positioned relative to a horizontal plane, a draw bar pivotally connected to the plates, means for normally



holding the plates in fixed relation to the draw bar, and means for permitting the rotation of the plates relative to the draw bar.

1,820,289. DETACHABLE LADDER AND CAGE CONSTRUCTION. LESLIE A. RAWSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 12, 1929. Serial No. 339,303. 8 Claims. (Cl. 228—1.)



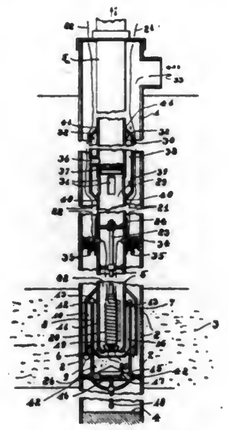
4. The combination with a derrick having a frame including reinforcing girts of: a ladder section; a cage section surrounding an end of said ladder section to provide a transfer platform therefor; and hook bolts carried by said ladder and cage sections adapted for detachable connection to said girts.

1,820,290. BUTTON LOOP. JESSUP SALISBURY, Hamden, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed June 6, 1930. Serial No. 459,471. 4 Claims. (Cl. 24—224.)



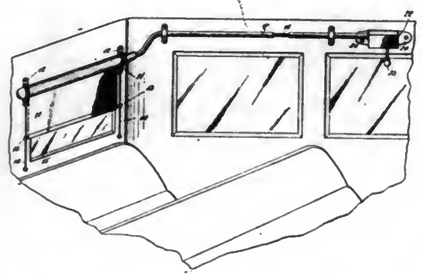
2. An expansible button loop having axially associated resilient and rigid loop members, the resilient member providing the button loop with an intermediate laterally expansible throat portion normally contracted, and each member being so constructed and both members being so assembled one to the other that both members are thereby maintained in a common plane and, as the throat portion is laterally expanded, the rigid member is thereby bodily moved to an axially upward position relative to the resilient member and, as a downward axial stress is placed upon said rigid member the rigid member is thereby bodily moved to a lower position, relative to the resilient member, such stress cooperating with the resilient tension of the throat portion in maintaining a normally contracted throat portion.

1,820,291. OIL EXTRACTING DEVICE. ARTHUR STRANDELL, Tallinn, Estonia. Filed Mar. 17, 1930. Serial No. 436,436. 2 Claims. (Cl. 166—17.)



1. In a device of the class described, a separating structure adapted to extend from the surface of the ground into a strata containing desired matter, a heating element in said structure adapted to cause matter to evaporate and rise through the structure to the surface of the ground, and a stop in said structure to retain recondensation in a compartment separate from evaporated and from the original matter.

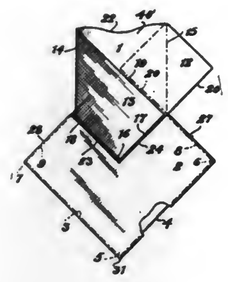
1,820,292. REAR CURTAIN OPERATOR DEVICE. GEORGE J. WRIGHT, Boston, Mass., assignor to Mary Wright, Quincy, Mass. Filed Sept. 25, 1930. Serial No. 484,346. 3 Claims. (Cl. 156—28.)



2. An automobile rear-curtain operating device comprising in combination a rear window curtain roller, a flexible shaft operatively connected at its rearward end to said roller, a support for the forward end of said shaft, a stud having threaded engagement with said support and rigidly connected to the forward ends of said shaft, said stud extending through said support and having an abutment on the inner end thereof, a crank, and means adjustably securing said crank to the outer end of said stud.

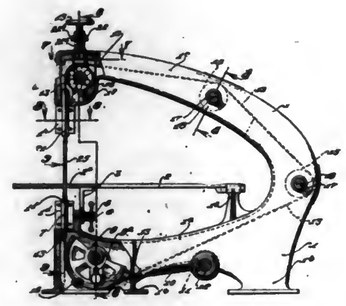
1,820,293. GARMENT. RUTH F. ALBERT, New York, N. Y. Filed Mar. 22, 1930. Serial No. 438,029. 8 Claims. (Cl. 2—73.)

1. A garment composed of a section of fabric forming the entire front of the garment, said section having integrally formed flaps which extend inwardly toward one another and meet at the back of the garment, the front section of the garment having a lower flared portion, and



a fabric section corresponding in shape to said flared portion and having its upper edge secured to the lower edge of one of the flaps and having its side edges attached to the side edges on the lower flared portion formed on the front section.

1,820,294. JIG SAW. ROBERT H. ANDERSON, San Diego, Calif., assignor of one-half to A. B. Bowman, San Diego, Calif. Filed Aug. 20, 1929. Serial No. 387,211. 6 Claims. (Cl. 143—70.)

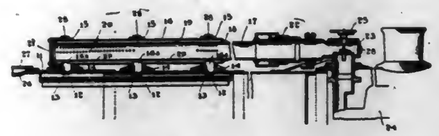


1. In a sawing machine of the class described, a frame comprising a base and an arm extending thereover, guide means portions at the extended portion of said arm and at the corresponding portion of said base, said portions having V grooves formed therein, substantially square slide members mounted in said V grooves and V formed plates detachably secured to said guide portions and over said slide members, idler pulleys supported by said arm and said base, a band extending around said idler pulleys and secured to said slide members, a saw connecting said slide members, and a means for causing reciprocal movement of said band and saw.

1,820,295. PROCESS OF TREATING CRUDE PETROLEUM. HARRY T. BENNETT, Tulsa, Okla. Filed July 22, 1926. Serial No. 124,300. 5 Claims. (Cl. 196—1.)

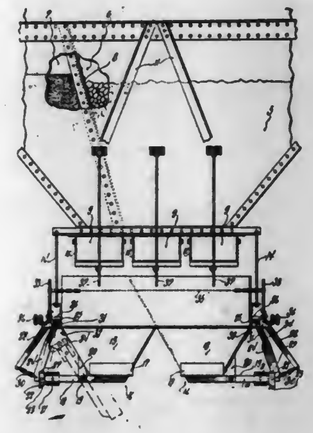
1. The process which comprises lowering the pour point of crude petroleum by commingling with said crude petroleum, a minute quantity of soap capable of lowering the pour point of the oil in amount sufficiently low to render the product capable of flowing at low temperatures without substantially affecting the viscosity of the petroleum.

1,820,296. LOCOMOTIVE BOILER. CHARLES E. BROOKS, Montreal, Quebec, Canada. Filed Nov. 21, 1929. Serial No. 408,835. 8 Claims. (Cl. 122—492.)



1. A locomotive boiler having a plurality of openings in the top wall thereof, a plurality of saddles mounted on the boiler and provided with bottom openings communicating with said boiler openings, said saddles also having openings extending therethrough in the longitudinal direction of the boiler, an external dry pipe supported to extend through the last mentioned openings of the saddles and one or more enclosed steam spaces surrounding said pipe and communicating with the bottom openings of the saddles, said dry pipe being provided with openings placing the interior of the pipe in communication with said enclosed steam space or spaces.

1,820,297. MATERIAL HANDLING EQUIPMENT. MORGAN R. BUTLER, Waukesha, Wis. Filed Jan. 19, 1929. Serial No. 333,680. 13 Claims. (Cl. 221—144.)

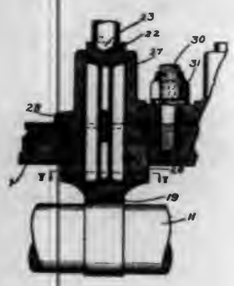


1. The combination with a material handling hopper having an outlet opening adapted to be closed by a gate structure movable to and from closed position, of means tending at all times to close the gate structure, and a single means mounted from a substantially fixed structure engageable with the gate structure for holding the same in either closed or open position.

1,820,298. PROCESS FOR PURIFYING ROSIN. DURAIN C. BUTTS, Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 16, 1926. Serial No. 142,159. 1 Claim. (Cl. 202—46.)

The method of treating wood rosin which includes heating wood rosin to a temperature sufficient to melt it without effecting substantial decomposition in an atmosphere of carbon dioxide and then subjecting the wood rosin under reduced pressure to a temperature of about 300° C. in an atmosphere of carbon dioxide to effect distillation without substantial decomposition of the wood rosin.

1,820,299. VALVE ACTUATING MECHANISM. HAROLD D. CHURCH, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 19, 1929. Serial No. 356,367. 8 Claims. (Cl. 123—90.)



1. A valve tappet of H-shaped cross section having transversely curved flanges and a guide therefor having curved ways in which said flanges slide.

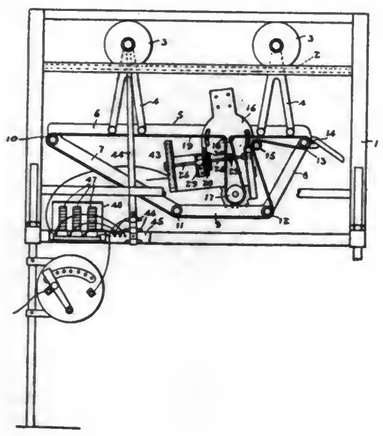
1,820,300. MERCURY SWITCH. PAUL K. CRAMBLET, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Feb. 23, 1926. Serial No. 89,838. 16 Claims. (Cl. 200—152.)



1. A mercury switch of the character described comprising an outer envelope, a protective sleeve of arc resistant material disposed in said envelope out of contact with the walls thereof, said sleeve being open at both ends and providing a passageway between one end of said envelope and the other end thereof, a ring-like supporting member and partition interposed between the sleeve and the outer envelope, layers of cement uniting the supporting member to the sleeve and to the outer envelope, a body of mercury in said envelope, electrodes sealed through the outer envelope and making contact with the body of mercury, said parts being so arranged that upon oscillation of said envelope said body of mercury is caused to alternately divide and unite at a point or points within said sleeve, removed from the walls of the envelope and intermediate said electrodes.

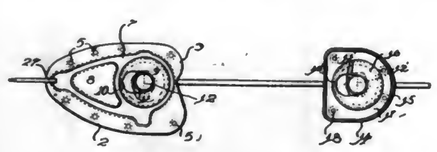
1,820,301. MEANS FOR CUTTING PLASTIC SUBSTANCES. RUDOLF D. DELAMERE, Toronto, Ontario, Canada, assignor to Delamere and Williams, Toronto, Canada. Filed June 28, 1928. Serial No. 289,057. 18 Claims. (Cl. 25—109.)

1. Means for cutting plastic substances, comprising the combination with means for feeding a strip of plastic material to be cut, of a frame movable longitudinally of the fed strip, a rotatable cutter, means mounted on said movable frame for supporting said rotatable cutter in a



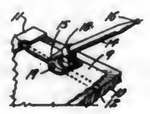
position to intersect the path of said plastic strip, and means controlled by the longitudinal movement of said frame for regulating the operation of the machine.

1,820,302. SKATE. STEPHEN DE ORLOW, Lansing, Mich., assignor to De Orlow Products Corporation, Lansing, Mich., a Corporation of Michigan. Filed Jan. 13, 1930. Serial No. 420,463. 8 Claims. (Cl. 208—167.)



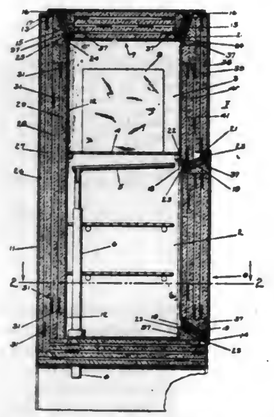
1. A skate comprising sole and heel plates, a runner, threaded studs extending from said runner and adapted for interlocking directly with said plates, and nuts on said threaded studs adapted to bind against said plates.

1,820,303. DECKLE EDGING DEVICE. PRESTEL O. DODGE, Denver, Colo. Filed Feb. 12, 1929. Serial No. 339,320. 10 Claims. (Cl. 92—68.)



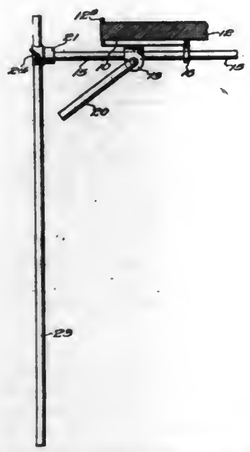
1. A method for forming a deckle edge upon a paper sheet comprising: placing said sheet over a depression and pressing a blunt instrument into said depression without contacting the edge thereof so as to break and sever said paper therein.

1,820,304. REFRIGERATOR. GEORGE H. ELLIS, St. Paul, Minn., assignor to The Insulite Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 26, 1928. Serial No. 321,927. 13 Claims. (Cl. 200—9.)



1. An insulating unit adapted to be interposed between inner and outer walls of a refrigerator, comprising a plurality of comparatively stiff, slightly compressible insulating boards, and furring strips between said boards and spacing the same apart, the said furring strips being situated in spaced-apart relation to each other and furring strips between certain surfaces of said insulating boards bearing offset relation to furring strips between other surfaces of said insulating boards.

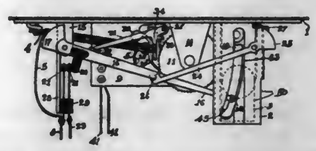
1,820,305. SUPPORT FOR LABORATORY APPLIANCES. CHESTER J. FARMER, Chicago, Ill. Filed Aug. 1, 1925. Serial No. 47,460. 2 Claims. (Cl. 23—259.)



1. A laboratory work bench comprising a table, a shelf over said table, a bracket secured to the underside of said shelf, and supporting means adjustably secured to said bracket for supporting laboratory apparatus above said table.

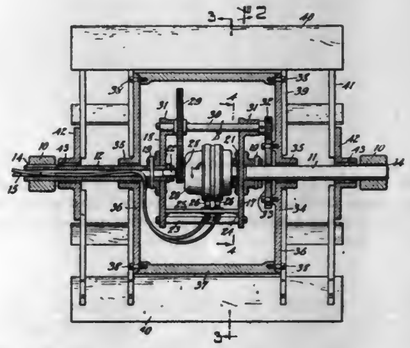
1,820,306. TIME SWITCH. JAMES FERGUSON, San Francisco, Calif. Filed July 1, 1930. Serial No. 465,146. 13 Claims. (Cl. 194—9.)

1. A time switch comprising a coin or token chute, a pivoted rod having means extending into the chute for intercepting a coin or token dropped therein, movable means for temporarily supporting the rod in a certain position, a thermostat, an electrical circuit connected to the thermostat, means actuated by the rod for closing and



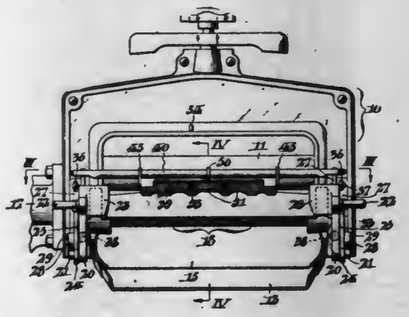
opening the circuit, rotatable means operated by the thermostat for actuating the means for temporarily supporting the rod and means for returning the rod to normal position.

1,820,307. PADDLE WHEEL. GEORGE T. HECKMAN, Cleveland, Ohio. Filed Oct. 25, 1928. Serial No. 315,082. 8 Claims. (Cl. 115—49.)



1. A paddle wheel including a cylindrical housing coaxially associated with said wheel and rotatable therewith, spaced shaft members axially supporting said wheel and said housing and extending into the latter, a stationary frame mounted within said housing between the terminals of said shaft members, a rotary power driving means mounted within said frame, and means for imparting rotary movement from said driving means to said housing.

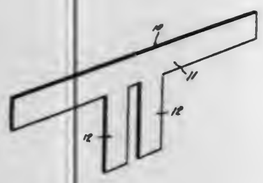
1,820,308. WRINGER. EMIL A. HIBNER, Allentown, Pa. Filed July 24, 1928. Serial No. 295,032. 10 Claims. (Cl. 68—32.)



1. In a wringer, a pair of cooperating squeeze rollers, feeding means in the form of a tongue bar having side arms with pivot trunnions and adapted to be overlapped by a margin of the material which is to be wrung for presenta-

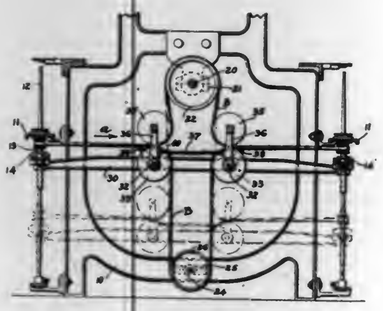
tion of such material to the bight of the squeeze rollers, pivotally suspended bearing members engaged by the pivot trunnions aforesaid to support the bar for swinging movement toward and away from the squeeze rollers, and means enabling individual vertical as well as lateral adjustment of the bearing members to properly position the bar at the level of the squeeze rollers in true alignment and parallelism respectively with the latter.

1,820,309. SWITCH BOX HOLDER. PERCIVAL L. JUDD, Lakewood, EARL B. ATKINSON, Bay Village, and ROY A. ANDERSON, Lakewood, Ohio. Filed Jan. 30, 1929. Serial No. 336,041. 7 Claims. (Cl. 247—21.)



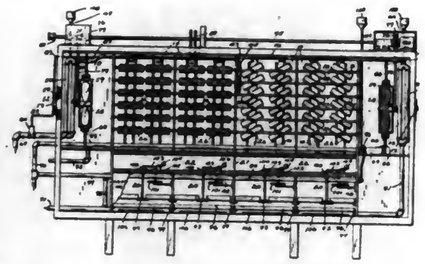
1. A switch box holder, adapted to support a switch box in an opening in a support comprising a thin flat sheet metal strip having a lateral extension projecting from one edge thereof adapted to engage over the outer edge of a switch box.

1,820,310. SPINDLE DRIVING MECHANISM. JOHN A. KOOISTRA, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass. Filed Feb. 6, 1931. Serial No. 513,983. 6 Claims. (Cl. 118—41.)



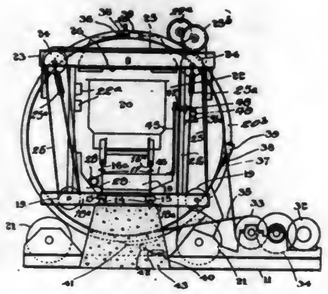
1. Spindle driving mechanism for axially movable belt-driven spindles comprising a machine frame, upper and lower shafts mounted in fixed bearings on said frame, pulleys on said shafts, a cross frame member mounted to move vertically with said spindles, guide pulleys rotatably mounted in fixed relation to said cross frame member, take-up pulleys mounted on arms pivoted on said cross frame member, means to apply yielding tension to said arms, and continuous belts each engaging pulleys on said upper and lower shafts, guide pulleys, take-up pulleys and a plurality of spindles.

1,820,311. INCUBATOR. HARRY M. LACKIE, Madison, Wis. Filed Mar. 27, 1926. Serial No. 97,879. 23 Claims. (Cl. 119—42.)



1. An incubator having in combination sets of hatching compartments and a superposed incubating compartment provided with air inlet and vent apertures, a heating system common to all the compartments and including radiating circulation pipes extending through the respective compartments to heat the air therein by direct radiation, means for maintaining forced circulation of air throughout the incubating compartment, separate circulation pipes connected with said heating system and disposed in the path of the fresh air entering the incubating compartment through its air inlet, and a set of egg trays adapted to be supported interchangeably in any of said compartments, said egg trays and their supports in the incubating compartments being constructed and disposed to provide oblique deflectors in the path of the circulating air.

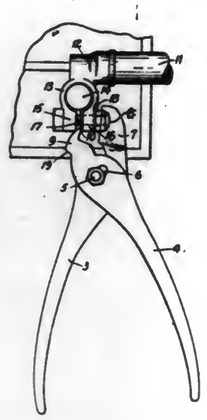
1,820,312. CAR DUMPING DEVICE. WILLIAM L. LAING, Montreal, Quebec, Canada. Filed Jan. 22, 1929, Serial No. 334,272, and in Canada Nov. 10, 1928. 5 Claims. (Cl. 214—55.)



1. In a car unloading device, a rotating frame, rollers for supporting the frame, a car receiving platform adapted to pass through and extend beyond each side of the frame, said platform being clear of the frame in its car receiving position and resting on suitable bearings, means to raise the platform with car thereon to first move it towards the side of the frame and then clamp the top of the car against the top of the frame, and means to control the level of the platform during the hoisting operation.

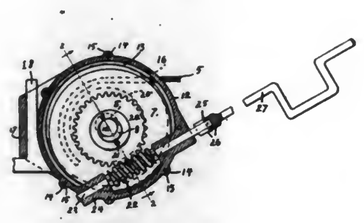
1,820,313. STORAGE BATTERY TOOL. FRANK J. MAYNARD, St. Louis, Mo. Filed July 18, 1929. Serial No. 379,081. 1 Claim. (Cl. 81—5.1.)

A storage battery tool comprising a pair of members pivotally united intermediate their ends, a jaw having a sharp inturned edge formed on one of said members, said edge extending transversely of said member and being



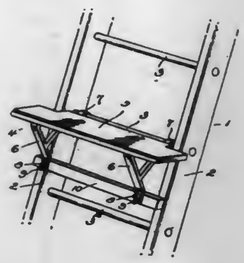
serrated, a flat recessed jaw formed on the remaining member and being longer than the first-mentioned jaw, and a heel formed on the serrated jaw.

1,820,314. TOWING MEANS FOR MOTOR VEHICLES AND THE LIKE. JACOB MENDELSON, Council Bluffs, Iowa. Filed Aug. 12, 1929. Serial No. 385,244. 1 Claim. (Cl. 254—166.)



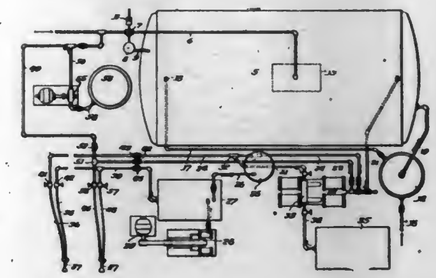
In a towing device for motor vehicles, a substantially cylindrical housing having at one side of the peripheral portion thereof an integral loop-member forming a socket, a bracket-member fixedly secured upon the vehicle-frame and having a tongue adapted to enter said socket to detachably retain the housing in fixed relation to the vehicle-frame, a shaft mounted revolubly in the ends of the housing and having an eccentric body inclosed within the housing, a drum mounted revolubly on said eccentric body of said shaft, a worm-wheel affixed to said drum, a worm mounted revolubly in said housing upon a fixed axis and adapted for engagement with said worm-wheel to actuate the same and to inhibit free rotation thereof, said worm-wheel being engaged with said worm and disengaged therefrom by rotation of said shaft to vary the position of the eccentric body thereof, means for rotating said shaft to effect engagement and disengagement of the worm-wheel and worm, and actuating means connected with said worm and extending from the housing to enable driving of the worm from a position remote from the housing.

1,820,315. STEP ATTACHMENT FOR LADDERS. CHARLES F. MILLER, Columbus, Ohio. Filed Apr. 30, 1929. Serial No. 359,244. 1 Claim. (Cl. 228—60.)



A step attachment for ladders comprising a platform, a pair of spaced brackets hingedly connected with the under side of said platform and provided with hook devices for securing the attachment to the rung of the ladder, said brackets being arranged to swing inwardly toward each other and longitudinally of the platform when in an inactive position, and a cross member detachably connected to the lower ends of said brackets below the plane of said platform, said cross member being adapted to engage the side bars of the ladder and serving to hold the brackets in their extended positions.

1,820,316. CLEANING APPARATUS. FRANK W. MILLER, Chicago, Ill., assignor to Harry S. Hart and Charles F. Fitts, trustees, Chicago, Ill. Filed Dec. 6, 1926. Serial No. 152,747. 4 Claims. (Cl. 299—84.)

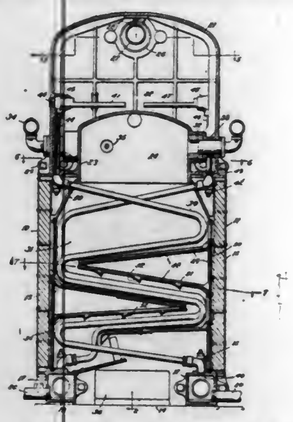


2. In a cleaning apparatus, the combination of a water supply tank, means for heating the water therein, a pump having its suction side connected with said tank, a discharge line leading from said pump, a pressure equalizing tank interposed in said discharge line, means including an air pump for exerting air pressure upon said equalizing tank, and means for mixing oil with the water in the line beyond the tank in quantities proportioned to the quantity of water discharged.

1,820,317. HEATER. CHARLES B. PAGE, Evanston, and ALBERT C. KALK, Chicago, Ill., assignors, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill., a Common-Law Trust. Filed Feb. 23, 1929. Serial No. 342,200. 6 Claims. (Cl. 122—356.)

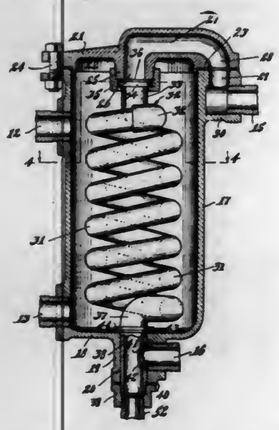
1. A heater comprising, in combination, an upright heating chamber, a head structure closing the top of said heating chamber, the interior of said structure constituting a water chamber, a part of the bottom wall of said head structure being raised to define a combustion chamber, a plurality of burners opening to said combustion chamber, a flue gas outlet at the lower end of said heating chamber,

a series of heating tubes disposed in said heating chamber and opening into said water chamber, certain of said tubes



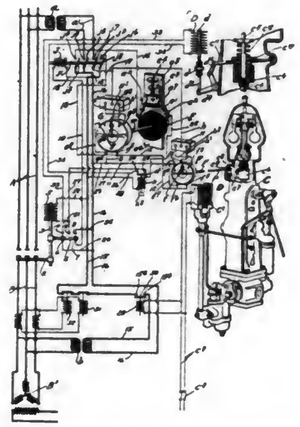
being arranged to discharge onto the raised portion of the bottom wall of said head structure and means for supplying water to said tubes.

1,820,318. WATER HEATER. HARRY E. PAGET, Chicago, Ill. Filed Dec. 29, 1928. Serial No. 329,281. 7 Claims. (Cl. 257—229.)



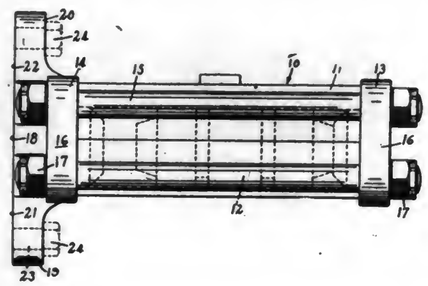
1. In a water heater of the character described, a longitudinally elongated casing having an integral end wall, and having provision near its opposite ends for pipe connections, a removable head for closing the end of said casing opposite to its integral end wall, said integral end wall of the casing having an external axial nipple extension, said nipple extension having a lateral opening for a pipe connection, said removable head having an internal axial nipple extension and a lateral passageway communicable with said nipple extension and a pipe connection provided therefor at the adjacent end of said casing, a tubular coil extending longitudinally within said casing, said coil having an axial nipple extension at one end fitted within the nipple extension of the integral end wall of said casing and having a lateral opening communicable with said lateral opening of said last mentioned nipple extension, means for detachably securing said axial extension of said coil to said integral end wall of the casing, said coil having an axial extension at its opposite end, and means for detachably connecting said last mentioned axial end extension to said nipple extension of said removable head.

1,820,319. AUTOMATIC SYNCHRONIZER. ERICK PEARSON, Columbia Heights, Minneapolis, Minn. Filed Feb. 26, 1924. Serial No. 695,153. 7 Claims. (Cl. 171—118.)



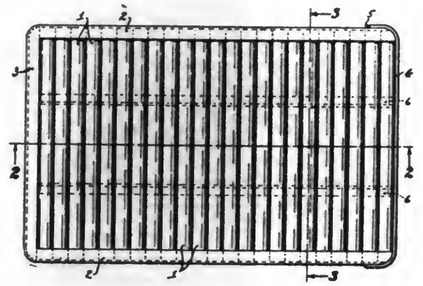
1. In combination, an alternating current distribution system, a generator adapted to supply electrical power thereto, means for synchronizing said generator with said distribution system, circuits connected to said system and generator for operating said synchronizing means, switches in said circuits, and a circuit for closing said switches, said circuit being energized by said generator.

1,820,320. VIBRATOR. GEORGE B. PICKOP, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn. Filed Apr. 4, 1930. Serial No. 441,595. 1 Claim. (Cl. 259—72.)



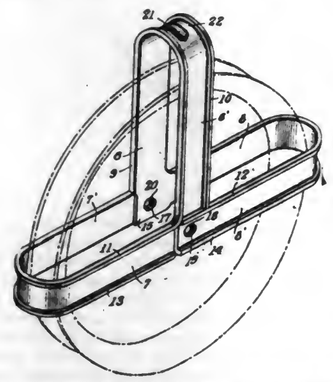
In a vibrator, a cylinder, a vibratory ram in said cylinder having vibratory movement in an axial direction therein, heads at each end of the cylinder, each of said heads being provided with a pair of radially opposite arms extending laterally beyond the cylinder, means passing through said arms for securing the heads to the cylinder, one of said heads being provided with laterally extending lugs disposed substantially at right angles to said arms, and a portion between said lugs which with the said lugs forms a flat surface at right angles to the axis of the vibrator, said lugs having axially directed openings therein for the reception of fastening members, and the plane of said flat surface being spaced outwardly from the radially opposite arms on the head whereby it lies beyond the ends of the securing means passing through said arms.

1,820,321. DECK FOR TRUCKS, TRAILERS, AND THE LIKE. EDWARD H. POLK, Sacramento, Calif. Filed Mar. 12, 1930. Serial No. 435,164. 2 Claims. (Cl. 296—3.)



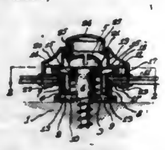
1. A deck for trucks, trailers and the like comprising a one-piece U-shaped frame, a plurality of tubular members extending across said frame with their ends engaging the side members thereof, and a bar extending across the open end of said frame and secured to said side members.

1,820,322. PULLEY GUARD AND HANGER. BERNARD L. POLKOSNIK, Derby, Conn. Filed Oct. 23, 1928. Serial No. 314,420. 1 Claim. (Cl. 254—197.)



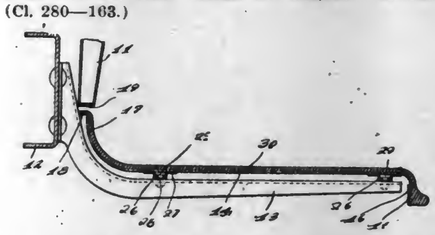
A combined pulley guard and hanger stamped from a single piece of sheet metal to present a central bar member having extensions reaching in opposite directions at right angles from its ends, said bar being bent to produce an open loop extending upwardly and said extensions being looped to encompass the sides of the pulley, the free ends of said side loops being overlapped and secured to the junction of the connected ends and means to receive a pulley pivot through the double thickness of the end loops.

1,820,323. FASTENER. JAMES F. POWELL, deceased, Flint, Mich., by Delbert J. Powell, administrator, Flint, Mich. Filed Oct. 11, 1928. Serial No. 311,794. 4 Claims. (Cl. 24—211.)



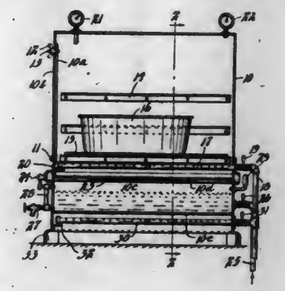
1. A fastener comprising a stud having a head thereon, a base member surrounding said stud and held thereby, a follower surrounding said stud, a coil spring tending to move said follower towards said head, stop means fixed to said base and engageable by said follower to prevent separation of said follower from said base, a relatively movable shell adapted for attachment to a fabric, a spring device within said shell and having a pair of spring fingers adapted to lie upon said follower and to extend beneath said head, a button slidable in said shell, and wedge members carried by said button and adapted to pass between and to spread said fingers.

1,820,324. RUNNING BOARD CONSTRUCTION. JOHN J. PUNKE, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Dec. 10, 1928. Serial No. 324,990. 14 Claims. (Cl. 280—163.)



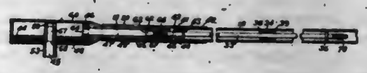
1. In a running board assembly, the combination with a running board and dust shield having longitudinal edge portions, of a mat completely concealing the upper surface of said running board and dust shield and having the longitudinal edge portions detachably embracing the edge portions aforesaid of said running board and dust shield.

1,820,325. COOKER WITH HEAT AND PRESSURE. SOFUS RAGE, Minneapolis, Minn. Filed July 10, 1929. Serial No. 377,194. 3 Claims. (Cl. 126—20.)



1. A cooking device comprising a chamber, a door opening into said chamber and adapted to be tightly closed whereby said chamber may constitute a retort, means for supporting a vessel in said chamber, a burner in said chamber below said means, a water containing chamber below said burner, and a burner below said water containing chamber, said water containing chamber having openings into said first mentioned chamber and means for covering and uncovering said openings whereby said chamber can be used either as a dry oven or as a steam retort.

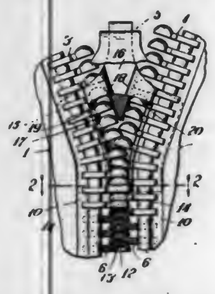
1,820,326. FISHING APPARATUS. CHARLES E. RAYMOND, Boston, Mass. Filed July 25, 1930. Serial No. 470,613. 13 Claims. (Cl. 43—15.)



1. Fishing apparatus comprising, in combination, a rod, a shaft supported by and extending lengthwise of said rod, means for rotating said shaft about its longitudinal axis,

a flexible leader, a coupling member for detachably coupling said leader to the outer end of said shaft, a line attached to said coupling member and extending rearwardly along said rod, and a reel for winding in said line when said coupling member is detached from said shaft.

1,820,327. FASTENER. EMMETT A. SAUNDERS, South Bend, Ind., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed June 24, 1926. Serial No. 118,151. 10 Claims. (Cl. 24—205.)



10. A fastener stringer having locking members secured along the longitudinal edge thereof, each member comprising an interlocking portion and overlapping clamping jaws for securing same to the stringer.

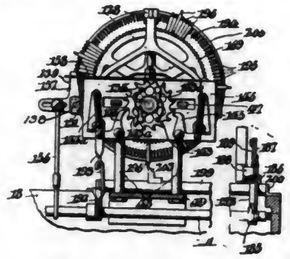
1,820,328. TASSEL. CHARLES P. SCHLEGEL, Rochester, N. Y., assignor to Schlegel Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 4, 1930. Serial No. 479,695. 8 Claims. (Cl. 156—40.)



2. A tassel comprising a tuft having a binding wire, a combined cord anchoring and ferrule holding member secured to said binding wire, a cord secured to the member, and a ferrule surrounding the cord and held by the member.

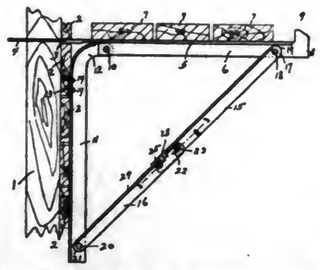
1,820,329. TYPEWRITER. ROBIE SEIDELINGER, Philadelphia, Pa. Filed Oct. 28, 1926. Serial No. 144,688. 2 Claims. (Cl. 197—82.)

1. In a typewriter embodying a platen carriage, and escapement mechanism therefor including an escapement wheel, a slide plate under guidance of ball bearings horizontally reciprocative in opposition to spring tension, individual full and half stop detents carried by said plate for alternate active engagement at opposite points of the escapement wheel, a universal bar with an operative connection to the slide plate including an adjustable link co-active with a notched bell-crank having a flexible connection to such slide plate, said bar being actuable by the letter keys of the typewriter to effect simultaneous horizontal movement of the slide plate in determining a two-stage shog incidental to each progressive movement of



the platen carriage, and a special key with operative connection to the full stop detent whereby the latter may be independently retracted to free the platen carriage from escapement control.

1,820,330. SCAFFOLD BRACKET. HERMAN W. SITTIG, Youngstown, Ohio. Filed Mar. 16, 1929. Serial No. 347,594. 2 Claims. (Cl. 304—33.)



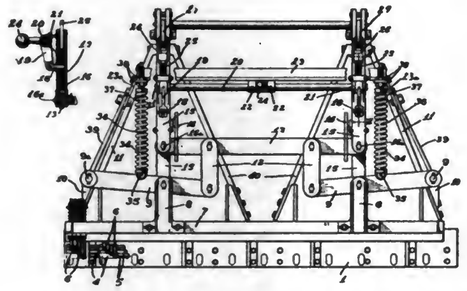
1. In a collapsible scaffold bracket a vertical angle iron having a curved upper portion, a horizontal angle iron having its inner end pivoted to said vertical angle iron and an extension at its outer end forming a securing hook, a two-part locking brace member, a pin pivotally securing the inner ends of said brace member parts, one of said brace member parts having a slot slidably engaged by said pin, and a lug adjacent the inner end of the other brace member part, the first named brace member part having a bifurcated end adapted to engage the lug to hold the brace member parts in locked position when the device is opened in position for use.

1,820,331. CLUTCH. CORNELIUS VON RIESEN, Beatrice, Nebr. Filed May 27, 1929. Serial No. 366,252. 5 Claims. (Cl. 192—28.)



1. A clutch including a shaft having thereon a driving disc, an intermediate disc and a clutch releasing disc, said discs being consecutively arranged on said shaft, said intermediate disc being secured to said shaft to rotate therewith and the other two of said discs being loosely journalled on said shaft, an internal ratchet on said driving disc, a pawl slidably secured to said intermediate disc, said pawl being normally in engagement with said ratchet, a lever pivotally secured to said intermediate disc and slidably held to said clutch releasing disc, the arrangement being such that said lever will withdraw said pawl from said ratchet when the movement of said clutch releasing disc is arrested.

1,820,332. BRICK SETTER. WILLIAM W. WALLACE, Chicago, Ill.; Lilla B. Wallace administratrix of said William W. Wallace, deceased. Filed Aug. 25, 1930. Serial No. 477,650. 3 Claims. (Cl. 294—63.)

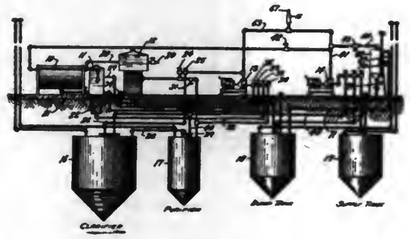


1. In a brick setter, a finger frame including a pair of uprights having parallel arms, brick clamp operating mechanism, a pair of levers connected to said mechanism and to said arms, a second pair of levers connected to said uprights and pivoted intermediate their ends to said first pair of levers, a turn table and links connecting said levers and turn table.

1,820,333. ELECTRIC CONNECTER PLUG. HUGO H. WERMINE, Villa Park, Ill., assignor to Belden Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 11, 1927. Serial No. 198,022. 10 Claims. (Cl. 173—343.)

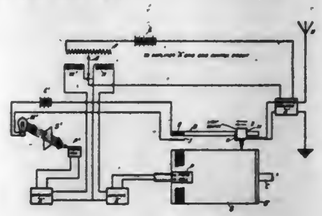
1. An electric plug connecter, comprising a main body member having a recess therein, an auxiliary body member interlocked therewith, one of said members being formed of resilient material so as to be capable of being distorted for permitting interlocking thereof with the other member, and a terminal disposed in the recess in said main body member and provided with a portion engaging said auxiliary member, whereby the terminal is retained in said aperture.

1,820,334. PURIFYING SYSTEM FOR DRY CLEANING SOLUTIONS. JEROME WIESMAN, Denver, Colo. Filed Aug. 22, 1928. Serial No. 301,213. 8 Claims. (Cl. 210—44.)



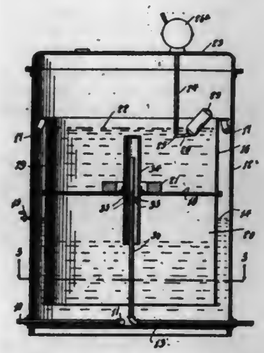
1. Means for purifying the solution from a washing machine comprising: a trap; a filter; a pump; a first closed circuit connecting said machine, said filter, said pump, and said trap; a clarifier; a purifier; a second circuit including said purifier and said clarifier; and means for placing said second circuit in circuit with said first circuit.

1,820,335. INTENSITY CONTROL. OTTO VON BRONK and HANS RUKOP, Berlin, Germany, assignors to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Aug. 6, 1927, Serial No. 211,084, and in Germany Aug. 9, 1926. 18 Claims. (Cl. 178—7.)



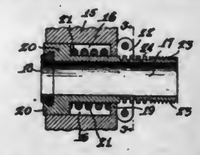
1. The method of eliminating intensity variations in radio picture transmission and reception which comprises providing an area of shade upon at least one edge of the picture and controlling the sensitiveness of a reproducing apparatus by the intensity of reception on said area of shade at each line of the picture.

1,820,336. GAS GENERATING APPARATUS. JOSEPH B. WEAVER, Toledo, Ohio. Filed Nov. 4, 1927. Serial No. 231,060. 1 Claim. (Cl. 261—26.)



Gas generating apparatus comprising an air receiver embodying a float having a liquid load imposed thereon to regulate the pressure and volume of air maintained in said receiver, means for supplying air under pressure to said receiver including an electric motor and a switch in the motor circuit including a float coacting with said liquid load to open the switch when the volume of air in the receiver is increased or depleted to a predetermined extent.

1,820,337. TERMINAL TUBE ADJUSTMENT FOR TRAIN CONNECTERS. ELLISON EDWARD WORKMAN, Montreal, Quebec, Canada, assignor to himself and Edward Arthur Robinson, Montreal, Canada. Filed Sept. 19, 1922. Serial No. 589,145. 1 Claim. (Cl. 285—58.)



In an automatic train pipe connecter, a coupling head supported from fixed train parts in position for automatic coupling and having an opening therethrough, an inwardly projecting flange near the rear of the opening,

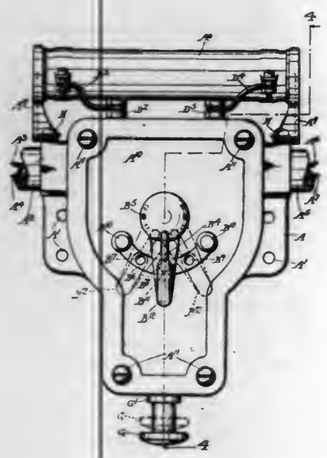
a train pipe terminal passing through the opening and enlarged at its forward end to slide in the opening, a spring between the flange and the enlarged portion of the terminal forwardly pressing the terminal from the flange, a clamp stop about the terminal pipe to the rear of the flange to limit the forward position of the terminal and adapted for adjustment about the terminal pipe, and members free from axial advancement along the terminal adapted to interlock on the inside of the clamp and the outside of the terminal pipe.

1,820,338. MARKING ROLL. CASPER E. YOUNGCHILD and JEAN K. VANATTA, Port Edwards, and JOHN W. YOUNGCHILD, Nekoosa, Wis., assignors to Nekoosa-Edwards Paper Company, Port Edwards, Wis., a Corporation of Wisconsin. Filed Apr. 17, 1930. Serial No. 445,180. 8 Claims. (Cl. 101—376.)



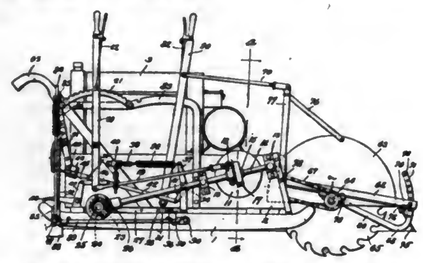
1. A marking sleeve, comprising a hollow body having an outer layer of hard rubber with a design therein, a backing of heavy fabric therefor, and a second layer of hard rubber removably secured to said fabric backing whereby said engraved rubber layer and its fabric backing may be stripped from the sleeve to expose said second rubber layer.

1,820,339. ELECTRIC SWITCH. JOHN A. AMOS, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 9, 1926. Serial No. 128,112. 5 Claims. (Cl. 201—48.)



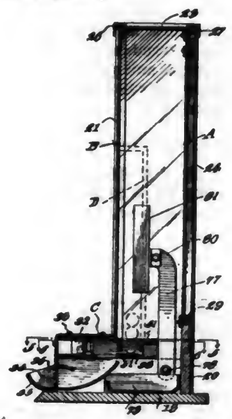
5. A switch assembly comprising a generally flat housing, a pocket extending laterally from and of smaller area than the housing, both of them being open on one side and a removable closure for them, sleeves integral with and projecting from opposed sides of the housing and adjacent that side furthest from the pocket, flanges integral with the sleeve and housing and in line with the bottom of the housing, brackets removably mounted on the flanges extending in a direction away from the pocket, a cylindrical self-contained resistance unit socketed at its end in said brackets, a rotatable switch handle projecting through the removable closure and adapted to rotate in a plane parallel therewith, a push switch handle propecting longitudinally through that side of the pocket furthest removed from the housing adapted to reciprocate in a plane parallel with the closure but on the opposed side from it with respect to the rotatable switch.

1,820,340. ICE SAWING MACHINE. JOSEPH C. BABST and JAMES H. FISCH, Barnesville, and JOSEPH BAUER, St. Paul, Minn. Filed June 27, 1930. Serial No. 464,398. 10 Claims. (Cl. 262—20.)



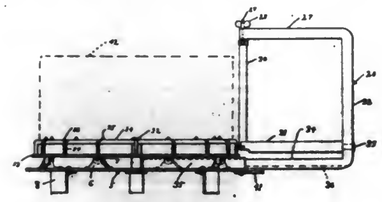
1. An ice sawing machine including a sled structure, ice sawing mechanism carried by said structure, toothed propelling wheels, yielding means for holding the wheels normally in engagement with a supporting surface, foot actuated means for disengaging said wheels from the supporting surface, means for automatically fastening the wheels in their raised positions, and means under the control of an operator for releasing the wheels.

1,820,341. CIGAR VENDING MACHINE. JOSEPH W. BESSON, East St. Louis, Ill., assignor to John E. Carson, Belleville, Ill. Filed Dec. 29, 1928. Serial No. 329,275. 1 Claim. (Cl. 312—80.)



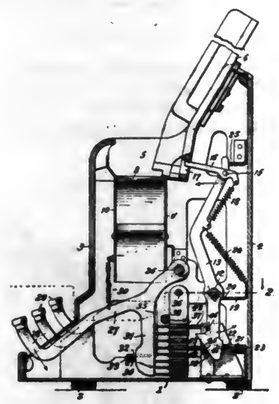
In a cigar vending machine having a base section formed of opaque material and an upper section having front, rear and side transparent panels, a cigar box holder adapted to hold said box against said front panel extending into the top section including vertically disposed arms, pivoted in the base section and being movable in a vertical plane, said arms having forwardly projecting arcuate terminals, and gripping jaws, comprising angle strips, normally disposed in a vertical plane adjustably carried on pivots by the arcuate terminals of the arms, and movable in a vertical plane.

1,820,342. CHEESE CUTTER. THEODORE J. BOEHMER, Columbus, Ohio. Filed Oct. 11, 1930. Serial No. 488,111. 1 Claim. (Cl. 31—19.)



A cheese cutter of the type described comprising a base, platform rotatably supported in a vertically spaced manner on said base, a radially reciprocable blade structure slidably mounted on said base, and means to controllably rotate the platform for positioning the platform with respect to the blade structure, and means on the platform for preventing horizontal displacement of a cheese placed thereon.

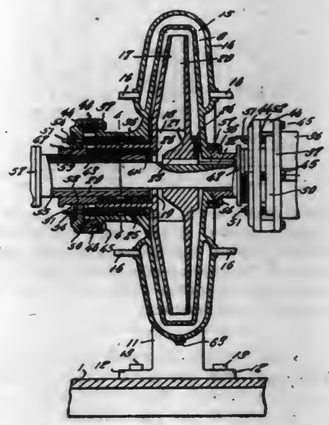
1,820,343. CHANGE MAKING MACHINE. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Automatic Cashier Company, Watertown, Wis., a Corporation of Wisconsin. Filed Jan. 16, 1926. Serial No. 81,853. 4 Claims. (Cl. 133—4.)



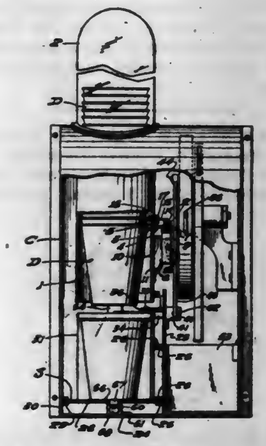
1. A change making machine comprising a coin receptacle, pivotally mounted key levers, a vertically extending projection formed on each of the key levers, coin ejecting levers mounted for swinging movement, each of said coin ejecting levers having inclined surface frames mounted for swinging movement horizontally extending projections carried by the frames and adapted to be engaged by the vertically extending projections formed on the key levers, and a roller carried by each frame and adapted to be engaged with the inclined surface of a coin ejecting lever.

1,820,344. CENTRIFUGAL COMPRESSOR. PRINCE D. CALDWELL, Los Angeles, Calif. Filed Nov. 25, 1930. Serial No. 498,158. 3 Claims. (Cl. 230—130.)

1. A compressor of the character described comprising a base, a series of longitudinally aligned impeller units mounted on the base, a rotary shaft extending longitudinally through the units, each unit including a housing having a centrally disposed fluid inlet opening in one side and a centrally disposed fluid outlet opening in its opposite side, conduits connected to the respective outlet openings and extending between the housings for passing the fluid therebetween, the shaft passing through the openings and conduits in spaced, concentric relation thereto, an integral neck extending longitudinally from the forward side of each housing in spaced, concentric, surrounding relation to the adjacent conduit, a centrifugal impeller fixed on the shaft for rotation in each housing and spaced therefrom, an integral flange extending longitudinally from one side of the impeller between the neck and the conduit in spaced concentric relation to said neck and conduit, and sealing means between the flange and the neck and between the flange and the conduit.

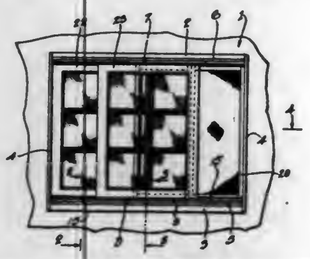


1,820,345. VENDING MACHINE. CHARLES KRESS CHERRY, Little Rock, Ark. Original application filed Oct. 18, 1927, Serial No. 226,964. Divided and this application filed Mar. 28, 1929. Serial No. 350,781. 5 Claims. (Cl. 312—44.)



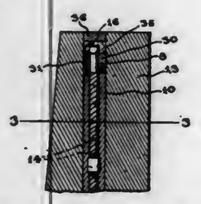
1. A vending machine comprising a magazine adapted to contain a stack of cups, a reciprocating carriage normally positioned below the magazine to receive a cup discharged therefrom, means for reciprocating said carriage, a holding member for the cups engaging the lowermost cup within the magazine, means for releasing said holding member upon initial operation of the means for reciprocating the carriage, and means for holding the remaining cups within the magazine when the holding member is released from the lowermost cup.

1,820,346. WINDOW CONSTRUCTION. HOLGER C. CHRISTENSEN, Waukegan, Ill. Filed Jan. 31, 1930. Serial No. 424,970. 9 Claims. (Cl. 20—51.)



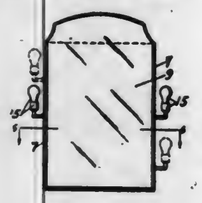
1. A window construction comprising a frame, a pair of sashes movably carried by the frame and arranged for lateral movement within the frame and with respect to each other, means for guiding said sashes, and means for rotatably mounting the sashes within the frame for permitting the sashes to be reversed.

1,820,347. APPARATUS FOR SEALING CREVICES IN ROCK FORMATIONS OR THE LIKE. GEORGE W. CHRISTIANS, Chattanooga, Tenn. Original application filed Aug. 7, 1926, Serial No. 127,896. Divided and this application filed Mar. 30, 1928. Serial No. 265,962. 2 Claims. (Cl. 61—36.)



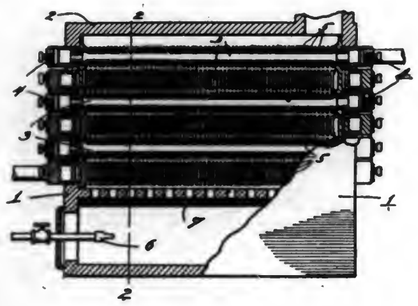
1. In combination, a passageway arranged in stone or similar formations, a conduit arranged within the passageway, a ported plug surrounding the upper portion of the conduit, a thermoplastic cap resting on the plug and within which the upper end of the conduit is embedded, and a plug of masonry material closing the upper end of the passageway.

1,820,348. ADJUSTABLE LIGHTING FIXTURE FOR MIRRORS. HARLEY G. CORWIN, GEORGE D. BLAIR, and CLARENCE W. GILMAN, Los Angeles, Calif. Filed Apr. 2, 1930. Serial No. 441,008. 1 Claim. (Cl. 240—4.1.)



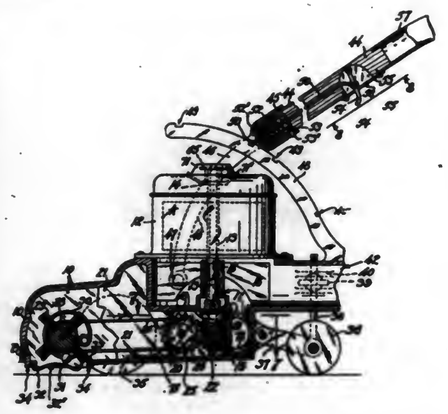
A device of the character described including a mirror, a chamber positioned in back of the mirror and adjacent a vertical edge thereof, said chamber having an elongated opening in the outer side face thereof and out of view when looking at the face of the mirror, a vertically extending rod positioned in the chamber and relative to the elongated opening, an arm adjustably carried by the rod and projecting through the elongated opening of the chamber, means for holding the rod in its adjusted positions, and an extension formed on the arm and carrying a light socket, the end of the extension and socket being positioned forwardly of the face of the mirror.

1,820,349. HEAT EXCHANGER. WALTER M. CROSS, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed May 12, 1924. Serial No. 712,845. 2 Claims. (Cl. 257—236.)



1. A heater construction comprising a chamber, adapted to contain products of combustion, a checker brick partition forming the roof of said chamber and the floor of a tube chamber, and adapted to distribute the products of combustion evenly in said tube chamber, a plurality of tubes positioned in said tube chamber above said partition, said tubes being arranged in staggered relation, the walls of said tube chamber being provided with abutments projecting therein to effect an efficient exchange of heat from products of combustion of said tubes.

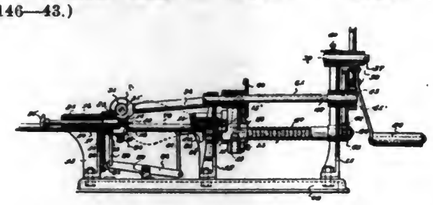
1,820,350. VACUUM CLEANER. CLIFFORD C. DANCE, Denver, Colo., assignor to Dance Suction Sweeper Company, Denver, Colo., a Corporation of Delaware. Filed Mar. 24, 1923. Serial No. 627,294. 19 Claims. (Cl. 15—8.)



1. In a vacuum cleaner, a casing having an intake opening, a motor having a shaft, a fan driven by said shaft, a drive member rotatably mounted on said shaft and adapted to have driving relation therewith, means to provide a driving connection therebetween, cleaning means operatively connected with said member, and separate means also on said shaft for holding said drive member in and out of driving relation with said shaft.

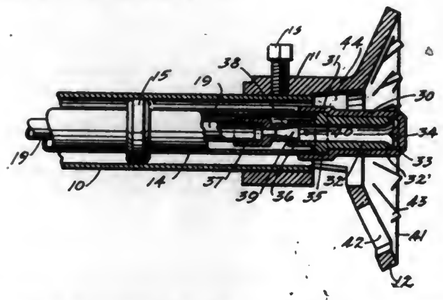
3. In a vacuum cleaner, a casing having an intake opening, a motor having a shaft, a fan driven by the shaft, a drive member rotatably mounted on said shaft and having a clutch part, a clutch part slidable on the shaft for driving engagement with said member, cleaning means adjacent said opening operatively connected with said member, means on the shaft for sliding the one clutch part out of driving relation with the first mentioned clutch part, and cooperating means on the shaft for sliding the clutch part into driving relation.

1,820,351. PARING APPARATUS. ARTHUR L. DUNCAN, Piedmont, Calif., assignor to Acme Canning Machines Company, Reno, Nev., a Corporation of Nevada. Filed Apr. 9, 1926. Serial No. 100,954. 18 Claims. (Cl. 146—43.)



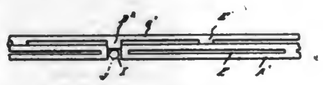
7. A fruit paring machine comprising holders for the fruit designed to yieldingly engage the stem and blossom ends of the fruit; a paring cutter; means to move said paring cutter endwise of the fruit; and means to intermittently shift said fruit angularly with respect to said cutter.

1,820,352. STEAM ATOMIZING OIL BURNER. ROSS H. FORNEY, Dallas, Tex., assignor to Forney Combustion Engineering Company, Dallas, Tex., a Corporation of Texas. Filed Aug. 12, 1929. Serial No. 385,325. 4 Claims. (Cl. 158—75.)



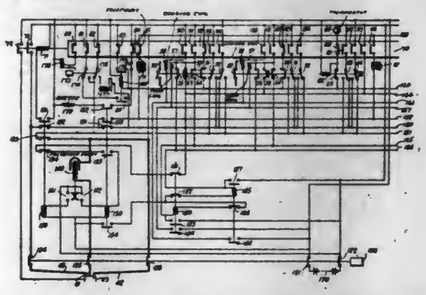
1. In a fuel burner, an oil tube, a steam tube within the oil tube, a burner tip, a mixing sleeve within the tip, and a nipple connected with the steam tube and projecting into the sleeve, said sleeve having oil admitting openings beyond the nipple, said nipple having a nozzle with a flared port for discharging and expanding steam in the sleeve, the sleeve having a flared discharge end and the tip having ports also flared therefrom, together with a cone projecting in the sleeve.

1,820,353. PISTON RING. NORMAN T. HARRINGTON, Cleveland, Ohio, assignor to The Simplex Piston Ring Company of America, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed July 22, 1929. Serial No. 380,106. 2 Claims. (Cl. 74—109.)



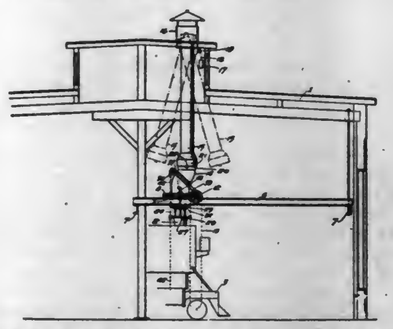
1. A piston ring comprising a pair of ring members, one of which is formed with opposite parallel plain faces with intermediate circumferentially extending slots and being trans-split at one point, and the other of said members having an outer plain face and axially inwardly extending lugs arranged for registration with said slots and a single lug of greater axial depth adapted to enter the slot formed by the transverse split in said first mentioned faces.

1,820,354. ELECTRICAL REMOTE CONTROL SYSTEM. BRUCE HAMER LEESON, Tynemouth, and OTIS CARTER FORMBY KING, London, England, assignors to A. Reyrolle & Company, Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed Nov. 12, 1928, Serial No. 318,972, and in Great Britain Dec. 6, 1927. 18 Claims. (Cl. 177—353.)



2. In an electrical remote control system, the combination of a device at the controlled end to which step-by-step movements are to be imparted each from one operative position to the next, apparatus at the control station for controlling the movements of such device, a device forming part of the controlling apparatus to which step-by-step movements are to be imparted corresponding to those of the device at the controlled end each movement being performed in two parts, means whereby the operation of the controlling apparatus causes its device to perform the first part of its movement and causes a current to be transmitted to the controlled end for the initiation of the movement of the device at that end, means whereby after such current has been transmitted the controlling apparatus is held inoperative with its step-by-step device in the intermediate position, and means for transmitting a release current from the controlled end when the step-by-step device at that end has completed its movement into the new operative position whereby the controlling apparatus is released and its step-by-step device is caused to perform the second part of its movement.

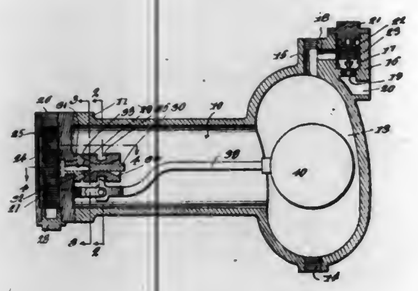
1,820,355. EXHAUST APPARATUS. LOOMIS L. KELLY, Roanoke, Va.; William M. Brodie administrator of said Loomis L. Kelly, deceased. Filed Aug. 22, 1930. Serial No. 477,128. 31 Claims. (Cl. 104—52.)



1. In an exhaust apparatus for locomotive roundhouses, the combination with an immovably mounted duct, of a horizontally movable carriage, and a series of normally

upright ducts depending from adjacent the roof of the roundhouse and the upper end of said series having communication with said immovable duct, the lower end of said series of ducts being connected to and movable with said carriage and the latter being movable with respect to the said upper end of said series whereby said ducts may be moved into operative association with the stack of a locomotive.

1,820,356. AUTOMATIC FEED WATER REGULATOR. JOHN T. LINDSTROM, Allentown, Pa. Filed Apr. 29, 1929. Serial No. 378,960. 2 Claims. (Cl. 137—101.)



1. In a device of the class described, a cylinder open at one end, a float chamber at the opposite end of the cylinder, a removable cover plate for the open end of the cylinder having a diametrically extending enlargement provided with an opening therethrough, one end of said opening constituting a water inlet, a screen for the water in said opening, a plug closing the opposite end of the opening against which the screen seats, the head having an axial opening communicating with the first mentioned opening, a valve post having an axial bore threaded into the last mentioned opening and provided with a conical valve seat having axial ports therein communicating with the bore, a valve slidable on said post having its opposite ends flared for seating on the conical seat, a float in the chamber, a float arm for the float having a fork on its inner end, a bracket secured to the removable closure, means pivotally securing the inner end of the arm to the bracket, and inwardly directed pins on said fork engaging the slide valve.

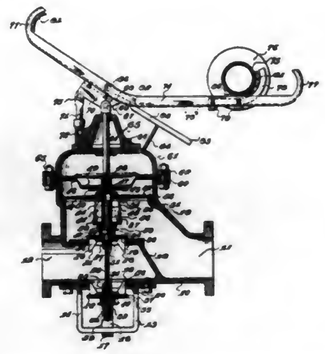
1,820,357. VISION-TONE DEVICE. LINN OLAF B. LINDSTROM, San Francisco, Calif., and ALBERT DARWIN RUEDEMANN, Cleveland, Ohio. Filed Feb. 15, 1929. Serial No. 340,297. 6 Claims. (Cl. 250—1.)



1. A vision-tone device comprising a light sensitive element and means for causing a change in frequency in an electrically oscillating tube circuit with a change in current through the light sensitive element, such means including a current controlled variable condenser, having fixed and movable plates, with its plates connected in the oscillating circuit, magnetic means for adjusting the position of said movable plate, and connections between said light sensitive element and said magnetic means.

2. A photo-electric or light sensitive cell holder having the cells mounted directly in front of the eye positions with a connecting nose piece and ear phones mounted on the ear stems to the cell holders.

1,820,358. MULTIPLE FLOW REGULATOR. ALLEN D. MACLEAN, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Filed Feb. 25, 1927. Serial No. 170,939. 16 Claims. (Cl. 137—153.)



1. An automatic flow regulator having a plurality of inlets and a single outlet, a plurality of valves movable as a unit controlling the flow from either of said inlets to said outlet, and means controlled by variations in pressure beyond a predetermined limit in one of said inlets to shift said valves with a snap movement and put the other inlet in communication with said outlet, said means including a lost motion connection to said valves and means to move said valves in either direction with a snap movement.

1,820,359. COMBINED CLUTCH RELEASE AND BRAKE SETTING DEVICE. PRENTICE H. MANNING, Bowling Green, Mo. Filed Nov. 12, 1928. Serial No. 318,787. 3 Claims. (Cl. 74—81.)



1. In a motor vehicle, the combination with a clutch release pedal movable from a starting position to release a clutch, and a service brake pedal movable from a starting position to set the brakes and in the same general direction as the movement of the clutch release pedal as aforesaid, of an abutment for the clutch release pedal, means for supporting said abutment in connection with the service brake pedal in a position in which the clutch release pedal will engage said abutment during its final movements from said starting position and will move said abutment in a direction and to an extent sufficient to operate said service brake pedal in a direction and to an extent to set the brakes, and means for securing said abutment on said supporting means in a position to cooperate with said clutch release pedal irrespective of the position in which said supporting means is mounted upon said service brake pedal.

1,820,360. FLY SWATTER. ROBERT F. MEGGITT, Cheboygan, Mich. Filed June 25, 1928. Serial No. 287,970. 1 Claim. (Cl. 43—137.)

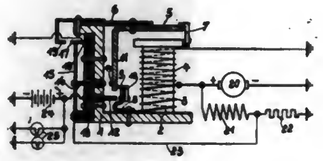
In a fly-swatter, a frame comprising a stem, arms projecting from the stem, and a cross piece connecting the

arms, the arms embodying curved portions disposed at the ends of the cross piece; a jaw comprising a cross piece and arms, the cross piece of the jaw extending across the arms of the frame in approximate parallelism to the cross piece of the frame; the cross piece of the jaw being slidably engaged with the curved portions of the arms



of the frame to cause the cross piece of the jaw to slide toward the cross piece of the frame, thereby to form a paddle-grip; the jaw being freely removable from the frame and being movable longitudinally of the frame to permit the cross pieces to function as aforesaid, and means for effecting a slidable and releasable connection between the arms of the jaw and the stem.

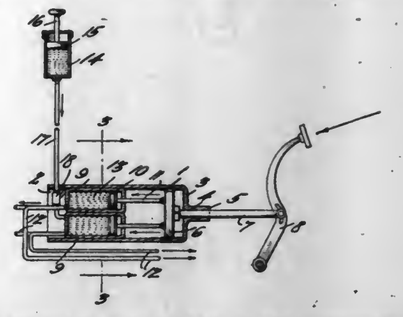
1,820,361. ELECTRIC SWITCH. FRIEDRICH MENZEL, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Dec. 20, 1928, Serial No. 327,428, and in Germany Dec. 17, 1927. 11 Claims. (Cl. 171—314.)



1. In a battery charging system, including a dynamo, dynamo voltage regulating means, a battery and current consuming devices, the combination of an automatic safety switch comprising a compound wound relay, an armature actuated by said relay, a main circuit from said dynamo to said current consuming devices and thermo-sensitive contact means situated in said main circuit, mechanically operated by said armature to open and close said main circuit and operated in response to heat generated by sparks in its actuation to actuate the switch contacts independently of the mechanical operation of said armature.

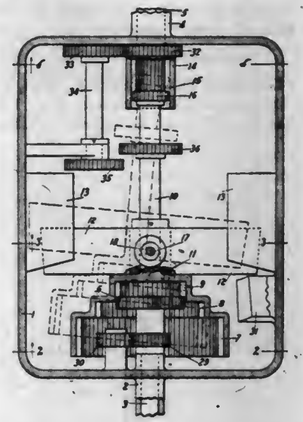
1,820,362. HYDRAULIC BRAKE. JAMES C. MONN, Harrisburg, and WILLIAM H. MILLER, Penbrook, Pa. Filed Mar. 6, 1929. Serial No. 344,878. 1 Claim. (Cl. 60—54.6.)

A hydraulic brake system including a guide casing, a plurality of pressure cylinders arranged within said guide casing, pipes leading from the cylinders to the brake elements, each pressure cylinder and pipe being wholly closed against any other pressure cylinder and pipe, a piston in each cylinder, a replenishing tank, means for subjecting the material in the tank to a selective pressure, a pipe leading from the replenishing tank into the guide casing, a manifold connected to said pipe within the guide casing and having communications with each of the pres-



sure cylinders, a valve in each of said communications opening under replenishing pressure in excess of cylinder pressure, a disk head slidably guided in the casing beyond the cylinders, a connection between said disk head and each piston, and means operative through one end of the casing to actuate the disk head and thereby the pistons within the cylinders.

1,820,363. TRANSMISSION MECHANISM. SAMUEL D. MORRAL, Morral, Ohio. Filed Sept. 4, 1928. Serial No. 303,683. 6 Claims. (Cl. 74—58.)



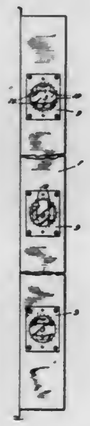
1. In a transmission mechanism, a housing, alined bearings at the respective ends of said housing, a driving shaft journaled in one of said bearings, a driven shaft journaled in the other of said bearings, a spur gear secured to said driving shaft, a supporting structure mounted in said housing for movement both longitudinally and transversely thereto, an intermediate shaft rotatably mounted on said supporting structure and movable therewith, means for connecting said intermediate shaft with said driven shaft for both axial movement and swinging movement with relation thereto, an internal gear unit carried by said supporting structure, rigidly secured to said intermediate shaft and having a plurality of toothed portions of different diameters, and an actuating lever pivotally mounted between its ends for movement about axes extending both longitudinally and transversely to said housing and having one end extending into said housing and operatively connected with said supporting structure.

1,820,364. SPARK PLUG TOOL. WILLIAM P. PRINGLE, Washington, D. C. Filed Oct. 4, 1928. Serial No. 310,327. 3 Claims. (Cl. 15—104.01.)



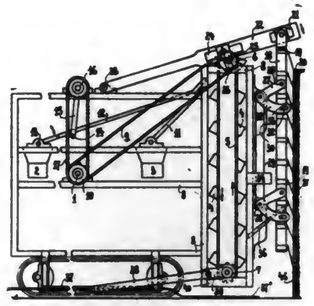
1. A spark plug cleaner comprising a head of general triangular outline, including a long narrow sharp point adapted to reach to the bottom of the spark plug air space, the opposite end of said head comprising a shoulder adapted to engage the under surface of a plug shell flange, an edge between the point of said shoulder and the point of said head adapted to scrape the inside of a shell, a neck having one side in a straight line parallel to the side of said head adjacent said shoulder, said neck being of such width as to be operable between the inner rim of said flange and the center porcelain.

1,820,365. PLUMB LEVEL. LEWIS B. RIES, Donora, and JAMES B. DICKERSON, Monongahela, Pa. Filed Jan. 6, 1930. Serial No. 418,914. 4 Claims. (Cl. 33—214.)



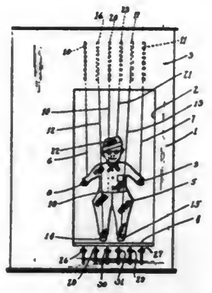
1. A level comprising a bar having an opening formed therethrough, a frame in said opening secured to the bar about the margins of the opening, a bubble glass, elastic bands fitting about said glass adjacent opposite ends thereof, clamps engaged about said bands and each having spaced ears extending therefrom, at a side of the glass, and screws passed through said ears and engaged in threaded openings formed in said frame to secure the clamps to the frame.

1,820,366. MECHANICAL BRICK PRESS. GASTON RIGAUX, Jumet, Belgium. Filed Jan. 25, 1928, Serial No. 249,437, and in Belgium Feb. 5, 1927. 4 Claims. (Cl. 37—1.)



1. A device for cutting or breaking down clay for use in brick presses, comprising a drive shaft, feed hoppers for receiving the clay, a rigid frame carrying transverse cutters arranged one above the other, means actuated by said drive-shaft for moving said frame laterally toward the clay wall and then downwardly in a vertical direction, and means for conveying the clay into the feed hoppers.

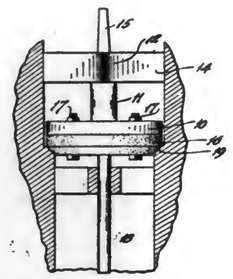
1,820,367. MARIONETTE TOY. HARRY T. ROGERS, Chicago, Ill. Filed Apr. 22, 1929. Serial No. 357,249. 1 Claim. (Cl. 46—40.)



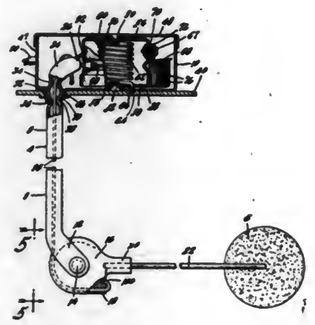
A device of the type described comprising a casing having a front wall, a back wall, and a partitioning wall positioned therebetween, a floor portion connecting the bottom portion of said partitioning wall with said front wall, a plurality of actuating levers, each of said levers having an end pivotally mounted within the casing, said levers extending beneath the floor portion and through slots in the front wall, a plurality of actuated levers, each of said levers having one end pivotally mounted within the casing and extending through slots in the partitioning wall, connecting links for connecting the actuating levers with the actuated levers, a marionette positioned between said partitioning wall and the front wall, said front wall having an opening therein whereby said marionette may be visible from the exterior of the casing, and means connecting each of the actuated levers with various parts of the marionette whereby said marionette will make various movements when the actuating levers are moved.

1,820,368. VALVE SEAT GRINDER. JAMES E. WHITMILL, Haynesville, La. Filed May 29, 1930. Serial No. 457,278. 1 Claim. (Cl. 51—205.)

A valve seat grinder comprising a grinding head of slightly less diameter than the valve chamber to permit its freely entering the latter, a star-shaped member having a shank portion by which it is integrally connected with the head but axially spaced from the same, the arms of the star-shaped member being of a radial extent to bring them in contact with the wall of the valve chamber, a grinding disk carried on the under face of the head, and a centering pilot protruding from the under face of the head for sliding engagement with the valve-stem guide.

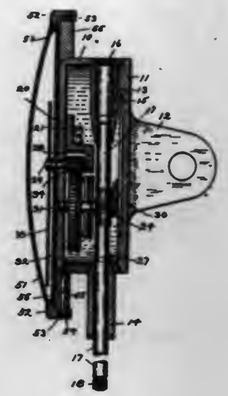


1,820,369. ELECTRIC GASOLINE GAUGE. BRUNO HENRY ZEIBIG, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Jan. 30, 1929. Serial No. 336,082. 3 Claims. (Cl. 201—48.)



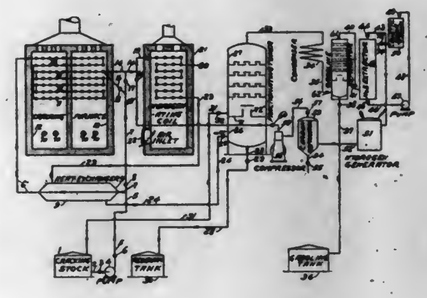
3. In a device for determining the level of a liquid in a receptacle, a housing secured to the receptacle, a tube rigidly mounted in the housing and extending both inside the housing and inside the receptacle, a contact movably mounted in the housing, a flexible member attached to the contact mounting and extending through the tube, a plurality of restricted portions in said tube serving as bearings for the flexible member and to restrict the passage of fumes from the receptacle to the housing, a float pivotally mounted within the receptacle on said tube, and means operably connecting said flexible member to said float to cause said contact to move in response to changes in level of the liquid.

1,820,370. DIAL GAUGE. ERIK H. ALDEBORGH and CRISTIAN EUGENE RUF, Poughkeepsie, N. Y., assignors to Standard Gage Company, Inc., a Corporation of New York. Filed Mar. 2, 1928. Serial No. 258,525. 3 Claims. (Cl. 33—172.)



1. A dial indicating gauge, comprising in combination with a casing having a dial and an indicating hand for said dial and a pinion for moving the hand, a reciprocating plunger mounted in said case and having a work contacting end, and a rack formed on said plunger within said casing, of a compound gearing mounted within said casing for transmitting movement from said rack to said pinion, means carried by and within said compound gearing comprising a flanged disk and a flat spring for preventing lost motion between said pinion and said gearing, and between said rack and said gearing.

1,820,371. PROCESS OF PRODUCING GASOLINE FROM HIGH BOILING HYDROCARBON OILS. JOHN C. BLACK, Los Angeles, and MARVIN L. CHAPPELL, Watson, Calif. Filed Oct. 31, 1927. Serial No. 230,114. 22 Claims. (Cl. 196—62.)



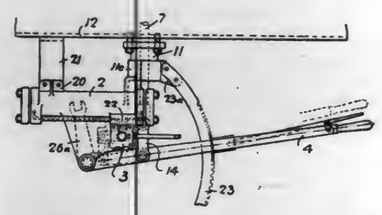
17. The step in the process of hydrogenating petroleum oil containing unsaturated hydrocarbons, comprising, passing the petroleum oil and hydrogen gas under superatmospheric pressure of more than 500 pounds gauge, at a hydrogenating temperature of approximately 700 to 750 degrees F., through an elongated passageway, and maintaining said hydrogenating temperature by continuously extracting the exothermic heat as produced by the hydrogenation reaction with a flowing cooling fluid.

1,820,372. EXERCISING MACHINE. AUGUST E. R. BLOMQUIST, Cleveland, Ohio. Filed Feb. 8, 1928. Serial No. 252,762. 8 Claims. (Cl. 272—73.)



1. In a machine of the class set forth, the combination of a relatively heavy base incorporating a casing and a platform, a hollow column rising from the base, a housing surmounting said column, a shaft within the column and having its ends disposed within the housing and casing, a crank action carried by the housing, a pedal action carried by the casing, and driving connections between each of said actions and the shaft.

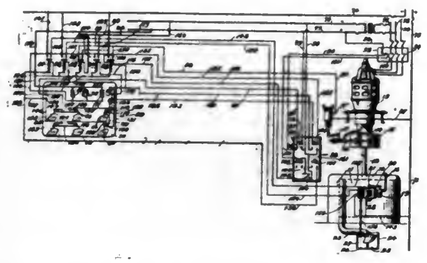
1,820,373. THROTTLE VALVE OPERATING MECHANISM. JAMES G. BLUNT and ROGER W. CLIFFORD, Schenectady, N. Y. Filed July 29, 1929. Serial No. 381,820. 9 Claims. (Cl. 137—139.)



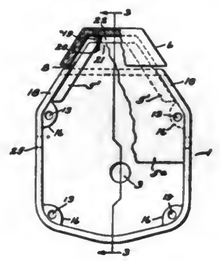
9. In a locomotive the combination of a longitudinally reciprocable throttle valve rod; a fluid pressure motor cylinder; a piston in the cylinder reciprocable in a path substantially transverse to the reciprocations of the throttle rod; an auxiliary valve for controlling the operations of the piston; a hand lever pivoted to swingggggg.....okkkkkkk the piston; a hand lever pivoted to swing for operating the valve; a fixed element; and means operatively connected to the piston, to the valve rod, to the hand lever, and to the fixed element, for translating the reciprocal movements of the piston to reciprocal movements of the throttle valve rod and to insure simultaneous swingings of the hand lever with reciprocations of the piston.

1,820,374. CONTROL DEVICE FOR AFFINATION CENTRIFUGALS. CHESTER L. CARLSON, Crockett, Calif. Filed June 15, 1927. Serial No. 198,947. 3 Claims. (Cl. 210—72.)

1. A sugar refining apparatus comprising means to separate liquid material from solid material mixed therewith, means to wash said solid material, several means to convey away the liquid separated from said material, controlling means for initiating operation of said separating means and for stopping said operation at a predetermined fixed time after initiation thereof, for initiating operation of said washing means at a predetermined fixed time with respect to said separating operation and for stopping said washing operation a predetermined fixed time after initiation thereof, and for deflecting said separated liquid from one of said conveying means to another at a predetermined fixed time with respect to said other operations, a means for initiating operation of said controlling means, and means for separately indicating the duration of each operation.



1,820,375. MOLDED RECEPTACLE. HOMER P. CHANDLEE, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Original application filed Apr. 3, 1925, Serial No. 20,403, now Patent No. 1,720,263, dated July 9, 1929. Divided and this application filed Mar. 10, 1928. Serial No. 260,703. 3 Claims. (Cl. 200—168.)



1. A switch receptacle comprising a casing member of formed up material having integral side and bottom walls and an integrally formed partition transversely disposed relative to the walls forming two compartments each open on opposite faces of the receptacle, a separately formed and removable cover for each compartment and positioned parallel with the fixed partition, transversely disposed registering openings in the cover of one compartment and the partition, a top side for the said one compartment formed integral with the sides and transversely disposed partition, a separately formed chute projecting from the top opening in the other compartment and a separately formed cover for said chute to enclose the top and sides of said chute with an air space therebetween and means to secure the covers in place.

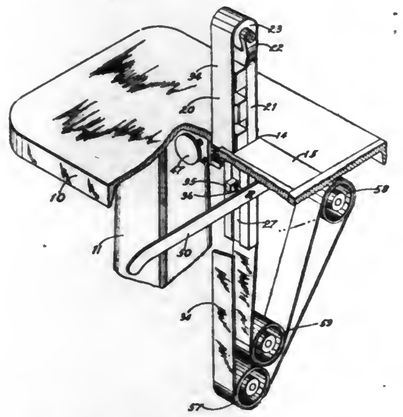
1,820,376. NECKTIE. THOMAS G. CRAIGHEAD, Seattle, Wash. Filed Nov. 21, 1930. Serial No. 497,277. 1 Claim. (Cl. 2—144.)

A necktie including a body portion formed from a length of cloth folded at its middle and arranged so that its sections lie flat, one against the other, said rear section of the body portion having a buttonhole formed



therein adjacent the fold, and a band encircling the two sections and secured thereto to imitate a knot formed therein.

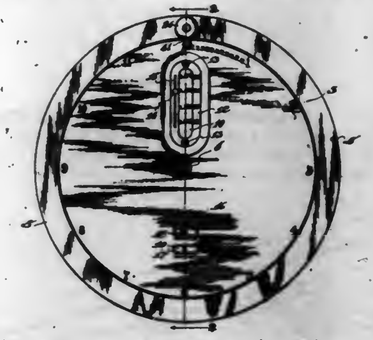
1,820,377. SANDING MACHINE. EDWARD W. CURTIS, Jamestown, N. Y. Filed Oct. 12, 1928. Serial No. 312,080. 2 Claims. (Cl. 51—141.)



1. In a wood sanding device having an endless sanding belt, a table having an opening therethrough, an upright frame removably secured to said table and extending through the opening therein, a carriage mounted for vertical reciprocation upon said frame, a plurality of sanding blocks secured to and extending outwardly from said carriage, and means adapted to raise or lower said carriage with relation to said frame whereby any one of said sanding blocks may be brought into position of use.

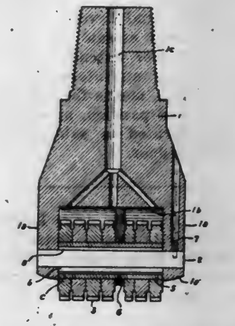
1,820,378. TIME CALCULATING AND WAGE COMPUTING MACHINE. LEON CYGON, Wichita Falls, Tex., assignor of one-half to Wayland D. Keith, Burkburnett, Tex. Filed July 23, 1928. Serial No. 294,603. 4 Claims. (Cl. 235—76.)

3. A time calculating and wage computing instrument comprising a housing having bottom and side walls and an open top, a vertically disposed shaft within said housing a stationary disk having an opening therein secured to said shaft and having its circumferential edge spaced from the side walls of the housing, a movable annular rim member supported by the side walls having its inner edge portion disposed beneath the edge portion of said stationary disk and having its outer edge portion overhanging the side walls of the housing exteriorly of the latter, a swinging tubular indicator arm having one end rotatably secured to said shaft and having its opposite end secured to and terminating above said annular rim member, a rotating disk having indicia thereon mounted on said shaft beneath said stationary disk, means connecting said indicating arm and said rotating disk for actuating the latter, and clutch means having a portion



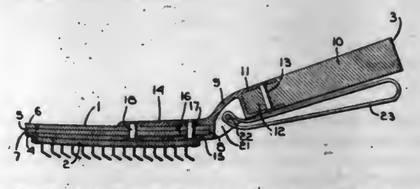
slidable through said indicator arm for rendering the rotating disk inoperative during nonremunerative periods in computing, without effecting the motion of said indicating arm.

1,820,379. DRILL CUTTER MOUNTING. JOHN R. DALLERUP, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Jan. 19, 1929. Serial No. 333,691. 10 Claims. (Cl. 255—71.)



1. In a drill, a head, a pin non-rotatably supported by said head, a plurality of gibs, a bushing upon said pin and gibs, and a cutter supported by said bushing, said gibs being capable of occupying a plurality of positions in said bushing relative to said pin to vary the position of said cutter with respect to said head.

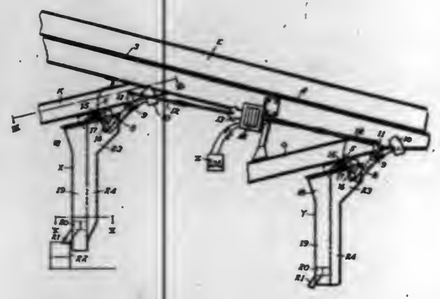
1,820,380. HAND CARD. WILLIAM A. DUTTON, Lawrence, Mass., assignor to Davis & Furber Machine Company, North Andover, Mass., a Corporation of Massachusetts. Filed May 28, 1927. Serial No. 195,115. 1 Claim. (Cl. 119—93.)



A hand card comprising a body, a handle having a metal section and a wooden section, the metal section presenting two flanges between which one edge of the

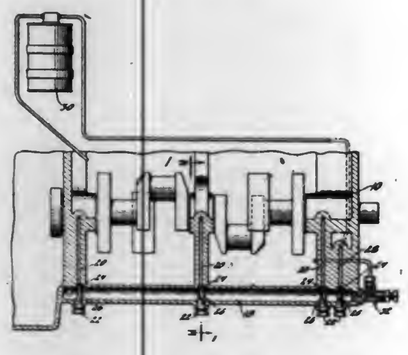
body is received, the flange on the back of the body being longer and wider than the flange on the front of the body, two rivets uniting the longer flange to the body, one of said rivets passing through both flanges, said metal section having a recess in its under side, a pin extending across said recess and a loop of flexible material encircling said pin and through which the fingers of the operator's hand may be inserted.

1,820,381. APPARATUS FOR TAKING SAMPLES OF COAL AND THE LIKE. HOWARD N. EAVENSON, Pittsburgh, Pa. Filed Sept. 5, 1928. Serial No. 304,117. 2 Claims. (Cl. 73—21.)



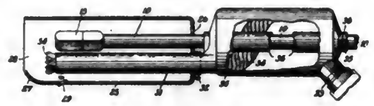
1. In apparatus of the class described the combination with a chute having a transversely slotted flat supporting floor for the stock, of a vertically movable gate arranged to be elevated and lowered in said slot, a trap-door hinged transversely of said floor in the rear of said slot and gate, said door extending transversely across said floor and forming an intermediate section thereof when in closed position, means for maintaining said trap-door normally in closed position, means for elevating said gate, and means operated by said gate-elevating means for opening said trap-door.

1,820,382. OIL FILTERING AND LUBRICATING SYSTEM. LOCKWOOD B. ELLIS, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 2, 1928. Serial No. 266,653. 5 Claims. (Cl. 184—6.)



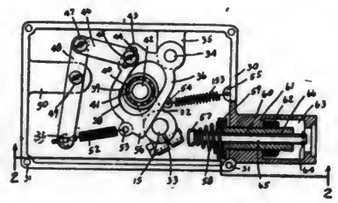
1. In a lubricating system including parts to be lubricated, the combination of an oil pressure line, and means for forcing oil under pressure through said line and a branch line connected to said pressure line for conducting oil to one of said parts and having its inlet facing down stream so that foreign particles are carried past the inlet by virtue of their greater inertia.

1,820,383. PORTABLE TORCH. WALTER C. ELZE, Forest Hills, N. Y., assignor to Hauck Manufacturing Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 22, 1930. Serial No. 446,213. 9 Claims. (Cl. 158—33.)



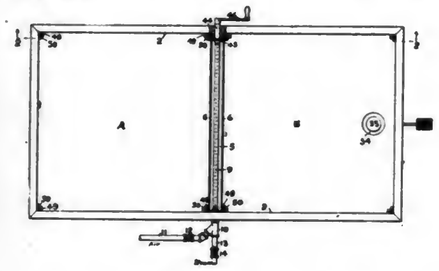
1. A portable torch, comprising a fuel supply tube, a nozzle element at the outer end of said tube, a hood enclosing the nozzle element, mounted over the tube and open at its outer end, a wick and fuel reservoir mounted on said tube and having a tubular extension projecting through the rear of said hood, and a wick extending from the tubular extension and cooperating with the nozzle element.

1,820,384. AUTOMATIC GOVERNOR. CARL C. ESSEX, Anderson, Ind., assignor to Pierce Governor Company, Anderson, Ind., a Corporation. Filed May 5, 1928. Serial No. 275,387. 6 Claims. (Cl. 137—152.)



1. In an intake for an internal combustion engine the combination of a cylinder intake passage, a butterfly valve pivotally mounted therein upon an axis transverse to the passage and offset an appreciable distance therefrom, and suction operable relief valve means carried by the valve and normally in longitudinal alignment with the intake passage axis when the butterfly valve is in closed position, said valve being of substantially elliptical outline and adapted to completely close said intake passage when inclined therein.

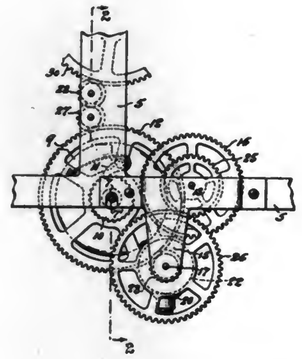
1,820,385. DYEING MACHINE. JOSEPH WILLIS FARQUHAR, Philadelphia, Pa., and WALTER HENSEL, Merchantville, N. J.; said Hensel assignor to H. W. Butterworth & Sons Company, a Corporation of Pennsylvania. Filed Sept. 6, 1928. Serial No. 304,242. 4 Claims. (Cl. 8—19.)



1. The combination of a tank structure having two tank portions, two independent removable frames adapted to fit into the respective tank portions so as to be submerged in the liquor contained therein, and said frames each provided with a plurality of transverse rotatable bars upon which the material to be dyed is supported, gearing upon each of the frames for rotating the transverse bars,

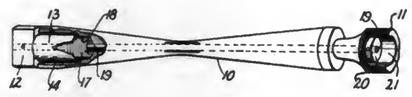
gearing fixedly positioned upon the tank structure intermediate of the gearing of the two removable frames and meshing so as to drive the rotatable bars of said frames, and inclined guides arranged in the tank portions for guiding diagonally opposite corners of the respective removable frames whereby the gearing thereon is respectively brought into meshed relation with the driving gearing positioning upon the tank.

1,820,386. CLOCK MECHANISM. FREDERICK A. FELDKAMP, Newark, N. J., assignor to Ernest Cantelo White, New York, N. Y. Filed July 8, 1927. Serial No. 204,246. 1 Claim. (Cl. 185—39.)



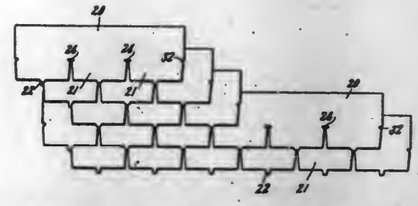
In a clock-work, a main spring, spring power-transmission means connected with and actuated by each end of said spring, a motor driven winding-shaft, a differential gear set comprising a pinion carried by said winding-shaft and a pair of gears rotatably mounted on said winding shaft and meshing with said pinion, one of said gears cooperating with a power transmission means at one end of said spring whereby spring power may be transmitted to and through said differential gear set when said winding shaft is idle and spring winding power may be transmitted through said differential gear set when said winding shaft is rotated, and the other gear of said differential gear set serving to transmit either spring power or motor generated power to a driven mechanism.

1,820,387. HAIR CURLING DEVICE. ERNEST O. FREDERICS, New York, N. Y., assignor to E. Frederics, Inc., New York, N. Y., a Corporation of New York. Original application filed Oct. 12, 1928, Serial No. 311,994. Divided and this application filed June 7, 1930. Serial No. 459,641. 4 Claims. (Cl. 132—33.)



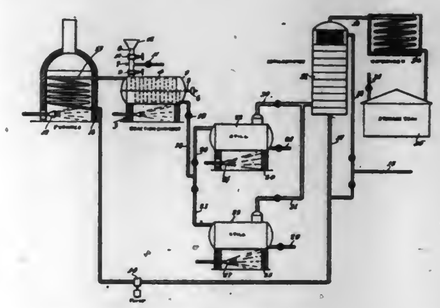
1. A hair-curling device, comprising a curling element, an attaching element, a stepped chamber at the end of the curling element adjacent said attaching element, a sleeve on said attaching element extending into the outer portion of said chamber, a spring fitting within said sleeve and within the inner portion of said chamber, a knob at the other end of said curling element and formed with a recess therein, a rod connected with said holding element and extending through said curling element, and a securing disk attached to the end of said rod and fitting within the recess of said knob.

1,820,388. INTERLOCKING ROOFING. HENRY R. FRENCH, Rutherford, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1926. Serial No. 152,365. 7 Claims. (Cl. 108—7.)



7. An interlocking roofing element having a plurality of trapezoidal weather portions, and an ear projecting from the butt edge of each said portion, said element having a slot extending upwardly from its butt edge with a widened upper end forming a pair of shoulders spaced apart a distance less than the line of juncture between a weather portion and its tab.

1,820,389. PROCESS OF TREATING HYDROCARBON OILS WITH METALLIC HALIDES. RICHARD W. HANNA, Piedmont, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Nov. 27, 1926. Serial No. 151,163. 8 Claims. (Cl. 196—54.)

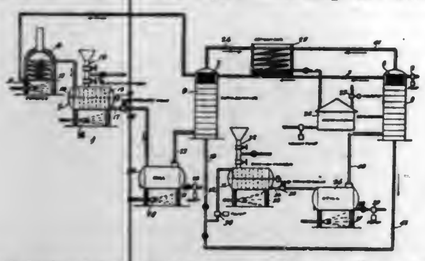


8. A process of treating hydrocarbon oil with metallic halide which comprises, heating hydrocarbon oil in a flowing stream to a temperature suitable for decomposing the hydrocarbon oil into lower boiling point oil when admixed with metallic halide, then contacting the heated hydrocarbon oil with anhydrous metallic halide under a pressure sufficient to maintain the hydrocarbon oil in substantially liquid phase, then passing said admixture to a chamber maintained under a substantially reduced pressure, and therein vaporizing the produced low boiling point hydrocarbon oil to separate it from residue retaining substantially all the aluminum chloride in the spent condition.

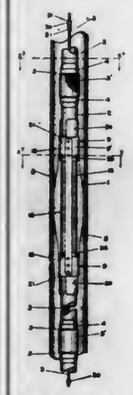
1,820,390. PROCESS OF TREATING HYDROCARBON OIL WITH METALLIC HALIDES. RICHARD W. HANNA, Piedmont, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Nov. 27, 1926. Serial No. 151,164. 5 Claims. (Cl. 196—54.)

1. A process of treating hydrocarbon oil with metallic halide, which comprises heating the hydrocarbon oil to a temperature sufficient to decompose the hydrocarbon oil into lower boiling point oil when contacted with metallic halide, then contacting the heated hydrocarbon oil with anhydrous metallic halide at such temperature and under a pressure sufficient to maintain the same in substantially

liquid phase, then passing said admixture into a chamber maintained under substantially reduced pressure, therein vaporizing hydrocarbon oil to separate it from residue retaining substantially all the metallic halide in the spent condition, fractionating from said vapors unconverted hydrocarbon oil, and then again contacting said unconverted hydrocarbon oil, at a temperature sufficient for decomposing the oil into lower boiling point oil, with metallic halide under a pressure sufficient to maintain the hydrocarbon oil in substantially liquid phase in a decomposing zone, separate from the zone in which the fresh hydrocarbon oil is decomposed.

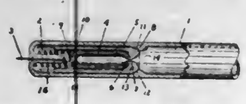


1,820,391. STABILIZER. WILLIAM WALTER HARTMAN, Los Angeles, Calif. Filed Apr. 2, 1930. Serial No. 440,975. 4 Claims. (Cl. 308—4.)



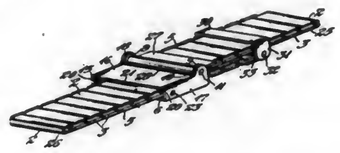
1. In a device of the kind described, the combination of a plurality of spring-like metallic centralizing members, two bearing members spaced apart from and in axial alignment with each other, each of said bearing members presenting an interior substantially cylindrical bearing surface, said device also having an end-stop projecting beyond one of said bearing surfaces, the entire end-stop being at a greater distance from the axis of said device than the said bearing surface is from the axis of said device.

1,820,392. DISCHARGE TUBE ELECTRODE. FRED HOTCHNER, Los Angeles, Calif. Filed Mar. 25, 1929. Serial No. 349,647. 18 Claims. (Cl. 176—126.)



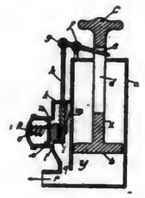
2. In a discharge tube, a hollow electrode, the inside surfaces of which are of conducting material, and a discharge passage from the inside of said electrode to the discharge column proper, the walls of said passage being of conducting material and in contact with the aforesaid inside surfaces of said electrode, the cross section of said passage being reduced to a diameter sufficiently small to prevent a discharge taking place from the walls thereof without preventing the passage of a discharge therethru to the chamber within said electrode.

1,820,393. CLASPING DEVICE FOR FLEXIBLE BRACELETS OR THE LIKE. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Feb. 6, 1930. Serial No. 426,407. 3 Claims. (Cl. 24—191.)



3. In a clasp for bands or linkages having serrated edges, the combination of a bottom member having a base-plate and side flanges bent upwardly therefrom and pierced with holes, a hinge-pin extending through the holes in the flanges, an upper member comprising a top-plate provided with side flanges having holes for receiving the ends of the hinge-pin to pivotally connect said member with the bottom member, detent-means on the side flanges of the members adapted to interengage to hold said members in closed relationship, and lugs bent down from the top-plate of the upper member in position to engage the serrations in the edges of the linkage when the top-member is swung down into closed position on the bottom member.

1,820,394. METHOD OF FUMIGATING WITH CALCIUM CYANIDE. JOHANN LINGLER, Offenbach-on-the-Main, Germany, assignor to Deutsche Gesellschaft fuer Schaedlingsbekaempfung m. b. H., Frankfort-on-the-Main, Germany, a Corporation. Filed Mar. 9, 1929, Serial No. 345,765, and in Germany Mar. 12, 1928. 6 Claims. (Cl. 43—147.)



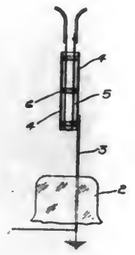
6. In combination, a closed container having an abrading surface, means for yieldingly holding a shaped solid body against said surface, means for causing relative movement between said surface and said body whereby said body is powdered, and means for blowing the powder out of said container.

1,820,395. METHOD AND MEANS FOR REMOVING CARBON DEPOSITS. WHEELER G. LOVELL and THOMAS A. BOYD, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 28, 1929. Serial No. 389,085. 14 Claims. (Cl. 87—5.)

3. The process of removing carbon deposits from the combustion chamber of an internal combustion engine which comprises heating the coated parts, applying to the carbon deposit a cyclic alcohol which is a varnish remover, and a low boiling varnish remover, and removing the carbon deposit.

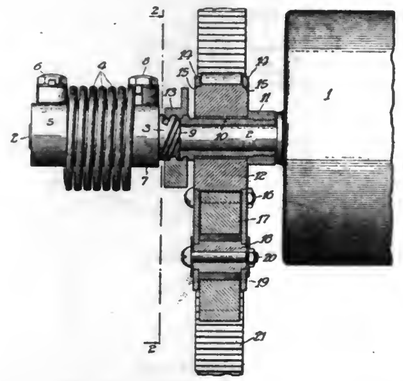
13. A composition of matter for removing carbon deposits from internal combustion engines comprising benzyl alcohol, benzol and ethyl alcohol.

1,820,396. ELECTRODE STRUCTURE. FREDERICK S. MCCULLOUGH, Edgewood, Pa., assignor to Stupakoff Laboratories, Inc., Pittsburgh, Pa., a Corporation. Filed Jan. 5, 1926. Serial No. 79,350. 8 Claims. (Cl. 250—275.)



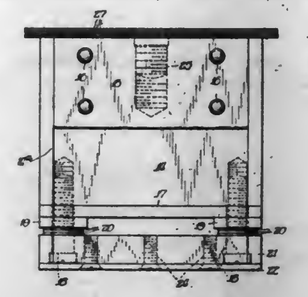
1. A cathode structure comprising a cylindrical metal shell open at at least one end having a plurality of spaced apart refractory discs therein in contact with the inner walls thereof and a heater wire in the form of a reentrant loop within the shell supported by the refractory discs out of contact with the metal shell, the terminals of the loop projecting from the open end of the cylinder.

1,820,397. ENGINE STARTER. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Sept. 4, 1925. Serial No. 54,433. 22 Claims. (Cl. 74—7.)



1. In an engine starter drive of the radial shift type, the combination with a rotatable member of the engine to be started, of a rotatable driving shaft, a rotatable driving member normally loosely mounted thereon, means actuated automatically by the rotation of such driving shaft for operatively connecting the driving member to the driving shaft when the latter is rotated, and a rotatable member constantly in operative relationship with the driving member and normally out of operative relationship with the engine member, but mounted to swing into such operative relationship by the torque transmitted through the driving member and being constantly free to swing into and out of such relationship according to direction of torque application thereto.

1,820,398. INTERPOLE FOR ROTARY CONVERTERS. ERWIN SAUTER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Aug. 9, 1926. Serial No. 128,111. 1 Claim. (Cl. 171—252.)



In a dynamo electric machine, an annular frame, a pole core including a body portion carried by said frame and extending radially inwardly with respect thereto, a winding disposed on said core, a shoe forming part of said core and disposed at the inner end of said body portion in spaced relation with respect thereto to provide an air gap in said core, spacing means interposed between said body portion and said shoe, a screw extending through said shoe and said spacing means and being screwed into said body portion to clamp said spacing means between the latter and said shoe, a plate disposed against the inner face of said shoe and extending laterally beyond the same, laterally-extending portion of said plate providing against inward movement of said winding out of assembled relation with respect to said core, and means holding said plate in position against the inner face of said shoe.

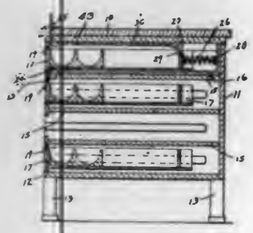
1,820,399. SLIP. MAX C. SCHRANK, Bridgeton, N. J. Filed Jan. 29, 1931. Serial No. 512,042. 1 Claim. (Cl. 2—73.)



A slip made of medial front and back pieces each consisting of a single straight piece of material forming a combined waist and skirt portion, side shaping and sizing pieces each consisting of a single shaped piece of material forming a combined waist and skirt portion, the front combination piece being stitched to the respective side combination pieces along its side edges, and the back combination piece being stitched to the side piece on one side along its entire side edge and on the opposite side along the

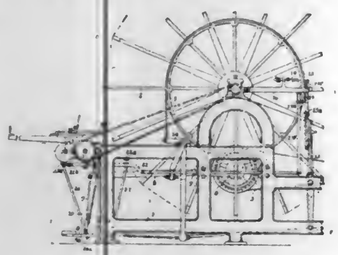
side edge of the upper portion only, a front skirt doubling ply stitched along its upper and both side edges to the upper and both side edges of the front skirt portion, and a rear skirt doubling ply stitched along its upper edge to the back skirt portion, and along one side edge only to the side edge of the side piece on the side on which the back skirt portion is left separate from the side skirt portion.

1,820,400. CASH DRAWER MECHANISM. JOSEPH R. SHOWERS, Shelbyville, Ind. Filed Mar. 7, 1927. Serial No. 173,435. 7 Claims. (Cl. 235—22.)



1. In combination a counter having a plurality of identical money drawer receiving compartments therein, a plurality of identical money drawers interchangeably receivable by said compartments, cooperating means in each compartment and on each drawer for individually and independently locking each drawer in any compartment, a money drawer receiving cabinet supported by the counter and adapted to receive any one of the money drawers, and means cooperating with the cabinet contained drawer to control drawer movement.

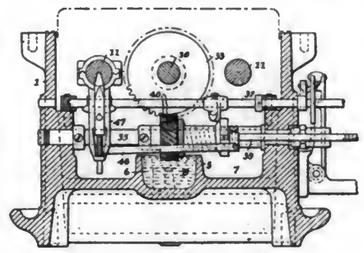
1,820,401. WARPING MACHINE. GRANT SIPP, Paterson, N. J., assignor to Sipp Eastwood Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 6, 1928. Serial No. 317,650. 10 Claims. (Cl. 192—17.)



1. A warping machine comprising, with a supporting structure and a reel journaled therein and having around its axis a braking surface, means to apply braking resistance to said surface including a brake-band supported by said structure with a portion thereof in face to face relation to said surface, and means to press said portion against said surface having its pressure surface of relatively limited area.

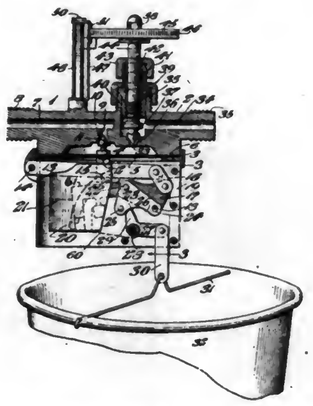
1,820,402. LUBRICATING SYSTEM FOR QUILLING MACHINES. GRANT SIPP, Paterson, N. J., assignor to Sipp Eastwood Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Dec. 2, 1927. Serial No. 237,303. Divided and this application filed Oct. 3, 1929. Serial No. 397,098. 1 Claim. (Cl. 184—13.)

The combination, with a supporting structure including a bottom wall, an elongated open-top lubricant well upstanding from said bottom wall and means, upstanding from said bottom wall and spaced from the well at both sides therof, to form with said bottom wall a housing, said wall and means forming a sump at and exterior of one end portion of the well and said wall having its upper surface inclined both sides of the well toward the sump, of a moving system of parts carried by said structure within the housing and including winding units arranged



in a series extending lengthwise of the well and an elongated driving member therefor also extending lengthwise of the well, said member and each unit having coactive means to transmit motion from the former to the latter dipping into the lubricant in the well, and means to return to the well from the sump lubricant ejected from the well by said coactive means and draining to the sump down said inclined surface.

1,820,403. SAFETY VALVE. GEORGE H. STEVENS, Woodbury Heights, N. J. Filed Mar. 27, 1928. Serial No. 265,122. 10 Claims. (Cl. 172—36.)

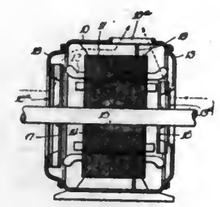


1. In a valve mechanism, a casing having an inlet and a discharge passage and a valve controlling communication between said passages, a weighted system of levers controlling said valve, and a removable key in the form of a pivotally mounted lever controlled by liquid in a receptacle to automatically release said system of levers.

1,820,404. ROTARY ELECTRIC MACHINE HAVING VENTILATION FEATURES. PHILIPP SUTER, Baden, Switzerland, assignor to Aktiengeselischaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 13, 1926, Serial No. 108,762, and in Germany June 18, 1925. 2 Claims. (Cl. 172—36.)

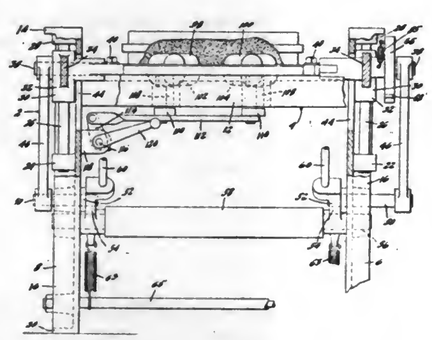
1. In a dynamo-electric machine comprising a stator, a rotor, and an enclosing casing, a shaft for said rotor, a fan affixed on said shaft in juxtaposition with one end of

said rotor and of diameter not greater than the diameter of said rotor, a second fan affixed to said shaft in juxtaposition with the opposite end of said rotor and of diameter greater than the diameter of said rotor, a partition sub-



dividing the said casing into two compartments, commensurate with the relative capacities of the two fans, each said compartment being provided with an inlet and an outlet to permit the flow of a cooling fluid therethrough responsive to actuation of one of the said fans.

1,820,405. MOLDING MACHINE. HARRY B. SWAN, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 10, 1929. Serial No. 407,658. 18 Claims. (Cl. 22—9.)

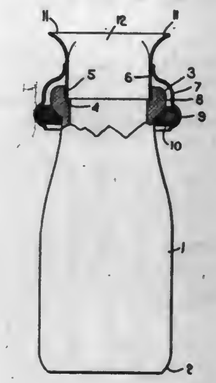


1. In a molding machine, a frame, a pattern plate having trunnions, patterns on both sides of said plate, reciprocable bearings for said trunnions mounted on said frame, means for reciprocating said bearings, and means operative on said reciprocation to rotate said plate to present either pattern.

1,820,406. POURING ATTACHMENT FOR BOTTLES. ALBERT W. THOMPSON, Lowell, Mass. Filed Sept. 4, 1930. Serial No. 479,690. 8 Claims. (Cl. 215—100.)

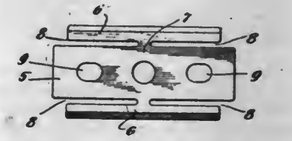
1. A pouring attachment for bottles of the class described comprising an inner annular outlet conduit adapted to extend freely within the cylindrical wall of the bottle mouth and at its lower end only to register upon the cap shelf of the bottle, and an outer casing having an annular lower portion provided with elastic retaining means extending below the lower end of said conduit and adapted to be forced over a convex annular surface of said bottle into elastic locking engagement with its re-

turning lower surface, with clearance between the attachment and the top surface of the bottle, to maintain



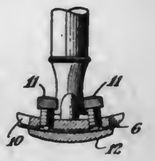
fluid-tight engagement between the cap shelf of said bottle and the lower end of said conduit by the reaction of said elastic retaining means.

1,820,407. SAFETY RAZOR BLADE. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 15, 1930. Serial No. 496,025. 7 Claims. (Cl. 30—12.)



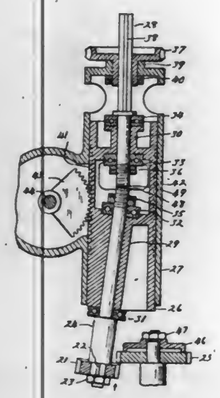
1. A safety razor blade having a sharpened edge portion and a body portion, said sharpened edge portion being attached to said body portion by a narrow centrally placed neck and being separated from said body portion on each side of said neck by longitudinal slots located between the sharpened edge and the center of the blade.

1,820,408. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,165. 5 Claims. (Cl. 30—12.)



1. A safety razor comprising, in combination, a perforated blade adapted to be transversely flexed when clamped in shaving position, cap and guard members for clamping said blade, and an adjustable extension on each end of one of said members for spacing said members, a desired distance apart, said extensions being shaped to pass freely through the perforations of the blade without interfering with the flexing thereof.

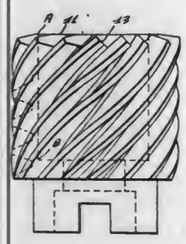
1,820,409. METHOD OF CUTTING GEARS AND APPARATUS THEREFOR. NIKOLA TRBOJEVICH, Highland Park, Mich. Filed Jan. 14, 1927. Serial No. 161,162. 13 Claims. (Cl. 90—9.)



1. A generating cutter for cutting gears comprising a cylindrical body having a plurality of longitudinally arranged teeth thereon to extend along the surface of a cylinder, said teeth being of constant cross section throughout the length thereof and being conically conjugate to the teeth of the gear to be generated in such a manner that said teeth cut without rubbing when said cutter is offset relative to the gear, said teeth also having a series of similar and similarly arranged cutting edges, all lying in a circle perpendicular to the axis of the cutter.

9. A method of gear cutting in which an imaginary truncated cone gear is first selected capable of meshing at its small end with the blank to be generated, and having a cone angle sufficient to provide a predetermined degree of cutting clearance, in which said conical lamina is copied upon the transverse section of a cylindrical cutter and said cutter is provided with cutting edges at one end thereof, in which the axis of the cutter is tilted relative to the plane of feed at the said clearance angle so that its cutting edges will engage the blank, in which the cutter is relatively translated parallel to the plane of feed and in which the cutter and the blank are rotated in unison to generate all teeth.

1,820,410. GEAR HOB AND METHOD OF MAKING AND USING THE SAME. NIKOLA TRBOJEVICH, Highland Park, Mich. Filed Aug. 6, 1928. Serial No. 297,766. 7 Claims. (Cl. 90—4.)



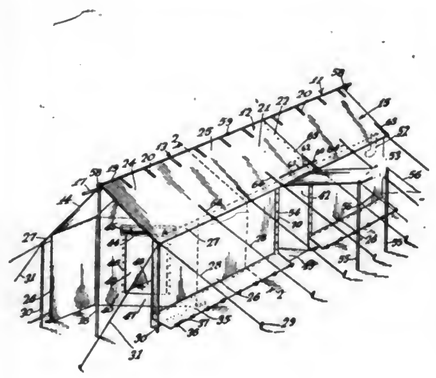
1. A method of constructing hobs of the solid worm unrelieved type consisting in generating an hour glass worm capable of meshing with the gear to be cut with a line contact, in selecting an offset zone in the said worm with a view upon the ultimate cutting clearance, in intersecting the threads of the said worm in the said zone by means of a plurality of transverse facets, in continuing the curves of intersection so obtained along the axis of the worm to form a helicoid of constant pitch and cross section, said helicoid always lying inside of the said hour glass surface, and in copying the hob from the said straight helicoid to conform with the same both as to its contour and the relative location of its cutting facets.

4. A hob for generating spur gears consisting of a cylindrical worm body having helical threads of a constant lead and cross section throughout and a frontal zone in the said body containing a plurality of cutting facets and cutting edges, said edges being the lines of intersection of the said worm with a coaxial longitudinally elliptic hour glass screw surface in a zone offset relative to a plane perpendicular to the pitch cylinder of the gear, said surface being capable of engaging the gear to be generated in a line contact in the said offset zone.

1,820,411. PROCESS OF MANUFACTURING ARTIFICIAL CORK. ENRIQUE VINCKE, Barcelona, Spain, assignor, by mesne assignments, to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Substitute for applications Serial No. 659,417, filed Aug. 25, 1923, and Serial No. 663,932, filed Sept. 20, 1923. This application filed Jan. 4, 1927. Serial No. 159,017. 4 Claims. (Cl. 154—2.)

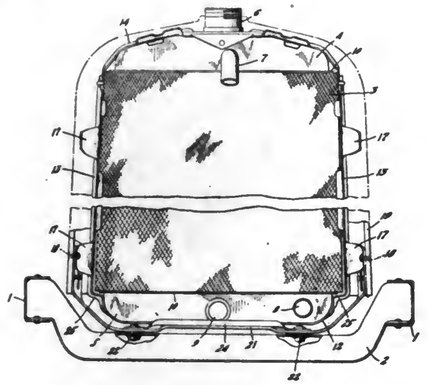
1. The process of producing cork products of superior flexibility which comprises subjecting cork to a severing operation along lines substantially perpendicular to the radial walls of the cells of the cork, subjecting the resulting severed sheets or films to a breaking-up action to derive cork scales, applying adhesive to the same, assembling the adhesive-applied scale while subjecting the same to relative movement to effect substantially face to face contact of the scales with one another and molding the same.

1,820,412. TENT. ROSCOE F. WARREN, Los Angeles, Calif. Filed Dec. 15, 1927. Serial No. 240,174. 3 Claims. (Cl. 135—1.)



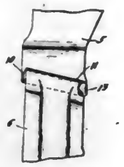
1. In a tent a roof and a wall structure, and a shedding cloth attached to the wall structure adjacent the lower part thereof and being distinct from the roof and from the wall structure, and means to attach the shedding cloth to the ground in a position spaced outwardly from the position in which the lower part of the wall engages the ground.

1,820,413. RADIATOR STRUCTURE. JAMES A. WHITE, Lockport, N. Y., assignor to Harrison Radiator Corporation, Lockport, N. Y., a Corporation of New York. Filed Aug. 24, 1929. Serial No. 388,085. 3 Claims. (Cl. 180—68.)



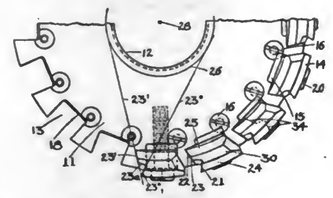
2. In a radiator, a heat transfer unit, including a tank having an outturned marginal flange, a core having one end joined to said flange and overhanging the side walls of the tank, and an anchorage band contractible about the core and tank to hold these parts assembled, portions of the band adjacent the joint between the core and outturned flange being inset for a distance slightly exceeding the core overhang for direct thrust engagement with the wall of the tank.

1,820,414. RADIATOR ASSEMBLY. JAMES A. WHITE, Lockport, N. Y., assignor to Harrison Radiator Corporation, Lockport, N. Y., a Corporation of New York. Filed Aug. 24, 1929. Serial No. 388,086. 9 Claims. (Cl. 180—68.)



2. In a radiator structure, the combination with an assembly of a heat radiating unit and headers therefor, of a band surrounding the assembly and wedge means associated with the band to vary its size and a lock for holding said wedge in adjusted position.

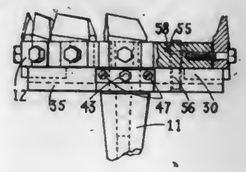
1,820,415. GEAR CUTTING TOOL. ERNEST WILDHABER, Brooklyn, N. Y. Filed Mar. 11, 1927. Serial No. 174,517. 10 Claims. (Cl. 29—105.)



1. A gear cutting tool of face mill type containing a cutter body, relieved cutting teeth projecting from said cutter body adjacent its periphery, an outside and an inside cutting edge being formed on each of said cutting teeth by a composite cutting face, said cutting face being composed of two different surfaces adjacent the two cutting edges respectively and of an intermediate connecting surface which intersects one of said two surfaces in an edge.

6. A gear cutting tool of face mill type, containing a cutter body, slots provided on the outside circumference of said cutter body, blades inserted in said slots, each of said blades containing an outside cutting edge as well as an inside cutting edge, head screws and nuts for securing said blades to said cutter body, said screws extending through the blades and having their heads disposed on the outside of the blades and their nuts on the inside of the blades.

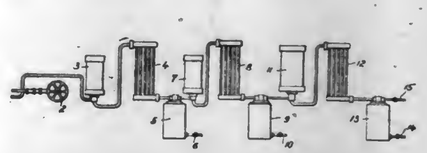
1,820,416. CUTTER HEAD FOR ROTARY GEAR CUTTING TOOLS. ERNEST WILDHABER, Brooklyn, N. Y. Filed Mar. 24, 1927. Serial No. 177,992. 21 Claims. (Cl. 29—105.)



1. A cutter head for rotary gear cutting tools, comprising a plurality of cutting teeth, a portion joining said cutting teeth to form a unit, a spindle, means for adjusting said unit relatively to said spindle in at least two directions angularly disposed to each other and angularly disposed to the axis of said spindle, and means for transmitting torque from said spindle to said unit.

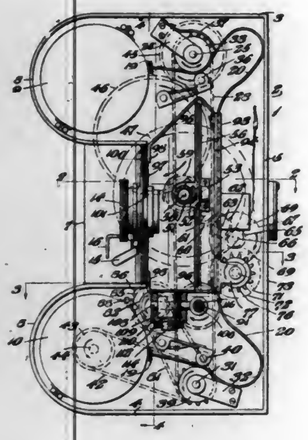
18. Cutter head for rotary gear cutting tools, comprising a plurality of cutting blades arranged to form a face mill and secured to two members, rigidly bolted together, a cutter spindle, a floating member, means for adjusting said two members with respect to said floating member, means for adjusting the floating member with respect to the cutter spindle, and means for rigidly connecting the spindle with the two members.

1,820,417. METHOD OF EFFECTING CATALYTIC REACTIONS. ROGER WILLIAMS, Wilmington, Del., assignor to Du Pont Ammonia Corporation, Wilmington, Del., a Corporation of Delaware. Filed Apr. 20, 1927. Serial No. 185,339. 8 Claims. (Cl. 23—7.)



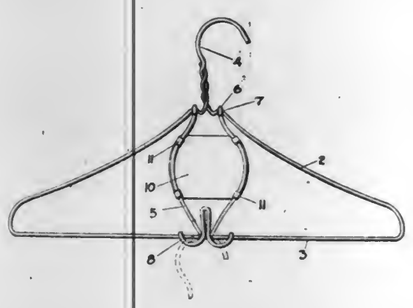
1. The method of improving the production of ammonia by catalytic reaction with gaseous mixtures containing hydrogen, which comprises subjecting the gaseous mixture including hydrogen and nitrogen, in proportions to combine to form ammonia, and carbon monoxide preliminarily and at reacting temperature to the action of a catalyst capable of converting carbon monoxide in the presence of hydrogen into oxygenated hydrocarbons, condensing and removing the oxygenated hydrocarbons from the gaseous mixture and subjecting the gaseous mixture at reacting temperature to the action of an ammonia synthesis catalyst

1,820,418. MOTION PICTURE MACHINE. CLAYTON WILLIAMS, Camden, N. J. Filed Jan. 29, 1929. Serial No. 335,873. 3 Claims. (Cl. 88—166.)



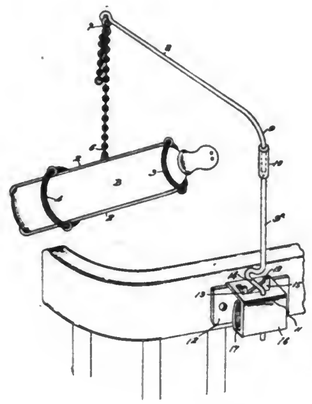
1. In a motion picture camera, a casing, an optical chamber within said casing, a lens carried by said optical chamber and projecting through the front of said casing, a film carried by the rear of said optical chamber, a driving mechanism for said film, a plate in the bottom of said casing below said optical chamber and having an arcuate slot therein, a guide pin carried by the bottom of said chamber and engaging said slot, and means connected to said pin and actuated by said film driving mechanism for intermittently reciprocating said optical chamber, lens, and film synchronously and as a unit.

1,820,419. GARMENT HANGER. ALOYSIUS B. WOBBE, Springfield, Ohio. Filed May 9, 1929. Serial No. 361,801. 3 Claims. (Cl. 223—61.)



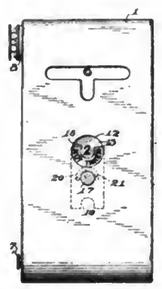
2. A garment hanger comprising a frame, a cross bar at the lower extremity of said frame, a clamping member pivoted at its upper end to the upper portion of said frame and bowed outwardly from its upper to its lower end for shaping parts of a garment extending thereover, and a foot formed by bending the lower extremity of the clamping member at right angles to the remaining portion thereof.

1,820,420. UNIVERSAL NURSING STAND. CALVEN AERICK, Los Angeles, Calif. Filed Mar. 13, 1929. Serial No. 346,763. 3 Claims. (Cl. 248—65.)



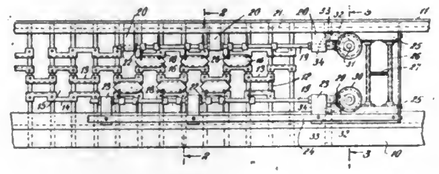
1. A nursing bottle stand having a supporting bracket, a crane standard mounted on the bracket to swing horizontally, means to limit movement of the crane, a bottle swing suspended by a flexible connection from the crane, and a cam device to impel the crane in one direction.

1,820,421. INDICATOR FOR CAMERAS. MAURICE ALLAND, Atlantic City, N. J. Filed Apr. 16, 1929. Serial No. 355,604. 3 Claims. (Cl. 40—67.)



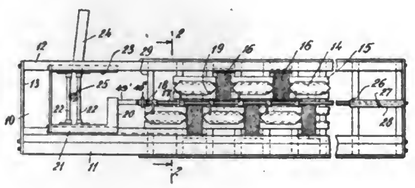
1. The combination of a camera, having an aperture and adapted to contain sensitized film associated with indicia corresponding with exposure-receiving areas of said film, with a pivoted oscillatable plate carried by the camera and also visible through said aperture simultaneously with and in addition to said indicia, to indicate by its position with respect to said camera whether the operatively positioned exposure area represented by the neighboring indicia has been exposed or not.

1,820,422. NARROW FABRIC LOOM. HERMAN BAADER, Mountainville, Pa., assignor to Textile Patents Corporation, Allentown, Pa., a Corporation of Delaware. Filed Oct. 3, 1928. Serial No. 310,039. 16 Claims. (Cl. 139—22.)



1. In a loom, the combination of a plurality of shuttles mounted in two rows, a pair of bars disposed at opposite sides of the rows of shuttles and lying between the front and rear ends of the shuttles, said bars being mounted for lengthwise and oscillating movements, a plurality of pairs of shuttle driving elements rigidly mounted in pairs on the bars one pair for each shuttle, the elements of each pair being angularly offset, and means for reciprocating the bars and oscillating them during their reciprocating movement whereby each shuttle is moved successively by the elements of the pair associated with it.

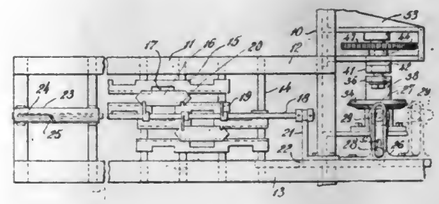
1,820,423. BATTEN CONSTRUCTION FOR NARROW FABRIC LOOMS. HERMAN BAADER, Mountainville, Pa., assignor to Textile Patents Corporation, Allentown, Pa., a Corporation of Delaware. Filed Oct. 3, 1928. Serial No. 310,042. 1 Claim. (Cl. 139—22.)



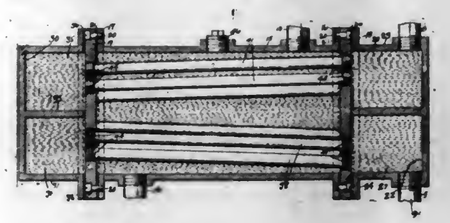
A batten for a narrow fabric loom which comprises a beam, and a plurality of sections mounted on said beam side by side lengthwise of said beam, each section comprising a pair of spaced upright members removably attached to said beam, a pair of shuttle guide blocks mounted on said upright members and extending between them, a second pair of shuttle guide blocks mounted on one of said upright members and offset both laterally and longitudinally relative to the first pair of guide blocks, adjacent blocks of said pair defining an open mounting for an element for driving the shuttles and members connecting said adjacent guide blocks for closing said mounting.

1,820,424. LOOM. HERMAN BAADER, Mountainville, Pa., assignor to Textile Patents Corporation, Allentown, Pa., a Corporation of Delaware. Filed Oct. 3, 1928. Serial No. 310,043. 6 Claims. (Cl. 139—22.)

1. In a loom, the combination of a shuttle and means for imparting movement to the shuttle including a member oscillating through an arc of 180° plus a small additional arc at each end of its path of oscillation, whereby the shuttle has a simple harmonic motion of 180° amplitude plus an additional movement of small amplitude and low velocity.

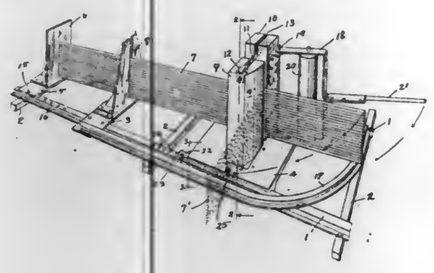


1,820,425. WATER HEATER. WILLIAM BADEN, Chicago, Ill. Filed Mar. 16, 1928. Serial No. 262,119. 1 Claim. (Cl. 257—240.)



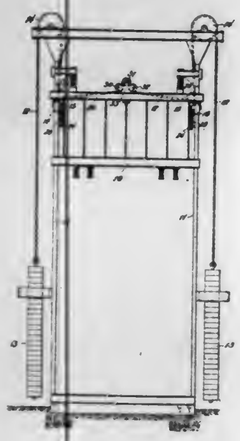
A hot water heater comprising a casing, tubing sheet plates connected with the ends of the casing, head caps connected with the casing and housing the sheet plates, one of said caps having a vertical partition engaging the adjacent sheet plate and a horizontal partition engaging said plate extending from one side of the cap to the vertical partition, said last mentioned sheet plate and the partitions defining a lower small cold water inlet and an upper small hot water outlet chamber and a large circulating chamber, a horizontal partition extending across the other cap engaging its adjacent sheet plate and defining in connection therewith upper and lower circulating chambers, tubes extending from one sheet plate to the other inclining from the cold water inlet chamber to the lower circulating chamber of the other cap, tubing extending from the last mentioned circulating chamber to the large circulating chamber of the first mentioned cap, tubes extending through the sheet plates connecting the large circulating chamber to the upper circulating chamber, and tubes extending through the sheet plates connecting the upper circulating chamber with the small upper outlet chamber.

1,820,426. ROD BENDING APPARATUS. PETER BEGHETTI, San Francisco, Calif. Filed Nov. 11, 1929. Serial No. 406,379. 9 Claims. (Cl. 153—16.)



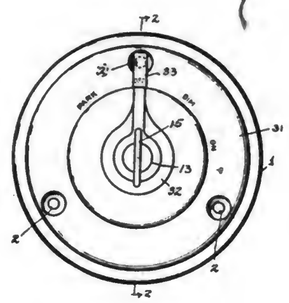
5. A rod bender comprising a frame, a plurality of pairs of upright members on said frame spaced and arranged to hold between them a row of horizontal rods positioned one above the other forming a vertical layer of rods, one pair of said members comprising posts provided with means for locking them together above the row of rods, a swinging lever pivoted to one of the posts provided with a member adapted to contact the side of the layer of rods for bending the same against one of the posts upon swinging the lever, and a track supporting the outer ends of the rods curved to follow the path of bending.

1,820,427. LOWERING MACHINE. OTTO BIRMANN, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Jan. 14, 1929. Serial No. 332,459. 7 Claims. (Cl. 187—86.)



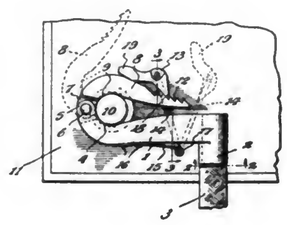
1. An elevator installation comprising, in combination, a pair of vertical guides; an elevator slidably mounted on said guides; a sheave at the top of each guide; a slidably mounted sheave at each end of the elevator; a cable having lifting weights secured to its ends, said cable passing over the two sheaves at the top of the guides and beneath the slidable sheaves with its mid portion between said slidable sheaves; means connected to the slidable sheaves to engage the guides and prevent the elevator from falling when the cable breaks; and means on the elevator to grip the cable intermediate its ends when the cable is taut and to release the grip when the cable breaks.

1,820,428. AUTOMOBILE LOCKING MECHANISM. CARL W. BLOSSOM and ELMER C. PETERSON, Cleveland, Ohio, assignors to The Blossom Lock Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 13, 1924. Serial No. 731,735. 8 Claims. (Cl. 70—127.)



1. In mechanism of the character described, the combination of a reciprocable lock-actuating member, manually operable means movable relative thereto for reciprocating said member, and an ignition circuit switch arranged coaxially with said manually operable means and controlled by said member.

1,820,429. CONDUCTOR TERMINAL. JOHN C. BOHAN, Hawley, Pa. Filed Jan. 23, 1929. Serial No. 334,500. 3 Claims. (Cl. 173—259.)

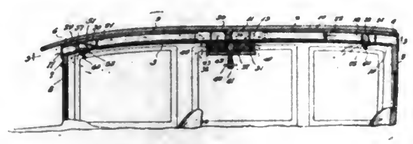


1. A conductor terminal comprising an elongated rigid member adapted to receive a conductor at one end, and having its free end curved, a clamp having a curved end pivoted to the curved end of the rigid member, the free end portion of said clamp being toothed, a link embracing the rigid member and clamp, a spring extending longitudinally of the rigid member and having one end secured to the rigid member and its other end formed with a sleeve receiving the link to pivotally mount the link and a latch pivoted to the free end of the link and adapted to adjustably engage the clamp to the free end portion of the clamp.

1,820,430. VENTILATOR. JOSEPH AUGUSTIN BOMBARD, Saranac Lake, N. Y., and ROLAND JAMES ROGERS, Laguna Beach, Calif., assignors of one-half to Elizabeth White Dixon, Baltimore, Md. Filed Dec. 4, 1929. Serial No. 411,631. 14 Claims. (Cl. 98—2.)

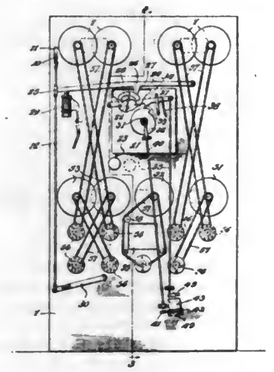
1. A ventilator comprising a tubular body open at its ends and having an opening intermediate its length and

other openings adjacent its front and rear ends, a partition extending transversely through said body in bisecting relation to the center opening and dividing the body into front and rear portions and the center opening into an



outlet for the front portion and an inlet for the rear portion, and partitions in end portions of the body defining chambers of less width than the body, the chambers being open at their outer ends and the openings near the ends of the body communicating with the chambers.

1,820,431. SCORE BOARD. WISTER P. BOTT, Homer, La. Filed Nov. 22, 1928. Serial No. 321,217. 2 Claims. (Cl. 161—17.)



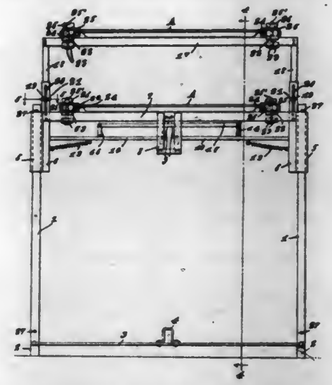
2. A score board provided with a dial on its face, a clock work mounted on the board, a time indicator movable over the dial by the clock work, the clock work having an arbor projecting therefrom, a cam on said arbor, a pinion on the arbor, a shaft mounted on the board, a pinion at the upper end of said shaft meshing with the pinion on the clock arbor, a cartridge holder adjacent the lower end of said shaft and rotated thereby, a lever pivoted on the board above the arbor and resting on the cam, yieldable means for holding the lever to the cam, and a firing rod pivoted to and depending from the lever for firing a cartridge in the cartridge holder.

1,820,432. ADHESIVE BASE. LAWRENCE BRADSHAW, Bainbridge, N. Y., assignor, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y., a Corporation of Delaware. Filed June 19, 1926. Serial No. 117,174. 15 claims. (Cl. 87—17.)

1. A new adhesive material comprising proteaginous peanut meal and an alkaline earth oxide together with an alkali metal salt which in aqueous solution will react with the said alkaline earth oxide to produce a solvent for protein, said adhesive material being alkaline when in the presence of water substantially as described.

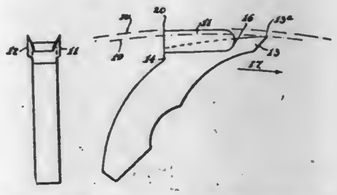
1,820,433. TRAY RACK. ROBERT C. BURNLEY, Louisville, Ky. Filed May 23, 1930. Serial No. 455,116. 5 claims. (Cl. 211—174.)

1. A device of the class described comprising a pair of uprights, sleeves slidably arranged on the uprights, manually operated latch means for holding the sleeves in adjusted position on the uprights, a cross piece connected with the sleeves, tray clamps carried by the cross piece,



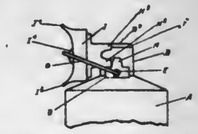
additional tray clamps, and means for securing the additional clamps to the sleeves and permitting vertical adjustment with reference to said sleeves.

1,820,434. SAW. CHARLES S. BUSQUE, St. Gideon De Beauce, Quebec, Canada. Filed Oct. 24, 1930. Serial No. 491,047. 6 Claims. (Cl. 143—141.)



1. In a circular saw tooth a chisel edge on the outer end of the tooth and a pair of incision blades, positioned to flank the outer end of the saw tooth, forming therebetween a channel shaped groove on said end, the outer edges of said blades extending further outwardly than the forward point of said chisel edge, said blades being shaped to bite into the wood without ripping it, thereby to form grooves in the wood on the flanks of the part thereof, which is to be removed by said chisel edge and in advance of the action of said chisel edge, thereby preventing ripping of the wood by said chisel edge.

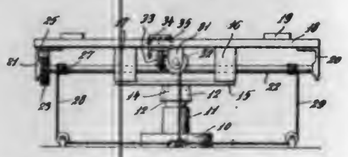
1,820,435. CLOSURE FOR COLLAPSIBLE TUBES. JOHN J. CALLAHAN and WILFRED D. MCDERMOTT, Lynn, Mass. Filed Apr. 23, 1930. Serial No. 446,534. 5 Claims. (Cl. 221—60.)



1. In combination with a receptacle having a hollow body and an apertured neck extending therefrom, the outer edge of said neck being bevelled and at its top flat, shoulders on opposite sides of said neck, transversely disposed sockets in said shoulders, a cap having recesses therein the inner edge of which is shaped to seat and seal upon said bevelled edge, and having a flat extreme inner surface teeth upon said shoulders adapted to cooperate with said cap, a gasket on said flat inner surface adapted to fit against the

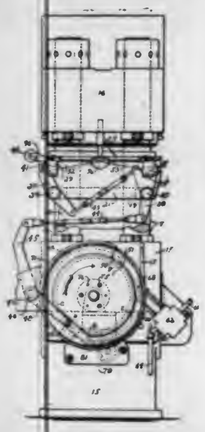
top of said neck when said bevelled edge is sealed, and a wire loop extending from the neck over the cap, said loop having angularly arranged pivot pins with a burr on the ends thereof adapted to fit into said transversely disposed sockets.

1,820,436. MASON'S LEVELING TABLE. ERNEST J. CARLSON, Reading, Pa. Filed May 5, 1930. Serial No. 449,864. 1 Claim. (Cl. 45—109.)



In a device of the class described, a table, a bell rigid with said table, a pedestal, a ball surmounting said pedestal registering in said bell, spindles beneath said table, cables wound about said spindles, said cables being adapted to alternately take up or pay out on said spindles and means for rotating said spindles to take up or pay out said cable to incline said table.

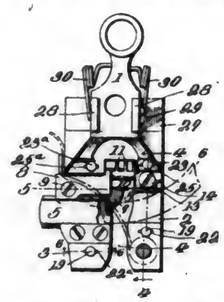
1,820,437. PRESS. JOHN J. CAVAGNARO, Ridgewood, N. J. Filed July 16, 1930. Serial No. 468,431. 30 Claims. (Cl. 101—3.)



1. In a press of the class described, a vertically movable hydraulically operable ram member; a valve device for controlling the movement of said ram member; a lower platen arranged above and movable relative to said ram member; a fixed upper platen arranged above said lower platen; mechanically operated means carried by and movable relative to said ram member for supporting said lower platen in its uppermost position and transmitting force thereto from said ram member, and for permitting movement of said lower platen toward said ram member and into its lowermost position; and a cam member adapted to operate said lower platen, said mechanically operatd means and said valve device.

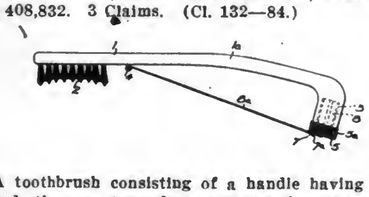
1,820,438. PRESSER FOOT FOR SEWING MACHINES. ALFRED T. CHIDLEY, Arlington Heights, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 3, 1929. Serial No. 367,937. 5 Claims. (Cl. 112—235.)

1. A presser foot for sewing machines comprising a shank, foot portions rigidly carried by sand shank, said presser foot having a channel between said foot portions for receiving and directing the upturned edge portions of fabric sections, said pressure foot having means for turning said fabric sections into flat overlapping relation for stitching, each foot section having a recess in its under



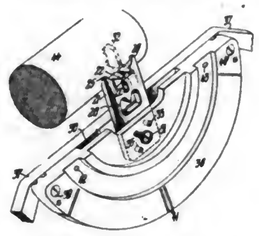
face adjacent the channel, and a non-flexible member yieldingly supported in each recess, said non-flexible member being of such extent that when forced into the recess it becomes in effect a rigid part of the section carrying the same.

1,820,439. TOOTHBRUSH. ROBERT JAMES GORDON CHURCH, Detroit, Mich. Filed Nov. 21, 1929. Serial No. 408,832. 3 Claims. (Cl. 132—84.)



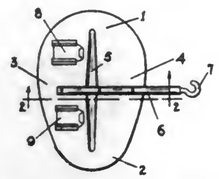
3. A toothbrush consisting of a handle having bristles mounted thereon towards one extremity, a container formed in the handle adjacent its other extremity, the container lying obliquely relative to the extremity of the handle on which the bristles are mounted, a removable cap on said container having an aperture therethrough through which a thread of dental floss contained in the container extends, means on the cap for holding a portion of the thread, and means on the handle adjacent the bristles for holding another portion of the thread, so that that portion of the thread which lies betwen the two holding means may be held taut and spaced from the intermediate portion of the handle.

1,820,440. METHOD OF FORMING TYPE-BAR GUIDES. FREDERICK U. CONARD, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1929. Serial No. 352,418. 7 Claims. (Cl. 29—148.)



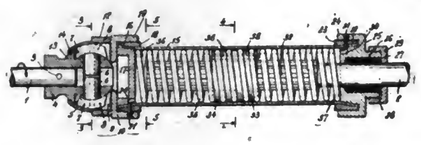
1. The method of developing a guide for the type-bars of a typewriting machine, including punching out a metal blank cold die-swedging the blank to expand it laterally and substantially reduce its thickness, simultaneously upsetting a lug upon the expanded face of the blank, trimming the blank to final form, and bifurcating the lug by a milling cut to form jaws that guide and center the type-bars.

1,820,441. WATER GATE. WILLIAM H. COGLEY, Greenacres, Wash. Filed Nov. 19, 1930. Serial No. 496,663. 1 Claim. (Cl. 61—29.)



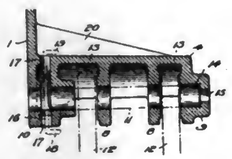
A sheet-metal water gate of oval shape having a reinforcing rib integral therewith and a transversely disposed handle strap, said gate having a small head at one end of its longitudinal axis, a larger medium head at the opposite end of its longitudinal axis, said heads together forming a larger head at one side of the longitudinal axis, and valved openings at one side of the longitudinal axis located in the small and medium heads respectively.

1,820,442. POWER TRANSMISSION MECHANISM. HERBERT COOPER, Brooklyn, N. Y. Filed Jan. 29, 1924. Serial No. 689,296. 13 Claims. (Cl. 64—96.)



4. In resilient, power transmission mechanism, the combination of a driving element, a driven element, a liquid-containing, hollow member connected to one of the elements and into which one end of the other element extends, a helical, resilient member within the hollow member and a part cooperatively related to an intermediate portion of the resilient member, mounted for longitudinal movement on the end of the element within the hollow member and provided with a passage to permit flow of liquid from the space within the hollow member on one side of the part to that on the other side when the part moves within the hollow member.

1,820,443. BRAKE HANGER BRACKET. GLENN F. COUCH, Rochester, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed June 23, 1927. Serial No. 200,978. 11 Claims. (Cl. 188—209.)

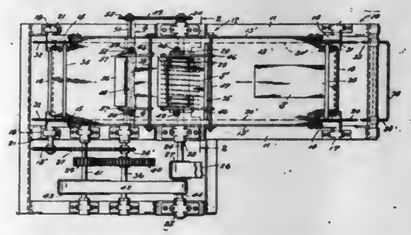


1. In combination, a truck side frame formed with a brake hanger lug extending from a side thereof, said lug being generally inverted U-shape in cross section with the arms of the U extending diagonally, a plurality of transverse webs extending between the elements of said U and perforated for receiving brake hanger connecting means, and a slotted portion disposed outside of the side of the frame for receiving means for locking said connecting means in place.

1,820,444. PIGMENT AND PROCESS OF PRODUCING THE SAME. ARTHUR B. COWDERY, Needham, Mass., assignor to The Barrett Company, a Corporation of New Jersey. Filed Nov. 6, 1923. Serial No. 673,129. 5 Claims. (Cl. 134—60.)

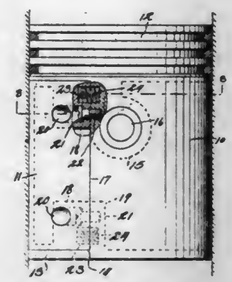
1. A material especially adapted for rubber compounding comprising a coal tar distillation residue having not less than about 40% by weight of constituents which have been produced in situ and which are insoluble in benzol, said residue having a melting point of substantially 220° F.

1,820,445. SHINGLE-SHAKE MACHINE. KENNETH DALE CRAFT, Whites, Wash. Filed Feb. 11, 1925. Serial No. 8,415. 17 Claims. (Cl. 144—13.)



1. In a device for converting ordinary shingles into shake shingles, a rotary grooving device for removing a portion of one face of an ordinary shingle to convert it into a shake shingle, a conveyor for successively advancing a plurality of shingles past said rotary device while maintaining one surface of the shingle substantially parallel to the line of shingle travel, and means for intermittently moving the conveyor and said rotary device relatively to each other while a shingle is disposed therebetween whereby to regulate the depth of cut.

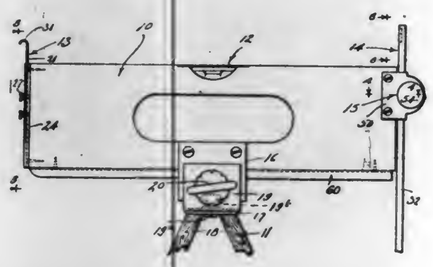
1,820,446. ADJUSTABLE PISTON. DELMER F. CRANDALL, Seattle, Wash. Filed Nov. 19, 1927. Serial No. 234,519. Renewed June 2, 1931. 1 Claim. (Cl. 74—108.)



A trunk piston formed in two sections, one of the sections including the head of the piston and having piston ring grooves and being formed to provide the skirt of the piston, the skirt being provided with inwardly projecting bosses having longitudinally flat faces and formed to provide wrist pin bearings, said skirt being cut away to provide an opening from a point adjacent one of said bosses to a point adjacent the other of said bosses and extending from a point just below the piston ring grooves nearly to the lower end of the piston, the last named section having bosses on its inner face adjacent its margins bearing against and confronting the bosses of the first named section, the bosses of the first named section having countersunk, screw-threaded passages extending

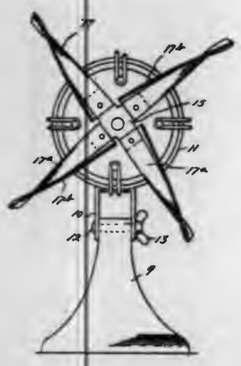
inward from the outer face of the section and the bosses of the second named section having screw-threaded passages alining with the countersunk passages, screws having heads loosely disposed in the counter-sunk passages and having threaded engagement with the screw-threaded passages and the bosses of the first named section, the confronting faces of the bosses of the two sections having alining bores and springs disposed in said bores and urging said sections apart to an extent permitted by the adjustment of said screws.

1,820,447. HEIGHT MEASURING DEVICE. BENJAMIN W. CURRY, Visalia, Calif. Filed Aug. 27, 1928. Serial No. 302,346. 3 Claims. (Cl. 33—73.)



2. An instrument of the character described including, an elongated body, a sight on one end of the body movable to operating position where it projects from the body, a support for the body, a vertically adjustable scale on the other end of the body, the scale having graduations to cooperate with a fixed part and having a point to be sighted from the sight, and means for operating the scale including a rotatable part on the end of the body, a body of fabric on the scale, and teeth carried by the rotatable part to engage the fabric.

1,820,448. FAN BLADE. LYNDEN N. DAVY, Butte, Mont. Filed Jan. 13, 1930. Serial No. 420,465. 6 Claims. (Cl. 170—159.)



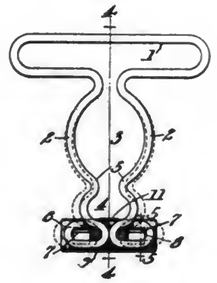
1. An impeller having a plurality of blades each provided with a rear portion arranged substantially normal to the axis of rotation of the fan blades and a front portion having an inner extremity arranged at a greater than ninety degree angle to said rear portion and having an outer extremity arranged at a less than ninety degree angle to said rear portion, the front portion intermediate its extremities having a substantially uniform twist.

1,820,449. ANTISKID DEVICE. ORLIE W. DUTTON, Dodge Center, Minn., assignor of one-half to Harold E. Thomas, Dodge Center, Minn. Filed Feb. 25, 1930. Serial No. 431,222. 3 Claims. (Cl. 24—68.)



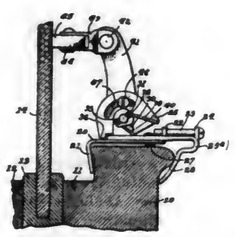
1. Means for locking bars together, comprising a lever terminally pivoted to one of said bars, a connecting link pivoted to said lever between the grip and the pivot thereof, and a loop substantially midway between the ends of said link engageable with the other of said bars.

1,820,450. RESILIENT BUTTON LOOP. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 7, 1930. Serial No. 442,318. 4 Claims. (Cl. 24—224.)



4. A button loop comprising a pair of spring arms cooperatingly bent to form associated loops in axial alignment and having an intermediate contracted portion, the extremities of the arms having looped enlargements normally abutting and providing elongated eyes, and a clip coupling securing the enlargements therein with a limited freedom of movement by means of lugs provided by the clip for relative sliding movement within the eyes.

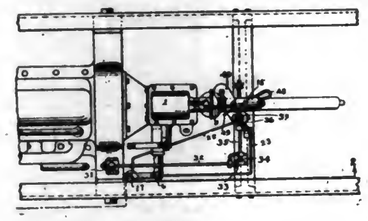
1,820,451. ANTIRATTLING DEVICE FOR AUTOMOBILE PANES. PATRICK J. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed Oct. 5, 1928. Serial No. 310,614. 9 Claims. (Cl. 292—219.)



1. In an anti-rattling device for automobile panes or the like, a base adapted to be attached to the pane casing, a sector and an arm coaxially pivoted on said base, means

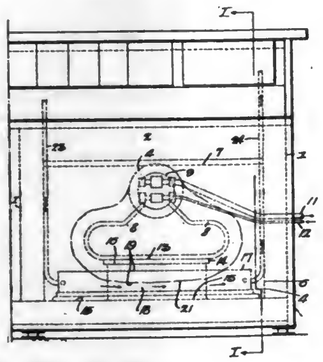
to secure said sector and said arm together at a selected angular relationship, a roller carried by said arm on an axis at a right angle to the direction of movement of said pane and adapted to contact the pane, and resilient means to rock said sector and thereby said arm to maintain said roller in contact with said pane.

1,820,452. FLUID OPERATED GEAR-SHIFTING MECHANISM. KENNETH W. GASKILL, Cleveland, Ohio. Filed Oct. 28, 1929. Serial No. 403,104. 12 Claims. (Cl. 74—58.)



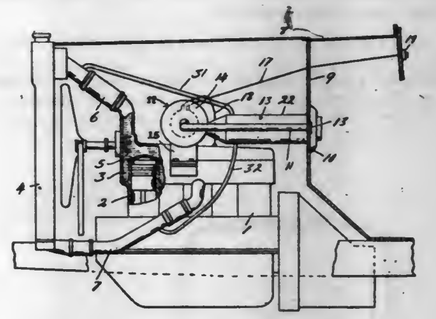
1. In a device of the class described, the combination of an engine, a shaft adapted to be driven thereby, a clutch connection and gear transmission between said engine and shaft, a reciprocatable plunger operatively connected to said gear transmission for effecting change in the gear ratio, a reciprocatable plunger operatively connected to the clutch control, means including a distributor for transmitting fluid pressure from said second-named plunger to said first-named plunger, a single means for adjusting said distributor so as to establish proper connections for the fluid pressure according to the gear ratio desired, and for adjusting said first-named plunger laterally in one direction in accordance with the adjustment of the distributor, and means for automatically effecting lateral adjustment thereof in the opposite direction.

1,820,453. SYSTEM OF REFRIGERATION. JOHN P. GREEN, Philadelphia, Pa. Filed Dec. 19, 1925. Serial No. 76,516. 10 Claims. (Cl. 62—141.)



1. In combination, refrigerating means adapted to form ice within a certain radius thereof and a beverage system subject to intermittent loads, comprising a conduit having a greatly enlarged elongated section extending partly within said radius in predetermined relation with said refrigerating means, whereby a predetermined portion of the beverage fluid may be frozen without interrupting the flow of the remainder through said conduit due to ice clogging said conduit.

1,820,454. HOT WATER HEATER FOR AUTOMOBILES. JOHN V. HARDING, Detroit, and RUDOLPH DE BOER, Grand Rapids, Mich., assignors to Metalcraft Heater Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed July 29, 1929. Serial No. 381,928. 3 Claims. (Cl. 257—241.)

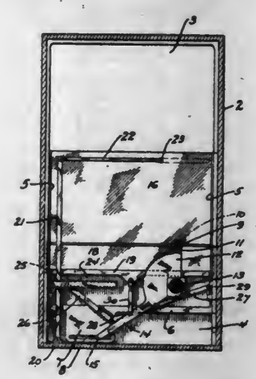


3. A heater for motor vehicles including a shell in which air from a suitable source is adapted to be heated, and means for heating the air within the shell, including coils containing a heating medium and arranged in cone formation.

1,820,455. TREATMENT OF ZINC-BEARING MATERIAL. WILLIAM C. HOOEY, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 7, 1929. Serial No. 338,335. 7 Claims. (Cl. 75—28.)

1. The method of treating zinc-bearing material in the form of zinc sulfide (blende) concentrates containing objectionable water-insoluble impurities in appreciable amounts which comprises subjecting the concentrates to a carefully regulated roasting operation whereby the impurities are converted to sulfates while inhibiting the formation of an appreciable amount of zinc compounds that are water-soluble, and removing the impurities that have been converted to sulfates.

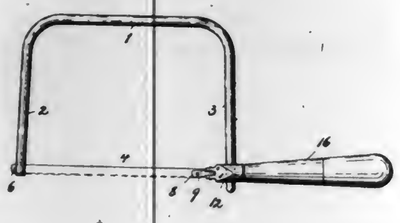
1,820,456. VEHICLE SIGNALING WINDOW. TATSUO H. ICHIO, San Francisco, Calif. Filed Mar. 27, 1929. Serial No. 350,183. 2 Claims. (Cl. 296—44.)



1. In a vehicle door having a window opening formed therein and a pocket below the window opening for the reception of a window, a frame guided in the pocket, a

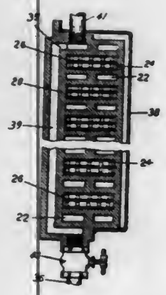
main window and a signaling window carried by the frame, means carried by the frame for raising and lowering the raise and lower the frame, together with the windows, menas carried by the frame for raising and lowering the signaling window on the frame and a control mechanism pivotally secured to the door cooperating with and slidably connected to said last named means for opening and closing said signaling window.

1,820,457. SAW FRAME. JOSEPH JANDA, Brooklyn, N. Y. Filed Nov. 29, 1930. Serial No. 498,967. 5 Claims. (Cl. 145—33.)



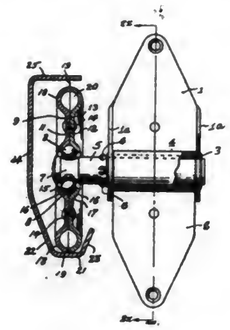
1. In combination with a substantially U-shaped saw-frame, a blade holder slotted lengthwise so as to form two clamping members shaped to receive between them one arm of said saw-frame, and screw means cooperating with said clamping members for drawing them together into clamping engagement with said frame arm.

1,820,458. ELECTRICAL WATER HEATER. FREDRICK ALFRED EDWARD JENKINS, Canterbury, near Sydney, Australia. Filed June 10, 1930, Serial No. 460,243, and in Australia May 2, 1929. 2 Claims. (Cl. 219—39.)



1. A water heater comprising a casing having a plurality of circuitous water passages therein connected at one of their ends by ports, said casing having pockets therein disposed between the passages, said casing having a delivery passage therein directly connecting the end passages only, heating elements in the pockets, a pipe for conducting cold water to the passages, and a pipe for discharging water from the passages connected with the delivery passage.

1,820,459. ROLLER DEVICE AND TRACK. CLARENCE G. JOHNSON, Hartford City, Ind. Filed Dec. 1, 1926. Serial No. 151,884. 6 Claims. (Cl. 16—87.)



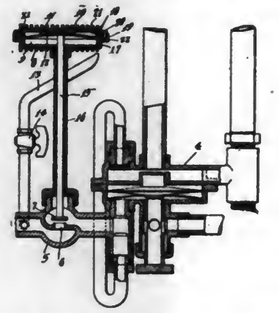
1. In a device of the class described, the combination with a hinge, of a pintle slidably mounted therein and projecting therefrom, and a roller journalled directly on the projecting end of said pintle and movable relative to said hinge by virtue of the sliding of said pintle in said hinge.

1,820,460. PRESSER FOOT FOR SEWING MACHINES. CHARLES H. JONES, Philadelphia, Pa., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 13, 1928. Serial No. 305,841. 4 Claims. (Cl. 112—235.)

1. The combination of horizontally disposed trimming devices, a presser foot associated therewith and having a channel for directing the upturned edge portions of fabric sections to said trimming devices and having means for turning down the trimmed portions into flat lapping relation, the foot portions of said presser foot along the side of said channel being rigidly supported by the shank of the presser foot, one of said foot portions having a recess in its under face, a spring member attached to said foot portion and extending from front to rear of said foot portion in said recess, said spring member being normally disposed beneath said foot portion when free from pressure and being flush with the foot portion when under pressure, said spring member having the free end thereof shaped so as to remain at all times under the lateral control of the side walls of the recess.

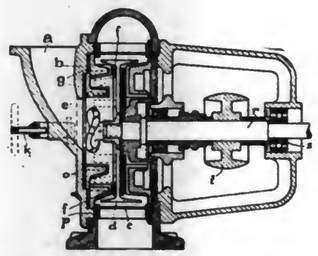
1,820,461. PILOT CONTROL FOR GAS BURNERS. ALLEN F. KIPPER, Glendale, Calif., assignor to General Water Heater Corporation, Los Angeles, Calif., a Corporation of Delaware. Filed Aug. 10, 1927. Serial No. 211,895. 5 Claims. (Cl. 158—117.)

1. In a pilot-controlled device for a gas burner, the combination of a normally lighted pilot burner, a gas-valve having a body with a port admitting gas to the pilot burner, a closure for the port, a thermostat located near the pilot frame, comprising a casing of box form having a chamber within the same, a connection connecting the middle portion of the casing to the valve-body, a thermostatic composite plate mounted in the chamber having means connected to its middle portion extending through



said connection and connecting the thermostatic plate with the valve closure, said plate operating to assume a bowed form when the thermostat casing is subjected to the heat of the flame of the pilot burner, said thermostat casing having a relatively large radiating surface operating to effect the rapid cooling of the casing when the pilot burner is extinguished and thereby effect a straightening of the thermostatic plate operating to close the valve.

1,820,462. GRINDING MILL. PAUL KITTAY, Vienna, Austria. Filed May 15, 1929. Serial No. 363,241, and in Austria May 18, 1928. 2 Claims. (Cl. 83—11.)



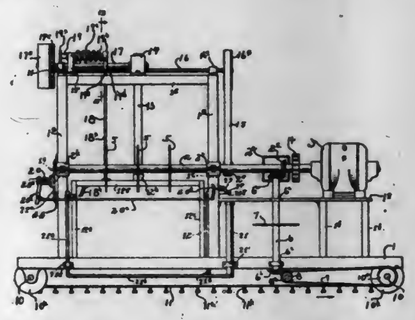
1. A mill of the class described, comprising a casing having a feed hopper, fixed grinding rings in the side of the casing next the hopper, a revoluble disc having beaters arranged to pass between the fixed grinding rings, and a beating rim on said disc and opposed to one of said fixed grinding rings, said beating rim having teeth on its opposed surface.

1,820,463. CLINKER TONGS. OTTO G. KLEIN, Barron Wis. Filed Apr. 30, 1931. Serial No. 534,034. 1 Claim. (Cl. 294—11.)



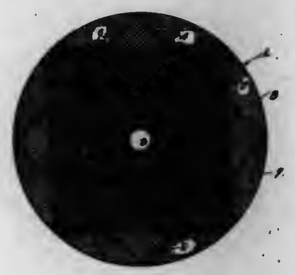
A clinker tongs having a tubular handle shank formed with a handle at one end, the other end of the shank terminating in a fork defined by two webs, fixed separated claws attached to said web, and opposed claws pivoted in said web and having an angularly projecting arm, a rod connected to said arm and extending longitudinally through the handle shank and at the end remote from the claws being angularly bent and extended out through a slot in the handle shank, and a compression spring disposed between the handle of the operating rod and the handle on the handle shank and urging the pivoted jaws to an open position.

1,820,464. ICE SCORING MACHINE. GEORGE KOMP, Sr., Hattiesburg, Miss., assignor, by mesne assignments, to General Ice Scoring Machine Company, a Corporation of Delaware. Filed Jan. 23, 1928. Serial No. 248,674. 41 Claims. (Cl. 125—13.)



32. In an ice-scoring machine, a frame, an elevator working in said frame, scoring elements past which said elevator is adapted to be lifted, means for lifting said elevator, and work-actuated means for initiating operation of said elevator lifting means.

1,820,465. BUFFER WHEEL. ALEXANDER LEVETT, Hendersonville, N. C. Filed Sept. 14, 1929. Serial No. 392,685. 2 Claims. (Cl. 51—193.)

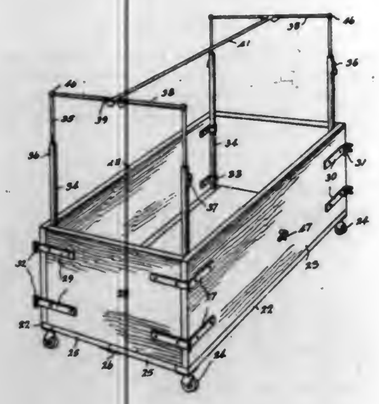


1. A buffer wheel, comprising a plurality of cloth disks arranged in side by side relation, applied cloth squares upon each side of the wheel arranged to have the threads thereof extend on a bias to the threads of the adjacent disk, and a second cloth square applied over each of the first mentioned squares and arranged to have the threads thereof extend parallel to the threads of the adjacent disk, said squares being secured to the wheel by stitching extending along each of the four edges thereof.

1,820,466. COLLAPSIBLE DELIVERY WAGON. CHAIM LIEBLEIN, New York, N.Y. Filed Jan. 22, 1930. Serial No. 422,608. 2 Claims. (Cl. 280—36.)

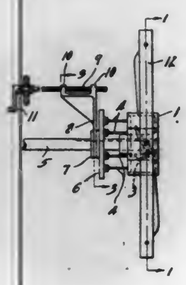
1. A foldable and collapsible wagon comprising sills mounted on wheels, sides fixedly secured to the sills, a bottom comprising two sections, each of which is hingedly secured to the respective sills, said bottom having its confronting ends hingedly connected, ends hingedly secured to the diagonally opposed corners of the sides, swingable

between the sides and means for connecting the free ends of the ends to the sides and an open frame comprising telescopic members arranged at the corners of the wagon, swivelly secured inwardly directed rods on the outer ele-



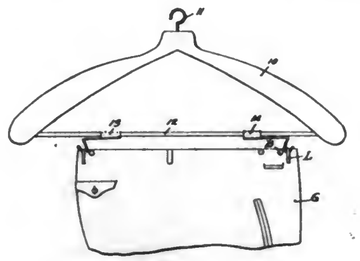
ments of the corner members, a longitudinal member having angle ends pivoted to the rods and removable means for securing the angle ends of the rods for holding said rods and ends in alinement.

1,820,467. AEROPLANE PROPELLER. JOSEPH LISKA, Lakewood, Ohio. Filed Apr. 13, 1928. Serial No. 269,626. 1 Claim. (Cl. 170—163.)



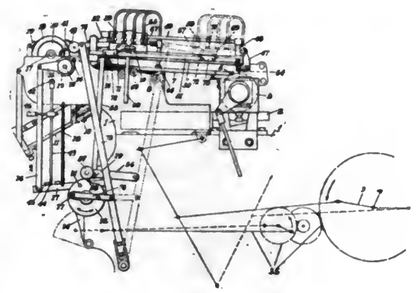
The combination of an aeroplane propeller comprising a slotted hub, a plurality of blades mounted upon said hub for pivotal adjustment substantially about their longitudinal axes, a propeller shaft therefor extending co-axially with said hub, lever mechanism for adjustment of the blades, said mechanism being arranged about said shaft, a disk having an annular groove and being slidably mounted upon said shaft and having operative connection with said lever mechanism for actuation of said disk, said operative connection comprisig a plurality of rods arranged about the axis of said shaft and being swivelled at one end to said disk and extending through the slots in said hub, a yoke member adapted for straight-line movement and having its yoke arms terminating in the groove of said disk for effecting sliding movement of said disk, and screw-threaded means accessible to the operator and having direct operative engagement with said yoke member for manipulating the same, whereby the blades may be readily adjusted and retained in set position.

1,820,468. CLOTHES HANGER. CARL W. LINDGREN, Los Angeles, Calif. Filed June 11, 1930. Serial No. 460,446. 2 Claims. (Cl. 223—62.)



1. A garment hanger comprisng a transverse bar, a sleeve spit along one side and having its opposed edges provided with knuckles capable of being positioned in alignment, and garment engaging means having a shank extending through the knuckles.

1,820,469. AUTOMATIC PAPER FEEDING MECHANISM FOR PRINTING PRESSES. CHARLES L. LOW, Fresno, Calif., assignor to Lisenby Manufacturing Company, Fresno, Calif., a Corporation. Filed Sept. 10, 1929. Serial No. 391,606. 5 Claims. (Cl. 271—26.)

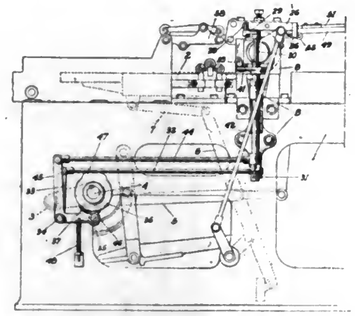


1. A paper feeding mechanism for a printing press having a supporting means for a pile of paper and a cylinder horizontally spaced from the pile, including a suction nozzle to engage the topmost sheet on the pile, a suction passage member connected with the nozzle and movable therewith, means for reciprocating the member and nozzle horizontally a distance sufficient to cause the edge of the sheet nearest the cylinder to be moved into overhanging relation to the latter, and means actuated automatically by and with the movement of the member to open said passage to the atmosphere as the sheet arrives at the cylinder.

1,820,470. GRIPPER MOTION FOR CYLINDER PRINTING PRESSES. CHARLES L. LOW, Fresno, Calif., assignor to Lisenby Manufacturing Company, Fresno, Calif., a Corporation. Filed Sept. 18, 1929. Serial No. 393,404. 4 Claims. (Cl. 101—277.)

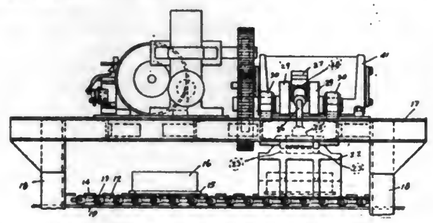
1. In a printing press having a printing cylinder, end bearing blocks for the cylinder, means for oscillating the cylinder through an arc of predetermined length, sheet supporting means associated with the cylinder, grippers mounted in the cylinder to normally engage the periphery of the cylinder so as to grip one edge of a sheet during

printing oscillation of the cylinder, a shaft parallel to the the axis of and mounted on the cylinder and to which the grippers are secured, an arm on the shaft beyond one end of the cylinder and disposed between said end and the adjacent bearing block, and a roller on the outer end of the arm; a means for engagement with said roller to cause the grippers to be retracted from, and allowed to engage the periphery of the cylinder at predetermined periods in the cycle of oscillation of the cylinder, said means comprising separate cam members extending about the axis of the cylinder outwardly of the path of the roller and adapted to



be alternately engaged by the same in a manner to cause the grippers to be moved clear of the cylinder, means supporting the cams slidably mounted in said block, bars secured to said supporting means outwardly of the block, springs acting to hold the cams adjacent the block and laterally clear of the roller, and means acting on the bars and functioning with the operation of the press to separately move the bars toward the block against the action of the springs whereby the corresponding cams will be shifted laterally into the path of travel of the roller.

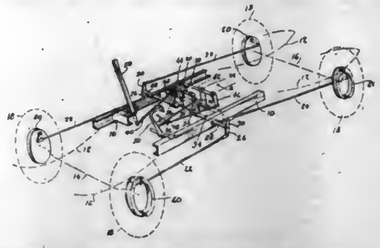
1,820,471. BRICK AND PALLET CENTERING DEVICE. GRAFTON E. LUCE, Chicago, Ill., and THOMAS B. HUESTIS, Greencastle, Ind., assignors to Lancaster Iron Works, Inc., Lancaster, Pa., a Corporation. Filed May 24, 1929. Serial No. 865,743. 12 Claims. (Cl. 198—29.)



1. The combination with a conveyor for movably supporting a pallet having brick thereon, of means for simultaneously aligning said pallet relative to the conveyor and said brick relative to the pallet including a slidably-mounted cross head member having a portion adapted to engage the brick and a portion adapted to engage the pallet, and power means for reciprocating said member.

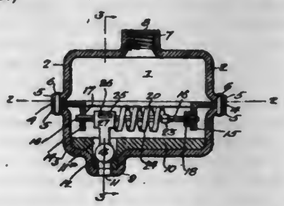
1,820,472. BRAKE OPERATING MECHANISM. MONTGOMERY W. MCCONKEY, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 25, 1928, Serial No. 249,294. Divided and this application filed Dec. 27, 1928. Serial No. 328,683. 16 Claims. (Cl. 188—106.)

1. A vehicle having, in combination, brakes, a shaft arranged to operate part of the brakes, a second shaft arranged to operate the remainder of the brakes, means for equalizing the brakes associated with each shaft, equalized means for operating the two shafts, an operating member



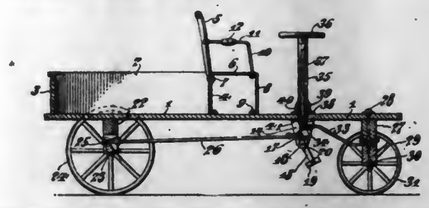
arranged to operate both shafts through said equalized means, an auxiliary connection from said operating member to one of the shafts, and another operating member having a separate connection to the other of said shafts.

1,820,473. ANTIFREEZE DEVICE FOR WATER SYSTEMS. SAMUEL MILONE, Camden, N. J., assignor, by mesne assignments, to Earle Anti-Freeze Valve Corporation, Camden, N. J., a Corporation of New Jersey. Filed Mar. 13, 1930. Serial No. 435,559. 10 Claims. (Cl. 137—34.3.)



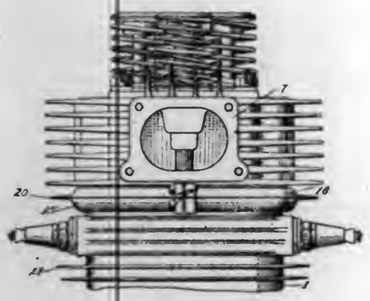
3. In an anti-freeze device for water systems, the combination of a casing having an inlet adapted to be connected to a water system and an outlet adapted to permit the draining of said system through said casing, a valve within the casing and normally closing said outlet, a bar supported within said casing, and a thermosensitive control element within the casing and operatively connected to said valve, said element comprising a bimetallic strip having one end secured to said bar and the remainder of the strip formed into a cylindrical body composed of a plurality of convolutions of substantially equal diameters spaced longitudinally of said bar and surrounding said bar, said strip terminating in an arm extending laterally from and adapted to fulcrum about said bar, said arm being operatively connected to said valve.

1,820,474. TOY VEHICLE. MICHELE MOLINARI, Philadelphia, Pa. Filed May 14, 1930. Serial No. 452,214. 2 Claims. (Cl. 208—114.)



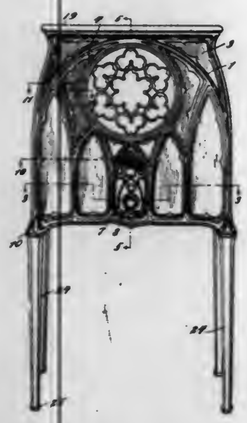
1. A toy vehicle, comprising a platform having an aperture, a tubular bushing extending through said aperture and having a head secured to the under side of said platform, a steering column extending through said bushing, and a tubular casing surrounding said column and having an enlarged lower end portion containing an enlargement of its bore to receive the free end of said bushing.

1,820,475. GAS ENGINE. ROBERT SHERMAN MOORE, Scranton, Pa., assignor to General Airmotors Company, Scranton, Pa., a Corporation of Pennsylvania. Filed Apr. 20, 1929. Serial No. 356,713. 3 Claims. (Cl. 123—171.)



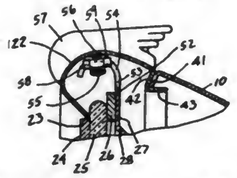
1. A gas engine including in combination a steel cylinder having its outer end closed except for the inlet and exhaust openings and terminating in a seating face lying in a single plane and having a projecting ledge extending all the way around the cylinder with a clamping face at the under side thereof, an aluminum alloy head for said cylinder having its lower end terminating in a seating face lying in a single plane and having a projecting ledge all the way around said lower end with a clamping face at the upper side thereof, one of said clamping faces being inclined, said seating faces extending to the outer edges of said ledges and making close contact with each other throughout the entire extent of said faces, and an annular clamping device for securing said head to said cylinder having members conforming to the clamping faces and making contact therewith throughout substantially their entire extent.

1,820,476. CABINET. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,338. 3 Claims. (Cl. 312—7.)



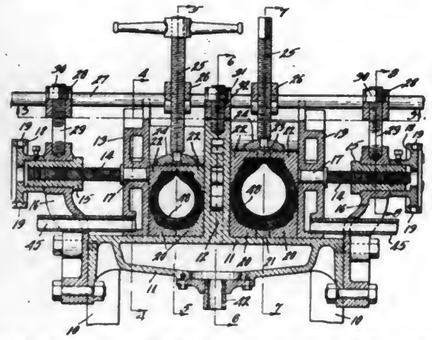
1. In a cabinet, front and side walls comprising an outer grille, studs on the inner surface of said grille, a backing member having openings therethrough to receive said studs, an intermediate layer of fabric between the backing member and the grille secured to said backing member, and lock washers on said studs to secure the backing member to said grille.

1,820,477. VEHICLE LAMP. FREDERICK W. C. NEUNER, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind., a Corporation. Filed Nov. 30, 1928. Serial No. 322,597. 8 Claims. (Cl. 240 41.5.)



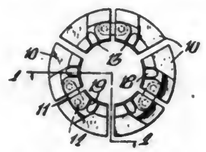
1. In an ornamental lamp, a door rim, an ornament secured thereto including an inwardly extending anchorage, a reflector supported adjacent the rim, and a bifurcated reflector extension associated with said anchorage for locating the rim and reflector relative to each other.

1,820,478. TIRE REPAIR VULCANIZER. CHARLES E. NORRIS, London, Ontario, Canada, assignor to The Summit Mold and Machine Company, Akron, Ohio, a Corporation of Ohio. Filed May 2, 1930. Serial No. 449,126. 5 Claims. (Cl. 18—18.)



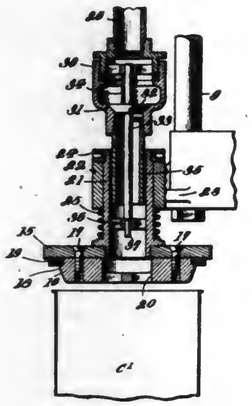
1. A duplex tire vulcanizer comprising a base provided with a central wall, floating walls movable over said base toward and from opposite sides of the central wall whereby two molding spaces adjustable to the same range of width are provided, pairs of tread molding plates and bead molding plates receivable in said spaces, independent means for urging each floating wall toward the central wall to clamp said molding plates therebetween, and independent means for urging each pair of bead molding plates toward said base in each molding space, said last-named means comprising bars, pressure applying means, slidable to adjusted positions along the bars, bracket means slidably mounting the bars independently of the floating wall members, and means on the central wall member for supporting the bars during application of pressure by said pressure applying means.

1,820,479. CASING SLIP. FREDERICK J. O'BRIEN, Titusville, Pa., assignor to Struthers Wells-Titusville Corporation, Titusville, Pa., a Corporation of Maryland. Filed Jan. 28, 1930. Serial No. 424,089. 5 Claims. (Cl. 24—263.)



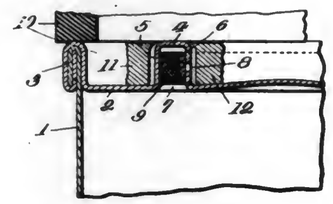
1. A casing slip of the character described, comprising a body having an upwardly-facing shoulder on its inner face and adjacent the lower end thereof, a replaceable liner including pipe-gripping means applied to its inner face and seated at its lower end on said shoulder, the upper end of the liner having a notch therein, and a clip secured to said body and having a part engaging said notch for preventing displacement of the liner relative to the body.

1,820,480. BRINE SUPPLYING ATTACHMENT FOR CAN CLOSING MACHINES. JAMES H. O'NEIL, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed June 17, 1927. Serial No. 199,537. 4 Claims. (Cl. 226—128.)



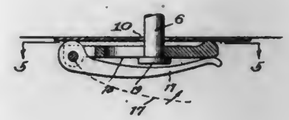
1. A brine supplying attachment for a can closing machine including a pad for engaging and temporarily closing the can, said pad having a portion projecting into the can and an opening leading through said pad, a brine supply chamber connected to said opening and including a valve casing movable relative to said pad, a valve disposed above and in fixed relation to said pad, and means for raising and lowering the valve casing and pad.

1,820,481. CONTAINER AND METHOD OF VACUUMIZING THE SAME. JAMES H. O'NEIL, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 25, 1930. Serial No. 491,267. 3 Claims. (Cl. 220—44.)



1. A container comprising a body portion, and ends seamed thereto, one of said ends having the metal thereof bent outwardly and shaped to provide a pocket for a sealing material, the wall of said pocket having an opening therethrough in the region of the sealing material whereby the container may be vacuumized, said sealing material being so disposed relative to the opening that when the metal of the pocket is deformed inwardly, the sealing material will be caused to enter and close the opening thus sealing the container.

1,820,482. PORTABLE POWER-DRIVEN MACHINE FOR SCRUBBING, POLISHING, RESURFACING, OR OTHERWISE TREATING FLOORS. WILLIAM G. ORTH, New York, N. Y. Filed Aug. 18, 1927. Serial No. 213,824. 1 Claim. (Cl. 15—49.)

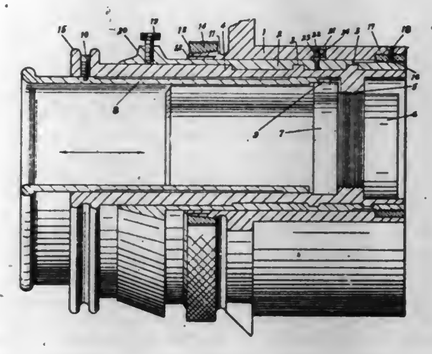


In a clamp for holding a brush to a polishing and surfacing machine, the combination of a drive shaft, an enlarged head at the bottom of said shaft, a plate having a slot therein for engagement with said drive shaft, a lever provided with a cam pivoted at one end to said plate, said cam bearing against the under side of said brush, the free end of said lever adapted to bear against the opposite end of said plate.

1,820,483. METHOD OF OBTAINING AN AZO COMPOUND FROM PHENYL-DIAZO-AMINO-ALPHA-MONAMINO-PYRIDINE. IWAN OSTROMISLENSKY, New York, N. Y., assignor to The Pyridium Corporation, New York, N. Y., a Corporation of New York. Original application filed Sept. 23, 1927, Serial No. 221,628. Divided and this application filed June 9, 1928. Serial No. 284,282. 3 Claims. (Cl. 260—42.)

1. The method of obtaining phenyl-azo-diamino-pyridine hydrochloride, which consists in boiling the hydrochloride of phenyl-diazo-amino-alpha-monamino-pyridine with a solvent.

1,820,484. FOCUSING LENS MOUNT. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,259. 2 Claims. (Cl. 95—45.)



1. A focusing lens mount comprising a lens holder, a longitudinally adjustable carrier therefor, providing a coarse adjustment for said holder, and a supporting means

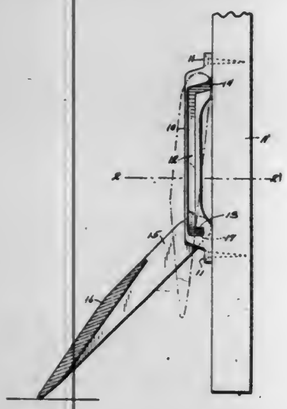
within which said carrier is rotatable for longitudinal adjustment and adapted for locking engagement with said carrier and operable to adjust said carrier and holder longitudinally for a fine adjustment of said holder.

1,820,485. DETACHABLE MILK PAIL HOLDER. ANDREW H. PALMBUSH, Conrad, Mont. Filed Mar. 7, 1930. Serial No. 434,098. 2 Claims. (Cl. 31—54.)



2. As a new article of manufacture a milk pail holder comprising a plate, a tongue formed at right angles to the plate and adapted to abut against the ear of a milk pail spaced tongues integral with the plate and adaptable to engage over the rim of a milk pail, and downward depending tongues having their ends disposed to abut against the outside of the pail.

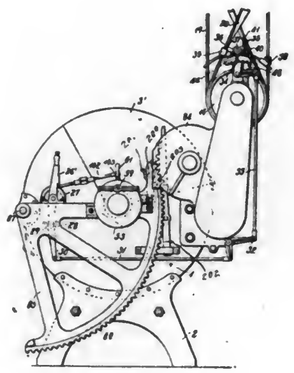
1,820,486. DOORSTOP. JAMES H. PATRICK and LEONARD H. PATRICK, San Jose, Calif. Filed Nov. 20, 1930. Serial No. 497,027. 1 Claim. (Cl. 292—338.)



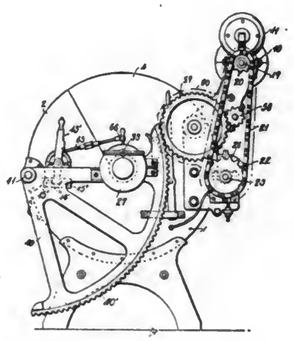
A door holder of the character described, comprising a base having means whereby it may be attached to the inside face of a door, the base being formed on each of its side faces with a longitudinally extending slot, the upper end of each slot having an angular extension extending to the inner face of the base and the lower end having an inwardly extending angular extension, and a brace coacting with the base, the brace being forked at its upper end to embrace the slotted portion of the base, the fork having inwardly extending pins engageable in said slots.

1,820,487. WASHING MACHINE. EMANUEL J. PERRY, New Bedford, Mass., assignor, by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Aug. 13, 1925. Serial No. 50,075. 10 Claims. (Cl. 68—18.)

1. In a washing machine, the combination with a casing, of a rotating washing cylinder therefor, means for rotating said cylinder, a brake mechanism, including a member rotatable with the cylinder and a non-rotatable retarding member, and means actuated by the movement of the cylinder for operating said mechanism to stop said cylinder in a predetermined position, said actuating means including a lever for the non-rotatable member and an element rotatable with the cylinder and engageable with the lever, when the cylinder occupies a predetermined position, to move the lever for applying the retarding member.

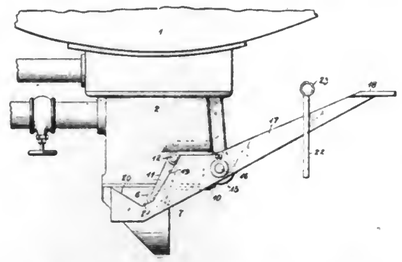


1,820,488. WASHING MACHINE. EMANUEL J. PERRY, New Bedford, Mass., assignor, by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Aug. 13, 1925. Serial No. 50,076. 10 Claims. (Cl. 68—18.)



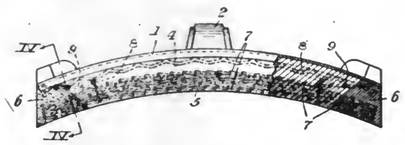
1. In a washing machine, the combination with a casing, of a washing cylinder therein, a driving motor for rotating said cylinder, gearing interposed between the cylinder and the driving motor including a shiftable driving gear driven by said motor, elevating mechanism for lifting the cylinder from the casing, gearing for operating said mechanism, and manual means for shifting said shiftable gear into operative association with said elevating gearing for transmitting power from said motor to said elevating mechanism.

1,820,489. FLUID DISCHARGE CONTROL DEVICE. EMANUEL J. PERRY, New Bedford, Mass., assignor by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Aug. 5, 1927. Serial No. 210,848. 8 Claims. (Cl. 137—9.)



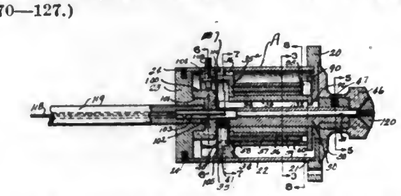
7. In a device of the character described, the combination with a liquid receptacle having a discharge opening, of a deflector pivoted adjacent said opening, and means operable upon movement in one direction to pivot said deflector in either of two opposite directions or successively in both of said opposite directions.

1,820,490. BRAKE SHOE. CLIFTON D. PETTIS, New York, N. Y. Filed July 5, 1928. Serial No. 290,364. 1 Claim. (Cl. 188—255.)



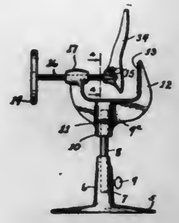
A brake shoe comprising a body portion and a reinforcing shell, the body portion extending continuously throughout the length of the shell and having chilled and unchilled portions bonded together by reticulated metal strips which extend continuously throughout the major portion of the body and are embedded within the body, said shell having downwardly and inwardly turned edges for anchoring the chilled and unchilled portions to the shell and to each other, at least of the metal strips having its ends turned upwardly and contacting with the shell in order to tie the strips and chilled and unchilled portions to the shell.

1,820,491. VEHICLE LOCKING MECHANISM. ELMER C. PETERSON, Cleveland, Ohio, assignor to The Blossom Lock Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 2, 1924. Serial No. 717,329. 5 Claims. (Cl. 70—127.)



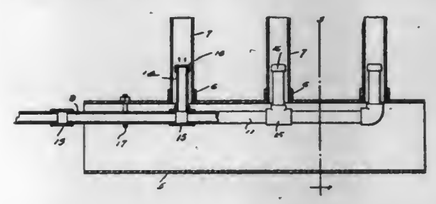
1. In a combination lock of the class described, the combination of a casing portion, a shaft rotatable and longitudinally slidable in the casing portion, a rod longitudinally slidable in said shaft, a switch base of insulation, means connecting the switch base to said rod so that upon rotation of the rod the switch base will move therewith and be prevented from longitudinal movement when the rod is so moved in said shaft, switch contact means carried by said insulation base, and tumbler means adapted to be actuated upon rotation of said shaft.

1,820,492. CLAMP AND SHOE LAST VISE. JOHN RATTAZZI, Brooklyn, N. Y. Filed Aug. 17, 1929. Serial No. 386,721. 3 Claims. (Cl. 12—123.)



1. A device of the class described comprising a base having a standard, a rod adapted to be adjusted within the standard, around and along a vertical axis, means for locking said rod in said standard, a yoke shaped frame on the upper end of the rod, means for locking said frame to the rod, one arm of said frame having a substantially vertical roughened surface on its inner face adapted to engage the heel portion of a shoe, a feed screw engaged in a tapped, horizontally disposed hole on the upper end of the opposite arm of said frame, a shoe last on one end of the feed screw, and a hand wheel on the opposite end of said screw for advancing or retarding said last, relative to the roughened surface of said arm.

1,820,493. GAS BURNER. MARTIN REAGAN, Duncan, Okla. Filed Aug. 22, 1929. Serial No. 387,699. 2 Claims. (Cl. 158—104.)

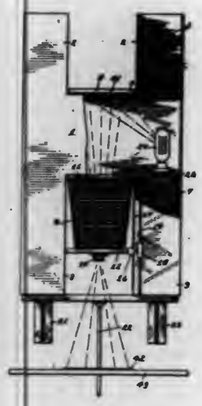


1. A gas burner, comprising an open ended tubular casing having a plurality of sets of discharge openings surrounded by attaching collars, tubular outlets connected with said collars, said outlets constituting fuel mixers, a gas feed pipe, and a gas distributing and feed assembly in the nature of an insert arranged within said casing and comprising a plurality of horizontally disposed spaced parallel pipes having longitudinally spaced nipples provided with apertured caps forming nozzles or jets, said nipples projecting telescopically into the complemental outlets and being of a diameter less than the diameter of the outlet to provide for mixing of the gas and air.

1,820,494. PHOTO PRINTING MACHINE. LYLE S. RENNICK, San Francisco, Calif., assignor to Hartsook-Rennick, Inc., Los Angeles, Calif., a Corporation of Delaware. Filed Apr. 17, 1928. Serial No. 270,635. 4 Claims. (Cl. 88—24.)

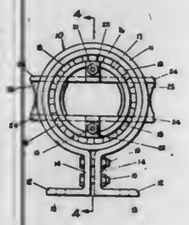
1. A photo printing device comprising an H-shaped housing comprising a central body portion having openings formed in the top and bottom thereof, and vertically disposed side portions having vent passages extending vertically therethrough at each side of the central portion, said vent passages opening into the central body portion and being provided with light obstructing baffles; lighting elements mounted within the sides of the body portion in vertical alinement with the side portions and arranged to project light onto the inner surface of a negative placed over the opening in the top of the body portion; light focus-

ing means mounted below the body portion in alinement with the openings therein to focus light reflected from the under surface of the negative onto a piece of sensitized



paper supported below the housing; and a light confining bellows connected between the focusing means and the housing.

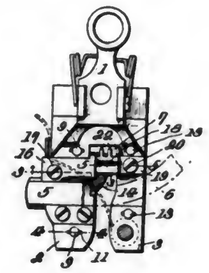
1,820,495. CABLE GUIDE. CONLEY W. RICHARDSON, Marion, Va., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 18, 1929. Serial No. 400,636. 6 Claims. (Cl. 254—190.)



1. A cable guide comprising a support, a ball race mounted in said support, brackets secured to and rotatable with a member of said ball race, cable rollers mounted in said brackets with their axes disposed at substantially right angles to the axis of rotation of said frame, and a cover plate for said ball race disposed between said race and said brackets.

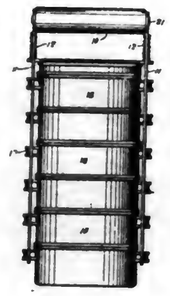
1,820,496. PRESSER FOOT FOR SEWING MACHINES. ALBERT S. RIVIERE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 27, 1929. Serial No. 381,494. 4 Claims. (Cl. 112—235.)

1. A presser foot for sewing machines including in combination a foot portion having a needle opening therethrough, a guiding channel extending from the front end of the foot portion longitudinally thereof for directing the upturned edge portions of the fabric sections, said presser foot having devices for turning down the edge portions into overlapped relation with each other, and means for yieldingly supporting said device operating on the under lapped fabric section on said foot portion



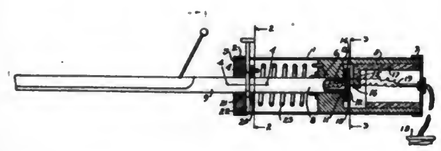
whereby said device is capable of remaining in contact with the fabric when the presser foot is raised by a passing cross seam.

1,820,497. CARRIER FOR CONTAINERS. ANTON J. ROSE, Cleveland, Ohio. Filed Apr. 26, 1930. Serial No. 447,524. 5 Claims. (Cl. 224—45.)



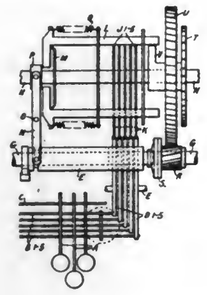
1. A carrier for stacked containers having handles at opposite sides, comprising a pair of hangers having slots to receive the handles of the containers, a handle connecting the hangers at the top, and a spring pressed clamping bar extending across the top container and between the hangers.

1,820,498. HAIR CURLER. GUY O. ROWLEY, San Jose, Calif. Filed Mar. 7, 1929. Serial No. 344,044. 2 Claims. (Cl. 132—34.)



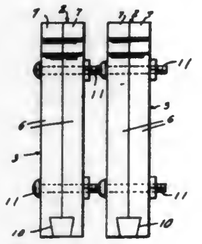
1. A hair curler comprising a tubular handle, an electrically heated curling clamp revolubly mounted in the handle, resilient means for urging the clamp to rotate in one direction, means for actuating the clamp in the opposite direction and operative from the exterior of the handle, and means for effecting an electrical connection between the revoluble clamp and an electrical current supply disposed within the handle.

1,820,499. TELEGRAPH TRANSMITTER. REGINALD DENNIS SALMON, Croydon, England, assignor to Creed and Company, Limited, Croydon, England. Filed Oct. 3, 1930, Serial No. 486,128, and in Great Britain Dec. 13, 1929. 10 Claims. (Cl. 178—17.)



1. A telegraph transmitter comprising a rotatable member, a plurality of members each corresponding to a particular position thereof, a corresponding plurality of keys, combination members less in number than said plurality of keys and actuated in varying combinations to select one of said plurality of members, and means actuated by said rotatable member for sending a signal in accordance with the particular key depressed.

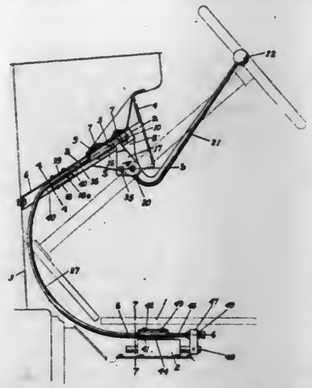
1,820,500. BEEHIVE BROOD FRAME. CHARLES E. SANDERS, La Plata, Mo. Filed Mar. 4, 1930. Serial No. 433,134. 6 Claims. (Cl. 6—10.)



4. A brood frame for beehives having top, bottom and side bars in which the top and side bars are each longitudinally divided to form coacting members between which the edges of a comb foundation may be placed, and means for securing the members of the top and side bars in gripping relation against an interposed edge of a foundation body, said securing means of each frame being of a character to coact with the securing means of an adjacent frame to properly space a plurality of the frames when in position in a hive.

1,820,501. TWIN-CABLE GEAR SHIFTING MECHANISM. BENJAMIN F. SCHMIDT, Los Angeles, Calif. Filed Aug. 3, 1928. Serial No. 297,310. 6 Claims. (Cl. 74—39.)

1. In a gear shift mechanism for motor vehicles, a supporting structure, means for securing said structure onto the dashboard of a vehicle transversely spaced bars slidably mounted on said structure, transversely spaced arms depending from the bars and slidably engaged at one end therewith, pivot means for the lower end of the arms mounted on the structure, and a shift lever for selective

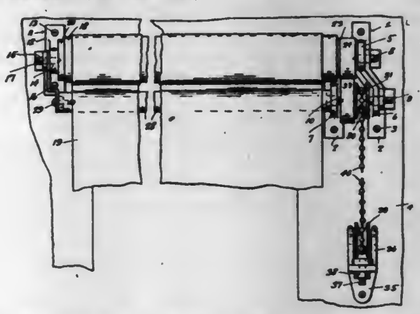


engagement with the arms pivoted on the supporting structure and projecting first downwardly from said pivot connection and then upwardly at a rearward angle.

1,820,502. BLEACHING CELLULOSE PULP. JOHN SCHUBER, Asheville, N. C., assignor to The Champion Fibre Company, Canton, N. C., a Corporation of Ohio. Filed June 30, 1928. Serial No. 289,636. 6 Claims. (Cl. 8—2.)

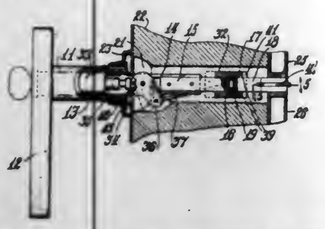
6. Process of bleaching cellulose pulp as defined in claim 5, in which the treatment with acid reducing agent follows a mild treatment with an oxidizing bleaching agent.

1,820,503. WINDOW SHADE. WILLIAM SENIOR, Bedford, Ind. Filed Feb. 21, 1931. Serial No. 517,565. 3 Claims. (Cl. 156—28.)



2. A window shade structure of the character described comprising a pair of spaced supporting brackets, a shade roller journaled between the brackets upon which the shade is windable, one of the brackets further including a pair of spaced, opposed arms, a resilient band encircling one end portion of the shade roller, a compound pulley journaled for rotation between the opposed arms of said one bracket, said pulley including a disk portion and a circumferentially grooved portion, a resilient band encircling the disk portion of the compound pulley and frictionally engaged with the band on the shade roller in a manner to operatively connect the shade roller to the compound pulley for actuation thereby, means for manually actuating the compound pulley, said means comprising a bracket mounted on the window frame in spaced relation beneath said one bracket, a yoke mounted for vertical adjustment on the third named bracket, a grooved pulley mounted for rotation in the yoke, and an endless chain trained around the last named pulley and the circumferentially grooved portion of the compound pulley.

1,820,504. LOCKING DOOR HANDLE. ROBERT SIMON, Chicago, Ill. Filed Mar. 29, 1929. Serial No. 350,928. 7 Claims. (Cl. 70—91.)



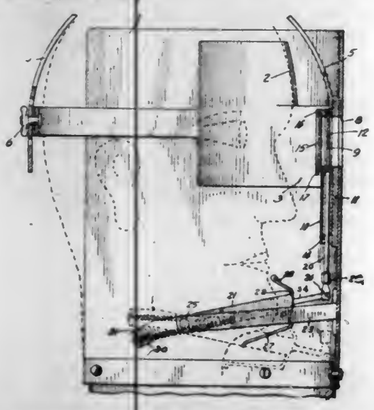
1. A latch operating handle comprising, a tubular stem having a pair of extended arms rigid therewith; a shank rigidly secured between said arms having a rotatable extension on the end thereof; latch actuating means engaged by said extension, a collar slidably mounted on said shank; a lever arm pivotally mounted between said arms having an operative connection with said collar; and key-operated means for moving said lever arm to slide the collar into engagement with said rotatable extension to render the latter non-rotatable relative to the shank.

1,820,505. FISSURE DETECTOR FOR METALS. ELMER A. SPERRY, Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del., a Corporation of Delaware. Filed Aug. 10, 1928. Serial No. 298,771. 16 Claims. (Cl. 175—183.)



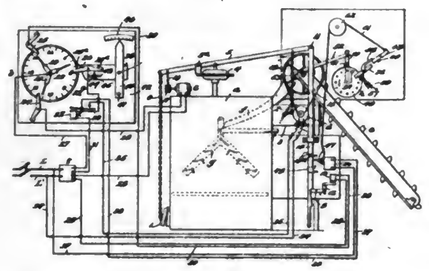
5. Apparatus for detecting flaws within electrical conductors comprising in combination, means for passing a direct current through the conductor to be tested, a pair of opposed conductors out of contact with but adjacent to said first conductor and movable relative to said first conductor, and means for indicating the E. M. F.'s induced in said pair of conductors.

1,820,506. OPERATING MECHANISM FOR HOODS. ERNEST J. STANLEY, Los Nietos, and CLAUDE H. TAYLOR, Los Angeles, Calif.; said Taylor assignor to said Stanley. Filed Mar. 11, 1930. Serial No. 435,005. 5 Claims. (Cl. 2—8.)



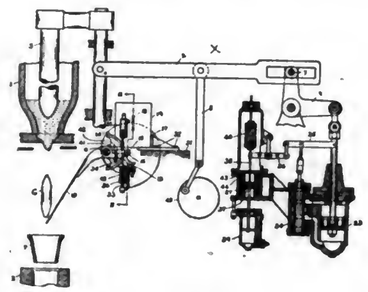
1. In combination, a hood for the face having a sight aperture, a transparent protecting shield for the sight aperture adapted to be opened and closed, a rod adapted for reciprocation in the hood for opening and closing the protecting shield, a lever pivoted in the hood and operatively connected to the rod, a seat on the lever adapted for engagement by the chin of the user for swinging the lever by opening and closing the lower jaw, and a spring connected to the lever and adapted for shifting of its axis to one side or the other of the pivotal mounting for the lever for yieldably holding the lever when swung to position for either opening or closing the protecting shield.

1,820,507. AUTOMATIC FEUL FEEDER. ROY H. STULL, Sunbury, Pa. Filed Aug. 3, 1927. Serial No. 210,276. 8 Claims. (Cl. 161—1.)



1. Mechanism for feeding fuel to furnaces comprising a conveyer, an electric motor for operating the conveyer, time mechanism and circuits controlled thereby adapted to cause the operation of the motor for predetermined periods at predetermined intervals, and means actuated by the motor for preventing further operations of the motor after it has operated for a predetermined number of periods, said means including a switch in the motor circuit and tripping mechanism driven by the motor and adapted to open said switch when the conveyer has traveled a given distance.

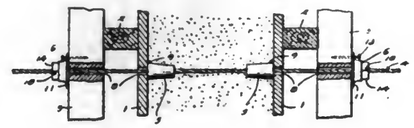
1,820,508. GLASS FEEDING APPARATUS. JULIUS SYLVESTER, Washington, Pa., assignor to Simplex Engineering Company, a Corporation of Delaware. Filed Aug. 30, 1930. Serial No. 478,823. 10 Claims. (Cl. 49—55.)



7. In glass-shaping machinery and in combination with gob-delivering apparatus which includes a feeder needle, means for reciprocating said feeder needle, such means including a lever reciprocating on a movable fulcrum, means for moving such fulcrum longitudinally of said lever, such means including a vertically arranged hydraulic cylinder containing a piston with extended stem, a hydraulic relay associated with said cylinder such relay including a vertically reciprocable member, a lever pivoted to the stem of the piston of said hydraulic cylinder, the vertically reciprocable member of the said relay being connected to said lever, a lever linked to the lever last named and adapted to swing on a fixed pivot, and

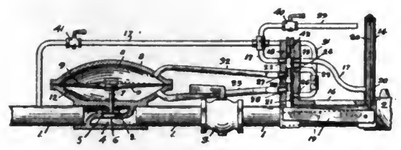
means subject to the weight of a descending gob of glass for causing the lever so pivoted on a fixed support to swing through a greater or less range, according to variation in the weight of succeeding gobs.

1,820,509. TIE OR CLAMP FOR BUILDING FORMS. HENRY HERBERT TOOGOOD, Los Angeles, Calif. Filed June 13, 1929. Serial No. 370,571. 3 Claims. (Cl. 25—131.)



3. A form tie or clamp comprising a plurality of intertwisted elements, the intertwisting of the elements uniting them and providing the stem or rod with screw threads extending throughout the entire length thereof, a cast metal spacer having inner screw threads engaging those of the stem or rod, a set screw mounted in said spacer and adapted to hold said spacer against rotation on said elements, and a cast metal nut having inner screw threads engaging those of the stem or rod.

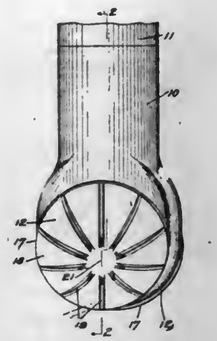
1,820,510. CONTROL VALVE MECHANISM FOR GAS FURNACES. GEORGE A. TUCK, San Francisco, Calif. Filed Sept. 22, 1930. Serial No. 483,605. 7 Claims. (Cl. 158—117.1.)



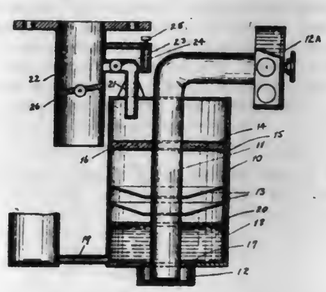
1. A control valve mechanism for gas furnaces comprising a supply pipe connected to a gas burner and provided with a main control valve; valve actuating means mounted in connection with the control valve and actuated by gas pressure to open and close the valve; a pilot burner having a supply connection connected to the supply pipe; a pilot valve mounted in connection with said pilot supply connection; means to automatically close the pilot valve when the pilot burner is extinguished; gas supply connections to deliver gas from the supply to opposite sides of the control valve actuating means to open and close the control valve; and valve means acuated by the pilot valve to open the connection to the valve opening side of the control valve actuating means when the pilot valve is open, and to close said connection and open the connection to the valve closing side of said actuating means when the pilot valve is closed.

1,820,511. EARTH BORING DRILL. BURTON VAN PATTEN, Brea, Calif. Filed Aug. 15, 1927. Serial No. 212,873. 11 Claims. (Cl. 255—71.)

1. In a rotary drill, a rotatable drill shank having an axial bore extending downwardly into the drill body, a cutter having a stud projecting from the same and secured thereto, the lower portion of the shank having an opening to receive said stud, and a member insertable into said bore thru the upper end of the shank and adapted to detachably journal the stud of said cutter upon the shank.



1,820,512. CARBURETOR. SIDNEY LE FEVRE VARVEL, Berowra, New South Wales, Australia. Filed Aug. 24, 1928. Serial No. 301,876. 2 Claims. (Cl. 261—123.)

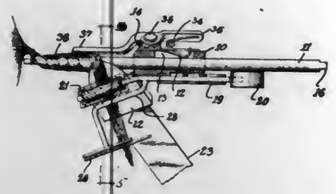


1. A carburetor, comprising in combination, a vaporizing chamber, a well in the bottom of the chamber, a perforated disk cover for the well, an air inlet tube of relatively large diameter extending vertically through the chamber into the well, a manually controllable air valve on the outer end of the tube, a splash-preventing perforated cork-float in the chamber, inverted truncated cone-shaped baffle plates mounted in the chamber above the float, spaced perforated metal plates mounted in the chamber above the baffle plates, a straining layer of felt between the perforated metal plates, an outlet pipe in the top of the chamber, and a float-controlled fuel supply chamber in communication with the vaporizing chamber near its base.

1,820,513. DEVICE FOR WINDING, COMBING, STRETCHING, AND TYING HAIR IN THE MAKING OF PERMANENT WAVES. HARRY VOGT and JOHN HECK, Brooklyn, N. Y. Filed Sept. 22, 1930. Serial No. 483,527. 4 Claims. (Cl. 132—33.)

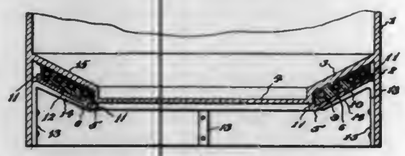
1. A device for winding, combing, stretching, and tying the hair comprising a holder block for the reception of a stick or a pin upon which the hair is to be wound, a spring for holding said pin in said block, a table and a roller for clamping the hair between them, a means for guiding said roller against said table with the hair between both, a

comb, means for attaching said comb to the table, a means for holding and guiding the hair passing through the comb, a spring controlled means for holding the hair flat and



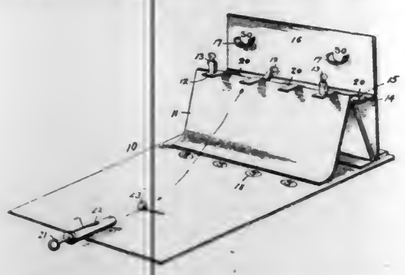
smooth upon said stick, a means for guiding paper between the hair during its winding upon said stick, and a means for tying the end of the hair to said stick.

1,820,514. ELECTRIC HEATER FOR WASHING MACHINES. LEROY WALLER, Macomb, Ill. Filed May 13, 1929. Serial No. 362,730. 2 Claims. (Cl. 219—44.)



1. In combination with a tub having the central portion of its bottom depressed, and the outer portion upwardly and outwardly inclined and having a skirt depending from the outer part of the bottom, a channel ring supported by the skirt and inclined upwardly and outwardly to conform to the outer inclined portion of the bottom and coacting therewith to enclose a space, of an electric ring heater disposed in said space and inclined upwardly and outwardly.

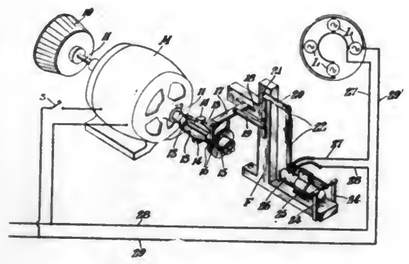
1,820,515. GAME APPARATUS. ALEXANDER WEINBERG, New York, N. Y. Filed Apr. 23, 1930. Serial No. 446,712. 6 Claims. (Cl. 273—102.)



1. Game apparatus comprising a missile receiving and directing surface that extends upward, a movable figure support above the bottom of such surface, and a figure movable bodily from such support when a blow is imparted to the underside of the support by a missle passing upward over such surface.

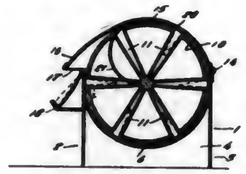
1,820,516. CONTROL SYSTEM FOR VIEWING DEVICES. FRANK E. WELLER, Newark, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 12, 1929. Serial No. 346,474. 4 Claims. (Cl. 88—24.)

1. In combination, means for supporting a member having information-imparting representations thereon, a source of light co-acting with said member to effect image display of said representations, a circuit for supplying electrical energy to said source of light, a tiltable mercury switch in said circuit, a motive device comprising a shaft for moving a cooling gaseous medium adjacent said source of light to decrease the temperature at said member, governor



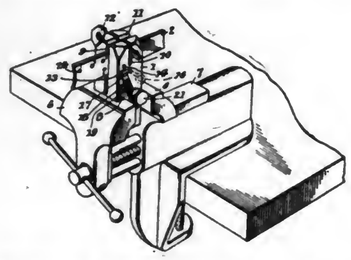
mechanism operated by said shaft, a mechanical connection between said governor mechanism and said switch, a housing for said switch, and a housing for said governor mechanism, said connection extending from one housing to the other.

1,820,517. COMB STERILIZER. CARL E. WELLS, Estherville, Iowa. Filed June 6, 1930. Serial No. 459,455. 3 Claims. (Cl. 312—84.)



1. A comb sterilizer of the character described comprising a tank for the reception of a sterilizing fluid, a shaft mounted for rotation in the tank, a pair of drums mounted in longitudinally spaced relation on the shaft for rotation therewith and having aligned pairs of recesses therein for the reception of the opposite end portions of the comb, a closure mounted on the tank above the drums and having an elongated slot therein constituting means for inserting the combs in the recesses of the drums, and an ejector depending from the closure between the drums and engageable with the combs in a manner to successively remove the same from the drums upon rotation of said drums.

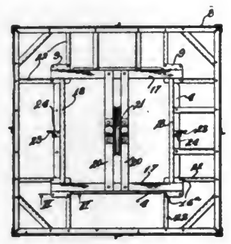
1,820,518. KEY DUPLICATING DEVICE. CHESTER M. WELLS and ELI COOK, Asheville, N. C., assignors of one-third to Lillie E. Starnes, Asheville, N. C. Filed June 18, 1930. Serial No. 462,057. 13 Claims. (Cl. 29—76.)



1. A key cutting device comprising a body formed with a key seat opening through the top thereof, a gauge movable through said body in crossed relation to the key seat and

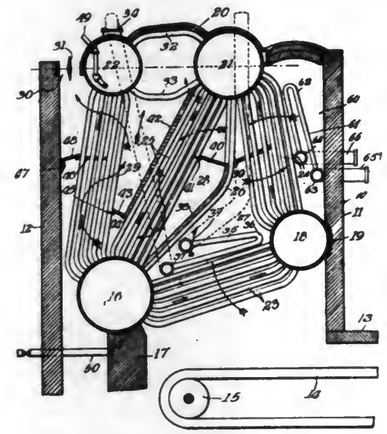
extending through the key seat and adapted to support a key with an edge portion projecting upwardly from the body, and means to releasably secure the gauge in a set position with a predetermined portion of the key projecting from the body whereby notches of desired depth may be cut in the exposed edge of the key.

1,820,519. TOP CASTING AND DERRICK CONSTRUCTION. DALLAS D. WERTZBERGER, Tulsa, Okla. Filed June 2, 1928. Serial No. 282,327. 6 Claims. (Cl. 189—21.)



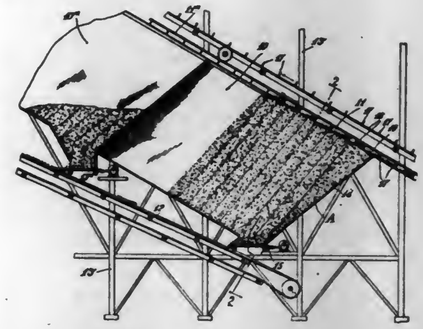
1. In combination, a derrick superstructure, a top section thereon, and means associated with said top section for supporting a screw block in positions at right angles to each other.

1,820,520. BOILER. ASHUR U. WETHERBEE, Chicago, Ill. Filed Feb. 25, 1925. Serial No. 11,389. 9 Claims. (Cl. 122—301.)



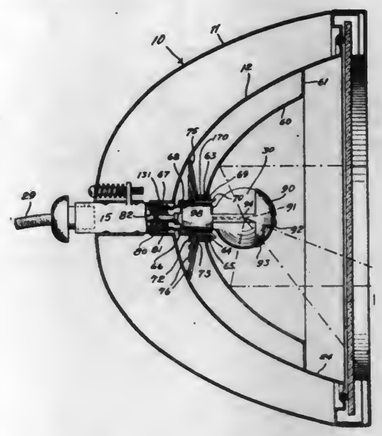
1. In combination, a boiler casing having a front wall, a boiler in said casing comprising a mud drum at the back of the casing, a water drum slightly above the mud drum and disposed at the forward side of the casing and sealed with the front wall, a steam and water drum disposed at a higher level than the water drum and between the water drum and the mud drum, tubes connecting said three drums in a ring circuit, a furnace in the lower part of the casing, the tubes joining the mud drum and water drum being inclined at a small angle to the horizontal to provide circulation, the length of said tubes being proportioned to the capacity of the furnace so that the fire gases flowing from the furnace strike across said tubes and fill the entire space through which said tubes are projected, and a baffle disposed above the lower tubes so as to provide a relatively large gas space above said tubes along their full length, and a bent tube type of superheater disposed in the aforesaid gas space substantially parallel to the lowermost bank of tubes.

1,820,521. FLOATING STORAGE AND MIXING BIN. ANDREWS ALLEN, Glencoe, Ill., assignor to Allen & Garcia Company, Chicago, Ill., a Corporation of Illinois. Filed July 29, 1929. Serial No. 381,784. 5 Claims. (Cl. 214—16.)



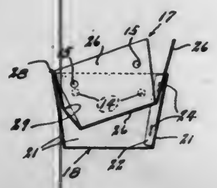
1. An apparatus for automatically mixing material comprising a substantially rectangular storage bin positioned whereby the bottom and one end wall thereof incline at angles over which the body of material stored therein will move by gravity toward the lower corner of the bin, a conveyor for feeding quantities of material into the bin to form contiguous layers therein inclined from the bottom to the top of the bin in substantially parallel planes, and means at said lower corner of the bin for withdrawing the material simultaneously from a plurality of said layers of the material.

1,820,522. LAMP SHIELD. SAMUEL F. ARBUCKLE, Highland Park, Mich., and CARL P. BROCKWAY, Paterson, N. J., assignors to Monogram Lens Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Jan. 28, 1924, Serial No. 688,947. Divided and this application filed May 27, 1927. Serial No. 194,564. 3 Claims. (Cl. 240—48.6)



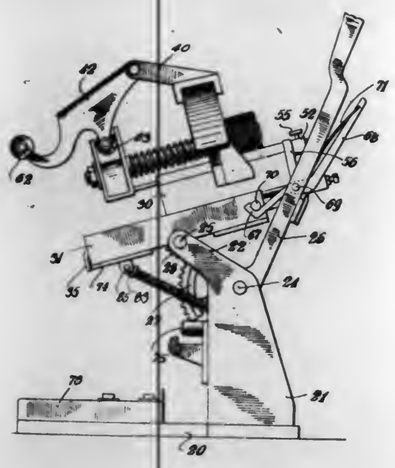
1. A glare screen comprising a body having a screen formed as a segment of a sphere and a supporting shank extended radially from the rear of said body and constructed to be interposed longitudinally between the base of a lamp bulb and its socket.

1,820,523. COLLAPSIBLE FRUIT AND NOVELTY BOX. CHARLES AUGUSTIN and THOMAS P. CARROLL, St. Louis, Mo. Filed July 3, 1928. Serial No. 290,087. 2 Claims. (Cl. 229—16.)



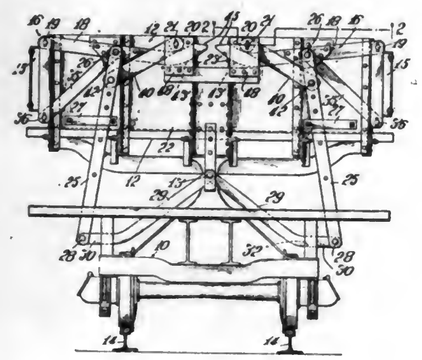
1. A collapsible box of the class described comprising a single piece blank of cardboard and consisting of an outer wall section and an inner wall section, said outer wall section having a plurality of trapezoid wall sections integrally connected along their adjacent side edges and said inner wall section consisting of a plurality of trapezoid wall members and a bottom member, said inner wall members being integrally connected along their base edges with the adjacent edges of said bottom member, the outer edge of one of said inner wall sections being integrally connected to the upper edge of one of said outer wall sections, said interconnected inner wall section being scored and foldable along a line spaced from the parallel edges thereof and parallel therewith to enable the insertion of the inner wall section within the formed outer wall section whereby the formed inner wall section is supported within the outer wall section frictionally and by virtue of the integral connection between said inner and outer wall sections.

1,820,524. MACHINE FOR THE PRODUCTION OF ARTIFICIAL FLOWERS. GIUSEPPE BONTEMPI, New York, N. Y. Filed Sept. 12, 1928. Serial No. 305,374. 14 Claims. (Cl. 41—2.)



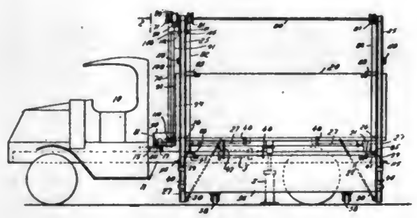
1. In a device of the character described, the combination with a platen, of a pivotally mounted tool arm movable to and from the surface of said platen in a plane at right angle thereto, means for forcing said tool arm against said platen, causing translatory movement of the end thereof bearing against said surface, along said surface, in the direction of said plane, means for simultaneously exerting pressure against said arm, opposing its pivotal and translatory movement, and means automatically locking said arm against return movement to its normal position at the ends of its working stroke.

1,820,525. DOOR OPERATING MECHANISM FOR DUMP CARS. WILLIAM L. BURNER, Columbus, Ohio, assignor to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed Apr. 28, 1928. Serial No. 273,562. 15 Claims. (Cl. 105—277.)



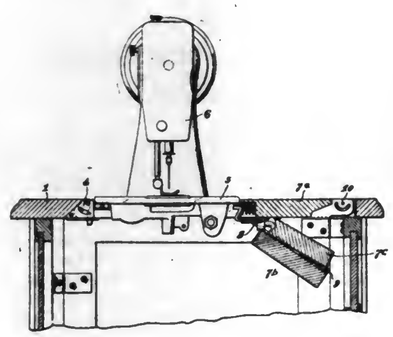
1. In combination, a dumping body, an abutment on said body, a door for said body, and swinging means for operating said door, said means including a strut connected with the door and tangentially engaging said abutment.

1,820,526. TRUCK LOADING MECHANISM. FREDERICK W. CALDWELL, New York, N. Y. Filed Dec. 27, 1928. Serial No. 328,736. 2 Claims. (Cl. 214—67.)



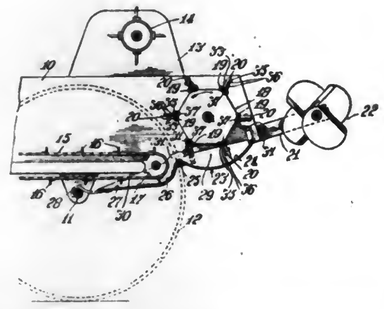
1. Truck loading mechanism comprising a truck, a power shaft thereon, a detachable framework including a set of guide rails mounted on each side of the truck, a receptacle independent of the truck and having rollers on one upstanding side, spaced to engage the desired set of rails, drums operatively connected to be driven by said shaft, cables connected to said drums and adapted for connection to said receptacle, coacting means on the rails and receptacle for tilting the receptacle when it reaches a predetermined position, and means located on said receptacle to engage said cables when the receptacle is tilted, thereby to utilize the elasticity of the cables to return the receptacle from its tilted position.

1,820,527. DISAPPEARING MACHINE REST. DANIEL H. CHASON, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 5, 1929. Serial No. 397,519. 6 Claims. (Cl. 312—30.)



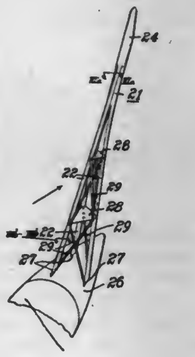
1. A sewing machine table having a top formed with an aperture and means for supporting a sewing machine in operative position in said aperture, said means including a rest having a movement in a direction substantially parallel to the plane of the table-top from non-supporting to machine-supporting position, and rest-locking means in engagement with which said rest is maintained by the weight of the supported sewing machine, said rest and rest-locking means having an interlocking projection and depression.

1,820,528. LIME SPREADING ATTACHMENT FOR MANURE SPREADERS. HARRY CLAAR, Watson, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Original application filed Mar. 26, 1924. Serial No. 701,949. Divided and this application filed Apr. 11, 1928. Serial No. 269,052. 11 Claims. (Cl. 275—3.)



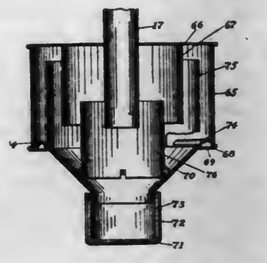
1. In a lime spreading attachment for manure spreaders, the combination with a beater having a plurality of outwardly projecting teeth, of a plurality of plates extending longitudinally of said beater and detachably secured to said teeth.

1,820,529. WIND MOTOR. GEORGES JEAN MARIE DARRIEUS, Paris, France, assignor to Société Anonyme pour l'Exploitation des Procédés Maurice Leblanc-Vickers, Paris, France. Filed June 22, 1928. Serial No. 287,520, and in France June 27, 1927. 11 Claims. (Cl. 170—79.)



1. A fluid motor having a plurality of blades mounted on a common hub, each of said blades having the form of a pylon of triangular section, said pylon consisting of three aerofoils rigidly secured to the hub.

1,820,530. AIR CLEANER. HENRY R. DAVIES, Valley Cottage, N. Y., assignor, by mesne assignments, to The Tillotson Manufacturing Company, Toledo, Ohio, a Corporation of Delaware. Original application filed May 29, 1919, Serial No. 300,617. Divided and this application filed Mar. 6, 1929. Serial No. 344,873. 3 Claims. (Cl. 183—79.)

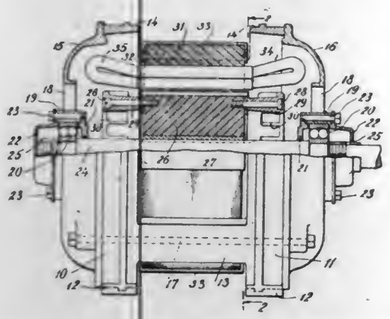


1. In an air cleaner, the combination of a casing having an air inlet and an air outlet; a plurality of substantially annular baffle plates in said casing, said baffles being so arranged that the cross sectional areas of the annular chambers formed by said baffle plates are substantially uniform.

1,820,531. DYNAMO-ELECTRIC MACHINE CONSTRUCTION. KARL ENGELHARDT, Kenilworth, N. J., assignor to Electro Dynamic Company, Bayonne, N. J., a Corporation of New Jersey. Filed Mar. 12, 1927. Serial No. 174,791. 2 Claims. (Cl. 171—252.)

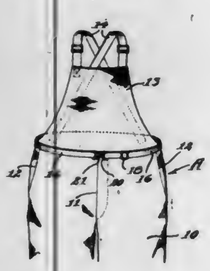
1. In a dynamo-electric machine, the combination of a frame including a plurality of cross-bars, and a stator

in said frame between the cross-bars, said stator comprising superimposed laminations and bands embracing said



laminations to hold them together, and welding between at least one cross-bar and the stator for securing the stator to the frame.

1,820,532. OVERALL. ERICK O. FELLROTH, Minneapolis, Minn., assignor to Martin Brothers Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Apr. 18, 1925. Serial No. 24,081. 4 Claims. (Cl. 2—227.)



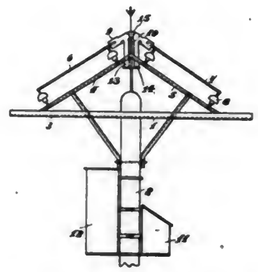
3. A garment of the character described, including a body portion having a drop seat portion, said body portion being formed with extensions underlying said drop seat portion at either side thereof, and suspenders for the garment attached to the front thereof and to said extensions, said suspenders comprising shoulder straps crossed at the back, the straps going over each shoulder connected with the extension on the opposite side of the body, and means for holding said drop seat in closed position.

1,820,533. FILTER. CHARLES B. FOLEY, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Original application filed Aug. 2, 1928, Serial No. 296,908. Divided and this application filed July 18, 1929. Serial No. 379,087. 13 Claims. (Cl. 210—169.)



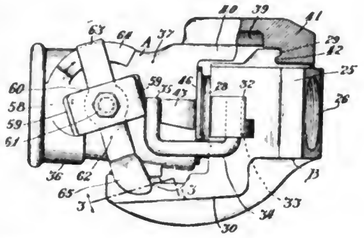
1. A filter element comprising laminations with spaced-apart cross-bars arcuately criss-crossed relative to adjacent laminations.

1,820,534. BEACON FOR LUMINOUS SIGNALIZATION. JEAN REGNIER PIERRE FRANCOTTE, Ixelles-Brussels, Belgium. Filed July 9, 1928, Serial No. 291,157, and in Belgium July 15, 1927. 3 Claims. (Cl. 177—352.)



2. A skylight for aerial and nautical purposes, comprising a pole, a horizontal frame-work mounted thereon at its upper end, a pair of plane frames mounted on the frame-work at an acute angle thereto and joined to each other at their upper end, insulators on said frames, discharge tubes, containing a rear gas and forming a tubing doubled back and forth upon itself, mounted on said insulators and forming two plane surfaces parallel to said frames, and electrodes for each tube located at the meeting edge of said frames, the two tubes being connected in series.

1,820,535. HOSE COUPLER. EGBERT H. GOLD, Evanston, and EDWARD A. RUSSELL, Chicago, Ill.; said Russell assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York; Margaret Jayne Gold and Biscayne Trust Company, executors of said Egbert H. Gold, deceased. Original application filed June 21, 1926, Serial No. 117,431, and in Canada Sept. 7, 1926. Divided and this application filed June 20, 1927. Serial No. 200,032. 1 Claim. (Cl. 285—69.)

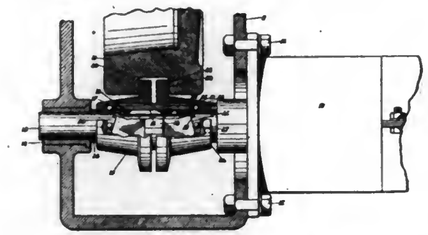


In combination a coupler comprising a head having on one side an undercut cam lug, on the other side a forwardly projecting arm provided with a cam lug, and formed with a port the outer end of which is spherically curved to provide a gasket seat; and a gasket having a spherical surface to fit said seat, the spherical surface of the gasket being of less width than the width of the seat to allow oscillating movement of the gasket without separation of any part of its curved surface from the curved surface forming the seat.

1,820,536. STARTER MECHANISM. ERNEST R. HUNTLEY, Milwaukee, Wis., assignor to Industrial Research Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Oct. 6, 1920. Serial No. 415,157. 6 Claims. (Cl. 74—7.)

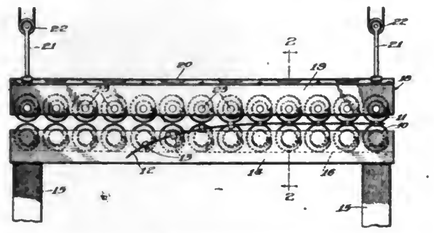
1. The combination of an engine member; a motor having an extended shaft; a cylindrical band secured to said shaft extension; said band having edges formed in

a plurality of notches with relatively inclined surfaces; a plurality of annular friction elements slidably mounted on said band, each of said elements having an inner radial flange at one end and an outer radial flange at the other end; said inner flange having bearing on the shaft



adjacent the band edge and said outer flange having bearing on the sleeve; and a plurality of balls placed in the notches between said inner flange and band, said balls being adapted to wedge the friction elements into contact with the engine member when the motor is driving the engine.

1,820,537. APPARATUS FOR USE IN AND METHOD OF ASSEMBLING SPRING CONSTRUCTIONS. FRANCIS A. KELLAR, Grand Rapids, Mich. Filed Jan. 17, 1930. Serial No. 421,506. 11 Claims. (Cl. 140—3.)



1. Apparatus for use in assembling spring constructions, comprising a support for a plurality of coiled springs, a holder for holding a plurality of coiled springs, and means for adjusting the position of the holder relative to the support to bring the springs in the holder into proximity to the springs on the support to enable spring connecting means to be applied to the proximate coils of the spring on the support and in the holder.

1,820,538. PROCESS OF MAKING MINERAL FIBER ARTICLES. ARTHUR L. KENNEDY, Keene, N. H., assignor to Plastic, Inc., a Corporation of New Hampshire. Filed June 2, 1928. Serial No. 282,508. 2 Claims. (Cl. 92—3.)

2. The process of forming fibrous bodies which comprises intermingling raw kelp, asbestos and an alkaline carbonate, introducing a salt of an organic acid as a precipitant to form insoluble kelp compounds thereof, and shaping the mass.

1,820,539. HEEL. DANIEL WARREN LEWIS, Lynn, Mass., assignor of one-half to Augustus Murray Bowzer, Lynn, Mass. Filed Apr. 19, 1929. Serial No. 356,479. 1 Claim. (Cl. 36—36.)

A French wood heel having a tread surface bounded continuously by a breast wall and a back wall and having an opening extending into the wood through the tread surface, the opening being bounded continuously by a wall substantially parallel and relatively close, to the breast wall and a wall substantially parallel, and relatively close, to the back wall, the walls of the opening inclining away from the tread surface, and a thin heel top lift comprising a first portion having substantially the same boundary as that of the tread surface and a second elastic portion having substantially the same boundary as that of the opening, whereby a marginal lip of substantially uniform and relatively small width is provided upon the first portion extending out beyond the walls of the second portion, the width and thickness of the lip being such that the lip has substantial rigidity, the second portion

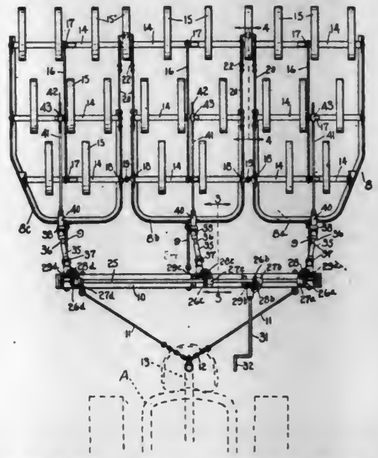


being seated in the opening and the lip contacting snugly with the wood of the tread surface, and the elastic walls of the second portion inclining away from the first portion substantially parallel to the inclined walls of the opening to engage frictionally against the inclined walls of the opening, whereby the rubber-inclined walls of the second portion press yieldingly against the inclined walls of the opening to lock the top lift to the heel.

1,820,540. PROCESS OF MAKING LAKES. THOMAS A. MARTONE, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 28, 1928. Serial No. 281,373. 4 Claims. (Cl. 260—89.)

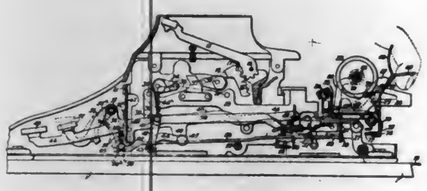
1. In the process of producing intermediates for lakes, the step which comprises diazotizing 2-amino-naphthalene-1-sulfonic acid in the presence of beta-naphthol.

1,820,541. HARROW. WILLIAM L. PAUL, Berkeley, Calif., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 18, 1929. Serial No. 347,831. 13 Claims. (Cl. 55—104.)



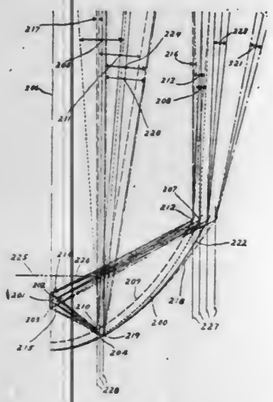
1. In a harrow, the combination with parallel frame sections flexibly connected laterally with each other, of transverse tooth carrying bars rockably mounted on said frame sections and each provided with earth working elements, and control means comprising bevel gear mechanism for simultaneously rocking said tooth carrying bars to adjust all of said earth working elements regardless of variations in the position of said frame sections with respect to each other.

1,820,542. TYPEWRITING MACHINE. JOSEPH PHELPS, Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Mar. 14, 1929. Serial No. 346,954. 20 Claims. (Cl. 197—193.)



1. The combination of a carriage, a center-lock for locking the carriage centered in its line of travel, a case-shift-lock, and releasing means controlled by said center-lock for automatically releasing said case-shift-lock.

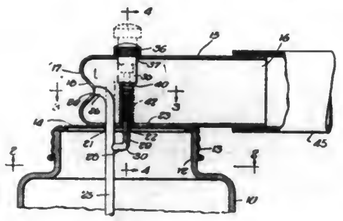
1,820,543. LIGHT PROJECTION APPARATUS. GEORGE B. REED, Brooklyn, N. Y. Filed Sept. 22, 1926, Serial No. 137,029. Renewed Jan. 27, 1931. 6 Claims. (Cl. 240—41.35.)



4. In a light projector, a light source, cut-off means on one side of the axis of said light source to prevent issue of rays out of that side of said projector, and a reflector on the other or open side of the axis of the light source, the effective portion of which reflector is generated by the revolution of a curve satisfying the coordinate formula $y^2=2px+ax^b$ where b is greater than 1, and less than 2, whereby to define a beam from the axis outward on the open side of said light projector.

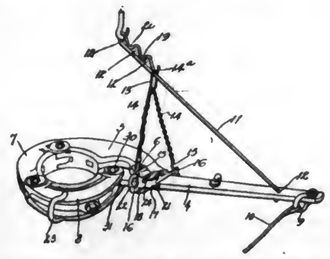
1,820,544. PAINT SPRAYER. JOHN F. SCHYLANDER, Chicago, Ill. Filed Dec. 17, 1928. Serial No. 326,627. 9 Claims. (Cl. 299—89.)

1. In a device of the class described, an air conduit having an inlet opening and an outlet opening, a material conduit having an outlet portion which axis is parallel to that of said air conduit, said outlet portion extending towards said outlet opening, manually operable means for moving said outlet portion transversely of its axis so as to bring its outlet into registry with that of said air conduit, adjustable means for limiting the movement of said manually operable means so as to control the maximum volume of material issuing from said device, and means for



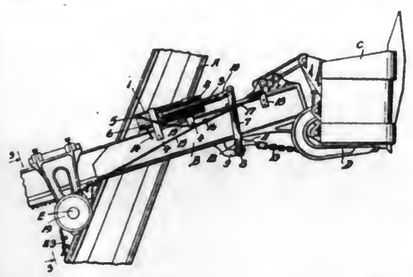
resiliently retaining said outlet portion out of registry with the outlet opening of said air conduit so that said device will be normally functionally inoperative.

1,820,545. CASING TONG. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron Jackson Co., West Berkeley, Calif., a Corporation of Delaware. Filed Sept. 27, 1927. Serial No. 222,237. 9 Claims. (Cl. 255—35.)



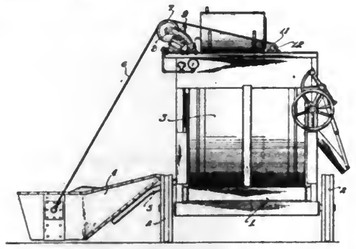
9. A casing tong comprising gripping means including pivotally connected segments, a handle pivoted at different points thereof to said segments, a slide, a means to adjustably secure the slide to the handle, and means on the slide for connecting said slide to a suspension device.

1,820,546. SOLENOID DIPPER TRIP. EDGAR H. TELLIER and ROBERT C. DECKMAN, Milwaukee, Wis., assignors to Koehring Company, Milwaukee, Wis., a Corporation. Filed Aug. 5, 1929. Serial No. 383,504. 6 Claims. (Cl. 214—146.)



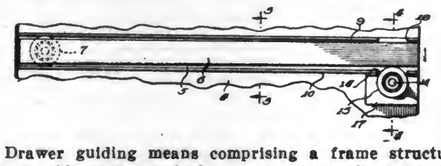
1. In dipper tripping mechanism for excavating apparatus, the combination with a dipper having a door latching mechanism, and shiftable supporting means therefor, of an electric actuating unit for said latching mechanism and carried by said supporting means, an electric conductor connected at one end to a suitable source of current supply and at the other end to said unit, and elastic, insulating slack take up means cooperating with said conductor to maintain slack take up of the same during shifting of the supporting means.

1,820,547. MEASURING AND WEIGHING DEVICE FOR CONCRETE MIXERS. SIDNEY L. WALKER, Jackson, Mich., assignor to The Knickerbocker Company, a Corporation of Michigan. Filed Apr. 5, 1928. Serial No. 267,599. 6 Claims. (Cl. 265—52.)



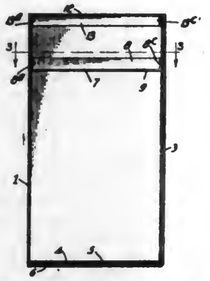
1. In a mixing machine including a swingable skip, a movable support, a cable attached to said skip and trained over said movable support, a scale attached to said machine, and means responsive to the movement of said movable support for actuating said scale.

1,820,548. DRAWER SUPPORT AND GUIDE. JOSEPH WALTER, Calumet City, Ill., assignor to Frank S. Betz Company, Hammond, Ind., a Corporation of Indiana. Filed Nov. 24, 1930. Serial No. 497,855. 1 Claim. (Cl. 45—77.)



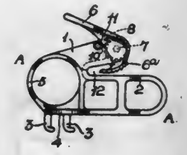
Drawer guiding means comprising a frame structure having side walls to which are attached horizontally disposed fixed channel bars with their flanges projecting inwardly, a drawer having side walls to which are attached channel bars of less width than the first mentioned channel bars and having flanges projecting inwardly between the flanges of the fixed channel bars, rollers carried by the drawer channels and substantially fitting between the flanges of the fixed channel bars, the lower flanges of the fixed channel bars being cut away at one point, stationary rollers carried by side walls of the frame structure and projecting through the cutaway points of the lower flanges, and the upper flanges of said stationary channels being cut away at points opposite the cut away points on the lower flanges.

1,820,549. MILK CONTAINER. HARRISON R. WILLIAMS, New York, N. Y. Filed Apr. 2, 1929. Serial No. 352,016. 10 Claims. (Cl. 229—15.)



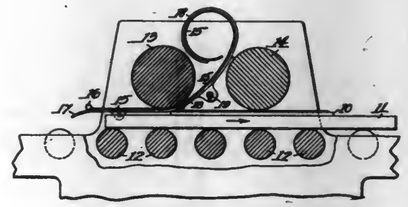
1. A cream-separating container formed of fibrous sheet material, adapted to be thrown away after a single use, and having liquid-tight walls and divided into a plurality of communicating compartments by a fixed, apertured partition.

1,820,550. DEVICE FOR USE IN STRETCHING SKINS OR THE LIKE. EVAN GEORGE WILSON, Blundellsands, near Liverpool, England. Filed Feb. 23, 1929, Serial No. 342,268, and in Great Britain Feb. 29, 1928. 4 Claims. (Cl. 24—84.)



1. An appliance for use in the straining or stretching of skins on frames, which appliance embodies means whereby a portion of the edge of a skin may be detachably held or gripped; a plurality of hook-like members carried by said means, in combination with a screen, said hook-like members being spaced one behind another unequally with respect to the spacing of parallel strands of said screen.

1,820,551. MATRIX ROLLER. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 8, 1930. Serial No. 419,323. 8 Claims. (Cl. 101—12.)



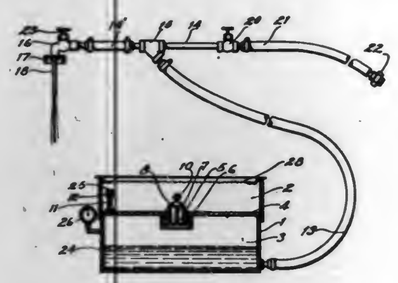
1. The method of molding and finishing a stereotype matrix which consists in first molding it to irregularities of the form against a sheet of resilient substance, pressing said sheet into the form behind the matrix, automatically removing the sheet of resilient substance and thereafter finishing the back of the matrix against the surface of the form in a continuous operation by a hard surface.

3. In a device for molding and finishing stereotype matrices, the combination with means for supporting a chase movably, of a pair of smooth rollers one located in position to be just out of contact with the surface of the matrix on the form and the other in position to engage and roll the said matrix, and a guide located at the side of the first roll for receiving a soft blanket located between the first roll and the form and turning it upwardly away from the matrix automatically before it passes under the second roller.

1,820,552. MOTOR CLEANING MEANS. ERNEST G. WOOLEY, Wichita, Kans., assignor of forty-five one-hundredths to Carl A. Nath and ten one-hundredths to Julius L. Lorenzen, Wichita, Kans. Filed July 29, 1929. Serial No. 381,988. 5 Claims. (Cl. 184—1.5.)

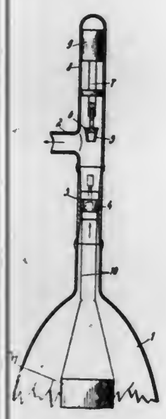
1. A device of the class described comprising a tank having a horizontal valved partition dividing the tank into an upper and lower compartment, the valve being seated by pressure within the lower compartment, a conduit connected to the lower compartment having an air inlet branch to supply air to the lower compartment to put

liquid therein under pressure and a liquid outlet branch and valves in the respective branches so that the air



supply to the lower compartment may be cut off and the liquid may be permitted to flow from the lower compartment through the outlet branch.

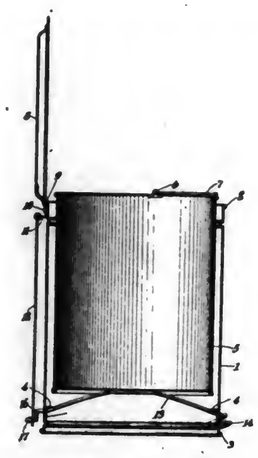
1,820,553. DEVICE FOR CUTTING OFF VACUUM VESSELS FROM THE EXHAUST TUBES OF VACUUM PUMPS. RUDOLF GOTTFRIED BERTHOLD, Berlin-Siemensstadt, and PAUL FRITSCH, Berlin-Tegelort, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Oct. 7, 1929, Serial No. 397,892, and in Germany Sept. 16, 1927. 2 Claims. (Cl. 250—27.5.)



1. A device for cutting off vacuum vessels from the vacuum pump exhaust tube by a sealing member soldered in place after the exhaustion of said vessel, said device having an extension at the exhaust tube in which prior to the soldering the sealing member is located out of the way of the exhaust current, and a ring for the reception of said sealing member and serving at the same time as terminal for the leading-in wires of said vacuum vessel.

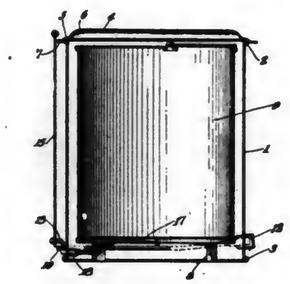
1,820,554. WASTE RECEPTACLE. SOL L. BUSCHMAN, New York, N. Y., assignor, by mesne assignments, to Metal Package Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 17, 1928, Serial No. 326,503. Renewed Apr. 29, 1931. 3 Claims. (Cl. 220—36.)

1. In a device of the character described, a container, a cover hinged thereto, a rock shaft journalled in the wall of said container, said shaft being provided at its forward end with a treadle and at its rear end with a crank, a link connecting said crank and said cover and a



receptacle supported within said container and normally spaced from said rock shaft and adapted to be raised within the container by said rock shaft.

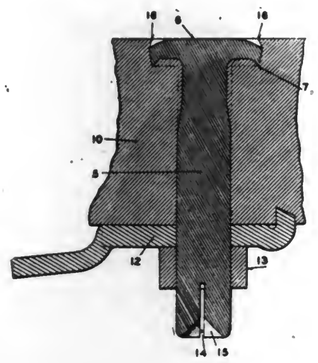
1,820,555. WASTE RECEPTACLE. SOL L. BUSCHMAN, New York, N. Y., assignor, by mesne assignments, to Metal Package Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1929. Serial No. 330,532. 6 Claims. (Cl. 220—36.)



1. In a device of the character described, a container, a hinged cover thereon, a receptacle supported within said container, a shaft supported by the wall of said container for raising said cover and having a foot actuated treadle extending from said container and a bar within said container normally separated from said shaft and adapted to be actuated by said shaft to raise said receptacle.

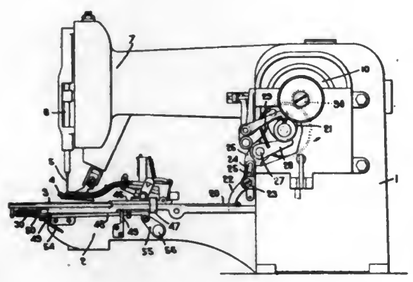
1,820,556. BOLT. STERLING H. CAMPBELL and FREDERICK K. HABENICHT, St. Louis, Mo., assignors to Western Railway Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 28, 1931. Serial No. 511,686. 1 Claim. (Cl. 85—9.)

A self-countersinking bolt for application to timber having an integral threaded shank and head, the periphery of said head being provided with a downwardly projecting cutting edge the exterior face of which is inwardly and downwardly inclined at a slight angle to the axis of the bolt, whereby the surrounding wood is compressed without crushing, said periphery terminating in a plane below the highest point of the head, said head being relieved above said plane to permit expansion of a portion of the material compressed by said cutting edge, the interior face



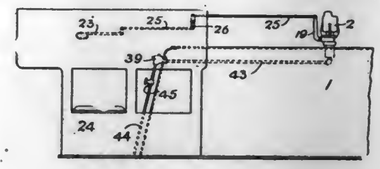
of said cutting edge being inclined in a direction opposite to the exterior face, and the shank being provided with locking recesses into which the material of the timber is forced by the action of the interior face of said cutting edge, said locking recesses extending inwardly beyond the periphery of the body of the shank.

1,820,557. THREAD HOLDER AND TRIMMER FOR BUTTONHOLE SEWING MACHINES. AXEL F. CARLSON, Cambridge, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Mar. 21, 1928. Serial No. 263,285. 12 Claims. (Cl. 112—252.)



1. In a two-thread sewing machine, the combination with a stationary frame having a head, of stitch-forming mechanism including a needle and a needle bar vertically reciprocating in said head, work-holding means carried by said frame and movable thereon relative to the stitch-forming mechanism, a cutter for cutting the under thread, a thread-gripping device, a sliding actuator mounted on the frame, means operated by the initial movement of said actuator to cause the thread-gripping device to grip the under thread and by continued movement of said actuator to cause the cutter to cut the under thread between the gripper device and the work.

1,820,558. WHISTLE. ROGER W. CLIFFORD, Schenectady, N. Y. Filed Oct. 3, 1930. Serial No. 486,113. 22 Claims. (Cl. 116—137.)



1. An actuating mechanism for a steam whistle having an operating valve, comprising means for effecting an application of fluid pressure in said mechanism to hold the said valve in closed position, and means for varying the application of said fluid pressure to actuate said valve.

1,820,559. TRANSFER OF COLOR DESIGNS TO FIBROUS MATERIALS. SAMUEL JAMES COX, London, England, assignor to Colorfuse Limited, London, England. Filed Oct. 29, 1929, Serial No. 403,864, and in Great Britain Nov. 2, 1928. 5 Claims. (Cl. 41—33.)

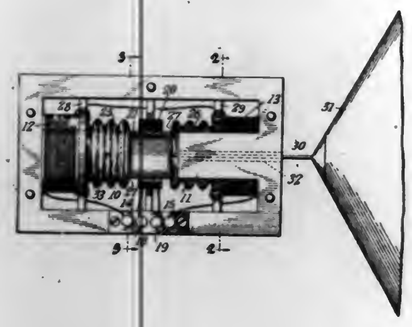
1. The method of transferring color designs to fibrous materials by production of the design in printing ink or the like on a temporary support, conveniently a flexible support, which is coated with a preparation which is fusible and soluble under the combined influence of heat and aqueous vapour and is emulsive with the printing ink or the like; followed by transfer of the design to the fibrous material by the action of hot water vapour under pressure which produces an emulsion of the coating and the ink and forces such emulsion deeply into the fibrous material.

1,820,560. WALL RADIATOR SUPPORT. ANTHONY E. DAVIS, Philadelphia, Pa. Filed Feb. 20, 1926. Serial No. 89,582. 4 Claims. (Cl. 248—17.)



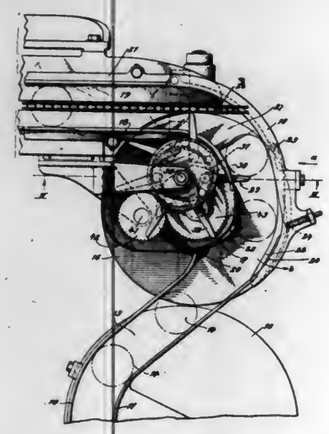
4. In a support for a radiator the combination with a wall piece adapted to be secured to the wall, a radiator seating bracket arranged to be supported on said wall piece, a substantially horizontal flange on said wall piece and an offset plate slidable upon the upper surface of said flange and adapted to be extended and retracted therefrom to form an adjustable abutment for changing the position of the radiator with respect to a vertical plane.

1,820,561. SPEAKER. GEORGE A. GILLEN, New York, N. Y., assignor to Gillen, Kimmey, Baker Syndicate, New York, N. Y. Filed Nov. 9, 1929. Serial No. 405,854. 16 Claims. (Cl. 179—180.)



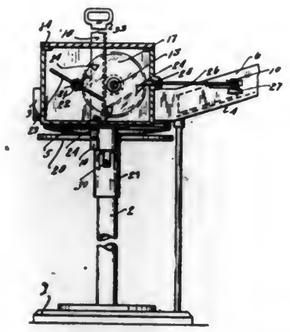
1. In a speaker, a pole piece, an armature mounted to coact therewith, a sound reproducing member connected to said armature, and expansible and contractible means surrounding said pole piece for supporting said armature.

1,820,562. ACCELERATING CAN FEED. HENRY L. GUENTHER, Los Angeles, Calif. Filed June 15, 1928. Serial No. 285,663. 6 Claims. (Cl. 198—22.)



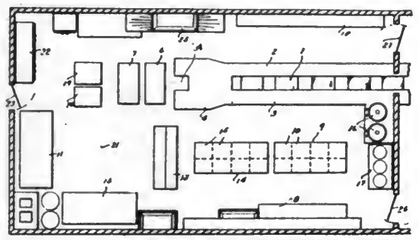
1. A can feed mechanism adapted to feed cans to a relatively high speed positive feed means, comprising a horizontally disposed rotary disc onto which cans are deposited at a relatively slow speed and by which the cans are advanced, means for yieldably retarding the advance of the cans along the disc, a positive timing star wheel adapted to cooperate with said retarding means to positively separate and time the cans with relation to the feed means, and a plurality of radial arms disposed in a horizontal plane and moving bodily around a common axis and located above and engaging cans carried by the rotary disc, said arms being moved in said horizontal plane at variable speeds during their circular path of travel whereby a can will be positively engaged thereby and will be moved to the high speed feed means at an accelerated speed.

1,820,563. STACKING MACHINE. CHARLES G. HALL, Boise, Idaho, assignor to Automatic Food Machinery Corporation, Boise, Idaho. Filed Feb. 3, 1930. Serial No. 425,699. 3 Claims. (Cl. 214—6.)



1. In a device of the class described, in combination, a supporting column, a gear box secured to the free end of the column, a receiving head secured to the gear box, a train of gearing disposed within the gear box, a receiving station slidably disposed upon the column and registerably aligned with the receiving head, a rack secured to the receiving station and associated with the train of gearing adapted for being manually manipulated, a chute directly aligned with the receiving head, a trip rockably disposed upon the chute and adapted for being actuated by the articles passing down the chute, and means disposed between the trip and the train of gearing for limiting the movement of the receiving station downwardly each time the trip is actuated.

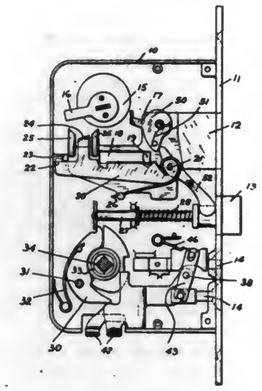
1,820,564. KITCHEN ARRANGEMENT. CHARLES G. HALL, Boise, Idaho, assignor to Automatic Food Machinery Corporation, Boise, Idaho. Filed Feb. 3, 1930. Serial No. 425,703. 4 Claims. (Cl. 186—1.)



1. In a kitchen of the class described, the combination of an endless conveyor running longitudinally of the kitchen, ranges arranged at right angles to each other, a work table accessible to each of the ranges and disposed between the ranges and the conveyor, and a chilled cabinet and a heated cabinet disposed between the work table and the conveyor and arranged parallelly to the conveyor.

1,820,565. LOCK. JOHN HINES, Astoria, N. Y., assignor to Segal Lock & Hardware Co. Inc., New York, N. Y., a Corporation of New York. Filed May 18, 1929. Serial No. 364,247. 3 Claims. (Cl. 70—29.)

1. A lock including, in combination, a latch, a pair of latch members, a pair of pivotally mounted levers each to be swung by one of said latch members for operating said latch, means connecting said latch to said levers, a spindle, a rotatable plate to be connected to said spindle, said plate bearing against said means whereby when the plate is rotated, said means will again be operated to retract



said latch, said plate being formed with a recess disposed adjacent one of said levers, and means projectable into the recess of said plate and path of travel of such lever to prevent operative movement of either.

1,820,566. BLASTING DEVICE. DAVID HODGE, Centralia, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 31, 1929, Serial No. 336,419, and in Great Britain Oct. 5, 1928. 22 Claims. (Cl. 102—7.)



1. In an electrically discharged cartridge, a casing and a heating unit in said casing, said heating unit being electrically connected to said casing and to a terminal within said casing, and a detachable means, connected to a source of current, adapted to be inserted in said casing for establishing an electrical circuit with said casing and terminal, said terminal being normally in electrical contact with said casing, and adapted to be moved out of contact therewith by said detachable means.

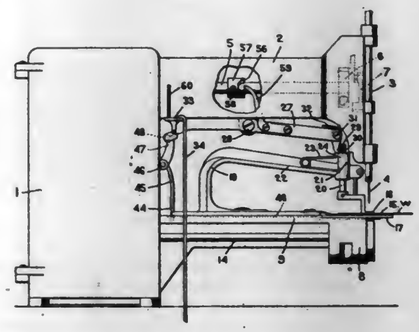
1,820,567. EXPLOSIVE. LLEWELLYN J. W. JONES, Tacoma, Wash., assignor to James F. O'Brien, Seattle, Wash. Filed Mar. 17, 1927. Serial No. 176,291. 7 Claims. (Cl. 52—8.)

1. An explosive composed of chlorates of alkaline metals; finely divided carbonaceous substances; and the ortho isomar alone of mononitrotoluene.

1,820,568. EXPLOSIVE. LLEWELLYN J. W. JONES, Tacoma, Wash., assignor to James F. O'Brien, Seattle, Wash. Filed Mar. 21, 1927. Serial No. 177,215. 7 Claims. (Cl. 52—13.)

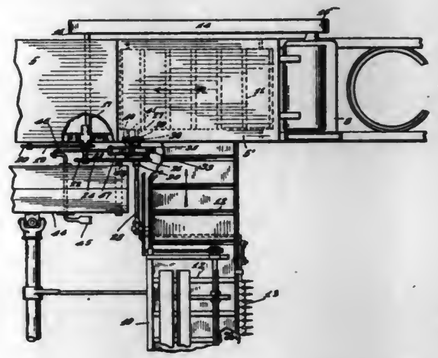
2. An explosive consisting of alkaline chlorates, a powdered carbonaceous absorbent, and a liquid mixture of liquid orthonitroluene with melted trinitrotoluene.

1,820,569. THREAD TRIMMER FOR SEWING MACHINES. JOHN KIEWICZ, Boston, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Sept. 24, 1925. Serial No. 58,246. 14 Claims. (Cl. 112—252.)



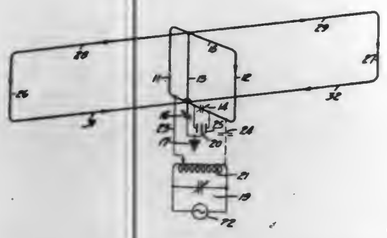
1. In a sewing machine, the combination with stitch-forming mechanism including a reciprocating needle operating to penetrate the work from above, of needle-reciprocating mechanism, manually-operable means to cut the thread, and means moving with the needle-reciprocating mechanism which prevents the operation of said thread-cutting means except when the needle is in a predetermined position.

1,820,570. COMBINATION HARVESTER THRASHER. NORMAN R. KRAUSE, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Feb. 3, 1930. Serial No. 425,387. 7 Claims. (Cl. 56—20.)



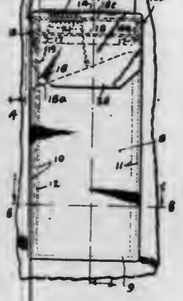
2. In a machine of the character described, a thrasher, a header embodying a conveyor, means including separable clutch members on the thrasher, a shaft on which said clutch members are mounted, a driven shaft connected to said clutch shaft and the conveyer, a brake encircling one of said clutch members, a link connected to the brake for throwing the clutch members into and out of engagement to actuate and discontinue the movement of the conveyer, and a pedal for operating the link.

1,820,571. RADIOANTENNA SYSTEM. GEOFFREY GOTTLIEB KRUESI, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif, a Corporation of California. Filed Mar. 27, 1928. Serial No. 265,029. 3 Claims. (Cl. 250—11.)



1. In an antenna system, an antenna comprising a pair of spaced conductors forming opposite sides of a loop, a third conductor extending in the general direction of said pair of conductors, phase shifting means associated with said third conductor, another antenna comprising a pair of spaced conductors arranged in a plane at an angle to the plane of said pair of conductors and on opposite sides thereof, means for combining said antennæ, and a signaling circuit cooperatively associated with both said antennæ.

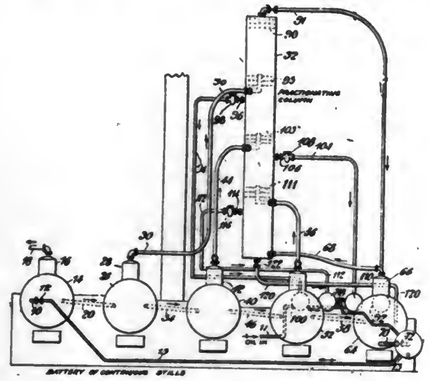
1,820,572. POCKET CLOSURE DEVICE. OLOF P. LING, Cambridge, Minn. Filed Sept. 15, 1930. Serial No. 481,850. 8 Claims. (Cl. 2—252.)



1. A closure device for the pocket of a fabric garment comprising, a pivot member, means for releasably securing said pivot member to the garment adjacent the open end of the pocket, a plate pivoted to said pivot member and a spring urging said plate against the garment adjacent the open end of the pocket to clamp against articles contained in the pocket and close the open end of the same.

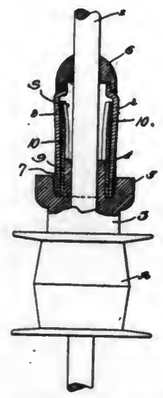
1,820,573. PROCESS OF AND APPARATUS FOR DISTILLING OIL. HENRY N. LYONS, Dover, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 17, 1923. Serial No. 632,598. 21 Claims. (Cl. 196—94.)

17. The method of fractionally condensing a plurality of vapor streams, each of different average boiling point, which comprises introducing said vapor streams simultaneously into a single condenser stream at intervals



therealong, said single stream being maintained at progressively lower temperatures from the first inlet to the outlet opening.

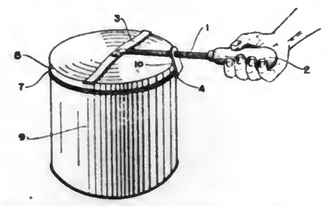
1,820,574. BOBBIN CLUTCH FOR SPINDLES. GEORGE H. MAGRATH, Whitinsville, Mass. Filed July 25, 1928. Serial No. 295,158. 5 Claims. (Cl. 242—46.6.)



1. Apparatus of the character described comprising a blade, a whirl mounted on the blade, the whirl having a hub provided with a neck fitting around the blade and an annular recess surrounding the neck, a case mounted on the blade and having spaced fingers extending into said recess, bobbin contact members disposed in the spaces between said fingers and extending into said recess, and a spring having a base secured in said recess between said neck and the inner ends of the fingers and contact members, the spring having projections extending from its base at spaced intervals and bearing against said contact members, the thickness of the inner ends of the contact members being less than the thickness of the fingers so that the contact members fit loosely in said recess.

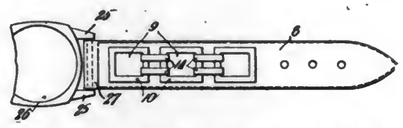
1,820,575. COVER LIFTER. GEORGE E. MAYHEW, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1930. Serial No. 503,947. 1 Claim. (Cl. 81—3.1.)

A device of the class described, comprising a shank provided with a handle at one end, a relatively long arcuate strap or cross bar secured to the opposite end of the shank and extending at a right angle to the shank on opposite sides of the latter and having its ends provided with flat fulcrum portions arranged to bear upon the upper



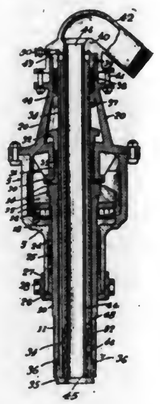
face of the cover of a can at opposite sides thereof adjacent the skirt of the cover, and a lifting hook rigidly connected to the shank and extending at an acute angle to the handle of the shank.

1,820,576. BRACELET CONSTRUCTION. CHARLES A. MEALY, West Barrington, R. I., assignor to The Hadley Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Dec. 10, 1930. Serial No. 501,266. 4 Claims. (Cl. 63—3.)



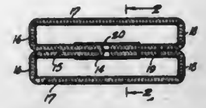
1. A bracelet band or the like comprising a body having spaced apertures therethrough, reinforcing members fitted to said apertures, and connecting links straddling adjacent apertures and engaging their reinforcements so that longitudinal strain upon the band is borne by said reinforcing members and links.

1,820,577. GREASE PACKED GLAND. BURT S. MINOR, San Pedro, Calif. Filed Oct. 10, 1928. Serial No. 311,520. 7 Claims. (Cl. 255—25.)



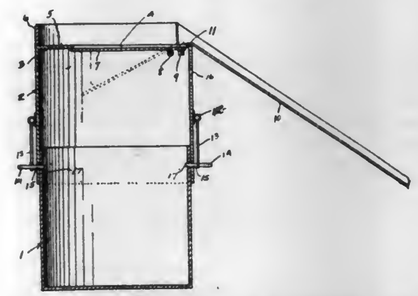
1. A packing device comprising a housing, a hollow stem rotatably carried thereby and extending from one end thereof, a liquid supply connection carried by the other end of the housing, a liquid conducting tube joined to said conection by a liquid-tight joint and extending within said holloww stem to provide a grease channel between the stem and the tube, a packing between the free end of the tube and the stem permitting relative rotation, and means for supplying grease under pressure to the opposite end of said channel.

1,820,578. SLIDE BUCKLE. CHARLES A. MOSGROVE, Waterbury, Conn., assignor to The Autoyre Company, Oakville, Conn., a Corporation of Connecticut. Filed May 22, 1929. Serial No. 364,967. 7 Claims. (Cl. 24—198.)



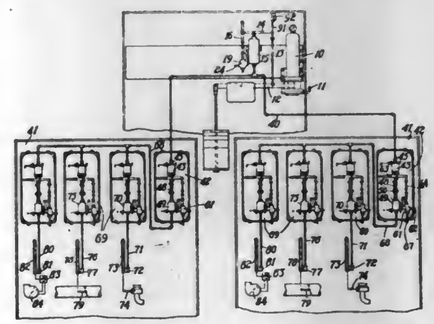
7. A slide buckle comprising a wire forming a central bar and side bars spaced therefrom on opposite sides thereof, and connected to the central bar portion at their ends to form loops, said side bars being swedged at their outer edges to reduce the thickness of the outer edges of the bars and leaving the inner edges of the bars of substantially their full thickness.

1,820,579. COLLAPSIBLE MOUSETRAP. SHOICHI NAKAGAWA, San Jose, Calif. Filed Nov. 24, 1928. Serial No. 321,577. 2 Claims. (Cl. 43—69.)



1. A mouse trap comprising an imprisoning chamber composed of two telescoping sections, means for locking said sections together in an extended and a shortened position, said means consisting of pins inserted in coinciding holes provided in each section, a trap door at the top of the upper section, and a runway leading to said trap door, and a shelf for bait on the side of the trap door farthest from the runway.

1,820,580. COMBUSTION CONTROL SYSTEM. THOMAS A. PEEBLES, Mount Lebanon, Pa., assignor to John M. Hopwood, Dormont, Pa. Filed May 9, 1929. Serial No. 361,657. 6 Claims. (Cl. 236—20.)



1. The combination with a plurality of furnace units of air and fuel supply mechanisms associated with each of said furnaces, means for controlling the operation of

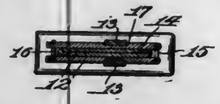
each of said mechanisms, a regulator associated with each furnace for controlling the operation of said means, a master regulator responsive to plant output for controlling the operation of said first named regulators and means for manually operating said first named regulators independently of said master regulator.

1,820,581. ABRASIVE WHEEL. HAROLD A. RICHMOND and DAVID D. MACLAUGHLIN, Niagara Falls, N. Y., assignors to General Abrasive Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Mar. 30, 1928. Serial No. 265,900. 6 Claims. (Cl. 51—209.)



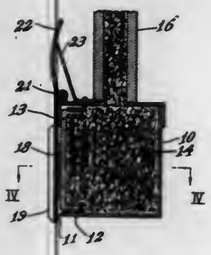
1. An integral annular abrasive wheel having slots extending thru the wall, and a waterproof coating covering the inner ends of the slots.

1,820,582. WATERPROOF RECEPTACLE. DANIEL H. STRAYER, Venice, Calif. Refiled for abandoned application Serial No. 279,272, filed May 21, 1928. This application filed Apr. 11, 1929. Serial No. 354,429. 2 Claims. (Cl. 150—5.)



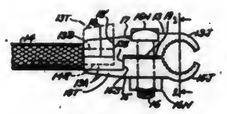
1. A receptacle formed of flexible waterproof material provided at its upper end with an opening, loops formed on the outer faces of the walls of said receptacle adjacent to said opening, rigid clamping members extending through and carried by said loops, the outer faces of which clamping members are notched for the reception of said loops, said clamping members being pivotally connected to each other at one end, and readily releasable means for detachably connecting the other ends of said clamping members.

1,820,583. TYPEWRITER RIBBON REJUVENATOR. FLOYD R. SWITZER, Birmingham, Ala., assignor to The Ribbonew Company, a Corporation of Alabama. Filed May 2, 1929. Serial No. 359,983. 3 Claims. (Cl. 91—62.5.)



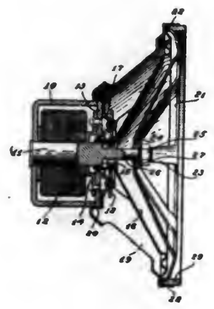
1. A typewriter ribbon moistener comprising a reservoir having an opening in one side thereof and being packed with loose fibrous material saturated with a moistening fluid, a relatively flat wick of close fibrous material disposed across the opening, and a spring pressed plate hinged across the opening and adapted to press the typewriter ribbon against the wick.

1,820,584. BATTERY CABLE TERMINAL. JOSEPH A. TESTA, St. Paul, Minn., assignor to Frederick P. Schneider, Gonerd W. Peterson, and Henry G. Peterson, St. Paul, Minn. Filed Jan. 13, 1930. Serial No. 420,555. 5 Claims. (Cl. 173—259.)



1. A cable terminal of the class described comprising a pair of elongated metal members each with an arcuate jaw member at one end, said jaws being counterparts, means intermediate the ends for adjusting said members and their jaws toward each other, one member formed with a cable receiving shank, transverse shoulder means on both members normally in slidable contact and rearward of the clamping means, said members provided forward of said shoulder means with spaced parallel faces, and means in said cable shank to facilitate the insertion of a battery cable to be held therein.

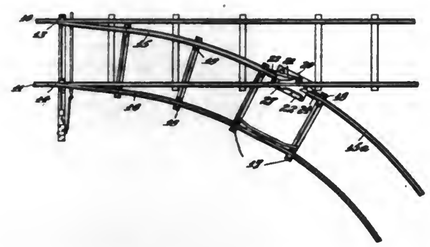
1,820,585. LOUD SPEAKER. RAY E. TOLBERTON, Fort Wayne, Ind., assignor to The Magnavox Company, Chicago, Ill., a Corporation of Arizona. Filed Feb. 20, 1931. Serial No. 517,335. 13 Claims. (Cl. 179—115.5.)



1. In sound reproducing apparatus of the type having a conical diaphragm and actuating coil, the combination of an open ended conical diaphragm, a magnetic field structure having a central pole and an outer annular pole forming an annular air gap for the diaphragm actuating coil, a flexible support for the apex of said diaphragm, an outwardly extending support for the rim of the diaphragm, a plate adapted to cooperate with said last support and clamp the rim of the diaphragm in a fixed position, and means extending from said plate through the diaphragm cooperating with the inner pole of the magnetic field structure for holding the parts together.

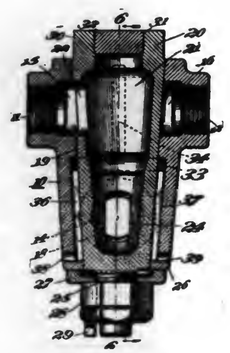
7. In a loud speaker of the moving coil type, the combination of a cylindrical magnetic field structure comprising a pot like member having a fixed inner pole and a removable annular pole, a diaphragm adapted to cooperate with said field structure, and a supporting housing for said diaphragm having a reentrant flange at one end adapted to receive and align said cylindrical pot and said annular pole piece with respect to each other and said diaphragm.

1,820,586. RAILWAY TRACK STRUCTURE. JOHN RAY ULRICH, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Oct. 25, 1929. Serial No. 402,412. 10 Claims. (Cl. 246—429.)



1. In a track structure the combination with continuous main rails, a turnout, a jump frog for said turnout, said frog comprising members which are adapted to engage opposite sides of one of the main rails, a plate associated with said members upon which one of said members is detachably mounted and means associated with said plate adapted to clamp said members into engagement with the main rail.

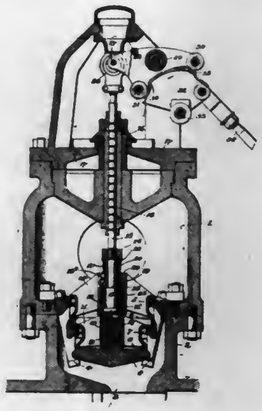
1,820,587. VALVE. BENJAMIN W. WINSHIP and WILLIAM T. HARDER, Steelton, Pa., assignors to Bethlehem Steel Company. Filed Dec. 12, 1927. Serial No. 239,274. 8 Claims. (Cl. 251—108.)



1. In a valve structure, a hollow body having a valve plug seat, and a plug mounted therein, said body being provided at its interior surface adjacent said plug with a central annular groove and upper and lower longitudinal grooves, said longitudinal grooves communicating with said annular groove, the lower longitudinal grooves terminating at their lower end into ports which open to the outside of said body.

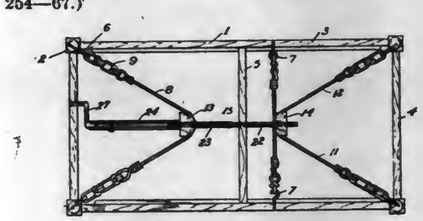
1,820,588. STEAM ENGINE VALVE. RUDOLF WINTZER, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 28, 1924. Serial No. 716,463. 2 Claims. (Cl. 121—185.)

1. In a valve the combination of a valve cage having four seats defining ports leading to a common passage; a pair of double beat valve elements co-operating with said seats, said elements being separately formed; a hollow hub extending upwardly from the lower element; a hub on the upper element, said hub being guided on the first named hub; an actuating stem extending downwardly into the first hub; a connection between said stem and



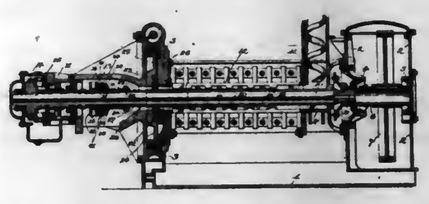
hub; means causing the valve elements to move as one when the lower element is moved slightly from its seat; and means for imparting endwise movement to the stem.

1,820,589. FURNITURE BRACE AND CONTROL THEREFOR. THEODORE H. WITTLIFF, Cleveland, Ohio. Filed May 14, 1925. Serial No. 30,155. 4 Claims. (Cl. 254—67.)



1. A brace of the character described comprising corner-stays, a saddle, a closed wire loop whose extremities are mounted upon said corner-stays and whose intermediate portion passes over said saddle to provide a pair of wire strands between said corner-stays, and a bolt for adjustably securing said saddle in position so as to exert a strong pull upon said corner-stays, said bolt also serving to maintain the strands out of contact with each other on the saddle.

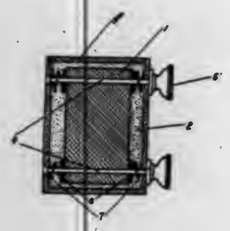
1,820,590. PRESS. RAYMOND T. ANDERSON, Cleveland, Ohio, assignor to The V. D. Anderson Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 9, 1928. Serial No. 284,217. 10 Claims. (Cl. 100—48.)



1. In a press the combination of means to compress material and to thereby expel the oil content thereof to the desired degree and to extrude cake; and means acting directly and continuously on the cake as it is formed and

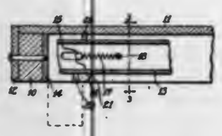
extruded as the result of said compressing action to re-press and re-form the cake, said last named means being adjustable toward and from the compression and extruding means whereby the thickness of the reformed cake may be regulated.

1,820,591. VARIABLE CONDUCTOR OF HIGH NEGATIVE TEMPERATURE CO-EFFICIENT. HENRI ANDRÉ, Paris, France. Filed Sept. 27, 1927, Serial No. 222,406, and in France Nov. 17, 1926. 4 Claims. (Cl. 20—76.)



4. Variable-resistance conductor substance having a high negative temperature coefficient, comprising silver and sulphur in quantity greater than that required to form silver sulphide with the total quantity of silver used, a layer of fused sulphur held by an outer envelope surrounding the solid part of the substance.

1,820,592. COLLAPSIBLE TABLE. WILLIAM J. BAUER, New York, N. Y. Filed Mar. 22, 1929. Serial No. 349,095. 4 Claims. (Cl. 45—11.)

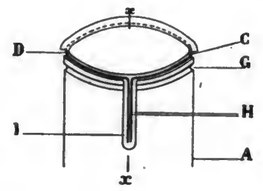


1. A collapsible article of furniture, comprising a top or platform element, hollow legs for supporting the same and having longitudinal slots oppositely disposed in their side walls, a plurality of U-shape brackets attached to said top, a pin secured to each of said brackets and passing through the inner end of a leg and the slots of its side walls, a spring connecting the pin with the corresponding leg, and means carried by the leg for further engagement with said bracket for axially positioning the leg relatively thereto.

1,820,593. LITHOGRAPHIC PLATE AND PROCESS OF PREPARATION. MURRAY C. BEEBE, Cheshire, Conn., and HAROLD V. HERLINGER, Fort Thomas, Ky., assignors to The Wadsworth Watch Case Co., Dayton, Ky., a Corporation of Kentucky. Filed Jan. 22, 1925. Serial No. 4,103. 21 Claims. (Cl. 95—5.7.)

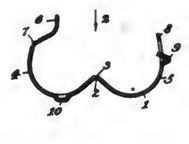
1. In preparing plates for lithography, the process which comprises: providing a plate with a "sensitive" area, and applying to said area a lacquer comprising a synthetic resin which is substantially insoluble in solvents of the order of acetone and benzene.

1,820,594. DEVICE FOR OPENING PRESERVE TINS WITH A WIRE. GABRIEL BERTOUT, Bois-Colombes, France. Filed Aug. 23, 1928, Serial No. 301,599, and in France Aug. 26, 1927. 3 Claims. (Cl. 220—49.)



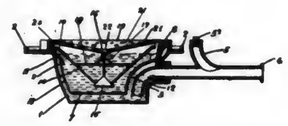
1. Means for opening preserve tins comprising a wire which is located on the outside of the tin in a groove indented towards the interior of the tin, the top edge of the tin projecting outwardly and forming a bead with the rim of the lid that covers the said groove and wire when in the closed position in order to form a sealed joint.

1,820,595. SEAL. WINFRED M. BROOKS, West Orange, N. J. Filed Aug. 29, 1930. Serial No. 478,680. 2 Claims. (Cl. 40—3.)



1. A seal including: a strip of sheet material having a bending zone intermediate its ends admitting of said opposed ends being brought toward each other, one end of said strip having a locking member capable of being bent, and the other end of said strip having a deflecting member and a complementary locking member provided with an opening admitting of the first locking member extending therethrough with its free end projecting outwardly from said strip, whereby when said strip is bent in the plane of its bending zone said locking members interengage, the first mentioned one of said locking members passing through the opening aforesaid and being deflected by the deflecting member associated with the other locking member into position to be subjected to additional bending to place it against said other locking member.

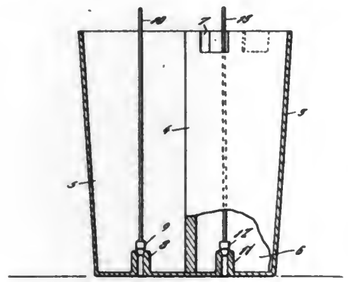
1,820,596. FLOOR DRAIN TRAP. SAMUEL G. BROWN, Lynn, Mass., assignor to Charles W. Lovett, Lynn, Mass. Filed Mar. 21, 1930. Serial No. 437,874. 8 Claims (Cl. 210—56.)



1. A gasoline, oil, grease and sediment retaining floor draining trap, having in combination a main pot, a drain connection with removable plug at its inner end opening under the normal water level in said pot and forming a sewer gas trap, a clean-out opening and removable plug accessible from the floor level, an open topped sediment pot set into the main pot and hinged at one side thereof

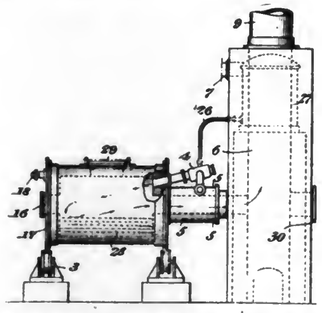
whereby it may be lifted to discharge the sediment accumulated therein, a removable open top and bottom separating pot, a removable strainer cover for the separating pot, with graduated perforations therein, the smallest perforations being at the outer edge of said cover gradually increasing to a large opening at the center, a baffle plate located beneath said cover, a cone shaped plug adaptable to close the bottom of said separating pot, and a handle member above said baffle plate for raising said baffle plate and cone plug so as to close the bottom of said separating pot and provide for its removal with contents, and said strainer cover being located slightly above the overflow edges of said sediment pot so as to indicate by flooding the necessity of emptying said separating pot from accumulated gasoline.

1,820,597. METHOD FOR MANUFACTURING INGOTS. ZACK COLWELL, Niles, Ohio. Filed Mar. 7, 1930. Serial No. 434,031. 5 Claims. (Cl. 22—200.)



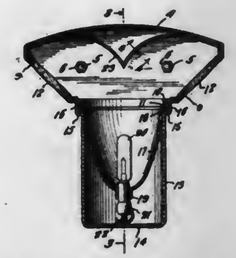
1. The method of constructing steel ingots consisting of suspending a duplex ladle above a series of mobile molds, filling said duplex ladle with furnace run until the slag rises and overflows into a slag retaining means thereon, discharging the steel first into an ingot mold and filling said mold almost full, and secondly, discharging hot slag from said slag retaining means into the same mold for capping the steel, and discharging steel into the next adjacent mold while simultaneously so capping the steel in the preceding mold with slag, whereby to produce simultaneous action of filing and capping two molds at a time.

1,820,598. MANUFACTURE OF ZINC WHITE. JOSEPH MARCEL HENRI CORNILLAT, Paris, France. Filed July 9, 1927, Serial No. 204,603, and in France July 15, 1926. 1 Claim. (Cl. 23—148.)



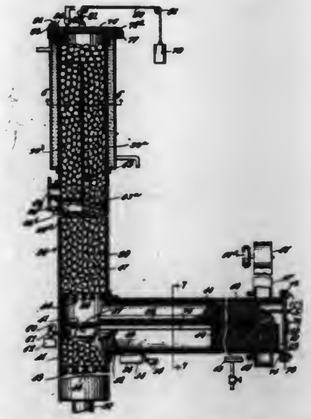
A process of making zinc white, comprising the steps of feeding fuel oil and preheated air under pressure to a burner for admixture therein and projecting the flame from the burner into a closed furnace to heat the walls thereof; introducing into the furnace, after its walls have been brought to white heat, a charge of metallic zinc to form a molten bath, with relation to which bath said flame is caused to travel in a U-shaped path first forwardly and then rearwardly and to lick across the bath during its rearward movement so as to carry off from the furnace, at the initial speed produced by the pressure, the zinciferous vapors liberated by the heat; oxidizing said vapors and constantly rocking the furnace to and fro during the entire operation.

1,820,599. THEATER ILLUMINATION DEVICE. GEORGE H. CUSHING, Washington, D. C. Filed June 15, 1929. Serial No. 371,261. 2 Claims. (Cl. 240—4.)



1. In combination with a theater seat, a lamp adapted to be secured to the back thereof, said lamp comprising a housing having an upper portion and a lower portion depending therefrom, a light source positioned in the lower portion of the housing, a primary parabolic reflector positioned around the light source and adapted to project light from the source upwardly, a secondary reflector positioned in the upper portion of said housing above the light source, said secondary reflector adapted to project light falling thereon through openings in opposite ends of the upper portion of said housing, said openings lying in planes angularly inclined with respect to each other.

1,820,600. DESTRUCTIVE DISTILLATION APPARATUS. EDMUND L. DAY, Westline, Pa. Filed Dec. 17, 1928. Serial No. 326,590. 4 Claims. (Cl. 202—82.)



1. A destructive distillation apparatus, comprising, a column having upper and lower vertical chambers, and upper and lower horizontal chambers, the upper vertical chamber being provided intermediate its ends with a discharge opening and provided with a passage extending from adjacent the upper end thereof to said opening, the horizontal chambers communicating at their outer ends and communicating at their inner ends with the vertical chambers, and fractionating units within the chambers.

1,820,601. WIND SCREENS AND GLAZING FOR MOTOR AND OTHER VEHICLES. GEORGES PAUL DESPRET, Paris, France, assignor to Compagnies Reunis des Glaces & Verres Speciaux du Nord de la France, Boussois-Sur-Sambre, Nord, France. Filed Mar. 21, 1929, Serial No. 349,001, and in France May 1, 1928. 1 Claim. (Cl. 296—84.)

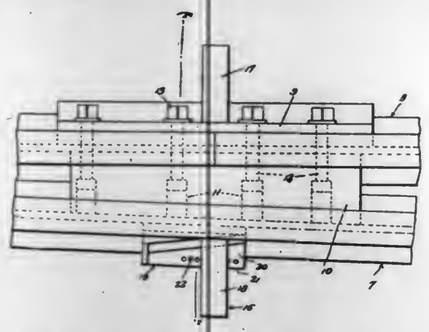
In a wind shield adapted for use upon motor cars and other vehicles, the use of a sheet or panel of hardened glass for constituting the transparent part of the windshield, so that and due to the property of hardened glass of resisting shocks and, when broken, to break in a crowd of very small fragments, the danger for the passengers of being severely injured by glass pieces will be much reduced.

1,820,602. FACE MASK OR LIKE. TALBERT M. DICK, Des Moines, Iowa. Filed Apr. 18, 1929. Serial No. 356,130. 9 Claims. (Cl. 128—254.)



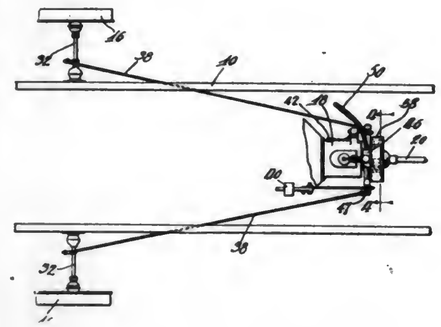
1. As a new article of manufacture, a flexible rubber pad like body adapted to embrace the face of the user, and an electric circuit of resistance wire embedded in said rubber, said wire being arranged in convolutions through the area of said body.

1,820,603. SWITCH POINT CONSTRUCTION. OSCAR A. DICKSON, Tucson, Ariz. Filed Nov. 29, 1929, Serial No. 410,597. Renewed June 15, 1931. 4 Claims. (Cl. 239—264.)



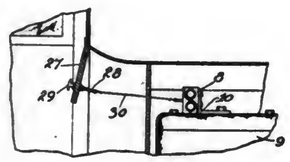
1. In a structure of the class described, in combination, a switch point structure embodying a pair of companion rails, a fish plate disposed on the exterior and bridging the joint between the sections of one rail, clamping means for securing the rails together to prevent separation of the rails, a spacing block interposed between the rails and provided below one inner top edge with lubricant receiving and conducting longitudinal channels, said side adapted to contact the movable rail and having deep squared sockets in said side communicating with bolt holes, through the block and bolts having their headed ends arranged in said sockets and their threaded ends extending through the opposite side of the block, through the web of the adjacent rail, and through a hole in said fish plate, and provided with retaining nuts, said sockets being deep enough to permit partial withdrawal of the bolts to permit adjustment of the fish plate.

1,820,604. BRAKING SYSTEM. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 17, 1925. Serial No. 37,660. 12 Claims. (Cl. 188—78.)



1. A vehicle having, in combination, transmission mechanism including a shaft and a housing, dirigible wheels having brakes, a brake acting on said transmission shaft and including a drum and friction means within the drum, a rockshaft supported by the transmission housing between said housing and the drum, means operated by the two ends of the rockshaft for applying the brakes on the dirigible wheels, and means operated by an intermediate part of the shaft and extending into said drum for applying the transmission brake.

1,820,605. SIGNALING DEVICE. SAMUEL M. DOVER, Chicago, Ill. Filed Mar. 31, 1930. Serial No. 440,421. 8 Claims. (Cl. 116—139.)



1. A signaling device comprising a piston-pump formed of a cylindrical member open at its opposite ends, closure-disks at the ends of said member and a piston in said member, said disks having portions extending crosswise thereof and lapping said member at the exterior of the latter, and air-pressure-operated sound-producing devices connected with said portions, said device containing passages leading from the interior of said member into said sound-producing devices.

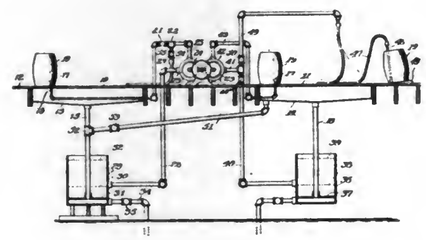
1,820,606. PRODUCTION OF PHOSPHORUS IN VOLATILIZATION FURNACES. HENRY W. EASTERWOOD, Nashville, Tenn., assignor to Victor Chemical Works, a Corporation of Illinois. Filed Mar. 23, 1929. Serial No. 349,519. 4 Claims. (Cl. 23—223.)

1. Briquettes for use in the manufacture of phosphorus by the volatilization process, said briquettes comprising ground phosphorus mineral, carbonaceous material in proportion suitable for the reduction of the phosphorus mineral, and fume separated from gases driven off from a phosphorus volatilization process prior to alteration of the phosphorus content thereof.

1,820,607. NONIRRITATING COMPOSITIONS CONTAINING ORGANIC COMPOUNDS WHICH IRRITATE THE SKIN. RUDOLF ENGELHARDT, Leverkusen-on-the-Rhine, Germany, assignor to I. G. Farben-Industrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 30, 1927, Serial No. 179,723, and in Germany Apr. 12, 1926. 8 Claims. (Cl. 106—1.)

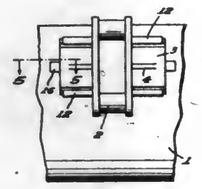
1. As a new product a non-irritating composition of matter comprising a halogenated naphthalene which is irritating to the skin and is used for moulding, insulating, impregnating and similar purposes intimately mixed with a relatively small amount of a material of the group consisting of organic bases, alkaline earth metal oxides and basic reacting salts.

1,820,608. APPARATUS FOR WASHING BARRELS. EDWIN F. ENGEL, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 17, 1926. Serial No. 123,214. 10 Claims. (Cl. 141—6.)



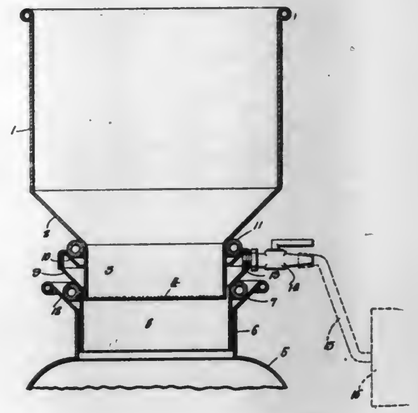
4. In a barrel-washing apparatus, the combination of a pump for the washing-fluid, means connected with said pump for conducting the fluid to the barrel to be washed, a receptacle for water, means for conducting the used barrel-washing fluid into said receptacle for passage through the water therein, and means for conducting the cleansed washing-fluid after passing through the water back to said pump.

1,820,609. BUCKET ELEVATOR. PETER S. ERIKSON, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,738. 4 Claims. (Cl. 198—151.)



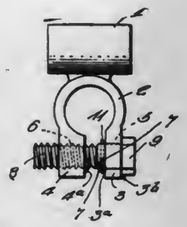
1. In a bucket elevator, attachment links, spaced blocks integral therewith, heels carried by said blocks and spaced apart, plates secured to said buckets and formed with flanges for telescopic engagement with said blocks, tongues integral with said plates for disposal between said blocks and abutment with said heels, and fingers terminating said tongues for removable disposal between said heels.

1,820,610. MILK STRAINER. PARVIN B. EVES, Whitewater, Wis. Filed Sept. 13, 1929. Serial No. 392,441. 1 Claim. (Cl. 226—38.)



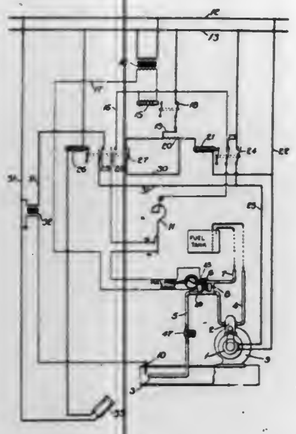
In a device for the purpose set forth, a funnel-shaped member having a tubular body and a head that comprises spaced inwardly and outwardly flared walls, the inwardly flared wall providing the mouth of the funnel and the space between the walls affording an annular air chamber and a hand operated cock screwed in said chamber, in combination with compressible rings for establishing an air-tight joint between the funnel and the mouth of a receptacle in which the funnel is received and a similar joint between a receptacle which is directed through the mouth of the funnel.

1,820,611. STORAGE BATTERY TERMINAL. ALBERT D. GOLDMAN, Baltimore, Md. Original application filed Sept. 21, 1928, Serial No. 307,416. Divided and this application filed July 2, 1931. Serial No. 548,405. 1 Claim. (Cl. 173—259.)



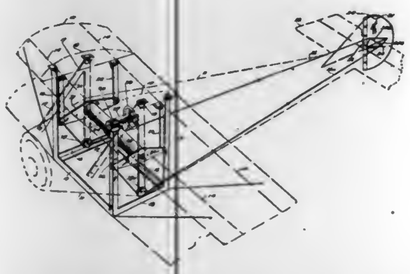
A clamp for storage battery posts including opposed integral jaw members having their ends normally spaced and formed with apertures, a clamping bolt loosely mounted in one of the apertures and threaded through the other aperture, a head on the bolt engaging the outer face of one of said jaws, and a transverse pin carried by the bolt near the inner face of the last named jaw member and movable therewith, with its ends projecting beyond the circumference of the bolt.

1,820,612. LIQUID PUMPING APPARATUS. JOHN GOOD, Garden City, and Edgar H. Olsen, New York, N. Y., assignors to Good Inventions Co., New York, N. Y., a Corporation of New York. Filed Apr. 21, 1928. Serial No. 271,743. 11 Claims. (Cl. 158—28.)



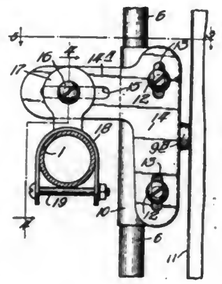
2. In a control system of the kind described, the combination of an oil line, a pump associated therewith, a motor for driving the pump, a control circuit for the motor, a switch in said circuit adapted to be closed during normal operation, and pressure responsive means connected to the oil line and directly responsive to pressure variation therein, said means arranged to open said switch in response to abnormal pressure drop in said line.

1,820,613. AEROPLANE. WILLIAM HERBERT GRAY, Parramatta, New South Wales, Australia. Filed July 29, 1929, Serial No. 381,835, and in Australia Oct. 8, 1928. 2 Claims. (Cl. 244—23.)



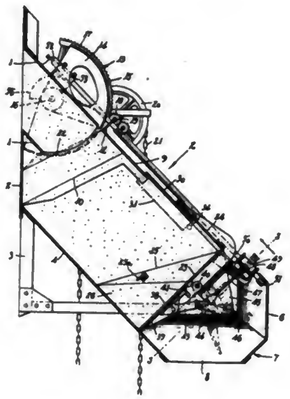
1. An aeroplane including a body, vertical supports arranged on the body, cross bars connecting the vertical supports, an aerofoil pivoted medially of its leading and trailing edges for vertical swinging movement on the upper ends of the supports, a frame suspended from the aerofoil and arranged about the body, stays connecting the aerofoil and the lower end of the frame, a transverse shaft journalled in the vertical supports, pairs of levers extending laterally from the shaft, rods pivotally connected between the ends of the levers and the undersurface of the aerofoils, a segmental worm gear on the shaft, another shaft journalled in the cross bars, a worm on the last mentioned shaft meshing with the worm gear, and a hand wheel on the last mentioned shaft for rotating the same to adjust the inclination of the aerofoil with respect to the body.

1,820,614. GRILLE OR SCREEN FOR AUTOMOBILE RADIATORS. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 5, 1931. Serial No. 506,550. 7 Claims. (Cl. 293—54.)



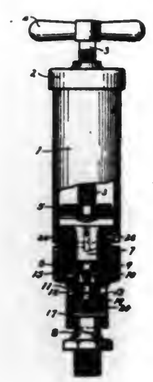
1. An attachment to a vehicle having a horizontal cross-bar spaced forwardly from and extending parallel to a frontal vehicle portion, comprising: a grille or the like comprising a foraminous main portion and a binding framing the said main portion, the said grille extending between the cross-bar and the said frontal vehicle portion; two webs fast upon and extending rearwardly from opposite side portions of the binding, bumper means extending rearwardly from spaced portions of the binding and pressing against but unsecured to the said frontal vehicle portion, and two connecting means respectively securing the two webs to the said cross-bar for supporting the grille with the bumper means in their said disposition, the said connecting means being arranged to permit both a horizontal and a relatively independent vertical adjustment of the grille with respect to the cross-bar.

1,820,615. BATCHER. JOSEPH H. GWYNNE, Warren, Ohio. Filed Oct. 10, 1928. Serial No. 311,672. 9 Claims. (Cl. 221—118.)



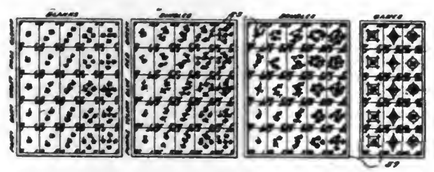
1. A batcher comprising a measuring chamber having an inclined bottom, side walls, a lower end wall adjustable between said side walls and an extensible top, said top including overlapping plates, some of which are guided for sliding movement from said side walls, one of said plates being movable with said end wall, said end wall having a discharge gate, and means controlling the flow of material into said chamber.

1,820,616. LUBRICATING MEANS. WILLIAM E. HANN, Detroit, Mich., assignor, by mesne assignments, to The Lubricating Equipment Company, Detroit, Mich., a Corporation of Michigan. Filed June 17, 1929. Serial No. 371,474. 4 Claims. (Cl. 284—18.)



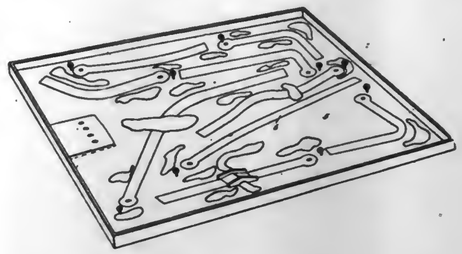
1. In a lubricating apparatus of the character described, connecting means comprising a lubricant ejection nozzle communicating with a source of lubricant under pressure, said nozzle terminating in an annular dirt cutting rim, a lubricant receiver affixable to the object of lubrication, and a coupling connecting said nozzle and receiver, said receiver and coupling having endwise interfitting and limited turning swivel connection, and said coupling and nozzle having threaded connection for moving said nozzle relatively to said receiver when rotated relatively thereto, the threaded and swivel connections being closed by the same direction of torque.

1,820,617. GAME APPARATUS. EDWARD P. HOLMBERG, Oklahoma City, Okla. Filed Oct. 20, 1928. Serial No. 313,830. 4 Claims. (Cl. 273—137.)



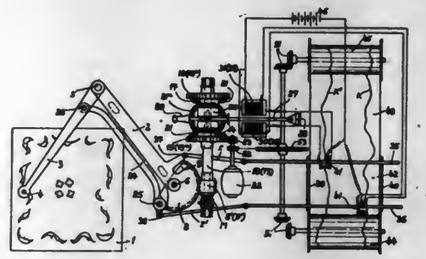
1. A game apparatus including playing pieces divided into a plurality of different sections, each section being differently indicated there being a certain number of sections composed of an equal number of playing pieces and another section having less playing pieces than any of the other sections, all sections being in turn divided into a plurality of differently indicated suits, the suits being the same for all sections, the playing pieces of each suit in each section being numbered serially from one upward, the playing pieces of the same suit in each section having the same scoring value indicated thereon, but the scoring value so indicated being different from the scoring value of the playing pieces of the same suit in other sections, scoring value indicated on the playing pieces of any one suit in any one section being different from the scoring value indicated on the playing pieces of any other suit of the same section.

1,820,618. INDOOR TABLE GOLF COURSE. GEORGE HOUZENGA, Phoenix, Ariz. Filed Dec. 15, 1930. Serial No. 502,539. 1 Claim. (Cl. 46—40.)



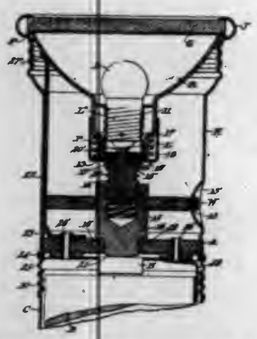
A device of the class described comprising a figure formed of wire and comprising a pair of leg portions, a cross piece connecting the upper ends of the leg portions together, a rod extending upwardly and forwardly from the said cross piece, a head on the upper end of the rod, a frame formed of wire and including a pair of arm forming portions having an eye at one end through which the rod passes, a lever having an eye intermediate its ends through which the rod passes, a bar-connecting one end of the lever to the eye of the frame, a socket member at the outer end of the frame, a golf stick adjustably held in the socket member, a spring having one end connected with the outer end of the frame, and a bracket on the rod to which the other end of the spring is connected, a handle bar connected with the crosspiece, and a bar slidably supported by said handle bar and having one end connected with the second end of the lever, whereby when said sliding bar moves longitudinally in one direction, it will impart movement to the lever to cause the connecting bar to the frame to swing the frame against the action of the spring, and thus cause the spring to swing the frame, when the sliding bar is released, to cause the golf stick to strike a ball.

1,820,619. PROCESS OF AND ARRANGEMENT FOR PERFORMING MECHANICAL WORK. FRANZ HÜBL, Warnsdorf, Czechoslovakia. Filed Mar. 13, 1930, Serial No. 435,667, and in Austria Mar. 13, 1929. 3 Claims. (Cl. 101—114.)



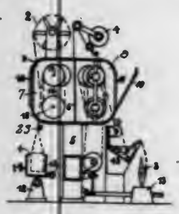
1. Apparatus for producing designs upon cloth comprising a stencil adapted to cover the cloth, a carrier, a spraying nozzle mounted on the carrier adapted to spray liquid into the openings of the stencil, driving means to move the carrier and the nozzle over the stencil, a film having steering slots therein corresponding to the openings of the stencil, means for steering the driving means to move the nozzle in the path of the stencil openings, a pin for recording the path of the steering slots on the film, and means for mechanically coupling the nozzle with the recording pin in order to record the steering slots of the film upon moving the nozzle over the stencil openings.

1,820,620. FOCUSING FLASH LIGHT. HOMER W. JONES, Elmhurst, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed July 12, 1923. Serial No. 651,149. 24 Claims. (Cl. 240—10.69.)



1. In a flashlight, the combination of a reflector, an incandescent lamp coaxial therewith, a casing for said lamp and said reflector, and means whereby said lamp and said reflector may be adjusted relatively to one another to vary the spread of the reflected beam comprising a wheel rotatable in a fixed plane about the axis of said reflector, said casing having an aperture exposing a portion of said wheel for manipulation.

1,820,621. APPARATUS FOR DRYING YARN. ADOLF H. JUNKERS, Rheydt, Germany. Filed June 17, 1925, Serial No. 37,817, and in Germany June 17, 1924. 3 Claims. (Cl. 34—48.)



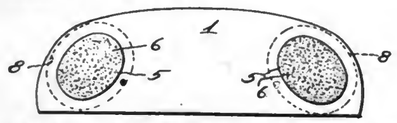
1. An apparatus for drying yarn, comprising in combination a pair of rotary drums adapted to receive a yarn in a plurality of spiral windings, axles in said drums arranged to cross each other in different planes, means for producing a drying air current, a casing for applying said air current to the yarn stretched between said drums, and an endless belt running over both said drums and adapted to receive and wind up the beginning of the yarn.

1,820,622. MANIPULATOR FOR ROLLING MILLS. ALBERT T. KELLER, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Feb. 8, 1930. Serial No. 426,816. 33 Claims. (Cl. 80—48.)



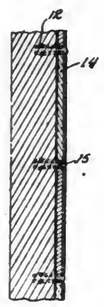
1. In a manipulator for rolling mill feed tables, a side guard movable over the table, turning bars each having an extending toe adapted to engage and turn the work on the table, and means for projecting the toes beyond the side face of the guard and for retracting the toes of the turning bars within the side face of the guard.

1,820,623. HOSE PROTECTOR. LEON LOUIS LYONS, Omaha, Nebr. Filed May 20, 1929. Serial No. 364,555. 1 Claim. (Cl. 36—58.6.)



A hose gripping device comprising a body member adapted to be received within the heel of a shoe and having an aperture therethrough, said body member being formed from non-stretchable material, a sponge rubber member within said aperture and entirely filling the same, and means for holding said sponge rubber within the aperture in extended position, said means comprising a disc secured to one side of the sponge rubber member and anchored to the outer side of the body member, and forming means for maintaining the sponge rubber member extended upon transverse movement of a heel in contact therewith.

1,820,624. METALLIC TILE. EMIL O. MEHLINE, Alameda, Calif., assignor, by direct and mesne assignments, to Victor V. Kunkel, Oakland, Calif. Filed Oct. 10, 1928. Serial No. 311,508. 6 Claims. (Cl. 72—19.)

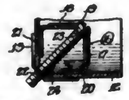


1. As an article of manufacture, a tile formed of metallic material and having foraminate means at its rear surface for securing it to a base, said means consisting of a separate layer of foraminous material attached to the back of the tile and being wholly exposed to be impressed in the base while this is in a plastic state.

1,820,625. ELECTRODE FOR ELECTRIC FURNACES. PAUL LOUIS JOSEPH MIGUET, St.-Julien de Maurienne, France, assignor to Société Electrometallurgique de Montricher, St.-Julien de Maurienne, Savoie, France. Filed June 23, 1928, Serial No. 287,896, and in France Mar. 31, 1928. 5 Claims. (Cl. 266—1.5.)

1. An electrode for electric furnaces said electrode having a conductive shell of preformed material, a filler of unbounded carbonaceous material in the upper end of said shell and a filler of bonded carbonaceous material in the bottom end of said shell.

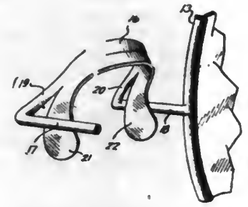
1,820,626. OUTLET RECEPTACLE. CHARLES NEWMAN, New York, N. Y., and ERNST G. APPLETON, Chicago, Ill., assignors to Roach-Appleton Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 9, 1928. Serial No. 318,117. 10 Claims. (Cl. 247—25.)



1. An outlet receptacle having two walls normal to each other, said two walls being provided with knock-outs adjacent to one another, and a clamping member adjacent

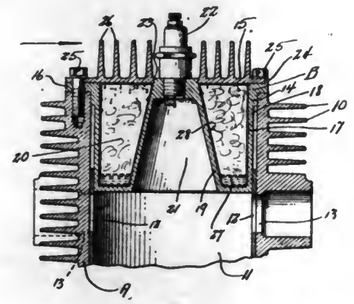
to said two walls, said clamping members having clamping portions, comprising walls mounted normally to each other having cable gripping edges directed in the general direction of the intersection of said two walls of said receptacle, adapted to overlie portions of the apertures defined by said adjacent knock-outs and means for drawing said cable gripping edges toward said intersection.

1,820,627. EYEGLASS CONSTRUCTION. GEORGE E. NERNEY, Attleboro, Mass., assignor to Bay State Optical Company, Attleboro, Mass., a Corporation of Maine. Filed Dec. 24, 1926. Serial No. 156,855. 9 Claims. (Cl. 88—41.)



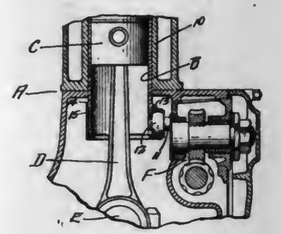
1. In a bridge construction of eyeglasses, in combination, a crest portion curving over the crest of the nose and adapted to rest upon the nose and thence extending downwardly on both sides of the nose, each of said downwardly extending side portions being integral with said crest portion and split lengthwise, the part thereof on the forward side of the split continuing downwardly to form with said crest portion a nose piece adapted to rest against the nose substantially throughout the entire length of the nose piece to support the weight of the eyeglasses, and the part thereof on the rear side of the split being extended forwardly in a shank to be connected to the lens mounting, the upper end of said split being spaced a substantial distance above said shank.

1,820,628. CYLINDER HEAD. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Nov. 7, 1927. Serial No. 231,420. 15 Claims. (Cl. 123—173.)



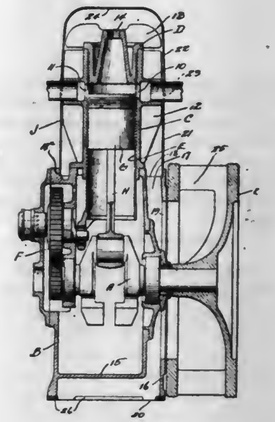
1. In an internal combustion engine, a cylinder, a cylinder head formed with a jacket enclosure, a combustion chamber and associated spark plug, and cylinder head cooling means including a cooling liquid within said jacket enclosure adapted to be vaporized by the heat generated by the engine.

1,820,629. SLEEVE VALVE AND METHOD OF MAKING SAME. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Jan. 20, 1928. Serial No. 248,123. 3 Claims. (Cl. 123—81.)



1. A tubular sleeve valve for internal combustion engines having an annular rib spaced above the sleeve lower end, and a ring surrounding the sleeve abutting the rib, said ring being welded to the rib and to the lower edge of the sleeve.

1,820,630. INTERNAL COMBUSTION ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Mar. 17, 1928. Serial No. 262,584. 8 Claims. (Cl. 123—171.)

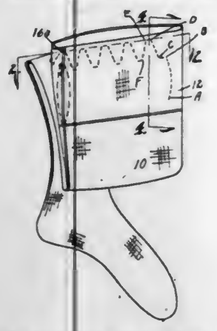


1. An internal combustion engine comprising in combination, a cylinder, a crankshaft, a piston working within the cylinder and operatively connected to the crankshaft, a crankcase structure comprising an inner casing and an outer casing spaced from the inner casing, said outer casing having a core opening spaced below the bottom of said inner casing, and means inducing a circulation of cooling air downwardly along the cylinder exterior and into the space between the inner and outer casing, said outer casing having an air outlet opening surrounding the crankshaft.

1,820,631. GARMENT REPAIR MEANS. THORNTON PENN, Des Moines, Iowa. Filed Jan. 16, 1928. Serial No. 247,073. 1 Claim. (Cl. 2—239.)

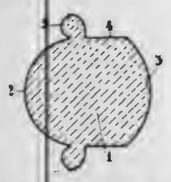
In combination with a knitted garment having a portion of double thickness, a plurality of repair threads carried by the garment between the two thicknesses of said portion, slight lengths of said repair threads being

staggered and the intermediate portions arranged in zigzag formation, said slight lengths projecting through one



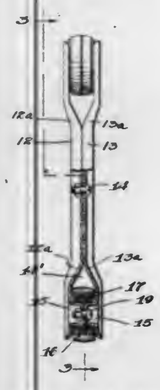
of the thicknesses and exposed whereby the same may be engaged for withdrawing one of said threads and whereby the threads are retained in a non-wrinkled condition.

1,820,632. LIGHT REFLECTOR. CHARLES WILLIAM PRICE, Birmingham, England. Filed Sept. 27, 1929, Serial No. 395,655, and in Great Britain Oct. 12, 1928. 2 Claims. (Cl. 88—1.)



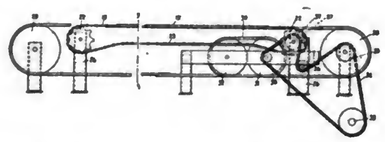
1. A light reflector comprising a solid piece of glass having a convex front face and a concave rear reflecting face for reflecting back the light rays in the direction of the source of light, and a bead of glass having a reflecting back surface surrounding the solid centre portion so that light rays incident on the bead will be reflected by the back surface of the bead in a scattered direction or over a wide angular range.

1,820,633. DRAG LINK. FREDERICK W. SAMPSON, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed July 22, 1929. Serial No. 380,158. 7 Claims. (Cl. 74—17.)



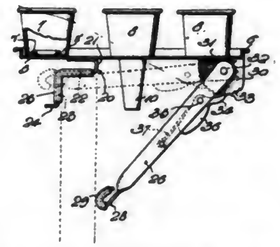
4. A drag link comprising a pair of complementary sheet metal sections secured together and provided with a spool member at one end thereof, and a yielding bearing ring encircling said spool member and secured thereon.

1,820,634. BELT SUPPORTING AND DRIVING MECHANISM. THOMAS HUBERT JOHN SIMMONS, Potters Bar, and FREDERICK WILLIAM BLACKBURNE, London, England, assignors, by mesne assignments, to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 18, 1929, Serial No. 356,140, and in Great Britain May 5, 1928. 14 Claims. (Cl. 198—16.)



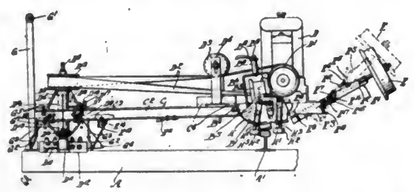
1. In combination, an endless belt arranged for movement over a stationary bed, a plurality of connected rollers rolling on said bed and interposed between said belt and said bed for supporting said belt, and a wheel rotatable about a fixed axis and frictionally engaging said belt for driving the same.

1,820,635. TRAY. JOHN W. STRICKLAND, Nashville, N. C. Filed Aug. 23, 1929. Serial No. 387,995. 4 Claims. (Cl. 45—51.)



1. A curb service tray, comprising a tray element, clamp means carried by the tray element to engage one side of the upstanding portion of an automobile or the like, a toothed segment arranged beneath and attached to the tray element, a lever having one end pivotally connected with the toothed segment so that its free end may be swung toward and away from the clamp means, such free end being adapted for engagement with the opposite side of said upstanding portion of the automobile, said lever being rigid throughout its length from its free end to its point of pivotal connection with the segment, and a pawl pivotally mounted upon the lever and arranged to engage with the toothed segment, said pawl having pivotal movement with relation to the free end portion of the lever.

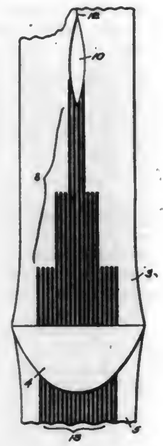
1,820,636. ADZING MACHINE. HENRY H. TALBOYS, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 12, 1930. Serial No. 427,735. 18 Claims. (Cl. 144—183.)



1. In a machine adapted for use upon a railroad track, supporting means adapted to engage one rail, a frame mounted upon said supporting means, a working member mounted on said frame and means for actuating it, a track

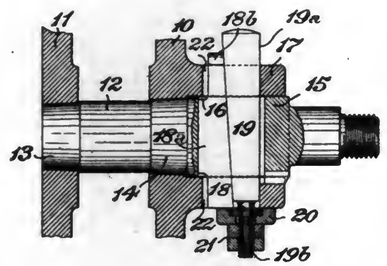
engaging member associated with said frame, bodily shiftable from one position in which it engages an opposite rail, to another position in which it tilts said frame and member upwardly away from the work, and a supporting member for said track engaging member, said supporting member being removably mounted upon said frame, means being provided for receiving it and securing it to said frame at a plurality of points on said frame.

1,820,637. SEAMLESS STOCKING AND METHOD OF MAKING SAME. CLARENCE H. TAUBEL, Riverside, N. J., assignor to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed July 27, 1927. Serial No. 208,767. 8 Claims. (Cl. 66—182.)



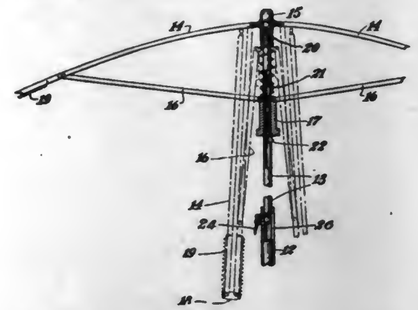
1. A stocking having at the rear thereof at a part to be ornamented by special shape of a contrasting area an additional thread knitted in to give a contrasting area, a portion of the stocking being cut out along said contrasting area, the edges of the cut-out portion being secured, thereby producing a tapering effect in said contrasting area.

1,820,638. CONNECTION FOR CONNECTING PISTON RODS TO MAIN RODS OF ENGINES. HENRY MORTIMER TOWER, Hastings-on-Hudson, N. Y. Filed Dec. 28, 1926. Serial No. 156,627. 3 Claims. (Cl. 287—96.)



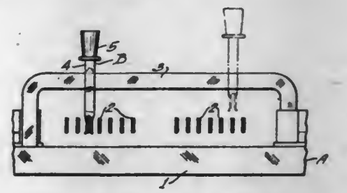
1. A gib comprising a shank, a lug disposed intermediate the length of the shank and projecting transversely thereof, and a head united to the shank and projecting therefrom transversely of the lug.

1,820,639. UMBRELLA. ALFRED WEISE, New York, N. Y. Filed Dec. 30, 1927. Serial No. 243,585. 4 Claims. (Cl. 135—22.)



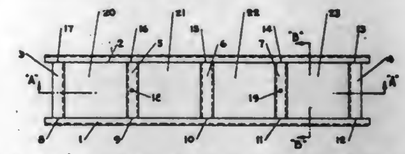
4. As a new article of manufacture, a collapsible umbrella, a collapsible handle therefor, and spring means for automatically opening the umbrella, said spring means being associated with tripping means and adapted to be tripped into operative position by the operation of extending the handle.

1,820,640. BUS BAR CONNECTER. WILLIAM WURDACK, Jr., St. Louis, Mo., assignor to Wm. Wurdack Electric Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 28, 1929. Serial No. 350,627. 1 Claim. (Cl. 173—324.)



A bus-bar connecter comprising an elongated hollow shell of yielding conducting material, the shell being generally of cylindrical contour and open at an end and whose wall is formed with pairs of registering cut-outs and flattened to thereby integrally include a first pair of spring jaws for engaging a bar disposed transversely the connecter, the open end comprising a second pair of spring jaws disposed in right angular longitudinal relation to the first pair of jaws for engaging a second bar disposed in underlying relation and, at a right angle to the first bar, the wall of the shell having an additional, larger cut-out for providing a bar-accommodating slot intermediate said pairs of jaws, said slot being in communication with the upper pair of jaws and being closed off at its lower end from the second pair of jaws.

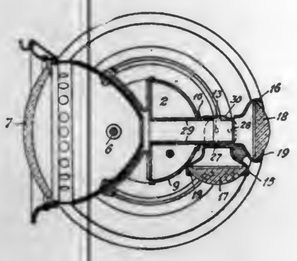
1,820,641. TANK FRAME FOR REFRIGERATOR CARS. BENJAMIN HAMELTON YODER, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 11, 1930. Serial No. 488,065. 3 Claims. (Cl. 62—19.)



1. A top retaining frame for a battery of brine retaining ice tanks in a refrigerator car consisting of two parallel angle irons adapted to span the width of a re-

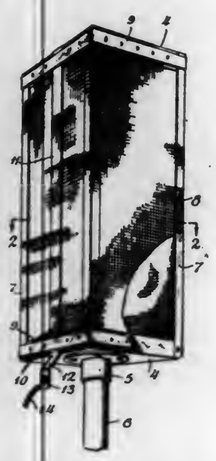
frigerator car and be firmly anchored thereto in combination with angle iron and channel iron spacers for holding the brine tanks in position.

1,820,642. SIGNAL LAMP. DOMINGO ANGLADA, New York, N. Y., assignor to Wolf Safety Lamp Company of America, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 31, 1929. Serial No. 389,652. 7 Claims. (Cl. 240—22.)



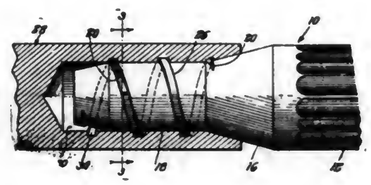
1. A signal lamp comprising a source of light, an illuminating outlet at the front of said lamp permitting the projection of illuminating rays from the interior of the lamp, a signal port aligned with and spaced from said outlet, a plurality of different signals arranged on the outside of said lamp near said port and adapted to be selectively moved, at will, into alignment with said port for illumination, said signals having a fixed spaced relation with respect to each other and upon movement of a signal out of alignment with said port another signal is automatically aligned, by reason of said fixed relation, with said port.

1,820,643. AERIAL DEVICE. ARGIMIRO ARIAS, Brooklyn, N. Y. Filed Nov. 3, 1930. Serial No. 492,984. 1 Claim. (Cl. 250—33.)



An aerial device comprising a body consisting of end members, longitudinal bars connecting said end members, a sheet of foraminous conducting material surrounding said body between said end members, straps for attaching said material to the end members, and a conducting strip to which the meeting ends of said sheet of material are affixed, said strip extending the length of said body and having an extension projecting beyond one end of the latter for attachment to a lead-in conductor.

1,820,644. COUPLING DEVICE. HARALD BACH, Oak Park, Ill. Filed Aug. 26, 1929. Serial No. 388,318. 1 Claim. (Cl. 279—99.)

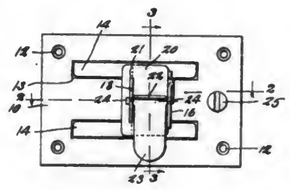


A machine tool coupling including a shank having an aperture extending axially thereof, said aperture including a cylindrical section and a tapered section opening outwardly from one end of said cylindrical section and extending to the outer edge of the shank, said aperture being provided with a helical groove having a relatively long lead, a rotary tool member, said tool member having a bevelled portion at one end to facilitate in inserting the tool in the shank, said tool member also including a cylindrical section companion with and adapted to be received by the cylindrical section of the aperture in the shank and a conical section adapted to be received by the companion tapered section of said aperture, the taper of said last named sections being sufficiently gradual to effect a firm binding action when the cylindrical section of said tool has been completely inserted, the cylindrical section of said tool being provided with a helical groove which is companion with the helical groove in the shank, and a detachable helical member adapted to be seated within said companion helical grooves for effecting relative longitudinal movement when the parts are relatively rotated.

1,820,645. PROCESS OF SEPARATING WAX FROM MINERAL OILS. HARRY T. BENNETT, Tulsa, Okla., assignor to The Atlantic Refining Company, a Corporation of Pennsylvania. Filed Jan. 9, 1930. Serial No. 419,730. 4 Claims. (Cl. 196—19.)

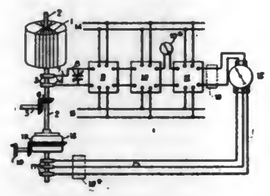
1. The process of separating naturally occurring waxy substances from a mineral oil, which comprises dissolving said mineral oil in a solution of organic solvent and diphenyl, and chilling the resultant solution to a temperature low enough to precipitate some of said waxy substances and diphenyl.

1,820,646. WINDOW SHADE BRACKET. JOHN H. BOSS, Baltimore, Md., assignor of one-half to Joseph Stabele, Baltimore, Md. Filed May 5, 1931. Serial No. 535,114. 2 Claims. (Cl. 156—24.)



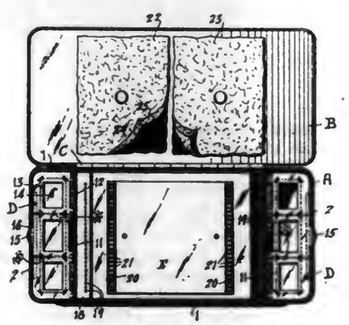
2. A shade roller fixture including a base, a pair of opposed transversely extending tongues carried by said base and spaced forwardly therefrom, a bracket member having a base provided with ends extending behind said tongues and having side flanges projecting forwardly from between said tongues, one of said flanges having means to receive the pintle of a shade roller, said flanges having alined bearing openings, a presser plate between said flanges and having its end resting on said tongues, said presser plate extending at one side beyond the bracket and being slotted to receive the flange at said side, and a cam member provided with an operating arm pivotally mounted on said flanges and between the same, said cam member being arranged to force the presser plate toward the base of the bracket and thereby clamp said tongues.

1,820,647. METHOD OF AND MEANS FOR INDICATING DIRECTION. ARTHUR WHITTEN BROWN, Langland, Swansea, Wales. Filed Aug. 14, 1930, Serial No. 475,339, and in Great Britain Aug. 13, 1929. 12 Claims. (Cl. 250—11.)



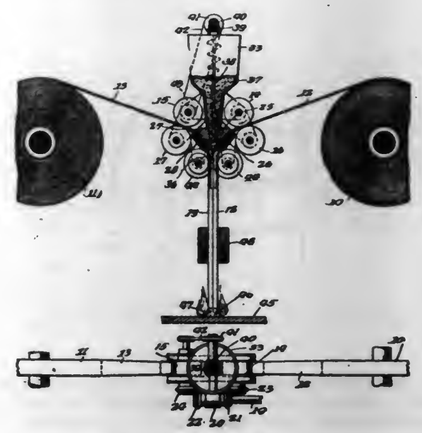
1. A method of indicating the direction of an incoming radio frequency current, which consists in varying the amplitude of said current to produce a wave having a predetermined frequency, correcting the form of said derived wave to conform to a true sine wave, generating a local alternating current having the same frequency as the produced wave, and indicating the phase relation between the produced wave and the locally generated current.

1,820,648. FLY AND LEADER RECEPTACLE. HENRY BRUCKER, Maplewood, N. J., assignor to American Aluminum Ware Co., a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,455. 1 Claim. (Cl. 43—32.)



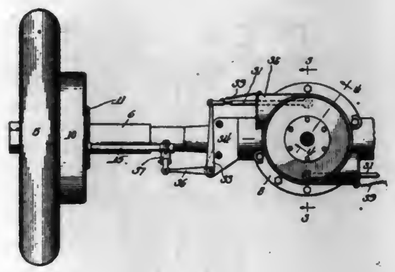
A leader and fly receptacle comprising a body portion and a cover, a leader supporting tray removably arranged in said body portion, and a soft fibrous body to receive flies secured to the inner side of said cover so as to occupy the space between said leader tray and the cover to yieldingly hold the tray against movement in the receptacle and serve as a shock absorbing pad therefor.

1,820,649. MEANS AND METHOD OF FORMING AND FEEDING WELDRODS. HOWARD J. BURNISH, Milwaukee, Wis. Filed May 8, 1930. Serial No. 450,848. 14 Claims. (Cl. 219—8.)



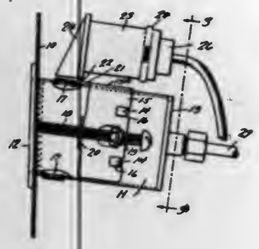
1. In a welding rod forming and feeding machine, means for shaping two strips of material and feeding them together to provide a hollow enclosing casing, and means for feeding fluxing material into said casing as the latter is formed to provide a composite welding rod, said rod being supplied to the work directly it is formed.

1,820,650. VEHICLE BRAKE. ADDI BENJAMIN CADMAN, Beloit, Wis., assignor, by mesne assignments, to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed Oct. 3, 1927. Serial No. 223,497. 11 Claims. (Cl. 188—140.)



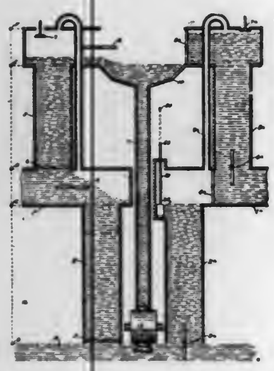
1. A power brake having, in combination with the rear wheels, the propeller shaft and the rear axle housing of an automotive vehicle, a pair of brakes, one on each of said wheels, a pair of bell cranks pivotally supported on said housing and each adapted to set one of said brakes when oscillated in either direction, a driving clutch element on said propeller shaft, an annular driven element rotatably mounted opposite said driving element, electromagnetic means adapted when energized to draw said elements into frictional engagement, a pair of outwardly extending parallel rods connected respectively to the upper and lower portions of said driven element and each arranged to actuate one of said bell cranks.

1,820,651. LAMP MOUNTING AND CLAMP. JOHN D. DURANT, Detroit, Mich., assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 21, 1930. Serial No. 469,495. 12 Claims. (Cl. 40—130.)



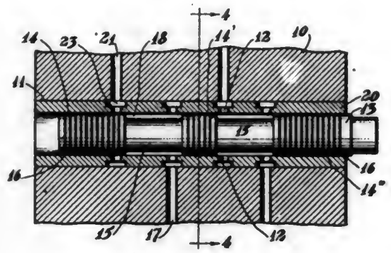
1. In combination with an indicator shell and the registering portions of the indicator, said shell having means therein through which light may pass to illuminate said portions, removable means for mounting an electric lamp adjacent said first means in illuminating relation with said portions, said removable means including a casing to contain said lamp and means removably mounted on said shell and supporting said casing thereon, and means carried by said shell for positioning said last means with respect thereto, said casing including means for directing light from said lamp upon said first means to illuminate said registering portions.

1,820,652. WATER POWER PLANT. HERMANN W. EBERHARDT and KARL FRIEDLMAIER, Columbus, Ohio. Filed June 28, 1929. Serial No. 374,424. 12 Claims. (Cl. 103—236.)



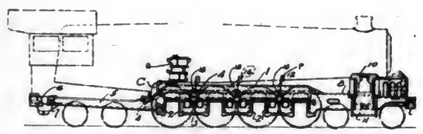
1. In a water power plant, a pair of tanks, sluice means for alternately creating a head of water in said tanks, a second pair of tanks about the first pair and resting on said sluice means, means operable by the discharge of water from said first pair of tanks to alternately fill the second pair of tanks, and means to alternately discharge the water from said second pair of tanks.

1,820,653. HYDRAULIC VALVE. HANS ERNST, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 8, 1930. Serial No. 434,414. 5 Claims. (Cl. 251—76.)



2. In a valve casing having a plurality of ports, a valve member having piston-like portions adapted to open and close said ports said portions having means thereon to cause an annular flow in a cross direction to a leakage flow to prevent the establishment of unbalanced forces on the valve.

1,820,654. LOCOMOTIVE CONSTRUCTION. ARTHUR H. FETTERS, Omaha, Nebr., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Oct. 1, 1928. Serial No. 309,618. 33 Claims. (Cl. 105—172.)

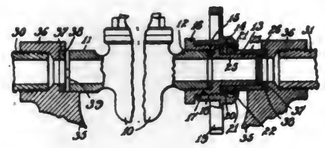


1. A locomotive underframe including driver pedestals and having an air reservoir forming a part of the underframe.

1,820,655. PROCESS OF OBTAINING BERYLLIUM COMPOUNDS FROM BERYLLIUM-BEARING MINERALS. HELLMUT FISCHER, Berlin-Friedenau, Germany, assignor, by mesne assignments, to Metal & Thermit Corporation, New York, N. Y., a Corporation of New Jersey. Filed Dec. 13, 1928, Serial No. 325,927, and in Germany Dec. 15, 1927. 4 Claims. (Cl. 23—16.)

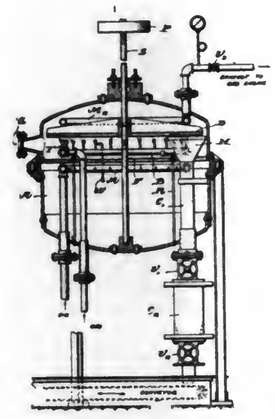
1. The process of obtaining beryllium compounds from beryllium-bearing minerals, which comprises comminuting a beryllium-bearing mineral, adding thereto pulverulent alkali metal carbonate used in excess, heating both of said substances together to a relatively high temperature, but below their melting points, for a length of time sufficient to convert said substances into a sintered mass, comminuting said mass, and subjecting it to further treatment for the production of beryllium compounds.

1,820,656. SERVICE LINE METER MOUNTING. JOHN L. FORD, Wabash, Ind., assignor to Ford Meter Box Company, Wabash, Ind., a Corporation of Indiana. Filed Apr. 10, 1929. Serial No. 354,020. 1 Claim. (Cl. 285—124.)



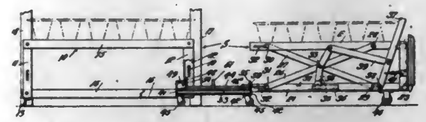
In a meter connection comprising a sleeve adapted to abut a line element and a nut cooperable therewith to provide for longitudinal movement of said sleeve, a member threadedly engaged with said nut and telescopically engaged in said sleeve, said nut being cooperable with said member to force said sleeve into abutment with said line element, said member being internally threaded for engagement with a meter nipple, and means disposed at the meter-engaging end of said member and engageable by a wrench for setting said member up tightly on said meter nipple and for holding said member against rotation with said nut.

1,820,657. MANUFACTURE OF CARBON BLACK. ALFRED W. FRANCIS, Cambridge, Mass., assignor to Magnolia Petroleum Company, Galveston, Tex., a Joint-Stock Association. Filed May 4, 1927. Serial No. 188,794. 17 Claims. (Cl. 134—60.)



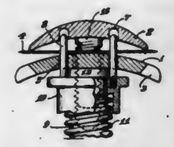
1. The process of partial conversion of a carbonaceous material into elementary carbon, which comprises maintaining continuous partial combustion of said carbonaceous material under super-atmospheric pressure in excess of ten pounds.

1,820,658. BED STRUCTURE. BENJAMIN M. FRANK and JOSEPH BASILE, New York, N. Y., assignors to Greenpoint Metallic Bed Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed May 4, 1929. Serial No. 360,388. 15 Claims. (Cl. 5—21.)



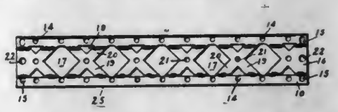
2. In a bed structure, the combination of a main bed frame, an auxiliary bed frame movable outwardly and inwardly thereof, means supported independently from the floor and connecting the two frames, and locking devices between the auxiliary bed frame and the connecting means for selectively locking the auxiliary bed frame in two positions, namely, in a position directly adjoining the main frame so as to provide a double bed, and in spaced relation to the main frame to provide isolated twin beds, and the auxiliary frame having a floor support independent of the floor support for the connecting means.

1,820,659. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Mar. 29, 1929. Serial No. 350,860. 10 Claims. (Cl. 30—12.)



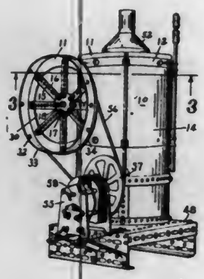
1. A safety razor comprising a guard member, a backing member, a handle, separable from one another, means to clamp the members, the handle and a blade together, and means slidable on the handle toward and from the backing member and separate from the handle, the members and the blade and cooperative with the members and the blade for aligning and retaining the said members and positioning a blade therebetween in shaving relation.

1,820,660. TOY BUILDING CONSTRUCTION. ALFRED C. GILBERT, Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Feb. 23, 1927. Serial No. 170,259. 10 Claims. (Cl. 46—35.)



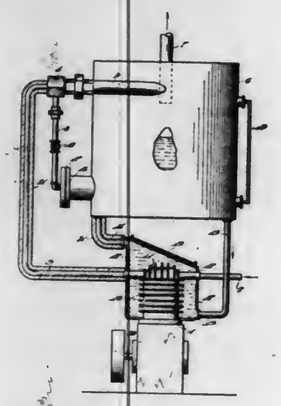
1. A toy building element comprising a sheet metal strip having a body portion and a flange portion, said flange portion extending along one edge only of said body portion and at right angles thereto, said body portion having a part offset therefrom, and extending the entire length thereof, said part being offset in the direction in which said flange extends, and being laterally spaced from the edge of said body portion an amount substantially equal to the width of said flange, said body portion adjacent each of its edges being provided with a series of aligned perforations equally spaced apart intermediate the ends of the strip and having laterally elongated perforations adjacent each end and in alignment with each of the aforesaid series of perforations.

1,820,661. CONSTRUCTION TOY. ALFRED C. GILBERT, Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed June 7, 1927. Serial No. 197,141. 15 Claims. (Cl. 43—35.)



1. A toy unit, composed of a plurality of toy elements, one of said elements comprising a ring having a flange extending at an angle from and about the periphery thereof, and a disk disposed within the opening formed by the internal periphery of said ring to substantially close the same.

1,820,662. GAS DISTRIBUTION APPARATUS. WILLIAM W. HACKNEY, Fort Wayne, Ind., assignor to The Western Gas Construction Company, a Corporation of Indiana. Filed Nov. 1, 1929. Serial No. 403,993. 4 Claims. (Cl. 261—76.)

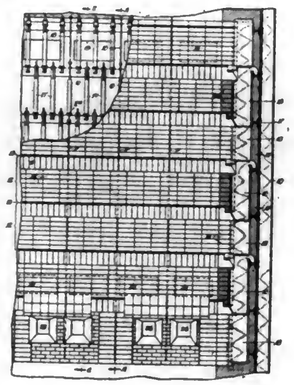


1. Apparatus for dispersing finely divided particles of liquid through a gas comprising an atomizer, means for supplying liquid to the atomizer, means for compressing and supplying gas to the atomizer and means for transmitting heat liberated by the compression of the gas to the gas and liquid passing through the atomizer.

1,820,663. METHOD OF TREATING YARN. JOSEPH P. HOLT, Merion, Pa., assignor to Aberfoyle Manufacturing Company, Chester, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1930. Serial No. 489,714. 9 Claims. (Cl. 118—69.)

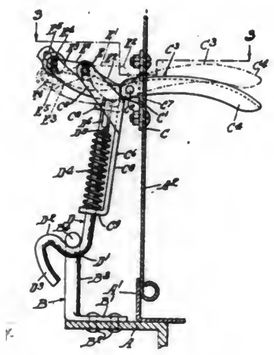
1. The herein described process of softening cotton yarn after the same has been chemically treated, comprising the steps of partially untwisting the same, and then retwisting it.

1,820,664. FURNACE CONSTRUCTION. LOUIS H. HOSBEIN, Winnetka, Ill., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 10, 1927. Serial No. 225,186. 16 Claims. (Cl. 72—101.)



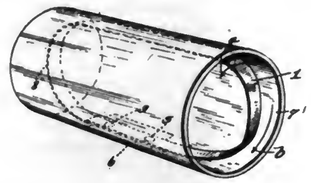
1. In furnace construction, the combination with a sectionally supported wall, of an exterior wall spaced therefrom to afford an intervening air space, supporting elements supporting respective sections of the refractory wall and partition members cooperating with vertically spaced supporting elements to subdivide the air space into separate lanes.

1,820,665. HOOD LATCH. DIBRELL P. HYNES and ELMER R. JOHNSON, Chicago, Ill., assignors to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 26, 1931. Serial No. 525,466. 14 Claims. (Cl. 292—113.)



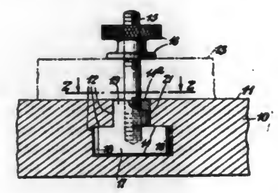
1. In a hood fastener for fastening the movable closure of an automobile hood, a latch member including a shank and a hook, a handle for imparting axial movement to said latch shank and hook, a pivoted guide in which said shank is axially movable, yielding means tending normally to move said shank upwardly in relation to said guide, said guide being pivoted to said hook adjacent the upper end of the latch shank, the hood being apertured to permit the outward extension of the handle therethrough, said aperture and handle being positioned adjacent the level of the pivotal connection between guide and hood.

1,820,666. HOLDER FOR SAFETY RAZOR BLADES WHEN SHARPENING THE SAME. CLARENCE W. JONES, Philadelphia, Pa. Filed Apr. 12, 1930. Serial No. 443,812. 3 Claims. (Cl. 76—89.2.)



1. As an article of manufacture a safety razor blade holder detachably carrying a safety razor blade, whereby upon insertion in a drinking glass and moving either the glass or the holder back and forth the opposite cutting edges of the blade can be sharpened, said holder comprising an oval spring body with one end adapted to fulcrum on the approximate center of the bottom of the glass, acting to retain the cutting edges of the blade substantially parallel with an element in the surface of the glass during the movement of either.

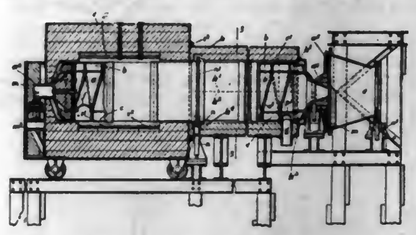
1,820,667. WORK HOLDING CLAMP. LOUIS LEYES, City Island, N. Y. Filed Jan. 20, 1930. Serial No. 422,079. 8 Claims. (Cl. 90—59.)



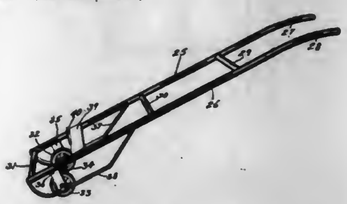
5. A work-clamping nut carrier for slotted work-tables or the like, comprising an elongated post carrier having an upstanding centrally located boss on one face thereof provided with two pairs of flat stop faces alternatively engageable with the side walls of a table slot, one pair of said side faces being located in spaced planes parallel with the longitudinal center line of the post carrier and the other pair being disposed in planes spaced the same distance apart as the first mentioned planes extending crosswisely of the carrier at a right angle to the longitudinally center line, said boss having two diagonally opposite rounded corner faces each connecting two angularly disposed ones of said stop faces and extending around the center of the boss through an angle of at least ninety degrees, and a post rising centrally from the carrier at the face of the carrier from which the boss rises, said post being provided with an external screw thread for connection of a work-clamping nut therewith.

1,820,668. ELECTRIC FURNACE. ALFRED GLYNNE LOBLEY, Birmingham, England, assignor of one-half to Birmingham Electric Furnaces Limited, Birmingham, England, a Company of Great Britain. Filed Aug. 7, 1929, Serial No. 384,065, and in Great Britain Dec. 28, 1928. 2 Claims. (Cl. 13—21.)

1. A furnace comprising a rotatable work holding drum, a frame, a stationary casing supported by the frame and surrounding a part of the drum, a stationary furnace structure surrounding the remaining part of the drum and having heating elements therein, means for normally securing the casing and furnace structure in fixed relationship, the furnace structure having a bearing associated with its outer end, a trunnion carried by the drum and rotatably engaging said bearing, and means supporting the furnace structure to permit longitudinal movement thereof in a direction away from the casing upon disconnecting the same from the casing, as and for the purpose set forth.



1,820,669. CONVEYER OR HANDLING DEVICE. WALTER J. LOERKE, Dayton, Ohio, assignor of one-third to F. P. Lutz and one-third to Earl F. McClintock, Dayton, Ohio. Filed July 26, 1929. Serial No. 381,349. 5 Claims. (Cl. 280—57.)



1. In a conveyer; the combination of a frame comprising side members, said members being joined by cross rods; brackets extending downwardly from the side members; a wheel supporting axle extending between the brackets, the ends of the axle projecting beyond the brackets; glider bars having their upper ends bent and being secured to the side members and forming acute angles therewith, the lower ends of the glider bars being curved and secured to the lower ends of side members substantially at right angles thereto; a support bar extending between the side members, the end of the support bar being bent downwardly to adjustably secure said bar to the side members; a projection bent upwardly at right angles to the support bar, the length of the projection being less than the length of the support bar.

1,820,670. ARTIFICIAL BAIT. HUBERT MAYS and SANFORD HOLMES KIRKLAND, Tampa, Fla. Filed Feb. 26, 1931. Serial No. 518,400. 3 Claims. (Cl. 43—42.)

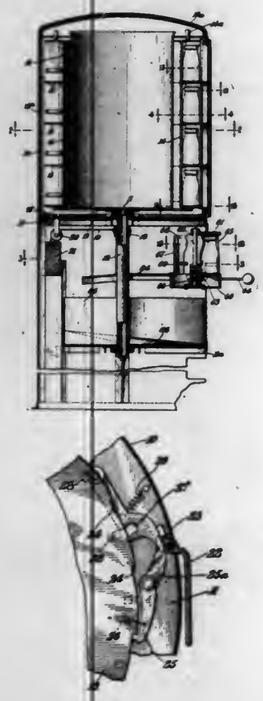


1. An artificial bait comprising a strip of pork rind or the like having an opening for the passage of a hook, and a hook having a barbed end extending through the opening and a shank secured to the central portion of the strip whereby both ends of the strip are left freely flexible.

1,820,671. VENDING MACHINE. JOHN H. MCCORMICK, CARL G. ALLEN, and FRANK M. BENDER, Williamsport, Pa., assignors to Vendicater, Inc., Williamsport, Pa., a Corporation of Pennsylvania. Filed Feb. 16, 1929. Serial No. 340,462. 12 Claims. (Cl. 312—36.)

1. A vending machine comprising a casing, a frame rotatably mounted in said casing, said frame being provided

with a plurality of superposed rows of peripheral merchandise compartments, a door in said casing of substantially the same height as said frame, means controlled by the opening and closing of said door for effecting step by step rotation of said frame to bring vertical rows of compartments successively into register with said door, shields normally preventing access to the compartments of all but one horizontal row of compartments, and means for rendering each shield inoperative upon removal of the merchandise from a row of compartments offset from said shield.

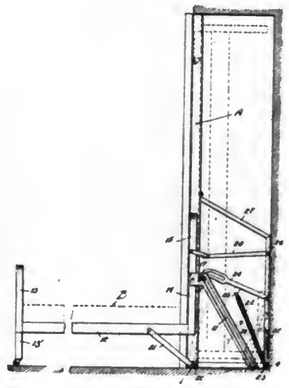


7. A vending machine comprising a casing having a doorway, a door therefor, a rotatable frame mounted in said casing and being provided with a plurality of peripheral compartments, said frame being subject to a force tending to rotate the same, a pair of pawls, stops on said frame engageable by said pawls to prevent rotation thereof, resilient means normally maintaining one pawl in operative and the other pawl in inoperative position, and means on said door engageable with said pawls to move the same simultaneously out of normal position.

1,820,672. RECESS FOLDING BED. LEON MUCHLINSKI, Kenosha, Wis. Filed Sept. 10, 1927. Serial No. 218,690. 4 Claims. (Cl. 5—140.)

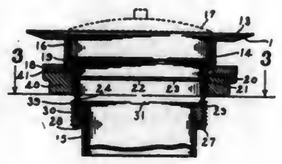
1. In a wall recess bed, a supporting frame structure comprising upright angle irons having flanges projecting laterally for fitting the inner corners of a door frame in a wall recess, a supporting base adapted to rest upon the floor and extending rearwardly from the angle irons and combined guiding and bracing members extending upwardly from the rear portion of the base to the angle irons, and a bed pivoted to said frame structure for movement from a horizontal position extending from said frame structure to a vertical position within said frame structure and guided in said movement by the combined guiding and bracing members of the supporting frame structure.

4. In a wall recess bed, a bed body, a support comprising an outwardly inclined guideway having a short horizontal portion at its upper end, a pin secured to the bed body and slidably engaged in said guideway, a link pivotally connecting the bed body to the support, counterbalancing mechanism comprising a lever pivotally mounted on the support having a longitudinal slot therein for receiving said pin, a spring connected at one end with said lever and at its other end with said support for actuating said lever,



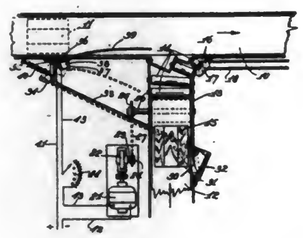
and a curved end portion on said lever having an arcuate slot therein communicative with said longitudinal slot for providing a slidable connection between said bed body and counterbalancing means, to effectively utilize the tension in said spring as the latter approaches its contracted limit, said curved portion being adapted to cam said pin from the horizontal portion of said guideway to the inclined portion thereof during the initial upward rotation of the foot portion of said bed body.

1,820,673. WASTE FITTING FOR SINKS OR THE LIKE. ERASTUS G. OAKLEY, Southport, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn. Filed Nov. 8, 1926. Serial No. 147,045. 6 Claims. (Cl. 285—175.)



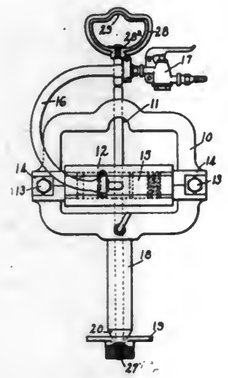
1. In a fitting for sinks or the like, a bushing having an inwardly extending flange adjacent its lower end, a pipe insertable in the upper end of the bushing having an outwardly extending flange of an external diameter larger than the internal diameter of the bushing flange, a packing member disposed between said flanges, and means on the bushing engaging the pipe flange to retain the pipe member within the bushing with the packing member compressed between the flanges.

1,820,674. SAFETY SHUT-OFF DEVICE FOR CONVEYER SYSTEMS. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Mar. 5, 1929. Serial No. 344,165. 11 Claims. (Cl. 198—21.)



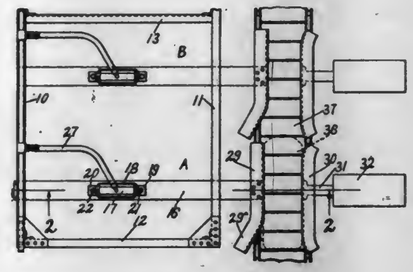
4. A conveyer system including two conveyers operating in transverse directions and having a junction at which loads are fed from one conveyer to the other, the feeding conveyer having a source of power and an electrical circuit for controlling the operation thereof, a normally closed switch connected in said circuit, a load actuated arm mounted adjacent each conveyer and mechanical connections between both arms and the switch arranged and adapted to render the switch operative for opening the circuit only when said arms are conjointly actuated by loads on the respective conveyers, whereby such conjoint actuation serves to break the electrical circuit and arrest the feeding conveyer.

1,820,675. VIBRATOR RAPPING AND DRAWING IRON. GEORGE B. PICKOP, New Haven, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn. Filed Apr. 20, 1929. Serial No. 356,759. 9 Claims. (Cl. 22—185.)



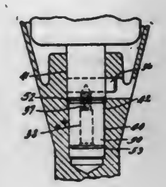
1. A rapping device comprising a shank portion adapted to be attached to a pattern or the like, a vibrator connected to said shank portion to vibrate the same, said shank portion having a tapered end for connection with the pattern and a draw rod movably connected to said device.

1,820,676. APPARATUS FOR VIBRATING OBJECTS. GEORGE B. PICKOP, New Haven, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn. Filed Feb. 7, 1930. Serial No. 426,743. 18 Claims. (Cl. 259—72.)



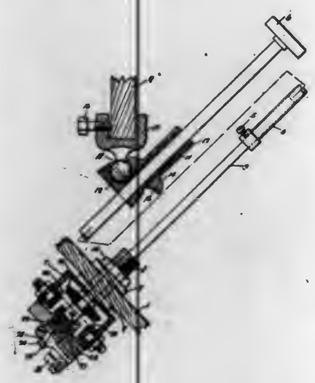
1. In combination, a work contact member, a vibrator attached to said member, means for supporting and transporting the work to be vibrated, and means for effecting contact of said contact member with the work, while the latter is carried by said transporting means, said supporting and transporting means being movable relatively to the contact member to carry the work to and past the latter.

1,820,677. APPARATUS FOR TREATING FOODSTUFFS. THOMAS F. RATAICZAK, Troy, Ohio, assignor to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed Aug. 20, 1926. Serial No. 130,475. 2 Claims. (Cl. 287—119.)



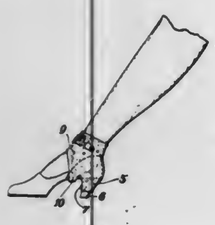
1. In apparatus of the character described, two members to be joined in driving relationship, means for detachably connecting said members in driving relationship, stepped shaft portions on one of said members including outer and inner cylindrical portions of different diameters, the other of said members having stepped socket portions including outer and inner cylindrical socket portions adapted to receive the said stepped cylindrical shaft portions in a close fitting shaft and socket connection, spaced bevels on one of said members, one of said bevels being at the outer end of the stepped portions of the said member and another of said bevels separating stepped portions thereof, the outer cylindrical shaft portion and the outer cylindrical socket portion being of slightly unequal lengths whereby one of said bevels contacts with the other member slightly in advance of the contact of a second bevel with the said other member, the said second bevel contacting before a shaft portion is completely aligned within its cooperating socket portion to provide a successive piloting action of the said bevels on the joining of the said two members.

1,820,678. AUTOMOBILE CONTROL. LINUS E. RUSSELL, Jr., and GEORGE E. PETERS, Springfield, Ohio. Filed June 8, 1928, Serial No. 283,988. Renewed July 16, 1931. 27 Claims. (Cl. 123—179.)



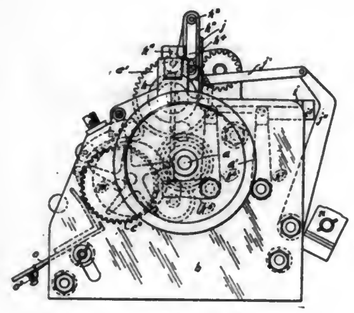
1. Means for operating a starter switch and controlling the fuel supply of an explosive engine, including a reciprocatory rock shaft, an electrical contact pertaining to the starter, a circuit closer member carried by the shaft and engageable with said contact in all positions of revoluble adjustment of the rock shaft, a rock arm connected with the shaft for unison rocking motion, but independent of which the shaft is capable of reciprocatory movement, and an operative connection between said arm and the fuel supply regulator of the engine, said shaft being longitudinally movable to effect the engagement of the circuit closer element and contact independent of the adjustment of the rock arm and further capable of rocking movement to effect the regulation of the fuel supply independent of the reciprocation of said shaft.

1,820,679. SHOE AND ANKLE PROTECTOR. FLORENCE SAWYER, Chicago, Ill. Filed July 24, 1929. Serial No. 380,486. 1 Claim. (Cl. 36—72.)



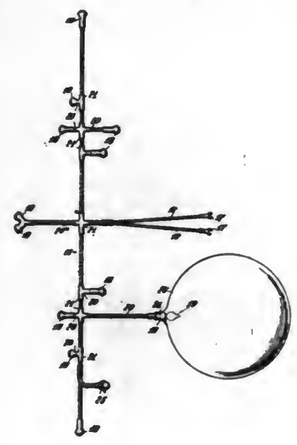
A device of the class described consisting of a body portion adapted to surround the heel and rear portion of a shoe and of the leg of a wearer, a pair of flaps on said body portion adapted to be wrapped about the ankle portion of the leg of a wearer, a strap on said body portion adapted to be arranged underneath the instep of the wearer, and means for releasably securing the flaps in wrapped position, one of said flaps having a crosswise extending opening adapted to receive the end of the other flap, and said second flap having a pair of openings adapted to let the end of the first mentioned flap extend therethrough.

1,820,680. AUTOMATIC FEEDING MECHANISM FOR COUNTERS AND THE LIKE. LOUIS SCHER, Cleveland, Ohio, assignor to The Tickometer Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 11, 1927. Serial No. 182,781. 13 Claims. (Cl. 271—39.)



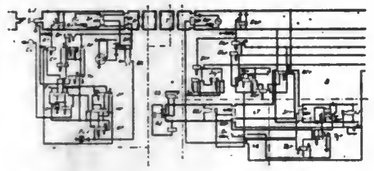
1. In mechanism of the class described the combination with means for feeding the papers, of an adjustably positioned caliper-member mounted closely adjacent to the initial feeding means, and associated mechanism actuated by the feeding means including means urging the feeding means and caliper-member toward each other for automatically maintaining the spaced relation of said parts in compensation for wear, substantially as set forth.

1,820,681. DANCER'S ILLUMINATING PARAPHERNALIA. JANE SCHMALBACH, New York, N. Y. Filed Feb. 19, 1931. Serial No. 516,871. 6 Claims. (Cl. 240—10.)



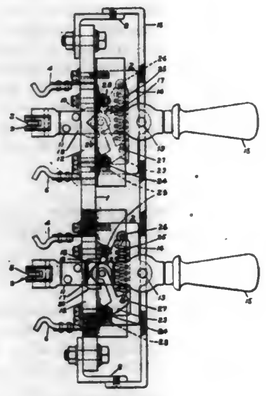
1. Paraphernalia of the character described comprising an elongated flexible body portion provided with a current conductor therein; the body throughout its length being provided with incandescent lamp holding socket members; inflatable rubber balloons secured in air-tight relation on said socket members; the conductor of the body portion having terminals for electrical connection with a source of electric current; and hand controlled switch mechanism secured to said body portion for controlling the electric circuit through the body portion.

1,820,682. TELEPHONE SYSTEM. CHARLES EDWARD STEVENS and ARMAND MAMOR, Antwerp, Belgium, assignors to International Standard Electric Corporation, New York, N. Y. Filed Apr. 24, 1930, Serial No. 446,876, and in Great Britain July 17, 1929. 12 Claims. (Cl. 179—27.)



1. A telephone system comprising a toll exchange, an automatic exchange, a two wire trunk extending between said exchanges, means at said toll exchange for transmitting alternating current impulses over said trunk to said automatic exchange to position automatic switches therein and means whereby said trunk is adapted to be employed as a recording trunk for calls from said automatic exchange to said toll exchange.

1,820,683. SWITCH. FRED G. VON HOORN, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 28, 1926. Serial No. 84,374. 11 Claims. (Cl. 200—6.)



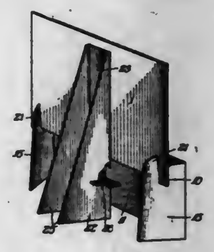
1. In a switch structure, a pivotally mounted contact member, co-operating stationary contact members, and resilient means for normally biasing the pivoted contact member to a neutral position relative to one set of stationary contact members and means associated with said resilient means for retaining the pivoted contact member in engagement with another set of contact members.

1,820,684. PROCESS FOR INCREASING THE APPARENT DENSITY OF ORGANIC COMPOUNDS BEFORE FUSION WITH CAUSTIC ALKALI. JUSTIN F. WAIT, New York, N. Y., assignor to National Aniline & Chemical Co., Inc., a Corporation of New York. Filed Dec. 31, 1924. Serial No. 759,050. 10 Claims. (Cl. 260—109.)

1. The improvement in the process of preparing an organic compound by the fusion with caustic alkali of an intermediate organic compound in the form of a powder, which comprises compressing the powder to remove gas from the interstices between particles thereof, thereby increasing the apparent density of said powder, and mixing the compressed powder with molten caustic alkali.

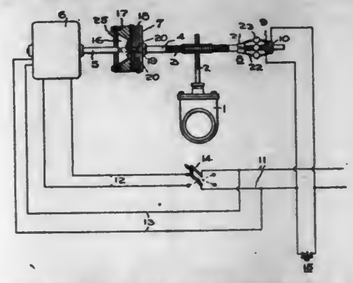
6. The improvement in the process of producing indoxyl which comprises removing moisture and aniline from an alkali-metal salt of phenylglycine in the form of a dry powder by heating it at a temperature above 140° C. for less than 10 minutes, compressing said powder to increase its apparent density, and mixing the compressed salt with a flux containing molten caustic alkali.

1,820,685. ADVERTISING STAND. ROBERT ALLEN WILCOX, Chicago, Ill., assignor to Grier Press, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1929. Serial No. 356,788. 4 Claims. (Cl. 40—146.)



1. In an advertising stand, a pair of front and rear panels, a flap foldably connecting the lower edge of said rear panel to the upper portion of said front panel whereby said panels may be moved from substantially the same plane to parallel planes determined by the width of said flap, a pair of supporting flanges foldably connected to the ends of said front panel whereby they may be folded in flat relation against the back of said front panel and move from such positions to angular positions for setting up the stand, said rear panel having a pair of slots in its lower edge more closely spaced than the folds of said flange adapted to engage the upward ends of said flanges when the panels and flanges are in flat folded relation and serve to guide the movement of said flanges into angular supporting relation when said rear panel is moved away from said front panel, the movement between said panels being limited by the engagement of said flanges with the ends of said slots.

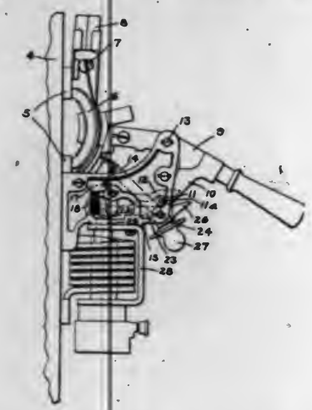
1,820,686. VALVE OPERATING MECHANISM. ALLEN S. WISE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 2, 1924. Serial No. 717,301. 5 Claims. (Cl. 137—139.)



1. A valve-operating mechanism comprising a valve, a gear-wheel secured to the valve stem thereof, a drive shaft cooperatively engaged with said wheel, a motor coupled to said drive shaft and having its armature shaft in coaxial alinement therewith, a friction clutch including a delayed motion device which acts independently of the

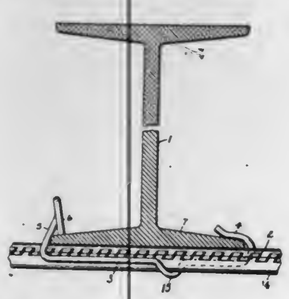
direction of rotation for connecting said motor and drive shaft, a centrifugal switch mounted on said drive shaft, an electrical circuit for connecting said switch and the motor windings, means for energizing said motor to operate said mechanism, and means operative to automatically de-energize said motor.

1,820,687. CIRCUIT BREAKER. WALTER M. AUSTIN and JOHN B. MACNEILL, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1921, Serial No. 442,382. Renewed Nov. 3, 1928. 6 Claims. (Cl. 200—109.)



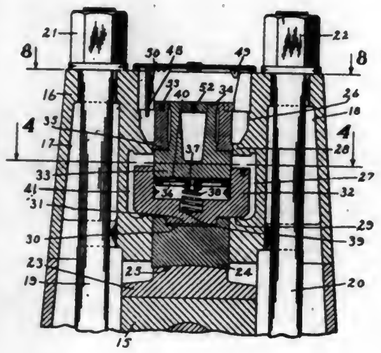
1. A locking device comprising, in combination, a trigger lever pivoted adjacent to one end, a locking lever disposed alongside of the trigger lever in substantial parallelism thereto and pivoted adjacent to its end which is farthest removed from the pivoted end of the trigger lever, an extension on the trigger lever at a point beyond its pivot, a spring interposed between said extension and the free end of the locking lever, a hooked portion formed on the free end of the trigger lever and adapted to engage a third lever, a lug on the locking lever normally lying in the path of a lug on the trigger lever to prevent movement of the trigger lever about its pivot, and an extension beyond the pivoted end of the locking lever in position to be engaged by the said third lever to cause rotative movement of the locking lever and permit the said third lever to be moved into locking engagement with the trigger lever.

1,820,688. LATH ATTACHING CLIP. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed June 6, 1930. Serial No. 459,446. 4 Claims. (Cl. 72—118.)



4. A clip of the class described formed of springable material and comprising a bent body portion having an inwardly facing hook at one end and an inwardly inclined arm at the other end, said arm having an inwardly directed support engaging lug.

1,820,689. PRESSURE REGULATING DEVICE FOR ROLLER MILLS. DAVID R. BOWEN, Ansonia, Conn., assignor, by mesne assignments, to Farrel-Birmingham Company, Incorporated, Ansonia, Conn., a Corporation of Connecticut. Filed Feb. 6, 1926. Serial No. 86,609. 25 Claims. (Cl. 100—47.)



1. In a roller mill, a roll support, rolls mounted in suitable bearings therein, a removable chambered cap for said support, and a hydraulic pressure device mounted in said cap comprising a cylinder operating on the roll bearing and a ram cooperating with the cylinder, the cap having a top opening communicating with the chamber, of less diameter than the cylinder, and said ram being removable through said opening, the walls of the cap overlying the cylinder and providing means for limiting the movement of the cylinder when the ram is removed.

1,820,690. FLUID CONDENSATION PRODUCT. ARTHUR L. BROWN, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 30, 1921. Serial No. 457,128. 17 Claims. (Cl. 260—4.)

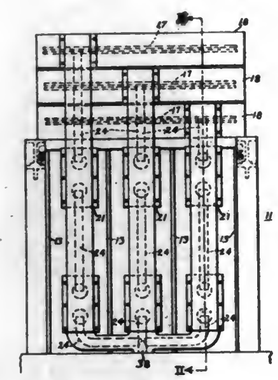
1. A method of forming a liquid condensation product which comprises causing a phenolic substance, China wood oil and formaldehyde to react to form a fluid product and removing water therefrom by vacuum distillation at about 50 to 80° C.

6. A condensation product formed from a mixture comprising about 49% of cresol, a substantial proportion of China wood oil less than the proportion of said cresol, a drier capable of catalyzing the reaction in the proportion of about 2.5% of said cresol and a substance containing an active methylene group, said product being liquid and capable of hardening when heated.

10. A condensation product formed from a mixture comprising a phenolic body, a vegetable drying oil and a substance containing an active methylene group, the proportion of the phenolic body to the vegetable drying oil being in the ratio of about four to one, said product being liquid at ordinary temperatures and capable of hardening when heated.

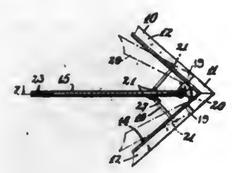
16. A condensation product formed from a mixture comprising a major proportion of cresol, from 15 to 25% of a vegetable drying oil and a substance containing an active methylene group, said product being liquid at ordinary temperatures and capable of being hardened when heated.

1,820,691. SWITCH MECHANISM. JAMES M. BROWN, deceased, Pittsburgh, Pa., by Jane D. Brown, administratrix, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 10, 1927. Serial No. 174,109. 2 Claims. (Cl. 175—298.)



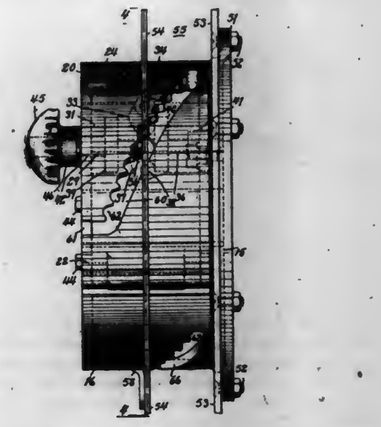
2. A switch structure comprising a cell for enclosing a bodily movable circuit breaker having a disconnect contact projecting therefrom, the cell having an opening therein aligned with the said contact, a main conduit having a main bus bar therein and provided with an opening in a side wall thereof, a branch conduit having an opening registering with that in the cell, a recessed closure for the opening in the branch conduit, a contact terminal supported therein, a branch bus bar connected to the contact terminal and projecting from another opening in the branch conduit and projecting therefrom into engagement with the main bus bar when the branch conduit is in operative position, the said conduit serving to close the said openings in the cell and main conduit and support the contact member in alignment with the said disconnect contact, whereby the latter may engage the contact terminal when the circuit breaker is moved into operative position.

1,820,692. SNOW SHOVEL. JAMES W. COOPER, Haddon Heights, N. J. Filed May 12, 1930. Serial No. 451,601. 5 Claims. (Cl. 37—53.)



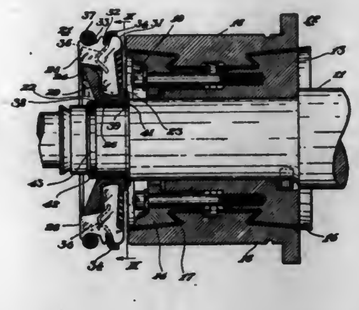
1. A snow shovel comprising a shovel head with a front point member and side forming members hinged on the front point to pivot on the horizontal only, said side forming members diverging rearwards and including a sharp bottom edge and a horizontal top edge, a handle pivotally connected at its front end on the rear of said front point for moving in the vertical only, a connecting brace between each side forming member and said handle for changing the diverging angle of the side forming member upon upward or downward pivoting, and means for adjusting the positions of the ends of the braces connecting with said handle for adjustments of said angle of divergence.

1,820,693. ADJUSTABLE REEL FOR STRIP MATERIAL, ETC. CHARLES A. DREISBACH, New Haven, Conn. Filed May 5, 1930. Serial No. 449,889. 12 Claims. (Cl. 242—78.)



1. In an adjustable reel, the combination with a body provided in its periphery with a plurality of helically-inclined passages; of a pair of complementary guide-flanges, one of which is provided with a plurality of inwardly-extending coupling-fingers entering the helically-inclined passages in the said body; whereby the space between the said complementary flanges may be readily and conveniently varied for the accommodation of strip-material of different widths.

1,820,694. SHORT-CIRCUITING DEVICE. HARRY D. ELSE, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1929. Serial No. 360,108. 15 Claims. (Cl. 172—279.)

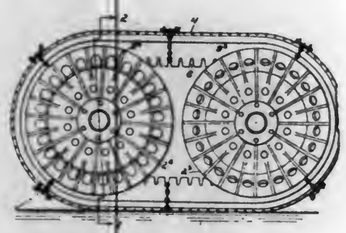


1. A centrifugally-actuable short-circuiting device including a peripherally-recessed hub, a plurality of substantially-radial weight members having their inner ends located in the hub recess, and a rigid guide ring supported by said weight members.

1,820,695. TRACTION DEVICE. ERNEST P. ENOSTROM, Akron, Ohio, assignor to The McNeil Boiler Company, Akron, Ohio, a Corporation of Ohio. Filed June 4, 1928. Serial No. 282,551. 1 Claim. (Cl. 305—8.)

In a traction unit, the combination of a driver and an idler wheel having V-shaped outer grooved peripheries,

the walls of the grooves of the driving wheel having slot-like apertures extending from the vertex of the groove half-way up the sides thereof, a flexible belt over the wheels and seated in the grooves therein, a traction plate upon the outer surface of the belt, said plate having upstanding portions adapted to enter the ground, a tie member pass-



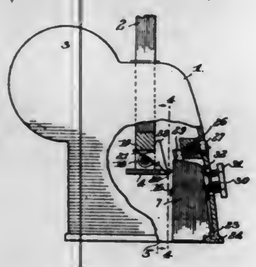
ing around the belt and secured to the plate, said tie member cooperating with said slot-like apertures to assist in non-slipping drive, and means to prevent travel of the traction plate on the belt, comprising notches on the inner periphery of the belt which engage a section of the tie-member.

1,820,696. SUPPORT FOR ELECTRIC HEATING UNITS. FRANK F. FORSHEE, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1927. Serial No. 188,447. 2 Claims. (Cl. 173—311.)



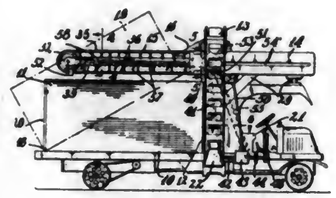
2. A molded refractory insulator for supporting a resistor comprising a body portion provided with an opening for the resistor and lugs disposed on opposite faces thereof, the lugs on the one face being staggered relative to those on the other, said lugs extending laterally of a plane containing the axis of said opening.

1,820,697. STAMP AFFIXING MACHINE. AZEL GAY, Rochester, N. Y., assignor to The Multipost Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 6, 1930. Serial No. 433,579. 10 Claims. (Cl. 216—28.)



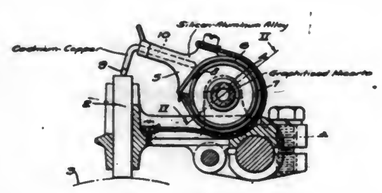
1. In a stamp affixing mechanism, the combination with a movable pressure member, a water reservoir, and a water projecting means actuated by the pressure member and controlled as to the volume of its delivery by the position of the reservoir relatively to the path of movement of the pressure member.

1,820,698. AUTOMATIC ASH TRUCK LOADER. JOSEPH GOODMAN, New York, N. Y. Filed Mar. 22, 1930. Serial No. 438,086. 8 Claims. (Cl. 214—67.)



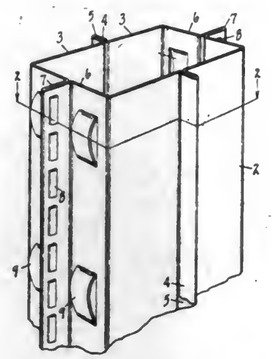
1. A refuse truck, comprising a truck with a load receptacle arranged for tilting upwards at its front end for dumping, a transverse elevator conveyor for lifting refuse from the sides of the truck to a point above the load receptacle, a stationary frame supported on said truck above said receptacle and out of its path of motion during tilting, a longitudinal conveyor having a longitudinal partition and slidable on said frame for moving over said receptacle and to a retracted position, a chute for transferring refuse from said point of discharge of the transverse conveyor onto said longitudinal conveyor, means for moving the longitudinal conveyor to extended and retracted positions, means for operating the longitudinal conveyor in extended position only, said partition of the longitudinal conveyor being formed with pivoted doors operable to discharge at various points along its length into said receptacle, and means for closing all of said doors upon motion of the longitudinal conveyor to its retracted position.

1,820,699. BRUSHHOLDER. HARRY F. HARTMAN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 11, 1929. Serial No. 398,891. 18 Claims. (Cl. 171—324.)



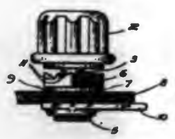
1. In a brushholder, the combination with a supporting shaft and a helical biasing spring, of a brushholder finger of the type having an enlarged hub mounted for movement around said shaft and having an annular recess open at one end for receiving said helical spring, characterized by the fact that the finger is nearly all of a cast silicon alloy of aluminum and is provided with a finger tip of a cadmium alloy of copper having a stem embedded in said cast alloy of aluminum, and characterized further by the fact that the said shaft is of a graphitized molded-composition product having a cloth base.

1,820,700. STRUCTURAL ELEMENT. CHARLES T. HATCH, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed May 12, 1930. Serial No. 451,685. 11 Claims. (Cl. 72—115.)



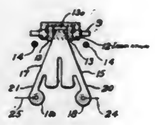
9. A structural device comprising a unit having oppositely projecting flanges, the flanges having projecting lugs, and attaching members adapted to receive said flanges on said studding unit and provided with lugs coacting with the said lugs thereon.

1,820,701. BINDING POST FOR ELECTRICAL INSTRUMENTS. GEORGE V. HETHERINGTON, Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 6, 1929. Serial No. 337,812. 3 Claims. (Cl. 173—259.)



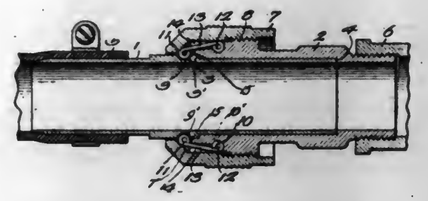
1. In a binding post, the combination with two cooperating members for clamping a conductor between them, one of said members comprising a terminal having a polygonal abutment thereon, of a plurality of grooves of V-shape in the clamping surface of said abutment each extending parallel to one of the sides of said abutment for the reception of said conductor.

1,820,702. ELECTROMAGNETIC SWITCH. CHARLES H. HODGKINS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 25, 1925. Serial No. 52,267. 4 Claims. (Cl. 200—113.)



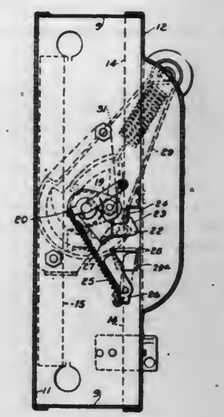
1. In a switch, the combination with a movable switch member and a thermal element for biasing said member, said element comprising bimetallic material provided with a pair of fixed terminals of relatively large thermal capacity and a constricted portion adjacent to each terminal to control the operation of said element.

1,820,703. COUPLING MECHANISM. WALLACE R. HUNGERFORD, Chicago, Ill., assignor, by mesne assignments, to Leonidas D. Woodruff, Chicago, Ill. Filed Aug. 1, 1928. Serial No. 296,671. 3 Claims. (Cl. 285—170.)



1. In a coupling of the character described, the combination of a pair of piping sections having telescopically connected ends and adapted to swivel relatively to one another, one of said sections being provided with an external screw thread and having formed therein a longitudinally extending channel leading to the end of said one section, the other section having formed therein an annular groove, a link for retaining the piping sections in connected relation formed of thin spring metal and comprising a flat central portion, said link being connected at one end thereof to the said one piping section and being arranged so that the central portion is disposed within the channel and its other end projects beyond the end of said one section, and a collar connected by an internal screw thread to the external screw thread on the said one section so that it is shiftable longitudinally by relative rotation thereof and embodying a cam formation at one of its ends adapted to engage the said other end of the link and operative when the collar is screwed into place to force said other link-end into the groove, the channelled part of the said one section being so formed that when the collar is screwed into place the central portion of the link is deflected or distorted outwardly and causes the said other link-end to engage the collar yieldably and hold the same against rotation.

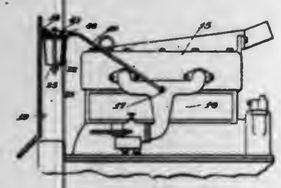
1,820,704. SWITCH MECHANISM. OLIVER S. JENNINGS, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1927. Serial No. 234,380. 4 Claims. (Cl. 200—50.)



1. Switch mechanism comprising a casing, a movable cover for the casing, a switch within the casing movable to open and closed positions, an operating handle for

the switch exterior of the casing, and an interlock for the switch and cover for preventing closing movement of the switch while the door is open comprising a movable latch mounted within the casing and extending exteriorly thereof through an opening in the casing for engaging the handle exteriorly of the casing and movable clear thereof by the cover when the latter is in closed position and means connected to the latch interiorly of the casing for yieldingly holding the latch in latching position.

1,820,705. TOP LUBRICATING SYSTEM. FRANK M. KINCAID, Lima, Ohio, assignor to William R. Bassick, Chicago, Ill. Filed Apr. 14, 1928. Serial No. 269,884. 7 Claims. (Cl. 123—196.)



1. A lubricating system for the cylinders of internal combustion engines, comprising a mounting bracket including a closure, a lubricant container removably secured to said closure, a conduit leading from said closure to the intake manifold of the engine, valved means in said closure between said conduit and the body of lubricant in said container, a filtering element embodied in said valved means, and means for remiering said valved means inversely responsive to the degree of suction in said conduit.

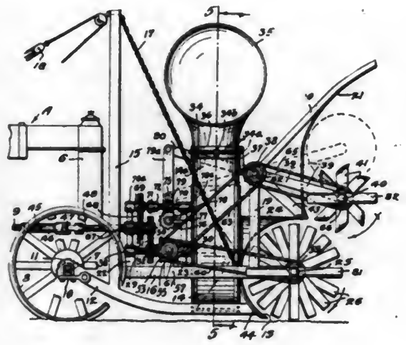
1,820,706. GARMENT HANGER. OTIS E. LAW, Brookfield, Ill., assignor, by direct and mesne assignments, to Pinless Clothes Line Corp., a Corporation of Illinois. Filed Jan. 9, 1928. Serial No. 245,583. 1 Claim. (Cl. 68—3.)



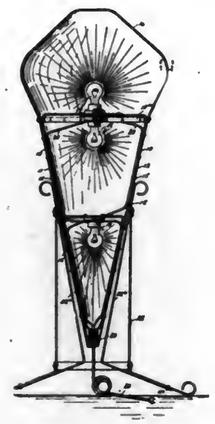
A clothes hanger formed of a plurality of wire links, each bent to provide a central twisted part, a loop at one end and a pair of prongs at the other end; a plurality of substantially rectilinear, imperforate strips of metal crimped at each end to provide an individual socket for the loop and the pair of prongs of said wire links, the wire links when joined by said strips of metal providing a continuous freely foldable hanger for securing garments and fabrics thereto.

1,820,707. SNOWPLOW. ANVER B. MOEN, St. James, and SYVER LIEN, Comfrey, Minn. Filed June 25, 1928. Serial No. 287,944. 11 Claims. (Cl. 37—43.)

4. A snow plow adapted to be mounted on a vehicle having in combination, supporting means adapted to be secured to the forward end of a vehicle, a mold board secured to said supporting means to extend transversely of the vehicle, a shield secured to the upper end of said mold board and projecting upwardly and forwardly therefrom, a rotary ejecting means secured to and communicating with the central portion of said mold board, a lower rotary disintegrator journaled in said frame, working ahead of said mold board, said disintegrator having a series of spaced radially projecting breaker elements adapted to engage, break up and centrally convey to said ejecting means snow and ice adjacent the ground in the path of the plow and an upper rotary disintegrating member mounted in a swingable frame for upwardly and downwardly oscillatory movement ahead of said shield above said lower disintegrating means and adapted to engage, break up and centrally convey snow and ice above said lower disintegrating means downwardly thereto, means for rotating said two disintegrating means and means for oscillating said upper disintegrator upwardly and downwardly.

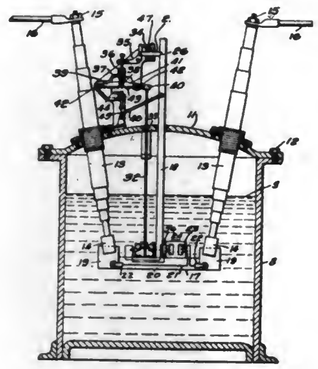


1,820,708. ADVERTISING DISPLAY DEVICE. JOSEPH O'NEILL, Akron, Ohio. Filed Dec. 6, 1929. Serial No. 412,065. 4 Claims. (Cl. 40—126.)



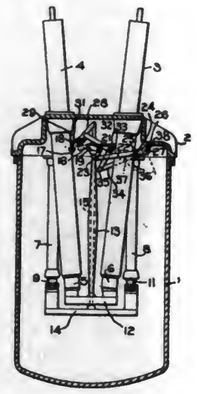
1. An advertising display device comprising a frame shaped as an inverted isosceles triangle with an annulus at the top thereof, one or more electric lamps mounted in said frame, a covering for said frame comprising one or more sheets of translucent cellulose material having wire fabric embedded therein wrapped about and secured to the frame to provide a cone-shaped body, a cap comprising said sheet material shaped to simulate a mass of ice cream in said cone, said cap being removably mounted on the annulus of said frame, said body and cap material being colored to simulate a cone containing ice cream, and leads extending through the bottom of the cone for supplying electricity to said lamps.

1,820,709. CIRCUIT BREAKER. KARL C. RANDALL, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 27, 1929. Serial No. 410,113. 10 Claims. (Cl. 200—116.)



1. The combination with an enclosed circuit breaker having a casing, a movable contact member within the case and a means carried by the casing for releasably retaining the said member in closed position, of a current-responsive means for actuating the releasing means in response to predetermined current conditions, carried by the movable contact member, and so movable thereby, that it is placed in operative relation to the said releasing means when the contact member is in closed position.

1,820,710. HIGH SPEED OIL CIRCUIT BREAKER. REINHOLD RUDENBERG, Berlin-Grunewald, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 9, 1927, Serial No. 182,292, and in Germany Apr. 23, 1926. 6 Claims. (Cl. 200—153.)



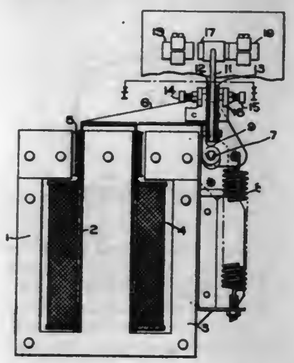
1. In a circuit interrupter, the combination with separate supporting means for main and arcing contact members, independent leverage means for connecting the supporting means to a common transmission mechanism, whereby the operation of the main and arcing contact members occurs in a predetermined sequence of movement and speed by means independent of each other.

1,820,711. VEHICLE WHEEL. WILLIAM D. SARGENT, West Orange, N. J. Filed Oct. 15, 1928. Serial No. 312,566. 9 Claims. (Cl. 301—6.)



1. A vehicle wheel having a malleable metal portion presenting a series of lugs, and a brake flange juxtaposed thereto, said lugs being bent into interlocking engagement with said flange and serving as the sole means to prevent relative circumferential, radial or axial movement.

1,820,712. VOLTAGE REGULATOR. WALTER SCHAELCHLIN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 23, 1927. Serial No. 221,422. 4 Claims. (Cl. 200—110.)

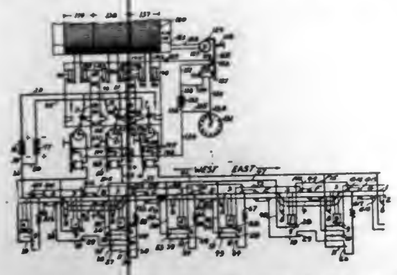


1. In a regulator, the combination with a core member provided with an air gap traversed by magnetic flux of substantially uniform density, two coils connected to be jointly energized in accordance with the regulated quantity, one of said coils being fixedly mounted on said core, the other of said coils being movably mounted to operate entirely within said air gap, a contact member actuated by said movable coil, and means for normally biasing said contact member to a predetermined position.

1,820,713. AUTOMATIC TRAIN CONTROL. PAUL J. SIMMEN, Eden, N. Y. Filed July 17, 1928. Serial No. 293,341. 3 Claims. (Cl. 246—4.)

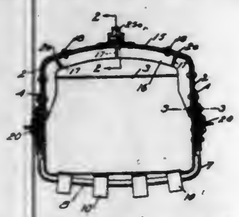
1. A system of train control comprising a trackway divided into sections, each section being divided into blocks, sidings adjacent the ends of the sections, train control means adjacent each block for each direction of train movement, a central station, a plurality of currents of different kinds at the central station, circuits leading from the central station to said train control means, a switch selectively operable to energize the train control means for one direction of train movement with one of said currents at the central office to indicate proceed, and also selectively operable to energize the train control means for the opposite direction of train movement with another of said currents to indicate proceed, track circuits for each block, said track circuits controlling said currents, a locking circuit for the switch to prevent a change in position there-

of when a train is in certain blocks of the section, said locking circuit having a part in common with the circuit leading from the central office, said locking circuit being controlled by the track relays of those blocks remote from



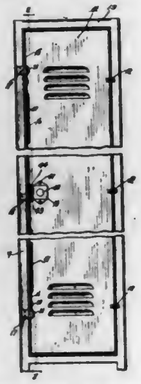
the sidings but released when the train is in an end block for the section adjacent the siding, whereby a change in signals may not be effected while a train is in the mid portion of a section but may be effected when the train approaches one end of said section.

1,820,714. DRAG LINE BUCKET. GEORGE F. THOMPSON, Erie, Pa., assignor to G. H. Williams Company, Erie, Pa., a Corporation of Pennsylvania. Filed June 26, 1928. Serial No. 288,360. 4 Claims. (Cl. 37—135.)



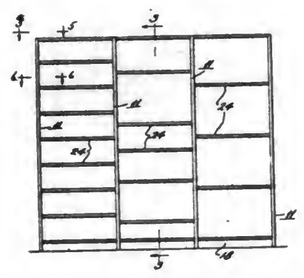
1. A drag line bucket comprising a body and side walls of sheet metal, a bridge joining the side walls formed of cast metal, said bridge being ribbed and extending down the inside of the side walls; a lip plate extending along the bottom and up the sides overlapping the bridge; and rivets extending through the bridge, side and lip plate.

1,820,715. LOCKING DEVICE. WALTER N. VANCE, Chicago Heights, Ill., assignor, by mesne assignments, to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Apr. 2, 1928. Serial No. 266,595. 2 Claims. (Cl. 70—74.)



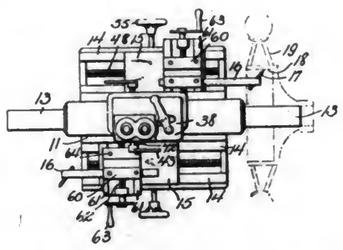
1. The combination with a locker, a door for said locker, and a door frame on said locker in which said door is pivotally mounted, of a bar mounted in vertical position on said door and having parts angularly arranged with respect to the door edge, keepers arranged on the door frame inside of said locker and having angularly arranged slots for receiving the angularly arranged slots for receiving the angularly disposed portions of said bar, closing of the door causing the angularly arranged parts of the bar to move through the angular slots of said keepers and into interengaging relation therewith.

1,820,716. RACK. WALTER N. VANCE, North Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Mar. 15, 1929. Serial No. 347,242. 6 Claims. (Cl. 211—136.)



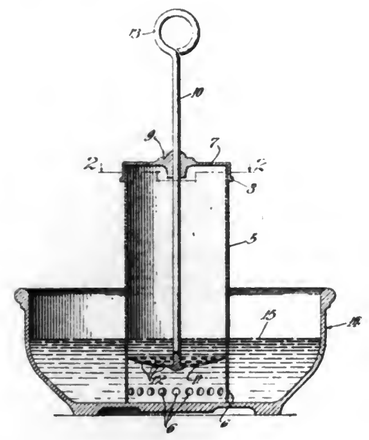
1. In a shelf rack, the combination with side upright members, each comprising intermediate connecting panels and tubular uprights, each said tubular uprights having a series of vertically arranged holes respectively spaced equal distances, of adjustable shelf supporting devices engageable within adjacent holes of said series, each said supporting device comprising a body having at its upper end an arm entering the upper hole of an engaged pair and terminating in a vertically extending lug projecting above the top of said hole and said body having at its bottom a horizontally projecting lug entering the bottom hole of said pair, to provide plural contact of said supporting device with respect to said upright, and shelving supported at its four corners by said supporting devices.

1,820,717. MACHINE FOR TRIMMING METAL PARTS. ALBERT H. WADELL, Newark, N. J. Filed Oct. 11, 1929. Serial No. 398,866. 2 Claims. (Cl. 82—2.)



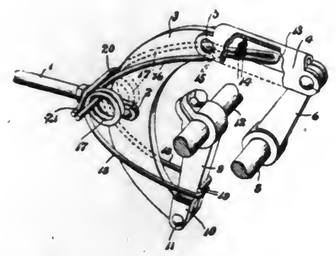
1. A machine for trimming brake drums comprising a housing, a motor in the lower part of the housing, a pair of wheel-supporting spindles, one projecting from each end of the housing, mechanism enclosed in the upper part of the housing above the spindles, said mechanism being connected to the motor and the spindles and including clutches operate the spindles selectively, and carriages mounted to slide at the sides of the casing, tool holders for carrying tools beyond the casing for operation on wheels mounted on the spindles and a speed control device interposed in the said mechanism for controlling the speed of the spindles.

1,820,718. DEVICE FOR WHIPPING CREAM AND SIMILAR USES. AUGUST J. WILLEMS, Chicago, Ill. Filed Aug. 1, 1930. Serial No. 472,215. 2 Claims. (Cl. 259—113.)



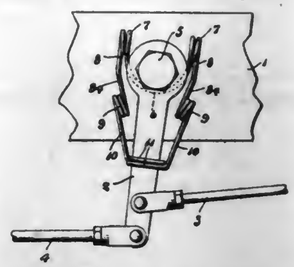
1. A device of the character described, comprising an open-ended tubular body member, said body member having an annular series of apertures near its open end, and a reciprocatory dasher in said tubular body, said dasher comprising a concavo-convex perforated disk-like head, the convex side of said head being disposed toward the open end of the body member and the marginal portion of said head being in a plane relative to the crown thereof, whereby, when the crown coincides with the plane of the open end of the body member said marginal portion of the head is in a plane inwardly from the end of the body member and beyond the annular series of apertures of said body member.

1,820,719. BRAKE RATTLE SILENCER. FLOYD G. WITHROW, Grand Rapids, Mich. Filed Oct. 21, 1929. Serial No. 401,336. 5 Claims. (Cl. 188—205.)



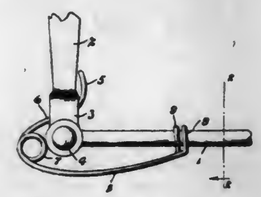
1. A device of the class described, formed from a single length of spring wire bent at its middle to form a close bend for a short distance, thereby providing a narrow terminal portion having wire sections located close together, said sections diverging outwardly, then extending in relatively long sides substantially parallel to each other, said sides being continued in spring coils coiled outwardly away from each other, the coils thence extending in other relatively long side sections spaced apart and parallel to each other and located in a plane at an obtuse angle to said first mentioned relatively long sides and terminating in inturned portions located at an angle of less than 90° to the parts from which they are bent.

1,820,720. SERVICE BRAKE LEVER SILENCER. FLOYD G. WITHROW, Grand Rapids, Mich. Filed Oct. 21, 1929. Serial No. 401,337. 3 Claims. (Cl. 188—205.)



1. A device of the class described, made from a single length of spring material and formed at its middle portion into a U-shaped loop, the ends of said loop being continued and immediately formed into spring coils, sides extending from said coils at an acute angle to the plane of the loop, additional spring coils formed intermediate the ends of said sides, horizontal sections turned inwardly and lying alongside each other from the ends, of said sides, each of said sections at its end being bent at right angles to provide a terminal lip, for the purposes described.

1,820,721. BRAKE ROD ANTIRATTLER. FLOYD G. WITHROW, Grand Rapids, Mich. Filed Oct. 21, 1929. Serial No. 401,339. 3 Claims. (Cl. 188—205.)



1. In combination with a rod, an arm having a forked end, said forked end of the arm having a pivotal connection to an end of the rod, and a silencer device formed of spring material passing at one end through the fork of said arm and bearing against said arm and against the joint between said arm and rod and then extending alongside the rod for a distance, and means on the other end of said device to detachably connect with said rod.

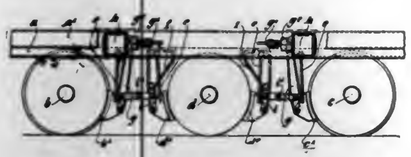
1,820,722. PROCESS OF SOLIDIFYING LAYERS OF GROUND AND SIMILAR MASSES. CARL ZEMLIN, Berlin-Pankow, Germany, assignor to Siemens-Bauunion, G. m. b. H. Kommanditgesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 13, 1930, Serial No. 435,665, and in Germany Apr. 17, 1929. 2 Claims. (Cl. 61—36.)

1. The process of solidifying masses containing silica, which consists in introducing an aqueous solution of hydrofluoric acid.

1,820,723. BRAKE RIGGING. ROBERT G. ANDERSON, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1929. Serial No. 412,990. 1 Claim. (Cl. 188—33.)

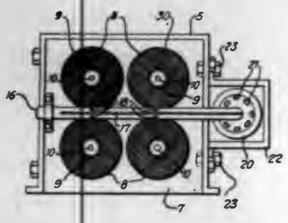
Brake mechanism for a three axle railway truck having three wheels at each side thereof comprising a plurality

of brake blocks intermediate adjacent wheels at one side of the truck, means to suspend two of the blocks upon opposite sides of the intermediate wheel to be moved into engagement therewith, levers carrying the other blocks pivotally for movement into engagement with the



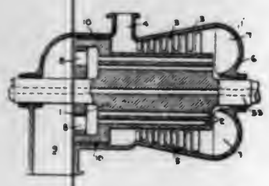
outer wheels, means to apply braking forces to the other ends of the last named levers, and means to apply substantially one third of the braking force applied to the last named levers to the brake blocks adjacent the intermediate wheels.

1,820,724. SELF RELIGHTING PILOT LIGHT FOR GAS BURNERS. HARRY A. ATWATER, Kansas City, Mo. Filed Aug. 26, 1929. Serial No. 388,445. 4 Claims. (Cl. 158—115.)



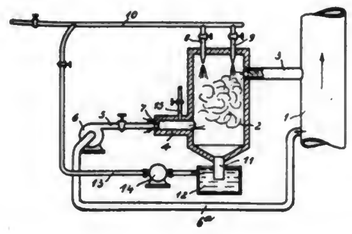
4. A pilot lighting device for gas burners comprising a tube provided with a pilot flame orifice and with a flame propagating structure extending from said orifice to a point remote therefrom, a hood structure shielding the outer end of the said flame propagating structure, and flaring in the direction of said orifice, and an air premixing device associated with the tube adjacent to said hood structure.

1,820,725. ELASTIC FLUID TURBINE. RICHARD WILLIAM BAILEY, Altrincham, England, assignor, by mesne assignments, to Associated Electrical Industries, Ltd., of England. Filed Dec. 15, 1927, Serial No. 240,240, and in Great Britian Dec. 17, 1926. 5 Claims. (Cl. 60—73.)



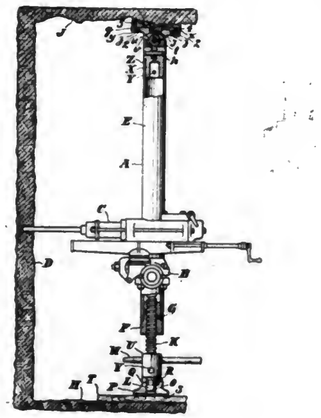
5. In a high temperature elastic fluid turbine, a casing, a rotor, cooperating blading portions carried by said casing and rotor and adapted to partially expand the motive fluid flowing therethrough, a passage extending longitudinally through said rotor, and means for conveying said partially expanded motive fluid through said passage for cooling said rotor.

1,820,726. HUMIDIFYING GAS PRIOR TO PURIFYING IT. HELMUT BAYHA, Berlin-Charlottenburg, CARL HAHN, Berlin-Siemensstadt, and OSCAR HEYMANN, Berlin-Wilmersdorf, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed July 23, 1929, Serial No. 380,309, and in Germany June 1, 1929. 3 Claims. (Cl. 261—115.)



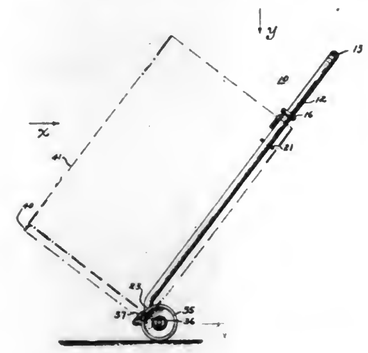
1. In a gas purification process, in particular of the electrical type, the process of increasing the relative humidity of gases to be purified by the introduction of steam into the gases, which consists in introducing into the gaseous combustion products of a gas flame, burning in a receptacle and fed with a portion of the gas under treatment, a liquid, such as water, and conducting the steam thus generated into the gases to be purified.

1,820,727. DRILL COLUMN. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 11, 1928. Serial No. 369,186. 1 Claim. (Cl. 248—30.)



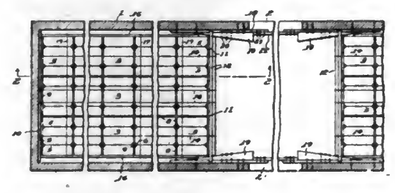
A device of the character described comprising a support, a bearing secured to the support, a head, a link interposed between the bearing and the head, tongues on opposite ends of the link, slots in the head and the bearing to receive the tongues, circular apertures in the head, the bearing and the tongues, said apertures in the tongues being larger than the apertures in the head and bearing, pins extending through the head, the bearing and the tongues to pivotally connect the link to the bearing and the head, said pins being disposed perpendicularly with respect to each other to permit of universal pivotal movement of the head relatively to the support, inclined surfaces on the head and the bearing adapted to cooperate with surfaces on the link for limiting the range of oscillatory movement of the head and the link, concave surfaces on each end of the link, and convex surfaces on the bearing and the head bearing against the concave surfaces on each end of the link whereby pressure applied to the device in any position of the head and link will be received by the bearing surfaces and not by the pins.

1,820,728. TRUCK. JOHN G. CALIS, Clifton, N. J. Filed Feb. 21, 1929. Serial No. 341,624. 4 Claims. (Cl. 280—53.)



1. A truck for moving containers comprising, a single piece frame member having parallel side bars uniformly spaced throughout their lengths and a transverse handle bar interconnecting the upper ends of said side bars, an axle for movably supporting said frame, wheels on said axle, the lower ends of said side bars being formed so as to directly grip and positively secure said axle to said frame member, and a unitary retaining member slidably mounted on said side bars, said retaining member having a transverse portion extending between said side bars with loops formed on the ends of said transverse portion, said loops respectively encircling said respective side bars for sliding engagement therewith, and depending catches formed on the free ends of said loops, each of said catches extending parallel with and disposed in close proximity to its respective side bar and cooperating with such side bar for the purpose of engaging and holding a container against such side bar and upon said truck.

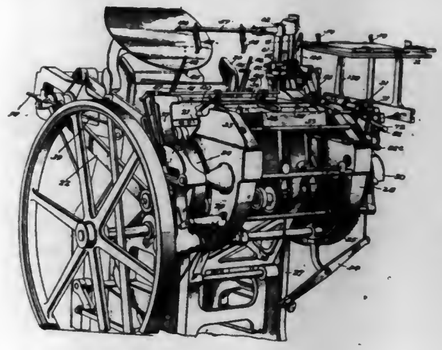
1,820,729. MEANS FOR PREVENTING SHIFTING OF LOADS IN RAILWAY CARS AND THE LIKE. JAMES B. CHALMERS, Gary, Ind., assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio, a Corporation of Ohio. Filed Sept. 8, 1930. Serial No. 480,370. 9 Claims. (Cl. 105—369.)



1. In combination with a railway car or the like having a load of material disposed on its floor adjacent each end thereof, retaining means disposed transversely of the car and respectively engaging said loads, a pair of wedges respectively disposed between one end of each of said retaining means and the adjacent wall of the car operative to maintain said engagement of the retaining means, and locking means operative to prevent displacement of the wedges.

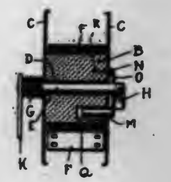
2. In combination with a railway car or the like having a load of material disposed on its floor adjacent each end thereof, retaining means disposed transversely of the car and respectively engaging said loads, a pair of oppositely extending wedges respectively disposed between one end of each of said retaining means and the adjacent wall of the car and operative to maintain said engagement of the retaining means, and locking means disposed between and in operative engagement with both of said wedges.

1,820,730. SHEET DELIVERING DEVICE. EDWARD CHESHIRE, St. Petersburg, Fla. Filed Apr. 30, 1925. Serial No. 26,972. Renewed Feb. 11, 1927. 30 Claims. (Cl. 101—287.)



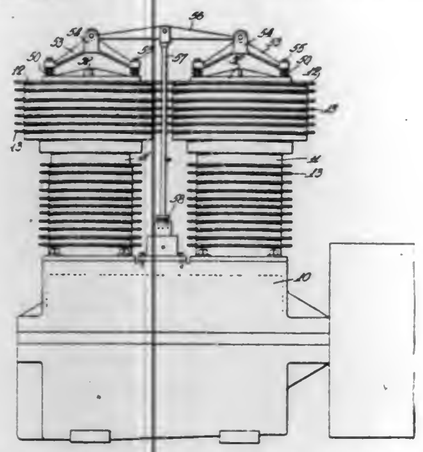
1. In a sheet delivery device for platen presses, means for moving the printed sheet from its position flat on the platen to a suspended position accessible for removal, and a gripping device for grasping the sheet in such suspended position and moving it to a place of deposition, said gripping device being movable substantially in the line of suspension of the sheet, and means for adjusting the extent of movement of said gripping device in such line.

1,820,731. MOTION PICTURE REWINDING MECHANISM. MAX DAINOW, West New York, N. J. Filed Dec. 6, 1929. Serial No. 412,132. 2 Claims. (Cl. 242—55.)



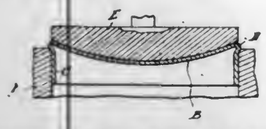
1. A device for winding or unwinding a motion picture film comprising a reel having an opening therein, a pin extending through said opening so that said reel can be freely turned on said pin, said pin having a stop pivotally connected to the outer end thereof, a crank-handle which is pivotally connected to said reel at a point which is offset with respect to said opening, said crank-handle having an arm having an opening through which said stop is adapted to pass when said stop is parallel to said pin, said reel having an additional recess which the end of said crank-handle is adapted to enter when said crank-handle is moved to the inoperative position, the arm of said crank-handle being between said stop and the adjacent face of the reel when said crank-handle is in the inoperative and said stop is in the operative position.

1,820,732. COMPRESSOR. PAUL H. DAVEY, Kent, Ohio, assignor, by direct and mesne assignments, to Davey Development Company, Kent, Ohio, a Corporation of Ohio. Filed Feb. 9, 1929. Serial No. 338,649. 8 Claims. (Cl. 230—31.)



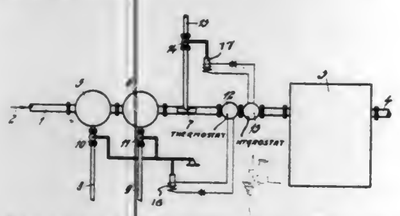
1. A compressor including a piston, a cylinder, a cylinder head formed with a central exhaust and an annular intake surrounding the exhaust and concentric annular plate intake and exhaust valves, in combination with a plurality of equally spaced knock out rods each having one end adjacent the intake annular valve and slidably mounted in and projecting outside the cylinder head for external operation.

1,820,733. MILK CAN AND METHOD OF FORMING SAME. DUNCAN J. FAHLMAN, Detroit, Mich., assignor to Buhl Stamping Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 29, 1928. Serial No. 315,875. 5 Claims. (Cl. 113—112.)



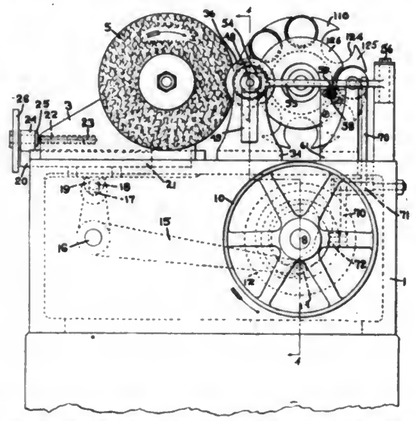
1. In the manufacture of cans having a cylindrical body and a bottom provided with a cylindrical flange fitting within said body, the steps of first forming the bottom and the flange with a connecting annular portion rounding radially outward beyond the outside diameter of the flange and of then compressing said annular rounding portion radially inward thereby deflecting the same axially upward to fill up the corner between said bottom and body.

1,820,734. GAS PURIFYING PLANT. WILHELM FELDMANN, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Aug. 5, 1929, Serial No. 383,742, and in Germany Jan. 9, 1929. 3 Claims. (Cl. 183—7.)



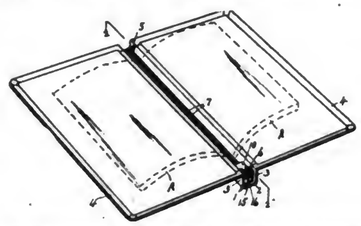
1. In an apparatus for purifying, particularly electrically, furnace gases, in combination, a precipitation chamber, a gas supply pipe to said chamber, a gas discharge pipe from said chamber, and devices located in said gas supply pipe for varying the temperature and humidity of the gases, and temperature and humidity responsive means for respectively controlling said devices for maintaining said gases at a given temperature and humidity.

1,820,735. GRINDING MACHINE. WARREN F. FRASER, Westboro, Mass. Filed Sept. 13, 1926. Serial No. 134,957. 5 Claims. (Cl. 51—215.)



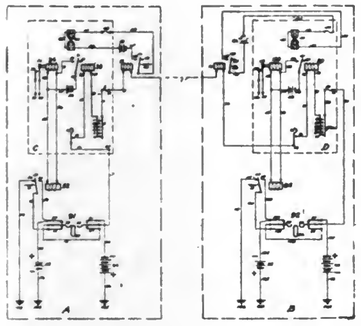
4. A grinding machine comprising a rotatably mounted grinding wheel, a work receiving turret having spaced undercut arms arranged to hold a multiplicity of duplicate work pieces in the turret, said work pieces being insertable axially between the adjacent arms, means to intermittently turn the turret and thereby successively present work pieces in the grinding zone, means for lifting a work piece from contact with the turret arms and centering and rotating it during the grinding operation, mechanism for releasing the work from said centering and rotating means for reception again by the turret, supporting means located near a work piece in the turret to receive the work, and a device actuated in timed relation with the turret movement to eject each finished work piece axially from the turret onto the support when the work has reached a predetermined position.

1,820,736. TEMPORARY BINDER FOR PAMPHLETS AND OTHER FOLDED ARTICLES. HENRY J. GAYLORD, Syracuse, N. Y. Filed Nov. 15, 1930. Serial No. 495,912. 2 Claims. (Cl. 129—38.)



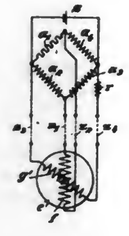
1. In a temporary binder for pamphlets and other folded articles, a channel-bar adapted to receive the folded edges of said articles, a lock-bar hinged at one end to one end of the channel-bar and adapted to swing into and out of the channel and adapted to enter the fold of an article to hold the fold in the channel, an angular lock-plate hinged adjacent its angle to the other end of the channel-bar and having one end movable to and from a position across said channel directly over the adjacent end of the lock-bar, and a key-controlled detent for engaging the other end of the lock-plate for holding the latter in its locking position.

1,820,737. PRINTING TELEGRAPHY. GEORGE A. GRAHAM, Washington, D. C. Filed Mar. 23, 1929. Serial No. 349,399. 8 Claims. (Cl. 178—4.1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A printing-telegraph system, comprising a plurality of sending-receiving stations; a single line circuit interconnecting said stations and normally open when at rest; control means in said circuit for starting and stopping any one station; and means operable through said line interconnecting circuit and responsive to said control means for starting and stopping other stations in the system.

1,820,738. ARRANGEMENT FOR THE DETERMINATION OF RESISTANCES. HEINZ GRÜSS, Berlin-Staaken, and KURT RAU, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, a German Corporation. Filed Mar. 30, 1928, Serial No. 265,908, and in Germany Apr. 9, 1927. 12 Claims. (Cl. 175—183.)



1. An arrangement for the determination of variations of resistances comprising in combination a Wheatstone bridge including the resistance to be tested in one of the four branches, and an indicating instrument with two crossed coils disposed movably in a magnetic field, electric connections for inserting one of the two crossed coils in the diagonal branch of said bridge, and other electric means for connecting the other of the two crossed coils to the working voltage, an additional resistance of a material sensitive to temperature changes and means for introducing said additional resistance in the circuit of said last-named coil.

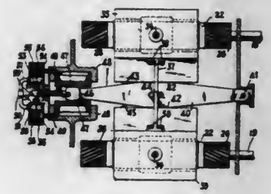
1,820,739. MOTION PICTURE SCREEN FRAME. JOHN THOMAS HECK, Chicago, Ill., assignor, by mesne assignments, to Da-Lite Screen Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed July 23, 1928. Serial No. 294,908. 6 Claims. (Cl. 88—24.)

1. In a device of the kind described, a cinematograph screen secured to and wound about a spring actuated roller, a supporting slat attached to one end of said screen, a bracket mounted upon each end of said slat, a plurality of hinged links provided with spring means to swing said links into aligned position, a base member, said hinged links connected to said base member and said brackets, and



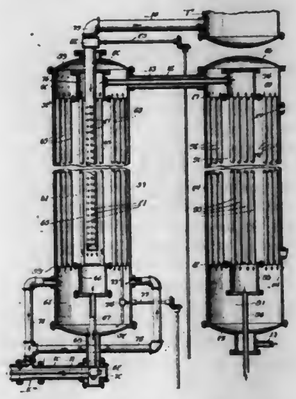
tripping means to releasingly lock the screen in erect, operative position, each of said brackets being pivotally mounted upon said slat for varying the distance between said slat and said base member.

1,820,740. REDUCTION GEAR WITH DYNAMOMETER. HERBERT T. HEAR, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 30, 1930. Serial No. 448,746. 10 Claims. (Cl. 74—7.)



1. The combination with reduction gearing including a pair of driving pinion elements, of frames for supporting the pinion elements, mechanism for restricting tangential translatory movement of the frames and pinions including tension means interposed between and connected to the frames, and means for restraining movement of the connected frame members in the common plane of the pinion element axes.

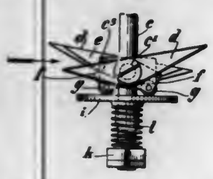
1,820,741. DEPHLEGMATING APPARATUS FOR DISTILLING PLANTS. FRANCIS M. HESS, Chicago, Ill. Original application filed June 7, 1922, Serial No. 566,470. Divided and this application filed Dec. 13, 1926. Serial No. 154,330. 6 Claims. (Cl. 196—139.)



1. In a pressure system of hydrocarbon distillation, a dephlegmator comprising a vertical shell, transverse diaphragms dividing said shell into upper, intermediate

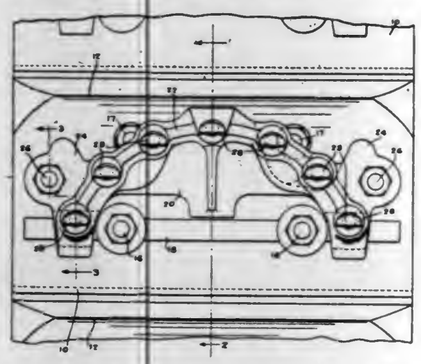
and lower compartments, a series of tubes extending between said diaphragms constituting vapor conduits from the lower to the upper compartment, means for delivering crude material to said intermediate compartment, and a conduit for the upward flow of heated residuum extending through said intermediate compartment.

1,820,742. FAN. EDWARD R. HEWITT, Midvale, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 4, 1929. Serial No. 360,338. 2 Claims. (Cl. 170—162.)



1. A fan shaft having a plurality of radial arms, blades mounted pivotally on the respective arms, each of said blades presenting a greater air surface on the trailing side with respect to its pivotal supports, a spring to resist yieldingly angular movements of the blades on their supports, and means operatively interposed between the blades and the spring whereby the force of the spring is applied to the blades with reduced leverage upon increase of the angularity of the blades.

1,820,743. CREEPER FOR TRACTOR BELTS. VERNON G. HONSTAIN, Minneapolis, Minn. Filed Feb. 9, 1928. Serial No. 253,029. 1 Claim. (Cl. 305—10.)

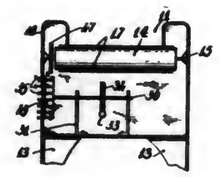


A creeper for endless tractor belts comprising a casting which includes a base member and a curved projection extending laterally across the outer face of the base member, said projection containing a plurality of holes whose inner end portions are enlarged and whose outer end portions taper inwardly, the ends of said base member being provided with transverse depressions which open into the enlarged end portions of the two outside holes in said projection, said depressions being adapted to receive a transverse rib on the underside of a plate of the tractor belt, calks having tapered shanks inserted in the tapered portions of said holes, and means for securing said casting to a plate of the tractor belt.

1,820,744. SOAP MANUFACTURE. CHARLES F. KAEGEBEIN, Hoboken, N. J., assignor to R. T. Vanderbilt Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 31, 1929. Serial No. 336,655. 11 Claims. (Cl. 87—16.)

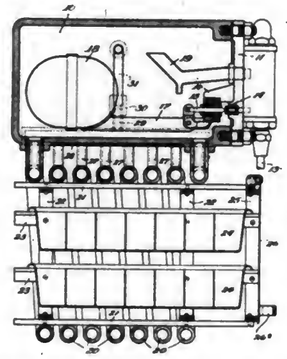
1. Soap comprising a fatty acid compound and 4-hydroxydiphenyl.

1,820,745. ELECTRIC BREAD TOASTER. GUSTAV KATER, New York, N. Y. Filed Jan. 10, 1929. Serial No. 331,654. 1 Claim. (Cl. 74—7.)



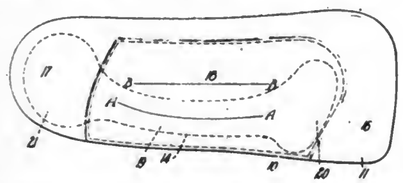
In a device of the class described, a casing, an endless conveyor therein, a gear adjacent an opening in the casing and fixed upon a driver shaft, another gear meshing with said gear and connected for moving said conveyor, the gear teeth of said first gear being slidably mounted so as to be movable to a position out of mesh with the teeth of said second gear, and rods with handles attached on the movable gear teeth and extending thru said opening so that the speed of the conveyor may be adjusted from the exterior of the casing by movements of said handles.

1,820,746. CHILLING UNIT. JOHN J. KORENCHAN, Chicago, Ill. Filed June 29, 1929. Serial No. 374,828. 16 Claims. (Cl. 62—126.)



6. A chilling unit comprising a refrigerant boiler, a series of coils formed from a single length of tube, conduit means communicating with the upper end of each coil and with said boiler and means adapted to supply liquid refrigerant to said coils.

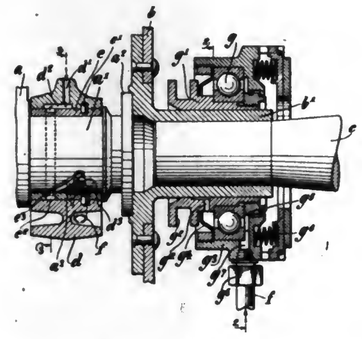
1,820,747. ARCH SUPPORT. ARTHUR F. KRAUSZ, Boston, Mass. Filed Dec. 6, 1930. Serial No. 500,521. 1 Claim. (Cl. 36—71.)



An arch support for a shoe having, in combination, a heel portion, a front end portion and an intermediate portion, the said support being of a contour to approximately fit within a shoe, the intermediate portion being arched longitudinally thereof, said arch support embodying an upper and a lower layer of soft sheet material, a cushion of soft material interposed between said layers,

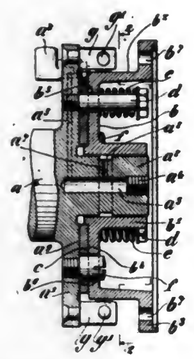
and a relatively narrow strip of resilient material interposed between said cushion and lower layer extending longitudinally of said arch support and arched to provide a resilient support for the instep of a human foot, the front end of said strip terminating in a laterally widened portion with an arcuate contour with the central portion thereof curved upwardly and adapted when in use to project beneath and support the metatarsal bones of the foot.

1,820,748. LUBRICATING DEVICE FOR CLUTCH THROW OUT BEARINGS. BRUNO LOEFFLER, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,080. 4 Claims. (Cl. 184—7.)



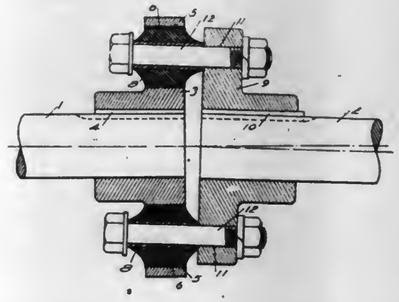
1. In combination with a crank shaft and a clutch driven thereby, a yoke actuated sleeve, a clutch throw out bearing carried by the sleeve, a bearing support for the shaft, a source of lubricant under pressure carried by the bearing support and communicating with the shaft, an offset groove in the shaft communicating with the source, a second duct in the bearing support communicating with the last named groove, a flexible conduit connecting the second duct with the throw out bearing, a duct in the sleeve communicating between the inner periphery thereof and the bearing, and a second flexible conduit communicating with the bearing at a desired oil level therein to carry off lubricant therefrom.

1,820,749. TORQUE DAMPER. BRUNO LOEFFLER, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 28, 1930. Serial No. 432,035. 7 Claims. (Cl. 64—100.)



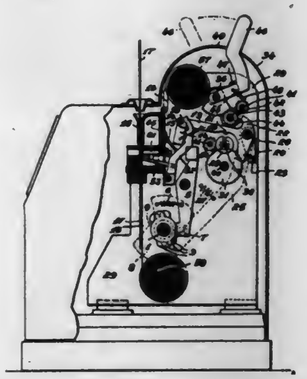
1. A power transmitting device comprising a plate having a hub co-axial therewith, a spider journalled on the hub and rotatable with respect thereto, a cylindrical flange on the spider, bolts on the plate extending parallel to the axis thereof, and to a plane adjacent the plane of the end of the cylindrical flange distant from the plate, enlarged apertures in the spider through which the bolts extend, a friction disc between the plate and spider, and low rate springs seated by the bolts to urge the plate and spider together.

1,820,750. FLEXIBLE COUPLING. HUGH C. LORD, Erie, Pa. Filed Mar. 28, 1928. Serial No. 265,279. 9 Claims. (Cl. 64—96.)



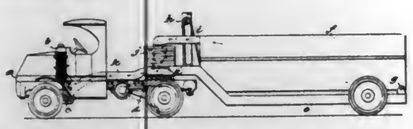
1. In a flexible coupling, the combination of two rotative shafts comprising an off-center joint having its outer member fixed with one shaft and its inner member fixed with the other shaft, and a rubber wall under initial tension between the outer and inner members.

1,820,751. STAMPING APPARATUS FOR REGISTRATION OF ANY DESIRED VALUES OF BUSINESS OR WORK OPERATIONS. PAUL MANSEL, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed June 18, 1928, Serial No. 286,127, and in Germany June 22, 1927. 7 Claims. (Cl. 164—112.)



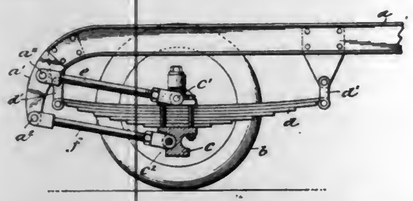
1. Stamping apparatus for registering any desired values of business or work operations on cards or paper strips, comprising a casing, a plurality of perforating punches in said casing, control levers associated with the punches, two setting discs for each of said control levers, means for connecting one of said discs to a clockwork or other automatic counting device to be controlled thereby, and manually operable means connected to the other of said discs.

1,820,752. VENTILATING DEVICE FOR GARBAGE, ASH, AND REFUSE TRUCKS. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 21, 1930. Serial No. 437,797. 1 Claim. (Cl. 280—33.)



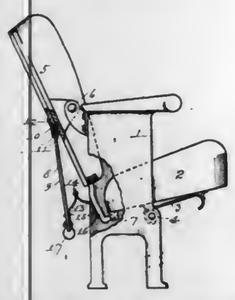
A tractor, a flow creating means thereon, a trailer mounted on the tractor through a fifth wheel connection, a closed body hingedly mounted on the trailer for dumping, an air cleaner on the trailer coaxial with the fifth wheel, a duct between the flow creating means and the cleaner, a universal joint connecting the duct with the cleaner, and a duct removable from the cleaner and communicating between the cleaner and body.

1,820,753. FRONT AXLE STABILIZING DEVICE. PHILIP E. MATTHEWS, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 1, 1929. Serial No. 403,934. 1 Claim. (Cl. 280—106.5.)



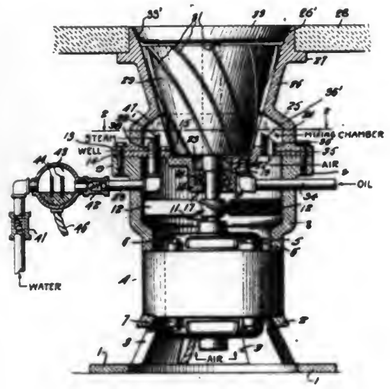
In combination with a vehicle frame and front axle, springs for mounting the axle on the frame, means mounting one of the springs on the frame to permit a degree of floating thereof with respect to the frame, means to mount the other spring on the frame to eliminate, substantially, floating movement of the spring, and parallel radius rods spacing the floating end of the axle from one point of the frame and maintaining it at a desired angle with respect thereto.

1,820,754. CUSHIONING SHIELD FOR RETRACTABLE SEATS. RALPH K. MERRILL, Grand Rapids, Mich. Filed Aug. 20, 1930. Serial No. 476,514. 3 Claims. (Cl. 155—116.)



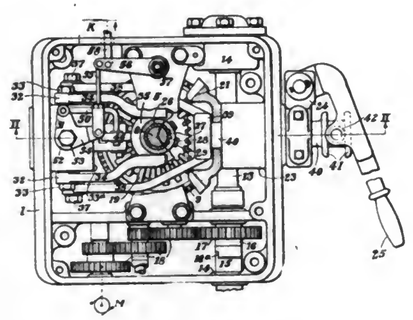
1. In combination with a chair having spaced side frames, and a seat movable forwardly-rearwardly thereon, a cushioning shield for the rearward movement of the seat comprising: a plate hingedly connected adjacent its upper edge with the frames and extending behind the seat; and a spring mounted on one of the hingedly connected parts urging the plate rearwardly from the seat.

1,820,755. METHOD OF PREPARING LIQUID FUEL FOR BURNING. JOSEPH I. MCMULLEN, Bethesda, Md. Filed Mar. 9, 1929. Serial No. 345,825. 4 Claims. (Cl. 158—117.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



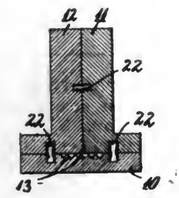
1. A method of burning liquid fuel comprising, collecting a body of fuel and maintaining a constant level thereof, drawing fuel from the surface thereof, mixing the fuel with steam and air, said air being supplied under forced draft, drawing the combustible mixture upwardly in the form of a rotating inverted truncated cone, and ejecting the fuel for burning.

1,820,756. RAILWAY SWITCH OPERATING APPARATUS. WILLIAM C. MCWHIRTER, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 8, 1930. Serial No. 419,290. 13 Claims. (Cl. 246—242.)



1. Railway switch operating apparatus comprising a switch actuating shaft, a plurality of gear wheels mounted for rotation adjacent said shaft, means for selectively connecting said gear wheels with said shaft, a motor for rotating one of said gear wheels, and means including a single manual lever for operating said connecting means and for rotating another of said gear wheels manually.

1,820,757. APPARATUS FOR CASTING BARS FOR BUCKLES. BERNAT MECHLOVITS, New York, N. Y. Filed Dec. 14, 1929. Serial No. 414,006. 6 Claims. (Cl. 22—136.)



1. A mold for casting buckles, consisting of a base section and two adjacent side sections on said base section adapted to be held together and formed with buckle-forming passages including buckle bar portions and melted substance passages to said bar portions, and projections of the side sections in said passages immediately above the buckle bar portions extending only a fractional part of the width of the buckle bar portion so that upon cooling of a casting made in the mold the excess metal may be broken off easily along the reduced portions formed by said projections.

1,820,758. OIL BURNER. HERMAN MILLER, Chicago, Ill., assignor to Burrell Engineering & Construction Company, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1929. Serial No. 380,301. 6 Claims. (Cl. 158—77.)



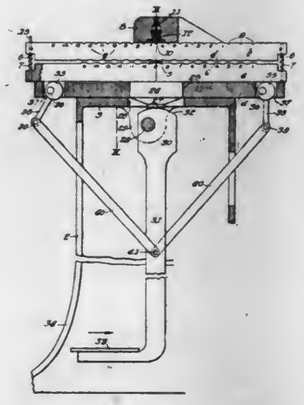
1. An oil burner comprising, in combination, a hollow rotatably mounted shaft, an oil discharge pipe enclosed within said shaft, power means for rotating said shaft, forced air supply means, an atomizer mounted upon said shaft adjacent the discharge end of said oil discharge pipe, an air projector adapted to confine the forced air and terminating in a circular edge portion spaced from said atomizer to provide a circular air opening, said atomizer provided with an inner tubular member and an outer tubular member with an air passage therebetween, said outer tubular member formed to provide an annular oil discharge opening spaced from said inner tubular member.

1,820,759. ARTIFICIAL FISH BAIT. WALTER E. OSTER, Chicago, Ill. Filed Aug. 28, 1930. Serial No. 478,351. 2 Claims. (Cl. 43—42.)



1. In an artificial bait a metal minnow having body and tail portions, and of sufficient thickness for having a bored hole in the tail portion, and a fish hook having a shank with notched surfaces inserted in said hole, and the metal of the body pressed into the notched surfaces of the shank.

1,820,760. EMBOSSING MACHINE. WILLIAM J. PANNIER, Jr., Bellevue, and OSCAR M. PANNIER, Kilbuck Township, Allegheny County, Pa., assignor to Pannier Brothers Stamp Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 26, 1929. Serial No. 350,056. 16 Claims. (Cl. 101—18.)



1. An embossing machine having a lower supporting base and an upper resisting face, a pair of spaced apart stamping bars between the base and said face, and means including a plurality of moving elements for moving and removing one of said bars towards and from the other.

1,820,761. MERCURIC RICINOLEATE. JASON L. RUSSELL and HENRY E. MELTON, Detroit, Mich., assignors to C. E. Jamieson & Company, Detroit, Mich., a Corporation of Michigan. Filed June 10, 1929. Serial No. 369,915. 4 Claims. (Cl. 260—13.)

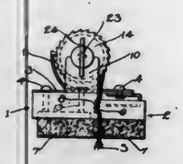
1. As a new composition of matter the substance mercuric ricinoleate.

1,820,762. COMBINATION COLLAR BUTTON AND TIE HOLDER. WILLIAM F. SCHERER, Kansas City, Mo. Filed Aug. 4, 1930. Serial No. 472,863. 2 Claims. (Cl. 24—64.)



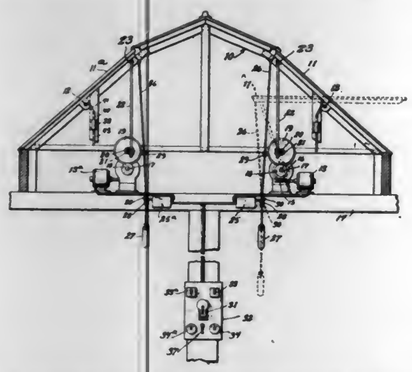
2. A combination collar button and tie fastener comprising a collar button element having a shank portion formed of a strip or flat spring material folded upon itself intermediate its ends and the latter attached to said button element, and a flat tubular tie mounting element formed with tie-attaching projections at one end and a collar engaging flange at its other end, said tie mounting element having a passage therethrough of a size and shape accommodating the said folded strip of spring material and the latter having oppositely bowed portions for adjustable engagement within said passage, said passage through said mounting element being open at both ends to permit projection of said shank entirely through the mounting element and thereby allowing adjustment of said flange into tight fitting relation against the collar.

1,820,763. HAIR WAVING CLAMP. WILLIAM G. SHELTON, St. Louis, Mo. Filed Jan. 21, 1931. Serial No. 510,292. 11 Claims. (Cl. 132—36.1.)



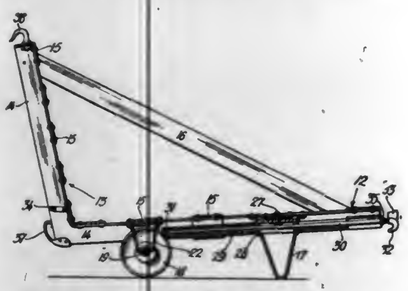
1. A clamp for a hair curling device including a pair of jaw members, one of said members having a longitudinal depression in its upper surface for seating a coil of hair wrapped around a curling rod and the other of said members having a substantially flat upper surface for receiving a heater jaw.

1,820,764. SKYLIGHT. LOUIS ABT, Chicago, Ill., assignor to William Paddor, Chicago, Ill. Filed Aug. 3, 1929. Serial No. 383,326. 8 Claims. (Cl. 268—19.)



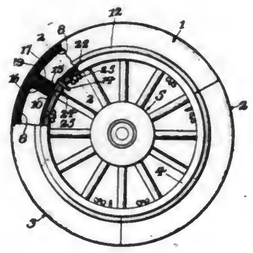
2. A ventilator control comprising motors for opening and closing said ventilators, a relay controlling the motor circuits, a thermostat controlling the relay and having high and low temperature circuit control contacts, adjustable means connected to said ventilators and automatically controlled by the position of the ventilators for switching the relay controlling circuit from the high to low temperature thermostat contacts.

1,820,765. HAND TRUCK. CHARLES ANDERSON, Eltingville, Staten Island, N. Y. Filed Mar. 1, 1929. Serial No. 343,714. 2 Claims. (Cl. 280—33.44.)



1. A hand truck including a body supported upon wheels, a bracket turnably mounted to the underside of said body, a coupling bar slidably mounted in said bracket, stop means for limiting inward and outward movement of said coupling bar to inoperative and operative positions respectively, said coupling bar having a hook at its outer end for engagement with a coupling eye secured to another truck, and a fin adjacent to said hook arranged to engage the body of said other truck to restrain unintentional dislodgment of said hook from said eye.

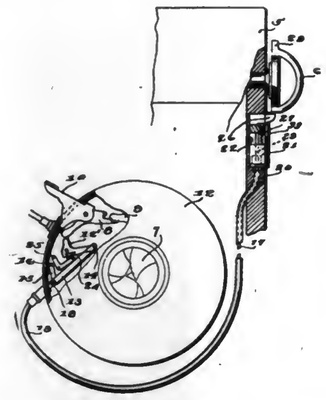
1,820,766. PNEUMATIC TIRE. JOSEPH ARICO, New York, N. Y., assignor of one-fourth to Sectional Tire Corporation, New York, N. Y., a Corporation of New York, and one-fourth to Louis Morosini, New York, N. Y. Filed Jan. 10, 1928. Serial No. 245,671. 2 Claims. (Cl. 152—22.)



1. A pneumatic tire comprising an annulus formed of a series of independently removable, inflatable, abutting sections, each of said sections including an outer shoe formed of an imperforate outer wall, a pair of imperforate end walls and a pair of imperforate side walls, each end terminal of each section being formed with an arcuate row of spaced, dove-tailed sockets, one row being formed in one end of the end wall and the outer portion of one end of each side wall of the section, the other row being formed in the other end of the end wall of the section, the sockets of one row opening at the ends and outer face of the end wall, the sockets of the outer row opening at its ends and outer faces of the end and side walls, each end terminal of each section being formed with an arcuate row of spaced, dove-tailed tongues projecting therefrom and extending in the direction of the length thereof, one row of tongues being integral with one end of and the outer portions of the side walls of the section, the tongues of the other row being integral with the other end of the end wall of the section, the tongues of one row having their outer faces flush with the outer face of the end wall of the section, the tongues of the other row having their outer faces flush with the outer face of the end and side walls of the section, said tongues seating in said sockets for locking the sections in endwise abutting relation and completely closing the outer ends and the outer portions of the sides of the joints between the sections.

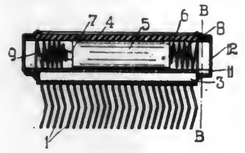
1,820,767. CAMERA. CLAUDE C. ARRASMITH and HARRY D. MARKWELL, Edmonds, Wash. Filed July 17, 1928. Serial No. 293,357. 2 Claims. (Cl. 95—31.)

1. In combination a roll film camera having side walls, a shutter trip, a latch device for retaining the shutter trip against actuation, a winding key having a portion extending through one of said side walls, said side wall having a recess below the winding key of the film roll, a spring pressed plunger vertically movable in the recess and normally urged in an upward direction and having a laterally extending lug provided with a cam surface at one side, a longitudinally movable flexible element having one end arranged in the recess in the path of movement of the plunger and its opposite end operatively connected with the latch device, and a lug on the winding key



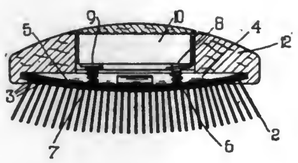
and engageable with the cam surface to depress the spring pressed plunger to render the latch device inoperative upon rotating the winding key a partial revolution.

1,820,768. POCKET COMB. ALBERT ADOLPH SIGMUND BARKER, Southchurch, England. Filed Sept. 8, 1930. Serial No. 480,553. 3 Claims. (Cl. 219—21.)



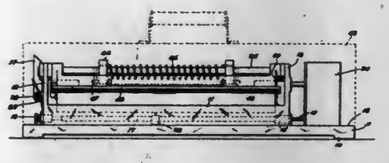
1. A comb comprising in combination a hollow body of insulated material, a pair of comb bars each having groups of prongs mounted thereon, and moulded into said insulating material, a detachable battery within said body, compression springs engaging contacts at each end of said battery, extension parts on the end of each spring each adapted to engage one end of one bar.

1,820,769. ELECTROTHERAPEUTIC HAIRBRUSH. ALBERT ADOLPH SIGMUND BARKER, Southchurch, England, assignor to Dundas Simpson, London, England. Filed Jan. 21, 1931, Serial No. 510,305, and in Great Britain Oct. 28, 1929. 1 Claim. (Cl. 219—21.)



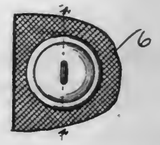
An electro-therapeutic hair brush comprising in combination a non-conductive body portion having a hollow back, said back having a depending flange provided with an inwardly projecting portion forming a recess at its peripheral edge, an arched sheet of rubber held within said recess and supporting a series of metallic bristles mounted therein with retaining heads protruding inwardly therethrough, a pair of arched contact plates adapted to contact with the heads of the bristles and divide them into two groups, a detachable battery mounted within the hollow of the back, and a pair of resilient conductive connecting devices between the separate plates and the battery, said devices also serving for resiliently opposing the elastic inward movement of the bristles and their supports.

1,820,770. IMPACT RECORDER. JOHN B. BASKERVILLE, Roanoke, Va., assignor to Impactograph Corporation, Roanoke, Va., a Corporation of Virginia. Filed May 7, 1928. Serial No. 275,931. 4 Claims. (Cl. 234—1.)



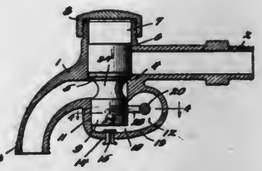
1. In an impact recorder, scribing means and a record sheet holder having a surface adapted to oscillate in contact with the scribing means and provided with a central slot, in combination with a member received in the slot to maintain a portion of a record sheet carried by the surface of the holder out of contact with the scribing means.

1,820,771. BUTTON. GEORGE A. BERING, Berkeley, Calif. Filed May 3, 1930. Serial No. 449,546. 1 Claim. (Cl. 24—111.)



A button construction comprising a front button member having a plurality of openings therein, a base member likewise equipped with a plurality of openings therein, and a flexible metal element adapted to penetrate a garment and serving to connect said front button member and said base member, and a rear button plate positioned over said base member, said rear button plate having a plurality of spaced flanges provided thereon for engaging the front face of said base member.

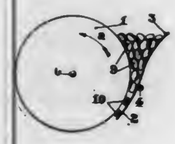
1,820,772. FAUCET. GEORGE A. BLAKE, New Bedford, Mass. Filed June 8, 1929. Serial No. 369,494. 8 Claims. (Cl. 251—133.)



4. In a faucet, the combination of a valve casing, a valve seat therein, a reciprocable valve member associated with said seat, a cushioning chamber in said casing, a piston extending into said cushioning chamber and connected to and movable with said reciprocable valve member, ro-

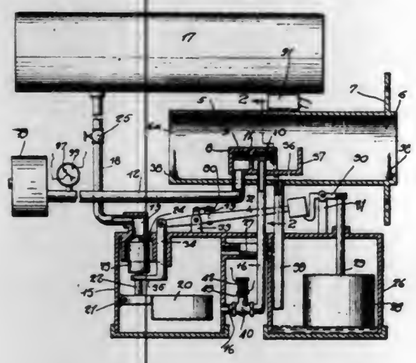
tary means in said cushioning chamber for actuating said valve member, said rotary means extending out of said cushioning chamber through a wall of said valve casing and means, including a shoulder carried by said rotary means within said cushioning chamber and adapted to be forced outwardly against said valve casing by fluid pressure, for preventing leakage out of the cushioning chamber between said rotary means and the valve casing.

1,820,773. GRADING AND SORTING-GRADING APPARATUS. MARCEL BOUQUET, Issoudun, France. Filed May 16, 1929, Serial No. 363,351, and in France May 19, 1928. 7 Claims. (Cl. 209—101.)



1. In grading apparatus of the type described a rotary cylinder and an adjustable shutter located adjacent and at an angle to the wall of said cylinder to form an open channel the lower part of said shutter being concave with respect to the cylinder wall.

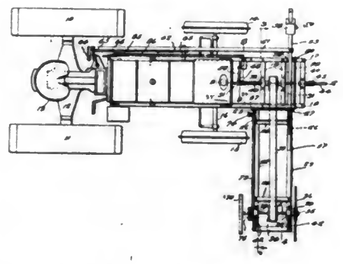
1,820,774. APPARATUS FOR BURNING LIQUID FUEL. CARROL R. BOYCE, Wautoma, Wis. Filed July 8, 1927, Serial No. 204,279. Renewed Jan. 24, 1931. 2 Claims. (Cl. 158—76.)



2. A liquid fuel burner constructed and adapted for insertion in a suitable combustion chamber and consisting of a hollow elongated casting closed at one end and open at the other end, and formed with a transverse partition dividing the casting into two chambers, and formed with a diminished aperture for the passage of an air jet, said casting having openings into the two chambers, for the admission of air under pressure, and the admission of fuel respectively, said openings being located in the base of the casting and having air and fuel supply pipes leading therethrough, the fuel supply pipe terminating at its upper end in line with the opening through the partition, whereby the fuel will be vaporized by the air jet.

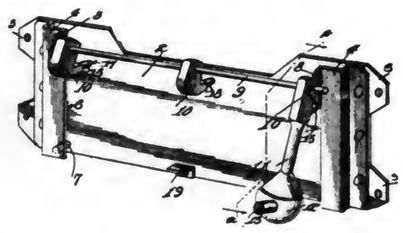
1,820,775. LOG SAWING MACHINE. NOAH A. BOYETTE, Habira, Ga. Filed Dec. 17, 1927. Serial No. 240,886. 1 Claim. (Cl. 143—43.)

In a device of the class described, a main frame for attachment to a tractor, a swinging saw frame mounted on the main frame, a saw operatively mounted on the saw frame, and a gaging device carried by the saw frame and movable transversely of the axis of rotation of the saw, said axis of rotation being parallel with and spaced from



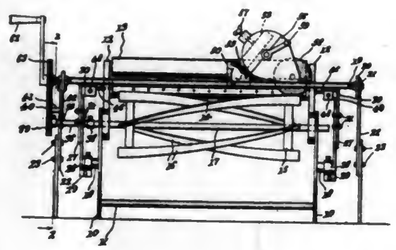
the path of travel of the tractor and of the longitudinal axis of the main frame, and the forward movement of the tractor parallel with the log positioning said gage and saw longitudinally of the log.

1,820,776. CARD HOLDER FOR FREIGHT CARS. AUBREY O. BRADSHAW, Bluefield, W. Va. Filed Aug. 11, 1930. Serial No. 474,490. 7 Claims. (Cl. 40—14.)



1. A device of the character described, comprising means to independently support a card, and means movably mounted on the supporting means for securing the card.

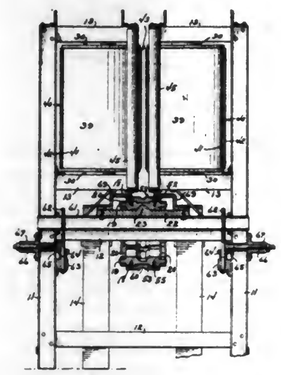
1,820,777. LAWN MOWER GRINDER. VAN LEONARD CALHOUN, Baton Rouge, La. Filed Jan. 31, 1929. Serial No. 336,598. 1 Claim. (Cl. 51—247.)



In a lawn mower sharpener, a pair of track rods, bracket plates mounted across the opposite ends of said rods, bracket arms adapted for attachment to a lawn mower and engaging said rods for supporting the same across one side of the lawn mower, adjustable legs carried by said bracket plates for engaging the ground to support the track rods in a definite position of adjustment, means for adjusting said bracket plates with respect to the fixed blade of the lawn mower, and for detachable con-

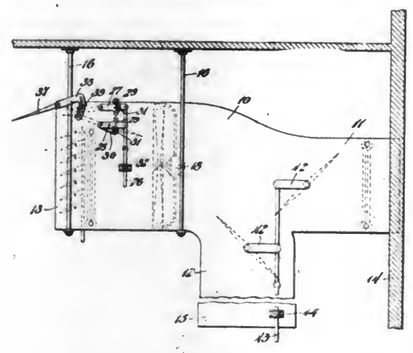
nection with the shaft of the cutting reel of the lawn mower, an extension shaft for connection with the end of said cutting reel shaft, adjustable links between the extension shaft and the adjacent bracket plate, a gear on said extension shaft, a second gear carried by the adjacent bracket plate and adapted to engage the first gear, a feed shaft mounted in said bracket plates between said rods and having a gear thereon meshing with said second gear, a handle for turning the feed shaft, a carriage mounted on said rods and engaging said feed shaft for operation thereby, and a tool grinder mounted on the carriage.

1,820,778. GLASS EDGING MACHINE. JOSEPH CAPELLMAN, Tarentum, Pa. Filed Oct. 26, 1928. Serial No. 315,235. 3 Claims. (Cl. 51—136.)



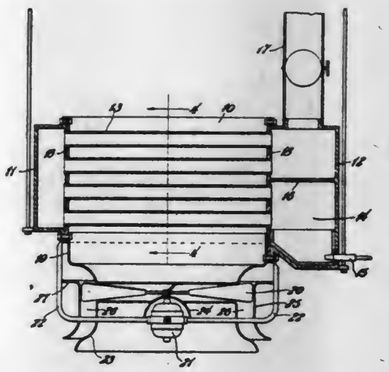
1. In an edging machine, an endless carrier including a plurality of flexibly connected blocks having transversely disposed grooves in one face, means to movably mount the carrier, edging elements mounted upon the other face of the blocks, a backing plate, a rib disposed longitudinally of the backing plate for engagement within the grooves of the blocks to guide the same and hold the edging elements in properly aligned relation, and means to movably support and guide the work in contact with the edging elements.

1,820,779. UNIT HEATER. CLIFFORD C. CARSON, Chicago, Ill. Filed Nov. 25, 1929. Serial No. 409,657. 15 Claims. (Cl. 257—137.)



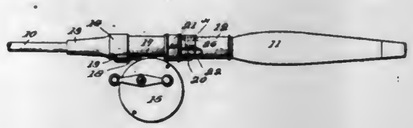
3. A unit heater having provision for heating and ventilating a working space within a building comprising, in combination, a casing having an air discharge opening; a fan within the casing; a heating element within the casing adjacent to the discharge opening; an adjustable nozzle above said heating element arranged to by-pass a portion of the air delivered by said fan around the heater and create a cold air stratum above the discharging heated air; an intake duct extending downwardly from the casing on the intake side of the fan and arranged to draw air from the space to be heated so as to be re-circulated through the heater.

1,820,780. DOWN-DRAFT UNIT HEATER. CLIFFORD C. CARSON, Chicago, Ill. Filed May 31, 1930. Serial No. 458,301. 10 Claims. (Cl. 126—116.)



1. A down-draft unit heater comprising air heating means; a discharge conduit connected to discharge heated air downwardly; and means to discharge an enveloping curtain of air around and above the discharging heated air.

1,820,781. FISHING REEL. CHARLES J. CLARKE, Kingsburg, Calif. Original application filed Nov. 19, 1929, Serial No. 408,341. Divided and this application filed Dec. 18, 1930. Serial No. 503,317. 6 Claims. (Cl. 43—22.)



1. In combination with a reel fastening for fishing rods comprising in part a sliding clamping member, a lock composed of a major segment of a circle of spring material provided with a downwardly extending lug, said rod behind said clamping member being provided with an opening, said lock being applied to said rod and held against verticle displacement thereon through resilient engagement therewith and lateral displacement thereon through engagement of the lock lug with the opening in the rod.

1,820,782. CRAYON OR PENCIL HOLDER. WILLIAM W. CLIMENSON, Honey Brook, Pa. Filed Feb. 18, 1930. Serial No. 429,380. 2 Claims. (Cl. 120—19.)

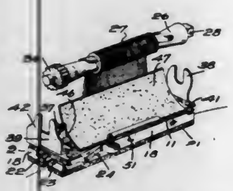
2. In a device of the class described, a holder having a slot formed throughout the length thereof, a sleeve slidably mounted on the holder and having ears extending into the slot, one of said ears adapted to engage a

pencil supported within the holder to secure the pencil to the sleeve, said holder having a notch formed near one



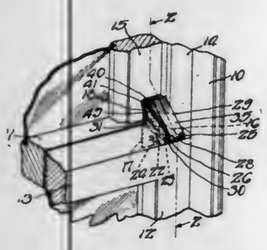
end thereof, and one of said ears adapted to move into the notch to restrict movement of the sleeve longitudinally of the holder.

1,820,783. PROTECTOR. WILLIAM H. H. DAVIS, San Francisco, Calif. Filed Dec. 23, 1929. Serial No. 415,996. 9 Claims. (Cl. 132—33.)



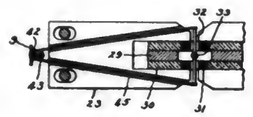
1. In a hair waving appliance, a pair of elongated members, means for clamping opposed edges of said members together in proximity to the scalp with a strand of hair extended between the same, means for holding the hair in wound form in proximity to said members, and means wound with the hair and overlying the space between said members for substantially preventing vapors from passing between said members to the scalp.

1,820,784. WINDOW SASH SNUBBER. ARTHUR E. DEVOL, Tinley Park, Ill., assignor of one-half to Edward Hartwig, Tinley Park, Ill. Filed Aug. 1, 1930. Serial No. 472,404. 3 Claims. (Cl. 292—230.)



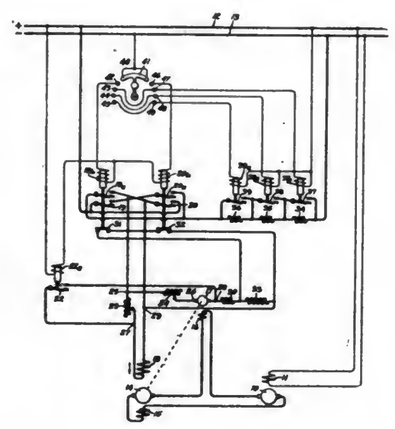
1. In a device of the class described, a pawl, an elastic member in said pawl, said member having a portion projecting from said pawl at one end thereof, means providing detachable connection between said pawl and said elastic member, supporting means for said pawl, said supporting means including a bracket, means providing hinged connection between said pawl and said bracket, and a guard member formed integrally with said bracket, said guard member projecting rightangularly from the main body portion of said bracket, said guard member being disposed adjacent one side of said pawl and extending parallel to said side.

1,820,785. OSCILLOGRAPH GALVANOMETER. GLENN L. DIMMICK, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,622. 8 Claims. (Cl. 171—95.)



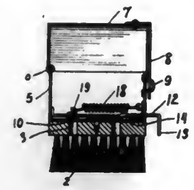
1. An oscillograph galvanometer comprising a magnet, an armature member mounted for movement in the field thereof, an oscillatable member actuated by said armature member, and connecting means between the armature member and oscillatable member arranged to produce a greater movement of the latter than that of the former, the moment of inertia of the armature member being approximately equal to the product of the moment of inertia of the oscillatable member and the square of the ratio of said movements.

1,820,786. MOTOR CONTROL SYSTEM. JOHN EATON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 31, 1929. Serial No. 382,465. 9 Claims. (Cl. 172—239.)



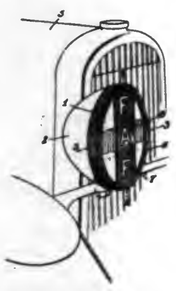
1. In a control system, the combination with a main dynamo electric machine provided with a field winding and a separate source of excitation therefor, of an auxiliary dynamo electric machine connected in circuit with said winding for supplying a component of excitation thereto, and means for disconnecting said winding from said source and said auxiliary machine and for reconnecting said auxiliary machine to said winding to supply current thereto in a direction to oppose the residual magnetism of said main dynamo electric machine.

1,820,787. AUTOMATIC POWDER BRUSH. ALLEN J. EVANS and ROBERT T. RAINES, Atlanta, Ga.; said Evans assignor to said Raines. Filed Apr. 5, 1930. Serial No. 441,956. 1 Claim. (Cl. 15—138.)



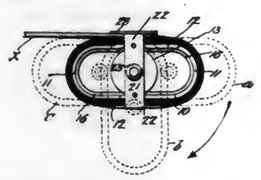
A brush having an apertured head, a container for a cleansing powder fixed on the top of the head having apertures which register with those in the head, an apertured valve plate slidable on the bottom of the container and having a handle end which is passed through the container, spring guides fixed on the container overlying the valve plate, lugs on the plate contacting with the edges of the guides, and spring means between the plate and container for normally holding the apertures of the plate out of register with the apertures in the bottom of the container and in the brush head, and clips fixed to the valve plate and overlying the guides for forcing the guides into tight frictional contact with the valve plate.

1,820,788. AUTOMOBILE IDENTIFICATION DEVICE. FLORA A. FAILING, Scarsdale, N. Y. Filed Dec. 18, 1930. Serial No. 503,313. 4 Claims. (Cl. 40—131.)



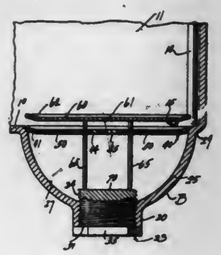
1. An automobile identifying device including a body adapted to overlap part of an automobile light, a panel carried by said body extending across the face of said light and carrying an identifying legend thereon, said body and panel being formed of stretchable and substantially transparent material.

1,820,789. COILING MEANS FOR CONCAVO-CONVEX SPRINGS. HIRAM A. FARRAND, Berlin, N. H., assignor to Hiram A. Farrand, Inc., Berlin, N. H., a Corporation of New Hampshire. Filed Jan. 21, 1927. Serial No. 162,512. 5 Claims. (Cl. 242—84.8.)



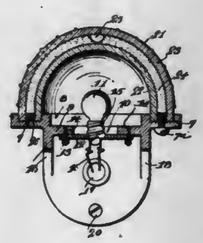
1. In combination with a concavo-convex spring having an arcuate cross-sectional form, the curvature of which is "set" to a definite and predetermined radius; means for reducing said spring to a compact formation having longitudinally curved sections alternating with longitudinally straight sections, said means comprising a forming structure against which the spring is laid in superposed layers, said forming structure comprising relatively spaced curved sections the radius of curvature of each of which is substantially equal to the radius of the cross-sectional curvature of the spring.

1,820,790. STRAINER AND SEDIMENT BOWL FOR GASOLINE TANKS. CLARENCE H. FEEZER, Kilgore, Nebr. Filed Feb. 11, 1929. Serial No. 339,136. 3 Claims. (Cl. 210—165.)



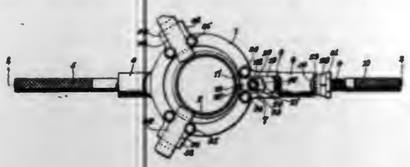
1. In a sediment trap the combination of a settlement receptacle having a sediment receiving compartment therein, sediment entrapment means over the top of the receptacle compartment comprising a fine mesh trapping screen provided with an opening therein sufficient to permit large particles to drop therethrough into the compartment, a drain plug for said receptacle, and valve means cooperating with the drain plug upon and entirely over said screen and said opening to close off communication therethrough to the receptacle compartment upon removal of the drain plug.

1,820,791. ANGLE INDICATOR FOR AIRCRAFT. ROBERT J. FORREST, Port Angeles, Wash. Filed May 3, 1929. Serial No. 360,211. 2 Claims. (Cl. 33—212.)



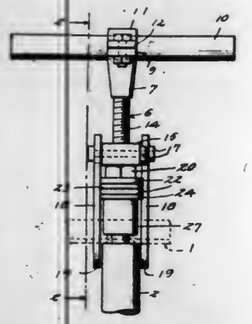
1. An angle indicator for aircraft comprising a flat supporting base for mounting in a horizontal plane having an annular channel in its upper face, a substantially hemispherical double walled hollow spirit level seated by its edges in said channel with said edges in the horizontal and parallel to the horizontal diameter of the hemispherical level, the inner wall of said level being of light transmitting material and the outer wall of substantially transparent material, said outer wall being visually divided by concentric lines grouped in quadrants by bisecting lines at right angles denoting the longitudinal and transverse axes of the aircraft with said concentric lines calibrated to denote angles of inclination from the horizontal planes of said longitudinal and transverse axes, and a level illuminating light radiating element mounted on said supporting base and positioned within the interior of the hollow hemispherical level.

1,820,792. REGROOVING TOOL. FRED H. FUNCHESS, Hanford, Calif., assignor to Budlong & Funchess Motor Products Co., Hanford, Calif., a Firm. Filed Mar. 12, 1930. Serial No. 435,353. 3 Claims. (Cl. 82—4.)



1. A regrooving tool comprising, a rotatable, annular member adapted to encircle a piston, a boss projecting laterally from the annular member and having a hollow, internally threaded outer end portion, a handle for the annular member, said handle being formed with a feed screw in engagement with the threaded portion of the boss, said boss having a cut away portion at its inner end formed with a recess opening through the wall of the hollow portion of the boss at the inner end of said hollow portion, a groove cutter slidably mounted in said recess and having its outer end connected with the feed screw to move longitudinally therewith, and a land cutter adjustably mounted on the groove cutter, said groove cutter and land cutter operating simultaneously upon the rotation of the annular member.

1,820,793. WHEEL TIGHTENER. ANDO Z. GATEWOOD, Temple, Okla. Filed Nov. 1, 1930. Serial No. 492,848. 2 Claims. (Cl. 153—10.)



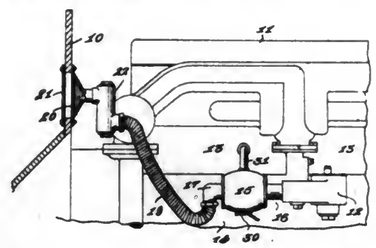
1. A spoke tightening device for vehicle wheels having a felloe and spokes each having a tenon extending through the felloe, comprising a shaft, a sleeve member adapted to position on the felloe around a spoke tenon, a bar having said shaft threadably extended therethrough, arm members carried by said bar and formed to engage over opposite edges of the felloe, an antifriction element surrounding the shaft and interposed between the bar and said sleeve, and means for limiting the movement of the bar on the shaft, said arms being adjustable longitudinally of the bar.

1,820,794. BLUING DEVICE. ROSARIO GIGUERE, Springfield, Mass., assignor of one-half to John Henry Wilson, Hartford, Conn. Filed Oct. 23, 1930. Serial No. 490,770. 10 Claims. (Cl. 68—11.)



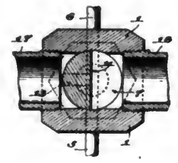
1. A bluing device of the character described including a holder, bluing material carried by the holder and means to which the holder is pivotally attached for agitating the same within a liquid.

1,820,795. AIR CLEANER. RAY F. GORDON and JAMES S. GWALTNEY, Suffolk, Va. Filed Dec. 13, 1929. Serial No. 413,892. 1 Claim. (Cl. 183—75.)



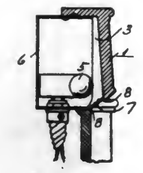
An air cleaner comprising a casing having a pair of inlets and an outlet located in one end thereof and connected to a carburetor, one of said inlets located in the other end of the casing and the other inlet located in the side wall of said casing and in communication with the crank case of an engine, a self closing valve connected to the other inlet located at one end of the casing and in communication with the interior of an automobile body and opened by the suction of the engine and adapted to prevent back pressure from escaping into the body of the automobile when the engine back-fires, groups of arcuately curved baffles in the casing and one group intercepting the incoming air from the automobile body and directing the said air toward the bottom of the casing and the other group directing air from the bottom of the casing toward the outlet, the air and fumes entering the casing from the crank casing of the engine being directed toward the bottom wall of the casing by the upper baffle of each group, said casing having an entrance in the bottom wall thereof with the inner ends of the baffles disposed thereover, and a self closing and outwardly swinging door for said opening and adapted to open under back pressure in the casing and to be opened manually for removing foreign substances clogged in the casing and adhering to the baffles.

1,820,796. FLUSH VALVE. ELBRIDGE G. HADEN, Charlottesville, Va. Filed Jan. 5, 1931. Serial No. 506,778. 1 Claim. (Cl. 251—110.)



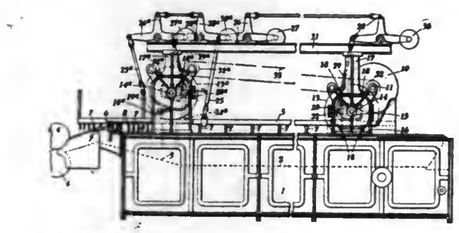
A flush valve comprising a casing having a cylindrical bore, a cylindrical valve member having reduced extensions, caps for said casing, said reduced extensions passing through said caps, said casing having a pair of registering openings, a passageway through the body of said cylindrical valve for establishing communication with said registering openings, said casing having a second pair of registering openings disposed at right angles to the first named pair, said cylindrical valve member having a passage extending transversely with respect to the first named passage for establishing communication between the second named pair of openings, means connected with the reduced portions for rotating the cylindrical valve member to bring either of said registering openings into communication at will, and a drain passage extending from said transverse passage and communicating with one of said first named openings when said transverse passage is in position to afford communication between said second named registering openings.

1,820,797. AISLE LIGHT. GEORGE H. HAMILTON and EDWARD W. CHAPMAN, Grand Rapids, Mich., assignors to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Dec. 26, 1929. Serial No. 416,542. 1 Claim. (Cl. 240—4.)



A theatre seat having a chamber containing a lamp and provided with a downwardly extending opening, and a plate extending across the opening and having light emitting openings therein arranged in rows, the openings in the rows being staggered and arranged close together with the adjacent portions of the openings having a common separating wall, said light emitting openings being tapered outwardly and the plate being provided at the outer ends of the openings with peripheral flanges projecting from the outer face of the plate.

1,820,798. MACHINE FOR WASHING WOOL AND OTHER FIBROUS MATERIALS. THOMAS WHITEHEAD HAWKINS, Ruabon, Wales. Filed Apr. 16, 1928, Serial No. 270,492, and in Great Britain Apr. 20, 1927. 5 Claims. (Cl. 141—5.)



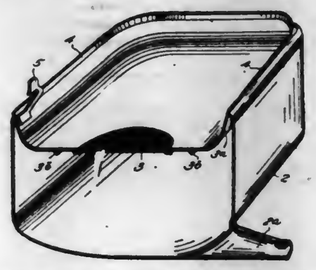
1. A machine for washing wool and other fibrous materials comprising, a bath for containing cleansing liquor and fibrous material, an oscillatory frame having prongs projecting into the liquor to advance the fibrous material therein, frame supporting means, angularly movable guiding members slidably carrying said frame supporting means, rotatable members on said frame supporting means, a cam track fixed in relation to the frame and engaged with said rotatable members, and rotary driving mechanism connected to said angularly movable members and acting thereon to shift said rotatable members and frame supporting means around the cam track to move the frame and its prongs in a succession of rectilinear paths at least one of which is parallel with the bottom of the bath.

1,820,799. ELECTRIC SOLDERING IRON. RAYMOND R. HAZLETT and WILLIAM J. ALEXANDER, Linden, N. J. Filed July 26, 1930. Serial No. 471,015. 5 Claims. (Cl. 219—26.)



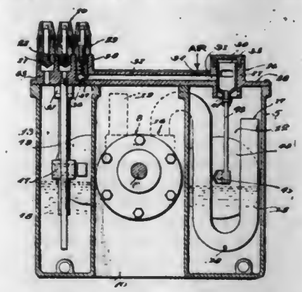
1. In an electric soldering iron, a handle of insulating material, a ferrule fitted to the forward end of the handle, a tubular shank extending forwardly from the ferrule, a hollow metal soldering tip separably connected with the forward end of the shank, an electrical resistance heating unit within the tip, plugs of insulating material within the ends of the tubular shank, electrical conductors supported at their end portions in the plugs and in circuit with the said heating unit, conductor wires extending in the handle and one having its terminal in circuit with one of the said conductors, the other conductor being resilient, and a circuit closing unit comprising a contact disk to which the other one of the conductor wires is connected, the disk having an opening therein, the said resilient conductor extending through said opening and normally out of contact with the wall thereof, and a rod of insulating material shiftably mounted in the handle and inwardly of the contact disk and having an opening into which the free end of the resilient conductor extends, whereby shifting of the rod will effect engagement of the said end of the resilient conductor with the wall of the opening in the contact disk to close the circuit through the heating unit.

1,820,800. METHOD OF STRAINING MILK AND A STRAINER FOR SEPARATING MACHINES. FERNAND HENRARD, Brussels, Belgium, assignor to Societe Anonyme Ecremeuses Melotte, Remicourt, Belgium. Filed Oct. 4, 1929, Serial No. 397,289, and in Belgium Mar. 1, 1929. 3 Claims. (Cl. 210—155.)



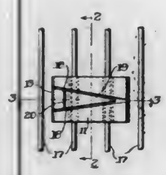
1. A device for straining emulsified milk before being poured into the reservoir of a separator, embodying a receptacle comprising a sieve or strainer, itself serving as the bottom; the external dimensions of said receptacle being substantially the same as those of the reservoir, and one of said dimensions being smaller than the corresponding one of the reservoir to enable, by partially swinging the receptacle, its introduction into the reservoir or its withdrawal therefrom.

1,820,801. OIL BURNER. FRANK E. HERR, Lancaster, Pa. Filed Mar. 17, 1930, Serial No. 436,605, and in Canada Sept. 26, 1929. 5 Claims. (Cl. 158—36.5.)



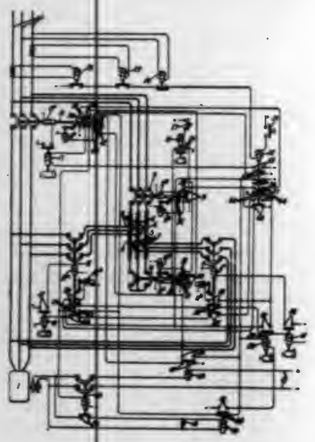
1. A control tank having a partition dividing it into primary and secondary chambers, a cover for the tank serving both chambers in common, a pipe having a relief valve for relieving the secondary chamber of excessive fluid under pressure, and a cross-over passage incorporated in the cover with the inlet of which the pipe is connected, said passage having an outlet discharging into the primary chamber.

1,820,802. BIRD-CAGE FOOD-HOLDER. HARRY H. HILL, Chicago, Ill., assignor of one-half to Gabriel Lipman, Chicago, Ill. Filed Sept. 12, 1929. Serial No. 392,088. 2 Claims. (Cl. 119—18.)



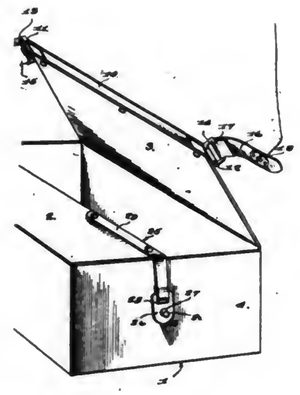
1. A food-holder of the character described, comprising an elastic one-piece metal member having a main body with a pair of outstanding terminal arms at its opposite ends compressible toward one another to allow their introduction between the bars of a bird-cage and normally tending to separate sufficiently to cause them to maintain the holder in position by engagement with the bars of the cage, said main body being slit to provide a tongue joined thereto at its base only near one end of said main body, said main body and tongue being automatically separable upon contraction of said arms and automatically contractible on an article of food between them upon expansion of said arms into bar-engaging relation.

1,820,803. METHOD OF AND APPARATUS FOR STARTING ALTERNATING CURRENT MOTORS. EUGENE L. HOUGH, St. Louis, Mo., assignor to General Electric Company, a Corporation of New York. Filed Jan. 14, 1927. Serial No. 161,194. 5 Claims. (Cl. 172—289.)



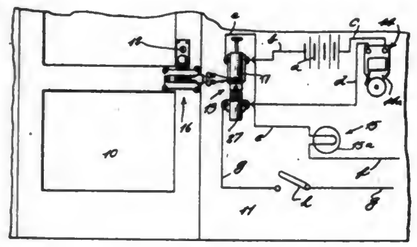
1. In combination, an alternating current source, an alternating current motor, an auto-transformer, a plurality of switching devices for controlling the interconnection of said source, auto-transformer and motor, means for effecting the operation of said devices so that said motor is connected to relatively low voltage taps of said auto-transformer, means for effecting the operation of said devices so that said motor is connected to relatively high voltage taps of said auto-transformer, means responsive to a predetermined condition of said motor for effecting the operation of certain of said devices in such a manner that said motor is connected to said source with a portion of the auto-transformer winding connected in series therewith so that it functions as a series reactor, and means responsive to another predetermined condition of said motor for connecting said motor directly to said source.

1,820,804. BOX CLOSURE. CHARLES E. HUFFMAN, Sutton, Nebr. Filed Oct. 14, 1929. Serial No. 399,550. 3 Claims. (Cl. 229—47.)



1. In combination a box having a two flap lid for closing the top of the box except for a slit at the meeting edges of the flap, a strip secured to the edge of one flap to project over the edge of the other flap and cover the slit between the flaps, members depending from the extremities of said strip and loosely connected therewith to avoid tension being exerted on said members, said members having fastener elements, complementary fastener elements carried by the box ends for detachable engagement with the fastener elements of said depending members, and means carried by one of said flaps and having means for engaging the fastener elements on the ends of the box for holding said box flaps against spreading at the center seam and the bulging of the box ends.

1,820,805. BURGLAR ALARM. GEORGE JAKOPEC, JOHN F. SALLEY, and VINCENT SCHWARZ, Chicago, Ill. Filed Aug. 8, 1929. Serial No. 384,306. 12 Claims. (Cl. 116—80.)

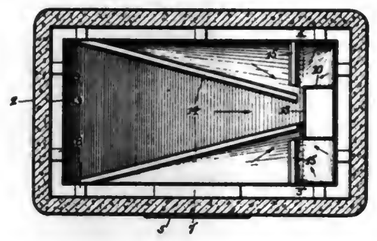


1. Operating mechanism for a burglar alarm comprising devices mounted on a door and separately operable from both sides of the door for placing the operating mechanism in set position, and a control lever operated by said mechanism.

1,820,806. REFRIGERATING APPARATUS. GEORGE A. JEWELL, Wilson, N. C., assignor to Hackney Bros. Body Co., a Corporation of North Carolina. Filed Jan. 30, 1931. Serial No. 512,419. 8 Claims. (Cl. 62—91.5.)

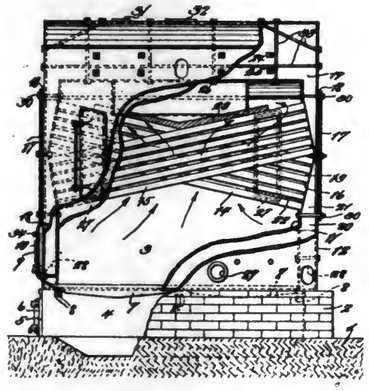
1. In a refrigerating apparatus, a container for articles to be refrigerated and adapted to be contained within a housing in spaced relation to the walls of the latter,

a bunker adapted to contain solid carbon dioxide extending into the container, said bunker having a gas discharge port and further having a gas return port in a



higher plane than the discharge port, and a plurality of deflectors seated on the container and each having an end thereof terminating adjacent and in spaced relation to said return port.

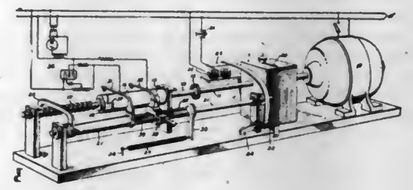
1,820,807. STEAM BOILER. RUSSELL E. JONES, Lebanon, Pa. Filed June 4, 1928. Serial No. 282,613. 2 Claims. (Cl. 122—154.)



1. A boiler including a fire box inner shell and an outer boiler shell provided with a steam chamber above the top wall of the fire box, two groups of water tubes each comprising a plurality of series of water tubes inclined upwardly in both directions from opposite walls of the fire box, the series of one group alternating with the series of the other group, baffles arranged between the lower ends of said lower water tubes and said fire box walls and a V-shaped baffle disposed upon the upper water tubes and corresponding to the central formation of the arrangement of said tubes, said both sets of baffles providing circuitous courses for undulated passage of the heat, and means located centrally between the groups of tubes where they connect with the fire box end plates for mechanically separating a water space between the fire box shell and the outer boiler shell, providing for greater and more efficient circulation.

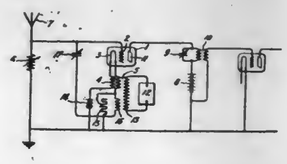
1,820,808. TIME SWITCH. WILLAM K. KEARSLEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 23, 1930. Serial No. 463,207. 8 Claims. (Cl. 200—91.)

1. A time switch comprising an electric motor, a drum rotated by said motor, said drum being provided with a cylindrical conducting surface between its ends, contacts spaced apart lengthwise of and adjacent to said drum, the spacing of said contacts being less than the length of the conducting surface of said drum, means driven by said motor for moving said contacts lengthwise of said drum, and means for rendering the last means active and moving said contacts onto the surface of said drum, whereby



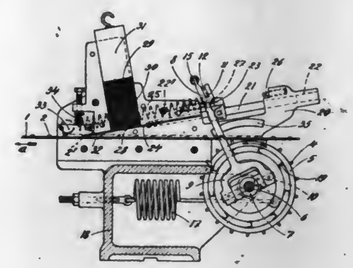
a circuit is momentarily completed through said contacts and conducting surface, said circuit being completed at one contact at one end of the conducting surface and broken at the other contact at the other end of said surface.

1,820,809. ELECTRICAL SYSTEM. EDWARD W. KELLOGG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 25, 1927. Serial No. 178,476. 10 Claims. (Cl. 250—20.)



1. A radio apparatus of the heterodyne type including a detector tube, an input circuit for said tube having a low potential end connected with the cathode of the tube for impressing a signal voltage upon said tube, an output circuit for said tube, means providing a common grounded connection between said output circuit and said low potential end of said input circuit, a source of oscillations, and means coupled with said source and interposed in circuit between the low potential end of the input circuit and said cathode for causing the cathode potential to vary with respect to the low potential end of said input circuit.

1,820,810. FEEDING ARRANGEMENT IN SHARPENING MACHINES FOR RAZOR BLADES. SVEN LARSSON, Sandviken, Sweden. Filed Apr. 13, 1928, Serial No. 269,829, and in Sweden Apr. 14, 1927. 2 Claims. (Cl. 51—76.)



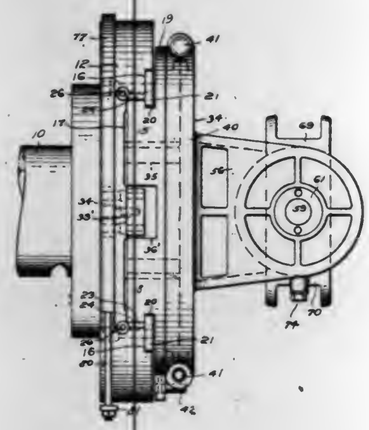
1. A feeding mechanism comprising a movable conveyor, a magazine to contain articles, a piston to displace the articles toward the conveyor, said piston having a cross-piece, a shaft loosely supporting a feed wheel

having means for its rotation by the conveyor, an arm pivoted on the shaft for shifting movement in the plane of the shaft axis and having engagement with the cross-piece, resilient means respectively urging the piston and arm in opposite directions, the resilient means of the arm being more powerful than to hold the piston in a retracted position, arm-engaging means on the wheel to engage and rock the arm against the tension of its resilient means thus yielding to the resilient means of the piston for a movement of the piston to displace an article, and a cam over which the arm rides to shift it on its pivot for disengagement of the arm from said arm-engaging means and a return of the arm and piston to the original position.

1,820,811. ARTIFICIAL MATERIAL AND PROCESS FOR MAKING SAME. LEON LILIENFELD, Vienna, Austria. Filed June 3, 1926. Serial No. 113,582, and in Austria June 20, 1925. 10 Claims. (Cl. 18—54.)

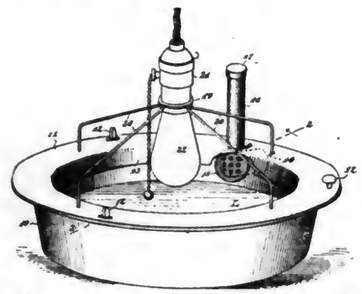
4. The process for manufacturing artificial material which comprises bringing viscose, prepared from an alkali cellulose which has been allowed to mature only from naught to 48 hours, into the form of an artificial material and acting upon it with a strong mineral acid of a strength equivalent to at least 55 per cent. sulphuric acid monohydrate.

1,820,812. WORKHOLDING DEVICE. MORTON LONGNECKER and WILLIAM M. ELKINS, Winchester, Ind., assignors to Overmyer Mould Company, Winchester, Ind., a Corporation of Indiana. Filed Dec. 15, 1930. Serial No. 502,485. 5 Claims. (Cl. 279—5.)



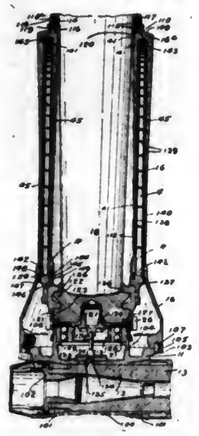
1. A work holding device comprising an attaching plate, a supporting member provided with a central opening and having a recess in its periphery, said supporting member slidably engaging the face of the attaching plate, means to radially adjust the supporting member with relation to the plate, a rotary supporting member having a central pivot to enter the central opening of the radially adjustable supporting member, and provided at its periphery with a recess, a coupling ring having flanges to enter the recesses at the peripheries of said members, means to lock the rotary supporting member to the radially adjustable supporting member, at a selected adjusted rotary position, and work holding means carried by the rotary supporting member.

1,820,813. DEVICE FOR TRAPPING AND EXTERMINATING INSECTS. FREDERICK WILLIAM LOOMIS, Chestnut Hill, Conn. Filed Dec. 4, 1929. Serial No. 411,580. 4 Claims. (Cl. 43—113.)



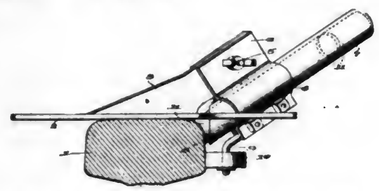
1. In a device of the class described, the combination of an open top receptacle, a bait holder of hollow construction provided with openings positioned on said receptacle, and a tube in communication with the interior of the receptacle in proximity to said bait holder, whereby to optionally induce an inflowing or outflowing current of air with respect to the interior of said receptacle.

1,820,814. SCREW PROPELLER. VICTOR LOUGHEED, Washington, D. C. Filed May 20, 1929. Serial No. 364,536. 15 Claims. (Cl. 170—162.)



1. In a variable pitch propeller, the combination of a hub, radially-mounted angularly-rotatable blades mounted thereon, means within the hub for carrying a liquid, means upon the blade for displacing a portion of said liquid whereby the liquid exerts a centripetal pressure upon said blades counteracting the centrifugal pressure thereof when under revolution.

1,820,815. LUBRICATING DEVICE. THOMAS MANEY, Louisville, Ky. Filed Feb. 29, 1928. Serial No. 258,020. 7 Claims. (Cl. 184—3.)



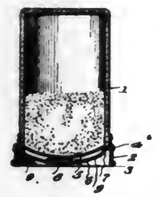
1. A lubricating device of the character described including a handle, a clamp connected with the handle, a guide plate secured to the clamp for overlapping a rail head, and a guide wheel carried by the clamp in position to engage the inner surface of the rail head.

1,820,816. SYNTHETIC RESIN AND METHOD OF MAKING SAME. JAMES MCINTOSH, Norristown, Pa., assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Aug. 12, 1920. Serial No. 403,125. 18 Claims. (Cl. 260—2.)

11. The process of producing a synthetic resin which comprises heating together a phenol, a water-soluble carbohydrate and water in the presence of a catalyst until there is produced an initial condensation product; separating said product; and further heating the same until there results a hard, infusible, insoluble resin.

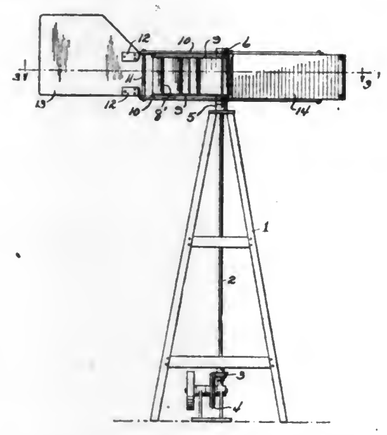
14. As a new composition of matter, a hard, infusible, insoluble synthetic resin comprising the final reaction product of a phenol, a water-soluble carbohydrate and a hardening agent.

1,820,817. SALT SHAKER, ETC. MARTIN J. MCRAE, Spokane, Wash. Filed Nov. 8, 1929. Serial No. 405,774. 3 Claims. (Cl. 65—45.)



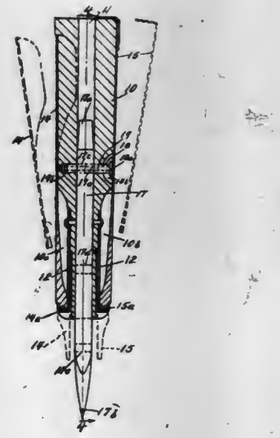
1. A condiment holder of the class described comprising a body having its lower end open, a pair of disks covering the open end and having their major portions spaced apart, means for supporting the disks and the upper disk having a centrally arranged hole therein and the other disk having a row of concentric holes therein.

1,820,818. WINDMILL. WALTER S. MCRAE, St. David, Ariz. Filed Jan. 7, 1930. Serial No. 419,130. 1 Claim. (Cl. 170—15.)



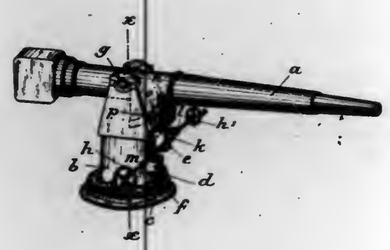
A wind mill comprising upper and lower frames, one positioned above the other in spaced relation and mounted for movement about a vertical axis, members connecting the frames at their corners, a vane secured to the frames, a wind wheel journalled between the frames, shielding plates hinged to a pair of oppositely disposed members and one of said plates of a greater length than the other plate and of a length substantially equal to the distance between a pair of corners of said frames, a third shield plate hinged to the free end of the plate having the greatest length of said first named plates, and spaced rods hinged to the free end of the third plate and to the free end of the first named plate having the shorter length to cause the plates to move in unison for controlling the speed of rotation of the wind wheel during wind currents of varying velocity.

1,820,819. FOUNDRY TOOL. ALCID A. MEYER, Minneapolis, Minn. Filed Apr. 25, 1929. Serial No. 358,096. 1 Claim. (Cl. 7—15.)



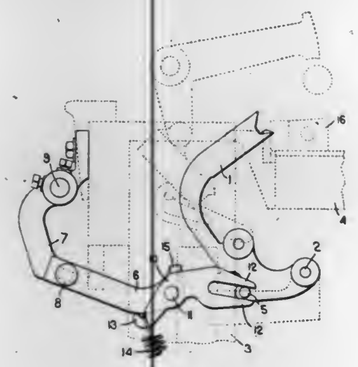
A foundry tool comprising a handle member having a bore therethrough extending from end to end thereof, a tool slidably mounted in said bore for projection outwardly therefrom at either end of said handle member, a pin slidably mounted transversely of said member and extending across said bore intermediate the ends thereof, said pin formed with a head for withdrawing the pin from across the bore and for sliding the same inwardly across the bore, the handle member formed with a recess at one side thereof receiving the head of said pin, the tool slidably mounted in said bore formed with a series of spaced transverse bores therethrough for receiving said pin to hold the tool in its several positions respectively, a tool pivotally mounted and disposed longitudinally of the handle member at one end thereof, the said tool swingable inwardly onto and against the handle member and swingable outwardly to position extending longitudinally from one end thereof, and said tool in position against the handle member extending across said recess and the pin head positioned therein to form a guard therefor.

1,820,820. POINTING MECHANISM FOR GUNS. EDUARD MÜLLER, Dusseldorf, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed July 15, 1930, Serial No. 468,149, and in Germany Aug. 16, 1929. 2 Claims. (Cl. 89—41.)



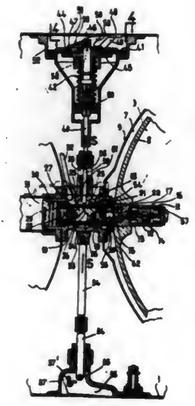
1. Pointing mechanism for turret guns, comprising a fixed cam track having the shape of the outline of the danger zones to be avoided; a rack slidably mounted on the turret of the gun and coacting with the track; and means for elevating the barrel of the gun cooperating with the rack and track for automatically raising the barrel by means of said rack to avoid the danger zones when the gun is moved laterally.

1,820,821. SHUTTLE FEELER FOR LOOMS. EDWARD C. NICHOLS, Upton, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed July 26, 1930. Serial No. 470,910. 3 Claims. (Cl. 139—231.)



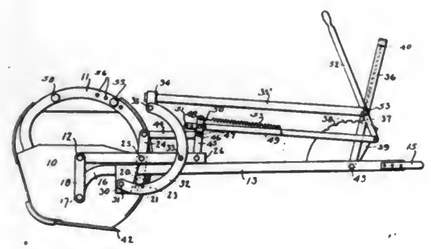
1. In a loom, a shuttle feeler transversely pivoted on the loom frame to swing toward and from the lay, a stud projecting transversely from the feeler, a rearward projecting starter arm transversely pivoted on the frame forward of the shuttle feeler to swing from a normal lower position to an upper position when the feeler is to be rendered active, a lever transversely pivoted on the starter arm having one arm bifurcated and projecting rearward and straddling the stud on the feeler, a stop on the starter arm to limit the upward movement of the bifurcated arm of the lever, and a spring engaging the lever and acting to hold it yieldingly against the stop.

1,820,822. TORPEDO. PAOLO ORLANDO, Fiume, Italy, assignor to Silurificio Whitehead Di Fiume Societa Anonima, Fiume, Italy, a Company of Italy. Filed Aug. 20, 1930, Serial No. 476,652, and in Italy Aug. 30, 1929. 10 Claims. (Cl. 114—25.)



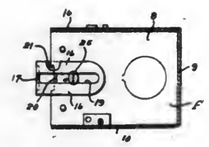
1. A device for reducing the weight of an automotive torpedo driven by an air motor fed by a compressed air vessel when it tends to sink beyond a predetermined depth, comprising a set of air discharging nozzles opening sternward through the torpedo shell, means providing a passage for air from said vessel to said nozzles, an exhaust valve located in said passage, and adjustable means subject to the pressure of the outstanding water and actuating said valve to open said passage when the torpedo reaches said predetermined depth.

1,820,823. EARTHWORKING APPARATUS. WILLIAM A. PERRY, Sidney, Ohio. Filed Dec. 10, 1928. Serial No. 324,920. 6 Claims. (Cl. 37—140.)



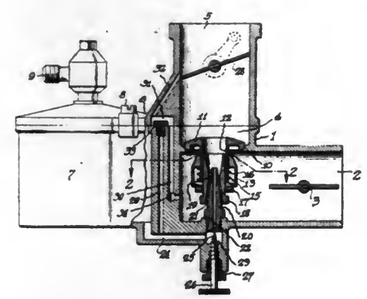
4. In a scraper, a scoop, a pulling frame connected to said scoop, said pulling frame comprising a yoke and links connecting said yoke and said scoop so that the yoke can move substantially horizontally relatively to said scoop, a stop on said scoop, a stop member pivotally mounted on said frame about an axis movable relatively to said yoke, a system of links connecting said stop member and said frame so that the force exerted on said stop member by the pull on the frame tending to raise the front of the scoop increases as the front of the scoop is raised, and means for locking said link system in a plurality of different positions.

1,820,824. OUTLET BOX. WILLARD L. PHIFFER, Horton, Kans. Filed Apr. 25, 1930. Serial No. 447,335. 9 Claims. (Cl. 247—21.)



1. In an outlet box for flush switches, a support embodying a pair of parallel spaced apart arms and an angularly offset switch mounting lug connecting the outer ends of the arms, a guide lug projecting inwardly from one wall of the box adjacent the open end thereof for extending between said arms, and a set screw threaded into the wall of the box in a direct alignment inwardly of said lug and extending between the arms, said set screw having its head engageable with the arms for locking the support in any longitudinally adjusted position.

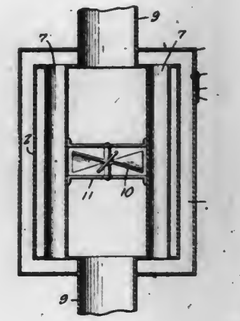
1,820,825. CARBURETOR. SIDNEY L. PICARD, Detroit, Mich. Filed Feb. 5, 1930. Serial No. 425,925. 3 Claims. (Cl. 261—41.)



1. In a carburetor, the combination of a body having a passage therethrough and formed with an annular valve seat, a valve seated on said seat and provided with a tubular stem forming a passage through said valve, a guide bearing for said stem within said passage below said seat, a plug screwed into the lower end of said stem and formed with a bore tapered inwardly from each end of the plug and forming a Venturi restriction in said bore, a spring sleeved on said stem to normally hold said valve seated, a fuel nozzle having a tapered end portion corresponding to said taper of the bore in the lower end of said plug and projecting into said bore, and means for supplying a liquid fuel to said nozzle.

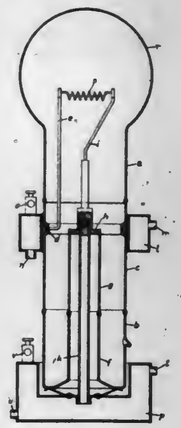
1,820,826. HEAT DISTRIBUTOR. WARREN M. PIGGOTT, Leavenworth, Kans. Filed Mar. 3, 1930. Serial No. 432,857. 5 Claims. (Cl. 257—219.)

5. A heat distributor comprising inner and outer receptacles having an air-tight chamber between the same, said chamber extending also between the end walls of said receptacles, means for admitting fluid to said chamber and to permit the escape of steam or vapor therefrom at a predetermined temperature or pressure, the said inner receptacle having a plurality of passages, some of said passages having communication with the interior of the outer receptacle and one of the passages having communication



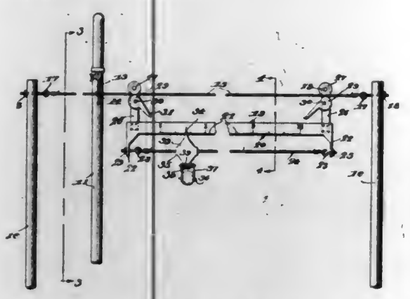
with the exterior of the outer receptacle to form a passage to permit gas or fluid to pass through said receptacles, and a retarding means in said last named passage.

1,820,827. CONSTRUCTION OF ELECTRIC DEVICES. MARCELLO PIRANI, Berlin-Wilmersdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Aug. 3, 1926, Serial No. 126,873, and in Germany Mar. 30, 1926. 4 Claims. (Cl. 176—16.)



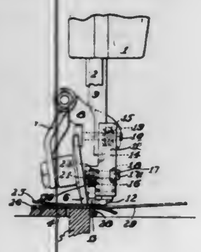
4. An incandescent lamp or similar device comprising a bulb with a tubular neck comprising two annular vitreous sections and a metal annulus between said sections constituting a terminal hermetically sealed at its end to said vitreous sections, a tubular metal skirt hermetically sealed at its outer end to the outer vitreous section of said neck and having its inner end positioned inside said neck adjacent said metal annulus, a hollow terminal inside said skirt with its inner end joined to the inner end of said skirt, leads projecting from said terminals into said bulb, a filament connected between said leads, and cooling means for circulating a cooling fluid thru the interior of said hollow terminal.

1,820,828. GAME INDICATOR. HENRY T. POWELL, Louisville, Ky. Filed Feb. 5, 1931. Serial No. 513,711. 8 Claims. (Cl. 116—120.)



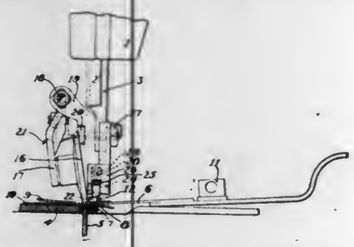
1. The combination of a game field and movable game piece, and a scale device movably supported upon said field for determining the amount of movement of said game piece.

1,820,829. SEWING MACHINE. EUGENE J. RAY, Beverly, Mass., assignor, by mesne assignments, to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 19, 1929. Serial No. 356,476. 5 Claims. (Cl. 112—127.)



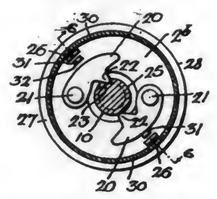
1. A sewing machine having, in combination, stitch-forming means, a disc presser-foot, an edge-gage, a knife comprising a thin blade vibrating in substantially the plane of the work and provided with a cutting edge at right angles to the blade acting below the edge-gage to trim one ply of a plurality comprising the work being sewed, a lip upon the edge-gage supporting the ply not being trimmed, and an auxiliary presser-foot holding down the work between the disc presser-foot and the edge-gage.

1,820,830. ATTACHMENT FOR SEWING MACHINES. EUGENE J. RAY, Beverly, Mass., assignor, by mesne assignments, to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 19, 1929. Serial No. 356,477. 10 Claims. (Cl. 112—127.)



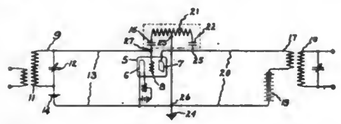
1. A sewing machine having, in combination, stitch forming devices, an edge-trimming knife arranged to trim a layer of the material being sewed to form an edge substantially flush with the edge of another layer of the material, and a lip upon the knife entering between the layers of material being sewed and extending between said layers beyond the line of cut.

1,820,831. WINDOW SHADE MECHANISM. EDWARD REUKAUF, Jr., Philadelphia, Pa., assignor to Carey-McFall Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 31, 1930. Serial No. 492,595. 13 Claims. (Cl. 156—36.)



12. In window shade mechanism, comprising a shade roller, a supporting spindle axially aligned with the roller and provided with a groove in its outer surface, a pawl operatively mounted on the end of the roller in a plane substantially at right angles to the axis of the roller and adapted to ride on the surface of the spindle and to enter the groove therein, and a stop for limiting the outward movement of the pawl relative to the spindle, the combination therewith of a resilient plug mounted in an opening formed in the end of the roller intermediate the outer edge of the pawl and the said stop and extending outwardly from the end of the roller between the said pawl and said stop in a position spaced from the pawl and the stop when the pawl is engaged in said groove and adapted to engage the pawl when said pawl is disengaged from said groove and riding the surface of the spindle.

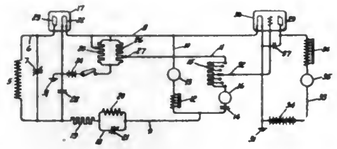
1,820,832. NEUTRALIZING DEVICE FOR VACUUM TUBES. ANDREW D. RING, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 5, 1929. Serial No. 368,704. 3 Claims. (Cl. 179—171.)



1. The combination with an electric discharge device having an anode, a cathode and a control electrode, of an input circuit connected between said control electrode and said cathode, an output circuit connected between said anode and said cathode a source of anode potential connected in said circuit, and a neutralizing device including an inductance connected at one end with the control electrode and at the other end with the anode, a neutralizing condenser interposed in circuit with said inductance and its connection with said anode, and a tap on said inductance connected with the cathode.

1,820,833. TESTING INSTRUMENT FOR TRANSMITTERS. ANDREW D. RING, Washington, D. C., assignor to General Electric Company, a Corporation of New York. Filed Aug. 22, 1929. Serial No. 387,738. 2 Claims. (Cl. 179—171.)

2. A testing instrument for a radio transmitter including an input circuit, means for tuning said input circuit to a desired frequency, a direct current branch circuit, an audio frequency branch circuit, indicating means for reading current flow in said direct current circuit, a vacuum tube voltmeter for reading current flow in said audio frequency branch circuit, a variable resistor in said audio frequency circuit for applying voltage to said vacuum tube



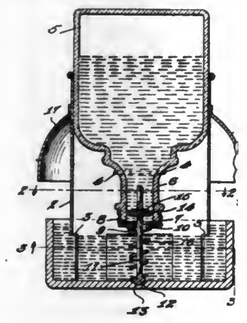
voltmeter, and a tuned trap circuit and a rectifier device inserted in circuit between said branch circuits and said tuned input circuit.

1,820,834. PREPARED BUILDING PRODUCT. THOMAS ROBINSON, New York, N. Y., assignor to Lancaster Asphalt, Inc., New York, N. Y., a Corporation of Delaware. Filed June 19, 1928. Serial No. 286,502. 5 Claims. (Cl. 108—8.)



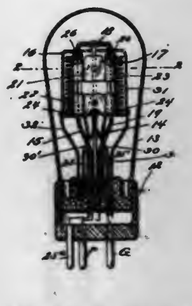
1. A tapered shingle which comprises a core of intermingled asphaltic material and fibrous material, this core having substantial rigidity, a layer of thin felt on each closing the opening and opened by the stem engaging the felt layers, said coating impregnating the felt and extending through it to the faces of the core to which it is united.

1,820,835. POULTRY FOUNTAIN. EMILE SAUVAGEAU, South Peabody, Mass. Filed June 10, 1929. Serial No. 369,795. 1 Claim. (Cl. 119—77.)



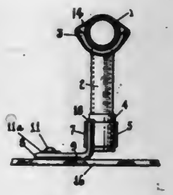
A poultry fountain including a fluid supply bottle having a reduced screw threaded neck, and a drinking fount including bottom and side walls, a cylindrical member resting on the bottom wall and spaced from the side wall and projecting above the latter to receive the bottle in an inverted position, arched pairs of spring members carried by the member and receiving the neck of the bottle, a cap threaded to the neck and having an opening to supply fluid to the fount within the cylindrical member, a stem extending through the opening, a valve on said stem for closing the opening and opened by the stem engaging the bottom wall of the fount, a head on the stem, a spring between the head and the neck to close the valve when the stem is disengaged from the bottom wall, said cylindrical member having openings arranged below the upper edge of the side wall to permit the fluid within the cylindrical member to pass in the space between the latter and the side wall of the fount, and a hood secured to the cylindrical member and disposed over and spaced from the upper edge of the fount.

1,820,836. ELECTRON DISCHARGE DEVICE. SALVATORE SCOGNAMILLO and PAUL ARNDT, New York, N. Y. Filed June 25, 1928, Serial No. 288,172. Renewed July 3, 1931. 4 Claims. (Cl. 250—275.)



1. An electron discharge device, including a cathode comprising a pair of metallic plates each having a channel in one of its faces adjacent each of its ends and secured together face-to-face with their channels disposed opposite to one another and forming a pair of parallel chambers, and a filament having a pair of parallel portions extending, respectively, through said chambers.

1,820,837. ADJUSTABLE SUPPORT FOR VACUUM TUBE LIGHTS. ROBERT C. SMALLEY, Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed June 2, 1926. Serial No. 113,305. 8 Claims. (Cl. 248—30.)

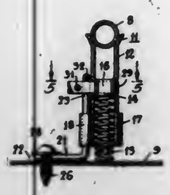


1. A support for mounting vacuum tube lights upon a base plate, comprising a tube receiving element, a spring collar adapted to encircle said element and a member having a pair of arms arranged for sliding engagement with said collar, and having a portion adapted to be fastened to said base plate.

1,820,838. SUPPORT FOR VACUUM TUBE LAMPS. ROBERT C. SMALLEY, Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 8, 1927. Serial No. 173,641. 14 Claims. (Cl. 248—30.)

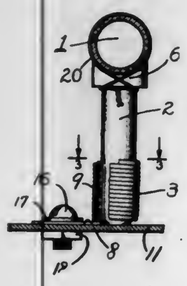
1. A support for mounting positive column tube lights upon a base plate, comprising a receiving element for a

positive column tube, yielding means in contact with the base plate and arranged to maintain said tube spaced



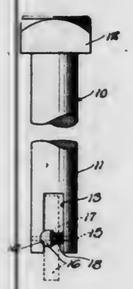
from said base plate, and means for adjustably securing said element to said base plate comprising a vertically slidable clamp.

1,820,839. TUBE SUPPORT. ROBERT C. SMALLEY, Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 10, 1930. Serial No. 434,619. 18 Claims. (Cl. 248—30.)



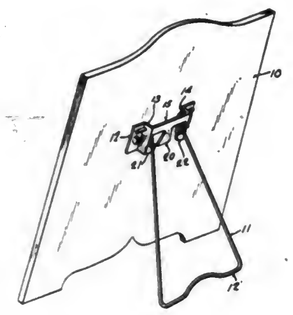
1. A tube support comprising in combination a supporting post, a sleeve encircling said post, and securing means engaging and maintaining the sleeve and post in interlocked relation at selectively adjustable relative longitudinal positions of the sleeve and the post and being adapted to be secured to a base.

1,820,840. KING BOLT. THEODORE R. SMITH, Rolfe, Iowa. Filed Oct. 2, 1929. Serial No. 396,892. 3 Claims. (Cl. 85—3.)



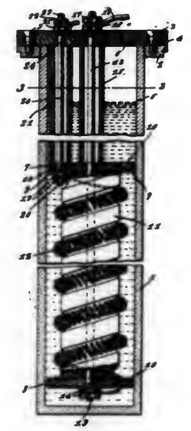
2. A king bolt comprising a shank having a bifurcated end forming limbs, the inner faces of said limbs being defined by the bifurcation, one of the limbs of said bifurcated end having a groove formed in the inwardly disposed face thereof, a pin extended transversely of said bifurcated end and extended through said groove, a bar pivotally mounted on said shank, and means for yieldably forcing said bar toward said groove to seat said bar therein to hold said bar in position transversely of said shank and the bifurcated end portion thereof.

1,820,841. DISPLAY STAND. HARRY E. SOREF, Milwaukee, Wis. Filed Sept. 29, 1927. Serial No. 222,862. 5 Claims. (Cl. 40—146.)



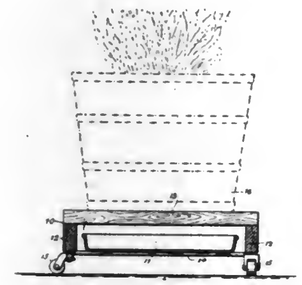
1. A device for supporting a display stand, the said device comprising a bracket for attachment to the stand, such bracket having a bridge-piece with opposite lateral ends offset at an angle to engage the said stand and space the bridge-piece therefrom, and a leg having at its upper end opposite lateral projections disposed in the space under the bridge-piece and pivotally engaged with the said angular ends of the bracket, the bridge-piece, when engaged by the leg, acting to limit the outward movement of the leg.

1,820,842. ELECTRICAL HEATING DEVICE. ROBERT M. SPARKS, Daytona Beach, Fla. Filed May 21, 1930. Serial No. 454,402. 3 Claims. (Cl. 219—38.)



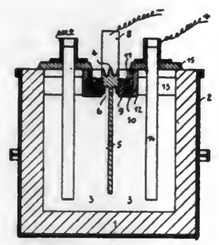
1. An electrical heater including a metallic casing having an insulating substance therein and having an insulator top, a spirally grooved porcelain core in the casing, insulator spacer elements contacting with the ends of the heater, a heater coil in the groove, a metal rod extending through the spacer elements, the core and the top of the casing, binding nuts on the ends of the rod, the lower binding nuts securing therebetween one end of the heater coil and the upper binding nuts being connected with an electric conductor, a porcelain tube surrounding the portion of the rod above the upper spacer member, a conductor rod between the upper spacer member and the top, binding nuts on the ends thereof, the inner binding nuts being connected to the second end of the coil and the outer binding nuts being connected to the second wire of the conductor.

1,820,843. PLANT STAND. WILLIAM SPITZ, Brooklyn, N. Y. Filed Oct. 6, 1928. Serial No. 310,813. 1 Claim. (Cl. 47—39.)



A stand of the class described comprising the combination of a portable base and a separate drip pan, said base comprising end members, upper and lower relatively spaced members secured to said end members, and rollers on certain of said members, said upper members of the base being adapted to have positioned thereon a filled plant or flower pot, and said drip pan being laterally insertable in place on the lower members of the base beneath said pot and removable from said lower members.

1,820,844. APPARATUS FOR OBTAINING LIGHT METALS BY ELECTROLYSIS. EWALD STEINBUCH, Basel, and GOTTFRIED FÜLLEMANN, Monthey, Valais, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 14, 1929, Serial No. 399,637, and in Switzerland Aug. 23, 1929. 5 Claims. (Cl. 204—19.)



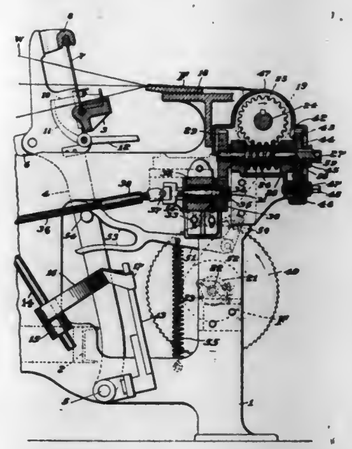
1. In electrolytic cells for obtaining light metals by electrolysis of fused haloid salts, the arrangement wherein the cathode compartments comprise, for the purpose of collecting the light metal, a relatively narrow but elongated metallic body provided with suitably insulated walls, immersed in the upper part of the fused salt, provided with a longitudinally extending channel and conductively connected with the working cathode, the latter being immersed below said body in the deeper parts of the electrolyte and extending parallel to said channel in the longitudinal direction thereof.

1,820,845. PROTECTING DEVICE FOR PIPE COVERINGS OR THE LIKE. ROYAL STERLING, Boston, Mass., assignor to Royal Protector Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 21, 1929. Serial No. 408,760. 5 Claims. (Cl. 154—44.)



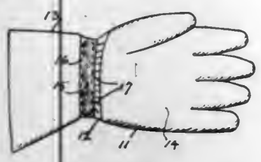
1. A binding and protecting member for the insulating covering of a pipe comprising a longitudinally split sleeve adapted to be clasped about the cylindrical walls of the pipe covering, said sleeve having an inwardly-turned, flanged bottom plate adapted to fit against the free end of the insulating shell, said bottom plate being formed of a plurality of substantially flat segments mutually displaced for interleaving overlapping sliding association whereby said member may be expanded and contracted while retaining its approximate cylindrical form, the interleaving of said segments providing for substantially uniform alteration of the diameter of the member while retaining the substantially flat formation of its flange.

1,820,846. TAKE-UP MECHANISM FOR LOOMS. EDWIN W. STONE, Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Sept. 11, 1930. Serial No. 481,121. 8 Claims. (Cl. 139—316.)



1. In a take-up mechanism for looms, the combination of a take-up roll, a worm and worm gear for rotating said roll, a power operated shaft for driving the worm to rotate the roll from a going part of the loom, a ring gear connected to said worm and provided with internal and external teeth, manually operable means engageable with said external teeth to rotate the ring gear and worm, and adjustable means movable into engagement with said internal teeth to drive the ring gear and worm from said shaft and movable out of engagement with the internal teeth to release the ring gear and worm from the shaft.

1,820,847. GLOVE. JOHN VINCENT SULLIVAN, Fremont, Ohio. Filed Apr. 3, 1928. Serial No. 266,980. 1 Claim. (Cl. 2—162.)



In a glove of comparatively soft material, a stiff gauntlet portion attached thereto, a reinforcing portion of heavy wearing material covering the palm side of the glove and terminating immediately adjacent the wrist portion, thereby leaving a narrow constricted and limp portion encircling the wrist between said gauntlet and the edge of the reinforcing portion; a wrist band of elastic material entirely encircling and lying in close contact with the exterior surface of the limp wrist portion so as to be entirely visible, said wrist band being permanently secured at intervals to the limp palm side of the wrist portion and having shirrings or wrinkles between the secured portion adapted to give when inserting the hand, and a clasp connecting the ends of the band to adjust the width thereof, substantially as set forth.

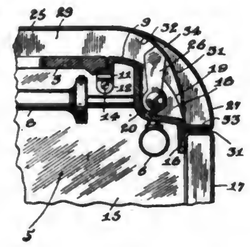
1,820,848. CAR LADDER. JOHN J. TATUM, Baltimore, Md. Filed Sept. 24, 1929. Serial No. 394,853. 4 Claims. (Cl. 228—49.)



1. In combination, in a car ladder, a combined top rung and spacing and holding bracket stiles slidably mounted on said rung, and means to hold the stiles in spaced relation on said rung.

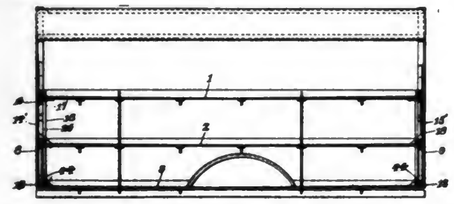
1,820,849. GAS OR ELECTRIC COOKING RANGE. JACOB TELLER, Chicago, and ARTHUR P. SCHULZ, Berwyn, Ill., assignors to Teller Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed Dec. 1, 1930. Serial No. 499,354. 17 Claims. (Cl. 126—37.)

1. In a cooking range, a cooking top embodying a rectangular frame for supporting the burner grates, a manifold extending across the front of said range, a guard plate extending across the front of said frame over said manifold and provided with a series of recesses, a series of valves beneath said guard plate connected with said manifold, the axes of said valves being arranged parallel with the axis of the said manifold, a valve stem for each of said valves extending into each of said recesses, a valve handle on each stem adapted to swing in a plane transverse to the axis of said manifold from substantially vertical to horizontal position, a cover for said cooking top hinged to the rear of said frame, and having a forward downwardly turned extension for covering said guard plate and valve parts when said valve handles are in



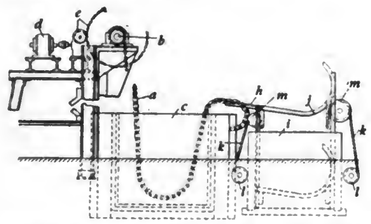
vertical position, and said handles when in horizontal position lying in the path of the lower flange of said extension, whereby said cover is prevented from being entirely closed when said valves are in open position.

1,820,850. END CLOSURE STRUCTURE FOR TRUCK BODIES. SIMEON E. TRAVIS, Jr., Hattiesburg, Miss., assignor to The Weidmech Steel Products Co., a Corporation of Mississippi. Original application filed Jan. 26, 1928, Serial No. 249,693. Divided and this application filed Mar. 5, 1929. Serial No. 344,531. 4 Claims. (Cl. 296—3.)



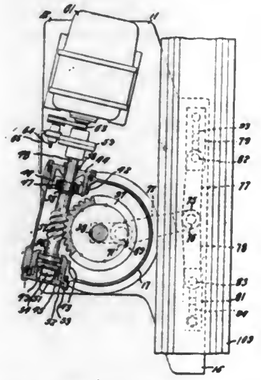
1. A truck body comprising an upper, intermediate and a lower deck, each of said decks including an end rail of L-shaped cross section, an angle iron secured to the lower face of the horizontal portion of the end rail of the upper deck and depending therefrom, a closure plate, said plate at its upper end abutting the horizontal portion of said angle iron, said plate further opposing the outer face of the end rail of the intermediate deck and extending into and supported from the end rail of the lower deck, means for connecting said plate to said angle iron, and means for securing said plate against the end rail of the lower deck.

1,820,851. APPARATUS FOR THE DIPPING OF TUBES OR RODS FOR PICKLING, ETC. HAVELOCK TREVORROW, Birmingham, England. Filed Apr. 29, 1929, Serial No. 359,066, and in Great Britain May 10, 1928. 6 Claims. (Cl. 266—7.)



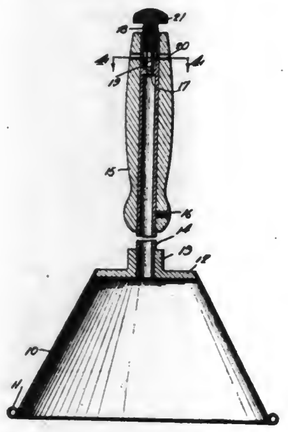
1. In apparatus for dipping metal tubes, bars, rods and similar articles in pickling or other baths, the combination of a tank for the bath, rotary means mounted above the tank at one side thereof, flexible slings extending, at one end thereof, over said rotary means and attached at the other end thereof to the opposite side of said tank, means for lowering the first named ends of said slings to lower the intermediate portions thereof into said tank with the work-pieces thereon, and for raising said first-named ends, at the conclusion of the dipping operation, for the removal of the work-pieces, and means for causing the alternate raising and lowering of said first-named sling ends during the continuance of the dipping operation, to cause relative rolling motion of said work-pieces.

1,820,852. DRIVING MECHANISM. RAYMOND A. WALTER, New York, N. Y. Filed Aug. 23, 1928. Serial No. 301,555. 10 Claims. (Cl. 198—220.)



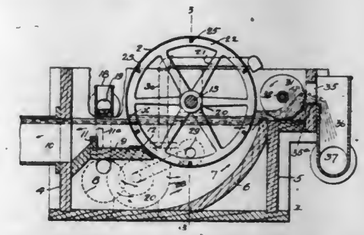
7. A conveyor drive comprising a rotary member, a plurality of reciprocating members selectively operated thereby, and means to fix one of the reciprocating members whereby reciprocating motion is imparted by the other.

1,820,853. HAND WASHER. ARTHUR J. WARREN, Pawtucket, R. I. Filed May 15, 1930. Serial No. 452,774. 1 Claim. (Cl. 68—5.)



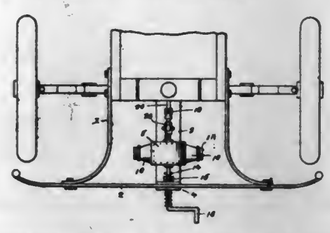
A clothes pounder comprising a frusto-conical cup, a tubular shaft fixed to the smaller end thereof and provided in the vicinity of its upper end with an interiorly located seat, the interior surface of the shaft above said seat having a thread and the shaft having openings located between the seat and the upper end, a handle grip mounted upon the shaft and having openings registering with the openings thereof, a valve member having a thread engaging the thread in the shaft, said valve member having a reduced lower end portion lying between said openings and an end portion adapted to engage the seat.

1,820,854. SAVE-ALL, PAPER MAKING MACHINE, ETC. JOSEPH A. WHITE, Melrose Park, Pa., assignor to The Moore & White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 13, 1930. Serial No. 488,415. 7 Claims. (Cl. 92—42.)



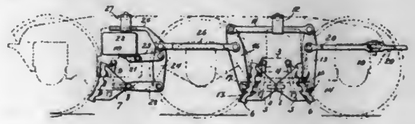
1. The combination in a cylinder machine for paper making, of a vat; a cylinder in the vat having a perforated periphery; means for rotating the cylinder in the vat; an inlet communicating with a portion of the cylinder to allow stock to adhere thereto and to allow water to pass into the cylinder through the perforations; and an outlet separated from the inlet and communicating with a portion of the perforated periphery, so that water will pass a second time through the perforations in the cylinder to the outlet.

1,820,855. PUMP ATTACHMENT FOR AUTOMOBILES. OTON L. WHITEHEAD, Tehula, Miss., assignor, by direct and mesne assignments, of two-thirds to Philip M. Smith, Tehula, Miss. Filed May 12, 1930. Serial No. 451,816. 4 Claims. (Cl. 180—53.)



1. In combination with a motor vehicle, a pump, means detachably connected with the vehicle for supporting the pump at the front of the vehicle, means detachably connecting the pump on said supporting means and means for operating the pump from the power plant of the vehicle.

1,820,856. BRAKE RIGGING FOR RAILWAY CARS. JOHN C. WHITRIDGE and CLAUDE L. ORR, Columbus, Ohio, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Jan. 18, 1928. Serial No. 247,632. 7 Claims. (Cl. 188—46.)



1. In brake rigging, the combination with a six-wheel car truck, of a plurality of brake beams, brake hangers for suspending said beams, operating mechanism including

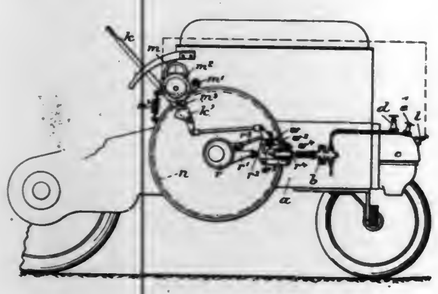
a plurality of levers each connected at its lower end with one of said brake beams, a connection between the upper ends of two of the levers, a bracket on the truck slidably supporting said connection, a connection between one of said levers and a third lever, a bolster, a bracket carried by said bolster, and a link connecting said bracket and third lever.

1,820,857. FILLER STRIP FOR DROP CENTER WHEEL RIMS. JOHN L. WILSON, Wisner, La. Filed Aug. 16, 1929. Serial No. 386,262. 4 Claims. (Cl. 152—20.)



1. A means for filling the drop centers of wheel rims, comprising a strip shaped to fill the circumferential recess in a wheel rim, said strip having overlapping ends adapted to receive the valve stem of an inner tube, and means pivotally engaging said ends and adapted to secure said strip ends to said valve stem.

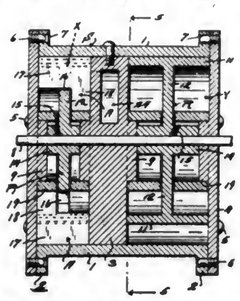
1,820,858. SPARKING DEVICE. FRITZ HUBER, Mannheim, Germany, assignor to Heinrich Lanz Aktiengesellschaft, Mannheim, Germany. Filed Jan. 9, 1931. Serial No. 507,551, and in Germany Mar. 6, 1929, and Jan. 2, 1930. 4 Claims. (Cl. 123—179.)



2. In a two cycle heavy oil engine, means for injecting light oil during starting, a spark plug adapted to ignite the injected light oil, electric means for producing a continuous rapid succession of sparks at the spark plug, means for injecting heavy oil, and a single means operable to substantially simultaneously render the light oil injecting means and electric means inoperative and to render the heavy oil injecting means operative.

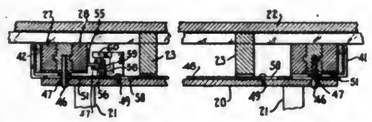
1,820,859. ROTARY ENGINE. OLOF OGREN, Braddock, Pa. Filed Jan. 28, 1930. Serial No. 424,015. 3 Claims. (Cl. 121—83.)

1. In a rotary engine, a stator having a cylindrical bore therethrough, end members for closing each end of the bore, a shaft rotatably supported by said end members, a pair of rotors secured to said shaft, a partition disposed in said bore between said rotors and dividing said bore into a high pressure and low pressure chamber, impellers disposed in each chamber, means for rotatably supporting certain of said impellers from said end members, and means for rotatably supporting certain others of said impellers from said partition, said partition having a passage therethrough communicating with each chamber, said



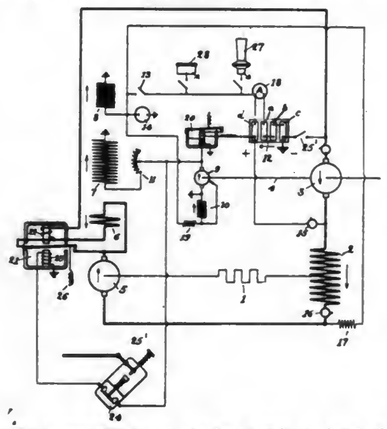
stator having an inlet discharging into one of said chambers, and an outlet exhausting from the other of said chambers.

1,820,860. EXTENSION TABLE. MARTIN BINDER, New Hyde Park, N. Y. Filed Sept. 27, 1928. Serial No. 308,671. 6 Claims. (Cl. 45—113.)



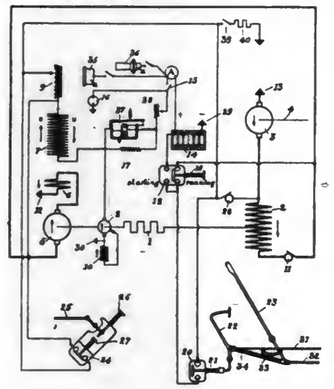
1. An extension table, comprising a fixed top, a pair of vertically movable slide blocks positioned beneath the same and each carrying a pair of coacting slide members horizontally movable relatively thereto in opposite directions, table leaves carried by the respective slide members and positioned thereby normally beneath the said table top, means to guide said slide members with leaves to the plane of the table top and to elevate thereby their slide blocks, and means common to both slide blocks, movable relatively to the table and actuated by the movement of a slide member of one of said blocks to bar the return of both of the elevated blocks to normal position.

1,820,861. ELECTRIC SYSTEM FOR VEHICLES. ALFONS HENRY NEULAND, Irvington, N. J., assignor to Electro-Mobile Corporation, Irvington, N. J. Filed July 12, 1928. Serial No. 292,195. 14 Claims. (Cl. 290—12.)



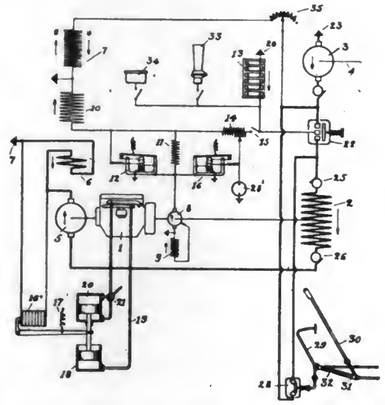
14. In combination, an engine shaft, a load shaft, a dynamo rotatively connected with both shafts having a field element, a second dynamo rotatively connected with the engine shaft having a field element, means for magnetizing both field elements with load current from one of the dynamos, and a separate source of current for maintaining a relatively slight magnetization in one of the field elements whenever load current ceases during operation of load shaft.

1,820,862. ELECTRIC SYSTEM FOR VEHICLES. ALFONS HENRY NEULAND, Irvington, N. J., assignor to Electro-Mobile Corporation, Irvington, N. J. Filed July 24, 1928. Serial No. 294,993. 14 Claims. (Cl. 290—17.)



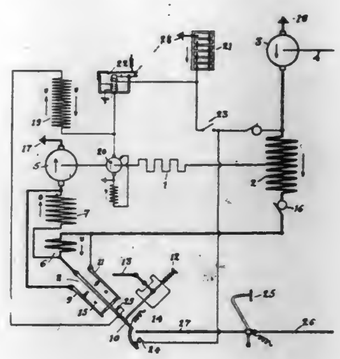
1. In combination, an engine shaft, a load shaft, a dynamo relatively connected with both shafts, a second dynamo rotatively connected with one of the shafts and having a shunt field coil, a load circuit including the dynamos, a battery, and an exciting circuit including the shunt field coil, battery and one of the dynamos adapted to circulate current thru the shunt field coil in a given direction in one stage of operation and to circulate current thru the shunt field coil in reverse direction in another stage of operation.

1,820,863. ELECTRIC SYSTEM FOR VEHICLES. ALFONS HENRY NEULAND, Irvington, N. J., assignor to Electro-Mobile Corporation, Irvington, N. J. Filed July 12, 1928. Serial No. 292,194. 17 Claims. (Cl. 290—12.)



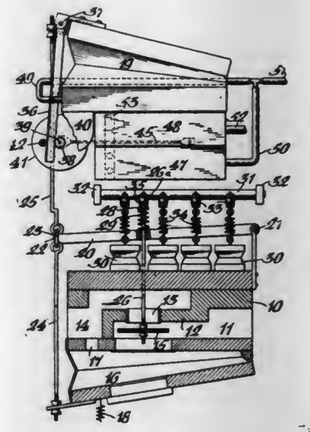
5. In combination, an engine shaft, a load shaft, a dynamo rotatively connected with one of the shafts, having a field coil, a second dynamo rotatively connected with both shafts, a load circuit including the dynamos, an auxiliary generator, a battery, and means for supplying the field coil with current from the auxiliary generator during relatively high speeds of engine shaft and from the battery during relatively low speeds of engine shaft.

1,820,864. ELECTRIC SYSTEM FOR VEHICLES. ALFONS HENRY NEULAND, Irvington, N. J., assignor to Electro-Mobile Corporation, Irvington, N. J. Filed July 31, 1928. Serial No. 296,468. 26 Claims. (Cl. 209—17.)



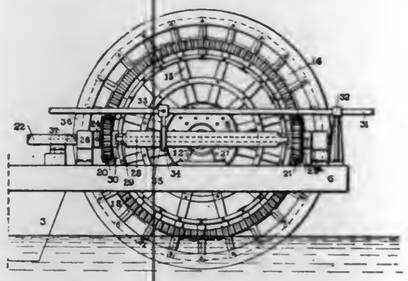
7. In combination, an engine having a shaft, a load shaft, a generator having a field element, a motor electrically connected with the generator for transmitting power between the shafts, means including a source of current for magnetizing the field element, and means including a switch for assisting the magnetization of field element with load current in one stage of operation and for opposing the magnetization of field element with load current in another stage.

1,820,865. EXPRESSION DEVICE FOR MUSICAL INSTRUMENTS. STEPHEN BATTNER, North Tonawanda, N. Y., assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y., a Corporation of New York. Filed July 10, 1929. Serial No. 377,287. 8 Claims. (Cl. 84—41.)



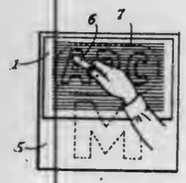
1. An expression device for automatic musical instruments, comprising a regulating pneumatic, a regulating valve interposed between the source of power and the playing action of the instrument, an expression pneumatic arranged in opposing relation to said regulating pneumatic, an actuating lever for said valve operatively connected to said regulating pneumatic and said expression pneumatic, the deflation of the regulating pneumatic tending to close the valve and the deflation of the expression pneumatic tending to open the valve, and automatic means for releasably holding said expression pneumatic in any intermediate position.

1,820,866. PADDLE WHEEL PROPELLER. FAURIE BRUGUIERE, New Orleans, La. Filed Aug. 4, 1930. Serial No. 472,956. 3 Claims. (Cl. 115—49.)



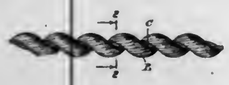
1. A paddle wheel including in combination a circular band secured to its outer periphery, extending thereboyond, and a pair of rollers, one of said pair adapted to operate on each side of said band and to secure said wheel against shifting axially.

1,820,867. TRANSFER SHEET AND METHOD OF MAKING SAME. HARRY Q. R. CROWDER, Chicago, Ill. Filed May 24, 1929. Serial No. 365,672. 15 Claims. (Cl. 41—33.)



1. A transfer sheet comprising a mounting sheet, a gelatinous coating on said sheet, inked markings carried by said gelatinous coating, and a coating of pressure adhesive material covering said markings, said pressure adhesive material being removable without injury to the surface to which the same is applied.

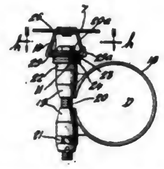
1,820,868. TIE CORD. BENJAMIN B. EPSTEIN, Brooklyn, N. Y., assignor to The Lees Manufacturing Company, New York, N. Y., a Corporation of Connecticut. Filed Mar. 2, 1931. Serial No. 519,549. 10 Claims. (Cl. 117—52.)



1. A decorative tie cord including a core, a covering therefor twisted with the core in the same direction and a binding spirally twisted about said core and covering whereby the covering is expanded or puffed away from the core and maintained by the binding.

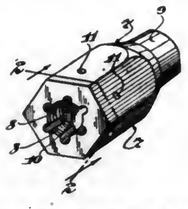
1,820,869. FASTENING DEVICE. WILLIAM H. EVERS, Rutherford, N. J., assignor to General Aviation Corporation, Teterboro, Hasbrouck Heights, N. J., a Corporation of Delaware. Filed Apr. 21, 1930. Serial No. 446,159. 4 Claims. (Cl. 244—31.)

1. A means for fastening a flexible covering material to a structural frame work comprising a supporting element for the covering material, of a substantially rigid composition, said supporting element having a surface upon which the covering material is adapted to be disposed and a base in spaced relationship to said surface, said base being slotted longitudinally of said element, a securing element formed for interlocking engagement with said supporting element, the covering material being interposed between said supporting element and said securing element, and a device for attaching said supporting element to a



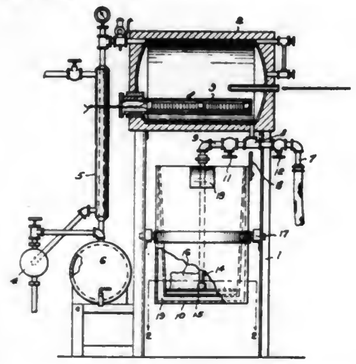
member of said structural frame work, said device embodying a seat for said supporting element formed to support the base thereof and adjustable means for retaining said supporting element within said seat.

1,820,870. COMBINED DIE AND WHEEL REMOVER. WILLIAM GUYER FISHER, Redlands, Calif. Filed Mar. 6, 1930. Serial No. 433,645. 1 Claim. (Cl. 29—85.)



A device comprising a combined die and wheel remover, a tapered metal body providing a striking head and having a socket for engaging a threaded axle end, said socket being internally threaded and having a plurality of longitudinally extending spaced grooves dividing the socket into a number of thread cutting surfaces, said die and wheel remover further having intermediate the ends thereof a plurality of radially extending apertures, each aperture directly communicating with a groove, whereby the socket may be thoroughly cleaned of steel cuttings without removing the device from the axle end.

1,820,871. APPARATUS FOR REFINING USED OIL. FRANKLIN O. KRIEGER, Kansas City, Mo., assignor to Refinoil Manufacturing Corporation, Kansas City, Mo., a Corporation of Missouri. Original application filed Oct. 24, 1927, Serial No. 228,278. Divided and this application filed Mar. 8, 1929. Serial No. 345,390. 4 Claims. (Cl. 210—124.)

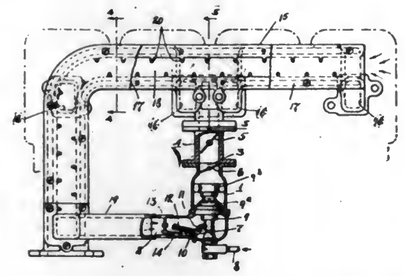


1. An apparatus for contacting used lubricating oils consisting of a cylindrical tank having imperforate side walls, means to insulate the said walls and the bottom of said tank, a foraminated reagent supporting member within said tank which abuts the side walls and is spaced from the bottom, a pipe which supports said member adapted to convey oil into said tank and below said member.

1,820,872. SULPHUR SOAP. VINCENT SAUCHELLI, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed Sept. 10, 1928. Serial No. 305,136. 2 Claims. (Cl. 87—5.)

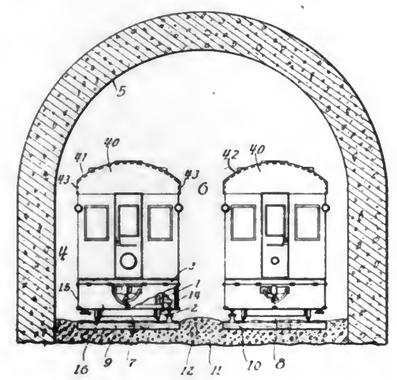
1. As a new article of manufacture, a soap containing sulphur separated by flotation from a liquid previously employed for the purification of fuel gas from hydrogen sulphide and analogous acidic impurities.

1,820,873. METHOD OF CARBURATION. JAMES J. TRACY, Cleveland, Ohio. Filed Nov. 8, 1918. Serial No. 261,674. 8 Claims. (Cl. 48—219.)



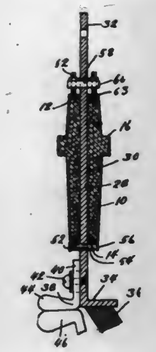
1. The method of carbureting air with kerosene and the like, which consists in heating the entire volume of air to be utilized sufficiently in excess of that at which such kerosene is maintained in vapor state to supply the latent heat of vaporization, and then spraying the proper amount of such kerosene into such heated air, while governing the spraying by the air temperature.

1,820,874. METHOD OF REDUCING SOUND IN SUBWAYS. JAMES M. WHITE, Champaign, Ill. Filed Aug. 4, 1930. Serial No. 472,775. 13 Claims. (Cl. 105—452.)



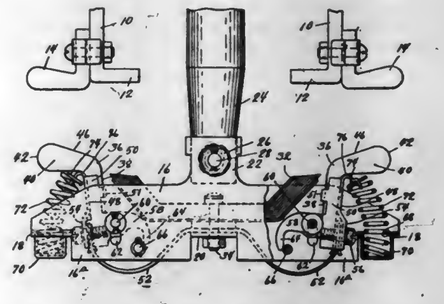
1. The method of deadening the noise in a subway which comprises, confining the noises generated beneath a car to the space beneath that car, and ballasting the road bed between the rails with a sound absorbing material which absorbs such sounds and exposing said material to such sounds.

1,820,875. ELECTRIC SWITCH AND TERMINAL. JOSEPH D. WOOD, Wollaston, Mass., assignor to Condit Electrical Manufacturing Company, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 18, 1927. Serial No. 169,340. 5 Claims. (Cl. 200—166.)



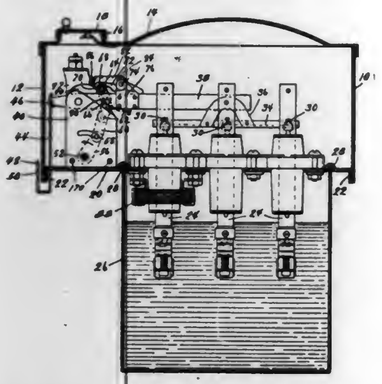
1. A terminal for an electrical apparatus comprising an insulating bushing, a conductor disposed therein, and clamping means for said conductor comprising a pin extended loosely through said conductor and bearing against the lower face of said bushing, a pressure-bar extended loosely through said conductor at the upper end thereof, and clamping-screws carried detachably by said bar on opposite sides of said conductor disposed above and bearing against the upper end of said bushing.

1,820,876. ELECTRIC SWITCH AND CONTACT STRUCTURE THEREFOR. JOSEPH D. WOOD, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 18, 1927. Serial No. 169,341. 21 Claims. (Cl. 200—166.)



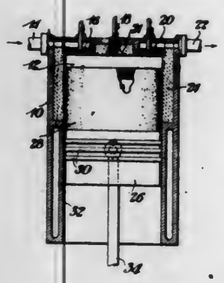
1. An electric switch having a stationary contact member providing a horizontal contact face, a cooperating movable contact member including a vertically-movable support, a vertical contact-supporting frame carried by said support having a vertical section which at the bottom has a pin and slot connection with said support, the slot being vertical, a contact member carried by the top of said vertical section having a vertical leg secured to said section and a contact-leg at right angles thereto which extends horizontally away from said pin and slot connection, a spring bearing in a vertical direction upon said frame under said horizontal contact-leg to rotate the frame in one direction about said pin and slot connection and also to press said contact-leg against said stationary contact member, and inter-engaging abutment-means carried by said frame and support to limit the rotary movement of said frame in one direction.

1,820,877. ELECTRIC SWITCH. JOSEPH D. WOOD, Wollaston, Mass. Filed July 1, 1927. Serial No. 202,950. 15 Claims. (Cl. 200—88.)



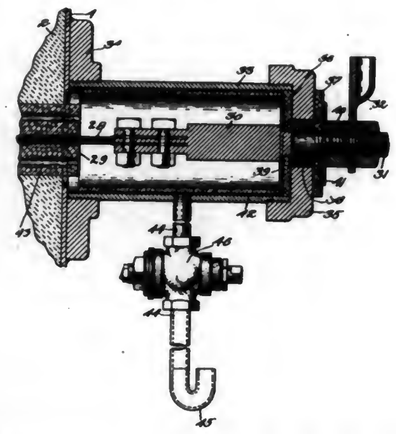
1. An electric switch having a movable switch member, contacts engaged thereby, an operating member therefor movable between switch open and closed positions, collapsible operating mechanism connecting said switch and operating members arranged to collapse and effect the opening movement of the switch member independently of corresponding movement of said operating member, said operating member adapted to be moved to open position to reset said collapsed operating mechanism for subsequent switch closing movement, a tripping device for the switch having a tripping member adapted to move from a normal set position into an operated position to trip the switch in response to a predetermined condition and to remain in such operated position until reset, means responsive to a condition of the switch circuit releasably to hold said tripping member in set condition prior to the engagement of said contacts, means controlled by said operating member in its mechanism-resetting motion to engage and reset said tripping member also, and means providing for the subsequent movement of said operating member in a switch closing direction free from engagement with said reset tripping member.

1,820,878. CATALYTIC COMBUSTION BY MEANS OF REFRACTORIES. GEORGE H. WYCKOFF, Mountain Lakes, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 22, 1926, Serial No. 137,067. Renewed Jan. 3, 1931. 5 Claims. (Cl. 123—191.)



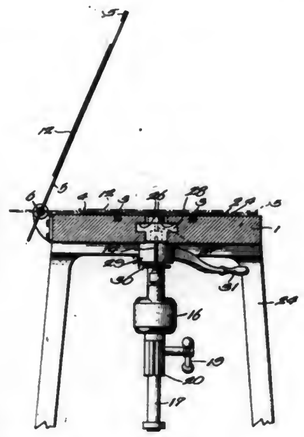
1. In an internal combustion engine, a cylinder the combustion space of which is covered at least in part by a lining containing a radio-active substance and having sufficient thickness to materially reduce the passage of heat through the wall of the cylinder.

1,820,879. HEAT TREATING FURNACE. HARRY O BREAKER, Buffalo, N. Y., assignor to Industrial Furnace Corporation, Buffalo, N. Y. Filed Mar. 3, 1928. Serial No. 258,853. 11 Claims. (Cl. 263—6.)



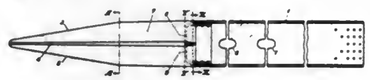
10. In a furnace of the class described and wherein means are provided for sealing the atmosphere within the furnace from interchange with the air outside of the furnace; means for condensing water vapor occurring within the furnace comprising a housing disposed externally of the furnace and in communication with the interior thereof by means of apertures of reduced area formed in the furnace wall, and a drain pipe connected to said housing, said drain pipe being provided with valve means permitting of the withdrawal of condensed vapor from said housing but preventing ingress of air from the exterior of said housing thereinto and into said furnace.

1,820,880. METHOD OF AND APPARATUS FOR MARKING OBJECTS. ROBBINS B. CREHORE, Chicago, Ill., assignor to Hacker Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 3, 1927. Serial No. 237,491. 3 Claims. (Cl. 33—184.5.)



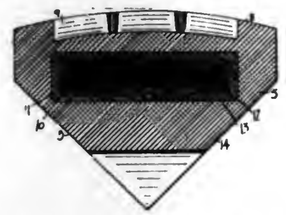
2. A marking implement including a bed for supporting printing plates to be marked, marking means fixed with respect to the bed, a sheet of transparent material having a mounting fixed with respect to the bed, said sheet of material being movable to a predetermined position over the bed to receive imprints from spaced apart portions of a printing plate on said bed to thereby provide a gauge with whose imprints corresponding spaced apart portions of subsequent plates to be marked are adapted to be placed in registry to thereby correctly position said subsequent plates on the bed to be marked by said marking means.

1,820,881. SPUD AND SPUD-POINT. RUDOLPH H. DIETERT, Ridgewood, N. J., assignor to Atlantic, Gulf and Pacific Company, a Corporation of West Virginia. Filed Nov. 17, 1928. Serial No. 320,031. 4 Claims. (Cl. 37—73.)



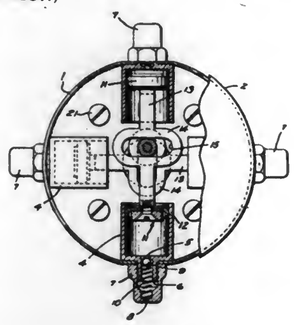
4. A spud consisting of a hollow member having one or more openings in the wall thereof to permit the inflow of water to overcome the buoyancy of the spud when being submerged, and to permit the outflow of water whereby the raising of the spud is facilitated.

1,820,882. TRACTOR BAND. ERNEST P. ENGSTROM, Akron, Ohio, assignor to The McNeil Boiler Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 7, 1927. Serial No. 217,990. 6 Claims. (Cl. 305—10.)



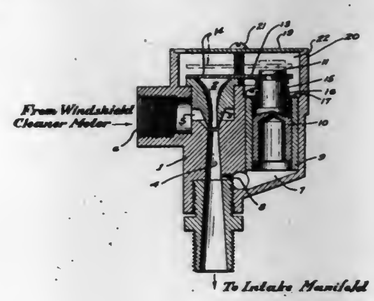
1. A traction member in the form of an endless band of rubber comprising a body portion, a reenforcing member embedded therein and vulcanized therewith, said member including a fibrous reenforcing cord spirally wound about the band in a plurality of transversely extending layers, a jacket of semi-hard rubber embedding the separate convolutions of said cord, and a plurality of coverings of rubber of graduated stiffness surrounding the jacket and covered by the body.

1,820,883. PUMP. HENRY HUEBER, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed July 31, 1929. Serial No. 382,522. 6 Claims. (Cl. 230—187.)



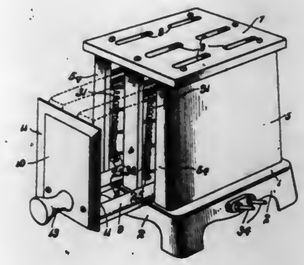
1. A suction pump comprising a substantially air-tight housing having an intake passage, a plurality of cylinders secured to the inner wall of the housing in opposing pairs and opening at their inner ends into the housing, said cylinders being unsupported inwardly from said inner wall and having exhaust ports opening to the exterior through the housing wall, a piston in each cylinder connected in tandem with the piston of the opposing cylinder, and means for imparting movement to the pistons.

1,820,884. SUCTION INTENSIFIER. HENRY HUEBER, Buffalo, and ERWIN C. HORTON, Hamburg, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Aug. 3, 1929. Serial No. 383,191. 9 Claims. (Cl. 230—111.)



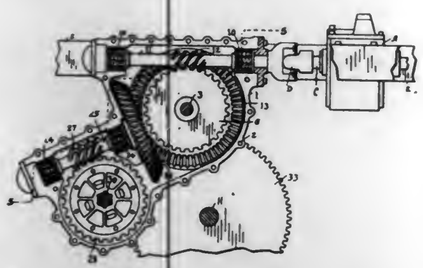
1. A suction intensifier for the suction lines of automobile accessories, comprising a body having an injector nozzle discharging across an aspirator chamber into a deliver passage, a cylinder formed in the body and having its inner end communicating with the delivery passage, a piston operable in the cylinder, a valve having an extension provided with a slot, a piston rod connected to the piston and having a part receivable in the slot of said valve extension for detachably connecting the valve to the piston to be operated thereby, and resilient means carried by the piston rod and engaging a fixed part of the body for resiliently supporting the valve and piston as a unit.

1,820,885. ELECTRIC TOASTER. HARRY C. LE VINE, Grand Rapids, Mich. Filed Sept. 17, 1928. Serial No. 306,528. 5 Claims. (Cl. 219—19.)



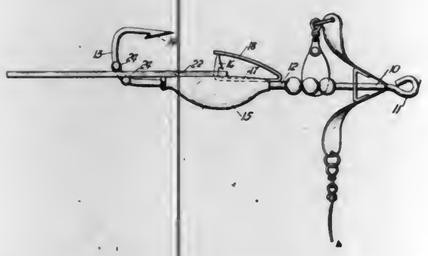
1. In a toaster, a heating element comprising, a continuous length of sheet metal bent into rectangular form and having its ends connected, the upper and lower sides of the frame having spaced apart opening therethrough, a continuous coil of resistance wire located between the upper and lower sides of the frame, means secured in the end openings of the lower side of the frame to which the ends of said coil are permanently secured, and hooks secured at the openings in the upper side of the frame and the remaining openings in the lower side of the frame around which the coil is passed.

1,820,886. AUXILIARY GEARING. GEORGE A. NEWHOUSE, Yorktown, Ind., assignor of one-half to Carl H. Wright, Yorktown, Ind. Filed Sept. 8, 1930. Serial No. 480,361. 4 Claims. (Cl. 74—7.)



1. An auxiliary gearing for motor driven vehicles comprising a casing adapted to be supported by the vehicle frame, a driving shaft journaled in said casing and which is adapted to be actuated by the power from the vehicle motor, a differential gearing with worm wheel retained in the casing driven shafts articulated with said differential gearing, a worm on the driving shaft, a second shaft journaled in the casing, a worm wheel secured on the said second shaft and which meshes with said worm, a third shaft journaled in said casing at a right angle to said second shaft and in downwardly inclined alignment, a worm on said third shaft to mesh with the worm wheel of said differential gearing, gearing between the second shaft and the third shaft, axle shafts journaled in housings carried by the vehicle frame, at position in advance of the shafts of the differential gearing, and gearing between the axle shafts and the shafts of the differential gearing.

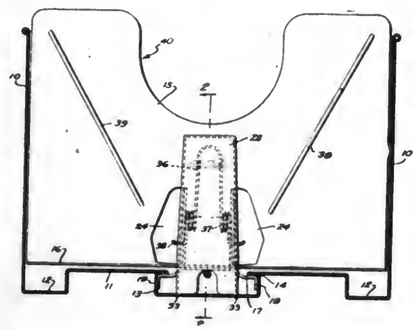
1,820,887. FISHHOOK. CHARLES T. PFLUEGER, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Original application filed June 19, 1924, Serial No. 720,902. Divided and this application filed Oct. 10, 1925. Serial No. 61,709. 7 Claims. (Cl. 43—40.)



1. In a device of the kind described, a hook having a straight shank and a prong, a second prong extending substantially perpendicularly from the shank, and a stop on the hook, said second prong and stop being so arranged on the hook as to be adapted to cooperate to hold the bait against the shank of the hook.

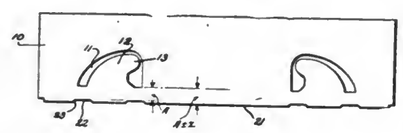
1,820,888. FOLLOWER FOR VERTICAL FILES. BENJAMIN G. RAND, North Tonawanda, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Apr. 13, 1929. Serial No. 354,886. 4 Claims. (Cl. 129—30.)

1. A file follower comprising a plate, a support for the plate, a locking lever, and a spring interposed between the lever and plate, said spring normally forcing the lever into locking position, and the ends of said springs being secured to the plate and the lever to form the only pivotal connection therebetween.



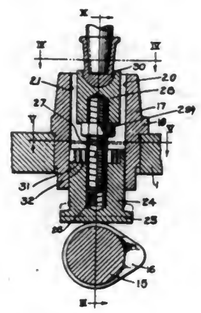
2. A file follower comprising a plate formed of sheet-metal having a lateral flange on the lower edge, a support member for said plate formed of a piece of sheet-metal having a web portion engaging said flange, and having a laterally extending tongue extending through said flange and secured to said plate, and depressed angular side portions on said web.

1,820,889. INDEX CARD. EDWARD W. SIBLEY, Kenmore, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Nov. 23, 1928. Serial No. 321,413. 2 Claims. (Cl. 129—16.7.)



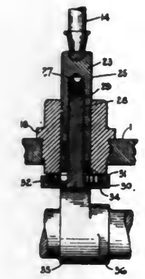
1. An index card comprising a card having a plurality of slots defining securing tongues formed adjacent one edge of the card, said edge being spaced a fixed uniform distance from the slots directly beneath the slots and being spaced a variable distance from a line joining the lower extremities of the slots at points remote from the slots.

1,820,890. VALVE ACTUATING MECHANISM. WILLIAM R. SPILLER, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 15, 1929. Serial No. 363,131. 17 Claims. (Cl. 123—90.)



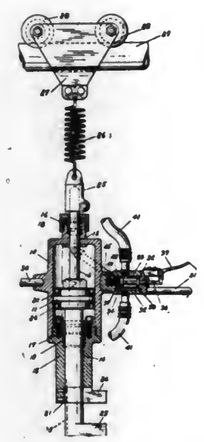
10. In an internal combustion motor, a cam shaft, a valve controlling communication with the interior of a cylinder of the motor, a tappet interposed between a cam on the cam shaft of the valve and consisting of two parts, one of which has a circular head bearing upon the cam at one side of its center and arranged to be rotated thereby, means actuated by said rotation to shorten the distance between said parts of the tappet during that part of the cycle in which the valve is open, and resilient means for extending said parts during the part of the cycle in which the valve is seated.

1,820,891. VALVE ACTUATING MECHANISM. WILLIAM R. SPILLER, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 30, 1929. Serial No. 382,265. 15 Claims. (Cl. 123—90.)



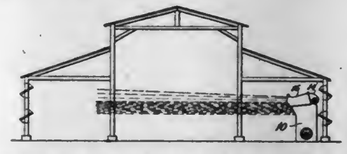
1. Valve actuating mechanism including a two-part tappet, the parts of which are threaded together, means for rotating one of said parts immediately after the valve closes, and becoming inoperative before the valve commences to open, and a spring for rotating the parts relatively in the opposite direction.

1,820,892. TIRE MOLD OPENER. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 3, 1926. Serial No. 152,378. 2 Claims. (Cl. 18—2.)



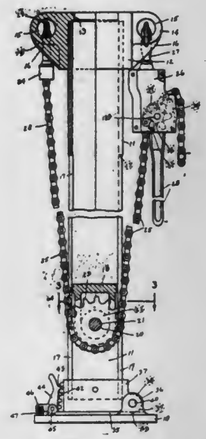
1. A device for separating tire molds, comprising a double acting hydraulic cylinder, a piston reciprocable therein, a piston rod extending from each side of said piston and attached thereto, a bearing at the top of the cylinder through which the upper piston rod passes, an extended base member projecting from the lower end of said cylinder, a bearing in said member through which the lower piston rod passes, sidewardly extending foot portions on the lower ends of said base portion and said lower piston rod, adapted to interfit when the piston is positioned at the top of the cylinder and to be separated when the piston is at the bottom of the cylinder, a helical spring attached to the upper end of said piston rod, a carriage member from which the cylinder is suspended by said spring for the vertical adjustment of the device, said carriage being adapted to travel horizontally for the lateral positioning of said device, and a hand-operated four-way valve having a reciprocable valve stem and suitable ports to admit water under pressure to the upper end of said cylinder and simultaneously exhaust water from the lower end and vice versa for relatively moving said foot portions.

1,820,893. METHOD OF HEATING. CLIFFORD C. CARSON, Cleveland, Ohio. Filed Sept. 27, 1928. Serial No. 308,681. 6 Claims. (Cl. 237—1.)



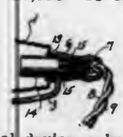
1. The method of heating a large room or enclosure which consists in discharging heated air horizontally below the breathing line and discharging a thin curtain of relatively cold air at a much higher velocity above the breathing line and in the same direction as the heated air to prevent the heated air from rising therethrough before it has given up a large portion of the contained heat units below the breathing line.

1,820,894. CHAIN JACK. FREDERICK W. COFFING, Perrysville, Ind. Filed Oct. 5, 1929. Serial No. 397,645. 3 Claims. (Cl. 254—148.)



1. In combination, a tubular member, a hoist anchorage near the upper end thereof, a unitary hoist capable of independent operation and detachably secured to the anchorage and including a chain, said member having a pair of oppositely positioned slots extending longitudinally of and for a considerable portion of the tubular member, said chain extending through the tubular member and through the slots and having one end anchored to the upper end of the tubular member opposite from the hoist anchorage, a load supporting member longitudinally slidable in the tubular member, and a chain engaging sprocket rotatably supported by and movable with the load supporting member and movable by said chain for moving the load supporting member.

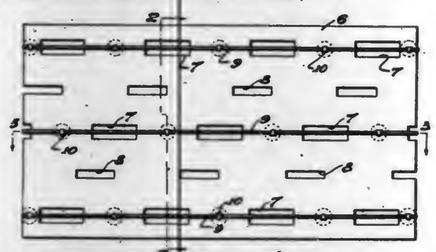
1,820,895. THERAPEUTICAL DEVICE. JACOB H. WEBER, New York, N. Y., assignor to A. Breslauer, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 1, 1926. Serial No. 91,396. 13 Claims. (Cl. 128—57.)



1. In a therapeutical device, a hollow perforated roller and a plurality of perforated receptacles within the roller.

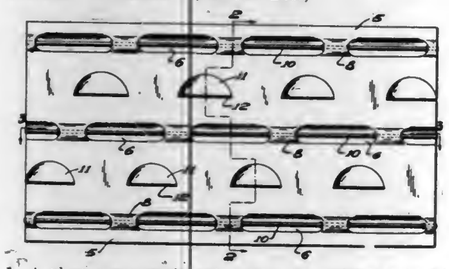
13. A massage instrument, a hollow handle with a frame secured thereto, a heating element fixedly mounted in said frame, a roller rotatably mounted on said heating element and prevented from excessive longitudinal movement by said frame.

1,820,896. LATH STRUCTURE. HERBERT E. WHITE and WALTER H. FISHEL, Youngstown, Ohio, assignors to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Feb. 18, 1929. Serial No. 340,968. 1 Claim. (Cl. 72—116.)



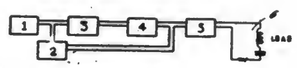
A plaster supporting structure comprising a backing sheet having rows of elongated openings therethrough, lath rods located along the face of the sheet and extending longitudinally of and over the openings, and fasteners securing the rods to the backing sheet between adjacent openings, and comprising flat heads bearing against the rear side of the sheet and having prongs passing forwardly through the sheet and having their free ends bent around the rods.

1,820,897. LATH STRUCTURE. HERBERT E. WHITE and WALTER H. FISHEL, Youngstown, Ohio, assignors to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Feb. 18, 1929. Serial No. 340,969. 3 Claims. (Cl. 72—116.)



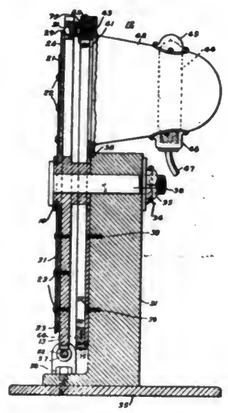
1. A plaster supporting structure, comprising a backing sheet having a generally flat face and provided at intervals with rearwardly recessed key-forming pockets and lath rods bridging said pockets and secured to the backing sheet by passing through the material of the backing sheet between the pockets, said material supporting the rods in spaced relation to the bottoms of the pockets.

1,820,898. TRANSMISSION SYSTEM. SALVATORE A. BARONE, Freeport, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Feb. 7, 1929. Serial No. 338,235. 9 Claims. (Cl. 250—17.)



8. The method for transmitting a selected portion of a band of modulated high frequency oscillations which comprises, modulating a source of high frequency oscillations to produce a carrier and two side bands, spacing said side bands in the frequency spectrum apart from said carrier, and transmitting a selected portion of said carrier and said bands.

1,820,899. LIGHTING APPLIANCE. MARY HALLOCK GREENEWALT, Philadelphia, Pa. Filed Apr. 10, 1924, Serial No. 705,568. Renewed Nov. 13, 1929. 6 Claims. (Cl. 240—1.)



2. In a lighting appliance, the combination with a light source, of a reflector therefor, of substantially sector-shape in lateral anterior section, a plate to which said reflector is secured, having an opening of sector-shape therethrough, and a light-modifying means moving in front of said plate.

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